

DATA PACKAGE

GC SEMI-VOLATILES

PROJECT NAME : 3313 BAY AVENUE

EARTH ENGINEERING INC.

403 Commerce Lane

West Berlin, NJ - 08091

Phone No: 856-768-1001

ORDER ID : Q2802

ATTENTION : Frank Dougherty, LSRP



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q2802

Project ID : 3313 BAY AVENUE

Client : Earth Engineering Inc.

Lab Sample Number

Q2802-01
Q2802-02
Q2802-03

Client Sample Number

S-1A
S-1B
S-2

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:35 am, Aug 15, 2025

Date: 8/13/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Earth Engineering Inc.

Project Name: 3313 BAY AVENUE

Project # N/A

Order ID # Q2802

Test Name: EPH_NF

A. Number of Samples and Date of Receipt:

3 Solid samples were received on 08/07/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: EPH_NF. This data package contains results for EPH_NF.

C. Analytical Techniques:

The analysis were performed on instrument FID_C. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis were performed on instrument FID_E. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis of EPH_NFs was based on method NJEPH and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis.

The Retention Times were met for all analysis.

The MS {Q2798-01MS} with File ID: FC069626.D recoveries met the requirements for all compounds except for [n-Nonane (C9)- 37%] due to matrix interference.

The MSD {Q2798-01MSD} with File ID: FC069627.D recoveries met the requirements for all compounds except for [n-Nonane (C9)- 39%] due to matrix interference.

The RPD were met for all analysis.

The Blank Spike met requirements for all compounds.

The Blank Spike Duplicate met requirements for all compounds.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

E. Additional Comments:

The soil samples results are based on a dry weight basis.

F. Manual Integration Comments:



284 Sheffield Street, Mountainside, NJ 07092
Phone: 908 789 8900 Fax: 908 789 8922

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:36 am, Aug 15, 2025

Signature _____

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “Results Qualifiers” are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. “10 U”. This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as “12 B”.
E	Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a “P”.
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2802

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 08/13/2025



SAMPLE DATA

Report of Analysis

Client:	Earth Engineering Inc.	Date Collected:	08/07/25
Project:	3313 BAY AVENUE	Date Received:	08/07/25
Client Sample ID:	S-1A	SDG No.:	Q2802
Lab Sample ID:	Q2802-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
08/08/25 09:37	08/08/25 18:19	PB169177

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C28-C40	Aliphatic C28-C40	37.8		1	1.30	2.21	mg/kg FE055217.D
Aliphatic C9-C28	Aliphatic C9-C28	21.7		1	1.00	4.41	mg/kg FE055217.D
Total AliphaticEPH	Total AliphaticEPH	59.5			2.31	6.62	mg/kg
Total EPH	Total EPH	59.5			2.31	6.62	mg/kg

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C40 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C40 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Earth Engineering Inc.	Date Collected:	08/07/25
Project:	3313 BAY AVENUE	Date Received:	08/07/25
Client Sample ID:	S-1A	SDG No.:	Q2802
Lab Sample ID:	Q2802-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	90.5
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE055217.D	1	08/08/25	08/08/25	PB169177

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	21.7		1.00	4.41	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	37.8		1.30	2.21	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	64.2		40 - 140	128%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	58.8		40 - 140	118%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2802-01	Acq On:	08 Aug 2025 18:19
Client Sample ID:	S-1A	Operator:	YP\AJ
Data file:	FE055217.D	Misc:	
Instrument:	FID_E	ALS Vial:	16
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.325	6.960	681935	5.839	300	ug/ml
Aliphatic C12-C16	6.961	10.413	10411154	83.138	200	ug/ml
Aliphatic C16-C21	10.414	13.792	19024184	150.502	300	ug/ml
Aliphatic C21-C28	13.793	17.464	6684090	55.467	400	ug/ml
Aliphatic C28-C40	17.465	22.492	58500305	513.218	600	ug/ml
Aliphatic EPH	3.325	22.492	95301668	808.165		ug/ml
ortho-Terphenyl (SURR)	12.088	12.088	8398930	58.81		ug/ml
1-chlorooctadecane (SURR)	13.524	13.524	6907652	64.24		ug/ml
Aliphatic C9-C28	3.325	17.464	36801363	294.946	1200	ug/ml

Report of Analysis

Client:	Earth Engineering Inc.	Date Collected:	08/07/25
Project:	3313 BAY AVENUE	Date Received:	08/07/25
Client Sample ID:	S-1B	SDG No.:	Q2802
Lab Sample ID:	Q2802-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	77.3
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
08/08/25 09:37	08/08/25 18:49	PB169177

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C28-C40	Aliphatic C28-C40	22.2		1	1.52	2.58	mg/kg FE055218.D
Aliphatic C9-C28	Aliphatic C9-C28	9.07		1	1.18	5.16	mg/kg FE055218.D
Total AliphaticEPH	Total AliphaticEPH	31.3			2.69	7.74	mg/kg
Total EPH	Total EPH	31.3			2.69	7.74	mg/kg

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C40 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C40 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Earth Engineering Inc.	Date Collected:	08/07/25
Project:	3313 BAY AVENUE	Date Received:	08/07/25
Client Sample ID:	S-1B	SDG No.:	Q2802
Lab Sample ID:	Q2802-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	77.3
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE055218.D	1	08/08/25	08/08/25	PB169177

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	9.07		1.18	5.16	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	22.2		1.52	2.58	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	61.0		40 - 140	122%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	58.5		40 - 140	117%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2802-02	Acq On:	08 Aug 2025 18:49
Client Sample ID:	S-1B	Operator:	YP\AJ
Data file:	FE055218.D	Misc:	
Instrument:	FID_E	ALS Vial:	17
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.325	6.960	432126	3.7	300	ug/ml
Aliphatic C12-C16	6.961	10.413	3149804	25.153	200	ug/ml
Aliphatic C16-C21	10.414	13.792	7120057	56.327	300	ug/ml
Aliphatic C21-C28	13.793	17.464	2425018	20.124	400	ug/ml
Aliphatic C28-C40	17.465	22.492	29332059	257.328	600	ug/ml
Aliphatic EPH	3.325	22.492	42459064	362.632		ug/ml
ortho-Terphenyl (SURR)	12.088	12.088	8351756	58.48		ug/ml
1-chlorooctadecane (SURR)	13.524	13.524	6562259	61.03		ug/ml
Aliphatic C9-C28	3.325	17.464	13127005	105.304	1200	ug/ml

Report of Analysis

Client:	Earth Engineering Inc.	Date Collected:	08/07/25
Project:	3313 BAY AVENUE	Date Received:	08/07/25
Client Sample ID:	S-2	SDG No.:	Q2802
Lab Sample ID:	Q2802-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.3
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
08/08/25 09:37	08/08/25 19:20	PB169177

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C28-C40	Aliphatic C28-C40	19.8		1	1.38	2.34	mg/kg	FE055219.D
Aliphatic C9-C28	Aliphatic C9-C28	2.79	J	1	1.06	4.68	mg/kg	FE055219.D
Total AliphaticEPH	Total AliphaticEPH	22.6			2.44	7.02	mg/kg	
Total EPH	Total EPH	22.6			2.44	7.02	mg/kg	

* As samples are not fractionated, all aliphatic and aromatic carbon compounds in the C9-C40 carbon range are calculated against the aliphatic calibration curve, and reported as Aliphatic EPH. Therefore, the aliphatic C9-C40 concentration for the sample is reported as the Total EPH.

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Earth Engineering Inc.	Date Collected:	08/07/25
Project:	3313 BAY AVENUE	Date Received:	08/07/25
Client Sample ID:	S-2	SDG No.:	Q2802
Lab Sample ID:	Q2802-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	85.3
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH_NF
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE055219.D	1	08/08/25	08/08/25	PB169177

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C28	Aliphatic C9-C28	2.79	J	1.06	4.68	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	19.8		1.38	2.34	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	50.9		40 - 140	102%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	51.6		40 - 140	103%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	Q2802-03	Acq On:	08 Aug 2025 19:20
Client Sample ID:	S-2	Operator:	YP\AJ
Data file:	FE055219.D	Misc:	
Instrument:	FID_E	ALS Vial:	18
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.325	6.960	531851	4.554	300	ug/ml
Aliphatic C12-C16	6.961	10.413	1219209	9.736	200	ug/ml
Aliphatic C16-C21	10.414	13.792	978011	7.737	300	ug/ml
Aliphatic C21-C28	13.793	17.464	1647398	13.671	400	ug/ml
Aliphatic C28-C40	17.465	22.492	28936902	253.861	600	ug/ml
Aliphatic EPH	3.325	22.492	33313371	289.559		ug/ml
ortho-Terphenyl (SURR)	12.088	12.088	7365629	51.58		ug/ml
1-chlorooctadecane (SURR)	13.523	13.523	5467468	50.85		ug/ml
Aliphatic C9-C28	3.325	17.464	4376469	35.698	1200	ug/ml

LAB CHRONICLE

OrderID:	Q2802	OrderDate:	8/7/2025 2:38:00 PM
Client:	Earth Engineering Inc.	Project:	3313 BAY AVENUE
Contact:	Frank Dougherty, LSRP	Location:	J13

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2802-01	S-1A	Solid	EPH_NF	NJEPH	08/07/25	08/08/25	08/08/25	08/07/25
Q2802-02	S-1B	Solid	EPH_NF	NJEPH	08/07/25	08/08/25	08/08/25	08/07/25
Q2802-03	S-2	Solid	EPH_NF	NJEPH	08/07/25	08/08/25	08/08/25	08/07/25



SHIPPING DOCUMENTS

CLIENT INFORMATION

CLIENT PROJECT INFORMATION

CLIENT BILLING INFORMATION

REPORT TO BE SENT TO:

COMPANY: Earth Engineering Inc.
ADDRESS: 403 Commerce Lane
CITY West Berlin STATE: NJ ZIP: 08091
ATTENTION: Frank Dougherty
PHONE: 856-768-1001 FAX:

PROJECT NAME: 3313 Bay Avenue
PROJECT NO.: 38584 LOCATION: NJ
PROJECT MANAGER: Frank Dougherty
e-mail: FrankD@earthengineering.com
PHONE: 856-768-1001 FAX:

BILL TO: Same PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 3 DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☒ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other
☐ EDD FORMAT

1	2	3	4	5	6	7	8	9

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	S-1A	Soil		X	8-7-25	9:45	1	X										
2.	S-1B	Soil		X	8-7-25	10:30	1	X										
3.	S-2	Soil		X	8-7-25	11:25	1	X										
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE/TIME: <u>8/7/25 14:35</u>	RECEIVED BY: 1. <u>[Signature]</u>	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP <u>4.1</u> °C
RELINQUISHED BY SAMPLER: 2. <u>[Signature]</u>	DATE/TIME:	RECEIVED BY: 2. <u>[Signature]</u>	Comments: <u>IF On #1</u>
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME:	RECEIVED BY: 3. <u>[Signature]</u>	Page <u> </u> of <u> </u> CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other <u> </u> Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488