

Cover Page

Order ID : Q2032

Project ID : South River WM Replacement

Client : CDM Smith

Lab Sample Number

Q2032-01
Q2032-02
Q2032-03
Q2032-04
Q2032-05
Q2032-06
Q2032-07
Q2032-08
Q2032-09
Q2032-11
Q2032-12

Client Sample Number

TP-11
TP-29
TP-29-99
TP-24
Q2032-04MS
Q2032-04MSD
TP-37
TP-32
COMP-1
FB-05132025
TB

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 : _____

Date: 5/21/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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 #: Q2032

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: PRADIP PRAJAPATI

Date: 05/21/2025

LAB CHRONICLE

OrderID:	Q2032	OrderDate:	5/13/2025 4:01:00 PM
Client:	CDM Smith	Project:	South River WM Replacement
Contact:	Marcie Ann Encinas	Location:	L41,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2032-01	TP-11	SOIL			05/13/25			05/13/25
			Diesel Range Organics	8015D		05/20/25	05/21/25	
			Gasoline Range Organics	8015D			05/16/25	
			Herbicide	8151A		05/16/25	05/19/25	
			PCB	8082A		05/16/25	05/16/25	
			Pesticide-TCL	8081B		05/16/25	05/16/25	
Q2032-02	TP-29	SOIL			05/13/25			05/13/25
			Diesel Range Organics	8015D		05/20/25	05/21/25	
			Gasoline Range Organics	8015D			05/15/25	
			Herbicide	8151A		05/16/25	05/19/25	
			PCB	8082A		05/16/25	05/16/25	
			Pesticide-TCL	8081B		05/16/25	05/16/25	
Q2032-03	TP-29-99	SOIL			05/13/25			05/13/25
			Diesel Range Organics	8015D		05/20/25	05/21/25	
			Gasoline Range Organics	8015D			05/16/25	
			Herbicide	8151A		05/16/25	05/19/25	
			PCB	8082A		05/16/25	05/16/25	
			Pesticide-TCL	8081B		05/16/25	05/16/25	
Q2032-04	TP-24	SOIL			05/13/25			05/13/25
			Diesel Range Organics	8015D		05/20/25	05/21/25	
			Gasoline Range Organics	8015D			05/15/25	
			Herbicide	8151A		05/16/25	05/19/25	
			PCB	8082A		05/16/25	05/16/25	
			Pesticide-TCL	8081B		05/16/25	05/16/25	
Q2032-07	TP-37	SOIL			05/13/25			05/13/25
			Diesel Range Organics	8015D		05/20/25	05/21/25	
			Gasoline Range Organics	8015D			05/16/25	

LAB CHRONICLE

Q2032-08	TP-32	SOIL	Herbicide	8151A	05/16/25	05/19/25	05/13/25	05/13/25
			PCB	8082A	05/16/25	05/16/25		
			Pesticide-TCL	8081B	05/16/25	05/16/25		
			Diesel Range Organics	8015D	05/20/25	05/21/25		
			Gasoline Range Organics	8015D		05/16/25		
			Herbicide	8151A	05/16/25	05/19/25		
Q2032-09	COMP-1	TCLP	PCB	8082A	05/16/25	05/16/25	05/13/25	05/13/25
			Pesticide-TCL	8081B	05/16/25	05/16/25		
			TCLP Herbicide	8151A	05/19/25	05/20/25		
			TCLP Pesticide	8081B	05/19/25	05/19/25		
Q2032-11	FB-05132025	Water					05/13/25	05/13/25
			Diesel Range Organics	8015D	05/16/25	05/19/25		
			Gasoline Range Organics	8015D		05/14/25		
			Herbicide	8151A	05/14/25	05/15/25		
			PCB	8082A	05/14/25	05/15/25		
			Pesticide-TCL	8081B	05/14/25	05/14/25		



QC SUMMARY

SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: CDM Smith
Lab Code: CHEM Case No.: Q2032 SAS No.: Q2032 SDG No.: Q2032

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FF015862.D	89				0
PIBLK-FF015869.D	103				0
PIBLK-FG015864.D	90				0
PIBLK-FG015875.D	88				0
PIBLK-FG015882.D	91				0
PB168064BL	80				0
PB168064BS	100				0
PB168064BSD	97				0
PB168084BL	90				0
PB168084BS	103				0
TP-11	52				0
TP-29	60				0
TP-29-99	50				0
TP-24	75				0
TP-24MS	66				0
TP-24MSD	67				0
TP-37	57				0
TP-32	60				0
FB-05132025	82				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 DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** CDM Smith
Lab Code: CHEM **Cas No:** Q2032 **SAS No :** Q2032 **SDG No:** Q2032
Client SampleID : TP-24MS **Datafile:** FG015873.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	8961	3740	13809	112%		68-131

SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** CDM Smith
Lab Code: CHEM **Cas No:** Q2032 **SAS No :** Q2032 **SDG No:** Q2032
Client SampleID : TP-24MSD **Datafile:** FG015874.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	8976	3740	14151	116%		68-131

MS/MSD % Recovery RPD : 3.2

WATER DIESEL RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE

Lab Name: Chemtech **Client:** CDM Smith
Lab Code: CHEM **Cas No:** Q2032 **SAS No :** Q2032 **SDG No:** Q2032
Matrix Spike - EPA Sample No : PB168064BS **Datafile:** FF015866.D

COMPOUND	SPIKE ADDED ug/L	CONCENTRATION ug/L	LCS/LCSD CONCENTRATION ug/L	% REC	QC LIMITS
DRO	200	0	202	101	78-117

WATER DIESEL RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE

Lab Name: Chemtech **Client:** CDM Smith
Lab Code: CHEM **Cas No:** Q2032 **SAS No :** Q2032 **SDG No:** Q2032
Matrix Spike - EPA Sample No : PB168064BSD **Datafile:** FF015867.D

COMPOUND	SPIKE ADDED ug/L	CONCENTRATION ug/L	LCS/LCSD CONCENTRATION ug/L	% REC	QC LIMITS
DRO	200	0	196	98	78-117

LCS/LCSD % Recovery RPD : 3.0

SOIL DIESEL RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RI

Lab Name: Chemtech **Client:** CDM Smith
Lab Code: CHEM **Cas No:** Q2032 **SAS No :** Q2032 **SDG No:** Q2032
Matrix Spike - EPA Sample No : PB168084BS **Datafile:** FG015868.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
DRO	6660	0	6529	98	68-131

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168064BL

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2032

SAS No.: Q2032 SDG NO.: Q2032

Lab File ID: FF015865.D

Lab Sample ID: PB168064BL

Instrument ID: FF

Date Extracted: 05/19/2025

Matrix: (soil/water) Water

Date Analyzed: 05/19/25

Level: (low/med) low

Time Analyzed: 12:08

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168064BS	PB168064BS	FF015866.D	05/19/25
PB168064BSD	PB168064BSD	FF015867.D	05/19/25
FB-05132025	Q2032-11	FF015868.D	05/19/25

COMMENTS: _____

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168084BL

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2032

SAS No.: Q2032 SDG NO.: Q2032

Lab File ID: FG015867.D

Lab Sample ID: PB168084BL

Instrument ID: FG

Date Extracted: 05/21/2025

Matrix: (soil/water) Soil

Date Analyzed: 05/21/25

Level: (low/med) low

Time Analyzed: 11:18

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168084BS	PB168084BS	FG015868.D	05/21/25
TP-11	Q2032-01	FG015869.D	05/21/25
TP-29	Q2032-02	FG015870.D	05/21/25
TP-29-99	Q2032-03	FG015871.D	05/21/25
TP-24	Q2032-04	FG015872.D	05/21/25
TP-24MS	Q2032-05MS	FG015873.D	05/21/25
TP-24MSD	Q2032-06MSD	FG015874.D	05/21/25
TP-37	Q2032-07	FG015877.D	05/21/25
TP-32	Q2032-08	FG015878.D	05/21/25

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-11	SDG No.:	Q2032
Lab Sample ID:	Q2032-01	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	76.3
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015869.D	1	05/20/25 10:15	05/21/25 12:16	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	3760		221	2180	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.4		37 - 130	52%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015869.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 12:16
Operator : YP\AJ
Sample : Q2032-01
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-11

Integration File: autoint1.e
Quant Time: May 22 00:39:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.983	1228138	10.431 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

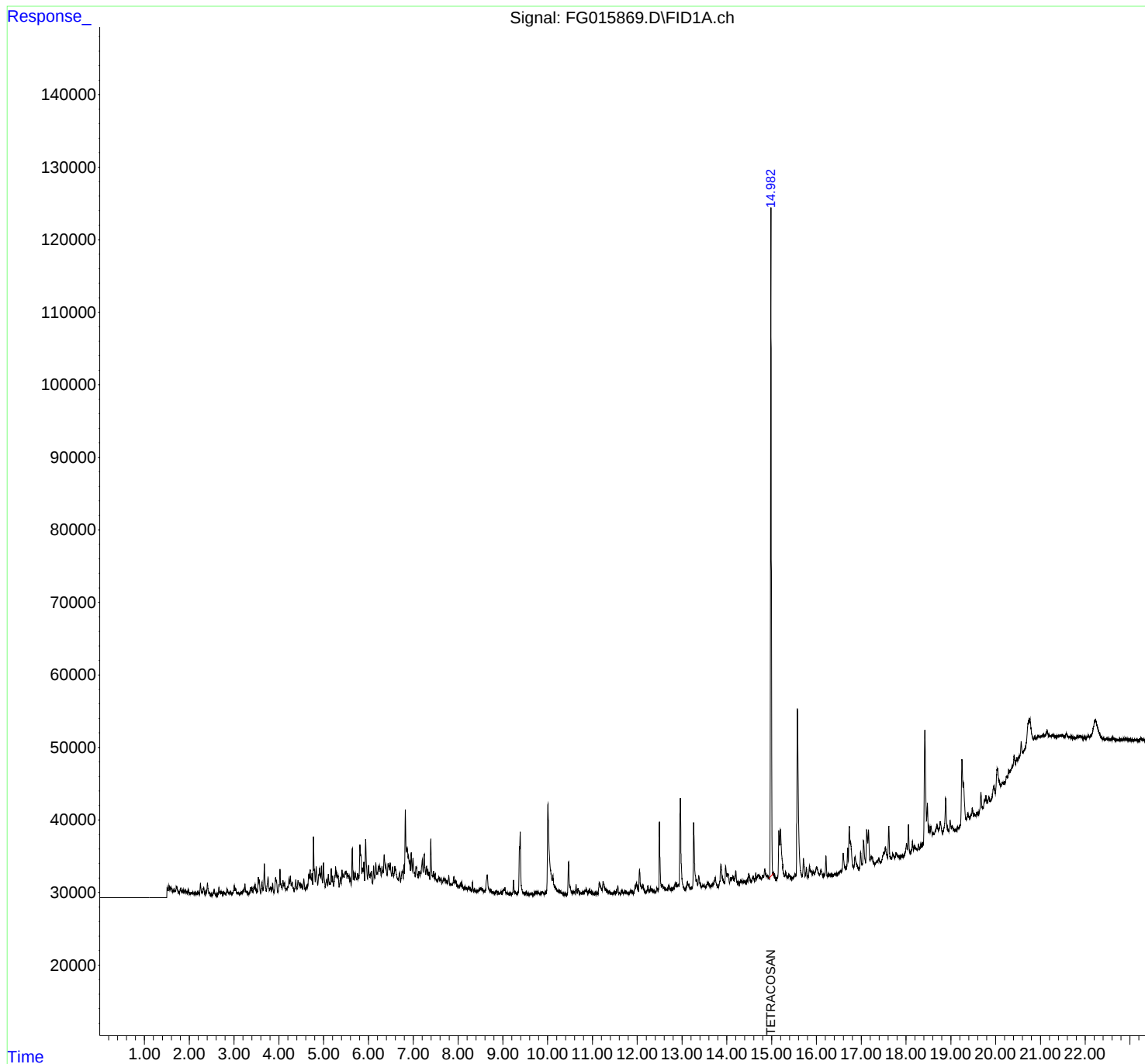
(m)=manual int.

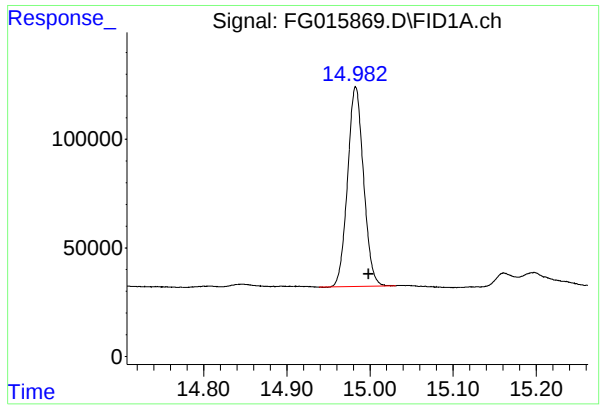
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015869.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 12:16
Operator : YP\AJ
Sample : Q2032-01
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-11

Integration File: autoint1.e
Quant Time: May 22 00:39:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.983 min
Delta R.T.: -0.015 min
Response: 1228138
Conc: 10.43 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-11

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015869.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 12:16
Sample : Q2032-01
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.378	4.330	4.405	BV	1410	18460	1.45%	0.152%
2	4.427	4.405	4.453	VV	1331	23819	1.87%	0.196%
3	4.469	4.453	4.489	VV	864	14616	1.15%	0.120%
4	4.499	4.489	4.510	VV	644	7370	0.58%	0.061%
5	4.518	4.510	4.535	VV	663	6158	0.48%	0.051%
6	4.558	4.535	4.596	VV	1616	23796	1.87%	0.196%
7	4.617	4.596	4.629	VV	541	6025	0.47%	0.050%
8	4.667	4.629	4.683	VV	2188	40572	3.19%	0.334%
9	4.698	4.683	4.727	VV	2823	53422	4.20%	0.439%
10	4.740	4.727	4.755	VV	2316	29099	2.29%	0.239%
11	4.774	4.755	4.790	VV	7342	88043	6.92%	0.724%
12	4.795	4.790	4.813	VV	2930	29260	2.30%	0.241%
13	4.834	4.813	4.869	VV	3201	68012	5.34%	0.559%
14	4.908	4.869	4.921	VV	3053	63342	4.98%	0.521%
15	4.928	4.921	4.939	VV	2227	21730	1.71%	0.179%
16	4.952	4.939	4.978	VV	3333	50871	4.00%	0.418%
17	4.998	4.978	5.039	VV	3832	67475	5.30%	0.555%
18	5.069	5.039	5.089	VV	1548	33219	2.61%	0.273%
19	5.105	5.089	5.128	VV	2291	33818	2.66%	0.278%
20	5.132	5.128	5.150	VV	963	12556	0.99%	0.103%
21	5.170	5.150	5.188	VV	3062	43514	3.42%	0.358%
22	5.201	5.188	5.222	VV	2092	28587	2.25%	0.235%
23	5.268	5.222	5.281	VV	3294	69090	5.43%	0.568%
24	5.290	5.281	5.307	VV	2554	34732	2.73%	0.286%
25	5.313	5.307	5.318	VV	1987	12974	1.02%	0.107%
26	5.324	5.318	5.347	VV	2077	24338	1.91%	0.200%
27	5.376	5.347	5.390	VV	1820	33394	2.62%	0.275%
28	5.410	5.390	5.425	VV	2920	43212	3.40%	0.355%
29	5.434	5.425	5.446	VV	2341	28067	2.21%	0.231%
30	5.450	5.446	5.460	VV	2102	16827	1.32%	0.138%
31	5.474	5.460	5.485	VV	2566	32957	2.59%	0.271%
32	5.494	5.485	5.500	VV	2747	24831	1.95%	0.204%
33	5.505	5.500	5.521	VV	2654	29081	2.29%	0.239%
34	5.535	5.521	5.562	VV	2362	51893	4.08%	0.427%
35	5.570	5.562	5.584	VV	2044	23218	1.82%	0.191%
36	5.596	5.584	5.615	VV	1810	25927	2.04%	0.213%

					rteres			
37	5.640	5.615	5.661	VV	5903	90568	7.12%	0.745%
38	5.674	5.661	5.693	VV	2634	38821	3.05%	0.319%
39	5.710	5.693	5.740	VV	2481	55099	4.33%	0.453%
40	5.759	5.740	5.772	VV	2451	39444	3.10%	0.324%
41	5.786	5.772	5.791	VV	2252	23179	1.82%	0.191%
42	5.811	5.791	5.853	VV	6440	163472	12.85%	1.344%
43	5.864	5.853	5.882	VV	3210	51457	4.04%	0.423%
44	5.896	5.882	5.914	VV	4068	59526	4.68%	0.489%
45	5.939	5.914	5.978	VV	7151	150586	11.83%	1.238%
46	6.003	5.978	6.033	VV	3571	83828	6.59%	0.689%
47	6.045	6.033	6.055	VV	2476	31178	2.45%	0.256%
48	6.066	6.055	6.094	VV	2798	44890	3.53%	0.369%
49	6.116	6.094	6.146	VV	3568	72273	5.68%	0.594%
50	6.166	6.146	6.190	VV	3993	78897	6.20%	0.649%
51	6.199	6.190	6.206	VV	2656	24385	1.92%	0.200%
52	6.222	6.206	6.240	VV	3470	62797	4.93%	0.516%
53	6.253	6.240	6.283	VV	3606	78711	6.18%	0.647%
54	6.304	6.283	6.331	VV	3530	82165	6.46%	0.676%
55	6.352	6.331	6.377	VV	5123	111540	8.76%	0.917%
56	6.390	6.377	6.419	VV	3773	76928	6.04%	0.632%
57	6.438	6.419	6.450	VV	3981	60259	4.73%	0.495%
58	6.457	6.450	6.473	VV	3724	48658	3.82%	0.400%
59	6.486	6.473	6.518	VV	4051	85324	6.70%	0.702%
60	6.540	6.518	6.562	VV	3519	73501	5.78%	0.604%
61	6.590	6.562	6.649	VV	3574	139808	10.99%	1.149%
62	6.659	6.649	6.672	VV	1892	25119	1.97%	0.207%
63	6.700	6.672	6.718	VV	2642	61072	4.80%	0.502%
64	6.750	6.718	6.776	VV	2910	81417	6.40%	0.669%
65	6.793	6.776	6.804	VV	3763	51027	4.01%	0.420%
66	6.824	6.804	6.847	VV	11402	182654	14.35%	1.502%
67	6.857	6.847	6.886	VV	6060	132561	10.42%	1.090%
68	6.896	6.886	6.911	VV	5082	70329	5.53%	0.578%
69	6.920	6.911	6.938	VV	4369	63239	4.97%	0.520%
70	6.956	6.938	6.979	VV	5445	101827	8.00%	0.837%
71	6.995	6.979	7.025	VV	4771	101975	8.01%	0.838%
72	7.030	7.025	7.045	VV	2782	31497	2.47%	0.259%
73	7.063	7.045	7.109	VV	3576	110590	8.69%	0.909%
74	7.130	7.109	7.151	VV	2980	63963	5.03%	0.526%
75	7.166	7.151	7.176	VV	2949	40813	3.21%	0.336%
76	7.203	7.176	7.222	VV	4626	102261	8.04%	0.841%
77	7.246	7.222	7.279	VV	5346	129823	10.20%	1.067%
78	7.296	7.279	7.315	VV	3655	68186	5.36%	0.561%
79	7.328	7.315	7.344	VV	3240	49392	3.88%	0.406%
80	7.354	7.344	7.372	VV	2879	39631	3.11%	0.326%
81	7.393	7.372	7.438	VV	7468	148522	11.67%	1.221%
82	7.455	7.438	7.476	VV	3016	57606	4.53%	0.474%
83	7.490	7.476	7.508	VV	2673	42208	3.32%	0.347%
84	7.517	7.508	7.539	VV	1928	33908	2.66%	0.279%
85	7.576	7.539	7.592	VV	2208	60906	4.79%	0.501%
86	7.617	7.592	7.649	VV	2093	60569	4.76%	0.498%
87	7.676	7.649	7.689	VV	2009	43434	3.41%	0.357%
88	7.710	7.689	7.736	VV	2105	50491	3.97%	0.415%
89	7.750	7.736	7.772	VV	1746	33063	2.60%	0.272%

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90	7.795	7.772	7.820	VV	2455	51962	4.08%	0.427%
91	7.841	7.820	7.869	VV	1324	36647	2.88%	0.301%
92	7.905	7.869	7.924	VV	2317	53558	4.21%	0.440%
93	7.940	7.924	7.945	VV	1709	20750	1.63%	0.171%
94	7.957	7.945	7.979	VV	1720	29189	2.29%	0.240%
95	7.989	7.979	8.013	VV	1144	20802	1.63%	0.171%
96	8.017	8.013	8.029	VV	982	9171	0.72%	0.075%
97	8.051	8.029	8.065	VV	1468	24685	1.94%	0.203%
98	8.079	8.065	8.100	VV	1623	27169	2.13%	0.223%
99	8.103	8.100	8.131	VV	980	14428	1.13%	0.119%
100	8.152	8.131	8.179	VV	944	21905	1.72%	0.180%
101	8.194	8.179	8.218	VV	798	15790	1.24%	0.130%
102	8.232	8.218	8.305	VV	1001	36185	2.84%	0.298%
103	8.323	8.305	8.353	VV	1655	24473	1.92%	0.201%
104	8.367	8.353	8.399	VV	569	12033	0.95%	0.099%
105	8.412	8.399	8.429	VV	460	6763	0.53%	0.056%
106	8.442	8.429	8.456	VV	574	7186	0.56%	0.059%
107	8.479	8.456	8.493	VV	793	13653	1.07%	0.112%
108	8.509	8.493	8.524	VV	908	14041	1.10%	0.115%
109	8.529	8.524	8.539	VV	719	6052	0.48%	0.050%
110	8.551	8.539	8.570	VV	766	10688	0.84%	0.088%
111	8.575	8.570	8.580	VV	397	1920	0.15%	0.016%
112	8.588	8.580	8.593	VV	383	2630	0.21%	0.022%
113	8.604	8.593	8.609	VV	473	3858	0.30%	0.032%
114	8.653	8.609	8.726	VV	2690	85807	6.74%	0.706%
115	8.733	8.726	8.745	VV	430	4687	0.37%	0.039%
116	8.748	8.745	8.776	VV	435	6208	0.49%	0.051%
117	8.792	8.776	8.808	VV	291	4240	0.33%	0.035%
118	8.814	8.808	8.828	VV	236	2532	0.20%	0.021%
119	8.837	8.828	8.851	VV	260	3069	0.24%	0.025%
120	8.866	8.851	8.913	VV	544	10614	0.83%	0.087%
121	8.927	8.913	8.932	VV	221	1772	0.14%	0.015%
122	8.957	8.932	8.974	VV	399	6324	0.50%	0.052%
123	9.012	8.974	9.033	VV	724	16596	1.30%	0.136%
124	9.047	9.033	9.096	VV	966	17514	1.38%	0.144%
125	9.098	9.096	9.109	VV	224	1281	0.10%	0.011%
126	9.114	9.109	9.143	VV	210	2741	0.22%	0.023%
127	9.147	9.143	9.152	PV	115	403	0.03%	0.003%
128	9.156	9.152	9.168	VV	131	1103	0.09%	0.009%
129	9.172	9.168	9.187	VV	174	1612	0.13%	0.013%
130	9.195	9.187	9.214	VV	202	2172	0.17%	0.018%
131	9.239	9.214	9.320	VV	2031	34489	2.71%	0.284%
132	9.337	9.320	9.348	VV	395	4675	0.37%	0.038%
133	9.373	9.348	9.377	VV	6641	61210	4.81%	0.503%
134	9.389	9.377	9.464	VV	8656	133765	10.51%	1.100%
135	9.466	9.464	9.482	VV	333	2532	0.20%	0.021%
136	9.491	9.482	9.499	VV	263	1964	0.15%	0.016%
137	9.526	9.499	9.560	VV	439	8724	0.69%	0.072%
138	9.575	9.560	9.591	VV	208	2394	0.19%	0.020%
139	9.597	9.591	9.604	VV	230	961	0.08%	0.008%
140	9.617	9.604	9.622	VV	198	1461	0.11%	0.012%
141	9.637	9.622	9.650	VV	229	2917	0.23%	0.024%

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142	9.654	9.650	9.664	VV	134	703	0.06%	0.006%
143	9.670	9.664	9.673	PV	62	365	0.03%	0.003%
144	9.677	9.673	9.684	VV	138	681	0.05%	0.006%
145	9.719	9.684	9.725	VV	335	5383	0.42%	0.044%
146	9.730	9.725	9.742	VV	361	3296	0.26%	0.027%
147	9.759	9.742	9.773	VV	423	6548	0.51%	0.054%
148	9.775	9.773	9.781	VV	328	1526	0.12%	0.013%
149	9.784	9.781	9.790	VV	339	1702	0.13%	0.014%
150	9.794	9.790	9.828	VV	347	5877	0.46%	0.048%
151	9.841	9.828	9.861	VV	255	4306	0.34%	0.035%
152	9.874	9.861	9.884	VV	455	4840	0.38%	0.040%
153	9.892	9.884	9.933	VV	432	7584	0.60%	0.062%
154	9.949	9.933	9.964	VV	525	6369	0.50%	0.052%
155	10.007	9.964	10.100	VV	12576	394864	31.03%	3.247%
156	10.119	10.100	10.180	VV	2751	78623	6.18%	0.646%
157	10.187	10.180	10.231	VV	1025	23027	1.81%	0.189%
158	10.238	10.231	10.255	VV	632	8041	0.63%	0.066%
159	10.268	10.255	10.339	VV	622	19209	1.51%	0.158%
160	10.342	10.339	10.346	VV	168	693	0.05%	0.006%
161	10.363	10.346	10.368	VV	214	1895	0.15%	0.016%
162	10.372	10.368	10.417	VV	171	3593	0.28%	0.030%
163	10.467	10.417	10.560	PV	4521	97328	7.65%	0.800%
164	10.600	10.560	10.618	VV	509	13724	1.08%	0.113%
165	10.637	10.618	10.661	VV	1459	19767	1.55%	0.163%
166	10.681	10.661	10.711	VV	883	16045	1.26%	0.132%
167	10.731	10.711	10.744	VV	353	5393	0.42%	0.044%
168	10.748	10.744	10.769	VV	339	3347	0.26%	0.028%
169	10.792	10.769	10.811	VV	515	8479	0.67%	0.070%
170	10.834	10.811	10.847	VV	600	10162	0.80%	0.084%
171	10.862	10.847	10.904	VV	885	17936	1.41%	0.147%
172	10.934	10.904	10.958	VV	771	15635	1.23%	0.129%
173	10.965	10.958	11.001	VV	471	8299	0.65%	0.068%
174	11.005	11.001	11.012	VV	252	1084	0.09%	0.009%
175	11.015	11.012	11.025	VV	189	1137	0.09%	0.009%
176	11.028	11.025	11.043	VV	200	1484	0.12%	0.012%
177	11.048	11.043	11.063	VV	236	2038	0.16%	0.017%
178	11.075	11.063	11.079	VV	280	1805	0.14%	0.015%
179	11.086	11.079	11.102	VV	266	3002	0.24%	0.025%
180	11.105	11.102	11.111	VV	204	1034	0.08%	0.009%
181	11.114	11.111	11.119	VV	231	822	0.06%	0.007%
182	11.155	11.119	11.218	VV	1729	57573	4.52%	0.473%
183	11.240	11.218	11.293	VV	1857	53421	4.20%	0.439%
184	11.296	11.293	11.299	VV	656	2502	0.20%	0.021%
185	11.313	11.299	11.359	VV	785	18973	1.49%	0.156%
186	11.366	11.359	11.407	VV	484	9788	0.77%	0.080%
187	11.409	11.407	11.418	VV	197	1252	0.10%	0.010%
188	11.422	11.418	11.431	VV	223	1396	0.11%	0.011%
189	11.438	11.431	11.441	VV	186	967	0.08%	0.008%
190	11.450	11.441	11.463	VV	245	2504	0.20%	0.021%
191	11.464	11.463	11.469	VV	247	594	0.05%	0.005%
192	11.472	11.469	11.482	VV	234	1259	0.10%	0.010%
193	11.499	11.482	11.523	VV	512	7501	0.59%	0.062%
194	11.566	11.523	11.588	VV	1179	22232	1.75%	0.183%

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195	11.603	11.588	11.629	VV	326	5221	0.41%	0.043%
196	11.653	11.629	11.696	VV	596	14177	1.11%	0.117%
197	11.728	11.696	11.751	VV	600	11303	0.89%	0.093%
198	11.759	11.751	11.793	VV	334	5003	0.39%	0.041%
199	11.818	11.793	11.833	PV	353	4818	0.38%	0.040%
200	11.863	11.833	11.875	VV	509	8905	0.70%	0.073%
201	11.882	11.875	11.925	VV	485	7402	0.58%	0.061%
202	11.953	11.925	11.965	VV	1204	17868	1.40%	0.147%
203	11.985	11.965	12.029	VV	1490	37643	2.96%	0.310%
204	12.051	12.029	12.081	VV	3346	55630	4.37%	0.457%
205	12.089	12.081	12.106	VV	1122	14431	1.13%	0.119%
206	12.122	12.106	12.198	VV	1228	30375	2.39%	0.250%
207	12.238	12.198	12.272	VV	1041	20361	1.60%	0.167%
208	12.296	12.272	12.324	VV	840	14502	1.14%	0.119%
209	12.332	12.324	12.359	VV	500	7341	0.58%	0.060%
210	12.367	12.359	12.410	VV	257	5272	0.41%	0.043%
211	12.438	12.410	12.471	PV	734	14925	1.17%	0.123%
212	12.495	12.471	12.543	VV	9775	136421	10.72%	1.122%
213	12.557	12.543	12.577	VV	979	16509	1.30%	0.136%
214	12.587	12.577	12.611	VV	730	12385	0.97%	0.102%
215	12.616	12.611	12.640	VV	519	7266	0.57%	0.060%
216	12.644	12.640	12.674	VV	390	5586	0.44%	0.046%
217	12.701	12.674	12.727	VV	905	17626	1.38%	0.145%
218	12.736	12.727	12.762	VV	421	7147	0.56%	0.059%
219	12.766	12.762	12.782	VV	322	2694	0.21%	0.022%
220	12.803	12.782	12.823	VV	511	8757	0.69%	0.072%
221	12.845	12.823	12.863	VV	1144	19581	1.54%	0.161%
222	12.878	12.863	12.897	VV	1155	17135	1.35%	0.141%
223	12.918	12.897	12.932	VV	849	15648	1.23%	0.129%
224	12.960	12.932	13.071	VV	12751	247726	19.47%	2.037%
225	13.117	13.071	13.142	VV	1159	26365	2.07%	0.217%
226	13.148	13.142	13.176	VV	744	10637	0.84%	0.087%
227	13.181	13.176	13.187	VV	310	1799	0.14%	0.015%
228	13.192	13.187	13.211	VV	286	3515	0.28%	0.029%
229	13.218	13.211	13.222	VV	363	1735	0.14%	0.014%
230	13.258	13.222	13.313	VV	9272	185955	14.61%	1.529%
231	13.322	13.313	13.352	VV	1277	22718	1.79%	0.187%
232	13.372	13.352	13.428	VV	1896	45974	3.61%	0.378%
233	13.439	13.428	13.445	VV	355	3006	0.24%	0.025%
234	13.462	13.445	13.479	VV	531	8097	0.64%	0.067%
235	13.492	13.479	13.510	VV	620	8070	0.63%	0.066%
236	13.519	13.510	13.531	VV	308	2900	0.23%	0.024%
237	13.534	13.531	13.540	VV	182	932	0.07%	0.008%
238	13.568	13.540	13.636	VV	824	29881	2.35%	0.246%
239	13.639	13.636	13.642	VV	280	810	0.06%	0.007%
240	13.656	13.642	13.665	VV	333	3759	0.30%	0.031%
241	13.684	13.665	13.697	VV	697	9399	0.74%	0.077%
242	13.735	13.697	13.800	VV	1385	43241	3.40%	0.356%
243	13.868	13.800	13.944	PV	3113	101042	7.94%	0.831%
244	13.972	13.944	13.996	VV	2863	52840	4.15%	0.434%
245	14.020	13.996	14.027	VV	1793	31052	2.44%	0.255%
246	14.031	14.027	14.059	VV	1765	22697	1.78%	0.187%

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247	14.081	14.059	14.098	VV	1169	20246	1.59%	0.166%
248	14.135	14.098	14.162	VV	1369	40445	3.18%	0.333%
249	14.199	14.162	14.268	VV	2076	55612	4.37%	0.457%
250	14.318	14.268	14.333	VV	675	17898	1.41%	0.147%
251	14.340	14.333	14.366	VV	580	9407	0.74%	0.077%
252	14.369	14.366	14.381	VV	494	3786	0.30%	0.031%
253	14.384	14.381	14.393	VV	460	3084	0.24%	0.025%
254	14.398	14.393	14.412	VV	441	3769	0.30%	0.031%
255	14.415	14.412	14.425	VV	308	1697	0.13%	0.014%
256	14.446	14.425	14.465	VV	652	10518	0.83%	0.086%
257	14.489	14.465	14.541	VV	1407	38441	3.02%	0.316%
258	14.588	14.541	14.625	VV	1063	35634	2.80%	0.293%
259	14.646	14.625	14.670	VV	1537	25054	1.97%	0.206%
260	14.701	14.670	14.737	VV	1261	40852	3.21%	0.336%
261	14.744	14.737	14.781	VV	920	18869	1.48%	0.155%
262	14.801	14.781	14.825	VV	1084	23095	1.81%	0.190%
263	14.846	14.825	14.887	VV	1933	50393	3.96%	0.414%
264	14.894	14.887	14.912	VV	1011	14487	1.14%	0.119%
265	14.914	14.912	14.946	VV	961	14727	1.16%	0.121%
266	14.983	14.946	15.031	VV	92756	1272648	100.00%	10.464%
267	15.035	15.031	15.104	VV	1219	33652	2.64%	0.277%
268	15.161	15.104	15.180	VV	6989	122390	9.62%	1.006%
269	15.198	15.180	15.284	VV	7184	214648	16.87%	1.765%
270	15.288	15.284	15.296	VV	767	5318	0.42%	0.044%
271	15.319	15.296	15.355	VV	1167	27222	2.14%	0.224%
272	15.387	15.355	15.444	VV	854	27817	2.19%	0.229%
273	15.467	15.444	15.475	VV	349	5553	0.44%	0.046%
274	15.492	15.475	15.500	VV	423	5646	0.44%	0.046%
275	15.523	15.500	15.540	VV	796	15792	1.24%	0.130%
276	15.574	15.540	15.685	VV	23551	542952	42.66%	4.464%
277	15.709	15.685	15.751	VV	2764	57227	4.50%	0.471%
278	15.775	15.751	15.819	VV	1506	28220	2.22%	0.232%
279	15.843	15.819	15.867	VV	1777	33622	2.64%	0.276%
280	15.882	15.867	15.916	VV	1078	24280	1.91%	0.200%
281	15.930	15.916	15.955	VV	852	16726	1.31%	0.138%
282	16.004	15.955	16.061	VV	1539	58776	4.62%	0.483%
283	16.065	16.061	16.071	VV	463	2529	0.20%	0.021%
284	16.099	16.071	16.152	VV	1038	27431	2.16%	0.226%
285	16.174	16.152	16.183	VV	403	4859	0.38%	0.040%
286	16.212	16.183	16.244	VV	2867	40951	3.22%	0.337%
287	16.247	16.244	16.251	VV	154	442	0.03%	0.004%
288	16.273	16.251	16.301	VV	398	7138	0.56%	0.059%
289	16.307	16.301	16.312	VV	223	1071	0.08%	0.009%
290	16.317	16.312	16.321	VV	157	580	0.05%	0.005%
291	16.347	16.321	16.371	VV	239	3962	0.31%	0.033%
292	16.416	16.371	16.421	PV	254	5239	0.41%	0.043%
293	16.442	16.421	16.471	VV	312	5418	0.43%	0.045%
294	16.531	16.471	16.537	PV	547	12438	0.98%	0.102%
295	16.541	16.537	16.551	VV	479	3722	0.29%	0.031%
296	16.555	16.551	16.559	VV	389	1673	0.13%	0.014%
297	16.595	16.559	16.641	VV	2869	67374	5.29%	0.554%
298	16.659	16.641	16.673	VV	940	13313	1.05%	0.109%
299	16.695	16.673	16.710	VV	3427	46924	3.69%	0.386%

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300	16.731	16.710	16.755	VV	6145	120983	9.51%	0.995%
301	16.761	16.755	16.829	VV	4117	90864	7.14%	0.747%
302	16.864	16.829	16.951	VV	1914	59311	4.66%	0.488%
303	16.987	16.951	17.020	PV	2347	40843	3.21%	0.336%
304	17.050	17.020	17.096	VV	3668	83272	6.54%	0.685%
305	17.122	17.096	17.147	VV	5048	103077	8.10%	0.847%
306	17.162	17.147	17.195	VV	5006	83715	6.58%	0.688%
307	17.219	17.195	17.229	VV	1223	20235	1.59%	0.166%
308	17.237	17.229	17.295	VV	1140	24342	1.91%	0.200%
309	17.335	17.295	17.347	PV	204	2504	0.20%	0.021%
310	17.392	17.347	17.400	PBA	220	5201	0.41%	0.043%

Sum of corrected areas: 12162585

FG042425.M Thu May 22 01:24:28 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29	SDG No.:	Q2032
Lab Sample ID:	Q2032-02	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	86.1
Sample Wt/Vol:	30.07	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015870.D	1	05/20/25 10:15	05/21/25 12:45	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1180	J	196	1930	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	12.0		37 - 130	60%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015870.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 12:45
Operator : YP\AJ
Sample : Q2032-02
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-29

Integration File: autoint1.e
Quant Time: May 22 00:39:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.984	1408089	11.960 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

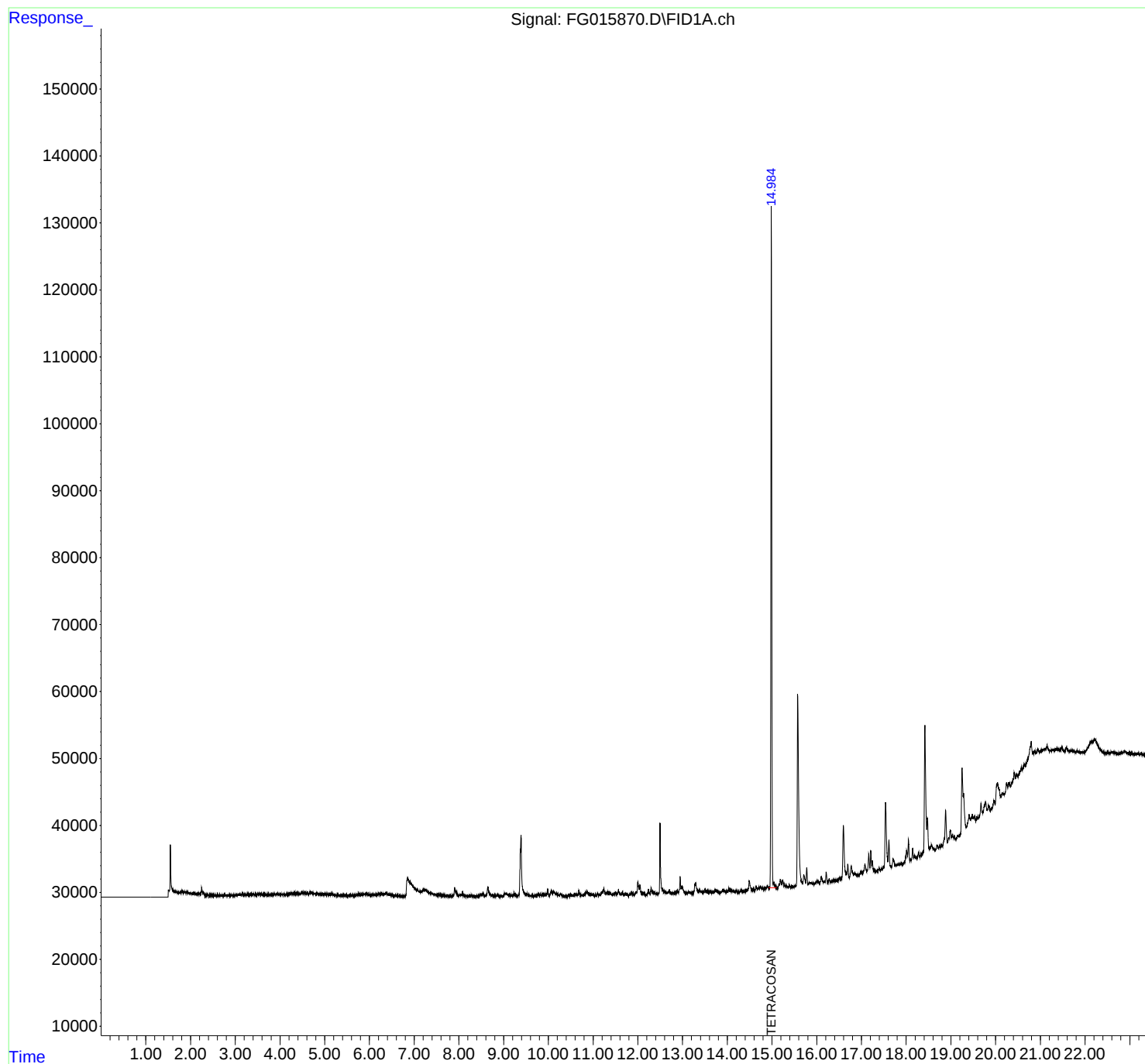
(m)=manual int.

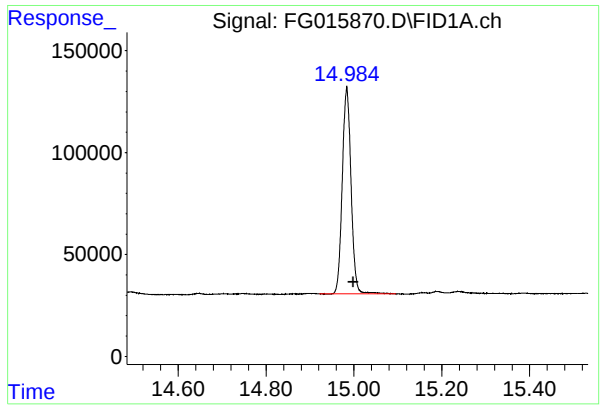
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015870.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 12:45
Operator : YP\AJ
Sample : Q2032-02
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-29

Integration File: autoint1.e
Quant Time: May 22 00:39:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.984 min
Delta R.T.: -0.015 min
Response: 1408089
Conc: 11.96 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-29

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015870.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 12:45
Sample : Q2032-02
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.316	4.300	4.330	BV	114	828	0.06%	0.016%
2	4.333	4.330	4.341	PV	205	441	0.03%	0.008%
3	4.346	4.341	4.359	PV	96	384	0.03%	0.007%
4	4.361	4.359	4.368	VV	71	302	0.02%	0.006%
5	4.379	4.368	4.395	VV	103	1068	0.07%	0.020%
6	4.421	4.395	4.445	PV	156	2765	0.19%	0.052%
7	4.451	4.445	4.464	VV	158	1120	0.08%	0.021%
8	4.495	4.464	4.511	VV	316	5739	0.40%	0.109%
9	4.530	4.511	4.547	VV	252	4138	0.29%	0.078%
10	4.551	4.547	4.559	VV	270	1410	0.10%	0.027%
11	4.563	4.559	4.586	VV	220	2647	0.19%	0.050%
12	4.593	4.586	4.600	VV	202	1234	0.09%	0.023%
13	4.615	4.600	4.645	VV	368	4702	0.33%	0.089%
14	4.667	4.645	4.685	VV	425	6633	0.46%	0.125%
15	4.690	4.685	4.705	VV	244	2612	0.18%	0.049%
16	4.711	4.705	4.738	VV	191	3539	0.25%	0.067%
17	4.742	4.738	4.748	VV	224	941	0.07%	0.018%
18	4.752	4.748	4.762	VV	189	1199	0.08%	0.023%
19	4.775	4.762	4.782	VV	214	2028	0.14%	0.038%
20	4.789	4.782	4.794	VV	229	1032	0.07%	0.020%
21	4.799	4.794	4.819	VV	203	2386	0.17%	0.045%
22	4.824	4.819	4.848	VV	168	2937	0.21%	0.056%
23	4.851	4.848	4.858	VV	135	853	0.06%	0.016%
24	4.870	4.858	4.889	VV	197	2814	0.20%	0.053%
25	4.901	4.889	4.951	VV	189	5548	0.39%	0.105%
26	4.956	4.951	4.961	VV	191	872	0.06%	0.016%
27	4.965	4.961	4.981	VV	132	1553	0.11%	0.029%
28	4.991	4.981	5.003	VV	159	1563	0.11%	0.030%
29	5.006	5.003	5.025	VV	180	1596	0.11%	0.030%
30	5.035	5.025	5.065	VV	205	3124	0.22%	0.059%
31	5.068	5.065	5.071	VV	155	444	0.03%	0.008%
32	5.075	5.071	5.094	VV	178	1545	0.11%	0.029%
33	5.122	5.094	5.132	VV	258	2498	0.17%	0.047%
34	5.158	5.132	5.172	VV	218	3591	0.25%	0.068%
35	5.175	5.172	5.180	VV	169	681	0.05%	0.013%
36	5.182	5.180	5.209	VV	181	2020	0.14%	0.038%

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37	5.214	5.209	5.219	VV	102	479	0.03%	0.009%
38	5.227	5.219	5.232	VV	100	591	0.04%	0.011%
39	5.234	5.232	5.239	VV	160	321	0.02%	0.006%
40	5.243	5.239	5.248	VV	152	509	0.04%	0.010%
41	5.254	5.248	5.295	VV	162	1460	0.10%	0.028%
42	5.304	5.295	5.336	PV	140	1304	0.09%	0.025%
43	5.343	5.336	5.351	VV	95	527	0.04%	0.010%
44	5.353	5.351	5.394	VV	137	1312	0.09%	0.025%
45	5.398	5.394	5.403	VV	72	295	0.02%	0.006%
46	5.407	5.403	5.442	VV	84	1313	0.09%	0.025%
47	5.450	5.442	5.466	VV	83	866	0.06%	0.016%
48	5.470	5.466	5.515	VV	146	2458	0.17%	0.046%
49	5.521	5.515	5.535	VV	165	774	0.05%	0.015%
50	5.541	5.535	5.544	PV	96	384	0.03%	0.007%
51	5.552	5.544	5.596	VV	174	2243	0.16%	0.042%
52	5.601	5.596	5.609	VV	84	553	0.04%	0.010%
53	5.616	5.609	5.624	VV	106	437	0.03%	0.008%
54	5.638	5.624	5.673	PV	141	2900	0.20%	0.055%
55	5.677	5.673	5.682	VV	115	561	0.04%	0.011%
56	5.701	5.682	5.708	VV	149	1738	0.12%	0.033%
57	5.721	5.708	5.727	VV	179	1649	0.12%	0.031%
58	5.748	5.727	5.770	VV	335	6821	0.48%	0.129%
59	5.775	5.770	5.816	VV	298	6571	0.46%	0.124%
60	5.830	5.816	5.869	VV	376	7475	0.52%	0.141%
61	5.883	5.869	5.886	VV	307	2604	0.18%	0.049%
62	5.898	5.886	5.911	VV	379	4374	0.31%	0.083%
63	5.915	5.911	5.956	VV	374	7576	0.53%	0.143%
64	5.961	5.956	5.976	VV	262	2824	0.20%	0.053%
65	5.988	5.976	6.004	VV	240	3438	0.24%	0.065%
66	6.013	6.004	6.025	VV	268	2612	0.18%	0.049%
67	6.037	6.025	6.042	VV	245	2102	0.15%	0.040%
68	6.046	6.042	6.052	VV	237	1270	0.09%	0.024%
69	6.057	6.052	6.066	VV	211	1534	0.11%	0.029%
70	6.069	6.066	6.074	VV	270	945	0.07%	0.018%
71	6.079	6.074	6.097	VV	253	2786	0.19%	0.053%
72	6.103	6.097	6.114	VV	235	2115	0.15%	0.040%
73	6.128	6.114	6.134	VV	214	2251	0.16%	0.043%
74	6.139	6.134	6.154	VV	246	2253	0.16%	0.043%
75	6.212	6.154	6.224	VV	415	11845	0.83%	0.224%
76	6.232	6.224	6.252	VV	360	5232	0.37%	0.099%
77	6.257	6.252	6.268	VV	441	3679	0.26%	0.070%
78	6.275	6.268	6.294	VV	394	5155	0.36%	0.097%
79	6.300	6.294	6.317	VV	368	4325	0.30%	0.082%
80	6.339	6.317	6.356	VV	414	8056	0.56%	0.152%
81	6.381	6.356	6.412	VV	581	13615	0.95%	0.257%
82	6.441	6.412	6.461	VV	314	7596	0.53%	0.144%
83	6.465	6.461	6.481	VV	285	2691	0.19%	0.051%
84	6.486	6.481	6.531	VV	280	5475	0.38%	0.104%
85	6.535	6.531	6.546	VV	192	1119	0.08%	0.021%
86	6.549	6.546	6.552	VV	153	541	0.04%	0.010%
87	6.567	6.552	6.582	VV	245	3011	0.21%	0.057%
88	6.588	6.582	6.596	VV	178	1111	0.08%	0.021%
89	6.602	6.596	6.607	VV	94	577	0.04%	0.011%

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90	6.613	6.607	6.616	VV	191	682	0.05%	0.013%
91	6.620	6.616	6.645	VV	192	2151	0.15%	0.041%
92	6.651	6.645	6.657	VV	130	652	0.05%	0.012%
93	6.674	6.657	6.694	VV	184	2678	0.19%	0.051%
94	6.700	6.694	6.727	VV	131	1445	0.10%	0.027%
95	6.735	6.727	6.752	VV	121	770	0.05%	0.015%
96	6.756	6.752	6.778	VV	57	644	0.05%	0.012%
97	6.849	6.778	6.861	VV	2741	53223	3.72%	1.006%
98	6.864	6.861	7.058	VV	2595	198528	13.89%	3.754%
99	7.064	7.058	7.107	VV	1054	26340	1.84%	0.498%
100	7.112	7.107	7.116	VV	830	4289	0.30%	0.081%
101	7.119	7.116	7.122	VV	795	2850	0.20%	0.054%
102	7.127	7.122	7.132	VV	754	4522	0.32%	0.086%
103	7.139	7.132	7.146	VV	772	5886	0.41%	0.111%
104	7.213	7.146	7.246	VV	1092	54506	3.81%	1.031%
105	7.253	7.246	7.265	VV	1059	10920	0.76%	0.206%
106	7.269	7.265	7.316	VV	968	24396	1.71%	0.461%
107	7.322	7.316	7.343	VV	641	9680	0.68%	0.183%
108	7.351	7.343	7.357	VV	589	4874	0.34%	0.092%
109	7.360	7.357	7.441	VV	629	23878	1.67%	0.452%
110	7.451	7.441	7.479	VV	413	8177	0.57%	0.155%
111	7.483	7.479	7.492	VV	357	2504	0.18%	0.047%
112	7.498	7.492	7.516	VV	323	4079	0.29%	0.077%
113	7.522	7.516	7.541	VV	328	4003	0.28%	0.076%
114	7.567	7.541	7.604	VV	344	9159	0.64%	0.173%
115	7.608	7.604	7.617	VV	249	1781	0.12%	0.034%
116	7.625	7.617	7.636	VV	279	2484	0.17%	0.047%
117	7.650	7.636	7.691	VV	281	6703	0.47%	0.127%
118	7.696	7.691	7.699	VV	166	670	0.05%	0.013%
119	7.703	7.699	7.731	VV	214	2860	0.20%	0.054%
120	7.738	7.731	7.744	VV	173	1354	0.09%	0.026%
121	7.746	7.744	7.759	VV	206	1092	0.08%	0.021%
122	7.776	7.759	7.835	VV	190	6188	0.43%	0.117%
123	7.852	7.835	7.864	VV	239	2741	0.19%	0.052%
124	7.906	7.864	7.935	VV	1407	28778	2.01%	0.544%
125	7.939	7.935	8.008	VV	769	16652	1.17%	0.315%
126	8.022	8.008	8.031	VV	305	3633	0.25%	0.069%
127	8.043	8.031	8.064	VV	394	6416	0.45%	0.121%
128	8.080	8.064	8.117	VV	831	13681	0.96%	0.259%
129	8.177	8.174	8.183	VV	103	604	0.04%	0.011%
130	8.192	8.183	8.197	VV	128	1078	0.08%	0.020%
131	8.204	8.197	8.217	VV	196	1521	0.11%	0.029%
132	8.223	8.217	8.227	VV	126	696	0.05%	0.013%
133	8.244	8.227	8.270	VV	236	4560	0.32%	0.086%
134	8.278	8.270	8.308	VV	361	4220	0.30%	0.080%
135	8.313	8.308	8.342	VV	174	2392	0.17%	0.045%
136	8.345	8.342	8.375	VV	154	1559	0.11%	0.029%
137	8.394	8.375	8.409	VV	159	2138	0.15%	0.040%
138	8.412	8.409	8.425	VV	90	849	0.06%	0.016%
139	8.480	8.425	8.500	PV	514	11670	0.82%	0.221%
140	8.537	8.500	8.582	VV	609	19361	1.35%	0.366%
141	8.589	8.582	8.595	VV	292	1603	0.11%	0.030%

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142	8.650	8.595	8.731	VV	1502	48230	3.37%	0.912%
143	8.734	8.731	8.744	VV	321	2212	0.15%	0.042%
144	8.751	8.744	8.766	VV	299	3498	0.24%	0.066%
145	8.769	8.766	8.773	VV	202	957	0.07%	0.018%
146	8.776	8.773	8.793	VV	234	2177	0.15%	0.041%
147	8.806	8.793	8.811	VV	264	1977	0.14%	0.037%
148	8.816	8.811	8.829	VV	195	1666	0.12%	0.032%
149	8.833	8.829	8.849	VV	227	2496	0.17%	0.047%
150	8.863	8.849	8.890	VV	369	6486	0.45%	0.123%
151	8.935	8.890	8.984	VV	248	6549	0.46%	0.124%
152	9.020	8.984	9.043	VV	590	13467	0.94%	0.255%
153	9.046	9.043	9.100	VV	560	14114	0.99%	0.267%
154	9.105	9.100	9.111	VV	353	1831	0.13%	0.035%
155	9.117	9.111	9.123	VV	301	1858	0.13%	0.035%
156	9.128	9.123	9.133	VV	283	1430	0.10%	0.027%
157	9.137	9.133	9.148	VV	227	1801	0.13%	0.034%
158	9.155	9.148	9.160	VV	260	1575	0.11%	0.030%
159	9.173	9.160	9.187	VV	270	3559	0.25%	0.067%
160	9.192	9.187	9.209	VV	251	2811	0.20%	0.053%
161	9.210	9.209	9.216	VV	237	768	0.05%	0.015%
162	9.239	9.216	9.266	VV	638	11986	0.84%	0.227%
163	9.269	9.266	9.301	VV	242	4535	0.32%	0.086%
164	9.308	9.301	9.319	VV	219	1689	0.12%	0.032%
165	9.325	9.319	9.329	VV	210	1155	0.08%	0.022%
166	9.390	9.329	9.489	VV	9140	238855	16.71%	4.516%
167	9.494	9.489	9.511	VV	363	4591	0.32%	0.087%
168	9.523	9.511	9.561	VV	476	10203	0.71%	0.193%
169	9.566	9.561	9.569	VV	263	1125	0.08%	0.021%
170	9.577	9.569	9.594	VV	236	2965	0.21%	0.056%
171	9.599	9.594	9.606	VV	174	1089	0.08%	0.021%
172	9.610	9.606	9.623	VV	176	1532	0.11%	0.029%
173	9.636	9.623	9.680	VV	205	4878	0.34%	0.092%
174	9.684	9.680	9.703	VV	172	1801	0.13%	0.034%
175	9.747	9.703	9.750	VV	295	5642	0.39%	0.107%
176	9.755	9.750	9.762	VV	318	2173	0.15%	0.041%
177	9.766	9.762	9.769	VV	344	1228	0.09%	0.023%
178	9.774	9.769	9.814	VV	354	8156	0.57%	0.154%
179	9.821	9.814	9.836	VV	286	3600	0.25%	0.068%
180	9.845	9.836	9.861	VV	302	4104	0.29%	0.078%
181	9.874	9.861	9.936	VV	484	13801	0.97%	0.261%
182	9.952	9.936	9.967	VV	501	6962	0.49%	0.132%
183	9.985	9.967	10.022	VV	1199	19563	1.37%	0.370%
184	10.028	10.022	10.034	VV	279	1629	0.11%	0.031%
185	10.077	10.034	10.100	VV	789	24502	1.71%	0.463%
186	10.104	10.100	10.109	VV	626	3419	0.24%	0.065%
187	10.124	10.109	10.174	VV	800	22815	1.60%	0.431%
188	10.189	10.174	10.222	VV	535	10695	0.75%	0.202%
189	10.228	10.222	10.236	VV	278	1981	0.14%	0.037%
190	10.240	10.236	10.252	VV	230	2400	0.17%	0.045%
191	10.266	10.252	10.276	VV	375	4560	0.32%	0.086%
192	10.279	10.276	10.314	VV	439	5316	0.37%	0.101%
193	10.318	10.314	10.336	VV	153	1116	0.08%	0.021%
194	10.340	10.336	10.368	VV	78	1469	0.10%	0.028%

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195	10.378	10.368	10.419	VV	149	2407	0.17%	0.046%
196	10.451	10.419	10.484	PV	349	6095	0.43%	0.115%
197	10.508	10.484	10.536	VV	345	6685	0.47%	0.126%
198	10.543	10.536	10.562	VV	147	2010	0.14%	0.038%
199	10.601	10.562	10.626	VV	452	11951	0.84%	0.226%
200	10.638	10.626	10.655	VV	322	4994	0.35%	0.094%
201	10.683	10.655	10.722	VV	902	17225	1.21%	0.326%
202	10.742	10.722	10.770	VV	253	5624	0.39%	0.106%
203	10.793	10.770	10.814	VV	360	6942	0.49%	0.131%
204	10.866	10.814	10.907	VV	737	26842	1.88%	0.508%
205	10.928	10.907	10.956	VV	462	9903	0.69%	0.187%
206	10.979	10.956	11.038	VV	289	11262	0.79%	0.213%
207	11.051	11.038	11.067	VV	247	2610	0.18%	0.049%
208	11.097	11.067	11.124	VV	317	7656	0.54%	0.145%
209	11.142	11.124	11.162	VV	336	5494	0.38%	0.104%
210	11.202	11.162	11.217	VV	684	16303	1.14%	0.308%
211	11.239	11.217	11.284	VV	1056	26411	1.85%	0.499%
212	11.316	11.284	11.359	VV	652	20042	1.40%	0.379%
213	11.371	11.359	11.442	VV	513	16445	1.15%	0.311%
214	11.459	11.442	11.475	VV	300	4530	0.32%	0.086%
215	11.502	11.475	11.533	VV	595	12346	0.86%	0.233%
216	11.568	11.533	11.593	VV	883	19432	1.36%	0.367%
217	11.602	11.593	11.631	VV	424	6754	0.47%	0.128%
218	11.655	11.631	11.702	VV	544	13159	0.92%	0.249%
219	11.725	11.702	11.749	VV	381	6690	0.47%	0.126%
220	11.762	11.749	11.793	VV	301	4040	0.28%	0.076%
221	11.819	11.793	11.837	PV	266	4469	0.31%	0.084%
222	11.856	11.837	11.929	VV	498	15424	1.08%	0.292%
223	11.955	11.929	11.971	VV	578	8695	0.61%	0.164%
224	12.001	11.971	12.034	VV	1972	47017	3.29%	0.889%
225	12.048	12.034	12.114	VV	1552	31868	2.23%	0.603%
226	12.128	12.114	12.193	VV	325	8713	0.61%	0.165%
227	12.239	12.193	12.276	VV	888	17995	1.26%	0.340%
228	12.299	12.276	12.329	VV	1074	20200	1.41%	0.382%
229	12.340	12.329	12.358	VV	519	6714	0.47%	0.127%
230	12.373	12.358	12.412	VV	367	7996	0.56%	0.151%
231	12.461	12.412	12.471	VV	191	4840	0.34%	0.092%
232	12.497	12.471	12.589	VV	10735	161472	11.30%	3.053%
233	12.597	12.589	12.622	VV	528	8129	0.57%	0.154%
234	12.627	12.622	12.681	VV	416	9993	0.70%	0.189%
235	12.703	12.681	12.731	VV	700	12965	0.91%	0.245%
236	12.741	12.731	12.751	VV	183	2114	0.15%	0.040%
237	12.761	12.751	12.776	VV	203	2541	0.18%	0.048%
238	12.804	12.776	12.847	VV	287	8272	0.58%	0.156%
239	12.881	12.847	12.909	VV	640	13030	0.91%	0.246%
240	12.946	12.909	12.966	VV	2627	41418	2.90%	0.783%
241	12.981	12.966	13.116	VV	1233	43954	3.08%	0.831%
242	13.136	13.116	13.189	VV	286	8724	0.61%	0.165%
243	13.202	13.189	13.221	VV	152	1872	0.13%	0.035%
244	13.287	13.221	13.360	VV	1645	59420	4.16%	1.124%
245	13.375	13.360	13.449	VV	510	16825	1.18%	0.318%
246	13.502	13.449	13.536	VV	716	18117	1.27%	0.343%

					rteres			
247	13.557	13.536	13.574	VV	319	6300	0.44%	0.119%
248	13.627	13.574	13.697	VV	387	15724	1.10%	0.297%
249	13.733	13.697	13.823	VV	528	18521	1.30%	0.350%
250	13.901	13.823	13.979	VV	426	20303	1.42%	0.384%
251	14.037	13.979	14.061	VV	724	15297	1.07%	0.289%
252	14.082	14.061	14.099	VV	557	7935	0.56%	0.150%
253	14.110	14.099	14.124	VV	275	3134	0.22%	0.059%
254	14.142	14.124	14.179	VV	260	6606	0.46%	0.125%
255	14.195	14.179	14.256	VV	260	6418	0.45%	0.121%
256	14.265	14.256	14.279	VV	143	1034	0.07%	0.020%
257	14.309	14.279	14.364	PV	212	8912	0.62%	0.169%
258	14.367	14.364	14.413	VV	182	3201	0.22%	0.061%
259	14.445	14.413	14.462	VV	396	6042	0.42%	0.114%
260	14.492	14.462	14.566	VV	1534	40253	2.82%	0.761%
261	14.584	14.566	14.619	VV	229	5286	0.37%	0.100%
262	14.647	14.619	14.666	VV	706	10433	0.73%	0.197%
263	14.705	14.666	14.724	VV	503	11310	0.79%	0.214%
264	14.748	14.724	14.787	VV	543	13212	0.92%	0.250%
265	14.799	14.787	14.831	VV	274	5289	0.37%	0.100%
266	14.864	14.831	14.875	VV	336	5585	0.39%	0.106%
267	14.897	14.875	14.941	VV	516	12848	0.90%	0.243%
268	14.984	14.941	15.123	VV	102155	1429213	100.00%	27.025%
269	15.158	15.123	15.169	PV	661	10356	0.72%	0.196%
270	15.189	15.169	15.214	VV	1233	22141	1.55%	0.419%
271	15.238	15.214	15.325	VV	1166	36469	2.55%	0.690%
272	15.334	15.325	15.362	VV	219	2853	0.20%	0.054%
273	15.386	15.362	15.414	VV	276	4263	0.30%	0.081%
274	15.529	15.414	15.541	PV	114	1987	0.14%	0.038%
275	15.574	15.541	15.687	VV	28332	628804	44.00%	11.890%
276	15.711	15.687	15.749	VV	1576	36787	2.57%	0.696%
277	15.776	15.749	15.811	VV	2557	39008	2.73%	0.738%
278	15.844	15.811	15.912	VV	312	10787	0.75%	0.204%
279	15.924	15.912	15.951	VV	76	1604	0.11%	0.030%
280	15.996	15.951	16.067	VV	375	14222	1.00%	0.269%
281	16.101	16.067	16.159	VV	952	24657	1.73%	0.466%
282	16.177	16.159	16.185	VV	197	2525	0.18%	0.048%
283	16.212	16.185	16.256	VV	1569	23568	1.65%	0.446%
284	16.278	16.256	16.316	VV	572	8364	0.59%	0.158%
285	16.344	16.316	16.353	PV	208	2085	0.15%	0.039%
286	16.359	16.353	16.371	VV	114	970	0.07%	0.018%
287	16.401	16.371	16.421	VV	211	3449	0.24%	0.065%
288	16.506	16.421	16.544	PV	398	11691	0.82%	0.221%
289	16.596	16.544	16.674	VV	7931	196905	13.78%	3.723%
290	16.695	16.674	16.727	VV	2055	32161	2.25%	0.608%
291	16.771	16.727	16.829	VV	1767	50468	3.53%	0.954%
292	16.850	16.829	16.877	VV	521	12259	0.86%	0.232%
293	16.885	16.877	16.897	VV	349	3355	0.23%	0.063%
294	16.906	16.897	16.949	VV	270	5372	0.38%	0.102%
295	16.992	16.949	17.022	VV	565	13734	0.96%	0.260%
296	17.077	17.022	17.116	VV	1524	43600	3.05%	0.824%
297	17.163	17.116	17.187	VV	2908	56423	3.95%	1.067%
298	17.209	17.187	17.229	VV	3309	49220	3.44%	0.931%
299	17.242	17.229	17.315	VV	1766	32108	2.25%	0.607%

300	17.357	17.315	17.371	VV	132	2681	0.19%	0.051%
					rteres			
					Sum of corrected areas:		5288511	

FG042425.M Thu May 22 01:24:57 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29-99	SDG No.:	Q2032
Lab Sample ID:	Q2032-03	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	86.8
Sample Wt/Vol:	30.02	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015871.D	1	05/20/25 10:15	05/21/25 13:15	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1010	J	195	1920	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.1		37 - 130	50%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 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
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015871.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 13:15
Operator : YP\AJ
Sample : Q2032-03
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-29-99

Integration File: autoint1.e
Quant Time: May 22 00:39:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.984	1187654	10.087 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

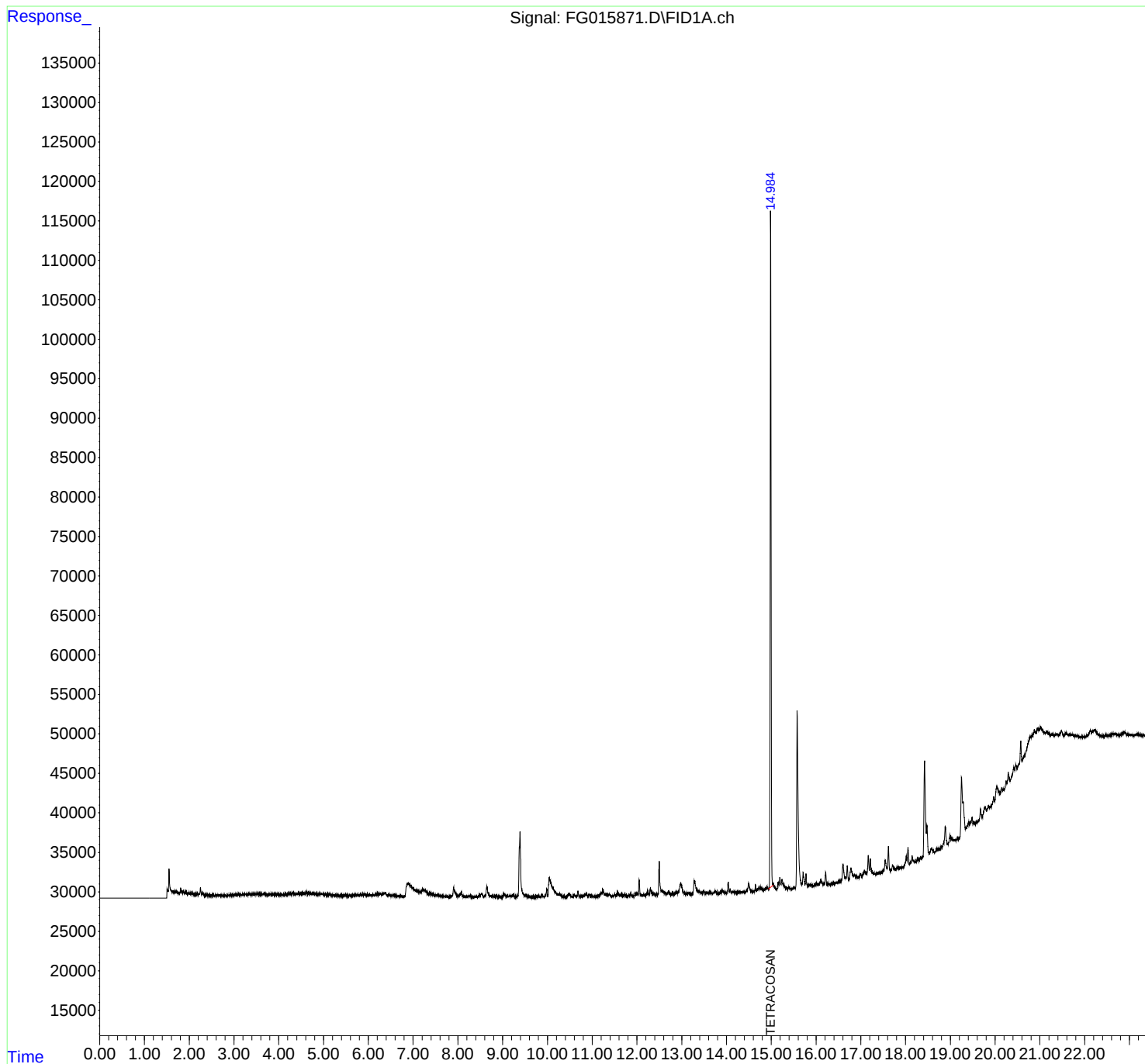
(m)=manual int.

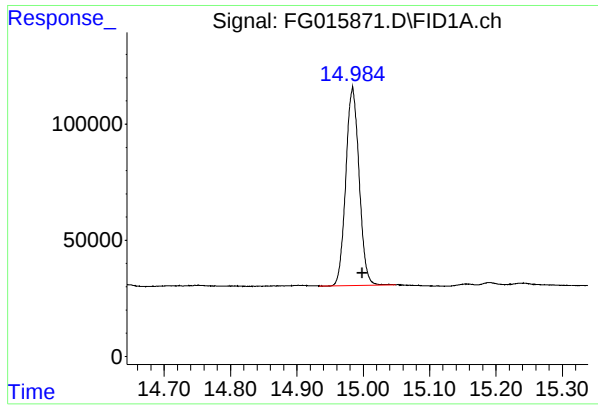
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015871.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 13:15
Operator : YP\AJ
Sample : Q2032-03
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-29-99

Integration File: autoint1.e
Quant Time: May 22 00:39:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.984 min
Delta R.T.: -0.014 min
Response: 1187654
Conc: 10.09 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-29-99

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015871.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 13:15
Sample : Q2032-03
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.318	4.300	4.344	BV	155	1222	0.10%	0.027%
2	4.349	4.344	4.367	PV	53	358	0.03%	0.008%
3	4.370	4.367	4.383	VV	120	569	0.05%	0.013%
4	4.387	4.383	4.403	VV	103	959	0.08%	0.021%
5	4.429	4.403	4.453	PV	120	2484	0.20%	0.055%
6	4.456	4.453	4.466	VV	156	771	0.06%	0.017%
7	4.490	4.466	4.510	VV	196	3633	0.30%	0.080%
8	4.527	4.510	4.533	VV	270	2269	0.18%	0.050%
9	4.551	4.533	4.567	VV	224	3587	0.29%	0.079%
10	4.577	4.567	4.581	VV	209	1386	0.11%	0.031%
11	4.585	4.581	4.598	VV	184	1530	0.12%	0.034%
12	4.613	4.598	4.647	VV	415	6718	0.55%	0.149%
13	4.668	4.647	4.691	VV	434	6760	0.55%	0.150%
14	4.702	4.691	4.724	VV	225	3892	0.32%	0.086%
15	4.732	4.724	4.758	VV	186	3297	0.27%	0.073%
16	4.765	4.758	4.780	VV	223	1962	0.16%	0.043%
17	4.788	4.780	4.798	VV	232	1872	0.15%	0.041%
18	4.809	4.798	4.838	VV	240	4492	0.36%	0.099%
19	4.845	4.838	4.851	VV	224	1534	0.12%	0.034%
20	4.860	4.851	4.868	VV	200	1864	0.15%	0.041%
21	4.874	4.868	4.896	VV	240	3099	0.25%	0.069%
22	4.899	4.896	4.903	VV	258	715	0.06%	0.016%
23	4.936	4.903	4.941	VV	266	4579	0.37%	0.101%
24	4.951	4.941	4.972	VV	278	3805	0.31%	0.084%
25	4.974	4.972	4.980	VV	282	1040	0.08%	0.023%
26	4.983	4.980	4.988	VV	228	933	0.08%	0.021%
27	4.996	4.988	5.028	VV	247	4622	0.38%	0.102%
28	5.033	5.028	5.057	VV	231	2816	0.23%	0.062%
29	5.062	5.057	5.067	VV	186	799	0.06%	0.018%
30	5.072	5.067	5.082	VV	167	1396	0.11%	0.031%
31	5.093	5.082	5.120	VV	203	3137	0.25%	0.069%
32	5.125	5.120	5.133	VV	157	1073	0.09%	0.024%
33	5.156	5.133	5.172	VV	260	3598	0.29%	0.080%
34	5.179	5.172	5.201	VV	194	2168	0.18%	0.048%
35	5.215	5.201	5.222	VV	157	1416	0.12%	0.031%
36	5.224	5.222	5.230	VV	143	535	0.04%	0.012%

					rteres			
37	5.237	5.230	5.251	VV	121	1245	0.10%	0.028%
38	5.255	5.251	5.274	VV	125	1238	0.10%	0.027%
39	5.287	5.274	5.294	VV	152	1086	0.09%	0.024%
40	5.308	5.294	5.312	PV	123	937	0.08%	0.021%
41	5.320	5.312	5.327	VV	131	778	0.06%	0.017%
42	5.331	5.327	5.341	VV	96	585	0.05%	0.013%
43	5.348	5.341	5.359	VV	81	629	0.05%	0.014%
44	5.362	5.359	5.368	VV	127	380	0.03%	0.008%
45	5.400	5.368	5.410	VV	136	1703	0.14%	0.038%
46	5.414	5.410	5.422	VV	139	617	0.05%	0.014%
47	5.434	5.422	5.440	VV	116	812	0.07%	0.018%
48	5.450	5.440	5.457	VV	129	873	0.07%	0.019%
49	5.459	5.457	5.463	VV	123	347	0.03%	0.008%
50	5.477	5.463	5.486	VV	174	1696	0.14%	0.038%
51	5.490	5.486	5.500	VV	140	805	0.07%	0.018%
52	5.508	5.500	5.513	VV	121	643	0.05%	0.014%
53	5.517	5.513	5.542	VV	129	1431	0.12%	0.032%
54	5.546	5.542	5.558	VV	127	623	0.05%	0.014%
55	5.562	5.558	5.569	VV	120	639	0.05%	0.014%
56	5.600	5.569	5.607	VV	179	2137	0.17%	0.047%
57	5.621	5.607	5.627	VV	151	950	0.08%	0.021%
58	5.633	5.627	5.645	VV	133	1104	0.09%	0.024%
59	5.667	5.645	5.676	VV	199	2703	0.22%	0.060%
60	5.692	5.676	5.699	VV	223	2216	0.18%	0.049%
61	5.713	5.699	5.732	VV	230	3582	0.29%	0.079%
62	5.750	5.732	5.763	VV	304	4477	0.36%	0.099%
63	5.767	5.763	5.788	VV	222	3040	0.25%	0.067%
64	5.794	5.788	5.806	VV	241	2311	0.19%	0.051%
65	5.827	5.806	5.845	VV	332	6136	0.50%	0.136%
66	5.857	5.845	5.862	VV	246	2085	0.17%	0.046%
67	5.871	5.862	5.899	VV	290	5927	0.48%	0.131%
68	5.902	5.899	5.918	VV	371	3145	0.26%	0.070%
69	5.930	5.918	5.934	VV	348	2689	0.22%	0.060%
70	5.944	5.934	5.948	VV	351	2380	0.19%	0.053%
71	5.952	5.948	5.959	VV	331	1557	0.13%	0.034%
72	5.964	5.959	5.983	VV	274	3279	0.27%	0.073%
73	5.990	5.983	6.008	VV	255	2818	0.23%	0.062%
74	6.013	6.008	6.025	VV	284	2420	0.20%	0.054%
75	6.029	6.025	6.040	VV	214	1866	0.15%	0.041%
76	6.042	6.040	6.060	VV	243	2320	0.19%	0.051%
77	6.076	6.060	6.095	VV	240	4152	0.34%	0.092%
78	6.100	6.095	6.106	VV	262	1370	0.11%	0.030%
79	6.113	6.106	6.129	VV	265	2851	0.23%	0.063%
80	6.134	6.129	6.146	VV	229	2029	0.16%	0.045%
81	6.153	6.146	6.168	VV	295	3015	0.24%	0.067%
82	6.173	6.168	6.178	VV	335	1408	0.11%	0.031%
83	6.207	6.178	6.215	VV	410	7161	0.58%	0.159%
84	6.219	6.215	6.235	VV	397	4079	0.33%	0.090%
85	6.250	6.235	6.261	VV	439	5362	0.44%	0.119%
86	6.265	6.261	6.269	VV	425	1853	0.15%	0.041%
87	6.275	6.269	6.293	VV	487	5589	0.45%	0.124%
88	6.335	6.293	6.344	VV	489	10793	0.88%	0.239%
89	6.386	6.344	6.411	VV	607	16657	1.35%	0.369%

					rteres			
90	6.419	6.411	6.427	VV	247	1862	0.15%	0.041%
91	6.447	6.427	6.463	VV	286	5215	0.42%	0.116%
92	6.467	6.463	6.471	VV	258	871	0.07%	0.019%
93	6.480	6.471	6.498	VV	241	3214	0.26%	0.071%
94	6.502	6.498	6.512	VV	248	1526	0.12%	0.034%
95	6.522	6.512	6.533	VV	247	2094	0.17%	0.046%
96	6.542	6.533	6.548	VV	268	1689	0.14%	0.037%
97	6.558	6.548	6.568	VV	255	2796	0.23%	0.062%
98	6.572	6.568	6.607	VV	265	3890	0.32%	0.086%
99	6.623	6.607	6.643	VV	208	2804	0.23%	0.062%
100	6.647	6.643	6.656	VV	179	991	0.08%	0.022%
101	6.664	6.656	6.682	VV	203	2093	0.17%	0.046%
102	6.686	6.682	6.693	VV	220	889	0.07%	0.020%
103	6.698	6.693	6.717	VV	159	1658	0.13%	0.037%
104	6.719	6.717	6.758	VV	149	2631	0.21%	0.058%
105	6.762	6.758	6.767	VV	117	459	0.04%	0.010%
106	6.779	6.767	6.790	PV	126	1099	0.09%	0.024%
107	6.796	6.790	6.803	VV	139	502	0.04%	0.011%
108	6.806	6.803	6.813	VV	142	491	0.04%	0.011%
109	6.875	6.813	6.901	VV	1801	63340	5.14%	1.403%
110	6.903	6.901	7.058	VV	1693	117463	9.54%	2.602%
111	7.059	7.058	7.085	VV	908	13403	1.09%	0.297%
112	7.091	7.085	7.108	VV	834	10176	0.83%	0.225%
113	7.113	7.108	7.123	VV	767	6382	0.52%	0.141%
114	7.124	7.123	7.131	VV	706	3139	0.25%	0.070%
115	7.136	7.131	7.152	VV	754	8772	0.71%	0.194%
116	7.174	7.152	7.180	VV	804	12040	0.98%	0.267%
117	7.232	7.180	7.256	VV	1034	42289	3.43%	0.937%
118	7.262	7.256	7.339	VV	972	34289	2.79%	0.759%
119	7.343	7.339	7.366	VV	557	7928	0.64%	0.176%
120	7.371	7.366	7.383	VV	533	4743	0.39%	0.105%
121	7.395	7.383	7.431	VV	517	12049	0.98%	0.267%
122	7.436	7.431	7.445	VV	420	3121	0.25%	0.069%
123	7.446	7.445	7.503	VV	356	10706	0.87%	0.237%
124	7.506	7.503	7.516	VV	309	1889	0.15%	0.042%
125	7.534	7.516	7.551	VV	282	5285	0.43%	0.117%
126	7.561	7.551	7.584	VV	304	4695	0.38%	0.104%
127	7.588	7.584	7.635	VV	184	5916	0.48%	0.131%
128	7.649	7.635	7.715	VV	205	6841	0.56%	0.152%
129	7.743	7.715	7.764	VV	150	3275	0.27%	0.073%
130	7.784	7.764	7.798	VV	169	2302	0.19%	0.051%
131	7.805	7.798	7.829	VV	162	1982	0.16%	0.044%
132	7.906	7.829	7.998	VV	1302	45589	3.70%	1.010%
133	8.048	7.998	8.062	VV	456	11203	0.91%	0.248%
134	8.078	8.062	8.141	VV	744	15217	1.24%	0.337%
135	8.149	8.141	8.195	VV	151	3595	0.29%	0.080%
136	8.200	8.195	8.223	VV	173	1464	0.12%	0.032%
137	8.251	8.223	8.258	VV	171	2692	0.22%	0.060%
138	8.275	8.258	8.315	VV	237	5479	0.45%	0.121%
139	8.323	8.315	8.332	VV	103	988	0.08%	0.022%
140	8.344	8.332	8.362	VV	129	1417	0.12%	0.031%
141	8.403	8.362	8.440	VV	156	5011	0.41%	0.111%

					rteres			
142	8.449	8.440	8.459	VV	172	1525	0.12%	0.034%
143	8.480	8.459	8.504	VV	492	8320	0.68%	0.184%
144	8.535	8.504	8.582	VV	488	15783	1.28%	0.350%
145	8.649	8.582	8.744	VV	1437	48919	3.97%	1.083%
146	8.754	8.744	8.779	VV	305	4250	0.35%	0.094%
147	8.785	8.779	8.817	VV	212	3449	0.28%	0.076%
148	8.868	8.817	8.895	VV	380	8481	0.69%	0.188%
149	8.898	8.895	8.919	VV	119	915	0.07%	0.020%
150	8.939	8.919	8.974	PV	112	2097	0.17%	0.046%
151	9.024	8.974	9.140	VV	417	23363	1.90%	0.517%
152	9.172	9.140	9.186	VV	278	6007	0.49%	0.133%
153	9.194	9.186	9.215	VV	257	3449	0.28%	0.076%
154	9.238	9.215	9.320	VV	534	14846	1.21%	0.329%
155	9.390	9.320	9.505	VV	8412	216907	17.62%	4.804%
156	9.522	9.505	9.610	VV	418	11794	0.96%	0.261%
157	9.632	9.610	9.662	VV	114	1960	0.16%	0.043%
158	9.695	9.662	9.722	VV	162	3377	0.27%	0.075%
159	9.768	9.722	9.786	VV	221	4973	0.40%	0.110%
160	9.800	9.786	9.839	VV	202	4125	0.34%	0.091%
161	9.872	9.839	9.932	VV	399	10625	0.86%	0.235%
162	9.952	9.932	9.963	VV	450	4642	0.38%	0.103%
163	9.985	9.963	10.008	VV	1103	16032	1.30%	0.355%
164	10.045	10.008	10.107	VV	2575	100816	8.19%	2.233%
165	10.116	10.107	10.177	VV	1386	42483	3.45%	0.941%
166	10.186	10.177	10.255	VV	710	23195	1.88%	0.514%
167	10.269	10.255	10.424	VV	510	20362	1.65%	0.451%
168	10.481	10.424	10.548	PV	494	20678	1.68%	0.458%
169	10.555	10.548	10.570	VV	219	1478	0.12%	0.033%
170	10.600	10.570	10.627	VV	389	8812	0.72%	0.195%
171	10.636	10.627	10.659	VV	251	3453	0.28%	0.076%
172	10.683	10.659	10.723	VV	795	14184	1.15%	0.314%
173	10.729	10.723	10.737	VV	176	1200	0.10%	0.027%
174	10.753	10.737	10.772	VV	207	2580	0.21%	0.057%
175	10.790	10.772	10.816	VV	305	4931	0.40%	0.109%
176	10.839	10.816	10.852	VV	409	6432	0.52%	0.142%
177	10.867	10.852	10.912	VV	506	12421	1.01%	0.275%
178	10.931	10.912	10.962	VV	324	6926	0.56%	0.153%
179	10.987	10.962	11.014	VV	303	5249	0.43%	0.116%
180	11.017	11.014	11.034	VV	155	1181	0.10%	0.026%
181	11.045	11.034	11.080	VV	119	2460	0.20%	0.054%
182	11.110	11.080	11.121	VV	196	3529	0.29%	0.078%
183	11.146	11.121	11.161	VV	259	4375	0.36%	0.097%
184	11.202	11.161	11.213	VV	590	12371	1.00%	0.274%
185	11.239	11.213	11.294	VV	975	26967	2.19%	0.597%
186	11.313	11.294	11.354	VV	431	12131	0.99%	0.269%
187	11.378	11.354	11.406	VV	361	8738	0.71%	0.194%
188	11.417	11.406	11.447	VV	157	3322	0.27%	0.074%
189	11.504	11.447	11.537	VV	337	10298	0.84%	0.228%
190	11.568	11.537	11.592	VV	691	13056	1.06%	0.289%
191	11.598	11.592	11.630	VV	292	5111	0.42%	0.113%
192	11.653	11.630	11.691	VV	434	8933	0.73%	0.198%
193	11.727	11.691	11.750	VV	379	7017	0.57%	0.155%
194	11.763	11.750	11.784	VV	201	2595	0.21%	0.057%

					rteres			
195	11.820	11.784	11.832	PV	238	2765	0.22%	0.061%
196	11.853	11.832	11.905	VV	469	9693	0.79%	0.215%
197	11.916	11.905	11.934	VV	106	1273	0.10%	0.028%
198	11.958	11.934	11.992	PV	437	10165	0.83%	0.225%
199	12.004	11.992	12.020	VV	414	5298	0.43%	0.117%
200	12.049	12.020	12.110	VV	2115	33525	2.72%	0.743%
201	12.135	12.110	12.150	VV	222	3893	0.32%	0.086%
202	12.159	12.150	12.192	VV	178	3008	0.24%	0.067%
203	12.238	12.192	12.277	VV	762	17672	1.44%	0.391%
204	12.299	12.277	12.324	VV	964	16681	1.35%	0.369%
205	12.337	12.324	12.355	VV	445	7528	0.61%	0.167%
206	12.367	12.355	12.411	VV	406	8140	0.66%	0.180%
207	12.445	12.411	12.465	VV	258	5169	0.42%	0.114%
208	12.496	12.465	12.545	VV	4385	72438	5.88%	1.604%
209	12.559	12.545	12.577	VV	751	11552	0.94%	0.256%
210	12.591	12.577	12.657	VV	589	18534	1.51%	0.410%
211	12.704	12.657	12.742	VV	632	16659	1.35%	0.369%
212	12.754	12.742	12.770	VV	181	2263	0.18%	0.050%
213	12.801	12.770	12.842	VV	434	9139	0.74%	0.202%
214	12.880	12.842	12.901	VV	529	10503	0.85%	0.233%
215	12.923	12.901	12.934	VV	535	7483	0.61%	0.166%
216	12.976	12.934	13.074	VV	1578	66603	5.41%	1.475%
217	13.098	13.074	13.117	VV	250	4318	0.35%	0.096%
218	13.138	13.117	13.229	VV	258	11318	0.92%	0.251%
219	13.282	13.229	13.360	PV	1754	67164	5.46%	1.488%
220	13.378	13.360	13.475	VV	528	21184	1.72%	0.469%
221	13.494	13.475	13.535	VV	413	8690	0.71%	0.192%
222	13.557	13.535	13.580	VV	315	5795	0.47%	0.128%
223	13.631	13.580	13.654	VV	302	9857	0.80%	0.218%
224	13.664	13.654	13.699	VV	132	2873	0.23%	0.064%
225	13.737	13.699	13.824	VV	402	14209	1.15%	0.315%
226	13.900	13.824	13.979	PV	368	15671	1.27%	0.347%
227	13.995	13.979	14.002	VV	110	1223	0.10%	0.027%
228	14.038	14.002	14.064	VV	1482	22689	1.84%	0.503%
229	14.081	14.064	14.125	VV	521	9239	0.75%	0.205%
230	14.137	14.125	14.184	VV	210	4550	0.37%	0.101%
231	14.192	14.184	14.229	VV	184	2198	0.18%	0.049%
232	14.234	14.229	14.255	PV	98	475	0.04%	0.011%
233	14.321	14.255	14.369	VV	145	5615	0.46%	0.124%
234	14.376	14.369	14.390	VV	87	777	0.06%	0.017%
235	14.414	14.390	14.424	PV	130	901	0.07%	0.020%
236	14.448	14.424	14.462	PV	255	3643	0.30%	0.081%
237	14.493	14.462	14.563	VV	1167	31089	2.53%	0.689%
238	14.587	14.563	14.620	PV	136	2643	0.21%	0.059%
239	14.646	14.620	14.677	VV	894	12276	1.00%	0.272%
240	14.707	14.677	14.717	VV	434	6714	0.55%	0.149%
241	14.722	14.717	14.728	VV	407	2458	0.20%	0.054%
242	14.750	14.728	14.785	VV	566	13187	1.07%	0.292%
243	14.805	14.785	14.836	VV	286	6174	0.50%	0.137%
244	14.874	14.836	14.880	VV	284	5591	0.45%	0.124%
245	14.903	14.880	14.944	VV	508	12460	1.01%	0.276%
246	14.984	14.944	15.122	VV	85426	1231176	100.00%	27.268%

					rteres			
247	15.156	15.122	15.170	VV	909	15339	1.25%	0.340%
248	15.190	15.170	15.214	VV	1521	27562	2.24%	0.610%
249	15.240	15.214	15.363	VV	1290	46234	3.76%	1.024%
250	15.387	15.363	15.420	VV	252	4610	0.37%	0.102%
251	15.423	15.420	15.432	VV	81	221	0.02%	0.005%
252	15.469	15.432	15.479	VV	71	927	0.08%	0.021%
253	15.517	15.479	15.540	PV	144	2419	0.20%	0.054%
254	15.577	15.540	15.687	VV	21965	507996	41.26%	11.251%
255	15.711	15.687	15.752	VV	1934	41450	3.37%	0.918%
256	15.775	15.752	15.822	VV	1701	27744	2.25%	0.614%
257	15.842	15.822	15.870	VV	274	5823	0.47%	0.129%
258	15.894	15.870	15.949	VV	246	6544	0.53%	0.145%
259	16.002	15.949	16.029	VV	379	11030	0.90%	0.244%
260	16.034	16.029	16.069	VV	259	4582	0.37%	0.101%
261	16.102	16.069	16.162	VV	710	20906	1.70%	0.463%
262	16.171	16.162	16.184	VV	209	1954	0.16%	0.043%
263	16.213	16.184	16.260	VV	1614	25626	2.08%	0.568%
264	16.282	16.260	16.310	VV	215	3096	0.25%	0.069%
265	16.354	16.310	16.377	PV	127	3221	0.26%	0.071%
266	16.394	16.377	16.405	VV	138	1348	0.11%	0.030%
267	16.434	16.405	16.447	VV	187	2712	0.22%	0.060%
268	16.454	16.447	16.480	VV	147	1795	0.15%	0.040%
269	16.510	16.480	16.538	VV	308	6129	0.50%	0.136%
270	16.599	16.538	16.649	PV	2261	61157	4.97%	1.354%
271	16.655	16.649	16.672	VV	621	7127	0.58%	0.158%
272	16.696	16.672	16.730	VV	1975	30946	2.51%	0.685%
273	16.778	16.730	16.840	VV	1522	53988	4.39%	1.196%
274	16.855	16.840	16.881	VV	704	12009	0.98%	0.266%
275	16.891	16.881	16.907	VV	362	5208	0.42%	0.115%
276	16.917	16.907	16.957	VV	269	5398	0.44%	0.120%
277	16.990	16.957	17.023	VV	554	11547	0.94%	0.256%
278	17.080	17.023	17.125	VV	792	30083	2.44%	0.666%
279	17.164	17.125	17.189	VV	2642	48113	3.91%	1.066%
280	17.211	17.189	17.234	VV	2145	34908	2.84%	0.773%
281	17.243	17.234	17.324	VV	662	14776	1.20%	0.327%
282	17.327	17.324	17.337	VV	103	409	0.03%	0.009%
					Sum of corrected areas:	4515075		

FG042425.M Thu May 22 01:25:30 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-24	SDG No.:	Q2032
Lab Sample ID:	Q2032-04	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	74.2
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015872.D	1	05/20/25 10:15	05/21/25 13:44	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	3740		228	2240	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	15.0		37 - 130	75%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015872.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 13:44
Operator : YP\AJ
Sample : Q2032-04
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-24

Integration File: autoint1.e
Quant Time: May 22 00:40:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.983	1764814	14.989 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

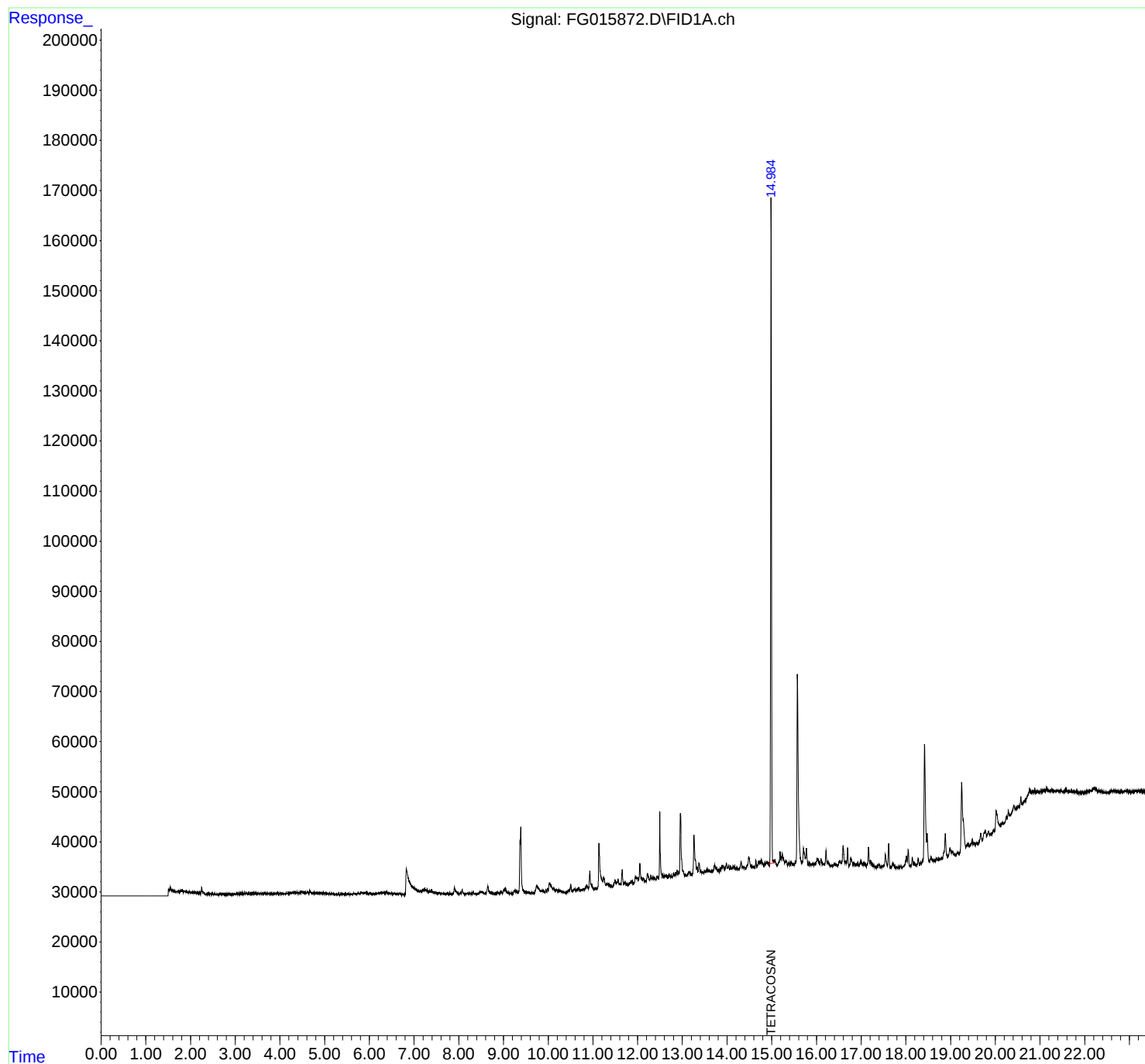
(m)=manual int.

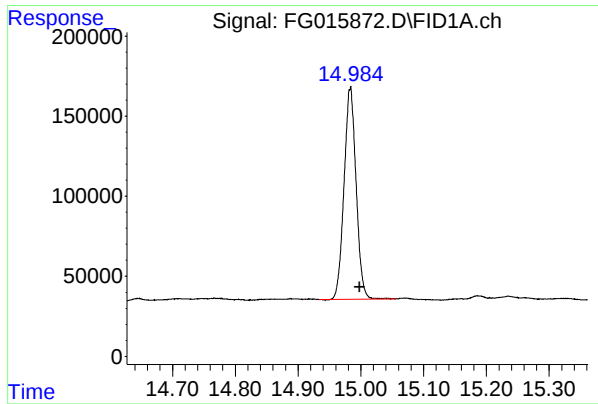
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015872.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 13:44
Operator : YP\AJ
Sample : Q2032-04
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-24

Integration File: autoint1.e
Quant Time: May 22 00:40:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.983 min
Delta R.T.: -0.015 min
Response: 1764814
Conc: 14.99 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-24

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
 Data File : FG015872.D
 Signal(s) : FID1A.ch
 Acq On : 21 May 2025 13:44
 Sample : Q2032-04
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
 Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.319	4.300	4.341	BV	113	1161	0.06%	0.009%
2	4.347	4.341	4.353	PV	96	334	0.02%	0.003%
3	4.360	4.353	4.365	VV	106	407	0.02%	0.003%
4	4.394	4.365	4.407	VV	184	2110	0.11%	0.017%
5	4.423	4.407	4.432	PV	165	1612	0.08%	0.013%
6	4.435	4.432	4.451	VV	154	1352	0.07%	0.011%
7	4.467	4.451	4.473	VV	206	2034	0.11%	0.016%
8	4.497	4.473	4.523	VV	400	8030	0.42%	0.065%
9	4.526	4.523	4.531	VV	277	914	0.05%	0.007%
10	4.534	4.531	4.549	VV	248	2186	0.11%	0.018%
11	4.557	4.549	4.569	VV	249	2041	0.11%	0.017%
12	4.574	4.569	4.588	VV	167	1554	0.08%	0.013%
13	4.616	4.588	4.648	VV	341	6249	0.33%	0.051%
14	4.670	4.648	4.694	VV	580	9107	0.48%	0.074%
15	4.695	4.694	4.701	VV	224	726	0.04%	0.006%
16	4.704	4.701	4.719	VV	196	1793	0.09%	0.015%
17	4.723	4.719	4.739	VV	190	1633	0.09%	0.013%
18	4.742	4.739	4.753	VV	157	1269	0.07%	0.010%
19	4.757	4.753	4.773	VV	198	1757	0.09%	0.014%
20	4.775	4.773	4.791	VV	241	1532	0.08%	0.012%
21	4.797	4.791	4.803	VV	200	982	0.05%	0.008%
22	4.807	4.803	4.829	VV	212	1842	0.10%	0.015%
23	4.849	4.829	4.877	VV	239	4202	0.22%	0.034%
24	4.879	4.877	4.883	VV	159	591	0.03%	0.005%
25	4.894	4.883	4.905	VV	246	2176	0.11%	0.018%
26	4.908	4.905	4.914	VV	194	842	0.04%	0.007%
27	4.931	4.914	4.959	VV	239	4681	0.25%	0.038%
28	4.974	4.959	4.978	VV	261	2211	0.12%	0.018%
29	4.982	4.978	4.985	VV	215	715	0.04%	0.006%
30	4.989	4.985	5.004	VV	221	1924	0.10%	0.016%
31	5.009	5.004	5.026	VV	188	1815	0.10%	0.015%
32	5.037	5.026	5.042	VV	192	1218	0.06%	0.010%
33	5.046	5.042	5.062	VV	152	1370	0.07%	0.011%
34	5.068	5.062	5.123	VV	180	4048	0.21%	0.033%
35	5.126	5.123	5.131	VV	95	378	0.02%	0.003%
36	5.137	5.131	5.143	PV	116	602	0.03%	0.005%

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37	5.149	5.143	5.165	VV	246	2111	0.11%	0.017%
38	5.168	5.165	5.172	VV	192	669	0.04%	0.005%
39	5.176	5.172	5.226	VV	179	3287	0.17%	0.027%
40	5.228	5.226	5.236	VV	106	345	0.02%	0.003%
41	5.246	5.236	5.250	VV	140	841	0.04%	0.007%
42	5.254	5.250	5.267	VV	137	946	0.05%	0.008%
43	5.273	5.267	5.300	VV	103	900	0.05%	0.007%
44	5.306	5.300	5.313	PV	134	512	0.03%	0.004%
45	5.320	5.313	5.343	VV	167	1245	0.07%	0.010%
46	5.346	5.343	5.355	VV	100	475	0.02%	0.004%
47	5.363	5.355	5.370	VV	107	554	0.03%	0.004%
48	5.376	5.370	5.382	VV	144	478	0.03%	0.004%
49	5.392	5.382	5.404	VV	134	882	0.05%	0.007%
50	5.408	5.404	5.416	VV	69	447	0.02%	0.004%
51	5.420	5.416	5.427	PV	76	324	0.02%	0.003%
52	5.444	5.427	5.464	VV	156	1878	0.10%	0.015%
53	5.471	5.464	5.476	VV	205	1055	0.06%	0.009%
54	5.481	5.476	5.504	VV	204	1839	0.10%	0.015%
55	5.508	5.504	5.535	VV	140	1461	0.08%	0.012%
56	5.542	5.535	5.553	VV	125	747	0.04%	0.006%
57	5.559	5.553	5.576	VV	121	997	0.05%	0.008%
58	5.578	5.576	5.588	VV	109	543	0.03%	0.004%
59	5.591	5.588	5.597	VV	87	433	0.02%	0.004%
60	5.611	5.597	5.621	VV	120	796	0.04%	0.006%
61	5.644	5.621	5.662	PV	321	4532	0.24%	0.037%
62	5.676	5.662	5.701	VV	204	2918	0.15%	0.024%
63	5.710	5.701	5.715	VV	133	838	0.04%	0.007%
64	5.743	5.715	5.755	VV	310	5472	0.29%	0.044%
65	5.771	5.755	5.783	VV	321	4486	0.24%	0.036%
66	5.802	5.783	5.826	VV	397	8273	0.43%	0.067%
67	5.830	5.826	5.847	VV	440	4551	0.24%	0.037%
68	5.861	5.847	5.866	VV	395	3758	0.20%	0.030%
69	5.874	5.866	5.885	VV	377	3884	0.20%	0.031%
70	5.892	5.885	5.897	VV	405	2425	0.13%	0.020%
71	5.901	5.897	5.927	VV	378	5994	0.32%	0.049%
72	5.930	5.927	5.933	VV	345	1272	0.07%	0.010%
73	5.945	5.933	5.988	VV	417	9463	0.50%	0.077%
74	5.990	5.988	6.003	VV	293	2035	0.11%	0.016%
75	6.005	6.003	6.025	VV	306	2660	0.14%	0.022%
76	6.029	6.025	6.034	VV	178	845	0.04%	0.007%
77	6.040	6.034	6.083	VV	231	4618	0.24%	0.037%
78	6.111	6.083	6.143	VV	242	6158	0.32%	0.050%
79	6.159	6.143	6.188	VV	295	6071	0.32%	0.049%
80	6.206	6.188	6.234	VV	394	8855	0.47%	0.072%
81	6.239	6.234	6.252	VV	372	3754	0.20%	0.030%
82	6.274	6.252	6.283	VV	446	7102	0.37%	0.057%
83	6.320	6.283	6.325	VV	480	8982	0.47%	0.073%
84	6.329	6.325	6.339	VV	446	3048	0.16%	0.025%
85	6.343	6.339	6.365	VV	398	5976	0.31%	0.048%
86	6.382	6.365	6.426	VV	625	14209	0.75%	0.115%
87	6.434	6.426	6.459	VV	325	5698	0.30%	0.046%
88	6.465	6.459	6.494	VV	356	5259	0.28%	0.043%
89	6.497	6.494	6.529	VV	261	4062	0.21%	0.033%

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90	6.547	6.529	6.569	VV	282	5612	0.30%	0.045%
91	6.574	6.569	6.587	VV	220	1818	0.10%	0.015%
92	6.591	6.587	6.602	VV	190	1217	0.06%	0.010%
93	6.610	6.602	6.623	VV	177	1632	0.09%	0.013%
94	6.629	6.623	6.654	VV	149	1637	0.09%	0.013%
95	6.671	6.654	6.699	VV	262	4713	0.25%	0.038%
96	6.704	6.699	6.721	VV	184	846	0.04%	0.007%
97	6.727	6.721	6.734	PV	105	411	0.02%	0.003%
98	6.739	6.734	6.743	VV	88	363	0.02%	0.003%
99	6.746	6.743	6.757	VV	69	476	0.03%	0.004%
100	6.767	6.757	6.795	VV	101	1200	0.06%	0.010%
101	6.829	6.795	6.985	VV	5153	288887	15.19%	2.339%
102	6.991	6.985	7.024	VV	1430	28401	1.49%	0.230%
103	7.029	7.024	7.061	VV	1107	21698	1.14%	0.176%
104	7.065	7.061	7.100	VV	939	18987	1.00%	0.154%
105	7.105	7.100	7.118	VV	769	7213	0.38%	0.058%
106	7.123	7.118	7.129	VV	684	4336	0.23%	0.035%
107	7.135	7.129	7.152	VV	694	8966	0.47%	0.073%
108	7.202	7.152	7.232	VV	1074	41353	2.17%	0.335%
109	7.248	7.232	7.279	VV	1018	25698	1.35%	0.208%
110	7.287	7.279	7.328	VV	871	21405	1.13%	0.173%
111	7.334	7.328	7.338	VV	644	3385	0.18%	0.027%
112	7.352	7.338	7.371	VV	704	11569	0.61%	0.094%
113	7.392	7.371	7.425	VV	1080	21841	1.15%	0.177%
114	7.428	7.425	7.433	VV	432	1803	0.09%	0.015%
115	7.435	7.433	7.439	VV	380	1390	0.07%	0.011%
116	7.452	7.439	7.465	VV	449	6237	0.33%	0.050%
117	7.471	7.465	7.480	VV	372	3076	0.16%	0.025%
118	7.485	7.480	7.519	VV	414	7603	0.40%	0.062%
119	7.533	7.519	7.541	VV	380	3835	0.20%	0.031%
120	7.567	7.541	7.572	VV	353	5527	0.29%	0.045%
121	7.579	7.572	7.592	VV	303	3320	0.17%	0.027%
122	7.593	7.592	7.606	VV	279	1818	0.10%	0.015%
123	7.628	7.606	7.634	VV	335	3938	0.21%	0.032%
124	7.638	7.634	7.640	VV	213	712	0.04%	0.006%
125	7.645	7.640	7.651	VV	252	1347	0.07%	0.011%
126	7.660	7.651	7.669	VV	250	2047	0.11%	0.017%
127	7.675	7.669	7.691	VV	175	1970	0.10%	0.016%
128	7.703	7.691	7.722	VV	168	2627	0.14%	0.021%
129	7.744	7.722	7.784	VV	211	5490	0.29%	0.044%
130	7.795	7.784	7.819	VV	328	3562	0.19%	0.029%
131	7.822	7.819	7.826	VV	116	320	0.02%	0.003%
132	7.830	7.826	7.836	VV	118	513	0.03%	0.004%
133	7.850	7.836	7.873	VV	158	2718	0.14%	0.022%
134	7.905	7.873	7.952	VV	1486	34267	1.80%	0.277%
135	7.958	7.952	7.989	VV	558	7465	0.39%	0.060%
136	8.003	7.989	8.023	VV	307	4027	0.21%	0.033%
137	8.049	8.023	8.061	VV	531	7461	0.39%	0.060%
138	8.078	8.061	8.131	VV	1058	17103	0.90%	0.138%
139	8.159	8.131	8.187	VV	241	5256	0.28%	0.043%
140	8.200	8.187	8.224	VV	254	3814	0.20%	0.031%
141	8.234	8.224	8.267	VV	329	5890	0.31%	0.048%

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142	8.273	8.267	8.305	VV	296	3832	0.20%	0.031%
143	8.323	8.305	8.352	PV	725	8796	0.46%	0.071%
144	8.370	8.352	8.389	VV	170	2378	0.12%	0.019%
145	8.392	8.389	8.397	VV	98	272	0.01%	0.002%
146	8.413	8.397	8.430	VV	216	2523	0.13%	0.020%
147	8.436	8.430	8.440	VV	171	818	0.04%	0.007%
148	8.444	8.440	8.451	VV	210	1132	0.06%	0.009%
149	8.478	8.451	8.496	VV	645	10656	0.56%	0.086%
150	8.503	8.496	8.518	VV	515	6238	0.33%	0.050%
151	8.523	8.518	8.537	VV	473	4500	0.24%	0.036%
152	8.541	8.537	8.592	VV	442	8452	0.44%	0.068%
153	8.652	8.592	8.710	VV	1627	45876	2.41%	0.371%
154	8.713	8.710	8.724	VV	318	1963	0.10%	0.016%
155	8.731	8.724	8.737	VV	277	1742	0.09%	0.014%
156	8.753	8.737	8.799	VV	282	6103	0.32%	0.049%
157	8.805	8.799	8.810	VV	121	697	0.04%	0.006%
158	8.817	8.810	8.839	VV	140	2120	0.11%	0.017%
159	8.864	8.839	8.905	VV	435	9096	0.48%	0.074%
160	8.929	8.905	8.944	VV	423	6214	0.33%	0.050%
161	8.957	8.944	8.977	VV	438	6308	0.33%	0.051%
162	9.012	8.977	9.032	VV	851	19701	1.04%	0.159%
163	9.047	9.032	9.072	VV	1319	19675	1.03%	0.159%
164	9.076	9.072	9.088	VV	342	2713	0.14%	0.022%
165	9.095	9.088	9.119	VV	347	4544	0.24%	0.037%
166	9.122	9.119	9.147	VV	228	2088	0.11%	0.017%
167	9.157	9.147	9.181	VV	173	2650	0.14%	0.021%
168	9.191	9.181	9.214	VV	166	2119	0.11%	0.017%
169	9.241	9.214	9.261	VV	762	14221	0.75%	0.115%
170	9.266	9.261	9.298	VV	684	11105	0.58%	0.090%
171	9.302	9.298	9.319	VV	395	4188	0.22%	0.034%
172	9.341	9.319	9.347	VV	547	7257	0.38%	0.059%
173	9.371	9.347	9.377	VV	10779	105662	5.55%	0.855%
174	9.388	9.377	9.502	VV	13376	210594	11.07%	1.705%
175	9.522	9.502	9.556	VV	369	8304	0.44%	0.067%
176	9.562	9.556	9.567	VV	206	1096	0.06%	0.009%
177	9.570	9.567	9.576	VV	204	948	0.05%	0.008%
178	9.580	9.576	9.606	VV	180	1645	0.09%	0.013%
179	9.620	9.606	9.623	VV	199	1241	0.07%	0.010%
180	9.635	9.623	9.654	VV	253	3038	0.16%	0.025%
181	9.659	9.654	9.664	VV	82	263	0.01%	0.002%
182	9.666	9.664	9.677	VV	118	422	0.02%	0.003%
183	9.738	9.677	9.859	PV	1638	83926	4.41%	0.679%
184	9.873	9.859	9.919	VV	694	16115	0.85%	0.130%
185	9.924	9.919	9.928	VV	251	1327	0.07%	0.011%
186	9.949	9.928	9.968	VV	714	10725	0.56%	0.087%
187	9.986	9.968	10.002	VV	1021	14553	0.77%	0.118%
188	10.027	10.002	10.059	VV	2084	52630	2.77%	0.426%
189	10.066	10.059	10.102	VV	1538	30624	1.61%	0.248%
190	10.118	10.102	10.140	VV	1134	19752	1.04%	0.160%
191	10.155	10.140	10.164	VV	611	7899	0.42%	0.064%
192	10.190	10.164	10.211	VV	709	15949	0.84%	0.129%
193	10.229	10.211	10.250	VV	517	9946	0.52%	0.081%
194	10.264	10.250	10.342	VV	578	15395	0.81%	0.125%

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195	10.345	10.342	10.369	VV	163	2017	0.11%	0.016%
196	10.374	10.369	10.377	VV	88	324	0.02%	0.003%
197	10.384	10.377	10.414	VV	132	1701	0.09%	0.014%
198	10.468	10.414	10.483	PV	610	12567	0.66%	0.102%
199	10.506	10.483	10.533	VV	1621	27089	1.42%	0.219%
200	10.596	10.533	10.625	VV	614	23860	1.25%	0.193%
201	10.649	10.625	10.660	VV	523	8783	0.46%	0.071%
202	10.681	10.660	10.701	VV	886	14540	0.76%	0.118%
203	10.707	10.701	10.768	VV	355	12588	0.66%	0.102%
204	10.788	10.768	10.812	VV	500	10318	0.54%	0.084%
205	10.860	10.812	10.902	VV	1288	41037	2.16%	0.332%
206	10.932	10.902	11.019	VV	3978	98485	5.18%	0.797%
207	11.088	11.019	11.097	VV	439	16848	0.89%	0.136%
208	11.137	11.097	11.215	VV	9337	249525	13.12%	2.020%
209	11.238	11.215	11.290	VV	2508	79344	4.17%	0.642%
210	11.310	11.290	11.355	VV	1281	39413	2.07%	0.319%
211	11.368	11.355	11.437	VV	1102	34757	1.83%	0.281%
212	11.496	11.437	11.520	VV	1710	54100	2.84%	0.438%
213	11.564	11.520	11.624	VV	1833	71922	3.78%	0.582%
214	11.655	11.624	11.690	VV	3754	74182	3.90%	0.601%
215	11.709	11.690	11.747	VV	1106	30505	1.60%	0.247%
216	11.764	11.747	11.789	VV	891	16869	0.89%	0.137%
217	11.862	11.789	11.914	VV	1301	69540	3.66%	0.563%
218	11.953	11.914	11.982	VV	1994	63740	3.35%	0.516%
219	11.996	11.982	12.027	VV	1927	45082	2.37%	0.365%
220	12.050	12.027	12.109	VV	4739	114057	6.00%	0.923%
221	12.125	12.109	12.157	VV	1667	40925	2.15%	0.331%
222	12.175	12.157	12.187	VV	1135	18306	0.96%	0.148%
223	12.219	12.187	12.269	VV	2490	83108	4.37%	0.673%
224	12.297	12.269	12.320	VV	2116	49823	2.62%	0.403%
225	12.338	12.320	12.355	VV	1762	31509	1.66%	0.255%
226	12.367	12.355	12.409	VV	1565	44028	2.31%	0.356%
227	12.435	12.409	12.471	VV	1776	55997	2.94%	0.453%
228	12.495	12.471	12.579	VV	14632	262814	13.82%	2.128%
229	12.599	12.579	12.610	VV	1853	32459	1.71%	0.263%
230	12.648	12.610	12.675	VV	1919	65340	3.43%	0.529%
231	12.703	12.675	12.775	VV	2104	95958	5.04%	0.777%
232	12.801	12.775	12.825	VV	2160	53586	2.82%	0.434%
233	12.842	12.825	12.859	VV	2261	39387	2.07%	0.319%
234	12.882	12.859	12.898	VV	2708	52022	2.73%	0.421%
235	12.915	12.898	12.927	VV	2275	35317	1.86%	0.286%
236	12.959	12.927	13.045	VV	13914	355408	18.68%	2.877%
237	13.062	13.045	13.096	VV	1698	47505	2.50%	0.385%
238	13.156	13.096	13.185	VV	2231	97901	5.15%	0.793%
239	13.197	13.185	13.220	VV	1785	34422	1.81%	0.279%
240	13.260	13.220	13.315	VV	9350	267185	14.05%	2.163%
241	13.326	13.315	13.349	VV	2997	52192	2.74%	0.423%
242	13.374	13.349	13.447	VV	3732	144854	7.61%	1.173%
243	13.456	13.447	13.480	VV	1921	35344	1.86%	0.286%
244	13.495	13.480	13.517	VV	2170	43840	2.30%	0.355%
245	13.565	13.517	13.582	VV	2320	84126	4.42%	0.681%
246	13.596	13.582	13.637	VV	2116	64985	3.42%	0.526%

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247	13.656	13.637	13.676	VV	2148	45414	2.39%	0.368%
248	13.720	13.676	13.757	VV	3181	120361	6.33%	0.974%
249	13.764	13.757	13.789	VV	2537	43621	2.29%	0.353%
250	13.802	13.789	13.827	VV	2029	43592	2.29%	0.353%
251	13.849	13.827	13.860	VV	2252	41393	2.18%	0.335%
252	13.883	13.860	13.895	VV	2860	54335	2.86%	0.440%
253	13.910	13.895	13.956	VV	2912	93373	4.91%	0.756%
254	13.985	13.956	14.015	VV	3263	93403	4.91%	0.756%
255	14.036	14.015	14.057	VV	2919	62599	3.29%	0.507%
256	14.079	14.057	14.111	VV	2662	72611	3.82%	0.588%
257	14.136	14.111	14.157	VV	2743	65540	3.45%	0.531%
258	14.166	14.157	14.204	VV	2420	60972	3.21%	0.494%
259	14.226	14.204	14.247	VV	2235	52811	2.78%	0.428%
260	14.313	14.247	14.340	VV	3367	135289	7.11%	1.095%
261	14.352	14.340	14.369	VV	2286	37723	1.98%	0.305%
262	14.381	14.369	14.414	VV	2314	56362	2.96%	0.456%
263	14.486	14.414	14.544	VV	4090	217747	11.45%	1.763%
264	14.554	14.544	14.569	VV	2230	32652	1.72%	0.264%
265	14.579	14.569	14.602	VV	2304	42914	2.26%	0.347%
266	14.608	14.602	14.624	VV	2165	26127	1.37%	0.212%
267	14.645	14.624	14.665	VV	3300	64692	3.40%	0.524%
268	14.710	14.665	14.731	VV	3196	106665	5.61%	0.864%
269	14.749	14.731	14.757	VV	3148	46329	2.44%	0.375%
270	14.768	14.757	14.820	VV	3408	104799	5.51%	0.848%
271	14.861	14.820	14.877	VV	2690	84955	4.47%	0.688%
272	14.890	14.877	14.907	VV	2891	49736	2.61%	0.403%
273	14.920	14.907	14.944	VV	2696	55844	2.94%	0.452%
274	14.983	14.944	15.035	VV	135081	1902231	100.00%	15.400%
275	15.040	15.035	15.056	VV	3058	35307	1.86%	0.286%
276	15.070	15.056	15.128	VV	3188	109815	5.77%	0.889%
277	15.187	15.128	15.214	VV	4434	157566	8.28%	1.276%
278	15.235	15.214	15.288	VV	4294	149006	7.83%	1.206%
279	15.325	15.288	15.356	VV	2806	101796	5.35%	0.824%
280	15.387	15.356	15.408	VV	2489	66054	3.47%	0.535%
281	15.442	15.408	15.491	VV	2393	105466	5.54%	0.854%
282	15.572	15.491	15.680	VV	39633	1004019	52.78%	8.128%
283	15.709	15.680	15.754	VV	5046	156647	8.23%	1.268%
284	15.774	15.754	15.819	VV	4936	120663	6.34%	0.977%
285	15.840	15.819	15.859	VV	2034	44482	2.34%	0.360%
286	15.873	15.859	15.909	VV	1788	50891	2.68%	0.412%
287	15.924	15.909	15.939	VV	1839	30662	1.61%	0.248%
288	15.971	15.939	15.979	VV	1923	41193	2.17%	0.333%
289	16.014	15.979	16.074	VV	2782	125701	6.61%	1.018%
290	16.101	16.074	16.185	VV	2603	121405	6.38%	0.983%
291	16.212	16.185	16.330	VV	4275	164913	8.67%	1.335%
292	16.341	16.330	16.369	VV	1204	24951	1.31%	0.202%
293	16.399	16.369	16.420	VV	1530	38924	2.05%	0.315%
294	16.439	16.420	16.482	VV	1383	43687	2.30%	0.354%
295	16.529	16.482	16.557	VV	2051	72008	3.79%	0.583%
296	16.596	16.557	16.634	VV	4826	127042	6.68%	1.028%
297	16.652	16.634	16.675	VV	1784	40030	2.10%	0.324%
298	16.696	16.675	16.723	VV	4284	67450	3.55%	0.546%
299	16.772	16.723	16.827	VV	2232	87254	4.59%	0.706%

					rteres			
300	16.852	16.827	16.880	VV	1184	31032	1.63%	0.251%
301	16.914	16.880	16.945	VV	1156	36910	1.94%	0.299%
302	16.990	16.945	17.055	VV	1682	69433	3.65%	0.562%
303	17.079	17.055	17.115	VV	1057	29391	1.55%	0.238%
304	17.163	17.115	17.193	VV	4240	82605	4.34%	0.669%
305	17.210	17.193	17.232	VV	1599	25202	1.32%	0.204%
306	17.244	17.232	17.268	VV	1098	15763	0.83%	0.128%
307	17.285	17.268	17.314	VV	426	7589	0.40%	0.061%
308	17.322	17.314	17.343	VV	232	2681	0.14%	0.022%
					Sum of corrected areas:	12352351		

FG042425.M Thu May 22 01:26:02 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-37	SDG No.:	Q2032
Lab Sample ID:	Q2032-07	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	82.5
Sample Wt/Vol:	30.04	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015877.D	1	05/20/25 10:15	05/21/25 16:10	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1220	J	205	2020	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.4		37 - 130	57%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015877.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 16:10
Operator : YP\AJ
Sample : Q2032-07
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-37

Integration File: autoint1.e
Quant Time: May 22 00:41:43 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.983	1341915	11.398 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

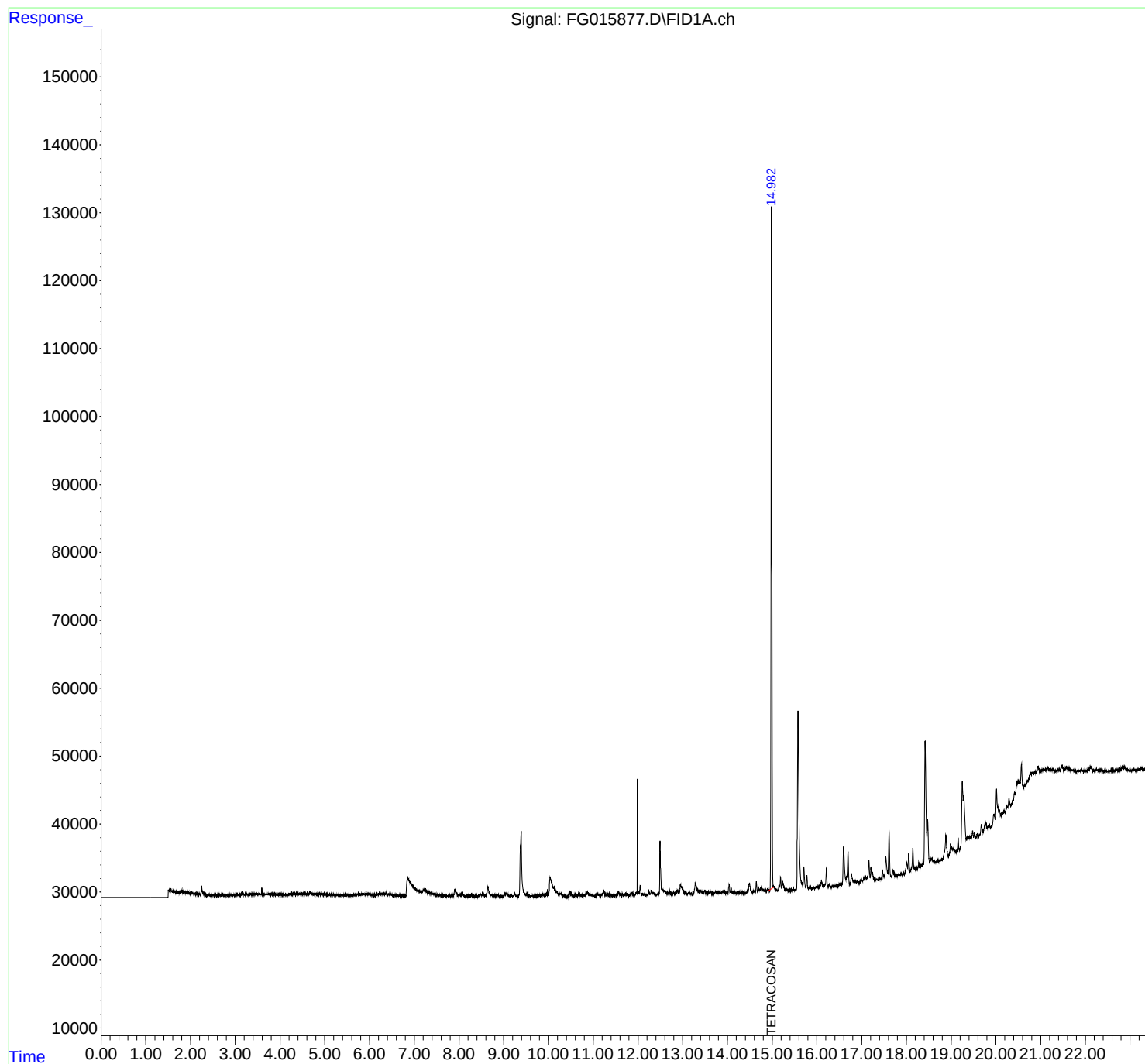
(m)=manual int.

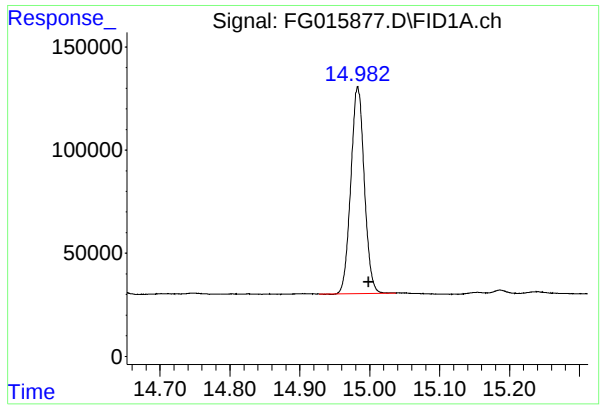
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015877.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 16:10
Operator : YP\AJ
Sample : Q2032-07
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-37

Integration File: autoint1.e
Quant Time: May 22 00:41:43 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.983 min
Delta R.T.: -0.016 min
Response: 1341915
Conc: 11.40 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-37

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015877.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 16:10
Sample : Q2032-07
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.310	4.300	4.346	BV	133	1881	0.14%	0.036%
2	4.360	4.346	4.365	PV	145	902	0.06%	0.017%
3	4.369	4.365	4.374	VV	107	403	0.03%	0.008%
4	4.377	4.374	4.393	VV	126	743	0.05%	0.014%
5	4.402	4.393	4.439	PV	171	2418	0.17%	0.047%
6	4.443	4.439	4.467	VV	79	1211	0.09%	0.023%
7	4.492	4.467	4.515	VV	293	4436	0.32%	0.086%
8	4.522	4.515	4.542	VV	245	2623	0.19%	0.051%
9	4.547	4.542	4.563	VV	232	2043	0.15%	0.040%
10	4.569	4.563	4.578	VV	185	1057	0.08%	0.020%
11	4.581	4.578	4.591	VV	122	670	0.05%	0.013%
12	4.615	4.591	4.643	VV	420	6312	0.45%	0.122%
13	4.667	4.643	4.696	VV	453	8209	0.59%	0.159%
14	4.702	4.696	4.720	VV	227	2517	0.18%	0.049%
15	4.725	4.720	4.752	VV	193	2527	0.18%	0.049%
16	4.756	4.752	4.760	VV	105	434	0.03%	0.008%
17	4.765	4.760	4.786	VV	140	1689	0.12%	0.033%
18	4.791	4.786	4.796	VV	149	681	0.05%	0.013%
19	4.808	4.796	4.812	VV	164	1305	0.09%	0.025%
20	4.823	4.812	4.827	VV	174	1234	0.09%	0.024%
21	4.830	4.827	4.841	VV	146	1114	0.08%	0.022%
22	4.846	4.841	4.865	VV	210	2053	0.15%	0.040%
23	4.873	4.865	4.890	VV	170	2116	0.15%	0.041%
24	4.917	4.890	4.923	VV	219	2694	0.19%	0.052%
25	4.926	4.923	4.934	VV	213	963	0.07%	0.019%
26	4.937	4.934	4.945	VV	190	1001	0.07%	0.019%
27	4.951	4.945	4.987	VV	197	3200	0.23%	0.062%
28	4.996	4.987	5.005	VV	138	1287	0.09%	0.025%
29	5.014	5.005	5.039	VV	211	2693	0.19%	0.052%
30	5.046	5.039	5.065	PV	169	1163	0.08%	0.023%
31	5.086	5.065	5.095	VV	160	1571	0.11%	0.030%
32	5.102	5.095	5.118	VV	151	931	0.07%	0.018%
33	5.154	5.118	5.178	VV	191	3243	0.23%	0.063%
34	5.181	5.178	5.203	VV	140	1159	0.08%	0.022%
35	5.214	5.203	5.220	VV	138	819	0.06%	0.016%
36	5.233	5.220	5.275	VV	170	2203	0.16%	0.043%

					rteres			
37	5.279	5.275	5.302	VV	94	662	0.05%	0.013%
38	5.309	5.302	5.325	VV	61	632	0.05%	0.012%
39	5.328	5.325	5.345	VV	36	521	0.04%	0.010%
40	5.351	5.345	5.359	VV	79	459	0.03%	0.009%
41	5.364	5.359	5.375	VV	65	382	0.03%	0.007%
42	5.382	5.375	5.389	VV	101	426	0.03%	0.008%
43	5.410	5.389	5.416	VV	88	842	0.06%	0.016%
44	5.424	5.416	5.428	PV	102	342	0.02%	0.007%
45	5.443	5.428	5.454	VV	105	968	0.07%	0.019%
46	5.475	5.454	5.494	VV	156	2405	0.17%	0.047%
47	5.514	5.494	5.520	VV	125	1511	0.11%	0.029%
48	5.533	5.520	5.566	VV	119	2202	0.16%	0.043%
49	5.587	5.566	5.600	VV	163	1618	0.12%	0.031%
50	5.607	5.600	5.630	VV	125	917	0.07%	0.018%
51	5.655	5.630	5.678	VV	123	2315	0.17%	0.045%
52	5.702	5.678	5.718	VV	136	2077	0.15%	0.040%
53	5.742	5.718	5.754	VV	275	3619	0.26%	0.070%
54	5.761	5.754	5.770	VV	230	1920	0.14%	0.037%
55	5.779	5.770	5.785	VV	230	1698	0.12%	0.033%
56	5.792	5.785	5.816	VV	229	3378	0.24%	0.065%
57	5.831	5.816	5.847	VV	402	5088	0.37%	0.099%
58	5.853	5.847	5.865	VV	254	2448	0.18%	0.047%
59	5.867	5.865	5.872	VV	229	817	0.06%	0.016%
60	5.889	5.872	5.902	VV	310	4425	0.32%	0.086%
61	5.911	5.902	5.933	VV	304	5350	0.38%	0.104%
62	5.938	5.933	5.985	VV	293	7082	0.51%	0.137%
63	5.990	5.985	6.020	VV	229	3468	0.25%	0.067%
64	6.028	6.020	6.054	VV	147	2898	0.21%	0.056%
65	6.055	6.054	6.070	VV	182	1200	0.09%	0.023%
66	6.077	6.070	6.089	VV	168	1339	0.10%	0.026%
67	6.134	6.089	6.154	VV	210	5520	0.40%	0.107%
68	6.211	6.154	6.222	VV	330	8900	0.64%	0.172%
69	6.225	6.222	6.249	VV	287	4018	0.29%	0.078%
70	6.252	6.249	6.256	VV	295	1185	0.09%	0.023%
71	6.274	6.256	6.309	VV	418	9566	0.69%	0.185%
72	6.320	6.309	6.333	VV	341	4322	0.31%	0.084%
73	6.338	6.333	6.345	VV	303	2100	0.15%	0.041%
74	6.384	6.345	6.414	VV	558	13501	0.97%	0.261%
75	6.415	6.414	6.427	VV	252	1668	0.12%	0.032%
76	6.439	6.427	6.445	VV	314	2409	0.17%	0.047%
77	6.450	6.445	6.457	VV	287	1454	0.10%	0.028%
78	6.466	6.457	6.498	VV	257	4217	0.30%	0.082%
79	6.502	6.498	6.523	VV	189	1654	0.12%	0.032%
80	6.562	6.523	6.627	VV	271	8441	0.61%	0.163%
81	6.633	6.627	6.658	VV	141	1409	0.10%	0.027%
82	6.681	6.658	6.731	VV	136	2849	0.20%	0.055%
83	6.737	6.731	6.750	PV	62	605	0.04%	0.012%
84	6.754	6.750	6.805	VV	88	1869	0.13%	0.036%
85	6.854	6.805	7.154	VV	2673	281240	20.19%	5.445%
86	7.164	7.154	7.173	VV	721	7290	0.52%	0.141%
87	7.233	7.173	7.245	VV	934	35674	2.56%	0.691%
88	7.253	7.245	7.352	VV	848	40500	2.91%	0.784%
89	7.361	7.352	7.519	VV	508	32305	2.32%	0.625%

					rteres			
90	7.529	7.519	7.560	VV	251	4537	0.33%	0.088%
91	7.572	7.560	7.611	VV	193	4571	0.33%	0.088%
92	7.626	7.611	7.659	VV	196	3995	0.29%	0.077%
93	7.665	7.659	7.686	VV	167	1576	0.11%	0.031%
94	7.696	7.686	7.742	VV	105	2293	0.16%	0.044%
95	7.758	7.742	7.773	VV	112	1131	0.08%	0.022%
96	7.785	7.773	7.820	VV	136	1951	0.14%	0.038%
97	7.905	7.820	8.009	VV	1037	35900	2.58%	0.695%
98	8.047	8.009	8.060	VV	323	7174	0.52%	0.139%
99	8.078	8.060	8.148	VV	675	11400	0.82%	0.221%
100	8.172	8.148	8.218	VV	106	2238	0.16%	0.043%
101	8.240	8.218	8.252	VV	187	1904	0.14%	0.037%
102	8.275	8.252	8.322	VV	226	4629	0.33%	0.090%
103	8.342	8.322	8.380	VV	110	1772	0.13%	0.034%
104	8.391	8.380	8.424	VV	85	1285	0.09%	0.025%
105	8.434	8.424	8.445	VV	125	958	0.07%	0.019%
106	8.478	8.445	8.495	VV	450	7252	0.52%	0.140%
107	8.530	8.495	8.581	VV	445	14962	1.07%	0.290%
108	8.650	8.581	8.777	VV	1477	49321	3.54%	0.955%
109	8.781	8.777	8.788	VV	190	863	0.06%	0.017%
110	8.799	8.788	8.811	VV	179	1694	0.12%	0.033%
111	8.822	8.811	8.834	VV	168	1639	0.12%	0.032%
112	8.869	8.834	8.914	VV	293	8018	0.58%	0.155%
113	8.939	8.914	8.974	PV	198	3843	0.28%	0.074%
114	9.030	8.974	9.041	VV	420	10008	0.72%	0.194%
115	9.058	9.041	9.134	VV	485	14218	1.02%	0.275%
116	9.176	9.134	9.215	VV	157	5123	0.37%	0.099%
117	9.246	9.215	9.289	VV	516	10988	0.79%	0.213%
118	9.290	9.289	9.315	VV	120	1204	0.09%	0.023%
119	9.389	9.315	9.499	VV	9509	251684	18.07%	4.873%
120	9.525	9.499	9.610	VV	421	15626	1.12%	0.303%
121	9.639	9.610	9.660	VV	152	3382	0.24%	0.065%
122	9.677	9.660	9.706	VV	192	3094	0.22%	0.060%
123	9.759	9.706	9.781	VV	296	8737	0.63%	0.169%
124	9.787	9.781	9.802	VV	230	2643	0.19%	0.051%
125	9.814	9.802	9.840	VV	243	4578	0.33%	0.089%
126	9.871	9.840	9.930	VV	455	12843	0.92%	0.249%
127	9.950	9.930	9.963	VV	438	6007	0.43%	0.116%
128	9.985	9.963	10.007	VV	1063	16540	1.19%	0.320%
129	10.040	10.007	10.110	VV	2826	119593	8.59%	2.316%
130	10.121	10.110	10.174	VV	1408	39551	2.84%	0.766%
131	10.184	10.174	10.232	VV	781	19645	1.41%	0.380%
132	10.270	10.232	10.326	VV	479	20788	1.49%	0.402%
133	10.337	10.326	10.347	VV	202	1902	0.14%	0.037%
134	10.357	10.347	10.419	VV	285	4305	0.31%	0.083%
135	10.478	10.419	10.562	PV	639	25690	1.84%	0.497%
136	10.607	10.562	10.624	VV	335	9462	0.68%	0.183%
137	10.635	10.624	10.655	VV	314	3910	0.28%	0.076%
138	10.683	10.655	10.772	VV	892	21843	1.57%	0.423%
139	10.790	10.772	10.813	VV	310	5316	0.38%	0.103%
140	10.838	10.813	10.850	VV	449	8112	0.58%	0.157%
141	10.866	10.850	10.912	VV	613	16821	1.21%	0.326%

					rteres			
142	10.934	10.912	10.954	VV	410	7825	0.56%	0.152%
143	10.977	10.954	11.025	VV	315	8445	0.61%	0.164%
144	11.049	11.025	11.065	VV	207	3047	0.22%	0.059%
145	11.085	11.065	11.118	VV	582	10261	0.74%	0.199%
146	11.143	11.118	11.167	VV	277	5956	0.43%	0.115%
147	11.239	11.167	11.292	VV	843	28737	2.06%	0.556%
148	11.318	11.292	11.350	VV	410	8912	0.64%	0.173%
149	11.373	11.350	11.445	VV	358	10371	0.74%	0.201%
150	11.460	11.445	11.471	VV	118	1513	0.11%	0.029%
151	11.501	11.471	11.526	VV	334	6100	0.44%	0.118%
152	11.567	11.526	11.590	VV	756	14689	1.05%	0.284%
153	11.600	11.590	11.630	VV	261	4168	0.30%	0.081%
154	11.649	11.630	11.688	VV	406	7724	0.55%	0.150%
155	11.723	11.688	11.750	VV	426	9441	0.68%	0.183%
156	11.762	11.750	11.795	VV	484	5485	0.39%	0.106%
157	11.817	11.795	11.832	PV	251	3370	0.24%	0.065%
158	11.857	11.832	11.930	VV	514	17151	1.23%	0.332%
159	11.954	11.930	11.972	VV	494	8149	0.59%	0.158%
160	11.985	11.972	12.025	VV	6892	26147	1.88%	0.506%
161	12.049	12.025	12.109	VV	1475	28094	2.02%	0.544%
162	12.129	12.109	12.188	VV	270	8641	0.62%	0.167%
163	12.238	12.188	12.274	VV	883	17594	1.26%	0.341%
164	12.297	12.274	12.354	VV	745	22171	1.59%	0.429%
165	12.366	12.354	12.415	VV	363	8967	0.64%	0.174%
166	12.443	12.415	12.459	VV	246	4109	0.29%	0.080%
167	12.494	12.459	12.547	VV	7988	122914	8.82%	2.380%
168	12.557	12.547	12.578	VV	863	14122	1.01%	0.273%
169	12.590	12.578	12.670	VV	707	25221	1.81%	0.488%
170	12.703	12.670	12.754	VV	689	17729	1.27%	0.343%
171	12.757	12.754	12.771	VV	267	2122	0.15%	0.041%
172	12.802	12.771	12.830	VV	429	10466	0.75%	0.203%
173	12.880	12.830	12.904	VV	764	18928	1.36%	0.366%
174	12.950	12.904	13.087	VV	1571	73877	5.30%	1.430%
175	13.098	13.087	13.114	VV	248	2719	0.20%	0.053%
176	13.145	13.114	13.216	VV	352	13134	0.94%	0.254%
177	13.285	13.216	13.355	VV	1650	62116	4.46%	1.203%
178	13.378	13.355	13.392	VV	559	10459	0.75%	0.203%
179	13.412	13.392	13.469	VV	585	16846	1.21%	0.326%
180	13.494	13.469	13.532	VV	594	13093	0.94%	0.254%
181	13.556	13.532	13.587	VV	363	8549	0.61%	0.166%
182	13.626	13.587	13.703	VV	411	14324	1.03%	0.277%
183	13.737	13.703	13.785	VV	403	12444	0.89%	0.241%
184	13.807	13.785	13.844	VV	442	9233	0.66%	0.179%
185	13.901	13.844	13.974	VV	493	20760	1.49%	0.402%
186	14.037	13.974	14.061	VV	1375	25976	1.86%	0.503%
187	14.080	14.061	14.125	VV	895	15760	1.13%	0.305%
188	14.135	14.125	14.180	VV	304	6856	0.49%	0.133%
189	14.192	14.180	14.207	VV	227	2462	0.18%	0.048%
190	14.213	14.207	14.237	VV	187	2290	0.16%	0.044%
191	14.240	14.237	14.270	VV	161	1359	0.10%	0.026%
192	14.319	14.270	14.335	PV	223	5566	0.40%	0.108%
193	14.347	14.335	14.402	VV	150	3919	0.28%	0.076%
194	14.444	14.402	14.457	PV	381	5036	0.36%	0.097%

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195	14.490	14.457	14.569	VV	1486	42078	3.02%	0.815%	
196	14.586	14.569	14.614	VV	295	6521	0.47%	0.126%	
197	14.645	14.614	14.677	VV	1704	24132	1.73%	0.467%	
198	14.703	14.677	14.730	VV	565	13194	0.95%	0.255%	
199	14.749	14.730	14.787	VV	739	16673	1.20%	0.323%	
200	14.804	14.787	14.819	VV	442	6214	0.45%	0.120%	
201	14.827	14.819	14.845	VV	364	4876	0.35%	0.094%	
202	14.856	14.845	14.874	VV	310	4470	0.32%	0.087%	
203	14.906	14.874	14.945	VV	456	13091	0.94%	0.253%	
204	14.983	14.945	15.127	VV	100286	1392888	100.00%	26.969%	
205	15.154	15.127	15.169	VV	1038	16379	1.18%	0.317%	
206	15.186	15.169	15.215	VV	2118	32212	2.31%	0.624%	
207	15.239	15.215	15.332	VV	1278	39005	2.80%	0.755%	
208	15.335	15.332	15.359	VV	268	2378	0.17%	0.046%	
209	15.386	15.359	15.420	PV	343	6298	0.45%	0.122%	
210	15.428	15.420	15.439	VV	57	538	0.04%	0.010%	
211	15.470	15.439	15.500	VV	542	7685	0.55%	0.149%	
212	15.525	15.500	15.540	VV	139	1794	0.13%	0.035%	
213	15.576	15.540	15.684	VV	26294	605183	43.45%	11.718%	
214	15.708	15.684	15.749	VV	3253	57406	4.12%	1.112%	
215	15.775	15.749	15.812	VV	2060	32253	2.32%	0.624%	
216	15.839	15.812	15.870	VV	322	6912	0.50%	0.134%	
217	15.889	15.870	15.944	VV	221	5804	0.42%	0.112%	
218	16.003	15.944	16.069	VV	386	15935	1.14%	0.309%	
219	16.101	16.069	16.154	VV	979	27519	1.98%	0.533%	
220	16.211	16.154	16.249	VV	2875	49309	3.54%	0.955%	
221	16.276	16.249	16.310	VV	588	9839	0.71%	0.191%	
222	16.352	16.310	16.370	PV	140	2634	0.19%	0.051%	
223	16.410	16.370	16.440	PV	159	3421	0.25%	0.066%	
224	16.456	16.440	16.470	VV	96	1210	0.09%	0.023%	
225	16.509	16.470	16.550	PV	278	8000	0.57%	0.155%	
226	16.596	16.550	16.645	VV	5693	128388	9.22%	2.486%	
227	16.694	16.645	16.736	VV	4911	94160	6.76%	1.823%	
228	16.773	16.736	16.834	VV	1507	38529	2.77%	0.746%	
229	16.855	16.834	16.877	VV	490	9750	0.70%	0.189%	
230	16.903	16.877	16.917	VV	271	5294	0.38%	0.103%	
231	16.924	16.917	16.955	VV	212	2537	0.18%	0.049%	
232	16.990	16.955	17.022	VV	675	13622	0.98%	0.264%	
233	17.078	17.022	17.109	VV	918	31177	2.24%	0.604%	
234	17.161	17.109	17.190	VV	3217	64344	4.62%	1.246%	
235	17.209	17.190	17.230	VV	1985	31158	2.24%	0.603%	
236	17.243	17.230	17.315	VV	1301	25636	1.84%	0.496%	
237	17.333	17.315	17.365	VV	189	3189	0.23%	0.062%	
					Sum of corrected areas:		5164713		

FG042425.M Thu May 22 01:28:07 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-32	SDG No.:	Q2032
Lab Sample ID:	Q2032-08	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	86.8
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015878.D	1	05/20/25 10:15	05/21/25 16:40	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1600	J	194	1920	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	12.0		37 - 130	60%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 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
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015878.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 16:40
Operator : YP\AJ
Sample : Q2032-08
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-32

Integration File: autoint1.e
Quant Time: May 22 00:42:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.983	1412262	11.995 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

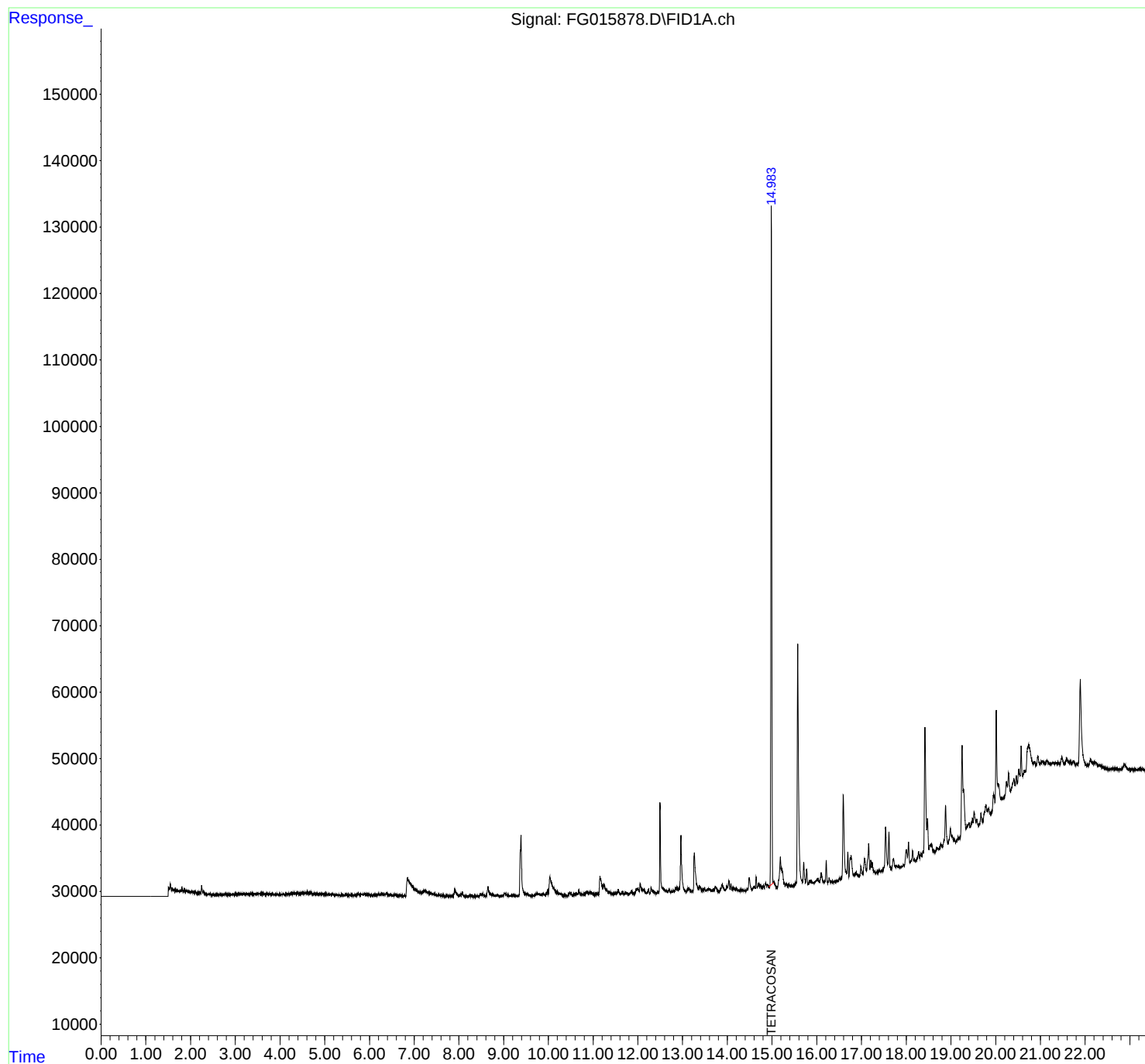
(m)=manual int.

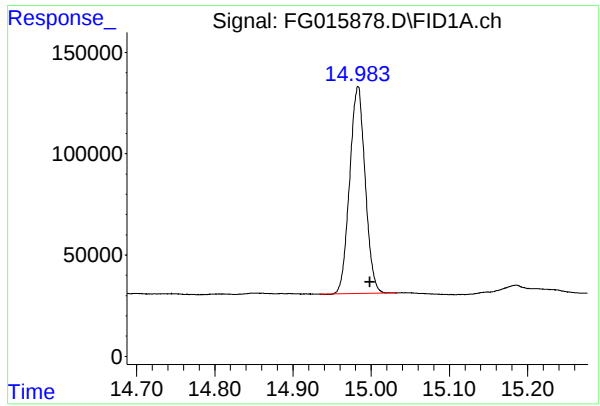
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015878.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 16:40
Operator : YP\AJ
Sample : Q2032-08
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-32

Integration File: autoint1.e
Quant Time: May 22 00:42:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.983 min
Delta R.T.: -0.015 min
Response: 1412262
Conc: 12.00 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-32

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015878.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 16:40
Sample : Q2032-08
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.307	4.300	4.314	BV	83	187	0.01%	0.003%
2	4.316	4.314	4.328	VV	96	231	0.02%	0.003%
3	4.334	4.328	4.345	PV	102	557	0.04%	0.008%
4	4.350	4.345	4.361	VV	89	469	0.03%	0.007%
5	4.364	4.361	4.375	VV	93	482	0.03%	0.007%
6	4.389	4.375	4.402	VV	129	1228	0.08%	0.018%
7	4.406	4.402	4.413	PV	87	618	0.04%	0.009%
8	4.417	4.413	4.424	VV	116	566	0.04%	0.008%
9	4.430	4.424	4.438	VV	158	827	0.06%	0.012%
10	4.443	4.438	4.457	VV	110	955	0.07%	0.014%
11	4.464	4.457	4.475	VV	154	1284	0.09%	0.019%
12	4.495	4.475	4.515	VV	339	5162	0.36%	0.077%
13	4.527	4.515	4.533	VV	250	1958	0.14%	0.029%
14	4.539	4.533	4.545	VV	209	1430	0.10%	0.021%
15	4.552	4.545	4.562	VV	254	2187	0.15%	0.033%
16	4.568	4.562	4.590	VV	297	3508	0.24%	0.052%
17	4.616	4.590	4.639	VV	409	6757	0.47%	0.101%
18	4.643	4.639	4.653	VV	157	1065	0.07%	0.016%
19	4.668	4.653	4.734	VV	439	10802	0.75%	0.161%
20	4.737	4.734	4.765	VV	208	2406	0.17%	0.036%
21	4.771	4.765	4.796	VV	204	2640	0.18%	0.039%
22	4.806	4.796	4.823	VV	218	2440	0.17%	0.036%
23	4.826	4.823	4.845	VV	228	1846	0.13%	0.028%
24	4.847	4.845	4.858	VV	197	1108	0.08%	0.017%
25	4.863	4.858	4.875	VV	158	1390	0.10%	0.021%
26	4.885	4.875	4.891	VV	218	1506	0.10%	0.022%
27	4.901	4.891	4.906	VV	205	1506	0.10%	0.022%
28	4.920	4.906	4.931	VV	201	2385	0.16%	0.036%
29	4.935	4.931	4.964	VV	212	2792	0.19%	0.042%
30	4.969	4.964	4.980	VV	121	1225	0.08%	0.018%
31	4.985	4.980	4.990	VV	210	922	0.06%	0.014%
32	4.994	4.990	5.000	VV	222	845	0.06%	0.013%
33	5.002	5.000	5.018	VV	185	1418	0.10%	0.021%
34	5.020	5.018	5.027	VV	164	584	0.04%	0.009%
35	5.035	5.027	5.046	VV	219	1496	0.10%	0.022%
36	5.051	5.046	5.068	VV	164	1430	0.10%	0.021%

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37	5.072	5.068	5.088	VV	163	1264	0.09%	0.019%
38	5.092	5.088	5.102	VV	146	787	0.05%	0.012%
39	5.108	5.102	5.123	VV	83	1122	0.08%	0.017%
40	5.129	5.123	5.133	VV	180	637	0.04%	0.009%
41	5.137	5.133	5.143	VV	140	613	0.04%	0.009%
42	5.158	5.143	5.167	VV	239	2321	0.16%	0.035%
43	5.170	5.167	5.177	VV	187	918	0.06%	0.014%
44	5.181	5.177	5.203	VV	149	1591	0.11%	0.024%
45	5.206	5.203	5.210	VV	81	350	0.02%	0.005%
46	5.214	5.210	5.240	VV	118	1401	0.10%	0.021%
47	5.250	5.240	5.266	PV	123	1112	0.08%	0.017%
48	5.270	5.266	5.281	VV	127	784	0.05%	0.012%
49	5.284	5.281	5.302	VV	96	871	0.06%	0.013%
50	5.306	5.302	5.311	VV	147	386	0.03%	0.006%
51	5.316	5.311	5.328	VV	86	675	0.05%	0.010%
52	5.336	5.328	5.345	VV	102	764	0.05%	0.011%
53	5.356	5.345	5.368	VV	93	1055	0.07%	0.016%
54	5.379	5.368	5.385	VV	155	780	0.05%	0.012%
55	5.418	5.385	5.438	VV	116	2572	0.18%	0.038%
56	5.442	5.438	5.448	VV	116	470	0.03%	0.007%
57	5.453	5.448	5.465	VV	163	1113	0.08%	0.017%
58	5.478	5.465	5.487	VV	335	1529	0.11%	0.023%
59	5.492	5.487	5.509	VV	142	1327	0.09%	0.020%
60	5.513	5.509	5.530	VV	64	709	0.05%	0.011%
61	5.540	5.530	5.566	PV	132	1463	0.10%	0.022%
62	5.569	5.566	5.575	VV	117	488	0.03%	0.007%
63	5.585	5.575	5.614	VV	164	1924	0.13%	0.029%
64	5.623	5.614	5.648	VV	174	1700	0.12%	0.025%
65	5.658	5.648	5.665	VV	126	1001	0.07%	0.015%
66	5.673	5.665	5.704	VV	161	2242	0.15%	0.033%
67	5.708	5.704	5.714	VV	159	466	0.03%	0.007%
68	5.742	5.714	5.752	VV	318	4942	0.34%	0.074%
69	5.755	5.752	5.776	VV	335	3443	0.24%	0.051%
70	5.781	5.776	5.795	VV	226	2075	0.14%	0.031%
71	5.831	5.795	5.855	VV	354	7283	0.50%	0.109%
72	5.862	5.855	5.868	VV	229	1410	0.10%	0.021%
73	5.875	5.868	5.882	VV	260	1922	0.13%	0.029%
74	5.885	5.882	5.890	VV	284	1258	0.09%	0.019%
75	5.893	5.890	5.905	VV	309	2305	0.16%	0.034%
76	5.914	5.905	5.935	VV	320	4245	0.29%	0.063%
77	5.939	5.935	5.954	VV	265	2416	0.17%	0.036%
78	5.958	5.954	5.992	VV	307	4289	0.30%	0.064%
79	5.996	5.992	6.001	VV	205	883	0.06%	0.013%
80	6.008	6.001	6.020	VV	193	1648	0.11%	0.025%
81	6.025	6.020	6.032	VV	156	1009	0.07%	0.015%
82	6.042	6.032	6.061	VV	218	2473	0.17%	0.037%
83	6.068	6.061	6.076	VV	137	966	0.07%	0.014%
84	6.077	6.076	6.091	VV	159	910	0.06%	0.014%
85	6.097	6.091	6.114	VV	195	2007	0.14%	0.030%
86	6.121	6.114	6.133	VV	187	1423	0.10%	0.021%
87	6.143	6.133	6.147	VV	188	1271	0.09%	0.019%
88	6.154	6.147	6.163	VV	198	1522	0.11%	0.023%
89	6.168	6.163	6.177	VV	245	1519	0.10%	0.023%

					rteres			
90	6.202	6.177	6.237	VV	371	8513	0.59%	0.127%
91	6.248	6.237	6.259	VV	285	3360	0.23%	0.050%
92	6.270	6.259	6.290	VV	377	5812	0.40%	0.087%
93	6.296	6.290	6.317	VV	291	3991	0.28%	0.060%
94	6.326	6.317	6.331	VV	297	2186	0.15%	0.033%
95	6.337	6.331	6.344	VV	305	2332	0.16%	0.035%
96	6.354	6.344	6.361	VV	344	3012	0.21%	0.045%
97	6.386	6.361	6.432	VV	594	13675	0.94%	0.204%
98	6.453	6.432	6.460	VV	308	4016	0.28%	0.060%
99	6.469	6.460	6.505	VV	273	5557	0.38%	0.083%
100	6.508	6.505	6.520	VV	190	1319	0.09%	0.020%
101	6.526	6.520	6.542	VV	156	1626	0.11%	0.024%
102	6.561	6.542	6.574	VV	284	4083	0.28%	0.061%
103	6.579	6.574	6.595	VV	243	2182	0.15%	0.033%
104	6.601	6.595	6.622	VV	250	2409	0.17%	0.036%
105	6.630	6.622	6.659	VV	245	2549	0.18%	0.038%
106	6.664	6.659	6.671	VV	163	738	0.05%	0.011%
107	6.677	6.671	6.683	VV	157	952	0.07%	0.014%
108	6.698	6.683	6.715	VV	170	2506	0.17%	0.037%
109	6.722	6.715	6.747	VV	172	1863	0.13%	0.028%
110	6.751	6.747	6.755	VV	115	477	0.03%	0.007%
111	6.760	6.755	6.783	VV	145	1711	0.12%	0.026%
112	6.791	6.783	6.798	VV	123	875	0.06%	0.013%
113	6.802	6.798	6.812	VV	80	584	0.04%	0.009%
114	6.851	6.812	6.956	PV	2622	164761	11.37%	2.457%
115	6.960	6.956	6.997	VV	1584	34529	2.38%	0.515%
116	7.001	6.997	7.018	VV	1216	13910	0.96%	0.207%
117	7.023	7.018	7.027	VV	1039	5739	0.40%	0.086%
118	7.032	7.027	7.109	VV	1010	41495	2.86%	0.619%
119	7.121	7.109	7.138	VV	712	11077	0.76%	0.165%
120	7.233	7.138	7.252	VV	894	51522	3.56%	0.768%
121	7.259	7.252	7.302	VV	830	21355	1.47%	0.319%
122	7.306	7.302	7.319	VV	625	5481	0.38%	0.082%
123	7.324	7.319	7.339	VV	576	6190	0.43%	0.092%
124	7.345	7.339	7.352	VV	487	3745	0.26%	0.056%
125	7.356	7.352	7.368	VV	499	4695	0.32%	0.070%
126	7.375	7.368	7.379	VV	496	3044	0.21%	0.045%
127	7.383	7.379	7.416	VV	479	9267	0.64%	0.138%
128	7.420	7.416	7.430	VV	391	2730	0.19%	0.041%
129	7.436	7.430	7.451	VV	367	4208	0.29%	0.063%
130	7.456	7.451	7.467	VV	382	3090	0.21%	0.046%
131	7.470	7.467	7.482	VV	308	2460	0.17%	0.037%
132	7.487	7.482	7.500	VV	335	2877	0.20%	0.043%
133	7.507	7.500	7.519	VV	270	2542	0.18%	0.038%
134	7.524	7.519	7.528	VV	268	1436	0.10%	0.021%
135	7.533	7.528	7.538	VV	261	1372	0.09%	0.020%
136	7.562	7.538	7.600	VV	306	7498	0.52%	0.112%
137	7.604	7.600	7.608	VV	188	758	0.05%	0.011%
138	7.625	7.608	7.671	VV	230	6394	0.44%	0.095%
139	7.698	7.671	7.706	VV	145	2269	0.16%	0.034%
140	7.710	7.706	7.721	VV	172	1123	0.08%	0.017%
141	7.735	7.721	7.764	VV	184	2843	0.20%	0.042%

					rteres			
142	7.784	7.764	7.789	VV	103	1213	0.08%	0.018%
143	7.794	7.789	7.804	VV	112	698	0.05%	0.010%
144	7.817	7.804	7.824	VV	137	1025	0.07%	0.015%
145	7.829	7.824	7.838	VV	104	568	0.04%	0.008%
146	7.852	7.838	7.868	VV	143	2057	0.14%	0.031%
147	7.905	7.868	8.004	VV	1230	37458	2.59%	0.559%
148	8.048	8.004	8.058	VV	425	8230	0.57%	0.123%
149	8.078	8.058	8.101	VV	767	11289	0.78%	0.168%
150	8.106	8.101	8.114	VV	183	976	0.07%	0.015%
151	8.120	8.114	8.147	VV	121	1516	0.10%	0.023%
152	8.167	8.147	8.190	VV	141	2162	0.15%	0.032%
153	8.202	8.190	8.220	VV	126	1149	0.08%	0.017%
154	8.226	8.220	8.232	VV	117	528	0.04%	0.008%
155	8.242	8.232	8.265	VV	181	2262	0.16%	0.034%
156	8.278	8.265	8.332	VV	210	3653	0.25%	0.054%
157	8.337	8.332	8.341	PV	67	241	0.02%	0.004%
158	8.345	8.341	8.365	VV	101	539	0.04%	0.008%
159	8.377	8.365	8.382	PV	48	345	0.02%	0.005%
160	8.392	8.382	8.402	VV	119	704	0.05%	0.010%
161	8.407	8.402	8.412	VV	48	249	0.02%	0.004%
162	8.444	8.412	8.450	VV	138	1390	0.10%	0.021%
163	8.477	8.450	8.497	VV	414	6578	0.45%	0.098%
164	8.530	8.497	8.592	VV	468	14908	1.03%	0.222%
165	8.650	8.592	8.722	VV	1504	46503	3.21%	0.694%
166	8.745	8.722	8.799	VV	345	10579	0.73%	0.158%
167	8.806	8.799	8.812	VV	184	1260	0.09%	0.019%
168	8.816	8.812	8.826	VV	195	1331	0.09%	0.020%
169	8.841	8.826	8.850	VV	211	2408	0.17%	0.036%
170	8.864	8.850	8.910	VV	330	6141	0.42%	0.092%
171	8.942	8.910	8.950	VV	165	2830	0.20%	0.042%
172	8.955	8.950	8.961	VV	197	773	0.05%	0.012%
173	8.968	8.961	8.981	VV	165	997	0.07%	0.015%
174	9.028	8.981	9.039	VV	465	10745	0.74%	0.160%
175	9.043	9.039	9.069	VV	472	6341	0.44%	0.095%
176	9.075	9.069	9.092	VV	320	3062	0.21%	0.046%
177	9.104	9.092	9.111	VV	250	2088	0.14%	0.031%
178	9.118	9.111	9.124	VV	194	1348	0.09%	0.020%
179	9.126	9.124	9.131	VV	160	493	0.03%	0.007%
180	9.136	9.131	9.142	VV	150	691	0.05%	0.010%
181	9.152	9.142	9.165	VV	162	1682	0.12%	0.025%
182	9.170	9.165	9.190	VV	166	2156	0.15%	0.032%
183	9.192	9.190	9.215	VV	209	2135	0.15%	0.032%
184	9.239	9.215	9.291	VV	302	7933	0.55%	0.118%
185	9.295	9.291	9.321	VV	110	1435	0.10%	0.021%
186	9.389	9.321	9.484	VV	9250	234570	16.19%	3.499%
187	9.488	9.484	9.503	VV	353	3916	0.27%	0.058%
188	9.508	9.503	9.513	VV	395	2065	0.14%	0.031%
189	9.526	9.513	9.560	VV	491	8374	0.58%	0.125%
190	9.567	9.560	9.579	VV	221	2220	0.15%	0.033%
191	9.583	9.579	9.616	VV	221	3198	0.22%	0.048%
192	9.620	9.616	9.639	VV	196	1743	0.12%	0.026%
193	9.644	9.639	9.661	VV	152	1517	0.10%	0.023%
194	9.680	9.661	9.696	VV	190	3203	0.22%	0.048%

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195	9.703	9.696	9.707	VV	213	1051	0.07%	0.016%
196	9.759	9.707	9.773	VV	443	12959	0.89%	0.193%
197	9.777	9.773	9.783	VV	393	2148	0.15%	0.032%
198	9.792	9.783	9.802	VV	360	3664	0.25%	0.055%
199	9.806	9.802	9.829	VV	382	5001	0.35%	0.075%
200	9.835	9.829	9.852	VV	261	3377	0.23%	0.050%
201	9.875	9.852	9.886	VV	451	7173	0.50%	0.107%
202	9.894	9.886	9.912	VV	333	4256	0.29%	0.063%
203	9.920	9.912	9.926	VV	253	1810	0.12%	0.027%
204	9.930	9.926	9.932	VV	193	638	0.04%	0.010%
205	9.953	9.932	9.964	VV	500	6850	0.47%	0.102%
206	9.986	9.964	10.003	VV	1055	15381	1.06%	0.229%
207	10.032	10.003	10.106	VV	2950	119195	8.23%	1.778%
208	10.115	10.106	10.160	VV	1351	34749	2.40%	0.518%
209	10.165	10.160	10.176	VV	719	6312	0.44%	0.094%
210	10.185	10.176	10.216	VV	745	14413	0.99%	0.215%
211	10.220	10.216	10.230	VV	480	3493	0.24%	0.052%
212	10.235	10.230	10.240	VV	455	2319	0.16%	0.035%
213	10.245	10.240	10.252	VV	458	2894	0.20%	0.043%
214	10.260	10.252	10.344	VV	447	14966	1.03%	0.223%
215	10.353	10.344	10.370	VV	152	1543	0.11%	0.023%
216	10.391	10.370	10.396	VV	151	1688	0.12%	0.025%
217	10.399	10.396	10.428	VV	81	771	0.05%	0.012%
218	10.475	10.428	10.484	PV	513	10407	0.72%	0.155%
219	10.488	10.484	10.497	VV	478	3030	0.21%	0.045%
220	10.502	10.497	10.538	VV	437	7059	0.49%	0.105%
221	10.544	10.538	10.548	VV	170	878	0.06%	0.013%
222	10.550	10.548	10.554	VV	166	552	0.04%	0.008%
223	10.598	10.554	10.622	VV	445	12058	0.83%	0.180%
224	10.638	10.622	10.649	VV	385	4676	0.32%	0.070%
225	10.655	10.649	10.662	VV	302	2073	0.14%	0.031%
226	10.682	10.662	10.715	VV	960	17244	1.19%	0.257%
227	10.750	10.715	10.763	VV	298	7688	0.53%	0.115%
228	10.770	10.763	10.775	VV	232	1509	0.10%	0.023%
229	10.786	10.775	10.812	VV	341	5657	0.39%	0.084%
230	10.834	10.812	10.849	VV	460	7810	0.54%	0.116%
231	10.865	10.849	10.895	VV	690	14222	0.98%	0.212%
232	10.898	10.895	10.912	VV	376	3376	0.23%	0.050%
233	10.929	10.912	10.959	VV	564	12032	0.83%	0.179%
234	10.975	10.959	11.036	VV	427	12859	0.89%	0.192%
235	11.056	11.036	11.062	VV	235	2949	0.20%	0.044%
236	11.089	11.062	11.112	VV	395	7621	0.53%	0.114%
237	11.153	11.112	11.221	VV	2907	98695	6.81%	1.472%
238	11.242	11.221	11.300	VV	1800	56385	3.89%	0.841%
239	11.306	11.300	11.309	VV	772	3806	0.26%	0.057%
240	11.312	11.309	11.351	VV	828	13563	0.94%	0.202%
241	11.370	11.351	11.439	VV	500	15825	1.09%	0.236%
242	11.443	11.439	11.447	VV	212	819	0.06%	0.012%
243	11.498	11.447	11.520	VV	447	9960	0.69%	0.149%
244	11.564	11.520	11.595	VV	857	19037	1.31%	0.284%
245	11.598	11.595	11.622	VV	247	2859	0.20%	0.043%
246	11.650	11.622	11.697	VV	499	11359	0.78%	0.169%

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247	11.726	11.697	11.745	VV	384	6718	0.46%	0.100%
248	11.758	11.745	11.794	VV	278	4551	0.31%	0.068%
249	11.812	11.794	11.834	VV	228	3432	0.24%	0.051%
250	11.855	11.834	11.907	VV	564	13975	0.96%	0.208%
251	11.910	11.907	11.929	VV	178	1446	0.10%	0.022%
252	11.956	11.929	11.979	PV	831	15718	1.08%	0.234%
253	11.999	11.979	12.030	VV	961	22667	1.56%	0.338%
254	12.050	12.030	12.115	VV	1634	47284	3.26%	0.705%
255	12.135	12.115	12.202	VV	740	20387	1.41%	0.304%
256	12.240	12.202	12.264	VV	744	13709	0.95%	0.204%
257	12.296	12.264	12.332	VV	1016	19540	1.35%	0.291%
258	12.337	12.332	12.352	VV	443	4238	0.29%	0.063%
259	12.368	12.352	12.379	VV	395	5127	0.35%	0.076%
260	12.383	12.379	12.408	VV	249	2605	0.18%	0.039%
261	12.446	12.408	12.472	VV	342	7565	0.52%	0.113%
262	12.494	12.472	12.544	VV	13703	185549	12.81%	2.767%
263	12.555	12.544	12.582	VV	932	17396	1.20%	0.259%
264	12.589	12.582	12.628	VV	724	14880	1.03%	0.222%
265	12.634	12.628	12.657	VV	431	6187	0.43%	0.092%
266	12.703	12.657	12.730	VV	593	16825	1.16%	0.251%
267	12.758	12.730	12.780	VV	317	7813	0.54%	0.117%
268	12.799	12.780	12.821	VV	457	8215	0.57%	0.123%
269	12.848	12.821	12.864	VV	847	15402	1.06%	0.230%
270	12.881	12.864	12.897	VV	1012	15095	1.04%	0.225%
271	12.920	12.897	12.933	VV	789	13685	0.94%	0.204%
272	12.962	12.933	13.049	VV	8695	187448	12.94%	2.796%
273	13.054	13.049	13.061	VV	359	2137	0.15%	0.032%
274	13.065	13.061	13.074	VV	285	1939	0.13%	0.029%
275	13.082	13.074	13.087	VV	270	1860	0.13%	0.028%
276	13.119	13.087	13.184	VV	741	29058	2.01%	0.433%
277	13.188	13.184	13.197	VV	237	1760	0.12%	0.026%
278	13.203	13.197	13.205	VV	234	1090	0.08%	0.016%
279	13.210	13.205	13.224	VV	304	2461	0.17%	0.037%
280	13.261	13.224	13.354	VV	5998	167557	11.56%	2.499%
281	13.378	13.354	13.432	VV	1064	32478	2.24%	0.484%
282	13.438	13.432	13.460	VV	378	5763	0.40%	0.086%
283	13.464	13.460	13.470	VV	351	1933	0.13%	0.029%
284	13.494	13.470	13.527	VV	759	14169	0.98%	0.211%
285	13.556	13.527	13.563	VV	468	7508	0.52%	0.112%
286	13.570	13.563	13.576	VV	478	3518	0.24%	0.052%
287	13.603	13.576	13.667	VV	573	19889	1.37%	0.297%
288	13.682	13.667	13.689	VV	379	3841	0.27%	0.057%
289	13.690	13.689	13.694	VV	337	895	0.06%	0.013%
290	13.716	13.694	13.720	VV	659	5966	0.41%	0.089%
291	13.733	13.720	13.817	VV	839	23957	1.65%	0.357%
292	13.881	13.817	13.919	VV	1169	37005	2.55%	0.552%
293	13.920	13.919	13.957	VV	547	8228	0.57%	0.123%
294	13.983	13.957	14.000	VV	880	15803	1.09%	0.236%
295	14.033	14.000	14.060	VV	1705	35936	2.48%	0.536%
296	14.080	14.060	14.102	VV	1175	17416	1.20%	0.260%
297	14.136	14.102	14.170	VV	667	18012	1.24%	0.269%
298	14.190	14.170	14.231	VV	496	12215	0.84%	0.182%
299	14.237	14.231	14.241	VV	186	955	0.07%	0.014%

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300	14.248	14.241	14.281	VV	167	2686	0.19%	0.040%
301	14.343	14.281	14.377	VV	295	11025	0.76%	0.164%
302	14.382	14.377	14.389	VV	115	649	0.04%	0.010%
303	14.393	14.389	14.421	VV	123	1731	0.12%	0.026%
304	14.441	14.421	14.458	PV	398	5474	0.38%	0.082%
305	14.487	14.458	14.560	VV	2024	51198	3.53%	0.764%
306	14.600	14.560	14.622	VV	606	15005	1.04%	0.224%
307	14.644	14.622	14.669	VV	2045	29737	2.05%	0.444%
308	14.699	14.669	14.727	VV	891	24000	1.66%	0.358%
309	14.729	14.727	14.737	VV	692	3956	0.27%	0.059%
310	14.746	14.737	14.780	VV	765	12962	0.89%	0.193%
311	14.807	14.780	14.829	VV	584	12467	0.86%	0.186%
312	14.852	14.829	14.880	VV	968	22811	1.57%	0.340%
313	14.886	14.880	14.890	VV	763	4172	0.29%	0.062%
314	14.896	14.890	14.912	VV	744	8111	0.56%	0.121%
315	14.917	14.912	14.943	VV	573	7904	0.55%	0.118%
316	14.983	14.943	15.032	VV	103024	1448894	100.00%	21.610%
317	15.042	15.032	15.108	VV	1021	25909	1.79%	0.386%
318	15.185	15.108	15.292	PV	4671	200628	13.85%	2.992%
319	15.293	15.292	15.304	VV	505	3198	0.22%	0.048%
320	15.315	15.304	15.360	VV	600	13663	0.94%	0.204%
321	15.381	15.360	15.398	VV	424	6650	0.46%	0.099%
322	15.411	15.398	15.429	VV	273	4156	0.29%	0.062%
323	15.435	15.429	15.442	VV	172	895	0.06%	0.013%
324	15.447	15.442	15.477	VV	134	2475	0.17%	0.037%
325	15.483	15.477	15.485	VV	159	544	0.04%	0.008%
326	15.525	15.485	15.534	VV	602	8912	0.62%	0.133%
327	15.572	15.534	15.659	VV	36388	741602	51.18%	11.061%
328	15.663	15.659	15.680	VV	845	9168	0.63%	0.137%
329	15.707	15.680	15.749	VV	3506	65822	4.54%	0.982%
330	15.773	15.749	15.819	VV	2412	39605	2.73%	0.591%
331	15.854	15.819	15.881	VV	673	17532	1.21%	0.261%
332	15.896	15.881	15.922	VV	464	9145	0.63%	0.136%
333	15.926	15.922	15.930	VV	292	1367	0.09%	0.020%
334	15.977	15.930	15.982	VV	563	10995	0.76%	0.164%
335	16.012	15.982	16.017	VV	726	13701	0.95%	0.204%
336	16.026	16.017	16.062	VV	745	14270	0.98%	0.213%
337	16.099	16.062	16.160	VV	1672	45686	3.15%	0.681%
338	16.210	16.160	16.248	VV	3441	51492	3.55%	0.768%
339	16.275	16.248	16.315	VV	745	13501	0.93%	0.201%
340	16.334	16.315	16.370	VV	292	4607	0.32%	0.069%
341	16.418	16.370	16.443	PV	212	6092	0.42%	0.091%
342	16.445	16.443	16.479	VV	187	2149	0.15%	0.032%
343	16.511	16.479	16.534	PV	532	11316	0.78%	0.169%
344	16.592	16.534	16.654	VV	12761	293138	20.23%	4.372%
345	16.655	16.654	16.669	VV	1295	10314	0.71%	0.154%
346	16.694	16.669	16.718	VV	4183	63894	4.41%	0.953%
347	16.744	16.718	16.749	VV	3144	36837	2.54%	0.549%
348	16.765	16.749	16.829	VV	3510	92094	6.36%	1.374%
349	16.836	16.829	16.841	VV	529	3539	0.24%	0.053%
350	16.875	16.841	16.950	VV	723	27963	1.93%	0.417%
351	16.985	16.950	17.023	PV	1623	30018	2.07%	0.448%

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352	17.067	17.023	17.108	VV	2667	71678	4.95%	1.069%	
353	17.159	17.108	17.189	VV	4592	113387	7.83%	1.691%	
354	17.208	17.189	17.225	VV	2096	32016	2.21%	0.477%	
355	17.240	17.225	17.324	VV	1723	34853	2.41%	0.520%	
356	17.339	17.324	17.347	VV	138	1060	0.07%	0.016%	
357	17.355	17.347	17.365	VV	108	629	0.04%	0.009%	
					Sum of corrected areas:	6704824			

FG042425.M Thu May 22 01:28:35 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	FB-05132025	SDG No.:	Q2032
Lab Sample ID:	Q2032-11	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	980	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF015868.D	1	05/16/25 11:40	05/19/25 16:39	PB168064

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	9.00	J	6.00	51.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	16.3		29 - 130	82%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015868.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 16:39
Operator : YP\AJ
Sample : Q2032-11
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
FB-05132025

Integration File: autoint1.e
Quant Time: May 20 03:55:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.021	1843509	16.336 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

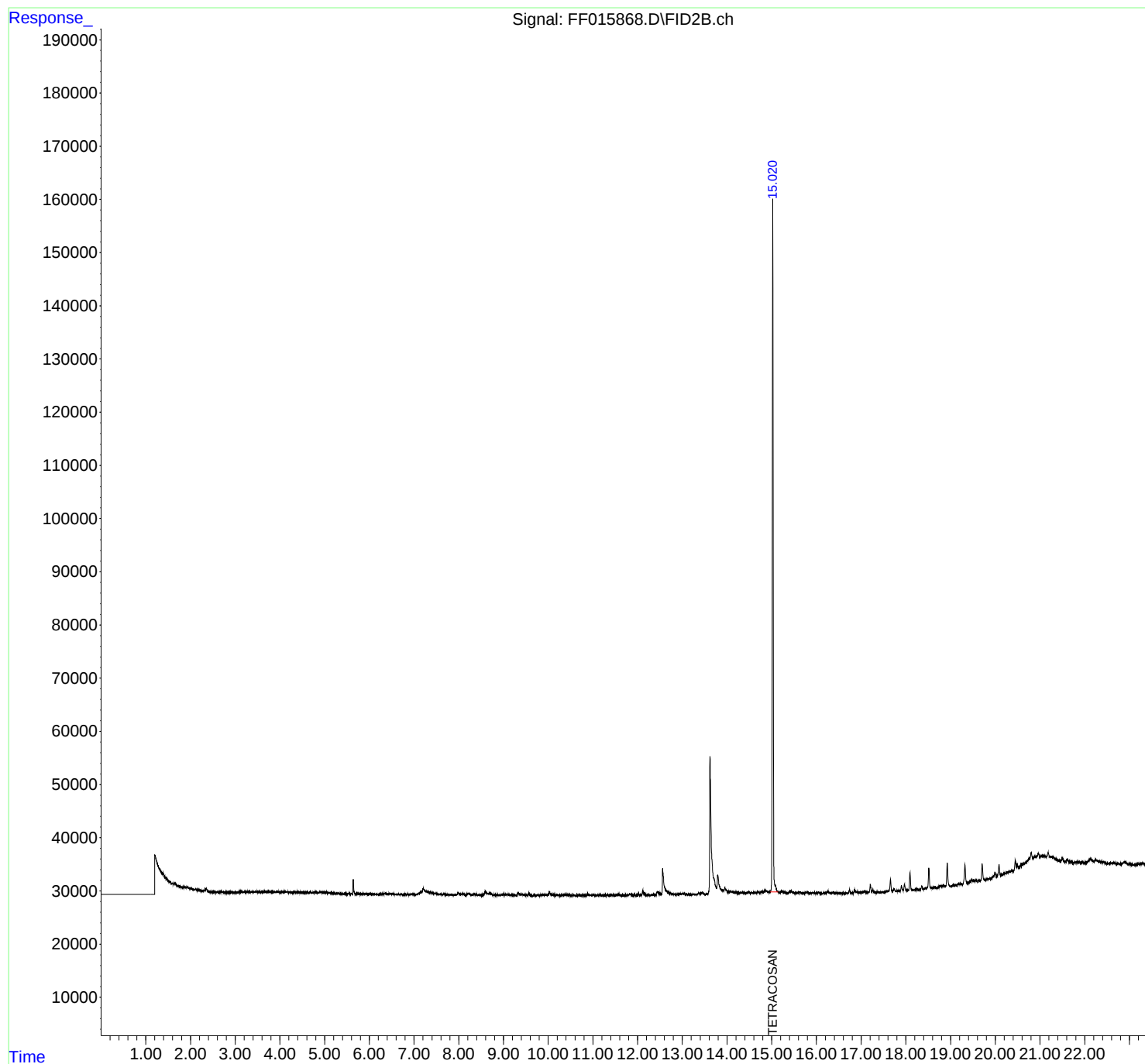
(m)=manual int.

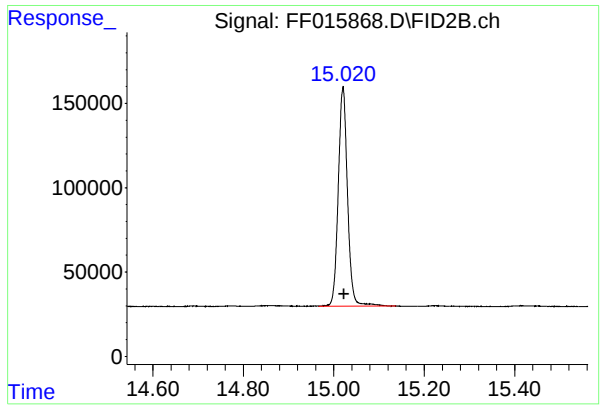
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015868.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 16:39
Operator : YP\AJ
Sample : Q2032-11
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
FB-05132025

Integration File: autoint1.e
Quant Time: May 20 03:55:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.021 min
Delta R.T.: -0.002 min
Response: 1843509
Conc: 16.34 ug/ml

Instrument :

FID_F

ClientSampleId :

FB-05132025

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015868.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 16:39
Sample : Q2032-11
Misc :
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	12.561	12.536	12.642	BB	4796	102030	5.53%	3.479%
2	13.620	13.572	13.764	BV	25716	668169	36.24%	22.785%
3	13.791	13.764	13.867	VB	3012	75759	4.11%	2.583%
4	15.021	14.967	15.137	BB	130070	1843509	100.00%	62.865%
5	18.090	18.057	18.129	BB	3306	50056	2.72%	1.707%
6	18.513	18.436	18.556	BB	3789	59049	3.20%	2.014%
7	18.925	18.869	18.976	BB	4374	71109	3.86%	2.425%
8	19.321	19.254	19.372	BB	3565	62818	3.41%	2.142%
Sum of corrected areas:						2932498		

FF042225.M Tue May 20 04:59:12 2025



CALIBRATION SUMMARY

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: CAMP02
 ProjectID: South River WM Replacement
 Lab Code: CHEM Case No.: Q2032 SAS No.: Q2032 SDG No.: Q2032

Calibration Sequence : FF042225			Test : Diesel Range Organics	
Concentration (PPM)	Area Count	Reference Factor	File ID	
1000	116059922	116060	FF015786.D	
500	58079559	116159	FF015787.D	
200	21235975	106180	FF015788.D	
100	11342548	113425	FF015789.D	
50	7274526	145491	FF015790.D	
AVG RF : 119463		% RSD : 12.646		AVG RT : 15.02

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: CAMP02
 ProjectID: South River WM Replacement
 Lab Code: CHEM Case No.: Q2032 SAS No.: Q2032 SDG No.: Q2032

Calibration Sequence : FG042425		Test : Diesel Range Organics	
Concentration (PPM)	Area Count	Reference Factor	File ID
1000	122641169	122641	FG015756.D
500	64139521	128279	FG015757.D
200	25210755	126054	FG015758.D
100	13317775	133178	FG015759.D
50	6223650	124473	FG015760.D
AVG RF : 126925		% RSD : 3.202	AVG RT : 15.0012

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2032 SAS No.: Q2032 SDG No.: Q2032
DataFile: FF015863.D Analyst Name: YP\AJ Analyst Date: 05-19-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	61976319	123953	119463	3.758

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
 Data File : FF015863.D
 Signal(s) : FID2B.ch
 Acq On : 19 May 2025 10:27
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 53 Sample Multiplier: 1

Instrument :
 FID_F
 ClientSampleId :
 50 PPM TRPH STD

Integration File: autoint1.e
 Quant Time: May 20 03:53:33 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
 Quant Title :
 QLast Update : Tue Apr 22 11:27:50 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.021	5645866	50.031 ug/ml
Target Compounds			
2) N-DECANE	4.563	5967040	58.474 ug/ml
3) N-DODECANE	6.732	6147586	56.144 ug/ml
4) N-TETRADECANE	8.560	6134108	53.146 ug/ml
5) N-HEXADECANE	10.167	6185441	52.410 ug/ml
6) N-OCTADECANE	11.610	6382284	50.735 ug/ml
7) N-EICOSANE	12.922	6369032	48.821 ug/ml
8) N-DOCOSANE	14.121	6256233	49.115 ug/ml
10) N-TETRACOSANE	15.225	6247089	49.664 ug/ml
11) N-HEXACOSANE	16.247	6131005	50.296 ug/ml
12) N-OCTACOSANE	17.198	6156501	52.028 ug/ml

(f)=RT Delta > 1/2 Window

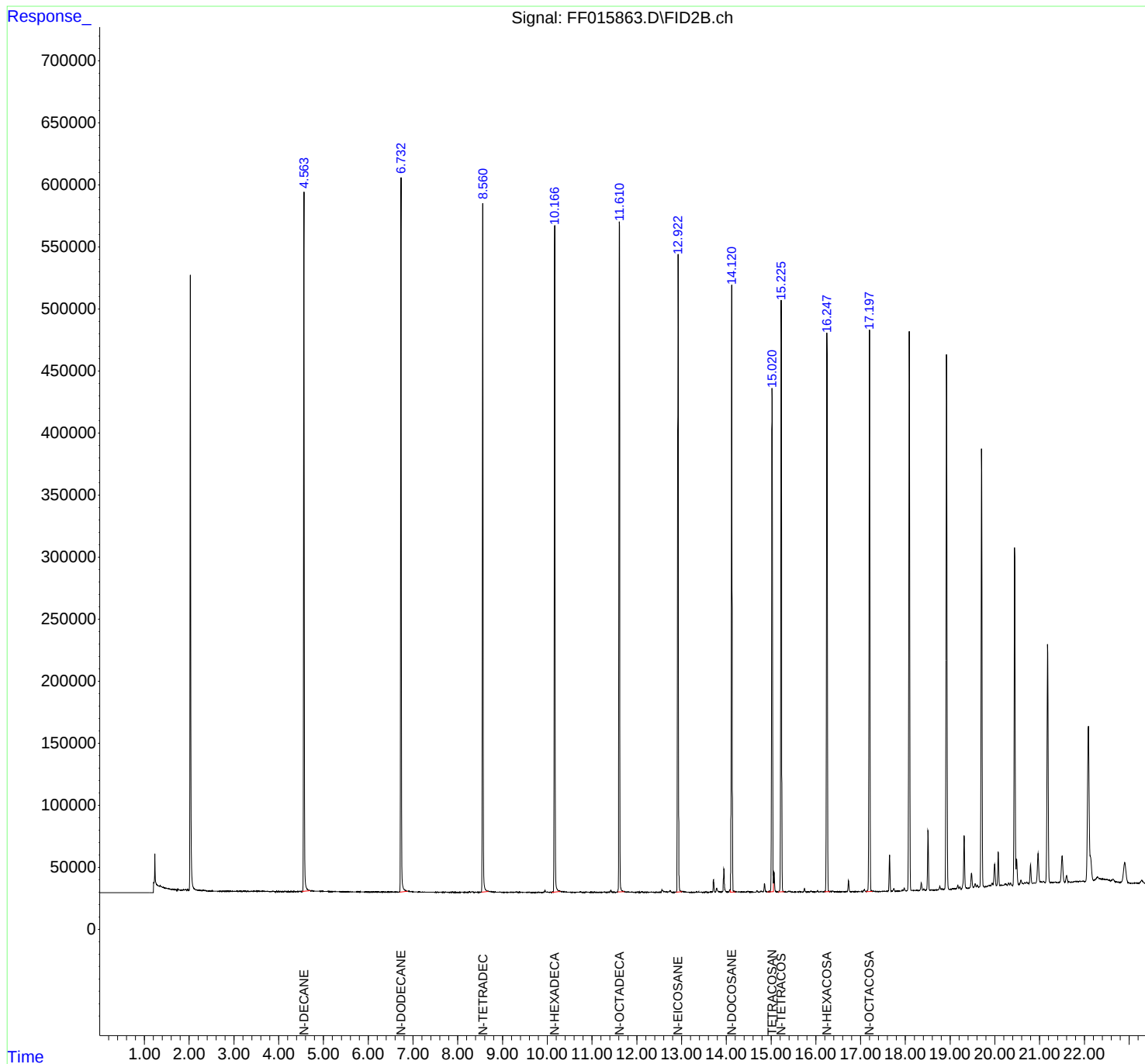
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015863.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 10:27
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 20 03:53:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015863.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 10:27
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.563	4.517	4.706	BB	563439	5967040	93.49%	8.824%
2	6.732	6.702	6.881	BB	575391	6147586	96.32%	9.091%
3	8.560	8.527	8.684	BB	557143	6134108	96.11%	9.071%
4	10.167	10.094	10.292	BB	537985	6185441	96.92%	9.147%
5	11.610	11.574	11.722	BB	540193	6382284	100.00%	9.438%
6	12.922	12.881	13.012	BB	515017	6369032	99.79%	9.419%
7	14.121	14.087	14.202	VB	488444	6256233	98.02%	9.252%
8	15.021	14.916	15.051	BV	406020	5645866	88.46%	8.349%
9	15.225	15.159	15.299	BB	476234	6247089	97.88%	9.238%
10	16.247	16.191	16.319	BB	449130	6131005	96.06%	9.067%
11	17.198	17.122	17.267	BB	452393	6156501	96.46%	9.104%
Sum of corrected areas:						67622183		

FF042225.M Tue May 20 04:50:21 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2032 SAS No.: Q2032 SDG No.: Q2032
DataFile: FF015870.D Analyst Name: YP\AJ Analyst Date: 05-19-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	64441382	128883	119463	7.885

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
 Data File : FF015870.D
 Signal(s) : FID2B.ch
 Acq On : 19 May 2025 18:08
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 53 Sample Multiplier: 1

Instrument :
 FID_F
 ClientSampleId :
 50 PPM TRPH STD

Integration File: autoint1.e
 Quant Time: May 20 03:55:42 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
 Quant Title :
 QLast Update : Tue Apr 22 11:27:50 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.021	5948329	52.711 ug/ml
Target Compounds			
2) N-DECANE	4.563	6051106	59.298 ug/ml
3) N-DODECANE	6.733	6272737	57.287 ug/ml
4) N-TETRADECANE	8.560	6301846	54.599 ug/ml
5) N-HEXADECANE	10.168	6414492	54.351 ug/ml
6) N-OCTADECANE	11.611	6638617	52.773 ug/ml
7) N-EICOSANE	12.922	6649486	50.971 ug/ml
8) N-DOCOSANE	14.121	6565472	51.543 ug/ml
10) N-TETRACOSANE	15.225	6573948	52.262 ug/ml
11) N-HEXACOSANE	16.247	6464054	53.028 ug/ml
12) N-OCTACOSANE	17.198	6509624	55.012 ug/ml

(f)=RT Delta > 1/2 Window

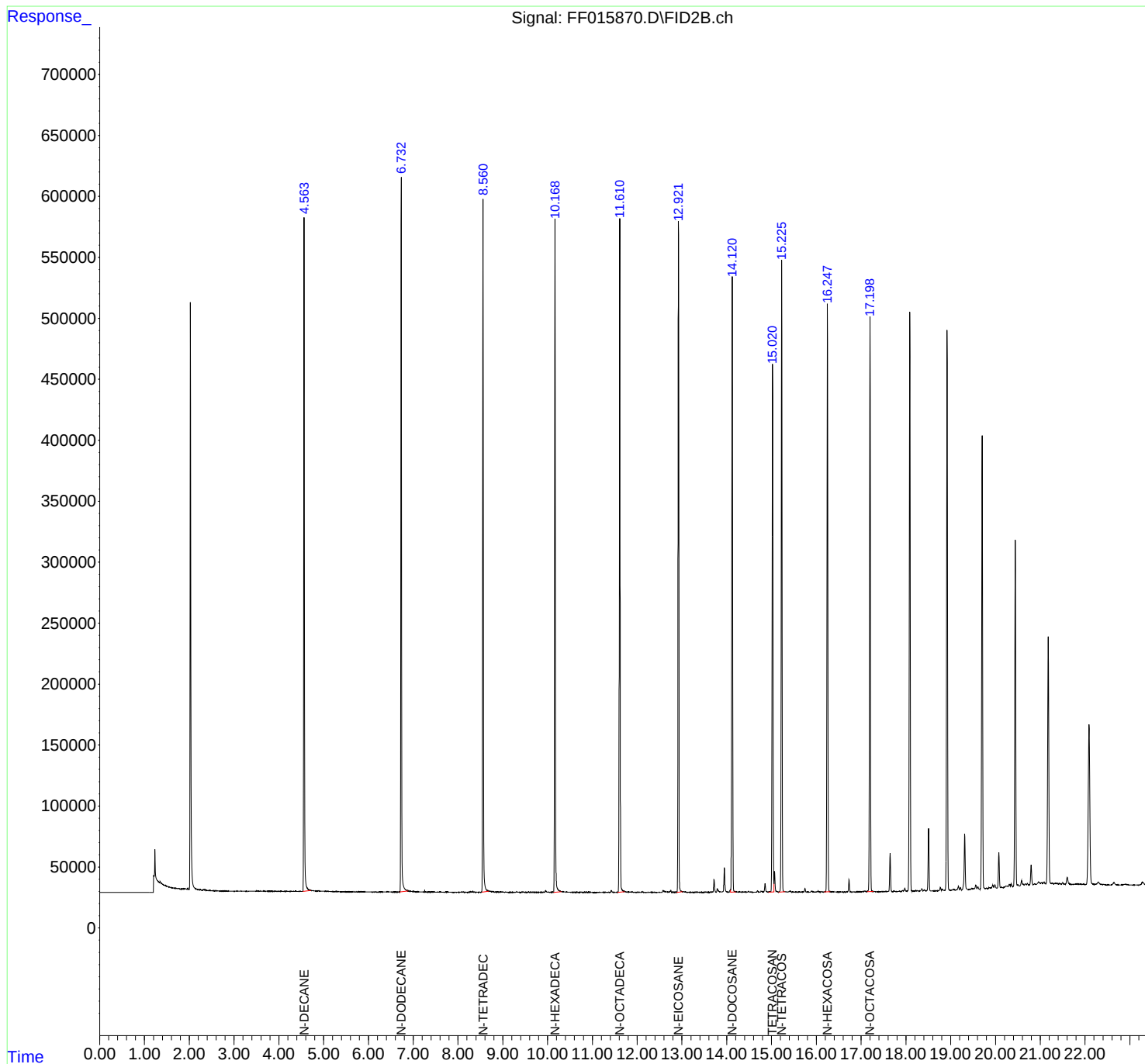
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015870.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 18:08
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 20 03:55:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015870.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 18:08
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.563	4.535	4.715	BB	553486	6051106	91.00%	8.597%
2	6.733	6.702	6.889	BB	584089	6272737	94.33%	8.911%
3	8.560	8.529	8.692	BB	568505	6301846	94.77%	8.953%
4	10.168	10.132	10.312	BB	550841	6414492	96.47%	9.113%
5	11.611	11.564	11.724	BB	552272	6638617	99.84%	9.431%
6	12.922	12.880	13.014	BB	549310	6649486	100.00%	9.447%
7	14.121	14.086	14.205	VB	505019	6565472	98.74%	9.327%
8	15.021	14.934	15.051	BV	433348	5948329	89.46%	8.451%
9	15.225	15.164	15.300	BB	516909	6573948	98.86%	9.339%
10	16.247	16.174	16.312	BB	480481	6464054	97.21%	9.183%
11	17.198	17.130	17.274	BB	471934	6509624	97.90%	9.248%
Sum of corrected areas:						70389711		

FF042225.M Tue May 20 04:53:47 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2032 SAS No.: Q2032 SDG No.: Q2032
DataFile: FG015865.D Analyst Name: YP\AJ Analyst Date: 05-21-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	70332673	140665	126925	10.825

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
 Data File : FG015865.D
 Signal(s) : FID1A.ch
 Acq On : 21 May 2025 10:19
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 50 PPM TRPH STD

Integration File: autoint1.e
 Quant Time: May 22 00:37:53 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
 Quant Title :
 QLast Update : Thu Apr 24 12:54:09 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.987	6384396	54.226 ug/ml
Target Compounds			
2) N-DECANE	4.489	6294158	56.534 ug/ml
3) N-DODECANE	6.672	6576007	57.381 ug/ml
4) N-TETRADECANE	8.509	6789565	56.032 ug/ml
5) N-HEXADECANE	10.122	6961884	55.454 ug/ml
6) N-OCTADECANE	11.570	7205635	54.983 ug/ml
7) N-EICOSANE	12.883	7366569	54.335 ug/ml
8) N-DOCOSANE	14.086	7225342	54.478 ug/ml
10) N-TETRACOSANE	15.193	7280213	54.785 ug/ml
11) N-HEXACOSANE	16.216	7267842	54.802 ug/ml
12) N-OCTACOSANE	17.168	7365458	55.869 ug/ml

(f)=RT Delta > 1/2 Window

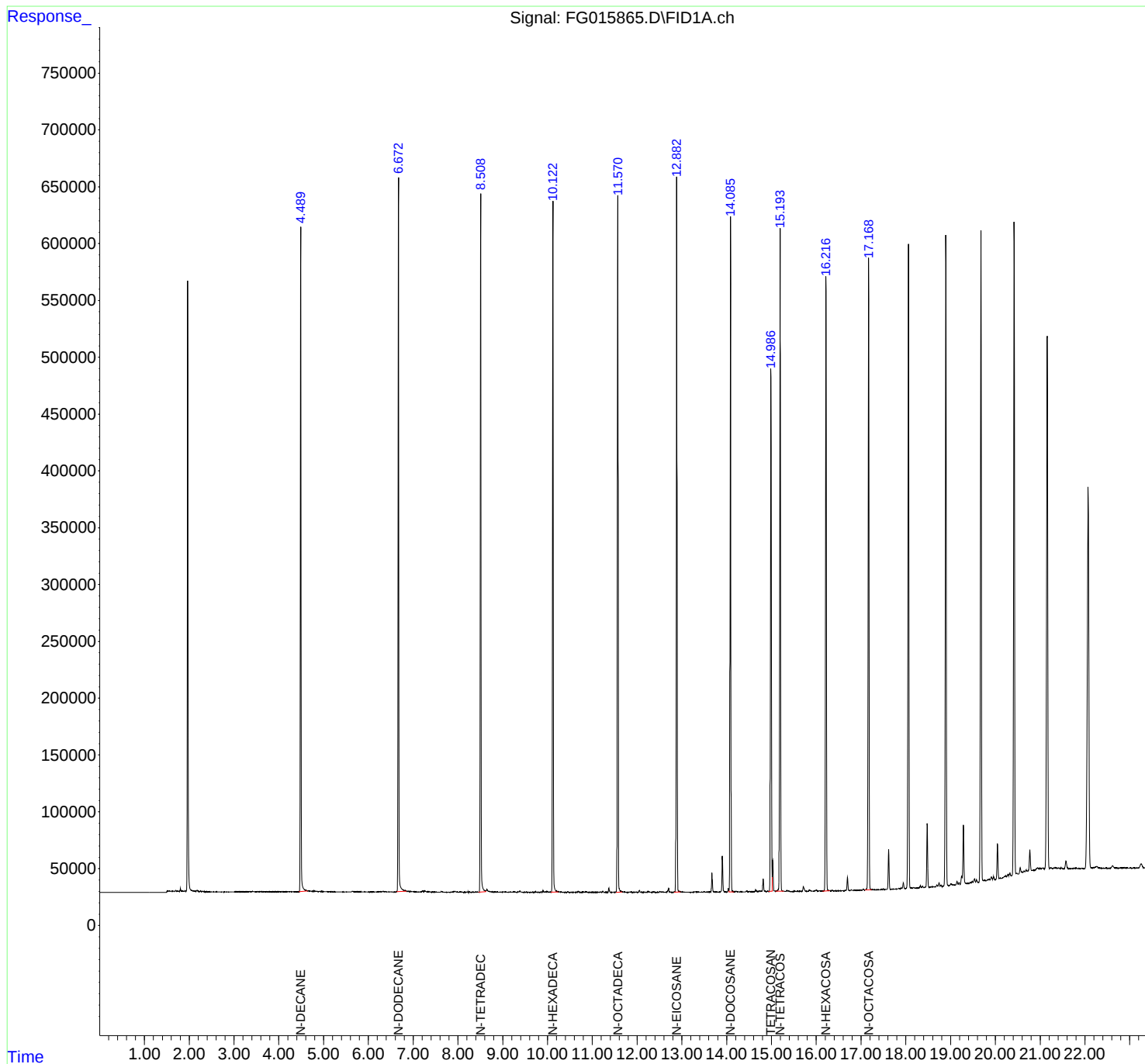
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015865.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 10:19
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 22 00:37:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015865.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 10:19
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.489	4.446	4.644	BB	585147	6294158	85.44%	8.204%
2	6.672	6.629	6.853	BB	628520	6576007	89.27%	8.572%
3	8.509	8.461	8.623	BV	614704	6789565	92.17%	8.850%
4	10.122	10.075	10.243	BB	607997	6961884	94.51%	9.075%
5	11.570	11.528	11.670	BB	611424	7205635	97.82%	9.392%
6	12.883	12.831	12.970	BB	623410	7366569	100.00%	9.602%
7	14.086	14.051	14.165	VB	592611	7225342	98.08%	9.418%
8	14.987	14.940	15.014	BV	452543	6384396	86.67%	8.322%
9	15.193	15.091	15.275	BB	577910	7280213	98.83%	9.490%
10	16.216	16.146	16.300	BB	537899	7267842	98.66%	9.474%
11	17.168	17.081	17.239	BB	554833	7365458	99.98%	9.601%
Sum of corrected areas:						76717070		

FG042425.M Thu May 22 01:17:14 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2032 SAS No.: Q2032 SDG No.: Q2032
DataFile: FG015876.D Analyst Name: YP\AJ Analyst Date: 05-21-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	56919649	113839	126925	10.31

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
 Data File : FG015876.D
 Signal(s) : FID1A.ch
 Acq On : 21 May 2025 15:41
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 53 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 50 PPM TRPH STD

Integration File: autoint1.e
 Quant Time: May 22 00:41:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
 Quant Title :
 QLast Update : Thu Apr 24 12:54:09 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.986	5361335	45.537 ug/ml
Target Compounds			
2) N-DECANE	4.488	5094492	45.759 ug/ml
3) N-DODECANE	6.670	5349643	46.680 ug/ml
4) N-TETRADECANE	8.507	5385683	44.446 ug/ml
5) N-HEXADECANE	10.120	5613077	44.711 ug/ml
6) N-OCTADECANE	11.568	5852118	44.655 ug/ml
7) N-EICOSANE	12.883	5894452	43.477 ug/ml
8) N-DOCOSANE	14.084	5856597	44.158 ug/ml
10) N-TETRACOSANE	15.191	5914676	44.509 ug/ml
11) N-HEXACOSANE	16.214	5905258	44.528 ug/ml
12) N-OCTACOSANE	17.167	6053653	45.919 ug/ml

(f)=RT Delta > 1/2 Window

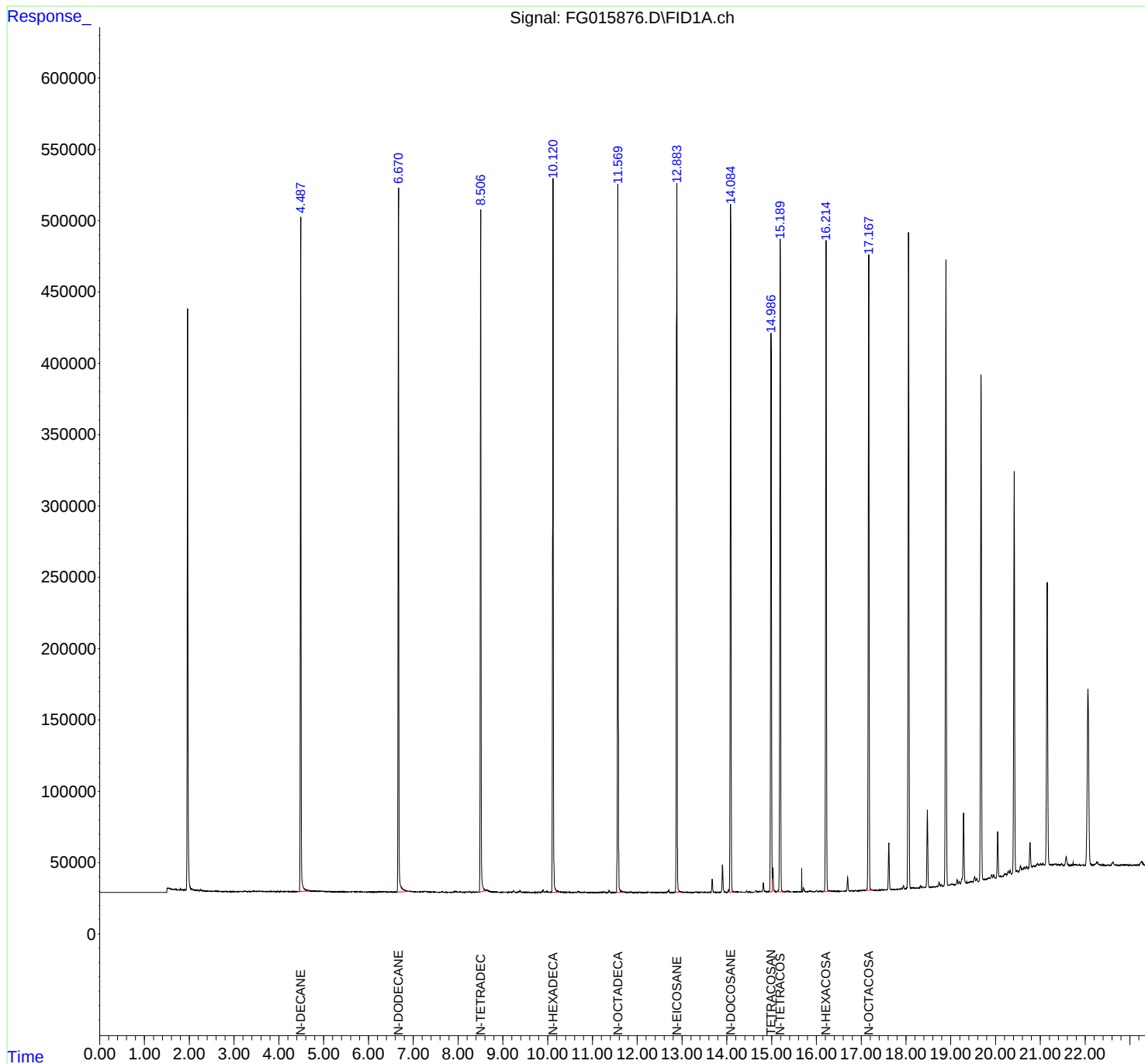
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015876.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 15:41
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 22 00:41:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015876.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 15:41
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.488	4.439	4.677	BB	471324	5094492	84.16%	8.180%
2	6.670	6.637	6.909	BB	492566	5349643	88.37%	8.590%
3	8.507	8.474	8.622	BV	475304	5385683	88.97%	8.647%
4	10.120	10.084	10.287	BB	501169	5613077	92.72%	9.013%
5	11.568	11.527	11.707	BV	497458	5852118	96.67%	9.396%
6	12.883	12.845	12.984	BB	489877	5894452	97.37%	9.464%
7	14.084	14.050	14.185	VB	478567	5856597	96.74%	9.404%
8	14.986	14.945	15.014	BV	392528	5361335	88.56%	8.608%
9	15.191	15.089	15.320	BV	457486	5914676	97.70%	9.497%
10	16.214	16.132	16.324	BB	454666	5905258	97.55%	9.482%
11	17.167	17.089	17.284	BB	445806	6053653	100.00%	9.720%
Sum of corrected areas:						62280983		

FG042425.M Thu May 22 01:22:21 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2032 SAS No.: Q2032 SDG No.: Q2032
DataFile: FG015883.D Analyst Name: YP\AJ Analyst Date: 05-21-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	64219295	128439	126925	1.193

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
 Data File : FG015883.D
 Signal(s) : FID1A.ch
 Acq On : 21 May 2025 19:06
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 76 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 50 PPM TRPH STD

Integration File: autoint1.e
 Quant Time: May 22 00:43:25 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
 Quant Title :
 QLast Update : Thu Apr 24 12:54:09 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.987	5853826	49.720 ug/ml
Target Compounds			
2) N-DECANE	4.488	5853395	52.575 ug/ml
3) N-DODECANE	6.670	6080794	53.060 ug/ml
4) N-TETRADECANE	8.507	6290779	51.916 ug/ml
5) N-HEXADECANE	10.121	6452667	51.398 ug/ml
6) N-OCTADECANE	11.569	6647325	50.723 ug/ml
7) N-EICOSANE	12.882	6767091	49.913 ug/ml
8) N-DOCOSANE	14.085	6602640	49.783 ug/ml
10) N-TETRACOSANE	15.191	6588253	49.578 ug/ml
11) N-HEXACOSANE	16.215	6530078	49.239 ug/ml
12) N-OCTACOSANE	17.168	6406273	48.593 ug/ml

(f)=RT Delta > 1/2 Window

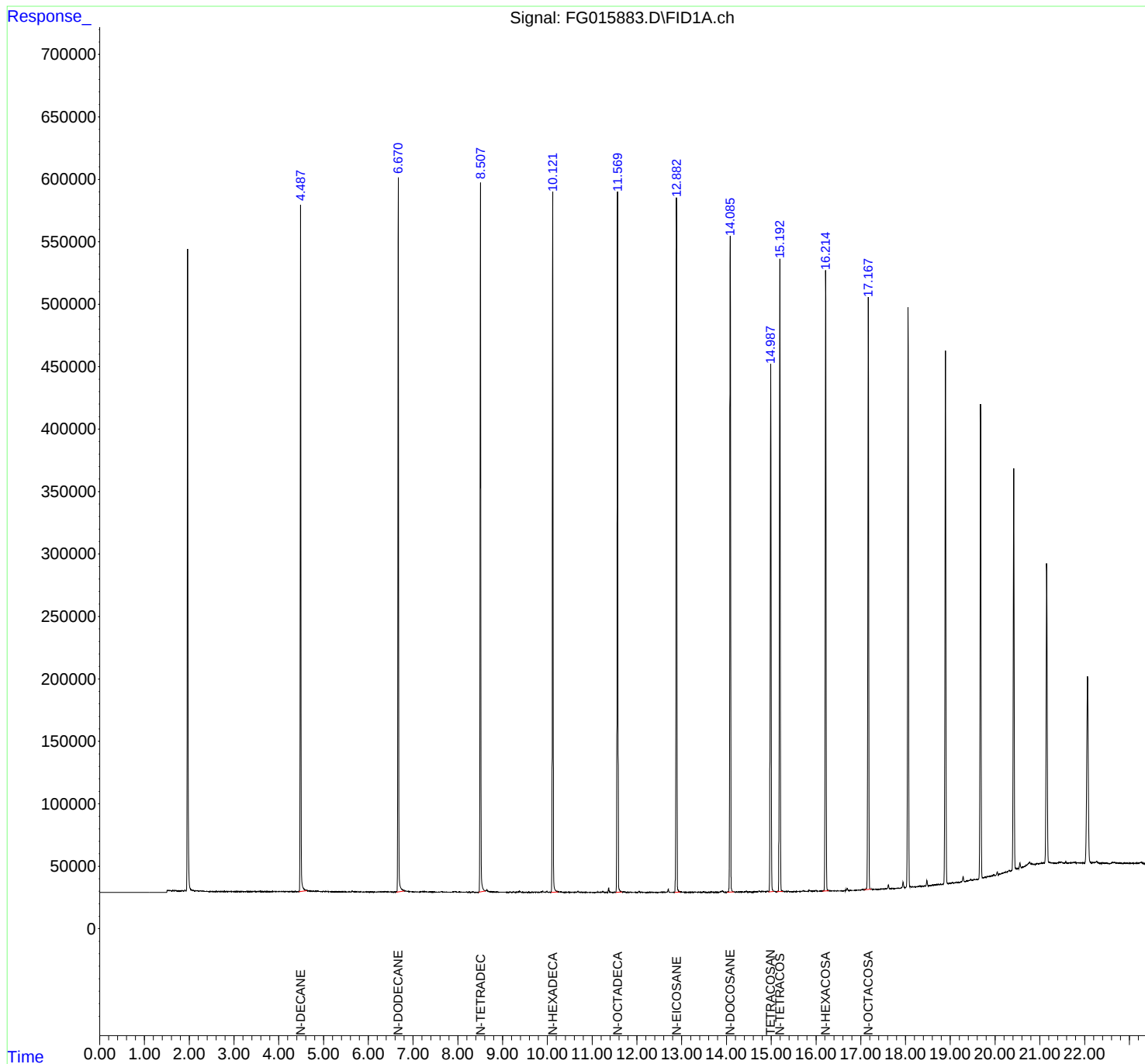
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015883.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 19:06
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 76 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: May 22 00:43:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015883.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 19:06
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.488	4.447	4.632	BB	547702	5853395	86.50%	8.353%
2	6.670	6.628	6.807	BB	571668	6080794	89.86%	8.678%
3	8.507	8.468	8.619	BV	566825	6290779	92.96%	8.977%
4	10.121	10.082	10.243	BB	559324	6452667	95.35%	9.208%
5	11.569	11.529	11.669	BB	559125	6647325	98.23%	9.486%
6	12.882	12.843	12.968	BB	556155	6767091	100.00%	9.657%
7	14.085	14.016	14.166	BB	526186	6602640	97.57%	9.423%
8	14.987	14.942	15.056	BV	419710	5853826	86.50%	8.354%
9	15.191	15.116	15.259	BB	505210	6588253	97.36%	9.402%
10	16.215	16.143	16.288	BB	495626	6530078	96.50%	9.319%
11	17.168	17.080	17.237	BB	471420	6406273	94.67%	9.142%
Sum of corrected areas:						70073120		

FG042425.M Thu May 22 01:23:19 2025

Analytical Sequence

Client: CDM Smith

SDG No.: Q2032

Project: South River WM Replacement

Instrument ID: FID_G

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 15.02					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	LBLK01	19 May 2025 09:58	FF015862.D	15.021	
50 PPM TRPH STD	50 PPM TRPH STD	19 May 2025 10:27	FF015863.D	15.021	
PB168064BL	PB168064BL	19 May 2025 12:08	FF015865.D	15.022	
PB168064BS	PB168064BS	19 May 2025 12:37	FF015866.D	15.018	
PB168064BSD	PB168064BSD	19 May 2025 13:07	FF015867.D	15.018	
FB-05132025	Q2032-11	19 May 2025 16:39	FF015868.D	15.021	
PIBLK02	LBLK02	19 May 2025 17:38	FF015869.D	15.021	
50 PPM TRPH STD	50 PPM TRPH STD	19 May 2025 18:08	FF015870.D	15.021	
PIBLK03	LBLK03	21 May 2025 09:50	FG015864.D	14.985	
50 PPM TRPH STD	50 PPM TRPH STD	21 May 2025 10:19	FG015865.D	14.987	
PB168084BL	PB168084BL	21 May 2025 11:18	FG015867.D	14.985	
PB168084BS	PB168084BS	21 May 2025 11:47	FG015868.D	14.984	
TP-11	Q2032-01	21 May 2025 12:16	FG015869.D	14.983	
TP-29	Q2032-02	21 May 2025 12:45	FG015870.D	14.984	
TP-29-99	Q2032-03	21 May 2025 13:15	FG015871.D	14.984	
TP-24	Q2032-04	21 May 2025 13:44	FG015872.D	14.983	
TP-24MS	Q2032-05MS	21 May 2025 14:13	FG015873.D	14.930	
TP-24MSD	Q2032-06MSD	21 May 2025 14:43	FG015874.D	14.984	
PIBLK04	LBLK04	21 May 2025 15:12	FG015875.D	14.984	
50 PPM TRPH STD	50 PPM TRPH STD	21 May 2025 15:41	FG015876.D	14.986	
TP-37	Q2032-07	21 May 2025 16:10	FG015877.D	14.983	
TP-32	Q2032-08	21 May 2025 16:40	FG015878.D	14.983	
PIBLK05	LBLK05	21 May 2025 18:37	FG015882.D	14.984	
50 PPM TRPH STD	50 PPM TRPH STD	21 May 2025 19:06	FG015883.D	14.987	



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168064BL	SDG No.:	Q2032
Lab Sample ID:	PB168064BL	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF015865.D	1	05/16/25 11:40	05/19/25 12:08	PB168064

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	15.9		29 - 130	80%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 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
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015865.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 12:08
Operator : YP\AJ
Sample : PB168064BL
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB168064BL

Integration File: autoint1.e
Quant Time: May 20 03:54:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.022	1793769	15.895 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

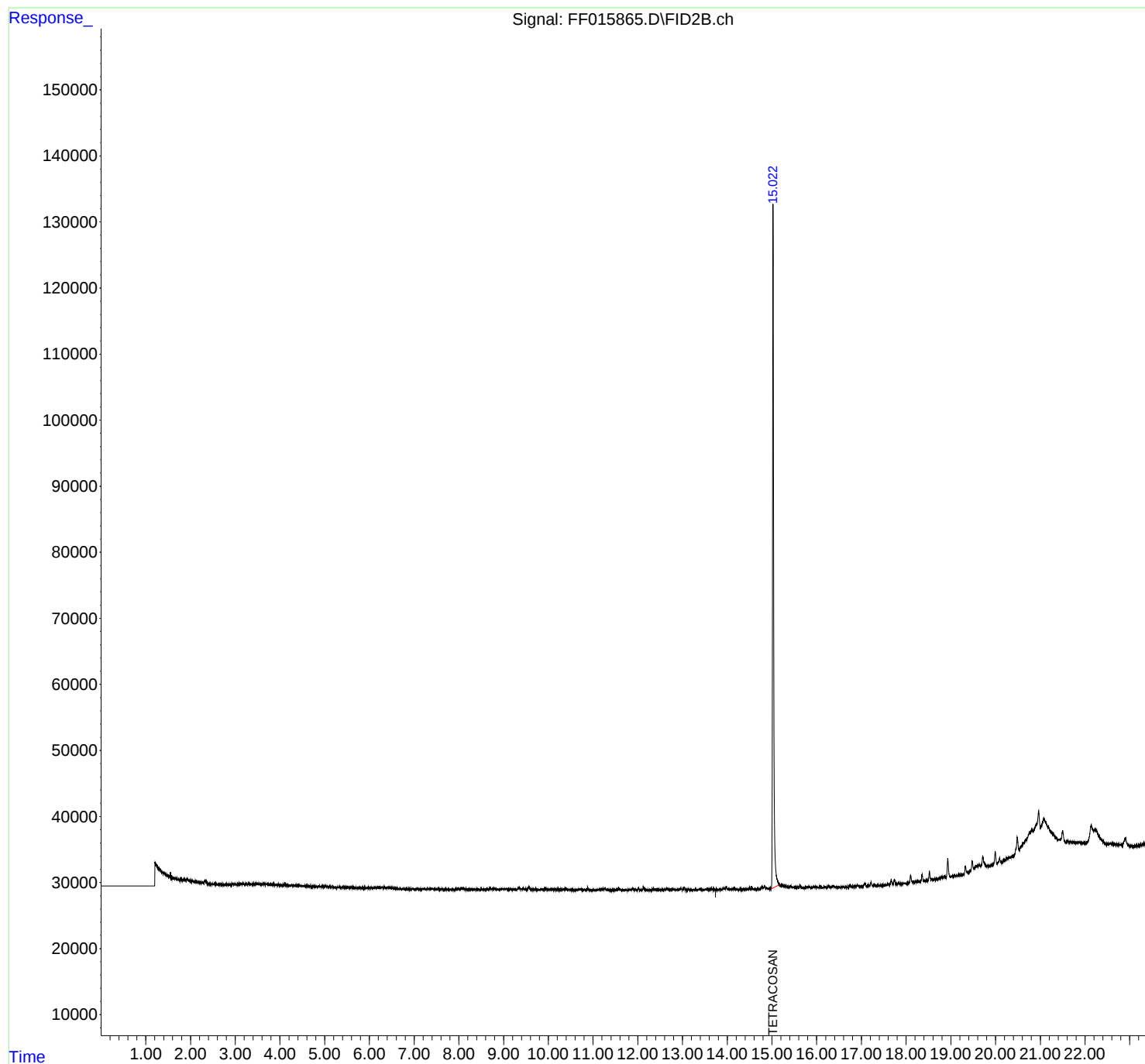
(m)=manual int.

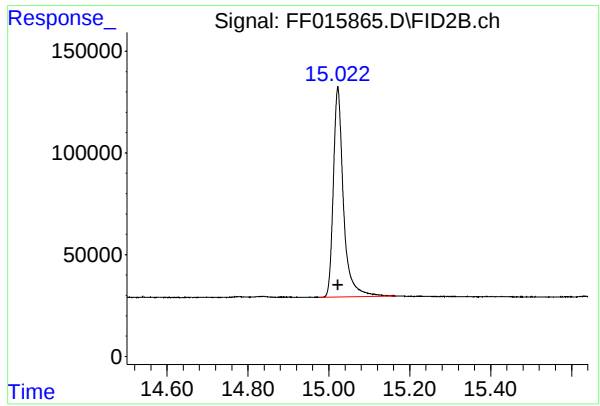
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015865.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 12:08
Operator : YP\AJ
Sample : PB168064BL
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB168064BL

Integration File: autoint1.e
Quant Time: May 20 03:54:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.022 min
Delta R.T.: 0.000 min
Response: 1793769
Conc: 15.90 ug/ml

Instrument :
FID_F
ClientSampleId :
PB168064BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015865.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 12:08
Sample : PB168064BL
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.022	14.976	15.166	BB	103414	1793769	100.00%	100.000%
Sum of corrected areas:						1793769		

FF042225.M Tue May 20 04:51:24 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168084BL	SDG No.:	Q2032
Lab Sample ID:	PB168084BL	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100
Sample Wt/Vol:	30.02	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Decanted:	
GPC Factor :		Final Vol:	1
Prep Method :	SW3541	Test:	Diesel Range Organics
		PH :	
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015867.D	1	05/20/25 10:15	05/21/25 11:18	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	169	U	169	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	18.0		37 - 130	90%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 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
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015867.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 11:18
Operator : YP\AJ
Sample : PB168084BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB168084BL

Integration File: autoint1.e
Quant Time: May 22 00:38:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.985	2121640	18.020 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

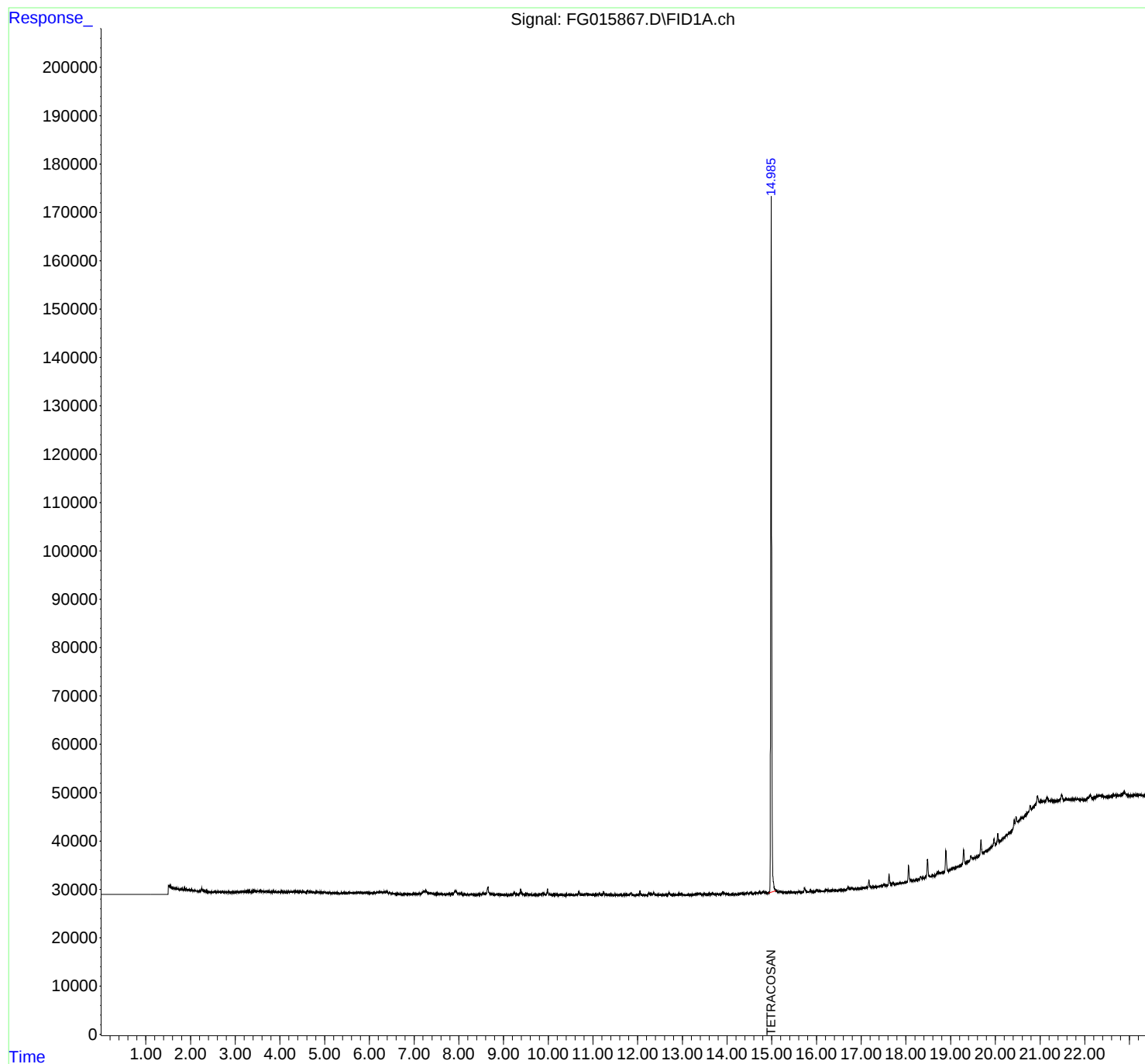
(m)=manual int.

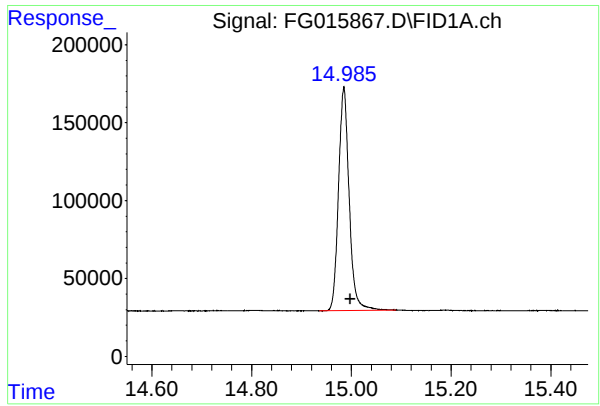
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015867.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 11:18
Operator : YP\AJ
Sample : PB168084BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB168084BL

Integration File: autoint1.e
Quant Time: May 22 00:38:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.985 min
Delta R.T.: -0.013 min
Response: 2121640
Conc: 18.02 ug/ml

Instrument :
FID_G
ClientSampleId :
PB168084BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015867.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 11:18
Sample : PB168084BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.985	14.935	15.090	BB	144033	2121640	100.00%	100.000%
Sum of corrected areas:						2121640		

FG042425.M Thu May 22 01:18:05 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/19/25
Project:	South River WM Replacement	Date Received:	05/19/25
Client Sample ID:	PIBLK-FF015862.D	SDG No.:	Q2032
Lab Sample ID:	I.BLK-FF015862.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF015862.D	1		05/19/25	FF051925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	17.9		29 - 130	89%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 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
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015862.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 09:58
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 20 03:53:17 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.021	2020191	17.902 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

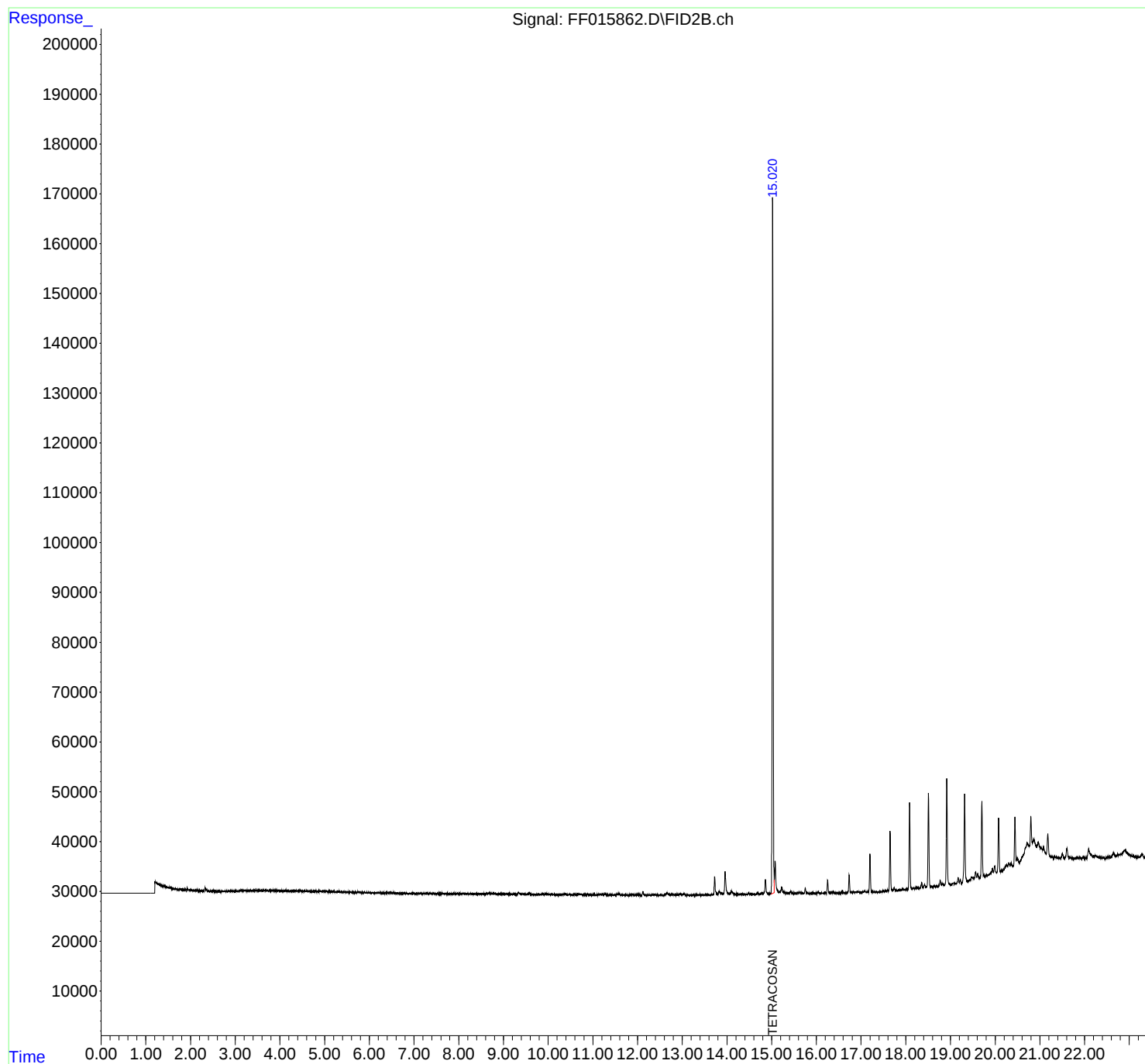
(m)=manual int.

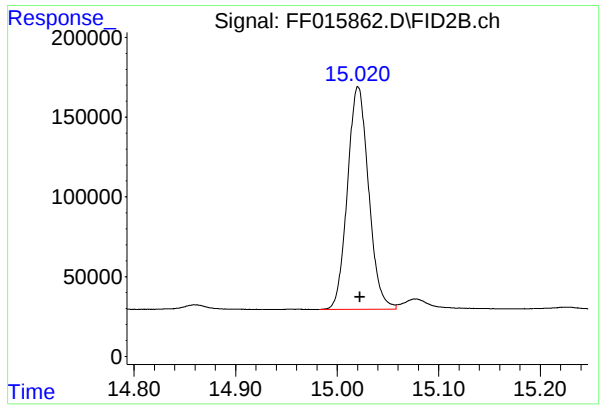
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015862.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 09:58
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 20 03:53:17 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.021 min
Delta R.T.: -0.002 min
Response: 2020191
Conc: 17.90 ug/ml

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015862.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 09:58
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.021	14.982	15.058	BV	139539	2020191	100.00%	100.000%
Sum of corrected areas:						2020191		

FF042225.M Tue May 20 04:48:52 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/19/25
Project:	South River WM Replacement	Date Received:	05/19/25
Client Sample ID:	PIBLK-FF015869.D	SDG No.:	Q2032
Lab Sample ID:	I.BLK-FF015869.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	1 mL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :	PH :	Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF015869.D	1		05/19/25	FF051925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	20.6		29 - 130	103%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015869.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 17:38
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 20 03:55:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.021	2320626	20.564 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

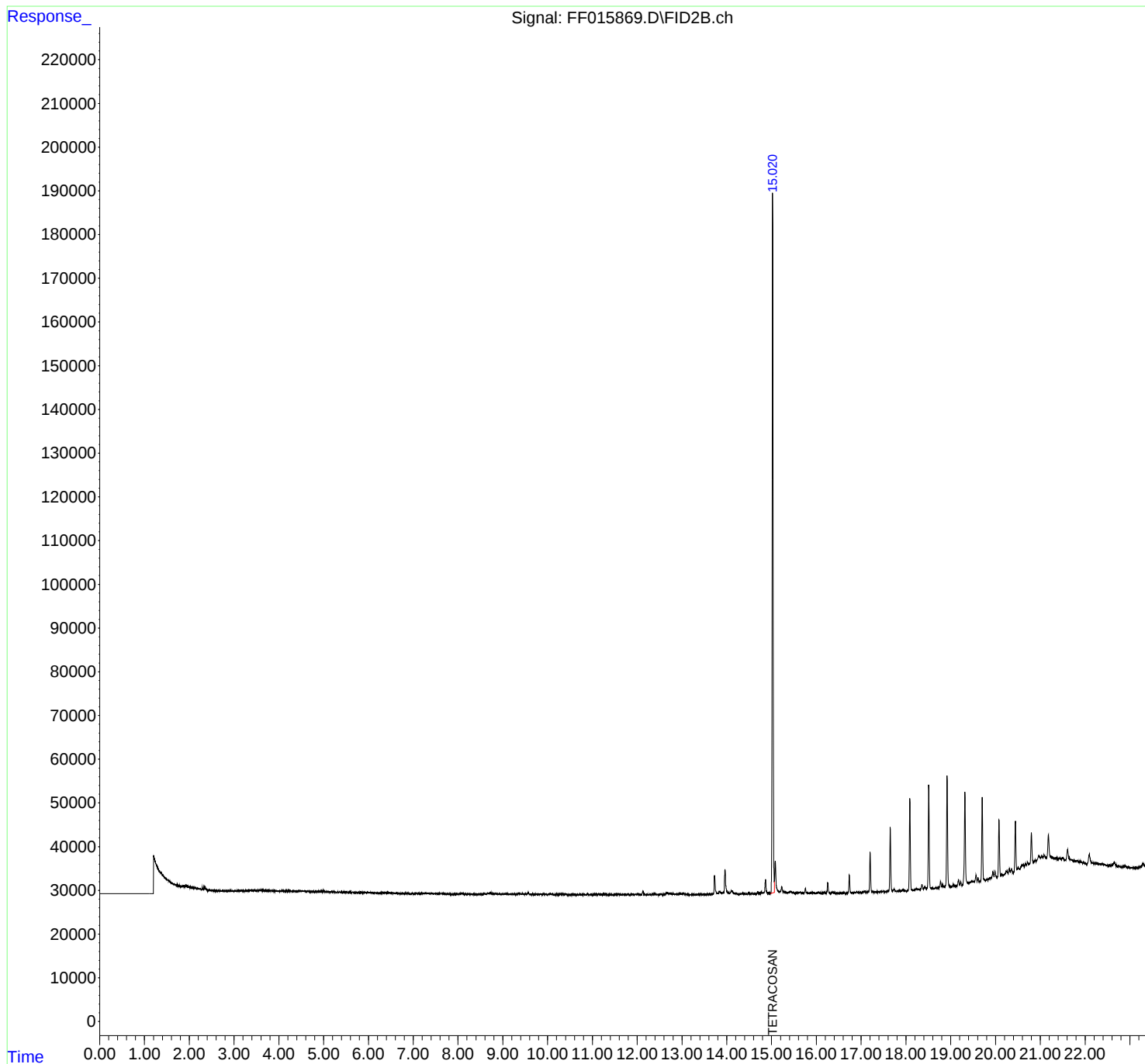
(m)=manual int.

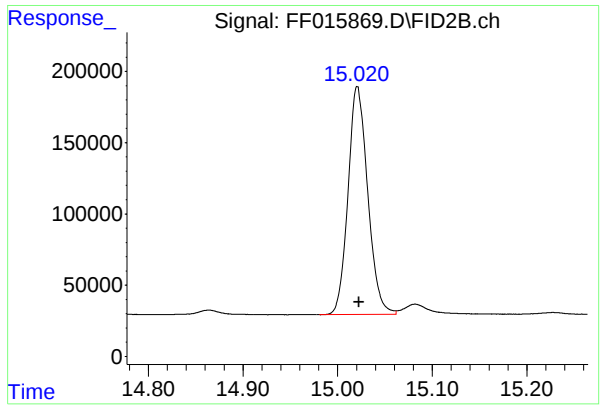
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015869.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 17:38
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 20 03:55:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.021 min
Delta R.T.: -0.002 min
Response: 2320626
Conc: 20.56 ug/ml

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015869.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 17:38
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.021	14.980	15.062	BV	160310	2320626	100.00%	100.000%
Sum of corrected areas:						2320626		

FF042225.M Tue May 20 04:53:06 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/21/25
Project:	South River WM Replacement	Date Received:	05/21/25
Client Sample ID:	PIBLK-FG015864.D	SDG No.:	Q2032
Lab Sample ID:	I.BLK-FG015864.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015864.D	1		05/21/25	FG052125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	18.0		29 - 130	90%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 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
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015864.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 09:50
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 22 00:37:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.985	2114388	17.959 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

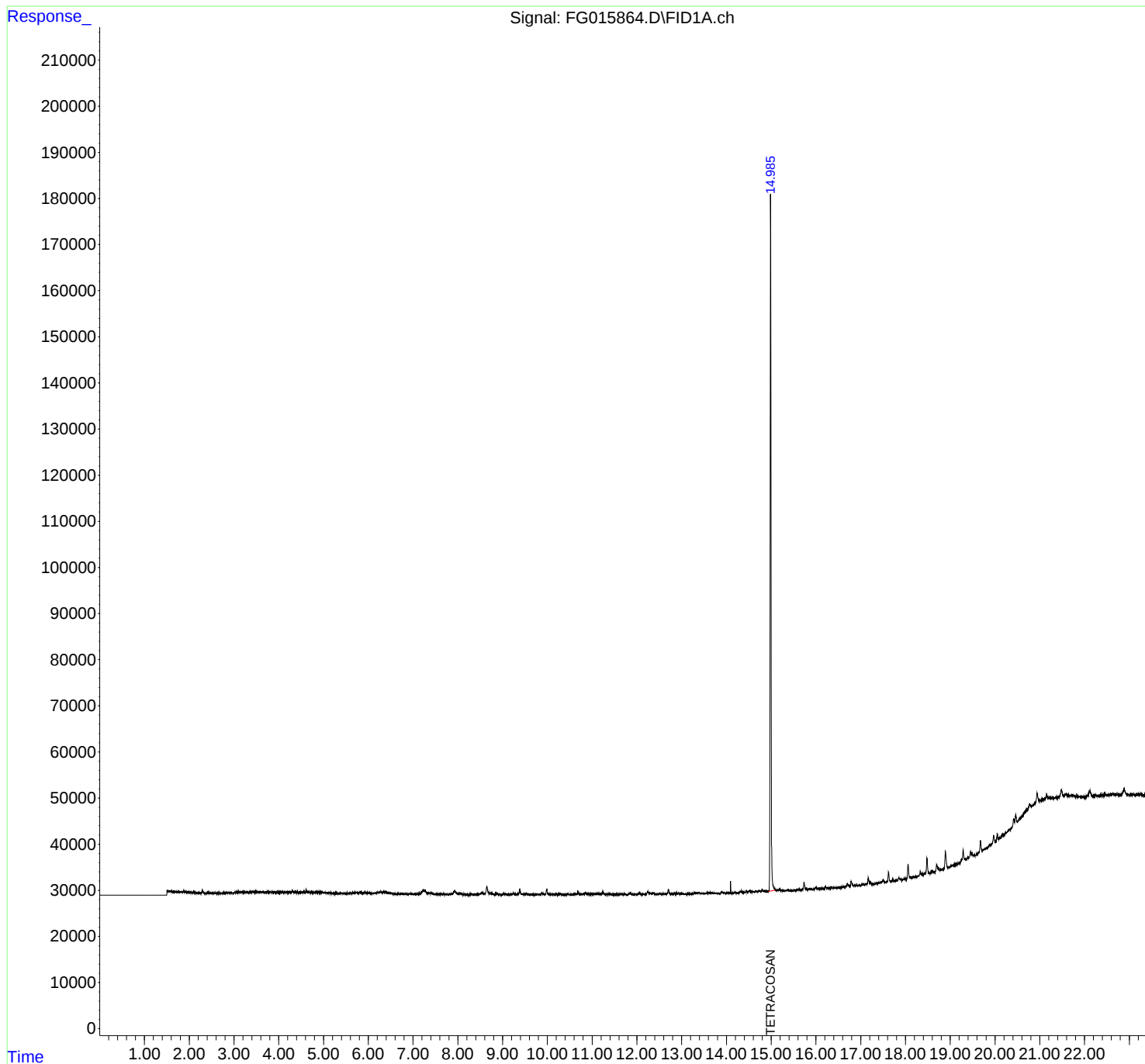
(m)=manual int.

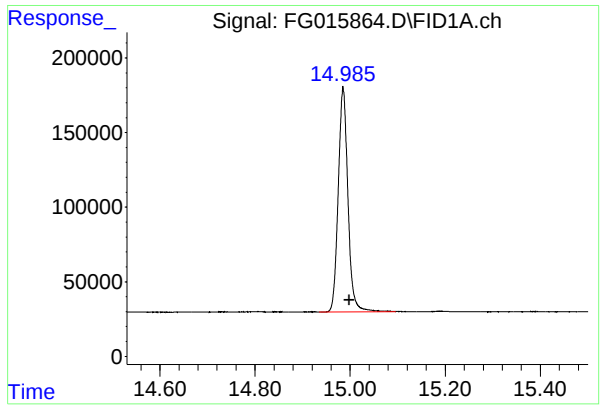
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015864.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 09:50
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 22 00:37:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.985 min

Delta R.T.: -0.013 min

Response: 2114388

Conc: 17.96 ug/ml

Instrument :

FID_G

ClientSampleId :

I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015864.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 09:50
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.985	14.935	15.096	BB	150240	2114388	100.00%	100.000%
Sum of corrected areas:						2114388		

FG042425.M Thu May 22 01:15:40 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/21/25
Project:	South River WM Replacement	Date Received:	05/21/25
Client Sample ID:	PIBLK-FG015875.D	SDG No.:	Q2032
Lab Sample ID:	I.BLK-FG015875.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	1 mL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :	PH :	Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015875.D	1		05/21/25	FG052125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	17.5		29 - 130	88%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 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
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015875.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 15:12
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 22 00:41:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.984	2064780	17.537 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

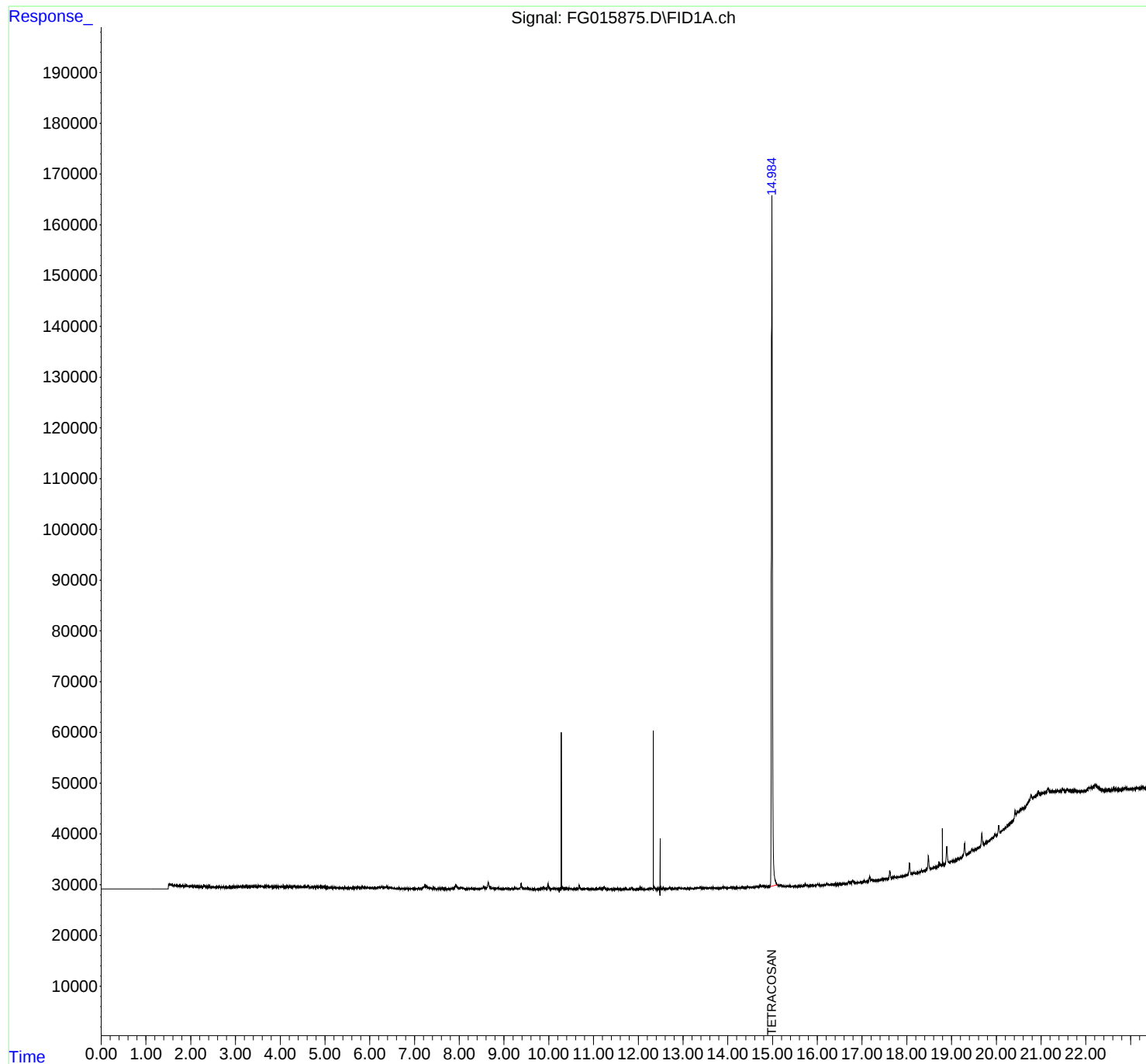
(m)=manual int.

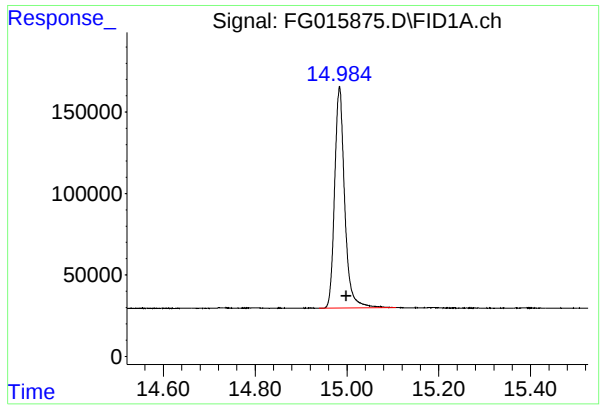
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015875.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 15:12
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 22 00:41:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.984 min
Delta R.T.: -0.014 min
Response: 2064780
Conc: 17.54 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015875.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 15:12
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.984	14.939	15.107	BB	135993	2064780	100.00%	100.000%
Sum of corrected areas:						2064780		

FG042425.M Thu May 22 01:21:21 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/21/25
Project:	South River WM Replacement	Date Received:	05/21/25
Client Sample ID:	PIBLK-FG015882.D	SDG No.:	Q2032
Lab Sample ID:	I.BLK-FG015882.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	1 mL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :	PH :	Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015882.D	1		05/21/25	FG052125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	18.3		29 - 130	91%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 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
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015882.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 18:37
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 22 00:43:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.984	2150574	18.266 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

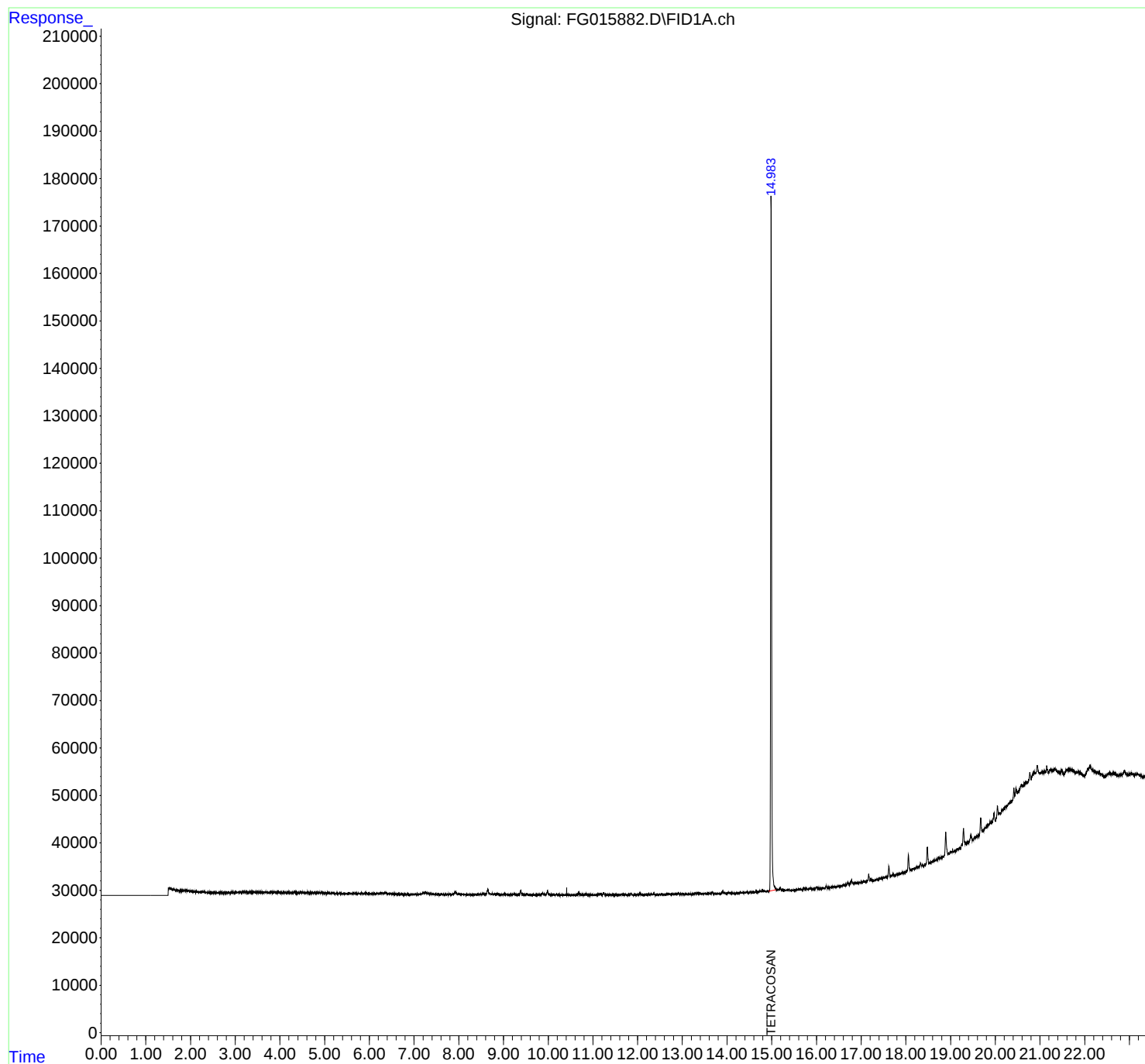
(m)=manual int.

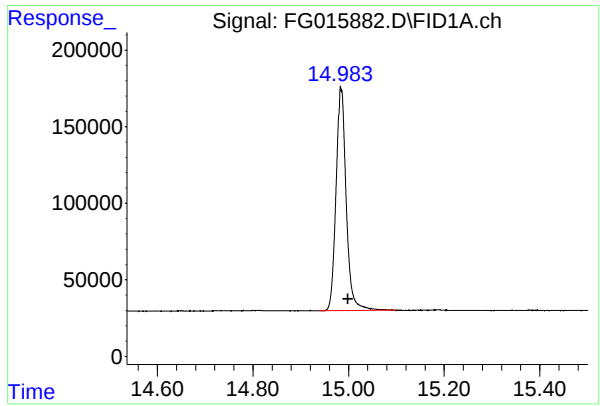
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015882.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 18:37
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: May 22 00:43:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.984 min
Delta R.T.: -0.014 min
Response: 2150574
Conc: 18.27 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015882.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 18:37
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	14.984	14.938	15.099	BB	144046	2150574	100.00%	100.000%
Sum of corrected areas:						2150574		

FG042425.M Thu May 22 01:22:46 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168064BS	SDG No.:	Q2032
Lab Sample ID:	PB168064BS	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF015866.D	1	05/16/25 11:40	05/19/25 12:37	PB168064

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	202		6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	20.0		29 - 130	100%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
 Data File : FF015866.D
 Signal(s) : FID2B.ch
 Acq On : 19 May 2025 12:37
 Operator : YP\AJ
 Sample : PB168064BS
 Misc :
 ALS Vial : 72 Sample Multiplier: 1

Instrument :
 FID_F
 ClientSampleId :
 PB168064BS

Integration File: autoint1.e
 Quant Time: May 20 03:54:27 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
 Quant Title :
 QLast Update : Tue Apr 22 11:27:50 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.018	2252664	19.962 ug/ml
Target Compounds			
2) N-DECANE	4.563	2229737	21.850 ug/ml
3) N-DODECANE	6.731	2363842	21.588 ug/ml
4) N-TETRADECANE	8.560	2331334	20.199 ug/ml
5) N-HEXADECANE	10.167	2380455	20.170 ug/ml
6) N-OCTADECANE	11.609	2521329	20.043 ug/ml
7) N-EICOSANE	12.920	2513864	19.270 ug/ml
8) N-DOCOSANE	14.118	2503705	19.656 ug/ml
10) N-TETRACOSANE	15.223	2507184	19.932 ug/ml
11) N-HEXACOSANE	16.244	2447274	20.076 ug/ml
12) N-OCTACOSANE	17.196	2391127	20.207 ug/ml

(f)=RT Delta > 1/2 Window

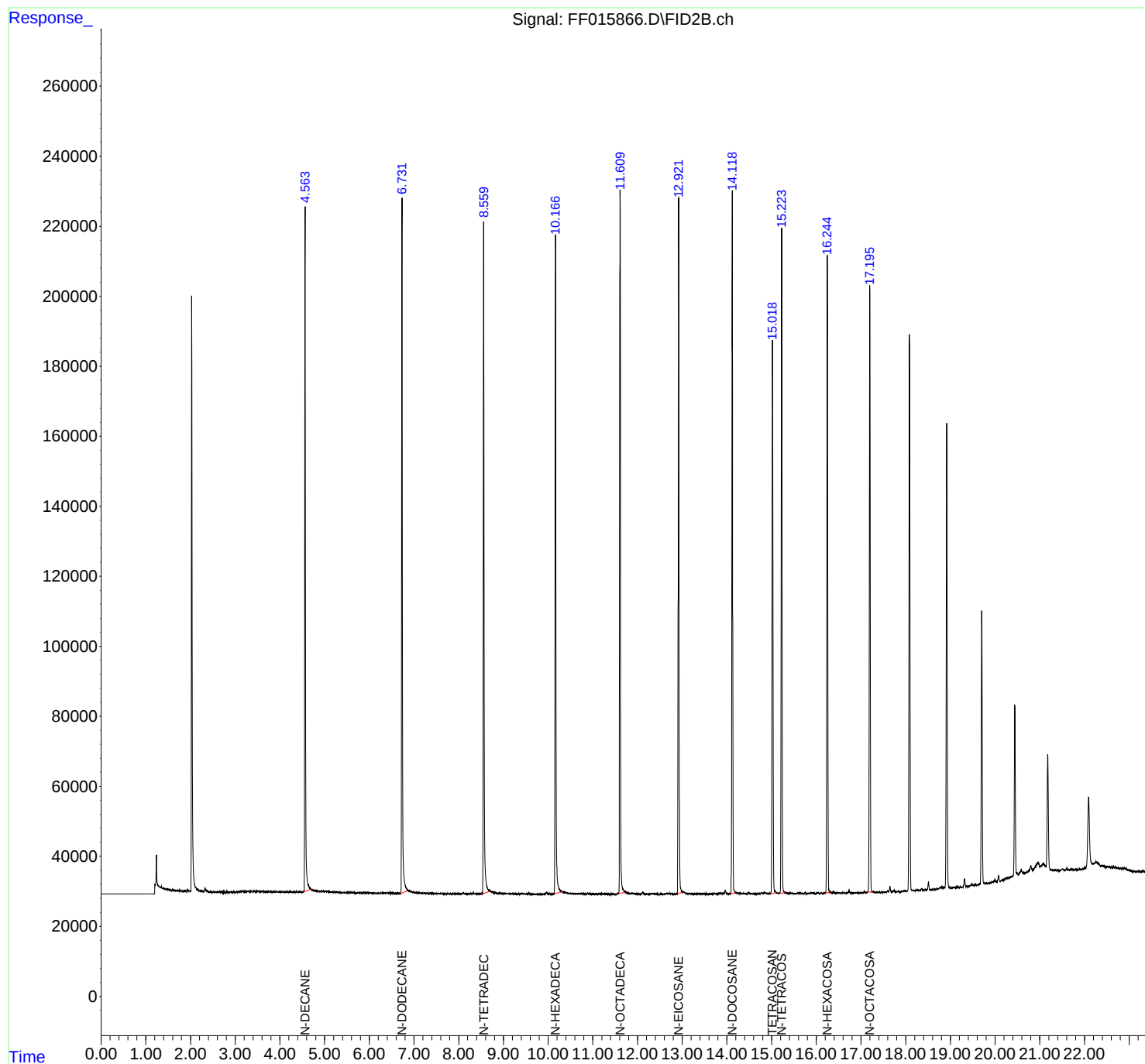
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015866.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 12:37
Operator : YP\AJ
Sample : PB168064BS
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB168064BS

Integration File: autoint1.e
Quant Time: May 20 03:54:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015866.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 12:37
Sample : PB168064BS
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.563	4.534	4.695	BB	195658	2229737	88.43%	8.432%
2	6.732	6.704	6.869	BB	198169	2363842	93.75%	8.940%
3	8.560	8.525	8.695	BB	191488	2331334	92.46%	8.817%
4	10.167	10.134	10.299	BB	188170	2380455	94.41%	9.002%
5	11.609	11.577	11.730	BB	201274	2521329	100.00%	9.535%
6	12.920	12.882	13.015	BB	198723	2513864	99.70%	9.507%
7	14.119	14.082	14.197	BB	200739	2503705	99.30%	9.468%
8	15.018	14.977	15.105	BB	158184	2252664	89.34%	8.519%
9	15.223	15.182	15.299	BB	188942	2507184	99.44%	9.482%
10	16.244	16.205	16.317	BB	180873	2447274	97.06%	9.255%
11	17.196	17.142	17.264	BB	173397	2391127	94.84%	9.043%
Sum of corrected areas:							26442513	

FF042225.M Tue May 20 04:51:52 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168084BS	SDG No.:	Q2032
Lab Sample ID:	PB168084BS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015868.D	1	05/20/25 10:15	05/21/25 11:47	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	6530		169	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	20.6		37 - 130	103%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
 Data File : FG015868.D
 Signal(s) : FID1A.ch
 Acq On : 21 May 2025 11:47
 Operator : YP\AJ
 Sample : PB168084BS
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 PB168084BS

Integration File: autoint1.e
 Quant Time: May 22 00:38:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
 Quant Title :
 QLast Update : Thu Apr 24 12:54:09 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.984	2424797	20.595 ug/ml
Target Compounds			
2) N-DECANE	4.488	2013773	18.088 ug/ml
3) N-DODECANE	6.670	2178191	19.007 ug/ml
4) N-TETRADECANE	8.505	2272446	18.754 ug/ml
5) N-HEXADECANE	10.119	2441706	19.449 ug/ml
6) N-OCTADECANE	11.566	2624828	20.029 ug/ml
7) N-EICOSANE	12.880	2645165	19.510 ug/ml
8) N-DOCOSANE	14.081	2662725	20.076 ug/ml
10) N-TETRACOSANE	15.188	2692207	20.259 ug/ml
11) N-HEXACOSANE	16.213	2671169	20.141 ug/ml
12) N-OCTACOSANE	17.164	2682870	20.350 ug/ml

(f)=RT Delta > 1/2 Window

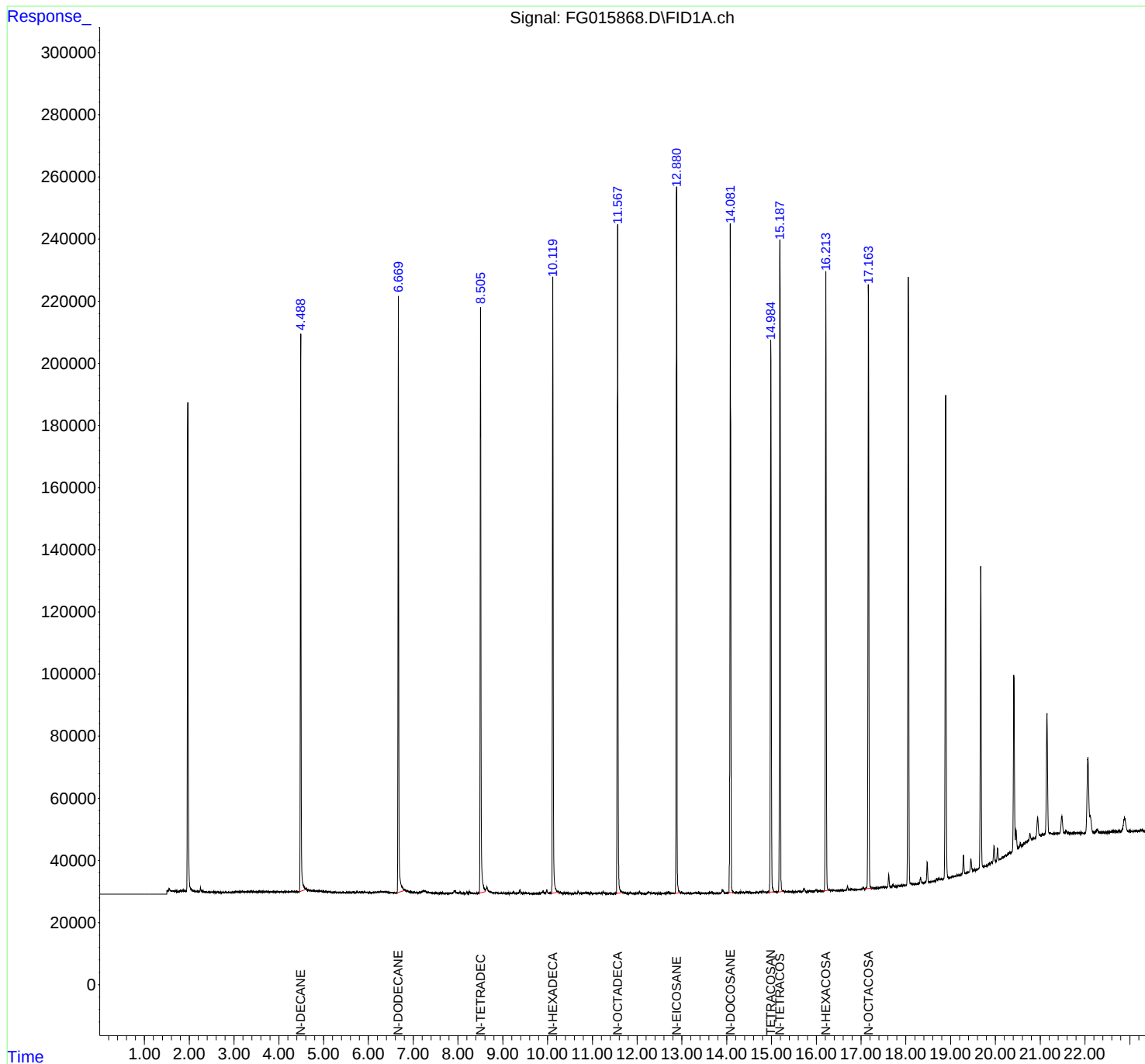
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015868.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 11:47
Operator : YP\AJ
Sample : PB168084BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB168084BS

Integration File: autoint1.e
Quant Time: May 22 00:38:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015868.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 11:47
Sample : PB168084BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.488	4.449	4.611	BB	179467	2013773	74.80%	7.374%
2	6.670	6.631	6.810	BB	191816	2178191	80.91%	7.976%
3	8.505	8.464	8.610	BV	187908	2272446	84.41%	8.321%
4	10.119	10.071	10.241	BB	197468	2441706	90.70%	8.941%
5	11.566	11.530	11.669	BB	214628	2624828	97.50%	9.611%
6	12.880	12.831	12.965	BB	226577	2645165	98.25%	9.686%
7	14.081	14.033	14.163	BB	214865	2662725	98.90%	9.750%
8	14.984	14.932	15.059	BB	177669	2424797	90.07%	8.879%
9	15.188	15.134	15.261	BB	209450	2692207	100.00%	9.858%
10	16.213	16.155	16.280	BB	198880	2671169	99.22%	9.781%
11	17.164	17.090	17.245	BB	193039	2682870	99.65%	9.824%
Sum of corrected areas:						27309875		

FG042425.M Thu May 22 01:19:47 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168064BSD	SDG No.:	Q2032
Lab Sample ID:	PB168064BSD	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF015867.D	1	05/16/25 11:40	05/19/25 13:07	PB168064

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	196		6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	19.3		29 - 130	97%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
 Data File : FF015867.D
 Signal(s) : FID2B.ch
 Acq On : 19 May 2025 13:07
 Operator : YP\AJ
 Sample : PB168064BSD
 Misc :
 ALS Vial : 73 Sample Multiplier: 1

Instrument :
 FID_F
 ClientSampleId :
 PB168064BSD

Integration File: autoint1.e
 Quant Time: May 20 03:54:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
 Quant Title :
 QLast Update : Tue Apr 22 11:27:50 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	15.018	2181349	19.330 ug/ml
Target Compounds			
2) N-DECANE	4.564	2158850	21.156 ug/ml
3) N-DODECANE	6.732	2299082	20.997 ug/ml
4) N-TETRADECANE	8.559	2249901	19.493 ug/ml
5) N-HEXADECANE	10.167	2305517	19.535 ug/ml
6) N-OCTADECANE	11.609	2447130	19.453 ug/ml
7) N-EICOSANE	12.920	2437085	18.681 ug/ml
8) N-DOCOSANE	14.118	2428820	19.068 ug/ml
10) N-TETRACOSANE	15.223	2433244	19.344 ug/ml
11) N-HEXACOSANE	16.245	2375079	19.484 ug/ml
12) N-OCTACOSANE	17.195	2324940	19.648 ug/ml

(f)=RT Delta > 1/2 Window

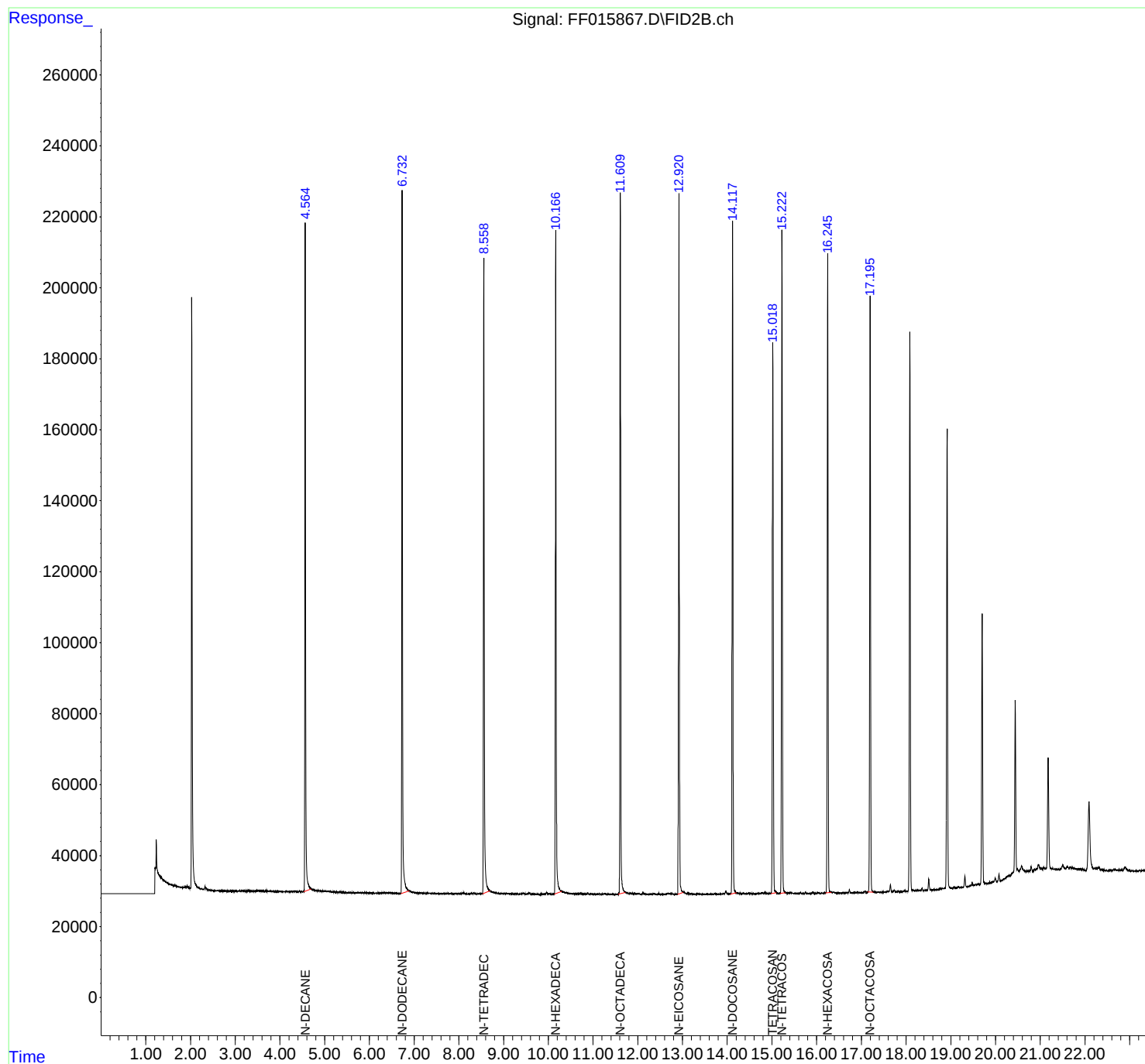
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015867.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 13:07
Operator : YP\AJ
Sample : PB168064BSD
Misc :
ALS Vial : 73 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB168064BSD

Integration File: autoint1.e
Quant Time: May 20 03:54:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Quant Title :
QLast Update : Tue Apr 22 11:27:50 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF051925\
Data File : FF015867.D
Signal(s) : FID2B.ch
Acq On : 19 May 2025 13:07
Sample : PB168064BSD
Misc :
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF042225.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.564	4.536	4.697	BB	188559	2158850	88.22%	8.420%
2	6.732	6.704	6.886	BB	197917	2299082	93.95%	8.966%
3	8.559	8.529	8.696	BB	178951	2249901	91.94%	8.775%
4	10.167	10.136	10.292	BB	185943	2305517	94.21%	8.992%
5	11.609	11.572	11.726	BB	197359	2447130	100.00%	9.544%
6	12.920	12.886	13.017	BB	196911	2437085	99.59%	9.505%
7	14.118	14.076	14.209	BB	189039	2428820	99.25%	9.472%
8	15.018	14.979	15.101	BB	154604	2181349	89.14%	8.507%
9	15.223	15.182	15.306	BB	186392	2433244	99.43%	9.490%
10	16.245	16.201	16.319	BB	180688	2375079	97.06%	9.263%
11	17.195	17.144	17.269	BB	167766	2324940	95.01%	9.067%
Sum of corrected areas:						25640997		

FF042225.M Tue May 20 04:52:36 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-24MS	SDG No.:	Q2032
Lab Sample ID:	Q2032-05MS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	74.2
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015873.D	1	05/20/25 10:15	05/21/25 14:13	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	13800		227	2240	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	13.2		37 - 130	66%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
 Data File : FG015873.D
 Signal(s) : FID1A.ch
 Acq On : 21 May 2025 14:13
 Operator : YP\AJ
 Sample : Q2032-05MS
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 TP-24MS

Integration File: autoint1.e
 Quant Time: May 22 00:40:21 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
 Quant Title :
 QLast Update : Thu Apr 24 12:54:09 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.983	1557133	13.226 ug/ml
Target Compounds			
2) N-DECANE	4.488	2506544	22.514 ug/ml
3) N-DODECANE	6.670	2723792	23.767 ug/ml
4) N-TETRADECANE	8.505	2808470	23.177 ug/ml
5) N-HEXADECANE	10.119	2951548	23.510 ug/ml
6) N-OCTADECANE	11.566	3171510	24.200 ug/ml
7) N-EICOSANE	12.881	3168001	23.367 ug/ml
8) N-DOCOSANE	14.082	3114625	23.484 ug/ml
10) N-TETRACOSANE	15.188	3146354	23.677 ug/ml
11) N-HEXACOSANE	16.211	3148999	23.744 ug/ml
12) N-OCTACOSANE	17.164	3070005	23.287 ug/ml

(f)=RT Delta > 1/2 Window

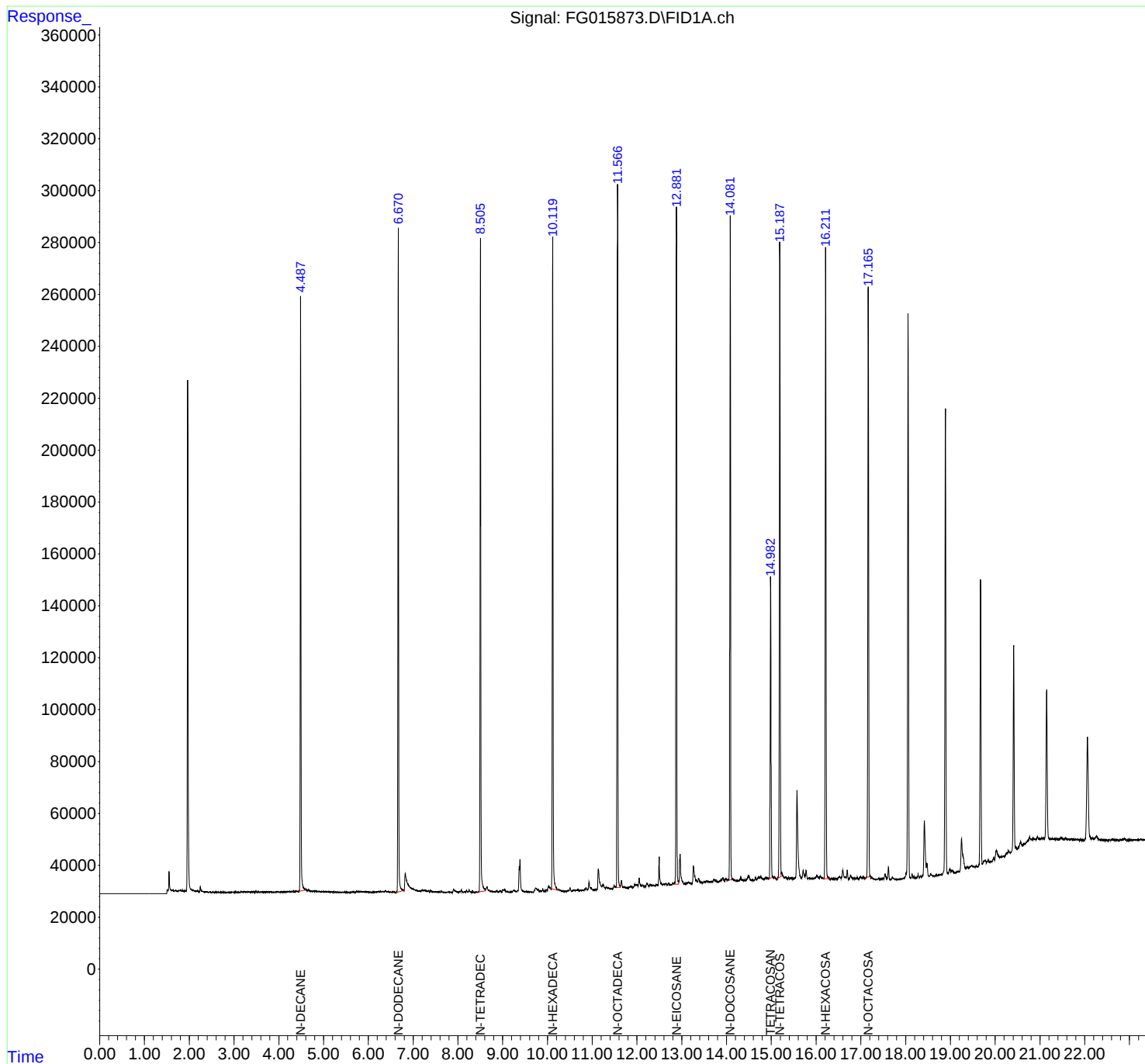
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015873.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 14:13
Operator : YP\AJ
Sample : Q2032-05MS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-24MS

Integration File: autoint1.e
Quant Time: May 22 00:40:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
 Data File : FG015873.D
 Signal(s) : FID1A.ch
 Acq On : 21 May 2025 14:13
 Sample : Q2032-05MS
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
 Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.313	4.300	4.318	BV	122	593	0.02%	0.001%
2	4.322	4.318	4.342	VV	115	903	0.03%	0.002%
3	4.355	4.342	4.365	PV	161	1166	0.04%	0.003%
4	4.375	4.365	4.405	PV	205	2646	0.08%	0.007%
5	4.409	4.405	4.413	VV	139	564	0.02%	0.001%
6	4.417	4.413	4.420	VV	144	485	0.01%	0.001%
7	4.434	4.420	4.444	VV	207	1874	0.06%	0.005%
8	4.452	4.444	4.456	VV	184	1053	0.03%	0.003%
9	4.488	4.456	4.602	VV	229410	2548567	77.85%	6.265%
10	4.612	4.602	4.645	VV	954	18652	0.57%	0.046%
11	4.664	4.645	4.749	VV	917	31503	0.96%	0.077%
12	4.776	4.749	4.793	VV	444	8559	0.26%	0.021%
13	4.802	4.793	4.815	VV	391	3876	0.12%	0.010%
14	4.822	4.815	4.839	VV	353	3995	0.12%	0.010%
15	4.846	4.839	4.851	VV	271	1757	0.05%	0.004%
16	4.858	4.851	4.866	VV	277	2255	0.07%	0.006%
17	4.873	4.866	4.884	VV	271	2434	0.07%	0.006%
18	4.891	4.884	4.895	VV	280	1592	0.05%	0.004%
19	4.906	4.895	4.920	VV	256	3563	0.11%	0.009%
20	4.923	4.920	4.930	VV	282	1430	0.04%	0.004%
21	4.939	4.930	4.949	VV	299	2783	0.09%	0.007%
22	4.954	4.949	4.963	VV	230	1785	0.05%	0.004%
23	4.965	4.963	4.973	VV	277	1503	0.05%	0.004%
24	4.977	4.973	4.990	VV	285	2129	0.07%	0.005%
25	4.999	4.990	5.046	VV	295	6130	0.19%	0.015%
26	5.053	5.046	5.058	VV	179	1003	0.03%	0.002%
27	5.074	5.058	5.093	VV	189	3251	0.10%	0.008%
28	5.096	5.093	5.102	VV	188	692	0.02%	0.002%
29	5.110	5.102	5.126	VV	182	1803	0.06%	0.004%
30	5.131	5.126	5.139	VV	155	1029	0.03%	0.003%
31	5.155	5.139	5.164	VV	219	2395	0.07%	0.006%
32	5.170	5.164	5.201	VV	217	3337	0.10%	0.008%
33	5.205	5.201	5.220	VV	158	1189	0.04%	0.003%
34	5.222	5.220	5.227	VV	104	329	0.01%	0.001%
35	5.230	5.227	5.237	VV	114	425	0.01%	0.001%
36	5.242	5.237	5.259	PV	165	1250	0.04%	0.003%

					rteres			
37	5.265	5.259	5.284	VV	157	1124	0.03%	0.003%
38	5.287	5.284	5.293	VV	84	350	0.01%	0.001%
39	5.303	5.293	5.316	PV	123	1091	0.03%	0.003%
40	5.320	5.316	5.331	VV	143	664	0.02%	0.002%
41	5.335	5.331	5.341	VV	97	442	0.01%	0.001%
42	5.344	5.341	5.353	VV	116	581	0.02%	0.001%
43	5.355	5.353	5.367	VV	94	549	0.02%	0.001%
44	5.371	5.367	5.399	VV	125	1486	0.05%	0.004%
45	5.407	5.399	5.429	VV	127	1288	0.04%	0.003%
46	5.440	5.429	5.445	VV	140	774	0.02%	0.002%
47	5.454	5.445	5.459	VV	167	870	0.03%	0.002%
48	5.464	5.459	5.492	VV	210	2668	0.08%	0.007%
49	5.495	5.492	5.515	VV	113	1261	0.04%	0.003%
50	5.517	5.515	5.521	VV	167	347	0.01%	0.001%
51	5.526	5.521	5.531	VV	117	506	0.02%	0.001%
52	5.533	5.531	5.545	VV	169	864	0.03%	0.002%
53	5.552	5.545	5.560	VV	109	541	0.02%	0.001%
54	5.563	5.560	5.571	VV	99	416	0.01%	0.001%
55	5.577	5.571	5.593	VV	87	1004	0.03%	0.002%
56	5.601	5.593	5.613	PV	154	998	0.03%	0.002%
57	5.620	5.613	5.625	VV	84	503	0.02%	0.001%
58	5.638	5.625	5.658	VV	390	4997	0.15%	0.012%
59	5.663	5.658	5.679	VV	240	1860	0.06%	0.005%
60	5.691	5.679	5.708	VV	167	1984	0.06%	0.005%
61	5.735	5.708	5.750	VV	399	6388	0.20%	0.016%
62	5.785	5.750	5.801	VV	450	10705	0.33%	0.026%
63	5.806	5.801	5.829	VV	456	7038	0.21%	0.017%
64	5.835	5.829	5.859	VV	447	6429	0.20%	0.016%
65	5.866	5.859	5.871	VV	353	2173	0.07%	0.005%
66	5.880	5.871	5.889	VV	338	3564	0.11%	0.009%
67	5.896	5.889	5.924	VV	377	6518	0.20%	0.016%
68	5.928	5.924	5.933	VV	327	1645	0.05%	0.004%
69	5.944	5.933	5.981	VV	412	7509	0.23%	0.018%
70	5.986	5.981	5.994	VV	273	1613	0.05%	0.004%
71	5.998	5.994	6.006	VV	206	1426	0.04%	0.004%
72	6.007	6.006	6.025	VV	249	1948	0.06%	0.005%
73	6.035	6.025	6.058	VV	247	3317	0.10%	0.008%
74	6.063	6.058	6.087	VV	203	2209	0.07%	0.005%
75	6.100	6.087	6.113	VV	235	2537	0.08%	0.006%
76	6.116	6.113	6.148	VV	289	3424	0.10%	0.008%
77	6.173	6.148	6.184	VV	265	4323	0.13%	0.011%
78	6.214	6.184	6.220	VV	413	6307	0.19%	0.016%
79	6.227	6.220	6.236	VV	336	2979	0.09%	0.007%
80	6.249	6.236	6.253	VV	396	3614	0.11%	0.009%
81	6.271	6.253	6.285	VV	460	7493	0.23%	0.018%
82	6.294	6.285	6.299	VV	389	2725	0.08%	0.007%
83	6.313	6.299	6.322	VV	449	5201	0.16%	0.013%
84	6.328	6.322	6.344	VV	433	4777	0.15%	0.012%
85	6.385	6.344	6.430	VV	683	20825	0.64%	0.051%
86	6.442	6.430	6.447	VV	336	3007	0.09%	0.007%
87	6.450	6.447	6.464	VV	348	2812	0.09%	0.007%
88	6.468	6.464	6.478	VV	276	1995	0.06%	0.005%
89	6.491	6.478	6.519	VV	263	4840	0.15%	0.012%

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90	6.539	6.519	6.545	VV	307	3145	0.10%	0.008%
91	6.549	6.545	6.580	VV	294	4641	0.14%	0.011%
92	6.584	6.580	6.605	VV	176	1658	0.05%	0.004%
93	6.608	6.605	6.613	VV	156	504	0.02%	0.001%
94	6.632	6.613	6.636	VV	195	1412	0.04%	0.003%
95	6.670	6.636	6.783	VV	256072	2762179	84.38%	6.790%
96	6.793	6.783	6.796	VV	773	5842	0.18%	0.014%
97	6.826	6.796	6.949	VV	7417	328876	10.05%	0.808%
98	6.953	6.949	6.979	VV	1733	28428	0.87%	0.070%
99	6.986	6.979	7.028	VV	1487	37387	1.14%	0.092%
100	7.034	7.028	7.054	VV	1114	15176	0.46%	0.037%
101	7.057	7.054	7.113	VV	913	25767	0.79%	0.063%
102	7.118	7.113	7.126	VV	650	4985	0.15%	0.012%
103	7.131	7.126	7.155	VV	652	10508	0.32%	0.026%
104	7.201	7.155	7.228	VV	920	34269	1.05%	0.084%
105	7.242	7.228	7.283	VV	981	27419	0.84%	0.067%
106	7.288	7.283	7.334	VV	836	19510	0.60%	0.048%
107	7.354	7.334	7.374	VV	629	11693	0.36%	0.029%
108	7.393	7.374	7.438	VV	915	19447	0.59%	0.048%
109	7.442	7.438	7.446	VV	340	1634	0.05%	0.004%
110	7.453	7.446	7.463	VV	326	2973	0.09%	0.007%
111	7.465	7.463	7.480	VV	292	2549	0.08%	0.006%
112	7.490	7.480	7.546	VV	276	8462	0.26%	0.021%
113	7.566	7.546	7.610	VV	270	6624	0.20%	0.016%
114	7.626	7.610	7.698	VV	555	11395	0.35%	0.028%
115	7.708	7.698	7.722	VV	177	1183	0.04%	0.003%
116	7.746	7.722	7.763	VV	164	2149	0.07%	0.005%
117	7.766	7.763	7.771	VV	97	395	0.01%	0.001%
118	7.798	7.771	7.823	VV	282	4605	0.14%	0.011%
119	7.826	7.823	7.831	VV	121	345	0.01%	0.001%
120	7.848	7.831	7.855	VV	136	1014	0.03%	0.002%
121	7.904	7.855	7.938	PV	1363	28624	0.87%	0.070%
122	7.941	7.938	7.953	VV	671	5029	0.15%	0.012%
123	7.956	7.953	7.993	VV	512	7823	0.24%	0.019%
124	7.995	7.993	8.022	VV	248	3107	0.09%	0.008%
125	8.051	8.022	8.059	VV	469	6681	0.20%	0.016%
126	8.078	8.059	8.103	VV	1148	15290	0.47%	0.038%
127	8.112	8.103	8.136	VV	279	3407	0.10%	0.008%
128	8.149	8.136	8.175	VV	341	5050	0.15%	0.012%
129	8.197	8.175	8.222	VV	1006	12257	0.37%	0.030%
130	8.253	8.222	8.306	VV	1031	19452	0.59%	0.048%
131	8.322	8.306	8.354	PV	734	9077	0.28%	0.022%
132	8.362	8.354	8.381	VV	163	1825	0.06%	0.004%
133	8.413	8.381	8.428	VV	418	5290	0.16%	0.013%
134	8.505	8.428	8.623	VV	250719	2856771	87.27%	7.023%
135	8.654	8.623	8.742	VV	2090	75273	2.30%	0.185%
136	8.745	8.742	8.783	VV	511	8844	0.27%	0.022%
137	8.786	8.783	8.807	VV	302	3576	0.11%	0.009%
138	8.818	8.807	8.850	VV	301	6728	0.21%	0.017%
139	8.866	8.850	8.912	VV	544	11131	0.34%	0.027%
140	8.937	8.912	8.947	VV	565	7754	0.24%	0.019%
141	8.956	8.947	8.976	VV	549	6412	0.20%	0.016%

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142	9.005	8.976	9.031	VV	1034	23362	0.71%	0.057%
143	9.045	9.031	9.075	VV	1352	21180	0.65%	0.052%
144	9.078	9.075	9.085	VV	303	1627	0.05%	0.004%
145	9.097	9.085	9.106	VV	365	3335	0.10%	0.008%
146	9.111	9.106	9.142	VV	356	3268	0.10%	0.008%
147	9.148	9.142	9.152	VV	141	558	0.02%	0.001%
148	9.163	9.152	9.183	VV	255	2696	0.08%	0.007%
149	9.195	9.183	9.214	VV	181	1888	0.06%	0.005%
150	9.245	9.214	9.253	VV	799	11100	0.34%	0.027%
151	9.256	9.253	9.306	VV	713	16012	0.49%	0.039%
152	9.309	9.306	9.316	VV	356	1919	0.06%	0.005%
153	9.338	9.316	9.349	VV	809	11074	0.34%	0.027%
154	9.372	9.349	9.378	VV	9923	96592	2.95%	0.237%
155	9.389	9.378	9.511	VV	12678	193430	5.91%	0.476%
156	9.520	9.511	9.553	VV	371	6086	0.19%	0.015%
157	9.572	9.553	9.582	VV	240	2922	0.09%	0.007%
158	9.584	9.582	9.607	VV	196	1297	0.04%	0.003%
159	9.634	9.607	9.656	PV	201	3011	0.09%	0.007%
160	9.661	9.656	9.668	VV	76	217	0.01%	0.001%
161	9.677	9.668	9.687	VV	71	313	0.01%	0.001%
162	9.738	9.687	9.777	VV	1613	52486	1.60%	0.129%
163	9.782	9.777	9.833	VV	980	21458	0.66%	0.053%
164	9.849	9.833	9.854	VV	452	4570	0.14%	0.011%
165	9.871	9.854	9.877	VV	545	6387	0.20%	0.016%
166	9.896	9.877	9.928	VV	1306	19356	0.59%	0.048%
167	9.950	9.928	9.968	VV	699	9210	0.28%	0.023%
168	9.985	9.968	10.000	VV	939	12599	0.38%	0.031%
169	10.024	10.000	10.087	VV	2197	78101	2.39%	0.192%
170	10.119	10.087	10.252	VV	252279	3043553	92.97%	7.482%
171	10.260	10.252	10.319	VV	767	19368	0.59%	0.048%
172	10.323	10.319	10.347	VV	247	3101	0.09%	0.008%
173	10.351	10.347	10.357	VV	140	842	0.03%	0.002%
174	10.363	10.357	10.377	VV	155	1282	0.04%	0.003%
175	10.380	10.377	10.385	VV	140	633	0.02%	0.002%
176	10.390	10.385	10.416	VV	179	1686	0.05%	0.004%
177	10.466	10.416	10.482	PV	474	10333	0.32%	0.025%
178	10.506	10.482	10.538	VV	1444	24367	0.74%	0.060%
179	10.544	10.538	10.548	VV	217	1120	0.03%	0.003%
180	10.584	10.548	10.590	VV	548	9377	0.29%	0.023%
181	10.595	10.590	10.621	VV	520	7273	0.22%	0.018%
182	10.656	10.621	10.662	VV	352	7274	0.22%	0.018%
183	10.680	10.662	10.712	VV	813	12746	0.39%	0.031%
184	10.717	10.712	10.723	VV	270	1394	0.04%	0.003%
185	10.741	10.723	10.752	VV	379	4631	0.14%	0.011%
186	10.754	10.752	10.768	VV	325	2601	0.08%	0.006%
187	10.787	10.768	10.809	VV	395	7104	0.22%	0.017%
188	10.862	10.809	10.904	VV	1222	36122	1.10%	0.089%
189	10.931	10.904	11.029	VV	3489	85299	2.61%	0.210%
190	11.084	11.029	11.095	VV	390	10094	0.31%	0.025%
191	11.104	11.095	11.109	VV	372	2705	0.08%	0.007%
192	11.137	11.109	11.217	VV	8198	219539	6.71%	0.540%
193	11.238	11.217	11.295	VV	2265	70579	2.16%	0.174%
194	11.313	11.295	11.334	VV	1162	21888	0.67%	0.054%

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195	11.338	11.334	11.358	VV	800	10328	0.32%	0.025%
196	11.367	11.358	11.408	VV	850	18659	0.57%	0.046%
197	11.414	11.408	11.419	VV	445	2921	0.09%	0.007%
198	11.427	11.419	11.444	VV	559	6760	0.21%	0.017%
199	11.493	11.444	11.520	VV	1535	44641	1.36%	0.110%
200	11.566	11.520	11.628	VV	271368	3226423	98.56%	7.932%
201	11.655	11.628	11.689	VV	3545	70486	2.15%	0.173%
202	11.705	11.689	11.746	VV	1054	28786	0.88%	0.071%
203	11.761	11.746	11.787	VV	748	13415	0.41%	0.033%
204	11.828	11.787	11.833	VV	780	17037	0.52%	0.042%
205	11.862	11.833	11.913	VV	1116	40562	1.24%	0.100%
206	11.953	11.913	11.976	VV	1859	48138	1.47%	0.118%
207	11.992	11.976	12.023	VV	1661	41257	1.26%	0.101%
208	12.050	12.023	12.082	VV	4241	81365	2.49%	0.200%
209	12.086	12.082	12.108	VV	1362	19432	0.59%	0.048%
210	12.125	12.108	12.161	VV	1453	34951	1.07%	0.086%
211	12.174	12.161	12.190	VV	855	13528	0.41%	0.033%
212	12.220	12.190	12.266	VV	2022	65050	1.99%	0.160%
213	12.294	12.266	12.319	VV	1712	40366	1.23%	0.099%
214	12.337	12.319	12.352	VV	1368	23283	0.71%	0.057%
215	12.361	12.352	12.387	VV	1267	23316	0.71%	0.057%
216	12.392	12.387	12.414	VV	1054	15064	0.46%	0.037%
217	12.437	12.414	12.448	VV	1397	25152	0.77%	0.062%
218	12.453	12.448	12.473	VV	1393	17421	0.53%	0.043%
219	12.495	12.473	12.575	VV	12085	209434	6.40%	0.515%
220	12.597	12.575	12.613	VV	1523	31555	0.96%	0.078%
221	12.617	12.613	12.628	VV	1412	12319	0.38%	0.030%
222	12.648	12.628	12.675	VV	1677	38320	1.17%	0.094%
223	12.702	12.675	12.726	VV	1818	42520	1.30%	0.105%
224	12.739	12.726	12.755	VV	1272	21031	0.64%	0.052%
225	12.760	12.755	12.778	VV	1144	15657	0.48%	0.038%
226	12.803	12.778	12.823	VV	1826	39238	1.20%	0.096%
227	12.881	12.823	12.928	VV	261671	3244599	99.11%	7.976%
228	12.960	12.928	13.048	VV	12768	316554	9.67%	0.778%
229	13.052	13.048	13.087	VV	1375	29619	0.90%	0.073%
230	13.098	13.087	13.113	VV	1359	20046	0.61%	0.049%
231	13.137	13.113	13.141	VV	1673	24880	0.76%	0.061%
232	13.153	13.141	13.186	VV	1813	41897	1.28%	0.103%
233	13.202	13.186	13.222	VV	1408	27643	0.84%	0.068%
234	13.259	13.222	13.320	VV	8162	233938	7.15%	0.575%
235	13.328	13.320	13.353	VV	2600	41535	1.27%	0.102%
236	13.376	13.353	13.413	VV	3118	83797	2.56%	0.206%
237	13.418	13.413	13.427	VV	1753	13384	0.41%	0.033%
238	13.430	13.427	13.448	VV	1692	19742	0.60%	0.049%
239	13.453	13.448	13.478	VV	1567	24848	0.76%	0.061%
240	13.494	13.478	13.515	VV	1979	36458	1.11%	0.090%
241	13.555	13.515	13.560	VV	1935	47482	1.45%	0.117%
242	13.563	13.560	13.583	VV	1930	23919	0.73%	0.059%
243	13.597	13.583	13.614	VV	1751	31421	0.96%	0.077%
244	13.626	13.614	13.645	VV	1639	27825	0.85%	0.068%
245	13.657	13.645	13.684	VV	1823	37628	1.15%	0.093%
246	13.717	13.684	13.756	VV	2612	89153	2.72%	0.219%

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247	13.766	13.756	13.794	VV	2075	41192	1.26%	0.101%
248	13.806	13.794	13.828	VV	1665	29776	0.91%	0.073%
249	13.847	13.828	13.860	VV	1866	32101	0.98%	0.079%
250	13.880	13.860	13.895	VV	2439	45168	1.38%	0.111%
251	13.915	13.895	13.958	VV	3035	90318	2.76%	0.222%
252	13.987	13.958	14.017	VV	2676	78715	2.40%	0.194%
253	14.037	14.017	14.048	VV	2478	41076	1.25%	0.101%
254	14.082	14.048	14.125	VV	257937	3209511	98.04%	7.890%
255	14.136	14.125	14.156	VV	2549	42662	1.30%	0.105%
256	14.166	14.156	14.198	VV	2141	47318	1.45%	0.116%
257	14.202	14.198	14.209	VV	1839	12074	0.37%	0.030%
258	14.225	14.209	14.252	VV	1821	43377	1.33%	0.107%
259	14.262	14.252	14.269	VV	1661	15798	0.48%	0.039%
260	14.275	14.269	14.281	VV	1619	11260	0.34%	0.028%
261	14.315	14.281	14.343	VV	2850	81238	2.48%	0.200%
262	14.346	14.343	14.352	VV	1846	10174	0.31%	0.025%
263	14.356	14.352	14.365	VV	1888	14274	0.44%	0.035%
264	14.373	14.365	14.385	VV	1893	22144	0.68%	0.054%
265	14.390	14.385	14.420	VV	1814	34730	1.06%	0.085%
266	14.444	14.420	14.450	VV	2124	32995	1.01%	0.081%
267	14.489	14.450	14.543	VV	3515	141448	4.32%	0.348%
268	14.548	14.543	14.555	VV	1795	12015	0.37%	0.030%
269	14.562	14.555	14.573	VV	1828	18260	0.56%	0.045%
270	14.578	14.573	14.612	VV	1846	39093	1.19%	0.096%
271	14.646	14.612	14.667	VV	2793	65759	2.01%	0.162%
272	14.709	14.667	14.723	VV	2641	74173	2.27%	0.182%
273	14.727	14.723	14.732	VV	2447	11929	0.36%	0.029%
274	14.738	14.732	14.742	VV	2465	15086	0.46%	0.037%
275	14.766	14.742	14.825	VV	2816	113800	3.48%	0.280%
276	14.852	14.825	14.869	VV	2281	52702	1.61%	0.130%
277	14.889	14.869	14.911	VV	2425	56115	1.71%	0.138%
278	14.916	14.911	14.924	VV	2158	16722	0.51%	0.041%
279	14.930	14.924	14.946	VV	2134	25454	0.78%	0.063%
280	14.983	14.946	15.035	VV	117112	1674910	51.16%	4.118%
281	15.038	15.035	15.056	VV	2605	30420	0.93%	0.075%
282	15.070	15.056	15.101	VV	2596	61203	1.87%	0.150%
283	15.106	15.101	15.126	VV	1925	24904	0.76%	0.061%
284	15.188	15.126	15.221	VV	245890	3273648	100.00%	8.048%
285	15.232	15.221	15.283	VV	3935	115927	3.54%	0.285%
286	15.289	15.283	15.296	VV	2086	15145	0.46%	0.037%
287	15.316	15.296	15.355	VV	2430	74367	2.27%	0.183%
288	15.387	15.355	15.407	VV	1983	54185	1.66%	0.133%
289	15.427	15.407	15.431	VV	1845	24108	0.74%	0.059%
290	15.435	15.431	15.443	VV	1896	12562	0.38%	0.031%
291	15.449	15.443	15.471	VV	1907	29134	0.89%	0.072%
292	15.473	15.471	15.491	VV	1702	18383	0.56%	0.045%
293	15.495	15.491	15.500	VV	1593	8033	0.25%	0.020%
294	15.529	15.500	15.540	VV	1840	40858	1.25%	0.100%
295	15.571	15.540	15.681	VV	35661	825351	25.21%	2.029%
296	15.709	15.681	15.749	VV	4632	129797	3.96%	0.319%
297	15.775	15.749	15.821	VV	4501	114144	3.49%	0.281%
298	15.837	15.821	15.868	VV	1642	42485	1.30%	0.104%
299	15.872	15.868	15.877	VV	1470	6701	0.20%	0.016%

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300	15.893	15.877	15.906	VV	1470	23893	0.73%	0.059%
301	15.925	15.906	15.943	VV	1469	29996	0.92%	0.074%
302	15.949	15.943	15.953	VV	1334	7549	0.23%	0.019%
303	15.969	15.953	15.973	VV	1696	16781	0.51%	0.041%
304	15.981	15.973	15.988	VV	1522	13140	0.40%	0.032%
305	16.026	15.988	16.062	VV	2394	83966	2.56%	0.206%
306	16.096	16.062	16.127	VV	2137	67066	2.05%	0.165%
307	16.132	16.127	16.153	VV	1390	20385	0.62%	0.050%
308	16.211	16.153	16.295	VV	243482	3241148	99.01%	7.968%
309	16.298	16.295	16.326	VV	1126	17856	0.55%	0.044%
310	16.348	16.326	16.369	VV	1015	22078	0.67%	0.054%
311	16.394	16.369	16.398	VV	1267	16975	0.52%	0.042%
312	16.402	16.398	16.428	VV	1160	16800	0.51%	0.041%
313	16.442	16.428	16.473	VV	991	22381	0.68%	0.055%
314	16.509	16.473	16.560	VV	1598	64558	1.97%	0.159%
315	16.594	16.560	16.634	VV	4192	104632	3.20%	0.257%
316	16.655	16.634	16.670	VV	1476	28339	0.87%	0.070%
317	16.694	16.670	16.724	VV	4104	65582	2.00%	0.161%
318	16.768	16.724	16.835	VV	1945	72383	2.21%	0.178%
319	16.851	16.835	16.873	VV	932	16728	0.51%	0.041%
320	16.880	16.873	16.886	VV	581	4282	0.13%	0.011%
321	16.923	16.886	16.950	VV	1051	26302	0.80%	0.065%
322	16.988	16.950	17.020	VV	1344	36776	1.12%	0.090%
323	17.024	17.020	17.030	VV	815	4651	0.14%	0.011%
324	17.036	17.030	17.040	VV	939	5263	0.16%	0.013%
325	17.044	17.040	17.059	VV	1022	9812	0.30%	0.024%
326	17.073	17.059	17.095	VV	905	15996	0.49%	0.039%
327	17.099	17.095	17.104	VV	670	3366	0.10%	0.008%
328	17.164	17.104	17.200	VV	226668	3129449	95.60%	7.693%
329	17.208	17.200	17.234	VV	1687	24418	0.75%	0.060%
330	17.241	17.234	17.265	VV	1021	13611	0.42%	0.033%
331	17.269	17.265	17.277	VV	378	2504	0.08%	0.006%
332	17.280	17.277	17.314	VV	338	4429	0.14%	0.011%
333	17.322	17.314	17.327	VV	156	835	0.03%	0.002%
334	17.332	17.327	17.340	VV	120	556	0.02%	0.001%
335	17.349	17.340	17.352	VV	78	369	0.01%	0.001%
336	17.395	17.352	17.400	PBA	166	1667	0.05%	0.004%
				Sum of corrected areas:		40677580		

FG042425.M Thu May 22 01:26:37 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-24MSD	SDG No.:	Q2032
Lab Sample ID:	Q2032-06MSD	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	74.2
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG015874.D	1	05/20/25 10:15	05/21/25 14:43	PB168084

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	14200		228	2240	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	13.4		37 - 130	67%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 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
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
 Data File : FG015874.D
 Signal(s) : FID1A.ch
 Acq On : 21 May 2025 14:43
 Operator : YP\AJ
 Sample : Q2032-06MSD
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 TP-24MSD

Integration File: autoint1.e
 Quant Time: May 22 00:40:43 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
 Quant Title :
 QLast Update : Thu Apr 24 12:54:09 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1uL
 Signal Phase : Rxi-1ms
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...	14.984	1582416	13.440 ug/ml
Target Compounds			
2) N-DECANE	4.488	2524324	22.674 ug/ml
3) N-DODECANE	6.670	2750898	24.004 ug/ml
4) N-TETRADECANE	8.505	2856872	23.577 ug/ml
5) N-HEXADECANE	10.119	3052461	24.314 ug/ml
6) N-OCTADECANE	11.566	3242042	24.739 ug/ml
7) N-EICOSANE	12.880	3237531	23.880 ug/ml
8) N-DOCOSANE	14.082	3176608	23.951 ug/ml
10) N-TETRACOSANE	15.188	3217146	24.210 ug/ml
11) N-HEXACOSANE	16.211	3209178	24.198 ug/ml
12) N-OCTACOSANE	17.163	3157587	23.951 ug/mlm

(f)=RT Delta > 1/2 Window

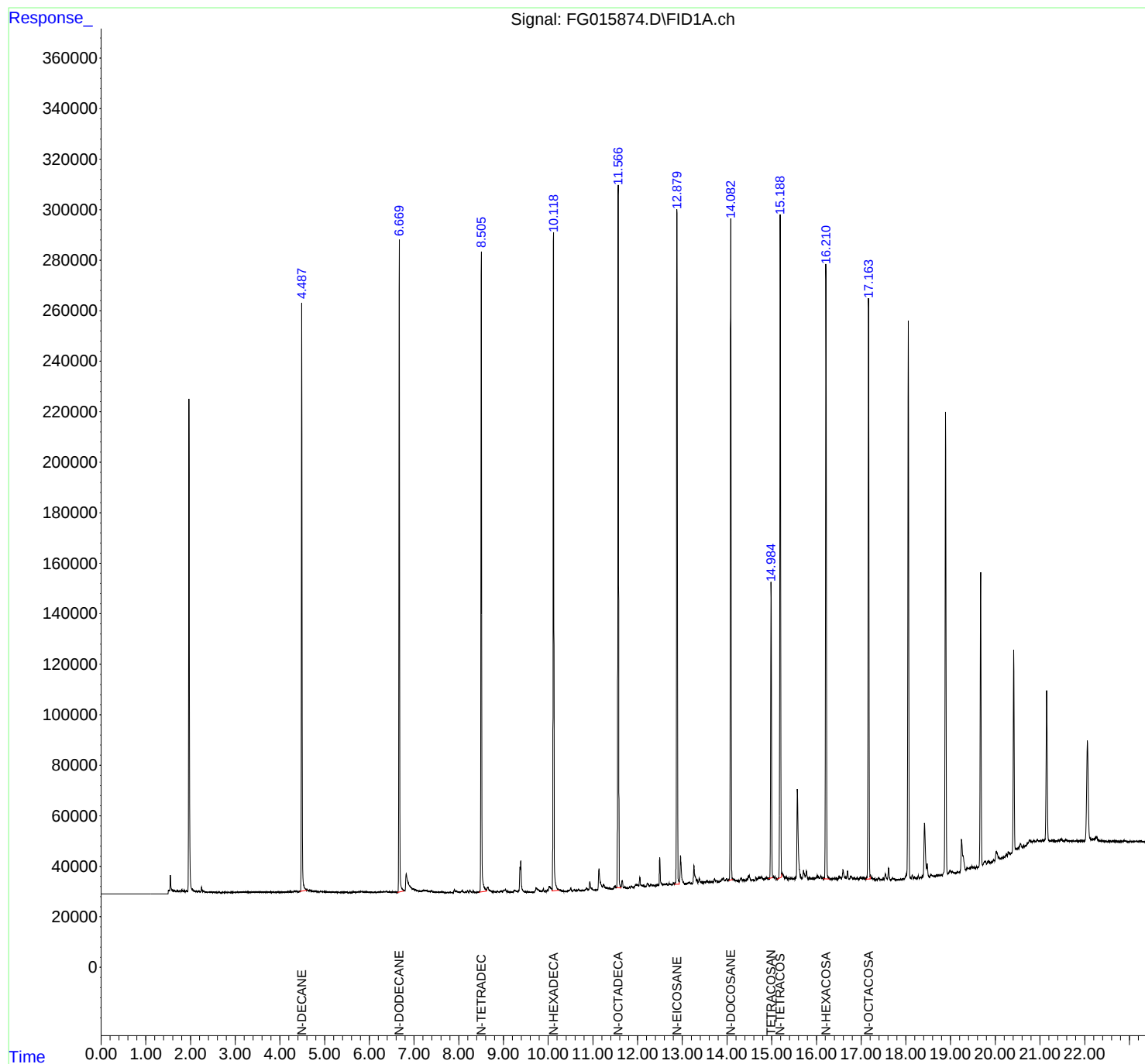
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
Data File : FG015874.D
Signal(s) : FID1A.ch
Acq On : 21 May 2025 14:43
Operator : YP\AJ
Sample : Q2032-06MSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-24MSD

Integration File: autoint1.e
Quant Time: May 22 00:40:43 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
Quant Title :
QLast Update : Thu Apr 24 12:54:09 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1uL
Signal Phase : Rxi-1ms
Signal Info : 20mx0.18mmx0.18um



Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG052125\
 Data File : FG015874.D
 Signal(s) : FID1A.ch
 Acq On : 21 May 2025 14:43
 Sample : Q2032-06MSD
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG042425.M
 Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.318	4.300	4.327	BV	262	1058	0.03%	0.003%
2	4.357	4.327	4.372	PV	168	2271	0.07%	0.005%
3	4.377	4.372	4.412	VV	143	2072	0.06%	0.005%
4	4.443	4.412	4.454	VV	187	2835	0.08%	0.007%
5	4.488	4.454	4.603	VV	233146	2562655	76.43%	6.160%
6	4.612	4.603	4.637	VV	930	14336	0.43%	0.034%
7	4.641	4.637	4.651	VV	544	4347	0.13%	0.010%
8	4.667	4.651	4.700	VV	883	18226	0.54%	0.044%
9	4.701	4.700	4.727	VV	497	6292	0.19%	0.015%
10	4.733	4.727	4.760	VV	402	5847	0.17%	0.014%
11	4.774	4.760	4.804	VV	431	8448	0.25%	0.020%
12	4.807	4.804	4.814	VV	338	1659	0.05%	0.004%
13	4.817	4.814	4.826	VV	308	1626	0.05%	0.004%
14	4.830	4.826	4.845	VV	254	2576	0.08%	0.006%
15	4.851	4.845	4.873	VV	291	3555	0.11%	0.009%
16	4.898	4.873	4.906	VV	246	3630	0.11%	0.009%
17	4.910	4.906	4.929	VV	225	2817	0.08%	0.007%
18	4.933	4.929	4.941	VV	249	1511	0.05%	0.004%
19	4.946	4.941	4.966	VV	301	3274	0.10%	0.008%
20	4.971	4.966	4.987	VV	229	2396	0.07%	0.006%
21	4.997	4.987	5.021	VV	239	3639	0.11%	0.009%
22	5.025	5.021	5.036	VV	184	1116	0.03%	0.003%
23	5.046	5.036	5.071	VV	135	2261	0.07%	0.005%
24	5.075	5.071	5.087	VV	170	1085	0.03%	0.003%
25	5.090	5.087	5.124	VV	175	2899	0.09%	0.007%
26	5.129	5.124	5.135	VV	123	555	0.02%	0.001%
27	5.156	5.135	5.166	VV	201	2510	0.07%	0.006%
28	5.173	5.166	5.188	VV	208	1666	0.05%	0.004%
29	5.192	5.188	5.210	VV	114	1302	0.04%	0.003%
30	5.215	5.210	5.230	VV	127	904	0.03%	0.002%
31	5.241	5.230	5.261	VV	138	1416	0.04%	0.003%
32	5.265	5.261	5.273	VV	79	325	0.01%	0.001%
33	5.295	5.273	5.299	PV	100	633	0.02%	0.002%
34	5.307	5.299	5.325	VV	92	1050	0.03%	0.003%
35	5.331	5.325	5.342	VV	110	855	0.03%	0.002%
36	5.345	5.342	5.351	VV	83	349	0.01%	0.001%

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37	5.356	5.351	5.371	VV	90	729	0.02%	0.002%
38	5.385	5.371	5.410	VV	72	1020	0.03%	0.002%
39	5.417	5.410	5.430	VV	94	650	0.02%	0.002%
40	5.470	5.430	5.484	VV	164	2774	0.08%	0.007%
41	5.487	5.484	5.502	VV	87	852	0.03%	0.002%
42	5.510	5.502	5.520	VV	64	519	0.02%	0.001%
43	5.535	5.520	5.550	VV	125	1032	0.03%	0.002%
44	5.576	5.550	5.590	PV	102	1118	0.03%	0.003%
45	5.598	5.590	5.607	VV	102	661	0.02%	0.002%
46	5.614	5.607	5.620	VV	96	369	0.01%	0.001%
47	5.637	5.620	5.665	VV	420	5927	0.18%	0.014%
48	5.692	5.665	5.702	VV	149	2250	0.07%	0.005%
49	5.731	5.702	5.737	VV	319	3733	0.11%	0.009%
50	5.745	5.737	5.751	VV	343	2523	0.08%	0.006%
51	5.762	5.751	5.767	VV	337	2960	0.09%	0.007%
52	5.780	5.767	5.793	VV	397	5260	0.16%	0.013%
53	5.808	5.793	5.823	VV	425	6567	0.20%	0.016%
54	5.833	5.823	5.854	VV	454	6494	0.19%	0.016%
55	5.860	5.854	5.877	VV	340	3921	0.12%	0.009%
56	5.882	5.877	5.970	VV	375	15571	0.46%	0.037%
57	5.982	5.970	5.988	VV	242	2062	0.06%	0.005%
58	5.998	5.988	6.012	VV	192	2324	0.07%	0.006%
59	6.016	6.012	6.030	VV	179	1593	0.05%	0.004%
60	6.036	6.030	6.039	VV	230	727	0.02%	0.002%
61	6.043	6.039	6.049	VV	187	795	0.02%	0.002%
62	6.054	6.049	6.089	VV	144	2655	0.08%	0.006%
63	6.110	6.089	6.144	PV	215	3761	0.11%	0.009%
64	6.163	6.144	6.182	VV	239	3686	0.11%	0.009%
65	6.207	6.182	6.216	VV	337	4902	0.15%	0.012%
66	6.264	6.216	6.302	VV	398	15794	0.47%	0.038%
67	6.316	6.302	6.345	VV	479	9352	0.28%	0.022%
68	6.382	6.345	6.415	VV	673	16814	0.50%	0.040%
69	6.420	6.415	6.498	VV	341	11690	0.35%	0.028%
70	6.561	6.498	6.618	VV	323	12654	0.38%	0.030%
71	6.670	6.618	6.799	VV	257984	2800164	83.51%	6.730%
72	6.826	6.799	6.984	VV	7523	365241	10.89%	0.878%
73	6.993	6.984	7.022	VV	1473	29138	0.87%	0.070%
74	7.033	7.022	7.112	VV	1170	44945	1.34%	0.108%
75	7.134	7.112	7.153	VV	678	14986	0.45%	0.036%
76	7.202	7.153	7.235	VV	942	38204	1.14%	0.092%
77	7.243	7.235	7.285	VV	903	25159	0.75%	0.060%
78	7.290	7.285	7.334	VV	756	17600	0.52%	0.042%
79	7.350	7.334	7.370	VV	597	10833	0.32%	0.026%
80	7.393	7.370	7.442	VV	968	21786	0.65%	0.052%
81	7.455	7.442	7.480	VV	350	6324	0.19%	0.015%
82	7.495	7.480	7.552	VV	317	9275	0.28%	0.022%
83	7.565	7.552	7.605	VV	318	6505	0.19%	0.016%
84	7.624	7.605	7.692	VV	556	12105	0.36%	0.029%
85	7.727	7.692	7.769	VV	125	3627	0.11%	0.009%
86	7.800	7.769	7.820	VV	231	3746	0.11%	0.009%
87	7.846	7.820	7.859	PV	91	932	0.03%	0.002%
88	7.905	7.859	7.987	PV	1397	38205	1.14%	0.092%
89	7.995	7.987	8.022	VV	275	3621	0.11%	0.009%

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90	8.050	8.022	8.060	VV	444	6646	0.20%	0.016%
91	8.078	8.060	8.130	VV	1082	17945	0.54%	0.043%
92	8.151	8.130	8.174	VV	316	5086	0.15%	0.012%
93	8.197	8.174	8.219	VV	914	12196	0.36%	0.029%
94	8.254	8.219	8.300	VV	1084	20449	0.61%	0.049%
95	8.322	8.300	8.347	VV	722	8754	0.26%	0.021%
96	8.361	8.347	8.384	VV	178	2675	0.08%	0.006%
97	8.410	8.384	8.431	VV	409	5538	0.17%	0.013%
98	8.505	8.431	8.615	VV	254025	2896734	86.39%	6.963%
99	8.651	8.615	8.732	VV	2161	81886	2.44%	0.197%
100	8.744	8.732	8.772	VV	548	10159	0.30%	0.024%
101	8.779	8.772	8.809	VV	386	6897	0.21%	0.017%
102	8.819	8.809	8.849	VV	315	6866	0.20%	0.017%
103	8.865	8.849	8.905	VV	599	11866	0.35%	0.029%
104	8.954	8.905	8.977	VV	527	17272	0.52%	0.042%
105	9.004	8.977	9.030	VV	1042	25122	0.75%	0.060%
106	9.046	9.030	9.085	VV	1379	24548	0.73%	0.059%
107	9.099	9.085	9.145	VV	365	8839	0.26%	0.021%
108	9.165	9.145	9.184	VV	229	3663	0.11%	0.009%
109	9.193	9.184	9.210	VV	208	2254	0.07%	0.005%
110	9.248	9.210	9.315	VV	867	34085	1.02%	0.082%
111	9.337	9.315	9.346	VV	833	10551	0.31%	0.025%
112	9.388	9.346	9.509	VV	12599	298800	8.91%	0.718%
113	9.527	9.509	9.562	VV	382	8234	0.25%	0.020%
114	9.571	9.562	9.602	VV	215	3348	0.10%	0.008%
115	9.637	9.602	9.682	VV	218	4989	0.15%	0.012%
116	9.738	9.682	9.839	PV	1683	81674	2.44%	0.196%
117	9.896	9.839	9.925	VV	1415	31057	0.93%	0.075%
118	9.950	9.925	9.965	VV	671	9944	0.30%	0.024%
119	9.986	9.965	9.998	VV	921	12839	0.38%	0.031%
120	10.028	9.998	10.086	VV	2219	81604	2.43%	0.196%
121	10.118	10.086	10.374	VV	260518	3129463	93.33%	7.522%
122	10.383	10.374	10.419	VV	117	2171	0.06%	0.005%
123	10.467	10.419	10.484	PV	545	11419	0.34%	0.027%
124	10.506	10.484	10.550	VV	1457	26051	0.78%	0.063%
125	10.585	10.550	10.623	VV	521	16878	0.50%	0.041%
126	10.647	10.623	10.660	VV	397	6715	0.20%	0.016%
127	10.681	10.660	10.709	VV	828	12720	0.38%	0.031%
128	10.752	10.709	10.766	VV	341	7523	0.22%	0.018%
129	10.788	10.766	10.807	VV	419	6672	0.20%	0.016%
130	10.860	10.807	10.901	VV	1300	35232	1.05%	0.085%
131	10.932	10.901	11.034	VV	3530	84976	2.53%	0.204%
132	11.137	11.034	11.217	VV	8475	235529	7.02%	0.566%
133	11.237	11.217	11.292	VV	2249	67707	2.02%	0.163%
134	11.312	11.292	11.355	VV	1114	31713	0.95%	0.076%
135	11.368	11.355	11.409	VV	772	18792	0.56%	0.045%
136	11.420	11.409	11.442	VV	471	8084	0.24%	0.019%
137	11.494	11.442	11.522	VV	1581	46254	1.38%	0.111%
138	11.566	11.522	11.629	VV	278161	3293146	98.21%	7.915%
139	11.655	11.629	11.689	VV	3525	69923	2.09%	0.168%
140	11.710	11.689	11.745	VV	1070	27508	0.82%	0.066%
141	11.762	11.745	11.792	VV	672	14731	0.44%	0.035%

					rteres			
142	11.858	11.792	11.907	VV	1179	53403	1.59%	0.128%
143	11.954	11.907	11.980	VV	1837	55204	1.65%	0.133%
144	11.992	11.980	12.027	VV	1692	42101	1.26%	0.101%
145	12.050	12.027	12.107	VV	4555	102299	3.05%	0.246%
146	12.126	12.107	12.158	VV	1523	36047	1.08%	0.087%
147	12.174	12.158	12.187	VV	854	14144	0.42%	0.034%
148	12.216	12.187	12.268	VV	2099	70505	2.10%	0.169%
149	12.295	12.268	12.321	VV	1815	41847	1.25%	0.101%
150	12.337	12.321	12.379	VV	1354	41066	1.22%	0.099%
151	12.386	12.379	12.410	VV	1152	19637	0.59%	0.047%
152	12.436	12.410	12.474	VV	1503	46759	1.39%	0.112%
153	12.494	12.474	12.579	VV	12207	217260	6.48%	0.522%
154	12.595	12.579	12.614	VV	1512	29835	0.89%	0.072%
155	12.625	12.614	12.635	VV	1454	18459	0.55%	0.044%
156	12.648	12.635	12.681	VV	1685	38690	1.15%	0.093%
157	12.703	12.681	12.725	VV	2006	39541	1.18%	0.095%
158	12.737	12.725	12.779	VV	1325	39882	1.19%	0.096%
159	12.800	12.779	12.822	VV	1976	40987	1.22%	0.099%
160	12.880	12.822	12.930	VV	268114	3321447	99.06%	7.983%
161	12.960	12.930	13.047	VV	12384	322288	9.61%	0.775%
162	13.060	13.047	13.077	VV	1399	23476	0.70%	0.056%
163	13.094	13.077	13.104	VV	1381	21613	0.64%	0.052%
164	13.154	13.104	13.200	VV	1788	90366	2.70%	0.217%
165	13.205	13.200	13.221	VV	1527	16717	0.50%	0.040%
166	13.259	13.221	13.349	VV	8399	280315	8.36%	0.674%
167	13.376	13.349	13.449	VV	3159	124493	3.71%	0.299%
168	13.456	13.449	13.475	VV	1658	23925	0.71%	0.058%
169	13.495	13.475	13.519	VV	1948	43152	1.29%	0.104%
170	13.559	13.519	13.582	VV	2005	69476	2.07%	0.167%
171	13.598	13.582	13.619	VV	1759	36955	1.10%	0.089%
172	13.628	13.619	13.640	VV	1612	20054	0.60%	0.048%
173	13.660	13.640	13.680	VV	1810	39731	1.18%	0.095%
174	13.719	13.680	13.754	VV	2777	94002	2.80%	0.226%
175	13.767	13.754	13.792	VV	2289	44217	1.32%	0.106%
176	13.803	13.792	13.824	VV	1800	31000	0.92%	0.075%
177	13.848	13.824	13.859	VV	1945	36677	1.09%	0.088%
178	13.884	13.859	13.895	VV	2487	48893	1.46%	0.118%
179	13.918	13.895	13.954	VV	3098	88133	2.63%	0.212%
180	13.986	13.954	14.019	VV	2720	90349	2.69%	0.217%
181	14.034	14.019	14.046	VV	2521	38502	1.15%	0.093%
182	14.082	14.046	14.122	VV	262474	3277056	97.73%	7.877%
183	14.134	14.122	14.150	VV	2635	42346	1.26%	0.102%
184	14.166	14.150	14.197	VV	2229	57156	1.70%	0.137%
185	14.217	14.197	14.267	VV	1953	73483	2.19%	0.177%
186	14.314	14.267	14.339	VV	2980	96218	2.87%	0.231%
187	14.347	14.339	14.364	VV	2047	29690	0.89%	0.071%
188	14.381	14.364	14.425	VV	2092	66978	2.00%	0.161%
189	14.489	14.425	14.541	VV	3439	173421	5.17%	0.417%
190	14.571	14.541	14.620	VV	1910	86439	2.58%	0.208%
191	14.644	14.620	14.668	VV	2741	63161	1.88%	0.152%
192	14.711	14.668	14.725	VV	2763	80286	2.39%	0.193%
193	14.769	14.725	14.823	VV	2966	145442	4.34%	0.350%
194	14.854	14.823	14.865	VV	2292	54027	1.61%	0.130%

					rteres			
195	14.887	14.865	14.909	VV	2550	62415	1.86%	0.150%
196	14.922	14.909	14.946	VV	2418	49340	1.47%	0.119%
197	14.984	14.946	15.023	VV	119362	1693462	50.50%	4.070%
198	15.037	15.023	15.055	VV	2861	50926	1.52%	0.122%
199	15.069	15.055	15.130	VV	2755	96140	2.87%	0.231%
200	15.188	15.130	15.227	VV	263881	3353088	100.00%	8.059%
201	15.233	15.227	15.292	VV	4166	118687	3.54%	0.285%
202	15.323	15.292	15.358	VV	2523	86074	2.57%	0.207%
203	15.390	15.358	15.415	VV	2061	62102	1.85%	0.149%
204	15.433	15.415	15.466	VV	2009	56570	1.69%	0.136%
205	15.475	15.466	15.496	VV	1889	30866	0.92%	0.074%
206	15.572	15.496	15.685	VV	36988	901242	26.88%	2.166%
207	15.709	15.685	15.757	VV	4957	140888	4.20%	0.339%
208	15.776	15.757	15.820	VV	4538	104258	3.11%	0.251%
209	15.845	15.820	15.867	VV	1904	46075	1.37%	0.111%
210	15.888	15.867	15.910	VV	1672	39272	1.17%	0.094%
211	15.927	15.910	15.942	VV	1577	28065	0.84%	0.067%
212	15.967	15.942	15.980	VV	1648	34584	1.03%	0.083%
213	16.018	15.980	16.068	VV	2462	102896	3.07%	0.247%
214	16.097	16.068	16.150	VV	2498	88195	2.63%	0.212%
215	16.212	16.150	16.295	VV	240182	3312874	98.80%	7.963%
216	16.309	16.295	16.327	VV	1264	21159	0.63%	0.051%
217	16.343	16.327	16.366	VV	1106	23856	0.71%	0.057%
218	16.397	16.366	16.424	VV	1307	38237	1.14%	0.092%
219	16.454	16.424	16.475	VV	1109	31034	0.93%	0.075%
220	16.521	16.475	16.555	VV	1778	68095	2.03%	0.164%
221	16.595	16.555	16.640	VV	4450	120476	3.59%	0.290%
222	16.652	16.640	16.670	VV	1506	25531	0.76%	0.061%
223	16.695	16.670	16.727	VV	4001	70426	2.10%	0.169%
224	16.770	16.727	16.834	VV	2034	78335	2.34%	0.188%
225	16.852	16.834	16.885	VV	1044	26361	0.79%	0.063%
226	16.919	16.885	16.949	VV	1103	30788	0.92%	0.074%
227	16.990	16.949	17.028	VV	1535	47028	1.40%	0.113%
228	17.042	17.028	17.061	VV	1093	17958	0.54%	0.043%
229	17.075	17.061	17.109	VV	946	22346	0.67%	0.054%
230	17.165	17.109	17.200	VV	230237	3185580	95.00%	7.657%
231	17.209	17.200	17.230	VV	1872	24173	0.72%	0.058%
232	17.243	17.230	17.333	VV	989	28349	0.85%	0.068%
233	17.343	17.333	17.364	PV	158	1770	0.05%	0.004%
Sum of corrected areas:						41604525		

FG042425.M Thu May 22 01:27:22 2025

Manual Integration Report

Sample ID	ClientId ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
5 TRPH STD		FF015790.D	FF042225	N-TETRACONTANE	mohammad	4/24/2025 6:33:56 AM	Peak Integrated by Software incorrectly

Manual Integration Report

Sample ID	ClientId ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
Q2032-06MSD		FG015874.D	FG052125	N-OCTACOSANE	 	 	Peak Integrated by Software incorrectly
Q2074-03		FG015881.D	FG052125	TETRACOSANE-d50 (SURROGA	 	 	Peak Integrated by Software incorrectly

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF042225

Review By	yogesh	Review On	4/22/2025 1:28:06 PM
Supervise By	mohammad	Supervise On	4/24/2025 6:33:56 AM
SubDirectory	FF042225	HP Acquire Method	HP Processing Method FF042225
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24468,PP24473		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FF015784.D	22 Apr 2025 08:12	YP\AJ	Ok
2	I.BLK	FF015785.D	22 Apr 2025 08:42	YP\AJ	Ok
3	100 TRPH STD	FF015786.D	22 Apr 2025 09:11	YP\AJ	Ok
4	50 TRPH STD	FF015787.D	22 Apr 2025 09:40	YP\AJ	Ok
5	20 TRPH STD	FF015788.D	22 Apr 2025 10:09	YP\AJ	Ok
6	10 TRPH STD	FF015789.D	22 Apr 2025 10:39	YP\AJ	Ok
7	5 TRPH STD	FF015790.D	22 Apr 2025 11:08	YP\AJ	Ok,M
8	FF042225ICV	FF015791.D	22 Apr 2025 11:39	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF051925

Review By	yogesh	Review On	5/19/2025 2:47:21 PM
Supervise By	mohammad	Supervise On	5/21/2025 5:36:34 AM
SubDirectory	FF051925	HP Acquire Method	HP Processing Method FF042225
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC Internal Standard/PEM	PP24469		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24468,PP24473		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FF015861.D	19 May 2025 09:28	YP\AJ	Ok
2	I.BLK	FF015862.D	19 May 2025 09:58	YP\AJ	Ok
3	50 PPM TRPH STD	FF015863.D	19 May 2025 10:27	YP\AJ	Ok
4	RT MARKER	FF015864.D	19 May 2025 11:02	YP\AJ	Ok
5	PB168064BL	FF015865.D	19 May 2025 12:08	YP\AJ	Ok
6	PB168064BS	FF015866.D	19 May 2025 12:37	YP\AJ	Ok
7	PB168064BSD	FF015867.D	19 May 2025 13:07	YP\AJ	Ok
8	Q2032-11	FF015868.D	19 May 2025 16:39	YP\AJ	Ok
9	I.BLK	FF015869.D	19 May 2025 17:38	YP\AJ	Ok
10	50 PPM TRPH STD	FF015870.D	19 May 2025 18:08	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG042425

Review By	yogesh	Review On	4/24/2025 12:59:08 PM
Supervise By	mohammad	Supervise On	4/26/2025 2:19:49 AM
SubDirectory	FG042425	HP Acquire Method	HP Processing Method FG042425
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24468,PP24473		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG015754.D	24 Apr 2025 09:50	YP\AJ	Ok
2	I.BLK	FG015755.D	24 Apr 2025 10:19	YP\AJ	Ok
3	100 TRPH STD	FG015756.D	24 Apr 2025 10:48	YP\AJ	Ok
4	50 TRPH STD	FG015757.D	24 Apr 2025 11:17	YP\AJ	Ok
5	20 TRPH STD	FG015758.D	24 Apr 2025 11:46	YP\AJ	Ok
6	10 TRPH STD	FG015759.D	24 Apr 2025 12:16	YP\AJ	Ok
7	5 TRPH STD	FG015760.D	24 Apr 2025 12:45	YP\AJ	Ok
8	FG042225ICV	FG015761.D	24 Apr 2025 13:14	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG052125

Review By	yogesh	Review On	5/21/2025 10:13:35 AM
Supervise By		Supervise On	
SubDirectory	FG052125	HP Acquire Method	HP Processing Method FG042425
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24469 PP24468,PP24473		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG015863.D	21 May 2025 09:21	YP\AJ	Ok
2	I.BLK	FG015864.D	21 May 2025 09:50	YP\AJ	Ok
3	50 PPM TRPH STD	FG015865.D	21 May 2025 10:19	YP\AJ	Ok
4	RT MARKER	FG015866.D	21 May 2025 10:48	YP\AJ	Ok
5	PB168084BL	FG015867.D	21 May 2025 11:18	YP\AJ	Ok
6	PB168084BS	FG015868.D	21 May 2025 11:47	YP\AJ	Ok
7	Q2032-01	FG015869.D	21 May 2025 12:16	YP\AJ	Ok
8	Q2032-02	FG015870.D	21 May 2025 12:45	YP\AJ	Ok
9	Q2032-03	FG015871.D	21 May 2025 13:15	YP\AJ	Ok
10	Q2032-04	FG015872.D	21 May 2025 13:44	YP\AJ	Ok
11	Q2032-05MS	FG015873.D	21 May 2025 14:13	YP\AJ	Ok
12	Q2032-06MSD	FG015874.D	21 May 2025 14:43	YP\AJ	Ok,NS
13	I.BLK	FG015875.D	21 May 2025 15:12	YP\AJ	Ok
14	50 PPM TRPH STD	FG015876.D	21 May 2025 15:41	YP\AJ	Ok
15	Q2032-07	FG015877.D	21 May 2025 16:10	YP\AJ	Ok
16	Q2032-08	FG015878.D	21 May 2025 16:40	YP\AJ	Ok
17	Q2074-01	FG015879.D	21 May 2025 17:09	YP\AJ	Ok
18	Q2074-02	FG015880.D	21 May 2025 17:38	YP\AJ	Ok
19	Q2074-03	FG015881.D	21 May 2025 18:07	YP\AJ	Ok,NS
20	I.BLK	FG015882.D	21 May 2025 18:37	YP\AJ	Ok
21	50 PPM TRPH STD	FG015883.D	21 May 2025 19:06	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF042225

Review By	yogesh	Review On	4/22/2025 1:28:06 PM
Supervise By	mohammad	Supervise On	4/24/2025 6:33:56 AM
SubDirectory	FF042225	HP Acquire Method	HP Processing Method FF042225

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24468,PP24473

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FF015784.D	22 Apr 2025 08:12		YP\AJ	Ok
2	I.BLK		FF015785.D	22 Apr 2025 08:42		YP\AJ	Ok
3	100 TRPH STD		FF015786.D	22 Apr 2025 09:11		YP\AJ	Ok
4	50 TRPH STD		FF015787.D	22 Apr 2025 09:40		YP\AJ	Ok
5	20 TRPH STD		FF015788.D	22 Apr 2025 10:09		YP\AJ	Ok
6	10 TRPH STD		FF015789.D	22 Apr 2025 10:39		YP\AJ	Ok
7	5 TRPH STD		FF015790.D	22 Apr 2025 11:08		YP\AJ	Ok,M
8	FF042225ICV		FF015791.D	22 Apr 2025 11:39		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF051925

Review By	yogesh	Review On	5/19/2025 2:47:21 PM
Supervise By	mohammad	Supervise On	5/21/2025 5:36:34 AM
SubDirectory	FF051925	HP Acquire Method	HP Processing Method FF042225

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24469 PP24468,PP24473

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FF015861.D	19 May 2025 09:28		YP\AJ	Ok
2	I.BLK		FF015862.D	19 May 2025 09:58		YP\AJ	Ok
3	50 PPM TRPH STD		FF015863.D	19 May 2025 10:27		YP\AJ	Ok
4	RT MARKER		FF015864.D	19 May 2025 11:02		YP\AJ	Ok
5	PB168064BL		FF015865.D	19 May 2025 12:08		YP\AJ	Ok
6	PB168064BS		FF015866.D	19 May 2025 12:37		YP\AJ	Ok
7	PB168064BSD		FF015867.D	19 May 2025 13:07		YP\AJ	Ok
8	Q2032-11		FF015868.D	19 May 2025 16:39		YP\AJ	Ok
9	I.BLK		FF015869.D	19 May 2025 17:38		YP\AJ	Ok
10	50 PPM TRPH STD		FF015870.D	19 May 2025 18:08		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG042425

Review By	yogesh	Review On	4/24/2025 12:59:08 PM
Supervise By	mohammad	Supervise On	4/26/2025 2:19:49 AM
SubDirectory	FG042425	HP Acquire Method	HP Processing Method FG042425

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24468,PP24473

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG015754.D	24 Apr 2025 09:50		YP\AJ	Ok
2	I.BLK		FG015755.D	24 Apr 2025 10:19		YP\AJ	Ok
3	100 TRPH STD		FG015756.D	24 Apr 2025 10:48		YP\AJ	Ok
4	50 TRPH STD		FG015757.D	24 Apr 2025 11:17		YP\AJ	Ok
5	20 TRPH STD		FG015758.D	24 Apr 2025 11:46		YP\AJ	Ok
6	10 TRPH STD		FG015759.D	24 Apr 2025 12:16		YP\AJ	Ok
7	5 TRPH STD		FG015760.D	24 Apr 2025 12:45		YP\AJ	Ok
8	FG042225ICV		FG015761.D	24 Apr 2025 13:14		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG052125

Review By	yogesh	Review On	5/21/2025 10:13:35 AM
Supervise By		Supervise On	
SubDirectory	FG052125	HP Acquire Method	HP Processing Method FG042425
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC	PP24469		
Internal Standard/PEM			
ICV/I.BLK	PP24468,PP24473		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG015863.D	21 May 2025 09:21		YPIAJ	Ok
2	I.BLK		FG015864.D	21 May 2025 09:50		YPIAJ	Ok
3	50 PPM TRPH STD		FG015865.D	21 May 2025 10:19		YPIAJ	Ok
4	RT MARKER		FG015866.D	21 May 2025 10:48		YPIAJ	Ok
5	PB168084BL		FG015867.D	21 May 2025 11:18		YPIAJ	Ok
6	PB168084BS		FG015868.D	21 May 2025 11:47		YPIAJ	Ok
7	Q2032-01		FG015869.D	21 May 2025 12:16		YPIAJ	Ok
8	Q2032-02		FG015870.D	21 May 2025 12:45		YPIAJ	Ok
9	Q2032-03		FG015871.D	21 May 2025 13:15		YPIAJ	Ok
10	Q2032-04		FG015872.D	21 May 2025 13:44		YPIAJ	Ok
11	Q2032-05MS		FG015873.D	21 May 2025 14:13		YPIAJ	Ok
12	Q2032-06MSD		FG015874.D	21 May 2025 14:43		YPIAJ	Ok,NS
13	I.BLK		FG015875.D	21 May 2025 15:12		YPIAJ	Ok
14	50 PPM TRPH STD		FG015876.D	21 May 2025 15:41		YPIAJ	Ok
15	Q2032-07		FG015877.D	21 May 2025 16:10		YPIAJ	Ok
16	Q2032-08		FG015878.D	21 May 2025 16:40		YPIAJ	Ok
17	Q2074-01		FG015879.D	21 May 2025 17:09		YPIAJ	Ok
18	Q2074-02		FG015880.D	21 May 2025 17:38		YPIAJ	Ok

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG052125

Review By	yogesh	Review On	5/21/2025 10:13:35 AM
Supervise By		Supervise On	
SubDirectory	FG052125	HP Acquire Method	HP Processing Method FG042425

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472
CCC	PP24469
Internal Standard/PEM	
ICV/I.BLK	PP24468,PP24473
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q2074-03		FG015881.D	21 May 2025 18:07		YP\AJ	Ok,NS
20	I.BLK		FG015882.D	21 May 2025 18:37		YP\AJ	Ok
21	50 PPM TRPH STD		FG015883.D	21 May 2025 19:06		YP\AJ	Ok

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/15/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 05/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:28
Out Date: 05/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135767

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q2021-01	WASTE	1	1.14	10.48	11.62	10.41	88.5	
Q2021-02	VOC	2	1.19	10.25	11.44	9.99	85.9	
Q2021-03	1	3	1.15	10.01	11.16	9.88	87.2	
Q2021-04	2	4	1.18	10.25	11.43	9.88	84.9	
Q2021-05	3	5	1.17	10.09	11.26	10.12	88.7	
Q2021-06	4	6	1.16	10.60	11.76	10.5	88.1	
Q2021-07	5	7	1.18	10.60	11.78	10.36	86.6	
Q2021-08	6	8	1.18	10.21	11.39	10.12	87.6	
Q2032-01	TP-11	9	1.14	10.08	11.22	8.83	76.3	
Q2032-02	TP-29	10	1.18	10.39	11.57	10.13	86.1	
Q2032-03	TP-29-99	11	1.19	10.40	11.59	10.22	86.8	
Q2032-04	TP-24	12	1.15	10.70	11.85	9.09	74.2	
Q2032-05	Q2032-04MS	13	1.15	10.70	11.85	9.09	74.2	
Q2032-06	Q2032-04MSD	14	1.15	10.70	11.85	9.09	74.2	
Q2032-07	TP-37	15	1.19	10.00	11.19	9.44	82.5	
Q2032-08	TP-32	16	1.17	10.08	11.25	9.92	86.8	
Q2034-01	L3-WC-1	17	1.14	10.24	11.38	10.11	87.6	
Q2034-02	L3-WC-1-EPH	18	1.18	10.23	11.41	10.22	88.4	
Q2034-03	L3-WC-1-VOC	19	1.15	10.10	11.25	10.19	89.5	
Q2034-04	L3-WC-1	20	1.14	10.24	11.38	10.11	87.6	
Q2034-05	L3-WC-2	21	1.17	10.18	11.35	9.88	85.6	
Q2034-06	L3-WC-2-EPH	22	1.18	10.71	11.89	10.47	86.7	
Q2034-07	L3-WC-2-VOC	23	1.19	10.52	11.71	10.46	88.1	
Q2034-09	L3-WC-3	24	1.14	10.26	11.4	9.65	82.9	
Q2034-10	L3-WC-3-EPH	25	1.14	10.26	11.4	10.11	87.4	
Q2034-11	L3-WC-3-VOC	26	1.19	10.53	11.72	10.39	87.4	
Q2034-13	L3-WC-4	27	1.18	10.51	11.69	10.26	86.4	
Q2034-14	L3-WC-4-EPH	28	1.15	10.42	11.57	10.23	87.1	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/15/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 05/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:28
Out Date: 05/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135767

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q2034-15	L3-WC-4-VOC	29	1.15	10.37	11.52	10.7	92.1	
Q2034-17	L3-WC-5	30	1.13	10.76	11.89	10.49	87.0	
Q2034-18	L3-WC-5-EPH	31	1.15	10.66	11.81	10.02	83.2	
Q2034-19	L3-WC-5-VOC	32	1.19	10.72	11.91	10.6	87.8	
Q2034-21	L3-WC-6	33	1.18	10.14	11.32	9.92	86.2	
Q2034-22	L3-WC-6-EPH	34	1.14	10.08	11.22	10.6	93.8	
Q2034-23	L3-WC-6-VOC	35	1.11	10.00	11.11	9.3	81.9	
Q2038-01	72-11991	36	1.15	10.56	11.71	10.81	91.5	
Q2039-01	TR-05-05142025	37	1.18	9.92	11.1	9.54	84.3	
Q2039-02	TR-05-05142025-E2	38	1.15	10.23	11.38	10.17	88.2	
Q2040-01	1	39	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2040-02	2	40	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2040-03	3	41	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2040-04	4	42	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2040-05	5	43	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2040-06	6	44	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2040-07	7	45	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2041-01	HIH359A-1-1	46	1.00	1.00	2.00	2.00	100.0	oilc
Q2041-02	HIH359A-1-2	47	1.00	1.00	2.00	2.00	100.0	oilc
Q2041-03	HIA9895-1-1	48	1.00	1.00	2.00	2.00	100.0	oilc
Q2041-04	HIA9895-1-2	49	1.00	1.00	2.00	2.00	100.0	oilc
Q2041-05	250-1-1	50	1.00	1.00	2.00	2.00	100.0	oilc
Q2041-06	250-1-2	51	1.00	1.00	2.00	2.00	100.0	oilc
Q2041-07	250-2-1	52	1.00	1.00	2.00	2.00	100.0	oilc
Q2041-08	250-2-2	53	1.00	1.00	2.00	2.00	100.0	oilc
Q2042-01	HEI570L-1-1	54	1.00	1.00	2.00	2.00	100.0	oilc
Q2042-02	HEI570L-1-2	55	1.00	1.00	2.00	2.00	100.0	oilc
Q2042-04	HEI570L-2-1	56	1.00	1.00	2.00	2.00	100.0	oilc



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/15/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 05/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:28
Out Date: 05/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135767

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q2042-05	HEI570L-2-2	57	1.00	1.00	2.00	2.00	100.0	oilc
Q2043-01	281	58	1.18	10.26	11.44	9.29	79.0	
Q2043-02	281-E2	59	1.16	10.44	11.6	10.6	90.4	
Q2043-03	72-12000	60	1.19	10.35	11.54	8.15	67.2	
Q2043-04	72-12000-E2	61	1.11	10.38	11.49	6.56	52.5	
Q2044-01	3858	62	1.00	1.00	2.00	2.00	100.0	oil sample
Q2046-01	BC136902-1-1	63	1.00	1.00	2.00	2.00	100.0	oilc
Q2046-02	BC136902-1-2	64	1.00	1.00	2.00	2.00	100.0	oilc
Q2047-01	SU-04-051425	65	1.18	10.07	11.25	10.72	94.7	
Q2047-02	SU-04-051425-E2	66	1.18	10.37	11.55	10.9	93.7	
Q2048-01	L2-WC-1	67	1.19	10.47	11.66	10.29	86.9	
Q2048-02	L2-WC-1-EPH	68	1.19	10.30	11.49	9.87	84.3	
Q2048-03	L2-WC-1-VOC	69	1.18	10.31	11.49	10.17	87.2	
Q2048-05	L2-WC-2	70	1.16	10.26	11.42	9.82	84.4	
Q2048-06	L2-WC-2-EPH	71	1.17	10.13	11.3	9.06	77.9	
Q2048-07	L2-WC-2-VOC	72	1.18	10.42	11.6	9.88	83.5	
Q2048-09	L2-WC-3	73	1.17	10.15	11.32	9.02	77.3	
Q2048-10	L2-WC-3-EPH	74	1.18	10.07	11.25	9.17	79.3	
Q2048-11	L2-WC-3-VOC	75	1.17	10.49	11.66	9.94	83.6	
Q2048-13	L2-WC-4	76	1.11	10.64	11.75	10.24	85.8	
Q2048-14	L2-WC-4-EPH	77	1.19	10.13	11.32	10.04	87.4	
Q2048-15	L2-WC-4-VOC	78	1.13	10.07	11.2	9.81	86.2	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

VB 135767

WorkList Name : %1-051425

WorkList ID : 189504

Department : Wet-Chemistry

Date : 05-14-2025 09:06:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2021-01	WASTE	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/12/2025	Chemtech -SO
Q2021-02	VOC	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/12/2025	Chemtech -SO
Q2021-03	1	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/12/2025	Chemtech -SO
Q2021-04	2	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/12/2025	Chemtech -SO
Q2021-05	3	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/12/2025	Chemtech -SO
Q2021-06	4	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/12/2025	Chemtech -SO
Q2021-07	5	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/12/2025	Chemtech -SO
Q2021-08	6	Solid	Percent Solids	Cool 4 deg C	SCIA01	L41	05/12/2025	Chemtech -SO
Q2032-01	TP-11	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/13/2025	Chemtech -SO
Q2032-02	TP-29	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/13/2025	Chemtech -SO
Q2032-03	TP-29-99	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/13/2025	Chemtech -SO
Q2032-04	TP-24	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/13/2025	Chemtech -SO
Q2032-05	Q2032-04MS	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/13/2025	Chemtech -SO
Q2032-06	Q2032-04MSD	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/13/2025	Chemtech -SO
Q2032-07	TP-37	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/13/2025	Chemtech -SO
Q2032-08	TP-32	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/13/2025	Chemtech -SO
Q2034-01	L3-WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-02	L3-WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-03	L3-WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-04	L3-WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-05	L3-WC-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO

Date/Time 05/14/25 15:10

Raw Sample Received by: JB WOC

Raw Sample Relinquished by: [Signature]

Date/Time 05/14/25

Raw Sample Received by: CP SM

Raw Sample Relinquished by: JB WOC

WORKLIST(Hardcopy Internal Chain)

B 135767

WorkList Name : %1-051425 WorkList ID : 189504 Department : Wet-Chemistry Date : 05-14-2025 09:06:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2034-06	L3-WC-2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-07	L3-WC-2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-09	L3-WC-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-10	L3-WC-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-11	L3-WC-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-13	L3-WC-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-14	L3-WC-4-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-15	L3-WC-4-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-17	L3-WC-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-18	L3-WC-5-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-19	L3-WC-5-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-21	L3-WC-6	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-22	L3-WC-6-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2034-23	L3-WC-6-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/13/2025	Chemtech -SO
Q2038-01	72-11991	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/14/2025	Chemtech -SO
Q2039-01	TR-05-05142025	Solid	Percent Solids	Cool 4 deg C	PSEG05	L21	05/14/2025	Chemtech -SO
Q2039-02	TR-05-05142025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L21	05/14/2025	Chemtech -SO
Q2040-01	1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2040-02	2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2040-03	3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2040-04	4	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO

Date/Time 05-14-25 15:10 Date/Time 05-14-25 Date/Time 17:30
 Raw Sample Received by: SP WOC Raw Sample Received by: CP SR Raw Sample Received by: CP SR
 Raw Sample Relinquished by: CP SR Raw Sample Relinquished by: SP WOC

WORKLIST(Hardcopy Internal Chain)

23567

WorkList Name : %1-051425 WorkList ID : 189504 Department : Wet-Chemistry Date : 05-14-2025 09:06:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2040-05	5	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2040-06	6	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2040-07	7	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2041-01	HIH359A-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2041-02	HIH359A-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2041-03	HIA9895-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2041-04	HIA9895-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2041-05	250-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2041-06	250-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2041-07	250-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2041-08	250-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2042-01	HEI570L-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2042-02	HEI570L-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2042-04	HEI570L-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2042-05	HEI570L-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2043-01	281	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2043-02	281-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2043-03	72-12000	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2043-04	72-12000-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/14/2025	Chemtech -SO
Q2044-01	3858	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/14/2025	Chemtech -SO
Q2046-01	BC136902-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/14/2025	Chemtech -SO

Date/Time 05-14-25 13:10
 Raw Sample Received by: cl sm
 Raw Sample Relinquished by: cl sm

WORKLIST(Hardcopy Internal Chain)

87135767

WorkList Name : %1-051425 WorkList ID : 189504 Department : Wet-Chemistry Date : 05-14-2025 09:06:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2046-02	BC136902-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/14/2025	Chemtech -SO
Q2047-01	SU-04-051425	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	05/14/2025	Chemtech -SO
Q2047-02	SU-04-051425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	05/14/2025	Chemtech -SO
Q2048-01	L2-WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-02	L2-WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-03	L2-WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-05	L2-WC-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-06	L2-WC-2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-07	L2-WC-2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-09	L2-WC-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-10	L2-WC-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-11	L2-WC-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-13	L2-WC-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-14	L2-WC-4-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO
Q2048-15	L2-WC-4-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/14/2025	Chemtech -SO

Date/Time 05-14-25 15:10
 Raw Sample Received by: SP WOC
 Raw Sample Relinquished by: CL 5m
 Date/Time 05-14-25 17:30
 Raw Sample Received by: SP WOC
 Raw Sample Relinquished by: SP WOC

SOP ID: M3510C,3580A-Extraction DRO-12

Clean Up SOP #: N/A

Extraction Start Date : 05/16/2025

Matrix : Water

Extraction Start Time : 11:40

Weigh By: N/A

Extraction By: RS

Extraction End Date : 05/16/2025

Balance check: N/A

Filter By: RJ

Extraction End Time : 16:15

Balance ID: N/A

pH Meter ID: N/A

Concentration By: EH

pH Strip Lot#: E3880

Hood ID: 4,6,7

Supervisor By : RUPESH

Extraction Method: ☒ Separatory Funnel

☐ Continous Liquid/Liquid

☐ Sonication

☐ Waste Dilution

☐ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Surrogate	1.0ML	20 PPM	PP24162
Spike Sol 1	1.0ML	20 PPM	PP24180
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Methylene Chloride	N/A	E3930
Baked Na2SO4	N/A	EP2611
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210443.

KD Bath ID: WATER BATH-1

Envap ID: NEVAP-02

KD Bath Temperature: 60 °C

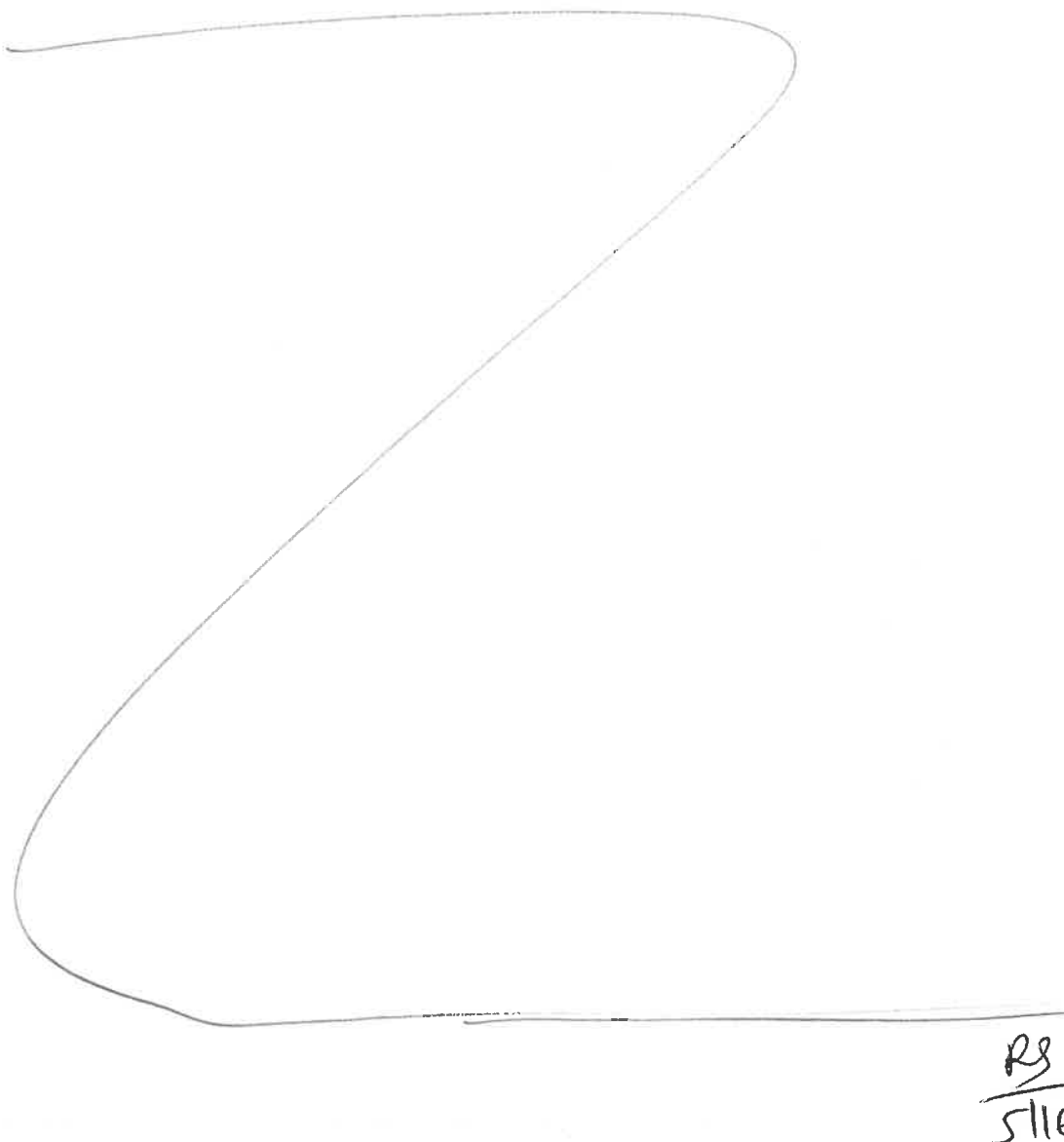
Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
5/16/25	RS (Ext Lab)	Y-P. est 11/13
16:20	Preparation Group	Analysis Group

Analytical Method: M3510C,3580A-Extraction DRO-12

Concentration Date: 05/16/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168064BL	PB168064BL	Diesel Range Organics	1000	6	RUPESH	ritesh	1			SEP-1
PB168064BS	PB168064BS	Diesel Range Organics	1000	6	RUPESH	ritesh	1			2
PB168064BSD	PB168064BSD	Diesel Range Organics	1000	6	RUPESH	ritesh	1			3
Q2032-11	FB-05132025	Diesel Range Organics	980	6	RUPESH	ritesh	1	G		4



RS
5/16

168064
11:35
0891

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2032D WorkList ID : 189609 Department : Extraction Date : 05-16-2025 11:34:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2032-11	FB-05132025	Water	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/13/2025	8015D

Date/Time 5/16/25 11:35
Raw Sample Received by: RS (Ext-10-b)
Raw Sample Relinquished by: IT (Ext-7)

Date/Time 5/16/25
Raw Sample Received by: IT (Ext-1)
Raw Sample Relinquished by: RS (Ext-10-b)

SOP ID:	M3541-ASE Extraction-14		
Clean Up SOP #:	N/A	Extraction Start Date :	05/20/2025
Matrix :	Solid	Extraction Start Time :	10:15
Welgh By:	EH	Extraction By:	RJ
Balance check:	RJ	Extraction End Date :	05/20/2025
Balance ID:	EX-SC-2	Filter By:	RJ
pH Strlp Lot#:	N/A	Extraction End Time :	13:30
		Concentration By:	EH
		Supervisor By :	RUPESH
Extraction Method:	☐ Seperatory Funnel ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☒ Soxhlet		

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	20 PPM	PP24162
Surrogate	1.0ML	20 PPM	PP24180
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
MeCl2/Acetone/1:1	N/A	EP2612
Baked Na2SO4	N/A	EP2614
Sand	N/A	E2865
Methylene Chloride	N/A	E3930
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673.

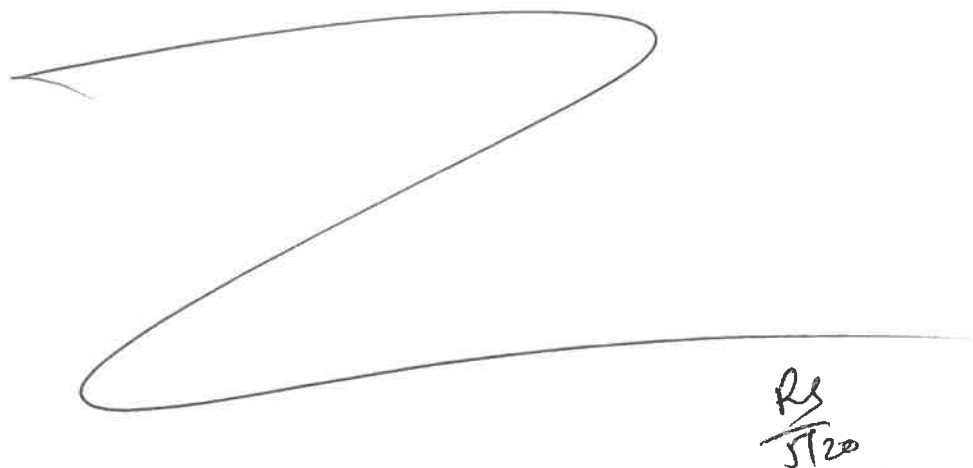
KD Bath ID:	N/A	Envap ID:	NEVAP-02
KD Bath Temperature:	N/A	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
5/20/25	RSC (B4 Lab)	R. Post / PeB Lab
13:35	Preparation Group	Analysis Group

Analytical Method: M3541-ASE Extraction-14

Concentration Date: 05/20/2025

Sample ID	Client Sample ID	Test	g/mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168084BL	PB168084BL	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1			U2-1
PB168084BS	PB168084BS	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1			2
Q2032-01	TP-11	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	E		3
Q2032-02	TP-29	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	E		4
Q2032-03	TP-29-99	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	E		5
Q2032-04	TP-24	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	E		6
Q2032-05	Q2032-04MS	Diesel Range Organics	30.08	N/A	ritesh	Evelyn	1	E		U3-1
Q2032-06	Q2032-04MSD	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	E		2
Q2032-07	TP-37	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	E		3
Q2032-08	TP-32	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	E		4
Q2074-01	TP-12	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	E		5
Q2074-02	TP-7	Diesel Range Organics	30.06	N/A	ritesh	Evelyn	1	E		6
Q2074-03	TP-15	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	E		U1-1
Q2074-04	TP-20	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	E		2
Q2074-05	TP-38	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	E		3
Q2074-06	TP-19	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	E		4
Q2074-07	TP-40	Diesel Range Organics	30.08	N/A	ritesh	Evelyn	1	E		5
Q2074-08	TP-18	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	E		6



168094
10:17

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2032DRO WorkList ID : 189623 Department : Extraction Date : 05-20-2025 08:40:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2032-01	TP-11	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/13/2025	8015D
Q2032-02	TP-29	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/13/2025	8015D
Q2032-03	TP-29-99	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/13/2025	8015D
Q2032-04	TP-24	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/13/2025	8015D
Q2032-05	Q2032-04MS	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/13/2025	8015D
Q2032-06	Q2032-04MSD	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/13/2025	8015D
Q2032-07	TP-37	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/13/2025	8015D
Q2032-08	TP-32	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L41	05/13/2025	8015D
Q2074-01	TP-12	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/16/2025	8015D
Q2074-02	TP-7	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/16/2025	8015D
Q2074-03	TP-15	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/16/2025	8015D
Q2074-04	TP-20	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/16/2025	8015D
Q2074-05	TP-38	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/16/2025	8015D
Q2074-06	TP-19	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/16/2025	8015D
Q2074-07	TP-40	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/16/2025	8015D
Q2074-08	TP-18	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	L31	05/16/2025	8015D

Date/Time 5/20/25 10:10
Raw Sample Received by: RJ (Ext-66)
Raw Sample Relinquished by: CJ

Date/Time 5/20/25 10:45
Raw Sample Received by: CJ
Raw Sample Relinquished by: RJ (Ext-66)

Prep Standard - Chemical Standard Summary

Order ID : Q2032

Test : Diesel Range Organics

Prepbatch ID : PB168064,PB168084,

Sequence ID/Qc Batch ID: FG052125,FF051925,

Standard ID :

EP2611,EP2612,EP2614,PP24162,PP24180,PP24467,PP24468,PP24469,PP24470,PP24471,PP24472,PP24473,

Chemical ID :

E2865,E3551,E3874,E3926,E3930,E3932,P11951,P11952,P11955,P11956,P13106,P13108,P13477,P13479,P13487,P13488,P13489,P13490,



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2611	05/09/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/09/2025
<u>FROM</u> 4000.00000gram of E3551 = Final Quantity: 4000.000 gram								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipettelD</u>	<u>Supervised By</u>
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2612	05/09/2025	11/05/2025	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel 05/09/2025
<u>FROM</u> 8000.00000ml of E3930 + 8000.00000ml of E3932 = Final Quantity: 16000.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2614	05/19/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/19/2025
<u>FROM</u> 4000.00000gram of E3551 = Final Quantity: 4000.000 gram								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3609	20 PPM DRO SPIKE SOLUTION (RESTEK)	PP24162	01/31/2025	07/30/2025	Yogesh Patel	None	None	Ankita Jodhani 01/31/2025
<u>FROM</u>	1.00000ml of P11955 + 1.00000ml of P11956 + 48.00000ml of E3874 = Final Quantity: 50.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
147	20 PPM DRO Surrogate Spike Solution	PP24180	02/03/2025	07/30/2025	Yogesh Patel	None	None	Ankita Jodhani 02/03/2025
<u>FROM</u>	1.00000ml of P13487 + 1.00000ml of P13488 + 1.00000ml of P13489 + 1.00000ml of P13490 + 196.00000ml of E3874 = Final Quantity: 200.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
433	100/100 PPM DRO (Restek)	PP24467	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza 05/08/2025
<u>FROM</u>	1.00000ml of P11951 + 1.00000ml of P11952 + 1.00000ml of P13477 + 7.00000ml of E3926 = Final Quantity: 10.000 ml							

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3979	100/100 PPM DRO ICV (RESTEK)	PP24468	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 1.00000ml of P13106 + 1.00000ml of P13108 + 1.00000ml of P13479 + 7.00000ml of E3926 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
435	50 PPM ICC DRO STD (Restek)	PP24469	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.50000ml of E3926 + 0.50000ml of PP24467 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
437	20 PPM ICC DRO STD (Restek)	PP24470	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.80000ml of E3926 + 0.20000ml of PP24467 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
438	10 PPM ICC DRO STD (Restek)	PP24471	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.90000ml of E3926 + 0.10000ml of PP24467 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
439	5 PPM ICC DRO STD (Restek)	PP24472	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.90000ml of E3926 + 0.10000ml of PP24469 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3608	50 PPM ICV DRO STD (RESTEK)	PP24473	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 0.50000ml of E3926 + 0.50000ml of PP24468 = Final Quantity: 1.000 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	06/30/2025	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	07/30/2025	01/30/2025 / Rajesh	01/20/2025 / Rajesh	E3874

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	10/08/2025	04/08/2025 / Rajesh	02/07/2025 / Rajesh	E3926

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	02/20/2026	05/02/2025 / RUPESH	03/09/2025 / RUPESH	E3930

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	11/05/2025	05/05/2025 / RUPESH	04/23/2025 / RUPESH	E3932

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	10/22/2025	04/22/2025 / yogesh	07/11/2022 / Yogesh	P11951

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	10/22/2025	04/22/2025 / yogesh	07/11/2022 / Yogesh	P11952

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	07/31/2025	01/31/2025 / yogesh	07/11/2022 / Yogesh	P11955

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	07/31/2025	01/31/2025 / yogesh	07/11/2022 / Yogesh	P11956

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0204859	10/22/2025	04/22/2025 / yogesh	01/12/2024 / Yogesh	P13106

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0204859	10/22/2025	04/22/2025 / yogesh	01/12/2024 / Yogesh	P13108

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	10/22/2025	04/22/2025 / yogesh	07/24/2024 / yogesh	P13477

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	10/22/2025	04/22/2025 / yogesh	07/24/2024 / yogesh	P13479

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	08/03/2025	02/03/2025 / yogesh	07/24/2024 / yogesh	P13487

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	08/03/2025	02/03/2025 / yogesh	07/24/2024 / yogesh	P13488

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	08/03/2025	02/03/2025 / yogesh	07/24/2024 / yogesh	P13489

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	08/03/2025	02/03/2025 / yogesh	07/24/2024 / yogesh	P13490

Sand
Purified
Washed and Ignited



Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

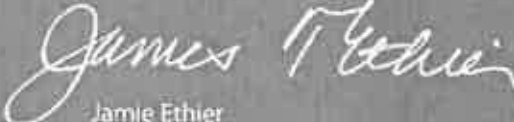
Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	$\leq 0.16\%$	0.01

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

E 2865


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700



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MONTERREY, S.A. DE C.V.**

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MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date: 2026-02-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	4
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	99.9%
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.8 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	$< 0.01\%$

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3874

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor



Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date: 2026-02-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	4
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	10
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.8 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	<0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	<5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	<0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3926

J. Croak

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor



Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date: 2026-02-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	4
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.8 ppm
Titration Acid (μ eq/g)	≤ 0.3	<0.1
Chloride (Cl)	≤ 10 ppm	<5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	<0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3930

J. Croak

Jamie Croak
Director Quality Operations, Bioscience Production

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Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

 avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

RS

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3932



Jamie Croak
Director Quality Operations, Bioscience Production

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Avantor Performance Materials LLC



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

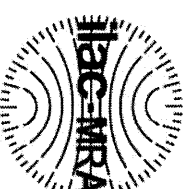
Belleville, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31266

Lot No.: A0186840

Description :

Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

Container Size :

2 mL

Pkg Amt: > 1 mL

Expiration Date :

July 31, 2029

Storage: 25°C nominal

Handling:

Sonicate prior to use.

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Octane (C8) CAS # 111-65-9 Purity 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) CAS # 124-18-5 Purity 99%	503.0 µg/mL	+/- 2.9877 µg/mL +/- 12.4968 µg/mL +/- 14.9795 µg/mL	Gravimetric Unstressed Stressed
3	n-Dodecane (C12) CAS # 112-40-3 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed
4	n-Tetradecane (C14) CAS # 629-59-4 Purity 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
5	n-Hexadecane (C16) CAS # 544-76-3 Purity 98%	504.7 µg/mL	+/- 2.9978 µg/mL +/- 12.5390 µg/mL +/- 15.0301 µg/mL	Gravimetric Unstressed Stressed
6	n-Octadecane (C18) CAS # 593-45-3 Purity 97%	504.4 µg/mL	+/- 2.9960 µg/mL +/- 12.5316 µg/mL +/- 15.0212 µg/mL	Gravimetric Unstressed Stressed
7	n-Eicosane (C20) CAS # 112-95-8 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed

P11948 } 7.8
P11962 } 07/11/16

8	n-Docosane (C22) CAS # 629-97-0 Purity 99%	(Lot MKCL8918)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Tetracosane (C24) CAS # 646-31-1 Purity 99%	(Lot MKCN2863)	503.5 µg/mL	+/- 2.9906 +/- 12.5092 +/- 14.9944	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Hexacosane (C26) CAS # 630-01-3 Purity 99%	(Lot MKCD4540)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Octacosane (C28) CAS # 630-02-4 Purity 99%	(Lot BCCG0084)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Triacontane (C30) CAS # 638-68-6 Purity 99%	(Lot MKCN9321)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Dotriacontane (C32) CAS # 544-85-4 Purity 99%	(Lot BCBW0661)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Tetratriacontane (C34) CAS # 14167-59-0 Purity 99%	(Lot OML4N)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Hexatriacontane (C36) CAS # 630-06-8 Purity 99%	(Lot U25B014)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Octatriacontane (C38) CAS # 7194-85-6 Purity 97%	(Lot 0000127235)	504.4 µg/mL	+/- 2.9960 +/- 12.5316 +/- 15.0212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetracontane (C40) CAS # 4181-95-7 Purity 98%	(Lot PADGI)	504.7 µg/mL	+/- 2.9978 +/- 12.5390 +/- 15.0301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

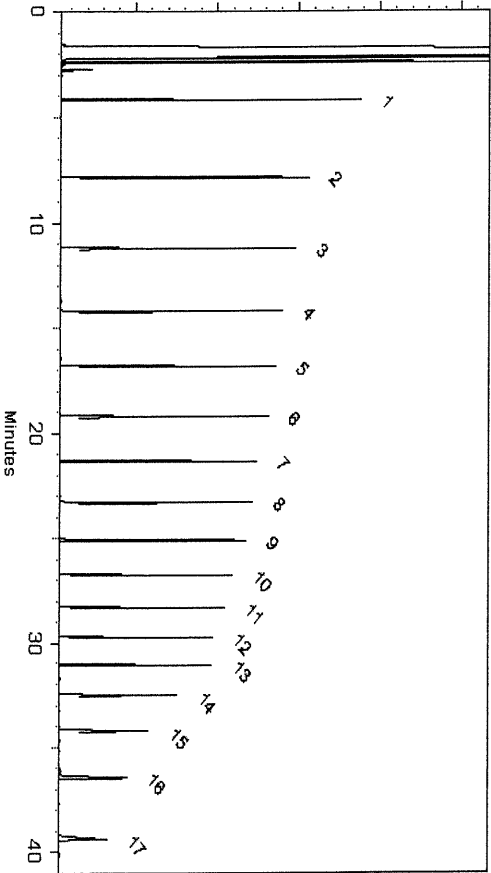
250°C

Det. Temp:

330°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-US for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-US.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

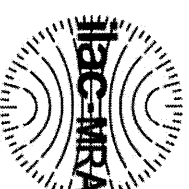
Bellefonte, PA 16823-8812

Tel: (800)356-1688

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Certificate of Analysis



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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31266

Lot No.: A0186840

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2029

Storage: 25°C nominal

Handling: Sonicate prior to use.

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Octane (C8) CAS # 111-65-9 Purity 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) CAS # 124-18-5 Purity 99%	503.0 µg/mL	+/- 2.9877 µg/mL +/- 12.4968 µg/mL +/- 14.9795 µg/mL	Gravimetric Unstressed Stressed
3	n-Dodecane (C12) CAS # 112-40-3 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed
4	n-Tetradecane (C14) CAS # 629-59-4 Purity 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
5	n-Hexadecane (C16) CAS # 544-76-3 Purity 98%	504.7 µg/mL	+/- 2.9978 µg/mL +/- 12.5390 µg/mL +/- 15.0301 µg/mL	Gravimetric Unstressed Stressed
6	n-Octadecane (C18) CAS # 593-45-3 Purity 97%	504.4 µg/mL	+/- 2.9960 µg/mL +/- 12.5316 µg/mL +/- 15.0212 µg/mL	Gravimetric Unstressed Stressed
7	n-Eicosane (C20) CAS # 112-95-8 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed

P11948 } 7.8
P11962 } 07/11/16

8	n-Docosane (C22) CAS # 629-97-0 Purity 99%	(Lot MKCL8918)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Tetracosane (C24) CAS # 646-31-1 Purity 99%	(Lot MKCN2863)	503.5 µg/mL	+/- 2.9906 +/- 12.5092 +/- 14.9944	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Hexacosane (C26) CAS # 630-01-3 Purity 99%	(Lot MKCD4540)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Octacosane (C28) CAS # 630-02-4 Purity 99%	(Lot BCCG0084)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Triacontane (C30) CAS # 638-68-6 Purity 99%	(Lot MKCN9321)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Dotriacontane (C32) CAS # 544-85-4 Purity 99%	(Lot BCBW0661)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Tetratriacontane (C34) CAS # 14167-59-0 Purity 99%	(Lot OML4N)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Hexatriacontane (C36) CAS # 630-06-8 Purity 99%	(Lot U25B014)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Octatriacontane (C38) CAS # 7194-85-6 Purity 97%	(Lot 0000127235)	504.4 µg/mL	+/- 2.9960 +/- 12.5316 +/- 15.0212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetracontane (C40) CAS # 4181-95-7 Purity 98%	(Lot PADGI)	504.7 µg/mL	+/- 2.9978 +/- 12.5390 +/- 15.0301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

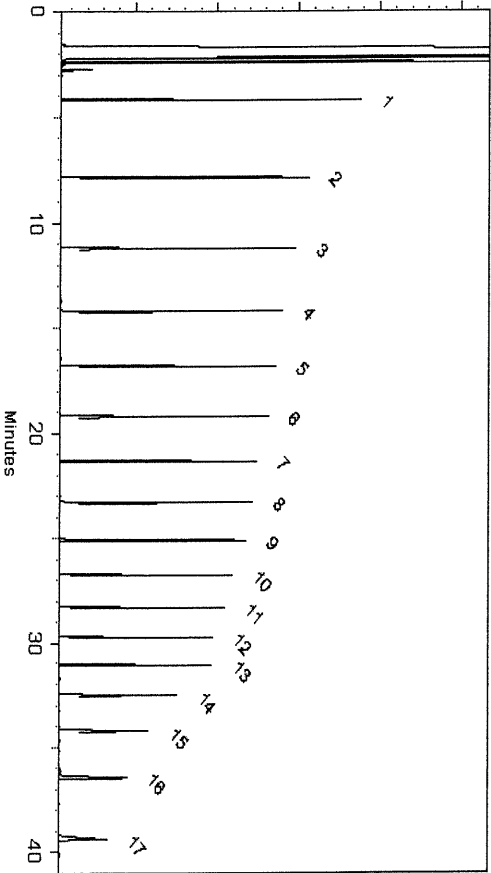
250°C

Det. Temp:

330°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

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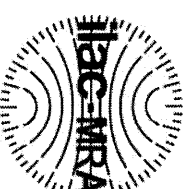
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Certificate of Analysis



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Lot No.: A0186840

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Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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Pkg Amt: > 1 mL

Expiration Date : July 31, 2029

Storage: 25°C nominal

Handling: Sonicate prior to use.

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3	n-Dodecane (C12) CAS # 112-40-3 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed
4	n-Tetradecane (C14) CAS # 629-59-4 Purity 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Stressed
5	n-Hexadecane (C16) CAS # 544-76-3 Purity 98%	504.7 µg/mL	+/- 2.9978 µg/mL +/- 12.5390 µg/mL +/- 15.0301 µg/mL	Gravimetric Unstressed Stressed
6	n-Octadecane (C18) CAS # 593-45-3 Purity 97%	504.4 µg/mL	+/- 2.9960 µg/mL +/- 12.5316 µg/mL +/- 15.0212 µg/mL	Gravimetric Unstressed Stressed
7	n-Eicosane (C20) CAS # 112-95-8 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Stressed

P11948 } 7.8
P11962 } 07/11/16

8	n-Docosane (C22) CAS # 629-97-0 Purity 99%	(Lot MKCL8918)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Tetracosane (C24) CAS # 646-31-1 Purity 99%	(Lot MKCN2863)	503.5 µg/mL	+/- 2.9906 +/- 12.5092 +/- 14.9944	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Hexacosane (C26) CAS # 630-01-3 Purity 99%	(Lot MKCD4540)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Octacosane (C28) CAS # 630-02-4 Purity 99%	(Lot BCCG0084)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Triacontane (C30) CAS # 638-68-6 Purity 99%	(Lot MKCN9321)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Dotriacontane (C32) CAS # 544-85-4 Purity 99%	(Lot BCBW0661)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Tetratriacontane (C34) CAS # 14167-59-0 Purity 99%	(Lot OML4N)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Hexatriacontane (C36) CAS # 630-06-8 Purity 99%	(Lot U25B014)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Octatriacontane (C38) CAS # 7194-85-6 Purity 97%	(Lot 0000127235)	504.4 µg/mL	+/- 2.9960 +/- 12.5316 +/- 15.0212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetracontane (C40) CAS # 4181-95-7 Purity 98%	(Lot PADGI)	504.7 µg/mL	+/- 2.9978 +/- 12.5390 +/- 15.0301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

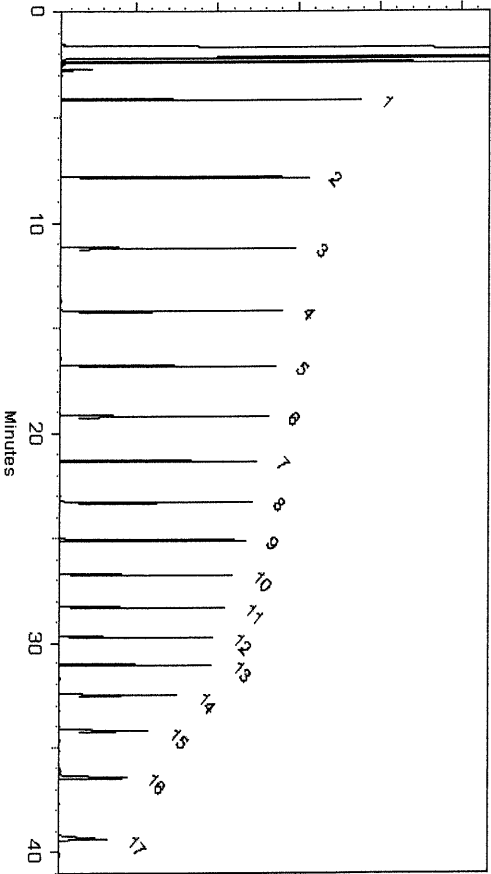
250°C

Det. Temp:

330°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills
Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-US for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-US.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

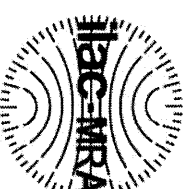
Belleville, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31266

Lot No.: A0186840

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2029

Storage: 25°C nominal

Handling: Sonicate prior to use.

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Octane (C8) CAS # 111-65-9 Purity 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Unstressed Stressed
2	n-Decane (C10) CAS # 124-18-5 Purity 99%	503.0 µg/mL	+/- 2.9877 µg/mL +/- 12.4968 µg/mL +/- 14.9795 µg/mL	Gravimetric Unstressed Unstressed Stressed
3	n-Dodecane (C12) CAS # 112-40-3 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Unstressed Stressed
4	n-Tetradecane (C14) CAS # 629-59-4 Purity 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Unstressed Stressed
5	n-Hexadecane (C16) CAS # 544-76-3 Purity 98%	504.7 µg/mL	+/- 2.9978 µg/mL +/- 12.5390 µg/mL +/- 15.0301 µg/mL	Gravimetric Unstressed Unstressed Stressed
6	n-Octadecane (C18) CAS # 593-45-3 Purity 97%	504.4 µg/mL	+/- 2.9960 µg/mL +/- 12.5316 µg/mL +/- 15.0212 µg/mL	Gravimetric Unstressed Unstressed Stressed
7	n-Eicosane (C20) CAS # 112-95-8 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Unstressed Stressed

P11948 } 7.8
P11962 } 07/11/16

8	n-Docosane (C22) CAS # 629-97-0 Purity 99%	(Lot MKCL8918)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Tetracosane (C24) CAS # 646-31-1 Purity 99%	(Lot MKCN2863)	503.5 µg/mL	+/- 2.9906 +/- 12.5092 +/- 14.9944	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Hexacosane (C26) CAS # 630-01-3 Purity 99%	(Lot MKCD4540)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Octacosane (C28) CAS # 630-02-4 Purity 99%	(Lot BCCG0084)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Triacontane (C30) CAS # 638-68-6 Purity 99%	(Lot MKCN9321)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Dotriacontane (C32) CAS # 544-85-4 Purity 99%	(Lot BCBW0661)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Tetratriacontane (C34) CAS # 14167-59-0 Purity 99%	(Lot OML4N)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Hexatriacontane (C36) CAS # 630-06-8 Purity 99%	(Lot U25B014)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Octatriacontane (C38) CAS # 7194-85-6 Purity 97%	(Lot 0000127235)	504.4 µg/mL	+/- 2.9960 +/- 12.5316 +/- 15.0212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetracontane (C40) CAS # 4181-95-7 Purity 98%	(Lot PADGI)	504.7 µg/mL	+/- 2.9978 +/- 12.5390 +/- 15.0301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

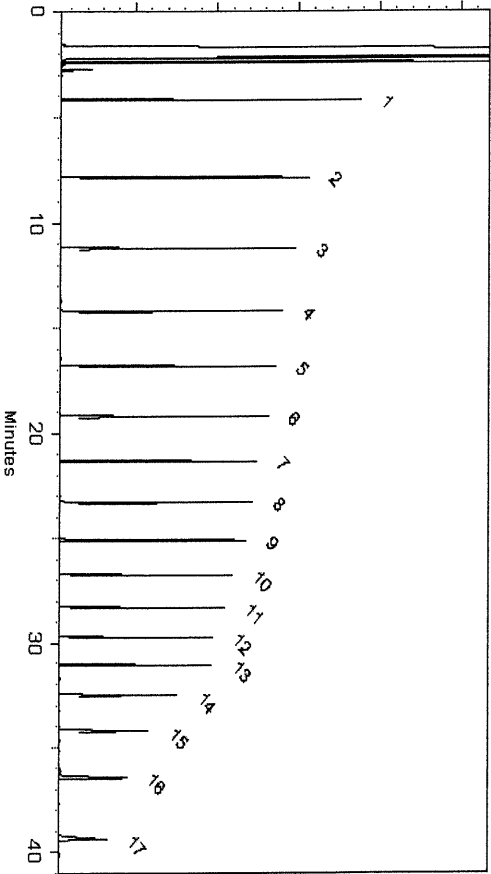
250°C

Det. Temp:

330°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-US for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-US.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31266 **Lot No.:** A0204859

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2030 **Storage:** 25°C nominal

Handling: Sonicate prior to use. **Ship:** Ambient

P13103 } Y.P.
↓
P13112 } 01/12/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Octane (C8)	111-65-9	SHBP9758	99%	504.4 µg/mL	+/- 13.0305
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	503.6 µg/mL	+/- 13.0098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	503.6 µg/mL	+/- 13.0098
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	504.0 µg/mL	+/- 13.0201
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	504.0 µg/mL	+/- 13.0201
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	504.1 µg/mL	+/- 13.0230
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	504.0 µg/mL	+/- 13.0204
8	n-Docosane (C22)	629-97-0	MKCQ3882	99%	503.6 µg/mL	+/- 13.0098
9	n-Tetracosane (C24)	646-31-1	MKCQ8345	99%	504.0 µg/mL	+/- 13.0201
10	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	504.0 µg/mL	+/- 13.0201
11	n-Octacosane (C28)	630-02-4	BCCG0084	99%	504.0 µg/mL	+/- 13.0201
12	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	504.0 µg/mL	+/- 13.0204
13	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	504.0 µg/mL	+/- 13.0201
14	n-Tetratriacontane (C34)	14167-59-0	OML4N	99%	504.4 µg/mL	+/- 13.0305
15	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	504.0 µg/mL	+/- 13.0201
16	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	503.8 µg/mL	+/- 13.0152
17	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	503.6 µg/mL	+/- 13.0098

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

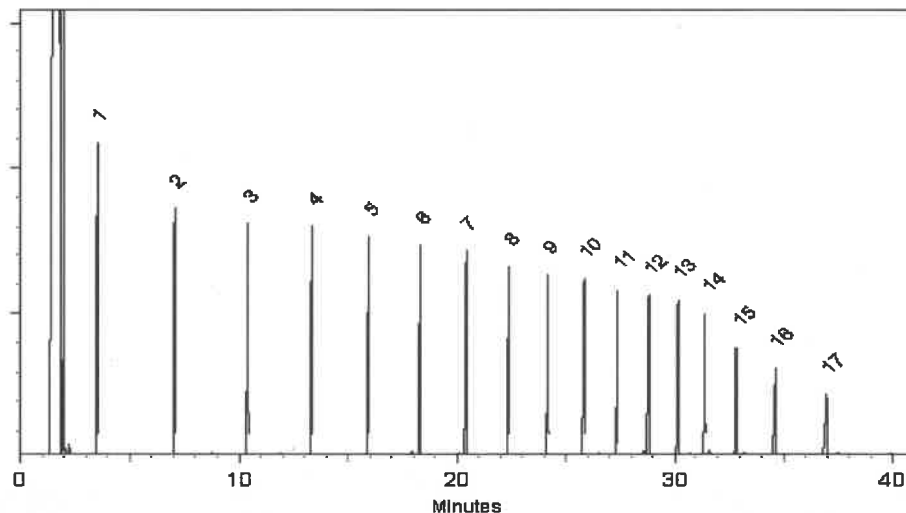
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl

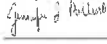


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 29-Nov-2023

Balance Serial # B442140311


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31266 **Lot No.:** A0204859

Description : Florida TRPH Standard

Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2030 **Storage:** 25°C nominal

Handling: Sonicate prior to use. **Ship:** Ambient

P13103 } Y.P.
↓
P13112 } 01/12/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Octane (C8)	111-65-9	SHBP9758	99%	504.4 µg/mL	+/- 13.0305
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	503.6 µg/mL	+/- 13.0098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	503.6 µg/mL	+/- 13.0098
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	504.0 µg/mL	+/- 13.0201
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	504.0 µg/mL	+/- 13.0201
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	504.1 µg/mL	+/- 13.0230
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	504.0 µg/mL	+/- 13.0204
8	n-Docosane (C22)	629-97-0	MKCQ3882	99%	503.6 µg/mL	+/- 13.0098
9	n-Tetracosane (C24)	646-31-1	MKCQ8345	99%	504.0 µg/mL	+/- 13.0201
10	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	504.0 µg/mL	+/- 13.0201
11	n-Octacosane (C28)	630-02-4	BCCG0084	99%	504.0 µg/mL	+/- 13.0201
12	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	504.0 µg/mL	+/- 13.0204
13	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	504.0 µg/mL	+/- 13.0201
14	n-Tetratriacontane (C34)	14167-59-0	OML4N	99%	504.4 µg/mL	+/- 13.0305
15	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	504.0 µg/mL	+/- 13.0201
16	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	503.8 µg/mL	+/- 13.0152
17	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	503.6 µg/mL	+/- 13.0098

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

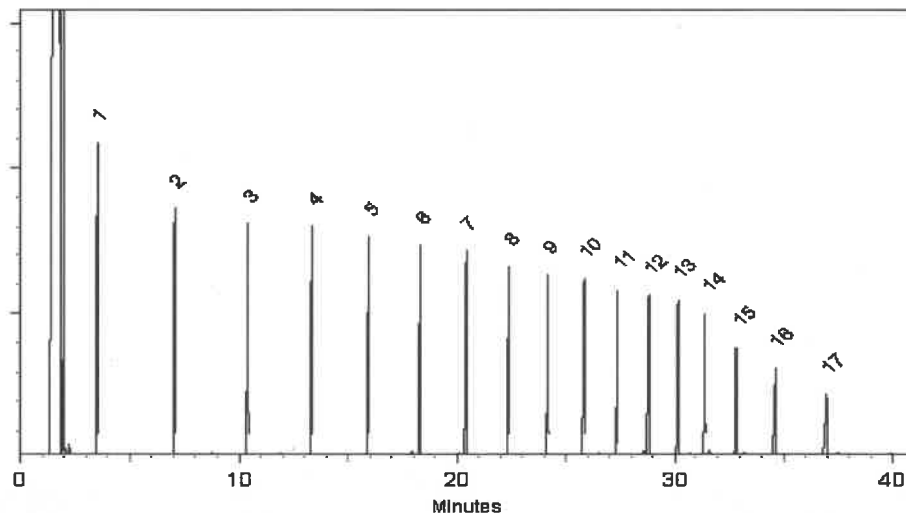
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl

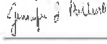


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 29-Nov-2023

Balance Serial # B442140311


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Dec-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within $\pm 0.5\%$ of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: UCRM is the expanded uncertainty which utilizes a $K = 2$ (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

Page 1 of 2



Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019



ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scope: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part # 10009R
Lot # 070716
Shelf Life Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
070721
Expiration Date: Ambient (20 °C)
Recommended Storage: 4000
Nominal Concentration (µg/mL): 822-275872-11
NIST Test ID#: 5E-05 Balance Uncertainty
0.058 Mass Uncertainty

Solvent(s): Methylene chloride
Lot# 78782

Formulated By: Paul Barron
Reviewed By: Pedro L. Rentes

070716
070716

Weight(s) shown below were combined and diluted to (mL): 500.0

Compound	SMW	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (µg)	Actual Weight (µg)	Actual Conc (µg/mL)	Expanded Uncertainty (µg/mL)	CAS#	MSDS Information (Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-1845M07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	15.4	2055-02-1	N/A	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-2339M031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	15.2	1146-85-2	10 ppm (50mg/m3/8h)	N/A	or-rat 400mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	15.2	15067-28-2	N/A	N/A	or-rat 500mg/kg
4. Phenanthrene-d10	248	PR-2305M081711PM1	4000	98	0.2	2.04093	2.04135	4000.8	15.4	1517-25-2	N/A	N/A	N/A
5. Chrysene-d12	92	I-19290	4000	98	0.2	2.04093	2.04150	4001.3	15.4	1719-03-5	N/A	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04155	4001.2	15.4	1503-58-3	N/A	N/A	N/A

Run 35, "P10009R L070716 [4000µg/mL in MeCl2]"
Run Length: 40.00 min, 23900 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070716-GC/MS", Method "GC-MS".
Analyzed using Method "GC-MS".

Comments:
GC-MS Analysis by Melissa Siciric
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 0.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) = 300 mL, Oven Temp 1 = 50°C (1 min).
Rise = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes, Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = sData Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Peak No. Name FID RT (min)

1	1,4-Dichlorobenzene-d4	8.34
2	Naphthalene-d8	8.98
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Printed: 5/8/2019, 12:55:50 PM

Part # 10009R Lot # 041219 1 of 2

Formulator
Reviewer

Actual
Concentration

Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

Part Number: **72072**
Lot Number: **101122**
Description: **n-Tetracosane-d50**

Solvent(s):
Methylene chloride
Lot#
105345

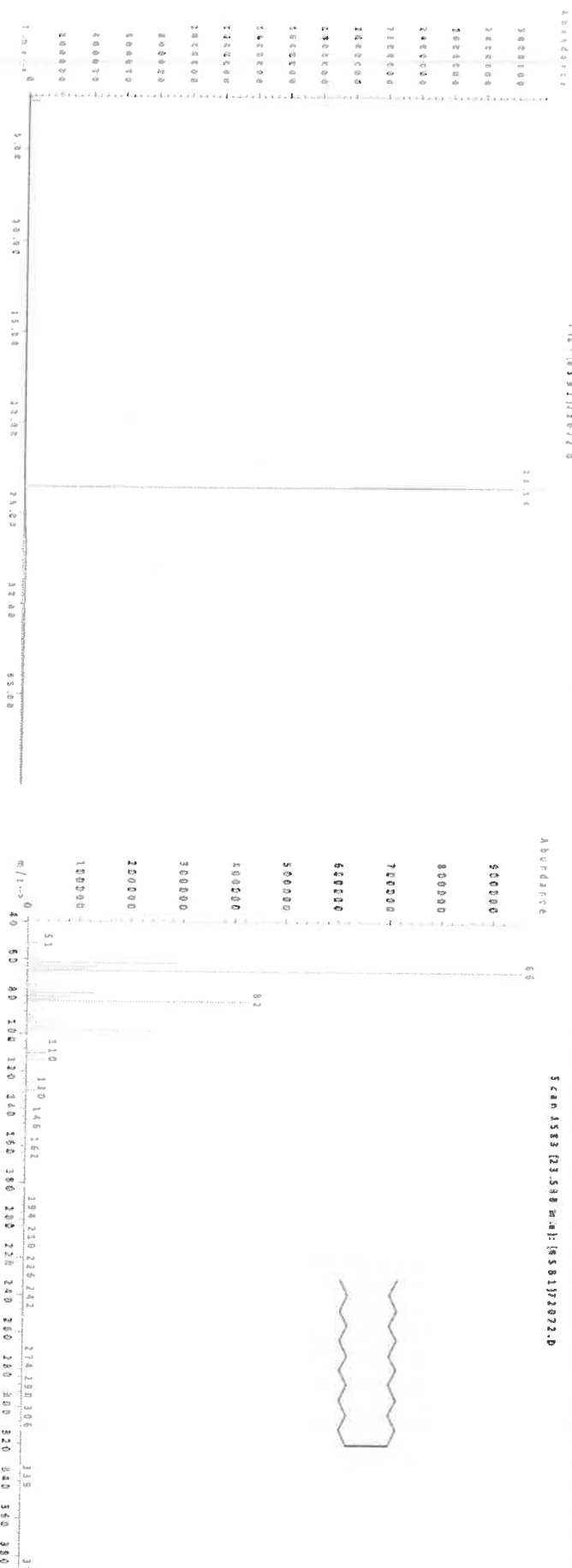
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

Formulated By:	<i>Prashant Chauhan</i>	101122
Reviewed By:	<i>Pedro L. Rentas</i>	101122
	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
1. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N., and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within $\pm 0.5\%$ of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: UCRM is the expanded uncertainty which utilizes a $K = 2$ (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

Page 1 of 2



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Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019



ABSOLUTE STANDARDS, INC.

ISO - 17034

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www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scope: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part # 10009R
Lot # 070716
Shelf Life Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
070721
Expiration Date: Ambient (20 °C)
Recommended Storage: 4000
Nominal Concentration (µg/mL): 822-275872-11
NIST Test ID#: 5E-05 Balance Uncertainty
0.058 Mass Uncertainty

Solvent(s): Methylene chloride
Lot# 78782

Formulated By: Paul Barron
Reviewed By: Pedro L. Rentes

070716
070716

Weight(s) shown below were combined and diluted to (mL): 500.0

Compound	SMW	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (µg)	Actual Weight (µg)	Actual Conc (µg/mL)	Expanded Uncertainty (µg/mL)	CAS#	MSDS Information (Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-1845M07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	15.4	2055-02-1	N/A	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-2339M031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	15.2	1146-85-2	10 ppm (50mg/m3/8h)	N/A	or-rat 400mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	15.2	15067-28-2	N/A	N/A	or-rat 500mg/kg
4. Phenanthrene-d10	248	PR-2305M081711PM1	4000	98	0.2	2.04093	2.04136	4000.8	15.4	1517-25-2	N/A	N/A	N/A
5. Chrysene-d12	92	I-19290	4000	98	0.2	2.04093	2.04159	4001.3	15.4	1719-03-5	N/A	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04156	4001.2	15.4	1503-58-3	N/A	N/A	N/A

Run 35, "P10009R L070716 [4000µg/mL in MeCl2]"
Run Length: 40.00 min, 23900 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070716-GC/MS", Method "GC-MS".
Analyzed using Method "GC-MS".

Comments:
GC-MS Analysis by Melissa Siciric
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 0.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) = 300 mL, Oven Temp 1 = 50°C (1 min).
Rise = 10°C/min, Oven Temp 2 = 300°C (14 min). Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Peak No. Name FID RT (min)

1	1,4-Dichlorobenzene-d4	6.34
2	Naphthalene-d8	8.98
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Printed: 5/8/2019, 12:55:50 PM

Formulator
Reviewer

Actual
Concentration
Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

Part Number: **72072**
Lot Number: **101122**
Description: **n-Tetracosane-d50**

Solvent(s):
Methylene chloride
Lot#
105345

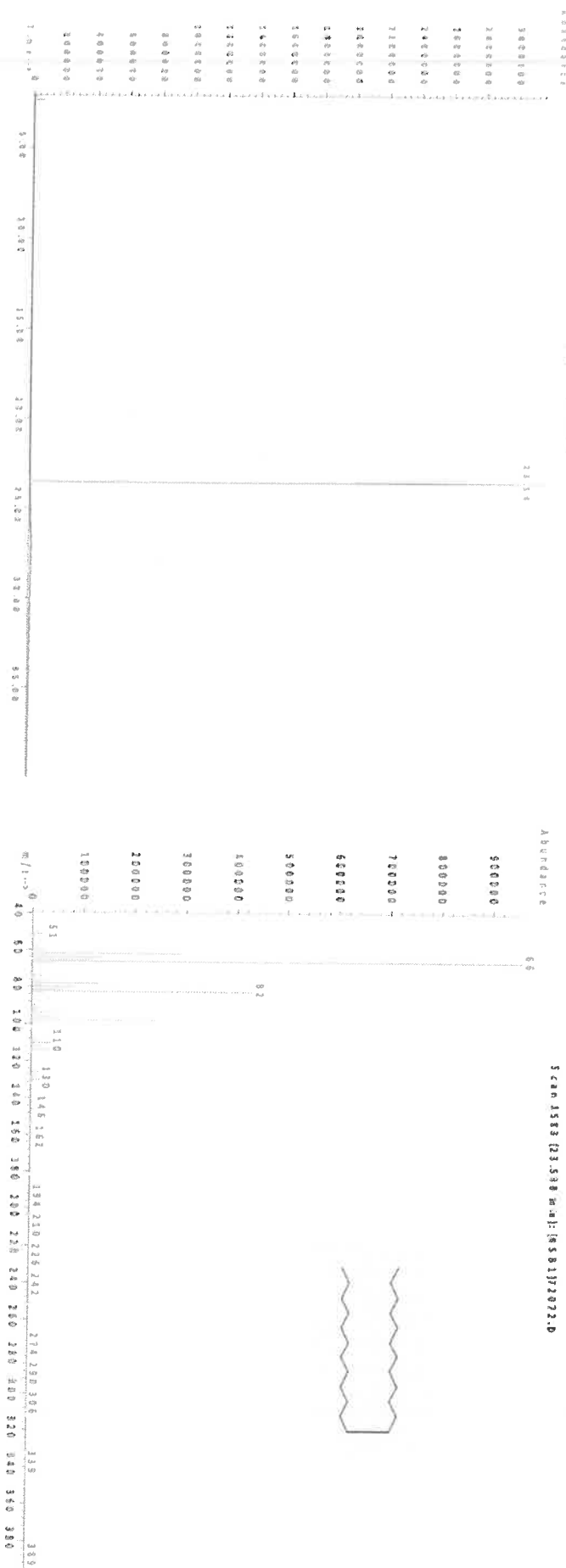
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

Formulated By:	<i>Prashant Chauhan</i>	101122
Reviewed By:	<i>Pedro L. Rentas</i>	101122
	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
1. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
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ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

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Certifying Officer: Stephen J. Arpie, M.S., Director General

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Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019



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ISO - 17034

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Certified Reference Material CRM

ISO 17034 Accredited
Scope: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part # 10009R
Lot # 070716
Shelf Life Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
070721
Expiration Date: Ambient (20 °C)
Recommended Storage: 4000
Nominal Concentration (µg/mL): 822-275872-11
NIST Test ID#: 5E-05 Balance Uncertainty
0.058 Mass Uncertainty

Solvent(s): Methylene chloride
Lot# 78782

Formulated By: Paul Barron
Reviewed By: Pedro L. Rentes

070716
070716

Weight(s) shown below were combined and diluted to (mL): 500.0

Compound	SMW	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (µg)	Actual Weight (µg)	Actual Conc (µg/mL)	Expanded Uncertainty (µg/mL)	CAS#	MSDS Information (Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-1845M07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	15.4	2055-02-1	N/A	en-ra 500mg/kg	
2. Naphthalene-d8	223	PR-2339M031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	15.2	1146-85-2	10 ppm (50mg/m3/8h)	en-ra 400mg/kg	
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	15.2	15067-28-2	N/A	en-ra 500mg/kg	
4. Phenanthrene-d10	248	PR-2305M081711PM1	4000	98	0.2	2.04093	2.04135	4000.8	15.4	1517-25-2	N/A	N/A	
5. Chrysene-d12	92	I-19290	4000	98	0.2	2.04093	2.04150	4001.3	15.4	1719-03-5	N/A	N/A	
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04155	4001.2	15.4	1503-58-3	N/A	N/A	

Run 35, "P10009R L070716 [4000µg/mL in MeCl2]"
Run Length: 40.00 min, 23900 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070716-GC/MS", Method "GC-MS".
Analyzed using Method "GC-MS".

Comments:
GC-MS Analysis by Melissa Siciric
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 0.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) = 300 mL, Oven Temp 1 = 50°C (1 min).
Rise = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes, Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Peak No. Name FID RT (min)

1	1,4-Dichlorobenzene-d4	8.34
2	Naphthalene-d8	8.98
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Printed: 5/8/2019, 12:55:50 PM

Part # 10009R Lot # 041219 1 of 2

Formulator
Reviewer

Actual
Concentration
Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

Part Number: **72072**
Lot Number: **101122**
Description: **n-Tetracosane-d50**

Solvent(s):
Methylene chloride
Lot#
105345

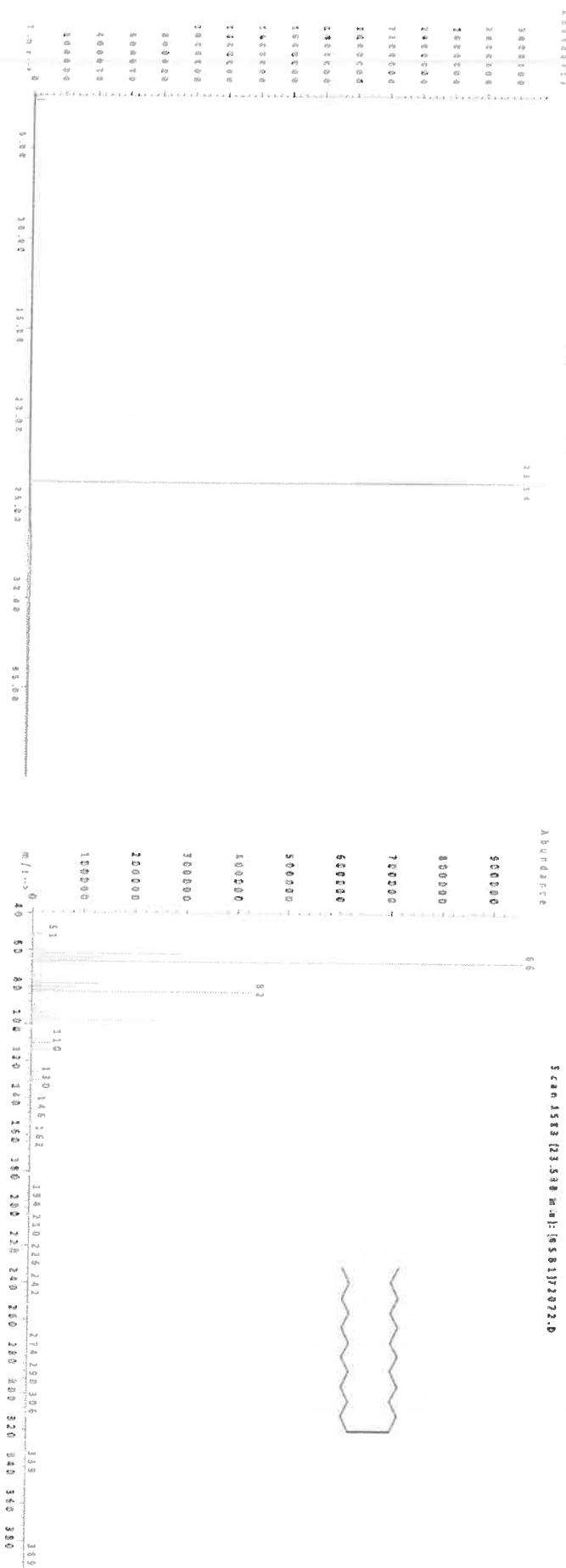
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

Formulated By:	<i>Prashant Chauhan</i>	101122
Reviewed By:	<i>Pedro L. Rentas</i>	101122
	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%D)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
1. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N., and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1996).

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within $\pm 0.5\%$ of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: UCRM is the expanded uncertainty which utilizes a $K = 2$ (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

Page 1 of 2



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Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019



ABSOLUTE STANDARDS, INC.

ISO - 17034



Understanding the Certified Weight Report



Each Certified Reference Material (CRM) is supported by a Certified Weight Report. Assigned values for concentrations and associated uncertainties are based upon NIST traceable masses & volumes used in production.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scope: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part # 10009R
Lot # 070716
Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
070721
Expiration Date:
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11
Weight(s) shown below were combined and diluted to (mL): 500.0

Solvent(s): Methylene chloride
Lot# 78782

Formulated By: Paul Barron
Reviewed By: Pedro L. Rentes

070716
070716

MSDS Information
(Solvent Safety Info. On Attached pg.)

Compound	SMW	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty (%)	Target Weight (µg)	Actual Weight (µg)	Actual Conc (µg/mL)	Expanded Uncertainty (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-1845M07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	15.4	2055-02-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-2339M031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	15.2	1146-85-2	10 ppm (50mg/m3)(H)	or-rat 400mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	15.2	15067-28-2	N/A	or-rat 500mg/kg
4. Phenanthrene-d10	248	PR-2305M081711PM1	4000	98	0.2	2.04093	2.04136	4000.8	15.4	1517-25-2	N/A	N/A
5. Chrysene-d12	92	I-19290	4000	98	0.2	2.04093	2.04159	4001.3	15.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04156	4001.2	15.4	1503-58-3	N/A	N/A

Run 35, "P10009R L070716 [4000µg/mL in MeCl2]"
Run Length: 40.00 min, 23900 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070716-GC/MS", Method "GC-MS".
Analyzed using Method "GC-MS".

Comments:
GC-MS Analysis by Melissa Siciric
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 0.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) = 300 mL, Oven Temp 1 = 50°C (1 min).
Rise = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes, Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = sData Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Peak No. Name FID RT (min)

1	1,4-Dichlorobenzene-d4	8.34
2	Naphthalene-d8	8.98
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Printed: 5/8/2019, 12:55:50 PM

Formulator
Reviewer

Actual
Concentration

Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

Part Number: **72072**
Lot Number: **101122**
Description: **n-Tetracosane-d50**

Solvent(s):
Methylene chloride
Lot#
105345

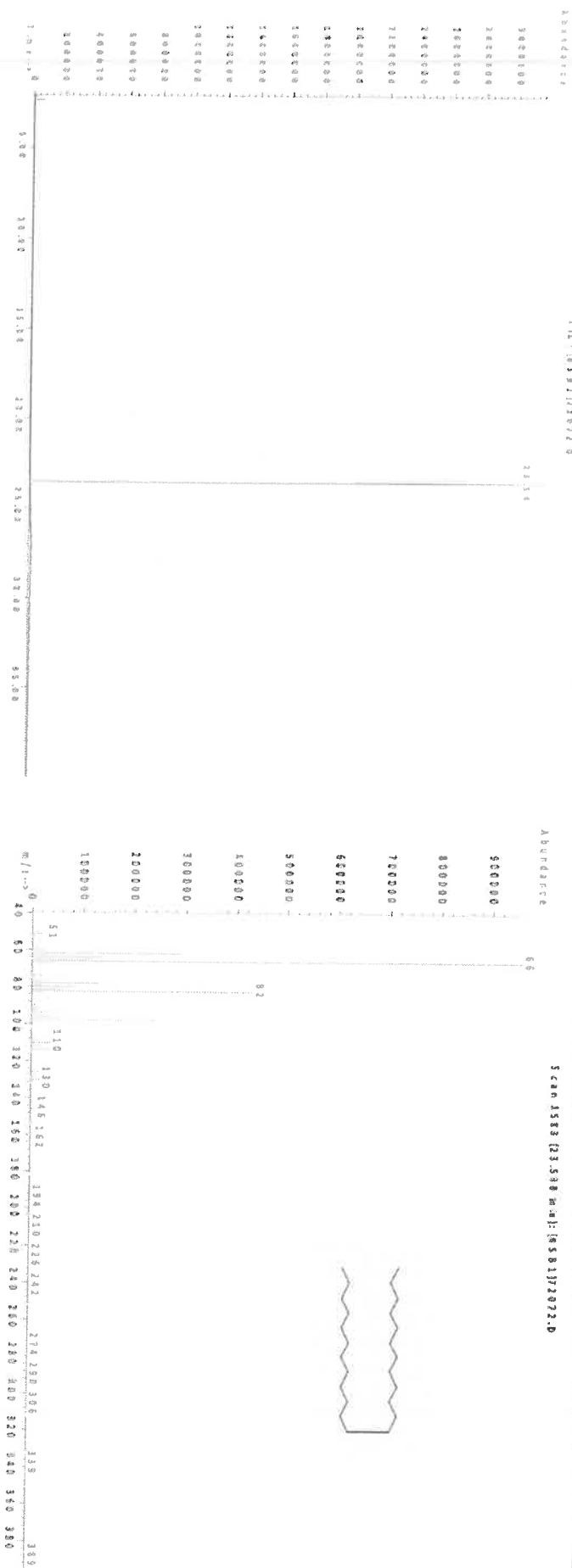
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13496
07/24/24
X.F.

Formulated By:	<i>Prashant Chauhan</i>	101122
Reviewed By:	<i>Pedro L. Rentas</i>	101122
DATE		DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
1. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N., and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within $\pm 0.5\%$ of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: UCRM is the expanded uncertainty which utilizes a $K = 2$ (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

Page 1 of 2



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Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: StephenArpie@AbsoluteStandards.com
Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019



ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

Each Certified Reference Material (CRM) is supported by a Certified Weight Report. Assigned values for concentrations and associated uncertainties are based upon NIST traceable masses & volumes used in production.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scope: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part # 10009R
Lot # 070716
Shelf Life Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
070721
Expiration Date: Ambient (20 °C)
Recommended Storage: 4000
Nominal Concentration (µg/mL): 822-275872-11
NIST Test ID#: 5E-05 Balance Uncertainty
0.058 Mass Uncertainty

Solvent(s): Methylene chloride
Lot# 78782

Formulated By: Paul Barron
Reviewed By: Pedro L. Rentes

070716
070716

Weight(s) shown below were combined and diluted to (mL): 500.0

Compound	SMW	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (µg)	Actual Weight (µg)	Actual Conc (µg/mL)	Expanded Uncertainty (µg/mL)	CAS#	MSDS Information (Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-1845M07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	15.4	2055-02-1	N/A	en-ra 500mg/kg	
2. Naphthalene-d8	223	PR-2339M031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	15.2	1146-85-2	10 ppm (50mg/m3/8h)	en-ra 400mg/kg	
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	15.2	15067-28-2	N/A	en-ra 500mg/kg	
4. Phenanthrene-d10	248	PR-2305M081711PM1	4000	98	0.2	2.04093	2.04135	4000.8	15.4	1517-25-2	N/A	N/A	
5. Chrysene-d12	92	I-19290	4000	98	0.2	2.04093	2.04150	4001.3	15.4	1719-03-5	N/A	N/A	
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04155	4001.2	15.4	1503-58-3	N/A	N/A	

Run 35, "P10009R L070716 [4000µg/mL in MeCl2]"
Run Length: 40.00 min, 23900 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070716-GC/MS", Method "GC-MS".
Analyzed using Method "GC-MS".

Comments:
GC-MS Analysis by Melissa Siciric
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 0.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) = 300 mL, Oven Temp 1 = 50°C (1 min).
Rise = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes, Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Peak No. Name FID RT (min)

1	1,4-Dichlorobenzene-d4	8.34
2	Naphthalene-d8	8.98
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Printed: 5/8/2019, 12:55:50 PM

Part # 10009R Lot # 041219 1 of 2

Formulator
Reviewer

Actual
Concentration

Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

Part Number: **72072**
Lot Number: **101122**
Description: **n-Tetracosane-d50**

Solvent(s):
Methylene chloride
Lot#
105345

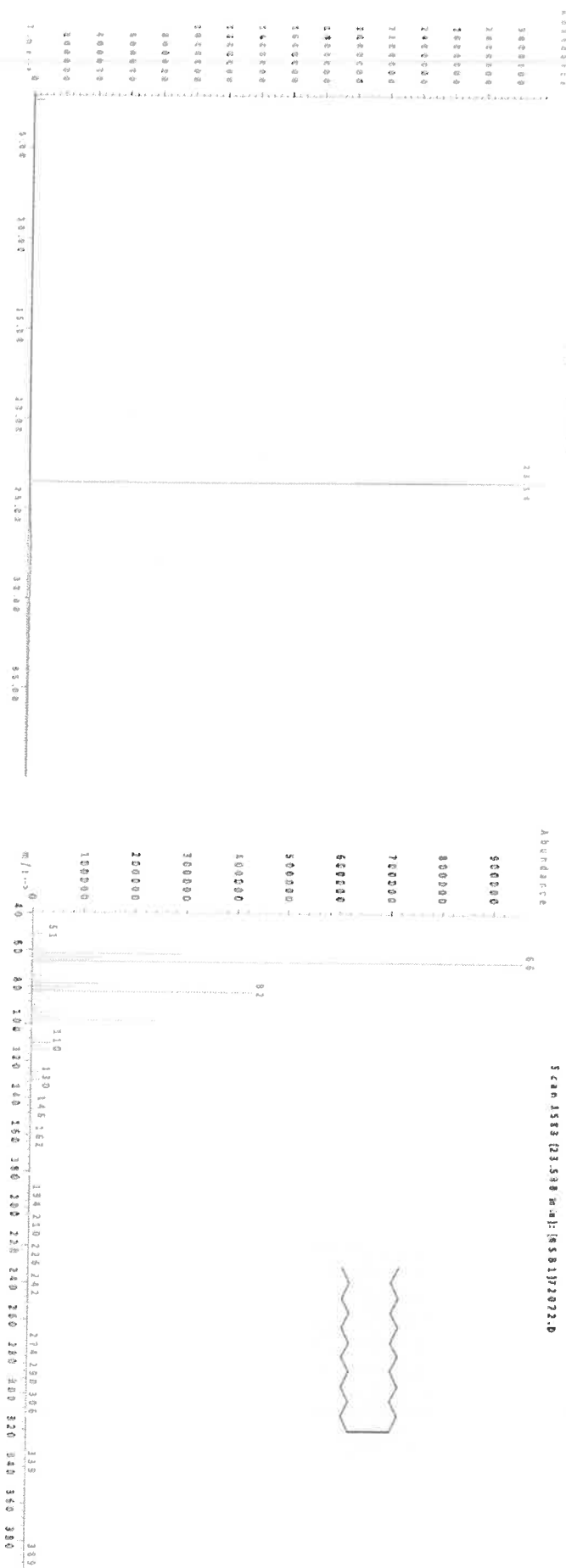
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13496
07/24/24
X.F.

Formulated By:	<i>Prashant Chauhan</i>	101122
Reviewed By:	<i>Pedro L. Rentas</i>	101122
	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%D)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
1. n-Tetracosane-d50	2072	PR-26606	1000	98.7	0.2	99.0	0.20471	0.20482	1000.6	4.1	16416-32-3	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N., and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1996).

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

Conformance: The "Certificate of Analysis" is applicable for CRM's, fulfilling the requirements in the current version of: ISO 17034.

Health & Safety: See the attached SDS & Certified Weight Report before use.

Intended Use: This Certified Reference Material (CRM) is intended primarily for use in the characterization of unknowns and the establishment of analyzer or instrument response factors by qualified personnel. Typical instrumental organic assays include: GC & LC, and inorganic assays include: ICP & AA. This product is for laboratory use only.

Characterization Values: In production, gravimetric/volumetric readings are certified to be within $\pm 0.5\%$ of the stated value & are valid between 18 °C & 30 °C. The measured characterization of uncertainty can be found on the Certified Weight Report. All product weighings are performed on an analytical balance that is calibrated to NIST Traceable standard weights & certified by the manufacturer. The volumetric glassware used is Class "A" type & conforms to ASTM E-288 unless otherwise stated. The solvents & compounds used are of the highest practical purity & typically meet or exceed ACS Reagent Grade & ACS Standards Grade specifications. The expanded uncertainty field on Certified Wt. Report represents CRM uncertainty as described in ISO 17034.

Homogeneity: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Verification: Uncertainties that are due to the analytical procedure(s) are within $\pm 5\%$ unless specifically stated on the Certified Wt. Report.

Stability: Uncertainties for short-term stability are determined in accordance with ISO 17034. Long-term stability is determined in accordance with ISO 17034. The shelf life is limited by the stated expiration for each product. Expiration dates and additional technical information can be found on the Certified Weight Report and on the product label.

Uncertainty: UCRM is the expanded uncertainty which utilizes a $K = 2$ (coverage factor of 2), in accordance with ISO 17034 as listed above (Characterization, Homogeneity, Verification, and Stability).

Purity & Identity: Organic solutions are typically formulated from neat materials whose purity & identity have been characterized by GC-MSD & LC-PDA techniques with comparison to a NIST Traceable library of mass spectra when available. Additional characterization techniques may include but are not limited to: refractive index measurements of liquids, melting point measurements of solids, & GC-FID, ECD, PID, ELCD, LC-PDA measurements for purity. Inorganic solutions & neats are typically formulated from materials whose purity & identity have been characterized by ICPMS with comparison to a NIST SRM® when available. Additional characterization techniques may include but are not limited to: titrimetry, and densitometry.

Storage: Sealed ampules and other containers should be stored in the dark and at temperatures indicated on the Certified Weight Report or product label. Certification by Absolute Standards, Inc. is typically valid for 3 years from the date of manufacture. Each product will show its own expiration date as the limit of certification. Certified values are not applicable to opened ampules or for any materials stored in re-sealable containers. Please see the "Certified Weight Report" for specific values and any exceptions.

Usage: Ampules & bottles should be brought to room temperature (18 to 30 °C) before opening. Sonication may be required for high concentration solutions or solutions that may precipitate during storage. After opening, care should be exercised to avoid concentration changes owing to evaporation of the solvent or essential components. We recommend that a suitable re-sealable container be available before opening an ampule to decant the standard for short-term storage and use.

Minimum Sample Size: 0.5 uL for analytical applications.

Legal Notice: Warranty of products are as described when shipped. No warranty as to fitness for any particular application is expressed or implied. Errant shipments and/or quality claims must be made within 10 days of receipt. Liability is limited solely to the replacement of the product or refund of purchase price.

Certifying Officer: Stephen J. Arpie, M.S., Director General

Page 1 of 2



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Document Identification: Certificate of Analysis Rev 14, Date Issued: 05/30/2019



ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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Absolute Standards, Inc.
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www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scope: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part # 10009R
Lot # 070716
Shelf Life Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
070721
Expiration Date: Ambient (20 °C)
Recommended Storage: 4000
Nominal Concentration (µg/mL): 822-275872-11
NIST Test ID#: 5E-05 Balance Uncertainty
0.058 Mass Uncertainty

Solvent(s): Methylene chloride
Lot# 78782

Formulated By: Paul Barron
Reviewed By: Pedro L. Rentes

070716
070716

Weight(s) shown below were combined and diluted to (mL): 500.0

Compound	SMW	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (µg)	Actual Weight (µg)	Actual Conc (µg/mL)	Expanded Uncertainty (µg/mL)	CAS#	MSDS Information (Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-1845M07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	15.4	2055-02-1	N/A	N/A	or-nr 500mg/kg
2. Naphthalene-d8	223	PR-2339M031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	15.2	1146-85-2	10 ppm (50mg/m3/8h)	N/A	or-nr 400mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	15.2	15067-28-2	N/A	N/A	or-nr 500mg/kg
4. Phenanthrene-d10	248	PR-2305M081711PM1	4000	98	0.2	2.04093	2.04135	4000.8	15.4	1517-25-2	N/A	N/A	N/A
5. Chrysene-d12	92	I-19290	4000	98	0.2	2.04093	2.04150	4001.3	15.4	1719-03-5	N/A	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04155	4001.2	15.4	1503-58-3	N/A	N/A	N/A

Run 35, "P10009R L070716 [4000µg/mL in MeCl2]"
Run Length: 40.00 min, 23900 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070716-GC/MS", Method "GC-MS".
Analyzed using Method "GC-MS".

Comments:
GC-MS Analysis by Melissa Siciric
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 0.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) = 300 mL, Oven Temp 1 = 50°C (1 min).
Rise = 10°C/min, Oven Temp 2 = 300°C (14 min). Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = sData Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Peak No. Name FID RT (min)

1	1,4-Dichlorobenzene-d4	8.34
2	Naphthalene-d8	8.98
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

Printed: 5/8/2019, 12:55:50 PM

Formulator
Reviewer

Actual
Concentration
Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

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CERTIFIED WEIGHT REPORT

Part Number: **72072**
Lot Number: **101122**
Description: **n-Tetracosane-d50**

Solvent(s):
Methylene chloride
Lot#
105345

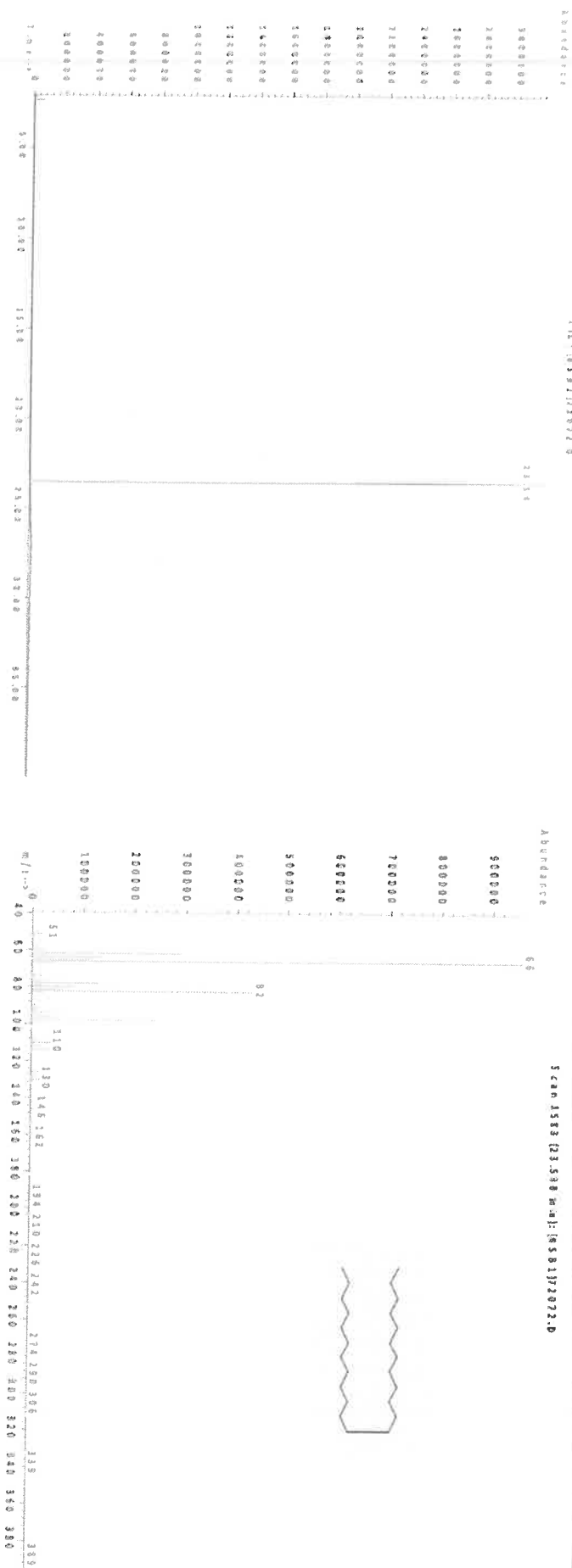
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

Formulated By:	<i>Prashant Chauhan</i>	101122
Reviewed By:	<i>Pedro L. Rentas</i>	101122
	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
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1. n-Tetracosane-d50 2072 PR-26606 1000 98.7 0.2 99.0 0.20471 0.20482 1000.6 4.1 16416-32-3 N/A
Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N., and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: CDM SMITH
ADDRESS: 110 FIELDCREST AVE #8 6TH FLOOR
CITY EDISON STATE: NJ ZIP: 08837
ATTENTION: MARCIE ENCINAS
PHONE: 732-590-4679 FAX: 732-225-7851

CLIENT PROJECT INFORMATION

PROJECT NAME: SOUTH RIVER WM REPLACEMENT
PROJECT NO.: 302781 LOCATION: SOUTH RIVER, NJ
PROJECT MANAGER: MARCIE ENCINAS
e-mail: ENCINASMA@CDMSMITH.COM
PHONE: 732-590-4679 FAX: 732-225-7851

CLIENT BILLING INFORMATION

BILL TO: CDM SMITH PO#:
ADDRESS: 110 FIELDCREST AVE #8 6TH FLOOR
CITY EDISON STATE: NJ ZIP: 08837
ATTENTION: MARCIE ENCINAS PHONE: 732-590-4679

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ 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.
TCL VOC TCL SVOC METALS PCB PESTICIDES HERBICIDES DRUGS FULL TCLP RCRA CHARAL

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	TP-11	SOIL		X	5/13/25	0830	6	X	X	X	X	X	X	X			E
2.	TP-29	SOIL		X	5/13/25	1010	6	X	X	X	X	X	X	X			E
3.	TP-29-99	SOIL		X	5/13/25	1010	6	X	X	X	X	X	X	X			E
4.	TP-24	SOIL		X	5/13/25	1130	18	X	X	X	X	X	X	X			E; MS/MSD
5.	TP-37	SOIL		X	5/13/25	1250	6	X	X	X	X	X	X	X			E
6.	TP-32	SOIL		X	5/13/25	1330	6	X	X	X	X	X	X	X			E
7.	COMP-1	SOIL	X		5/13/25	1405	4								X	X	E
8.	FB-05132025	ADUERS		X	5/13/25	1445	10	X	X	X	X	X	X	X			E, A, B
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. [Signature]	DATE/TIME: 5/13/25 1505	RECEIVED BY: [Signature] 1505	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP. 3.2 °C
RELINQUISHED BY SAMPLER: 2. [Signature]	DATE/TIME:	RECEIVED BY:	Comments:
RELINQUISHED BY SAMPLER: 3. [Signature]	DATE/TIME: 5-13-25	RECEIVED BY:	

Page ____ of CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete ☐ YES ☐ 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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2032	CAMP02	Order Date : 5/13/2025 4:01:00 PM	Project Mgr :
Client Name : CDM Smith		Project Name : South River WM Replacem	Report Type : Level 1
Client Contact : Marcie Ann Encinas		Receive DateTime : 5/13/2025 4:20:00 PM	EDD Type : EXCEL NOCLEANUP
Invoice Name : CDM Smith		Purchase Order :	Hard Copy Date :
Invoice Contact : Marcie Ann Encinas			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2032-01	TP-11	Solid	05/13/2025	08:30	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2032-02	TP-29	Solid	05/13/2025	10:10	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2032-03	TP-29-99	Solid	05/13/2025	10:10	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2032-04	TP-24	Solid	05/13/2025	11:30	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2032-05	Q2032-04MS	Solid	05/13/2025	11:30	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2032-06	Q2032-04MSD	Solid	05/13/2025	11:30	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2032-07	TP-37	Solid	05/13/2025	12:50	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2032-08	TP-32	Solid	05/13/2025	13:30					

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2032	CAMP02	Order Date : 5/13/2025 4:01:00 PM	Project Mgr :
Client Name : CDM Smith		Project Name : South River WM Replacem	Report Type : Level 1
Client Contact : Marcie Ann Encinas		Receive Date/Time : 5/13/2025 4:20:00 PM	EDD Type : EXCEL NOCLEANUP
Invoice Name : CDM Smith		Purchase Order :	Hard Copy Date :
Invoice Contact : Marcie Ann Encinas			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2032-11	FB-05132025	Water	05/13/2025	14:45	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2032-12	TB	Water	05/13/2025	00:00	VOC-TCLVOA-10		8260-Low	10 Bus. Days	
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	

Relinquished By :

Date / Time : 5/14/25 0940

Received By :

Date / Time :

Storage Area : VOA Refridgerator Room

9:50 Rg # 4
Rg # 6
B22