

Cover Page

Order ID : Q2484

Project ID : South River WM Replacement

Client : CDM Smith

Lab Sample Number

Q2484-01
Q2484-02
Q2484-03
Q2484-04
Q2484-05
Q2484-06

Client Sample Number

TP-58
TP-57
TP-64
TP-107
TP-106
TP-104

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: 7/11/2025

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 #: Q2484

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: PRATHA PARGHI

Date: 07/11/2025

LAB CHRONICLE

OrderID:	Q2484	OrderDate:	7/2/2025 9:23:00 AM
Client:	CDM Smith	Project:	South River WM Replacement
Contact:	Marcie Ann Encinas	Location:	--Select--,A12,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2484-01	TP-58	SOIL			07/01/25			07/01/25
			Diesel Range Organics	8015D		07/02/25	07/03/25	
			Gasoline Range Organics	8015D			07/03/25	
			PCB	8082A		07/02/25	07/02/25	
			Pesticide-TCL	8081B		07/02/25	07/02/25	
Q2484-02	TP-57	SOIL			07/01/25			07/01/25
			Diesel Range Organics	8015D		07/02/25	07/02/25	
			Gasoline Range Organics	8015D			07/03/25	
			PCB	8082A		07/02/25	07/02/25	
			Pesticide-TCL	8081B		07/02/25	07/02/25	
Q2484-03	TP-64	SOIL			07/01/25			07/01/25
			Diesel Range Organics	8015D		07/02/25	07/03/25	
			Gasoline Range Organics	8015D			07/03/25	
			PCB	8082A		07/02/25	07/02/25	
			Pesticide-TCL	8081B		07/02/25	07/02/25	
Q2484-04	TP-107	SOIL			07/01/25			07/01/25
			Diesel Range Organics	8015D		07/02/25	07/02/25	
			PCB	8082A		07/02/25	07/02/25	
			Pesticide-TCL	8081B		07/02/25	07/02/25	
Q2484-05	TP-106	SOIL			07/01/25			07/01/25
			Diesel Range Organics	8015D		07/02/25	07/02/25	
			Gasoline Range Organics	8015D			07/03/25	
			PCB	8082A		07/02/25	07/02/25	
			Pesticide-TCL	8081B		07/02/25	07/02/25	
Q2484-06	TP-104	SOIL			07/01/25			07/01/25
			Diesel Range Organics	8015D		07/02/25	07/02/25	
			Gasoline Range Organics	8015D			07/03/25	

LAB CHRONICLE

PCB	8082A	07/02/25	07/02/25
Pesticide-TCL	8081B	07/02/25	07/02/25



QC SUMMARY

SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Alliance

Client: CDM Smith

Lab Code: ACE

SDG No.: Q2484

CLIENT ID	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FF016073.D	80				0
PIBLK-FF016085.D	88				0
PIBLK-FG016199.D	85				0
PIBLK-FG016207.D	84				0
PIBLK-FG016213.D	84				0
PIBLK-FG016217.D	104				0
PIBLK-FG016222.D	83				0
PB168701BL	79				0
PB168701BS	76				0
TP-67MS	42				0
TP-67MSD	39				0
TP-58	104				0
TP-57	52				0
TP-64	26 *				1
TP-107	38				0
TP-106	49				0
TP-104	39				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: Alliance

Client: CDM Smith

Lab Code: ACE

SDG No: Q2484

Client Sample ID : TP-67MS

Datafile: FF016081.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS(%)
DRO	7420	8110	10715	35%	*	68-131

SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	<u>Alliance</u>	Client:	<u>CDM Smith</u>
Lab Code:	<u>ACE</u>	SDG No:	<u>Q2484</u>
Client Sample ID :	<u>TP-67MSD</u>	Datafile:	<u>FF016082.D</u>

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS(%)
DRO	7427	8110	10934	38%	*	68-131

MS/MSD % Recovery RPD : 7.9

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

Lab Name: Alliance

Client: CDM Smith

Lab Code: ACE

SDG No: Q2484

Client Sample ID : PB168701BS

Datafile: FF016076.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS (%)
DRO	6660	0	4984	75	68-131

4B
METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PB168701BL

Lab Name: Alliance

Contract: CAMP02

Lab Code: ACE

SDG NO.: Q2484

Lab File ID: FF016075.D

Lab Sample ID: PB168701BL

Instrument ID: FF

Date Extracted: 07/02/2025

Matrix: (soil/water) Soil

Date Analyzed: 07/02/25

Level: (low/med) low

Time Analyzed: 19:06

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

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168701BS	PB168701BS	FF016076.D	07/02/25
TP-67MS	Q2458-04MS	FF016081.D	07/02/25
TP-67MSD	Q2458-04MSD	FF016082.D	07/02/25
TP-57	Q2484-02	FG016206.D	07/02/25
TP-107	Q2484-04	FG016210.D	07/02/25
TP-106	Q2484-05	FG016211.D	07/02/25
TP-104	Q2484-06	FG016212.D	07/02/25
TP-58	Q2484-01	FG016220.D	07/03/25
TP-64	Q2484-03	FG016221.D	07/03/25

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	07/01/25
Project:	South River WM Replacement	Date Received:	07/01/25
Client Sample ID:	TP-58	SDG No.:	Q2484
Lab Sample ID:	Q2484-01	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	86.2
Sample Wt/Vol:	30.01	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
FG016220.D	5	07/02/25 09:17	07/03/25 10:47	PB168701

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	84500		980	9660	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	4.15		37 - 130	104%	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\FG070325\
Data File : FG016220.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 10:47
Operator : YP\AJ
Sample : Q2484-01 5X
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:29:17 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.207	487081	4.152 ug/ml
Target Compounds			

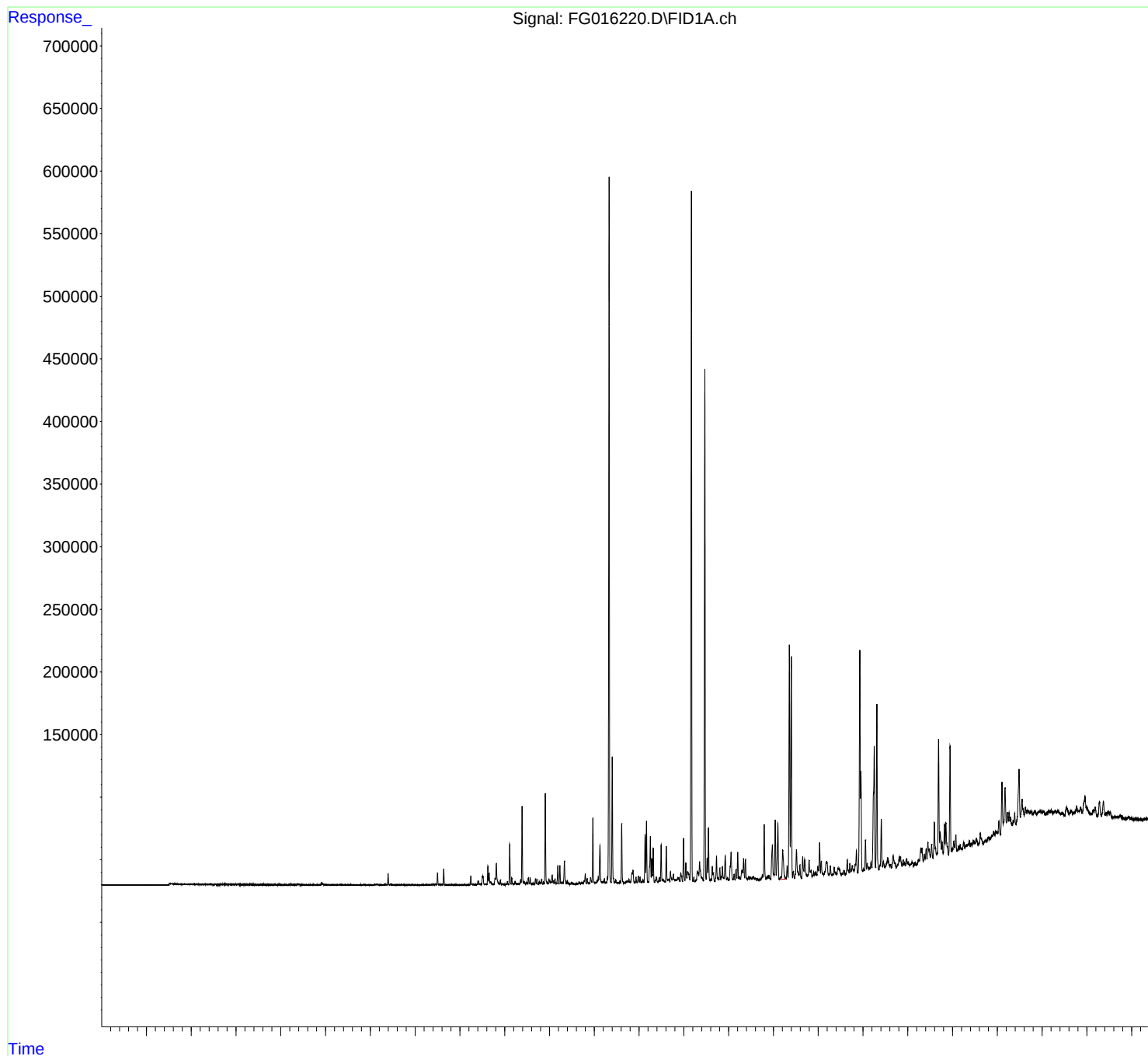
(f)=RT Delta > 1/2 Window

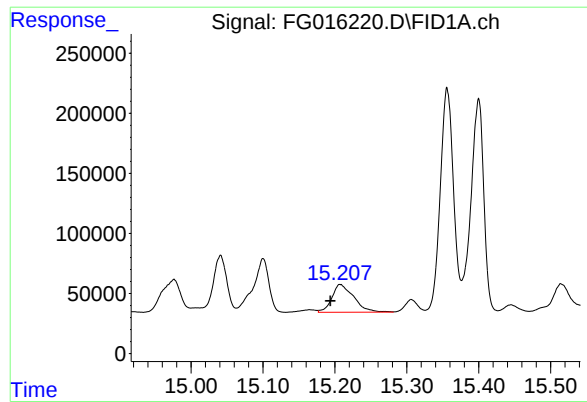
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\
Data File : FG016220.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 10:47
Operator : YP\AJ
Sample : Q2484-01 5X
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:29:17 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.207 min
Delta R.T.: 0.014 min
Response: 487081
Conc: 4.15 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\

Data File : FG016220.D

Signal(s) : FID1A.ch

Acq On : 03 Jul 2025 10:47

Sample : Q2484-01 5X

Misc :

ALS Vial : 71 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M

Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	8.244	8.215	8.266	PH	7252	73001	1.16%	0.127%
2	8.270	8.266	8.273	HH	279	1033	0.02%	0.002%
3	8.276	8.273	8.323	HH	289	3125	0.05%	0.005%
4	8.346	8.323	8.366	PH	430	3491	0.06%	0.006%
5	8.405	8.366	8.433	PH	2900	42298	0.67%	0.073%
6	8.448	8.433	8.464	HH	592	7540	0.12%	0.013%
7	8.502	8.464	8.510	HH	6931	73139	1.16%	0.127%
8	8.517	8.510	8.559	HH	6614	69696	1.10%	0.121%
9	8.576	8.559	8.591	HH	528	7073	0.11%	0.012%
10	8.624	8.591	8.640	HH	14927	166679	2.64%	0.289%
11	8.652	8.640	8.669	HH	9289	95835	1.52%	0.166%
12	8.680	8.669	8.734	HH	2417	45761	0.73%	0.079%
13	8.740	8.734	8.755	HH	364	3501	0.06%	0.006%
14	8.786	8.755	8.794	HH	5100	66212	1.05%	0.115%
15	8.812	8.794	8.860	HH	17023	257824	4.08%	0.448%
16	8.865	8.860	8.884	HH	1241	13116	0.21%	0.023%
17	8.903	8.884	8.935	HH	3977	46140	0.73%	0.080%
18	8.952	8.935	8.969	HH	563	7816	0.12%	0.014%
19	8.993	8.969	8.999	HH	265	3966	0.06%	0.007%
20	9.016	8.999	9.026	HH	235	3107	0.05%	0.005%
21	9.029	9.026	9.040	HH	216	1918	0.03%	0.003%
22	9.060	9.040	9.085	HH	2642	30118	0.48%	0.052%
23	9.112	9.085	9.137	HH	32536	324821	5.15%	0.564%

24	9.157	9.137	9.197	HH	5355	67503	1.07%	0.117%
25	9.228	9.197	9.246	HH	2425	37335	0.59%	0.065%
26	9.250	9.246	9.266	HH	1140	10509	0.17%	0.018%
27	9.276	9.266	9.291	HH	800	9270	0.15%	0.016%
28	9.306	9.291	9.319	HH	749	10357	0.16%	0.018%
29	9.355	9.319	9.367	HH	3964	54660	0.87%	0.095%
30	9.388	9.367	9.415	HH	62640	634787	10.06%	1.102%
31	9.429	9.415	9.453	HH	2551	37415	0.59%	0.065%
32	9.482	9.453	9.498	HH	1882	30035	0.48%	0.052%
33	9.528	9.498	9.548	HH	5363	70329	1.11%	0.122%
34	9.568	9.548	9.607	HH	5491	73365	1.16%	0.127%
35	9.625	9.607	9.659	HH	1030	18472	0.29%	0.032%
36	9.686	9.659	9.702	HH	4752	57439	0.91%	0.100%
37	9.717	9.702	9.736	HH	4239	46335	0.73%	0.080%
38	9.742	9.736	9.744	HH	575	2550	0.04%	0.004%
39	9.770	9.744	9.787	HH	2488	34127	0.54%	0.059%
40	9.823	9.787	9.844	HH	4346	72723	1.15%	0.126%
41	9.864	9.844	9.880	HH	2103	29646	0.47%	0.051%
42	9.907	9.880	9.960	HH	72830	785881	12.45%	1.365%
43	9.987	9.960	10.001	HH	4291	62785	0.99%	0.109%
44	10.005	10.001	10.018	HH	2832	25071	0.40%	0.044%
45	10.029	10.018	10.039	HH	2720	28441	0.45%	0.049%
46	10.059	10.039	10.077	HH	7780	108203	1.71%	0.188%
47	10.087	10.077	10.103	HH	3077	34725	0.55%	0.060%
48	10.122	10.103	10.152	HH	4598	69035	1.09%	0.120%
49	10.186	10.152	10.209	HH	15108	188130	2.98%	0.327%
50	10.232	10.209	10.257	HH	15429	174919	2.77%	0.304%
51	10.280	10.257	10.299	HH	1993	38804	0.61%	0.067%
52	10.333	10.299	10.377	HH	18877	283751	4.50%	0.493%
53	10.396	10.377	10.419	HH	3452	47765	0.76%	0.083%
54	10.434	10.419	10.455	HH	1123	18895	0.30%	0.033%
55	10.497	10.455	10.522	HH	1458	37417	0.59%	0.065%
56	10.534	10.522	10.559	HH	931	15231	0.24%	0.026%
57	10.565	10.559	10.577	HH	561	5999	0.10%	0.010%
58	10.607	10.577	10.621	HH	901	18107	0.29%	0.031%
59	10.628	10.621	10.639	HH	749	7830	0.12%	0.014%
60	10.661	10.639	10.694	HH	2169	43479	0.69%	0.075%
61	10.711	10.694	10.729	HH	1808	28566	0.45%	0.050%
62	10.771	10.729	10.780	HH	3202	55986	0.89%	0.097%

63	10.799	10.780	10.820	HH	8660	110660	1.75%	0.192%
64	10.839	10.820	10.876	HH	4795	78165	1.24%	0.136%
65	10.918	10.876	10.946	HH	5524	108434	1.72%	0.188%
66	10.969	10.946	11.021	HH	53389	604899	9.58%	1.050%
67	11.063	11.021	11.073	HH	3673	72757	1.15%	0.126%
68	11.089	11.073	11.100	HH	6415	76543	1.21%	0.133%
69	11.127	11.100	11.166	HH	31282	461305	7.31%	0.801%
70	11.192	11.166	11.205	HH	2397	49133	0.78%	0.085%
71	11.224	11.205	11.242	HH	4865	69704	1.10%	0.121%
72	11.261	11.242	11.274	HH	2051	34285	0.54%	0.060%
73	11.293	11.274	11.301	HH	6690	71499	1.13%	0.124%
74	11.332	11.301	11.371	HH	563606	6061037	96.03%	10.524%
75	11.401	11.371	11.444	HH	102007	1142248	18.10%	1.983%
76	11.450	11.444	11.462	HH	1887	20223	0.32%	0.035%
77	11.478	11.462	11.507	HH	3627	61452	0.97%	0.107%
78	11.525	11.507	11.550	HH	1724	38908	0.62%	0.068%
79	11.570	11.550	11.588	HH	3172	47181	0.75%	0.082%
80	11.612	11.588	11.658	HH	49005	543657	8.61%	0.944%
81	11.690	11.658	11.704	HH	1977	45486	0.72%	0.079%
82	11.733	11.704	11.747	HH	3081	65115	1.03%	0.113%
83	11.773	11.747	11.795	HH	4344	84833	1.34%	0.147%
84	11.841	11.795	11.850	HH	9813	175451	2.78%	0.305%
85	11.864	11.850	11.898	HH	11288	178740	2.83%	0.310%
86	11.931	11.898	11.952	HH	5969	105228	1.67%	0.183%
87	11.983	11.952	12.001	HH	6808	112363	1.78%	0.195%
88	12.021	12.001	12.047	HH	5869	98841	1.57%	0.172%
89	12.082	12.047	12.101	HH	3905	84662	1.34%	0.147%
90	12.135	12.101	12.150	HH	40245	474311	7.51%	0.824%
91	12.166	12.150	12.204	HH	50745	577727	9.15%	1.003%
92	12.252	12.204	12.270	HH	38605	596218	9.45%	1.035%
93	12.284	12.270	12.299	HH	20890	233881	3.71%	0.406%
94	12.316	12.299	12.341	HH	29223	355633	5.63%	0.617%
95	12.358	12.341	12.369	HH	3781	52972	0.84%	0.092%
96	12.391	12.369	12.414	HH	5857	114722	1.82%	0.199%
97	12.452	12.414	12.470	HH	5827	125578	1.99%	0.218%
98	12.493	12.470	12.515	HH	31868	380773	6.03%	0.661%
99	12.526	12.515	12.566	HH	4261	104170	1.65%	0.181%
100	12.570	12.566	12.582	HH	2608	23861	0.38%	0.041%
101	12.608	12.582	12.631	HH	30701	374069	5.93%	0.650%

102	12.642	12.631	12.651	HH	4098	46812	0.74%	0.081%
103	12.669	12.651	12.686	HH	4299	77657	1.23%	0.135%
104	12.700	12.686	12.736	HH	10361	183366	2.91%	0.318%
105	12.765	12.736	12.803	HH	8220	208101	3.30%	0.361%
106	12.818	12.803	12.829	HH	3940	55619	0.88%	0.097%
107	12.842	12.829	12.851	HH	4253	52655	0.83%	0.091%
108	12.863	12.851	12.875	HH	5805	73630	1.17%	0.128%
109	12.886	12.875	12.910	HH	5636	92208	1.46%	0.160%
110	12.932	12.910	12.969	HH	9551	209625	3.32%	0.364%
111	12.994	12.969	13.023	HH	37105	480735	7.62%	0.835%
112	13.045	13.023	13.064	HH	17509	250866	3.97%	0.436%
113	13.086	13.064	13.103	HH	10162	197888	3.14%	0.344%
114	13.109	13.103	13.131	HH	8686	113888	1.80%	0.198%
115	13.170	13.131	13.206	HH	550578	6311529	100.00%	10.959%
116	13.222	13.206	13.242	HH	6132	89839	1.42%	0.156%
117	13.259	13.242	13.269	HH	3837	51549	0.82%	0.090%
118	13.300	13.269	13.310	HH	10485	168941	2.68%	0.293%
119	13.320	13.310	13.333	HH	9646	123046	1.95%	0.214%
120	13.352	13.333	13.435	HH	18391	518847	8.22%	0.901%
121	13.469	13.435	13.497	HH	410370	4637234	73.47%	8.052%
122	13.519	13.497	13.532	HH	21245	266741	4.23%	0.463%
123	13.549	13.532	13.583	HH	45258	565971	8.97%	0.983%
124	13.602	13.583	13.615	HH	4801	78987	1.25%	0.137%
125	13.635	13.615	13.650	HH	14703	192457	3.05%	0.334%
126	13.659	13.650	13.687	HH	9549	139211	2.21%	0.242%
127	13.730	13.687	13.751	HH	23407	364998	5.78%	0.634%
128	13.762	13.751	13.778	HH	5768	81744	1.30%	0.142%
129	13.803	13.778	13.822	HH	13443	212234	3.36%	0.369%
130	13.836	13.822	13.845	HH	7063	80373	1.27%	0.140%
131	13.862	13.845	13.882	HH	14466	210041	3.33%	0.365%
132	13.888	13.882	13.898	HH	5457	51247	0.81%	0.089%
133	13.924	13.898	13.951	HH	22890	390108	6.18%	0.677%
134	13.971	13.951	14.000	HH	5422	132406	2.10%	0.230%
135	14.054	14.000	14.096	HH	26105	653688	10.36%	1.135%
136	14.122	14.096	14.141	HH	8363	161305	2.56%	0.280%
137	14.165	14.141	14.183	HH	12357	206904	3.28%	0.359%
138	14.203	14.183	14.226	HH	26004	352166	5.58%	0.611%
139	14.246	14.226	14.263	HH	5977	117499	1.86%	0.204%
140	14.298	14.263	14.316	HH	11678	275736	4.37%	0.479%

141	14.334	14.316	14.356	HH	21038	323189	5.12%	0.561%
142	14.376	14.356	14.414	HH	20370	345056	5.47%	0.599%
143	14.449	14.414	14.468	HH	6619	167007	2.65%	0.290%
144	14.486	14.468	14.508	HH	6157	127784	2.02%	0.222%
145	14.518	14.508	14.524	HH	4980	45382	0.72%	0.079%
146	14.541	14.524	14.575	HH	6697	174215	2.76%	0.302%
147	14.589	14.575	14.602	HH	5445	80003	1.27%	0.139%
148	14.612	14.602	14.628	HH	4987	71037	1.13%	0.123%
149	14.643	14.628	14.664	HH	4976	90549	1.43%	0.157%
150	14.699	14.664	14.712	HH	4449	116460	1.85%	0.202%
151	14.752	14.712	14.769	HH	7682	203584	3.23%	0.353%
152	14.795	14.769	14.831	HH	48141	695059	11.01%	1.207%
153	14.843	14.831	14.853	HH	5451	69804	1.11%	0.121%
154	14.870	14.853	14.883	HH	6465	106050	1.68%	0.184%
155	14.898	14.883	14.933	HH	7355	171572	2.72%	0.298%
156	14.976	14.933	15.000	HH	31777	669423	10.61%	1.162%
157	15.008	15.000	15.012	HH	8071	55543	0.88%	0.096%
158	15.041	15.012	15.063	HH	51898	757960	12.01%	1.316%
159	15.100	15.063	15.132	HH	49061	858761	13.61%	1.491%
160	15.165	15.132	15.176	HH	6487	145797	2.31%	0.253%
161	15.207	15.176	15.262	HH	27492	712113	11.28%	1.236%
162	15.269	15.262	15.284	HH	5042	64066	1.02%	0.111%
163	15.306	15.284	15.325	HH	15063	236588	3.75%	0.411%
164	15.356	15.325	15.376	HH	191447	2529338	40.07%	4.392%
165	15.400	15.376	15.427	HH	181891	2355559	37.32%	4.090%
166	15.445	15.427	15.470	HH	10677	200169	3.17%	0.348%
167	15.515	15.470	15.568	HH	28156	756707	11.99%	1.314%
168	15.591	15.568	15.627	HH	15872	335611	5.32%	0.583%
169	15.654	15.627	15.680	HH	22492	414754	6.57%	0.720%
170	15.699	15.680	15.749	HH	20131	517755	8.20%	0.899%
171	15.797	15.749	15.821	HH	19469	501832	7.95%	0.871%
172	15.841	15.821	15.863	HH	11417	243008	3.85%	0.422%
173	15.897	15.863	15.915	HH	9726	253376	4.01%	0.440%
174	15.936	15.915	15.966	HH	9933	274445	4.35%	0.477%
175	15.991	15.966	16.006	HH	14304	279405	4.43%	0.485%
176	16.032	16.006	16.053	HH	33557	550990	8.73%	0.957%
177	16.069	16.053	16.112	HH	18757	424932	6.73%	0.738%
178	16.116	16.112	16.124	HH	8411	59398	0.94%	0.103%
179	16.177	16.124	16.185	HH	18076	447267	7.09%	0.777%
180	16.193	16.185	16.226	HH	18442	353441	5.60%	0.614%

181	16.272	16.226	16.299	HH	14866	441287	6.99%	0.766%
182	16.321	16.299	16.335	HH	8561	175069	2.77%	0.304%
183	16.356	16.335	16.375	HH	13779	264291	4.19%	0.459%
184	16.387	16.375	16.408	HH	10071	183037	2.90%	0.318%
185	16.441	16.408	16.449	HH	13044	264444	4.19%	0.459%

186	16.459	16.449	16.472	HH	13218	176100	2.79%	0.306%
187	16.480	16.472	16.527	HH	12495	318199	5.04%	0.552%
188	16.532	16.527	16.539	HH	8424	59322	0.94%	0.103%
189	16.545	16.539	16.548	HH	8520	47228	0.75%	0.082%
190	16.574	16.548	16.606	HH	11247	325460	5.16%	0.565%

191	16.649	16.606	16.667	HH	19683	475638	7.54%	0.826%
192	16.673	16.667	16.689	HH	11726	138300	2.19%	0.240%
193	16.707	16.689	16.727	HH	16786	302545	4.79%	0.525%
194	16.760	16.727	16.782	HH	15252	419485	6.65%	0.728%

Sum of corrected areas: 57593054

FG061325.M Fri Jul 04 05:56:04 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/01/25
Project:	South River WM Replacement	Date Received:	07/01/25
Client Sample ID:	TP-57	SDG No.:	Q2484
Lab Sample ID:	Q2484-02	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	86
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
FG016206.D	1	07/02/25 09:17	07/02/25 18:06	PB168701

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	6690		196	1940	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\FG070225\
Data File : FG016206.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 18:06
Operator : YP\AJ
Sample : Q2484-02
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-57

Integration File: autoint1.e
Quant Time: Jul 03 01:23:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.203	1217704	10.381 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

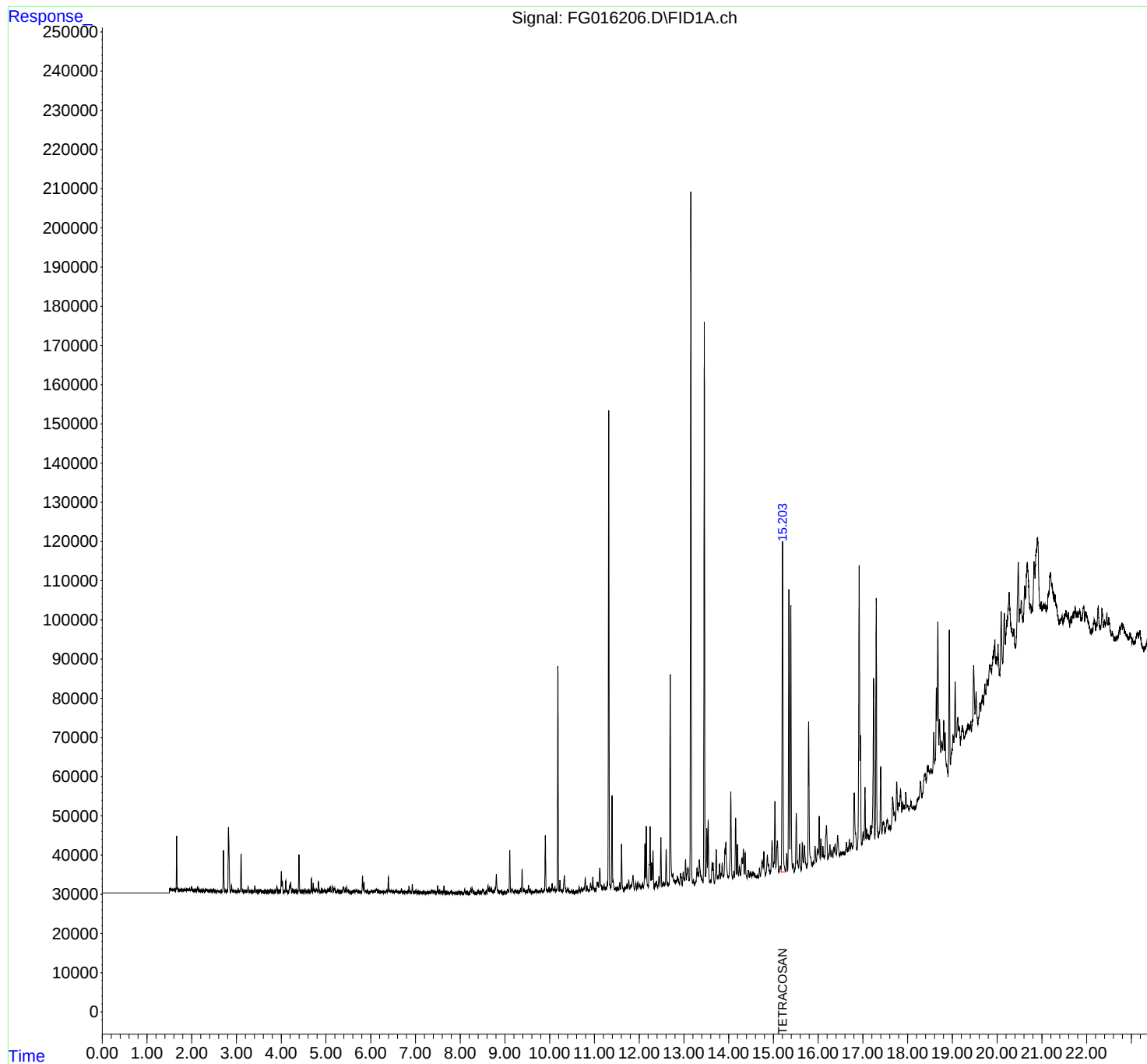
(m)=manual int.

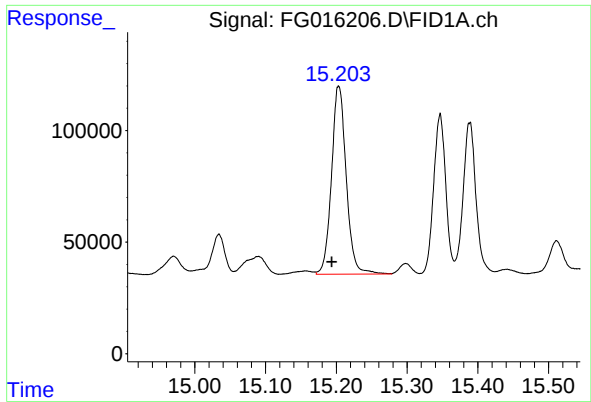
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016206.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 18:06
Operator : YP\AJ
Sample : Q2484-02
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-57

Integration File: autoint1.e
Quant Time: Jul 03 01:23:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.203 min
Delta R.T.: 0.010 min
Response: 1217704
Conc: 10.38 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-57

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016206.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 18:06
Sample : Q2484-02
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.533	4.500	4.553	BV	905	8035	0.41%	0.034%
2	4.572	4.553	4.599	PV	209	3748	0.19%	0.016%
3	4.616	4.599	4.633	VV	384	4887	0.25%	0.021%
4	4.636	4.633	4.652	VV	270	1957	0.10%	0.008%
5	4.675	4.652	4.695	VV	3542	36547	1.88%	0.154%
6	4.715	4.695	4.734	VV	2375	25937	1.34%	0.109%
7	4.748	4.734	4.769	VV	824	11122	0.57%	0.047%
8	4.788	4.769	4.815	VV	960	14244	0.73%	0.060%
9	4.834	4.815	4.856	VV	2755	31500	1.62%	0.132%
10	4.862	4.856	4.871	VV	283	1922	0.10%	0.008%
11	4.876	4.871	4.885	VV	182	1400	0.07%	0.006%
12	4.904	4.885	4.926	VV	720	10025	0.52%	0.042%
13	4.929	4.926	4.946	VV	295	2891	0.15%	0.012%
14	4.961	4.946	4.976	VV	693	7522	0.39%	0.032%
15	4.989	4.976	5.011	VV	497	5809	0.30%	0.024%
16	5.042	5.011	5.055	VV	586	8479	0.44%	0.036%
17	5.067	5.055	5.079	VV	1023	9817	0.51%	0.041%
18	5.096	5.079	5.115	VV	1531	16301	0.84%	0.069%
19	5.139	5.115	5.161	VV	1650	21928	1.13%	0.092%
20	5.179	5.161	5.189	VV	1178	12298	0.63%	0.052%
21	5.198	5.189	5.225	VV	980	11374	0.59%	0.048%
22	5.232	5.225	5.238	VV	182	1027	0.05%	0.004%
23	5.262	5.238	5.281	VV	938	11278	0.58%	0.047%
24	5.292	5.281	5.321	VV	419	6279	0.32%	0.026%
25	5.354	5.321	5.367	VV	575	8928	0.46%	0.038%
26	5.386	5.367	5.418	VV	1518	26623	1.37%	0.112%
27	5.433	5.418	5.454	VV	988	13095	0.67%	0.055%
28	5.467	5.454	5.485	VV	1423	14831	0.76%	0.062%
29	5.496	5.485	5.516	VV	730	8247	0.42%	0.035%
30	5.524	5.516	5.542	VV	299	2492	0.13%	0.010%
31	5.556	5.542	5.577	VV	192	2222	0.11%	0.009%
32	5.621	5.577	5.646	VV	761	13438	0.69%	0.056%
33	5.676	5.646	5.686	VV	676	10689	0.55%	0.045%
34	5.695	5.686	5.724	VV	771	9345	0.48%	0.039%
35	5.744	5.724	5.753	VV	347	4298	0.22%	0.018%
36	5.762	5.753	5.779	VV	277	2942	0.15%	0.012%

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37	5.784	5.779	5.788	PV	147	554	0.03%	0.002%
38	5.818	5.788	5.835	VV	4329	46251	2.38%	0.194%
39	5.850	5.835	5.868	VV	2696	27682	1.43%	0.116%
40	5.880	5.868	5.908	VV	618	9153	0.47%	0.038%
41	5.920	5.908	5.951	VV	817	9194	0.47%	0.039%
42	5.954	5.951	5.986	VV	174	2689	0.14%	0.011%
43	6.012	5.986	6.035	VV	807	12827	0.66%	0.054%
44	6.045	6.035	6.073	VV	555	8696	0.45%	0.037%
45	6.084	6.073	6.098	VV	406	5075	0.26%	0.021%
46	6.115	6.098	6.128	VV	854	11107	0.57%	0.047%
47	6.135	6.128	6.158	VV	1066	11395	0.59%	0.048%
48	6.175	6.158	6.179	VV	424	4171	0.21%	0.018%
49	6.184	6.179	6.199	VV	487	4551	0.23%	0.019%
50	6.210	6.199	6.228	VV	646	6664	0.34%	0.028%
51	6.263	6.228	6.286	VV	509	10812	0.56%	0.045%
52	6.299	6.286	6.323	VV	404	6126	0.32%	0.026%
53	6.358	6.323	6.376	VV	726	13950	0.72%	0.059%
54	6.395	6.376	6.430	VV	4097	50470	2.60%	0.212%
55	6.436	6.430	6.441	VV	524	3161	0.16%	0.013%
56	6.449	6.441	6.460	VV	567	6005	0.31%	0.025%
57	6.465	6.460	6.484	VV	667	6735	0.35%	0.028%
58	6.501	6.484	6.526	VV	616	9465	0.49%	0.040%
59	6.542	6.526	6.551	VV	457	5348	0.28%	0.022%
60	6.565	6.551	6.576	VV	548	6745	0.35%	0.028%
61	6.582	6.576	6.613	VV	491	6937	0.36%	0.029%
62	6.629	6.613	6.638	VV	360	4086	0.21%	0.017%
63	6.649	6.638	6.666	VV	385	4966	0.26%	0.021%
64	6.692	6.666	6.716	VV	971	15579	0.80%	0.065%
65	6.723	6.716	6.730	VV	288	2260	0.12%	0.010%
66	6.734	6.730	6.753	VV	371	4205	0.22%	0.018%
67	6.760	6.753	6.767	VV	404	2843	0.15%	0.012%
68	6.769	6.767	6.792	VV	398	4323	0.22%	0.018%
69	6.800	6.792	6.823	VV	413	5047	0.26%	0.021%
70	6.855	6.823	6.896	VV	1781	27098	1.40%	0.114%
71	6.929	6.896	6.965	VV	2320	28847	1.49%	0.121%
72	6.968	6.965	6.993	VV	301	3885	0.20%	0.016%
73	7.011	6.993	7.032	VV	522	8161	0.42%	0.034%
74	7.053	7.032	7.076	VV	368	6420	0.33%	0.027%
75	7.085	7.076	7.101	VV	243	2261	0.12%	0.010%
76	7.120	7.101	7.128	VV	259	3077	0.16%	0.013%
77	7.138	7.128	7.160	VV	306	4454	0.23%	0.019%
78	7.180	7.160	7.217	VV	401	8687	0.45%	0.037%
79	7.222	7.217	7.238	VV	159	1864	0.10%	0.008%
80	7.265	7.238	7.286	VV	346	5984	0.31%	0.025%
81	7.304	7.286	7.312	VV	226	2500	0.13%	0.011%
82	7.320	7.312	7.328	VV	278	2119	0.11%	0.009%
83	7.353	7.328	7.363	VV	520	7868	0.41%	0.033%
84	7.372	7.363	7.382	VV	553	5228	0.27%	0.022%
85	7.392	7.382	7.417	VV	651	8879	0.46%	0.037%
86	7.429	7.417	7.460	VV	358	7301	0.38%	0.031%
87	7.496	7.460	7.516	VV	1979	24371	1.25%	0.102%
88	7.533	7.516	7.570	VV	603	11205	0.58%	0.047%
89	7.583	7.570	7.615	VV	495	6814	0.35%	0.029%

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90	7.636	7.615	7.663	VV	1916	20787	1.07%	0.087%
91	7.672	7.663	7.696	VV	270	3918	0.20%	0.016%
92	7.700	7.696	7.730	VV	233	3351	0.17%	0.014%
93	7.733	7.730	7.746	VV	174	1148	0.06%	0.005%
94	7.754	7.746	7.762	VV	172	1261	0.06%	0.005%
95	7.772	7.762	7.776	VV	175	1176	0.06%	0.005%
96	7.808	7.776	7.830	VV	572	9241	0.48%	0.039%
97	7.867	7.830	7.879	VV	257	4031	0.21%	0.017%
98	7.882	7.879	7.912	VV	194	2610	0.13%	0.011%
99	7.936	7.912	7.956	VV	251	4719	0.24%	0.020%
100	7.967	7.956	7.980	VV	315	3535	0.18%	0.015%
101	7.988	7.980	8.010	VV	301	3505	0.18%	0.015%
102	8.016	8.010	8.020	VV	225	891	0.05%	0.004%
103	8.028	8.020	8.056	VV	415	3994	0.21%	0.017%
104	8.065	8.056	8.079	VV	184	1497	0.08%	0.006%
105	8.100	8.079	8.114	VV	1198	12847	0.66%	0.054%
106	8.126	8.114	8.150	VV	477	6208	0.32%	0.026%
107	8.155	8.150	8.172	VV	223	2070	0.11%	0.009%
108	8.176	8.172	8.184	VV	150	840	0.04%	0.004%
109	8.195	8.184	8.211	VV	222	2436	0.13%	0.010%
110	8.239	8.211	8.257	PV	1261	18548	0.95%	0.078%
111	8.270	8.257	8.295	VV	1286	16669	0.86%	0.070%
112	8.300	8.295	8.314	VV	295	2934	0.15%	0.012%
113	8.317	8.314	8.324	VV	266	1211	0.06%	0.005%
114	8.346	8.324	8.360	VV	284	3784	0.19%	0.016%
115	8.402	8.360	8.434	VV	628	13228	0.68%	0.056%
116	8.448	8.434	8.483	VV	292	6693	0.34%	0.028%
117	8.498	8.483	8.504	VV	800	7502	0.39%	0.032%
118	8.514	8.504	8.549	VV	1007	13804	0.71%	0.058%
119	8.585	8.549	8.599	VV	495	8615	0.44%	0.036%
120	8.622	8.599	8.637	VV	2046	25737	1.33%	0.108%
121	8.649	8.637	8.665	VV	1371	16773	0.86%	0.071%
122	8.694	8.665	8.729	VV	1284	31680	1.63%	0.133%
123	8.808	8.729	8.858	VV	4848	99358	5.12%	0.418%
124	8.862	8.858	8.878	VV	499	4654	0.24%	0.020%
125	8.899	8.878	8.914	VV	621	8993	0.46%	0.038%
126	8.928	8.914	8.969	VV	519	8151	0.42%	0.034%
127	9.004	8.969	9.016	VV	322	5145	0.26%	0.022%
128	9.023	9.016	9.033	VV	258	1904	0.10%	0.008%
129	9.057	9.033	9.084	VV	1092	16210	0.83%	0.068%
130	9.109	9.084	9.135	VV	10946	113432	5.84%	0.477%
131	9.156	9.135	9.193	VV	1025	22643	1.17%	0.095%
132	9.200	9.193	9.207	VV	319	2241	0.12%	0.009%
133	9.242	9.207	9.260	VV	765	16655	0.86%	0.070%
134	9.267	9.260	9.286	VV	413	4560	0.23%	0.019%
135	9.307	9.286	9.319	VV	590	7928	0.41%	0.033%
136	9.324	9.319	9.337	VV	498	4783	0.25%	0.020%
137	9.353	9.337	9.366	VV	1291	14943	0.77%	0.063%
138	9.384	9.366	9.407	VV	6157	64387	3.31%	0.271%
139	9.425	9.407	9.462	VV	999	20122	1.04%	0.085%
140	9.477	9.462	9.499	VV	562	7236	0.37%	0.030%
141	9.527	9.499	9.548	VV	1918	26298	1.35%	0.111%

					rteres			
142	9.564	9.548	9.586	VV	1087	13241	0.68%	0.056%
143	9.589	9.586	9.609	VV	259	2113	0.11%	0.009%
144	9.623	9.609	9.647	VV	267	3959	0.20%	0.017%
145	9.653	9.647	9.658	VV	184	842	0.04%	0.004%
146	9.681	9.658	9.698	VV	945	12312	0.63%	0.052%
147	9.713	9.698	9.738	VV	943	11776	0.61%	0.050%
148	9.765	9.738	9.781	VV	567	8984	0.46%	0.038%
149	9.785	9.781	9.789	VV	319	1316	0.07%	0.006%
150	9.819	9.789	9.843	VV	1058	16221	0.84%	0.068%
151	9.866	9.843	9.877	VV	690	10293	0.53%	0.043%
152	9.903	9.877	9.960	VV	14692	170227	8.76%	0.716%
153	9.984	9.960	10.013	VV	1437	25880	1.33%	0.109%
154	10.025	10.013	10.036	VV	1024	10258	0.53%	0.043%
155	10.056	10.036	10.073	VV	2363	33271	1.71%	0.140%
156	10.084	10.073	10.100	VV	989	12411	0.64%	0.052%
157	10.117	10.100	10.140	VV	1445	20770	1.07%	0.087%
158	10.183	10.140	10.209	VV	57523	603148	31.05%	2.536%
159	10.228	10.209	10.259	VV	3262	43187	2.22%	0.182%
160	10.266	10.259	10.277	VV	667	6438	0.33%	0.027%
161	10.279	10.277	10.296	VV	630	5584	0.29%	0.023%
162	10.328	10.296	10.372	VV	4418	84158	4.33%	0.354%
163	10.392	10.372	10.409	VV	937	14088	0.73%	0.059%
164	10.421	10.409	10.465	VV	753	11356	0.58%	0.048%
165	10.493	10.465	10.522	VV	455	9289	0.48%	0.039%
166	10.529	10.522	10.558	VV	241	2959	0.15%	0.012%
167	10.596	10.558	10.614	PV	336	5075	0.26%	0.021%
168	10.622	10.614	10.634	VV	218	1828	0.09%	0.008%
169	10.659	10.634	10.685	VV	1478	20203	1.04%	0.085%
170	10.708	10.685	10.726	VV	1297	17735	0.91%	0.075%
171	10.739	10.726	10.746	VV	661	6875	0.35%	0.029%
172	10.764	10.746	10.775	VV	1101	15480	0.80%	0.065%
173	10.794	10.775	10.818	VV	3611	46493	2.39%	0.195%
174	10.833	10.818	10.866	VV	1663	25131	1.29%	0.106%
175	10.876	10.866	10.891	VV	403	5549	0.29%	0.023%
176	10.913	10.891	10.944	VV	2348	40367	2.08%	0.170%
177	10.963	10.944	10.999	VV	3695	53010	2.73%	0.223%
178	11.010	10.999	11.028	VV	818	9642	0.50%	0.041%
179	11.060	11.028	11.072	VV	2574	36587	1.88%	0.154%
180	11.083	11.072	11.097	VV	2399	26906	1.39%	0.113%
181	11.120	11.097	11.176	VV	5983	125484	6.46%	0.528%
182	11.183	11.176	11.195	VV	947	10009	0.52%	0.042%
183	11.216	11.195	11.233	VV	1798	25207	1.30%	0.106%
184	11.259	11.233	11.271	VV	930	16055	0.83%	0.067%
185	11.286	11.271	11.295	VV	2222	21256	1.09%	0.089%
186	11.320	11.295	11.367	VV	122702	1309567	67.42%	5.506%
187	11.394	11.367	11.414	VV	24374	265886	13.69%	1.118%
188	11.420	11.414	11.459	VV	2707	34082	1.75%	0.143%
189	11.475	11.459	11.488	VV	762	10524	0.54%	0.044%
190	11.492	11.488	11.499	VV	588	3331	0.17%	0.014%
191	11.521	11.499	11.545	VV	719	14846	0.76%	0.062%
192	11.564	11.545	11.583	VV	2088	25560	1.32%	0.107%
193	11.606	11.583	11.653	VV	11903	136109	7.01%	0.572%
194	11.682	11.653	11.696	PV	657	10664	0.55%	0.045%

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195	11.726	11.696	11.745	VV	1287	27335	1.41%	0.115%
196	11.768	11.745	11.787	VV	2624	36810	1.90%	0.155%
197	11.861	11.787	11.895	VV	3625	98483	5.07%	0.414%
198	11.925	11.895	11.947	VV	1801	26725	1.38%	0.112%
199	11.976	11.947	11.997	VV	1698	29797	1.53%	0.125%
200	12.014	11.997	12.043	VV	1296	20674	1.06%	0.087%
201	12.076	12.043	12.093	VV	1367	25480	1.31%	0.107%
202	12.129	12.093	12.143	VV	11604	136364	7.02%	0.573%
203	12.159	12.143	12.183	VV	15991	178314	9.18%	0.750%
204	12.188	12.183	12.204	VV	1006	9702	0.50%	0.041%
205	12.245	12.204	12.263	VV	15900	236884	12.20%	0.996%
206	12.277	12.263	12.292	VV	6590	74950	3.86%	0.315%
207	12.309	12.292	12.336	VV	9484	112276	5.78%	0.472%
208	12.352	12.336	12.364	VV	1135	11770	0.61%	0.049%
209	12.388	12.364	12.408	VV	1832	27661	1.42%	0.116%
210	12.444	12.408	12.464	VV	2892	46031	2.37%	0.194%
211	12.486	12.464	12.511	VV	12798	143525	7.39%	0.603%
212	12.537	12.511	12.557	VV	1164	23633	1.22%	0.099%
213	12.561	12.557	12.566	VV	892	4871	0.25%	0.020%
214	12.604	12.566	12.624	VV	9681	117777	6.06%	0.495%
215	12.637	12.624	12.653	VV	1317	16553	0.85%	0.070%
216	12.661	12.653	12.670	VV	805	7819	0.40%	0.033%
217	12.695	12.670	12.742	VV	54231	678232	34.92%	2.851%
218	12.753	12.742	12.772	VV	3229	47199	2.43%	0.198%
219	12.782	12.772	12.798	VV	1683	22992	1.18%	0.097%
220	12.808	12.798	12.821	VV	1424	17876	0.92%	0.075%
221	12.835	12.821	12.841	VV	1442	16077	0.83%	0.068%
222	12.856	12.841	12.869	VV	2458	32650	1.68%	0.137%
223	12.876	12.869	12.905	VV	1863	26296	1.35%	0.111%
224	12.927	12.905	12.964	VV	3348	63044	3.25%	0.265%
225	12.984	12.964	13.016	VV	3639	62302	3.21%	0.262%
226	13.038	13.016	13.056	VV	6725	89668	4.62%	0.377%
227	13.092	13.056	13.117	VV	4514	113700	5.85%	0.478%
228	13.155	13.117	13.202	VV	176009	1942355	100.00%	8.166%
229	13.215	13.202	13.232	VV	1546	16425	0.85%	0.069%
230	13.254	13.232	13.263	VV	811	9202	0.47%	0.039%
231	13.291	13.263	13.304	VV	4235	59324	3.05%	0.249%
232	13.314	13.304	13.326	VV	3069	36944	1.90%	0.155%
233	13.345	13.326	13.427	VV	6418	165806	8.54%	0.697%
234	13.457	13.427	13.480	VV	143216	1532972	78.92%	6.445%
235	13.511	13.480	13.527	VV	14317	186627	9.61%	0.785%
236	13.542	13.527	13.575	VV	16363	202747	10.44%	0.852%
237	13.594	13.575	13.609	VV	1083	15722	0.81%	0.066%
238	13.629	13.609	13.641	VV	5349	62459	3.22%	0.263%
239	13.653	13.641	13.681	VV	5370	68627	3.53%	0.289%
240	13.722	13.681	13.745	PV	8629	128113	6.60%	0.539%
241	13.755	13.745	13.768	VV	1521	20070	1.03%	0.084%
242	13.797	13.768	13.818	VV	4945	78219	4.03%	0.329%
243	13.830	13.818	13.839	VV	2317	24819	1.28%	0.104%
244	13.854	13.839	13.872	VV	5021	62155	3.20%	0.261%
245	13.883	13.872	13.891	VV	1696	17620	0.91%	0.074%
246	13.918	13.891	13.925	VV	8352	107813	5.55%	0.453%

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247	13.935	13.925	13.992	VV	10050	181162	9.33%	0.762%
248	14.047	13.992	14.091	VV	22740	375156	19.31%	1.577%
249	14.115	14.091	14.132	VV	2490	36951	1.90%	0.155%
250	14.156	14.132	14.178	VV	15946	214297	11.03%	0.901%
251	14.196	14.178	14.218	VV	9145	110808	5.70%	0.466%
252	14.241	14.218	14.264	VV	3434	60664	3.12%	0.255%
253	14.295	14.264	14.313	VV	5476	111393	5.73%	0.468%
254	14.327	14.313	14.349	VV	7778	101339	5.22%	0.426%
255	14.368	14.349	14.409	VV	6694	97906	5.04%	0.412%
256	14.441	14.409	14.460	VV	2026	34581	1.78%	0.145%
257	14.478	14.460	14.489	VV	1352	16665	0.86%	0.070%
258	14.500	14.489	14.518	VV	1247	16610	0.86%	0.070%
259	14.538	14.518	14.571	VV	1465	31595	1.63%	0.133%
260	14.583	14.571	14.600	VV	1189	11811	0.61%	0.050%
261	14.608	14.600	14.623	VV	295	2306	0.12%	0.010%
262	14.637	14.623	14.648	PV	396	2895	0.15%	0.012%
263	14.658	14.648	14.669	VV	233	1951	0.10%	0.008%
264	14.687	14.669	14.708	VV	2155	24078	1.24%	0.101%
265	14.746	14.708	14.770	VV	4099	91722	4.72%	0.386%
266	14.787	14.770	14.821	VV	6107	87203	4.49%	0.367%
267	14.864	14.821	14.886	VV	5211	95540	4.92%	0.402%
268	14.893	14.886	14.934	VV	2753	42714	2.20%	0.180%
269	14.970	14.934	14.994	VV	8798	155305	8.00%	0.653%
270	15.034	14.994	15.055	VV	18617	263872	13.59%	1.109%
271	15.089	15.055	15.121	VV	8403	183150	9.43%	0.770%
272	15.157	15.121	15.172	VV	1826	37269	1.92%	0.157%
273	15.203	15.172	15.278	VV	84606	1233891	63.53%	5.187%
274	15.298	15.278	15.318	VV	4890	58885	3.03%	0.248%
275	15.347	15.318	15.367	VV	71925	854235	43.98%	3.591%
276	15.389	15.367	15.424	VV	67534	855329	44.04%	3.596%
277	15.441	15.424	15.470	VV	2046	30688	1.58%	0.129%
278	15.511	15.470	15.563	PV	14651	232211	11.96%	0.976%
279	15.585	15.563	15.623	VV	6464	84900	4.37%	0.357%
280	15.646	15.623	15.670	PV	6729	90606	4.66%	0.381%
281	15.693	15.670	15.743	VV	5842	113859	5.86%	0.479%
282	15.787	15.743	15.858	VV	36959	573802	29.54%	2.412%
283	15.864	15.858	15.874	VV	434	3579	0.18%	0.015%
284	15.892	15.874	15.904	VV	795	10097	0.52%	0.042%
285	15.931	15.904	15.962	VV	4841	79229	4.08%	0.333%
286	15.984	15.962	16.000	VV	3767	60665	3.12%	0.255%
287	16.024	16.000	16.045	VV	11968	165752	8.53%	0.697%
288	16.062	16.045	16.085	VV	6150	83381	4.29%	0.351%
289	16.107	16.085	16.128	VV	4035	60220	3.10%	0.253%
290	16.132	16.128	16.137	VV	1222	6573	0.34%	0.028%
291	16.185	16.137	16.223	VV	9022	221629	11.41%	0.932%
292	16.264	16.223	16.288	VV	3806	70695	3.64%	0.297%
293	16.309	16.288	16.328	VV	2159	31621	1.63%	0.133%
294	16.351	16.328	16.363	VV	2922	36990	1.90%	0.156%
295	16.379	16.363	16.406	VV	3433	51616	2.66%	0.217%
296	16.436	16.406	16.482	VV	5498	109162	5.62%	0.459%
297	16.503	16.482	16.520	VV	816	11852	0.61%	0.050%
298	16.531	16.520	16.542	VV	657	6867	0.35%	0.029%
299	16.556	16.542	16.576	VV	557	8122	0.42%	0.034%

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300	16.590	16.576	16.597	PV	339	2841	0.15%	0.012%
301	16.631	16.597	16.654	VV	2581	43198	2.22%	0.182%
302	16.666	16.654	16.678	VV	1270	13349	0.69%	0.056%
303	16.698	16.678	16.719	VV	3339	43878	2.26%	0.184%
304	16.738	16.719	16.766	VV	2240	43885	2.26%	0.184%
305	16.807	16.766	16.868	VV	14836	304611	15.68%	1.281%
306	16.917	16.868	16.936	PV	72112	1015697	52.29%	4.270%
307	16.945	16.936	16.972	VV	28520	312865	16.11%	1.315%
308	16.976	16.972	16.981	VV	727	3485	0.18%	0.015%
309	17.005	16.981	17.024	VV	3500	55742	2.87%	0.234%
310	17.047	17.024	17.069	VV	14673	185177	9.53%	0.779%
311	17.085	17.069	17.102	VV	3737	53421	2.75%	0.225%
312	17.109	17.102	17.127	VV	2034	26095	1.34%	0.110%
313	17.136	17.127	17.151	VV	1743	19179	0.99%	0.081%
314	17.168	17.151	17.184	VV	4239	54894	2.83%	0.231%
315	17.239	17.184	17.267	VV	41163	631647	32.52%	2.656%
316	17.298	17.267	17.343	VV	61358	755718	38.91%	3.177%
317	17.399	17.343	17.425	VV	17354	240724	12.39%	1.012%
318	17.447	17.425	17.460	VV	3156	42151	2.17%	0.177%
319	17.467	17.460	17.494	VV	2894	30655	1.58%	0.129%
					Sum of corrected areas:		23786110	

FG061325.M Thu Jul 03 01:59:56 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/01/25
Project:	South River WM Replacement	Date Received:	07/01/25
Client Sample ID:	TP-64	SDG No.:	Q2484
Lab Sample ID:	Q2484-03	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	88.4
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
FG016221.D	10	07/02/25 09:17	07/03/25 11:17	PB168701

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	95400		1910	18800	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	0.53	*	37 - 130	26%	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\FG070325\
Data File : FG016221.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 11:17
Operator : YP\AJ
Sample : Q2484-03 10X
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:29:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.206	61602	0.525 ug/ml

Target Compounds

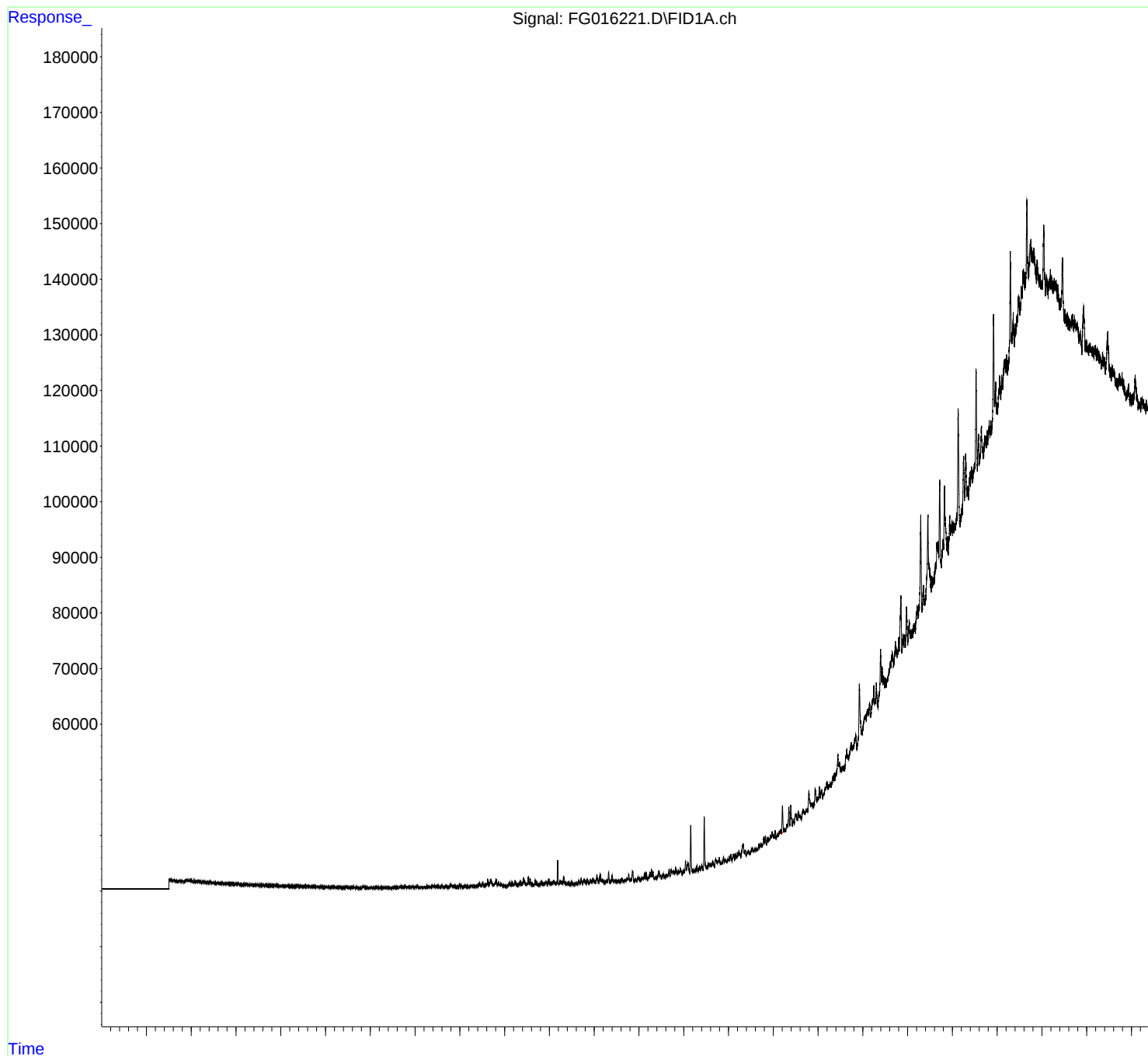
(f)=RT Delta > 1/2 Window

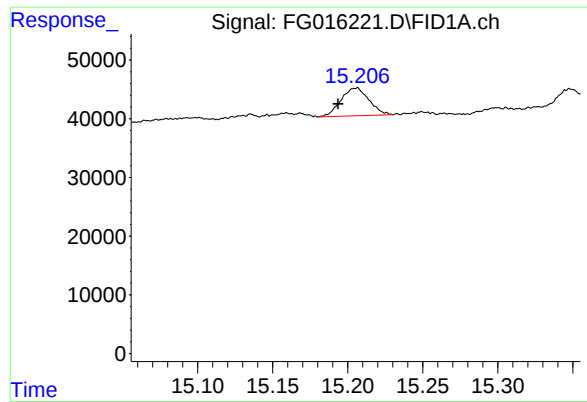
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\
Data File : FG016221.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 11:17
Operator : YP\AJ
Sample : Q2484-03 10X
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:29:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.206 min
Delta R.T.: 0.012 min
Response: 61602
Conc: 0.53 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\

Data File : FG016221.D

Signal(s) : FID1A.ch

Acq On : 03 Jul 2025 11:17

Sample : Q2484-03 10X

Misc :

ALS Vial : 72 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M

Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	8.248	8.208	8.274	PH	210	2467	0.13%	0.007%
2	8.279	8.274	8.291	HH	102	627	0.03%	0.002%
3	8.294	8.291	8.300	HH	115	471	0.03%	0.001%
4	8.302	8.300	8.310	HH	101	281	0.02%	0.001%
5	8.314	8.310	8.322	PH	72	184	0.01%	0.001%
6	8.329	8.322	8.334	HH	67	411	0.02%	0.001%
7	8.345	8.334	8.361	HH	106	581	0.03%	0.002%
8	8.390	8.361	8.394	PH	179	1677	0.09%	0.005%
9	8.398	8.394	8.408	HH	155	738	0.04%	0.002%
10	8.430	8.408	8.445	PH	585	6458	0.35%	0.019%
11	8.453	8.445	8.466	HH	364	3224	0.17%	0.010%
12	8.473	8.466	8.482	HH	132	975	0.05%	0.003%
13	8.501	8.482	8.537	PH	576	10630	0.58%	0.032%
14	8.541	8.537	8.555	HH	215	1480	0.08%	0.004%
15	8.577	8.555	8.582	HH	427	4246	0.23%	0.013%
16	8.590	8.582	8.599	HH	474	3892	0.21%	0.012%
17	8.622	8.599	8.639	HH	1254	16105	0.87%	0.049%
18	8.657	8.639	8.664	HH	580	6823	0.37%	0.021%
19	8.696	8.664	8.729	HH	1051	29783	1.61%	0.090%
20	8.740	8.729	8.757	HH	341	4695	0.25%	0.014%
21	8.775	8.757	8.787	HH	600	7121	0.39%	0.021%
22	8.809	8.787	8.848	HH	1316	24114	1.30%	0.073%
23	8.864	8.848	8.881	HH	756	9675	0.52%	0.029%

24	8.888	8.881	8.912	HH	363	5238	0.28%	0.016%
25	8.922	8.912	8.963	HH	470	7669	0.41%	0.023%
26	8.971	8.963	8.982	HH	188	1614	0.09%	0.005%
27	8.987	8.982	8.992	HH	143	696	0.04%	0.002%
28	8.996	8.992	9.011	HH	187	1151	0.06%	0.003%
29	9.016	9.011	9.024	HH	68	275	0.01%	0.001%
30	9.031	9.024	9.036	HH	58	321	0.02%	0.001%
31	9.048	9.036	9.052	HH	152	874	0.05%	0.003%
32	9.056	9.052	9.061	HH	244	869	0.05%	0.003%
33	9.063	9.061	9.070	HH	242	1002	0.05%	0.003%
34	9.109	9.070	9.137	HH	684	14843	0.80%	0.045%
35	9.142	9.137	9.147	HH	290	1436	0.08%	0.004%
36	9.166	9.147	9.192	HH	684	11751	0.64%	0.035%
37	9.205	9.192	9.217	HH	387	5002	0.27%	0.015%
38	9.238	9.217	9.291	HH	899	21030	1.14%	0.063%
39	9.304	9.291	9.309	HH	336	2967	0.16%	0.009%
40	9.328	9.309	9.334	HH	482	5506	0.30%	0.017%
41	9.353	9.334	9.372	HH	817	13800	0.75%	0.042%
42	9.385	9.372	9.403	HH	565	8939	0.48%	0.027%
43	9.426	9.403	9.491	HH	1453	39615	2.14%	0.119%
44	9.528	9.491	9.548	HH	1731	27496	1.49%	0.083%
45	9.567	9.548	9.608	HH	1311	22809	1.23%	0.069%
46	9.624	9.608	9.648	HH	428	7211	0.39%	0.022%
47	9.684	9.648	9.702	HH	1148	17132	0.93%	0.052%
48	9.715	9.702	9.733	HH	773	9003	0.49%	0.027%
49	9.741	9.733	9.753	HH	408	3506	0.19%	0.011%
50	9.769	9.753	9.784	HH	468	6718	0.36%	0.020%
51	9.801	9.784	9.805	HH	419	4146	0.22%	0.013%
52	9.821	9.805	9.846	HH	982	15018	0.81%	0.045%
53	9.862	9.846	9.889	HH	450	9837	0.53%	0.030%
54	9.912	9.889	9.918	HH	726	9976	0.54%	0.030%
55	9.932	9.918	9.961	HH	908	16265	0.88%	0.049%
56	9.987	9.961	10.022	HH	1290	27946	1.51%	0.084%
57	10.056	10.022	10.067	HH	727	15079	0.82%	0.045%
58	10.090	10.067	10.104	HH	794	15469	0.84%	0.047%
59	10.111	10.104	10.133	HH	809	10605	0.57%	0.032%
60	10.148	10.133	10.163	HH	632	9559	0.52%	0.029%
61	10.185	10.163	10.216	HH	4709	56256	3.04%	0.170%
62	10.233	10.216	10.237	HH	851	8581	0.46%	0.026%

63	10.246	10.237	10.269	HH	914	15167	0.82%	0.046%
64	10.275	10.269	10.296	HH	691	9735	0.53%	0.029%
65	10.317	10.296	10.373	HH	1763	41723	2.26%	0.126%
66	10.402	10.373	10.413	HH	526	11343	0.61%	0.034%
67	10.427	10.413	10.464	HH	658	15538	0.84%	0.047%
68	10.495	10.464	10.546	HH	723	23557	1.27%	0.071%
69	10.556	10.546	10.577	HH	447	7354	0.40%	0.022%
70	10.592	10.577	10.610	HH	554	8934	0.48%	0.027%
71	10.626	10.610	10.637	HH	494	7093	0.38%	0.021%
72	10.657	10.637	10.685	HH	972	19340	1.05%	0.058%
73	10.710	10.685	10.736	HH	1444	26681	1.44%	0.080%
74	10.766	10.736	10.784	HH	1221	25424	1.38%	0.077%
75	10.793	10.784	10.819	HH	1074	17678	0.96%	0.053%
76	10.838	10.819	10.887	HH	1145	34360	1.86%	0.104%
77	10.914	10.887	10.949	HH	982	30753	1.66%	0.093%
78	10.973	10.949	11.004	HH	1222	33595	1.82%	0.101%
79	11.015	11.004	11.032	HH	1004	14326	0.78%	0.043%
80	11.062	11.032	11.081	HH	2142	39566	2.14%	0.119%
81	11.085	11.081	11.106	HH	1106	13398	0.72%	0.040%
82	11.133	11.106	11.156	HH	2179	44340	2.40%	0.134%
83	11.167	11.156	11.197	HH	1132	24751	1.34%	0.075%
84	11.202	11.197	11.232	HH	951	17554	0.95%	0.053%
85	11.269	11.232	11.293	HH	1083	29783	1.61%	0.090%
86	11.322	11.293	11.359	HH	2550	53123	2.87%	0.160%
87	11.365	11.359	11.372	HH	866	6521	0.35%	0.020%
88	11.399	11.372	11.441	HH	2043	49650	2.69%	0.150%
89	11.458	11.441	11.488	HH	1096	27232	1.47%	0.082%
90	11.498	11.488	11.506	HH	941	9464	0.51%	0.029%
91	11.513	11.506	11.532	HH	948	14373	0.78%	0.043%
92	11.540	11.532	11.561	HH	988	15510	0.84%	0.047%
93	11.574	11.561	11.586	HH	1052	14517	0.79%	0.044%
94	11.633	11.622	11.663	HH	1190	24813	1.34%	0.075%
95	11.694	11.663	11.706	HH	1181	26296	1.42%	0.079%
96	11.741	11.706	11.752	HH	1287	33757	1.83%	0.102%
97	11.771	11.752	11.796	HH	2241	40212	2.18%	0.121%
98	11.801	11.796	11.806	HH	1217	7028	0.38%	0.021%
99	11.819	11.806	11.831	HH	1248	17714	0.96%	0.053%
100	11.855	11.831	11.893	HH	2772	66486	3.60%	0.200%
101	11.923	11.893	11.945	HH	1290	35088	1.90%	0.106%

102	11.980	11.945	12.002	HH	1723	46423	2.51%	0.140%
103	12.017	12.002	12.021	HH	1346	14216	0.77%	0.043%
104	12.024	12.021	12.049	HH	1354	21030	1.14%	0.063%
105	12.085	12.078	12.106	HH	1496	23022	1.25%	0.069%
106	12.124	12.106	12.146	HH	2225	45068	2.44%	0.136%
107	12.163	12.146	12.184	HH	2384	41450	2.24%	0.125%
108	12.188	12.184	12.201	HH	1446	13657	0.74%	0.041%
109	12.249	12.201	12.266	HH	2555	72313	3.91%	0.218%
110	12.282	12.266	12.298	HH	2954	45437	2.46%	0.137%
111	12.314	12.298	12.342	HH	2617	50946	2.76%	0.154%
112	12.349	12.342	12.361	HH	1470	15914	0.86%	0.048%
113	12.384	12.361	12.405	HH	1727	41192	2.23%	0.124%
114	12.447	12.405	12.484	HH	2829	98335	5.32%	0.296%
115	12.490	12.484	12.507	HH	1818	23586	1.28%	0.071%
116	12.574	12.569	12.578	HH	1743	9144	0.49%	0.028%
117	12.605	12.578	12.625	HH	2197	52825	2.86%	0.159%
118	12.637	12.625	12.651	HH	2102	30571	1.65%	0.092%
119	12.672	12.651	12.694	HH	3071	62731	3.39%	0.189%
120	12.711	12.694	12.740	HH	2997	72055	3.90%	0.217%
121	12.749	12.740	12.772	HH	2722	50331	2.72%	0.152%
122	12.786	12.772	12.797	HH	2701	38367	2.08%	0.116%
123	12.818	12.797	12.853	HH	3234	91782	4.97%	0.277%
124	12.864	12.853	12.874	HH	2552	30809	1.67%	0.093%
125	12.889	12.874	12.909	HH	2717	54040	2.92%	0.163%
126	12.927	12.909	12.969	HH	3108	94911	5.13%	0.286%
127	12.987	12.969	13.006	HH	2931	59480	3.22%	0.179%
128	13.040	13.006	13.061	HH	4499	109593	5.93%	0.330%
129	13.092	13.061	13.129	HH	4221	142554	7.71%	0.430%
130	13.156	13.129	13.203	HH	10933	211646	11.45%	0.638%
131	13.218	13.203	13.226	HH	2878	37179	2.01%	0.112%
132	13.235	13.226	13.241	HH	2875	25159	1.36%	0.076%
133	13.263	13.241	13.271	HH	2978	52125	2.82%	0.157%
134	13.293	13.271	13.314	HH	3716	81248	4.40%	0.245%
135	13.320	13.314	13.327	HH	2942	23558	1.27%	0.071%
136	13.350	13.327	13.376	HH	3632	94565	5.12%	0.285%
137	13.404	13.376	13.431	HH	3822	111450	6.03%	0.336%
138	13.458	13.431	13.503	HH	12438	246293	13.32%	0.743%
139	13.519	13.503	13.534	HH	3735	64344	3.48%	0.194%
140	13.552	13.534	13.580	HH	4156	107447	5.81%	0.324%

141	13.592	13.580	13.617	HH	4053	85901	4.65%	0.259%
142	13.649	13.617	13.685	HH	4445	160634	8.69%	0.484%
143	13.716	13.685	13.746	HH	4868	158911	8.60%	0.479%
144	13.761	13.746	13.776	HH	4613	80127	4.33%	0.242%
145	13.796	13.776	13.819	HH	5219	120649	6.53%	0.364%
146	13.828	13.819	13.841	HH	4268	54073	2.93%	0.163%
147	13.856	13.841	13.867	HH	4500	67867	3.67%	0.205%
148	13.886	13.867	13.907	HH	5329	113175	6.12%	0.341%
149	13.920	13.907	13.929	HH	4672	59468	3.22%	0.179%
150	13.934	13.929	13.961	HH	4750	85588	4.63%	0.258%
151	13.984	13.961	13.999	HH	4918	107974	5.84%	0.326%
152	14.011	13.999	14.024	HH	5269	72633	3.93%	0.219%
153	14.052	14.024	14.078	HH	5701	167288	9.05%	0.504%
154	14.117	14.078	14.137	HH	5800	185843	10.05%	0.560%
155	14.160	14.137	14.184	HH	5752	152569	8.25%	0.460%
156	14.200	14.184	14.215	HH	6027	104255	5.64%	0.314%
157	14.232	14.215	14.275	HH	6104	211558	11.45%	0.638%
158	14.327	14.275	14.359	HH	7561	328202	17.76%	0.990%
159	14.372	14.359	14.397	HH	6528	140566	7.60%	0.424%
160	14.420	14.397	14.425	HH	6137	98439	5.33%	0.297%
161	14.442	14.425	14.448	HH	6406	85454	4.62%	0.258%
162	14.451	14.448	14.456	HH	6218	28588	1.55%	0.086%
163	14.460	14.456	14.466	HH	6160	36461	1.97%	0.110%
164	14.467	14.466	14.474	HH	6110	28682	1.55%	0.086%
165	14.538	14.474	14.561	HH	6724	334599	18.10%	1.009%
166	14.594	14.561	14.601	HH	6597	153957	8.33%	0.464%
167	14.616	14.601	14.631	HH	6786	120249	6.51%	0.363%
168	14.637	14.631	14.650	HH	6695	76643	4.15%	0.231%
169	14.675	14.650	14.692	HH	7416	178594	9.66%	0.538%
170	14.728	14.692	14.746	HH	7660	235177	12.72%	0.709%
171	14.790	14.746	14.806	HH	8961	284590	15.40%	0.858%
172	14.825	14.806	14.846	HH	8904	200161	10.83%	0.604%
173	14.868	14.846	14.883	HH	8798	182400	9.87%	0.550%
174	14.898	14.883	14.911	HH	8603	139218	7.53%	0.420%
175	14.940	14.911	14.954	HH	9031	224910	12.17%	0.678%
176	14.976	14.954	14.996	HH	9871	233316	12.62%	0.703%
177	15.002	14.996	15.009	HH	9203	72264	3.91%	0.218%
178	15.036	15.009	15.056	HH	10087	256647	13.88%	0.774%
179	15.100	15.056	15.113	HH	9383	311926	16.87%	0.940%
180	15.136	15.113	15.148	HH	9997	202532	10.96%	0.611%

181	15.159	15.148	15.165	HH	10193	98336	5.32%	0.296%
182	15.169	15.165	15.180	HH	10143	92954	5.03%	0.280%
183	15.206	15.180	15.240	HH	14382	410511	22.21%	1.238%
184	15.249	15.240	15.278	HH	10386	231622	12.53%	0.698%
185	15.306	15.278	15.311	HH	11125	211142	11.42%	0.637%
186	15.348	15.311	15.370	HH	14212	426647	23.08%	1.286%
187	15.391	15.370	15.429	HH	14524	439045	23.75%	1.324%
188	15.451	15.429	15.469	HH	11883	277465	15.01%	0.837%
189	15.490	15.469	15.499	HH	12879	220588	11.93%	0.665%
190	15.513	15.499	15.531	HH	12968	243575	13.18%	0.734%
191	15.559	15.531	15.576	HH	13439	340361	18.41%	1.026%
192	15.588	15.576	15.593	HH	12711	127193	6.88%	0.383%
193	15.597	15.593	15.605	HH	12734	88528	4.79%	0.267%
194	15.610	15.605	15.628	HH	12645	170662	9.23%	0.515%
195	15.668	15.628	15.686	HH	13893	460986	24.94%	1.390%
196	15.689	15.686	15.709	HH	13509	186225	10.07%	0.561%
197	15.729	15.709	15.736	HH	13703	214306	11.59%	0.646%
198	15.738	15.736	15.759	HH	13897	191636	10.37%	0.578%
199	15.763	15.759	15.768	HH	13713	69427	3.76%	0.209%
200	15.796	15.768	15.834	HH	16994	612465	33.13%	1.847%
201	15.847	15.834	15.861	HH	14948	236171	12.78%	0.712%
202	15.874	15.861	15.884	HH	14939	205061	11.09%	0.618%
203	15.888	15.884	15.891	HH	14512	58954	3.19%	0.178%
204	15.906	15.891	15.912	HH	14860	182692	9.88%	0.551%
205	15.934	15.912	15.975	HH	17578	607769	32.88%	1.832%
206	15.992	15.975	16.004	HH	15967	278665	15.08%	0.840%
207	16.030	16.004	16.050	HH	17872	454467	24.59%	1.370%
208	16.076	16.050	16.102	HH	17391	525741	28.44%	1.585%
209	16.154	16.102	16.159	HH	17575	567625	30.71%	1.711%
210	16.199	16.159	16.224	HH	18921	703317	38.05%	2.121%
211	16.229	16.224	16.236	HH	17835	124785	6.75%	0.376%
212	16.238	16.236	16.241	HH	17965	51234	2.77%	0.154%
213	16.263	16.241	16.268	HH	18328	302450	16.36%	0.912%
214	16.274	16.268	16.278	HH	18536	105316	5.70%	0.318%
215	16.281	16.278	16.292	HH	18370	156139	8.45%	0.471%
216	16.335	16.292	16.347	HH	19734	616747	33.37%	1.860%
217	16.362	16.347	16.376	HH	20289	343460	18.58%	1.036%
218	16.396	16.376	16.404	HH	20196	338953	18.34%	1.022%
219	16.443	16.404	16.460	HH	23754	729182	39.45%	2.199%

220	16.476	16.460	16.499	HH	22323	507786	27.47%	1.531%
221	16.514	16.499	16.526	HH	21320	332189	17.97%	1.002%
222	16.552	16.526	16.566	HH	21526	514971	27.86%	1.553%
223	16.668	16.657	16.684	HH	23532	376333	20.36%	1.135%
224	16.743	16.684	16.769	HH	25784	1252562	67.76%	3.777%
225	16.785	16.769	16.796	HH	25400	397932	21.53%	1.200%
226	16.840	16.796	16.868	HH	27350	1134099	61.35%	3.419%
227	16.923	16.868	16.974	HH	36313	1848474	100.00%	5.573%
228	16.981	16.974	16.990	HH	27762	257583	13.93%	0.777%
229	17.052	16.990	17.077	HH	30643	1564758	84.65%	4.718%
230	17.108	17.077	17.130	HH	31845	988419	53.47%	2.980%
231	17.151	17.130	17.172	HH	33108	802342	43.41%	2.419%
232	17.302	17.265	17.340	HH	36555	1510217	81.70%	4.553%
Sum of corrected areas:					33166585			

FG061325.M Fri Jul 04 06:08:48 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/01/25
Project:	South River WM Replacement	Date Received:	07/01/25
Client Sample ID:	TP-107	SDG No.:	Q2484
Lab Sample ID:	Q2484-04	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	83.8
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
FG016210.D	1	07/02/25 09:17	07/02/25 20:35	PB168701

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	2810		202	1990	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	7.62		37 - 130	38%	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\FG070225\
Data File : FG016210.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 20:35
Operator : YP\AJ
Sample : Q2484-04
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-107

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/03/2025
Supervised By :mohammad ahmed 07/08/2025

Integration File: autoint1.e
Quant Time: Jul 03 01:24:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.209	893683	7.619 ug/mlm
Target Compounds			

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016210.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 20:35
Operator : YP\AJ
Sample : Q2484-04
Misc :
ALS Vial : 27 Sample Multiplier: 1

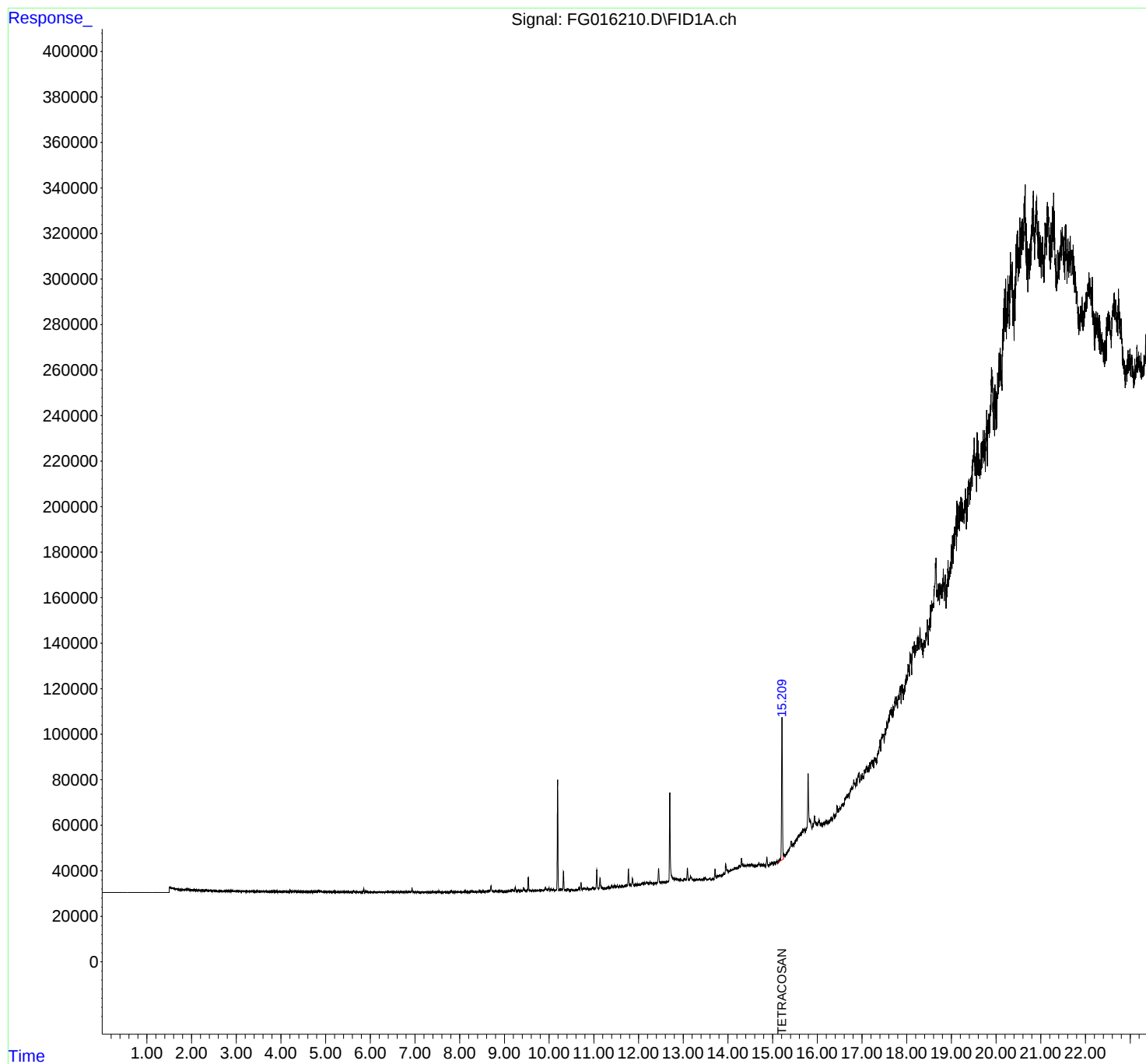
Instrument :
FID_G
ClientSampleId :
TP-107

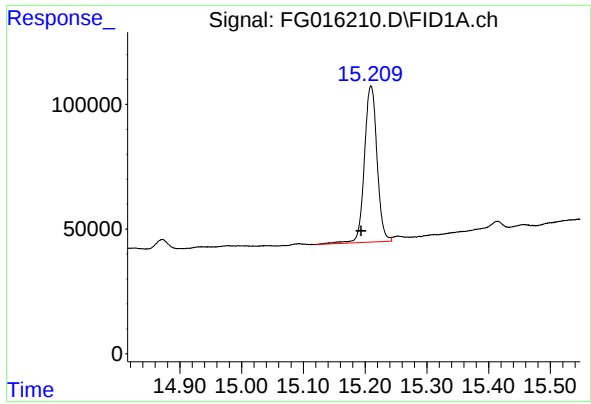
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/03/2025
Supervised By :mohammad ahmed 07/08/2025

Integration File: autoint1.e
Quant Time: Jul 03 01:24:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.209 min
Delta R.T.: 0.015 min
Response: 893683
Conc: 7.62 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-107

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/03/2025
Supervised By :mohammad ahmed 07/08/2025

Instrument :

FID_G

ClientSampleId :

TP-107

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/03/2025

Supervised By :mohammad ahmed 07/08/2025

rteres

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG07022
Data File : FG016210.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 20:35
Sample : Q2484-04
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.512	4.500	4.522	BV	94	240	0.03%	0.002%
2	4.525	4.522	4.539	PV	57	492	0.06%	0.005%
3	4.541	4.539	4.550	VV	104	367	0.04%	0.004%
4	4.554	4.550	4.558	PV	104	329	0.04%	0.003%
5	4.563	4.558	4.569	VV	110	545	0.06%	0.005%
6	4.575	4.569	4.588	VV	140	1075	0.12%	0.011%
7	4.591	4.588	4.600	VV	125	653	0.08%	0.006%
8	4.621	4.600	4.628	VV	174	1817	0.21%	0.018%
9	4.639	4.628	4.656	VV	243	2716	0.31%	0.027%
10	4.660	4.656	4.669	VV	222	1136	0.13%	0.011%
11	4.678	4.669	4.705	VV	262	3832	0.44%	0.038%
12	4.714	4.705	4.719	VV	192	1138	0.13%	0.011%
13	4.725	4.719	4.740	VV	181	1704	0.20%	0.017%
14	4.773	4.740	4.787	VV	212	3739	0.43%	0.037%
15	4.800	4.787	4.805	VV	213	1883	0.22%	0.019%
16	4.843	4.805	4.860	VV	608	12051	1.38%	0.119%
17	4.871	4.860	4.887	VV	477	7109	0.82%	0.070%
18	4.890	4.887	4.909	VV	491	3833	0.44%	0.038%
19	4.913	4.909	4.934	VV	227	2179	0.25%	0.022%
20	4.937	4.934	4.943	VV	117	645	0.07%	0.006%
21	4.954	4.943	4.959	VV	201	1371	0.16%	0.014%
22	4.967	4.959	4.981	VV	191	1924	0.22%	0.019%
23	4.992	4.981	5.002	VV	200	1714	0.20%	0.017%
24	5.005	5.002	5.036	VV	193	2663	0.31%	0.026%
25	5.046	5.036	5.053	VV	187	1329	0.15%	0.013%
26	5.060	5.053	5.067	VV	143	982	0.11%	0.010%
27	5.078	5.067	5.111	VV	154	2684	0.31%	0.026%
28	5.118	5.111	5.122	VV	129	534	0.06%	0.005%
29	5.137	5.122	5.143	VV	163	1414	0.16%	0.014%
30	5.148	5.143	5.155	VV	152	657	0.08%	0.006%
31	5.166	5.155	5.177	VV	140	1390	0.16%	0.014%
32	5.183	5.177	5.189	VV	124	819	0.09%	0.008%
33	5.192	5.189	5.205	VV	203	1387	0.16%	0.014%
34	5.210	5.205	5.230	VV	216	1390	0.16%	0.014%
35	5.237	5.230	5.246	VV	96	678	0.08%	0.007%
36	5.252	5.246	5.263	PV	83	721	0.08%	0.007%

					retention			
37	5.267	5.263	5.275	VV	116	694	0.08%	0.007%
38	5.286	5.275	5.293	VV	167	938		
39	5.302	5.293	5.312	VV	204	1251		
40	5.324	5.312	5.366	VV	234	4383		
41	5.370	5.366	5.393	VV	157	1624		
42	5.401	5.393	5.406	VV	161	753		
43	5.418	5.406	5.424	VV	176	1480	0.17%	0.015%
44	5.429	5.424	5.449	VV	212	1898	0.22%	0.019%
45	5.452	5.449	5.456	VV	141	485	0.06%	0.005%
46	5.488	5.456	5.515	VV	291	5794	0.67%	0.057%
47	5.521	5.515	5.530	VV	176	1076	0.12%	0.011%
48	5.535	5.530	5.543	VV	181	892	0.10%	0.009%
49	5.557	5.543	5.576	VV	205	2371	0.27%	0.023%
50	5.581	5.576	5.589	VV	129	746	0.09%	0.007%
51	5.623	5.589	5.647	VV	520	7463	0.86%	0.074%
52	5.665	5.647	5.676	VV	216	2621	0.30%	0.026%
53	5.680	5.676	5.689	VV	139	647	0.07%	0.006%
54	5.703	5.689	5.723	VV	218	2507	0.29%	0.025%
55	5.727	5.723	5.748	VV	144	1716	0.20%	0.017%
56	5.753	5.748	5.758	VV	163	697	0.08%	0.007%
57	5.760	5.758	5.764	VV	170	501	0.06%	0.005%
58	5.772	5.764	5.798	VV	177	2085	0.24%	0.021%
59	5.804	5.798	5.815	PV	152	825	0.09%	0.008%
60	5.822	5.815	5.834	VV	181	1612	0.19%	0.016%
61	5.853	5.834	5.879	VV	1759	18194	2.09%	0.180%
62	5.893	5.879	5.909	VV	522	6124	0.70%	0.060%
63	5.924	5.909	5.957	VV	727	9929	1.14%	0.098%
64	5.981	5.957	6.000	VV	206	3407	0.39%	0.034%
65	6.018	6.000	6.036	VV	168	2723	0.31%	0.027%
66	6.042	6.036	6.048	VV	177	975	0.11%	0.010%
67	6.051	6.048	6.070	VV	217	2201	0.25%	0.022%
68	6.080	6.070	6.096	VV	234	2857	0.33%	0.028%
69	6.098	6.096	6.127	VV	203	2896	0.33%	0.029%
70	6.138	6.127	6.167	VV	301	3799	0.44%	0.037%
71	6.190	6.167	6.204	VV	342	4337	0.50%	0.043%
72	6.210	6.204	6.219	VV	136	902	0.10%	0.009%
73	6.224	6.219	6.229	VV	110	551	0.06%	0.005%
74	6.232	6.229	6.244	VV	133	722	0.08%	0.007%
75	6.256	6.244	6.267	VV	136	1394	0.16%	0.014%
76	6.273	6.267	6.279	VV	118	671	0.08%	0.007%
77	6.284	6.279	6.316	VV	150	2388	0.27%	0.024%
78	6.338	6.316	6.345	VV	156	1896	0.22%	0.019%
79	6.367	6.345	6.384	VV	342	5726	0.66%	0.056%
80	6.394	6.384	6.411	VV	359	4687	0.54%	0.046%
81	6.424	6.411	6.441	VV	254	3566	0.41%	0.035%
82	6.444	6.441	6.450	VV	189	972	0.11%	0.010%
83	6.472	6.450	6.508	VV	383	8074	0.93%	0.080%
84	6.512	6.508	6.534	VV	210	2543	0.29%	0.025%
85	6.550	6.534	6.558	VV	221	2684	0.31%	0.026%
86	6.571	6.558	6.584	VV	275	3083	0.35%	0.030%
87	6.590	6.584	6.617	VV	305	4479	0.51%	0.044%
88	6.629	6.617	6.642	VV	242	3066	0.35%	0.030%
89	6.648	6.642	6.664	VV	260	2653	0.30%	0.026%

Instrument :

FID_G

ClientSampleId :

TP-107

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/03/2025

Supervised By :mohammad ahmed 07/08/2025

90	6.695	6.664	6.718	VV	588	10643	1.22%	0.105%
91	6.723	6.718	6.729	VV	217	1262		
92	6.742	6.729	6.749	VV	267	2573		
93	6.754	6.749	6.767	VV	247	2190		
94	6.780	6.767	6.786	VV	291	2567		
95	6.792	6.786	6.803	VV	260	2210		
96	6.814	6.803	6.831	VV	283	3185	0.37%	0.031%
97	6.864	6.831	6.905	VV	367	10864	1.25%	0.107%
98	6.932	6.905	6.977	VV	2111	25323	2.91%	0.250%
99	6.978	6.977	6.992	VV	288	1303	0.15%	0.013%
100	6.993	6.992	6.998	VV	171	386	0.04%	0.004%
101	7.023	6.998	7.028	VV	187	2626	0.30%	0.026%
102	7.034	7.028	7.052	VV	150	1732	0.20%	0.017%
103	7.063	7.052	7.084	VV	165	2216	0.25%	0.022%
104	7.086	7.084	7.099	VV	136	805	0.09%	0.008%
105	7.104	7.099	7.119	PV	144	977	0.11%	0.010%
106	7.141	7.119	7.154	VV	207	2755	0.32%	0.027%
107	7.204	7.154	7.213	VV	153	3172	0.36%	0.031%
108	7.220	7.213	7.234	VV	112	910	0.10%	0.009%
109	7.276	7.234	7.299	VV	207	4120	0.47%	0.041%
110	7.317	7.299	7.342	VV	203	2787	0.32%	0.027%
111	7.388	7.342	7.423	VV	331	10422	1.20%	0.103%
112	7.436	7.423	7.471	VV	207	3936	0.45%	0.039%
113	7.478	7.471	7.491	VV	109	1318	0.15%	0.013%
114	7.506	7.491	7.519	VV	237	3237	0.37%	0.032%
115	7.535	7.519	7.574	VV	526	8552	0.98%	0.084%
116	7.585	7.574	7.626	VV	167	3362	0.39%	0.033%
117	7.645	7.626	7.664	VV	206	2491	0.29%	0.025%
118	7.680	7.664	7.704	VV	196	2770	0.32%	0.027%
119	7.714	7.704	7.732	VV	135	1230	0.14%	0.012%
120	7.740	7.732	7.758	VV	108	1210	0.14%	0.012%
121	7.813	7.758	7.847	VV	679	13775	1.58%	0.136%
122	7.873	7.847	7.889	VV	192	2773	0.32%	0.027%
123	7.901	7.889	7.915	VV	113	1403	0.16%	0.014%
124	7.951	7.915	7.977	VV	140	3145	0.36%	0.031%
125	7.994	7.977	8.003	VV	205	2194	0.25%	0.022%
126	8.011	8.003	8.025	VV	172	1664	0.19%	0.016%
127	8.035	8.025	8.072	VV	110	1960	0.23%	0.019%
128	8.105	8.072	8.122	VV	589	6885	0.79%	0.068%
129	8.134	8.122	8.154	VV	220	2788	0.32%	0.028%
130	8.161	8.154	8.222	VV	102	3304	0.38%	0.033%
131	8.246	8.222	8.257	VV	327	5319	0.61%	0.052%
132	8.275	8.257	8.294	VV	811	10020	1.15%	0.099%
133	8.304	8.294	8.330	VV	262	4540	0.52%	0.045%
134	8.343	8.330	8.371	VV	257	3392	0.39%	0.033%
135	8.390	8.371	8.408	PV	327	4421	0.51%	0.044%
136	8.435	8.408	8.480	VV	503	12804	1.47%	0.126%
137	8.520	8.480	8.567	VV	689	13564	1.56%	0.134%
138	8.591	8.567	8.602	VV	384	5654	0.65%	0.056%
139	8.629	8.602	8.643	VV	551	9227	1.06%	0.091%
140	8.700	8.643	8.737	VV	2786	53277	6.12%	0.526%
141	8.749	8.737	8.771	VV	335	5737	0.66%	0.057%

Instrument :

FID_G

ClientSampleId :

TP-107

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/03/2025

Supervised By :mohammad ahmed 07/08/2025

Client Sample Field : TP-107							Manual Integration :	
142	8.812	8.771	8.847	VV	548	15356	1.76%	0.152%
143	8.871	8.847	8.910	VV	639	13080		
144	8.928	8.910	8.969	VV	600	9034		
145	8.990	8.969	9.024	PV	153	3849		
146	9.033	9.024	9.051	VV	187	1622		
147	9.072	9.051	9.089	VV	349	6468		
148	9.108	9.089	9.119	VV	472	6673	0.77%	0.066%
149	9.173	9.119	9.190	VV	947	24539	2.82%	0.242%
150	9.198	9.190	9.219	VV	515	7680	0.88%	0.076%
151	9.244	9.219	9.273	VV	1909	27884	3.20%	0.275%
152	9.311	9.273	9.344	VV	673	16861	1.94%	0.166%
153	9.357	9.344	9.382	VV	458	8486	0.98%	0.084%
154	9.428	9.382	9.462	VV	1420	31689	3.64%	0.313%
155	9.476	9.462	9.495	VV	508	8063	0.93%	0.080%
156	9.534	9.495	9.561	VV	6141	76590	8.80%	0.756%
157	9.572	9.561	9.601	VV	650	10199	1.17%	0.101%
158	9.629	9.601	9.662	VV	420	11554	1.33%	0.114%
159	9.689	9.662	9.706	VV	469	8271	0.95%	0.082%
160	9.720	9.706	9.755	VV	439	9230	1.06%	0.091%
161	9.773	9.755	9.791	VV	527	7364	0.85%	0.073%
162	9.826	9.791	9.861	VV	578	15238	1.75%	0.150%
163	9.869	9.861	9.878	VV	400	3428	0.39%	0.034%
164	9.915	9.878	9.946	VV	1583	34606	3.98%	0.341%
165	9.957	9.946	9.971	VV	646	7982	0.92%	0.079%
166	9.994	9.971	10.022	VV	1213	24106	2.77%	0.238%
167	10.044	10.022	10.067	VV	1002	16783	1.93%	0.166%
168	10.099	10.067	10.129	VV	867	18914	2.17%	0.187%
169	10.155	10.129	10.164	VV	653	8704	1.00%	0.086%
170	10.190	10.164	10.222	VV	48803	496924	57.09%	4.903%
171	10.238	10.222	10.246	VV	518	6157	0.71%	0.061%
172	10.280	10.246	10.295	VV	748	17685	2.03%	0.174%
173	10.320	10.295	10.354	VV	8424	101548	11.67%	1.002%
174	10.358	10.354	10.374	VV	423	4160	0.48%	0.041%
175	10.426	10.374	10.477	VV	548	18426	2.12%	0.182%
176	10.500	10.477	10.529	PV	406	7439	0.85%	0.073%
177	10.538	10.529	10.559	VV	249	3221	0.37%	0.032%
178	10.598	10.559	10.626	VV	265	5685	0.65%	0.056%
179	10.667	10.626	10.687	PV	1436	19790	2.27%	0.195%
180	10.713	10.687	10.744	VV	3324	48744	5.60%	0.481%
181	10.765	10.744	10.782	VV	777	11555	1.33%	0.114%
182	10.803	10.782	10.829	VV	931	14095	1.62%	0.139%
183	10.858	10.829	10.888	VV	694	13488	1.55%	0.133%
184	10.928	10.888	10.949	VV	274	6409	0.74%	0.063%
185	10.973	10.949	11.007	VV	783	16290	1.87%	0.161%
186	11.015	11.007	11.030	VV	457	4264	0.49%	0.042%
187	11.065	11.030	11.107	VV	8522	105987	12.18%	1.046%
188	11.139	11.107	11.229	VV	4894	85809	9.86%	0.847%
189	11.289	11.229	11.302	PV	384	7509	0.86%	0.074%
190	11.325	11.302	11.344	VV	692	9990	1.15%	0.099%
191	11.404	11.344	11.429	VV	944	25643	2.95%	0.253%
192	11.463	11.429	11.506	VV	1037	28293	3.25%	0.279%
193	11.524	11.506	11.559	VV	854	14963	1.72%	0.148%
194	11.579	11.559	11.600	VV	755	11115	1.28%	0.110%

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195	11.640	11.600	11.663	VV	524	13320	1.53%	0.131%
196	11.774	11.663	11.804	VV	7603	123030		
197	11.866	11.804	11.909	VV	3126	69093		
198	11.932	11.909	11.959	VV	658	14541		
199	11.971	11.959	12.001	VV	697	13442		
200	12.021	12.001	12.034	VV	582	9928		
201	12.083	12.034	12.114	VV	970	34418	3.95%	0.340%
202	12.131	12.114	12.149	VV	926	16192	1.86%	0.160%
203	12.177	12.149	12.201	VV	1250	29271	3.36%	0.289%
204	12.210	12.201	12.231	VV	919	14478	1.66%	0.143%
205	12.259	12.231	12.279	VV	1232	24141	2.77%	0.238%
206	12.290	12.279	12.309	VV	703	10478	1.20%	0.103%
207	12.325	12.309	12.344	VV	645	11004	1.26%	0.109%
208	12.382	12.344	12.406	VV	588	18179	2.09%	0.179%
209	12.450	12.406	12.481	VV	6823	105745	12.15%	1.043%
210	12.494	12.481	12.517	VV	706	13412	1.54%	0.132%
211	12.544	12.517	12.571	VV	1117	22909	2.63%	0.226%
212	12.612	12.571	12.623	VV	665	19699	2.26%	0.194%
213	12.700	12.623	12.774	VV	39882	580132	66.65%	5.724%
214	12.786	12.774	12.803	VV	1990	31059	3.57%	0.306%
215	12.822	12.803	12.851	VV	1880	47095	5.41%	0.465%
216	12.866	12.851	12.901	VV	1673	38431	4.42%	0.379%
217	12.921	12.901	12.972	VV	1228	43384	4.98%	0.428%
218	12.986	12.972	12.994	VV	887	10994	1.26%	0.108%
219	13.032	12.994	13.069	VV	1281	46042	5.29%	0.454%
220	13.094	13.069	13.142	VV	5956	96127	11.04%	0.948%
221	13.162	13.142	13.206	VV	1969	51415	5.91%	0.507%
222	13.241	13.206	13.280	VV	605	22730	2.61%	0.224%
223	13.299	13.280	13.329	VV	637	13173	1.51%	0.130%
224	13.355	13.329	13.388	VV	598	15197	1.75%	0.150%
225	13.419	13.388	13.441	VV	371	8305	0.95%	0.082%
226	13.463	13.441	13.477	VV	943	12226	1.40%	0.121%
227	13.493	13.477	13.531	VV	1020	16969	1.95%	0.167%
228	13.549	13.531	13.559	VV	245	2647	0.30%	0.026%
229	13.592	13.559	13.628	VV	479	10130	1.16%	0.100%
230	13.656	13.628	13.681	PV	331	4484	0.52%	0.044%
231	13.712	13.681	13.741	PV	4325	57546	6.61%	0.568%
232	13.775	13.741	13.790	VV	1084	25118	2.89%	0.248%
233	13.825	13.790	13.842	VV	1023	29651	3.41%	0.293%
234	13.906	13.842	13.926	VV	1319	48934	5.62%	0.483%
235	13.950	13.926	14.016	VV	5442	145190	16.68%	1.433%
236	14.108	14.016	14.121	VV	2337	128699	14.79%	1.270%
237	14.172	14.121	14.180	VV	2522	86302	9.92%	0.851%
238	14.255	14.180	14.275	VV	3531	150660	17.31%	1.486%
239	14.304	14.275	14.381	VV	6187	223368	25.66%	2.204%
240	14.390	14.381	14.409	VV	2636	43006	4.94%	0.424%
241	14.451	14.409	14.477	VV	2494	99886	11.48%	0.986%
242	14.493	14.477	14.500	VV	2280	29789	3.42%	0.294%
243	14.532	14.500	14.565	VV	2346	85609	9.84%	0.845%
244	14.574	14.565	14.652	VV	1711	72766	8.36%	0.718%
245	14.695	14.652	14.751	VV	2146	84751	9.74%	0.836%
246	14.779	14.751	14.818	VV	1109	35362	4.06%	0.349%

Instrument :

FID_G

ClientSampleId :

TP-107

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/03/2025

Supervised By :mohammad ahmed 07/08/2025

					retention				
247	14.826	14.818	14.844	VV	575	6641	0.76%	0.066%	
248	14.871	14.844	14.901	VV	3838	50092			
249	14.936	14.901	14.952	PV	528	8287			
250	14.978	14.952	15.023	VV	659	18367			
251	15.043	15.023	15.059	VV	242	3766			
252	15.093	15.059	15.117	PV	621	7869			
253	15.210	15.117	15.242	PV	62238	870379	100.00%	8.588%	
254	15.254	15.242	15.272	VV	1397	18185	2.09%	0.179%	
255	15.414	15.272	15.434	VV	4848	180553	20.74%	1.781%	
256	15.457	15.434	15.479	VV	2914	68861	7.91%	0.679%	
257	15.670	15.479	15.684	VV	5495	511245	58.74%	5.044%	
258	15.705	15.684	15.731	VV	5732	145448	16.71%	1.435%	
259	15.794	15.731	15.826	VV	28693	618333	71.04%	6.101%	
260	15.834	15.826	15.879	VV	7566	194104	22.30%	1.915%	
261	15.938	15.879	15.979	VV	8035	302295	34.73%	2.983%	
262	15.985	15.979	16.003	VV	3674	50625	5.82%	0.499%	
263	16.039	16.003	16.065	VV	4582	135104	15.52%	1.333%	
264	16.079	16.065	16.107	VV	2382	52387	6.02%	0.517%	
265	16.146	16.107	16.168	VV	1714	53683	6.17%	0.530%	
266	16.194	16.168	16.219	VV	1848	41833	4.81%	0.413%	
267	16.233	16.219	16.247	VV	773	10341	1.19%	0.102%	
268	16.311	16.247	16.329	PV	1676	34450	3.96%	0.340%	
269	16.368	16.329	16.392	VV	1722	24992	2.87%	0.247%	
270	16.441	16.392	16.464	PV	3734	54646	6.28%	0.539%	
271	16.510	16.464	16.522	VV	1288	34823	4.00%	0.344%	
272	16.548	16.522	16.564	VV	1693	26245	3.02%	0.259%	
273	16.577	16.564	16.591	VV	1168	13660	1.57%	0.135%	
274	16.625	16.591	16.634	VV	2874	43292	4.97%	0.427%	
275	16.662	16.634	16.675	VV	2791	59869	6.88%	0.591%	
276	16.699	16.675	16.714	VV	2769	45846	5.27%	0.452%	
277	16.769	16.714	16.787	VV	3769	120528	13.85%	1.189%	
278	16.816	16.787	16.855	VV	5747	146381	16.82%	1.444%	
279	16.874	16.855	16.888	VV	4680	64955	7.46%	0.641%	
280	16.930	16.888	16.952	VV	5971	155843	17.91%	1.538%	
281	16.975	16.952	16.990	VV	4038	56555	6.50%	0.558%	
282	17.006	16.990	17.035	VV	3924	60952	7.00%	0.601%	
283	17.057	17.035	17.078	VV	4227	76550	8.79%	0.755%	
284	17.096	17.078	17.129	VV	4545	99978	11.49%	0.986%	
285	17.146	17.129	17.157	VV	3628	42453	4.88%	0.419%	
286	17.174	17.157	17.194	VV	4254	67872	7.80%	0.670%	
287	17.208	17.194	17.216	VV	3871	43738	5.03%	0.432%	
288	17.224	17.216	17.235	VV	4203	38670	4.44%	0.382%	
289	17.247	17.235	17.262	VV	3759	35735	4.11%	0.353%	
290	17.278	17.262	17.303	PV	3856	62897	7.23%	0.621%	
291	17.312	17.303	17.331	VV	2680	20721	2.38%	0.204%	
292	17.366	17.331	17.374	PV	3248	66487	7.64%	0.656%	
293	17.402	17.374	17.419	VV	6086	99789	11.47%	0.985%	
294	17.449	17.419	17.462	VV	5702	104251	11.98%	1.029%	
295	17.481	17.462	17.501	VBA	3756	92242	10.60%	0.910%	

Sum of corrected areas: 10135396

Instrument :

FID_G

ClientSampleId :

TP-107

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/03/2025

Supervised By :mohammad ahmed 07/08/2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/01/25
Project:	South River WM Replacement	Date Received:	07/01/25
Client Sample ID:	TP-106	SDG No.:	Q2484
Lab Sample ID:	Q2484-05	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	87.9
Sample Wt/Vol:	30.09	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
FG016211.D	1	07/02/25 09:17	07/02/25 21:05	PB168701

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	3000		192	1890	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	9.77		37 - 130	49%	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\FG070225\
Data File : FG016211.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 21:05
Operator : YP\AJ
Sample : Q2484-05
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-106

Integration File: autoint1.e
Quant Time: Jul 03 01:24:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.209	1145939	9.769 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

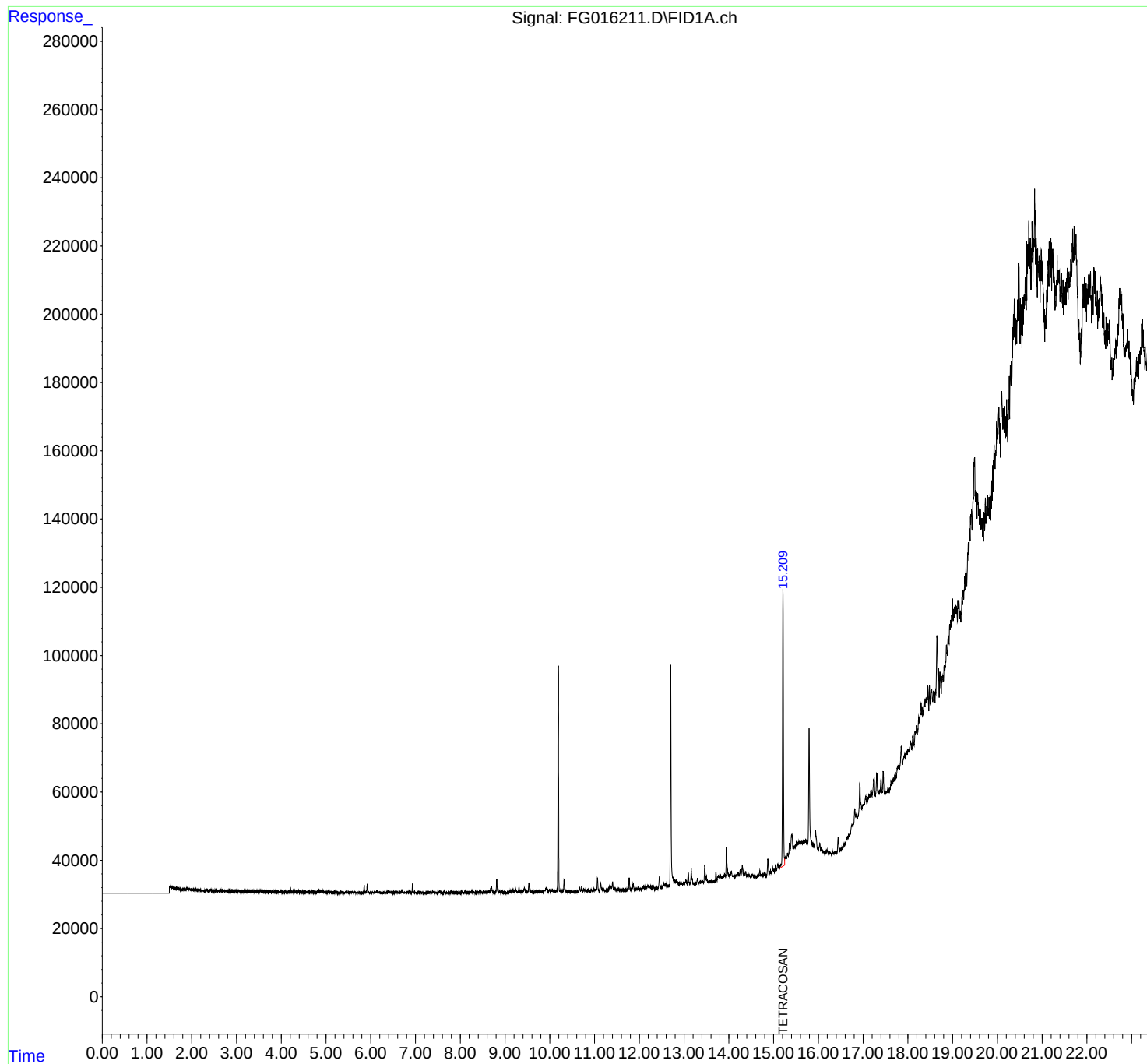
(m)=manual int.

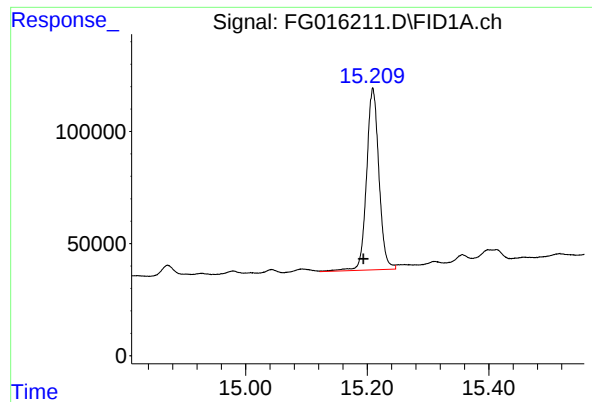
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016211.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 21:05
Operator : YP\AJ
Sample : Q2484-05
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-106

Integration File: autoint1.e
Quant Time: Jul 03 01:24:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.209 min
Delta R.T.: 0.016 min
Response: 1145939
Conc: 9.77 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-106

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
 Data File : FG016211.D
 Signal(s) : FID1A.ch
 Acq On : 02 Jul 2025 21:05
 Sample : Q2484-05
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
 Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.507	4.500	4.513	BV	103	447	0.04%	0.004%
2	4.516	4.513	4.527	VV	134	583	0.05%	0.005%
3	4.537	4.527	4.555	VV	139	1178	0.10%	0.010%
4	4.581	4.555	4.586	PV	115	1125	0.09%	0.010%
5	4.593	4.586	4.604	VV	119	997	0.08%	0.009%
6	4.607	4.604	4.617	VV	169	848	0.07%	0.007%
7	4.621	4.617	4.627	VV	146	711	0.06%	0.006%
8	4.638	4.627	4.663	VV	254	3388	0.27%	0.029%
9	4.679	4.663	4.693	VV	262	3414	0.28%	0.030%
10	4.697	4.693	4.710	VV	90	855	0.07%	0.007%
11	4.720	4.710	4.741	VV	204	1561	0.13%	0.014%
12	4.752	4.741	4.760	VV	117	928	0.08%	0.008%
13	4.764	4.760	4.785	VV	110	1363	0.11%	0.012%
14	4.800	4.785	4.806	VV	199	1681	0.14%	0.015%
15	4.844	4.806	4.862	VV	611	11444	0.93%	0.099%
16	4.875	4.862	4.881	VV	389	3873	0.31%	0.034%
17	4.910	4.881	4.967	VV	852	22377	1.81%	0.194%
18	4.971	4.967	4.978	VV	181	852	0.07%	0.007%
19	4.982	4.978	4.989	VV	162	866	0.07%	0.008%
20	4.993	4.989	5.006	VV	137	1219	0.10%	0.011%
21	5.009	5.006	5.014	VV	179	635	0.05%	0.006%
22	5.019	5.014	5.028	VV	163	899	0.07%	0.008%
23	5.036	5.028	5.040	VV	181	937	0.08%	0.008%
24	5.045	5.040	5.077	VV	232	3272	0.27%	0.028%
25	5.082	5.077	5.096	VV	123	1143	0.09%	0.010%
26	5.099	5.096	5.112	VV	135	774	0.06%	0.007%
27	5.115	5.112	5.121	VV	96	398	0.03%	0.003%
28	5.125	5.121	5.138	VV	141	905	0.07%	0.008%
29	5.142	5.138	5.150	VV	100	639	0.05%	0.006%
30	5.152	5.150	5.157	VV	86	286	0.02%	0.002%
31	5.171	5.157	5.176	PV	140	974	0.08%	0.008%
32	5.197	5.176	5.205	VV	172	2279	0.18%	0.020%
33	5.208	5.205	5.225	VV	195	1181	0.10%	0.010%
34	5.228	5.225	5.237	VV	162	732	0.06%	0.006%
35	5.241	5.237	5.250	VV	121	637	0.05%	0.006%
36	5.263	5.250	5.304	VV	153	2229	0.18%	0.019%

					rters			
37	5.316	5.304	5.320	VV	151	776	0.06%	0.007%
38	5.339	5.320	5.353	VV	310	3100	0.25%	0.027%
39	5.356	5.353	5.370	VV	65	620	0.05%	0.005%
40	5.374	5.370	5.385	VV	141	530	0.04%	0.005%
41	5.432	5.385	5.455	VV	165	3603	0.29%	0.031%
42	5.487	5.455	5.523	VV	228	3896	0.32%	0.034%
43	5.537	5.523	5.542	VV	114	598	0.05%	0.005%
44	5.562	5.542	5.591	VV	103	2594	0.21%	0.023%
45	5.624	5.591	5.652	VV	493	6575	0.53%	0.057%
46	5.656	5.652	5.659	VV	161	457	0.04%	0.004%
47	5.662	5.659	5.680	VV	147	876	0.07%	0.008%
48	5.691	5.680	5.702	VV	115	1079	0.09%	0.009%
49	5.707	5.702	5.744	VV	127	1507	0.12%	0.013%
50	5.757	5.744	5.787	VV	162	2027	0.16%	0.018%
51	5.791	5.787	5.797	VV	44	205	0.02%	0.002%
52	5.800	5.797	5.813	VV	56	301	0.02%	0.003%
53	5.826	5.813	5.831	VV	121	832	0.07%	0.007%
54	5.853	5.831	5.875	VV	2257	22018	1.78%	0.191%
55	5.890	5.875	5.903	VV	431	4482	0.36%	0.039%
56	5.920	5.903	5.957	VV	2584	26749	2.17%	0.232%
57	5.964	5.957	5.970	VV	154	953	0.08%	0.008%
58	5.972	5.970	5.979	VV	125	411	0.03%	0.004%
59	5.985	5.979	5.990	VV	97	473	0.04%	0.004%
60	5.996	5.990	6.025	VV	86	1513	0.12%	0.013%
61	6.040	6.025	6.053	VV	203	1676	0.14%	0.015%
62	6.077	6.053	6.082	VV	183	2475	0.20%	0.022%
63	6.086	6.082	6.089	VV	214	768	0.06%	0.007%
64	6.100	6.089	6.116	VV	278	2940	0.24%	0.026%
65	6.119	6.116	6.123	VV	187	579	0.05%	0.005%
66	6.137	6.123	6.176	VV	583	7493	0.61%	0.065%
67	6.191	6.176	6.213	VV	393	4555	0.37%	0.040%
68	6.219	6.213	6.227	VV	108	743	0.06%	0.006%
69	6.237	6.227	6.242	VV	134	865	0.07%	0.008%
70	6.247	6.242	6.281	VV	114	1533	0.12%	0.013%
71	6.291	6.281	6.297	PV	84	423	0.03%	0.004%
72	6.305	6.297	6.321	VV	63	372	0.03%	0.003%
73	6.336	6.321	6.343	VV	184	1211	0.10%	0.011%
74	6.360	6.343	6.381	VV	371	5143	0.42%	0.045%
75	6.399	6.381	6.422	VV	857	11082	0.90%	0.096%
76	6.425	6.422	6.449	VV	219	2911	0.24%	0.025%
77	6.451	6.449	6.455	VV	257	776	0.06%	0.007%
78	6.473	6.455	6.494	VV	481	6150	0.50%	0.053%
79	6.500	6.494	6.532	VV	164	2612	0.21%	0.023%
80	6.542	6.532	6.558	VV	218	2513	0.20%	0.022%
81	6.563	6.558	6.577	VV	243	2264	0.18%	0.020%
82	6.588	6.577	6.611	VV	313	4083	0.33%	0.035%
83	6.619	6.611	6.635	VV	166	1786	0.14%	0.016%
84	6.641	6.635	6.645	VV	162	817	0.07%	0.007%
85	6.657	6.645	6.674	VV	201	2564	0.21%	0.022%
86	6.695	6.674	6.720	VV	1046	13660	1.11%	0.119%
87	6.722	6.720	6.735	VV	163	1205	0.10%	0.010%
88	6.749	6.735	6.760	VV	229	2376	0.19%	0.021%
89	6.764	6.760	6.767	VV	185	618	0.05%	0.005%

					rteres			
90	6.771	6.767	6.786	VV	195	1737	0.14%	0.015%
91	6.791	6.786	6.798	VV	216	1324	0.11%	0.011%
92	6.815	6.798	6.825	VV	249	2891	0.23%	0.025%
93	6.836	6.825	6.842	VV	234	2029	0.16%	0.018%
94	6.855	6.842	6.911	VV	349	8835	0.72%	0.077%
95	6.932	6.911	6.973	VV	2749	29772	2.41%	0.259%
96	6.979	6.973	6.998	VV	221	2008	0.16%	0.017%
97	7.002	6.998	7.006	VV	123	447	0.04%	0.004%
98	7.021	7.006	7.040	VV	165	2304	0.19%	0.020%
99	7.060	7.040	7.074	VV	160	1710	0.14%	0.015%
100	7.090	7.074	7.095	VV	127	954	0.08%	0.008%
101	7.099	7.095	7.107	VV	150	512	0.04%	0.004%
102	7.111	7.107	7.127	VV	90	762	0.06%	0.007%
103	7.137	7.127	7.171	VV	174	2699	0.22%	0.023%
104	7.178	7.171	7.200	PV	135	1374	0.11%	0.012%
105	7.207	7.200	7.215	VV	81	605	0.05%	0.005%
106	7.220	7.215	7.232	VV	126	698	0.06%	0.006%
107	7.244	7.232	7.251	VV	145	1173	0.10%	0.010%
108	7.255	7.251	7.260	VV	91	537	0.04%	0.005%
109	7.274	7.260	7.294	VV	214	2343	0.19%	0.020%
110	7.321	7.294	7.341	VV	387	5278	0.43%	0.046%
111	7.391	7.341	7.424	VV	332	10840	0.88%	0.094%
112	7.438	7.424	7.472	VV	234	5159	0.42%	0.045%
113	7.477	7.472	7.488	VV	191	1615	0.13%	0.014%
114	7.504	7.488	7.519	VV	541	5808	0.47%	0.050%
115	7.536	7.519	7.569	VV	799	11560	0.94%	0.100%
116	7.584	7.569	7.625	VV	256	3927	0.32%	0.034%
117	7.642	7.625	7.660	VV	362	4109	0.33%	0.036%
118	7.681	7.660	7.704	VV	213	2980	0.24%	0.026%
119	7.714	7.704	7.730	VV	143	1391	0.11%	0.012%
120	7.745	7.730	7.762	VV	149	1903	0.15%	0.017%
121	7.766	7.762	7.779	VV	128	1096	0.09%	0.010%
122	7.811	7.779	7.829	VV	497	8926	0.72%	0.078%
123	7.834	7.829	7.847	VV	141	1312	0.11%	0.011%
124	7.861	7.847	7.889	VV	225	3054	0.25%	0.027%
125	7.891	7.889	7.913	VV	156	998	0.08%	0.009%
126	7.929	7.913	7.940	VV	165	1483	0.12%	0.013%
127	7.946	7.940	7.949	VV	144	594	0.05%	0.005%
128	7.953	7.949	7.975	VV	187	1463	0.12%	0.013%
129	7.995	7.975	8.016	PV	195	2490	0.20%	0.022%
130	8.031	8.016	8.055	VV	414	5237	0.42%	0.045%
131	8.074	8.055	8.087	VV	103	1178	0.10%	0.010%
132	8.103	8.087	8.122	VV	740	8663	0.70%	0.075%
133	8.128	8.122	8.144	VV	230	2296	0.19%	0.020%
134	8.149	8.144	8.152	VV	128	399	0.03%	0.003%
135	8.162	8.152	8.183	VV	126	1285	0.10%	0.011%
136	8.199	8.183	8.205	PV	130	850	0.07%	0.007%
137	8.207	8.205	8.218	VV	72	362	0.03%	0.003%
138	8.245	8.218	8.257	VV	427	6071	0.49%	0.053%
139	8.275	8.257	8.294	VV	931	11360	0.92%	0.099%
140	8.297	8.294	8.335	VV	275	4590	0.37%	0.040%
141	8.344	8.335	8.366	VV	259	2389	0.19%	0.021%

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142	8.374	8.366	8.385	VV	512	1934	0.16%	0.017%
143	8.408	8.385	8.417	VV	391	5455	0.44%	0.047%
144	8.436	8.417	8.453	VV	389	6686	0.54%	0.058%
145	8.456	8.453	8.489	VV	274	3754	0.30%	0.033%
146	8.522	8.489	8.557	VV	532	11771	0.95%	0.102%
147	8.587	8.557	8.610	VV	421	8846	0.72%	0.077%
148	8.633	8.610	8.652	VV	444	9110	0.74%	0.079%
149	8.699	8.652	8.739	VV	1693	45033	3.65%	0.391%
150	8.744	8.739	8.752	VV	244	1679	0.14%	0.015%
151	8.761	8.752	8.772	VV	243	2429	0.20%	0.021%
152	8.815	8.772	8.853	VV	4069	53717	4.35%	0.467%
153	8.870	8.853	8.887	VV	471	6535	0.53%	0.057%
154	8.891	8.887	8.912	VV	254	2606	0.21%	0.023%
155	8.928	8.912	8.968	VV	515	7990	0.65%	0.069%
156	8.981	8.968	9.017	VV	136	1901	0.15%	0.017%
157	9.066	9.017	9.088	PV	310	6313	0.51%	0.055%
158	9.117	9.088	9.135	VV	603	10475	0.85%	0.091%
159	9.140	9.135	9.152	VV	360	3353	0.27%	0.029%
160	9.172	9.152	9.220	VV	807	17818	1.44%	0.155%
161	9.242	9.220	9.285	VV	939	15830	1.28%	0.138%
162	9.312	9.285	9.345	VV	1715	22948	1.86%	0.199%
163	9.359	9.345	9.374	VV	415	5645	0.46%	0.049%
164	9.387	9.374	9.407	VV	358	6102	0.49%	0.053%
165	9.431	9.407	9.494	VV	1391	29964	2.43%	0.260%
166	9.497	9.494	9.503	VV	257	1202	0.10%	0.010%
167	9.532	9.503	9.560	VV	2760	35820	2.90%	0.311%
168	9.569	9.560	9.610	VV	466	8451	0.68%	0.073%
169	9.624	9.610	9.650	VV	420	6247	0.51%	0.054%
170	9.655	9.650	9.660	VV	120	540	0.04%	0.005%
171	9.687	9.660	9.704	VV	326	5843	0.47%	0.051%
172	9.718	9.704	9.744	VV	394	5953	0.48%	0.052%
173	9.749	9.744	9.759	VV	213	2006	0.16%	0.017%
174	9.773	9.759	9.806	VV	888	10894	0.88%	0.095%
175	9.826	9.806	9.852	VV	310	4474	0.36%	0.039%
176	9.876	9.852	9.895	VV	707	12727	1.03%	0.111%
177	9.914	9.895	9.945	VV	1317	26411	2.14%	0.229%
178	9.950	9.945	9.971	VV	510	6679	0.54%	0.058%
179	9.993	9.971	10.026	VV	711	14248	1.15%	0.124%
180	10.052	10.026	10.083	VV	763	16952	1.37%	0.147%
181	10.096	10.083	10.121	VV	562	8103	0.66%	0.070%
182	10.189	10.121	10.222	VV	66190	677930	54.92%	5.890%
183	10.227	10.222	10.231	VV	477	2012	0.16%	0.017%
184	10.234	10.231	10.241	VV	451	2337	0.19%	0.020%
185	10.257	10.241	10.274	VV	434	6859	0.56%	0.060%
186	10.279	10.274	10.291	VV	396	3337	0.27%	0.029%
187	10.319	10.291	10.344	VV	3593	43482	3.52%	0.378%
188	10.359	10.344	10.372	VV	524	6430	0.52%	0.056%
189	10.380	10.372	10.389	VV	282	2432	0.20%	0.021%
190	10.393	10.389	10.396	VV	291	916	0.07%	0.008%
191	10.423	10.396	10.469	VV	450	9638	0.78%	0.084%
192	10.475	10.469	10.517	PV	323	3674	0.30%	0.032%
193	10.539	10.517	10.552	VV	198	2279	0.18%	0.020%
194	10.574	10.552	10.585	VV	133	1255	0.10%	0.011%

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195	10.598	10.585	10.619	VV	165	1974	0.16%	0.017%
196	10.627	10.619	10.647	VV	204	1830	0.15%	0.016%
197	10.667	10.647	10.688	VV	1351	17119	1.39%	0.149%
198	10.713	10.688	10.743	VV	1513	23093	1.87%	0.201%
199	10.765	10.743	10.784	VV	624	10878	0.88%	0.095%
200	10.802	10.784	10.828	VV	673	9890	0.80%	0.086%
201	10.857	10.828	10.902	VV	489	12104	0.98%	0.105%
202	10.926	10.902	10.940	VV	475	7665	0.62%	0.067%
203	10.947	10.940	10.951	VV	313	1959	0.16%	0.017%
204	10.970	10.951	10.994	VV	914	14536	1.18%	0.126%
205	10.998	10.994	11.004	VV	321	1669	0.14%	0.014%
206	11.018	11.004	11.033	VV	473	5927	0.48%	0.051%
207	11.064	11.033	11.104	VV	3922	52180	4.23%	0.453%
208	11.138	11.104	11.162	VV	2224	35120	2.85%	0.305%
209	11.167	11.162	11.184	VV	633	7062	0.57%	0.061%
210	11.188	11.184	11.235	VV	467	8814	0.71%	0.077%
211	11.287	11.235	11.300	VV	228	5106	0.41%	0.044%
212	11.327	11.300	11.344	VV	1263	14748	1.19%	0.128%
213	11.360	11.344	11.379	VV	1332	20437	1.66%	0.178%
214	11.403	11.379	11.432	VV	2603	42511	3.44%	0.369%
215	11.439	11.432	11.446	VV	546	4322	0.35%	0.038%
216	11.462	11.446	11.508	VV	646	15066	1.22%	0.131%
217	11.525	11.508	11.563	VV	462	7491	0.61%	0.065%
218	11.576	11.563	11.612	VV	345	5249	0.43%	0.046%
219	11.617	11.612	11.622	VV	171	774	0.06%	0.007%
220	11.631	11.622	11.670	VV	224	2764	0.22%	0.024%
221	11.707	11.670	11.715	PV	264	3836	0.31%	0.033%
222	11.774	11.715	11.799	VV	3637	46316	3.75%	0.402%
223	11.819	11.799	11.835	VV	345	5846	0.47%	0.051%
224	11.863	11.835	11.909	VV	1746	30126	2.44%	0.262%
225	11.936	11.909	11.956	PV	369	5728	0.46%	0.050%
226	11.976	11.956	12.002	VV	506	7660	0.62%	0.067%
227	12.012	12.002	12.017	VV	171	1038	0.08%	0.009%
228	12.024	12.017	12.047	VV	189	2330	0.19%	0.020%
229	12.080	12.047	12.114	VV	843	22578	1.83%	0.196%
230	12.135	12.114	12.152	VV	889	14118	1.14%	0.123%
231	12.171	12.152	12.180	VV	993	12310	1.00%	0.107%
232	12.194	12.180	12.220	VV	1206	18384	1.49%	0.160%
233	12.234	12.220	12.246	VV	747	9234	0.75%	0.080%
234	12.255	12.246	12.274	VV	816	10615	0.86%	0.092%
235	12.287	12.274	12.301	VV	726	7664	0.62%	0.067%
236	12.316	12.301	12.354	VV	858	10743	0.87%	0.093%
237	12.387	12.354	12.403	PV	312	4199	0.34%	0.036%
238	12.450	12.403	12.489	VV	3500	52117	4.22%	0.453%
239	12.499	12.489	12.509	VV	419	4064	0.33%	0.035%
240	12.542	12.509	12.555	VV	1157	18595	1.51%	0.162%
241	12.573	12.555	12.592	VV	876	17574	1.42%	0.153%
242	12.612	12.592	12.635	VV	1027	19326	1.57%	0.168%
243	12.642	12.635	12.657	VV	592	6490	0.53%	0.056%
244	12.701	12.657	12.775	VV	64197	836784	67.79%	7.270%
245	12.786	12.775	12.802	VV	1831	25999	2.11%	0.226%
246	12.818	12.802	12.853	VV	1648	39552	3.20%	0.344%

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247	12.867	12.853	12.904	VV	1128	25897	2.10%	0.225%
248	12.909	12.904	12.912	VV	694	3214	0.26%	0.028%
249	12.931	12.912	12.975	VV	839	22131	1.79%	0.192%
250	12.995	12.975	13.007	VV	1057	13894	1.13%	0.121%
251	13.043	13.007	13.062	VV	1550	31687	2.57%	0.275%
252	13.094	13.062	13.135	VV	3603	61619	4.99%	0.535%
253	13.162	13.135	13.212	VV	4077	70899	5.74%	0.616%
254	13.218	13.212	13.232	VV	177	1175	0.10%	0.010%
255	13.300	13.232	13.335	VV	1602	30529	2.47%	0.265%
256	13.353	13.335	13.381	VV	808	13608	1.10%	0.118%
257	13.407	13.381	13.438	VV	879	16401	1.33%	0.143%
258	13.463	13.438	13.481	VV	5433	63015	5.11%	0.548%
259	13.496	13.481	13.542	VV	1939	35040	2.84%	0.304%
260	13.557	13.542	13.568	VV	505	6320	0.51%	0.055%
261	13.573	13.568	13.583	VV	474	3794	0.31%	0.033%
262	13.601	13.583	13.621	VV	441	7656	0.62%	0.067%
263	13.626	13.621	13.628	VV	197	788	0.06%	0.007%
264	13.634	13.628	13.643	VV	262	1885	0.15%	0.016%
265	13.662	13.643	13.688	VV	342	6233	0.50%	0.054%
266	13.712	13.688	13.734	VV	2856	38228	3.10%	0.332%
267	13.762	13.734	13.780	VV	1737	35749	2.90%	0.311%
268	13.799	13.780	13.850	VV	1967	59973	4.86%	0.521%
269	13.861	13.850	13.875	VV	1322	18142	1.47%	0.158%
270	13.904	13.875	13.929	VV	1778	47880	3.88%	0.416%
271	13.945	13.929	14.010	VV	9692	178614	14.47%	1.552%
272	14.054	14.010	14.090	VV	2463	79066	6.41%	0.687%
273	14.111	14.090	14.145	VV	1235	34639	2.81%	0.301%
274	14.165	14.145	14.184	VV	1390	26482	2.15%	0.230%
275	14.208	14.184	14.229	VV	2047	38392	3.11%	0.334%
276	14.254	14.229	14.273	VV	2756	45025	3.65%	0.391%
277	14.301	14.273	14.320	VV	3882	68618	5.56%	0.596%
278	14.336	14.320	14.360	VV	2576	39791	3.22%	0.346%
279	14.377	14.360	14.405	VV	2013	34202	2.77%	0.297%
280	14.411	14.405	14.417	VV	729	4769	0.39%	0.041%
281	14.422	14.417	14.427	VV	743	4172	0.34%	0.036%
282	14.431	14.427	14.434	VV	659	2364	0.19%	0.021%
283	14.449	14.434	14.475	VV	760	15425	1.25%	0.134%
284	14.526	14.475	14.564	VV	688	27408	2.22%	0.238%
285	14.580	14.564	14.615	VV	356	7131	0.58%	0.062%
286	14.693	14.615	14.718	VV	1776	33264	2.69%	0.289%
287	14.738	14.718	14.747	VV	403	5744	0.47%	0.050%
288	14.764	14.747	14.780	VV	438	7910	0.64%	0.069%
289	14.796	14.780	14.840	VV	803	14068	1.14%	0.122%
290	14.872	14.840	14.912	PV	4854	74198	6.01%	0.645%
291	14.928	14.912	14.949	VV	962	15054	1.22%	0.131%
292	14.979	14.949	15.002	VV	1792	32177	2.61%	0.280%
293	15.009	15.002	15.022	VV	937	9439	0.76%	0.082%
294	15.043	15.022	15.062	VV	2192	32550	2.64%	0.283%
295	15.094	15.062	15.122	VV	2232	54404	4.41%	0.473%
296	15.209	15.122	15.245	VV	82402	1234332	100.00%	10.724%
297	15.261	15.245	15.275	VV	3452	60861	4.93%	0.529%
298	15.311	15.275	15.327	VV	4644	119166	9.65%	1.035%
299	15.357	15.327	15.374	VV	7532	158869	12.87%	1.380%

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300	15.411	15.374	15.437	VV	9432	292791	23.72%	2.544%
301	15.459	15.437	15.477	VV	5920	137781	11.16%	1.197%
302	15.517	15.477	15.547	VV	7306	275067	22.28%	2.390%
303	15.565	15.547	15.584	VV	7054	147866	11.98%	1.285%
304	15.606	15.584	15.630	VV	6642	182126	14.76%	1.582%
305	15.675	15.630	15.698	VV	6925	266152	21.56%	2.312%
306	15.719	15.698	15.761	VV	6553	232977	18.87%	2.024%
307	15.793	15.761	15.899	VV	39238	903761	73.22%	7.852%
308	15.938	15.899	15.982	VV	8736	278698	22.58%	2.421%
309	15.991	15.982	16.003	VV	3399	40762	3.30%	0.354%
310	16.034	16.003	16.055	VV	4575	107805	8.73%	0.937%
311	16.072	16.055	16.155	VV	2958	114271	9.26%	0.993%
312	16.197	16.155	16.225	VV	1904	57956	4.70%	0.504%
313	16.261	16.225	16.297	VV	857	27470	2.23%	0.239%
314	16.315	16.297	16.340	VV	1049	15986	1.30%	0.139%
315	16.363	16.340	16.379	VV	435	7537	0.61%	0.065%
316	16.394	16.379	16.415	VV	257	3911	0.32%	0.034%
317	16.443	16.415	16.474	PV	4457	58010	4.70%	0.504%
318	16.750	16.474	16.769	PV	2864	110679	8.97%	0.962%
319	16.814	16.769	16.837	VV	6534	164072	13.29%	1.426%
320	16.846	16.837	16.867	VV	4207	66791	5.41%	0.580%
321	16.927	16.867	16.970	VV	12320	355664	28.81%	3.090%
322	17.057	16.970	17.084	VV	6033	325331	26.36%	2.827%
323	17.136	17.084	17.152	VV	5194	190614	15.44%	1.656%
324	17.177	17.152	17.198	VV	6173	143618	11.64%	1.248%
325	17.245	17.198	17.273	VV	8216	254484	20.62%	2.211%
326	17.306	17.273	17.351	VV	8710	206559	16.73%	1.795%
327	17.364	17.351	17.374	VV	2401	31193	2.53%	0.271%
328	17.400	17.374	17.425	VV	5545	102219	8.28%	0.888%
329	17.450	17.425	17.475	VV	7016	98291	7.96%	0.854%
330	17.492	17.475	17.500	VBA	308	19395	1.57%	0.169%

Sum of corrected areas: 11509646

FG061325.M Thu Jul 03 02:01:59 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/01/25
Project:	South River WM Replacement	Date Received:	07/01/25
Client Sample ID:	TP-104	SDG No.:	Q2484
Lab Sample ID:	Q2484-06	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	87.3
Sample Wt/Vol:	30.06	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
FG016212.D	1	07/02/25 09:17	07/02/25 21:35	PB168701

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	2720		193	1910	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	7.73		37 - 130	39%	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\FG070225\
Data File : FG016212.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 21:35
Operator : YP\AJ
Sample : Q2484-06
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-104

Integration File: autoint1.e
Quant Time: Jul 03 01:25:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.208	906991	7.732 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

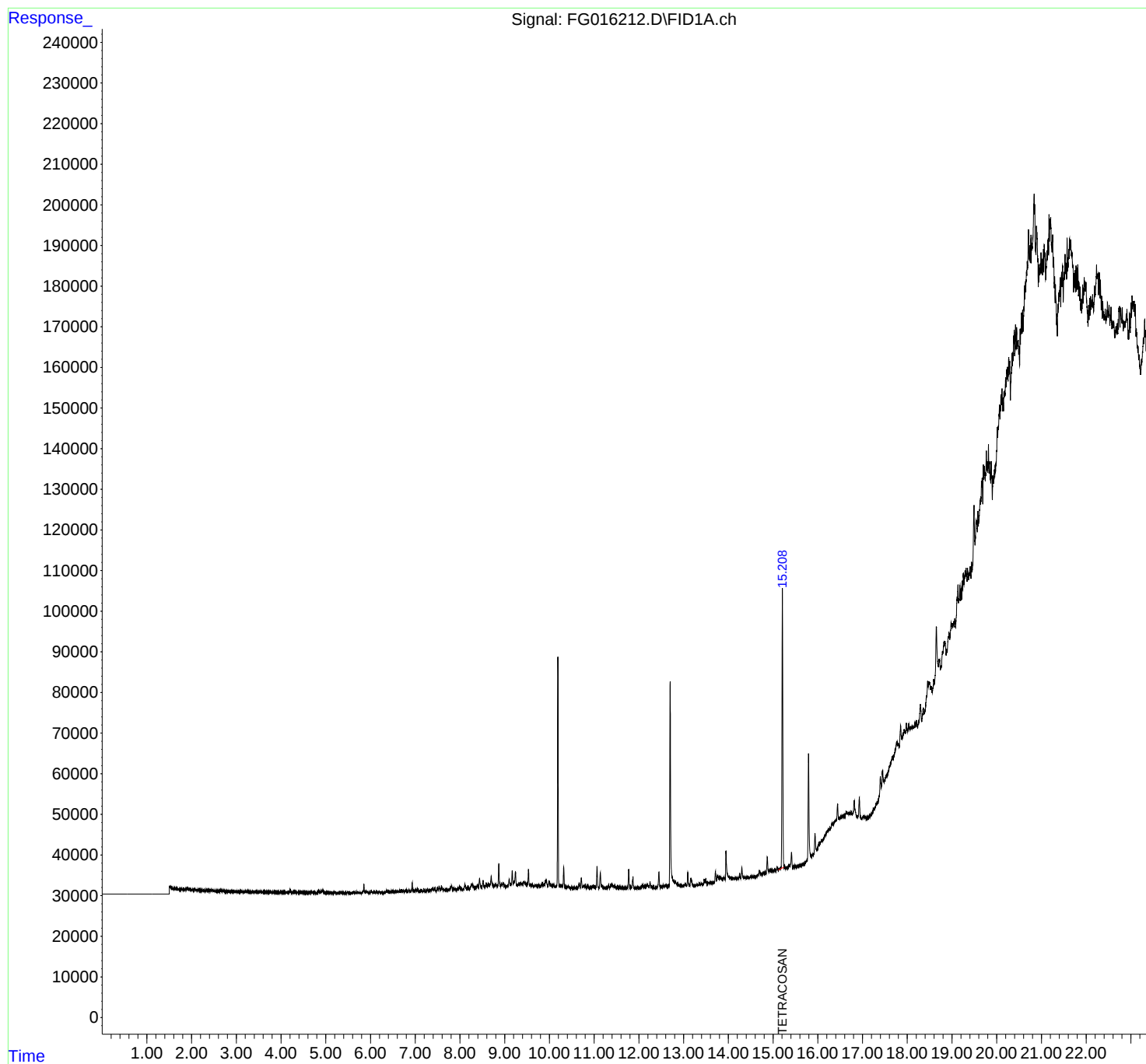
(m)=manual int.

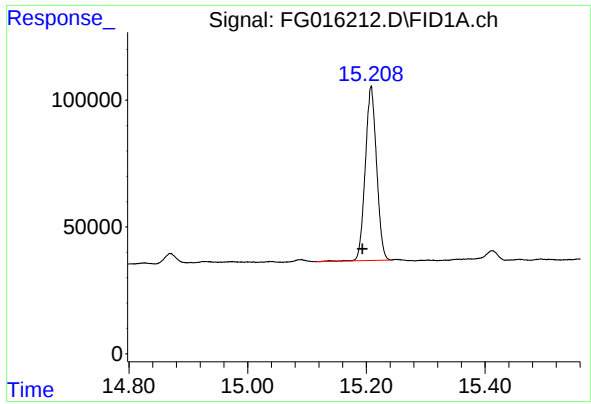
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016212.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 21:35
Operator : YP\AJ
Sample : Q2484-06
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-104

Integration File: autoint1.e
Quant Time: Jul 03 01:25:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.208 min
Delta R.T.: 0.015 min
Response: 906991
Conc: 7.73 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-104

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016212.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 21:35
Sample : Q2484-06
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.506	4.500	4.519	BV	33	119	0.01%	0.001%
2	4.560	4.519	4.585	PV	103	1409	0.15%	0.014%
3	4.593	4.585	4.611	VV	79	756	0.08%	0.007%
4	4.638	4.611	4.651	VV	177	2595	0.28%	0.025%
5	4.660	4.651	4.667	VV	149	1147	0.12%	0.011%
6	4.678	4.667	4.702	VV	262	3125	0.34%	0.031%
7	4.712	4.702	4.741	VV	166	2074	0.22%	0.020%
8	4.759	4.741	4.806	VV	154	2226	0.24%	0.022%
9	4.813	4.806	4.819	VV	97	563	0.06%	0.006%
10	4.843	4.819	4.872	VV	541	8966	0.96%	0.088%
11	4.898	4.872	4.909	VV	460	8114	0.87%	0.079%
12	4.920	4.909	4.925	VV	515	4762	0.51%	0.047%
13	4.931	4.925	5.004	VV	604	13558	1.46%	0.133%
14	5.020	5.004	5.036	VV	135	1999	0.22%	0.020%
15	5.044	5.036	5.055	VV	180	1334	0.14%	0.013%
16	5.064	5.055	5.069	VV	127	860	0.09%	0.008%
17	5.077	5.069	5.083	VV	119	865	0.09%	0.008%
18	5.087	5.083	5.105	VV	196	1554	0.17%	0.015%
19	5.125	5.105	5.134	VV	182	1830	0.20%	0.018%
20	5.139	5.134	5.156	VV	136	1510	0.16%	0.015%
21	5.161	5.156	5.173	PV	124	730	0.08%	0.007%
22	5.201	5.173	5.225	VV	241	3808	0.41%	0.037%
23	5.230	5.225	5.242	VV	78	635	0.07%	0.006%
24	5.264	5.242	5.271	PV	148	1299	0.14%	0.013%
25	5.273	5.271	5.284	VV	182	895	0.10%	0.009%
26	5.289	5.284	5.307	VV	112	1063	0.11%	0.010%
27	5.335	5.307	5.358	VV	255	4312	0.46%	0.042%
28	5.370	5.358	5.377	VV	176	1435	0.15%	0.014%
29	5.383	5.377	5.421	VV	191	2961	0.32%	0.029%
30	5.438	5.421	5.452	VV	183	2270	0.24%	0.022%
31	5.457	5.452	5.462	VV	128	634	0.07%	0.006%
32	5.490	5.462	5.496	VV	331	4938	0.53%	0.048%
33	5.500	5.496	5.517	VV	275	2297	0.25%	0.022%
34	5.524	5.517	5.546	VV	173	1776	0.19%	0.017%
35	5.551	5.546	5.554	PV	110	348	0.04%	0.003%
36	5.559	5.554	5.587	VV	138	2269	0.24%	0.022%

					rteres			
37	5.623	5.587	5.647	VV	426	7001	0.75%	0.068%
38	5.659	5.647	5.666	VV	226	1917	0.21%	0.019%
39	5.668	5.666	5.680	VV	201	1235	0.13%	0.012%
40	5.700	5.680	5.717	VV	390	4765	0.51%	0.047%
41	5.729	5.717	5.746	VV	218	1857	0.20%	0.018%
42	5.752	5.746	5.767	VV	181	1424	0.15%	0.014%
43	5.773	5.767	5.784	VV	121	785	0.08%	0.008%
44	5.794	5.784	5.807	VV	141	1152	0.12%	0.011%
45	5.825	5.807	5.829	VV	371	3327	0.36%	0.033%
46	5.853	5.829	5.871	VV	2240	24971	2.69%	0.244%
47	5.887	5.871	5.914	VV	545	9731	1.05%	0.095%
48	5.923	5.914	5.942	VV	514	5288	0.57%	0.052%
49	5.952	5.942	5.988	VV	210	3761	0.40%	0.037%
50	6.014	5.988	6.044	VV	731	11367	1.22%	0.111%
51	6.078	6.044	6.108	VV	294	7777	0.84%	0.076%
52	6.124	6.108	6.131	VV	371	4036	0.43%	0.039%
53	6.141	6.131	6.167	VV	435	4822	0.52%	0.047%
54	6.191	6.167	6.201	VV	311	3764	0.41%	0.037%
55	6.213	6.201	6.226	VV	242	2593	0.28%	0.025%
56	6.248	6.226	6.275	VV	201	3712	0.40%	0.036%
57	6.305	6.275	6.323	PV	214	2606	0.28%	0.025%
58	6.340	6.323	6.347	VV	247	2316	0.25%	0.023%
59	6.362	6.347	6.383	VV	657	9148	0.98%	0.089%
60	6.399	6.383	6.441	VV	433	10309	1.11%	0.101%
61	6.457	6.441	6.464	VV	346	3876	0.42%	0.038%
62	6.474	6.464	6.487	VV	428	4634	0.50%	0.045%
63	6.506	6.487	6.527	VV	557	7892	0.85%	0.077%
64	6.548	6.527	6.577	VV	444	9733	1.05%	0.095%
65	6.588	6.577	6.617	VV	507	8347	0.90%	0.082%
66	6.624	6.617	6.635	VV	287	2893	0.31%	0.028%
67	6.654	6.635	6.674	VV	537	8006	0.86%	0.078%
68	6.693	6.674	6.710	VV	867	10735	1.16%	0.105%
69	6.732	6.710	6.754	VV	519	8818	0.95%	0.086%
70	6.777	6.754	6.799	VV	528	10285	1.11%	0.101%
71	6.808	6.799	6.829	VV	658	8559	0.92%	0.084%
72	6.835	6.829	6.842	VV	372	2588	0.28%	0.025%
73	6.858	6.842	6.899	VV	635	13286	1.43%	0.130%
74	6.932	6.899	6.969	VV	2460	34839	3.75%	0.341%
75	6.975	6.969	6.981	VV	455	2820	0.30%	0.028%
76	7.015	6.981	7.034	VV	835	14925	1.61%	0.146%
77	7.057	7.034	7.079	VV	806	12757	1.37%	0.125%
78	7.091	7.079	7.112	VV	308	4411	0.47%	0.043%
79	7.132	7.112	7.170	VV	498	11957	1.29%	0.117%
80	7.197	7.170	7.219	VV	466	9976	1.07%	0.098%
81	7.234	7.219	7.255	VV	438	7293	0.78%	0.071%
82	7.272	7.255	7.293	VV	819	11354	1.22%	0.111%
83	7.339	7.293	7.354	VV	647	14467	1.56%	0.141%
84	7.371	7.354	7.388	VV	877	13133	1.41%	0.128%
85	7.398	7.388	7.417	VV	826	11485	1.24%	0.112%
86	7.438	7.417	7.467	VV	1082	19342	2.08%	0.189%
87	7.503	7.467	7.517	VV	883	19184	2.06%	0.188%
88	7.536	7.517	7.558	VV	1297	20461	2.20%	0.200%
89	7.562	7.558	7.566	VV	473	2143	0.23%	0.021%

					rteres			
90	7.586	7.566	7.627	VV	1546	31678	3.41%	0.310%
91	7.641	7.627	7.664	VV	698	10482	1.13%	0.102%
92	7.687	7.664	7.706	VV	752	14244	1.53%	0.139%
93	7.715	7.706	7.751	VV	582	12044	1.30%	0.118%
94	7.811	7.751	7.842	VV	1622	47620	5.12%	0.466%
95	7.855	7.842	7.861	VV	775	7623	0.82%	0.075%
96	7.864	7.861	7.887	VV	795	11515	1.24%	0.113%
97	7.889	7.887	7.921	VV	721	12347	1.33%	0.121%
98	7.950	7.921	7.961	VV	803	15433	1.66%	0.151%
99	7.992	7.961	8.019	VV	1187	31499	3.39%	0.308%
100	8.031	8.019	8.062	VV	717	14685	1.58%	0.144%
101	8.076	8.062	8.081	VV	830	7159	0.77%	0.070%
102	8.084	8.081	8.088	VV	773	2777	0.30%	0.027%
103	8.109	8.088	8.142	VV	1949	39428	4.24%	0.386%
104	8.160	8.142	8.186	VV	908	19502	2.10%	0.191%
105	8.202	8.186	8.222	VV	790	15125	1.63%	0.148%
106	8.256	8.222	8.263	VV	1508	29181	3.14%	0.285%
107	8.277	8.263	8.293	VV	1679	26190	2.82%	0.256%
108	8.302	8.293	8.329	VV	1309	21574	2.32%	0.211%
109	8.344	8.329	8.361	VV	974	16755	1.80%	0.164%
110	8.364	8.361	8.369	VV	893	4308	0.46%	0.042%
111	8.393	8.369	8.415	VV	1464	32968	3.55%	0.322%
112	8.438	8.415	8.491	VV	3201	74017	7.96%	0.724%
113	8.518	8.491	8.537	VV	2724	49449	5.32%	0.484%
114	8.547	8.537	8.560	VV	1307	16356	1.76%	0.160%
115	8.586	8.560	8.612	VV	2063	47733	5.14%	0.467%
116	8.628	8.612	8.641	VV	1728	25580	2.75%	0.250%
117	8.654	8.641	8.667	VV	1643	24118	2.60%	0.236%
118	8.699	8.667	8.732	VV	3746	86594	9.32%	0.847%
119	8.746	8.732	8.762	VV	1546	24962	2.69%	0.244%
120	8.790	8.762	8.804	VV	1660	36645	3.94%	0.358%
121	8.809	8.804	8.829	VV	1569	20802	2.24%	0.203%
122	8.868	8.829	8.911	VV	6705	123901	13.33%	1.212%
123	8.925	8.911	8.942	VV	1923	29527	3.18%	0.289%
124	8.961	8.942	9.022	VV	1926	68688	7.39%	0.672%
125	9.065	9.022	9.072	VV	1350	34584	3.72%	0.338%
126	9.101	9.072	9.124	VV	2661	58123	6.25%	0.568%
127	9.131	9.124	9.149	VV	1592	22720	2.44%	0.222%
128	9.169	9.149	9.191	VV	4974	74526	8.02%	0.729%
129	9.209	9.191	9.219	VV	2387	34443	3.71%	0.337%
130	9.240	9.219	9.266	VV	4653	82701	8.90%	0.809%
131	9.281	9.266	9.289	VV	1417	18891	2.03%	0.185%
132	9.296	9.289	9.301	VV	1471	10585	1.14%	0.104%
133	9.332	9.301	9.348	VV	1734	43975	4.73%	0.430%
134	9.363	9.348	9.380	VV	1884	32637	3.51%	0.319%
135	9.392	9.380	9.408	VV	1946	28571	3.07%	0.279%
136	9.427	9.408	9.451	VV	2206	48570	5.23%	0.475%
137	9.459	9.451	9.491	VV	1861	36460	3.92%	0.357%
138	9.504	9.491	9.512	VV	1608	18549	2.00%	0.181%
139	9.531	9.512	9.560	VV	5177	78874	8.49%	0.771%
140	9.578	9.560	9.595	VV	1569	27745	2.99%	0.271%
141	9.623	9.595	9.655	VV	1485	43157	4.64%	0.422%

					rteres			
142	9.687	9.655	9.714	VV	1276	39287	4.23%	0.384%
143	9.718	9.714	9.736	VV	1131	13360	1.44%	0.131%
144	9.767	9.736	9.786	VV	1240	33877	3.65%	0.331%
145	9.791	9.786	9.804	VV	1025	10285	1.11%	0.101%
146	9.826	9.804	9.836	VV	1450	22812	2.45%	0.223%
147	9.848	9.836	9.872	VV	1604	29465	3.17%	0.288%
148	9.885	9.872	9.889	VV	1382	12390	1.33%	0.121%
149	9.911	9.889	9.925	VV	2365	41007	4.41%	0.401%
150	9.934	9.925	9.966	VV	2306	39964	4.30%	0.391%
151	9.991	9.966	10.031	VV	2296	58334	6.28%	0.570%
152	10.044	10.031	10.061	VV	1334	20822	2.24%	0.204%
153	10.074	10.061	10.090	VV	1211	19920	2.14%	0.195%
154	10.097	10.090	10.126	VV	1302	21693	2.33%	0.212%
155	10.155	10.126	10.163	VV	1093	19947	2.15%	0.195%
156	10.189	10.163	10.217	VV	57414	582580	62.69%	5.697%
157	10.232	10.217	10.246	VV	1028	15982	1.72%	0.156%
158	10.274	10.246	10.292	VV	1093	26848	2.89%	0.263%
159	10.319	10.292	10.359	VV	5561	82557	8.88%	0.807%
160	10.380	10.359	10.397	VV	744	15067	1.62%	0.147%
161	10.427	10.397	10.477	VV	918	28596	3.08%	0.280%
162	10.499	10.477	10.521	VV	639	13625	1.47%	0.133%
163	10.533	10.521	10.552	VV	512	7993	0.86%	0.078%
164	10.573	10.552	10.580	VV	452	6670	0.72%	0.065%
165	10.598	10.580	10.618	VV	519	9440	1.02%	0.092%
166	10.633	10.618	10.640	VV	493	5406	0.58%	0.053%
167	10.665	10.640	10.687	VV	1664	26914	2.90%	0.263%
168	10.711	10.687	10.740	VV	2883	46758	5.03%	0.457%
169	10.765	10.740	10.780	VV	987	18873	2.03%	0.185%
170	10.800	10.780	10.825	VV	1032	18752	2.02%	0.183%
171	10.852	10.825	10.893	VV	898	24511	2.64%	0.240%
172	10.912	10.893	10.951	VV	549	15977	1.72%	0.156%
173	10.970	11.004	11.004	VV	855	20317	2.19%	0.199%
174	11.013	11.004	11.031	VV	634	8582	0.92%	0.084%
175	11.064	11.031	11.110	VV	5536	76571	8.24%	0.749%
176	11.138	11.110	11.160	VV	4099	60115	6.47%	0.588%
177	11.165	11.160	11.237	VV	795	22240	2.39%	0.217%
178	11.285	11.237	11.301	VV	413	10703	1.15%	0.105%
179	11.324	11.301	11.346	VV	1010	15322	1.65%	0.150%
180	11.366	11.346	11.374	VV	793	9904	1.07%	0.097%
181	11.398	11.374	11.422	VV	1025	23949	2.58%	0.234%
182	11.462	11.422	11.505	VV	794	24856	2.67%	0.243%
183	11.520	11.505	11.542	VV	523	8607	0.93%	0.084%
184	11.545	11.542	11.562	VV	249	2764	0.30%	0.027%
185	11.577	11.562	11.602	VV	517	7469	0.80%	0.073%
186	11.634	11.602	11.667	VV	353	7067	0.76%	0.069%
187	11.696	11.667	11.708	PV	249	4120	0.44%	0.040%
188	11.719	11.708	11.727	VV	275	2788	0.30%	0.027%
189	11.773	11.727	11.832	VV	4705	65777	7.08%	0.643%
190	11.867	11.832	11.911	VV	2418	38964	4.19%	0.381%
191	11.930	11.911	11.956	VV	313	4822	0.52%	0.047%
192	11.970	11.956	12.003	VV	352	5129	0.55%	0.050%
193	12.022	12.003	12.029	VV	221	2451	0.26%	0.024%
194	12.033	12.029	12.036	VV	150	631	0.07%	0.006%

					rteres			
195	12.073	12.036	12.078	VV	739	9349	1.01%	0.091%
196	12.082	12.078	12.112	VV	767	11521	1.24%	0.113%
197	12.129	12.112	12.147	VV	651	10408	1.12%	0.102%
198	12.193	12.147	12.228	VV	884	26504	2.85%	0.259%
199	12.249	12.228	12.275	VV	1614	22501	2.42%	0.220%
200	12.284	12.275	12.307	VV	358	4692	0.50%	0.046%
201	12.318	12.307	12.342	VV	218	3425	0.37%	0.033%
202	12.383	12.342	12.405	PV	148	3098	0.33%	0.030%
203	12.448	12.405	12.487	VV	3993	58263	6.27%	0.570%
204	12.495	12.487	12.519	VV	241	2552	0.27%	0.025%
205	12.544	12.519	12.561	VV	597	8745	0.94%	0.086%
206	12.583	12.561	12.598	VV	459	8009	0.86%	0.078%
207	12.607	12.598	12.614	VV	442	3839	0.41%	0.038%
208	12.615	12.614	12.622	VV	469	1742	0.19%	0.017%
209	12.625	12.622	12.646	VV	313	4070	0.44%	0.040%
210	12.652	12.646	12.662	VV	253	2383	0.26%	0.023%
211	12.699	12.662	12.779	VV	50501	669991	72.09%	6.552%
212	12.783	12.779	12.804	VV	1462	18245	1.96%	0.178%
213	12.819	12.804	12.852	VV	1304	29129	3.13%	0.285%
214	12.864	12.852	12.903	VV	834	16116	1.73%	0.158%
215	12.919	12.903	12.947	VV	435	9020	0.97%	0.088%
216	12.950	12.947	12.974	VV	296	2700	0.29%	0.026%
217	12.992	12.974	12.997	VV	167	1897	0.20%	0.019%
218	13.035	12.997	13.067	VV	555	12552	1.35%	0.123%
219	13.094	13.067	13.133	VV	3446	45145	4.86%	0.441%
220	13.161	13.133	13.211	VV	1840	37490	4.03%	0.367%
221	13.221	13.211	13.237	VV	167	1475	0.16%	0.014%
222	13.243	13.237	13.246	PV	118	399	0.04%	0.004%
223	13.251	13.246	13.282	VV	95	1292	0.14%	0.013%
224	13.302	13.282	13.330	VV	183	3280	0.35%	0.032%
225	13.353	13.330	13.379	VV	329	5520	0.59%	0.054%
226	13.405	13.379	13.432	VV	300	6860	0.74%	0.067%
227	13.462	13.432	13.477	PV	1423	17204	1.85%	0.168%
228	13.495	13.477	13.537	VV	1406	23546	2.53%	0.230%
229	13.546	13.537	13.564	VV	342	3999	0.43%	0.039%
230	13.592	13.564	13.620	VV	384	9175	0.99%	0.090%
231	13.626	13.620	13.641	VV	153	1415	0.15%	0.014%
232	13.657	13.641	13.684	VV	315	4246	0.46%	0.042%
233	13.711	13.684	13.734	PV	2942	39823	4.28%	0.389%
234	13.759	13.734	13.786	VV	1638	38816	4.18%	0.380%
235	13.803	13.786	13.855	VV	1407	44540	4.79%	0.436%
236	13.861	13.855	13.868	VV	758	5498	0.59%	0.054%
237	13.903	13.868	13.928	VV	1139	29832	3.21%	0.292%
238	13.946	13.928	14.042	VV	7513	148675	16.00%	1.454%
239	14.055	14.042	14.078	VV	750	13003	1.40%	0.127%
240	14.083	14.078	14.085	VV	458	1919	0.21%	0.019%
241	14.097	14.085	14.132	VV	655	13840	1.49%	0.135%
242	14.137	14.132	14.146	VV	386	2810	0.30%	0.027%
243	14.169	14.146	14.185	VV	410	8141	0.88%	0.080%
244	14.208	14.185	14.213	VV	358	4370	0.47%	0.043%
245	14.252	14.213	14.275	VV	1472	23333	2.51%	0.228%
246	14.301	14.275	14.364	VV	2882	46858	5.04%	0.458%

					rteres			
247	14.370	14.364	14.375	VV	234	1426	0.15%	0.014%
248	14.378	14.375	14.405	VV	241	2241	0.24%	0.022%
249	14.422	14.405	14.440	VV	270	3197	0.34%	0.031%
250	14.446	14.440	14.479	VV	215	2195	0.24%	0.021%
251	14.532	14.479	14.564	PV	256	6816	0.73%	0.067%
252	14.593	14.564	14.615	VV	143	2169	0.23%	0.021%
253	14.666	14.615	14.671	PV	426	4522	0.49%	0.044%
254	14.693	14.671	14.748	VV	1353	28614	3.08%	0.280%
255	14.756	14.748	14.767	VV	259	2282	0.25%	0.022%
256	14.793	14.767	14.807	VV	513	8147	0.88%	0.080%
257	14.826	14.807	14.844	VV	606	9093	0.98%	0.089%
258	14.870	14.844	14.898	VV	4242	62169	6.69%	0.608%
259	14.904	14.898	14.911	VV	591	3894	0.42%	0.038%
260	14.930	14.911	14.952	VV	921	17954	1.93%	0.176%
261	14.974	14.952	14.994	VV	744	15681	1.69%	0.153%
262	15.000	14.994	15.017	VV	587	6910	0.74%	0.068%
263	15.040	15.017	15.061	VV	590	11945	1.29%	0.117%
264	15.090	15.061	15.113	VV	1310	22633	2.44%	0.221%
265	15.118	15.113	15.121	VV	437	1982	0.21%	0.019%
266	15.138	15.121	15.151	VV	721	10291	1.11%	0.101%
267	15.164	15.151	15.174	VV	714	8866	0.95%	0.087%
268	15.208	15.174	15.242	VV	69287	929373	100.00%	9.088%
269	15.250	15.242	15.282	VV	952	15229	1.64%	0.149%
270	15.293	15.282	15.299	VV	488	4307	0.46%	0.042%
271	15.304	15.299	15.309	VV	571	3041	0.33%	0.030%
272	15.312	15.309	15.319	VV	488	2330	0.25%	0.023%
273	15.373	15.319	15.381	VV	882	22355	2.41%	0.219%
274	15.412	15.381	15.434	VV	3991	61872	6.66%	0.605%
275	15.458	15.434	15.477	VV	487	6822	0.73%	0.067%
276	15.495	15.477	15.529	VV	567	7880	0.85%	0.077%
277	15.601	15.529	15.629	VV	451	13812	1.49%	0.135%
278	15.679	15.629	15.689	PV	222	5382	0.58%	0.053%
279	15.693	15.689	15.703	VV	196	916	0.10%	0.009%
280	15.747	15.703	15.761	PV	445	8056	0.87%	0.079%
281	15.793	15.761	15.860	VV	26403	399439	42.98%	3.906%
282	15.874	15.860	15.879	VV	823	8660	0.93%	0.085%
283	15.888	15.879	15.892	VV	755	5601	0.60%	0.055%
284	15.938	15.892	15.972	VV	5768	114623	12.33%	1.121%
285	16.034	15.972	16.047	VV	2563	90659	9.75%	0.887%
286	16.089	16.047	16.105	VV	2888	92287	9.93%	0.902%
287	16.202	16.105	16.215	VV	4286	226724	24.40%	2.217%
288	16.235	16.215	16.239	VV	4291	57310	6.17%	0.560%
289	16.259	16.239	16.263	VV	4331	62599	6.74%	0.612%
290	16.320	16.263	16.340	VV	5353	215521	23.19%	2.107%
291	16.368	16.340	16.376	VV	5244	107841	11.60%	1.055%
292	16.397	16.376	16.410	VV	5500	107913	11.61%	1.055%
293	16.443	16.410	16.465	VV	8974	221323	23.81%	2.164%
294	16.477	16.465	16.494	VV	5486	90459	9.73%	0.885%
295	16.515	16.494	16.532	VV	5403	121325	13.05%	1.186%
296	16.546	16.532	16.574	VV	5128	126038	13.56%	1.232%
297	16.581	16.574	16.595	VV	5053	62131	6.69%	0.608%
298	16.643	16.595	16.667	VV	5607	224100	24.11%	2.191%
299	16.673	16.667	16.680	VV	4902	35265	3.79%	0.345%

					rters			
300	16.748	16.680	16.774	VV	4942	259246	27.89%	2.535%
301	16.813	16.774	16.871	VV	6968	263350	28.34%	2.575%
302	16.890	16.871	16.896	VV	2615	37845	4.07%	0.370%
303	16.928	16.896	16.982	VV	6910	162409	17.48%	1.588%
304	17.012	16.982	17.024	VV	1668	33979	3.66%	0.332%
305	17.030	17.024	17.038	VV	1391	10721	1.15%	0.105%
306	17.051	17.038	17.081	VV	1285	24580	2.64%	0.240%
307	17.101	17.081	17.106	VV	618	7793	0.84%	0.076%
308	17.111	17.106	17.124	VV	612	3831	0.41%	0.037%
309	17.127	17.124	17.131	VV	149	440	0.05%	0.004%
310	17.154	17.131	17.167	PV	642	6867	0.74%	0.067%
311	17.183	17.167	17.187	PV	351	2273	0.24%	0.022%
312	17.200	17.187	17.208	VV	205	2136	0.23%	0.021%
313	17.246	17.208	17.253	PV	629	8015	0.86%	0.078%
314	17.302	17.253	17.313	VV	776	12967	1.40%	0.127%
315	17.318	17.313	17.322	VV	602	2544	0.27%	0.025%
316	17.330	17.322	17.342	VV	509	3985	0.43%	0.039%
317	17.399	17.342	17.417	PV	4394	71762	7.72%	0.702%
318	17.449	17.417	17.481	VV	4060	72773	7.83%	0.712%
					Sum of corrected areas:		10226382	

FG061325.M Thu Jul 03 02:02:36 2025



CALIBRATION SUMMARY

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Alliance

Contract: CAMP02

ProjectID: South River WM Replacement

Lab Code: ACE

SDG No.: Q2484

Calibration Sequence : FF061325			Test : Diesel Range Organics	
Concentration	(PPM)	Area Count	Reference Factor	File ID
1000		128762116	128762	FF015964.D
500		64295722	128591	FF015965.D
200		27169561	135848	FF015966.D
100		13526499	135265	FF015967.D
50		7306219	146124	FF015968.D
AVG RF : 134918		% RSD : 5.299		AVG RT : 15.0944

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Alliance

Contract: CAMP02

ProjectID: South River WM Replacement

Lab Code: ACE

SDG No.: Q2484

Calibration Sequence : FG061325		Test : Diesel Range Organics	
Concentration (PPM)	Area Count	Reference Factor	File ID
1000	121978597	121979	FG016063.D
500	61365081	122730	FG016064.D
200	26234834	131174	FG016065.D
100	13396741	133967	FG016066.D
50	7145066	142901	FG016067.D
AVG RF : 130550		% RSD : 6.625	AVG RT : 15.1972

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: ACE SDG No.: Q2484
DataFile: FF016074.D Analyst Name: YP\AJ Analyst Date: 07-02-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	65207896	130416	134918	3.337

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
 Data File : FF016074.D
 Signal(s) : FID2B.ch
 Acq On : 02 Jul 2025 18:06
 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: Jul 03 03:22:06 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
 Quant Title :
 QLast Update : Fri Jun 13 15:23:30 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...	15.094	5642914	46.734 ug/ml
Target Compounds			
2) N-DECANE	4.617	6760199	51.596 ug/ml
3) N-DODECANE	6.794	6631129	49.799 ug/ml
4) N-TETRADECANE	8.626	6539598	48.794 ug/ml
5) N-HEXADECANE	10.235	6480698	47.986 ug/ml
6) N-OCTADECANE	11.681	6566188	47.364 ug/ml
7) N-EICOSANE	12.993	6621309	47.418 ug/ml
8) N-DOCOSANE	14.193	6424144	47.282 ug/ml
10) N-TETRACOSANE	15.299	6426533	47.418 ug/ml
11) N-HEXACOSANE	16.322	6370546	47.458 ug/ml
12) N-OCTACOSANE	17.274	6387552	48.384 ug/ml

(f)=RT Delta > 1/2 Window

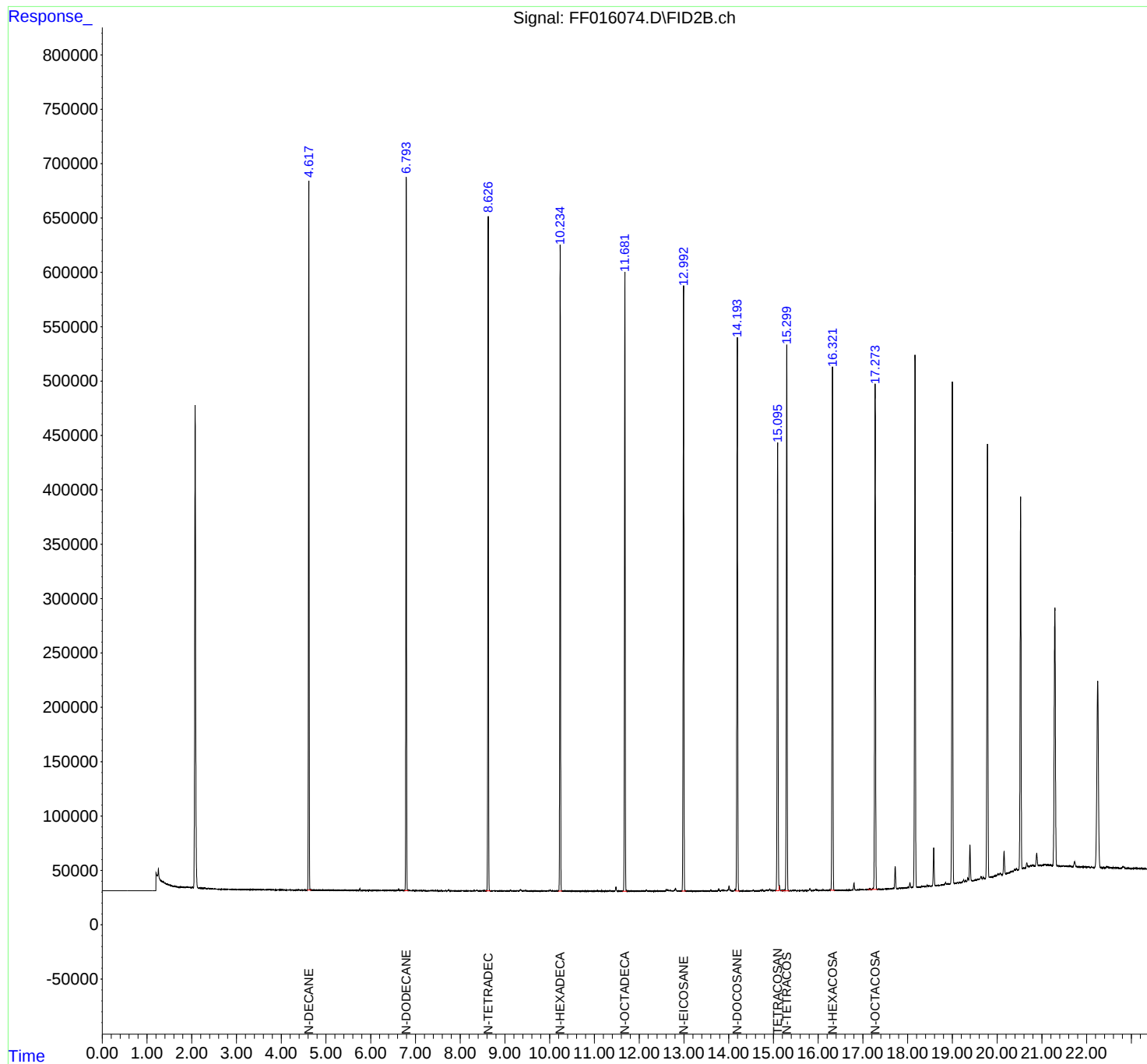
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016074.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 18:06
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: Jul 03 03:22:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 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\FF070225\
Data File : FF016074.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 18:06
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.617	4.577	4.675	BB	652183	6760199	100.00%	9.541%
2	6.794	6.757	6.842	BB	656731	6631129	98.09%	9.359%
3	8.626	8.567	8.675	BB	619308	6539598	96.74%	9.230%
4	10.235	10.194	10.280	BB	591114	6480698	95.87%	9.147%
5	11.681	11.625	11.727	BB	567514	6566188	97.13%	9.268%
6	12.993	12.949	13.044	BB	555776	6621309	97.95%	9.345%
7	14.193	14.156	14.247	VB	510373	6424144	95.03%	9.067%
8	15.094	15.049	15.127	BV	410891	5642914	83.47%	7.965%
9	15.299	15.165	15.352	VB	502120	6426533	95.06%	9.071%
10	16.322	16.272	16.375	BB	480204	6370546	94.24%	8.991%
11	17.274	17.115	17.327	BB	465295	6387552	94.49%	9.015%
Sum of corrected areas:						70850809		

FF061325.M Thu Jul 03 04:29:56 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: ACE SDG No.: Q2484
DataFile: FF016086.D Analyst Name: YP\AJ Analyst Date: 07-03-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	72212687	144425	134918	7.047

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
 Data File : FF016086.D
 Signal(s) : FID2B.ch
 Acq On : 03 Jul 2025 00:34
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 53 Sample Multiplier: 1

Instrument :
 FID_F
 ClientSampleId :
 50 PPM TRPH STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 07/03/2025
 Supervised By :mohammad ahmed 07/04/2025

Integration File: autoint1.e
 Quant Time: Jul 03 03:24:44 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
 Quant Title :
 QLast Update : Fri Jun 13 15:23:30 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...	15.102	6281883	52.026 ug/ml
Target Compounds			
2) N-DECANE	4.622	7182399	54.818 ug/ml
3) N-DODECANE	6.799	7232300	54.313 ug/ml
4) N-TETRADECANE	8.632	7261118	54.178 ug/ml
5) N-HEXADECANE	10.242	7288712	53.968 ug/ml
6) N-OCTADECANE	11.688	7415021	53.487 ug/ml
7) N-EICOSANE	13.000	7472610	53.514 ug/ml
8) N-DOCOSANE	14.202	7210488	53.070 ug/ml
10) N-TETRACOSANE	15.308	7136812	52.659 ug/ml
11) N-HEXACOSANE	16.331	7018617	52.286 ug/ml
12) N-OCTACOSANE	17.284	6994610	52.982 ug/mlm

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016086.D
Signal(s) : FID2B.ch
Acq On : 03 Jul 2025 00:34
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

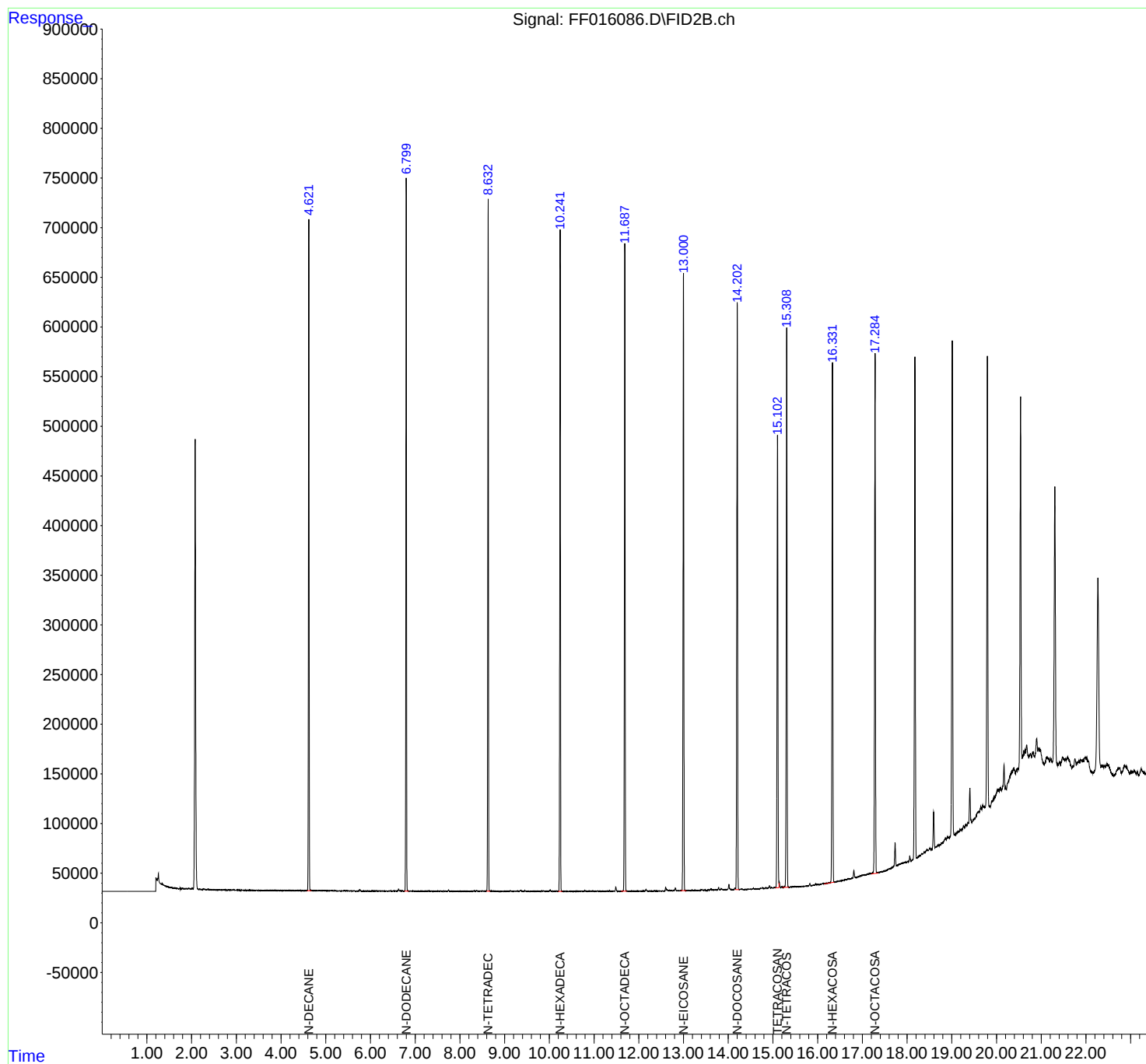
Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/03/2025
Supervised By :mohammad ahmed 07/04/2025

Integration File: autoint1.e
Quant Time: Jul 03 03:24:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Instrument :

FID_F

LabSampleId :

50 PPM TRPH STD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/03/2025

Supervised By :mohammad ahmed 07/04/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF07022
Data File : FF016086.D
Signal(s) : FID2B.ch
Acq On : 03 Jul 2025 00:34
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.622	4.586	4.679	BB	677047	7182399	96.12%	9.136%
2	6.799	6.764	6.849	BB	717741	7232300	96.78%	9.199%
3	8.632	8.596	8.676	BB	695900	7261118	97.17%	9.236%
4	10.242	10.197	10.292	BB	664441	7288712	97.54%	9.271%
5	11.688	11.604	11.732	BB	651608	7415021	99.23%	9.432%
6	13.000	12.934	13.066	BB	622946	7472610	100.00%	9.505%
7	14.202	14.164	14.244	VB	589786	7210488	96.49%	9.172%
8	15.102	15.052	15.135	BV	455201	6281883	84.07%	7.990%
9	15.308	15.214	15.361	BB	562570	7136812	95.51%	9.078%
10	16.331	16.149	16.371	BB	522828	7018617	93.92%	8.928%
11	17.284	16.841	17.347	VB	523113	7117488	95.25%	9.053%
Sum of corrected areas:						78617448		

FF061325.M Thu Jul 03 04:33:13 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: ACE SDG No.: Q2484
DataFile: FG016200.D Analyst Name: YP\AJ Analyst Date: 07-02-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	64913586	129827	130550	0.554

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
 Data File : FG016200.D
 Signal(s) : FID1A.ch
 Acq On : 02 Jul 2025 11:53
 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: Jul 03 01:22:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
 Quant Title :
 QLast Update : Fri Jun 13 12:34:28 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...	15.204	5774744	49.230 ug/ml
Target Compounds			
2) N-DECANE	4.675	6376636	50.825 ug/ml
3) N-DODECANE	6.857	6486825	50.836 ug/ml
4) N-TETRADECANE	8.698	6506920	50.421 ug/ml
5) N-HEXADECANE	10.317	6552710	50.204 ug/ml
6) N-OCTADECANE	11.771	6685010	49.917 ug/ml
7) N-EICOSANE	13.091	6709423	49.597 ug/ml
8) N-DOCOSANE	14.299	6513837	49.408 ug/ml
10) N-TETRACOSANE	15.409	6471656	49.128 ug/ml
11) N-HEXACOSANE	16.436	6375051	48.699 ug/ml
12) N-OCTACOSANE	17.393	6235518	48.268 ug/ml

(f)=RT Delta > 1/2 Window

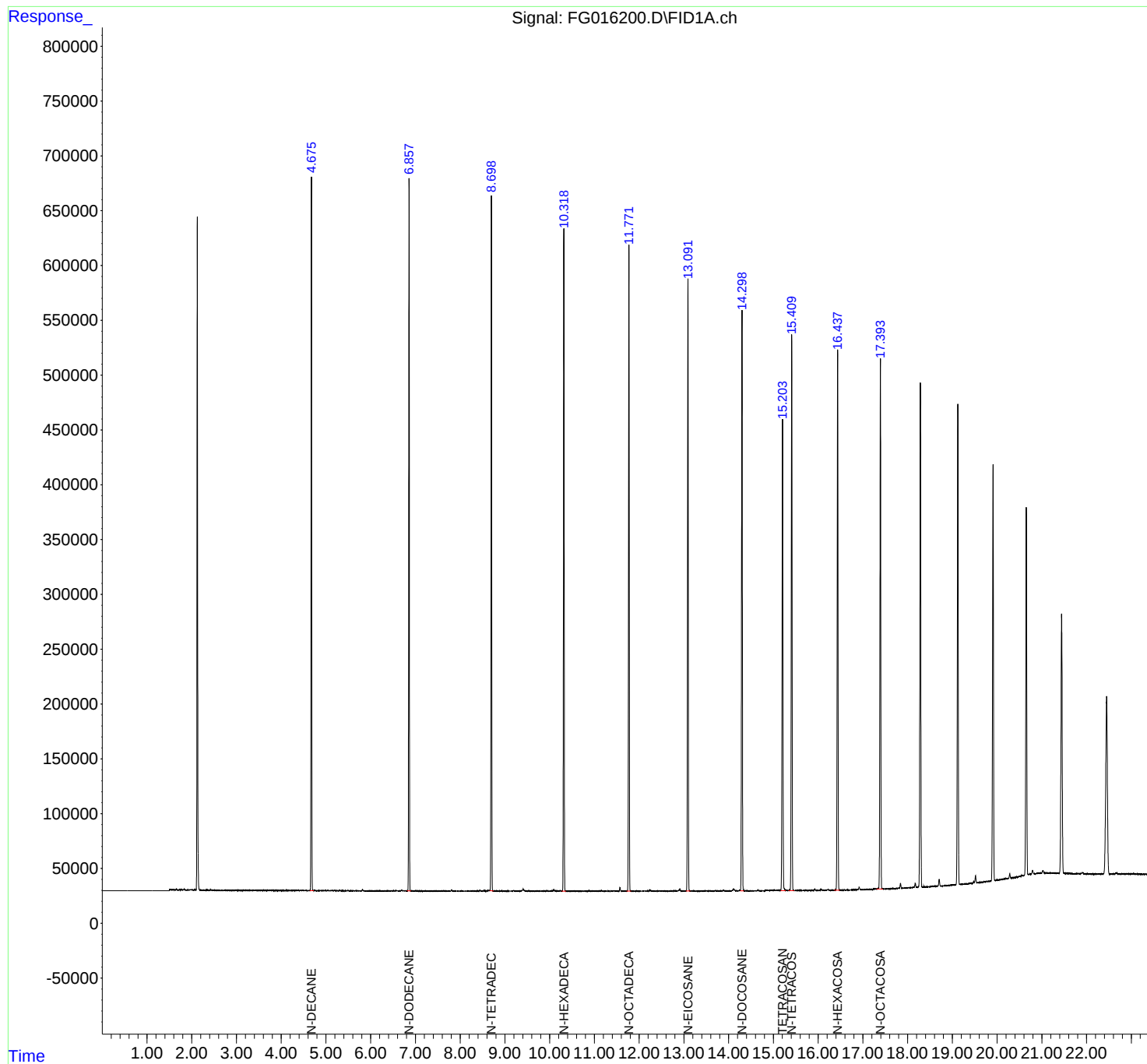
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016200.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 11:53
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: Jul 03 01:22:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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\FG070225\
Data File : FG016200.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 11:53
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.675	4.638	4.728	BB	649326	6376636	95.04%	9.021%
2	6.857	6.815	6.902	BB	649393	6486825	96.68%	9.177%
3	8.698	8.663	8.741	BB	632456	6506920	96.98%	9.205%
4	10.317	10.267	10.365	BB	604936	6552710	97.66%	9.270%
5	11.771	11.719	11.819	BB	586366	6685010	99.64%	9.457%
6	13.091	13.047	13.143	BB	558710	6709423	100.00%	9.492%
7	14.299	14.263	14.341	VV	527688	6513837	97.08%	9.215%
8	15.204	15.161	15.277	BV	428942	5774744	86.07%	8.169%
9	15.409	15.337	15.467	BB	505731	6471656	96.46%	9.155%
10	16.436	16.363	16.485	BB	491299	6375051	95.02%	9.019%
11	17.393	17.305	17.449	BB	482134	6235518	92.94%	8.821%
Sum of corrected areas:						70688330		

FG061325.M Thu Jul 03 01:49:40 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: ACE SDG No.: Q2484
DataFile: FG016208.D Analyst Name: YP\AJ Analyst Date: 07-02-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	63999772	128000	130550	1.953

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
 Data File : FG016208.D
 Signal(s) : FID1A.ch
 Acq On : 02 Jul 2025 19:06
 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: Jul 03 01:24:11 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
 Quant Title :
 QLast Update : Fri Jun 13 12:34:28 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...	15.207	5705081	48.636 ug/ml
Target Compounds			
2) N-DECANE	4.676	6254090	49.848 ug/ml
3) N-DODECANE	6.858	6363352	49.868 ug/ml
4) N-TETRADECANE	8.699	6382162	49.454 ug/ml
5) N-HEXADECANE	10.319	6435012	49.302 ug/ml
6) N-OCTADECANE	11.773	6578293	49.120 ug/ml
7) N-EICOSANE	13.093	6626385	48.983 ug/ml
8) N-DOCOSANE	14.300	6451613	48.936 ug/ml
10) N-TETRACOSANE	15.413	6419221	48.730 ug/ml
11) N-HEXACOSANE	16.440	6322288	48.296 ug/ml
12) N-OCTACOSANE	17.397	6167356	47.740 ug/ml

(f)=RT Delta > 1/2 Window

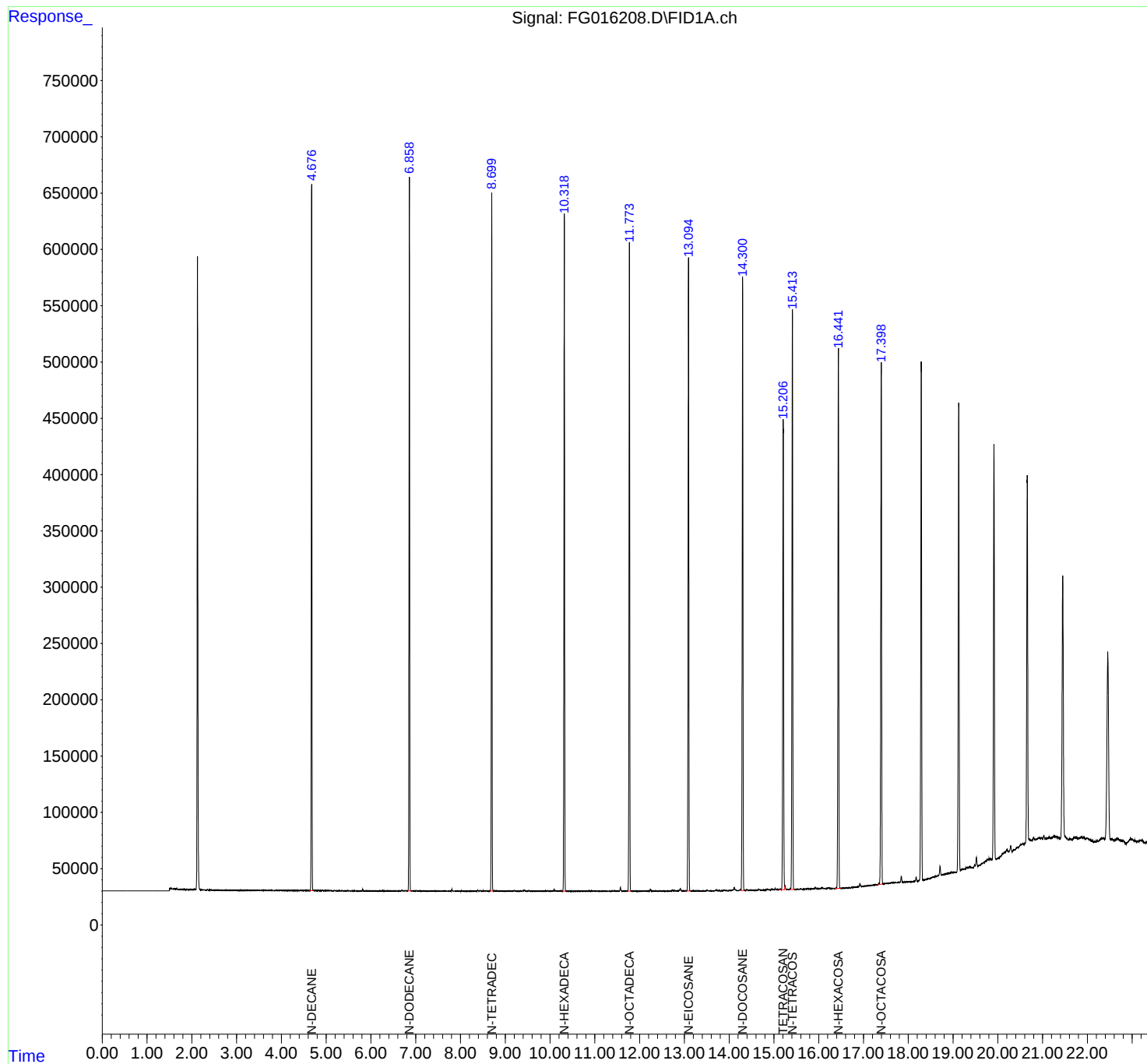
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016208.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 19:06
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: Jul 03 01:24:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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\FG070225\
Data File : FG016208.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 19:06
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.676	4.639	4.725	BB	627594	6254090	94.38%	8.972%
2	6.858	6.821	6.898	BB	633777	6363352	96.03%	9.129%
3	8.699	8.652	8.748	BB	619879	6382162	96.31%	9.156%
4	10.319	10.272	10.363	BB	601355	6435012	97.11%	9.232%
5	11.773	11.727	11.809	BB	575404	6578293	99.27%	9.437%
6	13.093	13.047	13.140	BB	559271	6626385	100.00%	9.506%
7	14.300	14.262	14.346	VB	543312	6451613	97.36%	9.256%
8	15.207	15.106	15.239	BV	413273	5705081	86.10%	8.185%
9	15.413	15.334	15.467	BB	515402	6419221	96.87%	9.209%
10	16.440	16.361	16.495	BB	479071	6322288	95.41%	9.070%
11	17.397	17.306	17.433	BB	458613	6167356	93.07%	8.848%
Sum of corrected areas:						69704852		

FG061325.M Thu Jul 03 01:51:29 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: ACE SDG No.: Q2484
DataFile: FG016214.D Analyst Name: YP\AJ Analyst Date: 07-02-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	64519521	129039	130550	1.157

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
 Data File : FG016214.D
 Signal(s) : FID1A.ch
 Acq On : 02 Jul 2025 22:35
 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: Jul 03 01:25:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
 Quant Title :
 QLast Update : Fri Jun 13 12:34:28 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...	15.211	5696888	48.566 ug/ml
Target Compounds			
2) N-DECANE	4.679	6394144	50.965 ug/ml
3) N-DODECANE	6.861	6493254	50.886 ug/ml
4) N-TETRADECANE	8.702	6501986	50.382 ug/ml
5) N-HEXADECANE	10.322	6542450	50.125 ug/ml
6) N-OCTADECANE	11.777	6672900	49.827 ug/ml
7) N-EICOSANE	13.098	6691829	49.467 ug/ml
8) N-DOCOSANE	14.305	6485316	49.192 ug/ml
10) N-TETRACOSANE	15.418	6404324	48.617 ug/ml
11) N-HEXACOSANE	16.445	6264055	47.851 ug/ml
12) N-OCTACOSANE	17.401	6069263	46.981 ug/ml

(f)=RT Delta > 1/2 Window

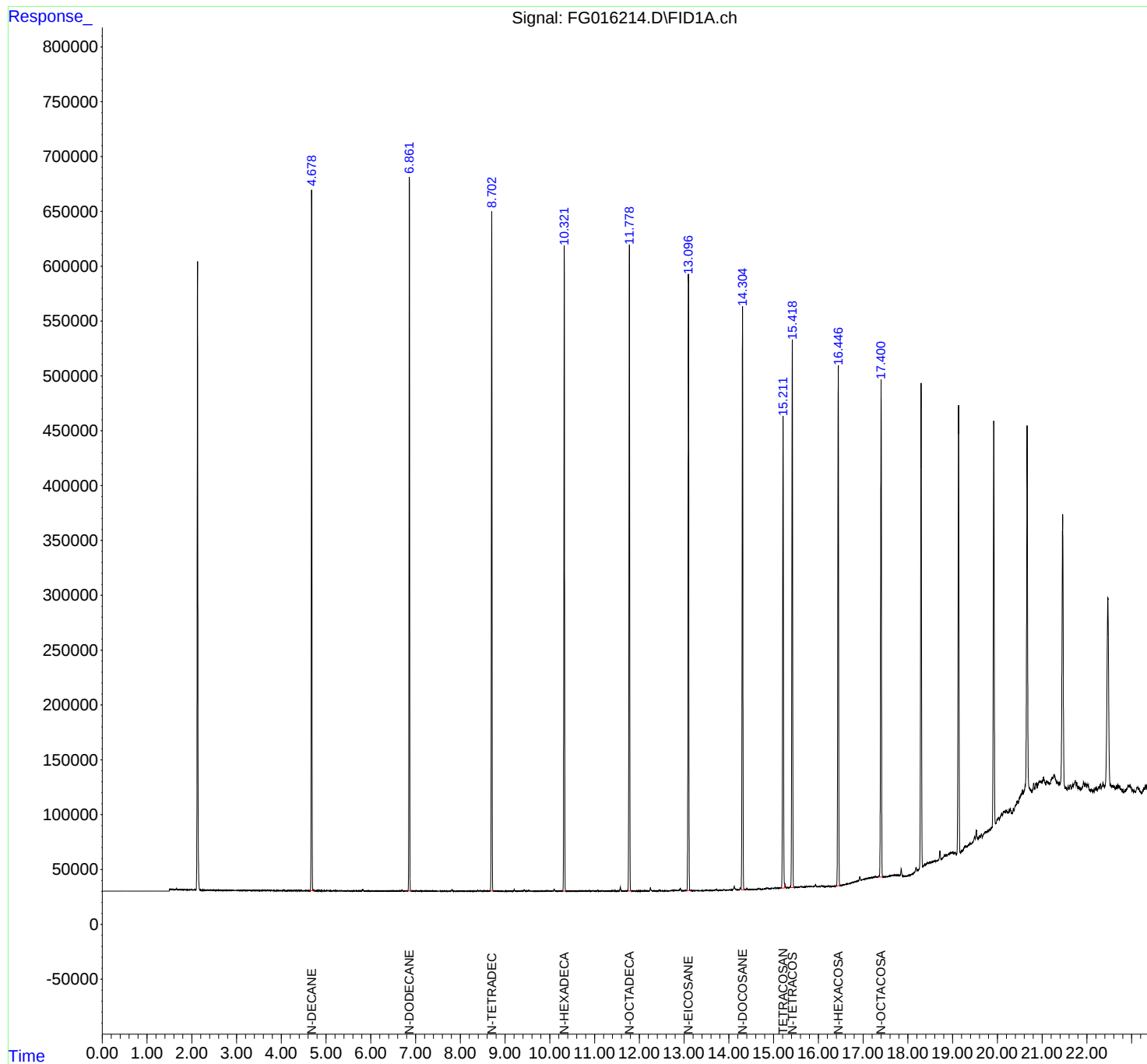
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016214.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 22:35
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: Jul 03 01:25:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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\FG070225\
Data File : FG016214.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 22:35
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.679	4.635	4.732	BB	638403	6394144	95.55%	9.106%
2	6.861	6.817	6.907	BB	650498	6493254	97.03%	9.247%
3	8.702	8.662	8.746	BB	618205	6501986	97.16%	9.260%
4	10.322	10.283	10.365	BB	586795	6542450	97.77%	9.318%
5	11.777	11.733	11.823	BB	587255	6672900	99.72%	9.503%
6	13.098	13.046	13.148	BB	559234	6691829	100.00%	9.530%
7	14.305	14.268	14.358	VB	530413	6485316	96.91%	9.236%
8	15.211	15.163	15.243	BV	428778	5696888	85.13%	8.113%
9	15.418	15.380	15.464	VB	498852	6404324	95.70%	9.121%
10	16.445	16.373	16.486	BB	470960	6264055	93.61%	8.921%
11	17.401	17.318	17.439	BB	450347	6069263	90.70%	8.644%
Sum of corrected areas:						70216407		

FG061325.M Thu Jul 03 01:52:40 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: ACE SDG No.: Q2484
DataFile: FG016218.D Analyst Name: YP\AJ Analyst Date: 07-03-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	65631043	131262	130550	0.545

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\
 Data File : FG016218.D
 Signal(s) : FID1A.ch
 Acq On : 03 Jul 2025 09:08
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
 Quant Time: Jul 04 05:28:53 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
 Quant Title :
 QLast Update : Fri Jun 13 12:34:28 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...	15.209	5803817	49.478 ug/ml
Target Compounds			
2) N-DECANE	4.677	6464832	51.528 ug/ml
3) N-DODECANE	6.860	6579712	51.564 ug/ml
4) N-TETRADECANE	8.701	6598633	51.131 ug/ml
5) N-HEXADECANE	10.321	6641992	50.888 ug/ml
6) N-OCTADECANE	11.775	6771012	50.559 ug/ml
7) N-EICOSANE	13.096	6798164	50.253 ug/ml
8) N-DOCOSANE	14.303	6592957	50.008 ug/ml
10) N-TETRACOSANE	15.416	6537898	49.631 ug/ml
11) N-HEXACOSANE	16.444	6407045	48.943 ug/ml
12) N-OCTACOSANE	17.399	6238798	48.293 ug/ml

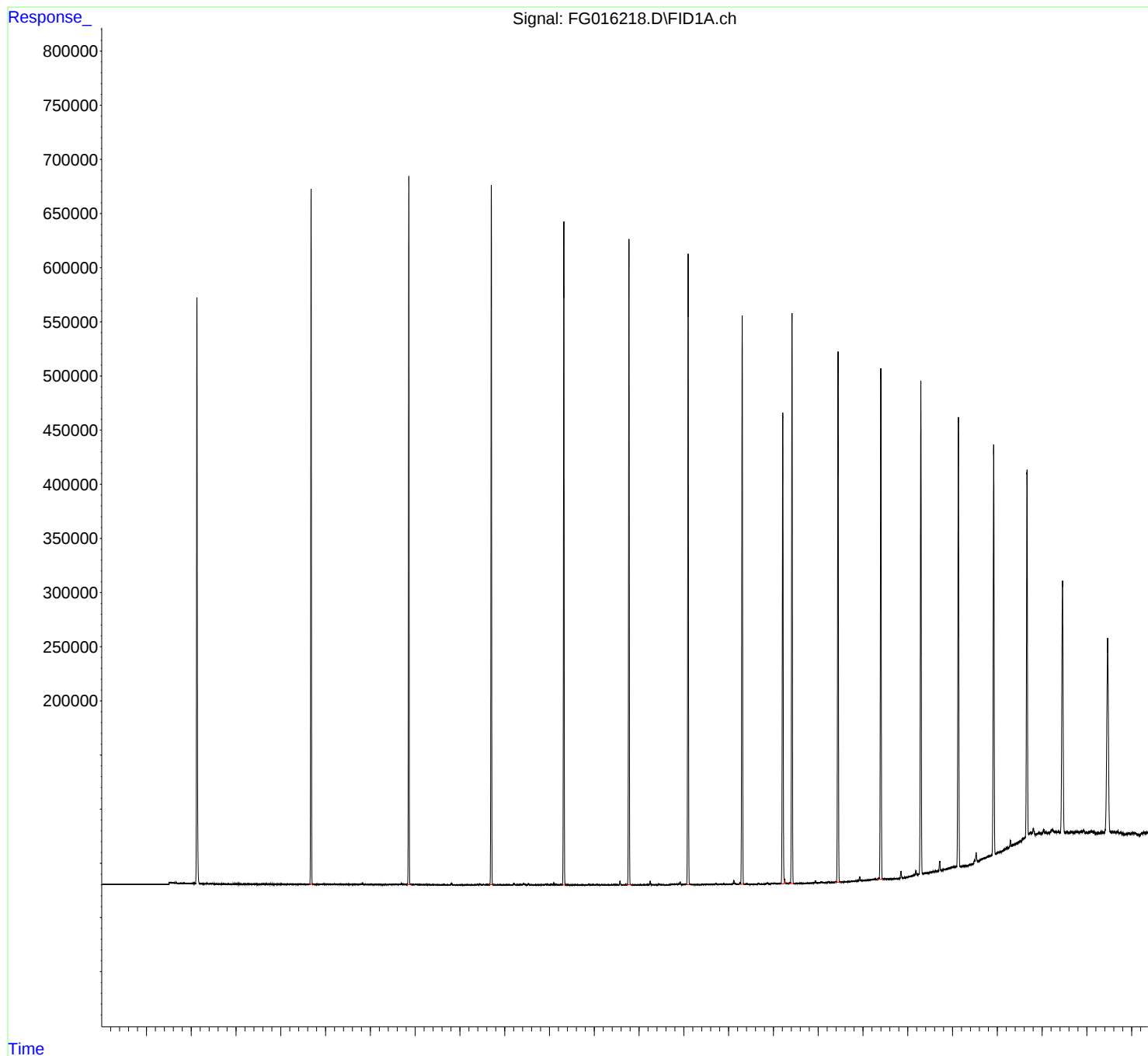
(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\
Data File : FG016218.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 09:08
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:28:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\

Data File : FG016218.D

Signal(s) : FID1A.ch

Acq On : 03 Jul 2025 09:08

Sample : 50 PPM TRPH STD

Misc :

ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M

Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.677	4.630	4.732	BB	642861	6464832	95.10%	9.050%
2	6.860	6.820	6.906	BB	654216	6579712	96.79%	9.211%
3	8.701	8.657	8.742	BB	644950	6598633	97.06%	9.237%
4	10.321	10.271	10.368	BB	611521	6641992	97.70%	9.298%
5	11.775	11.725	11.823	BB	595357	6771012	99.60%	9.479%
6	13.096	13.052	13.147	BB	582647	6798164	100.00%	9.517%
7	14.303	14.268	14.354	VB	524832	6592957	96.98%	9.229%
8	15.209	15.162	15.241	BV	433348	5803817	85.37%	8.125%
9	15.416	15.335	15.460	BB	523093	6537898	96.17%	9.152%
10	16.444	16.376	16.491	BB	488185	6407045	94.25%	8.969%
11	17.399	17.314	17.460	BB	468434	6238798	91.77%	8.734%

Sum of corrected areas: 71434859

FG061325.M Fri Jul 04 05:45:37 2025

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Alliane Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: ACE SDG No.: Q2484
DataFile: FG016223.D Analyst Name: YP\AJ Analyst Date: 07-03-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	64854029	129708	130550	0.645

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\
 Data File : FG016223.D
 Signal(s) : FID1A.ch
 Acq On : 03 Jul 2025 12:17
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
 Quant Time: Jul 04 05:29:51 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
 Quant Title :
 QLast Update : Fri Jun 13 12:34:28 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...	15.210	5742967	48.959 ug/ml
Target Compounds			
2) N-DECANE	4.677	6384087	50.885 ug/ml
3) N-DODECANE	6.860	6496580	50.912 ug/ml
4) N-TETRADECANE	8.702	6512221	50.462 ug/ml
5) N-HEXADECANE	10.321	6551358	50.193 ug/ml
6) N-OCTADECANE	11.776	6677668	49.862 ug/ml
7) N-EICOSANE	13.096	6708489	49.590 ug/ml
8) N-DOCOSANE	14.304	6522340	49.472 ug/ml
10) N-TETRACOSANE	15.416	6468206	49.102 ug/ml
11) N-HEXACOSANE	16.443	6349627	48.505 ug/ml
12) N-OCTACOSANE	17.402	6183453	47.865 ug/ml

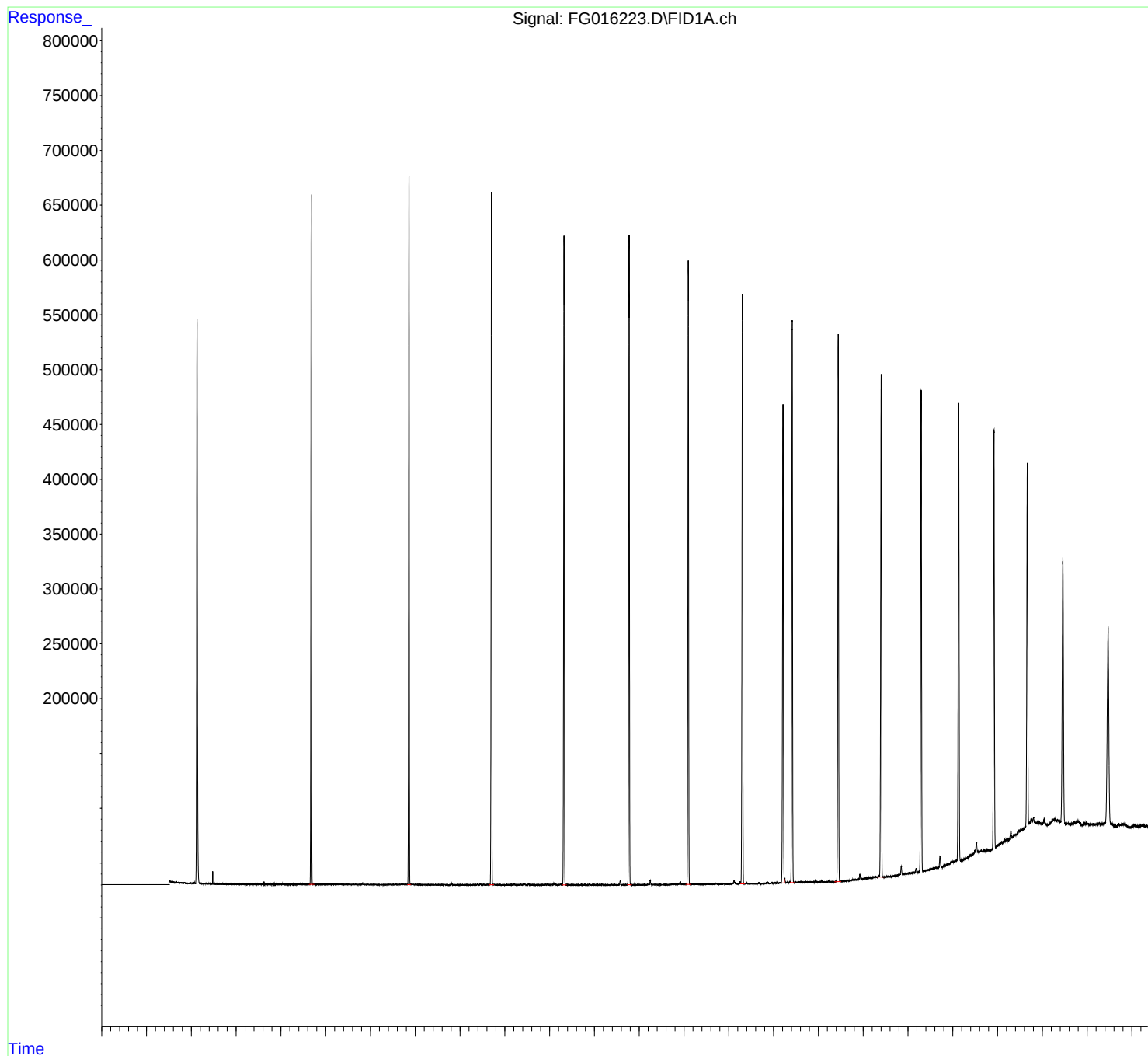
(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\
Data File : FG016223.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 12:17
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:29:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\

Data File : FG016223.D

Signal(s) : FID1A.ch

Acq On : 03 Jul 2025 12:17

Sample : 50 PPM TRPH STD

Misc :

ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M

Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.677	4.633	4.728	BB	629445	6384087	95.16%	9.043%
2	6.860	6.825	6.901	BB	646254	6496580	96.84%	9.202%
3	8.702	8.648	8.741	BB	631643	6512221	97.07%	9.225%
4	10.321	10.278	10.377	BB	587763	6551358	97.66%	9.280%
5	11.776	11.735	11.818	BB	591416	6677668	99.54%	9.459%
6	13.096	13.041	13.152	BB	566423	6708489	100.00%	9.503%
7	14.304	14.267	14.356	VB	532124	6522340	97.23%	9.239%
8	15.210	15.163	15.242	BV	435720	5742967	85.61%	8.135%
9	15.416	15.378	15.463	VB	510081	6468206	96.42%	9.162%
10	16.443	16.363	16.493	BB	498392	6349627	94.65%	8.994%
11	17.402	17.315	17.463	BB	458453	6183453	92.17%	8.759%

Sum of corrected areas: 70596996

FG061325.M Fri Jul 04 05:48:32 2025

Analytical Sequence

Client: CDM Smith

SDG No.: Q2484

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				15.0944	
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	LBLK01	02 Jul 2025 17:36	FF016073.D	15.092	
50 PPM TRPH STD	50 PPM TRPH STD	02 Jul 2025 18:06	FF016074.D	15.094	
PB168701BL	PB168701BL	02 Jul 2025 19:06	FF016075.D	15.092	
PB168701BS	PB168701BS	02 Jul 2025 19:36	FF016076.D	15.091	
TP-67MS	Q2458-04MS	02 Jul 2025 22:05	FF016081.D	15.096	
TP-67MSD	Q2458-04MSD	02 Jul 2025 22:35	FF016082.D	15.095	
PIBLK02	LBLK02	03 Jul 2025 00:04	FF016085.D	15.100	
50 PPM TRPH STD	50 PPM TRPH STD	03 Jul 2025 00:34	FF016086.D	15.102	
PIBLK03	LBLK03	02 Jul 2025 11:18	FG016199.D	15.199	
50 PPM TRPH STD	50 PPM TRPH STD	02 Jul 2025 11:53	FG016200.D	15.204	
TP-57	Q2484-02	02 Jul 2025 18:06	FG016206.D	15.203	
PIBLK04	LBLK04	02 Jul 2025 18:36	FG016207.D	15.204	
50 PPM TRPH STD	50 PPM TRPH STD	02 Jul 2025 19:06	FG016208.D	15.207	
TP-107	Q2484-04	02 Jul 2025 20:35	FG016210.D	15.209	
TP-106	Q2484-05	02 Jul 2025 21:05	FG016211.D	15.209	
TP-104	Q2484-06	02 Jul 2025 21:35	FG016212.D	15.208	
PIBLK05	LBLK05	02 Jul 2025 22:05	FG016213.D	15.208	
50 PPM TRPH STD	50 PPM TRPH STD	02 Jul 2025 22:35	FG016214.D	15.211	
PIBLK06	LBLK06	03 Jul 2025 08:38	FG016217.D	15.206	
50 PPM TRPH STD	50 PPM TRPH STD	03 Jul 2025 09:08	FG016218.D	15.209	
TP-58	Q2484-01	03 Jul 2025 10:47	FG016220.D	15.207	
TP-64	Q2484-03	03 Jul 2025 11:17	FG016221.D	15.206	
PIBLK07	LBLK07	03 Jul 2025 11:47	FG016222.D	15.207	
50 PPM TRPH STD	50 PPM TRPH STD	03 Jul 2025 12:17	FG016223.D	15.210	



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168701BL	SDG No.:	Q2484
Lab Sample ID:	PB168701BL	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :		PH :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016075.D	1	07/02/25 09:17	07/02/25 19:06	PB168701

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	15.9		37 - 130	79%	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\FF070225\
Data File : FF016075.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 19:06
Operator : YP\AJ
Sample : PB168701BL
Misc :
ALS Vial : 79 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB168701BL

Integration File: autoint1.e
Quant Time: Jul 03 03:22:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 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...	15.092	1916349	15.871 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

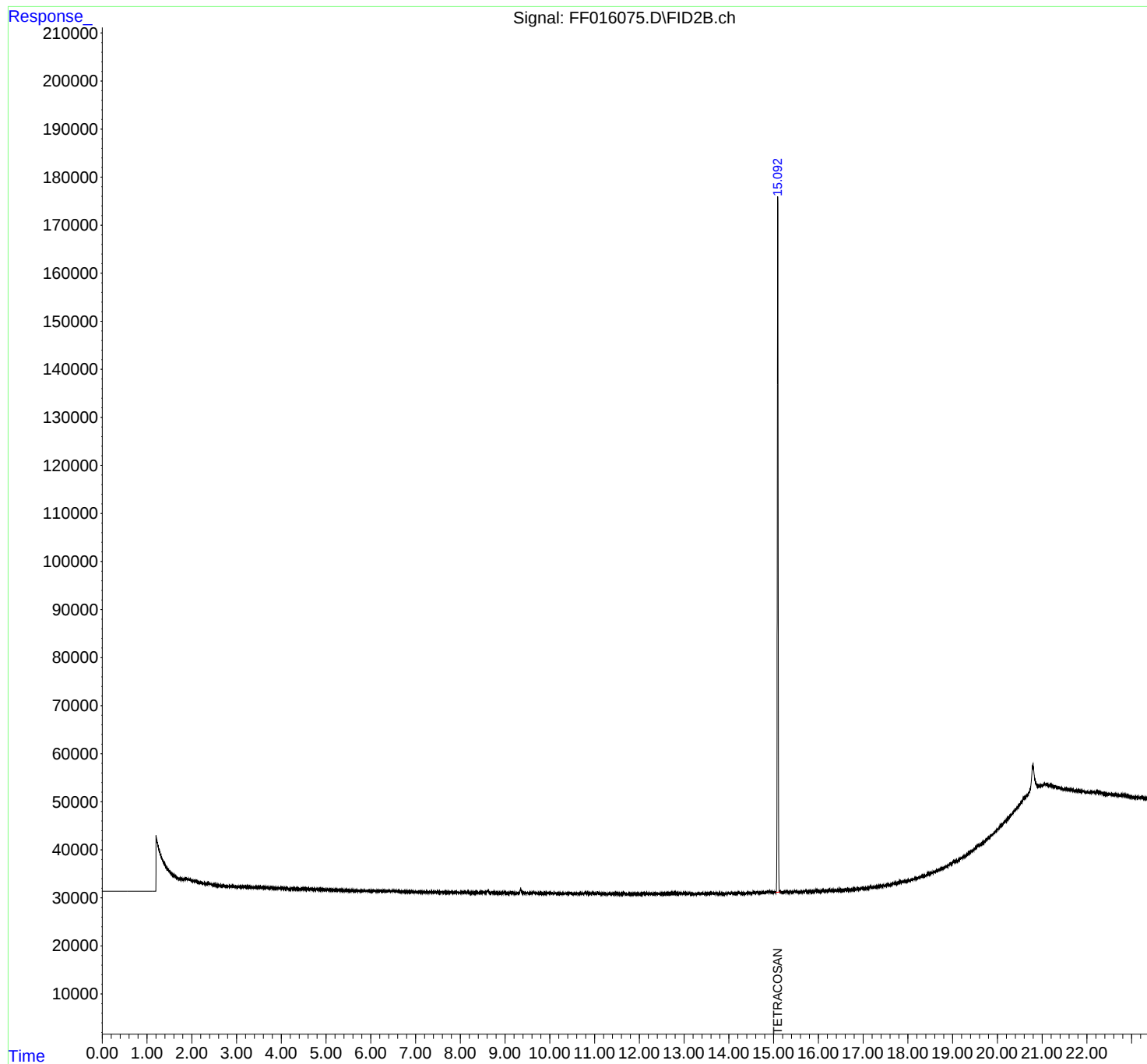
(m)=manual int.

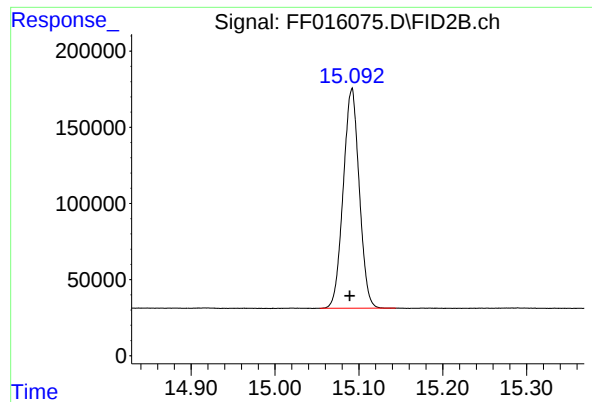
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016075.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 19:06
Operator : YP\AJ
Sample : PB168701BL
Misc :
ALS Vial : 79 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB168701BL

Integration File: autoint1.e
Quant Time: Jul 03 03:22:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 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.: 15.092 min
Delta R.T.: 0.002 min
Response: 1916349
Conc: 15.87 ug/ml

Instrument :
FID_F
ClientSampleId :
PB168701BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016075.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 19:06
Sample : PB168701BL
Misc :
ALS Vial : 79 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.092	15.054	15.144	BB	144785	1916349	100.00%	100.000%
Sum of corrected areas:						1916349		

FF061325.M Thu Jul 03 04:30:25 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/02/25
Client Sample ID:	PIBLK-FF016073.D	SDG No.:	Q2484
Lab Sample ID:	I.BLK-FF016073.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
FF016073.D	1		07/02/25	FF070225

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	16.0		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\FF070225\
Data File : FF016073.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 17:36
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: Jul 03 03:21:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 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...	15.092	1936597	16.039 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

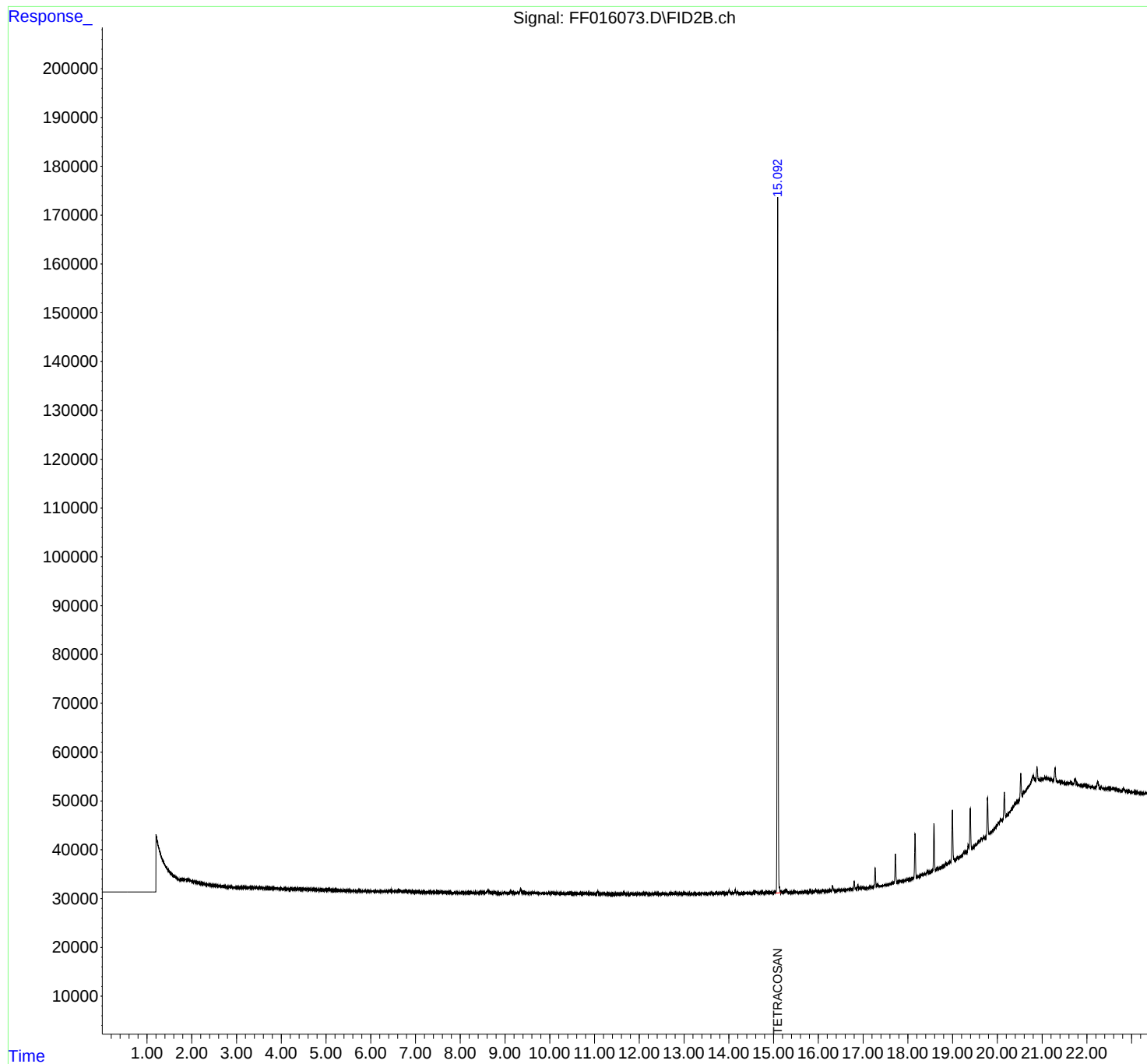
(m)=manual int.

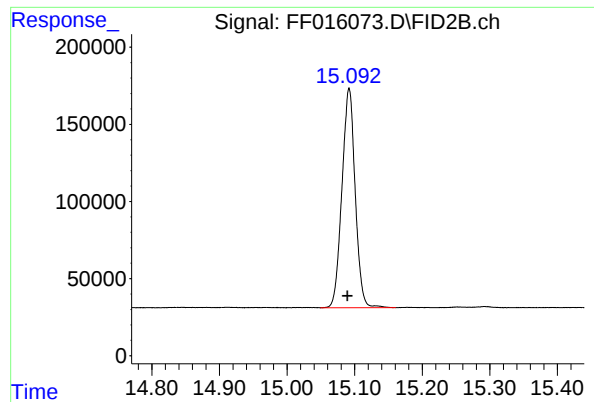
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016073.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 17:36
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 03 03:21:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 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.: 15.092 min
Delta R.T.: 0.003 min
Response: 1936597
Conc: 16.04 ug/ml

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016073.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 17:36
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.092	15.049	15.161	BB	142161	1936597	100.00%	100.000%
Sum of corrected areas:						1936597		

FF061325.M Thu Jul 03 04:29:11 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	PIBLK-FF016085.D	SDG No.:	Q2484
Lab Sample ID:	I.BLK-FF016085.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
FF016085.D	1		07/03/25	FF070225

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_F\Data\FF070225\
Data File : FF016085.D
Signal(s) : FID2B.ch
Acq On : 03 Jul 2025 00:04
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: Jul 03 03:24:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 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...	15.100	2117357	17.536 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

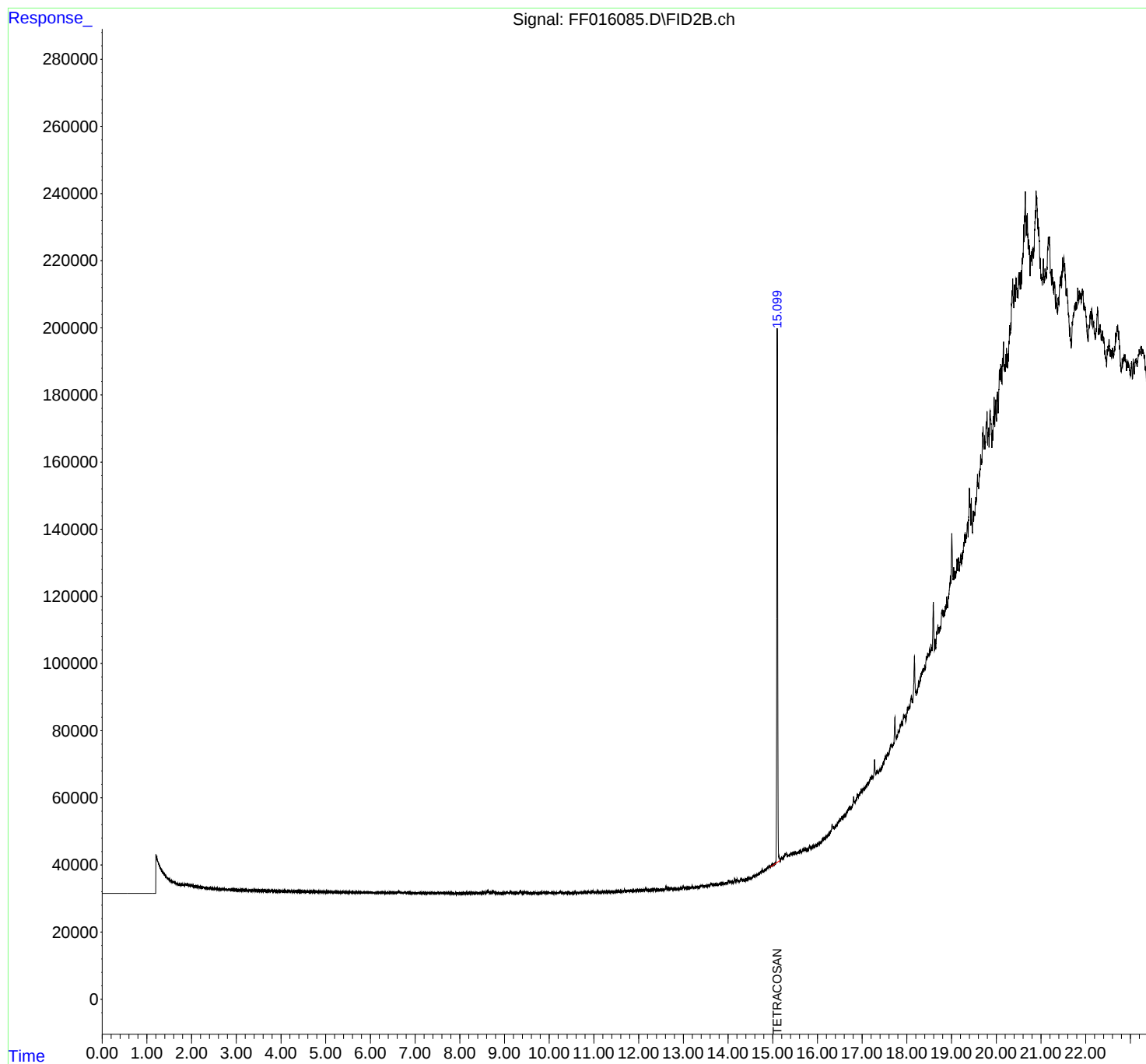
(m)=manual int.

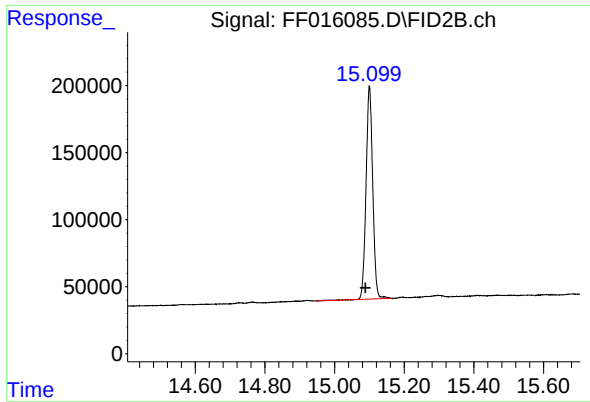
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016085.D
Signal(s) : FID2B.ch
Acq On : 03 Jul 2025 00:04
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 03 03:24:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 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.: 15.100 min
Delta R.T.: 0.011 min
Response: 2117357
Conc: 17.54 ug/ml

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016085.D
Signal(s) : FID2B.ch
Acq On : 03 Jul 2025 00:04
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.100	14.947	15.164	BV	158965	2117357	100.00%	100.000%
Sum of corrected areas:						2117357		

FF061325.M Thu Jul 03 04:32:31 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/02/25
Client Sample ID:	PIBLK-FG016199.D	SDG No.:	Q2484
Lab Sample ID:	I.BLK-FG016199.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
FG016199.D	1		07/02/25	FG070225

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	17.1		29 - 130	85%	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\FG070225\
Data File : FG016199.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 11:18
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: Jul 03 01:22:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.199	2000688	17.056 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

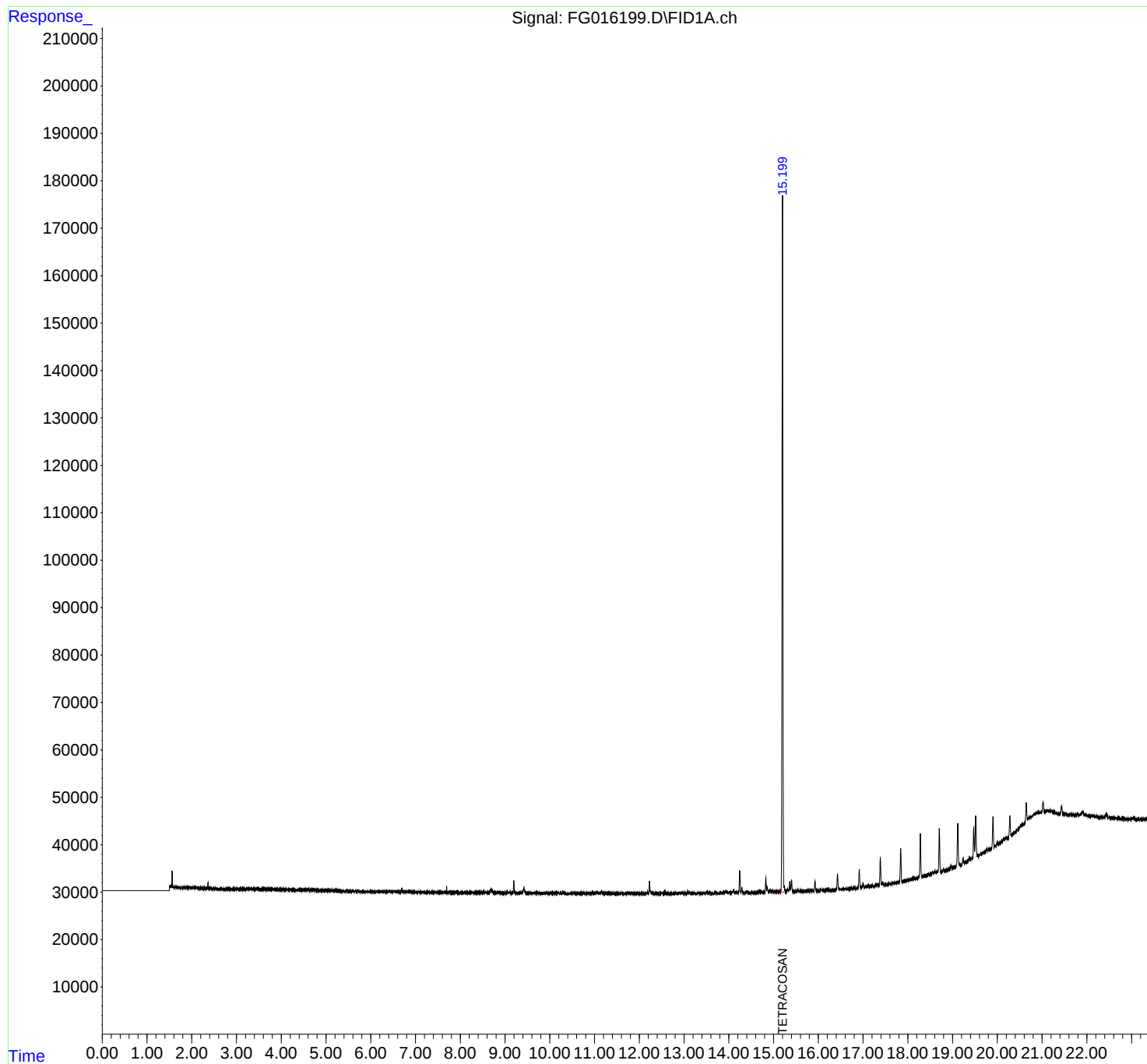
(m)=manual int.

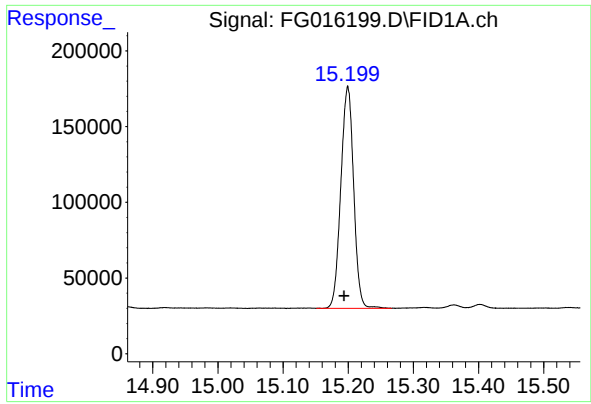
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016199.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 11:18
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 03 01:22:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.199 min
Delta R.T.: 0.006 min
Response: 2000688
Conc: 17.06 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016199.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 11:18
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.199	15.151	15.267	BB	146698	2000688	100.00%	100.000%
Sum of corrected areas:						2000688		

FG061325.M Thu Jul 03 01:49:05 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/02/25
Client Sample ID:	PIBLK-FG016207.D	SDG No.:	Q2484
Lab Sample ID:	I.BLK-FG016207.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
FG016207.D	1		07/02/25	FG070225

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	16.9		29 - 130	84%	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\FG070225\
Data File : FG016207.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 18:36
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: Jul 03 01:23:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.204	1981864	16.896 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

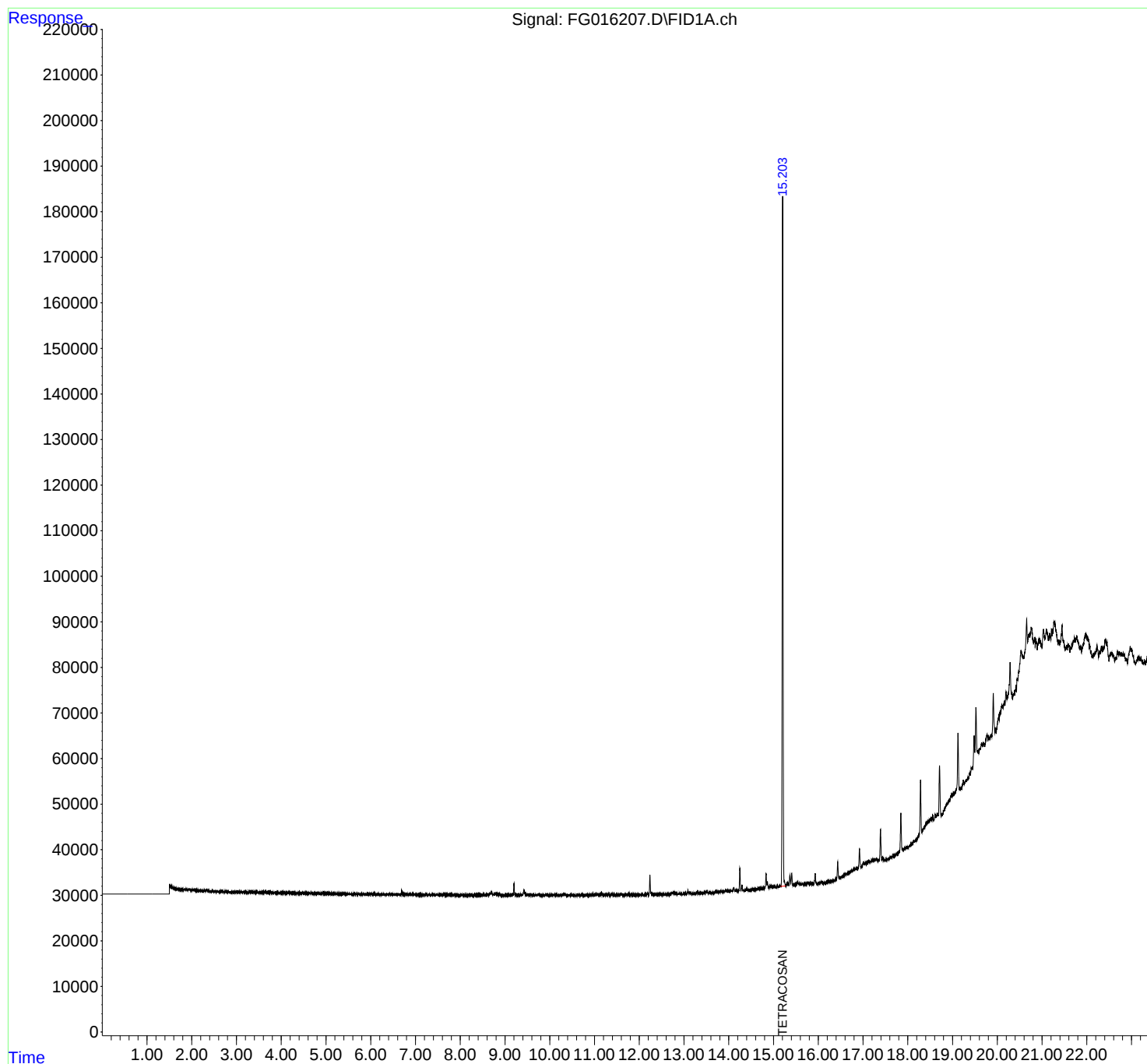
(m)=manual int.

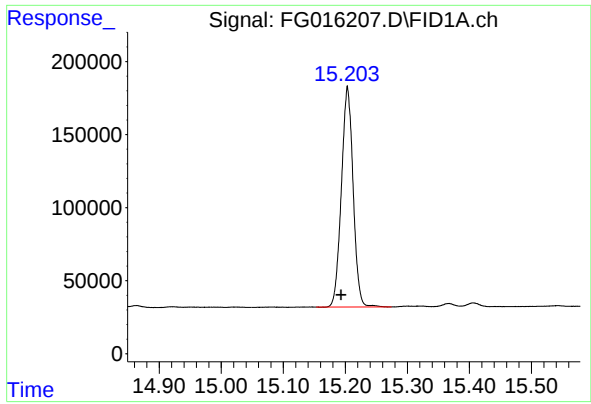
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016207.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 18:36
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 03 01:23:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.204 min
Delta R.T.: 0.010 min
Response: 1981864
Conc: 16.90 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016207.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 18:36
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.204	15.153	15.275	BV	150902	1981864	100.00%	100.000%
Sum of corrected areas:						1981864		

FG061325.M Thu Jul 03 01:50:40 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/02/25
Client Sample ID:	PIBLK-FG016213.D	SDG No.:	Q2484
Lab Sample ID:	I.BLK-FG016213.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
FG016213.D	1		07/02/25	FG070225

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	16.9		29 - 130	84%	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\FG070225\
Data File : FG016213.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 22:05
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: Jul 03 01:25:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.208	1977669	16.860 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

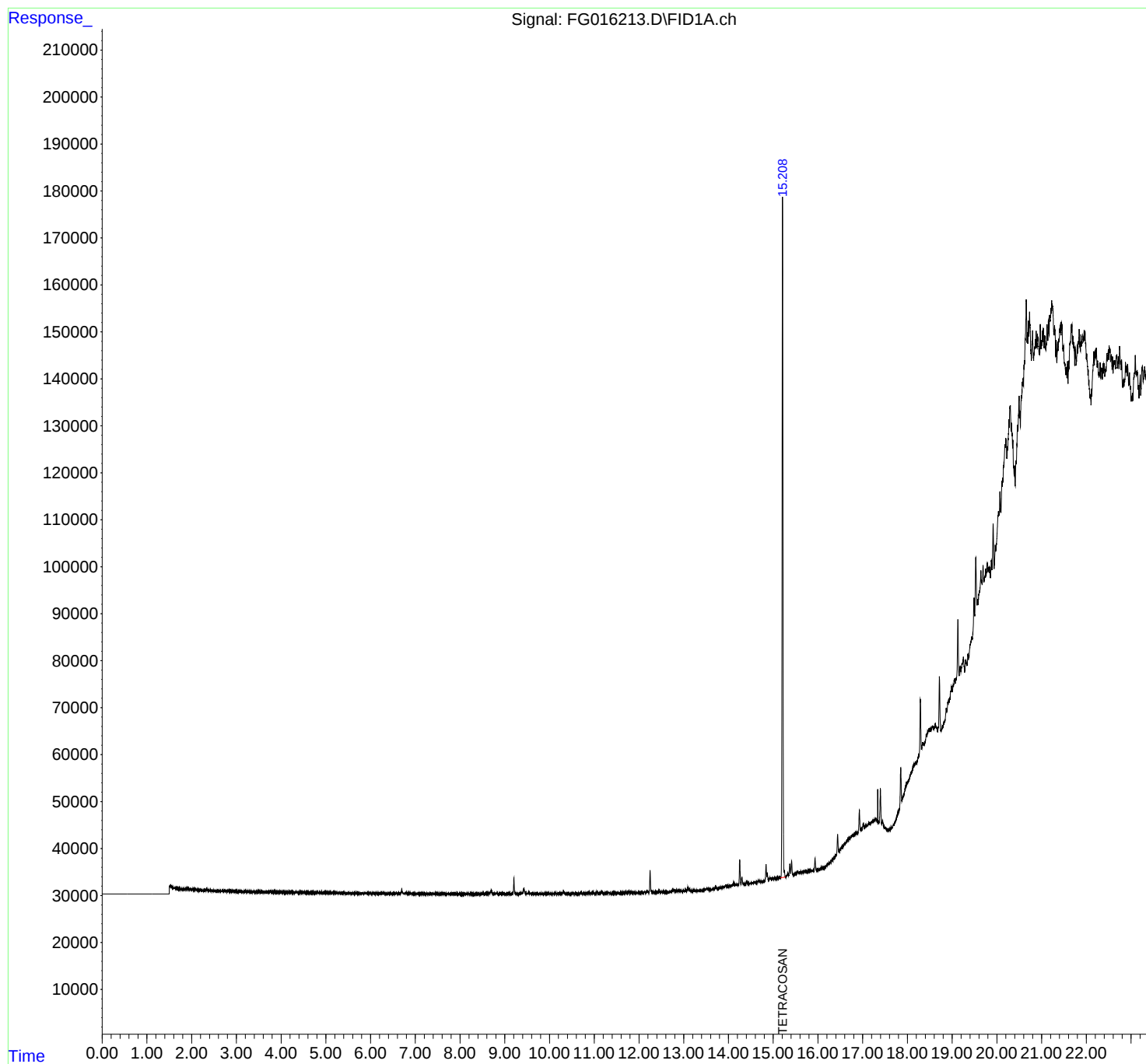
(m)=manual int.

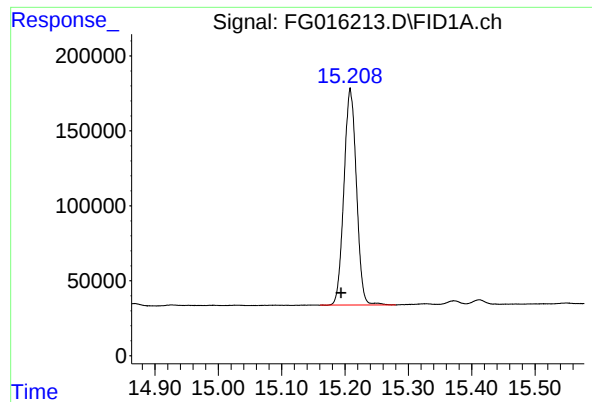
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016213.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 22:05
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 03 01:25:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.208 min
Delta R.T.: 0.015 min
Response: 1977669
Conc: 16.86 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070225\
Data File : FG016213.D
Signal(s) : FID1A.ch
Acq On : 02 Jul 2025 22:05
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.208	15.161	15.280	BV	144683	1977669	100.00%	100.000%
Sum of corrected areas:						1977669		

FG061325.M Thu Jul 03 01:51:59 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	PIBLK-FG016217.D	SDG No.:	Q2484
Lab Sample ID:	I.BLK-FG016217.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
FG016217.D	1		07/03/25	FG070325

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	20.7		29 - 130	104%	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\FG070325\
Data File : FG016217.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 08:38
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:28:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.206	2429841	20.715 ug/ml

Target Compounds

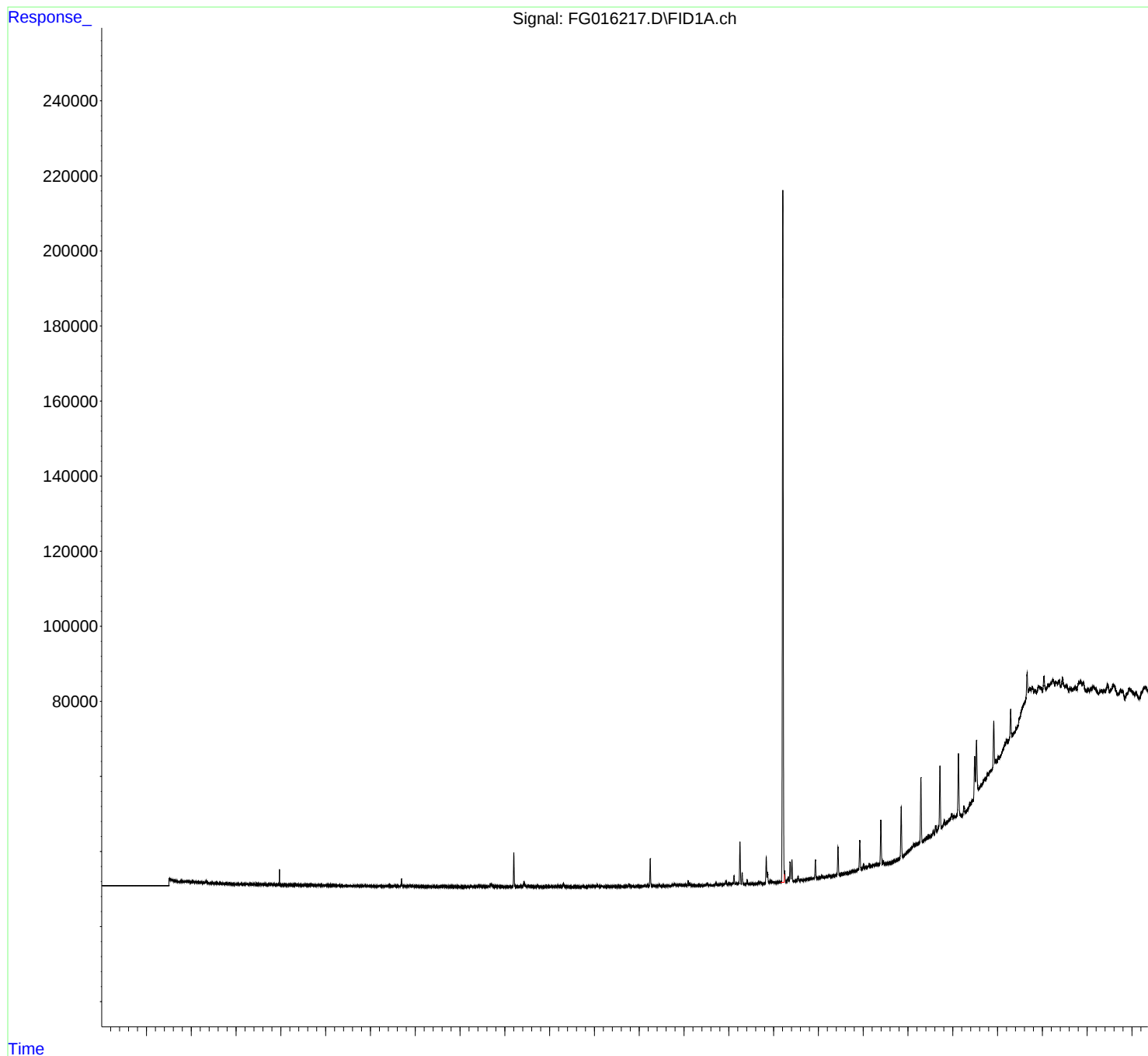
(f)=RT Delta > 1/2 Window

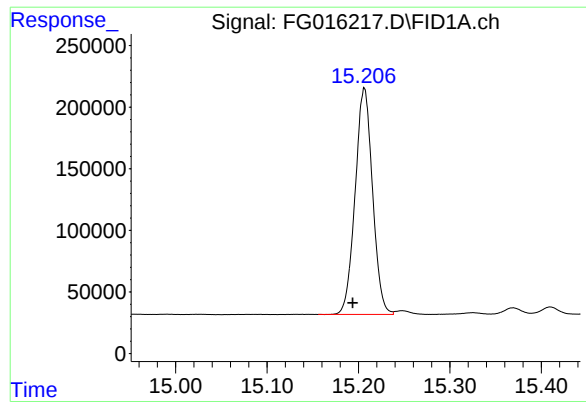
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\
Data File : FG016217.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 08:38
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:28:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.206 min
Delta R.T.: 0.013 min
Response: 2429841
Conc: 20.71 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\

Data File : FG016217.D

Signal(s) : FID1A.ch

Acq On : 03 Jul 2025 08:38

Sample : I.BLK

Misc :

ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M

Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.206	15.156	15.238	BV	184155	2429841	100.00%	100.000%
Sum of corrected areas:						2429841		

FG061325.M Fri Jul 04 05:44:56 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	PIBLK-FG016222.D	SDG No.:	Q2484
Lab Sample ID:	I.BLK-FG016222.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
FG016222.D	1		07/03/25	FG070325

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	16.6		29 - 130	83%	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\FG070325\
Data File : FG016222.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 11:47
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:29:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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...	15.207	1947904	16.606 ug/ml

Target Compounds

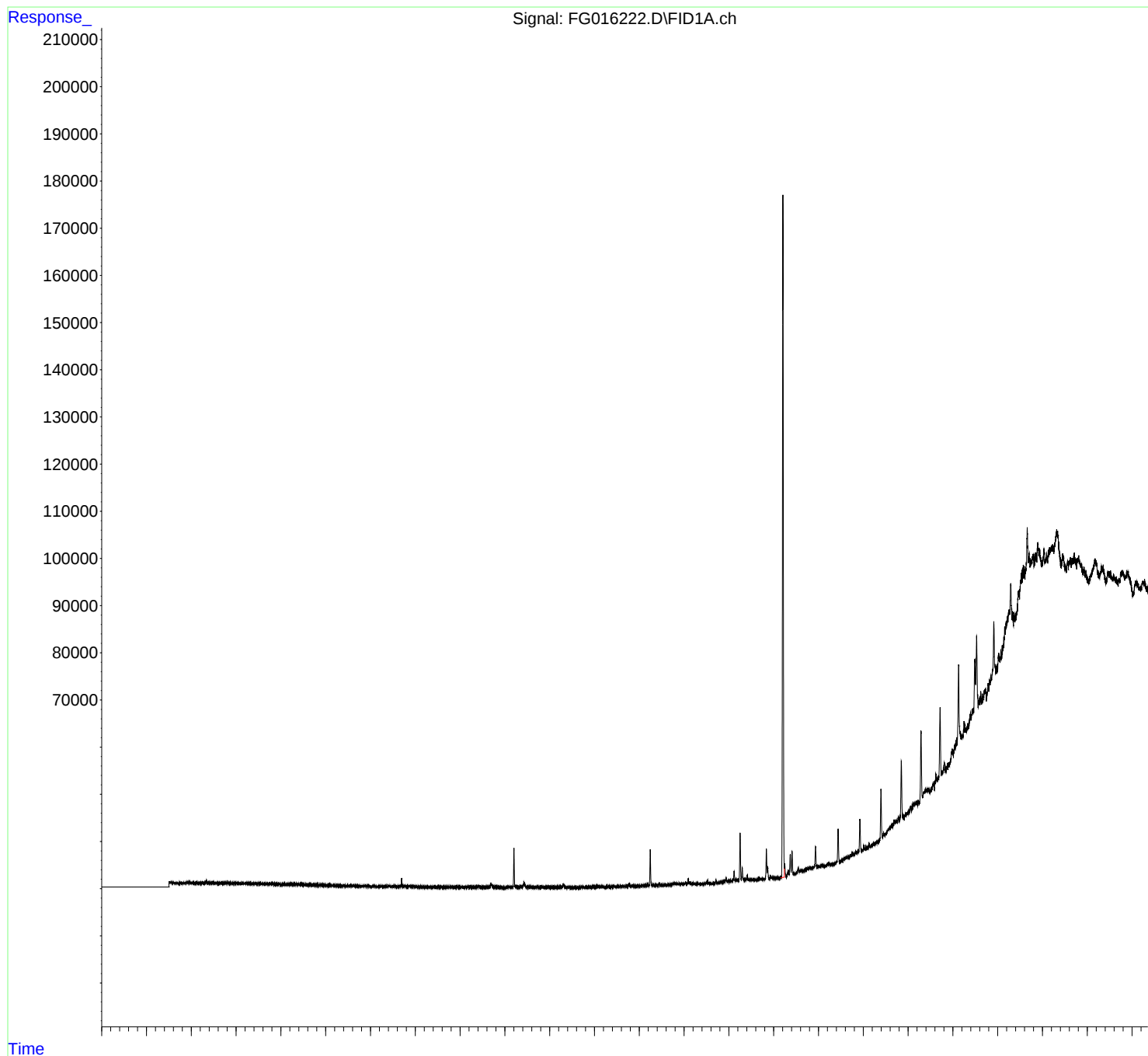
(f)=RT Delta > 1/2 Window

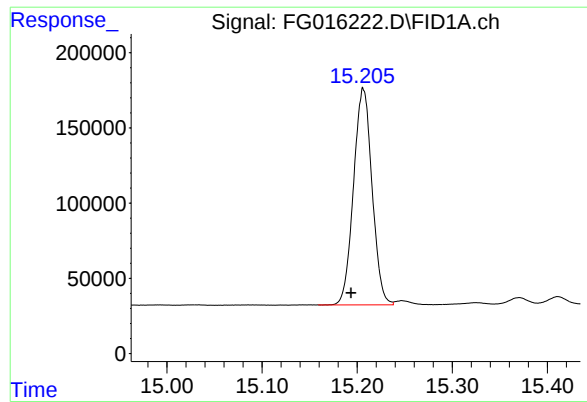
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\
Data File : FG016222.D
Signal(s) : FID1A.ch
Acq On : 03 Jul 2025 11:47
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 04 05:29:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M
Quant Title :
QLast Update : Fri Jun 13 12:34:28 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.: 15.207 min
Delta R.T.: 0.013 min
Response: 1947904
Conc: 16.61 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG070325\

Data File : FG016222.D

Signal(s) : FID1A.ch

Acq On : 03 Jul 2025 11:47

Sample : I.BLK

Misc :

ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG061325.M

Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.207	15.159	15.238	BV	143253	1947904	100.00%	100.000%
Sum of corrected areas:						1947904		

FG061325.M Fri Jul 04 05:46:32 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168701BS	SDG No.:	Q2484
Lab Sample ID:	PB168701BS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016076.D	1	07/02/25 09:17	07/02/25 19:36	PB168701

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	4980		169	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	15.1		37 - 130	76%	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\FF070225\
 Data File : FF016076.D
 Signal(s) : FID2B.ch
 Acq On : 02 Jul 2025 19:36
 Operator : YP\AJ
 Sample : PB168701BS
 Misc :
 ALS Vial : 80 Sample Multiplier: 1

Instrument :
 FID_F
 ClientSampleId :
 PB168701BS

Integration File: autoint1.e
 Quant Time: Jul 03 03:22:29 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
 Quant Title :
 QLast Update : Fri Jun 13 15:23:30 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...	15.091	1827774	15.138 ug/ml
Target Compounds			
2) N-DECANE	4.616	2055768	15.690 ug/ml
3) N-DODECANE	6.791	2041053	15.328 ug/ml
4) N-TETRADECANE	8.623	2022342	15.089 ug/ml
5) N-HEXADECANE	10.232	1995679	14.777 ug/ml
6) N-OCTADECANE	11.677	2034871	14.678 ug/ml
7) N-EICOSANE	12.988	2075198	14.861 ug/ml
8) N-DOCOSANE	14.189	2021263	14.877 ug/ml
10) N-TETRACOSANE	15.294	2019907	14.904 ug/ml
11) N-HEXACOSANE	16.318	1960683	14.606 ug/ml
12) N-OCTACOSANE	17.271	1965159	14.885 ug/ml

(f)=RT Delta > 1/2 Window

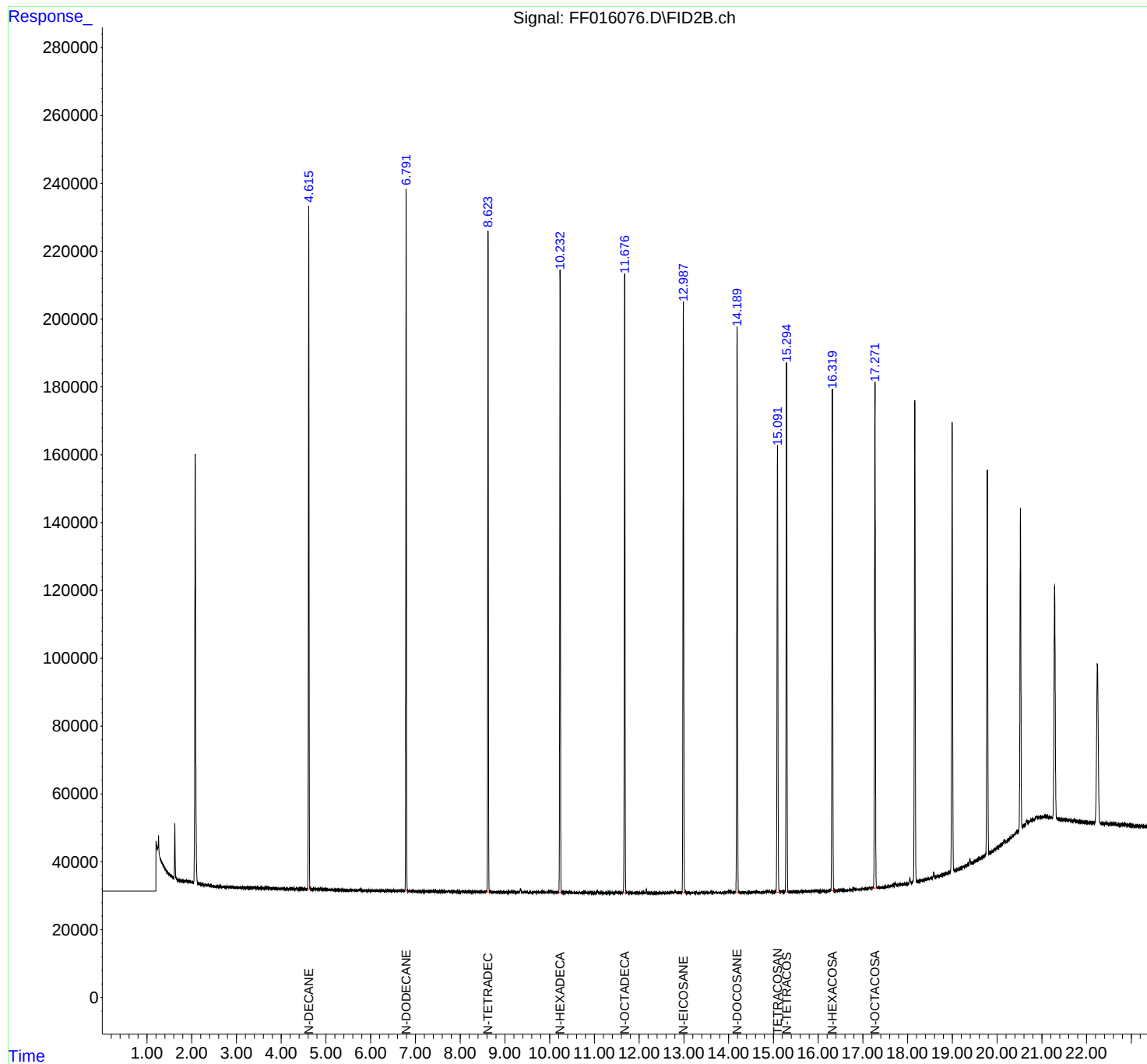
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016076.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 19:36
Operator : YP\AJ
Sample : PB168701BS
Misc :
ALS Vial : 80 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
PB168701BS

Integration File: autoint1.e
Quant Time: Jul 03 03:22:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 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\FF070225\
Data File : FF016076.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 19:36
Sample : PB168701BS
Misc :
ALS Vial : 80 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.616	4.584	4.666	BB	201383	2055768	99.06%	9.336%
2	6.791	6.761	6.827	BB	206521	2041053	98.35%	9.269%
3	8.623	8.569	8.666	BB	194534	2022342	97.45%	9.184%
4	10.232	10.192	10.279	BB	183731	1995679	96.17%	9.063%
5	11.677	11.627	11.716	BB	182408	2034871	98.06%	9.241%
6	12.988	12.954	13.022	BB	174336	2075198	100.00%	9.424%
7	14.189	14.152	14.231	BB	166632	2021263	97.40%	9.179%
8	15.091	15.052	15.157	BB	131347	1827774	88.08%	8.301%
9	15.294	15.251	15.337	BB	155353	2019907	97.34%	9.173%
10	16.318	16.276	16.367	BB	148132	1960683	94.48%	8.904%
11	17.271	17.192	17.321	BB	148343	1965159	94.70%	8.925%
Sum of corrected areas:						22019698		

FF061325.M Thu Jul 03 04:31:50 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	06/27/25
Project:	South River WM Replacement	Date Received:	06/27/25
Client Sample ID:	TP-67MS	SDG No.:	Q2484
Lab Sample ID:	Q2458-04MS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89.7
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
FF016081.D	1	07/02/25 09:17	07/02/25 22:05	PB168701

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	10700		188	1860	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	8.49		37 - 130	42%	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\FF070225\
 Data File : FF016081.D
 Signal(s) : FID2B.ch
 Acq On : 02 Jul 2025 22:05
 Operator : YP\AJ
 Sample : Q2458-04MS
 Misc :
 ALS Vial : 85 Sample Multiplier: 1

Instrument :
 FID_F
 ClientSampleId :
 TP-67MS

Integration File: autoint1.e
 Quant Time: Jul 03 03:23:35 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
 Quant Title :
 QLast Update : Fri Jun 13 15:23:30 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...	15.096	1025278	8.491 ug/ml
Target Compounds			
2) N-DECANE	4.618	1943609	14.834 ug/ml
3) N-DODECANE	6.794	1940990	14.577 ug/ml
4) N-TETRADECANE	8.627	1947144	14.528 ug/ml
5) N-HEXADECANE	10.236	1908999	14.135 ug/ml
6) N-OCTADECANE	11.682	1936515	13.969 ug/ml
7) N-EICOSANE	12.994	1968189	14.095 ug/ml
8) N-DOCOSANE	14.196	1906337	14.031 ug/ml
10) N-TETRACOSANE	15.301	1939402	14.310 ug/ml
11) N-HEXACOSANE	16.325	1849757	13.780 ug/ml
12) N-OCTACOSANE	17.277	1907336	14.447 ug/ml

(f)=RT Delta > 1/2 Window

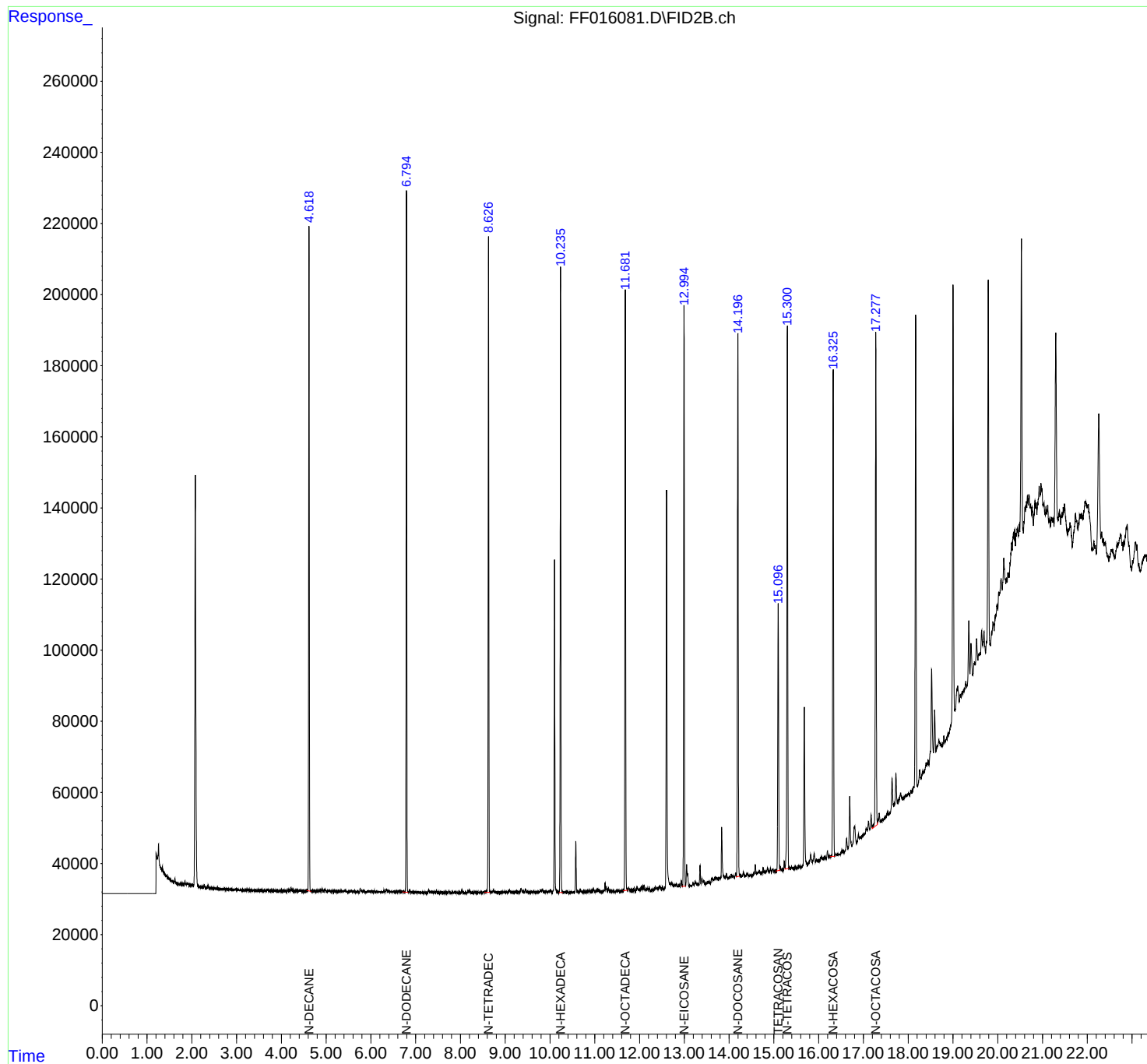
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016081.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 22:05
Operator : YP\AJ
Sample : Q2458-04MS
Misc :
ALS Vial : 85 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-67MS

Integration File: autoint1.e
Quant Time: Jul 03 03:23:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\

Data File : FF016081.D

Signal(s) : FID2B.ch

Acq On : 02 Jul 2025 22:05

Sample : Q2458-04MS

Misc :

ALS Vial : 85 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M

Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.079	2.042	2.223	HH	117543	1956374	78.27%	4.892%
2	2.233	2.223	2.261	HH	1787	38739	1.55%	0.097%
3	2.276	2.261	2.314	HH	2515	62819	2.51%	0.157%
4	2.318	2.314	2.329	HH	1634	14153	0.57%	0.035%
5	2.331	2.329	2.344	HH	1613	13894	0.56%	0.035%
6	2.365	2.344	2.391	HH	2278	50986	2.04%	0.127%
7	2.392	2.391	2.401	HH	1742	9006	0.36%	0.023%
8	2.417	2.401	2.457	HH	1679	52263	2.09%	0.131%
9	2.464	2.457	2.482	HH	1512	21396	0.86%	0.054%
10	2.498	2.482	2.516	HH	1600	29808	1.19%	0.075%
11	2.521	2.516	2.527	HH	1450	9395	0.38%	0.023%
12	2.534	2.527	2.558	HH	1458	25841	1.03%	0.065%
13	2.581	2.558	2.619	HH	1560	50414	2.02%	0.126%
14	2.623	2.619	2.638	HH	1333	14118	0.56%	0.035%
15	2.647	2.638	2.652	HH	1322	10713	0.43%	0.027%
16	2.660	2.652	2.680	HH	1255	20792	0.83%	0.052%
17	2.687	2.680	2.715	HH	1305	25626	1.03%	0.064%
18	2.725	2.715	2.749	HH	1298	24947	1.00%	0.062%
19	2.757	2.749	2.768	HH	1246	13092	0.52%	0.033%
20	2.772	2.768	2.795	HH	1253	19565	0.78%	0.049%
21	2.801	2.795	2.833	HH	1144	25455	1.02%	0.064%
22	2.857	2.833	2.873	HH	1264	27935	1.12%	0.070%
23	2.877	2.873	2.890	HH	1156	11264	0.45%	0.028%

24	2.894	2.890	2.942	HH	1195	34202	1.37%	0.086%
25	2.946	2.942	2.953	HH	1100	7312	0.29%	0.018%
26	2.973	2.953	2.979	HH	1280	17323	0.69%	0.043%
27	2.984	2.979	2.987	HH	1253	5780	0.23%	0.014%
28	2.997	2.987	3.031	HH	1261	29813	1.19%	0.075%
29	3.035	3.031	3.081	HH	1146	30679	1.23%	0.077%
30	3.087	3.081	3.117	HH	1103	21405	0.86%	0.054%
31	3.119	3.117	3.139	HH	1053	13318	0.53%	0.033%
32	3.143	3.139	3.158	HH	1036	10721	0.43%	0.027%
33	3.166	3.158	3.173	HH	1020	8613	0.34%	0.022%
34	3.182	3.173	3.188	HH	983	8355	0.33%	0.021%
35	3.201	3.188	3.229	HH	1058	23954	0.96%	0.060%
36	3.232	3.229	3.238	HH	991	5008	0.20%	0.013%
37	3.249	3.238	3.256	HH	1017	9836	0.39%	0.025%
38	3.264	3.256	3.269	HH	983	7552	0.30%	0.019%
39	3.279	3.269	3.292	HH	1015	13030	0.52%	0.033%
40	3.296	3.292	3.313	HH	962	11473	0.46%	0.029%
41	3.323	3.313	3.334	HH	923	10947	0.44%	0.027%
42	3.341	3.334	3.346	HH	936	6371	0.25%	0.016%
43	3.351	3.346	3.356	HH	1022	5856	0.23%	0.015%
44	3.361	3.356	3.384	HH	961	15507	0.62%	0.039%
45	3.394	3.384	3.407	HH	1017	12691	0.51%	0.032%
46	3.412	3.407	3.423	HH	980	8969	0.36%	0.022%
47	3.426	3.423	3.447	HH	1024	12350	0.49%	0.031%
48	3.451	3.447	3.456	HH	872	4765	0.19%	0.012%
49	3.461	3.456	3.469	HH	975	6688	0.27%	0.017%
50	3.475	3.469	3.480	HH	920	5602	0.22%	0.014%
51	3.486	3.480	3.510	HH	968	15437	0.62%	0.039%
52	3.525	3.510	3.534	HH	905	12733	0.51%	0.032%
53	3.540	3.534	3.557	HH	865	11654	0.47%	0.029%
54	3.566	3.557	3.571	HH	895	7207	0.29%	0.018%
55	3.574	3.571	3.605	HH	940	17603	0.70%	0.044%
56	3.611	3.605	3.630	HH	890	12277	0.49%	0.031%
57	3.645	3.630	3.657	HH	865	12895	0.52%	0.032%
58	3.666	3.657	3.678	HH	858	10585	0.42%	0.026%
59	3.700	3.678	3.718	HH	1026	21772	0.87%	0.054%
60	3.730	3.718	3.735	HH	934	9039	0.36%	0.023%
61	3.739	3.735	3.758	HH	925	11572	0.46%	0.029%
62	3.771	3.758	3.784	HH	868	13054	0.52%	0.033%

63	3.802	3.784	3.807	HH	937	11273	0.45%	0.028%
64	3.811	3.807	3.828	HH	927	10689	0.43%	0.027%
65	3.834	3.828	3.866	HH	857	17454	0.70%	0.044%
66	3.893	3.866	3.919	HH	897	24381	0.98%	0.061%
67	3.951	3.919	3.962	HH	793	19279	0.77%	0.048%
68	3.971	3.962	3.977	HH	727	6454	0.26%	0.016%
69	3.999	3.977	4.019	HH	923	19511	0.78%	0.049%
70	4.023	4.019	4.030	HH	694	4205	0.17%	0.011%
71	4.047	4.030	4.058	HH	820	12399	0.50%	0.031%
72	4.061	4.058	4.119	HH	808	25855	1.03%	0.065%
73	4.146	4.119	4.168	HH	1125	24340	0.97%	0.061%
74	4.171	4.168	4.175	HH	839	3448	0.14%	0.009%
75	4.182	4.175	4.200	HH	844	12014	0.48%	0.030%
76	4.215	4.200	4.255	HH	1757	36720	1.47%	0.092%
77	4.258	4.255	4.277	HH	951	11019	0.44%	0.028%
78	4.283	4.277	4.289	HH	701	4898	0.20%	0.012%
79	4.296	4.289	4.303	HH	710	5454	0.22%	0.014%
80	4.336	4.303	4.350	HH	939	22331	0.89%	0.056%
81	4.355	4.350	4.375	HH	810	11704	0.47%	0.029%
82	4.386	4.375	4.394	HH	818	8967	0.36%	0.022%
83	4.398	4.394	4.412	HH	734	7424	0.30%	0.019%
84	4.422	4.412	4.455	HH	834	19448	0.78%	0.049%
85	4.460	4.455	4.483	HH	684	10620	0.42%	0.027%
86	4.511	4.483	4.525	HH	732	16611	0.66%	0.042%
87	4.572	4.525	4.588	HH	988	30077	1.20%	0.075%
88	4.618	4.588	4.681	HH	187887	1983735	79.36%	4.960%
89	4.694	4.681	4.714	HH	812	14021	0.56%	0.035%
90	4.718	4.714	4.736	HH	633	7862	0.31%	0.020%
91	4.746	4.736	4.758	HH	772	9236	0.37%	0.023%
92	4.762	4.758	4.767	HH	743	3246	0.13%	0.008%
93	4.799	4.767	4.814	HH	774	20265	0.81%	0.051%
94	4.847	4.814	4.863	HH	890	22869	0.91%	0.057%
95	4.868	4.863	4.888	HH	798	10786	0.43%	0.027%
96	4.903	4.888	4.923	HH	1310	21015	0.84%	0.053%
97	4.931	4.923	4.942	HH	927	9421	0.38%	0.024%
98	4.962	4.942	4.967	HH	938	12333	0.49%	0.031%
99	4.976	4.967	5.004	HH	1001	18846	0.75%	0.047%
100	5.026	5.004	5.031	HH	812	11339	0.45%	0.028%
101	5.035	5.031	5.048	HH	747	6903	0.28%	0.017%

102	5.064	5.048	5.076	HH	979	13030	0.52%	0.033%
103	5.080	5.076	5.107	HH	855	12699	0.51%	0.032%
104	5.132	5.107	5.165	HH	805	22461	0.90%	0.056%
105	5.180	5.165	5.188	HH	562	7336	0.29%	0.018%
106	5.199	5.188	5.225	HH	640	12222	0.49%	0.031%
107	5.235	5.225	5.259	HH	672	11274	0.45%	0.028%
108	5.274	5.259	5.282	HH	594	7240	0.29%	0.018%
109	5.300	5.282	5.316	HH	727	12582	0.50%	0.031%
110	5.332	5.316	5.356	HH	998	17011	0.68%	0.043%
111	5.375	5.356	5.391	HH	734	13441	0.54%	0.034%
112	5.406	5.391	5.413	HH	774	9516	0.38%	0.024%
113	5.425	5.413	5.483	HH	778	25589	1.02%	0.064%
114	5.499	5.483	5.522	HH	524	10872	0.43%	0.027%
115	5.533	5.522	5.536	HH	614	4184	0.17%	0.010%
116	5.562	5.536	5.578	HH	1064	17855	0.71%	0.045%
117	5.582	5.578	5.587	HH	488	2586	0.10%	0.006%
118	5.594	5.587	5.600	HH	532	3788	0.15%	0.009%
119	5.606	5.600	5.623	HH	542	6520	0.26%	0.016%
120	5.639	5.623	5.654	HH	606	9492	0.38%	0.024%
121	5.658	5.654	5.663	HH	501	2590	0.10%	0.006%
122	5.665	5.663	5.673	HH	494	2745	0.11%	0.007%
123	5.678	5.673	5.684	HH	518	3018	0.12%	0.008%
124	5.688	5.684	5.699	HH	486	4033	0.16%	0.010%
125	5.704	5.699	5.714	HH	457	3484	0.14%	0.009%
126	5.718	5.714	5.728	HH	384	3316	0.13%	0.008%
127	5.731	5.728	5.736	HH	452	1793	0.07%	0.004%
128	5.760	5.736	5.779	HH	1438	21824	0.87%	0.055%
129	5.792	5.779	5.815	HH	874	14212	0.57%	0.036%
130	5.834	5.815	5.850	HH	1039	14672	0.59%	0.037%
131	5.861	5.850	5.871	HH	559	6349	0.25%	0.016%
132	5.877	5.871	5.903	HH	514	8969	0.36%	0.022%
133	5.908	5.903	5.916	HH	468	3286	0.13%	0.008%
134	5.946	5.916	5.980	HH	780	22712	0.91%	0.057%
135	5.989	5.980	6.010	HH	644	9594	0.38%	0.024%
136	6.023	6.010	6.049	HH	791	13209	0.53%	0.033%
137	6.075	6.049	6.107	HH	847	20094	0.80%	0.050%
138	6.128	6.107	6.152	HH	689	12925	0.52%	0.032%
139	6.156	6.152	6.161	HH	423	2165	0.09%	0.005%
140	6.177	6.161	6.214	HH	542	14131	0.57%	0.035%

141	6.232	6.214	6.253	HH	486	9865	0.39%	0.025%
142	6.260	6.253	6.265	HH	410	2577	0.10%	0.006%
143	6.293	6.265	6.314	HH	1002	17476	0.70%	0.044%
144	6.347	6.314	6.378	HH	1196	30359	1.21%	0.076%
145	6.402	6.378	6.421	HH	930	16759	0.67%	0.042%
146	6.438	6.421	6.469	HH	707	13934	0.56%	0.035%
147	6.482	6.469	6.492	HH	499	6386	0.26%	0.016%
148	6.507	6.492	6.557	HH	742	19251	0.77%	0.048%
149	6.586	6.557	6.603	HH	576	12378	0.50%	0.031%
150	6.630	6.603	6.650	HH	961	18228	0.73%	0.046%
151	6.656	6.650	6.666	HH	491	4338	0.17%	0.011%
152	6.678	6.666	6.693	HH	520	7385	0.30%	0.018%
153	6.698	6.693	6.703	HH	450	2793	0.11%	0.007%
154	6.716	6.703	6.764	HH	759	20927	0.84%	0.052%
155	6.794	6.764	6.848	HH	197585	1954775	78.20%	4.888%
156	6.868	6.848	6.895	HH	1176	18720	0.75%	0.047%
157	6.900	6.895	6.907	HH	406	2666	0.11%	0.007%
158	6.916	6.907	6.931	HH	434	5436	0.22%	0.014%
159	6.949	6.931	6.973	HH	578	10427	0.42%	0.026%
160	6.977	6.973	6.983	HH	376	1892	0.08%	0.005%
161	7.015	7.008	7.018	HH	338	1899	0.08%	0.005%
162	7.022	7.018	7.048	HH	293	5510	0.22%	0.014%
163	7.059	7.048	7.069	HH	377	4085	0.16%	0.010%
164	7.073	7.069	7.100	HH	339	5138	0.21%	0.013%
165	7.124	7.100	7.155	HH	419	10188	0.41%	0.025%
166	7.160	7.155	7.185	HH	297	4432	0.18%	0.011%
167	7.203	7.185	7.217	HH	366	5475	0.22%	0.014%
168	7.222	7.217	7.226	HH	263	1218	0.05%	0.003%
169	7.239	7.226	7.246	HH	293	2936	0.12%	0.007%
170	7.258	7.246	7.264	HH	288	2908	0.12%	0.007%
171	7.326	7.318	7.350	HH	537	8983	0.36%	0.022%
172	7.362	7.350	7.394	HH	435	9068	0.36%	0.023%
173	7.401	7.394	7.406	HH	271	1806	0.07%	0.005%
174	7.410	7.406	7.416	HH	333	1738	0.07%	0.004%
175	7.461	7.446	7.493	HH	714	13073	0.52%	0.033%
176	7.506	7.493	7.510	HH	355	2767	0.11%	0.007%
177	7.517	7.510	7.535	HH	438	4851	0.19%	0.012%
178	7.548	7.535	7.550	HH	264	1948	0.08%	0.005%
179	7.573	7.550	7.594	HH	465	8113	0.32%	0.020%
180	7.605	7.594	7.623	HH	330	4443	0.18%	0.011%

181	7.678	7.659	7.687	HH	248	3732	0.15%	0.009%
182	7.701	7.687	7.707	HH	346	3009	0.12%	0.008%
183	7.803	7.782	7.821	HH	371	5678	0.23%	0.014%
184	7.824	7.821	7.837	HH	254	2322	0.09%	0.006%
185	7.841	7.837	7.849	HH	244	1479	0.06%	0.004%
186	7.907	7.897	7.944	HH	269	5915	0.24%	0.015%
187	7.959	7.944	7.970	HH	301	3439	0.14%	0.009%
188	7.973	7.970	7.983	HH	252	1893	0.08%	0.005%
189	7.987	7.983	7.993	HH	242	1296	0.05%	0.003%
190	7.997	7.993	8.007	HH	217	1361	0.05%	0.003%
191	8.080	8.070	8.093	HH	278	2629	0.11%	0.007%
192	8.097	8.093	8.117	HH	294	2773	0.11%	0.007%
193	8.126	8.117	8.148	HH	251	3707	0.15%	0.009%
194	8.225	8.220	8.230	HH	392	2031	0.08%	0.005%
195	8.234	8.230	8.260	HH	381	5015	0.20%	0.013%
196	8.287	8.284	8.295	HH	228	1259	0.05%	0.003%
197	8.319	8.295	8.368	HH	486	13450	0.54%	0.034%
198	8.374	8.368	8.391	HH	421	4520	0.18%	0.011%
199	8.420	8.413	8.427	HH	303	2219	0.09%	0.006%
200	8.448	8.427	8.479	HH	511	10919	0.44%	0.027%
201	8.514	8.479	8.528	HH	498	10471	0.42%	0.026%
202	8.548	8.528	8.567	HH	727	11949	0.48%	0.030%
203	8.578	8.567	8.586	HH	572	5698	0.23%	0.014%
204	8.627	8.586	8.666	HH	184665	1958122	78.34%	4.896%
205	8.670	8.666	8.674	HH	411	1823	0.07%	0.005%
206	8.684	8.674	8.708	HH	493	8237	0.33%	0.021%
207	8.735	8.708	8.783	HH	1065	26479	1.06%	0.066%
208	8.788	8.783	8.842	HH	462	10056	0.40%	0.025%
209	8.904	8.883	8.915	HH	363	5008	0.20%	0.013%
210	8.927	8.915	8.946	HH	487	7431	0.30%	0.019%
211	8.952	8.946	8.975	HH	431	6538	0.26%	0.016%
212	8.985	8.975	8.991	HH	409	3581	0.14%	0.009%
213	9.001	8.991	9.017	HH	511	6901	0.28%	0.017%
214	9.036	9.017	9.052	HH	501	8654	0.35%	0.022%
215	9.078	9.052	9.082	HH	498	7610	0.30%	0.019%
216	9.169	9.128	9.209	HH	550	19417	0.78%	0.049%
217	9.246	9.244	9.260	HH	498	4179	0.17%	0.010%
218	9.288	9.260	9.326	HH	531	16724	0.67%	0.042%
219	9.452	9.418	9.474	HH	1325	22957	0.92%	0.057%

220	9.486	9.474	9.525	HH	593	13511	0.54%	0.034%
221	9.555	9.525	9.565	HH	395	7614	0.30%	0.019%
222	9.602	9.585	9.621	HH	457	8166	0.33%	0.020%
223	9.638	9.621	9.673	HH	590	13312	0.53%	0.033%
224	9.684	9.673	9.705	HH	477	7592	0.30%	0.019%
225	9.713	9.705	9.726	HH	431	4596	0.18%	0.011%
226	9.785	9.769	9.810	HH	1107	18945	0.76%	0.047%
227	9.874	9.854	9.888	HH	628	10330	0.41%	0.026%
228	9.905	9.888	9.938	HH	649	15448	0.62%	0.039%
229	9.973	9.938	9.981	HH	650	12909	0.52%	0.032%
230	9.996	9.981	10.000	HH	711	7322	0.29%	0.018%
231	10.013	10.000	10.042	HH	1096	16799	0.67%	0.042%
232	10.102	10.042	10.147	HH	93635	949148	37.97%	2.373%
233	10.152	10.147	10.158	HH	539	3453	0.14%	0.009%
234	10.169	10.158	10.194	HH	683	10633	0.43%	0.027%
235	10.236	10.194	10.287	HH	176165	1927046	77.09%	4.819%
236	10.309	10.287	10.325	HH	457	7983	0.32%	0.020%
237	10.340	10.325	10.374	HH	552	10859	0.43%	0.027%
238	10.393	10.374	10.429	HH	488	11384	0.46%	0.028%
239	10.436	10.429	10.441	HH	274	1667	0.07%	0.004%
240	10.469	10.441	10.475	HH	489	6746	0.27%	0.017%
241	10.482	10.475	10.495	HH	422	3953	0.16%	0.010%
242	10.512	10.495	10.517	HH	407	4496	0.18%	0.011%
243	10.521	10.517	10.525	HH	361	1573	0.06%	0.004%
244	10.531	10.525	10.533	HH	320	1388	0.06%	0.003%
245	10.538	10.533	10.545	HH	341	2166	0.09%	0.005%
246	10.576	10.545	10.607	HH	14603	160956	6.44%	0.402%
247	10.625	10.607	10.645	HH	669	11965	0.48%	0.030%
248	10.674	10.645	10.699	HH	832	20079	0.80%	0.050%
249	10.709	10.699	10.730	HH	615	9210	0.37%	0.023%
250	10.750	10.730	10.765	HH	664	10804	0.43%	0.027%
251	10.797	10.765	10.812	HH	550	13552	0.54%	0.034%
252	10.827	10.812	10.852	HH	643	13653	0.55%	0.034%
253	10.878	10.852	10.897	HH	964	18155	0.73%	0.045%
254	10.900	10.897	10.915	HH	549	5593	0.22%	0.014%
255	10.928	10.915	10.948	HH	771	12975	0.52%	0.032%
256	10.974	10.948	11.011	HH	1243	29591	1.18%	0.074%
257	11.039	11.011	11.043	HH	900	13406	0.54%	0.034%
258	11.049	11.043	11.060	HH	904	8508	0.34%	0.021%

259	11.074	11.060	11.112	HH	1047	24591	0.98%	0.061%
260	11.121	11.112	11.140	HH	651	9454	0.38%	0.024%
261	11.200	11.185	11.210	HH	1082	12797	0.51%	0.032%
262	11.229	11.210	11.243	HH	2965	35946	1.44%	0.090%
263	11.255	11.243	11.287	HH	1994	34550	1.38%	0.086%
264	11.304	11.287	11.331	HH	1553	26773	1.07%	0.067%
265	11.334	11.331	11.339	HH	702	3351	0.13%	0.008%
266	11.353	11.339	11.388	HH	779	19538	0.78%	0.049%
267	11.405	11.388	11.424	HH	686	13135	0.53%	0.033%
268	11.434	11.424	11.444	HH	596	6467	0.26%	0.016%
269	11.515	11.504	11.564	HH	960	26743	1.07%	0.067%
270	11.576	11.564	11.580	HH	718	6060	0.24%	0.015%
271	11.621	11.580	11.632	HH	846	23262	0.93%	0.058%
272	11.682	11.632	11.740	HH	169461	1993414	79.75%	4.985%
273	11.758	11.740	11.789	HH	1753	37420	1.50%	0.094%
274	11.793	11.789	11.815	HH	880	11866	0.47%	0.030%
275	11.838	11.815	11.857	HH	1087	22437	0.90%	0.056%
276	11.875	11.857	11.904	HH	1411	28891	1.16%	0.072%
277	11.943	11.904	11.993	HH	2002	65532	2.62%	0.164%
278	11.995	11.993	12.010	HH	1102	10573	0.42%	0.026%
279	12.034	12.010	12.049	HH	1860	31285	1.25%	0.078%
280	12.098	12.080	12.120	HH	2243	39319	1.57%	0.098%
281	12.132	12.120	12.137	HH	1165	10749	0.43%	0.027%
282	12.150	12.137	12.167	HH	1380	22730	0.91%	0.057%
283	12.183	12.167	12.196	HH	1453	21605	0.86%	0.054%
284	12.215	12.196	12.246	HH	1511	34225	1.37%	0.086%
285	12.350	12.310	12.373	HH	1721	48480	1.94%	0.121%
286	12.389	12.373	12.417	HH	1706	38792	1.55%	0.097%
287	12.507	12.484	12.548	HH	1707	55063	2.20%	0.138%
288	12.605	12.548	12.669	HH	113587	1524958	61.01%	3.813%
289	12.682	12.669	12.699	HH	3043	49258	1.97%	0.123%
290	12.712	12.699	12.756	HH	2969	88455	3.54%	0.221%
291	12.762	12.756	12.766	HH	2209	13333	0.53%	0.033%
292	12.779	12.766	12.792	HH	2323	35113	1.40%	0.088%
293	12.794	12.792	12.808	HH	2327	21360	0.85%	0.053%
294	12.824	12.808	12.862	HH	2803	75406	3.02%	0.189%
295	12.879	12.862	12.898	HH	2438	47236	1.89%	0.118%
296	12.935	12.898	12.954	HH	3415	88688	3.55%	0.222%
297	12.994	12.954	13.028	HH	165213	2059359	82.39%	5.149%

298	13.052	13.028	13.068	HH	8151	127190	5.09%	0.318%
299	13.073	13.068	13.103	HH	5483	78686	3.15%	0.197%
300	13.116	13.103	13.139	HH	2233	47128	1.89%	0.118%
301	13.152	13.139	13.157	HH	2208	23158	0.93%	0.058%
302	13.161	13.157	13.165	HH	2194	10952	0.44%	0.027%
303	13.239	13.221	13.282	HH	3356	106330	4.25%	0.266%
304	13.294	13.282	13.309	HH	2699	42779	1.71%	0.107%
305	13.315	13.309	13.324	HH	2563	22406	0.90%	0.056%
306	13.351	13.324	13.372	HH	7951	130620	5.23%	0.327%
307	13.431	13.417	13.467	HH	3501	93272	3.73%	0.233%
308	13.483	13.467	13.505	HH	2984	64305	2.57%	0.161%
309	13.528	13.505	13.533	HH	3240	53283	2.13%	0.133%
310	13.545	13.533	13.575	HH	3403	79056	3.16%	0.198%
311	13.682	13.662	13.703	HH	4588	105740	4.23%	0.264%
312	13.726	13.703	13.764	HH	4535	152264	6.09%	0.381%
313	13.810	13.764	13.817	HH	4482	137283	5.49%	0.343%
314	13.834	13.817	13.892	HH	18629	377230	15.09%	0.943%
315	13.896	13.892	13.902	HH	4548	27057	1.08%	0.068%
316	13.941	13.902	13.972	HH	5652	201579	8.06%	0.504%
317	13.990	13.972	13.999	HH	4477	70264	2.81%	0.176%
318	14.013	13.999	14.026	HH	4613	74640	2.99%	0.187%
319	14.047	14.026	14.074	HH	5325	140583	5.62%	0.352%
320	14.146	14.108	14.162	HH	5708	162585	6.50%	0.407%
321	14.196	14.162	14.235	HH	157011	2117459	84.71%	5.295%
322	14.241	14.235	14.245	HH	5029	28322	1.13%	0.071%
323	14.262	14.245	14.280	HH	5244	104690	4.19%	0.262%
324	14.401	14.375	14.418	HH	5710	135566	5.42%	0.339%
325	14.425	14.418	14.431	HH	5253	42066	1.68%	0.105%
326	14.435	14.431	14.455	HH	5246	72702	2.91%	0.182%
327	14.466	14.455	14.472	HH	5118	52089	2.08%	0.130%
328	14.476	14.472	14.501	HH	5160	87502	3.50%	0.219%
329	14.584	14.535	14.615	HH	8204	293484	11.74%	0.734%
330	14.628	14.615	14.643	HH	5929	97710	3.91%	0.244%
331	14.676	14.643	14.694	HH	6342	181530	7.26%	0.454%
332	14.760	14.736	14.782	HH	7375	177793	7.11%	0.445%
333	14.787	14.782	14.803	HH	6209	78545	3.14%	0.196%
334	14.978	14.946	15.001	HH	6994	214179	8.57%	0.536%
335	15.020	15.001	15.034	HH	6355	123364	4.94%	0.308%
336	15.039	15.034	15.047	HH	6421	50627	2.03%	0.127%

337	15.096	15.047	15.130	HH	81480	1345580	53.83%	3.365%
338	15.142	15.130	15.165	HH	7444	148612	5.95%	0.372%
339	15.184	15.165	15.209	HH	7026	175372	7.02%	0.439%
340	15.301	15.249	15.333	HH	159295	2291542	91.68%	5.730%
341	15.346	15.333	15.367	HH	7455	146253	5.85%	0.366%
342	15.443	15.434	15.453	HH	7100	81021	3.24%	0.203%
343	15.490	15.453	15.512	HH	7444	258650	10.35%	0.647%
344	15.583	15.565	15.610	HH	7675	201399	8.06%	0.504%
345	15.679	15.610	15.757	HH	52275	1325544	53.03%	3.315%
346	15.822	15.757	15.862	HH	10996	582357	23.30%	1.456%
347	15.946	15.927	15.975	HH	9781	269749	10.79%	0.675%
348	16.104	16.100	16.119	HH	9790	107622	4.31%	0.269%
349	16.146	16.119	16.167	HH	10384	292221	11.69%	0.731%
350	16.170	16.167	16.175	HH	9891	45846	1.83%	0.115%
351	16.253	16.233	16.265	HH	10489	200940	8.04%	0.502%
352	16.325	16.265	16.369	HH	147282	2499635	100.00%	6.250%
353	16.386	16.369	16.407	HH	11394	252899	10.12%	0.632%
354	16.420	16.407	16.425	HH	10901	119066	4.76%	0.298%
355	16.576	16.564	16.582	HH	12009	128236	5.13%	0.321%
356	16.625	16.582	16.661	HH	15525	626541	25.07%	1.567%
357	16.695	16.661	16.746	HH	27246	874704	34.99%	2.187%
358	16.890	16.842	16.907	HH	16873	600038	24.01%	1.500%
359	16.927	16.907	16.949	HH	16102	394981	15.80%	0.988%
360	17.013	16.996	17.021	HH	16589	248018	9.92%	0.620%

Sum of corrected areas: 39991990

Report of Analysis

Client:	CDM Smith	Date Collected:	06/27/25
Project:	South River WM Replacement	Date Received:	06/27/25
Client Sample ID:	TP-67MSD	SDG No.:	Q2484
Lab Sample ID:	Q2458-04MSD	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89.7
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
FF016082.D	1	07/02/25 09:17	07/02/25 22:35	PB168701

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	10900		188	1860	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	7.76		37 - 130	39%	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\FF070225\
 Data File : FF016082.D
 Signal(s) : FID2B.ch
 Acq On : 02 Jul 2025 22:35
 Operator : YP\AJ
 Sample : Q2458-04MSD
 Misc :
 ALS Vial : 86 Sample Multiplier: 1

Instrument :
 FID_F
 ClientSampleId :
 TP-67MSD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 07/03/2025
 Supervised By :mohammad ahmed 07/04/2025

Integration File: autoint1.e
 Quant Time: Jul 03 03:23:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
 Quant Title :
 QLast Update : Fri Jun 13 15:23:30 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...	15.095	936958	7.760 ug/mlm
Target Compounds			
2) N-DECANE	4.617	1652035	12.609 ug/ml
3) N-DODECANE	6.793	1655067	12.429 ug/ml
4) N-TETRADECANE	8.626	1662370	12.404 ug/ml
5) N-HEXADECANE	10.235	1638345	12.131 ug/ml
6) N-OCTADECANE	11.681	1657295	11.955 ug/ml
7) N-EICOSANE	12.993	1684346	12.062 ug/ml
8) N-DOCOSANE	14.195	1628317	11.985 ug/ml
10) N-TETRACOSANE	15.300	1664765	12.283 ug/ml
11) N-HEXACOSANE	16.324	1593028	11.867 ug/ml
12) N-OCTACOSANE	17.276	1604280	12.152 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF070225\
Data File : FF016082.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 22:35
Operator : YP\AJ
Sample : Q2458-04MSD
Misc :
ALS Vial : 86 Sample Multiplier: 1

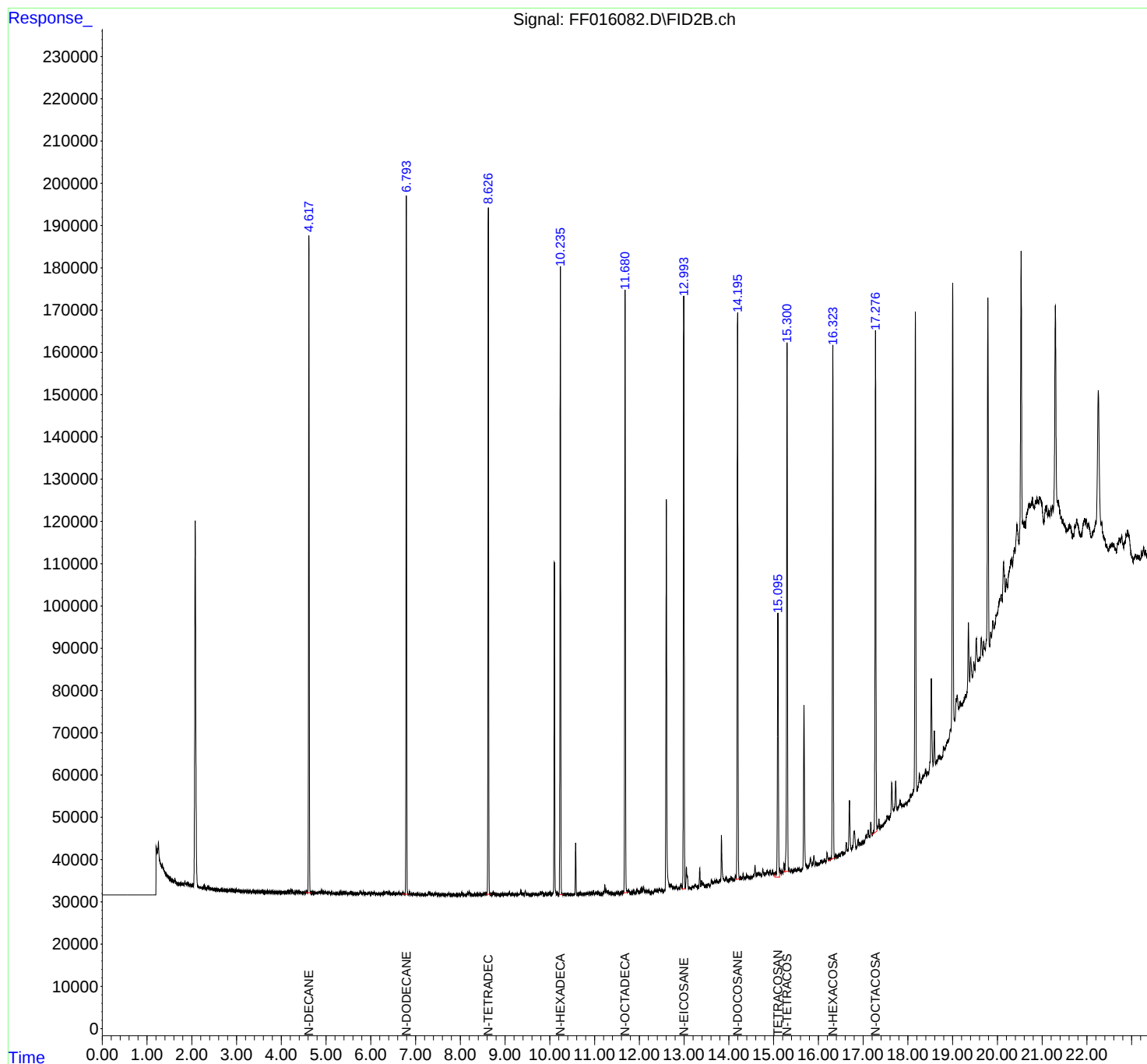
Instrument :
FID_F
ClientSampleId :
TP-67MSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/03/2025
Supervised By :mohammad ahmed 07/04/2025

Integration File: autoint1.e
Quant Time: Jul 03 03:23:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Quant Title :
QLast Update : Fri Jun 13 15:23:30 2025
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Instrument :

FID_F

ClientSampleId :

TP-67MSD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/03/2025

Supervised By :mohammad ahmed 07/04/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF07022
Data File : FF016082.D
Signal(s) : FID2B.ch
Acq On : 02 Jul 2025 22:35
Sample : Q2458-04MSD
Misc :
ALS Vial : 86 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF061325.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.484	4.481	4.488	HH	506	2062	0.08%	0.005%
2	4.513	4.488	4.524	HH	589	11226	0.44%	0.028%
3	4.528	4.524	4.539	HH	536	4279	0.17%	0.011%
4	4.568	4.539	4.588	HH	830	18581	0.73%	0.046%
5	4.618	4.588	4.673	HH	155953	1673495	66.11%	4.116%
6	4.692	4.673	4.725	HH	626	15774	0.62%	0.039%
7	4.754	4.725	4.773	HH	528	12956	0.51%	0.032%
8	4.784	4.773	4.788	HH	583	4486	0.18%	0.011%
9	4.798	4.788	4.803	HH	596	4822	0.19%	0.012%
10	4.808	4.803	4.813	HH	540	2768	0.11%	0.007%
11	4.836	4.813	4.840	HH	623	9309	0.37%	0.023%
12	4.846	4.840	4.864	HH	668	8668	0.34%	0.021%
13	4.871	4.864	4.884	HH	641	6773	0.27%	0.017%
14	4.903	4.884	4.920	HH	1089	16240	0.64%	0.040%
15	4.930	4.920	4.957	HH	732	14483	0.57%	0.036%
16	4.979	4.957	5.003	HH	747	15729	0.62%	0.039%
17	5.019	5.003	5.050	HH	557	13339	0.53%	0.033%
18	5.062	5.050	5.110	HH	654	18114	0.72%	0.045%
19	5.131	5.110	5.185	HH	624	17339	0.68%	0.043%
20	5.205	5.185	5.219	HH	428	6768	0.27%	0.017%
21	5.236	5.219	5.243	HH	418	5060	0.20%	0.012%
22	5.247	5.243	5.261	HH	378	3232	0.13%	0.008%
23	5.273	5.261	5.277	HH	372	3077	0.12%	0.008%
24	5.299	5.277	5.313	HH	535	8367	0.33%	0.021%
25	5.334	5.313	5.352	HH	651	10587	0.42%	0.026%
26	5.373	5.352	5.389	HH	600	9502	0.38%	0.023%
27	5.431	5.389	5.482	HH	558	23450	0.93%	0.058%
28	5.497	5.482	5.524	HH	366	7129	0.28%	0.018%
29	5.542	5.524	5.547	HH	405	4630	0.18%	0.011%
30	5.560	5.547	5.579	HH	771	10014	0.40%	0.025%
31	5.583	5.579	5.588	HH	345	1614	0.06%	0.004%
32	5.599	5.588	5.617	HH	417	5357	0.21%	0.013%
33	5.632	5.617	5.658	HH	368	7523	0.30%	0.019%
34	5.670	5.658	5.681	HH	332	3973	0.16%	0.010%
35	5.694	5.681	5.712	HH	331	4934	0.19%	0.012%
36	5.721	5.712	5.724	HH	233	1362	0.05%	0.003%

					retention			
37	5.733	5.724	5.740	HH	237	2076	0.08%	0.005%
38	5.760	5.740	5.781	HH	1078	14932	0.08%	0.005%
39	5.791	5.781	5.818	HH	604	8772	0.08%	0.005%
40	5.833	5.818	5.852	HH	768	9886	0.08%	0.005%
41	5.857	5.852	5.873	HH	373	3610	0.09%	0.005%
42	5.887	5.873	5.905	HH	349	4865	0.09%	0.005%
43	5.912	5.905	5.920	HH	269	2158	0.09%	0.005%
44	5.948	5.920	5.986	HH	550	14044	0.55%	0.035%
45	5.993	5.986	6.008	HH	373	3755	0.15%	0.009%
46	6.022	6.008	6.047	HH	575	8476	0.33%	0.021%
47	6.073	6.047	6.108	HH	606	12945	0.51%	0.032%
48	6.125	6.108	6.149	HH	484	6762	0.27%	0.017%
49	6.154	6.149	6.158	HH	187	852	0.03%	0.002%
50	6.175	6.158	6.188	HH	259	3959	0.16%	0.010%
51	6.192	6.188	6.216	HH	292	3753	0.15%	0.009%
52	6.232	6.216	6.244	HH	309	3988	0.16%	0.010%
53	6.251	6.244	6.274	HH	256	3735	0.15%	0.009%
54	6.295	6.274	6.313	HH	558	9248	0.37%	0.023%
55	6.348	6.313	6.380	HH	886	20122	0.79%	0.049%
56	6.403	6.380	6.418	HH	612	9781	0.39%	0.024%
57	6.436	6.418	6.456	HH	368	6413	0.25%	0.016%
58	6.465	6.456	6.472	HH	261	1988	0.08%	0.005%
59	6.483	6.472	6.488	HH	337	2373	0.09%	0.006%
60	6.507	6.488	6.547	HH	473	10111	0.40%	0.025%
61	6.557	6.547	6.565	HH	234	1866	0.07%	0.005%
62	6.584	6.565	6.605	HH	354	5761	0.23%	0.014%
63	6.629	6.605	6.663	HH	697	12809	0.51%	0.032%
64	6.679	6.663	6.701	HH	292	5250	0.21%	0.013%
65	6.716	6.701	6.764	HH	516	11683	0.46%	0.029%
66	6.793	6.764	6.850	HH	165365	1658736	65.53%	4.079%
67	6.866	6.850	6.899	HH	856	10870	0.43%	0.027%
68	6.903	6.899	6.910	HH	109	770	0.03%	0.002%
69	6.919	6.910	6.931	HH	229	1826	0.07%	0.004%
70	6.949	6.931	6.973	HH	363	4748	0.19%	0.012%
71	6.981	6.973	6.991	HH	174	1256	0.05%	0.003%
72	6.997	6.991	7.012	HH	149	1350	0.05%	0.003%
73	7.027	7.012	7.042	HH	113	1114	0.04%	0.003%
74	7.056	7.042	7.063	PH	175	1325	0.05%	0.003%
75	7.072	7.063	7.103	HH	141	1515	0.06%	0.004%
76	7.125	7.103	7.155	HH	179	2489	0.10%	0.006%
77	7.157	7.155	7.175	HH	91	565	0.02%	0.001%
78	7.199	7.175	7.224	PH	110	1892	0.07%	0.005%
79	7.227	7.224	7.256	HH	118	696	0.03%	0.002%
80	7.288	7.256	7.312	PH	667	9512	0.38%	0.023%
81	7.327	7.312	7.357	HH	341	5653	0.22%	0.014%
82	7.372	7.357	7.396	HH	175	2239	0.09%	0.006%
83	7.399	7.396	7.405	HH	60	178	0.01%	0.000%
84	7.431	7.405	7.444	PH	246	2602	0.10%	0.006%
85	7.462	7.444	7.503	HH	450	5427	0.21%	0.013%
86	7.519	7.503	7.548	PH	164	1163	0.05%	0.003%
87	7.573	7.548	7.592	PH	151	1241	0.05%	0.003%
88	7.604	7.592	7.612	HH	97	351	0.01%	0.001%
89	7.617	7.612	7.631	PH	85	271	0.01%	0.001%

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90	7.637	7.631	7.663	PH	102	488	0.02%	0.001%	
91	7.689	7.663	7.708	PH	100	686			
92	7.715	7.708	7.721	PH	132	577			
93	7.743	7.721	7.783	HH	498	5258			
94	7.785	7.783	7.791	PH	24	-31	-0.00%	0.000%	
95	7.801	7.791	7.807	PH	104	114			
96	7.810	7.807	7.821	PH	6	-95	-0.00%	-0.000%	
97	7.825	7.821	7.858	PH	50	168	0.01%	0.000%	
98	7.874	7.858	7.891	PH	88	486	0.02%	0.001%	
99	7.916	7.891	7.920	PH	72	108	0.00%	0.000%	
100	7.924	7.920	7.936	PH	28	-172	-0.01%	-0.000%	
101	7.964	7.936	7.974	PH	80	-425	-0.02%	-0.001%	
102	7.980	7.974	8.002	PH	10	-746	-0.03%	-0.002%	
103	8.031	8.002	8.071	PH	672	5983	0.24%	0.015%	
104	8.075	8.071	8.082	PH	44	-66	-0.00%	-0.000%	
105	8.086	8.082	8.090	PH	31	15	0.00%	0.000%	
106	8.094	8.090	8.106	PH	43	-22	-0.00%	-0.000%	
107	8.146	8.106	8.151	PH	146	158	0.01%	0.000%	
108	8.166	8.151	8.185	PH	550	6597	0.26%	0.016%	
109	8.201	8.185	8.283	HH	733	10523	0.42%	0.026%	
110	8.287	8.283	8.296	PH	-9	-467	-0.02%	-0.001%	
111	8.318	8.296	8.347	PH	210	2369	0.09%	0.006%	
112	8.356	8.347	8.363	HH	108	378	0.01%	0.001%	
113	8.378	8.363	8.404	PH	211	1483	0.06%	0.004%	
114	8.445	8.404	8.471	PH	228	2829	0.11%	0.007%	
115	8.479	8.471	8.491	PH	120	449	0.02%	0.001%	
116	8.519	8.491	8.528	HH	244	3528	0.14%	0.009%	
117	8.546	8.528	8.567	HH	439	5979	0.24%	0.015%	
118	8.577	8.567	8.585	HH	286	2384	0.09%	0.006%	
119	8.626	8.585	8.668	HH	162471	1670305	65.98%	4.108%	
120	8.682	8.668	8.697	HH	229	2390	0.09%	0.006%	
121	8.734	8.697	8.778	HH	774	12432	0.49%	0.031%	
122	8.784	8.778	8.845	HH	163	865	0.03%	0.002%	
123	8.853	8.845	8.884	PH	72	664	0.03%	0.002%	
124	8.903	8.884	8.909	PH	74	34	0.00%	0.000%	
125	8.931	8.909	8.942	PH	159	1377	0.05%	0.003%	
126	8.958	8.942	8.979	HH	177	2088	0.08%	0.005%	
127	8.993	8.979	9.023	HH	200	2457	0.10%	0.006%	
128	9.029	9.023	9.045	HH	167	1321	0.05%	0.003%	
129	9.097	9.045	9.124	PH	659	10395	0.41%	0.026%	
130	9.130	9.124	9.135	HH	147	627	0.02%	0.002%	
131	9.160	9.135	9.207	HH	269	4485	0.18%	0.011%	
132	9.233	9.207	9.244	PH	168	1853	0.07%	0.005%	
133	9.250	9.244	9.261	HH	131	1096	0.04%	0.003%	
134	9.279	9.261	9.326	HH	257	5083	0.20%	0.012%	
135	9.353	9.326	9.381	HH	1028	16428	0.65%	0.040%	
136	9.396	9.381	9.415	HH	343	3855	0.15%	0.009%	
137	9.421	9.415	9.428	PH	77	357	0.01%	0.001%	
138	9.451	9.428	9.475	PH	922	11853	0.47%	0.029%	
139	9.487	9.475	9.525	HH	355	4944	0.20%	0.012%	
140	9.528	9.525	9.536	PH	26	199	0.01%	0.000%	
141	9.542	9.536	9.553	HH	66	243	0.01%	0.001%	

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142	9.558	9.553	9.563	PH	31	39	0.00%	0.000%
143	9.567	9.563	9.571	PH	25	-68	-0.00%	-0.000%
144	9.600	9.571	9.619	PH	157	1502	0.00%	0.000%
145	9.632	9.619	9.637	PH	264	1468	0.00%	0.000%
146	9.640	9.637	9.662	HH	309	2307	0.00%	0.000%
147	9.665	9.662	9.674	PH	84	128	0.00%	0.000%
148	9.690	9.674	9.708	PH	138	1028	0.04%	0.003%
149	9.713	9.708	9.728	PH	83	201	0.01%	0.000%
150	9.738	9.728	9.752	PH	135	873	0.03%	0.002%
151	9.755	9.752	9.762	HH	109	221	0.01%	0.001%
152	9.786	9.762	9.809	PH	698	9245	0.37%	0.023%
153	9.830	9.809	9.858	HH	761	12038	0.48%	0.030%
154	9.873	9.858	9.886	HH	288	3216	0.13%	0.008%
155	9.902	9.886	9.916	HH	273	3507	0.14%	0.009%
156	9.922	9.916	9.939	HH	218	1647	0.07%	0.004%
157	9.946	9.939	9.950	PH	148	425	0.02%	0.001%
158	9.970	9.950	9.995	HH	305	5913	0.23%	0.015%
159	10.014	9.995	10.040	HH	746	8743	0.35%	0.022%
160	10.101	10.040	10.157	PH	78725	799772	31.59%	1.967%
161	10.167	10.157	10.193	HH	411	4868	0.19%	0.012%
162	10.235	10.193	10.289	HH	148714	1641287	64.84%	4.036%
163	10.313	10.289	10.325	HH	175	1719	0.07%	0.004%
164	10.340	10.325	10.365	HH	279	2870	0.11%	0.007%
165	10.390	10.365	10.431	PH	208	3393	0.13%	0.008%
166	10.459	10.431	10.500	PH	160	2150	0.08%	0.005%
167	10.509	10.500	10.535	HH	124	1043	0.04%	0.003%
168	10.541	10.535	10.553	HH	117	788	0.03%	0.002%
169	10.576	10.553	10.608	PH	12295	129202	5.10%	0.318%
170	10.623	10.608	10.644	HH	338	4600	0.18%	0.011%
171	10.678	10.644	10.704	HH	495	10362	0.41%	0.025%
172	10.708	10.704	10.730	HH	277	2601	0.10%	0.006%
173	10.748	10.730	10.777	HH	281	5385	0.21%	0.013%
174	10.788	10.777	10.812	HH	273	4377	0.17%	0.011%
175	10.834	10.812	10.849	HH	349	5910	0.23%	0.015%
176	10.877	10.849	10.906	HH	592	10689	0.42%	0.026%
177	10.933	10.906	10.942	HH	492	7662	0.30%	0.019%
178	10.973	11.007	11.007	HH	892	18749	0.74%	0.046%
179	11.035	11.007	11.039	HH	554	6597	0.26%	0.016%
180	11.044	11.039	11.062	HH	521	6150	0.24%	0.015%
181	11.074	11.062	11.104	HH	685	11968	0.47%	0.029%
182	11.106	11.104	11.154	HH	383	6672	0.26%	0.016%
183	11.166	11.154	11.178	HH	249	2869	0.11%	0.007%
184	11.200	11.178	11.209	HH	736	8436	0.33%	0.021%
185	11.228	11.209	11.243	HH	2382	27130	1.07%	0.067%
186	11.256	11.243	11.287	HH	1403	22874	0.90%	0.056%
187	11.303	11.287	11.332	HH	1065	17427	0.69%	0.043%
188	11.348	11.332	11.354	HH	444	4909	0.19%	0.012%
189	11.356	11.354	11.369	HH	435	3482	0.14%	0.009%
190	11.373	11.369	11.389	HH	383	3881	0.15%	0.010%
191	11.403	11.389	11.449	HH	434	10744	0.42%	0.026%
192	11.485	11.449	11.503	HH	627	11496	0.45%	0.028%
193	11.516	11.503	11.530	HH	547	7296	0.29%	0.018%
194	11.541	11.530	11.562	HH	515	6881	0.27%	0.017%

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195	11.593	11.562	11.597	HH	443	7391	0.29%	0.018%
196	11.681	11.597	11.744	HH	142906	1702709	67.39%	3.075%
197	11.758	11.744	11.814	HH	1191	29718	0.04%	0.003%
198	11.832	11.814	11.852	HH	694	12417	0.01%	0.001%
199	11.875	11.852	11.901	HH	946	17689	0.01%	0.001%
200	11.924	11.901	11.929	HH	648	7895	0.01%	0.001%
201	11.945	11.929	11.980	HH	1329	28732	1.14%	0.071%
202	11.984	11.980	12.012	HH	808	13017	0.51%	0.032%
203	12.034	12.012	12.048	HH	1431	20731	0.82%	0.051%
204	12.064	12.048	12.080	HH	1470	20891	0.83%	0.051%
205	12.098	12.080	12.124	HH	1817	31368	1.24%	0.077%
206	12.129	12.124	12.139	HH	774	6703	0.26%	0.016%
207	12.157	12.139	12.172	HH	979	17667	0.70%	0.043%
208	12.182	12.172	12.199	HH	1054	13764	0.54%	0.034%
209	12.213	12.199	12.250	HH	1046	21627	0.85%	0.053%
210	12.258	12.250	12.269	HH	586	6194	0.24%	0.015%
211	12.286	12.269	12.306	HH	711	13486	0.53%	0.033%
212	12.350	12.306	12.372	HH	1283	33744	1.33%	0.083%
213	12.387	12.372	12.420	HH	1111	28264	1.12%	0.070%
214	12.447	12.420	12.487	HH	1508	45680	1.80%	0.112%
215	12.507	12.487	12.529	HH	1208	25813	1.02%	0.063%
216	12.535	12.529	12.548	HH	922	9941	0.39%	0.024%
217	12.568	12.548	12.573	HH	1159	15748	0.62%	0.039%
218	12.604	12.573	12.669	HH	93482	1250190	49.39%	3.075%
219	12.681	12.669	12.696	HH	2380	35519	1.40%	0.087%
220	12.710	12.696	12.721	HH	2327	32131	1.27%	0.079%
221	12.725	12.721	12.762	HH	2150	45171	1.78%	0.111%
222	12.779	12.762	12.807	HH	1693	44097	1.74%	0.108%
223	12.822	12.807	12.860	HH	2093	54479	2.15%	0.134%
224	12.878	12.860	12.902	HH	1782	39294	1.55%	0.097%
225	12.932	12.902	12.957	HH	2630	65276	2.58%	0.161%
226	12.993	12.957	13.028	HH	141823	1745079	68.94%	4.292%
227	13.052	13.028	13.067	HH	6660	100168	3.96%	0.246%
228	13.073	13.067	13.099	HH	4359	59060	2.33%	0.145%
229	13.117	13.099	13.134	HH	1683	33015	1.30%	0.081%
230	13.151	13.134	13.165	HH	1607	29529	1.17%	0.073%
231	13.189	13.165	13.223	HH	1984	63116	2.49%	0.155%
232	13.245	13.223	13.279	HH	2413	71662	2.83%	0.176%
233	13.290	13.279	13.311	HH	1979	36770	1.45%	0.090%
234	13.319	13.311	13.326	HH	1824	16234	0.64%	0.040%
235	13.350	13.326	13.372	HH	6292	98824	3.90%	0.243%
236	13.392	13.372	13.418	HH	3273	75801	2.99%	0.186%
237	13.425	13.418	13.462	HH	2646	60490	2.39%	0.149%
238	13.482	13.462	13.508	HH	2173	56184	2.22%	0.138%
239	13.550	13.508	13.572	HH	2496	88695	3.50%	0.218%
240	13.576	13.572	13.580	HH	2037	10122	0.40%	0.025%
241	13.609	13.580	13.630	HH	3295	82509	3.26%	0.203%
242	13.636	13.630	13.658	HH	3030	49202	1.94%	0.121%
243	13.685	13.658	13.702	HH	3414	81847	3.23%	0.201%
244	13.726	13.702	13.765	HH	3445	118947	4.70%	0.293%
245	13.799	13.765	13.818	HH	3478	104619	4.13%	0.257%
246	13.834	13.818	13.902	HH	14027	306725	12.12%	0.754%

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247	13.938	13.902	13.975	HH	4362	162897	6.44%	0.401%
248	13.985	13.975	14.000	HH	3446	50912		
249	14.011	14.000	14.025	HH	3533	52133		
250	14.052	14.025	14.079	HH	4239	123071		
251	14.087	14.079	14.113	HH	3946	75901		
252	14.145	14.113	14.162	HH	4620	116834		
253	14.195	14.162	14.242	HH	138049	1809026	71.46%	4.449%
254	14.257	14.242	14.275	HH	4193	80176	3.17%	0.197%
255	14.317	14.275	14.339	HH	4975	160095	6.32%	0.394%
256	14.345	14.339	14.355	HH	4024	37316	1.47%	0.092%
257	14.362	14.355	14.370	HH	3956	36677	1.45%	0.090%
258	14.398	14.370	14.427	HH	4685	145298	5.74%	0.357%
259	14.433	14.427	14.441	HH	4321	35570	1.41%	0.087%
260	14.444	14.441	14.459	HH	4170	45168	1.78%	0.111%
261	14.472	14.459	14.484	HH	4207	60420	2.39%	0.149%
262	14.494	14.484	14.509	HH	4230	61868	2.44%	0.152%
263	14.527	14.509	14.532	HH	4354	59564	2.35%	0.146%
264	14.584	14.532	14.610	HH	7046	241344	9.53%	0.594%
265	14.624	14.610	14.630	HH	4920	57281	2.26%	0.141%
266	14.634	14.630	14.640	HH	4888	28070	1.11%	0.069%
267	14.674	14.640	14.697	HH	5291	167155	6.60%	0.411%
268	14.703	14.697	14.709	HH	4831	33672	1.33%	0.083%
269	14.715	14.709	14.735	HH	4839	73695	2.91%	0.181%
270	14.759	14.735	14.798	HH	6060	199290	7.87%	0.490%
271	14.813	14.798	14.840	HH	5172	127886	5.05%	0.315%
272	14.858	14.840	14.900	HH	5878	190421	7.52%	0.468%
273	14.920	14.900	14.940	HH	5836	130221	5.14%	0.320%
274	14.978	14.940	15.003	HH	5786	194392	7.68%	0.478%
275	15.015	15.003	15.042	HH	5221	119065	4.70%	0.293%
276	15.046	15.042	15.060	HH	5185	55837	2.21%	0.137%
277	15.095	15.060	15.129	HH	66704	1087098	42.95%	2.673%
278	15.140	15.129	15.168	HH	5947	132156	5.22%	0.325%
279	15.185	15.168	15.206	HH	5640	123283	4.87%	0.303%
280	15.231	15.206	15.247	HH	7464	153376	6.06%	0.377%
281	15.300	15.247	15.332	HH	130572	1949327	77.01%	4.794%
282	15.346	15.332	15.373	HH	6136	141537	5.59%	0.348%
283	15.394	15.373	15.428	HH	6079	189445	7.48%	0.466%
284	15.434	15.428	15.442	HH	5676	46209	1.83%	0.114%
285	15.444	15.442	15.450	HH	5689	27246	1.08%	0.067%
286	15.472	15.450	15.477	HH	5940	93692	3.70%	0.230%
287	15.488	15.477	15.514	HH	5988	127993	5.06%	0.315%
288	15.539	15.514	15.545	HH	6006	111349	4.40%	0.274%
289	15.554	15.545	15.559	HH	6062	50943	2.01%	0.125%
290	15.576	15.559	15.610	HH	6114	179635	7.10%	0.442%
291	15.631	15.610	15.635	HH	6062	89199	3.52%	0.219%
292	15.679	15.635	15.746	HH	44831	963606	38.07%	2.370%
293	15.751	15.746	15.759	HH	6586	51424	2.03%	0.126%
294	15.821	15.759	15.854	HH	8786	419879	16.59%	1.033%
295	15.901	15.854	15.928	HH	9333	346084	13.67%	0.851%
296	15.943	15.928	15.962	HH	7658	152336	6.02%	0.375%
297	15.973	15.962	15.984	HH	7232	95805	3.78%	0.236%
298	16.006	15.984	16.019	HH	7273	148225	5.86%	0.365%
299	16.064	16.019	16.104	HH	8120	401035	15.84%	0.986%

Instrument :

FID_F

ClientSampleId :

TP-67MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/03/2025

Supervised By :mohammad ahmed 07/04/2025

Instrument :

FID_F

ClientSampleId :

TP-67MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/03/2025

Supervised By :mohammad ahmed 07/04/2025

					rt	Area	Area%	Height
300	16.144	16.104	16.171	HH	8198	316569	12.51%	0.779%
301	16.196	16.171	16.228	HH	9749	301914	11.25%	0.779%
302	16.234	16.228	16.240	HH	8489	58867	2.25%	0.779%
303	16.249	16.240	16.263	HH	8577	121939	4.65%	0.779%
304	16.324	16.263	16.362	HH	129812	2090977	82.25%	0.779%
305	16.387	16.362	16.410	HH	9511	263091	10.05%	0.779%
306	16.427	16.410	16.435	HH	9149	134328	5.31%	0.330%
307	16.466	16.435	16.475	HH	9378	222063	8.77%	0.546%
308	16.519	16.475	16.561	HH	10107	502210	19.84%	1.235%
309	16.574	16.561	16.580	HH	9818	109902	4.34%	0.270%
310	16.625	16.580	16.663	HH	12410	537009	21.21%	1.321%
311	16.695	16.663	16.742	HH	22390	679872	26.86%	1.672%
312	16.806	16.742	16.842	HH	15119	759981	30.02%	1.869%
313	16.889	16.842	16.907	HH	13095	467785	18.48%	1.150%
314	16.927	16.907	16.947	HH	12321	285334	11.27%	0.702%
315	16.961	16.947	16.967	HH	12277	149284	5.90%	0.367%
316	17.004	16.967	17.009	HH	12545	308712	12.20%	0.759%
317	17.018	17.009	17.022	HH	12571	98421	3.89%	0.242%
318	17.061	17.022	17.082	HH	13926	480390	18.98%	1.181%
319	17.113	17.082	17.139	HH	15348	489186	19.33%	1.203%
320	17.171	17.139	17.205	HH	17180	595697	23.53%	1.465%
321	17.276	17.205	17.310	HH	132896	2531361	100.00%	6.225%
322	17.326	17.310	17.337	HH	16288	254017	10.03%	0.625%
323	17.352	17.337	17.374	HH	17884	373840	14.77%	0.919%
324	17.432	17.374	17.439	HH	16408	632975	25.01%	1.557%
325	17.486	17.439	17.490	HH	17209	515173	20.35%	1.267%

Sum of corrected areas: 40662317

FF061325.M Thu Jul 03 06:49:53 2025

Manual Integration Report

Sample ID	ClientId ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
Q2458-04MSD		FF016082.D	FF070225	TETRACOSANE-d50 (SURROGA	mohammad	7/4/2025 4:31:52 AM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FF016086.D	FF070225	N-OCTACOSANE	mohammad	7/4/2025 4:31:52 AM	Peak Integrated by Software incorrectly

Manual Integration Report

Sample ID	ClientId ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
Q2484-04		FG016210.D	FG070225	TETRACOSANE-d50 (SURROGA	mohammad	7/8/2025 9:13:31 AM	Peak Integrated by Software incorrectly

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF061325

Review By	yogesh	Review On	6/13/2025 11:34:17 AM
Supervise By	mohammad	Supervise On	6/17/2025 3:40:22 AM
SubDirectory	FF061325	HP Acquire Method	HP Processing Method FF061325
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	FF015962.D	13 Jun 2025 08:42	YP\AJ	Ok
2	I.BLK	FF015963.D	13 Jun 2025 12:37	YP\AJ	Ok
3	100 TRPH STD	FF015964.D	13 Jun 2025 13:06	YP\AJ	Ok
4	50 TRPH STD	FF015965.D	13 Jun 2025 13:35	YP\AJ	Ok
5	20 TRPH STD	FF015966.D	13 Jun 2025 14:05	YP\AJ	Ok
6	10 TRPH STD	FF015967.D	13 Jun 2025 14:34	YP\AJ	Ok
7	5 TRPH STD	FF015968.D	13 Jun 2025 15:03	YP\AJ	Ok
8	FF061325ICV	FF015969.D	13 Jun 2025 15:33	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF070225

Review By	yogesh	Review On	7/2/2025 11:59:46 AM
Supervise By	mohammad	Supervise On	7/4/2025 4:31:52 AM
SubDirectory	FF070225	HP Acquire Method	HP Processing Method FF061325
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	FF016061.D	02 Jul 2025 10:48	YP\AJ	Ok
2	I.BLK	FF016062.D	02 Jul 2025 11:18	YP\AJ	Ok
3	50 PPM TRPH STD	FF016063.D	02 Jul 2025 11:53	YP\AJ	Ok
4	RT MARKER	FF016064.D	02 Jul 2025 12:24	YP\AJ	Ok
5	PB168697BL	FF016065.D	02 Jul 2025 13:33	YP\AJ	Ok
6	PB168697BS	FF016066.D	02 Jul 2025 14:03	YP\AJ	Ok
7	PB168697BSD	FF016067.D	02 Jul 2025 14:33	YP\AJ	Ok
8	Q2458-10	FF016068.D	02 Jul 2025 15:02	YP\AJ	Ok
9	PB168697BS	FF016069.D	02 Jul 2025 15:36	YP\AJ	Ok
10	PB168697BS	FF016070.D	02 Jul 2025 16:06	YP\AJ	Ok
11	PB168697BS	FF016071.D	02 Jul 2025 16:36	YP\AJ	Ok
12	PB168697BS	FF016072.D	02 Jul 2025 17:06	YP\AJ	Ok
13	I.BLK	FF016073.D	02 Jul 2025 17:36	YP\AJ	Ok
14	50 PPM TRPH STD	FF016074.D	02 Jul 2025 18:06	YP\AJ	Ok
15	PB168701BL	FF016075.D	02 Jul 2025 19:06	YP\AJ	Ok
16	PB168701BS	FF016076.D	02 Jul 2025 19:36	YP\AJ	Ok
17	Q2458-01	FF016077.D	02 Jul 2025 20:06	YP\AJ	Ok
18	Q2458-02	FF016078.D	02 Jul 2025 20:35	YP\AJ	Dilution
19	Q2458-03	FF016079.D	02 Jul 2025 21:05	YP\AJ	Ok
20	Q2458-04	FF016080.D	02 Jul 2025 21:35	YP\AJ	Ok
21	Q2458-04MS	FF016081.D	02 Jul 2025 22:05	YP\AJ	Ok

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF070225

Review By	yogesh	Review On	7/2/2025 11:59:46 AM
Supervise By	mohammad	Supervise On	7/4/2025 4:31:52 AM
SubDirectory	FF070225	HP Acquire Method	HP Processing Method FF061325
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		

22	Q2458-04MSD	FF016082.D	02 Jul 2025 22:35	YP\AJ	Ok,M
23	Q2458-05	FF016083.D	02 Jul 2025 23:05	YP\AJ	Dilution
24	Q2458-06	FF016084.D	02 Jul 2025 23:34	YP\AJ	Dilution
25	I.BLK	FF016085.D	03 Jul 2025 00:04	YP\AJ	Ok
26	50 PPM TRPH STD	FF016086.D	03 Jul 2025 00:34	YP\AJ	Ok,M

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG061325

Review By	yogesh	Review On	6/13/2025 11:35:23 AM
Supervise By	mohammad	Supervise On	6/17/2025 3:40:29 AM
SubDirectory	FG061325	HP Acquire Method	HP Processing Method FG061325
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	FG016061.D	13 Jun 2025 09:11	YP\AJ	Ok
2	I.BLK	FG016062.D	13 Jun 2025 09:40	YP\AJ	Ok
3	100 TRPH STD	FG016063.D	13 Jun 2025 10:10	YP\AJ	Ok
4	50 TRPH STD	FG016064.D	13 Jun 2025 10:39	YP\AJ	Ok
5	20 TRPH STD	FG016065.D	13 Jun 2025 11:09	YP\AJ	Ok
6	10 TRPH STD	FG016066.D	13 Jun 2025 11:38	YP\AJ	Ok
7	5 TRPH STD	FG016067.D	13 Jun 2025 12:07	YP\AJ	Ok
8	FG061325ICV	FG016068.D	13 Jun 2025 12:37	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG070225

Review By	yogesh	Review On	7/2/2025 12:00:36 PM
Supervise By	mohammad	Supervise On	7/8/2025 9:13:31 AM
SubDirectory	FG070225	HP Acquire Method	HP Processing Method FG061325
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	FG016198.D	02 Jul 2025 10:48	YP\AJ	Ok
2	I.BLK	FG016199.D	02 Jul 2025 11:18	YP\AJ	Ok
3	50 PPM TRPH STD	FG016200.D	02 Jul 2025 11:53	YP\AJ	Ok
4	RT MARKER	FG016201.D	02 Jul 2025 12:24	YP\AJ	Ok
5	Q2458-07	FG016202.D	02 Jul 2025 16:06	YP\AJ	Ok
6	Q2458-08	FG016203.D	02 Jul 2025 16:36	YP\AJ	Ok
7	Q2458-09	FG016204.D	02 Jul 2025 17:06	YP\AJ	Ok
8	Q2484-01	FG016205.D	02 Jul 2025 17:36	YP\AJ	Dilution
9	Q2484-02	FG016206.D	02 Jul 2025 18:06	YP\AJ	Ok
10	I.BLK	FG016207.D	02 Jul 2025 18:36	YP\AJ	Ok
11	50 PPM TRPH STD	FG016208.D	02 Jul 2025 19:06	YP\AJ	Ok
12	Q2484-03	FG016209.D	02 Jul 2025 20:06	YP\AJ	Dilution
13	Q2484-04	FG016210.D	02 Jul 2025 20:35	YP\AJ	Ok,M
14	Q2484-05	FG016211.D	02 Jul 2025 21:05	YP\AJ	Ok
15	Q2484-06	FG016212.D	02 Jul 2025 21:35	YP\AJ	Ok
16	I.BLK	FG016213.D	02 Jul 2025 22:05	YP\AJ	Ok
17	50 PPM TRPH STD	FG016214.D	02 Jul 2025 22:35	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG070325

Review By	yogesh	Review On	7/3/2025 11:59:04 AM
Supervise By	mohammad	Supervise On	7/8/2025 9:13:46 AM
SubDirectory	FG070325	HP Acquire Method	HP Processing Method FG061325
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	FG016216.D	03 Jul 2025 08:09	YP\AJ	Ok
2	I.BLK	FG016217.D	03 Jul 2025 08:38	YP\AJ	Ok
3	50 PPM TRPH STD	FG016218.D	03 Jul 2025 09:08	YP\AJ	Ok
4	RT MARKER	FG016219.D	03 Jul 2025 09:38	YP\AJ	Ok
5	Q2484-01	FG016220.D	03 Jul 2025 10:47	YP\AJ	Ok
6	Q2484-03	FG016221.D	03 Jul 2025 11:17	YP\AJ	Ok
7	I.BLK	FG016222.D	03 Jul 2025 11:47	YP\AJ	Ok
8	50 PPM TRPH STD	FG016223.D	03 Jul 2025 12:17	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF061325

Review By	yogesh	Review On	6/13/2025 11:34:17 AM
Supervise By	mohammad	Supervise On	6/17/2025 3:40:22 AM
SubDirectory	FF061325	HP Acquire Method	HP Processing Method FF061325

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		FF015962.D	13 Jun 2025 08:42		YP\AJ	Ok
2	I.BLK		FF015963.D	13 Jun 2025 12:37		YP\AJ	Ok
3	100 TRPH STD		FF015964.D	13 Jun 2025 13:06		YP\AJ	Ok
4	50 TRPH STD		FF015965.D	13 Jun 2025 13:35		YP\AJ	Ok
5	20 TRPH STD		FF015966.D	13 Jun 2025 14:05		YP\AJ	Ok
6	10 TRPH STD		FF015967.D	13 Jun 2025 14:34		YP\AJ	Ok
7	5 TRPH STD		FF015968.D	13 Jun 2025 15:03		YP\AJ	Ok
8	FF061325ICV		FF015969.D	13 Jun 2025 15:33		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF070225

Review By	yogesh	Review On	7/2/2025 11:59:46 AM
Supervise By	mohammad	Supervise On	7/4/2025 4:31:52 AM
SubDirectory	FF070225	HP Acquire Method	HP Processing Method FF061325

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		FF016061.D	02 Jul 2025 10:48		YPIAJ	Ok
2	I.BLK		FF016062.D	02 Jul 2025 11:18		YPIAJ	Ok
3	50 PPM TRPH STD		FF016063.D	02 Jul 2025 11:53		YPIAJ	Ok
4	RT MARKER		FF016064.D	02 Jul 2025 12:24		YPIAJ	Ok
5	PB168697BL		FF016065.D	02 Jul 2025 13:33		YPIAJ	Ok
6	PB168697BS		FF016066.D	02 Jul 2025 14:03		YPIAJ	Ok
7	PB168697BSD		FF016067.D	02 Jul 2025 14:33		YPIAJ	Ok
8	Q2458-10		FF016068.D	02 Jul 2025 15:02		YPIAJ	Ok
9	PB168697BS		FF016069.D	02 Jul 2025 15:36		YPIAJ	Ok
10	PB168697BS		FF016070.D	02 Jul 2025 16:06		YPIAJ	Ok
11	PB168697BS		FF016071.D	02 Jul 2025 16:36		YPIAJ	Ok
12	PB168697BS		FF016072.D	02 Jul 2025 17:06		YPIAJ	Ok
13	I.BLK		FF016073.D	02 Jul 2025 17:36		YPIAJ	Ok
14	50 PPM TRPH STD		FF016074.D	02 Jul 2025 18:06		YPIAJ	Ok
15	PB168701BL		FF016075.D	02 Jul 2025 19:06		YPIAJ	Ok
16	PB168701BS		FF016076.D	02 Jul 2025 19:36		YPIAJ	Ok
17	Q2458-01		FF016077.D	02 Jul 2025 20:06		YPIAJ	Ok
18	Q2458-02		FF016078.D	02 Jul 2025 20:35	need 5x dilution	YPIAJ	Dilution

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF070225

Review By	yogesh	Review On	7/2/2025 11:59:46 AM
Supervise By	mohammad	Supervise On	7/4/2025 4:31:52 AM
SubDirectory	FF070225	HP Acquire Method	HP Processing Method
			FF061325
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		

19	Q2458-03		FF016079.D	02 Jul 2025 21:05		YP\AJ	Ok
20	Q2458-04		FF016080.D	02 Jul 2025 21:35		YP\AJ	Ok
21	Q2458-04MS		FF016081.D	02 Jul 2025 22:05		YP\AJ	Ok
22	Q2458-04MSD		FF016082.D	02 Jul 2025 22:35		YP\AJ	Ok,M
23	Q2458-05		FF016083.D	02 Jul 2025 23:05	need 2x dilution	YP\AJ	Dilution
24	Q2458-06		FF016084.D	02 Jul 2025 23:34	need 5x dilution	YP\AJ	Dilution
25	I.BLK		FF016085.D	03 Jul 2025 00:04		YP\AJ	Ok
26	50 PPM TRPH STD		FF016086.D	03 Jul 2025 00:34		YP\AJ	Ok,M

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG061325

Review By	yogesh	Review On	6/13/2025 11:35:23 AM
Supervise By	mohammad	Supervise On	6/17/2025 3:40:29 AM
SubDirectory	FG061325	HP Acquire Method	HP Processing Method FG061325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC	PP24469		
Internal Standard/PEM	PP24468,PP24473		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG016061.D	13 Jun 2025 09:11		YP\AJ	Ok
2	I.BLK		FG016062.D	13 Jun 2025 09:40		YP\AJ	Ok
3	100 TRPH STD		FG016063.D	13 Jun 2025 10:10		YP\AJ	Ok
4	50 TRPH STD		FG016064.D	13 Jun 2025 10:39		YP\AJ	Ok
5	20 TRPH STD		FG016065.D	13 Jun 2025 11:09		YP\AJ	Ok
6	10 TRPH STD		FG016066.D	13 Jun 2025 11:38		YP\AJ	Ok
7	5 TRPH STD		FG016067.D	13 Jun 2025 12:07		YP\AJ	Ok
8	FG061325ICV		FG016068.D	13 Jun 2025 12:37		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG070225

Review By	yogesh	Review On	7/2/2025 12:00:36 PM
Supervise By	mohammad	Supervise On	7/8/2025 9:13:31 AM
SubDirectory	FG070225	HP Acquire Method	HP Processing Method FG061325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC	PP24469		
Internal Standard/PEM	PP24468,PP24473		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG016198.D	02 Jul 2025 10:48		YP\AJ	Ok
2	I.BLK		FG016199.D	02 Jul 2025 11:18		YP\AJ	Ok
3	50 PPM TRPH STD		FG016200.D	02 Jul 2025 11:53		YP\AJ	Ok
4	RT MARKER		FG016201.D	02 Jul 2025 12:24		YP\AJ	Ok
5	Q2458-07		FG016202.D	02 Jul 2025 16:06		YP\AJ	Ok
6	Q2458-08		FG016203.D	02 Jul 2025 16:36		YP\AJ	Ok
7	Q2458-09		FG016204.D	02 Jul 2025 17:06		YP\AJ	Ok
8	Q2484-01		FG016205.D	02 Jul 2025 17:36	need 5x dilution	YP\AJ	Dilution
9	Q2484-02		FG016206.D	02 Jul 2025 18:06		YP\AJ	Ok
10	I.BLK		FG016207.D	02 Jul 2025 18:36		YP\AJ	Ok
11	50 PPM TRPH STD		FG016208.D	02 Jul 2025 19:06		YP\AJ	Ok
12	Q2484-03		FG016209.D	02 Jul 2025 20:06	Need 10X	YP\AJ	Dilution
13	Q2484-04		FG016210.D	02 Jul 2025 20:35		YP\AJ	Ok,M
14	Q2484-05		FG016211.D	02 Jul 2025 21:05		YP\AJ	Ok
15	Q2484-06		FG016212.D	02 Jul 2025 21:35		YP\AJ	Ok
16	I.BLK		FG016213.D	02 Jul 2025 22:05		YP\AJ	Ok
17	50 PPM TRPH STD		FG016214.D	02 Jul 2025 22:35		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG070325

Review By	yogesh	Review On	7/3/2025 11:59:04 AM
Supervise By	mohammad	Supervise On	7/8/2025 9:13:46 AM
SubDirectory	FG070325	HP Acquire Method	HP Processing Method FG061325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC	PP24469		
Internal Standard/PEM	PP24468,PP24473		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG016216.D	03 Jul 2025 08:09		YP\AJ	Ok
2	I.BLK		FG016217.D	03 Jul 2025 08:38		YP\AJ	Ok
3	50 PPM TRPH STD		FG016218.D	03 Jul 2025 09:08		YP\AJ	Ok
4	RT MARKER		FG016219.D	03 Jul 2025 09:38		YP\AJ	Ok
5	Q2484-01		FG016220.D	03 Jul 2025 10:47		YP\AJ	Ok
6	Q2484-03		FG016221.D	03 Jul 2025 11:17		YP\AJ	Ok
7	I.BLK		FG016222.D	03 Jul 2025 11:47		YP\AJ	Ok
8	50 PPM TRPH STD		FG016223.D	03 Jul 2025 12:17		YP\AJ	Ok

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/3/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 07/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:22
Out Date: 07/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136354

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
Q2480-01	GPX1	1	1.15	10.52	11.67	10.44	88.3	
Q2480-02	GPX2	2	1.19	10.60	11.79	10.66	89.3	
Q2480-03	GPX3	3	1.15	10.84	11.99	10.77	88.7	
Q2480-04	GPX4	4	1.13	10.84	11.97	10.66	87.9	
Q2480-05	GPX5	5	1.13	10.53	11.66	10.55	89.5	
Q2480-06	GPX6	6	1.17	10.56	11.73	10.35	86.9	
Q2480-07	GPX7	7	1.18	10.59	11.77	10.48	87.8	
Q2480-08	GPX8	8	1.18	10.37	11.55	10.22	87.2	
Q2484-01	TP-58	9	1.19	10.77	11.96	10.47	86.2	
Q2484-02	TP-57	10	1.18	10.22	11.4	9.97	86.0	
Q2484-03	TP-64	11	1.16	10.50	11.66	10.44	88.4	
Q2484-04	TP-107	12	1.13	10.69	11.82	10.09	83.8	
Q2484-05	TP-1006	13	1.14	10.48	11.62	10.35	87.9	
Q2484-06	TP-104	14	1.15	10.29	11.44	10.13	87.3	
Q2486-01	WASTE	15	1.16	10.31	11.47	9.77	83.5	
Q2486-02	VOC	16	1.18	11.32	12.5	10.65	83.7	
Q2486-03	1	17	1.15	10.80	11.95	10.24	84.2	
Q2486-04	2	18	1.13	10.46	11.59	9.74	82.3	
Q2486-05	3	19	1.13	10.78	11.91	10.12	83.4	
Q2486-06	4	20	1.19	10.00	11.19	9.65	84.6	
Q2486-07	5	21	1.19	10.26	11.45	8.79	74.1	
Q2491-01	EO-1-070225	22	1.19	10.51	11.7	10.9	92.4	
Q2491-02	EO-1-070225-E2	23	1.15	10.14	11.29	10.5	92.2	
Q2492-01	VNJ-254-1	24	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2492-02	VNJ-254-2	25	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2493-01	WC-11	26	1.13	10.45	11.58	10.4	88.7	
Q2493-02	WC-11-EPH	27	1.19	10.23	11.42	9.72	83.4	
Q2493-03	WC-11-VOC	28	1.14	9.89	11.03	10.2	91.6	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/3/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 07/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:22
Out Date: 07/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136354

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
Q2494-01	Playhouse/Storag	35	1.00	1.00	2.00	2.00	100.0	Caulk sample
Q2494-02	Playhouse/Storag	36	1.00	1.00	2.00	2.00	100.0	chair form
Q2494-03	Garage Seat Foa	37	1.00	1.00	2.00	2.00	100.0	seat form
Q2494-04	Black foam in Sou	38	1.00	1.00	2.00	2.00	100.0	black form
Q2494-05	Kids Room styof	39	1.00	1.00	2.00	2.00	100.0	yellow form
Q2494-06	Kids Room Lower	40	1.00	1.00	2.00	2.00	100.0	form
Q2494-07	Kids Room styof	41	1.00	1.00	2.00	2.00	100.0	styra form
Q2494-08	Dog Beg Foam	42	1.00	1.00	2.00	2.00	100.0	bag form
Q2494-09	Cotton Layer - Ott	43	1.00	1.00	2.00	2.00	100.0	cotton layer
Q2494-10	Foam Ottoman	44	1.00	1.00	2.00	2.00	100.0	form ottoman
Q2494-11	Foyer North Wall	45	1.00	1.00	2.00	2.00	100.0	foyer north wall plug
Q2494-12	NE Stucco Exterio	46	1.00	1.00	2.00	2.00	100.0	stucco exterior
Q2494-13	Master Mattress	47	1.00	1.00	2.00	2.00	100.0	mattress
Q2495-01	Chair Foam Parke	48	1.00	1.00	2.00	2.00	100.0	chair form
Q2495-02	SE Bedroom (3rd	49	1.00	1.00	2.00	2.00	100.0	mattress
Q2495-03	E Bedroom Ceilin	50	1.00	1.00	2.00	2.00	100.0	ceiling plug
Q2495-04	South East Ceilining	51	1.00	1.00	2.00	2.00	100.0	east selling plug
Q2495-05	Master Bathroom	52	1.00	1.00	2.00	2.00	100.0	selling plug
Q2495-06	3rd Fl Hallway N	53	1.00	1.00	2.00	2.00	100.0	hoalway selling
Q2495-07	SE Bedroom Park	54	1.00	1.00	2.00	2.00	100.0	bedrom plug
Q2495-08	Family Room SW	55	1.00	1.00	2.00	2.00	100.0	family plug
Q2495-09	Foyer SE Corner P	56	1.00	1.00	2.00	2.00	100.0	foyer plug
Q2495-10	Green Carpet Pad	57	1.00	1.00	2.00	2.00	100.0	green carpet pad
Q2495-11	Rug in Dining Roo	58	1.00	1.00	2.00	2.00	100.0	rug
Q2495-12	LR Couch Cushion	59	1.00	1.00	2.00	2.00	100.0	couch cushion
Q2495-13	Dining Room W	60	1.00	1.00	2.00	2.00	100.0	wood and foam
Q2495-14	Kitchen Dining E	61	1.00	1.00	2.00	2.00	100.0	kithean rug
Q2495-15	Garage Southwes	62	1.00	1.00	2.00	2.00	100.0	plug

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/3/2025

OVENTEMP IN Celsius(°C): 107
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Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:22
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Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136354

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
Q2495-16	Zack"s Matterss	63	1.00	1.00	2.00	2.00	100.0	mattess
Q2495-17	Zack"s Couch	64	1.00	1.00	2.00	2.00	100.0	zacks couch
Q2496-02	N exterior center	65	1.00	1.00	2.00	2.00	100.0	stucco wall
Q2496-03	Basement south	66	1.00	1.00	2.00	2.00	100.0	wall cavity stucc
Q2496-04	Entertainment ro	67	1.00	1.00	2.00	2.00	100.0	hvac close
Q2496-05	Black mat outside	68	1.00	1.00	2.00	2.00	100.0	outside mat
Q2496-06	Basement bedroom	69	1.00	1.00	2.00	2.00	100.0	bedrom form
Q2496-07	Basement bedroom-1	70	1.00	1.00	2.00	2.00	100.0	window plug
Q2496-08	Basement bedroom-2	71	1.00	1.00	2.00	2.00	100.0	window plug
Q2496-09	Maeve"s room ma	72	1.00	1.00	2.00	2.00	100.0	mattess
Q2496-10	Master bedroom	73	1.00	1.00	2.00	2.00	100.0	rug
Q2496-11	Master bedroom-1	74	1.00	1.00	2.00	2.00	100.0	chair form
Q2496-12	Master bedroom-2	75	1.00	1.00	2.00	2.00	100.0	mattess form
Q2496-13	Master bedroom-3	76	1.00	1.00	2.00	2.00	100.0	office chair form
Q2496-14	SE bedroom brow	77	1.00	1.00	2.00	2.00	100.0	form
Q2496-15	SE bedroom gray	78	1.00	1.00	2.00	2.00	100.0	gray cushion
Q2496-16	Maeves room gre	79	1.00	1.00	2.00	2.00	100.0	chair form
Q2496-17	Master bedroom-4	80	1.00	1.00	2.00	2.00	100.0	plug
Q2496-18	3rd floor roof ent	81	1.00	1.00	2.00	2.00	100.0	plug
Q2496-19	Living room couc	82	1.00	1.00	2.00	2.00	100.0	couch form
Q2496-20	Living room 2 sea	83	1.00	1.00	2.00	2.00	100.0	form
Q2496-21	Office leather cha	84	1.00	1.00	2.00	2.00	100.0	form
Q2496-22	Pink shoe sole	85	1.00	1.00	2.00	2.00	100.0	shoe sole
Q2496-23	Living room rug S	86	1.00	1.00	2.00	2.00	100.0	rug
Q2496-24	Dining room NE c	87	1.00	1.00	2.00	2.00	100.0	plug
Q2497-01	SW bedroom (San	88	1.00	1.00	2.00	2.00	100.0	plug
Q2497-02	Salman s room SE	89	1.00	1.00	2.00	2.00	100.0	plug compossi
Q2497-03	Sanah s room bed	90	1.00	1.00	2.00	2.00	100.0	sanah form

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/3/2025

OVENTEMP IN Celsius(°C): 107
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Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:22
Out Date: 07/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136354

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
Q2497-04	Salman s room m	91	1.00	1.00	2.00	2.00	100.0	mattess form
Q2497-05	Master bed mattr	92	1.00	1.00	2.00	2.00	100.0	mattess
Q2497-06	Kaihaan s room m	93	1.00	1.00	2.00	2.00	100.0	form
Q2497-07	Garage foam yog	94	1.00	1.00	2.00	2.00	100.0	garage foam
Q2497-08	Living room west	95	1.00	1.00	2.00	2.00	100.0	form
Q2497-09	Entrance rug	96	1.00	1.00	2.00	2.00	100.0	rug
Q2497-10	south exterior re	97	1.00	1.00	2.00	2.00	100.0	form
Q2497-11	Garage gym floor	98	1.00	1.00	2.00	2.00	100.0	garage foam
Q2497-12	Rug by the back d	99	1.00	1.00	2.00	2.00	100.0	rug
Q2497-13	Guest bed mattre	100	1.00	1.00	2.00	2.00	100.0	mattess
Q2497-14	Garage backyard	101	1.00	1.00	2.00	2.00	100.0	garage foam
Q2497-15	LR SW conner chai	102	1.00	1.00	2.00	2.00	100.0	form
Q2497-16	Living room NE co	103	1.00	1.00	2.00	2.00	100.0	catters
Q2497-17	Dining room SW c	104	1.00	1.00	2.00	2.00	100.0	chair form
Q2497-18	LR SW rug corner	105	1.00	1.00	2.00	2.00	100.0	rug
Q2497-19	LR west wall plug	106	1.00	1.00	2.00	2.00	100.0	plug
Q2497-20	LR NE corner plug	107	1.00	1.00	2.00	2.00	100.0	plug
Q2497-21	office east wall pl	108	1.00	1.00	2.00	2.00	100.0	plug
Q2497-22	Bedroom north w	109	1.00	1.00	2.00	2.00	100.0	plug
Q2497-23	Kitchen ceiling pl	110	1.00	1.00	2.00	2.00	100.0	ceilling plug
Q2498-01	NE Bd bed foam	111	1.00	1.00	2.00	2.00	100.0	bedrom form
Q2498-02	NE Bd pillow foa	112	1.00	1.00	2.00	2.00	100.0	form
Q2498-03	Master bed NE m	113	1.00	1.00	2.00	2.00	100.0	mattess
Q2500-01	X600-B2	29	1.15	10.84	11.99	11.24	93.1	
Q2500-02	X600-S2	30	1.19	10.36	11.55	10.6	90.8	
Q2500-03	X600-B1	31	1.13	10.42	11.55	11.02	94.9	
Q2500-04	X600-S1	32	1.13	10.32	11.45	10.6	91.8	
Q2500-05	X600-DUP1	33	1.14	10.85	11.99	11.3	93.6	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/3/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 07/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:22
Out Date: 07/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136354

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
Q2500-06	X600-S3	34	1.11	10.71	11.82	11.18	94.0	

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

WORKLIST(Hardcopy Internal Chain)

136354

WorkList Name : %1-070225

WorkList ID : 190499

Department : Wet-Chemistry

Date : 07-02-2025 08:07:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2480-01	GPX1	Solid	Percent Solids	Cool 4 deg C	GENV01	A43	06/30/2025	Chemtech -SO
Q2480-02	GPX2	Solid	Percent Solids	Cool 4 deg C	GENV01	A43	06/30/2025	Chemtech -SO
Q2480-03	GPX3	Solid	Percent Solids	Cool 4 deg C	GENV01	A43	07/01/2025	Chemtech -SO
Q2480-04	GPX4	Solid	Percent Solids	Cool 4 deg C	GENV01	A43	07/01/2025	Chemtech -SO
Q2480-05	GPX5	Solid	Percent Solids	Cool 4 deg C	GENV01	A43	07/01/2025	Chemtech -SO
Q2480-06	GPX6	Solid	Percent Solids	Cool 4 deg C	GENV01	A43	07/01/2025	Chemtech -SO
Q2480-07	GPX7	Solid	Percent Solids	Cool 4 deg C	GENV01	A43	07/01/2025	Chemtech -SO
Q2480-08	GPX8	Solid	Percent Solids	Cool 4 deg C	GENV01	A43	07/01/2025	Chemtech -SO
Q2484-01	TP-58	Solid	Percent Solids	Cool 4 deg C	GENV01	A43	07/01/2025	Chemtech -SO
Q2484-02	TP-57	Solid	Percent Solids	Cool 4 deg C	CAMP02	A12	07/01/2025	Chemtech -SO
Q2484-03	TP-64	Solid	Percent Solids	Cool 4 deg C	CAMP02	A12	07/01/2025	Chemtech -SO
Q2484-04	TP-107	Solid	Percent Solids	Cool 4 deg C	CAMP02	A12	07/01/2025	Chemtech -SO
Q2484-05	TP-1008	Solid	Percent Solids	Cool 4 deg C	CAMP02	A12	07/01/2025	Chemtech -SO
Q2484-06	TP-104	Solid	Percent Solids	Cool 4 deg C	CAMP02	A12	07/01/2025	Chemtech -SO
Q2486-01	WASTE	Solid	Percent Solids	Cool 4 deg C	CAMP02	A12	07/01/2025	Chemtech -SO
Q2486-02	VOC	Solid	Percent Solids	Cool 4 deg C	SCIA01	A61	07/01/2025	Chemtech -SO
Q2486-03	1	Solid	Percent Solids	Cool 4 deg C	SCIA01	A61	07/01/2025	Chemtech -SO
Q2486-04	2	Solid	Percent Solids	Cool 4 deg C	SCIA01	A61	07/01/2025	Chemtech -SO
Q2486-05	3	Solid	Percent Solids	Cool 4 deg C	SCIA01	A61	07/01/2025	Chemtech -SO
Q2486-06	4	Solid	Percent Solids	Cool 4 deg C	SCIA01	A61	07/01/2025	Chemtech -SO
Q2486-07	5	Solid	Percent Solids	Cool 4 deg C	SCIA01	A61	07/01/2025	Chemtech -SO

Date/Time 07/02/25 15:00

Raw Sample Received by: 8690C

Raw Sample Relinquished by: 8690C

Date/Time 07/02/25

Raw Sample Received by:

Raw Sample Relinquished by:

WORKLIST(Hardcopy Internal Chain)

136354

WorkList Name : %1-070225

WorkList ID : 190499

Department : Wet-Chemistry

Date : 07-02-2025 08:07:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2491-01	EO-1-070225	Solid	Percent Solids	Cool 4 deg C	PSEG03	A61	07/02/2025	Chemtech -SO
Q2491-02	EO-1-070225-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	A61	07/02/2025	Chemtech -SO
Q2492-01	VNJ-254-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	A61	07/02/2025	Chemtech -SO
Q2492-02	VNJ-254-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	A61	07/02/2025	Chemtech -SO
Q2493-01	WC-11	Solid	Percent Solids	Cool 4 deg C	PSEG03	A43	07/02/2025	Chemtech -SO
Q2493-02	WC-11-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	A43	07/02/2025	Chemtech -SO
Q2493-03	WC-11-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	A43	07/02/2025	Chemtech -SO
Q2494-01	Playhouse/Storage	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-02	Playhouse/Storage	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-03	Garage Seat Foa	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-04	Black foam in Sou	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-05	Kids Room styof	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-06	Kids Room Lower	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-07	Kids Room styof	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-08	Dog Beg Foam	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-09	Cotton Layer - Ott	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-10	Foam Ottoman	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-11	Foyer North Wall	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-12	NE Stucco Exterio	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2494-13	Master Mattress	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/25/2025	Chemtech -SO
Q2495-01	Chair Foam Parke	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO

Date/Time 07/02/25 15:00
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 07/02/25 17:35
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

136354

WorkList Name : %1-070225

WorkList ID : 190499

Department : Wet-Chemistry

Date : 07-02-2025 08:07:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2495-02	SE Bedroom (3rd	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-03	E Bedroom Ceilin	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-04	South East Ceiling	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-05	Master Bathroom	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-06	3rd Fl Hallway N	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-07	SE Bedroom Park	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-08	Family Room SW	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-09	Foyer SE Corner P	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-10	Green Carpet Pad	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-11	Rug in Dining Roo	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-12	LR Couch Cushion	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-13	Dining Room W	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-14	Kitchen Dining E	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-15	Garage Southwes	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-16	Zack's Matterss	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2495-17	Zack's Couch	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2496-02	N exterior center	Solid	Percent Solids	Cool 4 deg C	SUMM04	A53	06/11/2025	Chemtech -SO
Q2496-03	Basement south	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-04	Entertainment ro	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-05	Black mat outside	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-06	Basement bedroom	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO

Date/Time 07/02/25 15:00

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 07/02/25

Raw Sample Received by: [Signature]

WORKLIST(Hardcopy Internal Chain)

136354

WorkList Name : %1-070225

WorkList ID : 190499

Department : Wet-Chemistry

Date : 07-02-2025 08:07:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2496-07	Basement bedroom-1	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-08	Basement bedroom-2	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-09	Maeve's room ma	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-10	Master bedroom	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-11	Master bedroom-1	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-12	Master bedroom-2	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-13	Master bedroom-3	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-14	SE bedroom brow	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-15	SE bedroom gray	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-16	Maeves room gre	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-17	Master bedroom-4	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-18	3rd floor roof ent	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-19	Living room couc	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-20	Living room 2 sea	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-21	Office leather cha	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-22	Pink shoe sole	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-23	Living room rug S	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2496-24	Dining room NE c	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2497-01	SW bedroom (San	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/14/2025	Chemtech -SO
Q2497-02	Salman s room SE	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-03	Sanah s room bed	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO

Date/Time 07/02/25 15:00
 Raw Sample Received by: SSW
 Raw Sample Relinquished by: SSW

Date/Time 07/02/25 17:35
 Raw Sample Received by: SSW
 Raw Sample Relinquished by: SSW

WORKLIST(Hardcopy Internal Chain)

NR136354

WorkList Name : %1-070225

WorkList ID : 190499

Department : Wet-Chemistry

Date : 07-02-2025 08:07:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2497-04	Salman s room m	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-05	Master bed matr	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-06	Kaihaan s room m	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-07	Garage foam yog	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-08	Living room west	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-09	Entrance rug	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-10	south exterior re	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-11	Garage gym floor	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-12	Rug by the back d	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-13	Guest bed matre	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/15/2025	Chemtech -SO
Q2497-14	Garage backyard	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2497-15	LR SW conner chai	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2497-16	Living room NE co	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2497-17	Dining room SW c	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2497-18	LR SW rug corner	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2497-19	LR west wall plug	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2497-20	LR NE corner plug	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2497-21	office east wall pl	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2497-22	Bedroom north w	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2497-23	Kitchen ceiling pl	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/13/2025	Chemtech -SO
Q2498-01	NE Bd bed foam	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/20/2025	Chemtech -SO

Date/Time 07/02/25 15:00
 Raw Sample Received by: SR WWC
 Raw Sample Relinquished by: [Signature] SH

Date/Time 07/02/25 17:35
 Raw Sample Received by: [Signature] SH
 Raw Sample Relinquished by: SR WWC

WORKLIST(Hardcopy Internal Chain)

136354

WorkList Name : %1-070225

WorkList ID : 190499

Department : Wet-Chemistry

Date : 07-02-2025 08:07:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2498-02	NE Bd pillow foa	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/20/2025	Chemtech -SO
Q2498-03	Master bed NE m	Solid	Percent Solids	Cool 4 deg C	SUMM04	A61	06/20/2025	Chemtech -SO
Q2500-01	X600-B2	Solid	Percent Solids	Cool 4 deg C	ATCE02	A52	07/02/2025	Chemtech -SO
Q2500-02	X600-S2	Solid	Percent Solids	Cool 4 deg C	ATCE02	A52	07/02/2025	Chemtech -SO
Q2500-03	X600-B1	Solid	Percent Solids	Cool 4 deg C	ATCE02	A52	07/02/2025	Chemtech -SO
Q2500-04	X600-S1	Solid	Percent Solids	Cool 4 deg C	ATCE02	A52	07/02/2025	Chemtech -SO
Q2500-05	X600-DUP1	Solid	Percent Solids	Cool 4 deg C	ATCE02	A52	07/02/2025	Chemtech -SO
Q2500-06	X600-S3	Solid	Percent Solids	Cool 4 deg C	ATCE02	A52	07/02/2025	Chemtech -SO

Date/Time 07/02/25 15:00

Raw Sample Received by: SR WJC

Raw Sample Relinquished by: [Signature]

Date/Time 07/02/25 17:35

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

SOP ID: M3541-ASE Extraction-14

Clean Up SOP #: N/A

Matrix : Solid

Welgh By: EH **Extraction By:** RJ

Balance check: RJ **Filter By:** RJ

Balance ID: EX-SC-2 **pH Meter ID:** N/A

pH Strip Lot#: N/A **Hood ID:** 3,7

Extraction Method: ☐ Separatory Funnel ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☒ Soxhlet

Extraction Start Date : 07/02/2025

Extraction Start Time : 09:17

Extraction End Date : 07/02/2025

Extraction End Time : 14:45

Concentration By: EH

Supervisor By : RUPESH

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	20 PPM	PP24583
Surrogate	1.0ML	20 PPM	PP24596
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	EP2624
Sand	N/A	E2865
Methylene Chloride	N/A	E3943
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, Q2484 All samples added in batch at 11:53 AM.

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
7/2/25 14:50	RS (Ext Lab)	Y-P POSTPUB.
	Preparation Group	Analysis Group

Analytical Method: M3541-ASE Extraction-14

Concentration Date: 07/02/2025

Sample ID	Client Sample ID	Test	g/ mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168701BL	PB168701BL	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1			U2-1
PB168701BS	PB168701BS	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1			2
Q2458-01	TP-76	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	E		3
Q2458-02	TP-55	Diesel Range Organics	30.06	N/A	ritesh	Evelyn	1	E		4
Q2458-03	TP-68	Diesel Range Organics	30.08	N/A	ritesh	Evelyn	1	E		5
Q2458-04	TP-67	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	E		6
Q2458-04MS	TP-67MS	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	E		U3-1
Q2458-04MS D	TP-67MSD	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	E		2
Q2458-05	TP-66	Diesel Range Organics	30.09	N/A	ritesh	Evelyn	1	E		3
Q2458-06	TP-60	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	E		4
Q2458-07	TP-62	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	E		5
Q2458-08	TP-63	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	E		6
Q2458-09	TP-59	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	E		U6-1
Q2484-01	TP-58	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	E		2
Q2484-02	TP-57	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	E		3
Q2484-03	TP-64	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	E		4
Q2484-04	TP-107	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	E		5
Q2484-05	TP-1006	Diesel Range Organics	30.09	N/A	ritesh	Evelyn	1	E		6
Q2484-06	TP-104	Diesel Range Organics	30.06	N/A	ritesh	Evelyn	1	E		U1-1

* Extracts relinquished on the same date as received.

168391
17-5
9/17/25

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2458D WorkList ID : 190507 Department : Extraction Date : 07-02-2025 09:05:56

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2458-01	TP-76	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/26/2025	8015D
Q2458-02	TP-55	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/26/2025	8015D
Q2458-03	TP-68	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/27/2025	8015D
Q2458-04	TP-67	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/27/2025	8015D
Q2458-05	TP-66	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/27/2025	8015D
Q2458-06	TP-60	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/27/2025	8015D
Q2458-07	TP-62	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/27/2025	8015D
Q2458-08	TP-63	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/27/2025	8015D
Q2458-09	TP-59	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/27/2025	8015D
Q2458-10	FB-06272025	Water	Diesel Range Organics	Cool 4 deg C	CAMP02	D51	06/27/2025	8015D

Date/Time	7/2/25	9:12	Date/Time	7/2/25	9:35
Raw Sample Received by:	RJ (Ext Lab)		Raw Sample Received by:	CP SN	
Raw Sample Relinquished by:	CP SN		Raw Sample Relinquished by:	RJ (Ext Lab)	

(16739)
(2489)
(10:52)

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2484D WorkList ID : 190510 Department : Extraction Date : 07-02-2025 10:52:02

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2484-01	TP-58	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	A12	07/01/2025	8015D
Q2484-02	TP-57	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	A12	07/01/2025	8015D
Q2484-03	TP-64	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	A12	07/01/2025	8015D
Q2484-04	TP-107	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	A12	07/01/2025	8015D
Q2484-05	TP-1006	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	A12	07/01/2025	8015D
Q2484-06	TP-104	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	A12	07/01/2025	8015D

Date/Time 7/2/25 10:52
Raw Sample Received by: RJ (Ext 106)
Raw Sample Relinquished by: CP Sin

Date/Time 7/2/25 11:00
Raw Sample Received by: CP Sin
Raw Sample Relinquished by: RJ (Ext 106)

Prep Standard - Chemical Standard Summary

Order ID : Q2484

Test : Diesel Range Organics

Prepbatch ID : PB168701,

Sequence ID/Qc Batch ID: FF070225,FG070225,FG070325,

Standard ID :

EP2612,EP2624,PP24467,PP24468,PP24469,PP24470,PP24471,PP24472,PP24473,PP24583,PP24596,

Chemical ID :

E2865,E3551,E3926,E3930,E3931,E3932,E3943,P11951,P11952,P13106,P13108,P13477,P13479,P13483,P13484,P13485,P13486,P13938,P13945,

Extractions 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>
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2612	05/09/2025	11/05/2025	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel
05/09/2025								

FROM 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	EP2624	06/26/2025	12/04/2025	RUPESHKUMAR SHAH	Extraction_SC ALE_2	None	Riteshkumar Patel
(EX-SC-2)								

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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>
433	100/100 PPM DRO (Restek)	PP24467	04/22/2025	10/08/2025	Yogesh Patel	None	None	Abdul Mirza
								05/08/2025

FROM 1.00000ml of P11951 + 1.00000ml of P11952 + 1.00000ml of P13477 + 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>
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

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>
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

<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

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>
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

<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

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>
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

<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)	PP24583	05/16/2025	11/16/2025	Rahul Chavli	None	None	Yogesh Patel
								05/22/2025

FROM 0.70000ml of P13945 + 1.30000ml of P13938 + 48.00000ml of E3930 = 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	PP24596	05/20/2025	11/20/2025	Abdul Mirza	None	None	Yogesh Patel 05/22/2025
<u>FROM</u> 1.00000ml of P13483 + 1.00000ml of P13484 + 1.00000ml of P13485 + 1.00000ml of P13486 + 196.00000ml of E3931 = Final Quantity: 200.000 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	12/04/2025	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	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-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	02/20/2026	05/02/2025 / RUPESH	03/09/2025 / RUPESH	E3931

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 #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A2862010	12/13/2025	06/13/2025 / Rajesh	02/28/2025 / Rajesh	E3943

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	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

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

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	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	11/20/2025	05/20/2025 / Abdul	07/24/2024 / yogesh	P13483

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	11/20/2025	05/20/2025 / Abdul	07/24/2024 / yogesh	P13484

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	11/20/2025	05/20/2025 / Abdul	07/24/2024 / yogesh	P13485

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	11/20/2025	05/20/2025 / Abdul	07/24/2024 / yogesh	P13486

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0217113	11/16/2025	05/16/2025 / Rahul	03/07/2025 / yogesh	P13938

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	A0217113	11/16/2025	05/16/2025 / Rahul	03/07/2025 / yogesh	P13945

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

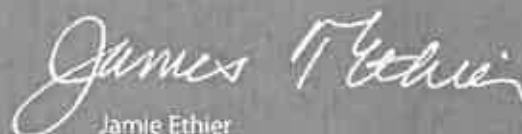
Certificate of Analysis

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



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

MIRADOR 201, COL. MIRADOR
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)

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_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 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)



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

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

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

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

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

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

Avantor Performance Materials LLC

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

avantor™



Material No.: 9266-A4

Batch No.: 25A2862010

Manufactured Date: 2024-12-18

Expiration Date: 2026-03-19

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	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	5
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.3 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

E3942

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

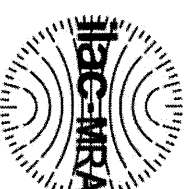
Bellefonte, PA 16823-8812

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:

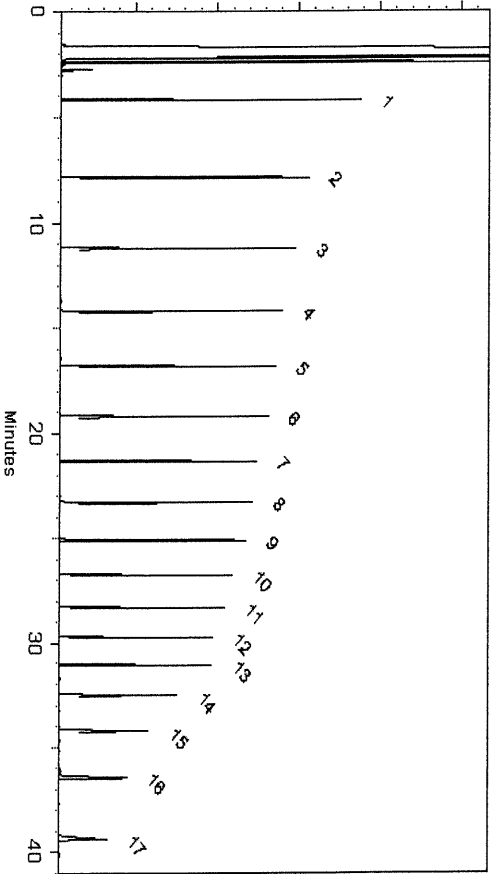
250°C

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.



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

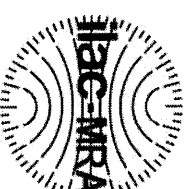
Bellefonte, PA 16823-8812

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:

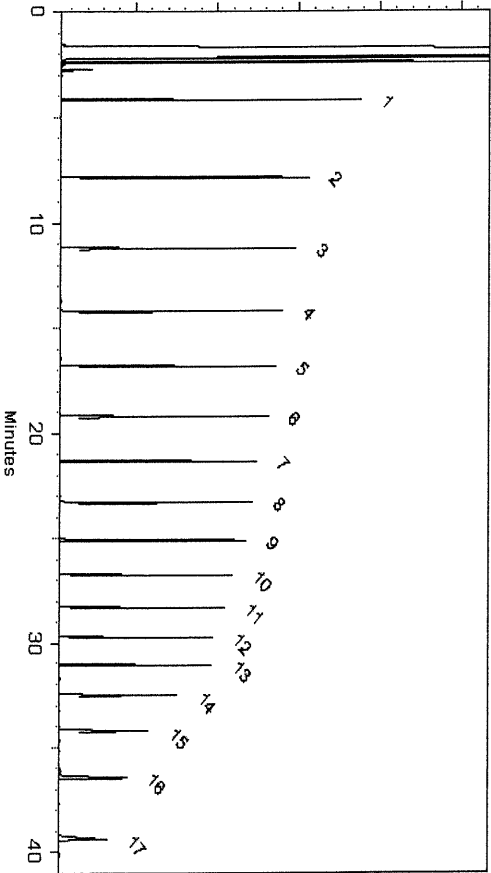
250°C

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.



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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.)

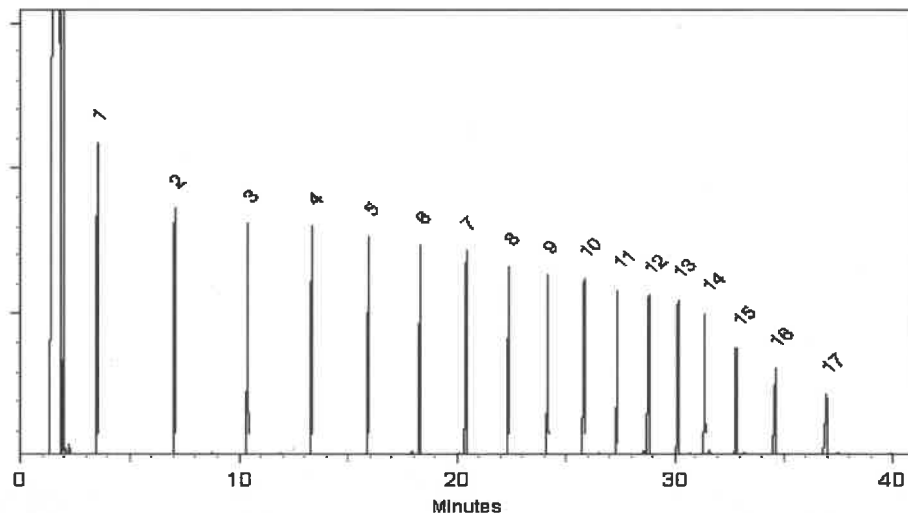
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl

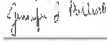


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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.



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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	MKQC3882	99%	503.6 µg/mL	+/- 13.0098
9	n-Tetracosane (C24)	646-31-1	MKQC8345	99%	504.0 µg/mL	+/- 13.0201
10	n-Hexacosane (C26)	630-01-3	MKQC4814	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	MKQC9436	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.)

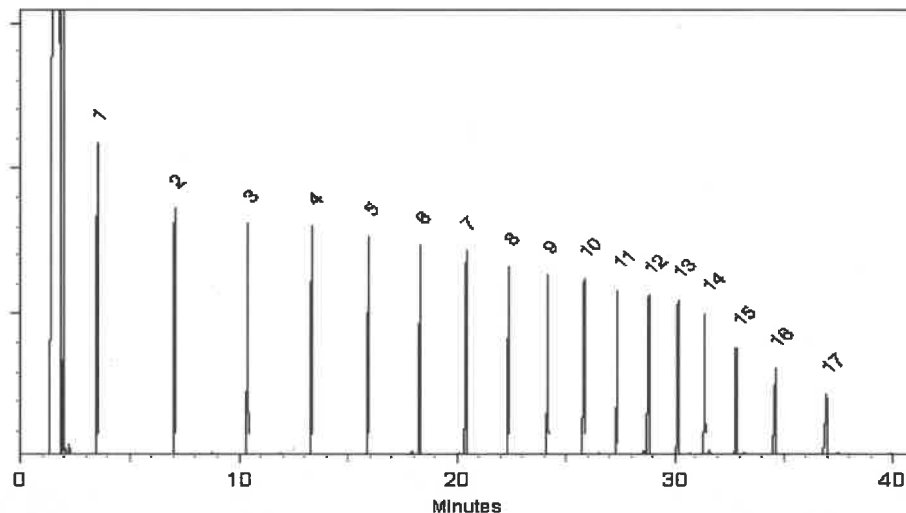
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl

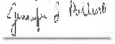


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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



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 070716

Part Number: 10009R
Lot Number: 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

5E-05 Balance Uncertainty
0.058 Peak Uncertainty

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	222	PR-2339M031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	15.2	1146-85-2	10 ppm (50mg/m3/8h)	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	2.04135	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 = sData Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Qualitative Quantitative

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

3rd Party Comparison

Analyte	Sup/Abs Dev (%)
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	2.74
Phenanthrene-d10	0.65
Chrysene-d12	1.93
Perylene-d12	-1.72
Total	-0.55

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

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

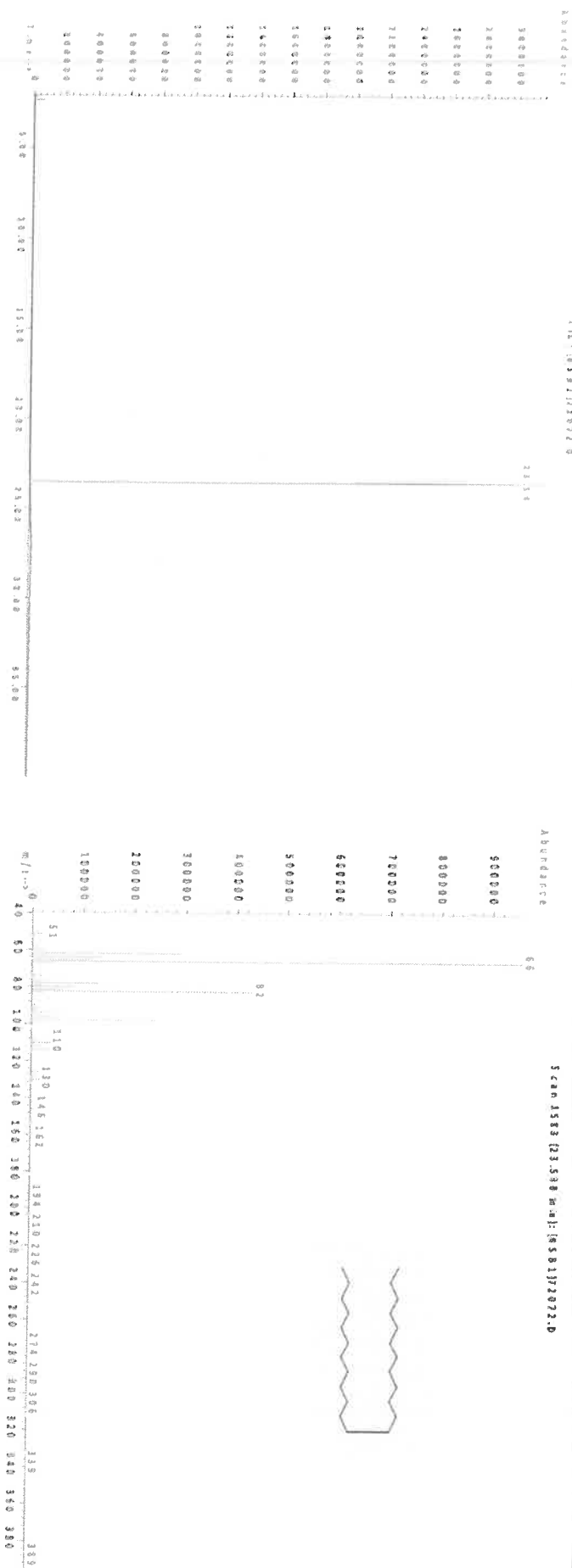
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

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



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

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

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

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#	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-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)	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	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
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 = sData Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Peak Data:

Peak No.	Name	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

Qualitative Quantitative

3rd Party Comparison

Analyte	Sup/Abs Dev (%)
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	2.74
Phenanthrene-d10	0.65
Chrysene-d12	1.93
Perylene-d12	-1.72
Total	-0.55

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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

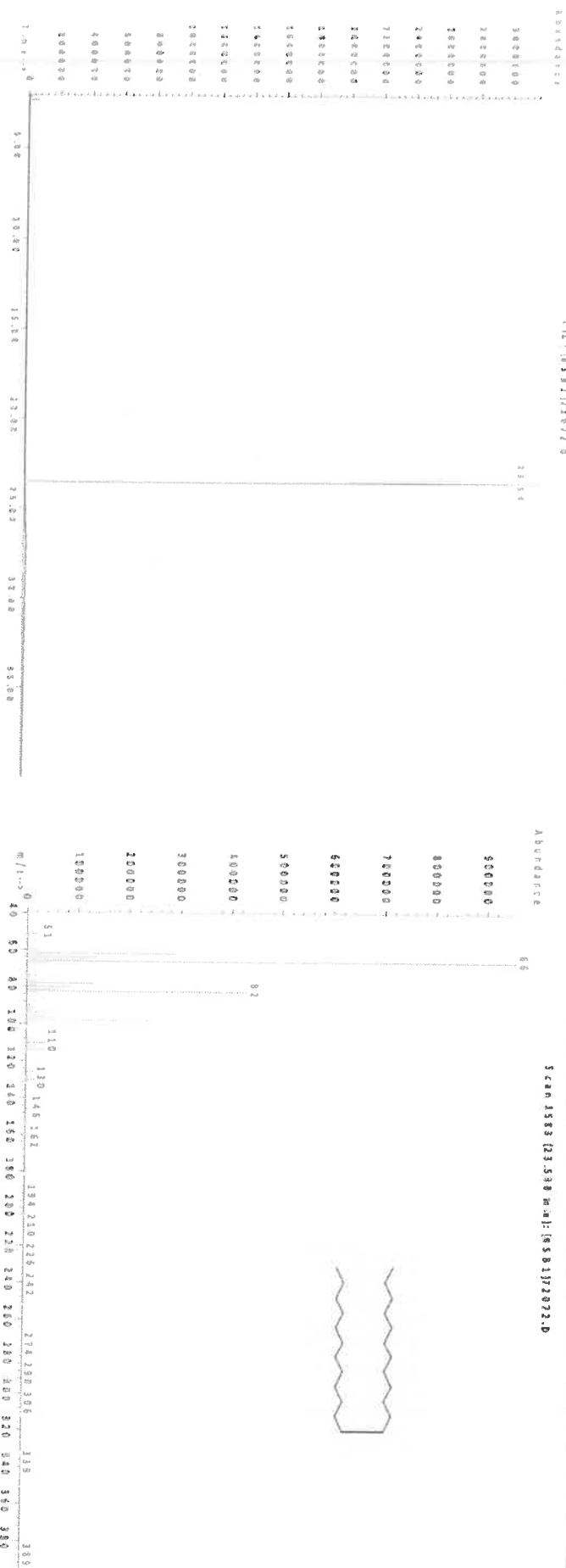
Expiration Date: 101132
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UB3
Weight(s) shown below were combined and diluted to (mL): 200.0 **Balance Uncertainty** 5E-05 **Flask Uncertainty** 0.058

Handwritten: P13437 } x.f.
P13496 } 07/24/24

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 (%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



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

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.
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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 = 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

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Part # 10009R Lot # 041219

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

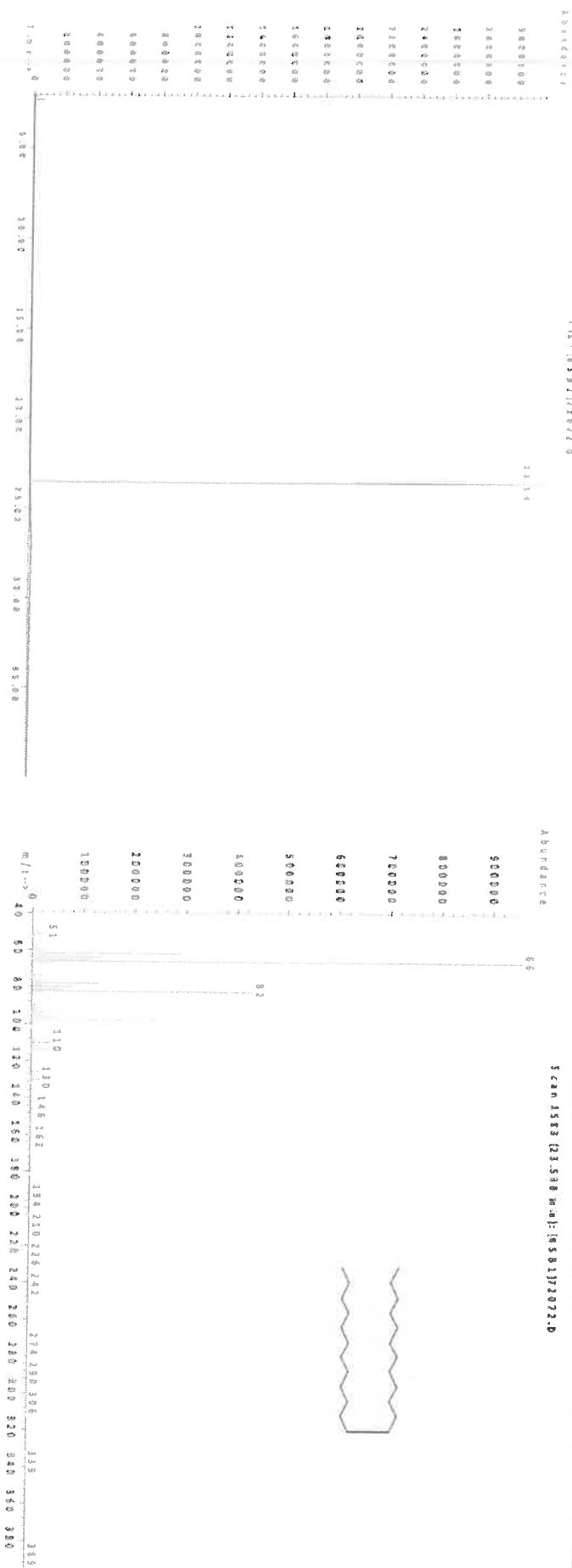
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

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



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

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 070716

Part Number: 10009R
Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
Expiration Date: 070721
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

5E-05 Balance Uncertainty
0.058 Peak Uncertainty

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/m3/8h)	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	2.04135	4000.8	15.4	1517-25-2	N/A	N/A
5. Chrysene-d12	92	I-19290	4000	98	0.2	2.04093	2.04159	4001.3	15.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04155	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 = sData Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Peak Data

Peak No.	Name	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

Qualitative Quantitative

3rd Party Comparison

Analyte	Sup/Abs Dev (%)
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	2.74
Phenanthrene-d10	0.65
Chrysene-d12	1.93
Perylene-d12	-1.72
Total	-0.55

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

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

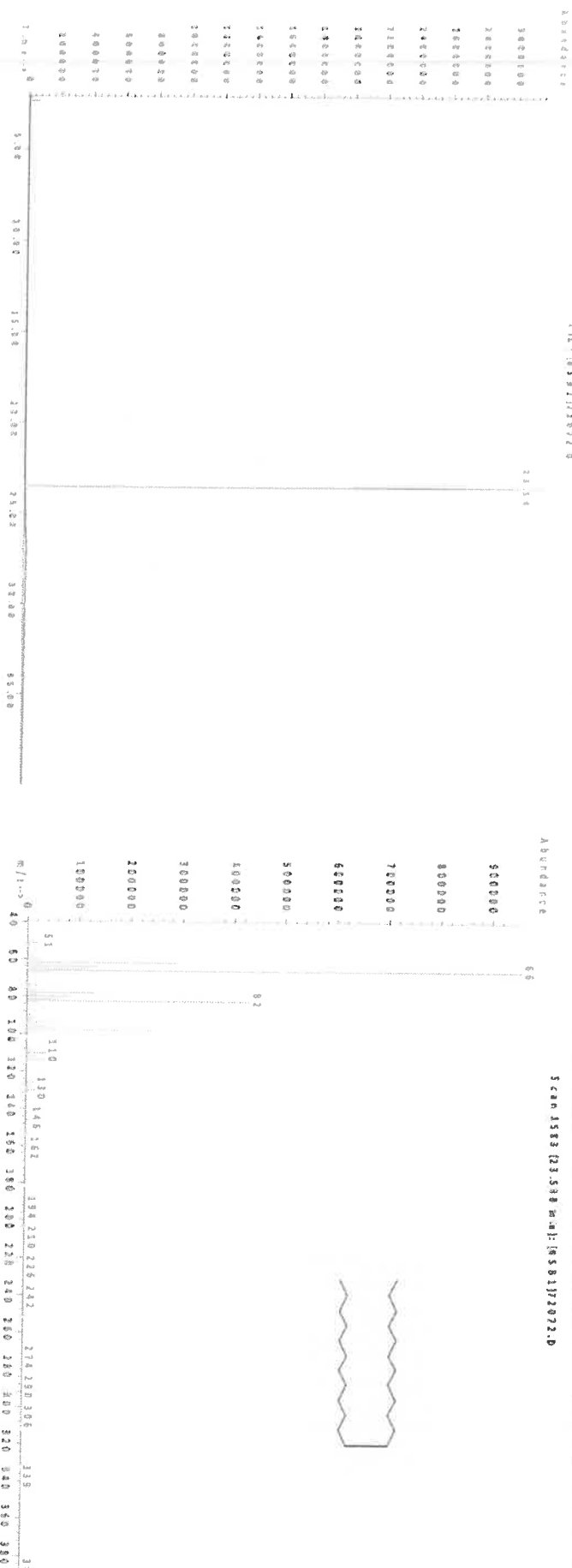
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

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, (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

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	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)(H)	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

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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

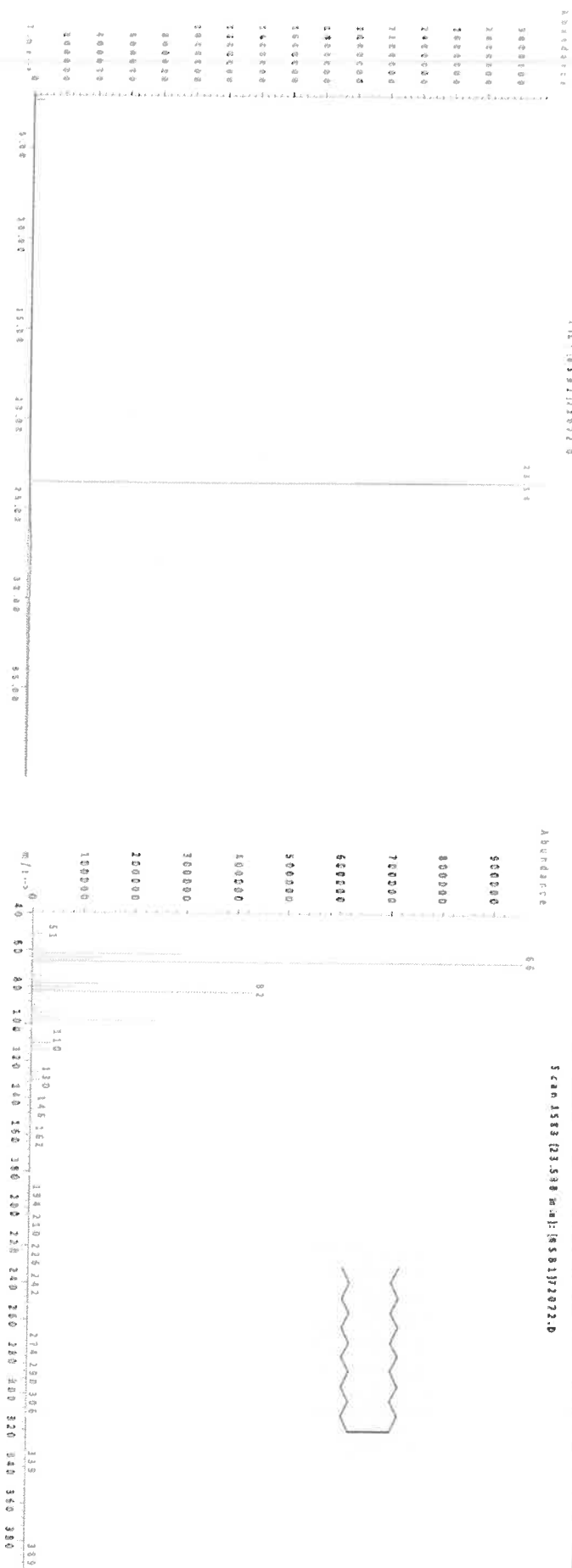
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

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, (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



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 070716

Part Number: 10009R
Lot Number: 070716
Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
070716
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)	MSDS Information (Solvent Safety Info. On Attached pg.)	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	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	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

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

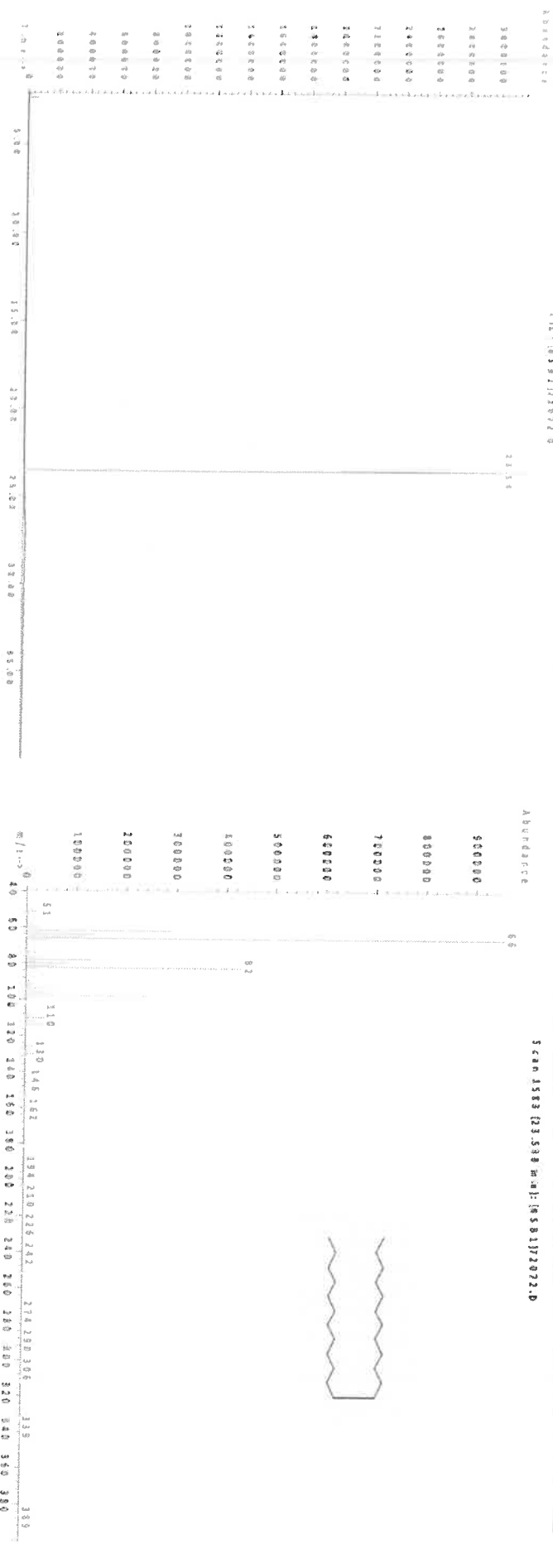
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

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
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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).



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.: A0217113

Description : Florida TRPH Standard

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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : October 31, 2031

Storage: 25°C nominal

Handling: Sonicate prior to use.

Ship: Ambient

P031937
*
P031946
Y.P.
03/07/25

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	SHBR0789	99%	502.0 µg/mL	+/- 12.9685
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	501.5 µg/mL	+/- 12.9555
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	502.5 µg/mL	+/- 12.9814
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	500.5 µg/mL	+/- 12.9297
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	500.0 µg/mL	+/- 12.9168
6	n-Octadecane (C18)	593-45-3	UB5NG	99%	500.5 µg/mL	+/- 12.9297
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	500.0 µg/mL	+/- 12.9177
8	n-Docosane (C22)	629-97-0	MKCQ3882	99%	500.5 µg/mL	+/- 12.9297
9	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	500.5 µg/mL	+/- 12.9297
10	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	502.0 µg/mL	+/- 12.9685
11	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	501.0 µg/mL	+/- 12.9426
12	n-Triacontane (C30)	638-68-6	MKCV7007	98%	499.8 µg/mL	+/- 12.9116
13	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	500.0 µg/mL	+/- 12.9168
14	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	501.5 µg/mL	+/- 12.9555
15	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	500.5 µg/mL	+/- 12.9297
16	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	500.2 µg/mL	+/- 12.9209
17	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	503.5 µg/mL	+/- 13.0072

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.)

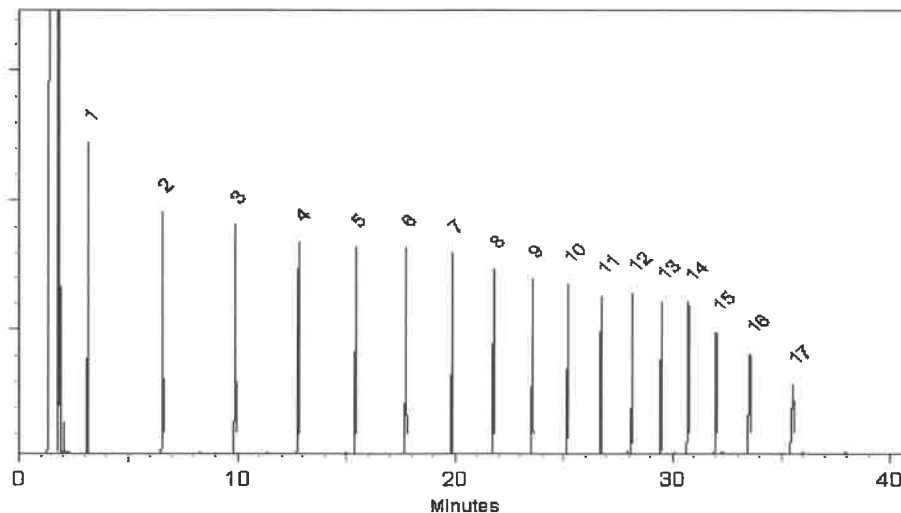
Inj. Temp:
250°C

Det. Temp:
330°C

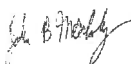
Det. Type:
FID

Split Vent:
2 ml/min.

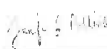
Inj. Vol
1µl



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.


Josh McCloskey - Operations Technician I

Date Mixed: 26-Sep-2024 **Balance Serial #** 1128353505


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 10-Oct-2024

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.
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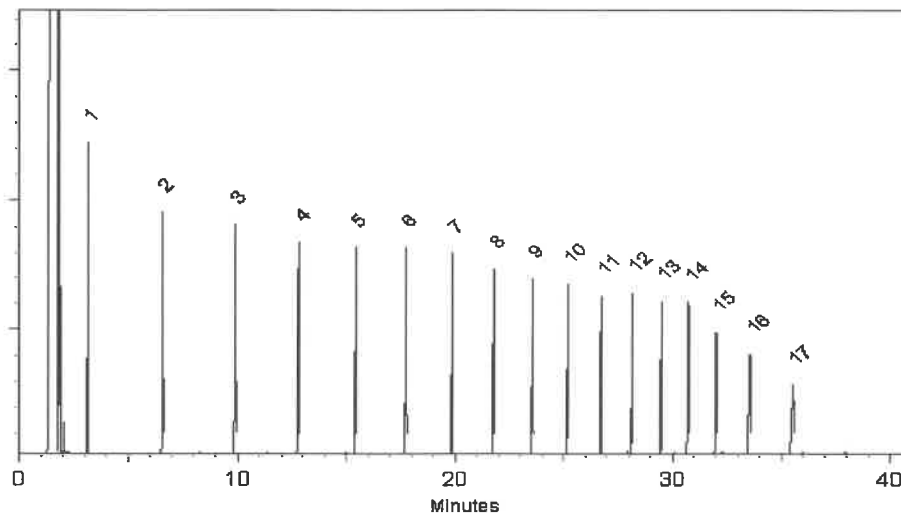
Inj. Temp:
250°C

Det. Temp:
330°C

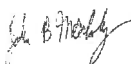
Det. Type:
FID

Split Vent:
2 ml/min.

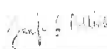
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SHIPPING DOCUMENTS

CLIENT INFORMATION

COMPANY: CDM SMITH
ADDRESS: 110 FIELDCREST AVE #8 6TH FLOOR
CITY: EDISON STATE: NJ ZIP: 08837
ATTENTION: MARCIE ENCINAS
PHONE: 7325904679 FAX:

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: 7325904679 FAX:

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: 7325904679

ANALYSIS

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 _____

TOL VOC
TOL SVOC
TOL METALS
PCBS
PESTICIDES
HERBICIDES
DRUGS

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	TP-58	S		X	7/1/05	0800		X	X	X	X	X	X	X			E
2.	TP-57	S		X	7/1/05	0840	6	X	X	X	X	X	X	X			E
3.	TP-64	S		X	7/1/05	0930	6	X	X	X	X	X	X	X			E
4.	TP-107	S		X	7/1/05	1040	6	X	X	X	X	X	X	X			E
5.	TP-106	S		X	7/1/05	1145	6	X	X	X	X	X	X	X			E
6.	TP-104	S		X	7/1/05	1240	6	X	X	X	X	X	X	X			E
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER:	DATE/TIME: 7/1/05 1510	RECEIVED BY: [Signature]	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP 3.6 °C
1. [Signature]		1. [Signature]	Comments:
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
2. [Signature]		2. [Signature]	
RELINQUISHED BY SAMPLER:	DATE/TIME: 7.1.25	RECEIVED BY: [Signature]	
3. [Signature]		3. [Signature]	

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 : Q2484 CAMP02

Order Date : 7/2/2025 9:23:00 AM

Project Mgr :

Client Name : CDM Smith

Project Name : South River WM Replacem

Report Type : Level 2 *af*

Client Contact : Marcie Ann Encinas

Receive DateTime : 7/1/2025 4:54:00 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
Q2484-01	TP-58	Solid	07/01/2025	08:00					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2484-02	TP-57	Solid	07/01/2025	08:40					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2484-03	TP-64	Solid	07/01/2025	09:30					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2484-04	TP-107	Solid	07/01/2025	10:40					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2484-05	TP-106 <i>106 af</i>	Solid	07/01/2025	11:45					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2484-06	TP-104	Solid	07/01/2025	12:40					
					VOC-TCLVOA-10		8260D		10 Bus. Days