

## LAB CHRONICLE

<b>OrderID:</b>	Q3434	<b>OrderDate:</b>	10/22/2025 1:40:00 PM
<b>Client:</b>	AECOM	<b>Project:</b>	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206
<b>Contact:</b>	Rob Forstner	<b>Location:</b>	D41,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3434-01	PR132-WC1-2025102 2	SOIL			10/22/25			10/22/25
			Pesticide-TCL	8081B		10/23/25	10/23/25	
			TPH GC	8015D		10/29/25	10/30/25	
Q3434-02	PR132-WC2-2025102 2	WATER			10/22/25			10/22/25
			Pesticide-TCL	8081B		10/28/25	10/28/25	



# SAMPLE DATA

## Report of Analysis

Client:	AECOM		Date Collected:	10/22/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206		Date Received:	10/22/25
Client Sample ID:	PR132-WC1-20251022		SDG No.:	Q3434
Lab Sample ID:	Q3434-01		Matrix:	SOIL
Analytical Method:	8015D TPH		% Solid:	57.9
Sample Wt/Vol:	30.06 g	Final Vol:	1 mL	Test:
Prep Method:	SW3541	Prep Date	10/29/25	

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
<b>TARGETS</b>									
PHC	Petroleum Hydrocarbons	39700		1	662	4880	ug/kg	10/30/25 13:21	PB170324
<b>SURROGATES</b>									
16416-32-3	TETRACOSANE-d50	10.9			37 - 130	54%	SPK: 20		

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

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# QC SUMMARY

**SOIL TPH GC SURROGATE RECOVERY**

Lab Name: Alliance

Client: AECOM

Lab Code: ACE

SDG No.: Q3434

CLIENT ID	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FF016631.D	90				0
PIBLK-FF016641.D	93				0
PB170324BL	81				0
PB170324BS	92				0
PR132-WC1-20251022	54				0
WASTEMS	56				0
WASTEMSD	56				0

**QC LIMITS**

TETRACOSANE-d50

For Water : 29-130

For Soil : 37-130

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogate Diluted Out

**SOIL TPH GC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

<b>Lab Name:</b>	<u>Alliance</u>	<b>Client:</b>	<u>AECOM</u>
<b>Lab Code:</b>	<u>ACE</u>	<b>SDG No:</b>	<u>Q3434</u>
<b>Client Sample ID :</b>	<u>WASTEMS</u>	<b>Datafile:</b>	<u>FF016638.D</u>

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS(%)
Petroleum Hydrocarbons	12967	83100	93000	76%		68-131

**SOIL TPH GC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

<b>Lab Name:</b>	<u>Alliance</u>	<b>Client:</b>	<u>AECOM</u>
<b>Lab Code:</b>	<u>ACE</u>	<b>SDG No:</b>	<u>Q3434</u>
<b>Client Sample ID :</b>	<u>WASTEMSD</u>	<b>Datafile:</b>	<u>FF016639.D</u>

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS(%)
Petroleum Hydrocarbons	12971	83100	92000	69%		68-131

**MS/MSD % Recovery RPD : 10.6**

**SOIL TPH GC LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY**

**Lab Name:** Alliance

**Client:** AECOM

**Lab Code:** ACE

**SDG No:** Q3434

**Client Sample ID :** PB170324BS

**Datafile:** FF016635.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS (%)
Petroleum Hydrocarbons	11322	0	11326	100	68-131



**4B**  
**METHOD BLANK SUMMARY**

CLIENT SAMPLE NO.

PB170324BL

Lab Name: Alliance

Contract: AEC002

Lab Code: ACE

SDG NO.: Q3434

Lab File ID: FF016634.D

Lab Sample ID: PB170324BL

Instrument ID: ff

Date Extracted: 10/30/2025

Matrix: (soil/water) Soil

Date Analyzed: 10/30/25

Level: (low/med) low

Time Analyzed: 12:22

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB170324BS	PB170324BS	FF016635.D	10/30/25
PR132-WC1-20251022	Q3434-01	FF016636.D	10/30/25
WASTEMS	Q3474-01MS	FF016638.D	10/30/25
WASTEMSD	Q3474-01MSD	FF016639.D	10/30/25

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_



# QC SAMPLE DATA

## Report of Analysis

Client:	AECOM		Date Collected:	
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206		Date Received:	
Client Sample ID:	PB170324BL		SDG No.:	Q3434
Lab Sample ID:	PB170324BL		Matrix:	SOIL
Analytical Method:	8015D TPH		% Solid:	100
Sample Wt/Vol:	30.02 g	Final Vol: 1 mL	Test:	TPH GC
Prep Method:	SW3541	Prep Date 10/29/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
<b>TARGETS</b>									
PHC	Petroleum Hydrocarbons	2830	U	1	384	2830	ug/kg	10/30/25 12:22	PB170324
<b>SURROGATES</b>									
16416-32-3	TETRACOSANE-d50	16.2			37 - 130	81%	SPK: 20		

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## Report of Analysis

Client:	AECOM		Date Collected:	10/30/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206		Date Received:	10/30/25
Client Sample ID:	PIBLK-FF016631.D		SDG No.:	Q3434
Lab Sample ID:	I.BLK-FF016631.D		Matrix:	Water
Analytical Method:	8015D TPH		% Solid:	0
Sample Wt/Vol:	1000 mL	Final Vol:	1 mL	Test:
Prep Method:	SW3510	Prep Date:	TPH GC	

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
<b>TARGETS</b>									
PHC	Petroleum Hydrocarbons	85.0	U	1	12.0	85.0	ug/L	10/30/25	FF103025
<b>SURROGATES</b>									
16416-32-3	TETRACOSANE-d50	17.9			29 - 130	90%	SPK: 20		

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Client:	AECOM		Date Collected:	10/30/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206		Date Received:	10/30/25
Client Sample ID:	PIBLK-FF016641.D		SDG No.:	Q3434
Lab Sample ID:	I.BLK-FF016641.D		Matrix:	Water
Analytical Method:	8015D TPH		% Solid:	0
Sample Wt/Vol:	1000 mL	Final Vol:	1 mL	Test:
Prep Method:	SW3510	Prep Date:	TPH GC	

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
<b>TARGETS</b>									
PHC	Petroleum Hydrocarbons	85.0	U	1	12.0	85.0	ug/L	10/30/25	FF103025
<b>SURROGATES</b>									
16416-32-3	TETRACOSANE-d50	18.6			29 - 130	93%	SPK: 20		

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## Report of Analysis

Client:	AECOM		Date Collected:	
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206		Date Received:	
Client Sample ID:	PB170324BS		SDG No.:	Q3434
Lab Sample ID:	PB170324BS		Matrix:	SOIL
Analytical Method:	8015D TPH		% Solid:	100
Sample Wt/Vol:	30.03 g	Final Vol: 1 mL	Test:	TPH GC
Prep Method:	SW3541	Prep Date 10/29/25		

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
<b>TARGETS</b>									
PHC	Petroleum Hydrocarbons	11300		1	384	2830	ug/kg	10/30/25 12:52	PB170324
<b>SURROGATES</b>									
16416-32-3	TETRACOSANE-d50	18.4			37 - 130	92%	SPK: 20		

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## Report of Analysis

Client:	AECOM		Date Collected:	10/27/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206		Date Received:	10/27/25
Client Sample ID:	WASTEMS		SDG No.:	Q3434
Lab Sample ID:	Q3474-01MS		Matrix:	SOIL
Analytical Method:	8015D TPH		% Solid:	87.2
Sample Wt/Vol:	30.07 g	Final Vol:	1 mL	Test:
Prep Method:	SW3541	Prep Date	10/29/25	TPH GC

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
<b>TARGETS</b>									
PHC	Petroleum Hydrocarbons	93000	E	1	439	3240	ug/kg	10/30/25 14:21	PB170324
<b>SURROGATES</b>									
16416-32-3	TETRACOSANE-d50	11.3			37 - 130	56%	SPK: 20		

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Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206		Date Received:	10/27/25
Client Sample ID:	WASTEMSD		SDG No.:	Q3434
Lab Sample ID:	Q3474-01MSD		Matrix:	SOIL
Analytical Method:	8015D TPH		% Solid:	87.2
Sample Wt/Vol:	30.06 g	Final Vol:	1 mL	Test:
Prep Method:	SW3541	Prep Date	10/29/25	TPH GC

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
<b>TARGETS</b>									
PHC	Petroleum Hydrocarbons	92000	E	1	439	3240	ug/kg	10/30/25 14:50	PB170324
<b>SURROGATES</b>									
16416-32-3	TETRACOSANE-d50	11.3			37 - 130	56%	SPK: 20		

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# CALIBRATION SUMMARY

**TPH GC INITIAL CALIBRATION SUMMARY**

Lab Name: Alliance Contract: AECO02  
 ProjectID: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-171  
 Lab Code: ACE SDG No.: Q3434

Calibration Sequence : FF102925		Test : TPH GC	
Concentration (PPM)	Area Count	Reference Factor	File ID
85	9472915	111446	FF016603.D
170	18165984	106859	FF016604.D
340	37023074	108891	FF016605.D
850	89698209	105527	FF016606.D
1700	169764046	99861	FF016607.D
AVG RF : 106517		% RSD : 4.074	AVG RT : 15.059

**TPH GC CONTINUING CALIBRATION SUMMARY**

**50 PPM TRPH STD**

Lab Name: Alliane Contract: AECO02  
ProjectID: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 6  
Lab Code: ACE SDG No.: Q3434  
DataFile: FF016632.D Analyst Name: YP\AJ Analyst Date: 10-30-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
850	84691500	99637	106517	6.459

**TPH GC CONTINUING CALIBRATION SUMMARY**

**50 PPM TRPH STD**

Lab Name: Alliane Contract: AECO02  
ProjectID: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 6  
Lab Code: ACE SDG No.: Q3434  
DataFile: FF016642.D Analyst Name: YP\AJ Analyst Date: 10-30-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
850	89241081	104990	106517	1.434

## Analytical Sequence

**Client:** AECOM

**SDG No.:** Q3434

**Project:** AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

**Instrument ID:** FID\_F

**GC Column:** RXI-1MS

**ID:** 0.18 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,  
AND STANDARDS IS GIVEN BELOW:

MEAN SUROGATE RT FROM INITIAL CALIBRATION <b>15.059</b>					
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	LBLK01	30 Oct 2025 10:24	FF016631.D	15.056	
50 PPM TRPH STD	50 PPM TRPH STD	30 Oct 2025 11:23	FF016632.D	15.058	
PB170324BL	PB170324BL	30 Oct 2025 12:22	FF016634.D	15.057	
PB170324BS	PB170324BS	30 Oct 2025 12:52	FF016635.D	15.056	
PR132-WC1-20251022	Q3434-01	30 Oct 2025 13:21	FF016636.D	15.006	
WASTEMS	Q3474-01MS	30 Oct 2025 14:21	FF016638.D	15.010	
WASTEMSD	Q3474-01MSD	30 Oct 2025 14:50	FF016639.D	15.012	
PIBLK02	LBLK02	30 Oct 2025 15:49	FF016641.D	15.062	
50 PPM TRPH STD	50 PPM TRPH STD	30 Oct 2025 16:19	FF016642.D	15.064	

# Column used to flag RT values with an \* values outside of QC limits

QC Limits  
(± 0.10 minutes)

Lower Limit  
14.959

Upper Limits  
15.159