## **APPENDIX A**

**City of Lynnwood Permits** 



## Tree Clearing Class II PERMIT

Permit No: CLR-030560-2022 Type: Tree Clearing Work Class: Class II Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

### **PROJECT INFORMATION**

Job Address:	
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6808 196TH STSW LYNNWOOD, WA 98036

**COMMENTS** 

Project: Texaco | Strickland Remediation Parcel: 27042000200600 Valuation \$0.00 Application Date:04/22/2022 Issue Date:09/02/2022 Final Date:09/02/2022

### **PROJECT SCOPE**

Description: Texaco | Strickland Remediation - Proposal is for a remedial excavation of contaminated soil under an Ecology Agreed Order. Components would include utility capping, building demo, shoring, excavation, and backfill to existing grade. No above ground construction is included.

### CONTACTS

<u>Contact Type</u> Contact	<u>Contact Name</u> Adam Griffin, Aspect Consulting, LLC	Business Phone	<u>E-mail</u> agriffin@aspectconsulting.com	License Number
Applicant	Breeyn Greer, Aspect Consulting		bgreer@aspectconsulting.com	
Contact	Clayton Mullendore, Rivers Edge Environmental Services Inc	(425) 584-7089	cmullendore@rivers.city	
Contractor	Rivers Edge Environmental Services Inc	2064554849	cmullendore@rivers.city	RIVEREE855DT
Property Owner	Ryan Megenity, Rainier Property Management LLC	4252523626	ryan@rpmcousa.com	
Property Owner	Strickland Real Estate Holdings LLC			

#### FEES

Fee Name Class II Tree Removal		Fee Amount \$257.00	Paid Amount \$257.00	<u>Fee Status</u> Paid In Full
Class II Optional Tree Replacement Waiver Fee		\$3,927.00 \$104.60	\$3,927.00 \$104.60	Paid In Full Paid In Full
	TOTALS	\$4,288.60	\$4,288.60	

#### CONDITIONS

DESCRIPTION

This project requires a Pre-Construction Meeting with Development Engineering Inspection Group. The permit cannot be issued until the preconstruction is held, and Development Engineering has notified the Permit Center to issue the permit.



## Tree Clearing Class II PERMIT

Permit No: CLR-030560-2022 Type: Tree Clearing Work Class: Class II Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

Permission is hereby given to commence the above described work, according to the conditions hereon and in accordance with the approved plans and specifications pertaining thereto, subject to compliance with City of Lynnwood ordinances and laws of the State of Washington.

\* I am the owner or the owner's agent and have permission to apply for this permit.

\* I am aware that my permit will become null and void if the authorized work has not been inspected within 180 calendar days of issuance or for a period of 180 calendar days from the last inspection.

\* I am aware that a one-time extension may be granted if a written request is submitted in writing to the building official showing just cause, prior to the expiration.

\* I have read and examined this application and know the information provided to be true and correct.

Permit Issued Date: 09/02/2022



## Tree Clearing Class II PERMIT

Permit No: CLR-030560-2022 Type: Tree Clearing Work Class: Class II Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

This Permit is to be conspicuously posted in an appropriate on-site location.

## **INSPECTION RECORD**

To request an inspection, please log into your DBS Portal account online: https://www.dbs.lynnwoodwa.gov

Inspection(s)	Date	Inspector	Comments
PW Replanting			
PW Final			

For more information about how to create an online account or request inspections online, please visit: https://dbs-training.lynnwoodwa.gov

## \*NOTICE\*

THIS PERMIT BECOMES NULL AND VOID IF THE AUTHORIZED WORK HAS NOT BEEN INSPECTED BY THIS DEPARTMENT WITHIN 180 CALENDAR DAYS OF ISSUANCE OR FOR A PERIOD OF 180 CALENDAR DAYS FROM THE LAST INSPECTION.

THE TOTAL LIFE OF THIS PERMIT IS LIMITED TO A MAXIMUM OF 540 CALENDAR DAYS, PROVIDED IT HAS NOT EXPIRED UNDER THE RESTRICTIONS ABOVE.



## Demolition Commercial Structures PERMIT

Permit No: DEMO-030556-2022 Type: Demolition

Work Class: Commercial Structures

Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

#### **PROJECT INFORMATION**

Job Address:

6808 196TH STSW LYNNWOOD, WA 98036 Project: Texaco | Strickland Remediation Parcel: 27042000200600 Valuation \$0.00 Application Date:04/22/2022 Issue Date:09/02/2022 Final Date:

#### **PROJECT SCOPE**

Description:

Texaco | Strickland Remediation - Building demolition for remedial excavation of contaminated soil under an Ecology Agreed Order.

#### CONTACTS

Contact Type	Contact Name	<b>Business Phone</b>	<u>E-mail</u>	License Number
Contact	Adam Griffin, Aspect Consulting, LLC		agriffin@aspectconsulting.com	
Engineer	Breeyn Greer, Aspect Consulting		bgreer@aspectconsulting.com	
Applicant	Breeyn Greer, Aspect Consulting		bgreer@aspectconsulting.com	
Contractor- Manual Verify	Rivers Edge Environmental Services	2064554849	cmullendore@rivers.city	RIVEREE855DT
Property Manager	Ryan Megenity, Rainier Property Management LLC	4252523626	ryan@rpmcousa.com	
Property Owner	Strickland Real Estate Holdings LLC			

FEES			
Fee Name	Fee Amount	Paid Amount	Fee Status
Demo Deposit	\$2,000.00	\$2,000.00	Paid In Full
Commercial/Multi-Family Demolition Fixed Fee	\$1,500.00	\$1,500.00	Paid In Full
Technology Fee	\$37.50	\$37.50	Paid In Full
тот	ALS \$3,537.50	\$3,537.50	

Permission is hereby given to commence the above described work, according to the conditions hereon and in accordance with the approved plans and specifications pertaining thereto, subject to compliance with City of Lynnwood ordinances and laws of the State of Washington.

\* I am the owner or the owner's agent and have permission to apply for this permit.

\* I am aware that my permit will become null and void if the authorized work has not been inspected within 180 calendar days of issuance or for a period of 180 calendar days from the last inspection.

\* I am aware that a one-time extension may be granted if a written request is submitted in writing to the building official showing just cause, prior to the expiration.

\* I have read and examined this application and know the information provided to be true and correct.

Permit Issued Date: 09/02/2022



## Demolition Commercial Structures PERMIT

Permit No: DEMO-030556-2022 Type: Demolition Work Class: Commercial Structures Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

#### This Permit is to be conspicuously posted in an appropriate on-site location.

### **INSPECTION RECORD**

To request an inspection, please log into your DBS Portal account online: https://www.dbs.lynnwoodwa.gov

Inspection(s)	Date	Inspector	Comments
BLD Demolition Final			

For more information about how to create an online account or request inspections online, please visit: https://dbs-training.lynnwoodwa.gov

## \*NOTICE\*

THIS PERMIT BECOMES NULL AND VOID IF THE AUTHORIZED WORK HAS NOT BEEN INSPECTED BY THIS DEPARTMENT WITHIN 180 CALENDAR DAYS OF ISSUANCE OR FOR A PERIOD OF 180 CALENDAR DAYS FROM THE LAST INSPECTION.

THE TOTAL LIFE OF THIS PERMIT IS LIMITED TO A MAXIMUM OF 540 CALENDAR DAYS, PROVIDED IT HAS NOT EXPIRED UNDER THE RESTRICTIONS ABOVE.



## Grade Grade PERMIT

Permit No: GRD-030557-2022 Type: Grade Work Class: Grade Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

### **PROJECT INFORMATION**

Job Address:

6808 196TH STSW LYNNWOOD, WA 98036

**COMMENTS** 

Project: Texaco | Strickland Remediation Parcel: 27042000200600 Valuation \$0.00 Application Date:04/22/2022 Issue Date:08/31/2022 Final Date:

## **PROJECT SCOPE**

Description: Texaco | Strickland Remediation - Proposal is for a remedial excavation of contaminated soil under an Ecology Agreed Order. Components would include utility capping, building demo, shoring, excavation, and backfill to existing grade. No above ground construction is included.

### CONTACTS

Contact Type	Contact Name	<b>Business Phone</b>	<u>E-mail</u>	License Number
Contact	Adam Griffin, Aspect Consulting, LLC		agriffin@aspectconsulting.com	
Applicant	Breeyn Greer, Aspect Consulting		bgreer@aspectconsulting.com	
Inspection Contact	Clayton Mullendore, Rivers Edge Environmental Services Inc	(425) 584-7089	cmullendore@rivers.city	
Contractor	Rivers Edge Environmental Services Inc	2064554849	cmullendore@rivers.city	RIVEREE855DT
Property Manager	Ryan Megenity, Rainier Property Management LLC	4252523626	ryan@rpmcousa.com	
Property Owner	Strickland Real Estate Holdings LLC			

### FEES

Fee Name	Fee Amount	Paid Amount	Fee Status
Grading Permit Administrative Fee	\$502.41	\$502.41	Paid In Full
Grading Inspection Fee Above 10,000 CY	\$555.95	\$555.95	Paid In Full
Grading Plan Review Over 10,000 CY	\$106.10	\$106.10	Paid In Full
Technology Fee	\$29.11	\$29.11	Paid In Full
тот	ALS \$1,193.57	\$1,193.57	

### CONDITIONS

DESCRIPTION This project requires a Pre-Construction Meeting with Development Engineering Inspection Group. The permit cannot be issued until the preconstruction is held, and Development Engineering has notified the Permit Center to issue the permit.





## Online Inspection Request: https://dbs.lynnwoodwa.gov

Permission is hereby given to commence the above described work, according to the conditions hereon and in accordance with the approved plans and specifications pertaining thereto, subject to compliance with City of Lynnwood ordinances and laws of the State of Washington.

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\* I am aware that my permit will become null and void if the authorized work has not been inspected within 180 calendar days of issuance or for a period of 180 calendar days from the last inspection.

\* I am aware that a one-time extension may be granted if a written request is submitted in writing to the building official showing just cause, prior to the expiration.

\* I have read and examined this application and know the information provided to be true and correct.

Permit Issued Date: 08/31/2022





## Online Inspection Request: https://dbs.lynnwoodwa.gov

#### This Permit is to be conspicuously posted in an appropriate on-site location.

### **INSPECTION RECORD**

To request an inspection, please log into your DBS Portal account online: https://www.dbs.lynnwoodwa.gov

Inspection(s)	Date	Inspector	Comments
PW Grading			

For more information about how to create an online account or request inspections online, please visit: https://dbs-training.lynnwoodwa.gov

## \*NOTICE\*

THIS PERMIT BECOMES NULL AND VOID IF THE AUTHORIZED WORK HAS NOT BEEN INSPECTED BY THIS DEPARTMENT WITHIN 180 CALENDAR DAYS OF ISSUANCE OR FOR A PERIOD OF 180 CALENDAR DAYS FROM THE LAST INSPECTION.

THE TOTAL LIFE OF THIS PERMIT IS LIMITED TO A MAXIMUM OF 540 CALENDAR DAYS, PROVIDED IT HAS NOT EXPIRED UNDER THE RESTRICTIONS ABOVE.



## Right of Way Right of Way PERMIT

Permit No: ROW-030558-2022 Type: Right of Way Work Class: Right of Way Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

#### **PROJECT INFORMATION**

Job /	Address:
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6808 196TH STSW LYNNWOOD, WA 98036 Project: Texaco | Strickland Remediation Parcel: 27042000200600 Valuation \$0.00 Application Date:04/22/2022 Issue Date:08/31/2022 Final Date: Expire Date: 11/29/2022

#### **PROJECT SCOPE**

Description: Texaco | Strickland Remediation - Proposal is for a remedial excavation of contaminated soil under an Ecology Agreed Order. Components would include utility capping, building demo, shoring, excavation, and backfill to existing grade. No above ground construction is included.

#### CONTACTS

Contact Type	Contact Name	<b>Business Phone</b>	<u>E-mail</u>	License Number
Contact	Adam Griffin, Aspect Consulting, LLC		agriffin@aspectconsulting.com	
Engineer	Breeyn Greer, Aspect Consulting		bgreer@aspectconsulting.com	
Applicant	Breeyn Greer, Aspect Consulting		bgreer@aspectconsulting.com	
Site Point of Contact	Clayton Mullendore, Rivers Edge Environmental Services Inc	(425) 584-7089	cmullendore@rivers.city	
Property Manager	Ryan Megenity, Rainier Property Management LLC	4252523626	ryan@rpmcousa.com	
Property Owner	Strickland Real Estate Holdings LLC			

#### FEES

Fee Name		Fee Amount	Paid Amount Fee Status	
Right of Way Use - Underground Work		\$719.74	\$719.74 Paid In Full	
Technology Fee		\$17.99	\$17.99 Paid In Full	
	TOTALS	\$737.73	\$737.73	

Permission is hereby given to commence the above described work, according to the conditions hereon and in accordance with the approved plans and specifications pertaining thereto, subject to compliance with City of Lynnwood ordinances and laws of the State of Washington.

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\* I am aware that my permit will become null and void if the authorized work has not been inspected within 180 calendar days of issuance or for a period of 180 calendar days from the last inspection.

\* I am aware that a one-time extension may be granted if a written request is submitted in writing to the building official showing just cause, prior to the expiration.

\* I have read and examined this application and know the information provided to be true and correct.

Permit Issued Date: 08/31/2022



## Right of Way Right of Way PERMIT

Permit No: ROW-030558-2022 Type: Right of Way Work Class: Right of Way Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

This Permit is to be conspicuously posted in an appropriate on-site location.

## **INSPECTION RECORD**

To request an inspection, please log into your DBS Portal account online: https://www.dbs.lynnwoodwa.gov

Inspection(s)	Date	Inspector	Comments
Development Engineering R			
Right of Way Job Start			
Right of Way Inspection			

For more information about how to create an online account or request inspections online, please visit: https://dbs-training.lynnwoodwa.gov

## \*NOTICE\*

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THE TOTAL LIFE OF THIS PERMIT IS LIMITED TO A MAXIMUM OF 540 CALENDAR DAYS, PROVIDED IT HAS NOT EXPIRED UNDER THE RESTRICTIONS ABOVE.



## Sewer Sewer Cap PERMIT

Permit No: SEWR-030559-2022 Type: Sewer Work Class: Sewer Cap Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

#### **PROJECT INFORMATION**

Job Address:

6808 196TH STSW LYNNWOOD, WA 98036 Project: Texaco | Strickland Remediation Parcel: 27042000200600 Valuation \$0.00 Application Date:04/22/2022 Issue Date:08/31/2022 Final Date:

### **PROJECT SCOPE**

Description:

on: Texaco | Strickland Remediation - Building demolition for remedial excavation of contaminated soil under an Ecology Agreed Order.

### CONTACTS

<u>Contact Type</u> Contact	Contact Name Adam Griffin, Aspect Consulting, LLC	Business Phone	<u>E-mail</u> agriffin@aspectconsulting.com	License Number
Applicant	Breeyn Greer, Aspect Consulting		bgreer@aspectconsulting.com	
Contractor	Rivers Edge Environmental Services Inc	2064554849	cmullendore@rivers.city	RIVEREE855DT
Inspection Contact	Rivers Edge Environmental Services	2064554849	cmullendore@rivers.city	RIVEREE855DT
Applicant	Rivers Edge Environmental Services	2064554849	cmullendore@rivers.city	RIVEREE855DT
Property Owner	Strickland Real Estate Holdings LLC			

#### FEES

Fee Name		Fee Amount	Paid Amount Fee Status
Sewer - Capping		\$88.23	\$88.23 Paid In Full
Technology Fee		\$2.21	\$2.21 Paid In Full
	TOTALS	\$90.44	\$90.44

## CONDITIONS DESCRIPTION

This project requires a Pre-Construction Meeting with Development Engineering Inspection Group. The permit cannot be issued until the preconstruction is held, and Development Engineering has notified the Permit Center to issue the permit.

#### **COMMENTS**



## Sewer Sewer Cap PERMIT

Permit No: SEWR-030559-2022 Type: Sewer Work Class: Sewer Cap Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

Permission is hereby given to commence the above described work, according to the conditions hereon and in accordance with the approved plans and specifications pertaining thereto, subject to compliance with City of Lynnwood ordinances and laws of the State of Washington.

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\* I am aware that a one-time extension may be granted if a written request is submitted in writing to the building official showing just cause, prior to the expiration.

\* I have read and examined this application and know the information provided to be true and correct.

Permit Issued Date: 08/31/2022



## Sewer Sewer Cap PERMIT

Permit No: SEWR-030559-2022 Type: Sewer Work Class: Sewer Cap Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

This Permit is to be conspicuously posted in an appropriate on-site location.

### **INSPECTION RECORD**

To request an inspection, please log into your DBS Portal account online: https://www.dbs.lynnwoodwa.gov

Inspection(s)	Date	Inspector	Comments
Sewer Cap Inspection			

For more information about how to create an online account or request inspections online, please visit: https://dbs-training.lynnwoodwa.gov

## \*NOTICE\*

THIS PERMIT BECOMES NULL AND VOID IF THE AUTHORIZED WORK HAS NOT BEEN INSPECTED BY THIS DEPARTMENT WITHIN 180 CALENDAR DAYS OF ISSUANCE OR FOR A PERIOD OF 180 CALENDAR DAYS FROM THE LAST INSPECTION.

THE TOTAL LIFE OF THIS PERMIT IS LIMITED TO A MAXIMUM OF 540 CALENDAR DAYS, PROVIDED IT HAS NOT EXPIRED UNDER THE RESTRICTIONS ABOVE.



## Fire Marshal Office Tank Decommission (C) PERMIT

Permit No: FMO-032109-2022 Type: Fire Marshal Office Work Class: Tank Decommission (C) Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

#### **PROJECT INFORMATION** Application Date:09/01/2022 Project: Texaco | Strickland Remediation 6808 196TH STSW Job Address: Issue Date:09/02/2022 LYNNWOOD, WA 98036 Parcel: 27042000200600 Final Date: Valuation \$0.00 **PROJECT SCOPE** Texaco | Strickland Remediation - (3) UST Decommission and remove in accordance with WAC 173-36. Description: Number of Tanks to be Removed: 3 Location: 6808 196th St SW CONTACTS Contact Type **Contact Name Business Phone** E-mail License Number Applicant Adam Griffin, Aspect Consulting, LLC agriffin@aspectconsulting.com Breeyn Greer, Aspect Consulting Contact bgreer@aspectconsulting.com **Property Manager** 4252523626 ryan@rpmcousa.com Ryan Megenity, Rainier Property Management LLC Strickland Real Estate Holdings LLC Property Owner FEES Fee Amount Paid Amount Fee Status Fee Name Fire Plan Review Fee \$127.56 \$127.56 Paid In Full Paid In Full **Technology Fee** \$3.19 \$3.19 TOTALS \$130.75 \$130.75

Permission is hereby given to commence the above described work, according to the conditions hereon and in accordance with the approved plans and specifications pertaining thereto, subject to compliance with City of Lynnwood ordinances and laws of the State of Washington.

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\* I am aware that my permit will become null and void if the authorized work has not been inspected within 180 calendar days of issuance or for a period of 180 calendar days from the last inspection.

\* I am aware that a one-time extension may be granted if a written request is submitted in writing to the building official showing just cause, prior to the expiration.

\* I have read and examined this application and know the information provided to be true and correct.

Permit Issued Date: 09/02/2022



## Fire Marshal Office Tank Decommission (C) PERMIT

Permit No: FMO-032109-2022 Type: Fire Marshal Office Work Class: Tank Decommission (C) Status: Issued

Online Inspection Request: https://dbs.lynnwoodwa.gov

This Permit is to be conspicuously posted in an appropriate on-site location.

## **INSPECTION RECORD**

To request an inspection, please log into your DBS Portal account online: https://www.dbs.lynnwoodwa.gov

Inspection(s)	Date	Inspector	Comments
FMO Removal of Tank			
Fire Dept. Final			

For more information about how to create an online account or request inspections online, please visit: https://dbs-training.lynnwoodwa.gov

## \*NOTICE\*

THIS PERMIT BECOMES NULL AND VOID IF THE AUTHORIZED WORK HAS NOT BEEN INSPECTED BY THIS DEPARTMENT WITHIN 180 CALENDAR DAYS OF ISSUANCE OR FOR A PERIOD OF 180 CALENDAR DAYS FROM THE LAST INSPECTION.

THE TOTAL LIFE OF THIS PERMIT IS LIMITED TO A MAXIMUM OF 540 CALENDAR DAYS, PROVIDED IT HAS NOT EXPIRED UNDER THE RESTRICTIONS ABOVE.



## Water Construction Water Cap PERMIT

Permit No: WAT-031994-2022 Type: Water Construction Work Class: Water Cap Status: Issued

## Online Inspection Request: https://dbs.lynnwoodwa.gov

## PROJECT INFORMATION

6808 196TH STSW LYNNWOOD, WA 98036

Project: Parcel: 27042000200600 Valuation \$0.00 Application Date:08/22/2022 Issue Date:09/02/2022 Final Date:

#### **PROJECT SCOPE**

Description:

tion: Utilities to be disconnected for building demolition and subsequent contaminated soil cleanup. Water service to be disconnected at meter box.

#### CONTACTS

<u>Contact Type</u> Applicant	<u>Contact Name</u> Adam Griffin, Aspect Consulting, LLC	Business Phone	<u>E-mail</u> agriffin@aspectconsulting.com	License Number
Contractor	Clayton Mullendore, Rivers Edge Environmental Services Inc	(425) 584-7089	cmullendore@rivers.city	
Property Manager	Ryan Megenity, Rainier Property Management LLC	4252523626	ryan@rpmcousa.com	
FEES				
Fee Name Water Service - Private - Technology Fee	Repair or Replacement TOTALS	Fee Amount           \$93.54           \$2.34           \$95.88	Paid AmountFee Status\$93.54Paid In Full\$2.34Paid In Full\$95.88	

Permission is hereby given to commence the above described work, according to the conditions hereon and in accordance with the approved plans and specifications pertaining thereto, subject to compliance with City of Lynnwood ordinances and laws of the State of Washington.

\* I am the owner or the owner's agent and have permission to apply for this permit.

\* I am aware that my permit will become null and void if the authorized work has not been inspected within 180 calendar days of issuance or for a period of 180 calendar days from the last inspection.

\* I am aware that a one-time extension may be granted if a written request is submitted in writing to the building official showing just cause, prior to the expiration.

\* I have read and examined this application and know the information provided to be true and correct.

Permit Issued Date: 09/02/2022



## Water Construction Water Cap PERMIT

Permit No: WAT-031994-2022 Type: Water Construction Work Class: Water Cap Status: Issued

Online Inspection Request: https://dbs.lynnwoodwa.gov

This Permit is to be conspicuously posted in an appropriate on-site location.

## **INSPECTION RECORD**

To request an inspection, please log into your DBS Portal account online: https://www.dbs.lynnwoodwa.gov

Inspection(s)	Date	Inspector	Comments
Water Cap Final			
Water Cap			
Water Meter Pull Request			

For more information about how to create an online account or request inspections online, please visit: https://dbs-training.lynnwoodwa.gov

## \*NOTICE\*

THIS PERMIT BECOMES NULL AND VOID IF THE AUTHORIZED WORK HAS NOT BEEN INSPECTED BY THIS DEPARTMENT WITHIN 180 CALENDAR DAYS OF ISSUANCE OR FOR A PERIOD OF 180 CALENDAR DAYS FROM THE LAST INSPECTION.

THE TOTAL LIFE OF THIS PERMIT IS LIMITED TO A MAXIMUM OF 540 CALENDAR DAYS, PROVIDED IT HAS NOT EXPIRED UNDER THE RESTRICTIONS ABOVE.

## **APPENDIX B**

Well Decommissioning Logs

RESOURCE PROTECTION WELL R	EPORT CURRENT
Construction/Decommission	Notice of Intent No. AE74951
Construction	Type of Well
Decommission OBICINIAL INSTALL (TRONG)	Resource Protection
of Intent Number	Geotechnical Soil Boring
-101031C	Site Address to Strict land
Consulting Firm <u>Mspect</u> MW-1	City Lyang and
Unique Ecology Well ID	E County Sav
Tag No. ALC 095	Location 1/4 NE 1/4 Mb/ Sec 20 Twn 27 a/ R 4 or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (s.t.r. Lat Deg
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg
Materials used and the information reported above are true to my best knowledge and belief	Tax Parcel No.
Driller/Trainee Signature	
Driller/Trainee License No. 3378	Cased or Uncased Diameter Static Level
If trainee liceaned deillard	Work/Decommision Start Date 8-26-7.7
Signature and License No.	
	Work/Decommision Completed Date 8-26-27
Construction/Design W	ell Data Formation Description
CONCRETE SUR	FACE SEAL <u>0</u> FT
BACKFILL	18 FT 0- FT Chips
	FT
DEPTH OF BORING	20 FT

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RESOURCE PROTECTION WELL RI	EPORT CURRENT
Construction/Decommission	Notice of Intent No. AE74951
	Type of Well
Decommission OPICINAL INCELLA (TRANSPORT	. Resource Protection
of Intent Number P 20577	Geotechnical Soil Boring
	Site Address A Strickland
Consulting Firm Happent Cum Drig Million	City City City City City City City City
Unique Ecology Well ID	County Saw
Tag No. ALK 096	Location 1/4 NE 1/4 NW Sec 20 Two 2721 R 4 or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	VW№
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg
Materials used and the information reported above are true to my best knowledge and belief	Ten here have
X Driller Trainee Name (Print) 6000 Koree	Tax Parcel No.
Driller/Trainee License No.	Cased or Uncased Diameter 7 Statia Lowel
SSI8	Work/Dearen and Carlo Carlo Level
If trainee, licesned drillers'	Work/Decommission Start Date 8-26-22
Signature and License No.	Work/Decommission Completed Date 8-7-6-7-7
Construction/Design Wo	
We	Formation Description
	ACE SEALFT
	7
	concrete
	18
	FTFT
	Chips
	<u> </u>
DEPTH OF BORING	20 FT
	<u>د</u>

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(SUBMIT ONE WELL REPORT DEP WELL DISTUINANT	EPORT CURRENT
Construction/Decommission	Notice of Intent No. AE74451
	Type of Well
	Resource Protection
of Intent Number 1 200 62 5	Geotechnical Soil Desire
of Intent Ivamber V 10512	Property Owner Strickland
Consulting Firm Aspect MW-2	Site Address 6808 196 45 54 54
	City Lygnaloud County Sav
Tag No. <u>ALK 097</u>	Location 1/4 NE 1/4 NW Sec 20 Twn 27N R 4 or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (s.t.r Lat Deg WWN
Construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg
Violet and the information reported above are true to my best knowledge and belief	Tax Parcel No
Driller/Trainee Signature	
Driller/Trainee License No.	Cased or Uncased Diameter Z
	Work/Decomments and a construction of the cons
If trainee, licesned drillers'	WorkDecommission Start Date <u>8-26-22</u>
Signature and License No.	Work/Decommission Completed Date 8-7 4-77
Construction/Design	
W	ell Data Formation Description
CONCRETE SUR	FACE SEAL 0 - FT
	7
	Cancere to
BACKFILL	<u>/8</u> FT 0 - FT
	Chipe
	FI FI
DEPTH OF BORING	20
	FT FT

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RESOURCE PROTECTION WELL R	EPORT CURRENT
Construction/Decommission	Notice of Intent No. $\mu \epsilon / 4451$
Construction	Type of Well
Decommission ORIGINAL INSTALLATION AL	Resource Protection
of Intent Number P 70577	Geotechnical Soil Boring
	Site Address & Strictland
Consulting Firm Hspect	City ( 144 14 14 14 14 14 14 14 14 14 14 14 14
Unique Ecology Well (D)	County Saw
Tag No. ALL 080 Muni	Location 1/4 NE 1/4 Nel Sec 20 Twn 2721 R 4 or
WELL CONSTRUCTION CERTIFICATION: Longstructed and/	WWV
construction of this well, and its compliance with all Washington well construction standarts	Lat/Long (s,t,r Lat Deg Lat Min/Sec
Materials used and the information reported above are true to my best knowledge and helief	Sin Required) Long Deg Long Min/Sec
X Driller Trainee Name (Print) 6rddy free	Tax Parcel No.
Driller/Trainee Signature	Cased or Uncased Diameter
Driller/Trainee License No3378	Static Level
If trainee, licesned drillers'	Work/Decommision Start Date 8-26-22
Signature and License No.	
	Work/Decommision Completed Date 8-26-27
Construction/Design W	ell Data Formation Description
CONCRETE SUR	FACE SEAL
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	Concrete
BACKFILL	
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(SUBMIT ONE WELL REPORT PER WELL INSTALLED)	REPORT CURRENT
Construction/Decommission	Notice of Intent No. AE74451
	Type of Well
	Resource Protection
of Intent Number	Geotechnical Soil Boring
0/11101111110001 VC 1051 2-	Property Owner Strictland
Consulting Firm Aspect Mlu-5	Site Address 6808 196-45 St SW
	City Lyandhard County Sau
Tag No.	Location 1/4 UE 1/4 UI / See 24 5 32 /
WELL CONSTRUCTION CERTIFICATION	The second secon
construction of this well, and its compliance with all the line in the second temporal second temp	Lat/Long (s,t,r Lat Deg Lat Min/Sec
Materials used and the information reported above with all Washington well construction standards	still Required) Long Deg Long Min/Sec
X Driller Trainee Name (Print)	Tax Parcel No.
Driller/Trainee Signature	
Driller/Trainee License No. 3378	Cased or Uncased Diameter Static Level 2
	Work/Decommission Start Data
If trainee, licesned drillers'	Determination Start Date D Chas CC
Signature and License No.	Work/Decommision Completed Date 8-26-22
Construction/Design	Well Date
	Formation Description
CONCRETE SUI	RFACE SEAL 0 - FT
■ BACKFILL	<u>18</u> FT <u>0</u> FT <u>Chips</u>
DEPTH OF BORING	<u> </u>

RESOURCE PROTECTION WELL F (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	REPORT CU	RRENT ce of Intent No	AFJUGS
Construction/Decommission		Time of W N	10/99/
Construction	•		
Decommission ORIGINAL INSTALLATION Notice		Resource Prot	ection
of Intent Number 271759	Property Owner #	Geotechnical	Soil Boring
	Filte Address	rickland	
Consulting Firm Aspect Mln-6	City Luce 1	8 196 - St	SW
Lingue Factore IV 11 ID	Cynnalouse	Cou	nty <u>Saw</u>
Tag No.	Location 1/4 NE	1/4 NU/ Sec 20	EWM
WELL CONSTRUCTION APPTITUM			Unio.
construction of this well and its compliance with the test	Lat/Long (s,t,r Lat Deg		Lat Min/Sec
Materials used and the information ment to be	still Required) Long Deg	-	Long Min/Sec
Trainer During the mitimation reported above are true to my best knowledge and belief	Tax Parcel No.		
Driller/Trainee Signature	-		
Driller/Trainee License No.	Cased or Uncased Diameter		Static Level 🔿
		Q-7	
If trainee, licesned drillers'	Work Decommission Start D	$\frac{3}{2}$	6-2C
Signature and License No.	Work/Decommision Comple	ted Data 8-7	6.77
Construction/Design			
	Well Data	Format	ion Description
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DEPTH OF BORING	<u>20</u> FT		

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(SUE	LOUUKUL PKO'IT BMIT ONE WELL REPORT PE	CCTION WELL R R Well INSTALLED)	EPORT	CURRENT	AFOLICIS.
Cons	struction/Decommission	)		Notice of Intent No	<u>HC 79951</u>
Πc	onstruction			Type of Well	
	- commission ORIGINAL INST	ITT ATTONING A	·.		Protection
	of Intent Numbe	$r = \frac{1}{2} \frac{1}{2} \frac{1}{2} \frac{3}{9}$	Property Owner	Geotechni	cal Soil Boring
	Λ		Site Address L	STRICE LAN	<u>st (11</u>
Con	sulting Firm 757CC	K CRAMN.	Z City Lygnal	nd	County Cou
Uniq Tagʻ	lue Ecology Well ID No. BAT 602		Location 1/4	4 NE 1/4 NW Sec 2	EWA Two 272 R 4 or
WELL	CONSTRUCTION CERTIFICATION: I con	structed and/or accept responsibility for	 Lat/Long (a tr. L		WW
construc	ction of this well, and its compliance with all y	Washington well construction standards	still Required)	at Deg	Lat Min/Sec
Materia X Dri	ls used and the information reported above are	e true to my best knowledge and belief	Tax Parcel No.		
Drille Drille	r/Trainee Signature	78	Cased or Uncased D	DiameterZ	Static Level
If trait	nee. licesned drillers'		Work/Decommision	n Start Date <u>8</u> ~	26-22
Signat	ture and License No.				~ / ~ 7
			work/Decommision	Completed Date	<u></u>
	Construction/Design		Well Data	Fo	rmation Description
		CONCRETE SU	RFACE SEAL	ET 2	FT
		BACKFILL	18	_FT0	FT
			_Chips	· · · · · · · · · · · · · · · · · · ·	
				0	FT

KESOURCE PROTECTION WELL F	REPORT CURRENT
Construction/Decommission	Notice of Intent No. AE74951
	Type of Well
Decommission OBIGINI (1, DISC )	Resource Protection
of Intent Number	Geotechnical Soit Paring
12 11 13 - 13 11 13 - 13 11 13 - 13 11 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 13 - 13 11 1	Property Owner Strictland
Consulting Firm 195720 CRA	Site Address 6808 19645 54 56
Unique Foology W-11 To	City Cy 4 nortocid County Saw
Tag No CAT 602 Mulu-8	Location 1/4 NE 1/4 NU/ Sec 20 Two 772/ P LI
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	
construction of this well, and its compliance with all Washington well construction standards	still Required) Lat Min/Sec
Materials used and the information reported above are true to my best knowledge and belief	Long Min/Sec
X Driller Trainee Name (Print) 6.74 dy hree	Tax Parcel No.
Driller/Trainee License No. 3378	Cased or Uncased Diameter Z. Static Level
If trainee, licesned drillers'	Work/Decommission Start Date 8-26-27
Signature and License No.	
Construction/Design	Work/Decommision Completed Date 8-26-27
W	/ell Data Formation Description
CONCRETE SUR	FACE SEAL
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	concrere
BACKFILL	- / X FT 0 - FT
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	Chips
	FT
DEPTH OF BORING	<u> </u>

RESOURCE PROTECTION WELL RI	EPORT CURRENT
Construction/Decommission	Notice of Intent No. AE74451
	Type of Well
	Resource Protection
of Intent Number	Geotechnical Soil Boring
in the terring	Property Owner Strictland
Consulting Firm Aspect CRA MW9	Sile Address 6808 19645 54 5W
Unique Ecology Well ID	County Sau
Tag No. BAT 604	Location 1/4 NE 1/4 MU Sec 20 Two 272 R 4 or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accent responsibility for	
construction of this well, and its compliance with all Washington well construction standards	Lat/Long (s,t,r Lat Deg Lat Min/Sec
Materials used and the information reported above are true to my best knowledge and belief	Early Long Deg Long Min/Sec
X Driller Trainee Name (Print) 604 dy hree	Lax Parcel No.
Driller/Trainee Ligence Ma	Cased or Uncased Diameter 7
Stinder Hunder License No. 3378	Static Level
If trainee, licesned drillers'	Work/Decommision Start Date 8-26-27
Signature and License No.	Work/Decommission Completed Data 8-7 (
Construction/Design	
We	II Data Formation Description
CONCRETE SURF	FACE SEAL 0 - FT
BACKFILL -	18 FT 0 - FT Chips
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■ DEPTH OF BORING	<u>ZØ</u> FT

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RESOURCE PROTECTION WELL RE	EPORT CURRENT
(SUBMIT ONE WELL REPORT PER WELL INSTALLED)	Notice of Intent No. AE74451
Construction/Decommission	Type of Well
Construction	
Decommission ORIGINAL INSTALLATION Notice	
of Intent Number 271758	Property Owner Struct Land
Consulting Firm America Consulting	Site Address 6808 196th St CL
Consuming Finn MASPECT CRA MW-PC	City Lygnarad County Com
Unique Ecology Well ID	Ewm
Tag No. <u>BAT 605</u>	Location $1/4 \underline{NE} 1/4 \underline{NU} \sec 2\sigma \operatorname{Twn} 27 \sigma R \underline{4} \operatorname{or}$
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (str. Lat Day
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg
Materials used and the information reported above are true to my best knowledge and belief	Tax Parcel No
[X] Driller [] Trainee Name (Print) brady free	
Driller/Trainee License No.	Cased or Uncased Diameter 7 Static Level
States Hamee Electise NoS318	
If trainee, licesned drillers'	work/Decommision Start Date 8-26-22
Signature and License No.	Work/Decommission Completed Data
Construction/Design	
We	ll Data Formation Description
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RESOURCE PROTECTION WELL R	EPORT CURRENT
Construction/Decomprise	Notice of Intent No. AE 74451
	Type of Well
	Resource Protection
of Intent Number DELATION Notice	Geotechnical Soil Boring
of Inten Number VL (1741	Property Owner Strickland
Consulting Firm Aspect MW-W	Site Address 6808 196Th St Sw
	City Lynablad County Sac
Tag No Tag No Tag No	Location 1/4 NH 1/4 MH/See 212 T D2
WELL CONSTRUCTION CEPTIFICATION	
construction of this well, and its compliance with all Washington right and	Lat/Long (s,t,r Lat Deg Lat Min/Sec
Materials used and the information reported above are true to my best knowledge and the	still Required) Long Deg Long Min/Sec
X Driller Trainee Name (Print)	Tax Parcel No.
Driller/Trainee Signature	Cased or Upgood Discuss
Driller/Trainee License No. 3378	Static Level
If trainee, licesned drillers'	Work/Decommision Start Date 8-26-27
Signature and License No.	
Construction (D. :	Work/Decommision Completed Date 8-26-22
W	ell Data Formation Description
CONCRETE SUR	FACE SEAL
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BACKFILL	
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DEPTH OF BORING	FT

RESOURCE PROTECTION WELL	REPORT CURRENT
Construction/Decommission	Notice of Intent No. 4E74451
	Type of Well
	Resource Protection
of Intent Number DE AD 22 ( )	Geotechnical Soil Boring
of Intent Number <u>Re11941</u>	Property Owner S-Icicle (and
Consulting Firm Aspect MW-12	City Lynn was County So
Unique Ecology Well ID Tag No. $\mathcal{R}$ $\mathcal{M}$ $\mathcal{F}$ - $\mathcal{T}$ <b>2</b> $\mathcal{T}$	Location 1/4 NE 1/4 Nulsee 20 Two 77 up 4
WELL CONSTRUCTION CERTIFICATION	
construction of this well, and its compliance with all Washington well construction granted and	r Lat/Long (s,t,r Lat Deg Lat Min/Sec
Materials used and the information reported above are true to my best knowledge and belief	still Required) Long Deg Long Min/Sec
X Driller Trainee Name (Print) Grady Green	Tax Parcel No.
Driller/Trainee License No. 3378	Cased or Uncased Diameter Static Level
If trainee, licesned drillers'	Work/Decommision Start Date 8-26-22
Signature and License No.	Work/Decommision Completed Date 8-26-27
Construction/Design	Well Data Formation Description
CONCRETE S	URFACE SEAL $0$ - FT $  FT$ $ C$ $FT$ $ FT$ $0$ - $FT$ $ FT$ $0$ - $FT$
DEPTH OF BORING	G <u>てい</u> FT

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RESOURCE PROTECTION WELL R (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	REPORT CURRENT
Construction/Decommission	Notice of Intent No. AE 1445
Construction	Type of Well
Decommission ORIGINAL INSTALL (TROUDE)	Resource Protection
of Intent Number <u>RE17741</u>	Property Owner Stuck land
Consulting Firm As Operat MU202	Site Address 6808 196 57 8W
Potrees Month	City Lynnwood County Sac
Unique Ecology Well ID Tag No. <u>Bun F J D B</u>	Location 1/4 NE 1/4/12 Sec 20 Twn ZINR 4 or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (a ta Lun)
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Dec
Materials used and the information reported above are true to my best knowledge and belief	Long Min/Sec
X Driller Trainee Name (Print) 60904 frem	Tax Parcel No.
Driller/Trainee Signature	Cased or Uncased Diameter Static Level >
	Work/Decommision Start Date 8-7/-77
Signature of Line N	Dent Date D CO CC
Signature and License No.	Work/Decommision Completed Date $8-26-77$
Construction/Design	
V	Vell Data Formation Description
CONCRETE SUF	RFACE SEAL <u>0</u> FT
■ BACKFILL	<u>18 Map FT</u> <u>o</u> FT <u>Chips</u>
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DEPTH OF BORING	<u> </u>

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RESOURCE PROTECTION WELL R (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	CURRENT CURRENT
Construction/Decommission	Notice of Intent No. <u>HE74951</u>
Construction	<b>Type of Well</b>
Decommission ORIGINAL INSTALLATION N.	Resource Protection
of Intent Number RE17241	, Geotechnical Soil Boring
	Site Address 1 Strict land
Consulting Firm Hspect	City ( 4 6 19 6 19 6 19 6 19 6 19 6 19 6 19 6
Unique Ecology Well ID	County Saw
Tag No. BMF >29 MW.	14 NE 1/4 NW See ZU Two ZTW R 4 or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (str. Lat Dec
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg
Materials used and the information reported above are true to my best knowledge and belief	Tax Parcel No
X Driller Trainee Name (Print) 6000 hree	
Driller/Trainee License No.	Cased or Uncased Diameter Static Level >
	Work/Decommission Start Data
If trainee, licesned drillers'	Beneficial Date 8 Clor CC
Signature and License No.	Work/Decommision Completed Date 8-26-22
Construction/Design W	/ell Data
	Formation Description
CONCRETE SUD	
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	concrete
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DEPTH OF BORING _	<u> </u>

# RESOURCE PROTECTION WELL REPORT (SUBMIT ONE WELL REPORT PER WELL INSTALLED)

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(SUBMIT ONE WELL REPORT PER WELL INSTALLED)	LEPORT CI	URRENT	AGDU
Construction/Decommission	No	tice of Intent No.	<u>HE 14451</u>
Construction		Type of Well	
Decommission ORIGINAL INSTALLATION Notice		Resource Pro	tection
of Intent Number QEIDIG	Dron auto O	Geotechnical	Soil Boring
	Site Address / 90	Kickland	1
Consulting Firm <u>Aspect</u> MW-15	City ( margared	<u>s 1767 5</u>	+ 50
Unique Ecology Well ID		0	unty Sad
Tag No. BMF 730	Location 1/4 <u>ME</u>	1/4 MW Sec 20	Twn 27 NR Ly or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	- Lat/Long (at n turb		WWM
construction of this well, and its compliance with all Washington well construction standards	still Required) Long D		Lat Min/Sec
Materials used and the information reported above are true to my best knowledge and belief	Tax Darrel M	g	Long Min/Sec
X Driller Trainee Name (Print) 6:00 Sieven			
Driller/Trainee License No	Cased or Uncased Diamete		Static Louis
<u> </u>	Wellow	0-7	
If trainee, licesned drillers'	work/Decommision Start ]	Date 82	6-22
Signature and License No.	Work/Decommision Comp	leted Date 8-2	6-27
Construction/Design			
V		Forma	tion Description
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CONCRETE SUR	FACE SEAL		FT
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DEPTH OF BODDIC	70		
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RESOURCE PROTECTION WELL RI	EPORT CURRENT
Construction/Decommission	Notice of Intent No. <u>HE74951</u>
Construction	Type of Well
Decommission ORIGINAL INSTALLATION AND	Resource Protection
of Intent Number 9 E1274(	Brans to O
	Site Address & Strict land
Consulting Firm <u>Aspect</u>	City Ly and County of
Unique Ecology Well ID	County Sav
Tag No. BMF 674 MW-18	Location 1/4 NE 1/4 MW Sec 20 Twn 272 R 4 or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	WWN
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Dec
Materials used and the information reported above are true to my best knowledge and belief	Tay Decel M
X Driller Trainee Name (Print) 6000 hree	Tax Parcel No.
Driller/Trainee Ligange Ma	Cased or Uncased Diameter 7 Static Level
Stitle License No S 3 1 8	
If trainee, licesned drillers'	Work/Decommision Start Date 8-26-22
Signature and License No.	Work/Decommision Completed Data 8-7 /
Construction/Design	
We	ell Data Formation Description
CONCRETE SURI	FACE SEAL <u>0</u> FT <u>Concrete</u> <u>18</u> FT <u>0</u> FT <u>Chips</u> <u>0</u> FT
DEPTH OF BORING	20_FT

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RESOURCE PROTECTION WELL RI (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	EPORT CURRENT
Construction/Decommission	Notice of Intent No. $\mu = 14451$
Construction	Type of Well
Decommission ORIGINAL INSTALLATION Method	Resource Protection
of Intent Number DE 1972.6	Geotechnical Soil Boring
<u> </u>	Site Address Long 1914 cf (1)
Consulting Firm <u>Hspect</u> MW-20	City Lyandroid County Con
Unique Ecology Well ID Tag No. <u> 「アルド 485</u>	Location $1/4 \underline{NE} 1/4 \underline{NW} \operatorname{Sec} 2 \underline{\sigma} \operatorname{Twn} 27 \underline{n} R \underline{4} \operatorname{or}$
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (s,t,r Lat Deg Lat Min/Sec
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg Long Min/Sec
X Driller Trainee Name (Print)	Tax Parcel No.
Driller/Trainee Signature	
Driller/Trainee License No. 3378	Cased or Oncased Diameter Static Level
If trained teillows	Work/Decommission Start Date 8-26-22
Signature and License No.	Work/Decommision Completed Date 8-26-22
Construction/Design W	ell Data Formation Description
CONCRETE SUR	FACE SEAL <u>0</u> - FT
DAUNFILL	FTFT
	<u>Chips</u>
	<u> </u>
DEPTH OF BORING	ZO FT

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RESOURCE PROTECTION WELL R (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	EPORT CURRENT Notice of Intent No. AF74951
Construction/Decommission	The of Well
Construction	
Decommission ORIGINAL INSTALLATION Notice	Geotechnical Soil Boring
of Intent Number <u>RE19776</u>	Property Owner Strict land
Consulting Firm Argent August	Site Address 6808 196 45 54 5W
Consulting Film <u>143 JECI</u> MW al	City Lyanaroud County Saw
Unique Ecology Well ID Tag No. <u> </u>	Location $1/4 \underline{NE} 1/4 \underline{NW} \sec \frac{2\omega}{1} \operatorname{Twn} \frac{27\omega}{27\omega} \operatorname{R} \frac{4}{2} \operatorname{or} WW$
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (s,t,r Lat Deg Lat Min/Sec
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg Long Min/Sec
X Driller Trainee Name (Print)	Tax Parcel No.
Driller/Trainee Signature	Cased or Uncased Diameter <b>7</b> Static Level <b>7</b>
Driller/Trainee License No. 3378	
If trainee, licesned drillers'	Work/Decommission Start Date 8-26-26
Signature and License No.	Work/Decommission Completed Date 8-26-22
Construction/Design	
land story and s	Well Data Formation Description
CONCRETE SUD	RFACESEAL 0 - FT
BACKFILL	<u> </u>
	<u>Chips</u>
	0 - FT
	20
DEPTH OF BORING	FT FT

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RESOURCE PROTECTION WELL R (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	EPORT CURRENT
Construction/Decommission	Notice of Intent No. <u>AE 74951</u>
Construction	Type of Well
Decommission ORIGINAL INSTALLATION MOVING	Resource Protection
of Intent Number RE 19726	Property Owners
Congulting Einer	Site Address b 808 19645 St SUL
Consulting Film <u>143 PECT</u> MG-27	City Lyandword County Car
Unique Ecology Well ID Tag No. <u>BNF481</u>	Location $1/4 \frac{NE}{NE} \frac{1}{4 \frac{NW}{Sec} 2 \sigma} \frac{2}{Twn} \frac{27 \sigma}{27 \kappa} \frac{2}{R} \frac{4}{\sigma} \sigma}{r}$
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (s.t.r. Lat Deg
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg
Materials used and the information reported above are true to my best knowledge and belief	Tax Parcel No.
Driller/Trainee Signature	
Driller/Trainee License No. 3378	Cased or Uncased Diameter Z Static Level
If trainee licegned drillord	Work/Decommission Start Date 8-26-27
Signature and License No.	
	Work/Decommision Completed Date 8-26-22
With Construction/Design With With With With With With With With	ell Data Formation Description
CONCRETE SUR	FACE SEAL 0 - ET
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	concrete
ВАСКЕП І.	18
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	the a
	<u> </u>
	0 ~ FT
DEPTH OF BORING	20
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RESOURCE PROTECTION WELL RI	EPORT CURRENT
Construction/Decommission	Notice of Intent No. AE74951
Construction	Type of Well
of Intent Number <u>RE19726</u>	Resource Protection Geotechnical Soil Boring
Consulting Firm Aspect	Site Address 6808 196th St SW City Lyandward County a
Unique Ecology Well ID Tag No. <u>BNF 482</u> MW.d J	Location 1/4 NE 1/4 NU/Sec 20 Twn 27N R 4 or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards Materials used and the information reported above are true to my best knowledge and belief	Lat/Long (s,t,r Lat Deg       Lat Min/Sec         still Required)       Long Deg         Tax Parcel No
Driller/Trainee Signature	Cased or Uncased Diameter
Driller/Trainee License No. 3378	Static Level
If traince, licesned drillers'	Work/Decommision Start Date 8-26-27
Signature and License No.	Work/Decommision Completed Date 8-26-22
Construction/Design We CONCRETE SURF CONCRETE SURF BACKFILL	FACE SEAL 0 - FT Z FT Concrecte 18 FT 0 - FT Chips
DEPTH OF BORING	<u> </u>

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RESOURCE PROTECTION WELL R	EPORT CURRENT
Construction/Decommission	Notice of Intent No. AE74951
	Type of Well
	Resource Protection
of Intent Number 20 E 10000	Geotechnical Soil Boring
of Inten Trumber RE19126	Property Owner Strictland
Consulting Firm Aspect Mid)-24	Site Address 6808 19644 54 5W
	City Cy 4 nd loud County Sau
Tag No. <u>ISNE 487</u>	Location 1/4 NE 1/4 NW Sec 20 Twn 27N R 4 or
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	- WWW
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg
Materials used and the information reported above are true to my best knowledge and belief	Tax Parcel No
Driller/Trainee Signature	
Driller/Trainee License No.	Cased or Uncased Diameter Static Level >
	Work/Decommission Start Data 6-7/ 37
If trainee, licesned drillers'	
Signature and License No.	Work/Decommision Completed Date 8-26-27
Construction/Design W	ell Data
	Formation Description
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DEPTH OF BORING	20 FT
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RESOURCE PROTECTION WELL R (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	EPORT CURRENT
Construction/Decommission	Notice of Intent No. <u>HE 14451</u>
	Type of Well
Decommission ORIGINAL INSTALLATION Notice	Resource Protection
of Intent Number, RE 19726	Property Owner de la Geotechnical Soil Boring
	Site Address La Strict Land
Consulting Firm Mrspect Mw-25	City Lyand with County of
Unique Ecology Well ID Tag No. RUF UCU	Location 1/4 NE 1/4 NW Sec 20 Two 224/ P 4
WELL CONSTRUCTION CERTIFICATION L CONSTRUCTION CERTIFICATION	
construction of this well, and its compliance with all Washington well construction standards	Lat/Long (s,t,r Lat Deg Lat Min/Sec
Materials used and the information reported above are true to my best knowledge and helief	Sin Required) Long Deg Long Min/Sec
X Driller Trainee Name (Print) 6rddy how	Tax Parcel No.
Driller/Trainee Signature	Cased or Uncased Diameter
Driller/Trainee License No. 3378	Static Level
If trainee, licesned drillers'	Work/Decommision Start Date 8-26-22
Signature and License No.	Work/Decommision Complete to a Ser 2 / 2 2
Construction/Design	and a second mission completed Date 0 26-2 C
W	Yell Data Formation Description
CONCRETE SUR	FACE SEAL 0 - FT
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#### **APPENDIX C**

**Construction Plan Set** 



## **TEXACO STRICKLAND SITE INTERIM ACTION** 6808 196TH STREET SW CITY OF LYNNWOOD, SNOHOMISH COUNTY, WASHINGTON



STRUCTURAL ENGINEER: GENERAL CONTRACTOR: SHEET NO. DE **GROUND SUPPORT** TBD CHRIS WOLSCHLAG, PE, SE, PhD G-01 (425) 488 - 1143 CC G-02 SI C-01 GE C-02 C-03 C-04 11 C-05 EX C-06 EX C-07 C-08 SH1.0 SH1.1 SH2.0 SH3.0 SH3.1

6808 196th Street SW, LYNNWOOD, WASHINGTON STRICKLAND REAL ESTATE HOLDINGS LLC 581 EATING PLACES (RESTAURANTS)

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SH3.2

SH4.0

SH5.0

SH5.1

SH5.2

DESCRIPTION	SHEET INDEX
COVER SHEET	1 OF 20
SITE SURVEY	2 OF 20
GENERAL NOTES AND ABBREVIATIONS	3 OF 20
SITE AND TESC PLAN	4 OF 20
TESC DETAILS	5 OF 20
UTILITY DEACTIVATION AND BUILDING DEMOLITION	6 OF 20
EXCAVATION PLAN	7 OF 20
EXCAVATION PROFILE AND DETAILS	8 OF 20
TRAFFIC CONTROL PLAN	9 OF 20
BACKFILL AND SITE RESTORATION	10 OF 20
TEMPORARY SHORING WALL COVER SHEET AND NOTES	11 OF 20
TEMPORARY SHORING WALL COVER SHEET AND NOTES	12 OF 20
TEMPORARY SHORING WALL SHORING PLAN	13 OF 20
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TEMPORARY SHORING WALL WEST ELEVATION	15 OF 20
TEMPORARY SHORING WALL NORTH ELEVATION	16 OF 20
TEMPORARY SHORING WALL CROSS-SECTIONS	17 OF 20
TEMPORARY SHORING WALL DETAILS	18 OF 20
TEMPORARY SHORING WALL DETAILS	19 OF 20
TEMPORARY SHORING WALL DETAILS	20 OF 20

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В								REVISED BY:	BMG
								DRAWN BY:	CMV
								DESIGNED BY:	BMG
			+ (	5	Ю N U			<b>PROJECT NUMBER:</b>	180357
С					ONSULT			REVISION:	1
								DATE:	Jun-06-2022
D		COVER SHEET					DOUD TADIN SIREEL SW		
		CIT	RE N G	SHI IUM		CE R:	4		



#### <u>NOTES</u>

- 1. HELD BASIS OF BEARING PER NORTHING, EASTING AND ELEVATION FROM PREVIOUS SURVEY WORK ON MONITORING WELLS FROM PLS.
- 2. DATE OF SURVEY: JANUARY 18, AUGUST 27 AND SEPTEMBER 1, 2021.
- 3. EQUIPMENT USED: LEICA TS 16.
- 4. UTILITIES SHOWN HEREON WERE FROM PHYSICAL STRUCTURES, OR FROM SURFACE PAINT MARKINGS BY A LOCATOR SERVICE.

#### <u>LEGEND</u>

	BOUNDARY L
	RIGHT-OF-W
	CENTERLINE
P P	UNDERGROUN
TT	UNDERGROUN
w w	WATER LINE
SS SS	SANITARY SE
G G	GAS LINE
<u>0</u>	WOOD FENCE

BOUNDARY LINE RIGHT-OF-WAY LINE CENTERLINE INDERGROUND POWER INDERGROUND TELEPHONE WATER LINE SANITARY SEWER

FH Q FIRE HYDRANT C ELECTRIC METER GMO *GAS METER* ICI GAS VALVE  $\bigotimes$  LUMINAIRE MBOX MAILBOX MW 🛆 MONITORING WELL -O- WOOD POLE TELEPHONE BOX

WM I WATER METER

⋈ WATER VALVE

( ) DECIDUOUS TREE W/DRIPLINE

CONIFEROUS TREE W/DRIPLINE

MONITORING WELLS									
NAME	NORTHING	PVC ELEVATION							
CMW-1	302947.21	1273806.18	446.785	446.250					
CMW-2	302931.74	1273729.84	447.830	447.390					
CMW-3	302873.95	1273772.39	477.465	477.064					
CMW-4	302906.47	1273862.02	446.985	446.426					
MW-22	303030.62	1273860.79	451.541	451.231					

SURVEY NOTES THE EXISTING SITE CONDITIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY NO CERTIFICATIONS ARE EXPRESSED OR IMPLIED.

### 6808 196th Street SW, Lynnwood, WA **Topographic Survey And Monitoring Wells**

For Aspect Consulting



Sheet

**G-02** 



2: Aloha Cafe / 180357 - Texaco Strickland Site RI (2021-Excavation Design / 180357-Plan Set. dwg C-01 || Date Saved: Jun 06, 2022 5:27 pm || User: bgre

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#### ENVIRONMENTAL NOTES

- 1. THE WORK DESCRIBED HEREIN (THE WORK) IS BEING CONDUCTED AS AN INTERIM ACTION IN ACCORDANCE WITH MODEL TOXICS CONTROL ACT (MTCA) CLEANUP REGULATION (WAC 173-340).
- 2. THE CONTRACTOR SHALL IMPLEMENT THE WORK ACCORDING TO THIS PLAN SET AND THE PROJECT CONSTRUCTION SPECIFICATIONS.

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- 3. THE WORK INCLUDES EXCAVATION AND OFF-SITE DISPOSAL OF SOIL CONTAINING PETROLEUM HYDROCARBONS WHICH EXHIBITS ELEVATED CONCENTRATIONS OF GASOLINE-, DIESEL, AND OIL- RANGE PETROLEUM HYDROCARBONS AND RELATED VOLATILE ORGANIC COMPOUNDS . THE WORK ALSO INCLUDES WATER MANAGEMENT AND BACKFILLING OF THE EXCAVATION.
- 4. THE ESTIMATED AERIAL EXTENT OF CONTAMINATED SOIL REMOVAL COVERS APPROXIMATELY 9,565 SQUARE FEET AND EXTENDS TO A MAXIMUM DEPTH OF APPROXIMATELY 25 FEET BELOW GROUND SURFACE (BGS). THE FINAL DEPTH AND EXTENT OF EXCAVATION WILL BE BASED ON FIELD SCREENING AND CONFIRMATION SOIL SAMPLING PERFORMED BY THE ENGINEER (ASPECT CONSULTING,LLC).
- 5. THE WORK PRESENTED IN THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR CONTAMINATED CONSTRUCTION SITES.
- 6. CONTRACTOR IS RESPONSIBLE FOR EXCAVATION SAFETY AND SHALL FOLLOW ALL APPLICABLE OSHA AND WISHA TRENCHING AND EXCAVATION REGULATIONS.

#### MINIMUM HANDLING AND DISPOSAL REQUIREMENTS FOR CONTAMINATED MATERIALS

- 1. ALL CONTRACTOR REQUIREMENTS FOR SCREENING, HANDLING, AND DISPOSAL OF CONTAMINATED SOIL AND WATER ARE PRESENTED IN THE PROJECT CONSTRUCTION SPECIFICATIONS. THE CONTRACTOR REQUIREMENTS ARE BASED ON THE ECOLOGY-APPROVED FINAL INTERIM ACTION WORK PLAN.
- 2. EXCAVATED SOIL WILL BE SEGREGATED AND HANDLED AS 1) POTENTIAL CLEAN SOIL, 2) POTENTIAL IMPACTED, OR 3) PETROLEUM CONTAMINATED SOIL (PCS). SEGREGATION WILL BE DIRECTED BY THE ENGINEER VIA FIELD SCREENING. POTENTIAL CLEAN AND POTENTIAL IMPACTED SOIL WILL BE VERIFIED WITH ANALYTICAL TESTING. CONTAMINATED SOIL DETERMINED BY FIELD SCREENING DOES NOT REQUIRE VERIFICATION WITH ANALYTICAL TESTING. OVERSIZED MATERIAL WILL BE SEGREGATED FROM EXCAVATED SOILS AND HANDLED AS CONTAMINATED DEBRIS.
- 3. IF TEMPORARY STOCKPILING IS NECESSARY, STOCKPILES LOCATIONS WILL BE APPROVED BY THE ENGINEER. EACH STOCKPILE WILL BE UNDERLAIN AND COVERED BY PLASTIC SHEETING.
- 4. ALL CONTAMINATED SOIL AND CONTAMINATED DEBRIS WILL BE LOADED AND TRANSPORTED OFF-SITE TO A PERMITTED SUBTITLE D DISPOSAL FACILITY. TRUCKS HAULING CONTAMINATED SOIL OR DEBRIS MUST BE COVERED DURING TRANSPORT.
- 5. ALL CONSTRUCTION-GENERATED WASTEWATER WILL BE HANDLED AS CONTAMINATED, AND STORED ONSITE IN A TANK UNTIL DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
- AIR MONITORING WILL OCCUR DURING EXCAVATION FOR WORKER INHALATION SAFETY AND LOWER EXPLOSIVE LIMIT (LEL).

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#### CONSTRUCTION NOTES AND PROPOSED SEQUENCE

- 1. LOCATE ALL EXISTING UTILITIES VIA POTHOLING.
- 2. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
- 3. UTILITY CAPPING AND DISCONNECTION AS NEEDED.
- 4. BUILDING DEMOLITION AND SURFACE DEBRIS REMOVAL TO THE DEMOLITION LIMITS.
- 5. UST DECOMMISSIONING AND REMOVAL.
- 6. SHORING PILE DRILLING AND INSTALLATION.
- 7. MARK LIMITS OF CONTAMINATED SOIL TO BE EXCAVATED.
- 8. EXCAVATE CONTAMINATED SOIL AND LOAD INTO TRUCKS FOR OFF-SITE DISPOSAL. IF NEEDED, SOIL CAN BE STOCKPILED.
- 7. REMOVE WATER FROM EXCAVATION AS NEEDED TO MAINTAIN DRY CONDITIONS TO THE EXTENT PRACTICAL VIA SUMP PUMP AND TANK STORAGE. CAPACITY TO STORE UP TO 10,000-GALLONS IS REQUIRED. ALL GENERATED WATER WILL BE HANDLED AS CONTAMINATED AND DISPOSED OF ACCORDING TO ALL STATE AND LOCAL REGULATIONS.
- 8. ADVANCE SOIL EXCAVATION TO THE TOWARDS THE MAXIMUM LIMITS OF EXCAVATION SHOWN ON THE PLANS. FINAL EXCAVATION LIMITS WILL BE DIRECTED BY THE ENGINEER.
- 9. THE ENGINEER IS RESPONSIBLE FOR CONDUCTING PERFORMANCE MONITORING AS REQUIRED BY THE ECOLOGY-APPROVED FINAL INTERIM ACTION WORK PLAN. WHEN FIELD SCREENING INDICATES THAT CONTAMINATED SOIL HAS BEEN REMOVED, THE ENGINEER WILL COLLECT SOIL SAMPLES FROM THE EXCAVATION SIDEWALL AND BOTTOM FOR LABORATORY ANALYSIS TO EVALUATE COMPLIANCE WITH REMEDIATION LEVELS. IF SAMPLE RESULTS EXCEED REMEDIATION LEVELS, AND IF FEASIBLE, OVER-EXCAVATION WILL BE DIRECTED BY THE ENGINEER AND ADDITIONAL SOIL SAMPLING CONDUCTED.

#### WATER MANAGEMENT NOTES

- 1. CONTRACTOR SHALL MAINTAIN DRY CONDITIONS TO THE EXTENT PRACTICAL DURING EXCAVATION.
- 2. REMOVE WATER FROM THE EXCAVATION AS NEEDED TO MAINTAIN UNSATURATED CONDITIONS TO FACILITATE SOIL EXCAVATION, HANDLING, LOADING FOR TRANSPORT, PERFORMANCE SAMPLING BY THE ENGINEER, AND EXCAVATION BACKFILLING.
- 3. ALL GENERATED WASTEWATER WILL BE HANDLED AND DISPOSED OF AS PETROLEUM CONTAMINATED.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL MANAGING WATER IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS. SHOULD A DISCHARGE PERMIT BECOME NECESSARY IT WILL BE ACQUIRED AND ADHERED TO BY THE CONTRACTOR.

#### NORTH WALL

WEST WALL

APPROXIMATE EXTENT OF INTERIM ACTION REMEDIAL EXCAVATION. EXTENDS TO A MAXIMUM DEPTH OF 30 FEET BGS. FINAL DEPTH AND EXTENT OF EXCAVATION WILL BE BASED ON FIELD SCREENING AND PERFORMANCE SAMPLING TO BE COMPLETED BY THE ENGINEER. SOIL SHOULD BE ASSUMED TO BE CONTAMINATED UNTIL FIELD SCREENING OCCURS. WATER MANAGEMENT WILL BE REQUIRED.



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SOUTH CANTILEVER WALL

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	WATTLE				ES	SIONA	L EN	GIL	•	
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*	POTHOLE EXISTING UTILITY TO VERIFY DEPTH, LOCATION, AND CONFIGURATION. CONTACT ENGINEER IMMEDIATELY IF DISCREPANCIES ARE FOUND		'	'	-	-	06/06/:	03/29/:	01/18/:	DAT
	PROPERTY BOUNDARY									
SS SS	EXISTING SANITARY SEWER									
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	EXISTING TELEPHONE (UNDERGROUND)						TY COMM	NTON SET	N MEETIN	
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	LIMITS OF DEMOLITION				,		0	4	0	REV.
	MONITORING WELL OR GAS PROBE - TO BE								÷	ИG
	DECOMMISSIONED MONITORING WELL - TO BE PROTECTED	В							REVISED B	BN
	BUILDING DEMOLITION									>
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. /. /.	DEMOLISH EXISTING UTILITY								Q	
	CAP UTILITY								ED BY:	BMG
	TOP OF EXCAVATION								DESIGN	
	SLOPE AT 1.5:1 TO ELEVATION 443								MBER:	357
	SLOPE AT MAX 1:1; ELEVATION 443 TO BOTTOM				ł	)	ტ 7		ROJECT NUI	1803
	SOLDIER PILE AND LAGGING OR CANTILEVER SHORING WALL				a	)			٩	
[]	TRENCH BOX IF NEEDED TO ATTAIN MAX DEPTH				Č	2	V_SU		SION:	1
$\bullet$	MONITORING WELL - TO BE PROTECTED	С				2			REVI	
$\mathbf{\Theta}$	CONTROL POINT (SEE C-06 FOR TABLE)					~	Ď			06-2022
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	EXISTING GROUND SURFACE			OTES						
	POTENTIALLY CLEAN SOIL			RAL N						י א טר, א
	PETROLEUM-CONTAMINATED SOIL (PCS) OR PETROLEUM-IMPACTED SOIL (PIS) TO BE EXCAVATED AND BACKFILLED TO FINAL GRADE			GENE						
	EXCAVATION BOTTOM (MAXIMUM EXTENTS)	D					F	_ 0	-	Ĺ
	SOLDIER PILE AND LAGGING SHORING WALL									
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ss	ss	s ss	EXISTING SANITARY SEWER (APPROXIMATE)							
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TION FACILITIES, UTILITIES,	ETC.). ESC PLA	NS AND THE (	CONSTRUCTION MAINTENANCE, REPLACEMENT, AND UPGRADING							
SE ESC FACILITIES IS THE F VED, AND THE POTENTIAL F	RESPONS	SIBILITY OF TH	IE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS HAS PASSED.							DRAWN BY:
UNDARIES OF THE CLEARI ARLY FLAGGED IN THE FIEL		IS SHOWN ON R TO CONSTRU	THIS PLAN (INCLUDING INDIVIDUAL TREES TO BE SAVED) SHALL ICTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE							
D THE FLAGGED CLEARING ANT/CONTRACTOR FOR TH C FACILITIES SHOWN ON T NCE AND IN SUCH A MANN	E DURAT HIS PLAN ER AS T(	SHALL BE PER FION OF CONS N MUST BE CO D INSURE THA	INITIED. THE FLAGGING SHALL BE MAINTAINED BY THE TRUCTION. INSTRUCTED AS OUTLINED ON THE TYPICAL CONSTRUCTION T SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE	_						DESIGNED BY:
I OR VIOLATE APPLICABLE C FACILITIES SHOWN ON T THE CONSTRUCTION PER	WATER S HIS PLAN IOD, THE	STANDARDS. N ARE THE MIN ESE ESC FACIL ES ETC ) AS NE	NIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. ITIES SHALL BE UPGRADED (E.G. ADDITIONAL SUMPS, FEDED FOR UNEXPECTED STORM EVENTS							- NUMBER:
RUCTION ACCESS TO THE S		LL BE ONLY AS	S SHOWN ON THE APPROVED PLANS. ALL VEHICLES LEAVING THE				ΰ	U Z		PROJECT
NTRACTOR SHALL CLEAN	ACCESS S	STREETS AND	RIGHT-OF-WAY USING ONLY VACUUM SWEEPERS AT LEAST DAILY				Q	JLT		
OR REMOVE AND REPLACE BLE STORAGE. ALL CATCH	INLET P BASINS / DIMENT	PROTECTION D AND CONVEYA LADEN WATE	EVICES WHEN SEDIMENT HAS FILLED ONE THIRD OF THE NCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING R INTO THE DOWNSTREAM SYSTEM.	С			<b>S</b> D	O N SI		REVISION:
PILES ARE TO BE LOCATED SEEDING OR MULCHING.	IN SAFE HYDROS	AREAS AND A EEDING IS PR	DEQUATELY PROTECTED BY TEMPORARY SECURED PLASTIC EFERRED.							
STRAW MULCH FOR TEMF	ORARY I	EROSION CON	TROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM							ATE:
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ATION SHALL BE ESTABLISH ZE EROSION. AREAS TO BE BE SEEDED WITH ANNUAL ENT BASIN EMBANKMENT.	ied on / Rough ., Peren Hydros	AREAS DISTUF GRADED WITF NIAL OR HYBF SEEDING IS PR	REED OR ON AREAS OF CONSTRUCTION AS NECESSARY TO I FINISHED GRADING TO FOLLOW NEAR PROJECT COMPLETION RID RYE GRASS. THIS ALSO INCLUDES PERIMETER DIKES AND THE REFERRED.						u -	Z
IATELY FOLLOWING FINISH		IG, PERMANEN	NT STABILIZATION WILL BE APPLIED AS APPROVED PER THE			7		Ĭ	l M C M	IGTOI
DNAL BMPS MAY BE REQUI	RED AT /	ANY TIME DUR	RING CONSTRUCTION.			<b>PLAI</b>			LANI TRFF	
				D		SITE AND TESO			IEXACU STRICK 6808-196TH S	LYNNWOOD. WA
		0					SH REFE NUI	ieet ren MBEI	CE R:	

SCALE: 1" = 10

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SHEET 4 OF 14



100LF OF ENTRANCE SHALL BE REDUCED TO THE MAXIMUM PRACTICABLE FIGURATION OF THE SITE DOES NOT ALLOW THE FULL LENGTH (100LF).
SITE ACCESS ROAD 20' WIDE MIN. MATERIAL MUST BE EQUAL TO I NOTE 1.
IALL BE PLACED UNDER THE SPALLS TO PREVENT FINE SEDIMENT FROM AD. THE GEOTEXTILE SHALL MEET THE FOLLOWING STANDARDS: "M D4751) 200 PSI MIN. STM D4632) 30% MAX. TM D3786-80A) 400 PSI MIN. 20-45 (U.S. STANDARD SIEVE SIZE)
STRUCTION ENTRANCE DETAIL 3 NTS C-03







4D Path: Q: Aloha Cafe/180357 - Texaco Strickland Site RI\2021-Excavation Design\180357-Plan Set.dwg. CO4 || Date Saved: Jun 08, 2022 5:19pm || User. bg

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ICE .				MONITORING WELL - TO	BE PROTECTED					06/	06/2	2022
ET & SIGN CTED, AND	)								,			- APPR.
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			X	TREE TO BE REMOVED						06/06	03/26	01/18 D,
		[	7.7.	DEMOLISH EXISTING UTI	ILITY							
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(-))	8-	× × × × ×	-X	CONSTRUCTION FENCE		В						VISED BY BN
$\sim$	X			~~~~~~								RE
	1.	REFER TO GENER	AL PLAN N	OTES (C-01) FOR ADDITION	NAL REOUIREMENTS.							<u>۲</u>
	2.	CONTRACTOR SH	ALL WALK	THE SITE WITH THE OWNE	R, OWNER'S REPRESENTATIVE, OR							awn by: <b>CN</b>
DANCE		ENGINEER PRIOR	TO CONST RES, UTILITI	RUCTION TO VERIFY THE A ES, AND STRUCTURES TO	APPROXIMATE LIMIT OF WORK AND REMAIN.							DR
$\leq$	3.	PRIOR TO DEMOL WITHIN THE LIMI	ITION ACTIN	/ITIES, VERIFY THE DEPTH K.	OF EXISTING UTILITIES TO REMAIN							зү: <b>1</b> G
$\sim$	4.			PROVEMENT WITHIN THE	LIMITS OF SURFACE DEMOLITION							ESIGNED I
NE & 13	5.	PROTECT ALL UN	DERGROUN	D UTILITIES AND UTILITY S	STRUCTURES WITHIN THE PUBLIC							DF
$\sim$	C	RIGHT-OF-WAY UN	NLESS NOT	ED OTHERWISE.				_				JUMBER: 0357
	6.	ACCORDANCE WI	TH WAC 17	3-360.	MIMISSIONED AND REMOVED IN		I	Ċ	) )	С 7		ROJECT N 18(
	7.	UNDERGROUND	PIPING AND OM THE GR	STRUCTURES TO BE DEN OUND AND CAPPED AT TH	IOLISHED SHALL BE REMOVED IE PROPERTY LINE, UNLESS NOTED			ă				<u>ط</u>
$\sum_{i=1}^{n}$	8.	DEMOLITION PLA	N SHOWS T	REE REMOVAL DEMOLITIC	ON SCOPE. VEGETATION DEBRIS WILL BE			č		l⊃ S		н Ч
	-	REMOVED FROM	THE PROPE	RTY.		С				Ž		REVISION
}	9.	ANY FEATURES TO ACTIVITIES SHALL	0 REMAIN 1 L BE FULLY	HAT ARE DAMAGED DURI	NG DEMOLITION OR CONSTRUCTION ACTOR'S EXPENSE AS DIRECTED BY THE			ď				22
	10.	PROVIDE CONSTR	RUCTION FE	NCING, SIGNAGE, AND BA	RRIERS REQUIRED TO PREVENT							08-202
		UNAUTHORIZED A	ACCESS TO ELD ADJUST	DEMOLITION AREAS. COO FENCE AS REQUIRED FOF	RDINATE WITH WITH THE OWNER OR R SPECIFIC SITE CONDITIONS.							<sub>DATE:</sub> Jun-(
NTIRETY	11.	IMMEDIATELY RE DEMOLITION.	MOVE ALL I	DEMOLITION DEBRIS FALL	ING OUTSIDE THE LIMITS OF SURFACE							
E	12.	DISPOSE OF EXC	ESS DEMOL	ITION MATERIAL OFF-SITE	IN A SAFE AND LEGAL MANNER.							
	13.	EXISTING GAS UT CONTRACTOR TO	ILITY TO BE COORDINA	CUT AND CAPPED BY PSE TE WITH PSE FOR DEMOL	E AT CONTRACTOR'S EXPENSE. ITION OF EXISTING GAS							
	11		E.					Z		SITF	$\mathbb{N}$	TON
	14.	BUILDING WORK BUILDING CODE.	(INCLUDIN	G DEMOLITION) WILL CON	FORM TO THE 2018 INTERNATIONAL		NOL			D D N		ING_
	15.	LIMITS OF BUILDI		ITION ASSUME A 1:1 CUT	SLOPE TO THE BASE OF EXISTING		TAVI	EMO		KI AI	STRI	/ASH
	16.	ANY WATER METI	ER TO BE R	ETIRED WILL BE PULLED E	BY CITY PERSONNEL. A FINAL READING		EACT	D DN		TRIC	 бТН	D, V
		WILL BE TAKEN V	VHEN PULL	ING THE METER AND THE	SETTER WILL BE LOCKED OFF.		ΔY			S C C	8 19 (	NOO
	(17.	FOR ANY WATER COUNTY FIRE MU	MAIN SHUT IST BE NOTI DAFTER RE	DOWN, FOLLOW CITY WAT FIED A MINIMUM OF 48 H STORATION, CONTRACTOR	ER MAIN SHUTDOWN SOP. SNOHOMISH			BUI		FXAC	808	NNV
	$\langle \$		AIRED FIRE	SYSTEMS.		D		AND		F	. 0	
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		Control P	oint Table	
Point #	Point ID	Northing	Easting	Existing Elevation
1	CP-01	302982.3400	1273810.8747	448.295
2	CP-02	303039.3397	1273809.6746	421.000
3	CP-03	303107.0439	1273850.0748	451.000
4	CP-04	303106.3811	1273808.1425	444.446
5	CP-05	303100.8019	1273913.7821	450.748
6	CP-06	302979.3236	1273893.4907	449.000



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#### LEGEND

---- EXISTING GROUND SURFACE

POTENTIALLY CLEAN SOIL TO BE EXCAVATED AND BACKFILLED TO FINAL GRADE

PETROLEUM-CONTAMINATED SOIL (PCS) OR PETROLEUM-IMPACTED SOIL (PIS) TO BE EXCAVATED AND BACKFILLED TO FINAL GRADE

6

EXCAVATION BOTTOM (MAXIMUM EXTENTS)

SOLDIER PILE AND LAGGING SHORING WALL

1. REFER TO GENERAL PLAN NOTES (C-01) FOR FURTHER REQUIREMENTS.

2. GRADING SHALL NOT RESULT IN ANY ADDITIONAL WATER TO ADJOINING PROPERTY. IF ADDITIONAL WATER DOES RESULT, THE APPLICANT WILL SUBMIT A PLAN OF CORRECTIVE ACTION FOR CITY APPROVAL AND WILL COMMENCE WITH THAT ACTION

3. CONTRACTOR TO REFERENCE THE GEOTECHNICAL REPORT BY ASPECT CONSULTING, LLC (ASPECT, NOVEMBER, 2021) FOR SOILS CONDITIONS AND EARTHWORK RECOMMENDATIONS. THE MAXIMUM CUT/FILL SLOPE SHALL NOT EXCEED ONE FOOT HORIZONTAL TO ONE FOOT VERTICAL WITHOUT STRUCTURAL SUPPORTS. CUT SLOPES SHALL NOT BE NEARER TO A PROPERTY LINE THAN 1/5 THE HEIGHT OF THE CUT WITH A MINIMUM OF 1.5 FEET. EXCAVATION AND COMPACTION WILL BE COMPLETED IN ACCORDANCE WITH CITY STANDARDS AND WSDOT STANDARD SPECIFICATIONS.

4. ALL GRADING SHALL BE LIMITED TO THE AREAS IDENTIFIED ON THE GRADING PLAN (C-05) AND SHALL NOT INFRINGE ADJACENT

5. GEOTECHNCIAL SPECIAL INSPECTION BY THE GEOTECHNICAL ENGINEER IS REQUIRED AS DIRECTED BY THE CITY DIRECTOR OF PUBLIC WORKS. INSPECTION REPORTS SHALL BE SUBMITTED TO THE CITY FOR REVIEW, COMMENT AND APPROVAL PRIOR TO

6. GRADING LIMITS ARE SHOWN AS MAXIMUM EXCAVATION LIMITS ON THE GRADING PLAN (C-05) HOWEVER, INTERMITTENT PERFORMANCE MONITORING WILL BE CONDUCTED BY THE ENGINEER AND THE FINAL EXCAVATION EXTENTS MAY BE SHALLOWER THAN THE MAXIMUM SHOWN AS DETERMINED BY THE ENGINEER. THE CONTRACTOR WILL PROVIDE THE ENGINEER SAFE ACCESS AND TIME ACCOMMODATION TO RETRIEVE THE PERFORMANCE MONITORING SAMPLES.

7. EXCAVATION BOTTOM PERFORMANCE MONITORING WILL BE COMPLETED IN EACH GRID CELL, INITIATED WHEN THE EXCAVATION BOTTOM REACHES ELEVATION 433 AND PROCEED EVERY TWO VERTICAL FEET UNTIL THE FINAL EXCAVATION EXTENTS ARE VERIFIED BY THE ENGINEER. THE CONTRACTOR SHALL ANTICIPATE THAT A WORK DELAY OF UP TO 36-HOURS WILL OCCUR WHILE SAMPLES ARE BEING ANALYZED; WORK MAY PROCEED IN OTHER AREAS OF THE SITE DURING THIS TIME AS DIRECTED BY

8. SIDEWALL PERFORMANCE MONITORING ON THE NORTH, WEST, AND SOUTH PERIMETERS WITH SHORING SUPPORT WILL OCCUR BEHIND THE SHORING WALLS FROM THE SLOPE CUT DURING INSTALLATION AND WILL BE SPACED NO GREATER THAN 20 FEET LATERALLY AND 5 FEET VERTICALLY. SIDEWALL PERFORMANCE MONITORING ON THE EASTERN PERIMETER AND SOUTHERN PERIMETER BELOW THE SOUTH CANTILEVER WALL WILL BE TAKEN FROM THE SIDESLOPES AT THE SAME SPACING INTERVALS.



SHEET 8 OF 14

SCALE: 1" = 10





3

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1

4

			LEGEND
			PROPERTY BOUNDARY
	X		CONSTRUCTION FENCE
	<b>_</b>		TOP OF EXCAVATION
			SOLDIER PILE AND LAGGING SHORING WALL
	-	┝	MONITORING WELL - TO BE PROTECTED
	450		FINAL CONTOURS (5-FT)
	— — -449		FINAL CONTOURS (1-FT)
		×.	CRUSHED SURFACING GRAVEL 9-03.9(3)
· SS	ss	— ss ——	EXISTING SANITARY SEWER
— G —	G	— G ———	EXISTING GAS LINE
— P ——	—— P ———	— P ———	EXISTING POWER (UNDERGROUND)
— т —	— T —	— T ———	EXISTING TELEPHONE (UNDERGROUND)
— w —	W	— w ———	EXISTING WATER (APPROXIMATE)
SD	SC		EXISTING STORM DRAIN LINE

6



5

1. REFER TO GENERAL PLAN NOTES (C-01) FOR ADDITIONAL REQUIREMENTS.

2. CONTRACTOR CAN BEGIN BACKFILLING AFTER ENGINEER APPROVAL TO FINAL GRADE IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS AND THE GEOTECHNICAL REPORT. FINAL GRADE IS ELEVATION 449.

3. ALL FINISHED GRADING ELEVATIONS SHALL MATCH EXISTING ELEVATIONS AT THE PROPERTY BOUNDARY; WHERE CONFLICTS EXIST, THE CONTRACTOR IS SHALL NOTIFY THE ENGINEER TO RESOLVE THE ISSUE PRIOR TO PROCEEDING.

4. EXCAVATION WILL BE BACKFILLED WITHIN 1 FOOT OF FINAL GRADE WITH MATERIAL MEETING THE REQUIREMENTS FOR WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD SPECIFICATION FOR GRAVEL BORROW 9-03.14(1). CONTRACTOR SHALL USE NON-IMPACTED SOILS FOR BACKFILL MATERIAL IN THE EXCAVATION; FILL MATERIAL SHALL BE OBTAINED FROM OFF-SITE BORROW SOURCED IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS.

5. WITHIN 1 FOOT OF FINAL GRADE, THE EXCAVATION WILL BE BACKFILLED WITH MATERIAL MEETING WSDOT STANDARD SPECIFICATION FOR CRUSHED SURFACING 9-03.9(3).

6. THE BACKFILL MATERIAL WILL BE PLACED ON A RELATIVELY FIRM AND UNVIELDING SUBGRADE, FREE FROM SOFT OR DISTURBED MATERIAL, STANDING WATER OR ORGANIC MATERIAL. THE EXPOSED SUBGRADE SOILS WILL BE COMPACTED (IN PLACE) TO A DENSE CONDITION PRIOR TO BACKFILL PLACEMENT. THE SUBGRADE PREPARATION WILL BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF BACKFILL.

7. THE BACKFILL WILL BE COMPACTED TO A FIRM AND UNVIELDING CONDITION TO A MINIMUM DENSITY OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM INTERNATIONAL (ASTM) D1557 (ASTM, 2020). BACKFILL SHOULD BE PLACED IN LIFTS WITH A LOOSE THICKNESS NO GREATER THAN 12 INCHES WHEN USING RELATIVELY LARGE COMPACTION EQUIPMENT, SUCH AS A VIBRATING PLATE ATTACHMENT TO AN EXCAVATOR (HOE PACK) OR A DRUM ROLLER. IF SMALL, HAND-OPERATED COMPACTION EQUIPMENT IS USED TO COMPACT STRUCTURAL FILL, LIFTS SHOULD NOT EXCEED 6 INCHES IN LOOSE THICKNESS.

MOISTURE CONTENT OF THE FILL WILL BE CONTROLLED TO WITHIN 3 PERCENT OF OPTIMUM MOISTURE DURING PLACEMENT AND WILL BE WET OF OPTIMUM MOISTURE BELOW THE STATIC GROUNDWATER TABLE. OPTIMUM MOISTURE CONTENT SHALL CORRESPOND TO THE LABORATORY DETERMINED MAXIMUM MODIFIED PROCTOR

ONLY ONCE BACKFILL AND SURFACING IS COMPLETE AND SIGNED OFF ON BY THE OWNER OR ENGINNER SHALL THE TESC BE REMOVED AND THE CONSTRUCTION FENCING TAKEN DOWN.





SHEET 10 OF 14

6

# ASPECT CONSULTING, LLC

# **TEXACO STRICKLAND SITE** INTERIM ACTION

### 6808 196TH STREET SW CITY OF LYNNWOOD, SNOHOMISH COUNTY, WASHINGTON

# TEMPORARY SHORING WALL PLANS

SH2.0SH3.0-3.2 SH4.0 SH5.0-5.2

HEET TITLE

COVER SHEET AND NOTES SHORING PLANS WALL ELEVATIONS CROSS-SECTIONS DETAILS



VICINITY MAP

#### GENERAL:

DESIGN CALCULATIONS: LEAN-MIX CONCRETE: THE TEMPORARY SHORING WALL DESIGN CALCULATIONS ARE CONTAINED IN THE LETTER THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING DIMENSIONS ANI ALL LEAN-MIX CONCRETE SHALL HAVE A MINIMUM OF 1-1/2 SACKS (141 LBS) OF CEMENT AND REPORT TITLED: "TEMPORARY SHORING WALL DESIGN CALCULATIONS AND PLANS, TEXACO 200 LBS OF FLY ASH PER CUBIC YARD OF CONCRETE. PORTLAND CEMENT SHALL BE TYPE STRICKLAND SITE, 6808 196TH STREET SW, LYNNWOOD, WA", PREPARED BY GROUND THE PLANS AND THOSE UTILITIES OR UNDERGROUND OBSTRUCTIONS NOT SHOWN ON THE , II, OR III CONFORMING TO ASTM CI50 / AASHTO M85. FLY ASH SHALL BE TYPE SUPPORT PLLC FOR ASPECT CONSULTING, LLC, DATED NOVEMBER 15, 2021. CONFORMING TO ASTM C618. LUMP FOR ALL LEAN-MIX CONCRETE SHALL NOT BE LESS THAN 5 INCHES AND NO GREATER THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION PROCESS AND THE SAFETY OF SUBSURFACE DESIGN PARAMETERS: THAN 9 INCHES. ADMIXTURES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C494 / AASHTO MI94, SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S THE SUBSURFACE DESIGN PARAMETERS AND SHORING WALL DESIGN CRITERIA ARE BASED RECOMMENDATIONS, AND SHALL BE APPROVED BY THE ENGINEER. UPON THE FOLLOWING PROJECT GEOTECHNICAL REPORT: "GEOTECHNICAL REPORT, TEXACO STRICKLAND SITE," PREPARED BY ASPECT CONSULTING, LLC, DATED NOVEMBER 2, 2021, AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C33 / AASHTO M6 FOR DRAFT. THE EARTH PRESSURE DIAGRAMS AND SHORING DESIGN CRITERIA ARE SHOWN ON FINE AGGREGATES AND AASHTO M&O, CLASS B FOR COARSE AGGREGATES. THIS SET OF PLANS. STRUCTURAL STEEL: GROUNDWATER: ALL STRUCTURAL STEEL WIDE FLANGE AND OTHER ROLLED SHAPES SHALL CONFORM TO GROUNDWATER WAS ENCOUNTERED DURING THE SOILS INVESTIGATION, AND IS LOCATED ASTM A572 / AASHTO M270, GRADE 50; ALL STRUCTURAL STEEL PLATES SHALL CONFORM FROM 7 TO 15 FEET BELOW GRADE IN THE GLACIAL TILL. THIS WATER IS LIKELY PERCHED, TO ASTM A36 / AASHTO M270, GRADE 36; ALL RECTANGULAR STEEL TUBE WALERS SHALL AND/OR THE TILL OF LOW ENOUGH PERMEABILITY THAT FLOWS ARE NOT EXPECTED TO BE CONFORM TO ASTM A500, GRADE B; AND ALL PIPES SHALL CONFORM TO ASTM A53 MUCH, AND THE PRESSURES EXPECTED TO BE SELF-RELIEVING AS THE EXCAVATION GRADE B, UNLESS SHOWN OTHERWISE ON THE PLANS, OR APPROVED OTHERWISE BY THE WELLS FOR ASPECT CONSULTING", DATED SEPTEMBER 8, 2021, PREPARED BY TRUE PROCEEDS DOWNWARD. THEREFORE, FOR THE PURPOSES OF DESIGN OF THE SHORING ENGINEER. WALLS, THE WATER TABLE HAS BEEN ASSUMED TO OCCUR AT THE BASE OF THE NORTH LAND SURVEYING, INC. EXCAVATION. NEVERTHELESS, IN WETTER SEASONS, LOCALIZED PERCHED ZONES AND/OR REMNANT POCKETS AND STRINGERS OF WATER-BEARING SOILS MAY BE ENCOUNTERED AT STRUCTURAL WELDING: THE WALL FACE. THE WALL FACE EXCAVATION MUST PROCEED CAUTIOUSLY TO AVOID EXCESSIVE GROUND LOSS OR DISTURBANCE IN AREAS OF WATER BEARING SOILS. GAPS IN MINIMUM WELD SIZE 1/4" CONTINUOUS FILLET. MINIMUM WELD LENGTH 2 INCHES. ALL WELDING THE TIMBER LAGGING WILL PROVIDE A FREE-DRAINING FACE CONDITION, AND SUMP PUMPS TO BE PERFORMED BY WABO-CERTIFIED WELDERS PER AWS STANDARD SPECIFICATIONS. AND TRENCHES WILL BE REQUIRED AT THE EXCAVATION BASE TO CONTROL WATER INSIDE USE ETOXX ELECTRODES. THE SITE. TIMBER LAGGING: ALL LAGGING BOARDS SHALL BE PRESSURE-TREATED, IN GOOD CONDITION, AND SHALL BE HEM-FIR NO. 2 OR BETTER, WITH AN ALLOWABLE FLEXURAL STRESS FB=1020 PSI (WHICH INCLUDES ALL APPLICABLE FLAT-USE AND SIZE FACTORS). ALL LAGGING BOARDS SHALL BE PRESSURE-TREATED IN ACCORDANCE WITH AWPA STANDARD CI4 (FOR END USE CLASSIFICATION 4B), TO A MINIMUM RETENTION OF 0.40 PCF, USING THE CCA PROCESS (COMMERCIAL PRODUCT NAME OSMOSE OR APPROVED EQUAL). ALTERNATIVE TREATMENT PROCESSES MAY BE SUBMITTED TO GROUND SUPPORT PLLC FOR APPROVAL. THE CONTRACTOR SHALL EXCAVATE THE WALL FACE AND INSTALL THE LAGGING IN SUCH A MANNER AS TO MAINTAIN A SAFE WORK PLACE AND AVOID EXCESSIVE SLOUGHING AND OVERBREAK. BACKFILL BEHIND LAGGING BOARDS WITH A FREE-DRAINING GRANULAR MATERIAL, OR NATIVE SOILS IF APPROVED BY THE GEOTECHNICAL ENGINEER.

SITE CONDITIONS, DETERMINING ACTUAL LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON PLANS, AND FOR REMOVAL OF ALL ABANDONED UTILITIES, OR OTHER UNDERGROUND THE WORKERS. THIS INCLUDES BUT IS NOT LIMITED TO, THE CONSTRUCTION SEQUENCE, TEMPORARY HANDRAILS, EXCAVATION ACCESS, AND BARRIERS. IT ALSO INCLUDES LIFTING OF MATERIALS AND CONSTRUCTION EQUIPMENT INTO AND OUT OF THE EXCAVATION, TEMPORARY BRACING OF FORMWORK, TEMPORARY SHORING OF EXCAVATIONS, AND REFERENCE DATA: THE EXISTING SITE, TOPOGRAPHICAL, AND UTILITY DATA; THE PROPOSED GRADES AND PROPOSED SHORING WALL LOCATIONS ARE BASED ON THE FOLLOWING: BUILDING CODES, DESIGN MANUALS, AND SPECIFICATIONS: 2015 INTERNATIONAL BUILDING CODE PUBLICATION NO. FHWA-IF-99-015, GEOTECHNICAL ENGINEERING CIRCULAR NO. 4, GROUND DESIGN SURCHARGE LOADS: FOR ALL OF THE SHORING WALLS, A 500 PSF VERTICAL AND 150 PSF LATERAL LIVE LOAD

OBSTRUCTIONS THAT INTERFERE WITH THE NEW CONSTRUCTION. STABILITY OF ALL TEMPORARY CUT SLOPES. UTILITIES; THE DIMENSIONS AND DEPTHS OF THE PROPOSED FOUNDATIONS; AND THE ANCHORS AND ANCHORED SYSTEMS SURCHARGE WAS CONSIDERED IN THE DESIGN.

• "6808 196TH STREET SW, LYNNWOOD, WA, TOPOGRAPHIC SURVEY AND MONITORING

AS A MINIMUM, PRIOR TO PLACING THE SUBSEQUENT SET OF TIMBER LAGGING, DO NOT EXCAVATE MORE THAN 4 FEET BELOW THE CURRENT DEPTH OF LAGGED WALL FACE. ALONG ANCHORED WALLS, DO NOT EXCAVATE MORE THAN 2 FEET BELOW THE CURRENT LEVEL OF ANCHORS UNTIL THE THOSE ANCHORS ARE INSTALLED, CURED, TESTED, AND STRESSED.



SH1.0

DRILLED SOLDIER PILES:

THE MINIMUM REQUIRED STRUCTURAL STEEL W-SHAPES FOR THE SOLDIER PILES ARE INDICATED ON THE PLANS. ALTERNATIVE STEEL SECTIONS MAY BE USED PROVIDED THAT THE SECTION MODULUS OF EACH ALTERNATIVE STEEL SECTION ARE EQUAL TO OR GREATER THAN THE CROSS-SECTIONAL AREA AND SECTION MODULUS OF THE CORRESPONDING STEEL SECTION SHOWN ON THE PLANS, AND IS APPROVED BY THE SHORING DESIGNER.

SHAFTS SHALL BE CONSTRUCTED SO THAT THE CENTER AT THE TOP OF THE SHAFT IS WITHIN +/- 3 INCHES OF THE PLAN LOCATION. SHAFTS SHALL BE PLUMB. THE ELEVATION AT THE TOP OF SHAFT SHALL BE +/- 3 INCHES FROM THE PLAN LOCATION. DURING CONSTRUCTION FOR THE SHAFTS, THE CONTRACTOR SHALL MAKE FREQUENT CHECKS ON THE PLUMBNESS, ALIGNMENT, AND DIMENSIONS OF THE SHAFTS. ANY DEVIATION EXCEEDING THE ALLOWABLE TOLERANCES SHALL BE CORRECTED IMMEDIATELY.

THE STEEL SOLDIER PILES SHALL BE PLACED SO THAT THE CENTER OF THE PILE IS WITHIN +/- I INCH OF THE PLAN LOCATION AT THE TOP OF THE PILE, AND WITHIN 0.5% OF VERTICAL WITH DEPTH.

SHAFTS SHALL BE EXCAVATED TO THE REQUIRED DEPTH AS SHOWN ON THE PLANS. THE EXCAVATION SHALL BE COMPLETED IN A CONTINUOUS OPERATION USING EQUIPMENT CAPABLE OF EXCAVATING THROUGH THE TYPE OF MATERIAL EXPECTED TO BE ENCOUNTERED.

IF THE SHAFT EXCAVATION IS STOPPED WITH THE APPROVAL OF THE ENGINEER, THE SHAFT SHALL BE SECURED BY INSTALLATION OF A SAFETY COVER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE SAFETY OF THE SHAFT AND SURROUNDING SOIL AND THE STABILITY OF THE SIDE WALLS. A TEMPORARY CASING SHOULD BE USED IF NECESSARY TO ENSURE SUCH SAFETY AND STABILITY.

WHERE CAVING CONDITIONS ARE ENCOUNTERED. FURTHER EXCAVATION WILL NOT BE ALLOWED UNTIL THE CONTRACTOR SELECTS A METHOD TO PREVENT GROUND MOVEMENT. THE CONTRACTOR MAY ELECT TO PLACE A TEMPORARY CASING OR USE OTHER METHODS APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL USE APPROPRIATE MEANS (SUCH AS A CLEANOUT BUCKET), TO CLEAN THE BOTTOM OF THE EXCAVATION SUCH THAT NO MORE THAN 2 INCHES OF LOOSE OR DISTURBED MATERIAL IS PRESENT.

WHEN UNEXPECTED OBSTRUCTIONS, WHICH REQUIRE SPECIALIZED EQUIPMENT AND/OR LABOR ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PROMPTLY AND THE OBSTRUCTIONS SHALL BE REMOVED AND THE EXCAVATION CONTINUED IN A MANNER APPROVED BY THE ENGINEER.

TEMPORARY CASINGS FOR THE SHAFTS SHALL BE REMOVED. A MINIMUM 5 FOOT HEAD OF CONCRETE MUST BE MAINTAINED TO BALANCE THE SOIL AND WATER PRESSURE AT THE BOTTOM OF THE CASING DURING REMOVAL. THE CASING SHALL BE SMOOTH.

SHAFT CONCRETE SHALL BE PLACED AS SHOWN ON THE PLANS AND SHALL COMMENCE WITHIN 2 HOURS AFTER COMPLETION OF THE EXCAVATION. SHAFT CONCRETE SHALL BE PLACED IN ONE CONTINUOUS OPERATION TO THE TOP OF THE SHAFT.

IF WATER IS NOT PRESENT, THE CONCRETE SHALL BE DEPOSITED BY A METHOD WHICH PREVENTS AGGREGATE SEGREGATION. THE CONTRACTOR'S METHOD FOR DEPOSITING CONCRETE SHALL HAVE APPROVAL OF THE ENGINEER PRIOR TO CONCRETE PLACEMENT. IF WATER IS PRESENT, THE CONCRETE SHALL BE DEPOSITED BY TREMIE PLACEMENT METHODS.

#### TEMPORARY GROUND ANCHORS:

I. GENERAL:

IA. THE CONTRACTOR SHALL SELECT THE GROUND ANCHOR TYPE, THE INSTALLATION THE SPECIFIED ANCHOR DIAMETER AND STRAND REQUIREMENTS.

IB. HOWEVER, IF THE PROPOSED METHODS RESULT IN A LARGER DIAMETER, A LONGER ANCHOR LENGTH, OR A SUBSTANTIALLY GREATER GROUTING PRESSURE THAN INDICATED ON THE APPROVED PLANS, THEN THE CONTRACTOR MUST SUBMIT HIS PROPOSED INSTALLATION AND GROUTING METHODS TO GROUND SUPPORT AND DPD FOR APPROVAL PRIOR TO CONSTRUCTION. THE DETAILS ON SH5.4 MAY BE REFERENCED TO SEE WHAT IS GENERALLY ENVISAGED AS FOR THE GROUND ANCHORS.

2. GROUND ANCHOR INSTALLATION:

2A. AT THE GROUND SURFACE, THE DRILLHOLE SHALL BE LOCATED WITHIN 4 INCHES OF THE LOCATION SHOWN ON THE PLANS. THE DRILLHOLE SHALL BE LOCATED SO THE LONGITUDINAL AXIS OF THE DRILLHOLE AND THE LONGITUDINAL AXIS OF THE TENDON ARE PARALLEL.

2B. AT THE ANCHOR WORK POINT ELEVATION SHOWN THE PLANS, THE GROUND ANCHOR DECLINATION AND SPLAY SHALL BE AS SHOWN ON THE PLANS. NO TOLERANCE IS PROVIDED TO CHANGE THESE VALUES. ANY PROPOSED CHANGES TO TIEBACK ANGLES MUST BE APPROVED BY GROUND SUPPORT AFTER POTENTIAL UTILITY CONFLICTS HAVE BEEN REVIEWED.

2C. WHEN CAVING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SELECT SHALL A METHOD TO PREVENT GROUND MOVEMENT. THE CONTRACTOR MAY USE TEMPORARY CASING.

2D. THE TENDON SHALL BE INSERTED INTO THE DRILLHOLE TO THE DESIRED DEPTH WITHOUT DIFFICULTY. WHEN THE TENDON CANNOT BE COMPLETELY INSERTED, THE CONTRACTOR SHALL REMOVE THE TENDON FROM THE DRILLHOLE AND CLEAN OR REDRILL THE HOLE TO PERMIT INSERTION. PARTIALLY INSERTED TENDONS SHALL NOT BE DRIVEN OR FORCED INTO THE HOLE.

2E. THE CONTRACTOR SHALL USE A NEAT-CEMENT OR A SAND-CEMENT GROUT. THE CEMENT SHALL NOT CONTAIN LUMPS OR OTHER INDICATIONS OF HYDRATION. ADMIXTURES, IF USED, SHALL BE MIXED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2F. THE GROUT EQUIPMENT SHALL PRODUCE A GROUT FREE OF LUMPS AND UNDISPERSED CEMENT. A POSITIVE DISPLACEMENT GROUT PUMP SHALL BE USED. THE PUMP SHALL BE EQUIPPED WITH A PRESSURE GAUGE TO MONITOR GROUT PRESSURES. THE PRESSURE GAUGE SHALL BE CAPABLE OF MEASURING PRESSURES OF AT LEAST 150 PSI OR TWICE THE ACTUAL GROUT PRESSURES USED BY THE CONTRACTOR, WHICHEVER IS GREATER. THE GROUTING EQUIPMENT SHALL BE SIZED TO ENABLE THE GROUT TO BE PUMPED IN ONE CONTINUOUS OPERATION. THE MIXER SHALL BE CAPABLE OF CONTINUOUSLY AGITATING THE GROUT.

26. THE GROUT SHALL BE INJECTED FROM THE LOWEST POINT OF THE DRILLHOLE. THE GROUT MAY BE PUMPED THROUGH GROUT TUBES, CASING, OR DRILL RODS. THE GROUT CAN BE PLACED BEFORE OR AFTER INSERTION OF THE TENDON. THE QUANTITY OF THE GROUT AND THE GROUT PRESSURES SHALL BE RECORDED. THE GROUT PRESSURES AND GROUT TAKES SHALL BE CONTROLLED TO PREVENT EXCESSIVE HEAVE IN SOILS OR FRACTURING OF ROCK FORMATIONS.

2H. NO GROUT SHALL BE PLACED UNDER PRESSURE ABOVE THE BOND LENGTH DURING INITIAL GROUTING OF THE ANCHOR BOND LENGTH. THE GROUT AT THE TOP OF THE DRILLHOLE SHALL NOT CONTACT THE BACK OF THE STRUCTURE.

21. AFTER GROUTING, THE TENDON SHALL NOT BE LOADED UNTIL THE GROUT HAS ATTAINED SUFFICIENT STRENGTH TO CARRY THE TEST LOAD.

3. ANCHOR GROUT:

3A. THE GROUT SHALL BE A NEAT OR SAND/CEMENT MIXTURE WITH A MINIMUM 3-DAY COMPRESSIVE STRENGTH OF 1500 PSI AND A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI PER ASTM CIO9 / AASHTO TIO6.

3B. TYPE II CEMENT CONFORMING TO THE REQUIREMENTS OF ASTM CI50 / AASHTO M85 SHALL BE USED.

3C. FINE AGGREGATES SHALL CONSIST OF CLEAN, NATURAL SAND, CONFORMING TO THE REQUIREMENTS OF ASTM C33 / AASHTO M6. MANUFACTURED SAND IS ACCEPTABLE PROVIDED IT IS SUITABLE FOR PUMPING IN ACCORDANCE WITH ACI 304, SECTION 4.2.2.

3D. ADMIXTURES SHALL BE IN ACCORDANCE WITH ASTM C494 / AASHTO MI94. ADMIXTURES WHICH CONTROL BLEED, IMPROVE FLOW, REDUCE WATER CONTENT, AND RETARD SET MAY BE USED IN THE GROUT SUBJECT TO THE APPROVAL OF THE ENGINEER. EXPANSIVE ADMIXTURES SHALL ONLY BE ADDED TO THE GROUT USED FOR FILLING SEALED ENCAPSULATIONS, TRUMPETS AND ANCHORAGE COVERS. ACCELERATORS WILL NOT BE PERMITTED. ADMIXTURES SHALL BE COMPATIBLE WITH PRESTRESSING STEELS AND MIXED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

4. ANCHOR TENDONS:

4A. THE GROUND ANCHORS TENDONS SHALL CONSIST OF THE FOLLOWING:

I. SEVEN-WIRE, LOW-RELAXATION STRANDS WITH AN ULTIMATE TENSILE STRENGTH OF 270 KSI CONFORMING TO ASTM A416 / AASHTO M203.

4B. STRAND COUPLERS SHALL NOT BE ALLOWED.

5. BONDBREAKER:

5A. A BONDBREAKER MUST BE PROVIDED TO PREVENT THE TENDON FROM BONDING TO THE ANCHOR GROUT SURROUNDING THE UNBONDED LENGTH.

5B. THE BONDBREAKER SHALL BE FABRICATED FROM A SMOOTH PLASTIC TUBE OR PIPE HAVING THE FOLLOWING PROPERTIES:

I. RESISTANCE TO CHEMICAL ATTACK FROM AGGRESSIVE ENVIRONMENTS, GROUT OR GREASE.

2. RESISTANCE TO AGING BY ULTRAVIOLET LIGHT. 3. FABRICATED FROM MATERIAL NON-DETRIMENTAL TO THE TENDON. 4. CAPABLE OF WITHSTANDING ABRASION, IMPACT, AND BENDING DURING HANDLING AND INSTALLATION.

5. ENABLE THE TENDON TO ELONGATE DURING TESTING AND STRESSING. 6. ALLOW THE TENDON TO REMAIN UNBONDED AFTER LOCKOFF.

#### METHOD, THE ANCHOR DIAMETER, AND THE METHOD OF GROUTING, IN ORDER TO DEVELOP THE DESIGN LOADS INDICATED ON THE PLANS, AS VERIFIED IN ACCORDANCE WITH THE ANCHOR TESTING PROGRAM. REVISED PLANS SHALL BE SUBMITTED TO DPD FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION, IF THE CONTRACTOR DECIDES TO INSTALL GROUND ANCHORS DIFFERENT FROM THE GROUND ANCHORS SHOWN ON THIS PLAN SET. SEE THE GROUND ANCHOR SCHEDULES ON THE WALL ELEVATION SHEETS, AND SHEET SH5.2 FOR

#### 6. SPACERS AND CENTRALIZERS:

6A. SPACERS SHALL BE USED ALONG THE TENDON BOND LENGTH OF MULTI-ELEMENT TENDONS TO SEPARATE EACH OF THE INDIVIDUAL ELEMENTS OF THE TENDON SO THE PRESTRESSING STEEL WILL BOND TO THE GROUT.

6B. SPACERS SHALL BE POSITIONED SO THEIR CENTER-TO-CENTER SPACING DOES NOT EXCEED IO FEET. IN ADDITION, THE UPPER SPACER SHALL BE LOCATED A MAXIMUM OF 5 FEET FROM THE TOP OF THE TENDON BOND LENGTH AND THE LOWER SPACER SHALL BE LOCATED A MAXIMUM OF 5 FEET FROM THE BOTTOM OF THE TENDON BOND LENGTH. SPACERS SHALL PERMIT GROUT TO FREELY FLOW UP THE DRILLHOLE. SPACERS SHALL BE FABRICATED FROM PLASTIC.

6C. CENTRALIZERS SHALL PERMIT FREE GROUT FLOW AND SHALL PROVIDE A MINIMUM OF I INCH OF COVER OVER THE TENDON BOND LENGTH.

6D. CENTRALIZERS SHALL BE SECURELY ATTACHED TO THE TENDON AND THE CENTER TO CENTER SPACING SHALL NOT EXCEED 10 FEET. THE UPPER CENTRALIZER SHALL BE LOCATED A MAXIMUM OF 5 FEET FROM THE TOP OF THE TENDON BOND LENGTH AND THE LOWER CENTRALIZER SHALL BE LOCATED A MAXIMUM OF I FOOT FROM THE BOTTOM OF THE TENDON BOND LENGTH. CENTRALIZERS SHALL BE FABRICATED FROM PLASTIC.

#### 7. ANCHORAGE DEVICES:

7A. ANCHORAGE DEVICES SHALL BE CAPABLE OF DEVELOPING 95% OF THE MINIMUM SPECIFIED ULTIMATE TENSILE STRENGTH OF THE PRESTRESSING STEEL TENDON. THE ANCHORAGE DEVICES SHALL CONFORM TO THE STATIC STRENGTH REQUIREMENTS OF SECTION 3.I.6(I) AND SECTION 3.I.8(I) OF THE PTI "GUIDE SPECIFICATION FOR POST TENSIONING MATERIALS".

7B. THE BEARING PLATES SHALL BE STRUCTURAL STEEL CONFORMING TO ASTM A36/AASHTO MI83. THE BEARING PLATES SHALL BE SIZED SO THE ALLOWABLE BENDING STRESSES IN THE PLATE PER AISC-ASD ARE NOT EXCEEDED WHEN THE DESIGN LOAD OF THE GROUND ANCHOR IS APPLIED.

8. ANCHOR TESTING:

8A. EACH GROUND ANCHOR SHALL BE TESTED. THE MAXIMUM TEST LOAD SHALL NOT EXCEED 80% OF THE MINIMUM GUARANTEED ULTIMATE TENSILE STRENGTH (GUTS) OF THE TENDON. THE TEST LOAD SHALL BE SIMULTANEOUSLY APPLIED TO THE ENTIRE TENDON. STRESSING OF SINGLE ELEMENTS OF MULTI-ELEMENT TENDONS WILL NOT BE PERMITTED.

8B. THE TESTING EQUIPMENT SHALL CONSIST OF:

I. A DIAL GAUGE OR VERNIER SCALE CAPABLE OF MEASURING TO 0.001 INCHES SHALL BE USED TO MEASURE THE GROUND ANCHOR MOVEMENT. THE MOVEMENT-MEASURING DEVICE SHALL HAVE A MINIMUM TRAVEL EQUAL TO THE THEORETICAL ELASTIC ELONGATION OF THE TOTAL ANCHOR LENGTH AT THE MAXIMUM TEST LOAD PLUS I INCH. THE DIAL GAUGE OR VERNIER SCALE SHALL BE SUPPORTED INDEPENDENT OF THE JACKING SYSTEM AND RETAINED STRUCTURE AND SHALL BE ALIGNED SO THAT ITS AXIS IS WITHIN 5 DEGREES FROM THE AXIS OF THE GROUND ANCHOR.

2. A HYDRAULIC JACK AND PUMP SHALL BE USED TO APPLY THE TEST LOAD. THE JACK AND PRESSURE GAUGE SHALL BE CALIBRATED BY AN INDEPENDENT TESTING LABORATORY AS A UNIT. THE PRESSURE GAUGE SHALL BE GRADUATED IN 100 PSI INCREMENTS OR LESS. THE PRESSURE GAUGE WILL BE USED TO MEASURE THE APPLIED LOAD. THE RAM TRAVEL OF THE JACK SHALL NOT BE LESS THAN THE THEORETICAL ELASTIC ELONGATION OF THE TOTAL ANCHOR LENGTH AT THE MAXIMUM TEST LOAD PLUS ONE INCH. THE JACK SHALL BE INDEPENDENTLY SUPPORTED AND CENTERED OVER THE TENDON SO THAT THE TENDON DOES NOT CARRY THE WEIGHT OF THE JACK.

#### 8C. VERIFICATION TESTS SHALL BE PERFORMED ON 2 ANCHORS PER SOIL TYPE ENCOUNTERED, ANCHOR TYPE USED, OR INSTALLATION METHOD USED. VERIFICATION ANCHORS CAN BE USED AS PRODUCTION ANCHORS IF THEY ARE ACCEPTABLE AS DEFINED BELOW. THE VERIFICATION TEST SHALL BE MADE BY INCREMENTALLY LOADING THE ANCHOR IN ACCORDANCE WITH THE FOLLOWING SCHEDULE.

THE ALIGNMENT LOAD (AL) SHOULD BE THE MINIMUM LOAD REQUIRED TO ALIGN THE TESTING APPARATUS AND SHOULD NOT EXCEED 0.05DL. DIAL GAUGES SHOULD BE SET AT "ZERO" AFTER THE ALIGNMENT LOAD HAS BEEN APPLIED.

A IO-MINUTE CREEP TEST SHALL BE PERFORMED AT THE 1.50 DL AND 2.00DL INCREMENTS. THE LOAD-HOLD PERIOD SHALL START AS SOON AS THE MAXIMUM TEST LOAD IS APPLIED AND THE ANCHOR MOVEMENT SHALL BE MEASURED AND RECORDED AT 1, 2, 3, 5, 6, AND 10 MINUTES. IF THE ANCHOR MOVEMENT BETWEEN I AND IO MINUTES EXCEEDS 0.04 INCHES, THE MAXIMUM TEST LOAD SHALL BE HELD OF AN ADDITIONAL 50 MINUTES. IF THE LOAD HOLD IS EXTENDED, THE ANCHOR MOVEMENTS SHALL BE RECORDED AT 20, 30, 50, AND 60 MINUTES. IF AN ANCHOR FAILS IN CREEP, RETESTING WILL NOT BE ALLOWED.

8D. PROOF TESTS SHALL BE PERFORMED ON ALL PRODUCTION ANCHORS BY INCREMENTALLY LOADING THE GROUND ANCHOR IN ACCORDANCE WITH THE FOLLOWING SCHEDULE. AT LOAD INCREMENTS OTHER THAN MAXIMUM TEST LOAD, THE LOAD SHALL BE HELD LONG ENOUGH TO OBTAIN A STABLE READING.



THE MAXIMUM TEST LOAD SHALL BE HELD FOR 10 MINUTES. THE LOAD-HOLD PERIOD SHALL START AS SOON AS THE MAXIMUM TEST LOAD IS APPLIED AND THE ANCHOR MOVEMENT SHALL BE MEASURED AND RECORDED AT 1, 2, 3, 5, 6, AND 10 MINUTES. IF THE ANCHOR MOVEMENT BETWEEN I AND IO MINUTES EXCEEDS 0.04 INCHES, THE MAXIMUM TEST LOAD SHALL BE HELD OF AN ADDITIONAL 50 MINUTES. IF THE LOAD HOLD IS EXTENDED, THE ANCHOR MOVEMENTS SHALL BE RECORDED AT 20, 30, 50, AND 60 MINUTES. IF AN ANCHOR FAILS IN CREEP, RETESTING WILL NOT BE ALLOWED.

THEORETICAL ELASTIC ELONGATION OF THE UNBONDED LENGTH.

ANCHOR TYPE.

PLLC

8E. A VERIFICATION OR PROOF TESTED GROUND ANCHOR WITH A 10 MINUTE LOAD HOLD CREEP TEST IS CONSIDERED ACCEPTABLE WHEN:

- I. THE GROUND ANCHOR CARRIES THE MAXIMUM TEST LOAD WITH LESS THAN 0.04 INCHES OF MOVEMENT BETWEEN THE I AND IO MINUTE READINGS. 2. THE TOTAL MOVEMENT AT THE MAXIMUM TEST LOAD EXCEEDS 80% OF THE
- 8F. A VERIFICATION OR PROOF TESTED GROUND ANCHOR WITH A 60 MINUTE LOAD HOLD CREEP TEST IS CONSIDERED ACCEPTABLE WHEN:
- I. THE GROUND ANCHOR CARRIES THE MAXIMUM TEST LOAD WITH LESS THAN 0.08 INCHES OF MOVEMENT PER LOG CYCLE OF TIME AND THE CREEP RATE IS LINEAR OR DECREASING. 2. THE TOTAL MOVEMENT AT THE MAXIMUM TEST LOAD EXCEEDS 80% OF THE THEORETICAL ELASTIC ELONGATION OF THE UNBONDED LENGTH.
- IN ADDITION TO THE ABOVE, A VERIFICATION TESTED GROUND ANCHOR MUST NOT EXPERIENCE A PULLOUT FAILURE AT THE MAXIMUM TEST LOAD. A PULLOUT FAILURE IS DEFINED AS THE LOAD AT WHICH ATTEMPTS TO INCREASE THE TEST LOAD RESULT IN CONTINUED PULLOUT MOVEMENT OF THE TEST ANCHOR.
- 8G. GROUND ANCHORS THAT HAVE A CREEP RATE GREATER THAN SPECIFIED CAN BE INCORPORATED IN THE FINISHED WORK AT A LOAD EQUAL TO ONE-HALF OF THE FAILURE LOAD. THE FAILURE LOAD IS THE MAXIMUM LOAD CARRIED BY THE ANCHOR AFTER THE LOAD HAS BEEN ALLOWED TO STABILIZE FOR TEN MINUTES.
- 8H. WHEN A GROUND ANCHOR FAILS, THE CONTRACTOR SHALL MODIFY THE ANCHOR DESIGN, THE CONSTRUCTION PROCEDURES, OR BOTH. THESE MODIFICATIONS MAY INCLUDE, BUT ARE NOT LIMITED TO: INSTALLING REPLACEMENT GROUND ANCHORS, MODIFYING THE INSTALLATION METHODS, INCREASING THE BOND LENGTH, OR CHANGING THE GROUND
- 81. AFTER INTERNAL SUPPORT OF THE EXCAVATION IS PROVIDED BY THE SUBSURFACE PORTION OF THE STRUCTURE, ANCHORS MUST BE DETENSIONED. BASED ON THE CONSTRUCTION SEQUENCE OF THE PERMANENT BASEMENT WALLS AND FLOOR SLABS, THE GENERAL CONTRACTOR WILL COORDINATE WITH THE DESIGN TEAM AS TO WHEN ANCHOR DETENSIONING IS APPROPRIATE. ANCHOR DETENSIONING AND PATCHING OF THE BASEMENT WALLS WILL BE PERFORMED BY THE GENERAL CONTRACTOR.
- SPECIAL INSPECTION OF THE SHORING WALLS:
- IN ACCORDANCE WITH SECTION 1704 OF IBC (2015), SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING SHORING ITEMS OR PROCESSES: SOLDIER PILE INSTALLATION, AND GROUND ANCHOR INSTALLATION AND TESTING.

#### SHORING MONITORING:

- SURVEY MONITORING OF THE SHORING WALLS, SHALL BE PERFORMED TO DETERMINE THE VERTICAL AND HORIZONTAL MOVEMENT OF THE MONITORING POINTS. THE MEASURING SYSTEM SHALL HAVE AN ACCURACY OF AT LEAST O.OI FEET.
- THE MONITORING PROGRAM SHALL BE DETERMINED BY THE GEOTECHNICAL SPECIAL INSPECTOR BUT, AT A MINIMUM, SHALL INCLUDE THE FOLLOWING:
- MONITORING POINTS SHALL CONSIST OF RODS OR BOLTS EMBEDDED INTO THE OBJECT OF INTEREST OR CROSS-HAIRS INSCRIBED ONTO A PLATE THAT IS ATTACHED TO THE OBJECT OF INTEREST.
- MONITORING POINTS SHALL BE ESTABLISHED: (1) A MAXIMUM OF 25 FEET ON CENTER AT THE TOP OF THE WALLS, (2) A MAXIMUM OF 25 FEET ON CENTER A DISTANCE OF 5 FEET BEHIND THE SHORING WALLS WHERE THERE ARE NO ADJACENT BUILDINGS, (3) A MAXIMUM OF 25 FEET ON CENTER A DISTANCE BEHIND THE SHORING WALLS WHERE THERE ARE NO ADJACENT BUILDINGS NO GREATER THAN HALF THE EXCAVATION HEIGHT OF THE WALL, AND (4) ON ANY ADJACENT STRUCTURES THAT ARE LOCATED WITHIN A HORIZONTAL DISTANCE EQUAL TO THE WALL HEIGHT ALONG THE SHORING WALLS.
- READINGS SHALL BE TAKEN AND REPORTED AT LEAST TWICE A WEEK, ONE TIME OF WHICH MUST BE BY A LICENSED SURVEYOR.
- MONITORING DATA SHALL BE DISTRIBUTED TO THE GEOTECHNICAL ENGINEER, THE SHORING DESIGN ENGINEER, AND THE GENERAL CONTRACTOR FOR REVIEW.
- THE EXPECTED LATERAL SHORING WALL MOVEMENT IS ON THE ORDER OF I'' FOR ALL WALLS UNLESS NOTED OTHERWISE. IF MOVEMENTS ARE TRACKING TO EXCEED THESE FINAL VALUES, THE EXCAVATION SHALL BE HALTED UNTIL FURTHER REVIEW BY GROUND SUPPORT

#### SHORING ABANDONMENT:

- THE CONTRACTOR SHALL DETENTION THE TEMPORARY GROUND ANCHORS DURING BACKFILLING OPERATIONS WHEN THEY ARE NO LONGER NECESSARY FOR EXCAVATION SUPPORT. THE CONTRACTOR SHALL SUBMIT THE DETENSIONING METHOD TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CUT OFF AND REMOVE THE TOPS OF THE SOLDIER PILES TO A MINIMUM OF 1'-O" BELOW FINAL GRADE SURFACE (ELEVATION +449 FEET) AFTER THE COMPLETION OF BACKFILLING OPERATIONS.

TEXACO STRICKLAND SITE TEMPORARY SHORING WALL COVER SHEET AND NOTES F1532 Woodinvile, WA 98072 P1: (425) 488-1143 Fax: (425) 605-4057	DESIGN DRAMN REVIEW DATE REV DESCRIPTION CJM CJM RJB II/I5/21 O PERMIT SUBMITTAL	
TEXACO STRICKLAND SITE TEMPORARY SHORING WALL COVER SHEET AND NOTES Foodinville, WA 9807 COVER SHEET AND NOTES F1232 Woodinville, WA 9807 CP152 065-4057 CP152 065-4057	COSTOM TO ST	A C C C C C C C C C C C C C C C C C C C
TEMPORARY SHORING WALL COVER SHEET AND NOTES		<b>Ground Support</b> PLLC 16932 Woodinville Redmond Rd NE, #210 Woodinville, WA 98072 Ph: (425) 488-1143 Fax: (425) 605-4057
	TEXACO STRICKLAND SITE	TEMPORARY SHORING WALL COVER SHEET AND NOTES







WALL DESIGNED FOR VERTICAL SURCHARGE OF 500 PSF

PROPERTY BOUNDARY

SOUTH WALL TIMBER LAGGING AREA = 380 SF

TOP LAG	OF TIMBER				T EXIS	TING GRADE HORING, EL. 4	49 +/-				
<b>S2</b> [449.5]	<b>S3</b> [449.5]	<b>S4</b> [449.5]	<b>S5</b> [449.5]	<b>S6</b> [449.5]	<b>87</b> [449.5]	<b>S8</b> [449.5]	<b>S9</b> [449.5]	<b>S10</b> [449.5]	<b>S11</b> [450.5]		
06XHM [431.5]	(431.5]	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	[431.5]	OCEX1	[431.5]	      	[431.5]	[431.5]	[43i.5]	TIMBER LAGGING (TYP) SOLDIER PILE, GRADE 50 STEEL BEAM PL'ACED IN 'A '24'' DIA' (MIN) DRILLED SHAFT, BACKFILLED WITH LEAN-MIX CONCRETE (TYP)	
				- 10 @ 8'					4' -/		
								· · · · · · · · · · · · · · · · · · ·			









### FEET







NORTH WALL TIMBER LAGGING AREA = 1,960 SF

: TIM NG (	TEL (DEF (TYP)	LEPHONE/COMM PTH & DETAILS (3' FROM SHOI	I LINE UNK.) RING)			EXISTING GE AT SHORING	RADE 5, EL. 451 +/- (DEF (7'·	WAT PTH & DETAI -10' FROM S	TER LINE						
	<b>N3</b> [451.5]	N4 [451.5]	<b>N5</b> [451.5]	<b>N6  </b> [451.5] [4	N7 451.5] [4	<b>N8</b> 451.5] [	<b>N9</b> 451.5]	N10 [451.5]	N11 [451.5]	<b>N12</b> [451.5]	<b>N13</b> [451.5]	<b>N14</b> [451.0]			- - - - - - - - - - - - - - - - - - -
		ита тса (444.С (444.С С С С С С С С С С С С С С С С С С	TCd WTR D)			GAS TCd TCd TCd TCd TCd TCd TCd TCd TCd TCd		GAS- TCd-WTT (4444.0 (4444.0 ESX+1 K [419.0]	CAS TCd C C C C C C C C C C C C C C C C C C	GAS- TCd TCd ESX7 HM EL. 424.5]		00000000000000000000000000000000000000	SOLDIER PILE, G BEAM PLACED II DRILLED SHAFT, LEAN-MIX CONCF	RADE 50 STEEL N A 24" DIA (MIN) BACKFILLED WITH RETE (TYP)	
 @ 8	ı <u> </u>	·····	2 @ 7'				·····	8 @ 8'	· · · · · · · · · · · · · · · · · · ·			/			
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·							· · · · ·			/			
					CHOR SCHED			1							
	PILE(S)	ROW NUMBER	DECLI- NATION (DEG)	TOTAL LENGTH (FT)	UNBOND LENGTH (FT)	BOND LENGTH (FT)	NO. OF	DESIGN LOAD (K)	LOCKOFI LOAD (K)				<u>.</u>	·····	
	NI-NI2		20	41	15	26	З	90	90						















TAE	BLE SH5.1-1		
COVER PLATE WELD LENGTH L (IN)	COVER PLATE WELD SIZE TI (IN)	GRADE 50 WEB STIFFENER PLATE DIMENSIONS (IN)	WEB STIFFENER PLATE WELD SIZE T2 (IN)
20	5/16	3/4 X 4 X FULL HT	5/16

NOTE:

WEB STIFFENER PLATES ARE FULL DEPTH, ARE FLUSH AT LOAD END, AND WELDED FULL LENGTH AND ALONG LOAD END, AND ON BOTH SIDES OF STIFFENER.

ANCHOR TO PILE CONNECTION SCHEDULE NOT TO SCALE





	TA STRAN	BLE SH5. D LOAD	2-I TABLE	
NO. STRANDS	STEEL AREA A <sub>PS</sub> (IN <sup>2</sup> )	0.6 fu A <sub>PS</sub> MAXIMUM DESIGN LOAD (KIPS)	0.8 fu Aps MAXIMUM TEST LOAD (KIPS)	fu Apsultimate Load (KIPS)
	0.217	35.2	46.9	58.6
2	0.43	70.3	93.7	117.2
3	0.65	105.4	140.6	175.8
4	0.86	140.6	187.5	234.4
5	1.08	175.8	.234.4	293.0
6	1.30	210.9	281.2	351.6
7	1.51	246.1	328.1	410.2
8	1.73	281.2	375.0	468.8



	TABLE SH5.2-2							
MAX DESIGN LOAD (KIPS)	GRADE 50 EXTRA-STRONG PIPE O.D. (MIN)	ANCHOR DECLINATION (DEG)	WELD SIZE T3 (IN)					
132	4	35	3/8					
		30 25	3/8 5/16					
183	5	35	7/16					
		30	3/8					
050		25	5/16					
252	6	35	1/2 7/16					
		25	3/8					

#### STRAND ENCAPSULATED BY GREASE-FILLED SHEATH; - OR I LARGER DIAMETER PVC PIPE TO ENCOMPASS ALL

TEMPORARY STRAND GROUND ANCHOR NOTES:

THE DETAILS ON THIS SHEET DEPICT THE MINIMUM DESIGN REQUIREMENTS FOR THE GROUND ANCHORS ON THIS PROJECT.

THE CONTRACTOR SHALL SELECT THE METHOD OF INSTALLATION (OPEN-HOLE, CASED, AUGER-CAST, ETC.), METHOD OF GROUTING (TREMIE, PRIMARY LOW-PRESSURE, SECONDARY HIGH PRESSURE), AND ANCHOR DIAMETER IN ORDER TO DEVELOP THE DESIGN LOADS SPECIFIED ON THE PLANS. THE MINIMUM REQUIRED ANCHOR DIAMETER, NUMBER OF STRANDS, UNBONDED LENGTHS, AND BOND LENGTHS ARE INDICATED ON THE PLANS.

THE METHOD OF INSTALLATION AND GROUTING UTILIZED FOR THE VERIFICATION TEST ANCHORS SHALL BE UTILIZED FOR ALL PRODUCTION ANCHORS INSTALLED THEREAFTER. IN THE EVENT THAT THE CONTRACTOR ELECTS TO MODIFY THE METHOD OF INSTALLATION AND GROUTING, ADDITIONAL VERIFICATION TESTING MAY BE REQUIRED BY GROUND SUPPORT, DEPENDING ON THE DETAILS OF THE METHOD OF INSTALLATION AND GROUTING.

INADEQUATE PERFORMANCE OF ANY TEST ANCHORS SHALL BE EVALUATED ON A CASE BY CASE BASIS BY GROUND SUPPORT TO DETERMINE THE REMAINING VALUE OF THE ANCHORS AND WHAT SUPPLEMENTAL INSTALLATIONS ARE REQUIRED TO AUGMENT THE INADEQUATE ANCHORS. THE CONTRACTOR SHALL MODIFY THE METHOD OF INSTALLATION AND GROUTING AS NECESSARY TO ACHIEVE THE MINIMUM DESIGN LOADS SPECIFIED ON THE PLANS.

PR				DESIGN DRAN	NN REVIEM	DATE RE		ESCRIPTION
20J. S	TEXACO STRICKLAND SITE		1. WULSCA	KIN MIN	ы Ш М	II/15/21 O	PERV	11T SUBMITTAL
NO. BHEET	TEMPORARY SHORING WALL		A The second second					
NUMBI	DETAILS	Ground Support	200 34407 E					
21-39 ER 2		16932 Woodinville Redmond Rd NE, #210 Woodinville, WA 98072 Ph: (425) 488-1143 Fax: (425) 605-4057	11/15/21					

#### **APPENDIX D**

Asbestos Containing Material Survey and Abatement



#### **Demo Survey**

Strickland Texaco Demo 6808 196<sup>th</sup> Street SW Lynnwood, WA



Performed for:

**Rivers Edge Environmental Services** 17115 SE 270<sup>th</sup> Place, Suite E106 Covington, WA 98042

Prepared By:

Melanie Sandefur Project Administrator PacRim

Sr. Review By:

Allison Lewis AHERA Accredited BI PacRim

Date Prepared: 8/15/2022 PacRim#: 17473

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Section 3.0	Asbestos Sampling Summary by Homogeneous Materials	7
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- Appendix A: Asbestos Inspection Summary
- Appendix B: Bulk Sample Analysis Report
- Appendix C: Sample Location Drawing
- Appendix D: WA State Guidelines for Less than 1% Asbestos Material

Appendix E: Inspector/Laboratory Certifications

QAQC Review By: \_\_\_\_\_\_ Date Reviewed: \_\_\_\_\_\_ Date Reviewed: \_\_\_\_\_\_

#### Section 1.0 Scope of Work Strickland Texaco Demo | 6808 196<sup>th</sup> Street SW – Lynnwood, WA

On August 10<sup>th</sup>, 2022, Tyler Sadler an AHERA Accredited Building Inspector for Pacific Rim Environmental, Inc. (PacRim), performed a limited asbestos survey at the subject property described below.

Site: Strickland Texaco 6808 196<sup>th</sup> Street: 2,000 SF single-story commercial service station.

#### Limitations: No report or field limitations noted. Structed scheduled for demolition.

Field inspection, data collection, and report generation were performed according to the following **Scope of Work**:

#### Asbestos-Containing Materials (ACM)

- 1. Bulk sampling and analysis of suspect asbestos-containing materials (ACM).
- 2. Analysis of suspect ACM by a NVLAP accredited laboratory.
- 3. Quantity estimates of ACM.
- 4. Written report including recommendations based on the technician's observations, abatement (removal) cost estimates (under separate cover), sample descriptions, and sample location.
- 5. Statement of Compliance with W.A.C. 296-62-07721 Sign-off form.

#### Section 2.0 Survey Definitions and Purpose Strickland Texaco Demo | 6808 196<sup>th</sup> Street SW – Lynnwood WA

#### **DEFINITIONS:**

**Surfacing:** Materials; which are either spray-applied or troweled-on for acoustical, decorative or fireproofing purposes.

**Thermal System Insulation (TSI):** Insulating materials used to inhibit heat transfer or to prevent condensation on pipes, boilers, tanks, ducts and various other components.

**Miscellaneous:** All other materials not included in the above categories such as floor tile, ceiling tile, roofing felt, cementitious materials, wallboard systems and products such as caulking, mastics and putties.

**Homogeneous Material:** For the purposes of this report; *Homogeneous Material* is defined as an area of surfacing material, thermal system insulation, or miscellaneous material that is uniform in color, texture and application. When materials are determined to be Homogeneous by the on-site AHERA Accredited Building Inspector; although laboratory results may vary, in accordance with AHERA regulations, if any of the samples in a Homogeneous Material Sample Set are found to contain asbestos, then all materials in the Sample Set must be considered to contain asbestos.

**HM#:** Homogeneous Material Number indicates which Homogeneous Material Sample Set that the collected sample belongs to.

**Homogeneous Area:** For the purposes of this report; *Homogeneous Area* is defined as a summary of all areas where a Homogeneous Material was identified within the Project Scope.

#### PURPOSE:

The survey was intended to identify possible asbestos-containing materials (ACM) on the interior and exterior of the building. This inspection covered only those areas, which were exposed and/or physically accessible to the inspector. *Materials uncovered during the course of demolition, renovation, or maintenance activities that are not identified in this inspection report must be presumed to contain asbestos until PLM analysis proves that this material is not asbestos-containing.* 

This survey is not intended for, nor should be used as a design specification. The Asbestos in Schools Hazard Amendment and Reauthorization Act (ASHARA), effective November 20, 1990, expanded accreditation requirements to apply to persons who work with asbestos in public and commercial buildings as well as schools. Specifically, ASHARA expanded the Toxic Substances Control Act (TSCA) Section 206 (a) (1) and (3) to require accreditation for any person who designs or conducts a response action with respect to friable ACM in a building. TSCA Section 207 provides for civil penalties of \$5,000 for each day of a violation for not employing accredited individuals to design and conduct response actions. Sampling of suspect asbestos-containing materials was conducted as prescribed in 40 CFR 763.86.

#### Section 3.0 Homogeneous Materials Sampling and Results Summary Strickland Texaco Demo | 6808 196<sup>th</sup> Street SW – Lynnwood, WA

Bulk samples collected were submitted for sample analysis in accordance with method EPA-600/R-93/116: "Method for the Determination of Asbestos in Bulk Building Materials". Analyses were performed at Pacific Rim Environmental, Inc., a NVLAP Accredited Laboratory (Lab Code 101631-0). Materials are positive for asbestos if they are found to contain greater than one percent (1%) or 1% asbestos. Materials that are less than one percent (<1%) asbestos, although not considered positive for asbestos, when removed must follow applicable Washington State regulations.

A total of thirty (30) bulk samples were collected by PacRim and submitted for PLM laboratory analysis.

*Limitations:* No report or field limitations noted. Structed scheduled for demolition.

The following materials were found to contain less than 1% Asbestos by laboratory analysis:

• Wall siding

HM #	AHERA Category	Material Description	Additional Locations	Estimated Quantity	Sample Location	Asbestos % / Type	Sample #
		Popcorn Ceiling Texture	N/A		Cashier desk - above ceiling grid	None Detected	01
1	Surfacing			N/A	Cashier desk - above ceiling grid	None Detected (Both Layers)	02
					Cashier desk - above ceiling grid	None Detected (All Layers)	03
2	Misc.	Grey Duct Sealant	N/A	N/A	Cashier desk - above ceiling grid	None Detected	04
3	Misc.	Ceramic floor tile with associated grout and mastic	Closet and drive through window	N/A	Cashier desk	None Detected (All Layers)	05
4	Misc.	Gypsum Wall Board/Tape/Joint Compound	Throughout perimeter walls and ceiling	N/A	Drive through window - west wall	None Detected (Both Layers)	06
4					Open area - north wall	None Detected (Both Layers)	12
					Men's restroom - west wall	None Detected (Both Layers)	16
55	Surfacing	Floor Leveling Compound	N/A	N/A	Open area - south end, underneath hardwood flooring	None Detected	07

#### Asbestos Sample Summary by Homogenous Number:

#### Section 3.0 Homogeneous Materials Asbestos Sample Summary Strickland Texaco Demo | 6808 196<sup>th</sup> Street SW – Lynnwood, WA

HM #	AHERA Category	Material Description	Additional Locations	Estimated Quantity	Sample Location	Asbestos % / Type	Sample #
6	Mice	Red Sheet Vinyl	N1/A	NI/A	Open area - south end, on concrete substrate	None Detected (All Layers)	08
0	IVIISC.	Flooring	N/A	IN/A	Open area - north end on concrete substrate	None Detected (All Layers)	11
7	Mico	2v4 Coiling Tile		NI / A	Janitor's closet	None Detected	09
	IVIISC.	ZX4 Celling The	N/A	IN/A	Women's restroom	None Detected	20
0	Micc	Carpot Mastic	N/A	N/A	Open area - north end, on concrete substrate	None Detected	10
0	IVIISC.		N/A	N/A	Mechanical room, on concrete substrate	None Detected	21
			Throughout		Open area - north wall	None Detected (Both Layers)	13
9	Misc.	Cove Base Mastic	interior of building	N/A	Men's restroom - east wall	None Detected	14
10	Misc.	White sheet Vinyl Flooring	Men's restroom, women's restroom and Janitor's closet	N/A	Men's restroom	None Detected (All Layers)	15
11	Micc	White coulking	Men's and	N/A	Men's restroom - around base of toilet	None Detected	17
11	IVIISC.	write cauking	restrooms	N/A	Women's restroom - around sink	None Detected	19
10	Mice	Wall mastic	Men's and women's	NI/A	Women's restroom - west wall, behind RFB	None Detected (Both Layers)	18
12	IVIISC.		restrooms, kitchen	N/A	East Closet - east wall behind RFB	None Detected (Both Layers)	30
13	Misc.	Grey sealant	N/A	N/A	Roof - west end on vent exhaust	None Detected	24
14	Misc.	White sealant	N/A	N/A	Roof - east end on square exhaust stack	None Detected	25
15	Misc.	Cement wallboard	Throughout perimeter exterior walls	N/A	Exterior - south wall, behind ceramic wall tile	None Detected (Both Layers)	26
16	Misc.	Black door Frame Caulk	N/A	N/A	Exterior - south wall around doorway	None Detected	27

PacRim #17473

#### Section 3.0 Homogeneous Materials Asbestos Sample Summary <u>Strickland Texaco Demo</u> | 6808 196<sup>th</sup> Street SW – Lynnwood, WA

HM #	AHERA Category	Material Description	Additional Locations	Estimated Quantity	Sample Location	Asbestos % / Type	Sample #
17	Misc.	Wall siding	N/A	400 SF	Exterior - south wall	Layer 1: (Painted texture) Tremolite <1% Layer 2: (Cementitious board) None Detected	28
10	Mice	Dellad Deefing	N/A	N/A	Roof - west end on wooden substrate	None Detected (All Layers)	22
	IVIISC.	Kolled Rooting	IN/A		Roof - east end on wooden substrate	None Detected (All Layers)	23
19	Misc.	Window Frame Caulk	N/A	N/A	Exterior - north wall around metal window frame	None Detected	29
N/A	Misc.	Non-Suspect - no vermiculite detected	N/A	N/A	Throughout perimeter CMU walls	Non-suspect	V-01

Materials uncovered during the course of demolition, renovation, or maintenance activities that are not identified in this inspection report must be presumed to contain asbestos until PLM analysis proves that this material is not asbestos-containing.

#### Section 4.0 Statement of Compliance Strickland Texaco Demo | 6808 196" Street SW – Lynnwood, WA

In accordance with W.A.C. 296-62-07721 and PSCAA Regulation III, Article 4, Pacific Rim Environmental, Inc. performed a limited asbestos survey of the Strickland Texaco service station located at 6808 196<sup>th</sup> Street SW in Lynnwood, Washington. Should employees or contract personnel encounter any suspect asbestos-containing materials (ACM) it is their responsibility to:

- 1. Contact a representative of the owner.
- 2. Consult the inspection report to determine whether or not the suspect material contains asbestos.
- 3. If the suspect material does not appear in the inspection report, then that material was not sampled and must be presumed to contain asbestos until proven otherwise by sampling and PLM analysis.
- 4. Ensure that all employees and contractors, who may disturb suspect materials, are informed and advised of the location and type of materials that contain asbestos.

#### Limitations: No report or field limitations noted. Structed scheduled for demolition.

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The following materials were found to contain less than 1% Asbestos by laboratory analysis:

• Wall siding

Hereby Attest:

İ

The inspection report has been made available to me. I will inform all subcontractors of the location and types of materials containing asbestos. I am authorized to sign on behalf of my company.

Contractor:	RIVERS EDGE Environmental	Owner's Rep:	ASPECT CONSULTING LLC
Signature:	Houp Sues.	Signature:	ad him
Print Name:	DAN KUHN	Print Name:	ADAM GRIFFIN
Title:	NULL ESTIMATOR	Title:	ABSOLIATE ENGINEER
Date:	8/22/22	Date:	8222022

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#### Appendix A: Asbestos Inspection Summary
### Pacific Rim Environmental Inc. 6510 Southcenter Blvd. Suite 40 Seattle, WA 98188 (206)244-8965 www.PacRimEnv.com



### Inspection Summary

	Project Information
Job Number	17473
Project Name	Strickland Texaco Demo
Project Address:	6808 196th Street SW Lynnwood, WA
Client:	Rivers Edge Environmental Services
Date of Survey:	10-Aug-2022
PacRim Technician:	Tyler Sadler
Limitations:	No field limitations noted.
Exterior Photo:	<image/>
Turnaround Requested:	3-5 Days

Project Number: 17473

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Sample			Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Categ	gory	Surfacing	
Sample Number	01	Homogenous Material Num	nber	1	
<b>Material Description</b>	Popcorn Ceiling Textur	e			
Homogenous Mtl Area	N/A				
Sample Location	Cashier desk - above co	eiling grid			
Quantity	40	Unit of Meas	easure Square Feet		
Asbestos Type/%	None Detected				
Sample Photo					

	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0		· · · · · · · · · · · · · · · · · · ·	
Sample Type	Physical Sample	AHERA Catego	ory	Surfacing	
Sample Number	02	Homogenous Material Numl	ber	1	
Material Description	Popcorn Ceiling Textur	e			
Homogenous Mtl Area	N/A				
Sample Location	Cashier desk - above co	eiling grid			
Quantity	See sample #01	Unit of Measu	ure		
Asbestos Type/%	None Detected (Both	Layers)			
Sample Photo					

Project Number: 17473

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Sample			Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Cate	gory	Surfacing	
Sample Number	03	Homogenous Material Nun	nber	1	
<b>Material Description</b>	Popcorn Ceiling Textur	e			
Homogenous Mtl Area	N/A				
Sample Location	Cashier desk - above ce	eiling grid			
Quantity	See sample #01	Unit of Mea	sure		
Asbestos Type/%	None Detected (All Lay	yers)			
Sample Photo					

	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Categ	gory	Miscellaneou	JS
Sample Number	04	Homogenous Material Num	ber	2	
Material Description	Grey Duct Sealant				
Homogenous Mtl Area	N/A				
Sample Location	Cashier desk - above ce	eiling grid			
Quantity	20	Unit of Meas	sure	Lineal Feet	
Asbestos Type/%	None Detected				
Sample Photo					

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Sample			Sar	nple Date	10-Aug-2022	
Project Name	Strickland Texaco Dem	0		· · · · · · · · · · · · · · · · · · ·		
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	JS	
Sample Number	05	Homogenous Material Nur	nber	3		
<b>Material Description</b>	Ceramic floor tile with	associated grout and mastic				
Homogenous Mtl Area	Closet and drive throug	gh windoe				
Sample Location	Cashier desk					
Quantity	300	Unit of Mea	Unit of Measure Square Feet			
Asbestos Type/%	None Detected (All Lay	yers)				
Sample Photo						

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Sample			Sai	mple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHE	RA Category	Miscellaneou	JS
Sample Number	06	Homogenous Mate	rial Number	4	
Material Description	Gypsum Wall Board/Ta	ape/Joint Compound			
Homogenous Mtl Area	Throughout perimeter	walls and ceiling			
Sample Location	Drive through window	- west wall			
Quantity	2,800	Unit	of Measure	Square Feet	
Asbestos Type/%	None Detected (Both	Layers)			
Sample Photo					

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Sample			Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Cate	gory	Surfacing	
Sample Number	07	Homogenous Material Nun	nber	5	
Material Description	Floor Leveling Compou	nd			
Homogenous Mtl Area	N/A				
Sample Location	Open area - south end,	, underneath hardwood flooi	ring		
Quantity	30	Unit of Mea	f Measure Square Feet		
Asbestos Type/%	None Detected				
Sample Photo					

Sample			Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0		· · · · · · · · · · · · · · · · · · ·	
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	JS
Sample Number	08	Homogenous Material Num	nber	6	
Material Description	Red Sheet Vinyl Floorir	ng			
Homogenous Mtl Area	N/A				
Sample Location	Open area - south end	, on concrete substrate			
Quantity	530	Unit of Measure Square Feet			
Asbestos Type/%	None Detected (All Lay	yers)			
Sample Photo					

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Sample			Sar	mple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	IS
Sample Number	09	Homogenous Material Nun	nber	7	
Material Description	2x4 Ceiling Tile				
Homogenous Mtl Area	N/A				
Sample Location	Janitor's closet				
Quantity	220	Unit of Mea	sure	Square Feet	
Asbestos Type/%	None Detected				
Sample Photo					

	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0		,	
Sample Type	Physical Sample	AHERA Categ	gory	Miscellaneou	JS
Sample Number	10	Homogenous Material Num	nber	8	
<b>Material Description</b>	Carpet Mastic				
Homogenous Mtl Area	N/A				
Sample Location	Open area - north end	, on concrete substrate			
Quantity	525	Unit of Measure Square Feet			
Asbestos Type/%	None Detected				
Sample Photo					

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Sample			Sample Date		10-Aug-2022
Project Name	Strickland Texaco Dem	0		-	
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	JS
Sample Number	11	Homogenous Material Nur	nber	6	
Material Description	Red Sheet Vinyl Floorir	ng			
Homogenous Mtl Area	N/A				
Sample Location	Open area - north end	on concrete substrate			
Quantity	See sample #08	Unit of Mea	sure		
Asbestos Type/%	None Detected (All La	yers)			
Sample Photo					

	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Categ	gory	Miscellaneou	JS
Sample Number	12	Homogenous Material Num	ıber	4	
<b>Material Description</b>	Gypsum Wall Board/Ta	ape/Joint Compound			
Homogenous Mtl Area	N/A				
Sample Location	Open area - north wall				
Quantity	See sample #06	Unit of Meas	sure		
Asbestos Type/%	None Detected (Both	Layers)			
Sample Photo					

Project Number: 17473

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	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0		· · · · · · · · · · · · · · · · · · ·	
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	JS
Sample Number	13	Homogenous Material Nun	nber	9	
<b>Material Description</b>	Cove Base Mastic				
Homogenous Mtl Area	Throughout interior of	building			
Sample Location	Open area - north wall				
Quantity	160	Unit of Mea	sure	Lineal Feet	
Asbestos Type/%	None Detected (Both I	Layers)			
Sample Photo					

	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Categ	gory	Miscellaneou	JS
Sample Number	14	Homogenous Material Num	nber	9	
Material Description	Cove Base Mastic				
Homogenous Mtl Area	N/A				
Sample Location	Men's restroom - east	wall			
Quantity	See sample #13	Unit of Meas	sure		
Asbestos Type/%	None Detected				
Sample Photo					

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	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0	-		
Sample Type	Physical Sample	AHERA Cate	egory	Miscellaneo	us
Sample Number	15	Homogenous Material Nur	nber	10	
<b>Material Description</b>	White sheet Vinyl Floo	ring			
Homogenous Mtl Area	Men's restroom, wom	en's restroom and Janitor's c	loset		
Sample Location	Men's restroom				
Quantity	150	Unit of Measure Square Feet			
Asbestos Type/%	None Detected (All La	yers)			
Sample Photo					

	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	IS
Sample Number	16	Homogenous Material Nun	nber	4	
Material Description	Gypsum Wall Board/Ta	ape/Joint Compound			
Homogenous Mtl Area	N/A				
Sample Location	Men's restroom - west	wall			
Quantity	See sample #06	Unit of Mea	sure		
Asbestos Type/%	None Detected (Both	Layers)			
Sample Photo					

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	Sample		Sar	mple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	JS
Sample Number	17	Homogenous Material Nur	nber	11	
<b>Material Description</b>	White caulking				
Homogenous Mtl Area	Men's and women's re	strooms			
Sample Location	Men's restroom - arou	nd base of toilet			
Quantity	10	Unit of Mea	sure	Lineal Feet	
Asbestos Type/%	None Detected				
Sample Photo					

	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Cate	egory	Miscellaneou	IS
Sample Number	18	Homogenous Material Nu	mber	12	
Material Description	Wall mastic				
Homogenous Mtl Area	Men's and women's re	strooms, kitchen			
Sample Location	Women's restroom - w	est wall, behind RFB			
Quantity	500	Unit of Measure Square Feet			
Asbestos Type/%	None Detected (Both	Layers)			
Sample Photo		1			

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	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0		· · · · · · · · · · · · · · · · · · ·	
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	JS
Sample Number	19	Homogenous Material Nur	nber	11	
Material Description	White caulking				
Homogenous Mtl Area	Men's and women's re	strooms			
Sample Location	Women's restroom - a	round sink			
Quantity	10	Unit of Mea	sure	Lineal Feet	
Asbestos Type/%	None Detected				
Sample Photo					

	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Categ	gory	Miscellaneou	S
Sample Number	20	Homogenous Material Num	ber	7	
Material Description	2x4 Ceiling Tile				
Homogenous Mtl Area	N/A				
Sample Location	Women's restroom				
Quantity	See sample #09	Unit of Meas	sure		
Asbestos Type/%	None Detected				
Sample Photo	6				

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### Pacific Rim Environmental Inc. 6510 Southcenter Blvd. Suite 40 Seattle, WA 98188 (206)244-8965 www.PacRimEnv.com



	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	JS
Sample Number	21	Homogenous Material Nur	nber	8	
Material Description	Carpet Mastic				
Homogenous Mtl Area	N/A				
Sample Location	Mechanical room, on o	concrete substrate			
Quantity	See sample #10	Unit of Mea	sure		
Asbestos Type/%	None Detected				
Sample Photo					

Sample			Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Category Miscellaneous			IS
Sample Number	22	Homogenous Material Number		18	
<b>Material Description</b>	Rolled Roofing				
Homogenous Mtl Area	N/A				
Sample Location	Roof - west end on wo	oden substrate			
Quantity	1,400	Unit of Mea	sure	Square Feet	
Asbestos Type/%	None Detected (All lay	/ers)			



Sample Photo				
	Sample	Sa	mple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0		
Sample Type	Physical Sample	AHERA Category	Miscellaneou	JS
Sample Number	23	Homogenous Material Number	18	
Material Description	Rolled Roofing			
Homogenous Mtl Area	N/A			
Sample Location	Roof - east end on woo	oden substrate		
Quantity	See sample #23	Unit of Measure		
Asbestos Type/%	None Detected (All La	yers)		
Sample Photo				

Sample			Sample Date		10-Aug-2022	
Project Name	Strickland Texaco Dem	Strickland Texaco Demo				
Sample Type	Physical Sample	Physical Sample AHERA Categ			JS	
Sample Number	24	Homogenous Material Number		13		
<b>Material Description</b>	Grey sealant					
Homogenous Mtl Area	N/A					
Sample Location	Roof - west end on vent exhaust					
Quantity	15	Unit of Mea	sure	Lineal Feet		
Asbestos Type/%	None Detected					

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### Pacific Rim Environmental Inc. 6510 Southcenter Blvd. Suite 40 Seattle, WA 98188 (206)244-8965 <u>www.PacRimEnv.com</u>



Sample Photo	

Sample			Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneo	us
Sample Number	25	Homogenous Material Nur	nber	14	
Material Description	White sealant				
Homogenous Mtl Area	N/A				
Sample Location	Roof - east end on squ	are exhaust stack			
Quantity	40	Unit of Mea	sure	Lineal Feet	
Asbestos Type/%	None Detected				
Sample Photo					

Sample			Sample Date		10-Aug-2022
Project Name	Strickland Texaco Dem	Strickland Texaco Demo			
Sample Type	Physical Sample	AHERA Category		Miscellaneous	
Sample Number	26	Homogenous Material Number		15	
<b>Material Description</b>	Cement wallboard				
Homogenous Mtl Area	Throughout perimeter	exterior walls			
Sample Location	Exterior - south wall, behind ceramic wall tile				
Quantity	400	Unit of Mea	sure	Square Feet	

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Asbestos Type/%	None Detected (Both Layers)
Sample Photo	

	Sample		Sar	nple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0			
Sample Type	Physical Sample	AHERA Cate	gory	Miscellaneou	IS
Sample Number	27	Homogenous Material Num	nber	16	
<b>Material Description</b>	Black door Frame Caul	k			
Homogenous Mtl Area	N/A				
Sample Location	Exterior - south wall ar	ound doorway			
Quantity	25	Unit of Mea	sure	Lineal Feet	
Asbestos Type/%	None Detected				
Sample Photo					

Sample			Sample Date		10-Aug-2022
Project Name	itrickland Texaco Demo				
Sample Type	Physical Sample	AHERA Category		Miscellaneous	
Sample Number	28	Homogenous Material Number		17	
<b>Material Description</b>	Wall siding				
Homogenous Mtl Area	N/A				
Sample Location	Exterior - south wall				

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Quantity	400	Unit of Measure	Square Feet			
Asbestos Type/%	Layer 1: (Painted textu	ure) Tremolite <1%				
	Layer 2: (Cementitious	Layer 2: (Cementitious board) None Detected				
Sample Photo						
	Sample	Sa	mple Date	10-Aug-2022		
Project Name	Strickland Texaco Dem	0				
Sample Type	Physical Sample	AHERA Category	Miscellaneou	JS		
Sample Number	29	Homogenous Material Number	19			
Material Description	Window Frame Caulk					
Homogenous Mtl Area	N/A					
Sample Location	Exterior - north wall ar	ound metal window frame				
Quantity	140	Unit of Measure	Lineal Feet			
Asbestos Type/%	None Detected					
Sample Photo						

Sample			Sample Date		10-Aug-2022
Project Name	Strickland Texaco Demo				
Sample Type	Physical Sample	AHERA Category		Miscellaneous	
Sample Number	30	Homogenous Material Number		12	
Material Description	Wall mastic				
Homogenous Mtl Area	N/A				
Sample Location	East Closet - east wall behind RFB				

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Project Number: 17473

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Quantity	See sample #18	Unit of Measure		
Asbestos Type/%	None Detected			
Sample Photo				
	Sample	Sa	mple Date	10-Aug-2022
Project Name	Strickland Texaco Dem	0		
Sample Type	Visual Sample	AHERA Category	Miscellaneou	JS
Sample Number	V-01	Homogenous Material Number		
Material Description	Non-Suspect - no verm	iculite detected		
Homogenous Mtl Area	N/A			
Sample Location	Throughout perimeter	CMU walls		
Quantity	N/A	Unit of Measure		
Asbestos Type/%	Non-Suspect			
Sample Photo				

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### Appendix B: Bulk Sample Analysis Report





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Customer Name:	<b>Rivers Edge Environmental Services</b> 34828 Enumclaw Black Diamond Road SE Black Diamond			PacRim Number: Report Number:	17473 2022-08-0147
	WA 98010	WA 98010			8/10/2022 8/11/2022
Customer Project Number: Project Name:	None Given Strickland Texaco I	Demo		Analysis End Date: Turnaround Time:	8/15/2022 3-5 Days
Project Address:	6808 196th Street Lynnwood WA	SW		Report Date: Report By: Analyst(s):	8/16/2022 William F. Golloway William F. Golloway
PO Number: Sample Date: Total Samples:	None Given 10-Aug-2022 30	Samples Analyzed for this i Beginning Laboratory ID Number: Ending Laboratory ID Number:	report 2022-08-014 2022-08-017	7 6	Sample Set Number 2022-3245

The bulk samples submitted were analyzed for asbestos content using Polarized Light Microscopy (PLM). Analysis was performed in accordance with Appendix E to Subpart E of 40 CFR Part 763 and EPA/600/R93/116.

The test results pertain only to the samples submitted for analysis. Unless otherwise noted, the samples were inhomogeneous; subsamples of components were analyzed to achieve representative analysis. Separate layers of layered samples were analyzed and reported separately. Unless otherwise stated, asbestos content was quantified by calibrated visual estimation (CVES). CVES concentrations are reported in two to three percent ranges for fiber concentrations ranging from one to ten percent, and usually five percent ranges for concentrations greater than ten percent. Samples in which asbestos was not observed are reported as "None Detected".

#### Limitations and Uncertainty:

Factors such as sample guality, sample size, interfering matrix material, fiber size, and fiber concentration contribute to the uncertainty in asbestos concentration estimates in bulk materials. Relative errors exceeding 100% may occur in samples containing less than ten percent asbestos. Relative errors are typically below thirty percent in samples having greater than ten percent asbestos, and approach zero as asbestos concentrations approach 100%.

Asbestos fibers with diameters less than approximately 0.25 microns are not detectable by PLM. Fibers with larger diameters may not be visible if obscured by interfering matrix materials. These extremely fine fibers may occur in floor tiles, adhesives, products with cement binders, and other non-friable or semi-friable materials. This limitation can be overcome using alternate analytical methods, such as Transmission Electron Microscopy (TEM).

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NVLAP Accredited Lab #: 101631-0 Samples Submitted by: PacRim

Reviewed by: 8-16-2022 Approved Signatory





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Custome	r Name: Rivers Edge Envi	ronmental Services	PacRim Number: Report Number:	17473 2022-08-0147
Customer Project Number:None GivenProject Name:Strickland TexaSample Date:10-Aug-2022Report Date:8/16/2022Report By:William F. Goll		o Demo Sample Set Nu 2022-3245 vay	Date Received: Analysis Start Date: Imber Analysis End Date: 5 Analyst(s):	8/10/2022 8/11/2022 8/15/2022 William F. Golloway
Field Sample Lab ID: 20	e Number: <u>01</u> 122-08-0147	Field Sample Description: Popcorn Ceiling Texture	Field Sample Location: Cashier desk - above ceiling grid	Analyst: WFG Analysis Date: 8/11/2022
	Lab Sample Description	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
	Light grey-painted, white to light brown, brittle, chalky texture material with embedded foam clumps	None Detected	Cellulose <1%	Mineral Aggregate, Binder, Foam, Paint
Field Sample Lab ID: 20	e Number: <u>02</u> 122-08-0148	Field Sample Description: Popcorn Ceiling Texture	Field Sample Location: Cashier desk - above ceiling grid	Analyst: WFG Analysis Date: 8/11/2022
	Lab Sample Description	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
Layer: 1	Pale grey-painted, white to light brown, brittle texture with embedded foam clumps	None Detected	Cellulose <1%	Mineral Aggregate, Binder, Foam, Paint
Layer: 2	White, chalky drywall with white-painted, light brown paper	None Detected	Cellulose 7-10%	Gypsum, Mineral Aggregate, Perlite, Binder, Paint
Field Sample Lab ID: 20	e Number: <u>03</u> 122-08-0149	Field Sample Description: Popcorn Ceiling Texture	Field Sample Location: Cashier desk - above ceiling grid	Analyst: WFG Analysis Date: 8/11/2022
	Lab Sample Description	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
Layer: 1	Pale grey-painted, white to light brown, brittle texture with embedded foam clumps	None Detected	Cellulose <1%	Mineral Aggregate, Binder, Foam, Paint
Layer: 2	White/blue-painted, white, chalky mud	None Detected	Cellulose 3-5%	Mineral Aggregate, Binder, Paint
Layer: 3	Light brown paper	None Detected	Cellulose 80-85%	Binder, Mineral Aggregate
Field Sample Lab ID: 20	e Number: <u>04</u> 022-08-0150	Field Sample Description: Grey Duct Sealant	Field Sample Location: Cashier desk - above ceiling grid	Analyst: WFG Analysis Date: 8/11/2022
	Lab Sample Description	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
	Light grey, somewhat flexible caulk-like material	None Detected	Cellulose 3-5%	Mineral Aggregate, Binder
	Note: Sample appears to be			

homogeneous.





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Customer Name:RiverCustomer Project Number:NoneProject Name:StrickSample Date:10-ArReport Date:8/16,Report By:Willia		Rivers Edge Environmental Services None Given Strickland Texaco Demo 10-Aug-2022 8/16/2022 Sample Set Number 2022-3245			<b>t Number</b> 3245	PacRim Numbe Report Number Date Received: Analysis Start D Analysis End Da Analyst(s):	<ul> <li>17473</li> <li>2022-08-0147</li> <li>8/10/2022</li> <li>8/11/2022</li> <li>8/15/2022</li> <li>William F. Golloway</li> </ul>	
Field Sample Lab ID: 20	e Number: <u>05</u> 22-08-0151			Field Sample Description Ceramic floor tile with associated grout and mas	: Field Sa Cashier tic	<b>mple Location:</b> desk	Analyst: WFG Analysis Date: 8/11/2022	
	Lab Sample De	scription		Asbestos Type/%	Non-As	bestos Fibers	Non-Fibrous Materials	
Layer: 1	Light grey-brown material	, ceramic t	ile	None Detected	Cellulo	se <1%	Binder, Mineral Aggregate	
Layer: 2	Grey, cementition grout	us, rust-sta	ined	None Detected	Cellulo	se <1%	Mineral Aggregate, Binder	
Layer: 3	White to light gre grained, cementi	ey, coarse- tious morta	ar	None Detected	No Oth	er Fibers Detected	Mineral Aggregate, Binder	
								_
Field Sample Lab ID: 20	e Number: <u>06</u> 22-08-0152			Field Sample Description Gypsum Wall Board/Tape/Joint Compo	: Field Sa Drive th und west wa	mple Location: rough window - Ill	Analyst: WFG Analysis Date: 8/11/2022	
Field Sample Lab ID: 20	e Number: <u>06</u> 22-08-0152 Lab Sample De	scription		Field Sample Description Gypsum Wall Board/Tape/Joint Compo Asbestos Type/%	Field Sa Drive th und west wa	mple Location: rough window - Ill bestos Fibers	Analyst: WFG Analysis Date: 8/11/2022 Non-Fibrous Materials	
Field Sample Lab ID: 20 Layer: 1	e Number: <u>06</u> 22-08-0152 Lab Sample De Light brown-pain chalky mud with white paper	scription ted, white, embedded	,	Field Sample Description Gypsum Wall Board/Tape/Joint Compo Asbestos Type/% None Detected	Field Sa Drive th und west wa Non-As Cellulo	mple Location: rough window - Ill bestos Fibers se 20-25%	Analyst:WFGAnalysis Date:8/11/2022Non-Fibrous MaterialsMineral Aggregate, Paint	
Field Sample Lab ID: 20 Layer: 1 Layer: 2	E Number: 06 22-08-0152 Lab Sample De Light brown-pain chalky mud with white paper White, chalky dry brown paper	scription ted, white, embedded rwall with l	, ight	Field Sample Description Gypsum Wall Board/Tape/Joint Compo Asbestos Type/% None Detected None Detected	Field Sa Drive th und west wa Non-As Cellulo Fibrous	mple Location: rough window - ill bestos Fibers se 20-25% se 3-5% s Glass 1-3%	Analyst: WFG Analysis Date: 8/11/2022 Non-Fibrous Materials Mineral Aggregate, Paint Gypsum, Mineral Aggregate, Binder	
Field Sample Lab ID: 20 Layer: 1 Layer: 2 Field Sample	E Number: <u>06</u> 22-08-0152 Lab Sample De Light brown-pain chalky mud with white paper White, chalky dry brown paper	scription ted, white, embedded rwall with l	, ight	Field Sample Description Gypsum Wall Board/Tape/Joint Compo Asbestos Type/% None Detected None Detected Field Sample Description	: Field Sa Drive th und west wa Non-As Cellulo Fibrous : Field Sa	mple Location: rough window - ill bestos Fibers se 20-25% se 3-5% s Glass 1-3% mple Location:	Analyst: WFG Analysis Date: 8/11/2022 Non-Fibrous Materials Mineral Aggregate, Paint Gypsum, Mineral Aggregate, Binder Analyst: WFG	
Field Sample Lab ID: 20 Layer: 1 Layer: 2 Field Sample Lab ID: 20	e Number: <u>06</u> 22-08-0152 Lab Sample De Light brown-pain chalky mud with white paper White, chalky dry brown paper Number: <u>07</u> 22-08-0153	scription ted, white, embedded rwall with I	, ight	Field Sample Description Gypsum Wall Board/Tape/Joint Compo Asbestos Type/% None Detected None Detected Field Sample Description Floor Leveling Compound	: Field Sa Drive th und west wa Non-As Cellulo Fibrous : Field Sa Open ar underne flooring	mple Location: rough window - ill bestos Fibers se 20-25% se 3-5% s Glass 1-3% mple Location: ea - south end, eath hardwood	Analyst:WFG 8/11/2022Non-Fibrous MaterialsMineral Aggregate, PaintGypsum, Mineral Aggregate, BinderAnalyst:WFG 8/12/2022	
Field Sample Lab ID: 20 Layer: 1 Layer: 2 Field Sample Lab ID: 20	e Number: <u>06</u> 22-08-0152 Lab Sample De Light brown-pain chalky mud with white paper White, chalky dry brown paper Number: <u>07</u> 22-08-0153 Lab Sample De	scription ted, white, embedded wall with l	, ight	Field Sample Description Gypsum Wall Board/Tape/Joint Compo Asbestos Type/% None Detected None Detected Field Sample Description Floor Leveling Compound Asbestos Type/%	: Field Sa Drive th und west wa Non-As Cellulo Fibrous : Field Sa Open ar underne flooring Non-As	mple Location: rough window - ill bestos Fibers se 20-25% se 3-5% s Glass 1-3% mple Location: ea - south end, eath hardwood bestos Fibers	Analyst:WFG Analysis Date:Non-Fibrous MaterialsMineral Aggregate, PaintGypsum, Mineral Aggregate, BinderAnalyst:WFG Analysis Date:Non-Fibrous Materials	



### Pacific Rim Environmental Inc. Bulk Sample Analysis Report



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Customer Name:Rivers Edge ECustomer Project Number:None GivenProject Name:Strickland TexSample Date:10-Aug-2022Report Date:8/16/2022Report By:William F. Gol			ironmental Services o Demo Sample Se 2022- way	PacRim Number: Report Number: Date Received: Analysis Start Date: Analysis End Date: -3245 Analyst(s):	17473 2022-08-0147 8/10/2022 8/11/2022 8/15/2022 William F. Golloway	
Field Sample Lab ID: 20	e Number: <u>08</u> 0 <b>22-08-0154</b>		Field Sample Descriptior Red Sheet Vinyl Flooring	n: Field Sample Location: Open area - south end, on concrete substrate	Analyst: WFG Analysis Date: 8/12/2022	
	Lab Sample De	scription	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials	
Layer: 1	Red, somewhat b flooring	rittle sheet	None Detected	Cellulose 40-45%	Binder, Mineral Aggregate	
Layer: 2	Brown, somewha backing with emb inseparable backi	t brittle bedded, ing	None Detected	Cellulose 35-40%	Binder, Mineral Aggregate	
Layer: 3	Light brown, britt	le mastic	None Detected	Cellulose <1%	Adhesive, Mineral Aggregate, Binder	
Field Sample	e Number: <u>09</u>		Field Sample Description	n: Field Sample Location:	Analyst: WFG	
Lab ID: 20	22-08-0155		2x4 Ceiling Tile	Janitor's closet	Analysis Date: 8/12/2022	
	Lab Sample De	scription	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials	
	White-painted, li fibrous ceiling tile	ght brown, e material	None Detected	Cellulose 40-45% Fibrous Glass 3-5%	Binder, Perlite, Mineral Aggregate	
Field Sample Lab ID: 20	e Number: <u>10</u> 0 <b>22-08-0156</b>		Field Sample Descriptior Carpet Mastic	n: Field Sample Location: Open area - north end, on concrete substrate	Analyst: WFG Analysis Date: 8/12/2022	
	Lab Sample De	scription	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials	
	Green, tacky and brittle, inseparab	light brown, le mastics	None Detected	Animal Hair <1%	Adhesive, Mineral Aggregate, Binder	
Field Sample Lab ID: 20	e Number: <u>11</u> 022-08-0157		Field Sample Descriptior Red Sheet Vinyl Flooring	n: Field Sample Location: Open area - north end on concrete substrate	Analyst: WFG Analysis Date: 8/12/2022	
	Lab Sample De	scription	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials	
Layer: 1	Red, somewhat b flooring material	rittle sheet	None Detected	Cellulose 35-40%	Binder, Mineral Aggregate	
Layer: 2	Purple, somewha backing with emb inseparable, light	t brittle bedded, brown mesh	None Detected	Cellulose 40-45%	Binder, Mineral Aggregate	
Layer: 3	Light brown, britt	le mastic	None Detected	Cellulose <1%	Adhesive, Mineral Aggregate, Binder	





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Customer Name:     Rivers Edge Env       Customer Project Number:     None Given       Project Name:     Strickland Texadom		<b>ge Environ</b> en Texaco De	ronmental Services			PacRim Number: Report Number: Date Received:	17473 2022-08-014 8/10/2022	7		
Sample Da Report Da Report By	Sample Date:10-Aug-2022Report Date:8/16/2022Report By:William F. Gollo		22 2 Golloway	Sample Set Number 2022-3245 /ay		er	Analysis Start Dat Analysis End Date Analyst(s):	e: 8/11/2022 : 8/15/2022 William F. Go	olloway	
Field Sample Lab ID: 202	Number: <u>12</u> 22-08-0158		Fi G B	ield Sample Descript ypsum Wall oard/Tape/Joint Com	on: pound	<b>Field Sampl</b> Open area -	e Location: north wall	Analyst: Analysis Da	WFG ate: 8/12/2	2022
	Lab Sample De	scription		Asbestos Type/%		Non-Asbes	tos Fibers	Non-Fibrous	Materials	
Layer: 1	Light brown and a white, chalky mu embedded, white	green-paint d with e paper	ed,	None Detected		Cellulose 4	5-50%	Mineral Aggreg Paint	ate, Binder,	
Layer: 2	ayer: 2 White, chalky drywall with light brown paper		ght	None Detected C		Cellulose 3-5% Fibrous Glass 1-3%		Gypsum, Mineral Aggregate, Binder		e,
Field Sample Lab ID: 202	Number: <u>13</u> 22-08-0159		Fi	ield Sample Descript ove Base Mastic	on:	<b>Field Sampl</b> Open area -	e Location:	Analyst: Analysis Da	WFG ate: 8/12/2	2022
Field Sample Lab ID: 202	Number: <u>13</u> 22-08-0159 Lab Sample De	scription	Fi C	ield Sample Descripti ove Base Mastic Asbestos Type/%	on:	Field Sampl Open area - Non-Asbes	e Location: • north wall tos Fibers	Analyst: Analysis Da Non-Fibrous I	WFG ate: 8/12/2 Materials	2022
Field Sample Lab ID: 202 Layer: 1	Number: <u>13</u> 22-08-0159 Lab Sample De Light brown, som mastic	scription what britt	Fi C [	ield Sample Descripti ove Base Mastic Asbestos Type/% None Detected	on:	Field Sampl Open area - Non-Asbes Cellulose <	e Location: north wall tos Fibers 1%	Analyst: Analysis Da Non-Fibrous I Adhesive, Mine Binder	WFG ate: 8/12/2 Materials eral Aggregat	2022 ] te,
Field Sample Lab ID: 202 Layer: 1 Layer: 2	Number: <u>13</u> 22-08-0159 Lab Sample De Light brown, som mastic Light brown-pain paper	scription what britt ted, white	Fi C [	ield Sample Descripti ove Base Mastic Asbestos Type/% None Detected None Detected	on:	Field Sampl Open area - Non-Asbes Cellulose < Cellulose 4	e Location: north wall tos Fibers 1% 0-45%	Analyst: Analysis Da Non-Fibrous I Adhesive, Mine Binder Binder, Paint, M Aggregate	WFG ate: 8/12/2 Materials eral Aggregat Aineral	2022 ] te,
Field Sample Lab ID: 202 Layer: 1 Layer: 2 Field Sample	Number: <u>13</u> 22-08-0159 Lab Sample De Light brown, som mastic Light brown-pain paper Number: <u>14</u>	scription lewhat britt ted, white	Fi C [	ield Sample Descripti ove Base Mastic Asbestos Type/% None Detected None Detected ield Sample Descripti	on:	Field Sampl Open area - Non-Asbes Cellulose < Cellulose 4 Field Sampl	e Location: north wall tos Fibers 1% 0-45% e Location:	Analyst: Analysis Da Non-Fibrous I Adhesive, Mine Binder Binder, Paint, N Aggregate Analyst:	WFG ate: 8/12/2 Materials eral Aggregat Aineral WFG	2022 ] te,
Field Sample Lab ID: 202 Layer: 1 Layer: 2 Field Sample Lab ID: 202	Number: <u>13</u> 22-08-0159 Lab Sample De Light brown, som mastic Light brown-pain paper Number: <u>14</u> 22-08-0160	scription what britt ted, white	Fi C tle Fi C	ield Sample Description ove Base Mastic Asbestos Type/% None Detected None Detected ield Sample Description ove Base Mastic	on:	Field Sampl Open area - Non-Asbes Cellulose < Cellulose 4 Field Sampl Men's restri	e Location: north wall tos Fibers 1% 0-45% e Location: oom - east wall	Analyst: Analysis Da Non-Fibrous I Adhesive, Mine Binder, Paint, M Aggregate Analyst: Analysis Da	WFG ate: 8/12/2 Materials eral Aggregat Aineral WFG ate: 8/12/2	2022 ] te, 2022
Field Sample Lab ID: 202 Layer: 1 Layer: 2 Field Sample Lab ID: 202	Number: <u>13</u> 22-08-0159 Lab Sample De Light brown, som mastic Light brown-pain paper Number: <u>14</u> 22-08-0160 Lab Sample De	scription lewhat britt ted, white scription	Fi C (le Fi C	ield Sample Description ove Base Mastic Asbestos Type/% None Detected None Detected ield Sample Description ove Base Mastic Asbestos Type/%	on:	Field Sampl Open area - Non-Asbes Cellulose < Cellulose 4 Field Sampl Men's restro Non-Asbes	e Location: north wall tos Fibers 1% 0-45% e Location: oom - east wall tos Fibers	Analyst: Analysis Da Non-Fibrous Adhesive, Mine Binder Binder, Paint, M Aggregate Analyst: Analysis Da	WFG ate: 8/12/2 Materials eral Aggregat Aineral WFG ate: 8/12/2 Materials	2022 ] te, 2022

Field Sample Number: <u>15</u> Lab ID: <b>2022-08-0161</b>		Number: <u>15</u> 22-08-0161	Field Sample Description: White sheet Vinyl Flooring	Field Sample Location: Men's restroom	Analyst: WFG Analysis Date: 8/12/2022
		Lab Sample Description	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
Layer:	1	Light grey and white, flexible sheet vinyl	None Detected	Cellulose <1%	Vinyl, Mineral Aggregate, Binder
Layer:	2	White, fibrous backing with inseparable, white mastic	None Detected	Cellulose 35-40% Fibrous Glass 1-3%	Mineral Aggregate, Binder, Adhesive
Layer:	3	Light grey, cementitious material	None Detected	Cellulose <1%	Mineral Aggregate, Binder





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Customer Name:RivCustomer Project Number:NoProject Name:StuSample Date:10Report Date:8/Project RuiW/	vers Edge Environ one Given rickland Texaco De -Aug-2022 16/2022	emo Sample S 2022	et Number -3245	PacRim Number: Report Number: Date Received: Analysis Start Date Analysis End Date: Analyst(s):	17473 2022-08-0147 8/10/2022 : 8/11/2022 8/15/2022 William F. Gollow	vay
Field Sample Number: <u>16</u> Lab ID: 2022-08-0162	F G B	i <b>eld Sample Descriptio</b> Gypsum Wall Board/Tape/Joint Comp	n: Field Sam Men's rest ound wall	ole Location: croom - west	Analyst: Analysis Date:	WFG 8/12/2022
Lab Sample Descri Layer: 1 Light blue-painted, w mud with embeddec paper	ption vhite, chalky I, white	Asbestos Type/%	Non-Asbe Cellulose	estos Fibers 20-25%	Non-Fibrous Mate Mineral Aggregate, Paint	erials Binder,
Layer: 2 White, chalky drywa brown paper	ll with light	None Detected	Cellulose Fibrous G	3-5% lass 3-5%	Gypsum, Mineral Ag Binder	ʒgregate,
Field Sample Number: <u>17</u> Lab ID: 2022-08-0163	F V	ield Sample Descriptio Vhite caulking	n: Field Sam Men's rest base of to	<b>ple Location:</b> croom - around ilet	Analyst: Analysis Date:	WFG 8/12/2022
Lab Sample Descri	ption	Asbestos Type/%	Non-Asbe	estos Fibers	Non-Fibrous Mate	erials
Light brown to white caulk-like material	e, flexible	None Detected	Cellulose Synthetic	<1% s <1%	Mineral Aggregate,	Binder
Field Sample Number: <u>18</u> Lab ID: <b>2022-08-0164</b>	F V	i <b>eld Sample Descriptio</b> Vall mastic	n: Field Sam Women's wall, behir	<b>ple Location:</b> restroom - west nd RFB	Analyst: Analysis Date:	WFG 8/12/2022
Lab Sample Descri	ption	Asbestos Type/%	Non-Asbe	estos Fibers	Non-Fibrous Mate	erials
Layer: 1 White to clear, tacky mastic	r, pliable	None Detected	Cellulose	<1%	Adhesive, Mineral A Binder	lggregate,
Layer: 2 White, chalky drywa orange-painted, light paper	ll with t brown	None Detected	Cellulose Fibrous G	25-30% lass 1-3%	Gypsum, Mineral Ag Binder	gregate,
Field Sample Number: 19	F	ield Sample Descriptio	n: Field Sam	ole Location:	Analyst:	WFG
Lab ID: 2022-08-0165	v	White caulking	Women's around sir	restroom - Ik	Analysis Date:	8/12/2022
Lab Sample Descri	ption	Asbestos Type/%	Non-Asbe	estos Fibers	Non-Fibrous Mate	erials
White, brittle caulk-l with light brown surf and adhering fibers	ike material face residue	None Detected	Cellulose	<1%	Mineral Aggregate,	Binder





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Custo Custo Proje Samp Repo Repo	omer omer ot Na ole Da rt Da rt By	Name: Project Number: ame: ate: ate: y:	<b>Rivers Edge En</b> None Given Strickland Tex 10-Aug-2022 8/16/2022 William F. Gol	nvironmental Services aco Demo Sam loway	<b>iple Set Number</b> 2022-3245	PacRim Number: Report Number: Date Received: Analysis Start Date: Analysis End Date: Analyst(s):	17473 2022-08-0147 8/10/2022 8/11/2022 8/15/2022 William F. Golloway	
Field Sar Lab ID:	nple 202	Number: <u>20</u> 22-08-0166	scription	Field Sample Desc 2x4 Ceiling Tile	ription: Field Wom	Sample Location: nen's restroom	Analyst: WFG Analysis Date: 8/12	5 2/2022
		White-painted, lig fibrous ceiling tile	ght brown, e material	None Detected	Cellu Fibro	ulose 40-45% pus Glass 1-3%	Binder, Mineral Aggrega Perlite, Paint	te,
Field Sar Lab ID:	nple 202	Number: <u>21</u> 22-08-0167	corintion	Field Sample Desc	ription: Field Mech conci	Sample Location: nanical room, on rete substrate	Analyst: WFG Analysis Date: 8/1	5/2022
		Light brown to cle pliable, inseparable, whit material	ear, brittle to le mastics with e, brittle	None Detected	Cellu	ulose <1%	Adhesive, Mineral Aggre Binder	gate,
Field Sar Lab ID:	nple 202	Number: <u>22</u> 22-08-0168		Field Sample Desc Rolled Roofing	ription: Field Roof wood	Sample Location: - west end on den substrate	Analyst: WFG Analysis Date: 8/1	5/2022
Layer:	1	Black, tar-like roc adhering, white a upper surface	scription fing with ggregate on	Asbestos Type/S	<u>% Non</u> Cellu	Asbestos Fibers	Non-Fibrous Materials Tar, Binder, Mineral Aggregate, Binder, Tar, Mineral Aggregate	
Layer:	2	Black, tar-like roc adhering, white a upper surface	fing with ggregate on	None Detected	Synt Cellu Fibro	hetics 10-15% Jlose <1% pus Glass <1%	Tar, Mineral Aggregate, Binder	
Layer:	3	Black, tar felt ma	terial	None Detected	Fibro	ous Glass 50-55%	Tar, Mineral Aggregate, Wood	
Field Sar Lab ID:	nple 202	Number: <u>23</u> 22-08-0169		Field Sample Desc Rolled Roofing	ription: Field Roof wood	Sample Location: - east end on den substrate	Analyst: WFG Analysis Date: 8/15	G 5/2022
		Lab Sample De	scription	Asbestos Type/	% Non-	-Asbestos Fibers	Non-Fibrous Materials	
Layer:	1	Black, tar-like roc with adhering, wl	fing material nite aggregate	None Detected	Cellu	ulose <1%	Binder, Tar, Mineral Aggregate	_
Layer:	2	Black, tar-like roc with adhering, wi	fing material nite aggregate	None Detected	Synt Cellu	hetics 10-15% ulose <1%	Tar, Mineral Aggregate, Binder	
Layer:	3	Black tar felt mat	erial	None Detected	Fibro	ous Glass 35-40%	Tar, Mineral Aggregate, Binder	





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Customer Name: Customer Project Number: Project Name: Sample Date: Report Date: Report By:	<b>Rivers Edge Envi</b> None Given Strickland Texaco 10-Aug-2022 8/16/2022 William F. Gollow	ronmental Services Demo Sample Set Nur 2022-3245	PacRim Number: Report Number: Date Received: Analysis Start Date Analysis End Date: Analyst(s):	17473 2022-08-0147 8/10/2022 : 8/11/2022 8/15/2022 William F. Golloway
Field Sample Number: <u>24</u> Lab ID: 2022-08-0170		Field Sample Description: Grey sealant	Field Sample Location: Roof - west end on vent exhaust	Analyst: WFG Analysis Date: 8/15/2022
Lab Sample De Grey, brittle, cau with white and b residue	escription lk-like material lack surface	Asbestos Type/%	Non-Asbestos Fibers Cellulose <1%	Non-Fibrous Materials Binder, Mineral Aggregate
Field Sample Number: <u>25</u> Lab ID: <b>2022-08-0171</b>		Field Sample Description: White sealant	Field Sample Location: Roof - east end on square exhaust stack	Analyst: WFG Analysis Date: 8/15/2022
Lab Sample De	escription	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
White, flexible m green and silver- residues	naterial with frey surface	None Detected	No Other Fibers Detected	Mineral Aggregate, Binder, Metal, Algae
Field Sample Number: <u>26</u> Lab ID: <b>2022-08-0172</b>		Field Sample Description: Cement wallboard	Field Sample Location: Exterior - south wall, behind ceramic wall tile	Analyst: WFG Analysis Date: 8/15/2022
Lab Sample De	escription	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
Layer: 1 Light grey, ceme material with bro brown, orange, k embedded aggre embedded, whit	ntitious own, light olack, and grey gate, and e mesh	None Detected	Fibrous Glass 1-3% Cellulose <1%	Mineral Aggregate, Binder
Layer: 2 Grey, cementitio material	us, mortar-like	None Detected	Cellulose <1%	Mineral Aggregate, Binder
Field Sample Number: <u>27</u> Lab ID: 2022-08-0173		Field Sample Description: Black door Frame Caulk	Field Sample Location: Exterior - south wall around doorway	Analyst: WFG Analysis Date: 8/15/2022
Lab Sample De	escription	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
Brown, flexible, ( material with ad fragments	caulk-like hering wood	None Detected	No Other Fibers Detected	Binder, Mineral Aggregate, Wood





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Customer Name:	Rivers Edge Environmental Ser	vices	PacRim Number:	17473
Customer Project Number:	None Given		Report Number:	2022-08-0147
Project Name:	Strickland Texaco Demo		Date Received:	8/10/2022
Sample Date:	10-Aug-2022		Analysis Start Date:	8/11/2022
Report Date:	8/16/2022	Sample Set Number	Analysis End Date: Analyst(s):	8/15/2022 William F. Golloway
Report By:	William F. Golloway	2022-3245		William P. Conoway

Field Sample Number: <u>28</u> Lab ID: <b>2022-08-0174</b>	Field Sample Description: Wall siding	Field Sample Location: Exterior - south wall	Analyst: WFG Analysis Date: 8/15/2022
Lab Sample Description	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
Layer: 1 Brown-painted, white, somewhat brittle texture or coating material	Tremolite <1%	Cellulose <1%	Binder, Paint, Mineral Aggregate
Layer: 2 Light grey, cementitious board material	None Detected	Cellulose 25-30%	Mineral Aggregate, Binder
Field Sample Number: 29	Field Sample Description:	Field Sample Location:	Analyst: WFG
Lab ID: 2022-08-0175	Window Frame Caulk	Exterior - north wall around metal window frame	<b>Analysis Date:</b> 8/15/2022
Lab Sample Description	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
Dark brown to light grey, flexible, caulk-like material with adhering metal fragments and fibers	None Detected	Cellulose <1%	Mineral Aggregate, Binder, Metal
Field Sample Number: <u>30</u>	Field Sample Description:	Field Sample Location:	Analyst: WFG
Lab ID: 2022-08-0176	Wall mastic	East Closet - east wall behind RFB	Analysis Date: 8/15/2022
Lab Sample Description	Asbestos Type/%	Non-Asbestos Fibers	Non-Fibrous Materials
Layer: 1 Clear, tacky mastic	None Detected	Cellulose <1%	Adhesive, Mineral Aggregate, Binder
Layer: 2 Light brown-painted, blue-green paper material	None Detected	Cellulose 40-45%	Paint, Binder, Mineral Aggregate

### Appendix C: Sample Location Drawing



### Appendix D: WA State Guidelines for Less than 1% Asbestos Material



Summary of regulatory requirements for materials containing less than 1% asbestos:

#### **Environmental Protection Agency**

If less than 1% the EPA does not regulate it as an asbestos-containing material.

#### Washington State Department of Labor and Industries

#### **Air Monitoring**

Exposure Monitoring (NEA) - yes Pre-abatement monitoring – unclear Post abatement monitoring – unclear

#### Work Practices and working Area Control

Regulated area required – yes Change area require – yes Warning signs required – yes Universal controls required – yes

- Wet Methods
- HEPA vacuums
- Prompt Disposal

Leak tight containers required - yes

#### **Personal Protective Equipment**

Respirator protection – yes, ½ mask APR with HEPA required until air monitoring results determine exposure below PELs Medical surveillance required – yes, because of negative pressure APR use Other personal protective equipment – yes, required until air monitoring results determine exposure below PELs **Communication of Hazard** 

Warning labels on in-place materials required – no Warning labels on disposal containers – no Training 2-hour awareness, hazard communication (specific to situation) Competent Person required – yes

- Training unclear how much training is required
- Must have knowledge and authority

#### Things that are not required:

Labeled bags Worker or supervisor certification No pre-demolition removal requirement No notification to L&I or PSCA

## Appendix E: Inspector / Laboratory Certifications

# Certificate of Completion

This is to certify that Tyler Sadler

has satisfactorily completed 4 hours of online refresher training as an AHERA Building Inspector

to comply with the training requirements of TSCA Title II, 40 CFR 763 (AHERA)

182608

Certificate Number

A TErracon COMPANY

ARGUS

TRAINING · CONSULTIN

EPA Provider # 1085

Instructor: Andre Zwanenburg ARGUS PACIFIC, INC / 21905 64th AVE W, SUITE 100 / MOUNTLAKE TERRACE, WASHINGTON 98043 / 206.285.3373 / ARGUSPACIFIC.COM

Oct 6, 2021 Date(s) of Training Expires in 1 year.

Exam Score: N/A (if applicable)

United States Department of Commerce National Institute of Standards and Technology



# Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101631-0

### Pacific Rim Environmental, Inc.

Tukwila, WA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

### **Asbestos Fiber Analysis**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2022-04-01 through 2023-03-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program

ac-MR

#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Pacific Rim Environmental, Inc. 6510 Southcenter Boulevard Suite #40 Tukwila, WA 98188 Mr. William F. Golloway Phone: 206-244-8965 Fax: 206-244-9096 Email: fgolloway@pacrimenv.com http://www.pacrimenv.com

### ASBESTOS FIBER ANALYSIS

#### NVLAP LAB CODE 101631-0

#### **Bulk Asbestos Analysis**

Code	<b>Description</b>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

### **APPENDIX E**

Vapor Suppressant SDS




Page 1 of 6

Section 1 – Chemica	cal Products and Company Identification		
Product Names:	BioSolve <sup>®</sup> Pinkwater <sup>®</sup>		
Product Uses:	Remediation of hydrocarbon (oil, fuel, petrochemical) contamination, including: impacted soils, suppression of VOCs, surface cleaning of equipment and protective clothing.		
Manufacturer:	The BioSolve Company 329 Massachusetts Ave Lexington, MA 02420	nue USA	
Contact Information:	+1 (800) 225-3909 +1 (781) 482-7900	US, Canada, Mexico and Puerto Rico All other locations	

### Section 2 – Hazards Identification

Health Hazards:	Eye Contact: Skin Contact: Ingestion:	Causes transient eye irritation May cause mild, transient irritation May be harmful if swallowed; can cause gastrointestinal irritation, nausea, vomiting and/or diarrhea
Hazard Mitigation:	Wear protective gl Avoid prolonged b	oves and eye/face protection reathing of spray
Environmental Hazards:	Moderately toxic to aquatic life. Avoid discharge to storm drains and waterways	
GHS Classification:	Toxic to aquatic lif	fe. Acute Category 2

### Section 3 – Composition/Information on Ingredients

Proprietary formulation with nonionic surfactants (32% active ingredients in water)

BioSolve products contain no caustic, d-limonene or hydrocarbon solvents.

BioSolve products do not contain any hazardous ingredients as defined by CERCLA, Massachusetts Right to Know Law and California Prop 65. All ingredients are TSCA compliant.





Page 2 of 6

#### Section 4 – First Aid Measures

- Eyes: Immediately flush eyes with water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Seek medical attention for lasting irritation.Skin: Rinse exposed area and wash with mild soap and water for several
- minutes. Seek medical attention if irritation develops.
- **Ingestion:** Seek medical attention in the event of serious or persistent abdominal discomfort, nausea or diarrhea.
- **Inhalation:** Inhalation of concentrated vapors resulting from spraying or heating in confined or poorly ventilated areas may cause irritation of nose and throat. Remove person to fresh air and seek medical attention if irritation persists.

#### Section 5 – Fire Fighting Measures

Suitable Extinguishing Media: None required; BioSolve products are non-flammable

Special Protective Equipment for Firefighters: None necessary

**Unusual Fire or Explosive Hazards:** None

#### Section 6 – Accidental Release Measures

In case of accidental release, breakage or leakage: Eliminate or contain source with inert material, such as sand, earth, absorbent pads, etc. Transfer liquid to suitable containers for recovery, re-use or disposal. Wipe up or mop up using water. Hard surfaces (e.g., floors, driveways) may be slippery; use care to avoid falling.

Rinse area with water. Avoid flow of run-off to surface waters. Always check with local regulations before discharging effluent to storm drains or sewers.

#### Section 7 – Handling and Storage

Handling:	Minimize periods of exposure to extreme temperatures. Keep from		
	freezing. If frozen, separation may occur; thaw and stir thoroughly		
	prior to use. Freezing will not affect product performance.		
Precautions:	Chemical resistant gloves and eye protection are recommended while		
	mixing and using.		
Incompatibilities:	Avoid contact with strong acids or strong oxidants.		
Storage:	Recommended storage temperature: $35^{\circ} - 120^{\circ} \text{ F} (1^{\circ} - 48^{\circ} \text{ C})$ .		
Shelf Life:	If unopened, more than 10 years.		





Page 3 of 6

# Section 8 – Exposure Controls / Personal Protection

Eyes Protection:	Safety glasses; chemical goggles or face shield recommended when
	spraying to protect against backsplash and drift.
Skin Protection:	Rubber or latex gloves recommended.
Respiratory	None required, except if application results in significant misting of
Protection:	product. If so, use of an approved air purifying respirator is recommended.
Engineering Controls:	For indoor use or for use in a confined space, normal ventilation is generally satisfactory.

# Section 9 – Physical and Chemical Properties

Appearance:	Deep red
Odor:	Mild, pleasant sassafras fragrance
Concentration:	~32% active ingredients as sold

Boiling Point	265°F/129°C	Vapor Pressure mm/Hg	Not available
Melting/Freezing Point	28°F/-2°C	Vapor Density (Air=1)	Not available
Flash Point	Non-flammable	Surface Tension*	29 Dyne/cm @25°C
Flammability Limits	Not applicable	Viscosity (concentrate)	490 centipoise
Reactivity with Water	None	Viscosity (6% solution)	1.5 centipoise
Evaporation Rate	Not determined	Solubility in Water	100%
Specific Gravity	1.01 gms/cc	VOC Content	Not determined
	8.43 lbs/U.S. gal	рН	9.1 +/- 0.3
1.00/ 1.1			

\*6% solution

# Section 10 – Stability and Reactivity

Stable; will not decompose if used according to manufacturer's directions.
Prolonged exposure to heat may cause product degradation. Freezing should also be avoided as discussed in Section 7.
Normally unreactive. Avoid strong alkalis, strong acids, strong oxidizing agents and materials with reactive hydroxyl compounds. These materials could damage the product and reduce its effectiveness during application.
Will not occur.





Page 4 of 6

### Section 11 – Toxicological Information

Overview:	No adverse acute or chronic health effects expected if product used in
	accordance with manufacturer's directions.
Carcinogenicity:	No ingredient has been shown to cause cancer in laboratory animals.
Specific Organ	None are known.
Toxicity:	

#### Section 12 – Ecological Considerations

Persistence and Degradability: Bioaccumulation Potential:	The total of the organic component classified as readily biodegradal product is inherently biodegrada (OECD-301B) and estimated >9 The bioaccumulation factor in fir ranging from 87 to 344.	ents contained ble (OECD-301 able with 60% o 95% degradatio ish has been es	in this product is not A-F). However, this degradation in 28 days n in 120 days. timated to be low,	
Mobility:	No data available			
Aquatic Toxicity:	LC50 of Concentrate (As shipp	ed)		
	Mysidopsis bahia	48-hours	3.6 mg/L	
	Menidia beryllina	96-hours	6.4 mg/L	
	LC50 of 3% Dilute Solution (As Used)			
	Mysidopsis bahia	48-hours	185 mg/L	
	Menidia beryllina	96-hours	247 mg/L	
	LC50 of 6% Dilute Solution (A	As Used)	-	
	Daphnia magna	48-hours	287 mg/L	
	Pimephales promelas	96-hours	124 mg/L	
	Onchorhynchus mykiss	96-hours	177 mg/L	
tion 13 - Disposa	1		-	

#### Section 13 - Disposal

DO NOT DUMP INTO STORM DRAINS OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. As manufactured, BioSolve products do not meet the definition of a hazardous waste. Small quantities of unused and uncontaminated product may be discharged to a qualified wastewater treatment facility. Always obtain approval from local and Federal regulatory agencies prior to discarding this product into public sewers.

As your supplier, we have no control over your handling and use of this product. However, the intended use of this product as a remediation and/or surface washing agent may produce wastewater containing emulsified or dispersed hydrocarbons that may be classified as a hazardous waste and should be treated and disposed of accordingly.





Page 5 of 6

### Section 14 – Transportation Information

USDOT Freight Class 55 (Liquid Cleaning Compound, Non-Hazardous) This product is not regulated by USDOT or Canadian TDG when shipped domestically by land.

North American Industry Classification System (NAICS) # 325613

U.S. ITC, Harmonized Tariff Schedule B Classification: 3402.90.30.00

#### Section 15 – Regulatory Information

This product is considered non-hazardous as defined by CERCLA, according to OSHA, Massachusetts Right to Know Law and California Prop 65.

Toxic Substances Control Act:	All components of this period the exempt from TSCA Inv	product are on the TSCA inventory or are entory requirements under 40 CFR 720.30.
CEPA – Domestic Substances List:	All substances containe Domestic Substances Li	d in this product are listed on the Canadian ist (DSL) or not required to be listed.
Canadian CPR Compliance:	This product has been c of the Canadian Control contains all the informa	lassified in accordance with the hazard criteria lled Products Regulations (CPR) and the SDS tion required by the CPR
WHMIS Classification:	D2B	Eye or skin irritant

Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with Federal, state or provincial and local laws.





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#### Section 16 – Other Information

HMIS Rating	Health Hazard: Fire Hazard: Reactivity: Personal Protective	1 (Eye/Skin Irritant) 0 0 Rubber gloves, safety
	Equipment:	glasses or face shield
NFPA Rating	Health:	1 (Eye/Skin Irritant)
	Flammability:	0
	Reactivity:	0
	Other Hazard:	None

BioSolve Pinkwater is on the US Environmental Protection Agency's NCP Product Schedule. This listing does NOT mean that EPA approves, recommends, licenses, certifies or authorizes the use of BioSolve Pinkwater on an oil discharge. This listing means only that data have been submitted to EPA as required by Subpart J of the National Contingency Plan, 40 CFR Section 300.915.

#### SDS Effective Date: May 12, 2016

The information contained herein is accurate to the best of our knowledge. The BioSolve Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or application or in combination with other substances.

For more information, visit: <u>www.biosolve.com</u>

# **APPENDIX F**

Underground Storage Tank Decommissioning Records

DEPARTMENT OF
State of Washington

### **30-DAY NOTICE** FOR UNDERGROUND STORAGE TANK SYSTEMS

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

County: \_\_\_\_\_

*This form provides Ecology 30-days' advanced notice for projects, as required by Chapter 173-360A WAC. Instructions are on the back page.* 

Please 🗸 the a	opropriate box:	🗌 Intent to	Install 📈 I	ntent to Close [	Change-in-Service		
	I. SITE INFO	ORMATION		II. Own	er/Operator Information		
Tag or UBI # (	if applicable):			Owner/Operator Na	ame: Ryan Megenity		
UST ID # (if ap	plicable): 6802			Business Name: Str	ickland Real Estate Holdings, LLC		
Site Name: 7	Fexaco Strickl	and		Mailing Address: 12	199 Village Center PL Ste. 201		
Site Address:	6808 196th S	st SW		<sup>City:</sup> Mukilteo	State: WA Zip: 98275		
City: Lynnwo	bod			Phone: 425.252.36	626		
Phone:				Email: ryan@rpmo	cousa.com		
	III. CERTIFIED SERVICE PROVIDER(S) Check the appropriate boxes. If more than one service provider is required for this project, fill out both sections. Note: Individuals performing UST services MUST be ICC-certified or have passed						
1)  Installer  Decommissioner  Site Assessor							
Company Nar	ne: Rivers Edge	Environmenta	L Services Inc.	Certification Type: ICC LIST Decommissioning			
Service Provid	ler Name: Dan	Kuhn		Cert. No.: 9291718 Exp. Date: 10/06/23			
Provider Phor	ne: 206.962.0	323		Provider Email: dkuhn@rivers city			
2) 🗌 Ins	taller 🗌 De	commissioner	X Site Asse	ssor			
Company Nar	ne: Aspect Cons	ulting		Certification Type: I	CC UST Washington State Site Assessmen		
Service Provid	ler Name: Danie	l Babcock		Cert. No.: 10222070	Exp. Date: 9/03/2024		
Provider Phor	ne: 316-617-049	9		Provider Email: dbabcock@aspectconsulting.com			
		IV.	Tank and/or P	IPING INFORMATION			
TANK ID	Tank Capacity	SUBSTANCE STORED	PIPING INSTALLATION OF REPLACEMENT ONLY (Y/N)	R DATE PROJECT IS EXPECTED TO BEGIN	Comments		
01	500 Gallon	Heating OII	No	10/03/2022	3 tanks on site. 2 have been		
02	500 Gallon	Waste Oil	No	10/03/2022	1 tank is unknown capacity,		
03	Unknown	Unknown	No	10/03/2022	unknown contents.		
					-		

### **30-DAY NOTICE** FOR UNDERGROUND STORAGE TANK SYSTEMS

#### **GENERAL INSTRUCTIONS**

Under WAC 173-360A-0300, 173-360A-0810 and 173-360A-0820, owners and/or operators are required to notify the Department of Ecology (Ecology) **at least 30 days prior** to beginning underground storage tank (UST) and/or piping installation, decommissioning, or change-in-service projects by mailing this notice to the address below. A separate form must be used for each project type (e.g. install, removal). Once this form is received by Ecology, it is date-stamped and returned to the owner/operator listed on the form. Installation and decommissioning projects cannot begin within the first 30 days after the date stamped on this form <u>unless the wait-period has been waived</u> by a regional Ecology UST inspector. If a project cannot meet the deadlines described below, an additional 30-Day Notice may be required.

Department of Ecology Underground Storage Tank Section PO Box 47655 Olympia, WA 98504-7655

#### SITE AND OWNER/OPERATOR INFORMATION

Fill in the site/owner information completely. The contact person listed on this form <u>must</u> confirm the exact date an installation or decommissioning project will begin by contacting the regional UST inspector **at least 3 business days** before proceeding.

#### INSTALLATION/REPLACEMENT OF TANK AND/OR PIPING

Installation projects must begin within 90 days of the date stamped on this notice. Complete the Tank Information section by assigning Tank ID numbers that have not previously been used at the facility. Once processed, this form allows a one-time drop of product for UST system testing purposes only. The fuel drop is not required to occur within the 90-day period. Once your tank(s) store more than one inch of product, <u>leak detection equipment and monitoring must be in place</u>.

To receive additional deliveries and operate the new tanks/piping, you must submit the <u>Business License application</u>, <u>UST</u> <u>Addendum</u>, and the tank/piping Manufacturer's Installation Checklists to the Department of Revenue (DOR) within 30 days of completing the installation. This activates the mailing of your Business License with tank endorsement(s) from DOR and the facility compliance tag from Ecology.

If <u>only</u> piping is being installed or replaced piping, the ICC-certified installer must certify the installation by completing the <u>Retrofit/Repair Checklist</u> with the Manufacturer's Installation Checklist and submitting it to the owner/operator. The form packet must be submitted by the owner/operator to Ecology **within 30 days** of completing the piping installation.

#### PERMANENT CLOSURE OF TANK AND/OR PIPING

Decommissioning projects must be completed within 90 days after the date stamped on this returned notice. Complete the Tank Information section using Tank ID numbers listed on the Business License. Use the Comments box to include additional information, such as the date when product was <u>removed from both the piping and the tank</u> to less than one inch.

Contact your local fire marshal and planning department prior to tank closure to procure any permits required by county or other local jurisdictions. Compliance with the State Environmental Policy Act (SEPA) Rules, Chapter 197-11 WAC may also apply.

A site assessment is required at the time of closure. If contamination is <u>not</u> discovered, a site assessment report must be submitted to the above address **within 30 days**. If contamination <u>is</u> discovered or confirmed, it must be reported to the appropriate Ecology regional office **within 24 hours** and a site characterization report must be submitted to the above address **within 90 days**.

The following are some examples of tanks that are exempt from the UST regulations.

- Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only. The fuel must be used for farm purposes and cannot be for resale.
- Tanks used for storing heating oil that is used solely for the purpose of heating the premises.
- ✤ Tanks with a capacity of 110 gallons or less.
- Emergency overflow tanks, catch basins, or sumps.

If you need this document in a format for the visually impaired, call Toxics Cleanup Program at (360) 407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with speech disability, call (877) 833-6341.

Marine Vacuum Service, Inc.

GENERAL CONTRACTOR CONTRACTORS LICENSE # MARINVS097JA P0. Box 24263 Seattle, Washington 98124 Telephone (206) 762-0240 FAX (206) 763-8084 1-800-540-7491

# **AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE**

Tank Size:	Thank (500 gallons each)
Last Contents	orlater
Tank Location:	6808 196 TH SW
	lynnwood wh

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are <u>NOT GAS FREE</u> or <u>NOT SAFE FOR HOT WORK</u>

Tank Owner:	Strikeland freed Estade
Contractor:	Roras Edge Environmental Mus SE 220 PI Cononger List 97042
M.V.S. Repres	entative:
Date:	0/6/22

Notes:

DBE # D4M1302341

EPA # WAD980974521

This Shippir	ng Order	must be legibly fille Carbon, and retaine	d in, in Ink indelible Pencil, or ad by the agent	in		Shipper N	o0 (	19095
						Carrier N	. 344	49
Page of		ha.e	RINE VACUUM S	SERVICE, ING	*	Dat	- 10/1	5/22
		4	(Name o	f carrier)	(SCAC)			
On Collect on Delivery shipments TO:	s, the letters "COD" mus	st appear before consignee's name o	or as otherwise provided in item 430, Sec.1.	FROM: Shipper	KIVERS Z	160		
Consignee AAA	NIE VAC		E. MC	Street 6	808 19	6-14 SC	J	
Street 510 G	<u>GRAHA</u>	M ST		City Lynna	Jood	State W	Zip Code	
	State	14/4	Zip Code	24 hr. Emergency Co	ontact Tel. No	00-540-74	191	
Route						Ve	hicle	25
No. of Units & Container Type	НМ	JN or NA Number, Prope	BASIC DESCRIPTION	s. Packing Group	TOTAL QUANTITY (Weight, Volume,	WEIGHT (Subject to	RATE	CHARGES (For Carrier
		211	1,500	Sallare	Gallons, etc.)	Correction)		Use Only)
		O/(	Water	Jactions 6	(4360)	6A		
			Sludge =		50	GAL		
			0	1				1
		0	TOTAL		3/	1- 11		
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PLACARD	STENDERF			REMIT		. <u> </u>		
Nota — (1) Where the rate is specifically in writing the agreed agreed or declared value of the	eviev no triebrageb	, shippers are required to state of the property, as follows: "The collically stated by the shipper to	I hereby declare that the contents of this consignment are fully and accurately	C.O.D. TO: ADDRESS				
be not exceeding	perper wisions specify a limita on by the shipper an	titon of the carrier's llability absent d the shipper does not release	described above by the proper shipping name and are classified, packaged marked and labelled/placarded, and are in all respects in proper condition to	COD	Amt: \$	C.O.I PRE COLI	D. FEE: PAID [] LECT [] \$	
(3) Commodities requiring special must be so marked and package	value, the camer's lial NMFC Item 172. al or additional care of the as to ensure safe the	bility shall be limited to the extent r attention in handling or stowing ansportation. See Section 2(a) of	transport according to applicable International and national governmental regulations.	Subject to Section 7 of the con consignee without recourse on following statement: The carrier shall not make	nditions, if this shipment is to be de the consignor, the consignor a delivery of this shipment without	ilivered to the tothe the tothe	AGES \$	
Item 360, Bills of Lading, Freight the Contract Terms and Condition	t Bills and Statements ins for a list of such an	of Charges and Section 1(a) of icles.	Signature	freight and all other lawful charge	nature of Consignor)	FREIGI Bicept right is	HEIGHT CHAMO TPREPAID Chec when box at checked	diES k box If charges are to be collect
HLCLIVED, the property tents of pac (the word ca possassion o nation, if on ally agreed a	, subject to the classifice described above in ap elkages unknown), mark arrier being understood of the property under the its route, otherwise to d as to each carrier of all	suons and tariffs in effect on the date parent good order, except as noted text, consigned, and destined as [nd I throughout this contract as meanin a contract) agrees to carry to its usus deliver to another carrier on the rout or any of, said property over all or t	of the Issue of this Bill of Lading, (contents and condition of con- icated above which said carrier ig any person or comporation in a place of defivery at said desit- e to said destination. It is mutu- any portion of said routs to rea-	tination and as to each pa be performed hereunder sh sification on the date of si Shipper Assification au governing classification au accepted for himself and i	arty at any time Interested in all all be subject to all the bill of lading hipment. tifkes that he is familiar with all not the said terms and conditions his assigns.	or any said property, the terms and conditions in the lading terms and are hereby agreed to	at every service to the governing clas- d conditions in the by the shipper and	
SHIPPER	RIV	ERS EDG	E	CARRIER		SERVIC	E, INC	
PER	Acu	J-		PER Sath				$\overline{2}$
	\$ 4 <sup>57</sup>			DATE 10	6/22			14
Permanent post-office ad	dress of shipper.		-	STYLE F375-4 @201	12 LABEL MASTER® (80	0) 621-5808 www	v.labeimaster.co	om ·



#### PERMANENT CLOSURE NOTICE FOR UNDERGROUND STORAGE TANKS

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

County: \_\_\_\_

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

	UST FACILITY		- 2 M	II. OWNER/OPI	RATOR INFORMA	TION	
Facility Compliance Ta	Owner/Op	Owner/Operator Name: Ryan Megenity					
UST ID #: 6802			Business N	lame: Stricklan	d Real Estate	Holdings, LLC	
Site Name: Texaco S	trickland		Address: 1	2199 Village	Center PL Ste.	201	
Site Address: 6808 '	196th St SW	,	City: Muk	ilteo	State: WA	zip: 98275	
City: Lynnwood			Phone: 42	5.252.3626			
Phone:			Email: <b>rya</b>	n@rpmcousa	.com		
		III. CERTIFIED U	ST DECOMMIS	SIONER			
Company Name: Rive	ers Edge Environ	mental Services In	c. Service Pro	ovider Name: D	an Kuhn		
Address: 17115 SE 27	Oth Place, Suite I	E106	Certificatio	on Type: ICC U	ST Decommiss	sioning	
City: Covington	State:	WA Zip: 9804	2 Cert. No.:	Cert. No.: 9191718 Exp. Date: 10/06/23			
Provider Phone: 42	5-584-70	189	Provider E	Provider Email: Dan Kuhn			
Provider Signature:	Ant	_	Date: /O	Date: 10/17/22			
6		IV. TANK	INFORMATION				
TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	removal	CLOSURE METHO	D change-in-service	CLOSURE DATE	
01	500 Gallon	Heating Oll	X			10/6/22	
02	500 Gallon	Waste Oil	X			10/6/2022	
03	500 Gall	Heating OII	X			10/4/2022	
	<u>ول</u> السرائية: وي من م	V. REQUI	RED SIGNATIUR				
Signature ackno	wledges UST(s) cor	mply with UST regula	ation WAC 173-3	860A-0810 Permai	nent Closure Requir	ements.	
Date	Signature of Tank ( Representative	Owner/Operator or /	Authorized	Print or T	ype Name	-	

)

#### ECY 020-94 (Revised October 2018)

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## **PERMANENT CLOSURE NOTICE**

FOR UNDERGROUND STORAGE TANKS

#### **INSTRUCTIONS**

This form must be completed and submitted within thirty days of completing permanent closure activities to the following address:

Dept. of Ecology UST Section PO Box 47655 Olympia, WA 98504-7655

- **I./II. UST Facility and Owner/Operator:** Fill out these sections completely. If you do not know your UST ID number, include the facility compliance tag number. If all tanks at the site are permanently closed, the facility compliance tag must be returned with this notice.
- **III. UST Decommissioner:** It is the responsibility of the ICC-certified Decommissioner to follow proper tank closure procedures in accordance with WAC 173-360A-0810. The Decommissioner signature certifies these procedures were followed.
- IV. Tank Information: Use the same Tank IDs that are listed on the facility's Business License. List the last substance stored in each tank, the tank sizes, the method by which the tank is being closed, and the date closure activities were conducted. All closure methods require a site assessment be conducted in accordance with Ecology's Guidance for Site Checks and Site Assessments for Underground Storage Tanks.
- V. **Required Signature:** The owner and/or operator's signature is required. Also, the owner and/or operator is responsible for reporting confirmed releases to Ecology within 24 hours.

All confirmed releases must be reported to Ecology by the owner immediately and by service providers within 72 hours of the discovery of the condition. If the owner or operator is not immediately available, the report should be made directly to Ecology.

Be sure to contact your local fire marshal and other local jurisdictions. They may have other codes and regulations that apply to a permanent tank closure.

Further questions? Please contact your regional office below and ask for a tank inspector to assist you.

Regional Office	Counties Served
Central (509) 575-2490	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima
Eastern (509) 329-3400	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman
HQ (360) 407-7170	Federal facilities in Western Washington
Northwest (425) 649-7000	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom
Southwest (360) 407-6300	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

## or find a complete list of UST inspectors at:

www.ecy.wa.gov/programs/tcp/ust-lust/people.html

#### ECY 020-94 (Revised October 2018)

1



# **APPENDIX G**

Laboratory Analytical Reports

#### ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Vineta Mills, M.S. Eric Young, B.S. 5500 4th Avenue South Seattle, WA 98108 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

January 9, 2023

Breeyn Greer, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Ms Greer:

Included are the results from the testing of material submitted on January 3, 2023 from the Texaco 180357, F&BI 301007 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcook ASP0109R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 3, 2023 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco 180357, F&BI 301007 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
301007 -01	SP-01
301007 -02	SP-02
301007 -03	SP-03

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/23 Date Received: 01/03/23 Project: Texaco 180357, F&BI 301007 Date Extracted: 01/03/23 Date Analyzed: 01/04/23

### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
SP-01 301007-01	<5	94
SP-02 301007-02	<5	88
SP-03 301007-03	<5	94
Method Blank <sup>03-004 MB</sup>	<5	112

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/23 Date Received: 01/03/23 Project: Texaco 180357, F&BI 301007 Date Extracted: 01/03/23 Date Analyzed: 01/04/23

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 50-150)
SP-01 301007-01	<50	<250	104
SP-02 301007-02	<50	<250	103
SP-03 301007-03	<50	<250	106
Method Blank <sup>03-048 MB</sup>	<50	<250	107

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SP-01 01/03/23 01/04/23 01/04/23 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco 180357, F&BI 301007 301007-01 010412.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	98	90	109
Toluene-d8		107	89	112
4-Bromofluorobenze	ene	99	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		0.072		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SP-02 01/03/23 01/04/23 01/04/23 Soil mg/kg (ppm	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco 180357, F&BI 301007 301007-02 010413.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	92	90	109
Toluene-d8		107	89	112
4-Bromofluorobenze	ene	96	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		0.12		
Ethylbenzene		< 0.05		
m,p-Xylene		0.16		
o-Xylene		0.058		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SP-03 01/03/23 01/04/23 01/04/23 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco 180357, F&BI 301007 301007-03 010414.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	95	90	109
Toluene-d8		109	89	112
4-Bromofluorobenze	ene	96	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		0.060		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blank		Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	9	Project:	Texaco 180357, F&BI 301007
Date Extracted:	01/04/23		Lab ID:	03-0049 mb
Date Analyzed:	01/04/23		Data File:	010405.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm) I	Dry Weight	Operator:	lm
			Lower	Upper
Surrogates:	ç	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	95	90	109
Toluene-d8		105	89	112
4-Bromofluorobenze	ene	95	84	115
	С	oncentration		
Compounds:	r	ng/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/23 Date Received: 01/03/23 Project: Texaco 180357, F&BI 301007

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

Laboratory Code: 2	12418-03 (Duplic	ate)			
		Samp	ole Du	iplicate	
	Reporting	Resu	lt I	Result	RPD
Analyte	Units	(Wet V	Wt) (W	/et Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: L	aboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	_
Gasoline	mg/kg (ppm)	20	125	70-130	_

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/23 Date Received: 01/03/23 Project: Texaco 180357, F&BI 301007

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

Laboratory Code:	301010-01 (Matri	x Spike)					
Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	2,000	<50	110	120	70-130	9
Laboratory Code:	Laboratory Contro	ol Sampl	e Percent				
	Reporting	Spike	Recovery	v Accepta	ance		
Analyte	Units	Level	LCS	Criter	ria		
Diesel Extended	mg/kg (ppm)	2,000	123	70-13	30		

9

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/09/23 Date Received: 01/03/23 Project: Texaco 180357, F&BI 301007

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

Laboratory Code: 212396-01 (Matrix Spike)

<b>Hasofator</b> , <b>State</b> , <b>Hasofator</b> , <b>Hasofato</b>	(intertim opinio)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	2	< 0.03	81	86	29-129	6
Toluene	mg/kg (ppm)	2	< 0.05	71	76	35 - 130	7
Ethylbenzene	mg/kg (ppm)	2	< 0.05	71	77	32 - 137	8
m,p-Xylene	mg/kg (ppm)	2	< 0.1	73	<b>78</b>	34-136	7
o-Xylene	mg/kg (ppm)	2	< 0.05	74	79	33-134	7
Naphthalene	mg/kg (ppm)	2	< 0.05	67	75	14 - 157	11

Laboratory Code: Laboratory Control Sample

U	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	2	114	71-118
Toluene	mg/kg (ppm)	2	99	66-126
Ethylbenzene	mg/kg (ppm)	2	99	64-123
m,p-Xylene	mg/kg (ppm)	2	101	78 - 122
o-Xylene	mg/kg (ppm)	2	102	77 - 124
Naphthalene	mg/kg (ppm)	2	98	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

	FII. (200) 283-8282	Friedman & Bruya, Inc.					50-95	20-75	10-25	Sample ID		PhoneE	City, State, ZIP		Address	Company PSPect	Report To Breen bi	L 00108
Received by:	Received by: M/M/M/M/	Relinquished by:	SIGNATURE			-	03 4	02	01 A-E 01/03/23	Lab ID Date Sampled		mail dente an portrom his	bgrear@wputronuting.		Ĺ	Consulting	eur, Danic/ Babco	
		ANA ANA					1020	1010	0001	Time Sampled		Mar Project s		REMAR	Texo	PROJE		SAMPLE
	When	Nikoh					E	/	Sil	Sample Type		pecific RLs		KS	10	T NAME	ERS (signat	CHAIN
	, Ph	x. (a	PRINT				4		い ス	NWTPH-Dx		? - Yes /			325		ure)	OF CU
	<i>kwi</i> N	1011	VAME		 	 	È		7	NWTPH-Gx		No			لـ		MM	STOD
					 	 				NWTPH-HCID	A			4I		ę	(m)	Y
					 					VOCs EPA 8260	NALY			VVOIC		PO	M	
	Fl	Ps		_	 -					PAHS EPA 8270 PCBs EPA 8082	SES R			ETO		#		0
Jam pl	5-1	Per	ÖMP				4		V	BTEX 8260	EQUE							1/0
es rec	1	イ	ANY					 	$  \wedge$	+Napthalene	STED	Def			Rus			5/23
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12 °C	21/03/23	۰ <u>۲/۲</u> ۵۸۵	DATE							No		<u>Dispose afte</u>	samples	APLE DISPO	$\int_{-\infty}^{-\infty}$ ges authorize	d turnaround	WAROUND 1	$\frac{1}{A}$
	132	21325	TIME							tes		r 30 days		SAL	›d by:	<u>ک</u>	TIME	-

File :P:\Proc\_GC14\01-03-23\010333.D
Operator : TL
Acquired : 03 Jan 2023 03:49 pm using AcqMethod DX.M
Instrument : GC14
Sample Name: 301007-01
Misc Info :
Vial Number: 30

ERR



Time

File :P:\Proc\_GC14\01-03-23\010334.D
Operator : TL
Acquired : 03 Jan 2023 04:00 pm using AcqMethod DX.M
Instrument : GC14
Sample Name: 301007-02
Misc Info :
Vial Number: 31

ERR



File :P:\Proc\_GC14\01-03-23\010335.D
Operator : TL
Acquired : 03 Jan 2023 04:12 pm using AcqMethod DX.M
Instrument : GC14
Sample Name: 301007-03
Misc Info :
Vial Number: 32

ERR



File :P:\Proc\_GC14\01-03-23\010303.D
Operator : TL
Acquired : 03 Jan 2023 05:25 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 500 Dx 67-143B
Misc Info :
Vial Number: 3

ERR



#### ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Vineta Mills, M.S. Eric Young, B.S. 5500 4th Avenue South Seattle, WA 98108 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

January 12, 2023

Breeyn Greer, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Ms Greer:

Included are the results from the testing of material submitted on January 4, 2023 from the Texaco 180357, F&BI 301030 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP0112R.DOC

#### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on January 4, 2023 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco 180357 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
301030 -01	PL-N12-447
301030 -02	PL-N12-442
301030 -03	PL-N10-447
301030 -04	PL-N10-442

The 8260D matrix spike and matrix spike duplicate failed the relative percent difference for toluene. The laboratory control sample passed the acceptance criteria, therefore the results were due to matrix effect.

All other quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/12/23 Date Received: 01/04/23 Project: Texaco 180357, F&BI 301030 Date Extracted: 01/05/23 Date Analyzed: 01/06/23

### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
PL-N12-447 301030-01	11	112
PL-N12-442 301030-02	<5	99
PL-N10-447 301030-03	160	ip
PL-N10-442 301030-04 1/20	1,500	137
Method Blank	<5	96

03-007 MB

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/12/23 Date Received: 01/04/23 Project: Texaco 180357, F&BI 301030 Date Extracted: 01/05/23 Date Analyzed: 01/05/23

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 50-150)
PL-N12-447 301030-01	<50	<250	104
PL-N12-442 301030-02	<50	<250	103
PL-N10-447 301030-03	<50	<250	104
PL-N10-442 301030-04	260 x	<250	105
Method Blank <sup>03-108 MB</sup>	<50	<250	107
# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	PL-N12-447 01/04/23 01/05/23 01/05/23 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco 180357, F&BI 301030 301030-01 010524.D GCMS4 Im
		219 Worght	o poratori	
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	100	90	109
Toluene-d8		108	89	112
4-Bromofluorobenze	ene	96	84	115
	(	Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	PL-N12-442 01/04/23 01/05/23 01/05/23 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco 180357, F&BI 301030 301030-02 010525.D GCMS4 Im
	8 (FF)		- p	
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	95	90	109
Toluene-d8		110	89	112
4-Bromofluorobenze	ene	98	84	115
	(	Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	PL-N10-447 01/04/23 01/05/23 01/07/23 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco 180357, F&BI 301030 301030-03 010647.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	101	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	101	84	115
	(	Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		0.17		
m,p-Xylene		0.59		
o-Xylene		0.13		
Naphthalene		1.2		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	PL-N10-442 01/04/23 01/05/23 01/10/23 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco 180357, F&BI 301030 301030-04 1/10 011006.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	103	90	109
Toluene-d8		106	89	112
4-Bromofluorobenze	ene	102	84	115
	(	Concentration		
Compounds:		mg/kg (ppm)		
Benzene		0.17 j		
Toluene		19		
Ethylbenzene		16		
m,p-Xylene		77		
o-Xylene		26		
Naphthalene		9.7		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blank	X	Client:	Aspect Consulting, LLC
Date Received:	Not Applicabl	e	Project:	Texaco 180357, F&BI 301030
Date Extracted:	01/05/23		Lab ID:	03-0051mb
Date Analyzed:	01/05/23		Data File:	010505.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	95	90	109
Toluene-d8		106	89	112
4-Bromofluorobenze	ene	96	84	115
	С	oncentration		
Compounds:	]	mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blan	k	Client:	Aspect Consulting, LLC
Date Received:	Not Applicab	le	Project:	Texaco 180357, F&BI 301030
Date Extracted:	01/06/23		Lab ID:	03-054 mb
Date Analyzed:	01/06/23		Data File:	010605.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	100	90	109
Toluene-d8		110	89	112
4-Bromofluorobenze	ene	96	84	115
	(	Concentration		
Compounds:		mg/kg (ppm)		
Benzene		<0.01 j		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/12/23 Date Received: 01/04/23 Project: Texaco 180357, F&BI 301030

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

Laboratory Code: 3	301003-04 (Duplic	eate)			
		Samp	ole Du	plicate	
	Reporting	Resu	lt F	lesult	RPD
Analyte	Units	(Wet V	Wt) (W	/et Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: I	Laboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	_
Gasoline	mg/kg (ppm)	$\overline{20}$	90	61-153	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/12/23 Date Received: 01/04/23 Project: Texaco 180357, F&BI 301030

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

Laboratory Code:	301030-01 (Matri	x Spike)	(Wot wt)	Porcont	Dorcont		
Analyte	Reporting Units	Spike Level	Sample Result	Recovery MS	Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	108	106	70-130	2
Laboratory Code:	Laboratory Contro	ol Sampl	e Percent				
	Reporting	Spike	Recovery	y Accepta	ance		
Analyte	Units	Level	LCS	Criter	ria		
Diesel Extended	mg/kg (ppm)	5,000	112	70-13	30		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/12/23 Date Received: 01/04/23 Project: Texaco 180357, F&BI 301030

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

Laboratory Code: 301037-02 (Matrix Spike)

Habbilatory coact correct	o= (inati apino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	2	< 0.03	89	74	29-129	18
Toluene	mg/kg (ppm)	2	< 0.05	<b>78</b>	65	35 - 130	18
Ethylbenzene	mg/kg (ppm)	2	< 0.05	<b>78</b>	65	32 - 137	18
m,p-Xylene	mg/kg (ppm)	2	< 0.1	81	66	34-136	20
o-Xylene	mg/kg (ppm)	2	< 0.05	82	66	33-134	22 vo
Naphthalene	mg/kg (ppm)	2	< 0.05	73	63	14 - 157	15

Laboratory Code: Laboratory Control Sample

-			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	2	160 vo	71-118
Toluene	mg/kg (ppm)	2	136 vo	66-126
Ethylbenzene	mg/kg (ppm)	2	136 vo	64-123
m,p-Xylene	mg/kg (ppm)	2	139 vo	78 - 122
o-Xylene	mg/kg (ppm)	2	140 vo	77 - 124
Naphthalene	mg/kg (ppm)	2	129	63-140

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/12/23 Date Received: 01/04/23 Project: Texaco 180357, F&BI 301030

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

Laboratory Code: 301039-02 (Matrix Spike)

Hasorator, coac. coroco o	(internet spinie)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	2	< 0.03	<b>59</b>	71	29-129	18
Toluene	mg/kg (ppm)	2	< 0.05	47	<b>59</b>	35-130	23 vo
Ethylbenzene	mg/kg (ppm)	2	0.47	37 b	48 b	32 - 137	26 b
m,p-Xylene	mg/kg (ppm)	2	5.0	0 b	15	34-136	nm
o-Xylene	mg/kg (ppm)	2	1.8	19 b	32 b	33-134	$51 \mathrm{b}$
Naphthalene	mg/kg (ppm)	2	2.5	0 b	20	14 - 157	nm

Laboratory Code: Laboratory Control Sample

C C	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	2	90	71-118
Toluene	mg/kg (ppm)	2	77	66-126
Ethylbenzene	mg/kg (ppm)	2	78	64-123
m,p-Xylene	mg/kg (ppm)	2	81	78 - 122
o-Xylene	mg/kg (ppm)	2	81	77 - 124
Naphthalene	mg/kg (ppm)	2	<b>78</b>	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

R	R		Friedman & Bruya, Inc. F Ph. (206) 225-2929					PL- N10-44-	PL-N10-44-	PL-N12-447	PL-NVZ-447	Sample ID		PhoneEm:	City, State, ZIP	Company Aspect ( Address	Report To Stee-In Gree	301030
eceived by:	elinquished by:	eceived by:	elinquished by:	SIG				2 04	1 05	- 02	01 A-E	Lab ID		iil <u>dbabcoue</u> ospe		onsultiv	I Daniel	
		And		NATURE		-		6			01/04/23	Date Sampled		teursulting		ى	Pablack	
			-fin					1240	1230	1100	1055	Time Sampled		And Project s	REMAR	Tour of	SAMPLI	SAMPLE
		AI	NIND					4			1:05	Sample Type		pecific RLs	S	T NAME	CRS (signa	CHAIN
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		Ž	20	AME			 	E			$\succ$	NWTPH-Gx		No				TOI
			1		 		 					BTEX EPA 8021					W.	YC
												VOCe EPA 8260	AN		INV			
				H								PAHs EPA 8270	ALYS		OICI	404		
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aæip		F81	50	MOC				4			X	BTEX 8260+N	EQU					14
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13 °C		01/04/23	22/20/13	DATE								Not		ispose after	PLE DISPOS	es authorized	VAROUND T	5-A1
		15:55	1555	TIME								ŝ		30 days	3AL	1 by:	IME	-

File :P:\Proc\_GC14\01-05-23\010508.D Operator : TL Acquired : 05 Jan 2023 09:28 am using AcqMethod DX.M Instrument : GC14 Sample Name: 301030-01 Misc Info : Vial Number: 10



File :P:\Proc\_GC14\01-05-23\010509.D
Operator : TL
Acquired : 05 Jan 2023 09:40 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 301030-02
Misc Info :
Vial Number: 11



File :P:\Proc\_GC14\01-05-23\010510.D Operator : TL Acquired : 05 Jan 2023 09:52 am using AcqMethod DX.M Instrument : GC14 Sample Name: 301030-03 Misc Info : Vial Number: 12



File :P:\Proc\_GC14\01-05-23\010511.D
Operator : TL
Acquired : 05 Jan 2023 10:03 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 301030-04
Misc Info :
Vial Number: 13



File :P:\Proc\_GC14\01-05-23\010504.D
Operator : TL
Acquired : 05 Jan 2023 08:40 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 03-108 mb
Misc Info :
Vial Number: 6



File:P:\Proc\_GC14\01-05-23\010502.DOperator: TLAcquired: 05 Jan 202307:02 am using AcqMethod DX.MInstrument: GC14Sample Name:500 MO 67-176CMisc Info: Dx JcolobVial Number:2



#### ENVIRONMENTAL CHEMISTS

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

October 6, 2022

Daniel Babcock, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Mr Babcock:

Included are the results from the testing of material submitted on September 26, 2022 from the Texaco Strickland 180357, F&BI 209417 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Adam Griffin ASP1006R.DOC

#### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on September 26, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 209417 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
209417 -01	SW-W02-444
209417 -02	SW-W04-444
209417 -03	SW-W06-444
209417 -04	SW-W08-444
209417 -05	SW-W10-444
209417 -06	SW-W12-444
209417 -07	SW-W14-444
209417 -08	SW-W16-444
209417 -09	SW-N01-444

The 8260D naphthalene calibration standard failed the acceptance criteria for the method blank. The data were flagged accordingly.

All other quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/22 Date Received: 09/26/22 Project: Texaco Strickland 180357, F&BI 209417 Date Extracted: 09/29/22 Date Analyzed: 09/29/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
SW-W02-444 209417-01	<5	105
SW-W04-444 209417-02	<5	107
SW-W06-444 209417-03	<5	103
SW-W08-444 209417-04	<5	103
SW-W10-444 209417-05	<5	104
SW-W12-444 209417-06	<5	104
SW-W14-444 209417-07	<5	109
SW-W16-444 209417-08	<5	104
SW-N01-444 209417-09	<5	103
Method Blank 02-2102 MB	<5	91

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/22 Date Received: 09/26/22 Project: Texaco Strickland 180357, F&BI 209417 Date Extracted: 09/30/22 Date Analyzed: 09/30/22

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 56-165)
SW-W02-444 209417-01	<50	<250	110
SW-W04-444 209417-02	<50	<250	98
SW-W06-444 209417-03	<50	<250	108
SW-W08-444 209417-04	<50	<250	109
SW-W10-444 209417-05	<50	<250	100
SW-W12-444 209417-06	<50	<250	105
SW-W14-444 209417-07	<50	<250	99
SW-W16-444 209417-08	<50	<250	98
SW-N01-444 209417-09	<50	<250	102
Method Blank 02-2382 MB	<50	<250	107

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W02-444 09/26/22 09/29/22 09/29/22 Soil mg/kg (ppm)	4 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 209417-01 092927.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	110	84	120
Toluene-d8		104	73	128
4-Bromofluorobenze	ene	93	57	146
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W04-444 09/26/22 09/29/22 09/29/22 Soil mg/kg (ppm)	4 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 209417-02 092928.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	105	84	120
Toluene-d8		105	73	128
4-Bromofluorobenz	ene	95	57	146
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W06-444 09/26/22 09/29/22 09/29/22 Soil mg/kg (ppm)	l Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 209417-03 092929.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	102	84	120
Toluene-d8		107	73	128
4-Bromofluorobenze	ene	93	57	146
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W08-444 09/26/22 09/29/22 09/29/22 Soil mg/kg (ppm)	l Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 209417-04 092930.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	104	84	120
Toluene-d8		105	73	128
4-Bromofluorobenz	ene	99	57	146
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W10-444 09/26/22 09/29/22 09/29/22 Soil mg/kg (ppm)	4 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 209417-05 092931.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	110	84	120
Toluene-d8		104	73	128
4-Bromofluorobenze	ene	94	57	146
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W12-444 09/26/22 09/29/22 09/29/22 Soil mg/kg (ppm)	4 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 209417-06 092932.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	102	84	120
Toluene-d8		106	73	128
4-Bromofluorobenz	ene	95	57	146
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W14-444 09/26/22 09/29/22 09/29/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 209417-07 092933.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	102	84	120
Toluene-d8		103	73	128
4-Bromofluorobenze	ene	94	57	146
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W16-444 09/26/22 09/29/22 09/29/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 209417-08 092934.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	104	84	120
Toluene-d8		103	73	128
4-Bromofluorobenz	ene	95	57	146
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N01-444 09/26/22 09/29/22 09/29/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 209417-09 092935.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	106	84	120
Toluene-d8		102	73	128
4-Bromofluorobenze	ene	95	57	146
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blar Not Applical 09/29/22 09/29/22 Soil mg/kg (ppm)	nk ole 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2297 mb 092912.D GCMS13 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	101	84	120
Toluene-d8		105	73	128
4-Bromofluorobenz	ene	97	57	146
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		<0.05 ca		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/22 Date Received: 09/26/22 Project: Texaco Strickland 180357, F&BI 209417

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

Laboratory Code: 20	)9443-01 (Duplic	ate)			
		Samp	ole Du	uplicate	
	Reporting	Resu	lt I	Result	RPD
Analyte	Units	(Wet V	Wt) (V	Vet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: La	aboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	_
Gasoline	mg/kg (ppm)	$\overline{20}$	110	61-153	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/22 Date Received: 09/26/22 Project: Texaco Strickland 180357, F&BI 209417

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

Laboratory Code:	209418-01 (Matri	x Spike)						
			Sample	Percent	Percent			
	Reporting	Spike	$\operatorname{Result}$	Recovery	Recovery	Acceptance	$\operatorname{RPD}$	
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)	
Diesel Extended	mg/kg (ppm)	5,000	4,500	84	96	63-146	13	
Laboratory Code: Laboratory Control Sample								
			Percent	t				
	Reporting	Spike	Recover	y Accep	tance			
Analyte	Units	Level	LCS	Crit	eria			
Diesel Extended	mg/kg (ppm)	5,000	94	79-1	144			

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/22 Date Received: 09/26/22 Project: Texaco Strickland 180357, F&BI 209417

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

Laboratory Code: 209391-05 (Matrix Spike)

(inder in opinio)						
		Sample	Percent	Percent		
Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
mg/kg (ppm)	1.0	< 0.03	81	85	15 - 129	5
mg/kg (ppm)	1.0	< 0.05	75	80	15 - 129	6
mg/kg (ppm)	1.0	< 0.05	71	75	23 - 133	<b>5</b>
mg/kg (ppm)	2.0	< 0.1	77	82	19-134	6
mg/kg (ppm)	1.0	< 0.05	72	77	20 - 132	7
mg/kg (ppm)	1.0	< 0.05	64	69	30 - 138	8
	Reporting Units mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm)	Reporting UnitsSpike Levelmg/kg (ppm)1.0mg/kg (ppm)1.0mg/kg (ppm)2.0mg/kg (ppm)1.0mg/kg (ppm)1.0mg/kg (ppm)1.0mg/kg (ppm)1.0mg/kg (ppm)1.0	Reporting Units         Spike Level         Sample Result           mg/kg (ppm)         1.0         <0.03	Reporting Units         Spike Level         Sample Result (Wet wt)         Percent Recovery MS           mg/kg (ppm)         1.0         <0.03	Reporting Units         Spike Level         Sample Result (Wet wt)         Percent Recovery MS         Percent Recovery MSD           mg/kg (ppm)         1.0         <0.03	Reporting Units         Spike Level         Sample Result (Wet wt)         Percent Recovery MS         Percent Recovery MSD         Acceptance Criteria           mg/kg (ppm)         1.0         <0.03

Laboratory Code: Laboratory Control Sample

i i	-			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1.0	102	70-130
Toluene	mg/kg (ppm)	1.0	95	63 - 127
Ethylbenzene	mg/kg (ppm)	1.0	91	60-140
m,p-Xylene	mg/kg (ppm)	2.0	99	56 - 145
o-Xylene	mg/kg (ppm)	1.0	92	61 - 137
Naphthalene	mg/kg (ppm)	1.0	85	67-143

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.
SM-NOT-HHH 15W - M16 - H44 NHH -2.1M-MS SW-WD-444 Address\_ Ph. (206) 285-8282 Friedman & Bruya, Inc. SM- MOB-HHH SW-W02-4444 Phone 316.617.0499 Emailed babeal correctionsi Ut of com City, State, ZIP Company Aspect Consult Report Torranel Babrack of Adam Griffin 2M-M14-H44 SW-WOH-HHH SW-WOG-444 Sample ID **a** 1 Received by: Relinquished by: Received by: Relinquished by:~ 06 20 20 40 24 30 3 ba OL:A-E Lab ID SIGNATURE mil 9/26/22 Sampled Date 4 ÷ 1245 1240 IIIS 1350 11HO 1125 1120 SAMPLE CHAIN OF CUSTODY 1145 SIL Sampled Time Project specific RLs? - Yes / No PROJECT NAME SAMPLERS (signature) REMARKS Texico Strukhend Sol ł Sample Type Ļ I have I Edward ANHPHAM # of Jars 5 PRINT NAME < + χ NWTPH-Dx X NWTPH-Gx . BTEX EPA 8021 NWTPH-HCID 180357 INVOICE TO INALYSES REQUESTED VOCs EPA 8260 P0 # PAHs EPA 8270 09/26/22 VSA3-A02 HSPLEY Samples received at IC °C PCBs EPA 8082 F8B COMPANY K BTEXN BZEDC X □ Archive samples Rush charges authorized by: XStandard turnaround 0 Other D RUSH\_ Default: Dispose after 30 days Page # \_\_\_\_\_ of \_\_\_\_\_ TURNAROUND TIME SAMPLE DISPOSAL 09/16/12 22/22/6 DATE Notes 14:59 458 TIME























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#### ENVIRONMENTAL CHEMISTS

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

October 10, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the results from the testing of material submitted on September 30, 2022 from the Texaco Strickland 180357, F&BI 209531 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1010R.DOC

#### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on September 30, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 209531 project. Samples were logged in under the laboratory ID's listed below.

Aspect Consulting, LLC
SW-N02-447
SW-N04-447
SW-N07-447
SW-N10-447
SW-N12-447
SW-N14-447

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 09/30/22 Project: Texaco Strickland 180357, F&BI 209531 Date Extracted: 10/05/22 Date Analyzed: 10/05/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
SW-N02-447 209531-01	<5	106
SW-N04-447 209531-02	<5	104
SW-N07-447 209531-03 1/5	73	108
SW-N10-447 209531-04 1/50	1,700	117
SW-N12-447 209531-05	30	110
SW-N14-447 209531-06	<5	104
Method Blank 02-2339 MB	<5	126

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 09/30/22 Project: Texaco Strickland 180357, F&BI 209531 Date Extracted: 10/04/22 Date Analyzed: 10/04/22

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 56-165)
SW-N02-447 209531-01	<50	<250	114
SW-N04-447 209531-02	<50	<250	116
SW-N07-447 209531-03	<50	<250	103
SW-N10-447 209531-04	550 x	<250	102
SW-N12-447 209531-05	<50	<250	101
SW-N14-447 209531-06	<50	<250	110
Method Blank	<50	<250	116

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	SW-N02-447		Client:	Aspect Consulting, LLC
Date Received:	09/30/22		Project:	Texaco Strickland 180357, F&BI 209531
Date Extracted:	10/04/22		Lab ID:	209531-01
Date Analyzed:	10/04/22		Data File:	100420.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	99	90	109
Toluene-d8		105	89	112
4-Bromofluorobenze	ne	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	SW-N04-447		Client:	Aspect Consulting, LLC
Date Received:	09/30/22		Project:	Texaco Strickland 180357, F&BI 209531
Date Extracted:	10/04/22		Lab ID:	209531-02
Date Analyzed:	10/04/22		Data File:	100421.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	100	90	109
Toluene-d8		104	89	112
4-Bromofluorobenze	ne	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed:	SW-N07-447 09/30/22 10/04/22 10/04/22		Client: Project: Lab ID: Data File:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 209531 209531-03 100422.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	99	90	109
Toluene-d8		103	89	112
4-Bromofluorobenze	ne	107	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		0.030		
Toluene		0.20		
Ethylbenzene		0.59		
m,p-Xylene		2.5		
o-Xylene		0.37		
Naphthalene		0.26		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed:	SW-N10-447 09/30/22 10/04/22 10/04/22		Client: Project: Lab ID: Data File:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 209531 209531-04 100423.D
Matrix:	Soil	D III 1 1	Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	102	90	109
Toluene-d8		126	89	112
4-Bromofluorobenze	ne	126	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		0.19		
Toluene		0.29		
Ethylbenzene		10		
m,p-Xylene		13		
o-Xylene		0.90		
Naphthalene		8.0		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N12-447 09/30/22 10/04/22 10/04/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 209531 209531-05 100424.D GCMS4 jeb
	o o un ,		Lowor	Uppor
Surrogates.		% Recovery:	Limit.	Limit:
1.2-Dichloroethane-	d4	98	90	109
Toluene-d8		103	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		0.56		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	SW-N14-447	,	Client:	Aspect Consulting, LLC
Date Received:	09/30/22		Project:	Texaco Strickland 180357, F&BI 209531
Date Extracted:	10/04/22		Lab ID:	209531-06
Date Analyzed:	10/04/22		Data File:	100425.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	101	90	109
Toluene-d8		104	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blank	Σ	Client:	Aspect Consulting, LLC
Date Received:	Not Applicabl	e	Project:	Texaco Strickland 180357, F&BI 209531
Date Extracted:	10/04/22		Lab ID:	02-2312 mb
Date Analyzed:	10/04/22		Data File:	100405.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm) I	Dry Weight	Operator:	jeb
			Lower	Upper
Surrogates:	(	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	98	90	109
Toluene-d8		103	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:	С	oncentration ng/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 09/30/22 Project: Texaco Strickland 180357, F&BI 209531

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

Laboratory Code: 20	)9531-01 (Duplic	ate)			
		Samp	le Du	plicate	
	Reporting	Resu	lt R	esult	RPD
Analyte	Units	(Wet V	Wt) (W	et Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: La	aboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	$\overline{20}$	110	71-131	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 09/30/22 Project: Texaco Strickland 180357, F&BI 209531

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

Laboratory Code:	210018-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	$\operatorname{Result}$	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	98	90	63-146	9
Laboratory Code:	Laboratory Contr	ol Samp	le				
			Percent	t			
	Reporting	Spike	Recover	y Accep	tance		
Analyte	Units	Level	LCS	Crit	eria		
Diesel Extended	mg/kg (ppm)	5,000	90	79-1	144		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 09/30/22 Project: Texaco Strickland 180357, F&BI 209531

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

Laboratory Code: 210015-01 (Matrix Spike)

			Sample	Percent	Percent							
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$					
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)					
Benzene	mg/kg (ppm)	1	0.13	68	76	29 - 129	11					
Toluene	mg/kg (ppm)	1	4.4	0 ip	0 ip	35 - 130	nm					
Ethylbenzene	mg/kg (ppm)	1	4.7	0 ip	0 ip	32 - 137	nm					
m,p-Xylene	mg/kg (ppm)	2	25	0 ip	0 ip	34 - 136	nm					
o-Xylene	mg/kg (ppm)	1	8.9	0 ip	0 ip	33-134	nm					
Naphthalene	mg/kg (ppm)	1	9.4	0 ip	0 ip	14 - 157	nm					

Laboratory Code: Laboratory Control Sample

~	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	117	71-118
Toluene	mg/kg (ppm)	1	111	66 - 126
Ethylbenzene	mg/kg (ppm)	1	111	64 - 123
m,p-Xylene	mg/kg (ppm)	2	111	78 - 122
o-Xylene	mg/kg (ppm)	1	112	77 - 124
Naphthalene	mg/kg (ppm)	1	112	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

		Ph. (206) 285-8282	1				5W-N 141-7447-7	5W-N12-147	FH1 - GIN-US	Zthin- EON-MS	ZHH - HON - MS	E HA - ZON -MS	Sample ID		Phone 516-617-0499 Er	City, State, ZIP	Address	Company April Largert			122000
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#### ENVIRONMENTAL CHEMISTS

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

October 10, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the results from the testing of material submitted on October 3, 2022 from the Texaco Strickland 180357, F&BI 210015 project. There are 20 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1010R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on October 3, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210015 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
210015 -01	UST-100322
210015 -02	SW-N02-442
210015 -03	SW-N04-442
210015 -04	SW-N07-442

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 10/03/22 Project: Texaco Strickland 180357, F&BI 210015 Date Extracted: 10/03/22 Date Analyzed: 10/03/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
UST-100322 210015-01 1/5	660	ip
SW-N02-442 210015-02	<5	91
SW-N04-442 210015-03	<5	90
SW-N07-442 210015-04 1/20	740	117
Method Blank 02-2335 MB	<5	105

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 10/03/22 Project: Texaco Strickland 180357, F&BI 210015 Date Extracted: 10/03/22 Date Analyzed: 10/04/22

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
UST-100322 210015-01	3,800 x	18,000	111
SW-N02-442 210015-02	<50	<250	91
SW-N04-442 210015-03	<50	<250	90
SW-N07-442 210015-04	440	<250	86
Method Blank	<50	<250	114

# ENVIRONMENTAL CHEMISTS

## Analysis For Total Metals By EPA Method 6020B

Client ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	UST-100322 10/03/22 10/03/22 10/03/22 Soil mg/kg (ppm) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210015-01 210015-01.130 ICPMS2 SP
Onits.	ing/kg (ppin) Dry weight	Operator.	51
Analyte:	Concentration mg/kg (ppm)		
Arsenic	1.35		
Barium	43.4		
Cadmium	<1		
Chromium	12.1		
Mercury	<1		
Selenium	<1		
Silver	<1		

## ENVIRONMENTAL CHEMISTS

# Analysis For Total Metals By EPA Method 6020B

Client ID:	UST-100322	Client:	Aspect Consulting, LLC
Date Received:	10/03/22	Project:	Texaco Strickland 180357
Date Extracted:	10/03/22	Lab ID:	210015-01 x5
Date Analyzed:	10/04/22	Data File:	210015-01 x5.086
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP
Analyte:	Concentration mg/kg (ppm)		
Lead	137		

# ENVIRONMENTAL CHEMISTS

# Analysis For Total Metals By EPA Method 6020B

Client ID: Date Received: Date Extracted: Date Analyzed: Matrix:	Method Blank NA 10/03/22 10/03/22 Soil	Client: Project: Lab ID: Data File: Instrument:	Aspect Consulting, LLC Texaco Strickland 180357 I2-703 mb I2-703 mb.123 ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP
Analyte:	Concentration mg/kg (ppm)		
Arsenic	<1		
Barium	<1		
Cadmium	<1		
Chromium	<1		
Lead	<1		
Mercury	<1		
Selenium	<1		
Silver	<1		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	UST-100322 10/03/22 10/04/22 10/04/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210015-01 100408.D GCMS4 jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	107	90	109
Toluene-d8		109	89	112
4-Bromofluorobenze	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		0.15		
Toluene		5.2		
Ethylbenzene		5.5		
m,p-Xylene		29		
o-Xylene		10		
Naphthalene		11		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N02-442 10/03/22 10/04/22 10/04/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210015-02 100412.D GCMS4 jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	104	90	109
Toluene-d8		104	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N04-442 10/03/22 10/04/22 10/04/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210015-03 100413.D GCMS4 jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	104	90	109
Toluene-d8		104	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N07-442 10/03/22 10/04/22 10/04/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210015-04 100414.D GCMS4 jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	101	90	109
Toluene-d8		120 ip	89	112
4-Bromofluorobenz	ene	115	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		1.2		
Ethylbenzene		5.1		
m,p-Xylene		27		
o-Xylene		8.1		
Naphthalene		6.4		

## ENVIRONMENTAL CHEMISTS

## Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applicab 10/04/22 10/04/22 Soil mg/kg (ppm)	k le Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2312 mb 100405.D GCMS4 jeb
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	-d4	98	90	109
Toluene-d8		103	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

## Analysis For PCBs By EPA Method 8082A

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	UST-100322 10/03/22 10/03/22 10/04/22 Soil mg/kg (ppm) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210015-01 1/6 100413.D GC7 VM
Surrogates: TCMX	% Recovery: 92	Lower Limit: 23	Upper Limit: 127
Compounds:	Concentration mg/kg (ppm)		
Aroclor 1221 Aroclor 1232 Aroclor 1016 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1262 Aroclor 1268	$< 0.05 \\ < 0.05 \\ < 0.05 \\ < 0.05 \\ < 0.05 \\ < 0.02 \\ < 0.02 \\ < 0.02 \\ < 0.02 \\ < 0.02 \\ < 0.02 $		

### ENVIRONMENTAL CHEMISTS

## Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Texaco Strickland 180357
Date Extracted:	10/03/22	Lab ID:	02-2393 mb2
Date Analyzed:	10/04/22	Data File:	100412.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM
Surrogates: TCMX	% Recovery: 130	Lower Limit: 23	Upper Limit: 127
	Concentration		
Compounds:	mg/kg (ppm)		
Aroclor 1221	< 0.004		
Aroclor 1232	< 0.004		
Aroclor 1016	< 0.004		
Aroclor 1242	< 0.004		
Aroclor 1248	< 0.004		
Aroclor 1254	< 0.004		
Aroclor 1260	< 0.004		
Aroclor 1262	< 0.004		
Aroclor 1268	< 0.004		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 10/03/22 Project: Texaco Strickland 180357, F&BI 210015

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

Laboratory Code: 20	)9490-02 (Duplic	eate)			
		Samp	le Du	plicate	
	Reporting	Resu	lt F	lesult	RPD
Analyte	Units	(Wet V	Vt) (W	/et Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: La	aboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	$\overline{20}$	95	71-131	_

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 10/03/22 Project: Texaco Strickland 180357, F&BI 210015

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

Laboratory Code:	210009-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
<b>Diesel Extended</b>	mg/kg (ppm)	5,000	150	92	93	63-146	1
Laboratory Code:	Laboratory Contr	rol Samp	le				
			Percent	5			
	Reporting	Spike	Recover	y Accep	tance		
Analyte	Units	Level	LCS	Crit	eria		
Diesel Extended	mg/kg (ppm)	5,000	92	79-1	144		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 10/03/22 Project: Texaco Strickland 180357, F&BI 210015

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 209519-01 (Matrix Spike)

			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Arsenic	mg/kg (ppm)	10	1.71	98	94	75 - 125	4
Barium	mg/kg (ppm)	50	24.7	110	104	75 - 125	6
Cadmium	mg/kg (ppm)	10	<1	99	97	75 - 125	2
Chromium	mg/kg (ppm)	50	12.0	95	98	75 - 125	3
Lead	mg/kg (ppm)	50	1.32	94	92	75 - 125	2
Mercury	mg/kg (ppm	<b>5</b>	<1	98	98	75 - 125	0
Selenium	mg/kg (ppm)	<b>5</b>	<1	93	93	75 - 125	0
Silver	mg/kg (ppm)	10	<1	96	92	75 - 125	4

Laboratory Code: Laboratory Control Sample

Laboratory cot	io. Eastratory com	lioi sumpio	Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Arsenic	mg/kg (ppm)	10	101	80-120
Barium	mg/kg (ppm)	50	102	80-120
Cadmium	mg/kg (ppm)	10	101	80-120
Chromium	mg/kg (ppm)	50	105	80-120
Lead	mg/kg (ppm)	50	104	80-120
Mercury	mg/kg (ppm)	5	106	80-120
Selenium	mg/kg (ppm)	5	99	80-120
Silver	mg/kg (ppm)	10	103	80-120

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 10/03/22 Project: Texaco Strickland 180357, F&BI 210015

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

Laboratory Code: 210015-01 (Matrix Spike)

	(inadi in Spino)		Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	0.13	68	76	29-129	11
Toluene	mg/kg (ppm)	1	4.4	0 ip	0 ip	35 - 130	nm
Ethylbenzene	mg/kg (ppm)	1	4.7	0 ip	0 ip	32 - 137	nm
m,p-Xylene	mg/kg (ppm)	2	25	0 ip	0 ip	34 - 136	nm
o-Xylene	mg/kg (ppm)	1	8.9	0 ip	0 ip	33 - 134	nm
Naphthalene	mg/kg (ppm)	1	9.4	0 ip	0 ip	14 - 157	nm

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 10/03/22 Project: Texaco Strickland 180357, F&BI 210015

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

Laboratory Code: Laboratory Control Sample

	I I I I I I I I I		Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	117	71-118
Toluene	mg/kg (ppm)	1	111	66-126
Ethylbenzene	mg/kg (ppm)	1	111	64-123
m,p-Xylene	mg/kg (ppm)	2	111	78 - 122
o-Xylene	mg/kg (ppm)	1	112	77 - 124
Naphthalene	mg/kg (ppm)	1	112	63-140

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/22 Date Received: 10/03/22 Project: Texaco Strickland 180357, F&BI 210015

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

Laboratory Code: 209526-01 1/6 (Matrix Spike) 1/6

			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Control	$\operatorname{RPD}$
Analyte	Units	Level	(Wet Wt)	MS	MSD	Limits	(Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	< 0.02	86	79	44-107	8
Aroclor 1260	mg/kg (ppm)	0.25	< 0.02	99	94	38 - 124	5

Laboratory Code: Laboratory Control Sample 1/6

			Percent	
	Reporting	$\mathbf{Spike}$	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Aroclor 1016	mg/kg (ppm)	0.25	104	47 - 158
Aroclor 1260	mg/kg (ppm)	0.25	101	69 - 147

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

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			Friedman & Bruya, Inc. Ph. (206) 285-8282								SW- NO7- 442	2M-404-442	5W-N02-442	UST-100322	Sample ID		Phone <u>36~67-0499</u> _E	City, State, ZIP	Address	Company Aspact Cor	2100 18 Report To Aslam 6-11774
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#### ENVIRONMENTAL CHEMISTS

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

October 13, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the results from the testing of material submitted on October 7, 2022 from the Texaco Strickland 180357, F&BI 210102 project. There are 15 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1013R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on October 7, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210102 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
210102 -01	SW-W03-434
210102 -02	SW-W99-434
210102 -03	SW-W05-434
210102 -04	SW-W09-434
210102 -05	SW-W11-434
210102 -06	SW-W14-434
210102 -07	SW-W16-434

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/22 Date Received: 10/07/22 Project: Texaco Strickland 180357, F&BI 210102 Date Extracted: 10/11/22 Date Analyzed: 10/11/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
SW-W03-434 210102-01	<5	105
SW-W99-434 210102-02	<5	107
SW-W05-434 210102-03	<5	104
SW-W09-434 210102-04	<5	103
SW-W11-434 210102-05	<5	96
SW-W14-434 210102-06	<5	104
SW-W16-434 210102-07	<5	100
Method Blank 02-2352 MB	<5	99

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/22 Date Received: 10/07/22 Project: Texaco Strickland 180357, F&BI 210102 Date Extracted: 10/10/22 Date Analyzed: 10/10/22

#### 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)

			Surrogate
<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>(% Recovery)</u> (Limit 56-165)
SW-W03-434 210102-01	<50	<250	123
SW-W99-434 210102-02	<50	<250	128
SW-W05-434 210102-03	<50	<250	112
SW-W09-434 210102-04	<50	<250	129
SW-W11-434 210102-05	<50	<250	120
SW-W14-434 210102-06	<50	<250	127
SW-W16-434 210102-07	<50	<250	126
Method Blank 02-2445 MB	<50	<250	122

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W03-434 10/07/22 10/10/22 10/10/22 Soil mg/kg (ppm)	4 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210102-01 101018.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	99	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W99-434 10/07/22 10/10/22 10/10/22 Soil mg/kg (ppm)	l Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210102-02 101019.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	98	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W05-434 10/07/22 10/10/22 10/10/22 Soil mg/kg (ppm)	4 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210102-03 101020.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	97	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		0.074		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W09-434 10/07/22 10/10/22 10/10/22 Soil mg/kg (ppm)	4 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210102-04 101021.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	103	90	109
Toluene-d8		95	89	112
4-Bromofluorobenze	ene	100	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		0.11		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		
# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W11-434 10/07/22 10/10/22 10/10/22 Soil mg/kg (ppm)	4 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210102-05 101022.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	102	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		0.12		
Toluene		< 0.05		
Ethylbenzene		0.096		
m,p-Xylene		0.26		
o-Xylene		0.075		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W14-434 10/07/22 10/10/22 10/10/22 Soil mg/kg (ppm)	4 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210102-06 101023.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	98	90	109
Toluene-d8		96	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W16-434 10/07/22 10/10/22 10/10/22 Soil mg/kg (ppm)	l Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210102-07 101024.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	97	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	100	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applicab 10/10/22 10/10/22 Soil mg/kg (ppm)	k le Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2325 mb 101005.D GCMS4 jm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	103	90	109
Toluene-d8		94	89	112
4-Bromofluorobenze	ene	100	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/22 Date Received: 10/07/22 Project: Texaco Strickland 180357, F&BI 210102

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

Laboratory Code: 2	10106-01 (Duplie	eate)			
		Samp	ole I	Duplicate	
	Reporting	Resu	lt	Result	RPD
Analyte	Units	(Wet V	Wt)	(Wet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: L	aboratory Contro	ol Sample	Э		
			Percen	t	
	Reporting	Spike	Recover	ry Acceptanc	e
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	20	105	71-131	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/22 Date Received: 10/07/22 Project: Texaco Strickland 180357, F&BI 210102

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

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	113	106	79-144	6

#### ENVIRONMENTAL CHEMISTS

#### Date of Report: 10/13/22 Date Received: 10/07/22 Project: Texaco Strickland 180357, F&BI 210102

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

Laboratory Code: 210102-01 (Matrix Spike)

	(inaci m opino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	73	<b>74</b>	29-129	1
Toluene	mg/kg (ppm)	1	< 0.05	80	82	35 - 130	2
Ethylbenzene	mg/kg (ppm)	1	< 0.05	82	84	32 - 137	2
m,p-Xylene	mg/kg (ppm)	2	< 0.1	82	83	34-136	1
o-Xylene	mg/kg (ppm)	1	< 0.05	83	82	33-134	1
Naphthalene	mg/kg (ppm)	1	< 0.05	83	87	14 - 157	5

U U	v 1		Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	90	71-118
Toluene	mg/kg (ppm)	1	98	66 - 126
Ethylbenzene	mg/kg (ppm)	1	100	64 - 123
m,p-Xylene	mg/kg (ppm)	2	98	78 - 122
o-Xylene	mg/kg (ppm)	1	99	77 - 124
Naphthalene	mg/kg (ppm)	1	98	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

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•3	. (200) 202-0202	iedman & Bruya, Inc.					1-WI6-1374	- UH -134	1-WII-434	J- WO9 - 4324	1-W05-434	J-WH9-4341	J-103-434	Sample ID		one36617,0499 F	y, State, ZIP	npany vy ci canso	And And a second	CIUIDS	5
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#### ENVIRONMENTAL CHEMISTS

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

October 18, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the results from the testing of material submitted on October 11, 2022 from the Texaco Strickland 180357, F&BI 210145 project. There are 18 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1018R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on October 11, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210145 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
210145 -01	Grab-101122
210145 -02	SW-S01-446
210145 -03	SW-S03-446
210145 -04	SW-S06-446

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145 Date Extracted: 10/12/22 Date Analyzed: 10/12/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
SW-S01-446 210145-02	<5	107
SW-S03-446 210145-03	<5	108
SW-S06-446 210145-04	<5	105
Method Blank 02-2356 MB	<5	94

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145 Date Extracted: 10/14/22 Date Analyzed: 10/14/22

### RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	Gasoline Range	Surrogate ( <u>% Recovery)</u> (Limit 51-134)
Grab-101122 210145-01 1/10	6,500	96
Method Blank 02-2504 MB	<100	90

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145 Date Extracted: 10/12/22 Date Analyzed: 10/12/22

### 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)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
SW-S01-446 210145-02	<50	<250	113
SW-S03-446 210145-03	<50	<250	109
SW-S06-446 210145-04	<50	<250	98
Method Blank 02-2466 MB2	<50	<250	65

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145 Date Extracted: 10/13/22 Date Analyzed: 10/13/22

### RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 41-152)
Grab-101122 <sup>210145-01</sup>	1,000 x	12,000	103
Method Blank 02-2521 MB	<50	<250	100

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	SW-S01-446		Client:	Aspect Consulting, LLC
Date Received:	10/11/22		Project:	Texaco Strickland 180357, F&BI 210145
Date Extracted:	10/12/22		Lab ID:	210145-02
Date Analyzed:	10/12/22		Data File:	101224.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	97	90	109
Toluene-d8		95	89	112
4-Bromofluorobenze	ne	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-S03-446 10/11/22 10/12/22 10/12/22 Soil	Dry Woight	Client: Project: Lab ID: Data File: Instrument:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210145 210145-03 101225.D GCMS4 LCM
Omus.	iiig/kg (ppiii)	Diy Weight	Operator.	5 CM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	97	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-S06-446 10/11/22 10/12/22 10/12/22 Soil mg/kg (npm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210145 210145-04 101226.D GCMS4 JCM
C mus.	inging (ppin)	Dig Woight	operator.	
<i></i>			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	101	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blank	Clie	ent:	Aspect Consulti	ng, LLC
Date Received:	Not Applicable	Pro	ject:	Texaco Stricklar	nd 180357, F&BI 210145
Date Extracted:	10/12/22	Lab	DID:	02-2330 mb	
Date Analyzed:	10/12/22	Dat	a File:	101205.D	
Matrix:	Soil	Ins	trument:	GCMS4	
Units:	mg/kg (ppm) Dry We	eight Ope	erator:	JCM	
			Lower	Upp	er
Surrogates:	% Reco	very:	Limit:	Limi	it:
1,2-Dichloroethane-	d4 97		90	109	)
Toluene-d8	94		89	112	2
4-Bromofluorobenze	ene 101	1	84	115	5
Compounds:	Concent mg/kg (	ration ppm)			
Benzene	<0.(	)3			
Toluene	<0.0	)5			
Ethylbenzene	<0.0	)5			
m,p-Xylene	<0.1	L			
o-Xylene	<0.0	)5			
Naphthalene	<0.0	)5			

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Grab-101122 10/11/22 10/12/22 10/13/22 Water ug/L (ppb)	2	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210145 210145-01 1/20 101312.D GCMS11 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	100	78	126
Toluene-d8		97	84	115
4-Bromofluorobenz	ene	96	72	130
		Concentration		
Compounds:		ug/L (ppb)		
Benzene		1,200		
Toluene		37		
Ethylbenzene		73		
m,p-Xylene		84		
o-Xylene		22		
Naphthalene		24		

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Unito:	Method Bla Not Applica 10/12/22 10/12/22 Water	ank able	Client: Project: Lab ID: Data File: Instrument:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210145 02-2329 mb 101207.D GCMS11 LM
Onits.	ug/L (ppb)		Operator.	
~			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	e-d4	101	78	126
Toluene-d8		94	84	115
4-Bromofluorobenz	ene	96	72	130
		Concentration		
Compounds:		ug/L (ppb)		
Benzene		< 0.35		
Toluene		<1		
Ethylbenzene		<1		
m,p-Xylene		<2		
o-Xylene		<1		
Naphthalene		<1		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145

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

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Gasoline	mg/kg (ppm)	20	100	105	61-153	5

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145

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

Laboratory Code: 210	080-07 (Dupli	cate)			
	Reporting	Samp	le Du	plicate	$\operatorname{RPD}$
Analyte	Units	Resu	Result Result		(Limit 20)
Gasoline	ug/L (ppb)	<100	) <	<100	nm
Laboratory Code: Lab	ooratory Contr	ol Sample			
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	_
Gasoline	ug/L (ppb)	1,000	105	69-134	_

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145

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

Laboratory Code: 2	210132-01 (Matrix	x Spike)					
			Sample	Percent	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	82	86	73-135	5
Laboratory Code:	Laboratory Contro	ol Sampl	e				
			Percent				
	Reporting	Spike	Recovery	Acceptar	ice		
Analyte	Units	Level	LCS	Criteria	a		
Diesel Extended	mg/kg (ppm)	5,000	82	74-139	)		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145

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

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Diesel Extended	ug/L (ppb)	2,500	64	68	63-142	6

#### ENVIRONMENTAL CHEMISTS

#### Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145

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

Laboratory Code: 209536-01 (Matrix Spike)

Laboratory could account (main spino)							
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	75	76	29-129	1
Toluene	mg/kg (ppm)	1	< 0.05	82	83	35 - 130	1
Ethylbenzene	mg/kg (ppm)	1	< 0.05	82	84	32 - 137	2
m,p-Xylene	mg/kg (ppm)	2	< 0.1	81	83	34-136	2
o-Xylene	mg/kg (ppm)	1	< 0.05	80	82	33-134	2
Naphthalene	mg/kg (ppm)	1	< 0.05	79	81	14 - 157	2

<i>v</i>	, <u> </u>					
		Percent				
	Reporting	Spike	Recovery	Acceptance		
Analyte	Units	Level	LCS	Criteria		
Benzene	mg/kg (ppm)	1	92	71-118		
Toluene	mg/kg (ppm)	1	102	66-126		
Ethylbenzene	mg/kg (ppm)	1	102	64-123		
m,p-Xylene	mg/kg (ppm)	2	102	78-122		
o-Xylene	mg/kg (ppm)	1	101	77-124		
Naphthalene	mg/kg (ppm)	1	99	63-140		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/18/22 Date Received: 10/11/22 Project: Texaco Strickland 180357, F&BI 210145

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 210138-07 (Matrix Spike)

			Percent				
	Reporting	Spike	Sample	Recovery	Acceptance		
Analyte	Units	Level	Result	MS	Criteria		
Benzene	ug/L (ppb)	10	< 0.35	86	50 - 150		
Toluene	ug/L (ppb)	10	<1	91	50 - 150		
Ethylbenzene	ug/L (ppb)	10	<1	89	50 - 150		
m,p-Xylene	ug/L (ppb)	20	<2	88	50 - 150		
o-Xylene	ug/L (ppb)	10	<1	89	50 - 150		
Naphthalene	ug/L (ppb)	10	<1	84	50 - 150		

	<b>I</b>		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Benzene	ug/L (ppb)	10	95	94	70-130	1
Toluene	ug/L (ppb)	10	96	94	70-130	2
Ethylbenzene	ug/L (ppb)	10	97	97	70-130	0
m,p-Xylene	ug/L (ppb)	20	97	96	70-130	1
o-Xylene	ug/L (ppb)	10	98	98	70-130	0
Naphthalene	ug/L (ppb)	10	94	95	70-130	1
#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

		Friedman & Bruya, Inc.						а • •	Sm-206-446	SW-503-4410	Smed - 105-ms	Girab-101122	Sample ID		PhoneE	City, State, ZIP	Company ASPET CON Address Sea He Wa	Report To Flam and	210145
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#### ENVIRONMENTAL CHEMISTS

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

October 20, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Mr Griffin:

Included are the results from the testing of material submitted on October 14, 2022 from the Texaco Strickland 180357, F&BI 210214 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1020R.DOC

#### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on October 14, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210214 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
210214 -01	B-N04-W09-428
210214 -02	B-N99-W99-428

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/14/22 Project: Texaco Strickland 180357, F&BI 210214 Date Extracted: 10/18/22 Date Analyzed: 10/18/22

### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
B-N04-W09-428 210214-01	<5	105
B-N99-W99-428 210214-02	<5	107
Method Blank	<5	109

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/14/22 Project: Texaco Strickland 180357, F&BI 210214 Date Extracted: 10/17/22 Date Analyzed: 10/17/22

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
B-N04-W09-428 210214-01	<50	<250	91
B-N99-W99-428 210214-02	<50	<250	90
Method Blank 02-2532 MB	<50	<250	69

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N04-W09-428 10/14/22 10/17/22 10/17/22 Soil mg/kg (npm) Dry Weigh	Client: Project: Lab ID: Data File: Instrument:	Aspect Consulting, LLC Texaco Strickland 1803 210214-01 101706.D GCMS4 JCM	) 57, F&BI 210214
Cintis.	ing/kg (ppin) D13 weigi	-		
		Lower	Upper	
Surrogates:	% Recover	ry: Limit:	Limit:	
1,2-Dichloroethane-	d4 102	90	109	
Toluene-d8	100	89	112	
4-Bromofluorobenze	ene 105	84	115	
Compounds:	Concentrat mg/kg (pp	tion m)		
Benzene	< 0.03			
Toluene	< 0.05			
Ethylbenzene	< 0.05			
m,p-Xylene	< 0.1			
o-Xylene	< 0.05			
Naphthalene	< 0.05			

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N99-W99-428 10/14/22 10/17/22 10/17/22 Soil mg/kg (ppm) Dr	y Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210214 210214-02 101707.D GCMS4 JCM
	ing ing (ppin) Di	, , , orgin	operator.	
<b>a</b>	0.4	D	Lower	Upper
Surrogates:	%	Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	98	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:	Con mg	centration (kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blank	Client:	Aspect Consulting, I	LLC
Date Received:	Not Applicable	Project:	Texaco Strickland 1	80357, F&BI 210214
Date Extracted:	10/17/22	Lab ID:	02-2483 mb	
Date Analyzed:	10/17/22	Data File:	101705.D	
Matrix:	Soil	Instrument:	GCMS4	
Units:	mg/kg (ppm) Dry Weig	ght Operator:	JCM	
		Lower	Upper	
Surrogates:	% Recove	ery: Limit:	Limit:	
1,2-Dichloroethane-	d4 101	90	109	
Toluene-d8	98	89	112	
4-Bromofluorobenze	ene 106	84	115	
Compounds:	Concentra mg/kg (pj	ation pm)		
Benzene	< 0.03	}		
Toluene	< 0.05	5		
Ethylbenzene	< 0.05	5		
m,p-Xylene	< 0.1			
o-Xylene	< 0.05	5		
Naphthalene	< 0.05	5		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/14/22 Project: Texaco Strickland 180357, F&BI 210214

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

Laboratory Code: 2	210214-01 (Duplic	eate)			
		Samp	ole D	Juplicate	
	Reporting	Resu	lt	Result	$\operatorname{RPD}$
Analyte	Units	(Wet V	Nt) (	Wet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: I	Laboratory Contro	ol Sample	e		
			Percent	t	
	Reporting	Spike	Recover	y Acceptance	e
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	20	105	71-131	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/14/22 Project: Texaco Strickland 180357, F&BI 210214

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

Laboratory Code: 210228-01 (Matrix Spike) Sample Percent Percent Reporting Spike Result RPD Recovery Recovery Acceptance Analyte Units Level (Wet Wt) MSMSD Criteria (Limit 20) **Diesel Extended** mg/kg (ppm) 5,000<50 86 88 73-135  $\mathbf{2}$ Laboratory Code: Laboratory Control Sample Percent Reporting Spike Recovery Acceptance Units Analyte Level LCS Criteria Diesel Extended 5,000 90 74-139 mg/kg (ppm)

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/14/22 Project: Texaco Strickland 180357, F&BI 210214

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

Laboratory Code: 210214-01 (Matrix Spike)

	(inaci in opinio)						
			Sample	Percent	Percent		
	Reporting	Spike	$\operatorname{Result}$	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	83	88	29-129	6
Toluene	mg/kg (ppm)	1	< 0.05	91	98	35 - 130	7
Ethylbenzene	mg/kg (ppm)	1	< 0.05	91	99	32 - 137	8
m,p-Xylene	mg/kg (ppm)	2	< 0.1	90	<b>98</b>	34-136	9
o-Xylene	mg/kg (ppm)	1	< 0.05	90	96	33-134	6
Naphthalene	mg/kg (ppm)	1	< 0.05	94	100	14 - 157	6

Laboratory Code: Laboratory Control Sample

C C	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	83	71-118
Toluene	mg/kg (ppm)	1	96	66 - 126
Ethylbenzene	mg/kg (ppm)	1	99	64-123
m,p-Xylene	mg/kg (ppm)	2	98	78 - 122
o-Xylene	mg/kg (ppm)	1	99	77 - 124
Naphthalene	mg/kg (ppm)	1	100	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

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Friedman & Bruya, Inc. Re Ph. (206) 285-8282 Rel Rel			8-14-194-428 8-14-194-428	Sample ID	210214 Report To <u>Parel</u> Block Company <u>Aspert</u> Consoli Address City, State, ZIP Phone <u>316.117.0489</u> Emi
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				PAHs EPA 8270	PO # PO #
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#### ENVIRONMENTAL CHEMISTS

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

October 21, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the results from the testing of material submitted on October 18, 2022 from the Texaco Strickland 180357, F&BI 210253 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1021R.DOC

#### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on October 18, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
210253 -01	SW-W06-429
210253 -02	SW-W09-429
210253 -03	SW-W11-429
210253 -04	SW-W14-429
210253 -05	Trip Blank

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/18/22 Project: Texaco Strickland 180357, F&BI 210253 Date Extracted: 10/20/22 Date Analyzed: 10/20/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
SW-W06-429 210253-01	<5	124
SW-W09-429 210253-02	<5	105
SW-W11-429 210253-03	<5	101
SW-W14-429 210253-04	<5	107
Method Blank 02-2515 MB	<5	104

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/18/22 Project: Texaco Strickland 180357, F&BI 210253 Date Extracted: 10/19/22 Date Analyzed: 10/19/22

# RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)	
Trip Blank 210253-05	<100	105	
Method Blank 02-2514 MB	<100	89	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/18/22 Project: Texaco Strickland 180357, F&BI 210253 Date ExtractedDate Analyzed: 10/19/22

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 56-165)
SW-W06-429 210253-01	<50	<250	112
SW-W09-429 210253-02	<50	<250	110
SW-W11-429 210253-03	<50	<250	111
SW-W14-429 210253-04	<50	<250	100
Method Blank 02-2543 MB	<50	<250	78

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W06-423 10/18/22 10/19/22 10/19/22 Soil mg/kg (ppm)	9 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210253-01 101909.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	102	90	109
Toluene-d8		94	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		0.51		
Toluene		< 0.05		
Ethylbenzene		0.073		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W09-429 10/18/22 10/19/22 10/19/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210253-02 101908.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	101	90	109
Toluene-d8		96	89	112
4-Bromofluorobenze	ene	100	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		0.060		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W11-429 10/18/22 10/19/22 10/19/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210253-03 101906.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	98	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W14-429 10/18/22 10/19/22 10/19/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210253-04 101907.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	99	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applical 10/19/22 10/19/22 Soil mg/kg (ppm)	nk ble 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2487 mb 101905.D GCMS4 LM
			Lower	Unner
Surrogates:		% Recovery:	Limit:	Limit:
1.2-Dichloroethane	-d4	104	90	109
Toluene-d8		97	89	112
4-Bromofluorobenz	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		
# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Trip Blank 10/18/22 10/19/22 10/19/22 Water ug/L (ppb)		Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210253-05 101911.D GCMS11 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	106	78	126
Toluene-d8		95	84	115
4-Bromofluorobenze	ene	100	72	130
		Concentration		
Compounds:		ug/L (ppb)		
Benzene		< 0.35		
Toluene		<1		
Ethylbenzene		<1		
m,p-Xylene		<2		
o-Xylene		<1		
Naphthalene		<1		

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Bla Not Applica 10/19/22 10/19/22 Water ug/L (ppb)	nk ble	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2488 mb 101907.D GCMS11 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	103	78	126
Toluene-d8		96	84	115
4-Bromofluorobenze	ene	95	72	130
Compounds:		Concentration ug/L (ppb)		
Benzene		< 0.35		
Toluene		<1		
Ethylbenzene		<1		
m,p-Xylene		<2		
o-Xylene		<1		
Naphthalene		<1		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/18/22 Project: Texaco Strickland 180357, F&BI 210253

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

Laboratory Code: 21	0253-03 (Duplic	ate)			
		Samp	le Du	iplicate	
	Reporting	Resu	lt F	Result	RPD
Analyte	Units	(Wet V	Vt) (W	/et Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: La	boratory Contro	l Sample	è		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	20	100	71-131	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/18/22 Project: Texaco Strickland 180357, F&BI 210253

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

Laboratory Code: 210	236-01 (Duplie	cate)			
	Reporting	Samp	le Du	plicate	RPD
Analyte	Units	Resul	t R	esult	(Limit 20)
Gasoline	ug/L (ppb)	<100	) <	<100	nm
Laboratory Code: Lab	oratory Contr	ol Sample			
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	_
Gasoline	ug/L (ppb)	1,000	108	69-134	_

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/18/22 Project: Texaco Strickland 180357, F&BI 210253

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

Laboratory Code: 2	210253-01 (Matri	x Spike)								
			Sample	Percent	Percent					
	Reporting	Spike	$\operatorname{Result}$	Recovery	Recovery	Acceptance	$\operatorname{RPD}$			
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)			
<b>Diesel Extended</b>	mg/kg (ppm)	5,000	<50	82	84	63-146	2			
Laboratory Code:	Laboratory Code: Laboratory Control Sample									
			Percent	t						
	Reporting	Spike	Recover	y Accep	tance					
Analyte	Units	Level	LCS	Crit	eria					
Diesel Extended	mg/kg (ppm)	5,000	82	79-1	144					

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/18/22 Project: Texaco Strickland 180357, F&BI 210253

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

Laboratory Code: 210253-01 (Matrix Spike)

Habbiatorj coat. =10=00 01	(interni »pino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	0.44	30 b	30 b	29-129	0 b
Toluene	mg/kg (ppm)	1	< 0.05	88	84	35 - 130	5
Ethylbenzene	mg/kg (ppm)	1	0.063	83	81	32 - 137	2
m,p-Xylene	mg/kg (ppm)	2	< 0.1	86	84	34 - 136	2
o-Xylene	mg/kg (ppm)	1	< 0.05	90	89	33 - 134	1
Naphthalene	mg/kg (ppm)	1	< 0.05	89	91	14 - 157	2

Laboratory Code: Laboratory Control Sample

<i>v</i>	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	97	71-118
Toluene	mg/kg (ppm)	1	103	66-126
Ethylbenzene	mg/kg (ppm)	1	104	64-123
m,p-Xylene	mg/kg (ppm)	2	104	78 - 122
o-Xylene	mg/kg (ppm)	1	103	77 - 124
Naphthalene	mg/kg (ppm)	1	105	63-140

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/18/22 Project: Texaco Strickland 180357, F&BI 210253

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 210249-01 (Matrix Spike)

				Percent	
	Reporting	Spike	Sample	Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
Benzene	ug/L (ppb)	10	< 0.35	99	50 - 150
Toluene	ug/L (ppb)	10	<1	101	50 - 150
Ethylbenzene	ug/L (ppb)	10	<1	99	50 - 150
m,p-Xylene	ug/L (ppb)	20	<2	99	50 - 150
o-Xylene	ug/L (ppb)	10	<1	97	50 - 150
Naphthalene	ug/L (ppb)	10	<1	96	50 - 150

Laboratory Code: Laboratory Control Sample

	1		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Benzene	ug/L (ppb)	10	105	99	70-130	6
Toluene	ug/L (ppb)	10	100	98	70-130	2
Ethylbenzene	ug/L (ppb)	10	103	97	70-130	6
m,p-Xylene	ug/L (ppb)	20	103	96	70-130	7
o-Xylene	ug/L (ppb)	10	104	94	70-130	10
Naphthalene	ug/L (ppb)	10	100	89	70-130	12

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

*æ.	~	Friedman & Bruya, Inc. Ph. (206) 285-8282		· · ·					thipblank	5W- M14- 429	5W-W1-W2	6-10- pow-w2	54-200-42g	Sample ID		PhoneEm	City, State, ZIP	Address 10 Line boo	company reject with	a Armort Fanci	-Report To Adum Quiffi)	2100NN
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#### ENVIRONMENTAL CHEMISTS

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

October 24, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the results from the testing of material submitted on October 19, 2022 from the Texaco Strickland 180357, F&BI 210272 project. There are 18 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1024R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on October 19, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210272 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
210272 -01	SW-W04-429
210272 -02	SW-N03-429
210272 -03	SW-N05-429
210272 -04	SW-N08-429
210272 -05	SW-N10-429
210272 -06	Trip Blank

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/24/22 Date Received: 10/19/22 Project: Texaco Strickland 180357, F&BI 210272 Date Extracted: 10/21/22 Date Analyzed: 10/21/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
SW-W04-429 210272-01	<5	94
SW-N03-429 210272-02	<5	107
SW-N05-429 210272-03	<5	105
SW-N08-429 210272-04	<5	103
SW-N10-429 210272-05	<5	107
Method Blank 02-2517 MB	<5	104

 $\mathbf{2}$ 

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/24/22 Date Received: 10/19/22 Project: Texaco Strickland 180357, F&BI 210272 Date Extracted: 10/20/22 Date Analyzed: 10/20/22

### RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	Gasoline Range	Surrogate ( <u>% Recovery)</u> (Limit 51-134)
Trip Blank 210272-06	<100	58
Method Blank 02-2516 MB	<100	90

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/24/22 Date Received: 10/19/22 Project: Texaco Strickland 180357, F&BI 210272 Date Extracted: 10/20/22 Date Analyzed: 10/20/22

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
SW-W04-429 210272-01	<50	<250	87
SW-N03-429 210272-02	<50	<250	94
SW-N05-429 210272-03	<50	<250	84
SW-N08-429 210272-04	<50	<250	90
SW-N10-429 210272-05	<50	<250	90
Method Blank 02-2547 MB2	<50	<250	68

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	SW-W04-429		Client:	Aspect Consulting, LLC
Date Received:	10/19/22		Project:	Texaco Strickland 180357, F&BI 210272
Date Extracted:	10/20/22		Lab ID:	210272-01
Date Analyzed:	10/20/22		Data File:	102010.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	0
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	96	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:	C	Concentration mg/kg (ppm)		
Benzene		0.057		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	SW-N03-429	1	Client:	Aspect Consulting, LLC
Date Received:	10/19/22		Project:	Texaco Strickland 180357, F&BI 210272
Date Extracted:	10/20/22		Lab ID:	210272-02
Date Analyzed:	10/20/22		Data File:	102011.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	0
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	97	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ne	100	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	SW-N05-429		Client:	Aspect Consulting, LLC
Date Received:	10/19/22		Project:	Texaco Strickland 180357, F&BI 210272
Date Extracted:	10/20/22		Lab ID:	210272-03
Date Analyzed:	10/20/22		Data File:	102014.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	0
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	95	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	SW-N08-429	)	Client:	Aspect Consulting, LLC
Date Received:	10/19/22		Project:	Texaco Strickland 180357, F&BI 210272
Date Extracted:	10/20/22		Lab ID:	210272-04
Date Analyzed:	10/20/22		Data File:	102015.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	0
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	99	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ne	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	SW-N10-429		Client:	Aspect Consulting, LLC
Date Received:	10/19/22		Project:	Texaco Strickland 180357, F&BI 210272
Date Extracted:	10/20/22		Lab ID:	210272-05
Date Analyzed:	10/20/22		Data File:	102016.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	0
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	102	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blank		Client:	Aspect Consulting, LLC
Date Received:	Not Applicable		Project:	Texaco Strickland 180357, F&BI 210272
Date Extracted:	10/20/22		Lab ID:	02-2489 mb
Date Analyzed:	10/20/22		Data File:	102005.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm) Dry	y Weight	Operator:	0
			Lower	Upper
Surrogates:	% ]	Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	103	90	109
Toluene-d8		95	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:	Con mg	centration /kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Trip Blank 10/19/22 10/20/22 10/20/22 Water ug/L (ppb)		Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210272 210272-06 102009.D GCMS11 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	e-d4	102	78	126
Toluene-d8		106	84	115
4-Bromofluorobenz	ene	104	72	130
Compounds:		Concentration ug/L (ppb)		
Benzene		< 0.35		
Toluene		<1		
Ethylbenzene		<1		
m,p-Xylene		<2		
o-Xylene		<1		
Naphthalene		<1		

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Bla Not Applica 10/20/22 10/20/22 Water ug/L (ppb)	unk able	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210272 02-2490 mb 102007.D GCMS11 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	104	78	126
Toluene-d8		106	84	115
4-Bromofluorobenz	ene	98	72	130
		Concentration		
Compounds:		ug/L (ppb)		
Benzene		< 0.35		
Toluene		<1		
Ethylbenzene		<1		
m,p-Xylene		<2		
o-Xylene		<1		
Naphthalene		<1		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/24/22 Date Received: 10/19/22 Project: Texaco Strickland 180357, F&BI 210272

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

Laboratory Code: 210272-01 (Duplicate)							
		Samp	ole Du	uplicate			
	Reporting	Resu	ılt I	Result	RPD		
Analyte	Units	(Wet V	Wt) (V	Vet Wt)	(Limit 20)		
Gasoline	mg/kg (ppm)	<5	<5 <5		nm		
Laboratory Code: L	aboratory Contro	ol Sample	e				
			Percent				
	Reporting	Spike	Recovery	Acceptance			
Analyte	Units	Level	LCS	Criteria	_		
Gasoline	mg/kg (ppm)	$\overline{20}$	100	71-131			

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/24/22 Date Received: 10/19/22 Project: Texaco Strickland 180357, F&BI 210272

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

Laboratory Code: 210263-07 (Duplicate)							
	Reporting	Sample	e Duj	olicate	$\operatorname{RPD}$		
Analyte	Units	Result	t Re	esult	(Limit 20)		
Gasoline	ug/L (ppb)	250	2	270	8		
Laboratory Code: La	boratory Contro	ol Sample					
			Percent				
	Reporting	Spike	Recovery	Acceptance			
Analyte	Units	Level	LCS	Criteria	_		
Gasoline	ug/L (ppb)	1,000	115	69-134	_		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/24/22 Date Received: 10/19/22 Project: Texaco Strickland 180357, F&BI 210272

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

Laboratory Code:	210267-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	$\operatorname{Result}$	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	74	74	63-146	0
Laboratory Code:	Laboratory Contr	ol Samp	le				
			Percent	t			
	Reporting	Spike	Recover	Recovery Accept			
Analyte	Units	Level	LCS	Crit	eria		
Diesel Extended	mg/kg (ppm)	5,000	82	79-1	144		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/24/22 Date Received: 10/19/22 Project: Texaco Strickland 180357, F&BI 210272

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

Laboratory Code: 210272-01 (Matrix Spike)

	(intaci in opino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	0.052	69	75	29-129	8
Toluene	mg/kg (ppm)	1	< 0.05	84	90	35 - 130	7
Ethylbenzene	mg/kg (ppm)	1	< 0.05	87	94	32 - 137	8
m,p-Xylene	mg/kg (ppm)	2	< 0.1	86	94	34 - 136	9
o-Xylene	mg/kg (ppm)	1	< 0.05	88	96	33 - 134	9
Naphthalene	mg/kg (ppm)	1	< 0.05	95	100	14 - 157	<b>5</b>

Laboratory Code: Laboratory Control Sample

U	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	90	71-118
Toluene	mg/kg (ppm)	1	99	66-126
Ethylbenzene	mg/kg (ppm)	1	103	64-123
m,p-Xylene	mg/kg (ppm)	2	103	78-122
o-Xylene	mg/kg (ppm)	1	103	77 - 124
Naphthalene	mg/kg (ppm)	1	109	63-140

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/24/22 Date Received: 10/19/22 Project: Texaco Strickland 180357, F&BI 210272

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 210275-01 (Matrix Spike)

			Percent				
	Reporting	Spike	Sample	Recovery	Acceptance		
Analyte	Units	Level	Result	MS	Criteria		
Benzene	ug/L (ppb)	10	< 0.35	99	50 - 150		
Toluene	ug/L (ppb)	10	<1	101	50 - 150		
Ethylbenzene	ug/L (ppb)	10	<1	101	50 - 150		
m,p-Xylene	ug/L (ppb)	20	<2	101	50 - 150		
o-Xylene	ug/L (ppb)	10	<1	100	50 - 150		
Naphthalene	ug/L (ppb)	10	<1	101	50 - 150		

Laboratory Code: Laboratory Control Sample

	Ŧ		Percent	Percent		
	Reporting	$\operatorname{Spike}$	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Benzene	ug/L (ppb)	10	102	98	70-130	4
Toluene	ug/L (ppb)	10	104	99	70-130	5
Ethylbenzene	ug/L (ppb)	10	105	100	70-130	<b>5</b>
m,p-Xylene	ug/L (ppb)	20	105	100	70-130	<b>5</b>
o-Xylene	ug/L (ppb)	10	104	98	70-130	6
Naphthalene	ug/L (ppb)	10	108	99	70-130	9

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

2W272 Report Porsaum Brithin, Daniel Pabeur company Aspect (ONSWATER City, State, ZIP SEATTLE, WA Address TTO 7Nd And Ste 450 Phone\_ SW-N03-429 SM-NOC - MEG SW-WOY-429 2M-NOB- 172 2m-10-429 Ph. (206) 285-8282 Friedman & Bruya, Inc. MP BUNK Sample ID . 7 .. 12 Email Received by: Received by: Beinghished by Relinquished by 02 0/ A-E/10/19/22 06 AB 8 3 50 Lab ID SIGNATURE Sampled Date 1 SAMPLE CHAIN OF CUSTODY 1110 9486 MS 321 126 Sampled SAMPLERS (signature) PROJECT NAME REMARKS Project specific RLs? - Yes / No Time texa (0- Shiuchund Sample Type 5 KNOWX / TUNY # of Jars S ¢ P PRINT NAME 井 × NWTPH-Dx AN NOW x É NWTPH-Gx BTEX EPA 8621 × C E 181357 NWTPH-HCID INVOICE TO ANALYSES REQUESTED VOCs EPA 8260 PO # Samples refeived at PAHs EPA 8270 ASPECT PCBs EPA 8082 19/2 COMPANY SAMPLE DISPOSAL RUSH 40-117 0 Other\_ Rush charges authorized by: Default: Dispose after 30 days VS A2/ VUU1/ CO2 Page # / of / CO2 V °C 10/19/22 NotronTB 0/10 per DB 12/ FUT ME DATE Notes 1602 20:91 TIME














#### ENVIRONMENTAL CHEMISTS

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

October 26, 2022

Daniel Babcock, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Mr Babcock:

Included are the results from the testing of material submitted on October 21, 2022 from the Texaco Strickland 180357, F&BI 210320 project. There are 29 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Adam Griffin ASP1026R.DOC

#### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on October 21, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210320 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
210320 -01	B-N04-W04-427
210320 -02	B-N04-W06-427
210320 -03	B-N04-W11-427
210320 -04	B-N04-W14-429
210320 -05	B-N04-W16-429
210320 -06	B-N07-W16-429
210320 -07	B-N99-W99-429
210320 -08	B-N10-W16-429
210320 -09	B-N07-W14-429
210320 -10	SW-W09-425
210320 -11	SW-W05-425
210320 -12	SW-W06-425
210320 -13	SW-W12-425
210320 -14	SW-W14-425
210320 -15	Trip Blank 102122

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320 Date Extracted: 10/24/22 Date Analyzed: 10/24/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
B-N04-W04-427 210320-01	<5	89
B-N04-W06-427 210320-02	<5	89
B-N04-W11-427 210320-03	<5	91
B-N04-W14-429 210320-04	<5	90
B-N04-W16-429 210320-05	<5	88
B-N07-W16-429 210320-06	<5	92
B-N99-W99-429 210320-07	<5	91
B-N10-W16-429 210320-08	<5	91
B-N07-W14-429 210320-09	<5	118
SW-W09-425 210320-10	<5	122

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320 Date Extracted: 10/24/22 Date Analyzed: 10/24/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
SW-W05-425 210320-11	<5	120
SW-W06-425 210320-12	<5	105
SW-W12-425 210320-13	<5	119
$\frac{\text{SW-W14-425}}{_{210320\cdot14}}$	<5	118
Method Blank 02-2562 MB	<5	119

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320 Date Extracted: 10/24/22 Date Analyzed: 10/24/22

### RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)
Trip Blank 102122 210320-15	<100	121
Method Blank 02-2518 MB	<100	92

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320 Date Extracted: 10/24/22 Date Analyzed: 10/24/22

#### 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)

Sumorato

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>(% Recovery)</u> (Limit 48-168)
B-N04-W04-427 210320-01	<50	<250	74
B-N04-W06-427 210320-02	<50	<250	73
B-N04-W11-427 210320-03	<50	<250	71
B-N04-W14-429 210320-04	<50	<250	79
B-N04-W16-429 210320-05	<50	<250	75
B-N07-W16-429 210320-06	<50	<250	78
B-N99-W99-429 210320-07	<50	<250	73
B-N10-W16-429 210320-08	<50	<250	74
B-N07-W14-429 210320-09	<50	<250	73
SW-W09-425 210320-10	<50	<250	75
SW-W05-425 210320-11	<50	<250	70

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320 Date Extracted: 10/24/22 Date Analyzed: 10/24/22

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
SW-W06-425 210320-12	<50	<250	80
SW-W12-425 210320-13	<50	<250	71
SW-W14-425 210320-14	<50	<250	73
Method Blank 02-2593 MB	<50	<250	104

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N04-W04- 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	427 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-01 102406.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	101	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	B-N04-W06-	427	Client:	Aspect Consulting, LLC
Date Received:	10/21/22		Project:	Texaco Strickland 180357
Date Extracted:	10/24/22		Lab ID:	210320-02
Date Analyzed:	10/24/22		Data File:	102407.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	LM
			Lower	Unner
Surrogates:		% Recoverv:	Limit:	Limit:
1,2-Dichloroethane-	d4	104	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	100	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N04-W11- 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	427 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-03 102408.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	-d4	102	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N04-W14- 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	429 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-04 102409.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	105	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N04-W16- 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	.429 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-05 102410.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	98	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N07-W16- 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	429 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-06 102411.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	-d4	102	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N99-W99- 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	.429 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-07 102412.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	101	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	100	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N10-W16- 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	429 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-08 102413.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	102	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N07-W14 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	429 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-09 102414.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	98	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	105	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W09-428 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	5 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-10 102415.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	99	90	109
Toluene-d8		101	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W05-428 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	5 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-11 102416.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	98	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		0.045		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W06-428 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	5 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-12 102417.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	100	90	109
Toluene-d8		100	89	112
4-Bromofluorobenz	ene	106	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W12-425 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-13 102418.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	102	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	106	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W14-428 10/21/22 10/24/22 10/24/22 Soil mg/kg (ppm)	5 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-14 102419.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	101	90	109
Toluene-d8		97	89	112
4-Bromofluorobenz	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blar Not Applical 10/24/22 10/24/22 Soil mg/kg (ppm)	lk ble Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2493 mb 102405.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	100	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

## Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Trip Blank 10/21/22 10/24/22 10/24/22 Water ug/L (ppb)	102122	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210320-15 102410.D GCMS11 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	96	78	126
Toluene-d8		106	84	115
4-Bromofluorobenze	ene	100	72	130
		Concentration		
Compounds:		ug/L (ppb)		
Benzene		< 0.35		
Toluene		<1		
Ethylbenzene		<1		
m,p-Xylene		<2		
o-Xylene		<1		
Naphthalene		<1		

# ENVIRONMENTAL CHEMISTS

## Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Bla Not Applica 10/24/22 10/24/22 Water ug/L (ppb)	nk ble	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2494 mb 102407.D GCMS11 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	101	78	126
Toluene-d8		95	84	115
4-Bromofluorobenze	ene	91	72	130
Compounds:		Concentration ug/L (ppb)		
Benzene		< 0.35		
Toluene		<1		
Ethylbenzene		<1		
m,p-Xylene		<2		
o-Xylene		<1		
Naphthalene		<1		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320

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

Laboratory Code: 210296-02 (Duplicate)							
		Samp	le Dı	iplicate			
	Reporting	Resu	lt I	Result	RPD		
Analyte	Units	(Wet V	Vt) (V	/et Wt)	(Limit 20)		
Gasoline	mg/kg (ppm)	(ppm) <5 <5		<5	nm		
Laboratory Code: La	aboratory Contro	ol Sample	e				
			Percent				
	Reporting	Spike	Recovery	Acceptance			
Analyte	Units	Level	LCS	Criteria	_		
Gasoline	mg/kg (ppm)	$\overline{20}$	98	71-131			

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320

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

Laboratory Code: 210	0343-01 (Duplie	cate)			
	Reporting	Samp	le Duj	plicate	RPD
Analyte	Units	Resul	ult Result		(Limit 20)
Gasoline	ug/L (ppb)	<100	) <	:100	nm
Laboratory Code: La	boratory Contr	ol Sample			
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	_
Gasoline	ug/L (ppb)	1,000	110	69-134	_

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320

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

Laboratory Code: 2	210330-01 (Matri	x Spike)							
			Sample	Percent	Percent				
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$		
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)		
<b>Diesel Extended</b>	mg/kg (ppm)	5,000	<50	82	82	63-146	0		
Laboratory Code: Laboratory Control Sample									
			Percent	t					
	Reporting	Spike	Recover	Recovery Accept					
Analyte	Units	Level	LCS	Crit	eria				
Diesel Extended	mg/kg (ppm)	5,000	82	79-1	144				

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320

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

Laboratory Code: 210320-01 (Matrix Spike)

	(intertime opinio)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	79	82	29-129	4
Toluene	mg/kg (ppm)	1	< 0.05	87	93	35 - 130	7
Ethylbenzene	mg/kg (ppm)	1	< 0.05	89	95	32 - 137	7
m,p-Xylene	mg/kg (ppm)	2	< 0.1	88	94	34-136	7
o-Xylene	mg/kg (ppm)	1	< 0.05	89	93	33-134	4
Naphthalene	mg/kg (ppm)	1	< 0.05	88	94	14 - 157	7

Laboratory Code: Laboratory Control Sample

-	Percent						
	Reporting	Spike	Recovery	Acceptance			
Analyte	Units	Level	LCS	Criteria			
Benzene	mg/kg (ppm)	1	94	71-118			
Toluene	mg/kg (ppm)	1	96	66 - 126			
Ethylbenzene	mg/kg (ppm)	1	96	64-123			
m,p-Xylene	mg/kg (ppm)	2	96	78 - 122			
o-Xylene	mg/kg (ppm)	1	97	77 - 124			
Naphthalene	mg/kg (ppm)	1	99	63-140			

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/26/22 Date Received: 10/21/22 Project: Texaco Strickland 180357, F&BI 210320

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 210263-07 (Matrix Spike)

		Percent					
	Reporting	Spike	Sample	Recovery	Acceptance		
Analyte	Units	Level	Result	MS	Criteria		
Benzene	ug/L (ppb)	10	< 0.35	89	50 - 150		
Toluene	ug/L (ppb)	10	<1	93	50 - 150		
Ethylbenzene	ug/L (ppb)	10	<1	93	50 - 150		
m,p-Xylene	ug/L (ppb)	20	<2	93	50 - 150		
o-Xylene	ug/L (ppb)	10	<1	91	50 - 150		
Naphthalene	ug/L (ppb)	10	<1	95	50 - 150		

Laboratory Code: Laboratory Control Sample

5	Ť		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Benzene	ug/L (ppb)	10	99	102	70-130	3
Toluene	ug/L (ppb)	10	92	97	70-130	5
Ethylbenzene	ug/L (ppb)	10	93	95	70-130	2
m,p-Xylene	ug/L (ppb)	20	93	96	70-130	3
o-Xylene	ug/L (ppb)	10	94	94	70-130	0
Naphthalene	ug/L (ppb)	10	97	95	70-130	2
### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

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#### ENVIRONMENTAL CHEMISTS

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

October 28, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the results from the testing of material submitted on October 25, 2022 from the Texaco Strickland 180357, F&BI 210372 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1028R.DOC

#### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on October 25, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210372 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
210372 -01	SW-W06-421
210372 -02	SW-W08-421
210372 -03	SW-W11-421

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/22 Date Received: 10/25/22 Project: Texaco Strickland 180357, F&BI 210372 Date Extracted: 10/26/22 Date Analyzed: 10/26/22

## 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
SW-W06-421 210372-01	<5	92
SW-W08-421 210372-02	<5	90
SW-W11-421 210372-03	<5	90
Method Blank 02-2567 mb	<5	93

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/22 Date Received: 10/25/22 Project: Texaco Strickland 180357, F&BI 210372 Date Extracted: 10/25/22 Date Analyzed: 10/25/22

## 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
SW-W06-421 210372-01	<50	<250	76
SW-W08-421 210372-02	<50	<250	76
SW-W11-421 210372-03	<50	<250	55
Method Blank 02-2605 MB2	<50	<250	64

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W06-422 10/25/22 10/26/22 10/26/22 Soil mg/kg (ppm)	1 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210372-01 102606.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	102	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W08-421 10/25/22 10/26/22 10/26/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210372-02 102607.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	104	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W11-422 10/25/22 10/26/22 10/26/22 Soil mg/kg (ppm)	1 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210372-03 102608.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	-d4	102	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applical 10/26/22 10/26/22 Soil mg/kg (ppm)	nk ble ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2498 mb 102605.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	99	90	109
Toluene-d8		100	89	112
4-Bromofluorobenz	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/22 Date Received: 10/25/22 Project: Texaco Strickland 180357, F&BI 210372

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

Laboratory Code: Laboratory Control Sample

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Gasoline	mg/kg (ppm)	20	125	115	61-153	8

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/22 Date Received: 10/25/22 Project: Texaco Strickland 180357, F&BI 210372

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

Laboratory Code: 210360-01 (Matrix Spike) a

Laboratory Coue. 2	210300-01 (Math	x opike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet Wt)	$\mathbf{MS}$	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	86	82	73-135	5
Laboratory Code: 1	Laboratory Contr	ol Sampl	le				
			Percent				
	Reporting	Spike	Recovery	Acceptar	nce		
Analyte	Units	Level	LCS	Criteri	a		
Diesel Extended	mg/kg (ppm)	5,000	88	74-139	)		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/22 Date Received: 10/25/22 Project: Texaco Strickland 180357, F&BI 210372

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

Laboratory Code: 210372-01 (Matrix Spike)

	(inaci m opino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	79	83	29-129	5
Toluene	mg/kg (ppm)	1	< 0.05	84	87	35 - 130	4
Ethylbenzene	mg/kg (ppm)	1	< 0.05	85	90	32 - 137	6
m,p-Xylene	mg/kg (ppm)	2	< 0.1	86	90	34-136	5
o-Xylene	mg/kg (ppm)	1	< 0.05	86	89	33-134	3
Naphthalene	mg/kg (ppm)	1	< 0.05	84	89	14 - 157	6

Laboratory Code: Laboratory Control Sample

U	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	98	71-118
Toluene	mg/kg (ppm)	1	104	66-126
Ethylbenzene	mg/kg (ppm)	1	105	64-123
m,p-Xylene	mg/kg (ppm)	2	106	78-122
o-Xylene	mg/kg (ppm)	1	104	77 - 124
Naphthalene	mg/kg (ppm)	1	100	63-140

### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

TRECEIVEN DY:	Relingvished by:	Recorded by:	Priedman & Bruya, Inc. Relinquished W. Ph. (206) 285-8282	SIGNATURE					SM-M1-421 03 V V 07	17 30 M m		SWINNALL OF AND INTERNAL AND	Sample ID Lab ID Date Sampled S			PhoneEmail	City, State, ZIP	Address 710 Wol New CHE 550	Company KYRU COMSUNIANO	Report To FRIMIN OINTINS Valuel Balacaje	
		the change	ACOUNT ANDIA	DEINT NIAME					TON V & V V	155	and Coll R X X X		Sample Time Sample Jars NWTPH-Dx NWTPH-Gx		Project specific RLs? - Yes / No		REMARKS	texaco-shickland	PROJECT NAME	AMM (ACA	
Samples receive	- TC	Alline AD Lake	ACTION COMPANY										BTEXEPA 8021 NWTPH-HCID VOCs EPA 8260 PAHs EPA 8270 PCBs EPA 8082	ANALYSES REQUESTED	Defa		INVOICE TO	190357 Rus	PO#		
id at 000	1025122125	75 51 20167.101	DATE TIME										Notes		ault: Dispose after 30 days	rchive samples	SAMPLE DISPOSAL	NUSH 77-711 sh charges authorized by:	tonus turnarqund	Page # / of /	

#### ENVIRONMENTAL CHEMISTS

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

October 31, 2022

Daniel Babcock, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Mr Babcock:

Included are the results from the testing of material submitted on October 26, 2022 from the Texaco Strickland 180357, F&BI 210402 project. There are 43 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Adam Griffin ASP1031R.DOC

#### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on October 26, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210402 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
210402 -01	B-N02-W02-438
210402 -02	B-N02-W04-424
210402 -03	B-N02-W06-423
210402 -04	B-N02-W09-424
210402 -05	B-N02-W12-425
210402 -06	B-N02-W14-429
210402 -07	B-N02-W16-434
210402 -08	B-N04-W02-437
210402 -09	B-N07-W02-438
210402 -10	B-N07-W04-431
210402 -11	B-N07-W06-430
210402 -12	B-N07-W09-426
210402 -13	B-N07-W12-426
210402 -14	B-N10-W02-438
210402 -15	B-N10-W04-431
210402 -16	B-N10-W06-431
210402 -17	B-N10-W12-429
210402 -18	B-N10-W14-429
210402 -19	B-N12-W02-444
210402 -20	B-N12-W12-439
210402 -21	B-N12-W14-439
210402 -22	B-N12-W16-439
210402 -23	Trip Blank-102622

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402 Date Extracted: 10/27/22 Date Analyzed: 10/27/22

# RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	Gasoline Range	Surrogate ( <u>% Recovery)</u> (Limit 51-134)
Trip Blank-102622 210402-23	<100	87
Method Blank 02-2571 mb	<100	91

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402 Date Extracted: 10/27/22 Date Analyzed: 10/27/22

## 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)		
B-N02-W02-438 210402-01	<5	123		
B-N02-W04-424 210402-02	<5	103		
B-N02-W06-423 210402-03	<5	119		
B-N02-W09-424 210402-04	<5	119		
B-N02-W12-425 210402-05	<5	122		
B-N02-W14-429 210402-06	<5	120		
B-N02-W16-434 210402-07	<5	121		
B-N04-W02-437 210402-08	<5	121		
B-N07-W02-438 210402-09	<5	119		
B-N07-W04-431 210402-10	<5	121		
B-N07-W06-430 210402-11	14	134		
#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402 Date Extracted: 10/27/22 Date Analyzed: 10/27/22

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

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
B-N07-W09-426 210402-12	9.4	115
B-N07-W12-426 210402-13	<5	116
B-N10-W02-438 210402-14	<5	122
B-N10-W04-431 210402-15	<5	121
B-N10-W06-431 210402-16	<5	122
B-N10-W12-429 210402-17	<5	121
B-N10-W14-429 210402-18	<5	120
B-N12-W02-444 210402-19	<5	122
B-N12-W12-439 210402-20	<5	145
B-N12-W14-439 210402-21 1/10	1,600	ip

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402 Date Extracted: 10/27/22 Date Analyzed: 10/27/22

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

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
B-N12-W16-439 210402-22	<5	122
Method Blank 02-2568 MB	<5	89
Method Blank 02-2572 mb	<5	125

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402 Date Extracted: 10/27/22 Date Analyzed: 10/27/22

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
B-N02-W02-438 210402-01	<50	<250	90
B-N02-W04-424 210402-02	<50	<250	86
B-N02-W06-423 210402-03	<50	<250	87
B-N02-W09-424 210402-04	<50	<250	86
B-N02-W12-425 210402-05	<50	<250	91
B-N02-W14-429 210402-06	<50	<250	87
B-N02-W16-434 210402-07	<50	<250	86
B-N04-W02-437 210402-08	<50	<250	87
B-N07-W02-438 210402-09	<50	<250	90
B-N07-W04-431 210402-10	<50	<250	86
B-N07-W06-430 210402-11	<50	<250	99

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402 Date Extracted: 10/27/22 Date Analyzed: 10/27/22

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 48-168)
B-N07-W09-426 210402-12	<50	<250	97
B-N07-W12-426 210402-13	<50	<250	94
B-N10-W02-438 210402-14	<50	<250	87
B-N10-W04-431 210402-15	<50	<250	97
B-N10-W06-431 210402-16	<50	<250	86
B-N10-W12-429 210402-17	<50	<250	88
B-N10-W14-429 210402-18	<50	<250	86
B-N12-W02-444 210402-19	<50	<250	86
B-N12-W12-439 210402-20	310 x	630	107
B-N12-W14-439 210402-21	<50	<250	89

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402 Date Extracted: 10/27/22 Date Analyzed: 10/27/22

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
B-N12-W16-439 210402-22	<50	<250	67
Method Blank 02-2658 MB	<50	<250	89
Method Blank 02-2659 MB	<50	<250	88

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N02-W02- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	438 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-01 102716.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	100	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N02-W04- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	.424 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-02 102717.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	104	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N02-W06- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	423 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-03 102718.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	104	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	105	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N02-W09- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	424 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-04 102719.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	99	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N02-W12- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	.425 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-05 102720.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	100	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N02-W14- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	429 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-06 102721.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	100	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N02-W16 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	-434 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-07 102722.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	106	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N04-W02- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	-437 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-08 102723.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	-d4	106	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N07-W02- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	-438 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-09 102724.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	101	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N07-W04- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	431 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-10 102725.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	99	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	98	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N07-W06- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	430 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-11 102726.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	99	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N07-W09- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	426 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-12 102727.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	99	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N07-W12- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	-426 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-13 102728.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	102	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N10-W02- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	-438 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-14 102729.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	103	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	105	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N10-W04- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	431 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-15 102730.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	101	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N10-W06- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	431 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-16 102731.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	101	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	105	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N10-W12- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-17 102732.D GCMS4 lm
	0 0 11 /		I orrow	Unnor
C		0/ D	Lower	
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	106	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N10-W14- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	429 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-18 102733.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	106	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N12-W02- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-19 102734.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	103	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	100	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N12-W12 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	-439 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-20 102735.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	105	90	109
Toluene-d8		104	89	112
4-Bromofluorobenze	ene	108	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		0.15		
m,p-Xylene		0.35		
o-Xylene		< 0.05		
Naphthalene		0.45		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N12-W14 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm	-439 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-21 102736.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	102	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N12-W16- 10/26/22 10/27/22 10/27/22 Soil mg/kg (ppm)	439 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-22 102737.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	96	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	100	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

## Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blar Not Applical 10/27/22 10/27/22 Soil mg/kg (ppm)	hk ble Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2612 mb 102712.D GCMS11 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	102	79	128
Toluene-d8		104	84	121
4-Bromofluorobenze	ene	96	84	116
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blar	ık	Client:	Aspect Consulting, LLC
Date Received:	Not Applical	ole	Project:	Texaco Strickland 180357
Date Extracted:	10/27/22		Lab ID:	02-2613 mb
Date Analyzed:	10/27/22		Data File:	102715.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	103	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

## Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Trip Blank 10/26/22 10/27/22 10/27/22 Water ug/L (ppb)	102622	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 210402-23 102713.D GCMS11 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	95	78	126
Toluene-d8		107	84	115
4-Bromofluorobenze	ene	97	72	130
		Concentration		
Compounds:		ug/L (ppb)		
Benzene		< 0.35		
Toluene		<1		
Ethylbenzene		<1		
m,p-Xylene		<2		
o-Xylene		<1		
Naphthalene		<1		

# ENVIRONMENTAL CHEMISTS

## Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Bla Not Applica 10/27/22 10/27/22 Water ug/L (ppb)	nk ble	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2611 mb 102707.D GCMS11 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	104	78	126
Toluene-d8		102	84	115
4-Bromofluorobenze	ene	99	72	130
Compounds:		Concentration ug/L (ppb)		
Benzene		< 0.35		
Toluene		<1		
Ethylbenzene		<1		
m,p-Xylene		<2		
o-Xylene		<1		
Naphthalene		<1		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402

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

Laboratory Code: 210	)408-01 (Dupli	cate)			
	Reporting	Samp	le Du	plicate	$\operatorname{RPD}$
Analyte	Units	Resu	lt R	esult	(Limit 20)
Gasoline	ug/L (ppb)	<100	) <	:100	nm
Laboratory Code: Lab	ooratory Contr	ol Sample			
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	_
Gasoline	ug/L (ppb)	1,000	115	69-134	_

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402

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

Laboratory Code: 2	10378-01 (Duplic	eate)			
		Samp	ole D	uplicate	
	Reporting	Resu	ılt	Result	RPD
Analyte	Units	(Wet V	Nt) (	Wet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: L	aboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recover	y Acceptance	9
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	20	110	61-153	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402

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

Laboratory Code: 2	10402-15 (Duplic	eate)			
		Samp	ole D	uplicate	
	Reporting	Resu	lt I	Result	$\operatorname{RPD}$
Analyte	Units	(Wet V	Wt) (V	Vet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: L	aboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	$\overline{20}$	105	71-131	_

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402

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

Laboratory Code: 210402-01 (Matrix Spike) Sample Percent Percent Reporting Spike Result RPD Recovery Recovery Acceptance Analyte Units Level (Wet Wt) MSMSD Criteria (Limit 20) **Diesel Extended** mg/kg (ppm) 5,000<50 929273-135 0 Laboratory Code: Laboratory Control Sample Percent Reporting Spike Recovery Acceptance Units Analyte Level LCS Criteria Diesel Extended 5,000 74-139 mg/kg (ppm) 94

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402

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

aboratory Code: 210402-21 (Matrix Spike)							
			Sample	Percent	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	90	92	73-135	2
Laboratory Code: 1	Laboratory Contro	ol Sampl	e				
			Percent				
	Reporting	Spike	Recovery	Acceptan	ce		
Analyte	Units	Level	LCS	Criteria	1		
Diesel Extended	mg/kg (ppm)	5,000	92	74-139			
#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402

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

Laboratory Code: 210391-23 (Matrix Spike)

<b>Hasolatol</b> , <b>South</b>	=o (intactin opino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	$\mathbf{MS}$	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1.0	< 0.03	76	89	50 - 150	16
Toluene	mg/kg (ppm)	1.0	< 0.05	80	92	50 - 150	14
Ethylbenzene	mg/kg (ppm)	1.0	< 0.05	82	95	50 - 150	15
m,p-Xylene	mg/kg (ppm)	2.0	< 0.1	83	96	50 - 150	15
o-Xylene	mg/kg (ppm)	1.0	< 0.05	80	93	50 - 150	15
Naphthalene	mg/kg (ppm)	1.0	< 0.05	75	92	50 - 150	20

Laboratory Code: Laboratory Control Sample

U U	-			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1.0	103	70-130
Toluene	mg/kg (ppm)	1.0	102	70-130
Ethylbenzene	mg/kg (ppm)	1.0	101	70-130
m,p-Xylene	mg/kg (ppm)	2.0	102	70-130
o-Xylene	mg/kg (ppm)	1.0	98	70-130
Naphthalene	mg/kg (ppm)	1.0	92	69-119

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402

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

Laboratory Code: 210402-20 (Matrix Spike)

Easoratory couct =1010= =0 (	(inaci in opino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	79	82	29 - 129	4
Toluene	mg/kg (ppm)	1	< 0.05	82	84	35 - 130	2
Ethylbenzene	mg/kg (ppm)	1	0.13	80	90	32 - 137	12
m,p-Xylene	mg/kg (ppm)	2	0.31	80	91	34-136	13
o-Xylene	mg/kg (ppm)	1	< 0.05	83	89	33-134	7
Naphthalene	mg/kg (ppm)	1	0.39	85 b	122  b	14 - 157	36 b

Laboratory Code: Laboratory Control Sample

U U	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	107	71-118
Toluene	mg/kg (ppm)	1	110	66-126
Ethylbenzene	mg/kg (ppm)	1	111	64-123
m,p-Xylene	mg/kg (ppm)	2	112	78-122
o-Xylene	mg/kg (ppm)	1	111	77 - 124
Naphthalene	mg/kg (ppm)	1	108	63-140

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/26/22 Project: Texaco Strickland 180357, F&BI 210402

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 210425-04 (Matrix Spike)

				Percent	
	Reporting	Spike	Sample	Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
Benzene	ug/L (ppb)	10	< 0.35	93	50 - 150
Toluene	ug/L (ppb)	10	<1	92	50 - 150
Ethylbenzene	ug/L (ppb)	10	<1	91	50 - 150
m,p-Xylene	ug/L (ppb)	20	<2	91	50 - 150
o-Xylene	ug/L (ppb)	10	<1	89	50 - 150
Naphthalene	ug/L (ppb)	10	<1	83	50 - 150

Laboratory Code: Laboratory Control Sample

<i>. . . .</i>	1		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Benzene	ug/L (ppb)	10	94	96	70-130	2
Toluene	ug/L (ppb)	10	94	98	70-130	4
Ethylbenzene	ug/L (ppb)	10	94	98	70-130	4
m,p-Xylene	ug/L (ppb)	20	95	99	70-130	4
o-Xylene	ug/L (ppb)	10	94	96	70-130	2
Naphthalene	ug/L (ppb)	10	93	95	70-130	2

### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

And Gravity SAMPLE CHAIN OF CUSTORY IO/ 26/22 CO-(V.S2./VM)   Sampled Sampled REMAINER No INVUICE TO   In Date Time Sampled Sampled No   In Date Time Sampled Sampled No   In Date Time Sampled No No   In Date Time Sampled No No   In Date Time Sampled No No   In Sampled Sampled No No No   In Date Sampled No No No   In Sampled Sampled No No No   In Sampled Sampled No No No   In Sampled No No No No   In In No No No No No	Ph. (206) 285-8282	Seattle, WA 98119-2029	3012 16th Avenue West	Friedman & Bruya, Inc.		13-No-7-W04-431	8-NO-7-W2-438	5-NO4-W02-437	8-102-10:6:434	B-NOZ-U14-429	3-10-2-01-2-425	12H-1004-20N-2	13-NOZ-W06- 4723	8-N0-2-N0-4-424	3-NO-2-U02-438	Sample ID		PhoneEm:	City, State, ZIP	Address	Company	Report To 2ND Blank JA	20.00
SAMPLE CHAIN OF CUSTODY 10/26/22 SAMPLERS (signature) PROJECT NAME PROJECT NAME Project specific RLs? - Yes / No Project specific RLs? - Yes / Ye	Received by:	Relinquished by:	Received by:	Relinquished by:	, SI	10 1	09	R	40	00	R	04	03	01	OI ATE	Lab ID		ail				lan Gratin	
SAMPLE CHAIN OF CUSTODY 10/26/22 rage # COUNSIDE   SAMPLERS (signature) P0 # P0 # Page # of   PROJECT NAME P0 # Samalage NAROUND TIME Samalage NAROUND TIME Samalage NAROUND TIME   Project specific RLs? Ves / No INVOICE TO CAchive sample in the constraint of			M	0	GNATURE	Ċ						and an Arrist			10/25/22	Date Sampled							
CHAIN OF CUSTODY 10/26/22 Page # C04/032/142   PRS (signature) P0 # TURNAGOUND TIME TURNAGOUND TIME   TNAME P0 # B07.61 Sample Sample   recific RLs? - Yes / No INVOICE TO SAMPLE DISPOSAL SAMPLE DISPOSAL   Sample archive samples Oday Samples Samples   rype archive samples Default: Dispose after 30 day Default: Dispose after 30 day   Sample archive samples Notes Notes   Type Archive samples Notes Notes						5221	1230	1230	1340	1.3.35	0251	1310	1300	1250	1215	Time Sampled		- Project s	- REMARI		PROJEC	- SAMPLE	SAMPLE
I OF CUSTODY IO/26/22 Page #orf   Po # Po # Sec.74   Po # Rec.74 Sec.74   Po # Rec.74 Sample   Po # NWTPH-BCX Sample   Page # Po # Sample   Po # NWTPH-HCID Archive samples   Po # NWTPH-HCID Default: Dispose after 30 day   Po B NWTPH-HCID Notes   NWTPH-HOX NWTPH-HCID Notes   NWTPH-HOX Po B Notes   NWTPH-HOX Po B Notes   Notes Notes Notes   NOTE Po B Notes   NOTE Notes Notes   Printr NAME Po B Notes   Po C Notes Notes   Po C Notes Notes   Po C Notes Notes   Po C NOTE Notes			Þ	Ash											Sail	Sample Type		pecific RL	S		T NAME	RS (signu	CHAIN
CUSTODY IO/ 2.6 / d.g. Page # Conf. Name   PO # Reg.# NUTPH-Dx NUTPH-Dx Sandard turnacound   NWTPH-Gx Roc. GAT Reg.# INVOICE TO Sandard turnacound   ANALYSES REQUESTED ANALYSES REQUESTED Cother Default: Dispose atther 30 day   NWTPH-HCID NWTPH-HCID VOCS EPA 8260 Notes   NWTPH-B NWTPH-HCID VOCS EPA 8260 Notes   NWTPH-HCID VOCS EPA 8260 Notes Notes   NWTPH-MCID VOCS EPA 8260 Notes Notes   NWTPH-MCID VOCS EPA 8260 Notes Notes   NUT VOCS EPA 8260 NOTE Notes			IN H	(m)	PRII		E								N	# of Jars		.s? - Υ				uture)	OF
TODY 10/26/22 Page # Cold VSP_/mage   PO # 10/26/22 Po # TURNAROUND TIME   PO # 10/26/22 TURNAROUND TIME   PO # 10/26/22 Invoice to   ANALYSES REQUESTED SAMPLE DISPOSAL Invoice dy:   ANALYSES REQUESTED Invoice to SAMPLE DISPOSAL   Other Invoice anther 30 day   PCBs EPA 8082 Invoice atter 30 day   PCBs EPA 8082 Invoice atter 30 day   Invoice atter 30 day Invoice atter 30 day			pt.	Now	NT NA	G									X	NWTPH-Dx		es / N				$\left  \right\rangle$	CUS
Y 10/26/22 Page #of   P0 # Standad turnaround RUSH_CH_FY Standad turnaround RUSH_CH_FY   INVOICE TO SAMPLE DISPOSAL Other Default: Dispose after 30 day   ANALYSES REQUESTED Other Default: Dispose after 30 day   ANALYSES REQUESTED Notes   VOCs EPA 8260 PCBs EPA 8082   PCBs EPA 8082 Notes   VOCS QUART Notes   Standad turnaround RUSH_CH_FY Notes   NUTPH-HCID Notes   Standad turnaround RUSH_CH_FY Notes   NUTPH-HCID Notes   VOCs EPA 8082 Notes   VOCs EPA 8082 Notes   PCBs EPA 8082 Notes   VOCs EPA 8082 Notes   PCBs EPA 8082 Notes   Standad turnaround RUSH_CH_FA Notes   Standad turnaround RUSH_CH_FA Notes   Standad turnaround RUSH_CH_FA Notes			HAr	SO	AME	0								· · · ·	XX	NWTPH-Gx		Vo				V	TOD
IO/ 26/22 Page #of   PO # Standard turnaround CRUSH_C1 = +i y   Rochor Standard turnaround CRUSH_C1 = +i y   NVOICE TO Archive samples   Other Default: Dispose after 30 day   Default: Dispose after 30 day Default: Dispose after 30 day   VOCs EPA 8082 Notes   NALYSES REQUESTED Notes   NOTE Notes   PCBs PCBs   VOCS Notes   VOCS Notes   Notes Notes   NOTE NOTE   NOTE NOTE   NOTE NOTE			4													NWTPH-HCID			Н	-			Y
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Page #   COY/VS2/Wb     TURNAROUND TIME     Standard turnaround     ARUSH 2 - +iv     Bush charges authorized by:     Default: Dispose after 30 day     Default: Dispose after 30 day     Notes     Archive samples     Other     Default: Dispose after 30 day     Notes     Archive samples     Default: Dispose after 30 day     Notes     Archive samples     Default: Dispose after 30 day     Notes     Archive samples     Default: Dispose after 30 day     Notes     Image: Standard turnaround	Sar		FS	Perk	CON											PCBs EPA 8082	REQU		0				122
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age # $COYVSB2/Mu$ age # $COYVSB2/Mu$ dard turnaround H $CY = tiV$ harges authorized by: SAMPLE DISPOSAL ive samples r DATE DISPOSAL It: Dispose after 30 day It: Dispose after 30 day It: Dispose after 10 day It: D	receiv				W												B	Defau	] Arch Othe	Rush c	] Stan	Ч	
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			2	1	K	M2D	R	20 V	3-N12-W12-439
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Notes	PAHs EPA 8270 PCBs EPA 8082	BTEXEPA SOF	NWTPH-Gx	NWTPH-Dx	Sample # ( Type Ja	Time Sampled	Date Sampled	Lab ID	Sample ID
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mutasnhas	10/26/22	DY	STO	FCU	CHAIN O	SAMPLE			804 OIS

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Ph. (206) 285-8282 Received	Seattle, WA 98119-2029 Relinqui	3012 16th Avenue West Received	Friedman & Bruya, Inc. Relinqui						TipBlenk-1022 D	13-NIZ-WI6-439 2:	8-NiZ-WH-439 2	Sample ID		Phone316.617.599 Emailds	City, State, ZIP	Address	Comment As Bart Long Mart	Report To Ishot Block & A	210402
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#### ENVIRONMENTAL CHEMISTS

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

October 31, 2022

Daniel Babcock, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Mr Babcock:

Included are the results from the testing of material submitted on October 27, 2022 from the Texaco Strickland 180357, F&BI 210437 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Adam Griffin ASP1031R.DOC

### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on October 27, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210437 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
210437 -01	B-N14-W16-449
210437 -02	B-N14-W14-449
210437 -03	B-N12-W04-438
210437 -04	B-N14-W06-449
210437 -05	B-N14-W12-449
210437 -06	B-N12-W06-438
210437 -07	B-N12-W10-438
210437 -08	B-N14-W10-449
210437 -09	B-N10-W09-430

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/27/22 Project: Texaco Strickland 180357, F&BI 210437 Date Extracted: 10/27/22 Date Analyzed: 10/28/22

## 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
B-N14-W16-449 210437-01	<5	95
B-N14-W14-449 210437-02	<5	90
B-N12-W04-438 210437-03	<5	89
B-N14-W06-449 210437-04	<5	90
B-N14-W12-449 210437-05	<5	89
B-N12-W06-438 210437-06	<5	91
B-N12-W10-438 210437-07	<5	89
B-N14-W10-449 210437-08	<5	89
B-N10-W09-430 210437-09	<5	88
Method Blank 02-2572 MB	<5	125

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/27/22 Project: Texaco Strickland 180357, F&BI 210437 Date Extracted: 10/27/22 Date Analyzed: 10/27/22

## 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
B-N14-W16-449 210437-01	<50	<250	92
B-N14-W14-449 210437-02	<50	<250	111
B-N12-W04-438 210437-03	<50	<250	87
B-N14-W06-449 210437-04	<50	<250	87
B-N14-W12-449 210437-05	<50	<250	89
B-N12-W06-438 210437-06	<50	<250	89
B-N12-W10-438 210437-07	<50	<250	97
B-N14-W10-449 210437-08	<50	<250	119
B-N10-W09-430 210437-09	<50	<250	88
Method Blank 02-2659 MB	<50	<250	88
# ENVIRONMENTAL CHEMISTS

Client Sample ID:	B-N14-W16-449		Client:	Aspect Consulting, LLC
Date Received:	10/27/22		Project:	Texaco Strickland 180357, F&BI 210437
Date Extracted:	10/28/22		Lab ID:	210437-01
Date Analyzed:	10/28/22		Data File:	102806.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm) Dry	Weight	Operator:	LM
			Lower	Upper
Surrogates:	% Re	ecovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	100	90	109
Toluene-d8		101	89	112
4-Bromofluorobenze	ne	101	84	115
Compounds:	Conce mg/k	entration xg (ppm)		
Benzene	<	<0.03		
Toluene	<	< 0.05		
Ethylbenzene	<	< 0.05		
m,p-Xylene	<	< 0.1		
o-Xylene		0.10		
Naphthalene	<	< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N14-W14-449 10/27/22 10/28/22 10/28/22 Soil mg/kg (ppm) Dry We	Clier Proje Lab Data Instr eight Oper	nt: ect: ID: File: rument: rator:	Aspect Consulting Texaco Strickland 210437-02 102807.D GCMS4 LM	g, LLC l 180357, F&BI 210437
			Lower	Upper	,
Surrogates:	% Reco	verv:	Limit:	Limit	
1,2-Dichloroethane-	d4 10	0	90	109	
Toluene-d8	102	2	89	112	
4-Bromofluorobenze	ne 10-	4	84	115	
Compounds:	Concent mg/kg (	ration (ppm)			
Benzene	<0.0	03			
Toluene	<0.	05			
Ethylbenzene	<0.	05			
m,p-Xylene	<0.	1			
o-Xylene	<0.	05			
Naphthalene	<0.	05			

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N12-W04-43 10/27/22 10/28/22 10/28/22 Soil mg/kg (ppm) D	8 Pry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 210437 210437-03 102808.D GCMS4 LM
			Lower	Upper
Surrogates:	%	6 Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	103	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:	Com	oncentration ng/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	B-N14-W06-4	49	Client:	Aspect Consulting, LLC
Date Received:	10/27/22		Project:	Texaco Strickland 180357, F&BI 210437
Date Extracted:	10/28/22		Lab ID:	210437-04
Date Analyzed:	10/28/22		Data File:	102810.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm) l	Dry Weight	Operator:	LM
			Lower	Upper
Surrogates:	(	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	99	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ne	104	84	115
Compounds:	С	oncentration ng/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID:	B-N14-W12-44	9	Client:	Aspect Consulting, LLC
Date Received:	10/27/22		Project:	Texaco Strickland 180357, F&BI 210437
Date Extracted:	10/28/22		Lab ID:	210437-05
Date Analyzed:	10/28/22		Data File:	102811.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm) D	ry Weight	Operator:	LM
			Lower	Upper
Surrogates:	%	Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	95	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:	Com	ncentration ng/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B-N12-W06-438 10/27/22 10/28/22 10/28/22 Soil mg/kg (ppm) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 1803 210437-06 102812.D GCMS4 LM	57, F&BI 210437
		Lower	Unner	
Surrogates:	% Recovery	: Limit:	Limit:	
1,2-Dichloroethane-	d4 102	90	109	
Toluene-d8	99	89	112	
4-Bromofluorobenze	ne 101	84	115	
Compounds:	Concentratic mg/kg (ppm	)n 1)		
Benzene	< 0.03			
Toluene	< 0.05			
Ethylbenzene	< 0.05			
m,p-Xylene	< 0.1			
o-Xylene	< 0.05			
Naphthalene	< 0.05			

### ENVIRONMENTAL CHEMISTS

Client Sample ID:	B-N12-W10-4	438	Client:	Aspect Consulting, LLC
Date Received:	10/27/22		Project:	Texaco Strickland 180357, F&BI 210437
Date Extracted:	10/28/22		Lab ID:	210437-07
Date Analyzed:	10/28/22		Data File:	102813.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	99	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ne	103	84	115
Compounds:	(	Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID:	B-N14-W10-449		Client:	Aspect Consul	ting, LLC
Date Received:	10/27/22		Project:	Texaco Strickl	and 180357, F&BI 210437
Date Extracted:	10/28/22		Lab ID:	210437-08	
Date Analyzed:	10/28/22		Data File:	102814.D	
Matrix:	Soil		Instrument:	GCMS4	
Units:	mg/kg (ppm) Dry	Weight	Operator:	LM	
			Lower	Up	per
Surrogates:	% Re	ecovery:	Limit:	Lir	nit:
1,2-Dichloroethane-	d4	99	90	10	09
Toluene-d8		102	89	1	12
4-Bromofluorobenze	ene	101	84	1	15
Compounds:	Conce mg/k	entration g (ppm)			
Benzene	<	0.03			
Toluene	<	< 0.05			
Ethylbenzene	<	< 0.05			
m,p-Xylene	<	:0.1			
o-Xylene	<	< 0.05			
Naphthalene	<	< 0.05			

### ENVIRONMENTAL CHEMISTS

Client Sample ID:	B-N10-W09-430		Client:	Aspect Consulting, LLC	
Date Received:	10/27/22		Project:	Texaco Strickland 180357, F&BI 21043	57
Date Extracted:	10/28/22		Lab ID:	210437-09	
Date Analyzed:	10/28/22		Data File:	102815.D	
Matrix:	Soil		Instrument:	GCMS4	
Units:	mg/kg (ppm) Dry	Weight	Operator:	LM	
			Lower	Upper	
Surrogates:	% R	ecovery:	Limit:	Limit:	
1,2-Dichloroethane-	d4	98	90	109	
Toluene-d8		101	89	112	
4-Bromofluorobenze	ene	103	84	115	
Compounds:	Conce mg/l	entration xg (ppm)			
Benzene	<	< 0.03			
Toluene	<	< 0.05			
Ethylbenzene	<	< 0.05			
m,p-Xylene	<	< 0.1			
o-Xylene	<	< 0.05			
Naphthalene	<	< 0.05			

### ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blank	Client:	А	Aspect Consulting, LLC	
Date Received:	Not Applicable	Project	: Т	exaco Strickland 18035	7, F&BI 210437
Date Extracted:	10/28/22	Lab ID	): 02	2-2614 mb	
Date Analyzed:	10/28/22	Data F	'ile: 1	02805.D	
Matrix:	Soil	Instru	ment: G	CMS4	
Units:	mg/kg (ppm) Dry Wei	ight Operat	or: L	M	
		Ι	lower	Upper	
Surrogates:	% Recov	very: I	limit:	Limit:	
1,2-Dichloroethane-	d4 103	- •	90	109	
Toluene-d8	100	)	89	112	
4-Bromofluorobenze	ene 102		84	115	
Compounds:	Concenti mg/kg (j	ration ppm)			
Benzene	<0.0	)3			
Toluene	<0.0	15			
Ethylbenzene	<0.0	15			
m,p-Xylene	< 0.1				
o-Xylene	<0.0	15			
Naphthalene	<0.0	15			

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/27/22 Project: Texaco Strickland 180357, F&BI 210437

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

Laboratory Code: 2	10402-15 (Duplic	eate)			
		Samp	ole D	uplicate	
	Reporting	Resu	lt I	Result	$\operatorname{RPD}$
Analyte	Units	(Wet V	Wt) (V	Vet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5	<5 <5		nm
Laboratory Code: L	aboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	$\overline{20}$	105	71-131	_

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/27/22 Project: Texaco Strickland 180357, F&BI 210437

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

Laboratory Code:	210402-21 (Matrix	x Spike)					
			Sample	Percent	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	90	92	73-135	2
Laboratory Code:	Laboratory Contro	ol Sampl	le				
			Percent				
	Reporting	Spike	Recovery	Acceptar	nce		
Analyte	Units	Level	LCS	Criteria	a		
Diesel Extended	mg/kg (ppm)	5,000	92	74-139	)		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/31/22 Date Received: 10/27/22 Project: Texaco Strickland 180357, F&BI 210437

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

Laboratory Code: 210437-01 (Matrix Spike)

	(inderin Spine)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	$\mathbf{MS}$	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	74	69	29-129	7
Toluene	mg/kg (ppm)	1	< 0.05	82	75	35 - 130	9
Ethylbenzene	mg/kg (ppm)	1	< 0.05	85	78	32 - 137	9
m,p-Xylene	mg/kg (ppm)	2	< 0.1	85	80	34 - 136	6
o-Xylene	mg/kg (ppm)	1	0.098	75	72	33-134	4
Naphthalene	mg/kg (ppm)	1	< 0.05	84	76	14 - 157	10

Laboratory Code: Laboratory Control Sample

U	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	98	71-118
Toluene	mg/kg (ppm)	1	109	66-126
Ethylbenzene	mg/kg (ppm)	1	112	64-123
m,p-Xylene	mg/kg (ppm)	2	111	78-122
o-Xylene	mg/kg (ppm)	1	108	77 - 124
Naphthalene	mg/kg (ppm)	1	106	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

Ph. (206) 285-8282	Seattle, WA 98119-2029	3012 16th Avenue West	Friedman & Bruya, Inc.			B-N10-W09-430	12-11-01-449	B-N1Z-110-438	B-N1-Z-W06-438	B-NH-W-2-449	13-N14-000-4447	854- 497 - 21 N-23	14-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	13-11-14-W16-449	Sample ID		Phone 316 617 15 49 Eme	City, State, ZIP		Company 145 2 2	~ Amartí	Report To David Block	101101
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#### ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Vineta Mills, M.S. Eric Young, B.S. 5500 4th Avenue South Seattle, WA 98108 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

December 9, 2022

Daniel Babcock, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Mr Babcock:

Included are the results from the testing of material submitted on December 7, 2022 from the Texaco Strickland 180357, F&BI 212097 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Breeyn Greer ASP1209R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on December 7, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 212097 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
212097 -01	N14-W13-450
212097 -02	N14-W14-439
212097 -03	N15-W14-447
212097 -04	N15-W13-442
212097 -05	N15-W14-440
212097 -06	N13-W12-442
212097 -07	N16-W14-442
212097 -08	N15-W15-442
212097 -09	N15-W12-442

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/09/22 Date Received: 12/07/22 Project: Texaco Strickland 180357, F&BI 212097 Date Extracted: 12/08/22 Date Analyzed: 12/08/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
N14-W14-439 212097-02	<5	97
N16-W14-442 212097-07	<5	92
N15-W15-442 212097-08	<5	94
N15-W12-442 <sup>212097-09</sup>	<5	96
Method Blank 02-2837 MB	<5	96

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/09/22 Date Received: 12/07/22 Project: Texaco Strickland 180357, F&BI 212097 Date Extracted: 12/08/22 Date Analyzed: 12/08/22

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 50-150)
N14-W14-439 212097-02	<50	<250	88
N16-W14-442 212097-07	<50	<250	85
N15-W15-442 212097-08	<50	<250	87
N15-W12-442 212097-09	<50	<250	90
Method Blank 02-2910 MB	<50	<250	87

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	N14-W14-439 12/07/22 12/08/22 12/08/22 Soil mg/kg (ppm)	9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 212097 212097-02 120806.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	95	90	109
Toluene-d8		103	89	112
4-Bromofluorobenze	ene	101	84	115
	(	Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID:	N16-W14-44	2	Client:	Aspect Consulting, LLC
Date Received:	12/07/22		Project:	Texaco Strickland 180357, F&BI 212097
Date Extracted:	12/08/22		Lab ID:	212097-07
Date Analyzed:	12/08/22		Data File:	120807.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	92	90	109
Toluene-d8		103	89	112
4-Bromofluorobenze	ene	101	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	N15-W15-442 12/07/22 12/08/22 12/08/22 Soil mg/kg (ppm) Dry	y Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 212097 212097-08 120808.D GCMS4 Im
			Lower	Upper
Surrogates:	%	Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	97	90	109
Toluene-d8		101	89	112
4-Bromofluorobenze	ene	98	84	115
	Con	centration		
Compounds:	mg	/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	N15-W12-442 12/07/22 12/08/22 12/08/22 Soil mg/kg (ppm)	2 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357, F&BI 212097 212097-09 120809.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	100	90	109
Toluene-d8		104	89	112
4-Bromofluorobenze	ene	101	84	115
	(	Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID:	Method Blank		Client:	Aspect Consulting, LLC
Date Received:	Not Applicable		Project:	Texaco Strickland 180357, F&BI 212097
Date Extracted:	12/08/22		Lab ID:	02-2857 mb
Date Analyzed:	12/08/22		Data File:	120805.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm) Di	ry Weight	Operator:	lm
			Lower	Upper
Surrogates:	%	Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	93	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ne	100	84	115
	Co	ncentration		
Compounds:	m	g/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/09/22 Date Received: 12/07/22 Project: Texaco Strickland 180357, F&BI 212097

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

Laboratory Code: 2	12073-01 (Duplic	eate)			
		Samp	ole Di	uplicate	
	Reporting	Resu	lt 1	Result	RPD
Analyte	Units	(Wet V	Wt) (V	Vet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: L	aboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	$\overline{20}$	90	61-153	_
#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/09/22 Date Received: 12/07/22 Project: Texaco Strickland 180357, F&BI 212097

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

Laboratory Code:	212097-02 (Matri	x Spike)		Deveet	Deveet		
Analyte	Reporting Units	Spike Level	(wet wt) Sample Result	Recovery MS	Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	2,000	<50	90	90	70-130	0
Laboratory Code:	Laboratory Contro	ol Sampl	e Percent				
	Reporting	Spike	Recovery	y Accepta	ance		
Analyte	Units	Level	LCS	Crite	ria		
Diesel Extended	mg/kg (ppm)	2,000	84	70-13	30		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/09/22 Date Received: 12/07/22 Project: Texaco Strickland 180357, F&BI 212097

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

Laboratory Code: 212097-02 (Matrix Spike)

Baseratory couct =12001							
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	$\mathbf{MS}$	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	73	78	29-129	7
Toluene	mg/kg (ppm)	1	< 0.05	73	82	35 - 130	12
Ethylbenzene	mg/kg (ppm)	1	< 0.05	75	84	32 - 137	11
m,p-Xylene	mg/kg (ppm)	2	< 0.1	<b>74</b>	82	34 - 136	10
o-Xylene	mg/kg (ppm)	1	< 0.05	<b>74</b>	83	33 - 134	11
Naphthalene	mg/kg (ppm)	1	< 0.05	75	83	14 - 157	10

Laboratory Code: Laboratory Control Sample

U	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	78	71-118
Toluene	mg/kg (ppm)	1	79	66 - 126
Ethylbenzene	mg/kg (ppm)	1	77	64-123
m,p-Xylene	mg/kg (ppm)	2	78	78 - 122
o-Xylene	mg/kg (ppm)	1	77	77 - 124
Naphthalene	mg/kg (ppm)	1	76	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

Address 710 2nd AV2 Suite # 550 NH - WH - 439 N19 - W13 - 450 Phone (36) 617- VIPE maild babaccad aspectic suffy Project specific RLs? - Yes / No 7 51 City, State, ZIP Sectle, W.A 98104 Company\_\_\_ ALADY Report To Vaniel Babaack + Breeyn Greer 7 51 N15-W14-447 Friedman & Bruya, Inc. 7 51 Ph. (206) 285-8282 515 ح دی ح آک ۱ ( ł - w13 - 442 - W14 - 4410 ١ Sample ID EH-- 213 212-Aspect Consulting, UC W15 - 442 442 442 んせい Relinquished by:~ Received by: Received by: Relinquished by:  $\overline{Q}$ 00 2 0 7 9 ŝ 20 <del>1</del>0 01 A -E Lab ID SIGNATURE 12/5/202 12/6/2022 12/7/2012 0740 Sampled Date ¢ C SAMPLE CHAIN OF CUSTODY 0945 0935 (100 0925 0925 Sampled 0750 nos 1340 SAMPLERS (signature) Time REMARKS PROJECT NAME lexace Strictland Soil Sample TOMLADD Type Ъ 92 6 **ζ**ail Jars # of S PRINT NAME <  $\frac{1}{2}$ X NWTPH-Dx NWTPH-Gx Kepect Consulting BTEX EPA 8021 180357 ι. NWTPH-HCID INVOICE TO ANALYSES REQUESTED VOCs EPA 8260 PO # Aspaci Consulting PAHs EPA 8270 JA A 12/07/22 PCBs EPA 8082 Samples received at COMPANY BTEXN 8:260  ${ imes}$ Standard turnaround XRUSH <u>2'i-h</u>€ Rush charges, authorized by: Daniel Dabcock Archive samples Default: Dispose after 30 days □ Other G-2 / VIII-13-03 Page #\_\_\_\_\_of \_\_\_\_\_ TURNAROUND TIME SAMPLE DISPOSAL 12.0772/1318 12/07/22 Run 24-40 DATE Run 24-hr Hold Heid ¢ Notes <u>8</u> 8 TIME

```
File
          :D:\GC13\GC13_Data\12-08-22\120808.D
Operator
          : TL
Acquired : 08 Dec 2022 09:17 am using AcqMethod Dx.M
              GC13
Instrument :
Sample Name: 212097-02
Misc Info :
Vial Number: 10
```

Response\_



```
File :D:\GC13\GC13_Data\12-08-22\120809.D
Operator : TL
Acquired : 08 Dec 2022 09:29 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 212097-07
Misc Info :
Vial Number: 11
```

Response\_



```
File :D:\GC13\GC13_Data\12-08-22\120810.D
Operator : TL
Acquired : 08 Dec 2022 09:41 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 212097-08
Misc Info :
Vial Number: 12
```

Response\_



File :D:\GC13\GC13\_Data\12-08-22\120811.D
Operator : TL
Acquired : 08 Dec 2022 09:52 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 212097-09
Misc Info :
Vial Number: 13



File :D:\GC13\GC13\_Data\12-08-22\120804.D
Operator : TL
Acquired : 08 Dec 2022 08:30 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 02-2910 mb
Misc Info :
Vial Number: 6



File :D:\GC13\GC13\_Data\12-08-22\120803.D
Operator : TL
Acquired : 08 Dec 2022 06:50 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 500 Dx 66-186H
Misc Info :
Vial Number: 3

ERR



Time

#### ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Vineta Mills, M.S. Eric Young, B.S. 5500 4th Avenue South Seattle, WA 98108 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

December 16, 2022

Daniel Babcock, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Mr Babcock:

Included are the results from the testing of material submitted on December 8, 2022 from the Texaco Strickland 180357, F&BI 212149 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Breeyn Greer ASP1216R.DOC

#### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on December 8, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 212149 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
212149 -01	PL-N07-447
212149 -02	PL-N07-442

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/16/22 Date Received: 12/08/22 Project: Texaco Strickland 180357, F&BI 212149 Date Extracted: 12/13/22 Date Analyzed: 12/13/22

### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
PL-N07-447 212149-01	<5	95
PL-N07-442 212149-02 1/20	1,400	125
Method Blank 02-2925 MB	<5	93

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/16/22 Date Received: 12/08/22 Project: Texaco Strickland 180357, F&BI 212149 Date Extracted: 12/09/22 Date Analyzed: 12/09/22

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 50-150)
PL-N07-447 212149-01	<50	<250	84
PL-N07-442 212149-02	400 x	<250	89
Method Blank 02-2919 MB2	<50	<250	90

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	PL-N07-447 12/08/22 12/09/22 12/09/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212149-01 120911.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	97	90	109
Toluene-d8		103	89	112
4-Bromofluorobenze	ene	101	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	PL-N07-442 12/08/22 12/09/22 12/09/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212149-02 120912.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	90	90	109
Toluene-d8		110	89	112
4-Bromofluorobenze	ene	109	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		12		
m,p-Xylene		52 ve		
o-Xylene		12		
Naphthalene		10		

## ENVIRONMENTAL CHEMISTS

Client Sample ID:	PL-N07-442		Client:	Aspect Consulting, LLC
Date Received:	12/08/22		Project:	Texaco Strickland 180357
Date Extracted:	12/09/22		Lab ID:	212149-02 1/10
Date Analyzed:	12/09/22		Data File:	120916.D
Matrix:	Soil		Instrument:	GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	93	90	109
Toluene-d8		107	89	112
4-Bromofluorobenz	ene	110	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
m,p-Xylene		53		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applical 12/09/22 12/09/22 Soil mg/kg (ppm)	nk ble 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2863 mb 120910.D GCMS4 lm
	8 8 4 4	,	T	TT
a ,		0/ <b>D</b>	Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	97	90	109
Toluene-d8		99	89	112
4-Bromofluorobenze	ene	101	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/16/22 Date Received: 12/08/22 Project: Texaco Strickland 180357, F&BI 212149

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

Laboratory Code: 2	12149-01 (Duplic	eate)			
		Samp	ole D	uplicate	
	Reporting	Resu	lt	Result	RPD
Analyte	Units	(Wet V	Nt) (\	Wet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: L	aboratory Contro	ol Sample	e		
			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	20	95	61-153	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/16/22 Date Received: 12/08/22 Project: Texaco Strickland 180357, F&BI 212149

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

Laboratory Code:	212145-03 (Matrix	x Spike)					
			(Wet wt)	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	2,000	290	102	96	70-130	6
Laboratory Code:	Laboratory Contro	ol Sampl	e				
			Percent				
	Reporting	Spike	Recovery	y Accepta	ance		
Analyte	Units	Level	LCS	Crite	ria		
Diesel Extended	mg/kg (ppm)	2,000	98	70-13	30		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/16/22 Date Received: 12/08/22 Project: Texaco Strickland 180357, F&BI 212149

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

Laboratory Code: 212149-01 (Matrix Spike)

	(intactin & pinte)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	97	102	29-129	5
Toluene	mg/kg (ppm)	1	< 0.05	97	105	35 - 130	8
Ethylbenzene	mg/kg (ppm)	1	< 0.05	99	106	32 - 137	7
m,p-Xylene	mg/kg (ppm)	2	< 0.1	100	107	34-136	7
o-Xylene	mg/kg (ppm)	1	< 0.05	99	105	33-134	6
Naphthalene	mg/kg (ppm)	1	< 0.05	104	108	14 - 157	4

Laboratory Code: Laboratory Control Sample

6	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	111	71-118
Toluene	mg/kg (ppm)	1	111	66-126
Ethylbenzene	mg/kg (ppm)	1	113	64-123
m,p-Xylene	mg/kg (ppm)	2	113	78-122
o-Xylene	mg/kg (ppm)	1	111	77-124
Naphthalene	mg/kg (ppm)	1	108	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

		Friedman & Bruya, Inc. 1 Ph. (206) 285-8282								PL - NOT - 442	PL-N07-447	Sample ID		Phone (SIC) 6 A VH Ema	City, State, ZIP South	Address TIC XIM ITVE		Commany Acalert Co	Report To Parile Dobo	212149
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	And	Jonet	GNATURE							12/08/2022	12/08/2012	Date Sampled		a) aspectar	<u>1</u>				in Greer	
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	ΝH	n.	PRIN							5 U	Ы	# of Jars		? - Ye				$\int$	ture)	OFC
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File :D:\GC13\GC13\_Data\12-09-22\120941.D
Operator : TL
Acquired : 09 Dec 2022 05:50 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 212149-01
Misc Info :
Vial Number: 37



File :D:\GC13\GC13\_Data\12-09-22\120942.D
Operator : TL
Acquired : 09 Dec 2022 06:02 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 212149-02
Misc Info :
Vial Number: 38

ERR



Time

File :D:\GC13\GC13\_Data\12-09-22\120935.D
Operator : TL
Acquired : 09 Dec 2022 04:39 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 02-2919 mb2
Misc Info :
Vial Number: 31

ERR

Response\_ Signal: 120935.D\FID1B.ch 1.45e+07 1.4e+07 1.35e+07 1.3e+07 1.25e+07 1.2e+07 1.15e+07 1.1e+07 1.05e+07 1e+07 9500000 9000000 8500000 8000000 7500000 7000000 6500000 6000000 5500000 5000000 4500000 4000000 3500000 3000000 2500000 2000000 1500000 1000000 500000 ----------0.50 1.00 1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6 50 7.00

Time

File :D:\GC13\GC13\_Data\12-09-22\120903.D
Operator : TL
Acquired : 09 Dec 2022 06:40 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 500 Dx 66-186H
Misc Info :
Vial Number: 3



#### ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Vineta Mills, M.S. Eric Young, B.S. 5500 4th Avenue South Seattle, WA 98108 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

December 20, 2022

Daniel Babcock, Project Manager Aspect Consulting, LLC 710 2<sup>nd</sup> Ave S, Suite 550 Seattle, WA 98104

Dear Mr Babcock:

Included are the results from the testing of material submitted on December 12, 2022 from the Texaco Strickland 180357, F&BI 212189 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Breeyn Greer ASP1220R.DOC

#### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on December 12, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180357, F&BI 212189 project. Samples were logged in under the laboratory ID's listed below.

Aspect Consulting, LLC
SW-W01-449
SW-W03-449
SW-W06-449
SW-W09-449
SW-W11-449
SW-W14-449
SW-W16-449
SW-S08-448
SW-S10-448

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/20/22 Date Received: 12/12/22 Project: Texaco Strickland 180357, F&BI 212189 Date Extracted: 12/15/22 Date Analyzed: 12/15/22

### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 58-139)
SW-W01-449 212189-01	<5	93
SW-W03-449 212189-02	<5	98
SW-W06-449 212189-03	<5	99
SW-W09-449 212189-04	<5	95
SW-W11-449 212189-05	<5	96
SW-W14-449 212189-06	<5	82
SW-W16-449 212189-07	<5	99
SW-S08-448 212189-08	<5	97
SW-S10-448 212189-09	<5	100
Method Blank 02-2929 MB	<5	98

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/20/22 Date Received: 12/12/22 Project: Texaco Strickland 180357, F&BI 212189 Date Extracted: 12/13/22 Date Analyzed: 12/13/22

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 50-150)
SW-W01-449 212189-01	<50	<250	107
SW-W03-449 212189-02	<50	<250	105
SW-W06-449 212189-03	<50	<250	108
SW-W09-449 212189-04	<50	<250	118
SW-W11-449 212189-05	<50	<250	115
SW-W14-449 212189-06	<50	<250	110
SW-W16-449 212189-07	<50	<250	111
SW-S08-448 212189-08	<50	<250	109
SW-S10-448 212189-09	<50	<250	110
Method Blank 02-2944 MB2	<50	<250	111

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W01-449 12/12/22 12/13/22 12/13/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212189-01 121310.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	d4	90	90	109
Toluene-d8		103	89	112
4-Bromofluorobenze	ene	101	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W03-444 12/12/22 12/13/22 12/13/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212189-02 121311.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	95	90	109
Toluene-d8		101	89	112
4-Bromofluorobenze	ene	99	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W06-449 12/12/22 12/13/22 12/13/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212189-03 121312.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	95	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ene	97	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W09-444 12/12/22 12/13/22 12/13/22 Soil mg/kg (ppm)	9 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212189-04 121313.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	92	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ene	101	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix:	SW-W11-449 12/12/22 12/13/22 12/14/22 Soil	)	Client: Project: Lab ID: Data File: Instrument:	Aspect Consulting, LLC Texaco Strickland 180357 212189-05 121412.D GCMS4
Units:	mg/kg (ppm)	Dry Weight	Operator:	lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	92	90	109
Toluene-d8		104	89	112
4-Bromofluorobenze	ene	102	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		
### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W14-449 12/12/22 12/13/22 12/13/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212189-06 121315.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	97	90	109
Toluene-d8		101	89	112
4-Bromofluorobenze	ene	102	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W16-449 12/12/22 12/13/22 12/13/22 Soil mg/kg (ppm)	9 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212189-07 121316.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	90	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ene	101	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-S08-448 12/12/22 12/13/22 12/13/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212189-08 121317.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	-d4	92	90	109
Toluene-d8		104	89	112
4-Bromofluorobenze	ene	103	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-S10-448 12/12/22 12/13/22 12/13/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 212189-09 121318.D GCMS4 lm
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	96	90	109
Toluene-d8		102	89	112
4-Bromofluorobenze	ene	100	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applica 12/13/22 12/13/22 Soil mg/kg (ppm)	nk ble ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180357 02-2851 mb 121307.D GCMS4 lm
	88 (FF	, ,	T	TT
<b>a</b>		0 / D	Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	93	90	109
Toluene-d8		103	89	112
4-Bromofluorobenze	ene	103	84	115
		Concentration		
Compounds:		mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/20/22 Date Received: 12/12/22 Project: Texaco Strickland 180357, F&BI 212189

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

Laboratory Code: 21	2189-01 (Duplic	ate)				
		Samp	le Du	plicate		
	Reporting	Resu	lt R	esult	RPD	
Analyte	Units	(Wet V	Vt) (W	et Wt)	(Limit 20)	
Gasoline	mg/kg (ppm)	<5	<5 <5		nm	
Laboratory Code: La	aboratory Contro	ol Sample	e			
			Percent			
	Reporting	Spike	Recovery	Acceptance		
Analyte	Units	Level	LCS	Criteria	_	
Gasoline	mg/kg (ppm)	$\overline{20}$	110	61-153		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/20/22 Date Received: 12/12/22 Project: Texaco Strickland 180357, F&BI 212189

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

Laboratory Code:	212166-01 (Matri	x Spike)	(Wet.wt)	Percent	Percent		
Analyte	Reporting Units	Spike Level	Sample Result	Recovery MS	Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	2,000	140	109	99	70-130	10
Laboratory Code:	Laboratory Contro	ol Sampl	e Percent				
	Reporting	Spike	Recovery	7 Accepta	ance		
Analyte	Units	Level	LCS	Criter	ria		
Diesel Extended	mg/kg (ppm)	2,000	106	70-13	30		

15

#### ENVIRONMENTAL CHEMISTS

Date of Report: 12/20/22 Date Received: 12/12/22 Project: Texaco Strickland 180357, F&BI 212189

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

Laboratory Code: 212189-01 (Matrix Spike)

Basoratory coac. =1=100 01	(intertim opinio)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	78	86	29-129	10
Toluene	mg/kg (ppm)	1	< 0.05	<b>78</b>	87	35 - 130	11
Ethylbenzene	mg/kg (ppm)	1	< 0.05	80	89	32 - 137	11
m,p-Xylene	mg/kg (ppm)	2	< 0.1	81	89	34 - 136	9
o-Xylene	mg/kg (ppm)	1	< 0.05	80	89	33 - 134	11
Naphthalene	mg/kg (ppm)	1	< 0.05	77	84	14 - 157	9

Laboratory Code: Laboratory Control Sample

C C	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	109	71-118
Toluene	mg/kg (ppm)	1	110	66-126
Ethylbenzene	mg/kg (ppm)	1	109	64-123
m,p-Xylene	mg/kg (ppm)	2	110	78-122
o-Xylene	mg/kg (ppm)	1	105	77 - 124
Naphthalene	mg/kg (ppm)	1	108	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

Re	Re	Friedman & Bruya, Inc. Re Ph. (206) 285-8282			SW-SIO - 448	5 502 - 44B	5W-W16-449	しかちービュー	20-11-14-110-MS	SM- MOG-HHJ	SM- 70M- MAJ	1944 - 50M - M2	SW- WOI - HAA	Sample ID		Phone316 617.0449 Email	City, State, ZIP	Address	Commany Aspect Consultie	Report To I iniz! Schick of	212189
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File :D:\GC10\GC10\_Data\12-13-22\121305.D Operator : TL : 13 Dec 2022 08:28 using AcqMethod DX.M Acquired Instrument : GC10 Sample Name: 212189-01 Misc Info : Vial Number: 7

Response\_



File :D:\GC10\GC10\_Data\12-13-22\121306.D Operator : TL Acquired : 13 Dec 2022 08:40 using AcqMethod DX.M Instrument : GC10 Sample Name: 212189-02 Misc Info : Vial Number: 8

Response\_



File :D:\GC10\GC10\_Data\12-13-22\121307.D
Operator : TL
Acquired : 13 Dec 2022 08:51 using AcqMethod DX.M
Instrument : GC10
Sample Name: 212189-03
Misc Info :
Vial Number: 9

Response\_ Signal: 121307.D\FID1B.ch 1.9e+07 View Mode: Integration 1.8e+07 1.7e+07 1.6e+07 1.5e+07 1.4e+07 1.3e+07 1.2e+07 1.1e+07 1e+07 9000000 8000000 7000000 6000000 5000000 4000000 3000000 2000000 1000000 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 0.50 1.00 1.50 2.00 2.50

Time

File :D:\GC10\GC10\_Data\12-13-22\121308.D
Operator : TL
Acquired : 13 Dec 2022 09:03 using AcqMethod DX.M
Instrument : GC10
Sample Name: 212189-04
Misc Info :
Vial Number: 10



File :D:\GC10\GC10\_Data\12-13-22\121309.D
Operator : TL
Acquired : 13 Dec 2022 09:15 using AcqMethod DX.M
Instrument : GC10
Sample Name: 212189-05
Misc Info :
Vial Number: 11



Time

File :D:\GC10\GC10\_Data\12-13-22\121318.D
Operator : TL
Acquired : 13 Dec 2022 11:01 using AcqMethod DX.M
Instrument : GC10
Sample Name: 212189-06
Misc Info :
Vial Number: 12



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File :D:\GC10\GC10\_Data\12-13-22\121319.D Operator : TL Acquired : 13 Dec 2022 11:12 using AcqMethod DX.M Instrument : GC10 Sample Name: 212189-07 Misc Info : Vial Number: 13



File :D:\GC10\GC10\_Data\12-13-22\121320.D Operator : TL Acquired : 13 Dec 2022 11:24 using AcqMethod DX.M Instrument : GC10 Sample Name: 212189-08 Misc Info : Vial Number: 14

Response\_



File :D:\GC10\GC10\_Data\12-13-22\121321.D
Operator : TL
Acquired : 13 Dec 2022 11:36 using AcqMethod DX.M
Instrument : GC10
Sample Name: 212189-09
Misc Info :
Vial Number: 15

Response\_



File :D:\GC10\GC10\_Data\12-13-22\121304.D
Operator : TL
Acquired : 13 Dec 2022 08:16 using AcqMethod DX.M
Instrument : GC10
Sample Name: 02-2944 mb2
Misc Info :
Vial Number: 6

Response\_



Time

File :D:\GC10\GC10\_Data\12-13-22\121303.D
Operator : TL
Acquired : 13 Dec 2022 07:46 using AcqMethod DX.M
Instrument : GC10
Sample Name: 500 DX 67-143B
Misc Info :
Vial Number: 3

Response\_ Signal: 121303.D\FID1B.ch 1.9e+07 View Mode: Integration 1.8e+07 1.7e+07 1.6e+07 1.5e+07 1.4e+07 1.3e+07 1.2e+07 1.1e+07 1e+07 9000000 8000000 7000000 6000000 5000000 4000000 3000000 2000000-1000000 6.50 5.50 6.00 7.00 4.50 5.00 4.00 0.50 1.00 1.50 2.00 2.50 3.00 3.50

Time

#### ENVIRONMENTAL CHEMISTS

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

October 21, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the results from the testing of material submitted on October 17, 2022 from the Texaco Strickland 180387, F&BI 210237 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1021R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on October 17, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 180387, F&BI 210237 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Aspect Consulting, LLC
210237 -01	SW-N02-437
210237 -02	SW-N04-437
210237 -03	SW-N07-437
210237 -04	SW-N10-437
210237 -05	SW-N12-437

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/17/22 Project: Texaco Strickland 180387, F&BI 210237 Date Extracted: 10/19/22 Date Analyzed: 10/19/22

### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
SW-N02-437 210237-01	<5	109
SW-N04-437 210237-02	<5	107
SW-N07-437 210237-03	<5	99
SW-N10-437 210237-04	<5	113
SW-N12-437 210237-05	<5	108
Method Blank 02-2513 MB	<5	108

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/17/22 Project: Texaco Strickland 180387, F&BI 210237 Date Extracted: 10/18/22 Date Analyzed: 10/18/22

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
SW-N02-437 210237-01	<50	<250	78
SW-N04-437 210237-02	<50	<250	78
SW-N07-437 210237-03	<50	<250	74
SW-N10-437 210237-04	<50	<250	72
SW-N12-437 210237-05	<50	<250	49
Method Blank 02-2532 MB2	<50	<250	54

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N02-437 10/17/22 10/18/22 10/18/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180387 210237-01 101810.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	98	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N04-437 10/17/22 10/18/22 10/18/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180387 210237-02 101811.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	95	90	109
Toluene-d8		96	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N07-437 10/17/22 10/18/22 10/18/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180387 210237-03 101812.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	98	90	109
Toluene-d8		96	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		0.057		
Ethylbenzene		0.085		
m,p-Xylene		0.23		
o-Xylene		0.054		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N10-437 10/17/22 10/18/22 10/18/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180387 210237-04 101813.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	97	90	109
Toluene-d8		96	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N12-437 10/17/22 10/18/22 10/18/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180387 210237-05 101814.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	99	90	109
Toluene-d8		95	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blar Not Applicat 10/18/22 10/18/22 Soil mg/kg (ppm)	lk ble Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 180387 02-2482 mb 101805.D GCMS4 LM			
			Lower	Upper			
Surrogates:		% Recovery:	Limit:	Limit:			
1,2-Dichloroethane	-d4	103	90	109			
Toluene-d8		95	89	112			
4-Bromofluorobenze	ene	100	84	115			
Compounds:		Concentration mg/kg (ppm)					
Benzene		< 0.03					
Toluene		< 0.05					
Ethylbenzene		< 0.05					
m,p-Xylene		< 0.1					
o-Xylene		< 0.05					
Naphthalene		< 0.05					

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/17/22 Project: Texaco Strickland 180387, F&BI 210237

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

Laboratory Code: 210237-01 (Duplicate)													
		Samp	ole Du	uplicate									
	Reporting	Resu	ılt I	Result	RPD								
Analyte	Units	(Wet V	Nt) (V	/et Wt)	(Limit 20)								
Gasoline	mg/kg (ppm)	<5		<5	nm								
Laboratory Code: La	aboratory Contro	ol Sample	e										
			Percent										
	Reporting	Spike Recovery		Acceptance									
Analyte	Units	Level	LCS	Criteria									
Gasoline	mg/kg (ppm)	$\overline{20}$	115	71-131									

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/17/22 Project: Texaco Strickland 180387, F&BI 210237

mg/kg (ppm)

Diesel Extended

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

RPD

(Limit 20)

 $\mathbf{2}$ 

Laboratory Code: 210228-01 (Matrix Spike) Sample Percent Percent Reporting Spike Result Recovery Recovery Acceptance Analyte Units Level (Wet Wt) MSMSD Criteria **Diesel Extended** mg/kg (ppm) 5,000 <50 86 88 73-135 Laboratory Code: Laboratory Control Sample Percent Reporting Spike Recovery Acceptance Units Analyte Level LCS Criteria

90

74-139

5,000

11

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/21/22 Date Received: 10/17/22 Project: Texaco Strickland 180387, F&BI 210237

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

Laboratory Code: 210205-02 (Matrix Spike)

	(intacti in Spino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	69	75	29-129	8
Toluene	mg/kg (ppm)	1	< 0.05	67	73	35 - 130	9
Ethylbenzene	mg/kg (ppm)	1	< 0.05	62	69	32 - 137	11
m,p-Xylene	mg/kg (ppm)	2	< 0.1	60	67	34 - 136	11
o-Xylene	mg/kg (ppm)	1	< 0.05	61	69	33 - 134	12
Naphthalene	mg/kg (ppm)	1	< 0.05	79	92	14 - 157	15

Laboratory Code: Laboratory Control Sample

<i>v</i>	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	97	71-118
Toluene	mg/kg (ppm)	1	103	66-126
Ethylbenzene	mg/kg (ppm)	1	104	64-123
m,p-Xylene	mg/kg (ppm)	2	103	78-122
o-Xylene	mg/kg (ppm)	1	104	77 - 124
Naphthalene	mg/kg (ppm)	1	100	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

R	R	Ph. (206)-285-8282		2			5W-NR-437	5W-N10-427	5W-N07-427	F24-404-427	5W-101-437	Sample ID		Phone Ema	City, State, ZIP <u>SONTR</u>	Address HO Und Aul	Company ASPECT CON	Report To Adam Oniffini	420018
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#### ENVIRONMENTAL CHEMISTS

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

October 21, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the amended results from the testing of material submitted on October 4, 2022 from the Texaco Strickland 220275, F&BI 210033 project. The sample IDs have been corrected.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1020R.DOC

#### ENVIRONMENTAL CHEMISTS

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

October 20, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the additional results from the testing of material submitted on October 4, 2022 from the Texaco Strickland 220275, F&BI 210033 project. There are 10 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1020R.DOC

#### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on October 4, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 220275, F&BI 210033 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
210033 -01	SW-N10-442
210033 -02	SW-N12-442
210033 -03	SW-N14-442
210033 -04	UST3-100422

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/04/22 Project: Texaco Strickland 220275, F&BI 210033 Date Extracted: 10/13/22 Date Analyzed: 10/13/22

### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
SW-N12-442 210033-02 1/10	370	ip
SW-N14-442 210033-03	<5	112
Method Blank 02-2356 MB	<5	94

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/04/22 Project: Texaco Strickland 220275, F&BI 210033 Date Extracted: 10/13/22 Date Analyzed: 10/13/22

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
SW-N12-442 210033-02	74 x	<250	87
SW-N14-442 210033-03	<50	<250	93
Method Blank	<50	<250	62

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N12-442 10/04/22 10/13/22 10/14/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 210033-02 101413.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	99	90	109
Toluene-d8		100	89	112
4-Bromofluorobenze	ene	107	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		0.48		
m,p-Xylene		0.92		
o-Xylene		0.064		
Naphthalene		3.3		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-N14-442 10/04/22 10/13/22 10/14/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 210033-03 101414.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	99	90	109
Toluene-d8		96	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blar Not Applical 10/13/22 10/13/22 Soil mg/kg (ppm)	hk ble Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 02-2478 mb 101305.D GCMS4 JCM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	101	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	105	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/04/22 Project: Texaco Strickland 220275, F&BI 210033

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

Laboratory Code: Laboratory Control Sample

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Gasoline	mg/kg (ppm)	20	100	105	61 - 153	5

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/04/22 Project: Texaco Strickland 220275, F&BI 210033

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

Laboratory Code: 210164-05 (Matrix Spike) Sample Percent Percent Reporting Spike Result RPD Recovery Recovery Acceptance Analyte Units Level (Wet Wt) MSMSD Criteria (Limit 20) **Diesel Extended** mg/kg (ppm) 5,000<50 929473-135  $\mathbf{2}$ Laboratory Code: Laboratory Control Sample Percent Reporting Spike Recovery Acceptance Units Analyte Level LCS Criteria Diesel Extended 5,000 74-139 mg/kg (ppm) 88

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/20/22 Date Received: 10/04/22 Project: Texaco Strickland 220275, F&BI 210033

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

Laboratory Code: 210182-01 (Matrix Spike)

	(intati in Spino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	86	86	29-129	0
Toluene	mg/kg (ppm)	1	< 0.05	96	95	35 - 130	1
Ethylbenzene	mg/kg (ppm)	1	< 0.05	95	95	32 - 137	0
m,p-Xylene	mg/kg (ppm)	2	< 0.1	94	95	34-136	1
o-Xylene	mg/kg (ppm)	1	< 0.05	97	95	33-134	2
Naphthalene	mg/kg (ppm)	1	< 0.05	95	94	14 - 157	1

Laboratory Code: Laboratory Control Sample

<i>v</i>	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	91	71-118
Toluene	mg/kg (ppm)	1	103	66-126
Ethylbenzene	mg/kg (ppm)	1	103	64-123
m,p-Xylene	mg/kg (ppm)	2	102	78-122
o-Xylene	mg/kg (ppm)	1	100	77-124
Naphthalene	mg/kg (ppm)	1	101	63-140

#### 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

Kece	Relí	Ph. (206) 285-8282 Rece	Friedman & Bruya, Inc. Refu							455-100422	24- MM-442	Sm- 1012 - 412	2m-10-442	Sample ID		PhoneEmail	City, State, ZIP Seattle,	Address 710 god And	Company Bodain De	Report To ASAPCA ( ONSUL	210033
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#### ENVIRONMENTAL CHEMISTS

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

October 12, 2022

Adam Griffin, Project Manager Aspect Consulting, LLC 350 Madison Ave. N. Bainbridge Island, WA 98110-1810

Dear Mr Griffin:

Included are the results from the testing of material submitted on October 5, 2022 from the Texaco Strickland 220275, F&BI 210054 project. There are 15 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Aspect Data, Daniel Babcock ASP1012R.DOC

#### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on October 5, 2022 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Texaco Strickland 220275, F&BI 210054 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
210054 -01	SW-W16-439
210054 -02	SW-W13-439
210054 -03	SW-W11-439
210054 -04	SW-W08-439
210054 -05	SW-W06-439
210054 -06	SW-W03-439
210054 -07	SW-W01-439

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/22 Date Received: 10/05/22 Project: Texaco Strickland 220275, F&BI 210054 Date Extracted: 10/07/22 Date Analyzed: 10/07/22

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
SW-W16-439 210054-01	<5	105
$\underset{210054-02}{\text{SW-W13-439}}$	<5	106
$\underset{210054-03}{\text{SW-W11-439}}$	<5	106
SW-W08-439 210054-04	<5	106
SW-W06-439 210054-05	<5	105
SW-W03-439 210054-06	<5	102
SW-W01-439 210054-07	<5	116
Method Blank 02-2347 MB	<5	108

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/22 Date Received: 10/05/22 Project: Texaco Strickland 220275, F&BI 210054 Date Extracted: 10/06/22 Date Analyzed: 10/06/22

#### 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)

			Surrogate
<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	(% Recovery)
Laboratory ID	$(C_{10}-C_{25})$	$(C_{25}-C_{36})$	(Limit 48-168)
SW-W16-439 210054-01	<50	<250	91
SW-W13-439 210054-02	<50	<250	112
SW-W11-439 210054-03	<50	<250	102
SW-W08-439 210054-04	<50	<250	109
SW-W06-439 210054-05	<50	<250	106
SW-W03-439 210054-06	<50	<250	107
SW-W01-439 210054-07	<50	<250	90
Method Blank 02-2417 MB2	<50	<250	119

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W16-439 10/05/22 10/07/22 10/07/22 Soil mg/kg (ppm)	Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 210054-01 100716.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	103	90	109
Toluene-d8		96	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W13-439 10/05/22 10/07/22 10/07/22 Soil mg/kg (ppm)	9 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 210054-02 100717.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	96	90	109
Toluene-d8		95	89	112
4-Bromofluorobenze	ene	104	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		0.15		
Ethylbenzene		< 0.05		
m,p-Xylene		0.11		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W11-439 10/05/22 10/07/22 10/07/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 210054-03 100718.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	d4	101	90	109
Toluene-d8		97	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W08-439 10/05/22 10/07/22 10/07/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 210054-04 100719.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	102	90	109
Toluene-d8		98	89	112
4-Bromofluorobenze	ene	105	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W06-439 10/05/22 10/07/22 10/07/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 210054-05 100720.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	99	90	109
Toluene-d8		96	89	112
4-Bromofluorobenze	ene	102	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W03-439 10/05/22 10/07/22 10/07/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 210054-06 100723.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	·d4	100	90	109
Toluene-d8		96	89	112
4-Bromofluorobenze	ene	101	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	SW-W01-433 10/05/22 10/07/22 10/07/22 Soil mg/kg (ppm)	) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 210054-07 100724.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	100	90	109
Toluene-d8		96	89	112
4-Bromofluorobenz	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		

## ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blar Not Applical 10/07/22 10/07/22 Soil mg/kg (ppm)	nk ble 9 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	Aspect Consulting, LLC Texaco Strickland 220275 02-2322 mb 100705.D GCMS4 LM
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	·d4	99	90	109
Toluene-d8		95	89	112
4-Bromofluorobenze	ene	103	84	115
Compounds:		Concentration mg/kg (ppm)		
Benzene		< 0.03		
Toluene		< 0.05		
Ethylbenzene		< 0.05		
m,p-Xylene		< 0.1		
o-Xylene		< 0.05		
Naphthalene		< 0.05		
# ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/22 Date Received: 10/05/22 Project: Texaco Strickland 220275, F&BI 210054

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

Laboratory Code: 2	10054-01 (Duplie	eate)			
		Samp	ole I	Duplicate	
	Reporting	Resu	lt	Result	RPD
Analyte	Units	(Wet V	Nt) (	Wet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<5		<5	nm
Laboratory Code: L	aboratory Contro	ol Sample	Э		
			Percen	t	
	Reporting	Spike	Recover	y Acceptanc	e
Analyte	Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	20	90	71-131	

# ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/22 Date Received: 10/05/22 Project: Texaco Strickland 220275, F&BI 210054

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

Laboratory Code: 2	210046-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
<b>Diesel Extended</b>	mg/kg (ppm)	5,000	<50	96	102	63-146	6
Laboratory Code:	Laboratory Contr	ol Samp	le				
			Percent	t			
	Reporting	Spike	Recover	y Accep	tance		
Analyte	Units	Level	LCS	Crit	eria		
Diesel Extended	mg/kg (ppm)	5,000	102	79-1	144		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/22 Date Received: 10/05/22 Project: Texaco Strickland 220275, F&BI 210054

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

Laboratory Code: 210054-01 (Matrix Spike)

<b>Haberatory</b> could <b>1</b> 00001 01	(inder in Spino)						
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	1	< 0.03	77	79	29-129	3
Toluene	mg/kg (ppm)	1	< 0.05	85	88	35 - 130	3
Ethylbenzene	mg/kg (ppm)	1	< 0.05	86	90	32 - 137	<b>5</b>
m,p-Xylene	mg/kg (ppm)	2	< 0.1	85	89	34-136	5
o-Xylene	mg/kg (ppm)	1	< 0.05	87	88	33-134	1
Naphthalene	mg/kg (ppm)	1	< 0.05	87	87	14 - 157	0

Laboratory Code: Laboratory Control Sample

~	<i>v</i> 1			
			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	1	73	71-118
Toluene	mg/kg (ppm)	1	81	66-126
Ethylbenzene	mg/kg (ppm)	1	82	64-123
m,p-Xylene	mg/kg (ppm)	2	80	78 - 122
o-Xylene	mg/kg (ppm)	1	81	77 - 124
Naphthalene	mg/kg (ppm)	1	<b>78</b>	63-140

# 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 analyte 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 due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

 ${\rm J}$  - 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.

Received by:	Relinquished by:	Friedman & Bruya, Inc. Relinquished by: Ph. (206) 285-8282 Received by: 1	SIG				40 (24 10w - w?	5w-woz-439 06	50-moryza 05.	10 122 - 20 m - m2	1 20 11- HZH - 1/m-m	20 122n-21m-m		Sample ID Lab ID		PhoneEmail	Ury, state, dir <u>Sewil w/wr</u>	THE CHARTER CONTRACTOR	Address 710 Ind Awe SHE 500	CompanyAsper (onswiting	Report Toppening anifin; Daniel Prak	
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# **APPENDIX H**

**Construction Photo Log** 



Photograph 1. Demolition of Former Aloha Café Building.



Photograph 2. Installation of soldier piles.



Photograph 3. Excavation along the west sidewall of the Property.



Photograph 4. Shoring tieback installation.



Photograph 5. Final original extent of excavation.



Photograph 6. Excavation backfilling.



Photograph 7. Overexcavation of eastern slope.



Photograph 8. Over excavation between north sidewall and Property line.



Photograph 9. Final Site restoration.

# **APPENDIX I**

**Data Validation Report** 



Aspect Consulting LLC 701 Second Ave., Suite 550 Seattle, WA 98104 ATTN: Jason Yabandeh jyabandeh@aspectconsulting.com April 18, 2023

SUBJECT: Aloha Café - Data Validation

Dear Mr. Yabandeh,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on January 19, 2023. Attachment 1 is a summary of the samples that were reviewed for each analysis.

#### **Revision:**

209531

Volatiles – Added qualifiers to sample SW-N10-447 due to surrogate %R.

301030

Volatiles – Added a qualifier for benzene for sample PL-N10-442 due to result < RL.

#### LDC Project #55997 RV1:

#### <u>SDG #</u>

#### Fraction

209417, 209531, 210015, 210033, 210054, 210102, 210145, 210214, 210237, 210253, 210272, 210320, 210372, 210402, 210437, 212097, 212149, 212189, 301007, 301030

Volatiles, Total Petroleum Hydrocarbons as Gasoline, Total Petroleum Hydrocarbons as Extractables, Polychlorinated Biphenyls, Metals

The data validation was performed under Stage 2A guidelines. The analysis was validated using the following documents, as applicable to each method:

- Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019)
- USEPA Region 2 Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program, SOP HW-2b, Revision 15 (December 2012)
- USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020)
- USEPA National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review (January 2017)
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014; update VI, July 2018

Please feel free to contact us if you have any questions.

Sincerely,

Stella Cuenco scuenco@lab-data.com Project Manager/Senior Chemist

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	Stage 2A EDD	)			L	DCi	<b>#</b> 5!	599	7 (/	Asp	ec	t C	ons	sult	ing	, Ll	_C	- S	eat	tle,	W	<b>A /</b> /	Alo	ha	Ca	fe)											
LDC	SDG#	DATE REC'D	(3) DATE DUE	(0 V0 (826	6) DA 60D)	PC (808	Bs 32A)	(8 Met (602	3) tals 20B)	TPI (NW -G	H-G TPH ix)	TPI (NW -D	H-E TPH 9x)																								
Matri	: Water/Soil	T	T	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s	W	s
А	209417	01/19/23	02/09/23	0	9	-	-	-	-	0	9	0	9																								
В	209531	01/19/23	02/09/23	0	6	-	-	-	-	0	6	0	6																								
С	210015	01/19/23	02/09/23	0	4	0	1	0	1	0	4	0	4																								
D	210033	01/19/23	02/09/23	1	3	1	0	-	-	1	3	1	3																								
Е	210054	01/19/23	02/09/23	0	7	-	-	-	-	0	7	0	7																								
F	210102	01/19/23	02/09/23	0	7	-	-	-	-	0	7	0	7																								
G	210145	01/19/23	02/09/23	1	3	-	-	-	-	1	3	1	3																								
Н	210214	01/19/23	02/09/23	0	2	-	-	-	1	0	2	0	2																								
Ι	210237	01/19/23	02/09/23	0	5	-	-	-	1	0	5	0	5																								
J	210253	01/19/23	02/09/23	1	4	-	-	-	1	1	4	0	4																								
к	210272	01/19/23	02/09/23	1	5	-	-	-	1	1	5	0	5																								
L	210320	01/19/23	02/09/23	1	14	-	-	-	1	1	14	0	14																								
М	210372	01/19/23	02/09/23	0	3	-	-	-	1	0	3	0	3																								
Ν	210402	01/19/23	02/09/23	1	22	-	-	-	1	1	22	0	22																								
0	210437	01/19/23	02/09/23	0	9	-	-	-	-	0	9	0	9																								
Р	212097	01/19/23	02/09/23	0	4	-	-	-	-	0	4	0	4																								
Q	212149	01/19/23	02/09/23	0	3	-	-	-	-	0	2	0	2																								
R	212189	01/19/23	02/09/23	0	9	-	-	-	-	0	9	0	9																								
S	301007	01/19/23	02/09/23	0	3	-	-	-	-	0	3	0	3																								
Т	301030	01/19/23	02/09/23	0	4	-	-	-	-	0	4	0	4																								
										1			1									1	1	1			1						1				
Total	TR/SC			6	126	1	1	0	1	6	125	2	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	393

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
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LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 209417

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-W02-444	209417-01	Soil	09/26/22
SW-W04-444	209417-02	Soil	09/26/22
SW-W06-444	209417-03	Soil	09/26/22
SW-W08-444	209417-04	Soil	09/26/22
SW-W10-444	209417-05	Soil	09/26/22
SW-W12-444	209417-06	Soil	09/26/22
SW-W14-444	209417-07	Soil	09/26/22
SW-W16-444	209417-08	Soil	09/26/22
SW-N01-444	209417-09	Soil	09/26/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# **II. GC/MS Instrument Performance Check**

Instrument performance check data were not reviewed for Stage 2A validation.

# III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### VI. Field Blanks

No field blanks were identified in this SDG.

#### VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VIII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

# IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# X. Field Duplicates

No field duplicates were identified in this SDG.

# XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

# XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 209417

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 209417

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 209417

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Date: 07/22/23 Page: of Reviewer: 04 2nd Reviewer:

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: <u>55997A1a</u> SDG #: 209417

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

**Comments** Validation Area Sample receipt/Technical holding times A / A١. П. GC/MS Instrument performance check Ν 111. Initial calibration/ICV N/N IV. Continuing calibration Ν Δ V. Laboratory Blanks h VI. Field blanks A VII. Surrogate spikes К VIII. Matrix spike/Matrix spike duplicates LCS A IX. Laboratory control samples M Х. Field duplicates N XI. Internal standards XII. Target analyte quantitation Ν XIII. Target analyte identification Ν A XIV Overall assessment of data

Note:

N = Not provided/applicable SW = See worksheet

A = Acceptable

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	SW-W02-444	209417-01	Soil	09/26/22
2	SW-W04-444	209417-02	Soil	09/26/22
3	SW-W06-444	209417-03	Soil	09/26/22
4	SW-W08-444	209417-04	Soil	09/26/22
5	SW-W10-444	209417-05	Soil	09/26/22
6	SW-W12-444	209417-06	Soil	09/26/22
7	SW-W14-444	209417-07	Soil	09/26/22
8	SW-W16-444	209417-08	Soil	09/26/22
9	SW-N01-444	209417-09	Soil	09/26/22
10				
Notes			·····	
-	02-2297 MP			

BTEX + Naphthalene

AII ND

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 209417

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-W02-444	209417-01	Soil	09/26/22
SW-W04-444	209417-02	Soil	09/26/22
SW-W06-444	209417-03	Soil	09/26/22
SW-W08-444	209417-04	Soil	09/26/22
SW-W10-444	209417-05	Soil	09/26/22
SW-W12-444	209417-06	Soil	09/26/22
SW-W14-444	209417-07	Soil	09/26/22
SW-W16-444	209417-08	Soil	09/26/22
SW-N01-444	209417-09	Soil	09/26/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

# VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

# XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 209417

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 209417

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 209417

No Sample Data Qualified in this SDG
VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Date: <u>02/22/23</u> Page: <u>1 of 1</u> Reviewer: ()//-2nd Reviewer: \_\_\_\_\_

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997A7

SDG #: 209417

#### METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	Å/A	
<u> </u>	Initial calibration/ICV	N/N	
.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	Ń	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	Ň	
VIII.	Laboratory control samples	A	les
IX.	Field duplicates	N.	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
<b>~</b> 1	SW-W02-444	209417-01	Soil	09/26/22
2	SW-W04-444	209417-02	Soil	09/26/22
3	SW-W06-444	209417-03	Soil	09/26/22
4	SW-W08-444	209417-04	Soil	09/26/22
5	SW-W10-444	209417-05	Soil	09/26/22
6	SW-W12-444	209417-06	Soil	09/26/22
7	SW-W14-444	209417-07	Soil	09/26/22
8	SW-W16-444	209417-08	Soil	09/26/22
9	SW-N01-444 D	209417-09	Soil	09/26/22
10				
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 209417

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-W02-444	209417-01	Soil	09/26/22
SW-W04-444	209417-02	Soil	09/26/22
SW-W06-444	209417-03	Soil	09/26/22
SW-W08-444	209417-04	Soil	09/26/22
SW-W10-444	209417-05	Soil	09/26/22
SW-W12-444	209417-06	Soil	09/26/22
SW-W14-444	209417-07	Soil	09/26/22
SW-W16-444	209417-08	Soil	09/26/22
SW-N01-444	209417-09	Soil	09/26/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

## VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

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The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 209417

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 209417

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 209417

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #: 209417 Laboratory: Friedman & Bruya, Inc., Seattle, WA

#### **METHOD:** GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area Comments А Δ Sample receipt/Technical holding times 1 ١. Initial calibration/ICV N/N II. III. Continuing calibration Ν A IV. Laboratory Blanks k V. Field blanks A VI. Surrogate spikes Ы VII. Matrix spike/Matrix spike duplicates Δ VIII. us Laboratory control samples N IX. Field duplicates Ν Х. Target analyte quantitation XI. Target analyte identification Ν A XII Overall assessment of data

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

**Client ID** Lab ID Matrix Date SW-W02-444 209417-01 Soil 09/26/22 1 2 SW-W04-444 209417-02 Soil 09/26/22 3 SW-W06-444 209417-03 Soil 09/26/22 SW-W08-444 209417-04 Soil 09/26/22 4 5 SW-W10-444 209417-05 Soil 09/26/22 SW-W12-444 209417-06 Soil 09/26/22 6 7 SW-W14-444 209417-07 Soil 09/26/22 Soil 8 SW-W16-444 209417-08 09/26/22 . b 9 SW-N01-444 209417-09 Soil 09/26/22 10 11 12 12

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All

Date: 02/22/23 Page: 1 of 1 Reviewer: 200 2nd Reviewer:

LDC #: 55997A8

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site	Name:	Aloha Café

LDC Report Date: April 18, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 209531

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-N02-447	209531-01	Soil	09/29/22
SW-N04-447	209531-02	Soil	09/30/22
SW-N07-447	209531-03	Soil	09/30/22
SW-N10-447	209531-04	Soil	09/30/22
SW-N12-447	209531-05	Soil	09/30/22
SW-N14-447	209531-06	Soil	09/30/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

3

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

# III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

No field blanks were identified in this SDG.

## VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Affected Analyte	Flag	A or P
SW-N10-447	Toluene-d8 Bromofluorobenzene	126 (89-112) 126 (84-115)	All analytes	J (all detects)	Р

## VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were not within QC limits. No data were qualified since there were no associated samples in this SDG. Relative percent differences (RPD) were within QC limits.

# IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### X. Field Duplicates

No field duplicates were identified in this SDG.

#### XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

#### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

#### XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### **XIV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to surrogate %R, data were qualified as estimated in one sample.

## Aloha Café Volatiles - Data Qualification Summary - SDG 209531

Sample	Analyte	Flag	A or P	Reason
SW-N10-447	All analytes	J (all detects)	Р	Surrogates (%R)

#### Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 209531

# No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 209531

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Date: 0<sup>2</sup>/22/25 Page: of 1 Reviewer: 2nd Reviewer:

SDG #: 209531 Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997B1a

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	AIA	
١١.	GC/MS Instrument performance check	N	
111.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
<b>V</b> .	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	SÄY	
VIII.	Matrix spike/Matrix spike duplicates	Siki	210015-01 (NO associated sample - NG)
IX.	Laboratory control samples	Á	Les
Х.	Field duplicates	N	
XI.	Internal standards	N	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
xiv	Overall assessment of data	A	

Note: A = Acceptable N = Not provider

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID			Lab ID	Matrix	Date
1	SW-N02-447			209531-01	Soil	09/29/22
2	SW-N04-447			209531-02	Soil	09/30/22
3+	SW-N07-447			209531-03	Soil	09/30/22
4+	SW-N10-447			209531-04	Soil	09/30/22
5 <b>+</b>	SW-N12-447			209531-05	Soil	09/30/22
16	SW-N14-447		 	209531-06	Soil	09/30/22
7						
8						
9						
10			 			
Notes:						
4	02 - 2312 Mb					

BIER + Naphthalone

LDC #: 55997 BIA

#### VALIDATION FINDINGS WORKSHEET Surrogate Spikes

Page: \_\_\_\_of\_\_\_\_ Reviewer: \_\_\_JVG

#### METHOD: GC/MS VOA (EPA SW 846 Method 8260p)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N/A Were all surrogate %R within QC limits?

N/A If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?

#	Date	Sample ID	Surrogate	%Recovery (Limits)	Qualifications
		4 (Pet)	TOL	126 (89-112)	J dets /P
			BFB	126 (84-115)	
				( )	
				()	
				()	
				()	
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(TOL) = Toluene-d8 (BFB) = Bromofluorobenzene (DCE) = 1,2-Dichloroethane-d4 (DFM) = Dibromofluoromethane

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 209531

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-N02-447	209531-01	Soil	09/29/22
SW-N04-447	209531-02	Soil	09/30/22
SW-N07-447	209531-03	Soil	09/30/22
SW-N10-447	209531-04	Soil	09/30/22
SW-N12-447	209531-05	Soil	09/30/22
SW-N14-447	209531-06	Soil	09/30/22
SW-N02-447DUP	209531-01DUP	Soil	09/29/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 209531

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 209531

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 209531

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997B7

SDG #: 209531

Date: 02/22/23 Page: 1 of 1 Reviewer: 04 2nd Reviewer: 04

#### METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
<b>I</b> .	Sample receipt/Technical holding times	A,A	
11.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	Ä	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates /Lp	N/A	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	N	-
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

Lab ID Matrix **Client ID** Date -Soil 09/29/22 SW-N02-447 209531-01 1 Soil 09/30/22 2 SW-N04-447 209531-02 3+ SW-N07-447 209531-03 Soil 09/30/22 (\_+ SW-N10-447 209531-04 Soil 09/30/22 1<u>1</u> 209531-05 Soil 09/30/22 SW-N12-447 SW-N14-447 209531-06 Soil 09/30/22 6 7 SW-N02-447DUP 209531-01DUP Soil 09/29/22 8 9 10 11 12 12 Notes:

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# LDC Report# 55997B8

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Alona Cate	Project/Site Name:	Aloha Café
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LDC Report Date: February 27, 2023

Parameters:Total Petroleum Hydrocarbons as Extractables

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 209531

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-N02-447	209531-01	Soil	09/29/22
SW-N04-447	209531-02	Soil	09/30/22
SW-N07-447	209531-03	Soil	09/30/22
SW-N10-447	209531-04	Soil	09/30/22
SW-N12-447	209531-05	Soil	09/30/22
SW-N14-447	209531-06	Soil	09/30/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 209531

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 209531

No Sample Data Qualified in this SDG

Aloha Café Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 209531

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #:<u>209531</u> Laboratory: Friedman <u>& Bruya</u>, Inc., Seattle, WA Date: 02/223 Page: \\_of \_\_\_ Reviewer: \_\_\_\_\_ 2nd Reviewer: \_\_\_\_\_

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

LDC #: 55997B8

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area **Comments** A,A Sample receipt/Technical holding times 1. 11. Initial calibration/ICV N/N Ш. Continuing calibration Ν h IV. Laboratory Blanks V. Field blanks k Á VI. Surrogate spikes N VII. Matrix spike/Matrix spike duplicates A us VIII. Laboratory control samples N IX. **Field duplicates** Х. Target analyte quantitation Ν XI. Target analyte identification Ν A XII Overall assessment of data

Note:

A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

**Client ID** Matrix Lab ID Date -SW-N02-447 209531-01 Soil 09/29/22 1 2 ~ SW-N04-447 209531-02 Soil 09/30/22 SW-N07-447 3 209531-03 Soil 09/30/22 ₄+ SW-N10-447 209531-04 Soil 09/30/22 5 SW-N12-447 209531-05 Soil 09/30/22 SW-N14-447 209531-06 09/30/22 6 Soil 7 8 9 10 11 12 13 Notes 02- 2399 MD

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site	Name:	Aloha	Café

LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210015

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
UST-100322	210015-01	Soil	10/03/22
SW-N02-442	210015-02	Soil	10/03/22
SW-N04-442	210015-03	Soil	10/03/22
SW-N07-442	210015-04	Soil	10/03/22
UST-100322MS	210015-01MS	Soil	10/03/22
UST-100322MSD	210015-01MSD	Soil	10/03/22

1

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# **II. GC/MS Instrument Performance Check**

Instrument performance check data were not reviewed for Stage 2A validation.

# III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

No field blanks were identified in this SDG.

## **VII. Surrogates**

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Affected Analyte	Flag	A or P
SW-N07-442	Toluene-d8	120 (89-112)	All analytes	J (all detects)	Ρ

## VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. For UST-100322MS/MSD, no data were qualified for toluene, ethylbenzene, m,p-Xylene, o-Xylene, and naphthalene percent recoveries (%R) outside the QC limits since the parent sample results were greater than 4X the spike concentration. Relative percent differences (RPD) were within QC limits.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### X. Field Duplicates

No field duplicates were identified in this SDG.

#### XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

#### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

#### XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to surrogate %R, data were qualified as estimated in one sample.

# Aloha Café Volatiles - Data Qualification Summary - SDG 210015

Sample	Analyte	Flag	A or P	Reason
SW-N07-442	All analytes	J (all detects)	Ρ	Surrogates (%R)

# Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG
#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997C1a

SDG #: 210015

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area **Comments** A / A Sample receipt/Technical holding times 1. 11. GC/MS Instrument performance check Ν Ш. Initial calibration/ICV N/N IV. Continuing calibration Ν A V. Laboratory Blanks N VI. Field blanks SN VII. Surrogate spikes SW VIII. Matrix spike/Matrix spike duplicates чs A IX. Laboratory control samples N Х. Field duplicates XI. Internal standards Ы XII. Target analyte quantitation Ν XIII. Target analyte identification Ν А XIV Overall assessment of data

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1+	UST-100322	210015-01	Soil	10/03/22
2	SW-N02-442	210015-02	Soil	10/03/22
13	SW-N04-442	210015-03	Soil	10/03/22
+ 4	SW-N07-442	210015-04	Soil	10/03/22
5	UST-100322MS	210015-01MS	Soil	10/03/22
6	UST-100322MSD	210015-01MSD	Soil	10/03/22
7				
8				
9				
10				
Notes:				
-	02-2312 MB			

Date: 02/22/23 Page: 1 of 1 Reviewer: 34 2nd Reviewer:

LDC #: 55 997 C/a

## VALIDATION FINDINGS WORKSHEET Surrogate Spikes

Page: of Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260 ))

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

<u>N/A</u> Were all surrogate %R within QC limits?

Y) N N/A If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?

#	Date	Sample ID	Surrogate	%Recovery (Limits)	Qualifications
		4 (Det)	TOL	120 (89-112)	J dets/P
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(TOL) = Toluene-d8 (BFB) = Bromofluorobenzene (DCE) = 1,2-Dichloroethane-d4 (DFM) = Dibromofluoromethane

SUR.wpd

LDC #: 55997CIA

## VALIDATION FINDINGS WORKSHEET <u>Matrix Spike/Matrix Spike Duplicates</u>

METHOD : GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

(Y) <u>N N/A</u>

Was a MS/MSD analyzed every 20 samples of each matrix?

Y/N/N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	5/6	CC	0 (35-130)	$()$ (35- $b_{0}$ )	( )	1 (Det)	NA *
		EE	0 (32-137)	0 (32-137)	( )		
		RRR	0 (34-136)	0 (34-136)	()		
		555	0 (33-134)	0 (33-134)	()		
		MMM	0 (14-127)	0 (14-157)	( )		
			( )	( ' ')	( )	•	
			( )	( )	( )		* Parent conc
			( )	( )	( )		>4× spike
			()	( )	( )		
			( )	( )	. ( )		
			( )	( )	( )		
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## Laboratory Data Consultants, Inc. Data Validation Report

Proiect/Site	Name:	Aloha	Café
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LDC Report Date: February 24, 2023

Parameters: Polychlorinated Biphenyls

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210015

· · · · · · · · · · · · · · · · · · ·	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
UST-100322	210015-01	Soil	10/03/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polychlorinated Biphenyls (PCBs) by Environmental Protection Agency (EPA) SW 846 Method 8082A

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## V. Field Blanks

No field blanks were identified in this SDG.

## VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Polychlorinated Biphenyls - Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

Aloha Café

Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

Aloha Café Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #: 210015 Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997C3b

#### **METHOD:** GC Polychlorinated Biphenyls (EPA SW-846 Method 8082A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area Comments A,A Sample receipt/Technical holding times I. N/N 11. Initial calibration/ICV Continuing calibration Ν Ш. Д IV. Laboratory Blanks V. Field blanks h A VI. Surrogate spikes Ь VII. Matrix spike/Matrix spike duplicates US VIII. Laboratory control samples IX. Field duplicates Target analyte quantitation Ν Х. XI. Target analyte identification N A XII Overall assessment of data

Note:

A = Acceptable N = Not provided/applicable

SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	UST-100322	210015-01	Soil	10/03/22
2				
3				
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12				
13				
Votes:				

1	- 02-2393 MBV			

## Laboratory Data Consultants, Inc. Data Validation Report

- Project/Site Name: Aloha Café
- LDC Report Date: February 16, 2023
- Parameters: Metals
- Validation Level: Stage 2A

Laboratory:Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210015

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
UST-100322	210015-01	Soil	10/03/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019), the USEPA Region 2 *Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program*, SOP HW-2b, Revision 15 (December 2012), and a modified outline of the USEPA National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review (January 2017). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver by Environmental Protection Agency (EPA) SW 846 Method 6020B

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- X The numerical value of the result is accurate. However, the analyte was not positively identified at that value because the chromatographic pattern in the sample did not match that of the associated fuel standard. This qualifier is applicable only to TPH results.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met.

#### II. ICPMS Tune

ICP-MS tune data were not reviewed for Stage 2A validation.

#### III. Instrument Calibration

Instrument performance check data were not reviewed for Stage 2A validation.

#### **IV. ICP Interference Check Sample Analysis**

Interference check sample (ICS) analysis data were not reviewed for Stage 2A validation.

#### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### VI. Field Blanks

No field blanks were identified in this SDG.

#### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

#### VIII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

#### IX. Serial Dilution

Serial dilution was not performed for this SDG.

#### X. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### **XI. Field Duplicates**

No field duplicates were identified in this SDG.

## XII. Internal Standards (ICP-MS)

Internal standard data were not reviewed for Stage 2A validation.

#### XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Metals - Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

Aloha Café Metals - Laboratory Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

Aloha Café Metals - Field Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 28 A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997C4a

SDG #: 210015

#### METHOD: Metals (EPA SW-846 Method 6020B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area **Comments** A,A I. Sample receipt/Technical holding times II. **ICP/MS** Tune Ν Ν III. Instrument Calibration IV. ICP Interference Check Sample (ICS) Analysis Ν A V. Laboratory Blanks N VI. Field Blanks  $\nabla$ VII. Matrix Spike/Matrix Spike Duplicates N VIII. Duplicate sample analysis IX. Serial Dilution 165 Х. Laboratory control samples N۱ XI. **Field Duplicates** XII. Internal Standard (ICP-MS) Ν XIII. Ν **Target Analyte Quantitation** A XIV Overall Assessment of Data

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	UST-100322	210015-01	Soil	10/03/22
2				
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8				
9				
10				
11				
12				
13				
Notes	D:	······································		

## VALIDATION FINDINGS WORKSHEET Sample Specific Element Reference

All elements are applicable to each sample as noted below.

Sample ID	Target Analyte List	
1	As,Ba,Cd,Cr,Pb,Se,Ag,Hg	
1	Analysis Method	

ICP		
ICP-MS	As,Ba,Cd,Cr,Pb,Se,Ag,Hg	
CVAA		

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210015

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
UST-100322	210015-01	Soil	10/03/22
SW-N02-442	210015-02	Soil	10/03/22
SW-N04-442	210015-03	Soil	10/03/22
SW-N07-442	210015-04	Soil	10/03/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

#### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method with the following exceptions:

Sample	Finding	Affected Analyte	Flag	A or P
UST-100322	Laboratory indicated surrogate recovery fell outside of control limits due to sample matrix effects and flagged "ip".	TPH as gasoline	J (all detects)	Ρ

#### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

#### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### **IX. Field Duplicates**

No field duplicates were identified in this SDG.

#### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

#### XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to surrogate, data were qualified as estimated in one sample.

## Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210015

Sample	Analyte	Flag	A or P	Reason
UST-100322	TPH as gasoline	J (all detects)	Ρ	Surrogates

#### Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997C7

SDG #: 210015

Date: <u>02/22</u> Page: <u>1 of 1</u> Reviewer: <u>14</u> 2nd Reviewer: <u>14</u>

**METHOD:** GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area Comments A/A Sample receipt/Technical holding times ١. П. Initial calibration/ICV N/N III. Continuing calibration Ν A IV. Laboratory Blanks V. Field blanks SW VI. Surrogate spikes N VII. Matrix spike/Matrix spike duplicates LCS Á VIII. Laboratory control samples N IX. Field duplicates Х. Target analyte quantitation Ν Target analyte identification Ν XI. A XII Overall assessment of data

Note:

A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate				
TB = Trip blank				
EB = Equipment blank				

SB=Source blank OTHER:

	Client ID			Lab ID	Matrix	Date
1+	UST-100322		 	210015-01	Soil	10/03/22
2-	SW-N02-442			210015-02	Soil	10/03/22
3	SW-N04-442		 	210015-03	Soil	10/03/22
4 <sup>+</sup>	SW-N07-442			210015-04	Soil	10/03/22
5						
6			 			
7						
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9		 				
10			 			
11						
12			 			
13		 	 	<u> </u>		
Notes:	:		 			
-	02-2935 Mb					

#### VALIDATION FINDINDS WORKSHEET Surrogate Recovery

#### METHOD: GC HPLC

Are surrogates required by the method? Yes\_\_\_\_ or No\_\_\_\_. Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A". <u>Y N N/A</u> Were surrogates spiked into all samples and blanks? <u>Y N N/A</u> Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID		Surrogate Compound					%R (Limits)		Qualifications
	1 (Det)	Lal lim	poratory indicated surrogate re its due to sample matrix effect	ecovery is and fl	fell outside of control agged "ip".	( )			)	J/UJ/P
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								(	)	
		(No	ote: surrogate not identified an	d no nu	umeric value reported.)			(	)	
								(	)	
								(	)	
	Surrogate Compound		Surrogate Compound		Surrogate Compound			Surrogate Compound	L	Surrogate Compound
A	Chlorobenzene (CBZ)	1	Fluorobenzene (FBZ)	Q	Dichlorophenyl Acetic Acid (DC,	AA)	Y	Tetrachloro-m- xylene	GG	2-Nitro-m-xylene
В	4Bromofluorobenzene (BFB)	J	n-Triacontane	R	4-Nitrophenol		Z	2-Bromonaphthalene	НН	p-Terphenyl
С	a,a,a-Trifluorotoluene	к	Hexacosane	s	1-Chloro-3-Nitrobenzene		AA	1-Chlorooctadecane		Tripropylphosphate
D	Bromochlorobenzene	L	Bromobenzene	T	3,4-Dinitrotoluene		BB	2,4-Dichlorophenylacetic acid	JJ	2,3-Dibromopropionic acid
E	1,4-Dichlorobutane	М	Benzo(e)Pyrene	υ	Tripentyltin		cc	2,5-Dibromotoluene	КК	Pentachloroethane
F	1,4-Difluorobenzene (DFB)	N	Terphenyl-D14	V	Tri-n-propyltin		DD	n-Nonatriacontane	LL	1,1,1,2-Tetrachloroethane
	Octacosane	0	Decachlorobiphenyl (DCB)	W	Tributyl Phosphate		EE	1,2-Dibromopropane	MM.	5-alpha Androstane
н	Ortho-Terphenyl	Р	1-methylnaphthalene	X	Triphenyl Phosphate		FF	1,2-Dinitrobenzene	NN.	2-Fluorobiphenyl

## LDC Report# 55997C8

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210015

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
UST-100322	210015-01	Soil	10/03/22
SVV-N02-442	210015-02	Soil	10/03/22
SVV-N04-442	210015-03	Soil	10/03/22
SVV-N07-442	210015-04	Soil	10/03/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

#### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

#### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### **IX. Field Duplicates**

No field duplicates were identified in this SDG.

#### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210015

No Sample Data Qualified in this SDG

VALIDATION	COMPL	<b>.ETENESS</b>	WORKSHEET
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Stage 2A

Date: <u>07/22/29</u> Page: <u>\</u> of <u>)</u> Reviewer: <u>46</u> 2nd Reviewer: <u>46</u>

SDG #: 210015 Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997C8

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	AIA	
11.	Initial calibration/ICV	N/N	
.	Continuing calibration	N	
IV.	Laboratory Blanks	A_	· · · · · · · · · · · · · · · · · · ·
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	,
VIII.	Laboratory control samples	A	Les
IX.	Field duplicates	N_	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A_	

Note:

A = Acceptable N = Not provided/applicable

SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date		
1	UST-100322	210015-01	Soil	10/03/22		
2	SW-N02-442	210015-02	Soil	10/03/22		
3	SW-N04-442	210015-03	Soil	10/03/22		
4	SW-N07-442	210015-04	Soil	10/03/22		
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Notes:						

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# Laboratory Data Consultants, Inc. Data Validation Report

Proiect/Site	Name:	Aloha Café

- LDC Report Date: February 23, 2023
- Parameters: Volatiles
- Validation Level: Stage 2A

Laboratory:Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210033

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-N10-442	210033-01	Soil	10/03/22
SW-N12-442	210033-02	Soil	10/03/22
SVV-N14-442	210033-03	Soil	10/03/22
UST3-100422	210033-04	Water	10/04/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.
# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

#### II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

#### III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### VI. Field Blanks

No field blanks were identified in this SDG.

#### VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VIII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

#### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Date: <u>62/22/23</u> Page: <u>of</u> Reviewer: <u>57</u> 2nd Reviewer:

SDG #: 210033 Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: <u>55997D1a</u>

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area Comments A, A Ι. Sample receipt/Technical holding times Ш. GC/MS Instrument performance check Ν 111. Initial calibration/ICV N/N IV. Ν Continuing calibration A V. Laboratory Blanks VI. Field blanks Κ A VII. Surrogate spikes VIII. Matrix spike/Matrix spike duplicates Los 12 IX. Laboratory control samples Х. Field duplicates N XI. Internal standards XII. Ν Target analyte quantitation XIII. Target analyte identification Ν XIV Overall assessment of data

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate

FB = Field blank

TB = Trip blank EB = Equipment blank

D = Duplicate

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
+ e 1	SW-N10-442	210033-01	Soil	10/03/22
2	SW-N12-442	210033-02	Soil	10/03/22
4 3	SW-N14-442	210033-03	Soil	10/03/22
4	UST3-100422	210033-04	Water	<b>4</b> 10/0 <b>2</b> /22
5				
6				
7				
8				
9				
10				
Note				
-1	02-2478 MB			
2	02-2318			
3	12-2317			

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Polychlorinated Biphenyls
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210033

	Laboratory Sample	,	Collection
Sample Identification	Identification	Matrix	Date
UST3-100422	210033-04	Water	10/04/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polychlorinated Biphenyls (PCBs) by Environmental Protection Agency (EPA) SW 846 Method 8082A

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

# XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

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Aloha Café Polychlorinated Biphenyls - Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

Aloha Café Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

Aloha Café Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

LDC #: 55997D3b VALIDATION SDG #: 210033 Laboratory: Friedman & Bruya, Inc., Seattle, WA Date: 07/22/23 Page: 1 of 1 Reviewer: 079 2nd Reviewer:

METHOD: GC Polychlorinated Biphenyls (EPA SW-846 Method 8082A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area Comments A/A I. Sample receipt/Technical holding times II. Initial calibration/ICV N/N III. Continuing calibration Ν A IV. Laboratory Blanks V. Field blanks VI. Surrogate spikes VII. Matrix spike/Matrix spike duplicates LCS N VIII. Laboratory control samples IX. Field duplicates Х. Ν Target analyte quantitation Target analyte identification XI. Ν Å XII Overall assessment of data

Note:

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A = Acceptable N = Not provided/applicable ND = No compounds detected R = Rinsate

FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

SW = See worksheet

	Client ID	Lab	ID	Matrix	Date
1	UST3-100422	2100	)33-04	Water	<b>4</b> 10/08/22
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
otes				<u> </u>	

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210033

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-N10-442	210033-01	Soil	10/03/22
SW-N12-442	210033-02	Soil	10/03/22
SW-N14-442	210033-03	Soil	10/03/22
UST3-100422	210033-04	Water	10/04/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## V. Field Blanks

No field blanks were identified in this SDG.

## VI. Surrogates

Surrogates were added to all samples as required by the method with the following exceptions:

Sample	Finding	Affected Analyte	Flag	A or P
SW-N12-442	Laboratory indicated surrogate recovery fell outside of control limits due to sample matrix effects and flagged "ip".	TPH as gasoline	J (all detects)	Ρ

# VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

# **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## **IX. Field Duplicates**

No field duplicates were identified in this SDG.

#### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

#### XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to surrogate, data were qualified as estimated in one sample.

## Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210033

Sample	Analyte	Flag	A or P	Reason
SW-N12-442	TPH as gasoline	J (all detects)	Ρ	Surrogates

#### Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

LDC #: <u>55997D7</u>	VALIDATION COMPLETENESS WORKSHEET
SDG #: 210033	Stage 2A
Laboratory: Friedman & Bruya,	Inc., Seattle, WA

Date: <u>02/22/23</u> Page: 1 of <u>1</u> Reviewer: <u>1</u> 2nd Reviewer: 1

# **METHOD:** GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
11.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	Ň	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	N_	
VIII.	Laboratory control samples	A	LCS/D
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = D	Duplicate
TB =	Trip blank
EB =	Equipment blank

SB=Source blank

OTHER:

	Client ID	Lab ID	Matrix	Date			
1 7	SW-N10-442	210033-01	Soil	10/03/22			
21	SW-N12-442	210033-02	Soil	10/03/22			
3 <sup>1</sup>	SW-N14-442	210033-03	Soil	10/03/22			
4 3	UST3-100422	210033-04	Water	10/08/22			
5							
6							
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10							
11							
12							
13			I				
Notes	Votes:						
	02-2356 MB						
2	02-2347						
	02-2340						

#### VALIDATION FINDINDS WORKSHEET Surrogate Recovery

METHOD: \_\_GC \_\_ HPLC

Are surrogates required by the method? Yes <u>/</u> or No\_\_\_\_. Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID		Surrogate Compound %R (Limits)		Qualifications					
	2 (Det)	La lim	poratory indicated surrogate re its due to sample matrix effect	ecovery is and fl	fell outside of control agged "ip".	(			)	J/UJ/P
						( )		)		
			<u></u>					(	)	
							( )			
	<u>, , , , , , , , , , , , , , , , , , , </u>						( )			
							( )			
								(	)	
								(	)	
		1					( )			
<b> </b>						(		)		
						(		(	)	
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				(		)	
							(		)	
		(No	ote: surrogate not identified an	d no nu	imeric value reported.)			(	)	
								(	)	
								(	)	
	Surrogate Compound		Surrogate Compound		Surrogate Compound			Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	I	Fluorobenzene (FBZ)	Q	Dichlorophenyl Acetic Acid (DCA	4A)	Y	Tetrachloro-m- xylene	GG	2-Nitro-m-xylene
в	4-Bromofluorobenzene (BFB)	J	n-Triacontane	R	4-Nitrophenol		Z	2-Bromonaphthalene	НН	p-Terphenyl
С	a,a,a-Trifluorotoluene	к	Hexacosane	s	1-Chloro-3-Nitrobenzene		AA	1-Chlorooctadecane	- 11	Tripropylphosphate
D	Bromochlorobenzene	L	Bromobenzene	т	3,4-Dinitrotoluene		BB	2,4-Dichlorophenylacetic acid	JJ	2,3-Dibromopropionic acid
E	1,4-Dichlorobutane	М	Benzo(e)Pyrene	U	Tripentyltin		СС	2,5-Dibromotoluene	КК	Pentachloroethane
F	1,4-Difluorobenzene (DFB)	N	Terphenyl-D14	V	Tri-n-propyltin		DD	n-Nonatriacontane	LL	1,1,1,2-Tetrachloroethane
	Octacosane	0	Decachlorobiphenyl (DCB)	W	Tributyl Phosphate		EE	1,2-Dibromopropane	MM.	5-alpha Androstane
н	Ortho-Terphenyl	Р	1-methyinaphthalene	Х	Triphenyl Phosphate		FF	1,2-Dinitrobenzene	NN.	2-Fluorobiphenyl

# Laboratory Data Consultants, Inc. Data Validation Report

Proiect/Site	Name:	Aloha Café

# LDC Report Date: February 27, 2023

Parameters:Total Petroleum Hydrocarbons as Extractables

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210033

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-N10-442	210033-01	Soil	10/03/22
SW-N12-442	210033-02	Soil	10/03/22
SW-N14-442	210033-03	Soil	10/03/22
UST3-100422	210033-04	Water	10/04/22
SW-N10-442MS	210033-01MS	Soil	10/03/22
SW-N10-442MSD	210033-01MSD	Soil	10/03/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## V. Field Blanks

No field blanks were identified in this SDG.

## VI. Surrogates

Surrogates were added to all samples as required by the method. Surrogate recoveries (%R) were not within QC limits for sample UST3-100422. No data were qualified for samples analyzed at greater than or equal to 5X dilution.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## **IX. Field Duplicates**

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

Aloha Café Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210033

No Sample Data Qualified in this SDG

|--|

Stage 2A

Date: <u>1/22/23</u> Page: <u>1 of</u> Reviewer: <u>3/</u> 2nd Reviewer:

SDG #: <u>210033</u> Laboratory: <u>Friedman & Bruya</u>, Inc., Seattle, WA

LDC #: 55997D8

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A,A	
11.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	ŚW	#4 NQ-dil
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	Ϋ́Α	ues 1
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date		
1	SW-N10-442	210033-01	Soil	10/03/22		
2	SW-N12-442	210033-02	Soil	10/03/22		
3	SW-N14-442	210033-03	Soil	10/03/22		
<b>† 3</b> 4	UST3-100422	210033-04	Water	10/02/22		
5	SW-N10-442MS	210033-01MS	Soil	10/03/22		
6	SW-N10-442MSD	210033-01MSD	Soil	10/03/22		
7						
8						
9						
10						
11						
12						
13						
Notes:						
+ 1	02-2418 MB2					
2	02-2501					
2	12 2401					

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
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- LDC Report Date: February 23, 2023
- Parameters: Volatiles
- Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210054

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-W16-439	210054-01	Soil	10/05/22
SW-W13-439	210054-02	Soil	10/05/22
SW-W11-439	210054-03	Soil	10/05/22
SW-W08-439	210054-04	Soil	10/05/22
SW-W06-439	210054-05	Soil	10/05/22
SW-W03-439	210054-06	Soil	10/05/22
SW-W01-439	210054-07	Soil	10/05/22
SW-W16-439MS	210054-01MS	Soil	10/05/22
SW-W16-439MSD	210054-01MSD	Soil	10/05/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

#### II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

## III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### **IV. Continuing Calibration**

Continuing calibration data were not reviewed for Stage 2A validation.

#### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### VI. Field Blanks

No field blanks were identified in this SDG.

#### VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## **IX. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

## XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210054

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210054

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210054

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997E1a

SDG #: 210054

Date: 62/22/23 Page: 1 of 1 Reviewer: 64 2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area **Comments** A, A Sample receipt/Technical holding times I. 11. GC/MS Instrument performance check Ν III. Initial calibration/ICV N/N IV. Continuing calibration Ν A V. Laboratory Blanks VI. Field blanks K Δ VII. Surrogate spikes A VIII. Matrix spike/Matrix spike duplicates TCS Ά IX. Laboratory control samples Field duplicates Х. A XI. Internal standards XII. Target analyte quantitation Ν XIII. Target analyte identification Ν A XIV Overall assessment of data

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate

FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	SW-W16-439	210054-01	Soil	10/05/22
ŧ	SW-W13-439	210054-02	Soil	10/05/22
3	SW-W11-439	210054-03	Soil	10/05/22
~ 4	SW-W08-439	210054-04	Soil	10/05/22
5	SW-W06-439	210054-05	Soil	10/05/22
- 6	SW-W03-439	210054-06	Soil	10/05/22
7	SW-W01-439	210054-07	Soil	10/05/22
8	SW-W16-439MS	210054-01MS	Soil	10/05/22
9	SW-W16-439MSD	210054-01MSD	Soil	10/05/22
10				
Votes				
-	02-2322 MB			

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café	
LDC Report Date:	February 24, 2023	
Parameters:	Total Petroleum Hydrocarbons as Gasoline Stage 2A	
Validation Level:		
Laboratory:	Friedman & Bruya, Inc., Seattle, WA	

Sample Delivery Group (SDG): 210054

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W16-439	210054-01	Soil	10/05/22
SW-W13-439	210054-02	Soil	10/05/22
SW-W11-439	210054-03	Soil	10/05/22
SW-W08-439	210054-04	Soil	10/05/22
SW-W06-439	210054-05	Soil	10/05/22
SW-W03-439	210054-06	Soil	10/05/22
SW-W01-439	210054-07	Soil	10/05/22
SW-W16-439DUP	210054-01DUP	Soil	10/05/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.
## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

### XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210054

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210054

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210054

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #: <u>210054</u> Laboratory: Friedman & Bruya, Inc., Seattle, WA



METHOD: GC TPH as Gasoline (NWTPH-Gx)

LDC #: 55997E7

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area **Comments** A/A Sample receipt/Technical holding times Ι. Initial calibration/ICV N/N II. III. Continuing calibration Ν A IV. Laboratory Blanks V. Field blanks Δ VI. Surrogate spikes N A Matrix spike/Matrix spike duplicates / UD VII. LCS VIII. Laboratory control samples IX. **Field duplicates** Target analyte quantitation Ν Х. XI. Ν Target analyte identification А XII Overall assessment of data

Note:

A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

**Client ID** Lab ID Matrix Date Soil 10/05/22 SW-W16-439 210054-01 1 2 SW-W13-439 210054-02 Soil 10/05/22 3 SW-W11-439 210054-03 Soil 10/05/22 SW-W08-439 210054-04 Soil 10/05/22 4 SW-W06-439 Soil 10/05/22 5 210054-05 10/05/22 SW-W03-439 210054-06 6 Soil 7 SW-W01-439 210054-07 Soil 10/05/22 SW-W16-439DUP 210054-01DUP 8 Soil 10/05/22 9 10 11 12 13 Notes:

62-2347 MB

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site	Name:	Aloha	Café
1 1010000100	110011101	/	0010

LDC Report Date: February 27, 2023

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210054

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W16-439	210054-01	Soil	10/05/22
SW-W13-439	210054-02	Soil	10/05/22
SW-W11-439	210054-03	Soil	10/05/22
SW-W08-439	210054-04	Soil	10/05/22
SW-W06-439	210054-05	Soil	10/05/22
SW-W03-439	210054-06	Soil	10/05/22
SW-W01-439	210054-07	Soil	10/05/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were idéntified in this SDG.

### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

### IX. Field Duplicates

No field duplicates were identified in this SDG.

### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 210054

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210054

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210054

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #: 210054 Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997E8

Date: 07/22/23 Page: \_\_\_\_\_\_ of \_\_\_\_ Reviewer: \_\_\_\_\_\_ 2nd Reviewer: \_\_\_\_\_\_

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A, A	
11.	Initial calibration/ICV	N/N	
_ 111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	À	
VII.	Matrix spike/Matrix spike duplicates	2	
VIII.	Laboratory control samples	À	4CS
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XII	Overall assessment of data	A	

Note:

F

A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	SW-W16-439	210054-01	Soil	10/05/22
2	SW-W13-439	210054-02	Soil	10/05/22
3	SW-W11-439	210054-03	Soil	10/05/22
4	SW-W08-439	210054-04	Soil	10/05/22
5	SW-W06-439	210054-05	Soil	10/05/22
6	SW-W03-439	210054-06	Soil	10/05/22
7	SW-W01-439	210054-07	Soil	10/05/22
8				
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10				
11				
12				
13				
Notes:				
-	62-2417 MB			

62-2417 MB

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site name: Alona Ca
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LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory:Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210102

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W03-434	210102-01	Soil	10/07/22
SW-W99-434	210102-02	Soil	10/07/22
SW-W05-434	210102-03	Soil	10/07/22
SW-W09-434	210102-04	Soil	10/07/22
SW-W11-434	210102-05	Soil	10/07/22
SW-W14-434	210102-06	Soil	10/07/22
SW-W16-434	210102-07	Soil	10/07/22
SW-W03-434MS	210102-01MS	Soil	10/07/22
SW-W03-434MSD	210102-01MSD	Soil	10/07/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

### III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### VI. Field Blanks

No field blanks were identified in this SDG.

### VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

### IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# X. Field Duplicates

No field duplicates were identified in this SDG.

### XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

### XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210102

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210102

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210102

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Date: <u>07/22/23</u> Page: \_of \_\_) Reviewer: \_\_\_\_\_\_ 2nd Reviewer: \_\_\_\_\_\_

SDG #: <u>210102</u> Laboratory: <u>Friedman & Bruya</u>, Inc., Seattle, WA

LDC #: <u>55997F1a</u>

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area **Comments** A, ۸ Ι. Sample receipt/Technical holding times II. GC/MS Instrument performance check Ν III. Initial calibration/ICV N/N IV. Continuing calibration Ν A V. Laboratory Blanks N VI. Field blanks A VII. Surrogate spikes Å VIII. Matrix spike/Matrix spike duplicates A LCS IX. Laboratory control samples N X. Field duplicates N XI. Internal standards XII. Ν Target analyte quantitation XIII. Target analyte identification Ν A XIV Overall assessment of data

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate

FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	SW-W03-434	210102-01	Soil	10/07/22
2 ~	SW-W99-434	210102-02	Soil	10/07/22
3	SW-W05-434	210102-03	Soil	10/07/22
4	SW-W09-434	210102-04	Soil	10/07/22
+ 5	SW-W11-434	210102-05	Soil	10/07/22
6 6	SW-W14-434	210102-06	Soil	10/07/22
7	SW-W16-434	210102-07	Soil	10/07/22
8	SW-W03-434MS	210102-01MS	Soil	10/07/22
9	SW-W03-434MSD	210102-01MSD	Soil	10/07/22
10				
votes:				
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A

Laboratory:Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210102

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W03-434	210102-01	Soil	10/07/22
SW-W99-434	210102-02	Soil	10/07/22
SW-W05-434	210102-03	Soil	10/07/22
SW-W09-434	210102-04	Soil	10/07/22
SW-W11-434	210102-05	Soil	10/07/22
SW-W14-434	210102-06	Soil	10/07/22
SW-W16-434	210102-07	Soil	10/07/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

### IX. Field Duplicates

No field duplicates were identified in this SDG.

### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

# XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

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Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210102

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210102

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210102

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #: 210102 Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997F7

Date: <u>02/22/23</u> Page: 1 of 1 Reviewer: \_\_\_\_\_\_ 2nd Reviewer: \_\_\_\_\_\_

METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area **Comments** A,A Sample receipt/Technical holding times I. N/N II. Initial calibration/ICV Continuing calibration 111. Ν Å IV. Laboratory Blanks V. Field blanks Δ VI. Surrogate spikes N VII. Matrix spike/Matrix spike duplicates A US VIII. Laboratory control samples K IX. Field duplicates Ν Х. Target analyte quantitation XI. Target analyte identification Ν A XII Overall assessment of data

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank

.

SB=Source blank OTHER:

**Client ID** Lab ID Matrix Date SW-W03-434 210102-01 Soil 10/07/22 1 2 SW-W99-434 210102-02 Soil 10/07/22 3 SW-W05-434 210102-03 Soil 10/07/22 4 SW-W09-434 Soil 10/07/22 210102-04 5 SW-W11-434 210102-05 Soil 10/07/22 6 SW-W14-434 210102-06 Soil 10/07/22 7 SW-W16-434 210102-07 Soil 10/07/22 8 9 10 11 12 13 Notes:

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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210102

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W03-434	210102-01	Soil	10/07/22
SW-W99-434	210102-02	Soil	10/07/22
SW-W05-434	210102-03	Soil	10/07/22
SW-W09-434	210102-04	Soil	10/07/22
SW-W11-434	210102-05	Soil	10/07/22
SW-W14-434	210102-06	Soil	10/07/22
SW-W16-434	210102-07	Soil	10/07/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

### VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

# **IX. Field Duplicates**

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

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### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 210102

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210102

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210102

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #: 210102 Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997F8

Date: <u>07/27/23</u> Page: \_\_\_\_\_\_0f\_\_\_\_ Reviewer: \_\_\_\_\_\_4 2nd Reviewer: \_\_\_\_\_\_4

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
	Initial calibration/ICV	, N/N	
- 111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	LCS b
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

F

A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate				
TB = Trip blank				
EB = Equipment blank				

SB=Source blank OTHER:

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	Client ID	Lab ID	Matrix	Date			
1	SW-W03-434	210102-01	Soil	10/07/22			
2	SW-W99-434	210102-02	Soil	10/07/22			
3	SW-W05-434	210102-03	Soil	10/07/22			
4	SW-W09-434	210102-04	Soil	10/07/22			
5	SW-W11-434	210102-05	Soil	10/07/22			
6	SW-W14-434	210102-06	Soil	10/07/22			
7	SW-W16-434	210102-07	Soil	10/07/22			
8							
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12							
13							
Notes	lotes:						

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# Laboratory Data Consultants, Inc. Data Validation Report

- Project/Site Name: Aloha Café
- LDC Report Date: February 23, 2023
- Parameters: Volatiles
- Validation Level: Stage 2A
- Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210145

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
Grab-101122	210145-01	Water	10/11/22
SW-S01-446	210145-02	Soil	10/11/22
SW-S03-446	210145-03	Soil	10/11/22
SW-S06-446	210145-04	Soil	10/11/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### **II. GC/MS Instrument Performance Check**

Instrument performance check data were not reviewed for Stage 2A validation.

### III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### VI. Field Blanks

No field blanks were identified in this SDG.

#### VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VIII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

### IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

### X. Field Duplicates

No field duplicates were identified in this SDG.
## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

#### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

#### XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210145

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210145

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210145

No Sample Data Qualified in this SDG

LDC #: <u>55997G1a</u>	VALIDATION COMPLETENESS WORKSHEET
SDG #: 210145	Stage 2A
Laboratory: Friedman & Bruya,	Inc., Seattle, WA



## METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
<u> </u>	Sample receipt/Technical holding times	AIA	
	GC/MS Instrument performance check	N	
.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	2	
IX.	Laboratory control samples	A	resp
Х.	Field duplicates	N	
XI.	Internal standards	N	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV.	Overall assessment of data	A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
	Grab-101122	210145-01	Water	10/11/22
$\overline{2}$ 1	SW-S01-446	210145-02	Soil	10/11/22
31	SW-S03-446	210145-03	Soil	10/11/22
4	SW-S06-446	210145-04	Soil	10/11/22
5				
6				
7				
8				
9				
10				
Votes:				

$\Box$	02-2330 MB2			
<b>,</b>	02-2329			

# Laboratory Data Consultants, Inc. Data Validation Report

LDC Report Date:February 24, 2023Parameters:Total Petroleum Hydrocarbons as GasolineValidation Level:Stage 2ALaboratory:Friedman & Bruya, Inc., Seattle, WA	Project/Site Name:	Aloha Café
Parameters:Total Petroleum Hydrocarbons as GasolineValidation Level:Stage 2ALaboratory:Friedman & Bruya, Inc., Seattle, WA	LDC Report Date:	February 24, 2023
Validation Level:Stage 2ALaboratory:Friedman & Bruya, Inc., Seattle, WA	Parameters:	Total Petroleum Hydrocarbons as Gasoline
Laboratory: Friedman & Bruya, Inc., Seattle, WA	Validation Level:	Stage 2A
	Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210145

Sample Identification	Laboratory Sample	Matrix	Collection Date
Grab-101122	210145-01	Water	10/11/22
SW-S01-446	210145-02	Soil	10/11/22
SW-S03-446	210145-03	Soil	10/11/22
SW-S06-446	210145-04	Soil	10/11/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### **IV. Laboratory Blanks**

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

## VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

#### VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XII. Overall Assessment of Data

1

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210145

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210145

No Sample Data Qualified in this SDG

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210145

No Sample Data Qualified in this SDG

LDC #: <u>55997G7</u>	VALIDATION COMPLETENESS WORKSHEET
SDG #: 210145	Stage 2A
Laboratory: Friedman & Bruya	, Inc., Seattle, WA



## METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A,A	
11.	Initial calibration/ICV	N/N	
ш.	Continuing calibration	N	
IV.	Laboratory Blanks	A_	
V.	Field blanks	N_	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	LCS B
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	L_A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate

FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

OTHER:

	Client ID	Lab ID	Matrix	Date
1+	Grab-101122	210145-01	Water	10/11/22
2 ~	SW-S01-446	210145-02	Soil	10/11/22
3 -	SW-S03-446	210145-03	Soil	10/11/22
4-	SW-S06-446	210145-04	Soil	10/11/22
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Notes:				

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# Laboratory Data Consultants, Inc. Data Validation Report

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LDC Report Date: February 27, 2023

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210145

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
Grab-101122	210145-01	Water	10/11/22
SW-S01-446	210145-02	Soil	10/11/22
SW-S03-446	210145-03	Soil	10/11/22
SW-S06-446	210145-04	Soil	10/11/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

#### I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### **IV. Laboratory Blanks**

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 210145

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210145

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210145

No Sample Data Qualified in this SDG

LDC #: <u>55997G8</u>	VALIDATION COMPLETENESS WORKSHEET	
SDG #: <u>210145</u>	Stage 2A	
Laboratory: Friedman & Bruya,	Inc., Seattle, WA	Re

Date: <u>07/27/21</u> Page: <u>1</u> of <u>1</u> Reviewer: <u>106</u> 2nd Reviewer: <u>106</u>

METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A,A	
11.	Initial calibration/ICV	N/N	
Ш.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	Ň	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	Ϋ́	
VIII.	Laboratory control samples	A	LCS/D
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XII	Overall assessment of data	I A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

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Ο	l	н	E	к	:

	Client ID	Lab ID	Matrix	Date
1	Grab-101122	210145-01	Water	10/11/22
2	SW-S01-446	210145-02	Soil	10/11/22
- 3	SW-S03-446	210145-03	Soil	10/11/22
 4	SW-S06-446	210145-04	Soil	10/11/22
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Notes				
F1	02-2966 MB			
-2	02-2521			

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site	Name:	Aloha	Café

LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210214

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B-N04-W09-428	210214-01	Soil	10/14/22
B-N99-W99-428	210214-02	Soil	10/14/22
B-N04-W09-428MS	210214-01MS	Soil	10/14/22
B-N04-W09-428MSD	210214-01MSD	Soil	10/14/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

## III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

No field blanks were identified in this SDG.

## VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## X. Field Duplicates

Samples B-N04-W09-428 and B-N99-W99-428 were identified as field duplicates. No results were detected in any of the samples.

## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

## XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

#### XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210214

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210214

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210214

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #: 210214 Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997H1a

Date: 02/22/23 Page: of Reviewer: 06 2nd Reviewer:

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
11.	GC/MS Instrument performance check	N	- ·
	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	'À	
IX.	Laboratory control samples	À	Les
Х.	Field duplicates	ND	D = 1/2
XI.	Internal standards	N	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	A	

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	 		Lab ID	Matrix	Date
ĩ	B-N04-W09-428			210214-01	Soil	10/14/22
2	B-N99-W99-428			210214-02	Soil	10/14/22
3	B-N04-W09-428MS			210214-01MS	Soil	10/14/22
4	B-N04-W09-428MSD			210214-01MSD	Soil	10/14/22
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210214

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B-N04-W09-428	210214-01	Soil	10/14/22
B-N99-W99-428	210214-02	Soil	10/14/22
B-N04-W09-428DUP	210214-01DUP	Soil	10/14/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

## **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## IX. Field Duplicates

Samples B-N04-W09-428 and B-N99-W99-428 were identified as field duplicates. No results were detected in any of the samples.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210214

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210214

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210214

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997H7

SDG #: 210214

## Date: <u>07/123</u> Page: <u>1</u> of <u>)</u> Reviewer: <u>14</u> 2nd Reviewer:

#### METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A, A	
Ш.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates / レカ	N/A	
VIII.	Laboratory control samples	` A'	les
IX.	Field duplicates	ND	D = 1/2
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XII	Overall assessment of data	L A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date		
1 -	в-N04-W09-428	210214-01	Soil	10/14/22		
2 -	в-N99-W99-428	210214-02	Soil	10/14/22		
3	B-N04-W09-428DUP	210214-01DUP	Soil	10/14/22		
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Notes:						
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210214

Sample Identification	Laboratory Sample Identification	Laboratory Sample Identification Matrix	
B-N04-W09-428	210214-01	Soil	10/14/22
B-N99-W99-428	210214-02	Soil	10/14/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## V. Field Blanks

No field blanks were identified in this SDG.

# VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

# VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# **IX. Field Duplicates**

Samples B-N04-W09-428 and B-N99-W99-428 were identified as field duplicates. No results were detected in any of the samples.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.
Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 210214

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210214

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210214

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Date: Page: Reviewer: 2nd Reviewer:

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997H8

SDG #: 210214

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
١١.	Initial calibration/ICV	N/N	
	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	Ň	
VIII.	Laboratory control samples	A	les
IX.	Field duplicates	ND	D = 1/2
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XII	Overall assessment of data		

Note:

A = Acceptable

ND = No compounds detected R = Rinsate FB = Field blank

D =	Duplicate
TB :	= Trip blank
EB :	= Equipment blank

SB=Source blank OTHER:

N = Not provided/applicable SW = See worksheet

Date
10/14/22
10/14/22

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Aloha Café

LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210237

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-N02-437	210237-01	Soil	10/17/22
SW-N04-437	210237-02	Soil	10/17/22
SW-N07-437	210237-03	Soil	10/17/22
SW-N10-437	210237-04	Soil	10/17/22
SW-N12-437	210237-05	Soil	10/17/22

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#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

## III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

No field blanks were identified in this SDG.

## VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VIII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

## XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

#### XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210237

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210237

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210237

No Sample Data Qualified in this SDG

Stage 2A

LDC #:<u>55997l1a</u>

SDG #: 210237

#### Date: <u>07/27/23</u> Page: <u>1</u> of <u>1</u> Reviewer: <u>274</u> 2nd Reviewer: <u>1</u>

Laboratory: Friedman & Bruya, Inc., Seattle, WA

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A / A	
<u> </u>	GC/MS Instrument performance check	N	
.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	A	LCS
Х.	Field duplicates	N	
XI.	Internal standards	N	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	A	

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	SW-N02-437	210237-01	Soil	10/17/22
2	SW-N04-437	210237-02	Soil	10/17/22
<u>3</u> †	SW-N07-437	210237-03	Soil	10/17/22
4	SW-N10-437	210237-04	Soil	10/17/22
5	SW-N12-437	210237-05	Soil	10/17/22
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210237

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-N02-437	210237-01	Soil	10/17/22
SW-N04-437	210237-02	Soil	10/17/22
SW-N07-437	210237-03	Soil	10/17/22
SW-N10-437	210237-04	Soil	10/17/22
SW-N12-437	210237-05	Soil	10/17/22
SW-N02-437DUP	210237-01DUP	Soil	10/17/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## V. Field Blanks

No field blanks were identified in this SDG.

## VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

## **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

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Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210237

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210237

No Sample Data Qualified in this SDG

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210237

No Sample Data Qualified in this SDG

VALIDATION	COMPL	<b>ETENESS</b>	WORKSHEET
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Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 5599717

SDG #: 210237

Date: 42 Page: 1 Reviewer: 2nd Reviewer:

#### **METHOD:** GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A, A	
١١.	Initial calibration/ICV	N/N	
NI.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	Â	
VII.	Matrix spike/Matrix spike duplicates	N/A	
VIII.	Laboratory control samples	Â	LCS
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	Ă	

A = Acceptable

Note:

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

N = Not provided/applicable SW = See worksheet

	Client ID	Lab ID	Matrix	Date
1	SW-N02-437	210237-01	Soil	10/17/22
2	SW-N04-437	210237-02	Soil	10/17/22
3	SW-N07-437	210237-03	Soil	10/17/22
4	SW-N10-437	210237-04	Soil	10/17/22
ے 5	SW-N12-437	210237-05	Soil	10/17/22
6	SW-N02-437DUP	210237-01DUP	Soil	10/17/22
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210237

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-N02-437	210237-01	Soil	10/17/22
SW-N04-437	210237-02	Soil	10/17/22
SW-N07-437	210237-03	Soil	10/17/22
SW-N10-437	210237-04	Soil	10/17/22
SW-N12-437	210237-05	Soil	10/17/22

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#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### **III.** Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

## VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 210237

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210237

No Sample Data Qualified in this SDG

Aloha Café Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210237

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 5599718

SDG #: 210237

## Date: Page: Reviewer 2nd Reviewer

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
1.	Sample receipt/Technical holding times	A, A	
П.	Initial calibration/ICV	N/N	
Ш.	Continuing calibration	N	
IV.	Laboratory Blanks	Á	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	Â	Les
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

A = Acceptable

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

N = Not provided/applicable SW = See worksheet

	Client ID	Lab ID	Matrix	Date
1	SW-N02-437	210237-01	Soil	10/17/22
2	SW-N04-437	210237-02	Soil	10/17/22
3-	SW-N07-437	210237-03	Soil	10/17/22
4-	SW-N10-437	210237-04	Soil	10/17/22
5	SW-N12-437	210237-05	Soil	10/17/22
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# Laboratory Data Consultants, Inc. Data Validation Report

	Project/Site Name:	Aloha Café
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LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210253

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W06-429	210253-01	Soil	10/18/22
SW-W09-429	210253-02	Soil	10/18/22
SW-W11-429	210253-03	Soil	10/18/22
SW-W14-429	210253-04	Soil	10/18/22
Trip Blank	210253-05	Water	10/18/22
SW-W06-429MS	210253-01MS	Soil	10/18/22
SW-W06-429MSD	210253-01MSD	Soil	10/18/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## **II. GC/MS Instrument Performance Check**

Instrument performance check data were not reviewed for Stage 2A validation.

## III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

Sample Trip Blank was identified as a trip blank. No contaminants were found.

## VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# X. Field Duplicates

No field duplicates were identified in this SDG.

# XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

## XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210253

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210253

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210253

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Date: <u>02/22/29</u> Page: <u>1</u> of <u>1</u> Reviewer: <u>Wu</u> 2nd Reviewer:

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997J1a

SDG #: 210253

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A,A	
١١.	GC/MS Instrument performance check	N	
111.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	ND	TB = 4
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	Á	
IX.	Laboratory control samples	Á	US
Х.	Field duplicates	N	
XI.	Internal standards	N	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
xiv	Overall assessment of data		

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date		
+ 1	SW-W06-429	210253-01	Soil	10/18/22		
† 2	SW-W09-429	210253-02	Soil	10/18/22		
13	SW-W11-429	210253-03	Soil	10/18/22		
<u> </u>	SW-W14-429	210253-04	Soil	10/18/22		
5	Trip Blank	210253-05	Water	10/18/22		
6	SW-W06-429MS	210253-01MS	Soil	10/18/22		
7	SW-W06-429MSD	210253-01MSD	Soil	10/18/22		
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site	Name:	Aloha	Café

LDC Report Date: February 24, 2023

Parameters:Total Petroleum Hydrocarbons as Gasoline

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210253

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W06-429	210253-01	Soil	10/18/22
SW-W09-429	210253-02	Soil	10/18/22
SW-W11-429	210253-03	Soil	10/18/22
SW-W14-429	210253-04	Soil	10/18/22
Trip Blank	210253-05	Water	10/18/22
SW-W11-429DUP	210253-03DUP	Soil	10/18/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

#### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### **IV. Laboratory Blanks**

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

Sample Trip Blank was identified as a trip blank. No contaminants were found.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

#### **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210253

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210253

No Sample Data Qualified in this SDG

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210253

No Sample Data Qualified in this SDG
LDC #: <u>55997J7</u>	VALIDATION COMPLETENESS WORKSHEET	Date: 02/22/2
SDG #: 210253	Stage 2A	Page: <u>lof</u> )
Laboratory: Friedman & Bruya	, Inc., Seattle, WA	Reviewer:
		2nd Reviewer:

#### METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
Г.   І.	Sample receipt/Technical holding times	AIA	
11.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	WD	TB = 5
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates $/L_D$	N/A	
VIII.	Laboratory control samples	Â	Les
IX.	Field duplicates	Ň	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

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	Client ID	Lab ID	Matrix	Date
1	SW-W06-429	210253-01	Soil	10/18/22
2	SW-W09-429	210253-02	Soil	10/18/22
3	SW-W11-429	210253-03	Soil	10/18/22
4	SW-W14-429	210253-04	Soil	10/18/22
5	Trip Blank	210253-05	Water	10/18/22
6	SW-W11-429DUP	210253-03DUP	Soil	10/18/22
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# Laboratory Data Consultants, Inc. Data Validation Report

Proiect/Site	Name:	Aloha	Café
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LDC Report Date: February 27, 2023

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210253

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-W06-429	210253-01	Soil	10/18/22
SW-W09-429	210253-02	Soil	10/18/22
SW-W11-429	210253-03	Soil	10/18/22
SW-W14-429	210253-04	Soil	10/18/22
SW-W06-429MS	210253-01MS	Soil	10/18/22
SW-W06-429MSD	210253-01MSD	Soil	10/18/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## **III. Continuing Calibration**

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## V. Field Blanks

No field blanks were identified in this SDG.

## VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## **IX. Field Duplicates**

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 210253

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210253

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210253

No Sample Data Qualified in this SDG

LDC #:_	55997J8	VALIDATION COMPLETENESS WORKSHEET
SDG #:_	210253	Stage 2A

Stage 2A

Date:02 Page: Reviewer: 2nd Reviewer:

Laboratory: Friedman & Bruya, Inc., Seattle, WA

#### **METHOD:** GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A, A	
11.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	Á	
VIII.	Laboratory control samples	A	les
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected R = Rinsate

FB = Field blank

D = Duplicate TB = Trip blank SB=Source blank

OTHER:

EB = Equipment blank

Date **Client ID** Lab ID Matrix 210253-01 Soil 10/18/22 SW-W06-429 1 SW-W09-429 210253-02 Soil 10/18/22 2 Soil 10/18/22 3 SW-W11-429 210253-03 210253-04 Soil 10/18/22 SW-W14-429 4 -01 MS MC 1 5 ł -01 MSD 1 MSD 6 7 8 9 10 11 12 13 Notes:

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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site	Name:	Aloha	Café

LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210272

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W04-429	210272-01	Soil	10/19/22
SW-N03-429	210272-02	Soil	10/19/22
SW-N05-429	210272-03	Soil	10/19/22
SVV-N08-429	210272-04	Soil	10/19/22
SVV-N10-429	210272-05	Soil	10/19/22
Trip Blank	210272-06	Water	10/19/22
SW-W04-429MS	210272-01MS	Soil	10/19/22
SW-W04-429MSD	210272-01MSD	Soil	10/19/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

## III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

Sample Trip Blank was identified as a trip blank. No contaminants were found.

## VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

## XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## **XIV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210272

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210272

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210272

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997K1a

SDG #: 210272

## METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A.A	
11.	GC/MS Instrument performance check	N	
111.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	ND	TB = 6
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	Á	
IX.	Laboratory control samples	'A	Les
Х.	Field duplicates	Ň	
XI.	Internal standards	Ň	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	A	

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate

FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	SW-W04-429	210272-01	Soil	10/19/22
2	SW-N03-429	210272-02	Soil	10/19/22
3	SW-N05-429	210272-03	Soil	10/19/22
4	SW-N08-429	210272-04	Soil	10/19/22
5	SW-N10-429	210272-05	Soil	10/19/22
) 6	Trip Blank	210272-06	Water	10/19/22
7	SW-W04-429MS	210272-01MS	Soil	10/19/22
8	SW-W04-429MSD	210272-01MSD	Soil	10/19/22
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Notes		·····		

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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210272

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-W04-429	210272-01	Soil	10/19/22
SW-N03-429	210272-02	Soil	10/19/22
SW-N05-429	210272-03	Soil	10/19/22
SW-N08-429	210272-04	Soil	10/19/22
SW-N10-429	210272-05	Soil	10/19/22
Trip Blank	210272-06	Water	10/19/22
SW-W04-429DUP	210272-01DUP	Soil	10/19/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

,

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## V. Field Blanks

Sample Trip Blank was identified as a trip blank. No contaminants were found.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

#### **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210272

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210272

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210272

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #:<u>210272</u> Laboratory: <u>Friedman & Bruya</u>, Inc., Seattle, WA

LDC #: 55997K7

Date: 02/22/23 Page: \_\_\_\_\_of\_\_\_ Reviewer: \_\_\_\_\_\_ 2nd Reviewer: \_\_\_\_\_\_

#### METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
11.	Initial calibration/ICV	N/N	
	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	NO	TB = 6
<u>VI.</u>	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates $/\nu$ D	N/A	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	N	
<u> </u>	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	L A	

Note: /

A = Acceptable N = Not provided/applicable

SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

**Client ID** Lab ID Matrix Date ----1 SW-W04-429 Soil 210272-01 10/19/22 ĩ SW-N03-429 210272-02 Soil 10/19/22 3 SW-N05-429 210272-03 Soil 10/19/22 4 SW-N08-429 210272-04 Soil 10/19/22 5 SW-N10-429 210272-05 Soil 10/19/22 16 Trip Blank 210272-06 Water 10/19/22 7 SW-W04-429DUP 210272-01DUP Soil 10/19/22 8 9 10 11 12 13 Notes:

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210272

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W04-429	210272-01	Soil	10/19/22
SW-N03-429	210272-02	Soil	10/19/22
SW-N05-429	210272-03	Soil	10/19/22
SW-N08-429	210272-04	Soil	10/19/22
SW-N10-429	210272-05	Soil	10/19/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

#### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 210272

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210272

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210272

No Sample Data Qualified in this SDG

LDC #: <u>55997K8</u>	VALIDATION COMPLETENESS WORKSHEET	Date: 02/22/23
SDG #: 210272	Stage 2A	Page:of/_
Laboratory: Friedman & Bruya,	Inc., Seattle, WA	Reviewer:
		2nd Reviewer:

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
<u> </u>	Sample receipt/Technical holding times	A/A	
11.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	Á	
VII.	Matrix spike/Matrix spike duplicates	Å	
VIII.	Laboratory control samples	Â	LCS
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XII	Overall assessment of data	A	

Note:

T

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank

Т

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	SW-W04-429	210272-01	Soil	10/19/22
2	SW-N03-429	210272-02	Soil	10/19/22
3	SW-N05-429	210272-03	Soil	10/19/22
4	SW-N08-429	210272-04	Soil	10/19/22
5	SW-N10-429	210272-05	Soil	10/19/22
6				1
7				
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11	· · · · · · · · · · · · · · · · · · ·			
12				
13				
Notes				
-	02-2547 MB			

# Laboratory Data Consultants, Inc. Data Validation Report

3

LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210320

	Laboratory Sample	· · · · · · · · · · · · · · · · · · ·	Collection
Sample Identification	Identification	Matrix	Date
B-N04-W04-427	210320-01	Soil	10/21/22
B-N04-W06-427	210320-02	Soil	10/21/22
B-N04-W11-427	210320-03	Soil	10/21/22
B-N04-W14-429	210320-04	Soil	10/21/22
B-N04-W16-429	210320-05	Soil	10/21/22
B-N07-W16-429	210320-06	Soil	10/21/22
B-N99-W99-429	210320-07	Soil	10/21/22
B-N10-W16-429	210320-08	Soil	10/21/22
B-N07-W14-429	210320-09	Soil	10/21/22
SW-W09-425	210320-10	Soil	10/21/22
SW-W05-425	210320-11	Soil	10/21/22
SW-W06-425	210320-12	Soil	10/21/22
SW-W12-425	210320-13	Soil	10/21/22
SW-W14-425	210320-14	Soil	10/21/22
Trip Blank 102122	210320-15	Water	10/21/22
B-N04-W04-427MS	210320-01MS	Soil	10/21/22
B-N04-W04-427MSD	210320-01MSD	Soil	10/21/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

## III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## VI. Field Blanks

Sample Trip Blank 102122 was identified as a trip blank. No contaminants were found.

## VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## X. Field Duplicates

Samples B-N99-W99-429 and B-N10-W16-429 were identified as field duplicates. No results were detected in any of the samples.

## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

## XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210320

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210320

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210320

No Sample Data Qualified in this SDG

Stage 2A

Date: 07/27/29 Page: of 7 Reviewer: 06 2nd Reviewer:

SDG #: 210320 Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: <u>55997L1a</u>

## METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
<u> </u>	Sample receipt/Technical holding times	A / A	
١١.	GC/MS Instrument performance check	N	
- 111.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	₹₽	TB = 15
VII\.	Surrogate spikes	Á	
VIII.	Matrix spike/Matrix spike duplicates	Á	
IX.	Laboratory control samples	Ă	LCS/D
Х.	Field duplicates	ND	D = 7/8
XI.	Internal standards	N	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	B-N04-W04-427	210320-01	Soil	10/21/22
2	B-N04-W06-427	210320-02	Soil	10/21/22
3	B-N04-W11-427	210320-03	Soil	10/21/22
4	B-N04-W14-429	210320-04	Soil	10/21/22
5	B-N04-W16-429	210320-05	Soil	10/21/22
6	B-N07-W16-429	210320-06	Soil	10/21/22
7	B-N99-W99-429	210320-07	Soil	10/21/22
8	B-N10-W16-429	210320-08	Soil	10/21/22
9	B-N07-W14-429	210320-09	Soil	10/21/22
10	SW-W09-425	210320-10	Soil	10/21/22
11	SW-W05-425	210320-11	Soil	10/21/22
12	SW-W06-425	210320-12	Soil	10/21/22
13	SW-W12-425	210320-13	Soil	10/21/22
14	SW-W14-425	210320-14	Soil	10/21/22
15	Trip Blank 102122	210320-15	Water	10/21/22
LDC #: 55997L1a	VALIDATION COMPLETENESS WORKSHEET			
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	- · · · · · · · · · · · · · · · · · · ·			

Stage 2A

SDG #: 210320 Laboratory: Friedman & Bruya, Inc., Seattle, WA Date: <u>62/hz/2</u>9 Page: <u></u>Pof <u></u> Reviewer: <u></u> 2nd Reviewer: <u></u>

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

	Client ID			Lab ID	Ma	atrix	Date
16	B-N04-W04-427MS			210320-01MS	So	il	10/21/22
17	B-N04-W04-427MSD			210320-01MSD	So	il	10/21/22
18							
19							
20							
Notes	:						
1	02 - 2493 MB	·····					
- 2	02-2494						

## Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210320

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
B-N04-W04-427	210320-01	Soil	10/21/22
B-N04-W06-427	210320-02	Soil	10/21/22
B-N04-W11-427	210320-03	Soil	10/21/22
B-N04-W14-429	210320-04	Soil	10/21/22
B-N04-W16-429	210320-05	Soil	10/21/22
B-N07-W16-429	210320-06	Soil	10/21/22
B-N99-W99-429	210320-07	Soil	10/21/22
B-N10-W16-429	210320-08	Soil	10/21/22
B-N07-W14-429	210320-09	Soil	10/21/22
SW-W09-425	210320-10	Soil	10/21/22
SW-W05-425	210320-11	Soil	10/21/22
SW-W06-425	210320-12	Soil	10/21/22
SW-W12-425	210320-13	Soil	10/21/22
SW-W14-425	210320-14	Soil	10/21/22
Trip Blank 102122	210320-15	Water	10/21/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## V. Field Blanks

Sample Trip Blank 102122 was identified as a trip blank. No contaminants were found.

## VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## **IX. Field Duplicates**

Samples B-N99-W99-429 and B-N10-W16-429 were identified as field duplicates. No results were detected in any of the samples.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210320

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210320

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210320

No Sample Data Qualified in this SDG

LDC #: <u>55997L7</u>	VALIDATION COMPLETENESS WORKSHEET
SDG #: <u>210320</u>	Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Date: o	2/2	<u>7/22</u>
Page:	_of_	1
Reviewer:	<u></u>	2
2nd Reviewer:		

METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
11.	Initial calibration/ICV	N/N	
III.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	1XPD	TB = 15
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	Â	lez
IX.	Field duplicates	ND	D = 7/8
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	I A	

Note:

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A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

Date

10/21/22

10/21/22

10/21/22

10/21/22

10/21/22

OTHER:

Client ID Lab ID Matrix B-N04-W04-427 210320-01 Soil Soil B-N04-W06-427 210320-02 B-N04-W11-427 210320-03 Soil B-N04-W14-429 210320-04 Soil B-N04-W16-429 Soil 210320-05

6	B-N07-W16-429	210320-06	Soil	10/21/22
7	в-N99-W99-429	210320-07	Soil	10/21/22
8	B-N10-W16-429 D	210320-08	Soil	10/21/22
9	B-N07-W14-429	210320-09	Soil	10/21/22
10	SW-W09-425	210320-10	Soil	10/21/22
11	SW-W05-425	210320-11	Soil	10/21/22
12	SW-W06-425	210320-12	Soil	10/21/22
13	SW-W12-425	210320-13	Soil	10/21/22
14	SW-W14-425	210320-14	Soil	10/21/22
15	Trip Blank 102122	210320-15	Water	10/21/22
16				
17	62-2567MB			
- 2	02-2518 J (A11 ND)			

## Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210320

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
B-N04-W04-427	210320-01	Soil	10/21/22
B-N04-W06-427	210320-02	Soil	10/21/22
B-N04-W11-427	210320-03	Soil	10/21/22
B-N04-W14-429	210320-04	Soil	10/21/22
B-N04-W16-429	210320-05	Soil	10/21/22
B-N07-W16-429	210320-06	Soil	10/21/22
B-N99-W99-429	210320-07	Soil	10/21/22
B-N10-W16-429	210320-08	Soil	10/21/22
B-N07-W14-429	210320-09	Soil	10/21/22
SW-W09-425	210320-10	Soil	10/21/22
SW-W05-425	210320-11	Soil	10/21/22
SW-W06-425	210320-12	Soil	10/21/22
SW-W12-425	210320-13	Soil	10/21/22
SW-W14-425	210320-14	Soil	10/21/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## IX. Field Duplicates

Samples B-N99-W99-429 and B-N10-W16-429 were identified as field duplicates. No results were detected in any of the samples.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 210320

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210320

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210320

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No Sample Data Qualified in this SDG

LDC #: <u>55997L8</u>	VALIDATION COMPLETENESS WORKSHEET
SDG #: 210320	Stage 2A
Laboratory: Friedman & Bruya	a, Inc., Seattle, WA



#### **METHOD:** GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
<u> </u>	Sample receipt/Technical holding times	A/A	
11.	Initial calibration/ICV	N/N	
	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	Ň	
VIII.	Laboratory control samples	A	
IX.	Field duplicates	ĹŃ	b = 7/8
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XII	Overall assessment of data	LA	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected R = Rinsate

FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank

SB=Source blank

OTHER:

	Client ID	Lab ID	Matrix	Date
1	B-N04-W04-427	210320-01	Soil	10/21/22
2	B-N04-W06-427	210320-02	Soil	10/21/22
3	B-N04-W11-427	210320-03	Soil	10/21/22
4	B-N04-W14-429	210320-04	Soil	10/21/22
5	B-N04-W16-429	210320-05	Soil	10/21/22
<b>6</b>	B-N07-W16-429	210320-06	Soil	10/21/22
7	в-№99-₩99-429 Ď	210320-07	Soil	10/21/22
8	в-N10-W16-429	210320-08	Soil	10/21/22
9	B-N07-W14-429	210320-09	Soil	10/21/22
10	SW-W09-425	210320-10	Soil	10/21/22
11	SW-W05-425	210320-11	Soil	10/21/22
12	SW-W06-425	210320-12	Soil	10/21/22
13	SW-W12-425	210320-13	Soil	10/21/22
14	SW-W14-425	210320-14	Soil	10/21/22
15				
16	~			
17	02-2593 MB			
	(AII ND)			

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## Laboratory Data Consultants, Inc. Data Validation Report

- Project/Site Name: Aloha Café
- LDC Report Date: February 23, 2023
- Parameters: Volatiles
- Validation Level: Stage 2A
- Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210372

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W06-421	210372-01	Soil	10/25/22
SW-W08-421	210372-02	Soil	10/25/22
SW-W11-421	210372-03	Soil	10/25/22
SW-W06-421MS	210372-01MS	Soil	10/25/22
SW-W06-421MSD	210372-01MSD	Soil	10/25/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

#### II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

#### III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### **IV.** Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### VI. Field Blanks

No field blanks were identified in this SDG.

#### VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

#### IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

## X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

#### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210372

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210372

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210372

No Sample Data Qualified in this SDG

LDC #: <u>55997M1a</u>	_ VALIDATION COMPLETENESS WORKSHEET	Date: 07/22/23
SDG #: 210372	_ Stage 2A	Page: lof_1
Laboratory: Friedman & Bruya	, Inc., Seattle, WA	Reviewer:
		2nd Reviewer:

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
Ι.	Sample receipt/Technical holding times	A A	
11.	GC/MS Instrument performance check	N N	
111.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	Ă	LGS
Х.	Field duplicates	Ň	
XI.	Internal standards	N	
XII.	Target analyte quantitation	, N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	A	

Note:

A = AcceptableND = NN = Not provided/applicableR = RinSW = See worksheetFB = F

٧D	= No	compounds	detected
<b>२</b> =	Rins	ate	

FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank

SB=Source blank OTHER: 1

	Lab ID	Matrix	Date
W-W06-421	210372-01	Soil	10/25/22
W-W08-421	210372-02	Soil	10/25/22
W-W11-421	210372-03	Soil	10/25/22
W-W06-421MS	210372-01MS	Soil	10/25/22
W-W06-421MSD	210372-01MSD	Soil	10/25/22
	W-W06-421 W-W08-421 W-W11-421 W-W06-421MS W-W06-421MSD	W-W06-421 210372-01   W-W08-421 210372-02   W-W11-421 210372-03   W-W06-421MS 210372-01MS   W-W06-421MSD 210372-01MSD   Image: Comparison of the system 210372-01MSD   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system   Image: Comparison of the system Image: Comparison of the system	W-W06-421 210372-01 Soil   W-W08-421 210372-02 Soil   W-W11-421 210372-03 Soil   W-W06-421MS 210372-01MS Soil   W-W06-421MSD 210372-01MSD Soil   Image: Soil

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## Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210372

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W06-421	210372-01	Soil	10/25/22
SW-W08-421	210372-02	Soil	10/25/22
SW-W11-421	210372-03	Soil	10/25/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

## II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

## VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

## **IX. Field Duplicates**

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210372

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210372

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210372

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997M7

SDG #: 210372

Date: 02/2/22 Page: 1 of 1 Reviewer: 2017 2nd Reviewer:

METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A,A	
11.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	4	
V.	Field blanks	Ň	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	2	
VIII.	Laboratory control samples	A	Las b
IX.	Field duplicates	N	
Х.	Target analyte quantitation	Ň	
XI.	Target analyte identification	N	
XII	Overall assessment of data	A	

Note: A

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	SW-W06-421	210372-01	Soil	10/25/22
2	SW-W08-421	210372-02	Soil	10/25/22
3	SW-W11-421	210372-03	Soil	10/25/22
4				
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210372

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SW-W06-421	210372-01	Soil	10/25/22
SW-W08-421	210372-02	Soil	10/25/22
SW-W11-421	210372-03	Soil	10/25/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

## I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

#### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### **III.** Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

#### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### **IX. Field Duplicates**

No field duplicates were identified in this SDG.

## X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 210372

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210372

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210372

No Sample Data Qualified in this SDG

LDC #: <u>55997M8</u>	VALIDATION COMPLETENESS WORKSHEET
SDG #: 210372	Stage 2A
Laboratory: Friedman & Bruya	Inc., Seattle, WA

Date: <u>67/27/23</u> Page: <u>of</u> Reviewer: <u>26</u> 2nd Reviewer:

METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A,A	
<u> </u>	Initial calibration/ICV	N/N	
	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
<u>VI.</u>	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	'N	
VIII.	Laboratory control samples	Á	Les
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XIL	Overall assessment of data	A	

Note:

F

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

-1

OTHER:

	Client ID					Lab ID	ł	Matrix	Date
1	SW-W06-421					210372-01		Soil	10/25/22
2	SW-W08-421					210372-02		Soil	10/25/22
3	SW-W11-421					210372-03		Soil	10/25/22
4									
5									
6									
7									
8									
9							1		
10									
11									
12									
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 23, 2023
Parameters:	Volatiles
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210402

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
B-N02-W02-438	210402-01	Soil	10/26/22
B-N02-W04-424	210402-02	Soil	10/26/22
B-N02-W06-423	210402-03	Soil	10/26/22
B-N02-W09-424	210402-04	Soil	10/26/22
B-N02-W12-425	210402-05	Soil	10/26/22
B-N02-W14-429	210402-06	Soil	10/26/22
B-N02-W16-434	210402-07	Soil	10/26/22
B-N04-W02-437	210402-08	Soil	10/26/22
B-N07-W02-438	210402-09	Soil	10/26/22
B-N07-W04-431	210402-10	Soil	10/26/22
B-N07-W06-430	210402-11	Soil	10/26/22
B-N07-W09-426	210402-12	Soil	10/26/22
B-N07-W12-426	210402-13	Soil	10/26/22
B-N10-W02-438	210402-14	Soil	10/26/22
B-N10-W04-431	210402-15	Soil	10/26/22
B-N10-W06-431	210402-16	Soil	10/26/22
B-N10-W12-429	210402-17	Soil	10/26/22
B-N10-W14-429	210402-18	Soil	10/26/22
B-N12-W02-444	210402-19	Soil	10/26/22
B-N12-W12-439	210402-20	Soil	10/26/22
B-N12-W14-439	210402-21	Soil	10/26/22
B-N12-W16-439	210402-22	Soil	10/26/22
Trip Blank-102622	210402-23	Water	10/26/22
B-N12-W12-439MS	210402-20MS	Soil	10/26/22
B-N12-W12-439MSD	210402-20MSD	Soil	10/26/22

#### Introduction

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The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### **II. GC/MS Instrument Performance Check**

Instrument performance check data were not reviewed for Stage 2A validation.

### III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### VI. Field Blanks

Sample Trip Blank-102622 was identified as a trip blank. No contaminants were found.

### VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits.

Relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	RPD (Limits)	Flag	A or P
B-N12-W12-439MS/MSD (B-N12-W12-439)	Naphthalene	36 (≤20)	J (all detects)	A

## IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

### X. Field Duplicates

No field duplicates were identified in this SDG.

#### XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

#### XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to MS/MSD RPD, data were qualified as estimated in one sample.

# Aloha Café Volatiles - Data Qualification Summary - SDG 210402

Sample	Analyte	e Flag		Reason
B-N12-W12-439	Naphthalene	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD)

# Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210402

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210402

No Sample Data Qualified in this SDG

# VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: <u>55997N1a</u> SDG #: <u>210</u>402 Date: <u>67/27/29</u> Page: of <u>7</u> Reviewer: <u>7</u> 2nd Reviewer: <u>7</u>

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
Ι.	Sample receipt/Technical holding times	A.A	
- 11.	GC/MS Instrument performance check	N	
.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	, ND	TB = 23
VII\.	Surrogate spikes	Á	
VIII.	Matrix spike/Matrix spike duplicates	SW	
IX.	Laboratory control samples	Á	LCS/p
X.	Field duplicates	N	
XI.	Internal standards	4	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	A	

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	B-N02-W02-438	210402-01	Soil	10/26/22
2	B-N02-W04-424	210402-02	Soil	10/26/22
3	B-N02-W06-423	210402-03	Soil	10/26/22
4	B-N02-W09-424	210402-04	Soil	10/26/22
5	B-N02-W12-425	210402-05	Soil	10/26/22
6	B-N02-W14-429	210402-06	Soil	10/26/22
7	B-N02-W16-434	210402-07	Soil	10/26/22
8	B-N04-W02-437	210402-08	Soil	10/26/22
9	B-N07-W02-438	210402-09	Soil	10/26/22
10	B-N07-W04-431	210402-10	Soil	10/26/22
11	B-N07-W06-430	210402-11	Soil	10/26/22
12	B-N07-W09-426	210402-12	Soil	10/26/22
13	B-N07-W12-426	210402-13	Soil	10/26/22
14	B-N10-W02-438	210402-14	Soil	10/26/22
15	B-N10-W04-431	210402-15	Soil	10/26/22

LDC #: <u>55997N1a</u> SDG #: <u>210402</u>

### \_\_\_ VALIDATION COMPLETENESS WORKSHEET

Stage 2A

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Laboratory: Friedman & Bruya, Inc., Seattle, WA

Date: <u>\$2/27/23</u> Page: <u>2 of 7</u> Reviewer: <u>(17/</u> 2nd Reviewer: \_\_\_\_

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

	Client ID	Lab ID		Matrix	Date				
16	B-N10-W06-431					210402-16	,	Soil	10/26/22
17	B-N10-W12-429					210402-17	ę	Soil	10/26/22
18	B-N10-W14-429					210402-18	5	Soil	10/26/22
19	B-N12-W02-444					210402-19	Ş	Soil	10/26/22
20	B-N12-W12-439					210402-20	Ę	Soil	10/26/22
21	B-N12-W14-439					210402-21	ę	Soil	10/26/22
22	B-N12-W16-439					210402-22		Soil	10/26/22
23	Trip Blank-102622			210402-23 Water		Nater	10/26/22		
24	B-N12-W12-439MS					210402-20MS Soil		Soil	10/26/22
25	B-N12-W12-439MSD					210402-20MSD	5	Soil	10/26/22
26									
27									
28									
Notes:									
F1	02-2612 MB								
- 7	62-2613								
- 3	02-2611								

1

# TARGET COMPOUND WORKSHEET

METHOD: VOA					
A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene	A2. 1,2,4,5-Tetramethylbenzene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane	B2. Octane
C. Vinyl choride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane	C2.
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene	D2.
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11	E2
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12	F2.
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113	G2.
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114	H2.
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane	12.
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide	J2.
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane	K2.
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane	L2.
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane	M2.
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. lodomethane	N1. 2-Methylpentane	N2.
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	0000.1,1-Difluoroethane	O1. 3-Methylpentane	O2.
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane	P2.
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane	Q2.
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane	R2
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane	S2.
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane	T2.
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal	U2.
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene	V2.
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol	W2.
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene	X2.
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol	Y2.
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1. p-Diethylbenzene	Z2.

.

LDC #: 55997 NA

# VALIDATION FINDINGS WORKSHEET Matrix Spike/Matrix Spike Duplicates

Page:	of
Reviewer:	JVG

METHOD : GC/MS VOA (EPA SW 846 Method 8260 b)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

<u>Y)N N/A</u> Y N/N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	24/25	MMM	( )	( )	36 (20)	20 (Det)	J dets /A
	•		( )	. ( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( . )		
			( )	( )	( )		
			( )	( )	( )		
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210402

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
B-N02-W02-438	210402-01	Soil	10/26/22
B-N02-W04-424	210402-02	Soil	10/26/22
B-N02-W06-423	210402-03	Soil	10/26/22
B-N02-W09-424	210402-04	Soil	10/26/22
B-N02-W12-425	210402-05	Soil	10/26/22
B-N02-W14-429	210402-06	Soil	10/26/22
B-N02-W16-434	210402-07	Soil	10/26/22
B-N04-W02-437	210402-08	Soil	10/26/22
B-N07-W02-438	210402-09	Soil	10/26/22
B-N07-W04-431	210402-10	Soil	10/26/22
B-N07-W06-430	210402-11	Soil	10/26/22
B-N07-W09-426	210402-12	Soil	10/26/22
B-N07-W12-426	210402-13	Soil	10/26/22
B-N10-W02-438	210402-14	Soil	10/26/22
B-N10-W04-431	210402-15	Soil	10/26/22
B-N10-W06-431	210402-16	Soil	10/26/22
B-N10-W12-429	210402-17	Soil	10/26/22
B-N10-W14-429	210402-18	Soil	10/26/22
B-N12-W02-444	210402-19	Soil	10/26/22
B-N12-W12-439	210402-20	Soil	10/26/22
B-N12-W14-439	210402-21	Soil	10/26/22
B-N12-W16-439	210402-22	Soil	10/26/22
Trip Blank-102622	210402-23	Water	10/26/22
B-N10-W04-431DUP	210402-15DUP	Soil	10/26/22

### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

Sample Trip Blank-102622 was identified as a trip blank. No contaminants were found.

### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

# VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210402

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210402

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210402

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET	VAL		COMPLI	ETENESS	WORKSHEET
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Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997N7

SDG #: 210402

Date: <u>62/2-2/27</u> Page: <u>1</u> of <u>7</u> Reviewer: <u>4</u> 2nd Reviewer: <u>4</u>

METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
١١.	Initial calibration/ICV	N/N	
III.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	ND	TB = 23
VI.	Surrogate spikes	Ă	
VII.	Matrix spike/Matrix spike duplicates $/U$	N/A	
VIII.	/ Laboratory control samples	A	LCS
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

OTHER:

	Client ID	Lab ID	Matrix	Date
1	B-N02-W02-438	210402-01	Soil	10/26/22
2	B-N02-W04-424	210402-02	Soil	10/26/22
3	B-N02-W06-423	210402-03	Soil	10/26/22
4	B-N02-W09-424	210402-04	Soil	10/26/22
5	B-N02-W12-425	210402-05	Soil	10/26/22
6	B-N02-W14-429	210402-06	Soil	10/26/22
7	B-N02-W16-434	210402-07	Soil	10/26/22
8	B-N04-W02-437	210402-08	Soil	10/26/22
9	B-N07-W02-438	210402-09	Soil	10/26/22
10	B-N07-W04-431	210402-10	Soil	10/26/22
11	B-N07-W06-430	210402-11	Soil	10/26/22
12	B-N07-W09-426	210402-12	Soil	10/26/22
13	B-N07-W12-426	210402-13	Soil	10/26/22
14	B-N10-W02-438	210402-14	Soil	10/26/22
15	B-N10-W04-431	210402-15	Soil	10/26/22
16	B-N10-W06-431	210402-16	Soil	10/26/22
17	B-N10-W12-429	210402-17	Soil	10/26/22

1/41	COMPL	ETENESS	WORKSHEET
VAL	COMPL	EIENE33	WURNSHEEL

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997N7

SDG #: 210402

Date: <u>62/27/23</u> Page: <u>7</u>of <u>7</u> Reviewer: <u>574</u> 2nd Reviewer:\_\_\_\_

METHOD: GC TPH as Gasoline (NWTPH-Gx)

	Client ID	Lab ID	Matrix	Date
18	B-N10-W14-429	210402-18	Soil	10/26/22
19	B-N12-W02-444	210402-19	Soil	10/26/22
20	B-N12-W12-439	210402-20	Soil	10/26/22
21	B-N12-W14-439	210402-21	Soil	10/26/22
22	B-N12-W16-439	210402-22	Soil	10/26/22
231	Trip Blank-102622	210402-23	Water	10/26/22
24	B-N10-W04-431DUP	210402-15DUP	Soil	10/26/22
25				
26				
27				
Notes				
+ 1	02-2571 MB			
2	02-2568			
3	02-2572			

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210402

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
B-N02-W02-438	210402-01	Soil	10/26/22
B-N02-W04-424	210402-02	Soil	10/26/22
B-N02-W06-423	210402-03	Soil	10/26/22
B-N02-W09-424	210402-04	Soil	10/26/22
B-N02-W12-425	210402-05	Soil	10/26/22
B-N02-W14-429	210402-06	Soil	10/26/22
B-N02-W16-434	210402-07	Soil	10/26/22
B-N04-W02-437	210402-08	Soil	10/26/22
B-N07-W02-438	210402-09	Soil	10/26/22
B-N07-W04-431	210402-10	Soil	10/26/22
B-N07-W06-430	210402-11	Soil	10/26/22
B-N07-W09-426	210402-12	Soil	10/26/22
B-N07-W12-426	210402-13	Soil	10/26/22
B-N10-W02-438	210402-14	Soil	10/26/22
B-N10-W04-431	210402-15	Soil	10/26/22
B-N10-W06-431	210402-16	Soil	10/26/22
B-N10-W12-429	210402-17	Soil	10/26/22
B-N10-W14-429	210402-18	Soil	10/26/22
B-N12-W02-444	210402-19	Soil	10/26/22
B-N12-W12-439	210402-20	Soil	10/26/22
B-N12-W14-439	210402-21	Soil	10/26/22
B-N12-W16-439	210402-22	Soil	10/26/22
B-N02-W02-438MS	210402-01MS	Soil	10/26/22
B-N02-W02-438MSD	210402-01MSD	Soil	10/26/22
B-N12-W14-439MS	210402-21MS	Soil	10/26/22
B-N12-W14-439MSD	210402-21MSD	Soil	10/26/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

# VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# **IX. Field Duplicates**

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 210402

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210402

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210402

No Sample Data Qualified in this SDG

LDC #: <u>55997N8</u> VALIDA	TION COMPLETENESS WORKSHEET	Date: 02/22/22
SDG #: <u>210402</u>	Stage 2A	Page: 1 of <u></u>
Laboratory: Friedman & Bruya, Inc., Seattle	e <u>, WA</u>	Reviewer: 0V4
		2nd Reviewer:

### **METHOD:** GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
п.	Initial calibration/ICV	N/N	
ш.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	Á	
VII.	Matrix spike/Matrix spike duplicates	Å	
VIII.	Laboratory control samples	Â	US
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XIL	Overall assessment of data	Á	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

**Client ID** Lab ID Matrix Date B-N02-W02-438 210402-01 Soil 10/26/22 1 2 B-N02-W04-424 210402-02 Soil 10/26/22 3 B-N02-W06-423 210402-03 Soil 10/26/22 4 B-N02-W09-424 210402-04 Soil 10/26/22 5 B-N02-W12-425 210402-05 Soil 10/26/22 6 B-N02-W14-429 Soil 210402-06 10/26/22 7 B-N02-W16-434 210402-07 Soil 10/26/22 8 B-N04-W02-437 Soil 10/26/22 210402-08 9 B-N07-W02-438 210402-09 Soil 10/26/22 10 B-N07-W04-431 210402-10 Soil 10/26/22 11 B-N07-W06-430 210402-11 Soil 10/26/22 12 B-N07-W09-426 210402-12 Soil 10/26/22 13 B-N07-W12-426 Soil 210402-13 10/26/22 14 B-N10-W02-438 210402-14 Soil 10/26/22 15 B-N10-W04-431 210402-15 Soil 10/26/22 16 B-N10-W06-431 Soil 210402-16 10/26/22 B-N10-W12-429 210402-17 Soil 10/26/22 17

ALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

SDG #: 210402

Date: 07/23 Page: 20f 2 Reviewer: 20f 2nd Reviewer: 2

METHOD: GC TPH as Extractables (NWTPH-Dx)

	Client ID	Lab ID	Matrix	Date
18	B-N10-W14-429	210402-18	Soil	10/26/22
19	B-N12-W02-444	210402-19	Soil	10/26/22
20	B-N12-W12-439	210402-20	Soil	10/26/22
21	B-N12-W14-439	210402-21	Soil	10/26/22
22	B-N12-W16-439	210402-22	Soil	10/26/22
23	B-N02-W02-438MS	210402-01MS	Soil	10/26/22
24	B-N02-W02-438MSD	210402-01MSD	Soil	10/26/22
25	B-N12-W14-439MS	210402-21MS	Soil	10/26/22
26	B-N12-W14-439MSD	210402-21MSD	Soil	10/26/22
27				
28				
29	-			
Notes				
1	02-2658 MB			
2	02-2659 }			

# Laboratory Data Consultants, Inc. Data Validation Report

<b>FIGIECUSILE NAME.</b> Alona Cal	Project/Site	Name:	Aloha	Café
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LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210437

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
B-N14-W16-449	210437-01	Soil	10/27/22
B-N14-W14-449	210437-02	Soil	10/27/22
B-N12-W04-438	210437-03	Soil	10/27/22
B-N14-W06-449	210437-04	Soil	10/27/22
B-N14-W12-449	210437-05	Soil	10/27/22
B-N12-W06-438	210437-06	Soil	10/27/22
B-N12-W10-438	210437-07	Soil	10/27/22
B-N14-W10-449	210437-08	Soil	10/27/22
B-N10-W09-430	210437-09	Soil	10/27/22
B-N14-W16-449MS	210437-01MS	Soil	10/27/22
B-N14-W16-449MSD	210437-01MSD	Soil	10/27/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# **II. GC/MS Instrument Performance Check**

Instrument performance check data were not reviewed for Stage 2A validation.

# III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

# V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

# VI. Field Blanks

No field blanks were identified in this SDG.

# VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

# IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# X. Field Duplicates

No field duplicates were identified in this SDG.

## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 210437

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 210437

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 210437

No Sample Data Qualified in this SDG

LDC #: 5599701a V	ALIDATION COMPLETENESS WORKSHEET	Date: 62/22/
SDG #: 210437	Stage 2A	Page: <u> </u> of <u>/</u>
Laboratory: Friedman & Bruya, Inc.	, Seattle, WA	Reviewer:

23 2nd Reviewer:

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
<u> </u>	Sample receipt/Technical holding times	AIA	
١١.	GC/MS Instrument performance check	N N	
III.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	2	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	Los
Х.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
	Overall assessment of data	L A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
ţ	B-N14-W16-449	210437-01	Soil	10/27/22
2	B-N14-W14-449	210437-02	Soil	10/27/22
3	B-N12-W04-438 .	210437-03	Soil	10/27/22
4	B-N14-W06-449	210437-04	Soil	10/27/22
5	B-N14-W12-449	210437-05	Soil	10/27/22
6	B-N12-W06-438	210437-06	Soil	10/27/22
7	B-N12-W10-438	210437-07	Soil	10/27/22
8	B-N14-W10-449	210437-08	Soil	10/27/22
9	B-N10-W09-430	210437-09	Soil	10/27/22
10	B-N14-W16-449MS	210437-01MS	Soil	10/27/22
11	B-N14-W16-449MSD	210437-01MSD	Soil	10/27/22
12				
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210437

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
B-N14-W16-449	210437-01	Soil	10/27/22
B-N14-W14-449	210437-02	Soil	10/27/22
B-N12-W04-438	210437-03	Soil	10/27/22
B-N14-W06-449	210437-04	Soil	10/27/22
B-N14-W12-449	210437-05	Soil	10/27/22
B-N12-W06-438	210437-06	Soil	10/27/22
B-N12-W10-438	210437-07	Soil	10/27/22
B-N14-W10-449	210437-08	Soil	10/27/22
B-N10-W09-430	210437-09	Soil	10/27/22

### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.
### I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### **III.** Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

### IX. Field Duplicates

No field duplicates were identified in this SDG.

### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

### XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 210437

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 210437

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 210437

No Sample Data Qualified in this SDG

LDC #:	VALIDATION COMPLETENESS WORKSHEET	Date: 62/27/23
SDG #: 210437	_ Stage 2A	Page:of
Laboratory: Friedman & Bruy	a, Inc., Seattle, WA	Reviewer:
		2nd Reviewer:

#### **METHOD:** GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A,A	
11.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N/A	210402-15
VIII.	Laboratory control samples	A	les
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N.	·
XII	Overall assessment of data	A	

Note: A = Acceptable N = Not provided/applicable

SW = See worksheet

ND = No compound R = Rinsate FB = Field blank

ds detected	D = Duplicate
	TB = Trip blank
	EB = Equipment blank

SB=Source blank OTHER:

**Client ID** Lab ID Matrix Date B-N14-W16-449 210437-01 Soil 10/27/22 1 2 B-N14-W14-449 210437-02 Soil 10/27/22 10/27/22 3 B-N12-W04-438 210437-03 Soil Soil 4 B-N14-W06-449 210437-04 10/27/22 5 B-N14-W12-449 210437-05 Soil 10/27/22 B-N12-W06-438 210437-06 Soil 10/27/22 6 7 B-N12-W10-438 210437-07 Soil 10/27/22 8 B-N14-W10-449 210437-08 Soil 10/27/22 B-N10-W09-430 210437-09 Soil 10/27/22 9 10 11 12 13

Notes:

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 210437

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
B-N14-W16-449	210437-01	Soil	10/27/22
B-N14-W14-449	210437-02	Soil	10/27/22
B-N12-W04-438	210437-03	Soil	10/27/22
B-N14-W06-449	210437-04	Soil	10/27/22
B-N14-W12-449	210437-05	Soil	10/27/22
B-N12-W06-438	210437-06	Soil	10/27/22
B-N12-W10-438	210437-07	Soil	10/27/22
B-N14-W10-449	210437-08	Soil	10/27/22
B-N10-W09-430	210437-09	Soil	10/27/22

### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

### I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### **III.** Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

### **IX. Field Duplicates**

No field duplicates were identified in this SDG.

### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

### XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

1

### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 210437

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 210437

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 210437

No Sample Data Qualified in this SDG

LDC #:_	5599708	VALIDATION COMPLETENESS WORKSHEET
SDG #:	210437	Stage 2A
Laborate	ory: Friedman & Bruya	, Inc., Seattle, WA



#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
	Initial calibration/ICV	N/N	
	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	210 402-21
VIII.	Laboratory control samples	À	VCS
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XII	Overall assessment of data		

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate

FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

OTHER:

OTTLR.

**Client ID** Lab ID Matrix Date ב 1 B-N14-W16-449 210437-01 Soil 10/27/22 2-B-N14-W14-449 210437-02 Soil 10/27/22 3 210437-03 Soil 10/27/22 B-N12-W04-438 4 Soil B-N14-W06-449 210437-04 10/27/22 15 Soil 10/27/22 B-N14-W12-449 210437-05 -16 Soil B-N12-W06-438 210437-06 10/27/22 -۱<u>7</u> 210437-07 Soil 10/27/22 B-N12-W10-438 8 B-N14-W10-449 210437-08 Soil 10/27/22 9 B-N10-W09-430 210437-09 Soil 10/27/22 10 11 12 13 Notes:

-	62 - 2659 Mp			

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 23, 2023
Parameters:	Volatiles
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 212097

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
N14-W14-439	212097-02	Soil	12/06/22
N16-W14-442	212097-07	Soil	12/07/22
N15-W15-442	212097-08	Soil	12/07/22
N15-W12-442	212097-09	Soil	12/07/22
N14-W14-439MS	212097-02MS	Soil	12/06/22
N14-W14-439MSD	212097-02MSD	Soil	12/06/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

### I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### **II. GC/MS Instrument Performance Check**

Instrument performance check data were not reviewed for Stage 2A validation.

### III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### VI. Field Blanks

No field blanks were identified in this SDG.

### VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

### IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

### X. Field Duplicates

No field duplicates were identified in this SDG.

### XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

### XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### **XIV. Overall Assessment of Data**

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 212097

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 212097

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 212097

No Sample Data Qualified in this SDG

-

LDC #:_	55997P1a	VALIDATION COMPLETENESS WORKSHEET
SDG #:	212097	Stage 2A
Laborate	ory: Friedman & Bruya,	Inc., Seattle, WA



#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
<u> </u>	Sample receipt/Technical holding times	A/A	
П.	GC/MS Instrument performance check	N	
- 111.	Initial calibration/ICV	<u>N/N</u>	
. IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	Ä	
IX.	Laboratory control samples	A	Los
Х.	Field duplicates	N	
XI.	Internal standards	N	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	A	
vote:	A = Acceptable ND = N	, No compounds	detected D = Duplicate SB=Source blank

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
<b>7</b>	N14-W14-439	212097-02	Soil	12/06/22
2	N16-W14-442	212097-07	Soil	12/07/22
5	N15-W15-442	212097-08	Soil	12/07/22
4	N15-W12-442	212097-09	Soil	12/07/22
<b>5M</b>	N14-W14-439MS	212097-02MS	Soil	12/06/22
6	N14-W14-439MSD	212097-02MSD	Soil	12/06/22
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## Laboratory Data Consultants, Inc. Data Validation Report

LDC Report Date: February 24, 2023

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 212097

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
N14-W14-439	212097-02	Soil	12/06/22
N16-W14-442	212097-07	Soil	12/07/22
N15-W15-442	212097-08	Soil	12/07/22
N15-W12-442	212097-09	Soil	12/07/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

### I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

### IX. Field Duplicates

No field duplicates were identified in this SDG.

### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

### XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 212097

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 212097

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 212097

No Sample Data Qualified in this SDG

LDC #: <u>55997P7</u>	VALIDATION COMPLETENESS WORKSHEET
SDG #: <u>212097</u>	Stage 2A
Laboratory: Friedman & Bruva.	Inc., Seattle, WA



**METHOD:** GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
Ι.	Sample receipt/Technical holding times	A/A	
11.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	H	
VI.	Surrogate spikes	Â	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	Les
IX.	Field duplicates	'À	-
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	L A	

Note: A = Ac

F

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

OTHER:
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	Client ID		Lab ID	Matrix	Date
1	N14-W14-439		212097-02	Soil	12/06/22
2	N16-W14-442	-	212097-07	Soil	12/07/22
3	N15-W15-442		212097-08	Soil	12/07/22
4	N15-W12-442		212097-09	Soil	12/07/22
5					
6					
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11					
12					
13					
Notes	3:				
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 212097

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
N14-W14-439	212097-02	Soil	12/06/22
N16-W14-442	212097-07	Soil	12/07/22
N15-W15-442	212097-08	Soil	12/07/22
N15-W12-442	212097-09	Soil	12/07/22
N14-W14-439MS	212097-02MS	Soil	12/06/22
N14-W14-439MSD	212097-02MSD	Soil	12/06/22

### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

### I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

### **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

### **IX. Field Duplicates**

No field duplicates were identified in this SDG.

### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

### XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 212097

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 212097

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 212097

No Sample Data Qualified in this SDG

LDC #: <u>55997P8</u>	VALIDATION COMPLETENESS WORKSHEET
SDG #: 212097	Stage 2A

Stage 2A

Date: Page: Reviewer: 2nd Reviewer:

Laboratory: Friedman & Bruya, Inc., Seattle, WA

#### **METHOD:** GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A+A	
II.	Initial calibration/ICV	N/N	
III.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	Ń	
VI.	Surrogate spikes	Á	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	Å	rcs
IX.	Field duplicates	Å	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
ХІІ	Overall assessment of data	LA	·

Note:

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A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

OTHER:

	Client ID		Lab ID	Matrix	Date
1	N14-W14-439		212097-02	Soil	12/06/22
2	N16-W14-442		212097-07	Soil	12/07/22
3	N15-W15-442		212097-08	Soil	12/07/22
4	N15-W12-442		212097-09	Soil	12/07/22
5	N14-W14-439MS		212097-02MS	Soil	12/06/22
6	N14-W14-439MSD		212097-02MSD	Soil	12/06/22
7					
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha	Café
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LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 212149

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
PL-N07-447	212149-01	Soil	12/08/22
PL-N07-442	212149-02	Soil	12/08/22
PL-N07-447MS	212149-01MS	Soil	12/08/22
PL-N07-447MSD	212149-01MSD	Soil	12/08/22
PL-N07-442DL	212149-02DL	Soil	12/08/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

### I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

### II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

### III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

### IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### VI. Field Blanks

No field blanks were identified in this SDG.

### VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

### VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

### IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

### X. Field Duplicates

No field duplicates were identified in this SDG.
## XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

In the case where more than one result was reported for an individual sample, the least technically acceptable results were deemed not reportable as follows:

Sample	Analyte	Reason	Flag	A or P
PL-N07-442	m,p-Xylene	Results exceeded calibration range.	Not reportable	-

# Aloha Café Volatiles - Data Qualification Summary - SDG 212149

Sample	Analyte	Flag	A or P	Reason
PL-N07-442	m,p-Xylene	Not reportable	-	Overall assessment of data

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 212149

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 212149

No Sample Data Qualified in this SDG

LDC #: <u>55997Q1a</u>	VALIDATION COMPLETENESS WORKSHEET	Date:
SDG #: 212149	Stage 2A	Page: 10t
Laboratory: Friedman & Bruya	, Inc., Seattle, WA	Reviewer: <u>744</u>
		2nd Reviewer: ()

## METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
١١.	GC/MS Instrument performance check	N N	
111.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	Ń	
VII.	Surrogate spikes	Å	
VIII.	Matrix spike/Matrix spike duplicates	Ά.	
IX.	Laboratory control samples	Á	LCS
Х.	Field duplicates	Ň	
XI.	Internal standards	N	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	SW	

Note:

A = Acceptable

N = Not provided/applicable

SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER: ı

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	Client ID	Lab ID	Matrix	Date
1	PL-N07-447	212149-01	Soil	12/08/22
2	PL-N07-442	212149-02	Soil	12/08/22
3	PL-N07-447MS	212149-01MS	Soil	12/08/22
4	PL-N07-447MSD	212149-01MSD	Soil	12/08/22
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LDC #: 55997 QIA

# VALIDATION FINDINGS WORKSHEET Overall Assessment of Data

METHOD: GC/MS VOA (EPA SW 846 Method 8260))

#	Date	Sample ID	Compound	Finding	Qualifications
		2	RRR	> cal range	NR
				<u> </u>	

Comments:

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 212149

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Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
PL-N07-447	212149-01	Soil	12/08/22
PL-N07-442	212149-02	Soil	12/08/22
PL-N07-447DUP	212149-01DUP	Soil	12/08/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

## **III.** Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

## IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

## V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

# **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 212149

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 212149

No Sample Data Qualified in this SDG

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 212149

No Sample Data Qualified in this SDG

VALIDATION	COMPLI	TENESS	WORKSHEET
VALIDATION		LIENESS	WURNSHEEL

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997Q7

SDG #: 212149

Date: 02/22/23
Page:of
Reviewer:
2nd Reviewer:

METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
١١.	Initial calibration/ICV	N/N	
III.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	Á	
VII.	Matrix spike/Matrix spike duplicates / レD	N/A	
VIII.	Laboratory control samples	A	Les
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	L A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate					
TB = T	rip blank				
EB = E	Equipment blank				

SB=Source blank

OTHER:

	Client ID	Lab ID	Matrix	Date
	PL-N07-447	212149-01	Soil	12/08/22
2+	PL-N07-442	212149-02	Soil	12/08/22
3	PL-N07-447DUP	212149-01DUP	Soil	12/08/22
4				
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Notes:				

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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 212149

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date	
PL-N07-447	212149-01	Soil	12/08/22	
PL-N07-442	212149-02	Soil	12/08/22	

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# **III.** Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

# IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

# V. Field Blanks

No field blanks were identified in this SDG.

# VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

# **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 212149

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 212149

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 212149

No Sample Data Qualified in this SDG

Stage 2A

SDG #: <u>212149</u> Laboratory: <u>Friedman & Bruya</u>, Inc., Seattle, WA

LDC #: 55997Q8



#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	AA	
11.	Initial calibration/ICV	N/N	
	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	Å'	
VIII.	Laboratory control samples	Á	Les
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XII	Overall assessment of data	<u>LA</u>	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank

SB=Source blank

OTHER:

5....

	Client ID	Lab ID	Matrix	Date
1	PL-N07-447	212149-01	Soil	12/08/22
2+	PL-N07-442	212149-02	Soil	12/08/22
3				
4				
5				
6				
7				
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11				
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13				
Notes:		· · · · · · · · · · · · · · · · · · ·		
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site	Name:	Aloha	Café
_			

LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory:Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 212189

Sample Identification	Laboratory Sample	Matrix	Collection Date
SW-W01-449	212189-01	Soil	12/12/22
SW-W03-449	212189-02	Soil	12/12/22
SW-W06-449	212189-03	Soil	12/12/22
SW-W09-449	212189-04	Soil	12/12/22
SW-W11-449	212189-05	Soil	12/12/22
SW-W14-449	212189-06	Soil	12/12/22
SW-W16-449	212189-07	Soil	12/12/22
SW-S08-448	212189-08	Soil	12/12/22
SW-S10-448	212189-09	Soil	12/12/22
SW-W01-449MS	212189-01MS	Soil	12/12/22
SW-W01-449MSD	212189-01MSD	Soil	12/12/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# **II. GC/MS Instrument Performance Check**

Instrument performance check data were not reviewed for Stage 2A validation.

# III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

# V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### VI. Field Blanks

No field blanks were identified in this SDG.

# **VII. Surrogates**

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

# IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# X. Field Duplicates

No field duplicates were identified in this SDG.

# XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

#### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

## XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

## XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Volatiles - Data Qualification Summary - SDG 212189

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 212189

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 212189

No Sample Data Qualified in this SDG

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997R1a

SDG #: 212189

Date: <u>02/22/27</u> Page: ] of ] Reviewer: <u></u> 2nd Reviewer: \_\_\_\_\_

#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
<u> </u>	Sample receipt/Technical holding times	A/A	
П.	GC/MS Instrument performance check	N N	
111.	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	ΪÂ.	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	Á	
IX.	Laboratory control samples	A	Les
Х.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	Á	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
1	SW-W01-449	212189-01	Soil	12/12/22
2	SW-W03-449	212189-02	Soil	12/12/22
3	SW-W06-449	212189-03	Soil	12/12/22
4	SW-W09-449	212189-04	Soil	12/12/22
5	SW-W11-449	212189-05	Soil	12/12/22
6	SW-W14-449	212189-06	Soil	12/12/22
7	SW-W16-449	212189-07	Soil	12/12/22
8	SW-S08-448	212189-08	Soil	12/12/22
9	SW-S10-448	212189-09	Soil	12/12/22
10	SW-W01-449MS	212189-01MS	Soil	12/12/22
11	SW-W01-449MSD	212189-01MSD	Soil	12/12/22
12				
Notes	; 			
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 212189

Sample Identification	Laboratory Sample	Motrix	Collection
Sample identification		IVIAUIX	Date
SW-W01-449	212189-01	Soil	12/12/22
SW-W03-449	212189-02	Soil	12/12/22
SW-W06-449	212189-03	Soil	12/12/22
SW-W09-449	212189-04	Soil	12/12/22
SW-W11-449	212189-05	Soil	12/12/22
SW-W14-449	212189-06	Soil	12/12/22
SW-W16-449	212189-07	Soil	12/12/22
SW-S08-448	212189-08	Soil	12/12/22
SW-S10-448	212189-09	Soil	12/12/22
SW-W01-449DUP	212189-01DUP	Soil	12/12/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

# IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

# V. Field Blanks

No field blanks were identified in this SDG.

# VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

# **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 212189

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 212189

No Sample Data Qualified in this SDG

Aloha Café Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification

Summary - SDG 212189

No Sample Data Qualified in this SDG

	I.		TION	COMPL	ETENESS	WORKSHEET
vr	\∟	IDP		CONTL	EIENESS	WURNSHEEL

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997R7

SDG #: 212189



#### METHOD: GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
Ι.	Sample receipt/Technical holding times	A/A	
	Initial calibration/ICV	N/N	
Ш.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	A	
VI.	Surrogate spikes	Á	
VII.	Matrix spike/Matrix spike duplicates / LD	N/A	
VIII.	Laboratory control samples	A	405
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	Ν	
хш	Overall assessment of data	<u> </u>	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

OTHER:

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	Client ID	Lab ID	Matrix	Date
1	SW-W01-449	212189-01	Soil	12/12/22
2	SW-W03-449	212189-02	Soil	12/12/22
3	SW-W06-449	212189-03	Soil	12/12/22
4	SW-W09-449	212189-04	Soil	12/12/22
5	SW-W11-449	212189-05	Soil	12/12/22
6	SW-W14-449	212189-06	Soil	12/12/22
7	SW-W16-449	212189-07	Soil	12/12/22
8	SW-S08-448	212189-08	Soil	12/12/22
9	SW-S10-448	212189-09	Soil	12/12/22
10	SW-W01-449DUP	212189-01DUP	Soil	12/12/22
11				
12				
13				
Votes				

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# Laboratory Data Consultants, Inc. Data Validation Report

LDC Report Date: February 27, 2023

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 212189

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
SW-W01-449	212189-01	Soil	12/12/22
SW-W03-449	212189-02	Soil	12/12/22
SW-W06-449	212189-03	Soil	12/12/22
SW-W09-449	212189-04	Soil	12/12/22
SW-W11-449	212189-05	Soil	12/12/22
SW-W14-449	212189-06	Soil	12/12/22
SW-W16-449	212189-07	Soil	12/12/22
SW-S08-448	212189-08	Soil	12/12/22
SW-S10-448	212189-09	Soil	12/12/22

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

# IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

# V. Field Blanks

No field blanks were identified in this SDG.

# VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

# VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.
# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 212189

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 212189

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 212189

No Sample Data Qualified in this SDG

LDC #: <u>55997R8</u>	VALIDATION COMPLETENESS WORKSHEET
SDG #: 212189	Stage 2A
Laboratory: Friedman & Bru	uya, Inc., Seattle, WA

Date: <u>07/22/25</u> Page: <u>1</u> of <u>1</u> Reviewer: <u>044</u> 2nd Reviewer: \_\_\_\_\_

### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A,A	
١١.	Initial calibration/ICV	N/N	
	Continuing calibration	N	
IV.	Laboratory Blanks	A_	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	Ň_	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	A	

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate

FB = Field blank

ed D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

OTHER:

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Client ID Lab ID Matrix Date SW-W01-449 212189-01 Soil 12/12/22 1 2 SW-W03-449 212189-02 Soil 12/12/22 SW-W06-449 212189-03 Soil 12/12/22 3 SW-W09-449 212189-04 Soil 12/12/22 4 5 Soil 12/12/22 SW-W11-449 212189-05 SW-W14-449 212189-06 Soil 12/12/22 6 7 Soil SW-W16-449 212189-07 12/12/22 8 SW-S08-448 212189-08 Soil 12/12/22 9 SW-S10-448 212189-09 Soil 12/12/22 10 11 12 13 Notes:

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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
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LDC Report Date: February 23, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 301007

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SP-01	301007-01	Soil	01/03/23
SP-02	301007-02	Soil	01/03/23
SP-03	301007-03	Soil	01/03/23

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. GC/MS Instrument Performance Check

Instrument performance check data were not reviewed for Stage 2A validation.

# III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

# V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

# VI. Field Blanks

No field blanks were identified in this SDG.

# VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

#### VIII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

# IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# X. Field Duplicates

No field duplicates were identified in this SDG.

# XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

### XII. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

/

Aloha Café Volatiles - Data Qualification Summary - SDG 301007

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 301007

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 301007

No Sample Data Qualified in this SDG

LDC #:_	55997S1a	VALIDATION COMPLETENESS WORKSHEET
SDG #:	301007	Stage 2A
Laborat	ory: <u>Friedman &amp; Bruya,</u>	Inc., Seattle, WA



#### METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A.A	
П.	GC/MS Instrument performance check	N	
	Initial calibration/ICV	N/N	
IV.	Continuing calibration	N	
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	Á	Les
Х.	Field duplicates	N	
XI.	Internal standards	N	
XII.	Target analyte quantitation	N	
XIII.	Target analyte identification	N	
XIV	Overall assessment of data	A	

Note: A

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank OTHER:

	Client ID	Lab ID	Matrix	Date
ł	SP-01	301007-01	Soil	01/03/23
<b>†</b> 2	SP-02	301007-02	Soil	01/03/23
+ 3	SP-03	301007-03	Soil	01/03/23
4				
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1	03-0049 MB			

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 301007

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SP-01	301007-01	Soil	01/03/23
SP-02	301007-02	Soil	01/03/23
SP-03	301007-03	Soil	01/03/23

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

#### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

# XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 301007

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 301007

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 301007

No Sample Data Qualified in this SDG

VAI	IDATION	COMPL	ETENESS	WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997S7

SDG #: 301007



#### **METHOD:** GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A,A	
١١.	Initial calibration/ICV	N/N	
Ш.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	Â	res
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data	L A	

Note:

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A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank

Т

SB=Source blank

Τ

OTHER:

Т

	Client ID	Lab ID	Matrix	Date
- 1	SP-01	301007-01	Soil	01/03/23
2	SP-02	301007-02	Soil	01/03/23
3	SP-03	301007-03	Soil	01/03/23
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 301007

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
SP-01	301007-01	Soil	01/03/23
SP-02	301007-02	Soil	01/03/23
SP-03	301007-03	Soil	01/03/23

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

# IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

# V. Field Blanks

No field blanks were identified in this SDG.

# VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

# VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

# XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 301007

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 301007

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 301007

No Sample Data Qualified in this SDG

V	ALIDATION	COMPL	<b>ETENESS</b>	WORKSHEET
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Stage 2A

Date:07/27/25 Page:\_lof\_) Reviewer:\_\_\_\_\_ 2nd Reviewer:\_\_\_\_\_

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997S8

SDG #: 301007

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
11.	Initial calibration/ICV	N/N	
III.	Continuing calibration	Ν	
IV.	Laboratory Blanks	A	
V.	Field blanks	2	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	
VIII.	Laboratory control samples	A	res
IX.	Field duplicates	N	•
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data		

Note:

F

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

OTHER:

OTTE

	Client ID	Lab ID	Matrix	Date
<b>v</b> 1	SP-01	301007-01	Soil	01/03/23
2	SP-02	301007-02	Soil	01/03/23
3	SP-03	301007-03	Soil	01/03/23
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Notes				
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# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site	Name:	Aloha	Café

LDC Report Date: April 18, 2023

Parameters: Volatiles

Validation Level: Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 301030

Sample Identification	Laboratory Sample	Matrix	Collection
Sample Identification	Incluincation	IVIAUIA	Date
PL-N12-447	301030-01	Soil	01/04/23
PL-N12-442	301030-02	Soil	01/04/23
PL-N10-447	301030-03	Soil	01/04/23
PL-N10-442	301030-04	Soil	01/04/23

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260D

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

2

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# **II. GC/MS Instrument Performance Check**

Instrument performance check data were not reviewed for Stage 2A validation.

# III. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# IV. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

# V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

# VI. Field Blanks

No field blanks were identified in this SDG.

# VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VIII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

# IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
LCS (PL-N12-447 PL-N12-442)	Benzene Toluene Ethylbenzene m,p-Xylene o-Xylene	160 (71-118) 136 (66-126) 136 (64-123) 139 (78-122) 140 (77-124)	NA	-

### X. Field Duplicates

No field duplicates were identified in this SDG.

#### XI. Internal Standards

Internal standard data were not reviewed for Stage 2A validation.

# XII. Target Analyte Quantitation

All analytes reported between the MDL and the RL were qualified as follows:

Sample	Analyte	Finding	Flag	A or P
PL-N10-442	PL-N10-442 Benzene Results report MDL and the		J (all detects)	A

#### XIII. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to results reported between the MDL and the RL, data were qualified as estimated in one sample.

# Aloha Café Volatiles - Data Qualification Summary - SDG 301030

Sample	Analyte	Flag	A or P	Reason
PL-N10-442	Benzene	J (all detects)	А	Target analyte quantitation

Aloha Café Volatiles - Laboratory Blank Data Qualification Summary - SDG 301030

No Sample Data Qualified in this SDG

Aloha Café Volatiles - Field Blank Data Qualification Summary - SDG 301030

No Sample Data Qualified in this SDG

VALIDATION COMPLETENESS WORKSHEET

Stage 2A

SDG #: <u>301030</u> Laboratory: <u>Friedman & Bruya</u>, Inc., Seattle, WA

LDC #: 55997T1a

Date: 02/22/23 Page: of / Reviewer: 94 2nd Reviewer: 4

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

Validation Area Comments A / ASample receipt/Technical holding times I. II. GC/MS Instrument performance check Ν III. Initial calibration/ICV N/N IV. Continuing calibration Ν A V. Laboratory Blanks N VI. Field blanks A VII. Surrogate spikes VIII. Matrix spike/Matrix spike duplicates LS SW IX. Laboratory control samples Х. N Field duplicates N XI. Internal standards 514 XII. Target analyte quantitation XIII. Target analyte identification Ν A XIV Overall assessment of data

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate

FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank OTHER:

	Client ID	 			Lab ID	Matrix	Date
1	PL-N12-447				301030-01	Soil	01/04/23
2	PL-N12-442				301030-02	Soil	01/04/23
<del>1</del> 3	PL-N10-447				301030-03	Soil	01/04/23
4	PL-N10-442				301030-04	Soil	01/04/23
5							
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7					<u></u> /*** <u></u>		
8		 			<b>_</b>		
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Notes	:		· · · · · · · · · · · · · · · · · · ·	 			
-	03-0051 MM						
1	03-054						

LDC #: <u>56997T1a</u>

# VALIDATION FINDINGS WORKSHEET Target Analyte Quantitation and RLs

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Y N N/A Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the analyte? Were analyte quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Sample ID	Analyte	Finding	Qualifications
	4	Benzene	Result reported between the MDL and the RL	J det/A
	,			

Comments:

# Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 27, 2023
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 301030

	Laboratory Sample		Collection
Sample Identification	Identification	Matrix	Date
PL-N12-447	301030-01	Soil	01/04/23
PL-N12-442	301030-02	Soil	01/04/23
PL-N10-447	301030-03	Soil	01/04/23
PL-N10-442	301030-04	Soil	01/04/23
PL-N12-447MS	301030-01MS	Soil	01/04/23
PL-N12-447MSD	301030-01MSD	Soil	01/04/23

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Extractables by NWTPH-Dx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

# I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

# II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

# **III. Continuing Calibration**

Continuing calibration data were not reviewed for Stage 2A validation.

### **IV. Laboratory Blanks**

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

### V. Field Blanks

No field blanks were identified in this SDG.

# VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

# VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

# **VIII. Laboratory Control Samples**

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

# IX. Field Duplicates

No field duplicates were identified in this SDG.

# X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.
### XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Aloha Café Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -SDG 301030

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 301030

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 301030

No Sample Data Qualified in this SDG

#### VALIDATION COMPLETENESS WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: <u>55997T8</u> SDG #: 301030

Date: 02/22	22
Page: 1 of	ļ´
Reviewer:	
2nd Reviewer:	

#### METHOD: GC TPH as Extractables (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
Ι.	Sample receipt/Technical holding times	Ă, A	
١١.	Initial calibration/ICV	N/N	
111.	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	Ň	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	Les
IX.	Field duplicates	N	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
XII	Overall assessment of data		

Note:

6

A = Acceptable N = Not provided/applicable SW = See worksheet ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank

OTHER:

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	Client ID	Lab ID	Matrix	Date
1-	PL-N12-447	301030-01	Soil	01/04/23
2	PL-N12-442	301030-02	Soil	01/04/23
3	PL-N10-447	301030-03	Soil	01/04/23
4	PL-N10-442	301030-04	Soil	01/04/23
5	PL-N12-447MS	301030-01MS	Soil	01/04/23
6	PL-N12-447MSD	301030-01MSD	Soil	01/04/23
7				
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## Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name:	Aloha Café
LDC Report Date:	February 24, 2023
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Stage 2A
Laboratory:	Friedman & Bruya, Inc., Seattle, WA

Sample Delivery Group (SDG): 301030

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
PL-N12-447	301030-01	Soil	01/04/23
PL-N12-442	301030-02	Soil	01/04/23
PL-N10-447	301030-03	Soil	01/04/23
PL-N10-442	301030-04	Soil	01/04/23

#### Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Appendix E, CEMC Review Draft, Sampling and Analysis/Quality Assurance Project Plan (February 2019) and a modified outline of the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review (November 2020). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Total Petroleum Hydrocarbons (TPH) as Gasoline by NWTPH-Gx

All sample results were subjected to Stage 2A data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- U (Non-detected): The analyte was analyzed for but was determined to be nondetect above the reported sample quantitation limit, or the quantitation limit was raised to the concentration found in the sample due to blank contamination.
- UJ (Non-detected estimated): The analyte was not detected above the reported quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R (Rejected): The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.
- DNR (Do Not Report): Do not report from this analysis; the result for this analyte is to be reported from an alternative analysis.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

### I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

#### II. Initial Calibration and Initial Calibration Verification

Initial calibration data were not reviewed for Stage 2A validation.

#### III. Continuing Calibration

Continuing calibration data were not reviewed for Stage 2A validation.

#### IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

#### V. Field Blanks

No field blanks were identified in this SDG.

#### VI. Surrogates

Surrogates were added to all samples as required by the method with the following exceptions:

Sample	Finding	Affected Analyte	Flag	A or P
PL-N10-447	Laboratory indicated surrogate recovery fell outside of control limits due to sample matrix effects and flagged "ip".	TPH as gasoline	J (all detects)	Ρ

#### VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

#### VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

#### **IX. Field Duplicates**

No field duplicates were identified in this SDG.

#### X. Target Analyte Quantitation

Raw data were not reviewed for Stage 2A validation.

#### XI. Target Analyte Identification

Raw data were not reviewed for Stage 2A validation.

#### XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to surrogate, data were qualified as estimated in one sample.

#### Aloha Café Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 301030

Sample	Analyte	Flag	A or P	Reason
PL-N10-447	TPH as gasoline	J (all detects)	Р	Surrogates

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 301030

No Sample Data Qualified in this SDG

Aloha Café

Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 301030

No Sample Data Qualified in this SDG

		,	
VAL	<b>IDATION</b>	COMPLETENESS	WORKSHEET

Stage 2A

Laboratory: Friedman & Bruya, Inc., Seattle, WA

LDC #: 55997T7

SDG #: 301030

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#### **METHOD:** GC TPH as Gasoline (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
١.	Sample receipt/Technical holding times	A/A	
11.	Initial calibration/ICV	N/N	
	Continuing calibration	N	
IV.	Laboratory Blanks	A	
V.	Field blanks	ίλ.	
VI.	Surrogate spikes	SŴ	
VII.	Matrix spike/Matrix spike duplicates	Ň	
VIII.	Laboratory control samples	Â	LCS
IX.	Field duplicates	Ń	
Х.	Target analyte quantitation	N	
XI.	Target analyte identification	N	
	Overall assessment of data		

Note:

A = Acceptable N = Not provided/applicable SW = See worksheet

ND = No compounds detected R = Rinsate FB = Field blank

D = Duplicate TB = Trip blank EB = Equipment blank SB=Source blank

OTHER:

	Client ID	Lab ID	Matrix	Date
7	PL-N12-447	301030-01	Soil	01/04/23
2	PL-N12-442	301030-02	Soil	01/04/23
<del>1</del> 3	PL-N10-447	301030-03	Soil	01/04/23
4	PL-N10-442	301030-04	Soil	01/04/23
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#### VALIDATION FINDINDS WORKSHEET Surrogate Recovery

METHOD: \_\_GC \_\_ HPLC

Are surrogates required by the method? Yes \_\_\_\_ or No\_\_\_\_. Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A". Y N/A\_ Were surrogates spiked into all samples and blanks? Y N/A\_ Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID		Surrogate C	ompou	nd			%R (Limits)		Qualifications
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	Surrogate Compound		Surrogate Compound	Γ	Surrogate Compound			Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	1	Fluorobenzene (FBZ)	Q	Dichlorophenyl Acetic Acid (DCA	(A)	Y	Tetrachloro-m- xylene	GG	2-Nitro-m-xvlene
в	4-Bromofluorobenzene (BFB)	J	n-Triacontane	R	4-Nitrophenol		Z	2-Bromonaphthalene	НН	p-Terphenyl
С	a,a,a-Trifluorotoluene	к	Hexacosane	S	1-Chloro-3-Nitrobenzene		AA	1-Chlorooctadecane		Tripropylphosphate
D	Bromochlorobenzene	L	Bromobenzene	т	3,4-Dinitrotoluene		BB	2,4-Dichlorophenylacetic acid	JJ	2,3-Dibromopropionic acid
E	1,4-Dichlorobutane	М	Benzo(e)Pyrene	U	Tripentyltin		СС	2,5-Dibromotoluene	КК	Pentachloroethane
F	1,4-Difluorobenzene (DFB)	N	Terphenyl-D14	V	Tri-n-propyltin		DD	n-Nonatriacontane	LL	1,1,1,2-Tetrachloroethane
	Octacosane	0	Decachlorobiphenyl (DCB)	W	Tributyl Phosphate		EE	1,2-Dibromopropane	MM.	5-alpha Androstane
н	Ortho-Terphenyl	Р	1-methylnaphthalene	X	Triphenyl Phosphate		FF	1,2-Dinitrobenzene	NN.	2-Fluorobiphenyl

## **APPENDIX J**

Water Sample Results for Disposal and Tracking

	DATE	WORK ORD	DER #	TICKET #
2661 North Pearl St. #145	10-24-22	69640	2	36221
Tacoma, WA 98407	OPERATO	R	LAB	ORER
ENVIRONMENTAL 253.503.3096	Jess	se l		evitane sue alle
Customer Rivers Edge	Job Phone	253-7	97-30	38
Job Address 6808 196th St SW	C, S, 3	Lynw	oal w,	A 98306
TRAVEL TO SITE ON SITE	DUMP OUT COMPLETED	RETURN TO SHOP		TRUCK #
START STOP 700 IN 700 001/100			110	9/229
QUANTITY JOB DESCRIPT	ION		RATE	TOTAL
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1 Traitoralluctrailer gdr	iver			
1 Energy compliance +	ee			
DISPOSAL: ON SITE OFF	SITE	SUBTOTAL	L	
LOCATION: Mar Vac	A second	TAX		The second
		TOTAL		
SIGNATURE BELOW ACKNOWLEDGES PAYMENT TERMS ON REVERSE:	m	nna	1	

Payment Terms. Customer agrees to pay Contractor for services performed at the unit price set forth above. Any payment which Customer owes Contractor as detailed on the invoice shall be deemed earned as such Services are performed, with payment to be made without offset or deduction net (10) days after the date Contractor's invoice is received by Customer. All payments shall be made to Northern Environmental at 2661 North Pearl St. #145, Tacoma, Washington 98407 or to such other place as Contractor may from time to time designate in writing. Amounts due to Contractor which have not been paid shall accrue interest at the rate of one and one half percent (1.5%) per month from the date due until paid in full.

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CITY, ST	Lynwood WA 9830	8						
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ADDRESS	1510 5. Graham 5	.+	PHONE #					
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Payment Terms. Customer agrees to pay Contractor for services performed at the unit price set forth above. Any payment which Customer owes Contractor as detailed on the invoice shall be deemed earned as such Services are performed, with payment to be made without offset or deduction net (10) days after the date Contractor's invoice is received by Customer. All payments shall be made to Northern Environmental at 2661 North Pearl St. #145, Tacoma, Washington 98407 or to such other place as Contractor may from time to time designate in writing. Amounts due to Contractor which have not been paid shall accrue interest at the rate of one and one half percent (1.5%) per month from the date due until paid in full.

### **B.O.L.** # 13537

### SHIPPING PAPER

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### B.O.L. # 13536

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#### **BILL OF LADING** N° 25052 PRODUCT TRANSPORT MANIFEST MARINE VACUUM SERVICE, INC. 24 HOUR EMERGENCY PHONE NUMBER (206) 762-0240 FAX NUMBER 206-763-8084 82022 TRUCK NUMBER 002 DATE NO TO FROM DESTINATION SHIPPER NAME NAME STREET STREET CITY/STATE CITY/STATE UND QUANTITY PROPER SHIPPING NAME UN (PLACARD) NUMBER D SAM SLUDGE RECEIVER DATE SHIPPER DATE NOTE:

## APPENDIX K

# **Soil Disposal Tracking**

(available as separate file)

## **APPENDIX L**

Material Specifications and Import Clean Certification


**Client:** Aspect Consulting Project: Strickland Project Number: 08-175 Location: Select Borrow Cadman Sample Number: 8589 Description: Poorly graded GRAVEL with sand **USCS Classification: GP** Tested by: AD

Checked by: JAM

# Test Data and Results

**Test Specification:** 

Type of Test: ASTM D 1557-91 Procedure B Modified

Mold Dia: 4.00 Hammer Wt.: 10 lb. Drop: 18 in. Layers: five Blows per Layer: 25



Point No.	1	2	3
Wt. M+S	6087.5	6296.7	6185.3
Wt. M	4245.1	4245.1	4245.1
Wt. W+T	589.5	573.5	689.5
Wt. D+T	568.7	544.7	632.3
Tare	16.1	16.1	12.7
Moist.	3.8	5.4	9.2
Moist.*	2.6	3.6	5.8
Dry Den.*	134.2	142.5	134.2

**Rock Corrected Results:** Uncorrected Results:

Max. Dr	y Den.=	143.6 pcf	Opt. Moist.=	4.0%
Max. Dr	y Den.=	130.1 pcf	Opt. Moist.=	6.2%

Rock Correction Data Correction Method: ASTM D4718-15

Percentage of Oversize Material (%> 3/8 in.): 41.1 Bulk Specific Gravity of Oversize Material: 2.7

**Oversize Material Moisture Content: .89** 

\*Note: the rock correction was applied to every test point's density and moisture value.



			GI	RAIN SIZI	E DISTRI	BUTION	N TEST D	ΑΤΑ			11/2/202
lient: Aspe	ct Consulti	ng									
roject: Strie	ckland										
roject Num	ber: 08-17	5									
.ocation: Se	elect Borro	w Cadma	an								
ample Num	nber: 8589										
laterial Des	cription: I	Poorly grad	led GRAV	EL with sa	nd						
Date: 11/2/2	2										
JSCS Class	ification: (	ЗP									
ested by: A	D					Checke	d by: JAN	1			
1965 B	1091			1.59 %	Sieve T	est Data	11000				
ost #200 Wa	sh Test We	ights (gram	s): Dry Sau Tare W Minus #	mple and Ta it. = 777.30 # <b>200 from w</b>	are = 3802. vash = 3.8%	70 %					
Dry Sample and Tare (grams)	Tare (grams)	Cumul Pa Tare W (gran	lative n /eight ns)	Sieve Opening Size	Cumu Wei Reta	lative ght ined ms)	Percent Finer				
3922.60	777 30	) (	0.00	1 25'	(9.0	0.00	100.0				
5722.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			1.20	3	6.90	98.8				
				3/4'	16	1.90	94.9				
				5/8'	51	5.50	83.6				
				3/8'	129	3.60	58.9				
				#4	167	0.20	46.9				
				#1(	) 220	4.80	29.9				
				#4(	) 286	1.90	9.0				
				#100	298	5.50 2.50	5.1				
2	2.107			#200	actional (	5.50	3.9 opte	E Harris			
and the second second	CTOTAL STA	The state of a	and the second second		actional C	sompon	entes		1000	100000	- 10 A 10
Cobbles		Gravel				Sand				Fines	
	Coarse	Fine	Tota	l Coar	se Mea	lium	Fine	Total	Silt	Clay	Total
0.0	5.1	48.0	53.1	17.	0 20	).9	5.1	43.0			3.9
D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.1439	0.4857	0.7977	1.1469	2.0097	3.2316	6.0215	5 9.871	2 15.0181	16.2037	17.4533	19.1152
Fineness	Cu	Cc									
5.22	20.32	0.84									
5.22	20.32	0.04									



Client: Aspect Consulting Project: Strickland Project Number: 08-175 Location: Cal Portland Kenmore Sample Number: 8588 Description: Well graded SAND with gravel USCS Classification: SW Tested by: AD

#### Checked by: JAM

# Test Data and Results

#### **Test Specification:**

Type of Test: ASTM D 1557-91 Procedure B Modified

Mold Dia: 4.00 Hammer Wt.: 10 lb. Drop: 18 in. Layers: five Blows per Layer: 25



Point No.	1	2	3
Wt. M+S	6123.8	6255.0	6201.0
Wt. M	4245.1	4245.1	4245.1
Wt. W+T	623.8	726.0	614.6
Wt. D+T	599.6	688.6	573.5
Tare	12.7	12.8	12.8
Moist.	4.1	5.5	7.3
Moist.*	3.3	4.3	5.7
Dry Den.*	129.1	134.8	130.1

Rock Corrected Results: Uncorrected Results:

Max. Dry Den.=	134.9 pcf	Opt. Moist.=	4.5%
Max. Dry Den.=	126.1 pcf	Opt. Moist.=	5.7%

#### Rock Correction Data Correction Method: ASTM D4718-15

Percentage of Oversize Material (%> 3/8 in.): 25.8 Bulk Specific Gravity of Oversize Material: 2.7

**Oversize Material Moisture Content: .89** 

\*Note: the rock correction was applied to every test point's density and moisture value.



#### **GRAIN SIZE DISTRIBUTION TEST DATA**

Client: Aspect Consulting Project: Strickland Project Number: 08-175 Location: Cal Portland Kenmore Sample Number: 8588 Material Description: Well graded SAND with gravel Date: 11/2/22 USCS Classification: SW

# Tested by: AD

## Checked by: JAM Sieve Test Data

#### Post #200 Wash Test Weights (grams): Dry Sample and Tare = 4338.10 Tare Wt. = 595.70

	Minus #200 from wash = $4.8\%$				
Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
4526.90	595.70	0.00	1.25"	0.00	100.0
			1"	56.60	98.6
			3/4"	234.40	94.0
			5/8"	375.20	90.5
			3/8"	1015.60	74.2
			#4	1597.40	59.4
			#10	2465.40	37.3
			#40	3441.10	12.5
			#100	3684.50	6.3
			#200	3738.50	4.9
			Frac	tional Compo	nents

Cabbles		Gravel			Sai	nd			Fines	
Coubles	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	6.0	34.6	40.6	22.1	24.8	7.6	54.5			4.9

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0804	0.3134	0.5481	0.8159	1.4509	2.2247	3.2305	4.8982	11.3774	13.1640	15.5819	20.1028

Fineness Modulus	c <sub>u</sub>	Cc
4.73	15.63	1.37



Client: Aspect Consulting Project: Strickland Project Number: 08-175 Location: Elk Heights Sample Number: 8588 Description: Poorly graded SAND with silt and gravel USCS Classification: SP-SM Tested by: AD

Checked by: JAM

# **Test Data and Results**

#### **Test Specification:**

Type of Test: ASTM D 1557-91 Procedure B Modified

Mold Dia: 4.00 Hammer Wt.: 10 lb. Drop: 18 in. Layers: five Blows per Layer: 25



Point No.	1	2	3
Wt. M+S	6150.9	6381.1	6235.8
Wt. M	4245.1	4245.1	4245.1
Wt. W+T	689.5	648.1	599.5
Wt. D+T	654.2	599.7	542.6
Tare	12.9	12.6	12.7
Moist.	5.5	8.2	10.7
Moist.*	4.3	6.3	8.1
Dry Den.*	129.6	138.9	129.1

Rock Corrected Results: Uncorrected Results:

5:	Max. Dry Den.= 138.9 pc	of Opt. Moist.=	6.2%
s:	Max. Dry Den.= 130.6 pc	of Opt. Moist.=	8.1%

Rock Correction Data Correction Method: ASTM D4718-15

Percentage of Oversize Material (%> 3/8 in.): 26.7 Bulk Specific Gravity of Oversize Material: 2.7

**Oversize Material Moisture Content: .89** 

\*Note: the rock correction was applied to every test point's density and moisture value.



## **GRAIN SIZE DISTRIBUTION TEST DATA**

Client: Aspect Consulting Project: Strickland Project Number: 08-175 Location: Elk Heights Sample Number: 8588 Material Description: Poorly graded SAND with silt and gravel Date: 11/2/22 USCS Classification: SP-SM Tested by: AD

Checked by: JAM Sieve Test Data

#### Post #200 Wash Test Weights (grams): Dry Sample and Tare = 3790.60 Tare Wt. = 598.60

	<b>Minus #200 from wash =</b> 5.7%					
Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer	
3982.10	598.60	0.00	1"	0.00	100.0	
			3/4"	305.50	91.0	
			5/8"	467.50	86.2	
			3/8"	904.20	73.3	
			#4	1462.40	56.8	
			#10	2081.00	38.5	
			#40	2966.90	12.3	
			#100	3147.20	7.0	
			#200	3181.60	6.0	
			Frac	tional Compo	nents	

Cabbles	Gravel				Sa	nd		Fines		
Cobbles	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	9.0	34.2	43.2	18.3	26.2	6.3	50.8			6.0

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
	0.3227	0.5366	0.7550	1.3114	2.1526	3.4813	5.4746	12.4429	15.1512	18.3936	21.7794

Fineness Modulus	c <sub>u</sub>	Cc		
4.76	16.96	0.97		



**Client:** Aspect Consulting Project: Strickland Project Number: 08-175 Location: WSDOT Gravel Borrow Cadman Sample Number: 8589 Description: Well graded SAND with gravel **USCS Classification: SW** 

Tested by: AD

Checked by: JAM

#### Test Data and Results

#### **Test Specification:**

Type of Test: ASTM D 1557-91 Procedure B Modified

Mold Dia: 4.00 Hammer Wt.: 10 lb. Drop: 18 in. Layers: five Blows per Layer: 25



Point No.	1	2	3
Wt. M+S	6185.3	6248.9	6103.9
Wt. M	4245.1	4245.1	4245.1
Wt. W+T	752.5	859.3	623.5
Wt. D+T	725.6	814.8	575.2
Tare	12.8	16.0	12.9
Moist.	3.8	5.6	8.6
Moist.*	3.2	4.6	7.0
Dry Den.*	130.9	132.5	121.5

**Rock Corrected Results: Uncorrected Results:** 

Max. Dry Den.=	132.7 pcf	Opt. Moist.=	4.4%
Max. Dry Den.=	125.7 pcf	Opt. Moist.=	5.3%

Rock Correction Data Correction Method: ASTM D4718-15

Percentage of Oversize Material (%> 3/8 in.): 20.7 Bulk Specific Gravity of Oversize Material: 2.7

**Oversize Material Moisture Content: .89** 

\*Note: the rock correction was applied to every test point's density and moisture value.



#### GRAIN SIZE DISTRIBUTION TEST DATA

Sieve Test Data

Client: Aspect Consulting Project: Strickland Project Number: 08-175 Location: WSDOT Gravel Borrow Cadman Sample Number: 8589 Material Description: Well graded SAND with gravel Date: 11/2/22 USCS Classification: SW

Tested by: AD

Checked by: JAM

#### Post #200 Wash Test Weights (grams): Dry Sample and Tare = 3185.20 Tare Wt. = 621.20 Minus #200 from wash = 3.8%

				. 51070	
Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
3286.90	621.20	0.00	1.25"	0.00	100.0
			1"	62.70	97.6
			3/4"	189.70	92.9
			5/8"	250.90	90.6
			3/8"	552.60	79.3
			#4	1049.70	60.6
			#10	1668.00	37.4
			#40	2420.10	9.2
			#100	2538.30	4.8
			#200	2562.50	3.9
143 10 18 - 43			Frac	tional Compo	nents

Cabbles		Gravel			Sa	nd			Fines		
Coppies	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total	
0.0	7.1	32.3	39.4	23.2	28.2	5.3	56.7			3.9	

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.1720	0.4603	0.6779	0.9100	1.4697	2.2124	3.2219	4.6430	9.7925	11.9252	15.2604	21.6718

Fineness Modulus	с <sub>и</sub>	с <sub>с</sub>
4.76	10.09	1.01

# **APPENDIX M**

Geotechnical Construction Completion Letter

(available as separate file