

Cover Page

Order ID : Q2529

Project ID : South River WM Replacement

Client : CDM Smith

Lab Sample Number

Q2529-01
Q2529-02
Q2529-03
Q2529-04
Q2529-05
Q2529-06
Q2529-07
Q2529-08
Q2529-09
Q2529-10

Client Sample Number

TP-91
TP-80
TP-79
TP-95
TP-98
TP-102
TP-101
TP-89
TP-33
TP-30

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: 7/18/2025

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 #: Q2529

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: 07/18/2025

LAB CHRONICLE

OrderID:	Q2529	OrderDate:	7/8/2025 3:36:00 PM
Client:	CDM Smith	Project:	South River WM Replacement
Contact:	Marcie Ann Encinas	Location:	O11,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2529-01	TP-91	SOIL			07/03/25			07/08/25
			Diesel Range Organics	8015D		07/16/25	07/16/25	
			Gasoline Range Organics	8015D			07/10/25	
			PCB	8082A		07/09/25	07/09/25	
			Pesticide-TCL	8081B		07/09/25	07/09/25	
Q2529-02	TP-80	SOIL			07/07/25			07/08/25
			Diesel Range Organics	8015D		07/16/25	07/16/25	
			Gasoline Range Organics	8015D			07/10/25	
			PCB	8082A		07/09/25	07/09/25	
			Pesticide-TCL	8081B		07/09/25	07/09/25	
Q2529-03	TP-79	SOIL			07/07/25			07/08/25
			Diesel Range Organics	8015D		07/16/25	07/16/25	
			Gasoline Range Organics	8015D			07/11/25	
			PCB	8082A		07/09/25	07/09/25	
			Pesticide-TCL	8081B		07/09/25	07/09/25	
Q2529-04	TP-95	SOIL			07/07/25			07/08/25
			Diesel Range Organics	8015D		07/16/25	07/16/25	
			Gasoline Range Organics	8015D			07/10/25	
			PCB	8082A		07/09/25	07/09/25	
			Pesticide-TCL	8081B		07/09/25	07/09/25	
Q2529-05	TP-98	SOIL			07/07/25			07/08/25
			Diesel Range Organics	8015D		07/16/25	07/16/25	
			Gasoline Range Organics	8015D			07/10/25	
			PCB	8082A		07/09/25	07/09/25	
			Pesticide-TCL	8081B		07/09/25	07/09/25	
Q2529-06	TP-102	SOIL			07/07/25			07/08/25
			Diesel Range Organics	8015D		07/16/25	07/17/25	

LAB CHRONICLE

Q2529-07	TP-101	SOIL	Gasoline Range Organics	8015D		07/11/25	
			PCB	8082A	07/09/25	07/09/25	
			Pesticide-TCL	8081B	07/09/25	07/09/25	
					07/07/25		07/08/25
Q2529-08	TP-89	SOIL	Diesel Range Organics	8015D	07/16/25	07/16/25	
			Gasoline Range Organics	8015D		07/10/25	
			PCB	8082A	07/09/25	07/09/25	
			Pesticide-TCL	8081B	07/09/25	07/09/25	
Q2529-09	TP-33	SOIL			07/08/25		07/08/25
			Diesel Range Organics	8015D	07/16/25	07/16/25	
			Gasoline Range Organics	8015D		07/11/25	
			PCB	8082A	07/09/25	07/09/25	
Q2529-10	TP-30	SOIL	Pesticide-TCL	8081B	07/09/25	07/09/25	
					07/08/25		07/08/25
			Diesel Range Organics	8015D	07/16/25	07/16/25	
			Gasoline Range Organics	8015D		07/10/25	
			PCB	8082A	07/09/25	07/09/25	
			Pesticide-TCL	8081B	07/09/25	07/09/25	



QC SUMMARY

SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Alliance

Client: CDM Smith

Lab Code: ACE

SDG No.: Q2529

CLIENT ID	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FF016162.D	98				0
PIBLK-FF016170.D	92				0
PIBLK-FF016177.D	101				0
PIBLK-FF016180.D	112				0
PIBLK-FF016184.D	111				0
PIBLK-FG016300.D	91				0
PIBLK-FG016308.D	93				0
PIBLK-FG016313.D	93				0
PB168878BL	88				0
PB168878BS	85				0
TP-91	57				0
TP-80	78				0
TP-79	59				0
TP-95	59				0
TP-98	58				0
TP-102	78				0
TP-101	57				0
TP-89	51				0
TP-33	54				0
TP-30	61				0
TP-23-99MS	62				0
TP-23-99MSD	59				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: Q2529

Client Sample ID : TP-23-99MS

Datafile: FG016311.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS(%)
DRO	7793	4230	10586	82%		68-131

SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Alliance

Client: CDM Smith

Lab Code: ACE

SDG No: Q2529

Client Sample ID : TP-23-99MSD

Datafile: FG016312.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS(%)
DRO	7801	4230	10604	82%		68-131

MS/MSD % Recovery RPD : 0.2

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

Lab Name: Alliance

Client: CDM Smith

Lab Code: ACE

SDG No: Q2529

Client Sample ID : PB168878BS

Datafile: FG016304.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS (%)
DRO	6660	0	5498	83	68-131

4B
METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PB168878BL

Lab Name: Alliance

Contract: CAMP02

Lab Code: ACE

SDG NO.: Q2529

Lab File ID: FG016303.D

Lab Sample ID: PB168878BL

Instrument ID: FG

Date Extracted: 07/16/2025

Matrix: (soil/water) Soil

Date Analyzed: 07/16/25

Level: (low/med) low

Time Analyzed: 14:18

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

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
TP-95	Q2529-04	FF016165.D	07/16/25
TP-98	Q2529-05	FF016166.D	07/16/25
TP-101	Q2529-07	FF016168.D	07/16/25
TP-89	Q2529-08	FF016169.D	07/16/25
TP-33	Q2529-09	FF016172.D	07/16/25
TP-30	Q2529-10	FF016173.D	07/16/25
TP-102	Q2529-06	FF016183.D	07/17/25
PB168878BS	PB168878BS	FG016304.D	07/16/25
TP-91	Q2529-01	FG016305.D	07/16/25
TP-80	Q2529-02	FG016306.D	07/16/25
TP-79	Q2529-03	FG016307.D	07/16/25
TP-23-99MS	Q2543-04MS	FG016311.D	07/16/25
TP-23-99MSD	Q2543-04MSD	FG016312.D	07/16/25

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-91	SDG No.:	Q2529
Lab Sample ID:	Q2529-01	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	90.9
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
FG016305.D	1	07/16/25 10:00	07/16/25 15:17	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	10200		186	1830	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.4		37 - 130	57%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range
 P = Indicates >25% difference for detected concentrations between the two GC columns
 Q = indicates LCS control criteria did not meet requirements
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016305.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 15:17
Operator : YP\AJ
Sample : Q2529-01
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-91

Integration File: Sample.e
Quant Time: Jul 17 02:34:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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	1141098	11.413 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

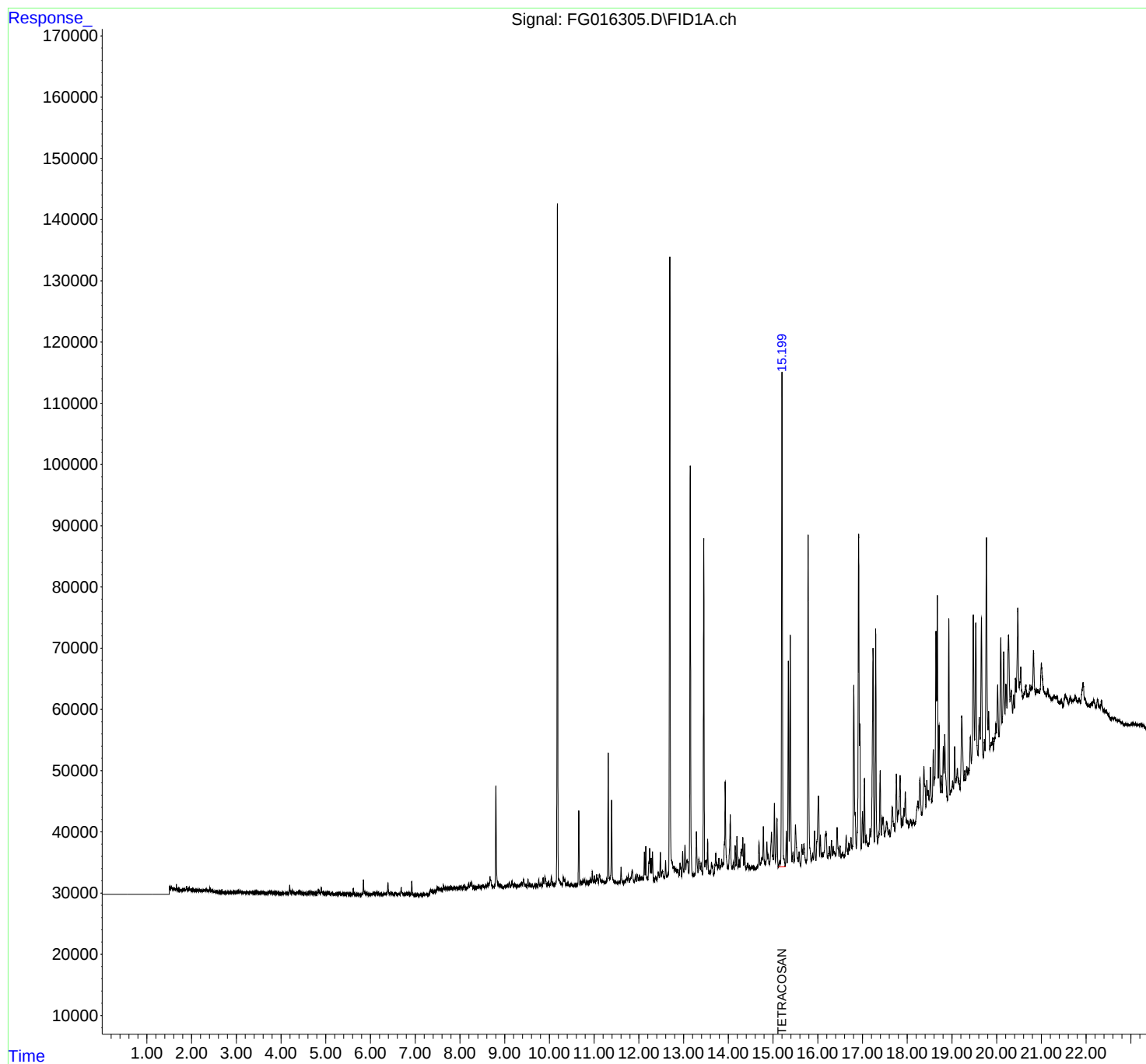
(m)=manual int.

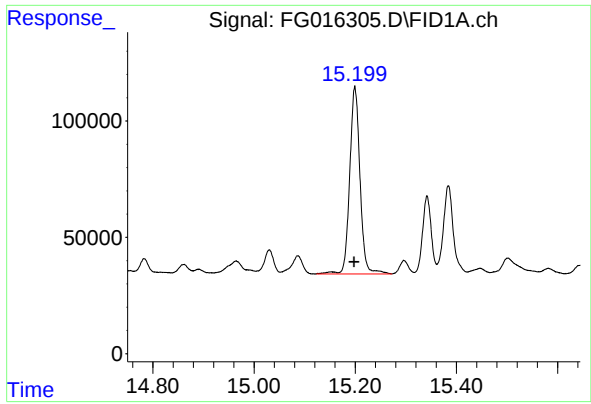
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016305.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 15:17
Operator : YP\AJ
Sample : Q2529-01
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-91

Integration File: Sample.e
Quant Time: Jul 17 02:34:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.: 0.002 min
Response: 1141098
Conc: 11.41 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-91

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
 Data File : FG016305.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 15:17
 Sample : Q2529-01
 Misc :
 ALS Vial : 23 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.625	4.610	4.651	PH	223	1943	0.14%	0.006%
2	4.669	4.651	4.693	PH	340	3426	0.24%	0.010%
3	4.704	4.693	4.733	PH	146	788	0.06%	0.002%
4	4.784	4.781	4.808	HH	53	614	0.04%	0.002%
5	4.833	4.808	4.878	HH	626	9458	0.67%	0.028%
6	4.901	4.878	4.944	PH	928	12216	0.86%	0.037%
7	5.615	5.598	5.641	PH	820	5044	0.36%	0.015%
8	5.843	5.826	5.864	PH	2255	18346	1.30%	0.055%
9	5.873	5.864	5.896	HH	285	1102	0.08%	0.003%
10	6.390	6.365	6.432	PH	1690	16842	1.19%	0.051%
11	6.685	6.663	6.700	PH	991	8300	0.59%	0.025%
12	6.922	6.900	6.966	PH	1977	13541	0.96%	0.041%
13	7.340	7.323	7.374	PH	608	9087	0.64%	0.027%
14	7.388	7.374	7.411	HH	335	5677	0.40%	0.017%
15	7.438	7.411	7.445	HH	396	5839	0.41%	0.018%
16	7.452	7.445	7.456	HH	346	2125	0.15%	0.006%
17	7.492	7.456	7.507	HH	1175	19062	1.35%	0.057%
18	7.521	7.507	7.551	HH	873	17950	1.27%	0.054%
19	7.557	7.551	7.567	HH	668	5744	0.41%	0.017%
20	7.586	7.567	7.610	HH	704	16457	1.17%	0.049%
21	7.633	7.610	7.658	HH	1178	25028	1.77%	0.075%
22	7.668	7.658	7.691	HH	965	16348	1.16%	0.049%
23	7.706	7.691	7.717	HH	852	12438	0.88%	0.037%
24	7.742	7.717	7.748	HH	872	14990	1.06%	0.045%
25	7.754	7.748	7.769	HH	844	10329	0.73%	0.031%
26	7.803	7.769	7.824	HH	1076	29883	2.12%	0.090%
27	7.834	7.824	7.844	HH	852	9645	0.68%	0.029%
28	7.863	7.844	7.873	HH	960	15245	1.08%	0.046%
29	7.883	7.873	7.899	HH	904	13604	0.96%	0.041%
30	7.920	7.899	7.956	HH	975	30068	2.13%	0.090%
31	7.983	7.956	7.994	HH	959	19977	1.41%	0.060%
32	8.000	7.994	8.006	HH	968	6689	0.47%	0.020%
33	8.020	8.006	8.042	HH	1157	21293	1.51%	0.064%
34	8.046	8.042	8.069	HH	964	14365	1.02%	0.043%
35	8.094	8.069	8.140	HH	1465	42390	3.00%	0.127%
36	8.155	8.140	8.174	HH	940	17297	1.22%	0.052%

rteres								
37	8.189	8.174	8.214	HH	1495	28739	2.03%	0.086%
38	8.230	8.214	8.249	HH	1678	29917	2.12%	0.090%
39	8.263	8.249	8.287	HH	1858	32097	2.27%	0.096%
40	8.302	8.287	8.320	HH	1037	18950	1.34%	0.057%
41	8.323	8.320	8.329	HH	910	4966	0.35%	0.015%
42	8.335	8.329	8.355	HH	921	13524	0.96%	0.041%
43	8.377	8.355	8.389	HH	1009	18776	1.33%	0.056%
44	8.425	8.389	8.475	HH	1184	54140	3.83%	0.163%
45	8.514	8.475	8.542	HH	1406	44608	3.16%	0.134%
46	8.546	8.542	8.550	HH	998	4563	0.32%	0.014%
47	8.581	8.550	8.595	HH	1380	31857	2.26%	0.096%
48	8.616	8.595	8.629	HH	1640	27961	1.98%	0.084%
49	8.672	8.629	8.731	HH	2760	103501	7.33%	0.311%
50	8.742	8.731	8.762	HH	1153	20242	1.43%	0.061%
51	8.804	8.762	8.849	HH	17615	254518	18.02%	0.764%
52	8.859	8.849	8.880	HH	1604	25449	1.80%	0.076%
53	8.885	8.880	8.909	HH	1292	20613	1.46%	0.062%
54	8.919	8.909	8.946	HH	1361	26705	1.89%	0.080%
55	8.951	8.946	8.958	HH	1032	7126	0.50%	0.021%
56	8.961	8.958	8.967	HH	1001	5213	0.37%	0.016%
57	8.971	8.967	8.975	HH	984	5014	0.35%	0.015%
58	8.994	8.975	9.010	HH	1206	22780	1.61%	0.068%
59	9.025	9.010	9.041	HH	1268	22225	1.57%	0.067%
60	9.056	9.041	9.083	HH	1382	31436	2.23%	0.094%
61	9.103	9.083	9.134	HH	1820	44158	3.13%	0.133%
62	9.164	9.134	9.194	HH	1949	53718	3.80%	0.161%
63	9.198	9.194	9.211	HH	1339	12342	0.87%	0.037%
64	9.231	9.211	9.264	HH	1493	41238	2.92%	0.124%
65	9.267	9.264	9.279	HH	1161	10365	0.73%	0.031%
66	9.304	9.279	9.310	HH	1212	21324	1.51%	0.064%
67	9.352	9.310	9.365	HH	1600	44042	3.12%	0.132%
68	9.380	9.365	9.394	HH	1902	27841	1.97%	0.084%
69	9.420	9.394	9.459	HH	2372	65578	4.64%	0.197%
70	9.465	9.459	9.489	HH	1364	22101	1.56%	0.066%
71	9.521	9.489	9.545	HH	2325	51179	3.62%	0.154%
72	9.560	9.545	9.593	HH	1617	38045	2.69%	0.114%
73	9.617	9.593	9.651	HH	1602	43266	3.06%	0.130%
74	9.673	9.651	9.692	HH	1572	32314	2.29%	0.097%
75	9.709	9.692	9.730	HH	1607	29639	2.10%	0.089%
76	9.762	9.730	9.787	HH	2329	53559	3.79%	0.161%
77	9.815	9.787	9.840	HH	1623	41997	2.97%	0.126%
78	9.858	9.840	9.882	HH	2521	46914	3.32%	0.141%
79	9.899	9.882	9.938	HH	2775	70282	4.98%	0.211%
80	9.947	9.938	9.955	HH	1457	13858	0.98%	0.042%
81	9.979	9.955	10.013	HH	1797	53097	3.76%	0.159%
82	10.043	10.013	10.098	HH	2846	89033	6.30%	0.267%
83	10.107	10.098	10.120	HH	1493	19339	1.37%	0.058%
84	10.179	10.120	10.219	HH	112592	1230872	87.14%	3.696%
85	10.222	10.219	10.236	HH	2258	21176	1.50%	0.064%
86	10.243	10.236	10.270	HH	1957	34243	2.42%	0.103%
87	10.272	10.270	10.288	HH	1528	15935	1.13%	0.048%
88	10.311	10.288	10.333	HH	2689	56411	3.99%	0.169%
89	10.343	10.333	10.372	HH	2350	41697	2.95%	0.125%

					rteres			
90	10.414	10.372	10.438	HH	1699	59255	4.19%	0.178%
91	10.443	10.438	10.456	HH	1301	13836	0.98%	0.042%
92	10.460	10.456	10.464	HH	1315	6158	0.44%	0.018%
93	10.484	10.464	10.505	HH	1488	33601	2.38%	0.101%
94	10.527	10.505	10.552	HH	1376	36880	2.61%	0.111%
95	10.560	10.552	10.576	HH	1356	18947	1.34%	0.057%
96	10.593	10.576	10.609	HH	1420	26380	1.87%	0.079%
97	10.617	10.609	10.627	HH	1431	14344	1.02%	0.043%
98	10.656	10.627	10.682	HH	13539	175676	12.44%	0.527%
99	10.702	10.682	10.722	HH	2061	41543	2.94%	0.125%
100	10.757	10.722	10.773	HH	2217	57249	4.05%	0.172%
101	10.790	10.773	10.815	HH	2323	46257	3.27%	0.139%
102	10.832	10.815	10.850	HH	2049	38367	2.72%	0.115%
103	10.853	10.850	10.866	HH	1849	17041	1.21%	0.051%
104	10.870	10.866	10.889	HH	1764	23065	1.63%	0.069%
105	10.920	10.889	10.935	HH	2350	55778	3.95%	0.167%
106	10.959	10.935	10.987	HH	3605	75967	5.38%	0.228%
107	11.008	10.987	11.026	HH	2892	53891	3.82%	0.162%
108	11.056	11.026	11.069	HH	3017	62048	4.39%	0.186%
109	11.077	11.069	11.095	HH	2402	33028	2.34%	0.099%
110	11.119	11.095	11.152	HH	3141	83609	5.92%	0.251%
111	11.158	11.152	11.172	HH	2042	24331	1.72%	0.073%
112	11.187	11.172	11.205	HH	2064	38461	2.72%	0.115%
113	11.209	11.205	11.230	HH	2003	27020	1.91%	0.081%
114	11.254	11.230	11.268	HH	1972	40662	2.88%	0.122%
115	11.282	11.268	11.291	HH	2358	28464	2.02%	0.085%
116	11.315	11.291	11.336	HH	22927	265199	18.77%	0.796%
117	11.342	11.336	11.355	HH	2522	26599	1.88%	0.080%
118	11.391	11.355	11.441	HH	15206	256283	18.14%	0.769%
119	11.449	11.441	11.478	HH	1984	41305	2.92%	0.124%
120	11.482	11.478	11.502	HH	1903	26131	1.85%	0.078%
121	11.505	11.502	11.525	HH	1799	23981	1.70%	0.072%
122	11.534	11.525	11.543	HH	1754	18247	1.29%	0.055%
123	11.562	11.543	11.582	HH	2027	43924	3.11%	0.132%
124	11.602	11.582	11.654	HH	4266	103227	7.31%	0.310%
125	11.691	11.654	11.705	HH	2072	58326	4.13%	0.175%
126	11.735	11.705	11.750	HH	2611	61610	4.36%	0.185%
127	11.763	11.750	11.784	HH	3053	51118	3.62%	0.153%
128	11.854	11.784	11.899	HH	3752	177263	12.55%	0.532%
129	11.922	11.899	11.941	HH	2811	58898	4.17%	0.177%
130	11.961	11.941	11.987	HH	3028	69712	4.94%	0.209%
131	12.011	11.987	12.026	HH	2984	59323	4.20%	0.178%
132	12.049	12.026	12.059	HH	2510	48318	3.42%	0.145%
133	12.071	12.059	12.100	HH	2664	59233	4.19%	0.178%
134	12.124	12.100	12.140	HH	6819	102060	7.22%	0.306%
135	12.155	12.140	12.177	HH	7721	109655	7.76%	0.329%
136	12.183	12.177	12.202	HH	2639	36420	2.58%	0.109%
137	12.223	12.202	12.228	HH	5038	58632	4.15%	0.176%
138	12.241	12.228	12.260	HH	7360	105321	7.46%	0.316%
139	12.274	12.260	12.288	HH	5770	78127	5.53%	0.235%
140	12.305	12.288	12.332	HH	6832	110292	7.81%	0.331%
141	12.350	12.332	12.355	HH	2243	30246	2.14%	0.091%

					rteres			
142	12.376	12.355	12.402	HH	2791	68822	4.87%	0.207%
143	12.438	12.402	12.457	HH	3461	93505	6.62%	0.281%
144	12.481	12.457	12.503	HH	6705	114283	8.09%	0.343%
145	12.528	12.503	12.579	HH	3652	137379	9.73%	0.412%
146	12.598	12.579	12.620	HH	5376	93442	6.61%	0.281%
147	12.632	12.620	12.640	HH	2959	33345	2.36%	0.100%
148	12.657	12.640	12.663	HH	3331	41674	2.95%	0.125%
149	12.692	12.663	12.766	HH	103954	1412594	100.00%	4.241%
150	12.774	12.766	12.792	HH	4432	64363	4.56%	0.193%
151	12.804	12.792	12.824	HH	4405	76195	5.39%	0.229%
152	12.827	12.824	12.843	HH	3970	43031	3.05%	0.129%
153	12.855	12.843	12.862	HH	3651	41192	2.92%	0.124%
154	12.874	12.862	12.900	HH	3953	78323	5.54%	0.235%
155	12.921	12.900	12.934	HH	4998	82457	5.84%	0.248%
156	12.937	12.934	12.957	HH	4174	49631	3.51%	0.149%
157	12.980	12.957	13.006	HH	6841	131593	9.32%	0.395%
158	13.031	13.006	13.052	HH	7913	148741	10.53%	0.447%
159	13.068	13.052	13.072	HH	5216	56307	3.99%	0.169%
160	13.079	13.072	13.084	HH	5317	38461	2.72%	0.115%
161	13.089	13.084	13.121	HH	5278	93342	6.61%	0.280%
162	13.149	13.121	13.195	HH	69778	930909	65.90%	2.795%
163	13.208	13.195	13.227	HH	3205	57306	4.06%	0.172%
164	13.249	13.227	13.259	HH	3321	58776	4.16%	0.176%
165	13.287	13.259	13.322	HH	10098	212082	15.01%	0.637%
166	13.343	13.322	13.378	HH	5564	154624	10.95%	0.464%
167	13.391	13.378	13.423	HH	4937	109908	7.78%	0.330%
168	13.451	13.423	13.474	HH	57966	704586	49.88%	2.116%
169	13.488	13.474	13.495	HH	5393	63475	4.49%	0.191%
170	13.504	13.495	13.521	HH	5385	75882	5.37%	0.228%
171	13.538	13.521	13.568	HH	8884	153350	10.86%	0.460%
172	13.589	13.568	13.603	HH	3720	73377	5.19%	0.220%
173	13.625	13.603	13.638	HH	5157	89067	6.31%	0.267%
174	13.645	13.638	13.676	HH	4432	85759	6.07%	0.257%
175	13.718	13.676	13.768	HH	6453	254787	18.04%	0.765%
176	13.789	13.768	13.810	HH	5730	121697	8.62%	0.365%
177	13.826	13.810	13.834	HH	4604	61131	4.33%	0.184%
178	13.850	13.834	13.866	HH	5638	96804	6.85%	0.291%
179	13.881	13.866	13.892	HH	5012	73880	5.23%	0.222%
180	13.930	13.892	13.990	HH	18258	460449	32.60%	1.382%
181	14.043	13.990	14.081	HH	12793	367076	25.99%	1.102%
182	14.113	14.081	14.130	HH	5068	128500	9.10%	0.386%
183	14.153	14.130	14.174	HH	7796	155366	11.00%	0.466%
184	14.192	14.174	14.217	HH	9340	164431	11.64%	0.494%
185	14.242	14.217	14.260	HH	5506	126089	8.93%	0.379%
186	14.290	14.260	14.308	HH	7266	178562	12.64%	0.536%
187	14.324	14.308	14.346	HH	9163	160123	11.34%	0.481%
188	14.365	14.346	14.405	HH	8126	192365	13.62%	0.578%
189	14.423	14.405	14.429	HH	4652	60846	4.31%	0.183%
190	14.439	14.429	14.461	HH	4756	86490	6.12%	0.260%
191	14.473	14.461	14.496	HH	4431	87823	6.22%	0.264%
192	14.508	14.496	14.513	HH	4259	42887	3.04%	0.129%
193	14.529	14.513	14.556	HH	4455	109122	7.72%	0.328%
194	14.577	14.556	14.599	HH	4300	104636	7.41%	0.314%

					rteres			
195	14.605	14.599	14.611	HH	3999	29171	2.07%	0.088%
196	14.635	14.611	14.647	HH	4373	88754	6.28%	0.266%
197	14.686	14.647	14.710	HH	8383	219071	15.51%	0.658%
198	14.742	14.710	14.763	HH	5848	167491	11.86%	0.503%
199	14.783	14.763	14.811	HH	10879	208606	14.77%	0.626%
200	14.816	14.811	14.839	HH	5095	83999	5.95%	0.252%
201	14.861	14.839	14.880	HH	8425	165850	11.74%	0.498%
202	14.891	14.880	14.921	HH	6378	135316	9.58%	0.406%
203	14.965	14.921	15.005	HH	9995	345963	24.49%	1.039%
204	15.030	15.005	15.053	HH	14709	261395	18.50%	0.785%
205	15.087	15.053	15.123	HH	12136	301738	21.36%	0.906%
206	15.152	15.123	15.166	HH	5260	126873	8.98%	0.381%
207	15.199	15.166	15.272	HH	85044	1402456	99.28%	4.211%
208	15.296	15.272	15.317	HH	10154	185559	13.14%	0.557%
209	15.342	15.317	15.362	HH	37969	517690	36.65%	1.554%
210	15.384	15.362	15.422	HH	42205	670845	47.49%	2.014%
211	15.447	15.422	15.467	HH	6768	160047	11.33%	0.481%
212	15.502	15.467	15.565	HH	11232	419135	29.67%	1.258%
213	15.582	15.565	15.614	HH	6817	166177	11.76%	0.499%
214	15.643	15.614	15.672	HH	8014	221679	15.69%	0.666%
215	15.690	15.672	15.743	HH	8061	272609	19.30%	0.819%
216	15.784	15.743	15.852	HH	57475	1108555	78.48%	3.328%
217	15.886	15.852	15.906	HH	6341	186764	13.22%	0.561%
218	15.927	15.906	15.960	HH	10160	239989	16.99%	0.721%
219	16.017	15.960	16.042	HH	15792	512660	36.29%	1.539%
220	16.058	16.042	16.091	HH	9593	213959	15.15%	0.642%
221	16.104	16.091	16.119	HH	6716	105950	7.50%	0.318%
222	16.165	16.119	16.172	HH	9727	239133	16.93%	0.718%
223	16.184	16.172	16.220	HH	10203	236066	16.71%	0.709%
224	16.260	16.220	16.285	HH	7630	253252	17.93%	0.760%
225	16.307	16.285	16.329	HH	8618	192911	13.66%	0.579%
226	16.347	16.329	16.362	HH	7693	137298	9.72%	0.412%
227	16.369	16.362	16.390	HH	6818	109476	7.75%	0.329%
228	16.393	16.390	16.407	HH	6504	66914	4.74%	0.201%
229	16.433	16.407	16.477	HH	10819	336817	23.84%	1.011%
230	16.494	16.477	16.524	HH	7823	190528	13.49%	0.572%
231	16.531	16.524	16.540	HH	6255	58657	4.15%	0.176%
232	16.557	16.540	16.586	HH	6618	177875	12.59%	0.534%
233	16.635	16.586	16.654	HH	9420	298293	21.12%	0.896%
234	16.663	16.654	16.677	HH	7205	94069	6.66%	0.282%
235	16.697	16.677	16.715	HH	8189	166943	11.82%	0.501%
236	16.744	16.715	16.762	HH	9152	231184	16.37%	0.694%
237	16.806	16.762	16.860	HH	33963	882698	62.49%	2.650%
238	16.914	16.860	16.933	HH	58294	1081623	76.57%	3.248%
239	16.941	16.933	16.974	HH	27577	400733	28.37%	1.203%
240	17.000	16.974	17.022	HH	13339	300425	21.27%	0.902%
241	17.044	17.022	17.069	HH	18782	352185	24.93%	1.057%
242	17.082	17.069	17.124	HH	9471	282391	19.99%	0.848%
243	17.168	17.124	17.185	HH	10596	323036	22.87%	0.970%
244	17.235	17.185	17.265	HH	40001	940067	66.55%	2.823%
245	17.295	17.265	17.340	HH	43228	820377	58.08%	2.463%
246	17.395	17.340	17.419	HH	20047	579921	41.05%	1.741%

						rteres		
247	17.443	17.419	17.453	HH	12349	222235	15.73%	0.667%
248	17.465	17.453	17.489	HH	12336	246567	17.45%	0.740%
					Sum of corrected areas:		33305751	

FG070925.M Thu Jul 17 03:15:49 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/07/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-80	SDG No.:	Q2529
Lab Sample ID:	Q2529-02	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	90.7
Sample Wt/Vol:	30.07	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
FG016306.D	1	07/16/25 10:00	07/16/25 15:47	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	24100		186	1830	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	15.5		37 - 130	78%	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\FG071625\
Data File : FG016306.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 15:47
Operator : YP\AJ
Sample : Q2529-02
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-80

Integration File: Sample.e
Quant Time: Jul 17 02:35:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.200	1550600	15.508 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

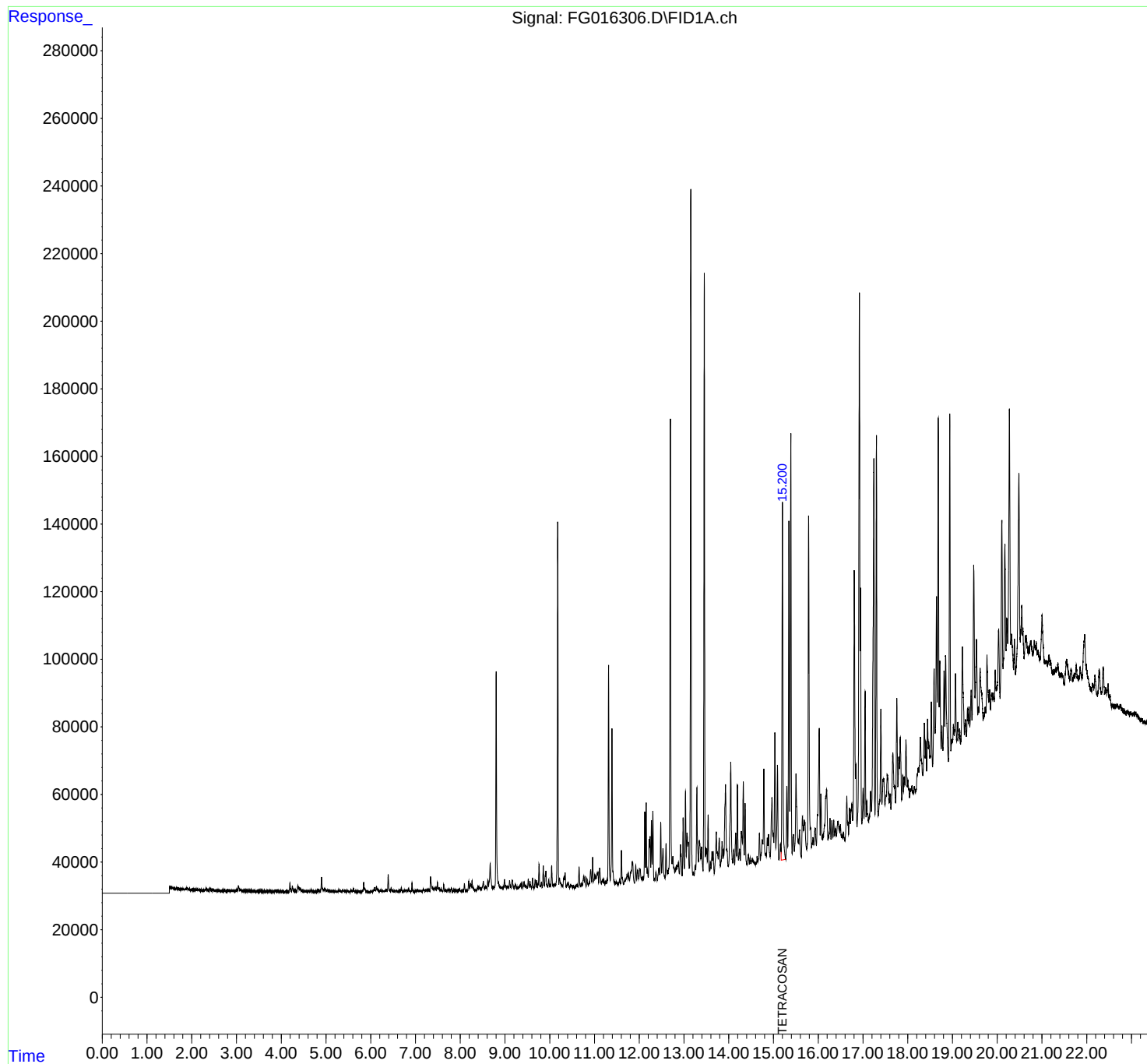
(m)=manual int.

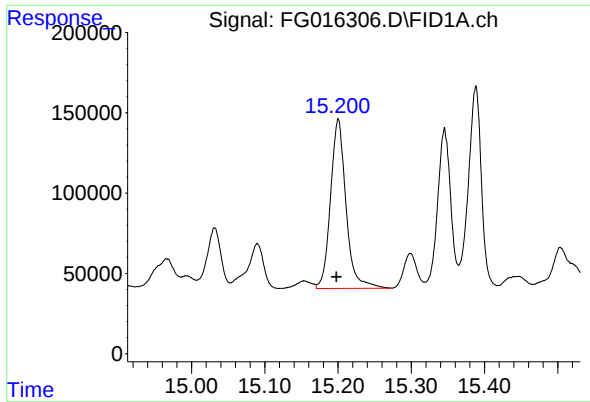
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016306.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 15:47
Operator : YP\AJ
Sample : Q2529-02
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-80

Integration File: Sample.e
Quant Time: Jul 17 02:35:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.: 15.200 min
Delta R.T.: 0.003 min
Response: 1550600
Conc: 15.51 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-80

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
 Data File : FG016306.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 15:47
 Sample : Q2529-02
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.901	4.874	4.938	PH	4077	48258	1.56%	0.062%
2	5.616	5.596	5.642	PH	781	4235	0.14%	0.005%
3	5.842	5.826	5.858	PH	2566	23256	0.75%	0.030%
4	5.871	5.858	5.902	HH	710	5491	0.18%	0.007%
5	6.061	6.044	6.070	PH	144	484	0.02%	0.001%
6	6.088	6.070	6.107	HH	1023	9580	0.31%	0.012%
7	6.129	6.107	6.146	PH	1315	14513	0.47%	0.019%
8	6.153	6.146	6.168	HH	370	2859	0.09%	0.004%
9	6.172	6.168	6.178	HH	163	771	0.02%	0.001%
10	6.223	6.217	6.262	HH	213	648	0.02%	0.001%
11	6.273	6.262	6.305	PH	119	-384	-0.01%	-0.000%
12	6.322	6.305	6.332	PH	331	1408	0.05%	0.002%
13	6.348	6.332	6.371	PH	453	4958	0.16%	0.006%
14	6.390	6.371	6.428	PH	4751	48963	1.58%	0.063%
15	6.458	6.428	6.483	PH	700	6347	0.20%	0.008%
16	6.686	6.659	6.721	PH	964	7382	0.24%	0.010%
17	6.791	6.768	6.813	PH	270	2969	0.10%	0.004%
18	6.850	6.813	6.898	PH	472	2592	0.08%	0.003%
19	6.922	6.898	6.958	PH	2450	19793	0.64%	0.026%
20	7.041	7.026	7.072	PH	264	1789	0.06%	0.002%
21	7.180	7.155	7.213	PH	603	8560	0.28%	0.011%
22	7.229	7.213	7.243	PH	356	3338	0.11%	0.004%
23	7.262	7.243	7.285	HH	393	5459	0.18%	0.007%
24	7.306	7.285	7.320	HH	318	3857	0.12%	0.005%
25	7.337	7.320	7.380	PH	4161	68960	2.23%	0.089%
26	7.384	7.380	7.415	HH	936	15331	0.50%	0.020%
27	7.438	7.415	7.459	HH	905	18362	0.59%	0.024%
28	7.491	7.459	7.507	HH	2578	34365	1.11%	0.044%
29	7.517	7.507	7.562	HH	888	15510	0.50%	0.020%
30	7.575	7.562	7.613	HH	528	3936	0.13%	0.005%
31	7.631	7.613	7.658	PH	1995	18508	0.60%	0.024%
32	7.669	7.658	7.688	PH	318	2390	0.08%	0.003%
33	7.702	7.688	7.717	PH	273	2289	0.07%	0.003%
34	7.725	7.717	7.740	HH	223	1471	0.05%	0.002%
35	7.749	7.740	7.771	HH	268	2916	0.09%	0.004%
36	7.805	7.771	7.846	PH	764	8666	0.28%	0.011%

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37	7.858	7.846	7.876	PH	279	2006	0.06%	0.003%
38	7.881	7.876	7.904	PH	84	433	0.01%	0.001%
39	7.933	7.904	7.948	PH	212	1759	0.06%	0.002%
40	7.982	7.948	8.008	PH	334	5485	0.18%	0.007%
41	8.019	8.008	8.025	PH	159	573	0.02%	0.001%
42	8.030	8.025	8.038	PH	75	-6	-0.00%	-0.000%
43	8.051	8.038	8.068	PH	70	79	0.00%	0.000%
44	8.094	8.068	8.120	PH	2106	22553	0.73%	0.029%
45	8.147	8.120	8.164	PH	106	992	0.03%	0.001%
46	8.189	8.164	8.209	PH	2888	35809	1.16%	0.046%
47	8.229	8.209	8.249	HH	2252	39674	1.28%	0.051%
48	8.264	8.249	8.280	HH	3044	36325	1.17%	0.047%
49	8.289	8.280	8.319	HH	1010	13435	0.43%	0.017%
50	8.337	8.319	8.351	HH	329	3969	0.13%	0.005%
51	8.401	8.351	8.454	HH	1139	43269	1.40%	0.056%
52	8.462	8.454	8.478	HH	620	7747	0.25%	0.010%
53	8.516	8.478	8.551	HH	2690	63372	2.05%	0.082%
54	8.577	8.551	8.595	HH	1168	25594	0.83%	0.033%
55	8.617	8.595	8.633	HH	3179	43502	1.40%	0.056%
56	8.670	8.633	8.721	HH	8068	178670	5.77%	0.231%
57	8.735	8.721	8.757	HH	1127	21310	0.69%	0.028%
58	8.804	8.757	8.848	HH	64973	790223	25.52%	1.023%
59	8.856	8.848	8.878	HH	2422	34159	1.10%	0.044%
60	8.893	8.878	8.910	HH	1404	21689	0.70%	0.028%
61	8.919	8.910	8.923	HH	917	6613	0.21%	0.009%
62	8.935	8.923	8.951	HH	1022	14837	0.48%	0.019%
63	8.963	8.951	8.972	HH	1114	12720	0.41%	0.016%
64	8.988	8.972	9.040	HH	3410	70237	2.27%	0.091%
65	9.061	9.040	9.082	HH	1327	28298	0.91%	0.037%
66	9.103	9.082	9.134	HH	3105	53369	1.72%	0.069%
67	9.163	9.134	9.207	HH	3185	74288	2.40%	0.096%
68	9.232	9.207	9.252	HH	1894	36464	1.18%	0.047%
69	9.266	9.252	9.280	HH	1188	16381	0.53%	0.021%
70	9.299	9.280	9.308	HH	1145	15683	0.51%	0.020%
71	9.323	9.308	9.335	HH	1480	19877	0.64%	0.026%
72	9.350	9.335	9.365	HH	1940	29098	0.94%	0.038%
73	9.380	9.365	9.396	HH	2551	33423	1.08%	0.043%
74	9.422	9.396	9.453	HH	2580	57732	1.86%	0.075%
75	9.459	9.453	9.465	HH	1389	9528	0.31%	0.012%
76	9.472	9.465	9.497	HH	1460	21772	0.70%	0.028%
77	9.521	9.497	9.542	HH	3556	54452	1.76%	0.070%
78	9.560	9.542	9.594	HH	2875	51008	1.65%	0.066%
79	9.616	9.594	9.648	HH	3800	61317	1.98%	0.079%
80	9.675	9.648	9.693	HH	3199	53230	1.72%	0.069%
81	9.708	9.693	9.728	HH	3135	39826	1.29%	0.052%
82	9.761	9.728	9.783	HH	7916	116325	3.76%	0.151%
83	9.788	9.783	9.799	HH	1478	13062	0.42%	0.017%
84	9.816	9.799	9.836	HH	2491	38881	1.26%	0.050%
85	9.856	9.836	9.881	HH	7437	102917	3.32%	0.133%
86	9.915	9.881	9.938	HH	5936	122795	3.97%	0.159%
87	9.942	9.938	9.957	HH	1560	16276	0.53%	0.021%
88	9.979	9.957	10.015	HH	3405	70578	2.28%	0.091%
89	10.043	10.015	10.069	HH	7538	115004	3.71%	0.149%

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90	10.082	10.069	10.097	HH	1862	28034	0.91%	0.036%
91	10.113	10.097	10.128	HH	2036	31240	1.01%	0.040%
92	10.178	10.128	10.202	HH	109003	1217084	39.30%	1.575%
93	10.220	10.202	10.268	HH	3628	97967	3.16%	0.127%
94	10.278	10.268	10.293	HH	1740	23976	0.77%	0.031%
95	10.318	10.293	10.330	HH	3830	67040	2.16%	0.087%
96	10.343	10.330	10.370	HH	5437	76782	2.48%	0.099%
97	10.414	10.370	10.444	HH	2309	75338	2.43%	0.098%
98	10.463	10.444	10.472	HH	1659	22926	0.74%	0.030%
99	10.485	10.472	10.512	HH	1621	32832	1.06%	0.042%
100	10.527	10.512	10.548	HH	1609	25261	0.82%	0.033%
101	10.568	10.548	10.583	HH	1307	23452	0.76%	0.030%
102	10.599	10.583	10.603	HH	1696	17285	0.56%	0.022%
103	10.615	10.603	10.632	HH	1836	27941	0.90%	0.036%
104	10.656	10.632	10.685	HH	7008	106334	3.43%	0.138%
105	10.702	10.685	10.721	HH	2214	37843	1.22%	0.049%
106	10.757	10.721	10.775	HH	4226	95169	3.07%	0.123%
107	10.789	10.775	10.812	HH	4277	65316	2.11%	0.085%
108	10.830	10.812	10.864	HH	3656	76384	2.47%	0.099%
109	10.879	10.864	10.890	HH	2425	33590	1.08%	0.043%
110	10.915	10.890	10.940	HH	6309	128999	4.17%	0.167%
111	10.959	10.940	10.981	HH	9988	140322	4.53%	0.182%
112	11.007	10.981	11.020	HH	4893	88828	2.87%	0.115%
113	11.030	11.020	11.042	HH	4057	49599	1.60%	0.064%
114	11.055	11.042	11.067	HH	5144	69238	2.24%	0.090%
115	11.077	11.067	11.094	HH	5517	72090	2.33%	0.093%
116	11.115	11.094	11.153	HH	6710	153943	4.97%	0.199%
117	11.185	11.153	11.199	HH	3329	78970	2.55%	0.102%
118	11.208	11.199	11.227	HH	3206	45146	1.46%	0.058%
119	11.236	11.227	11.243	HH	2358	23245	0.75%	0.030%
120	11.254	11.243	11.269	HH	2958	39828	1.29%	0.052%
121	11.283	11.269	11.288	HH	3297	33091	1.07%	0.043%
122	11.315	11.288	11.352	HH	66464	809323	26.13%	1.048%
123	11.391	11.352	11.435	HH	48014	681839	22.02%	0.883%
124	11.445	11.435	11.462	HH	2798	39847	1.29%	0.052%
125	11.485	11.462	11.504	HH	2816	60517	1.95%	0.078%
126	11.510	11.504	11.528	HH	2219	30355	0.98%	0.039%
127	11.560	11.528	11.581	HH	3306	80993	2.62%	0.105%
128	11.602	11.581	11.650	HH	12024	203177	6.56%	0.263%
129	11.681	11.650	11.693	HH	3178	71128	2.30%	0.092%
130	11.728	11.693	11.748	HH	4933	133623	4.31%	0.173%
131	11.764	11.748	11.781	HH	5199	83034	2.68%	0.107%
132	11.812	11.781	11.816	HH	5637	90964	2.94%	0.118%
133	11.854	11.816	11.894	HH	8313	268172	8.66%	0.347%
134	11.923	11.894	11.942	HH	7614	135504	4.38%	0.175%
135	11.966	11.942	11.988	HH	6096	135310	4.37%	0.175%
136	12.014	11.988	12.057	HH	6443	198690	6.42%	0.257%
137	12.071	12.057	12.087	HH	4184	66278	2.14%	0.086%
138	12.125	12.087	12.140	HH	23309	321285	10.37%	0.416%
139	12.155	12.140	12.175	HH	26125	309235	9.99%	0.400%
140	12.185	12.175	12.202	HH	6440	87872	2.84%	0.114%
141	12.223	12.202	12.231	HH	15315	181033	5.85%	0.234%

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142	12.242	12.231	12.258	HH	16065	199963	6.46%	0.259%
143	12.274	12.258	12.289	HH	20870	252485	8.15%	0.327%
144	12.305	12.289	12.331	HH	23639	315901	10.20%	0.409%
145	12.343	12.331	12.354	HH	3567	46297	1.49%	0.060%
146	12.372	12.354	12.403	HH	5441	127236	4.11%	0.165%
147	12.442	12.403	12.458	HH	6766	169385	5.47%	0.219%
148	12.482	12.458	12.502	HH	20150	288514	9.32%	0.373%
149	12.531	12.502	12.576	HH	12528	322798	10.42%	0.418%
150	12.600	12.576	12.621	HH	14025	220222	7.11%	0.285%
151	12.632	12.621	12.647	HH	6102	87491	2.83%	0.113%
152	12.697	12.647	12.734	HH	139683	1994916	64.42%	2.582%
153	12.752	12.734	12.770	HH	10254	191026	6.17%	0.247%
154	12.776	12.770	12.792	HH	6944	83924	2.71%	0.109%
155	12.807	12.792	12.818	HH	6592	96600	3.12%	0.125%
156	12.830	12.818	12.842	HH	7643	98691	3.19%	0.128%
157	12.876	12.842	12.902	HH	8508	248576	8.03%	0.322%
158	12.922	12.902	12.960	HH	13650	310654	10.03%	0.402%
159	12.982	12.960	13.010	HH	21653	346626	11.19%	0.449%
160	13.034	13.010	13.053	HH	29422	440738	14.23%	0.570%
161	13.070	13.053	13.087	HH	17001	301369	9.73%	0.390%
162	13.097	13.087	13.119	HH	14468	209118	6.75%	0.271%
163	13.153	13.119	13.197	HH	206623	2550401	82.35%	3.301%
164	13.211	13.197	13.228	HH	5689	96746	3.12%	0.125%
165	13.250	13.228	13.263	HH	7564	129451	4.18%	0.168%
166	13.288	13.263	13.324	HH	30557	560518	18.10%	0.726%
167	13.341	13.324	13.380	HH	14800	411598	13.29%	0.533%
168	13.394	13.380	13.426	HH	12881	261513	8.44%	0.338%
169	13.454	13.426	13.477	HH	179826	2131109	68.82%	2.758%
170	13.486	13.477	13.497	HH	12687	140163	4.53%	0.181%
171	13.508	13.497	13.521	HH	12525	164842	5.32%	0.213%
172	13.539	13.521	13.569	HH	22409	364023	11.75%	0.471%
173	13.591	13.569	13.607	HH	8447	166352	5.37%	0.215%
174	13.626	13.607	13.638	HH	11659	178608	5.77%	0.231%
175	13.652	13.638	13.677	HH	11757	204017	6.59%	0.264%
176	13.721	13.677	13.743	HH	17462	427776	13.81%	0.554%
177	13.748	13.743	13.765	HH	11315	140266	4.53%	0.182%
178	13.788	13.765	13.813	HH	15650	338899	10.94%	0.439%
179	13.851	13.813	13.868	HH	14619	345521	11.16%	0.447%
180	13.883	13.868	13.894	HH	12263	171883	5.55%	0.222%
181	13.929	13.894	13.991	HH	31470	969528	31.31%	1.255%
182	14.045	13.991	14.090	HH	38031	1011550	32.66%	1.309%
183	14.113	14.090	14.132	HH	12229	247715	8.00%	0.321%
184	14.155	14.132	14.173	HH	17027	320455	10.35%	0.415%
185	14.194	14.173	14.217	HH	31395	479127	15.47%	0.620%
186	14.242	14.217	14.259	HH	12394	268078	8.66%	0.347%
187	14.282	14.259	14.307	HH	17671	422163	13.63%	0.546%
188	14.325	14.307	14.347	HH	32199	497475	16.06%	0.644%
189	14.366	14.347	14.407	HH	25851	505715	16.33%	0.655%
190	14.442	14.407	14.460	HH	10711	290190	9.37%	0.376%
191	14.477	14.460	14.497	HH	9825	195331	6.31%	0.253%
192	14.526	14.497	14.546	HH	9418	260572	8.41%	0.337%
193	14.552	14.546	14.570	HH	8714	124820	4.03%	0.162%
194	14.574	14.570	14.594	HH	8355	115891	3.74%	0.150%

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195	14.605	14.594	14.615	HH	8316	102969	3.32%	0.133%
196	14.635	14.615	14.651	HH	10139	194655	6.29%	0.252%
197	14.686	14.651	14.707	HH	17066	401287	12.96%	0.519%
198	14.747	14.707	14.765	HH	15212	433754	14.01%	0.561%
199	14.785	14.765	14.819	HH	35839	632026	20.41%	0.818%
200	14.832	14.819	14.844	HH	11070	161807	5.22%	0.209%
201	14.861	14.844	14.875	HH	15592	255796	8.26%	0.331%
202	14.890	14.875	14.923	HH	16504	390260	12.60%	0.505%
203	14.966	14.923	14.986	HH	27658	705907	22.79%	0.914%
204	14.993	14.986	15.007	HH	17014	201318	6.50%	0.261%
205	15.032	15.007	15.053	HH	46802	759749	24.53%	0.983%
206	15.090	15.053	15.125	HH	36997	829472	26.78%	1.074%
207	15.154	15.125	15.170	HH	13879	316298	10.21%	0.409%
208	15.200	15.170	15.273	HH	114838	2120006	68.46%	2.744%
209	15.299	15.273	15.319	HH	30990	522594	16.87%	0.676%
210	15.345	15.319	15.365	HH	108983	1493426	48.22%	1.933%
211	15.388	15.365	15.419	HH	135521	1855943	59.93%	2.402%
212	15.446	15.419	15.466	HH	16626	411891	13.30%	0.533%
213	15.504	15.466	15.562	HH	34645	1142340	36.89%	1.479%
214	15.583	15.562	15.617	HH	18088	470791	15.20%	0.609%
215	15.648	15.617	15.673	HH	21844	577070	18.63%	0.747%
216	15.689	15.673	15.698	HH	20951	296872	9.59%	0.384%
217	15.704	15.698	15.742	HH	20392	410462	13.25%	0.531%
218	15.786	15.742	15.852	HH	110944	2319620	74.90%	3.002%
219	15.884	15.852	15.903	HH	15790	440114	14.21%	0.570%
220	15.932	15.903	15.960	HH	18568	545686	17.62%	0.706%
221	16.022	15.960	16.044	HH	47936	1403358	45.32%	1.816%
222	16.061	16.044	16.096	HH	28753	641611	20.72%	0.830%
223	16.107	16.096	16.120	HH	16724	233597	7.54%	0.302%
224	16.185	16.120	16.218	HH	30001	1344384	43.41%	1.740%
225	16.265	16.218	16.289	HH	21436	735637	23.75%	0.952%
226	16.306	16.289	16.329	HH	20861	439862	14.20%	0.569%
227	16.348	16.329	16.366	HH	20965	404370	13.06%	0.523%
228	16.383	16.366	16.408	HH	18479	438466	14.16%	0.568%
229	16.445	16.408	16.463	HH	20587	624026	20.15%	0.808%
230	16.470	16.463	16.483	HH	19247	224976	7.26%	0.291%
231	16.497	16.483	16.519	HH	19762	382471	12.35%	0.495%
232	16.533	16.519	16.545	HH	16398	256975	8.30%	0.333%
233	16.563	16.545	16.599	HH	17289	514537	16.61%	0.666%
234	16.640	16.599	16.658	HH	28131	745869	24.08%	0.965%
235	16.666	16.658	16.679	HH	20244	247040	7.98%	0.320%
236	16.699	16.679	16.717	HH	24524	477343	15.41%	0.618%
237	16.752	16.717	16.769	HH	25598	713834	23.05%	0.924%
238	16.807	16.769	16.833	HH	94428	1888226	60.97%	2.444%
239	16.844	16.833	16.868	HH	37199	624707	20.17%	0.809%
240	16.921	16.868	16.937	HH	176875	3096851	100.00%	4.008%
241	16.947	16.937	16.977	HH	89498	1202576	38.83%	1.557%
242	17.003	16.977	17.024	HH	30292	704002	22.73%	0.911%
243	17.049	17.024	17.070	HH	58976	1038279	33.53%	1.344%
244	17.086	17.070	17.125	HH	26670	766302	24.74%	0.992%
245	17.170	17.125	17.188	HH	29441	909765	29.38%	1.178%
246	17.244	17.188	17.269	HH	126765	2890441	93.33%	3.741%

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247	17.302	17.269	17.342	HH	134917	2419819	78.14%	3.132%
248	17.400	17.342	17.424	HH	53737	1573399	50.81%	2.037%
249	17.450	17.424	17.459	HH	32729	625340	20.19%	0.809%
250	17.465	17.459	17.492	HH	33312	591086	19.09%	0.765%

Sum of corrected areas: 77257803

FG070925.M Thu Jul 17 03:17:29 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/07/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-79	SDG No.:	Q2529
Lab Sample ID:	Q2529-03	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	90.6
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016307.D	1	07/16/25 10:00	07/16/25 16:17	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	8560		186	1840	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.8		37 - 130	59%	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\FG071625\
Data File : FG016307.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 16:17
Operator : YP\AJ
Sample : Q2529-03
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-79

Integration File: Sample.e
Quant Time: Jul 17 02:35:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.201	1175722	11.759 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

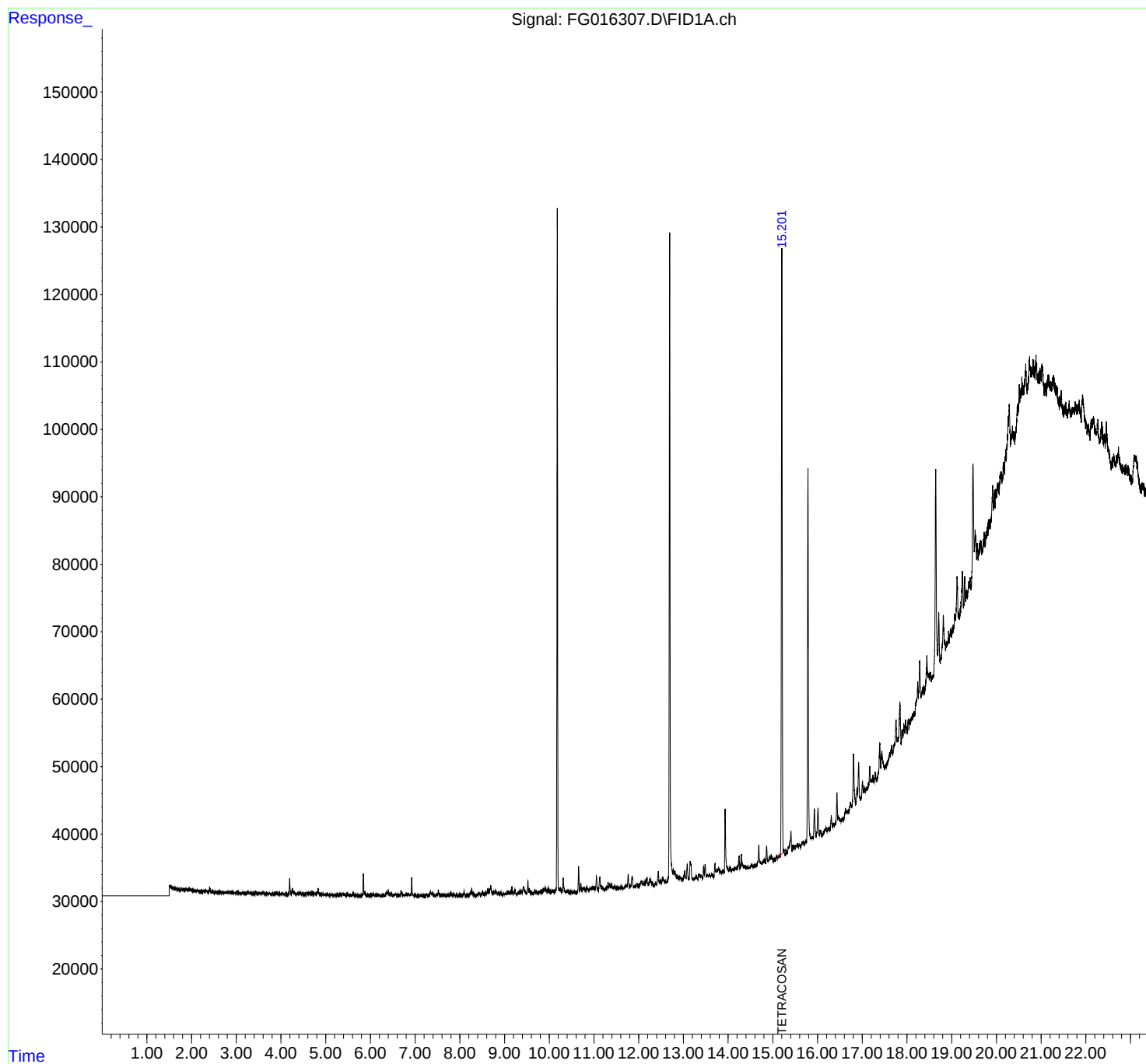
(m)=manual int.

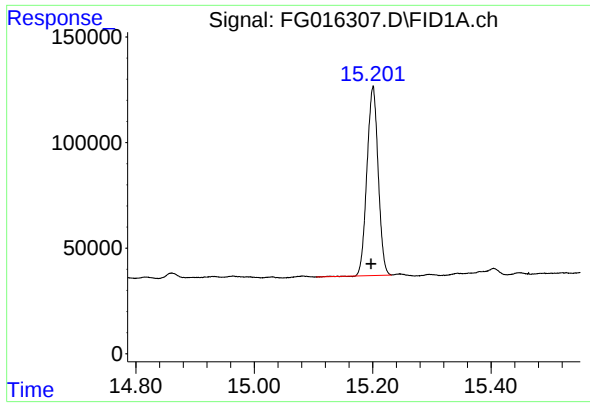
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016307.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 16:17
Operator : YP\AJ
Sample : Q2529-03
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-79

Integration File: Sample.e
Quant Time: Jul 17 02:35:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.: 15.201 min
Delta R.T.: 0.003 min
Response: 1175722
Conc: 11.76 ug/ml

Instrument :
FID_G
ClientSampleId :
TP-79

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
 Data File : FG016307.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 16:17
 Sample : Q2529-03
 Misc :
 ALS Vial : 25 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.582	4.563	4.605	PH	290	2023	0.14%	0.007%
2	4.619	4.605	4.623	PH	142	684	0.05%	0.002%
3	4.629	4.623	4.647	HH	165	1148	0.08%	0.004%
4	4.671	4.647	4.699	PH	344	3703	0.26%	0.013%
5	4.704	4.699	4.727	PH	208	1222	0.09%	0.004%
6	4.788	4.772	4.800	PH	132	1059	0.07%	0.004%
7	4.833	4.800	4.872	HH	773	9684	0.68%	0.035%
8	5.615	5.597	5.640	PH	339	318	0.02%	0.001%
9	5.843	5.823	5.863	PH	3022	25956	1.82%	0.093%
10	5.875	5.863	5.901	PH	403	1734	0.12%	0.006%
11	6.352	6.310	6.370	PH	228	-1298	-0.09%	-0.005%
12	6.392	6.370	6.436	HH	483	5484	0.38%	0.020%
13	6.459	6.447	6.484	PH	234	467	0.03%	0.002%
14	6.685	6.662	6.724	PH	499	3143	0.22%	0.011%
15	6.922	6.902	6.958	PH	2448	19612	1.37%	0.070%
16	7.341	7.322	7.374	PH	347	2704	0.19%	0.010%
17	7.379	7.374	7.416	HH	106	-591	-0.04%	-0.002%
18	7.520	7.503	7.558	PH	628	3120	0.22%	0.011%
19	8.094	8.070	8.130	PH	531	371	0.03%	0.001%
20	8.232	8.190	8.248	PH	202	-888	-0.06%	-0.003%
21	8.264	8.248	8.281	HH	824	7497	0.53%	0.027%
22	8.293	8.281	8.324	HH	254	-55	-0.00%	-0.000%
23	8.510	8.481	8.532	PH	379	3366	0.24%	0.012%
24	8.585	8.549	8.592	PH	224	2038	0.14%	0.007%
25	8.620	8.592	8.634	HH	545	7953	0.56%	0.028%
26	8.649	8.634	8.665	HH	623	8745	0.61%	0.031%
27	8.691	8.665	8.725	HH	1307	23127	1.62%	0.083%
28	8.748	8.725	8.768	HH	313	4983	0.35%	0.018%
29	8.802	8.768	8.821	HH	547	10189	0.71%	0.036%
30	8.825	8.821	8.844	HH	208	1539	0.11%	0.005%
31	8.860	8.844	8.875	HH	304	2412	0.17%	0.009%
32	8.888	8.875	8.904	HH	116	957	0.07%	0.003%
33	8.919	8.904	8.956	PH	290	2606	0.18%	0.009%
34	8.969	8.956	8.974	PH	62	152	0.01%	0.001%
35	8.978	8.974	8.981	PH	87	184	0.01%	0.001%
36	8.985	8.981	9.012	HH	128	202	0.01%	0.001%

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37	9.018	9.012	9.020	PH	17	-95	-0.01%	-0.000%
38	9.026	9.020	9.038	PH	65	140	0.01%	0.000%
39	9.058	9.038	9.083	PH	333	5003	0.35%	0.018%
40	9.090	9.083	9.108	HH	258	2936	0.21%	0.010%
41	9.163	9.108	9.195	HH	1114	21659	1.52%	0.077%
42	9.200	9.195	9.210	HH	297	1897	0.13%	0.007%
43	9.234	9.210	9.261	HH	752	11377	0.80%	0.041%
44	9.310	9.261	9.330	PH	235	5884	0.41%	0.021%
45	9.345	9.330	9.369	HH	498	7333	0.51%	0.026%
46	9.385	9.369	9.400	HH	402	5402	0.38%	0.019%
47	9.421	9.400	9.486	HH	1211	28204	1.98%	0.101%
48	9.523	9.486	9.545	HH	1891	24967	1.75%	0.089%
49	9.560	9.545	9.579	HH	726	8473	0.59%	0.030%
50	9.585	9.579	9.610	HH	239	2868	0.20%	0.010%
51	9.619	9.610	9.647	HH	212	2921	0.20%	0.010%
52	9.678	9.647	9.692	HH	507	7250	0.51%	0.026%
53	9.709	9.692	9.732	HH	527	6961	0.49%	0.025%
54	9.739	9.732	9.745	HH	206	1462	0.10%	0.005%
55	9.763	9.745	9.777	HH	316	4488	0.31%	0.016%
56	9.816	9.777	9.839	HH	684	13198	0.92%	0.047%
57	9.861	9.839	9.884	HH	676	13208	0.93%	0.047%
58	9.905	9.884	9.937	HH	1059	21240	1.49%	0.076%
59	9.946	9.937	9.959	HH	474	5352	0.38%	0.019%
60	9.981	9.959	10.013	HH	975	17965	1.26%	0.064%
61	10.039	10.013	10.052	HH	410	7876	0.55%	0.028%
62	10.060	10.052	10.066	HH	488	3427	0.24%	0.012%
63	10.085	10.066	10.117	HH	550	13232	0.93%	0.047%
64	10.146	10.117	10.153	HH	801	10672	0.75%	0.038%
65	10.179	10.153	10.215	HH	101744	1041752	72.99%	3.719%
66	10.245	10.215	10.291	HH	890	28920	2.03%	0.103%
67	10.311	10.291	10.364	HH	2361	42566	2.98%	0.152%
68	10.368	10.364	10.371	HH	366	1541	0.11%	0.006%
69	10.376	10.371	10.392	HH	395	4485	0.31%	0.016%
70	10.417	10.392	10.459	HH	612	15500	1.09%	0.055%
71	10.487	10.466	10.527	HH	506	11589	0.81%	0.041%
72	10.534	10.527	10.545	HH	341	2854	0.20%	0.010%
73	10.549	10.545	10.564	HH	285	2649	0.19%	0.009%
74	10.580	10.564	10.604	HH	385	7382	0.52%	0.026%
75	10.616	10.604	10.630	HH	420	5224	0.37%	0.019%
76	10.656	10.630	10.682	HH	4134	52435	3.67%	0.187%
77	10.703	10.682	10.729	HH	1623	27900	1.95%	0.100%
78	10.754	10.729	10.777	HH	992	22128	1.55%	0.079%
79	10.787	10.777	10.816	HH	954	16239	1.14%	0.058%
80	10.833	10.816	10.886	HH	996	29229	2.05%	0.104%
81	10.916	10.886	10.922	HH	866	16052	1.12%	0.057%
82	10.930	10.922	10.948	HH	858	12175	0.85%	0.043%
83	10.969	10.948	10.994	HH	1041	24677	1.73%	0.088%
84	11.008	10.994	11.027	HH	1138	17694	1.24%	0.063%
85	11.055	11.027	11.097	HH	2649	52223	3.66%	0.186%
86	11.128	11.097	11.147	HH	2519	47168	3.30%	0.168%
87	11.152	11.147	11.174	HH	1225	17535	1.23%	0.063%
88	11.178	11.174	11.189	HH	1019	8131	0.57%	0.029%
89	11.196	11.189	11.219	HH	1059	14548	1.02%	0.052%

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90	11.221	11.219	11.245	HH	742	9687	0.68%	0.035%
91	11.257	11.245	11.262	HH	773	7630	0.53%	0.027%
92	11.279	11.262	11.295	HH	990	17138	1.20%	0.061%
93	11.315	11.295	11.329	HH	1687	25298	1.77%	0.090%
94	11.344	11.329	11.362	HH	1420	24522	1.72%	0.088%
95	11.367	11.362	11.372	HH	1146	6611	0.46%	0.024%
96	11.388	11.372	11.414	HH	1400	29679	2.08%	0.106%
97	11.451	11.414	11.476	HH	1159	37306	2.61%	0.133%
98	11.482	11.476	11.501	HH	1036	14408	1.01%	0.051%
99	11.508	11.501	11.544	HH	985	23264	1.63%	0.083%
100	11.574	11.544	11.581	HH	988	19629	1.38%	0.070%
101	11.624	11.581	11.657	HH	1168	44332	3.11%	0.158%
102	11.709	11.657	11.723	HH	1199	41429	2.90%	0.148%
103	11.729	11.723	11.743	HH	1290	14930	1.05%	0.053%
104	11.764	11.743	11.789	HH	2968	50801	3.56%	0.181%
105	11.797	11.789	11.822	HH	1245	23471	1.64%	0.084%
106	11.852	11.822	11.894	HH	2711	73372	5.14%	0.262%
107	11.926	11.894	11.941	HH	1262	32537	2.28%	0.116%
108	11.962	11.941	11.994	HH	1535	40864	2.86%	0.146%
109	12.007	11.994	12.012	HH	1236	13396	0.94%	0.048%
110	12.067	12.012	12.100	HH	1808	82726	5.80%	0.295%
111	12.123	12.100	12.140	HH	1861	38474	2.70%	0.137%
112	12.158	12.140	12.170	HH	2074	31870	2.23%	0.114%
113	12.182	12.170	12.209	HH	2352	43540	3.05%	0.155%
114	12.253	12.209	12.267	HH	2360	62397	4.37%	0.223%
115	12.274	12.267	12.291	HH	1952	24808	1.74%	0.089%
116	12.306	12.291	12.359	HH	1767	60646	4.25%	0.217%
117	12.374	12.359	12.392	HH	1644	30459	2.13%	0.109%
118	12.439	12.392	12.468	HH	3385	98342	6.89%	0.351%
119	12.491	12.468	12.514	HH	1963	49253	3.45%	0.176%
120	12.536	12.514	12.587	HH	2552	91243	6.39%	0.326%
121	12.593	12.587	12.619	HH	1874	33986	2.38%	0.121%
122	12.634	12.619	12.641	HH	1897	23352	1.64%	0.083%
123	12.693	12.641	12.762	HH	98105	1350796	94.64%	4.822%
124	12.776	12.762	12.793	HH	3565	60308	4.23%	0.215%
125	12.808	12.793	12.843	HH	3456	89843	6.29%	0.321%
126	12.853	12.843	12.901	HH	2628	86120	6.03%	0.307%
127	12.921	12.901	12.959	HH	2561	82654	5.79%	0.295%
128	12.965	12.959	12.969	HH	2132	12376	0.87%	0.044%
129	12.980	12.969	12.991	HH	2249	28141	1.97%	0.100%
130	13.029	12.991	13.059	HH	3374	110031	7.71%	0.393%
131	13.085	13.059	13.129	HH	4431	126805	8.88%	0.453%
132	13.151	13.129	13.162	HH	4876	73463	5.15%	0.262%
133	13.168	13.162	13.196	HH	4478	71892	5.04%	0.257%
134	13.209	13.196	13.228	HH	2345	42894	3.01%	0.153%
135	13.288	13.228	13.319	HH	2837	129804	9.09%	0.463%
136	13.344	13.319	13.372	HH	2931	84620	5.93%	0.302%
137	13.397	13.372	13.424	HH	2848	81380	5.70%	0.291%
138	13.450	13.424	13.467	HH	4076	81182	5.69%	0.290%
139	13.486	13.467	13.524	HH	4434	114128	8.00%	0.407%
140	13.542	13.524	13.558	HH	2892	56278	3.94%	0.201%
141	13.584	13.558	13.606	HH	2998	81320	5.70%	0.290%

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142	13.610	13.606	13.624	HH	2695	28898	2.02%	0.103%
143	13.644	13.624	13.676	HH	3044	86170	6.04%	0.308%
144	13.705	13.676	13.726	HH	4519	105209	7.37%	0.376%
145	13.753	13.726	13.772	HH	3712	98454	6.90%	0.351%
146	13.784	13.772	13.805	HH	3830	70693	4.95%	0.252%
147	13.809	13.805	13.819	HH	3464	29718	2.08%	0.106%
148	13.823	13.819	13.836	HH	3444	33473	2.35%	0.119%
149	13.853	13.836	13.864	HH	3282	54785	3.84%	0.196%
150	13.881	13.864	13.906	HH	3638	85425	5.99%	0.305%
151	13.932	13.906	14.019	HH	12615	359670	25.20%	1.284%
152	14.043	14.019	14.067	HH	3942	108248	7.58%	0.386%
153	14.072	14.067	14.079	HH	3578	25034	1.75%	0.089%
154	14.100	14.079	14.130	HH	3767	110985	7.78%	0.396%
155	14.154	14.130	14.186	HH	4030	127215	8.91%	0.454%
156	14.243	14.186	14.268	HH	5556	214299	15.01%	0.765%
157	14.294	14.268	14.347	HH	5907	219760	15.40%	0.785%
158	14.357	14.347	14.386	HH	4150	92835	6.50%	0.331%
159	14.389	14.386	14.402	HH	3950	37886	2.65%	0.135%
160	14.413	14.402	14.431	HH	4025	68783	4.82%	0.246%
161	14.436	14.431	14.466	HH	4031	81528	5.71%	0.291%
162	14.470	14.466	14.472	HH	3922	16113	1.13%	0.058%
163	14.483	14.472	14.492	HH	3909	45311	3.17%	0.162%
164	14.508	14.492	14.521	HH	4263	71845	5.03%	0.256%
165	14.529	14.521	14.550	HH	4432	73787	5.17%	0.263%
166	14.605	14.550	14.624	HH	4329	184898	12.95%	0.660%
167	14.629	14.624	14.641	HH	4228	42057	2.95%	0.150%
168	14.685	14.641	14.749	HH	7289	330420	23.15%	1.180%
169	14.785	14.749	14.799	HH	4896	140301	9.83%	0.501%
170	14.817	14.799	14.838	HH	5214	116546	8.17%	0.416%
171	14.861	14.838	14.885	HH	7078	159975	11.21%	0.571%
172	14.897	14.885	14.908	HH	5074	70861	4.96%	0.253%
173	14.930	14.908	14.945	HH	5521	118538	8.31%	0.423%
174	14.964	14.945	15.011	HH	5724	209637	14.69%	0.748%
175	15.031	15.011	15.048	HH	5295	111483	7.81%	0.398%
176	15.082	15.048	15.102	HH	5698	172299	12.07%	0.615%
177	15.129	15.102	15.144	HH	5598	137279	9.62%	0.490%
178	15.152	15.144	15.157	HH	5605	43680	3.06%	0.156%
179	15.162	15.157	15.166	HH	5561	27158	1.90%	0.097%
180	15.201	15.166	15.236	HH	95451	1427298	100.00%	5.095%
181	15.246	15.236	15.271	HH	6731	133175	9.33%	0.475%
182	15.296	15.271	15.315	HH	6523	159939	11.21%	0.571%
183	15.344	15.315	15.353	HH	7071	150992	10.58%	0.539%
184	15.404	15.353	15.427	HH	9334	340177	23.83%	1.214%
185	15.448	15.427	15.467	HH	7290	164193	11.50%	0.586%
186	15.527	15.467	15.538	HH	7307	296400	20.77%	1.058%
187	15.554	15.538	15.574	HH	7551	154547	10.83%	0.552%
188	15.599	15.574	15.619	HH	7401	197032	13.80%	0.703%
189	15.664	15.619	15.672	HH	7795	235471	16.50%	0.841%
190	15.678	15.672	15.694	HH	7630	97616	6.84%	0.348%
191	15.698	15.694	15.706	HH	7464	51913	3.64%	0.185%
192	15.742	15.706	15.754	HH	8022	222073	15.56%	0.793%
193	15.785	15.754	15.855	HH	63092	1232094	86.32%	4.399%
194	15.865	15.855	15.876	HH	8440	102783	7.20%	0.367%

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195	15.890	15.876	15.899	HH	8492	116304	8.15%	0.415%
196	15.930	15.899	15.965	HH	12637	395909	27.74%	1.413%
197	16.010	15.965	16.042	HH	12663	467016	32.72%	1.667%
198	16.058	16.042	16.094	HH	9494	281183	19.70%	1.004%
199	16.171	16.094	16.176	HH	9626	446393	31.28%	1.594%
200	16.189	16.176	16.210	HH	9875	195970	13.73%	0.700%
201	16.240	16.210	16.249	HH	9719	222795	15.61%	0.795%
202	16.256	16.249	16.277	HH	9864	165361	11.59%	0.590%
203	16.308	16.277	16.341	HH	11703	396191	27.76%	1.414%
204	16.358	16.341	16.373	HH	10556	198053	13.88%	0.707%
205	16.385	16.373	16.389	HH	10486	97717	6.85%	0.349%
206	16.394	16.389	16.404	HH	10540	95481	6.69%	0.341%
207	16.434	16.404	16.454	HH	15008	371253	26.01%	1.325%
208	16.470	16.454	16.486	HH	11454	214221	15.01%	0.765%
209	16.495	16.486	16.511	HH	11263	167071	11.71%	0.596%
210	16.517	16.511	16.524	HH	10861	85123	5.96%	0.304%
211	16.568	16.524	16.590	HH	11434	440799	30.88%	1.574%
212	16.633	16.590	16.649	HH	12600	420371	29.45%	1.501%
213	16.653	16.649	16.672	HH	12261	174660	12.24%	0.624%
214	16.690	16.672	16.709	HH	12310	268828	18.83%	0.960%
215	16.737	16.709	16.760	HH	13627	400501	28.06%	1.430%
216	16.805	16.760	16.860	HH	20766	918019	64.32%	3.277%
217	16.883	16.860	16.896	HH	15734	321440	22.52%	1.148%
218	16.920	16.896	16.960	HH	19502	618642	43.34%	2.209%
219	17.007	16.960	17.022	HH	16795	568252	39.81%	2.029%
220	17.047	17.022	17.066	HH	15719	400313	28.05%	1.429%
221	17.094	17.066	17.099	HH	15724	308848	21.64%	1.103%
222	17.104	17.099	17.125	HH	15846	244735	17.15%	0.874%
223	17.140	17.125	17.149	HH	16501	229026	16.05%	0.818%
224	17.167	17.149	17.221	HH	18938	746418	52.30%	2.665%
225	17.239	17.221	17.255	HH	17634	352789	24.72%	1.259%
226	17.292	17.255	17.316	HH	18089	625648	43.83%	2.234%
227	17.329	17.316	17.334	HH	17202	186833	13.09%	0.667%
228	17.355	17.334	17.361	HH	18086	285789	20.02%	1.020%
229	17.392	17.361	17.414	HH	22268	632936	44.35%	2.260%
230	17.439	17.414	17.495	HH	21223	954631	66.88%	3.408%

Sum of corrected areas: 28011355

FG070925.M Thu Jul 17 03:19:39 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/07/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-95	SDG No.:	Q2529
Lab Sample ID:	Q2529-04	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	83.7
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
FF016165.D	1	07/16/25 10:00	07/16/25 14:18	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	4190		202	1990	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.8		37 - 130	59%	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\FF071625\
Data File : FF016165.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 14:18
Operator : YP\AJ
Sample : Q2529-04
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-95

Integration File: autoint1.e
Quant Time: Jul 17 03:37:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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	1151629	11.827 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

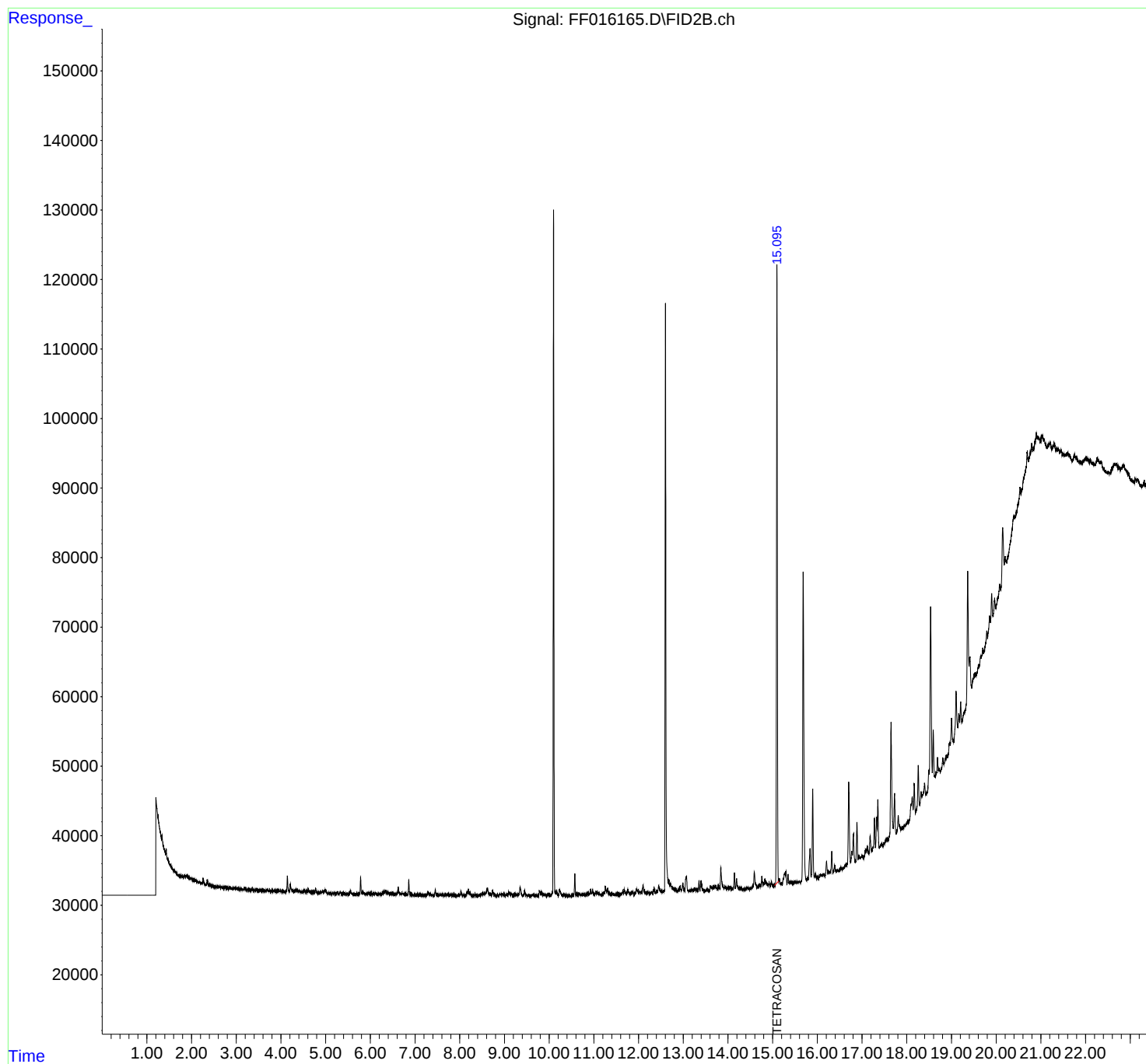
(m)=manual int.

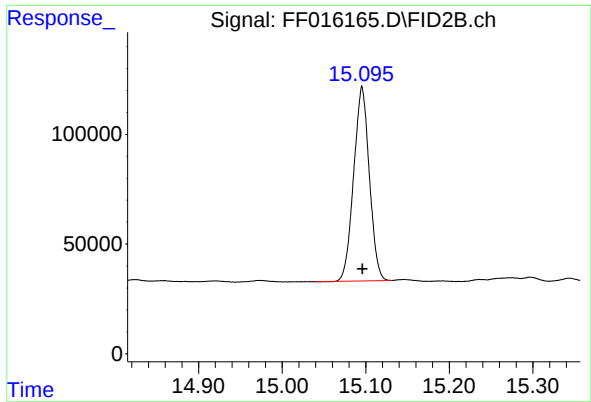
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016165.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 14:18
Operator : YP\AJ
Sample : Q2529-04
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-95

Integration File: autoint1.e
Quant Time: Jul 17 03:37:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.096 min
Delta R.T.: 0.000 min
Response: 1151629
Conc: 11.83 ug/ml

Instrument :
FID_F
ClientSampleId :
TP-95

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016165.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 14:18
Sample : Q2529-04
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.106	4.093	4.110	HH	540	5002	0.40%	0.038%
2	4.144	4.110	4.187	HH	2781	50166	4.05%	0.377%
3	4.211	4.187	4.285	HH	1613	48573	3.92%	0.365%
4	4.293	4.285	4.304	HH	628	6445	0.52%	0.048%
5	4.320	4.304	4.338	HH	761	13998	1.13%	0.105%
6	4.355	4.338	4.359	HH	704	8463	0.68%	0.064%
7	4.368	4.359	4.399	HH	746	14324	1.16%	0.108%
8	4.403	4.399	4.433	HH	642	11421	0.92%	0.086%
9	4.447	4.433	4.468	HH	546	10549	0.85%	0.079%
10	4.519	4.468	4.542	HH	777	24911	2.01%	0.187%
11	4.565	4.542	4.582	HH	690	13669	1.10%	0.103%
12	4.612	4.582	4.643	HH	824	21506	1.74%	0.162%
13	4.649	4.643	4.674	HH	566	8890	0.72%	0.067%
14	4.688	4.674	4.699	HH	541	6584	0.53%	0.050%
15	4.703	4.699	4.716	HH	428	4098	0.33%	0.031%
16	4.725	4.716	4.745	HH	432	7245	0.58%	0.054%
17	4.750	4.745	4.758	HH	454	3023	0.24%	0.023%
18	4.774	4.758	4.827	HH	1059	22573	1.82%	0.170%
19	4.837	4.827	4.848	HH	436	5018	0.41%	0.038%
20	4.851	4.848	4.855	HH	423	1823	0.15%	0.014%
21	4.858	4.855	4.868	HH	490	3227	0.26%	0.024%
22	4.872	4.868	4.896	HH	477	6929	0.56%	0.052%
23	4.900	4.896	4.916	HH	469	5067	0.41%	0.038%
24	4.969	4.916	4.973	HH	708	18088	1.46%	0.136%
25	4.984	4.973	5.034	HH	752	19985	1.61%	0.150%
26	5.038	5.034	5.062	HH	326	4878	0.39%	0.037%
27	5.068	5.062	5.108	HH	304	7476	0.60%	0.056%
28	5.116	5.108	5.130	HH	306	3169	0.26%	0.024%
29	5.143	5.130	5.190	HH	269	8202	0.66%	0.062%
30	5.192	5.190	5.198	HH	296	1186	0.10%	0.009%
31	5.203	5.198	5.217	HH	263	2420	0.20%	0.018%
32	5.228	5.217	5.235	HH	260	2189	0.18%	0.016%
33	5.267	5.235	5.297	HH	486	11063	0.89%	0.083%
34	5.329	5.297	5.360	HH	450	11194	0.90%	0.084%
35	5.376	5.360	5.389	HH	295	4074	0.33%	0.031%
36	5.393	5.389	5.399	HH	238	1394	0.11%	0.010%

					rteres			
37	5.410	5.399	5.426	HH	371	4556	0.37%	0.034%
38	5.431	5.426	5.452	HH	307	3478	0.28%	0.026%
39	5.458	5.452	5.469	HH	222	1967	0.16%	0.015%
40	5.488	5.469	5.508	HH	227	3883	0.31%	0.029%
41	5.526	5.508	5.531	HH	249	2505	0.20%	0.019%
42	5.554	5.531	5.579	HH	700	11098	0.90%	0.083%
43	5.580	5.579	5.595	HH	324	2424	0.20%	0.018%
44	5.600	5.595	5.606	HH	278	1682	0.14%	0.013%
45	5.614	5.606	5.634	HH	305	3564	0.29%	0.027%
46	5.638	5.634	5.642	HH	244	973	0.08%	0.007%
47	5.646	5.642	5.652	HH	232	991	0.08%	0.007%
48	5.658	5.652	5.672	HH	258	1948	0.16%	0.015%
49	5.678	5.672	5.687	HH	215	1668	0.13%	0.013%
50	5.690	5.687	5.705	HH	177	1926	0.16%	0.014%
51	5.711	5.705	5.718	HH	205	1077	0.09%	0.008%
52	5.729	5.718	5.738	HH	190	1897	0.15%	0.014%
53	5.756	5.738	5.760	HH	260	2536	0.20%	0.019%
54	5.782	5.760	5.814	HH	2583	30934	2.50%	0.233%
55	5.828	5.814	5.868	HH	684	12714	1.03%	0.096%
56	5.878	5.868	5.887	HH	274	2473	0.20%	0.019%
57	5.896	5.887	5.910	HH	274	2770	0.22%	0.021%
58	5.916	5.910	5.924	HH	271	1825	0.15%	0.014%
59	5.938	5.924	5.962	HH	284	5321	0.43%	0.040%
60	5.982	5.962	5.994	HH	320	4217	0.34%	0.032%
61	6.016	5.994	6.047	HH	330	7264	0.59%	0.055%
62	6.067	6.047	6.094	HH	419	6382	0.52%	0.048%
63	6.117	6.094	6.136	HH	359	5375	0.43%	0.040%
64	6.157	6.136	6.162	HH	179	1483	0.12%	0.011%
65	6.173	6.162	6.178	HH	141	1071	0.09%	0.008%
66	6.181	6.178	6.199	HH	185	1716	0.14%	0.013%
67	6.211	6.199	6.245	HH	200	3574	0.29%	0.027%
68	6.262	6.245	6.269	HH	321	3009	0.24%	0.023%
69	6.286	6.269	6.309	HH	592	9382	0.76%	0.071%
70	6.324	6.309	6.333	HH	588	6534	0.53%	0.049%
71	6.341	6.333	6.376	HH	680	13108	1.06%	0.099%
72	6.393	6.376	6.439	HH	504	11235	0.91%	0.084%
73	6.443	6.439	6.450	HH	190	998	0.08%	0.008%
74	6.455	6.450	6.458	HH	146	672	0.05%	0.005%
75	6.474	6.458	6.485	HH	292	3391	0.27%	0.026%
76	6.496	6.485	6.544	HH	438	8322	0.67%	0.063%
77	6.548	6.544	6.559	HH	156	1103	0.09%	0.008%
78	6.565	6.559	6.585	HH	243	2925	0.24%	0.022%
79	6.588	6.585	6.595	HH	256	977	0.08%	0.007%
80	6.624	6.595	6.668	HH	1207	21001	1.70%	0.158%
81	6.671	6.668	6.693	HH	269	3266	0.26%	0.025%
82	6.704	6.693	6.729	HH	280	5066	0.41%	0.038%
83	6.734	6.729	6.745	HH	205	1755	0.14%	0.013%
84	6.749	6.745	6.765	HH	215	1901	0.15%	0.014%
85	6.769	6.765	6.775	HH	221	1121	0.09%	0.008%
86	6.785	6.775	6.809	HH	263	3736	0.30%	0.028%
87	6.812	6.809	6.821	HH	146	796	0.06%	0.006%
88	6.824	6.821	6.835	HH	139	769	0.06%	0.006%
89	6.860	6.835	6.899	HH	2152	25667	2.07%	0.193%

					rteres			
90	6.915	6.899	6.929	HH	193	1848	0.15%	0.014%
91	6.950	6.929	6.970	HH	151	1414	0.11%	0.011%
92	6.973	6.970	6.978	PH	52	70	0.01%	0.001%
93	6.983	6.978	6.988	PH	86	242	0.02%	0.002%
94	7.244	7.240	7.262	HH	126	536	0.04%	0.004%
95	7.282	7.262	7.303	PH	479	6102	0.49%	0.046%
96	7.311	7.303	7.314	HH	333	1770	0.14%	0.013%
97	7.322	7.314	7.348	HH	316	3926	0.32%	0.030%
98	7.353	7.348	7.385	HH	153	1396	0.11%	0.010%
99	7.407	7.385	7.412	PH	60	3	0.00%	0.000%
100	7.416	7.412	7.421	PH	57	103	0.01%	0.001%
101	7.454	7.421	7.480	PH	848	9461	0.76%	0.071%
102	7.484	7.480	7.504	HH	108	868	0.07%	0.007%
103	7.572	7.538	7.592	PH	85	382	0.03%	0.003%
104	7.602	7.592	7.620	PH	182	1001	0.08%	0.008%
105	7.639	7.620	7.654	PH	71	224	0.02%	0.002%
106	7.686	7.668	7.701	PH	99	710	0.06%	0.005%
107	7.735	7.701	7.758	PH	175	1669	0.13%	0.013%
108	7.763	7.758	7.785	HH	84	336	0.03%	0.003%
109	7.793	7.785	7.817	PH	153	994	0.08%	0.007%
110	8.026	8.005	8.049	PH	635	6132	0.50%	0.046%
111	8.165	8.129	8.181	PH	538	6992	0.56%	0.053%
112	8.197	8.181	8.212	HH	842	9658	0.78%	0.073%
113	8.223	8.212	8.255	HH	472	5179	0.42%	0.039%
114	8.511	8.476	8.541	PH	307	5646	0.46%	0.042%
115	8.547	8.541	8.553	HH	227	1286	0.10%	0.010%
116	8.619	8.553	8.664	HH	1032	28315	2.29%	0.213%
117	8.678	8.664	8.696	HH	312	3203	0.26%	0.024%
118	8.700	8.696	8.708	PH	35	199	0.02%	0.001%
119	8.731	8.708	8.825	HH	682	11167	0.90%	0.084%
120	8.897	8.875	8.908	PH	273	1832	0.15%	0.014%
121	8.909	8.908	8.913	HH	180	336	0.03%	0.003%
122	8.917	8.913	8.932	HH	82	812	0.07%	0.006%
123	8.943	8.932	8.967	HH	233	2168	0.18%	0.016%
124	8.987	8.967	9.025	PH	248	2989	0.24%	0.022%
125	9.032	9.025	9.044	PH	91	542	0.04%	0.004%
126	9.057	9.044	9.072	HH	149	1515	0.12%	0.011%
127	9.094	9.072	9.114	PH	554	7305	0.59%	0.055%
128	9.126	9.114	9.149	HH	323	3163	0.26%	0.024%
129	9.158	9.149	9.205	HH	201	950	0.08%	0.007%
130	9.229	9.205	9.283	PH	359	5465	0.44%	0.041%
131	9.287	9.283	9.322	PH	123	1131	0.09%	0.009%
132	9.351	9.322	9.408	HH	1190	22294	1.80%	0.168%
133	9.414	9.408	9.419	PH	-13	-381	-0.03%	-0.003%
134	9.449	9.419	9.480	PH	728	8505	0.69%	0.064%
135	9.486	9.480	9.507	HH	80	188	0.02%	0.001%
136	9.782	9.763	9.812	PH	661	8913	0.72%	0.067%
137	9.826	9.812	9.861	HH	472	6399	0.52%	0.048%
138	9.908	9.861	9.931	PH	123	2135	0.17%	0.016%
139	9.945	9.931	9.952	PH	-28	-487	-0.04%	-0.004%
140	10.011	10.005	10.031	PH	80	-33	-0.00%	-0.000%
141	10.035	10.031	10.039	PH	-74	-426	-0.03%	-0.003%

					rteres			
142	10.065	10.039	10.072	PH	296	2603	0.21%	0.020%
143	10.099	10.072	10.141	HH	98361	1019640	82.32%	7.668%
144	10.166	10.141	10.207	HH	723	11938	0.96%	0.090%
145	10.231	10.207	10.242	PH	795	8994	0.73%	0.068%
146	10.250	10.242	10.301	HH	649	7452	0.60%	0.056%
147	10.335	10.323	10.363	PH	218	1166	0.09%	0.009%
148	10.574	10.524	10.601	PH	3113	32589	2.63%	0.245%
149	10.623	10.601	10.643	PH	299	3229	0.26%	0.024%
150	10.657	10.643	10.664	HH	235	2183	0.18%	0.016%
151	10.676	10.664	10.696	HH	268	3489	0.28%	0.026%
152	10.703	10.696	10.707	HH	112	570	0.05%	0.004%
153	10.711	10.707	10.737	HH	149	912	0.07%	0.007%
154	10.753	10.737	10.771	PH	165	1630	0.13%	0.012%
155	10.789	10.771	10.807	HH	192	2696	0.22%	0.020%
156	10.828	10.807	10.860	HH	189	4420	0.36%	0.033%
157	10.879	10.860	10.890	HH	272	3923	0.32%	0.030%
158	10.896	10.890	10.907	HH	247	2211	0.18%	0.017%
159	10.928	10.907	10.949	HH	895	11872	0.96%	0.089%
160	10.972	10.949	10.997	HH	842	11753	0.95%	0.088%
161	11.001	10.997	11.014	HH	190	1262	0.10%	0.009%
162	11.042	11.014	11.056	HH	371	6202	0.50%	0.047%
163	11.072	11.056	11.098	HH	602	8538	0.69%	0.064%
164	11.107	11.098	11.118	HH	292	2550	0.21%	0.019%
165	11.121	11.118	11.156	HH	230	2204	0.18%	0.017%
166	11.161	11.156	11.171	HH	110	797	0.06%	0.006%
167	11.196	11.171	11.212	HH	261	3975	0.32%	0.030%
168	11.231	11.212	11.240	HH	536	5732	0.46%	0.043%
169	11.256	11.240	11.286	HH	1302	21212	1.71%	0.160%
170	11.304	11.286	11.372	HH	928	20903	1.69%	0.157%
171	11.377	11.372	11.389	HH	195	1672	0.13%	0.013%
172	11.413	11.389	11.444	HH	256	5776	0.47%	0.043%
173	11.450	11.444	11.462	HH	132	714	0.06%	0.005%
174	11.467	11.462	11.472	HH	114	404	0.03%	0.003%
175	11.491	11.472	11.496	HH	190	1707	0.14%	0.013%
176	11.499	11.496	11.514	HH	147	1192	0.10%	0.009%
177	11.520	11.514	11.526	HH	131	696	0.06%	0.005%
178	11.537	11.526	11.556	HH	213	2125	0.17%	0.016%
179	11.562	11.556	11.590	HH	86	1393	0.11%	0.010%
180	11.614	11.590	11.627	HH	288	4659	0.38%	0.035%
181	11.646	11.627	11.662	HH	563	8250	0.67%	0.062%
182	11.677	11.662	11.695	HH	860	11096	0.90%	0.083%
183	11.709	11.695	11.714	HH	414	4115	0.33%	0.031%
184	11.718	11.714	11.738	HH	381	4426	0.36%	0.033%
185	11.758	11.738	11.800	HH	846	17898	1.44%	0.135%
186	11.809	11.800	11.817	HH	201	1846	0.15%	0.014%
187	11.840	11.817	11.847	HH	401	5646	0.46%	0.042%
188	11.874	11.847	11.901	HH	523	9944	0.80%	0.075%
189	11.922	11.901	11.931	HH	278	3759	0.30%	0.028%
190	11.952	11.931	11.976	HH	880	17789	1.44%	0.134%
191	11.980	11.976	12.014	HH	661	11892	0.96%	0.089%
192	12.034	12.014	12.051	HH	546	8678	0.70%	0.065%
193	12.069	12.051	12.076	HH	585	6395	0.52%	0.048%
194	12.099	12.076	12.150	HH	1472	34224	2.76%	0.257%

					rteres			
195	12.158	12.150	12.176	HH	538	5945	0.48%	0.045%
196	12.186	12.176	12.191	HH	334	2801	0.23%	0.021%
197	12.194	12.191	12.198	HH	259	1234	0.10%	0.009%
198	12.222	12.198	12.246	HH	371	8821	0.71%	0.066%
199	12.249	12.246	12.259	HH	270	2014	0.16%	0.015%
200	12.286	12.259	12.313	HH	468	10476	0.85%	0.079%
201	12.347	12.313	12.376	HH	932	20757	1.68%	0.156%
202	12.413	12.376	12.426	HH	680	16024	1.29%	0.121%
203	12.450	12.426	12.492	HH	1291	35211	2.84%	0.265%
204	12.494	12.492	12.500	HH	669	2599	0.21%	0.020%
205	12.504	12.500	12.539	HH	627	11990	0.97%	0.090%
206	12.561	12.539	12.577	HH	737	12595	1.02%	0.095%
207	12.603	12.577	12.666	HH	85199	1059614	85.54%	7.969%
208	12.680	12.666	12.698	HH	2258	36227	2.92%	0.272%
209	12.710	12.698	12.752	HH	1690	44976	3.63%	0.338%
210	12.755	12.752	12.791	HH	1058	22044	1.78%	0.166%
211	12.799	12.791	12.807	HH	826	7513	0.61%	0.057%
212	12.822	12.807	12.863	HH	901	25896	2.09%	0.195%
213	12.879	12.863	12.892	HH	693	11197	0.90%	0.084%
214	12.928	12.892	12.963	HH	1314	38321	3.09%	0.288%
215	12.990	12.963	13.035	HH	1687	43037	3.47%	0.324%
216	13.071	13.035	13.137	HH	2674	83459	6.74%	0.628%
217	13.144	13.137	13.162	HH	654	8964	0.72%	0.067%
218	13.168	13.162	13.175	HH	626	4495	0.36%	0.034%
219	13.193	13.175	13.228	HH	829	20969	1.69%	0.158%
220	13.249	13.228	13.281	HH	1015	25669	2.07%	0.193%
221	13.286	13.281	13.290	HH	774	4079	0.33%	0.031%
222	13.292	13.290	13.307	HH	770	7402	0.60%	0.056%
223	13.312	13.307	13.326	HH	760	7933	0.64%	0.060%
224	13.353	13.326	13.372	HH	2078	33530	2.71%	0.252%
225	13.399	13.372	13.431	HH	2148	48342	3.90%	0.364%
226	13.438	13.431	13.467	HH	853	15998	1.29%	0.120%
227	13.493	13.467	13.509	HH	719	16555	1.34%	0.125%
228	13.528	13.509	13.537	HH	792	12422	1.00%	0.093%
229	13.551	13.537	13.586	HH	932	19844	1.60%	0.149%
230	13.611	13.586	13.636	HH	1336	31185	2.52%	0.235%
231	13.661	13.636	13.667	HH	1130	19772	1.60%	0.149%
232	13.669	13.667	13.673	HH	1147	3606	0.29%	0.027%
233	13.683	13.673	13.696	HH	1149	15297	1.23%	0.115%
234	13.701	13.696	13.709	HH	1145	9067	0.73%	0.068%
235	13.722	13.709	13.763	HH	1390	36468	2.94%	0.274%
236	13.792	13.763	13.824	HH	1437	41209	3.33%	0.310%
237	13.840	13.824	13.916	HH	3989	104382	8.43%	0.785%
238	13.941	13.916	13.980	HH	1294	41644	3.36%	0.313%
239	14.010	13.980	14.032	HH	1176	32900	2.66%	0.247%
240	14.050	14.032	14.080	HH	1201	28940	2.34%	0.218%
241	14.093	14.080	14.116	HH	1043	20311	1.64%	0.153%
242	14.144	14.116	14.169	HH	3247	56848	4.59%	0.428%
243	14.193	14.169	14.212	HH	2424	42824	3.46%	0.322%
244	14.217	14.212	14.240	HH	1324	19467	1.57%	0.146%
245	14.260	14.240	14.277	HH	1054	22210	1.79%	0.167%
246	14.283	14.277	14.329	HH	1060	29021	2.34%	0.218%

					rteres			
247	14.331	14.329	14.335	HH	958	3249	0.26%	0.024%
248	14.346	14.335	14.358	HH	944	11755	0.95%	0.088%
249	14.364	14.358	14.372	HH	882	7223	0.58%	0.054%
250	14.382	14.372	14.392	HH	957	10502	0.85%	0.079%
251	14.399	14.392	14.402	HH	950	5931	0.48%	0.045%
252	14.434	14.402	14.491	HH	1058	51901	4.19%	0.390%
253	14.497	14.491	14.511	HH	942	11055	0.89%	0.083%
254	14.521	14.511	14.534	HH	1030	13992	1.13%	0.105%
255	14.553	14.534	14.567	HH	1341	24443	1.97%	0.184%
256	14.590	14.567	14.649	HH	3348	96342	7.78%	0.725%
257	14.677	14.649	14.696	HH	1331	35511	2.87%	0.267%
258	14.714	14.696	14.735	HH	1473	32844	2.65%	0.247%
259	14.759	14.735	14.779	HH	2662	51685	4.17%	0.389%
260	14.790	14.779	14.802	HH	1729	22641	1.83%	0.170%
261	14.824	14.802	14.842	HH	2358	47115	3.80%	0.354%
262	14.857	14.842	14.902	HH	1834	57975	4.68%	0.436%
263	14.920	14.902	14.944	HH	1813	38726	3.13%	0.291%
264	14.973	14.944	15.002	HH	2009	54749	4.42%	0.412%
265	15.038	15.002	15.047	HH	1420	37459	3.02%	0.282%
266	15.096	15.047	15.131	HH	90458	1238698	100.00%	9.316%
267	15.146	15.131	15.175	HH	2446	53782	4.34%	0.404%
268	15.191	15.175	15.212	HH	1778	36190	2.92%	0.272%
269	15.274	15.212	15.285	HH	3191	110020	8.88%	0.827%
270	15.297	15.285	15.319	HH	3451	55230	4.46%	0.415%
271	15.344	15.319	15.364	HH	2992	61065	4.93%	0.459%
272	15.396	15.364	15.443	HH	1983	85860	6.93%	0.646%
273	15.489	15.443	15.515	HH	1969	78507	6.34%	0.590%
274	15.557	15.515	15.577	HH	2019	70288	5.67%	0.529%
275	15.609	15.577	15.620	HH	1990	48460	3.91%	0.364%
276	15.683	15.620	15.759	HH	45876	927683	74.89%	6.977%
277	15.778	15.759	15.794	HH	2526	49756	4.02%	0.374%
278	15.836	15.794	15.862	HH	6695	177273	14.31%	1.333%
279	15.896	15.862	15.932	HH	15204	275944	22.28%	2.075%
280	15.950	15.932	15.987	HH	3015	91339	7.37%	0.687%
281	15.994	15.987	16.004	HH	2596	25182	2.03%	0.189%
282	16.071	16.004	16.098	HH	2965	153102	12.36%	1.151%
283	16.144	16.098	16.169	HH	3046	122937	9.92%	0.925%
284	16.205	16.169	16.244	HH	4778	163639	13.21%	1.231%
285	16.252	16.244	16.269	HH	3367	49470	3.99%	0.372%
286	16.286	16.269	16.299	HH	3428	60870	4.91%	0.458%
287	16.323	16.299	16.362	HH	6300	163787	13.22%	1.232%
288	16.387	16.362	16.432	HH	4276	155944	12.59%	1.173%
289	16.448	16.432	16.478	HH	3669	97179	7.85%	0.731%
290	16.519	16.478	16.561	HH	4007	187403	15.13%	1.409%
291	16.623	16.561	16.646	HH	4379	208859	16.86%	1.571%
292	16.703	16.646	16.747	HH	16163	465799	37.60%	3.503%
293	16.772	16.747	16.783	HH	6346	122495	9.89%	0.921%
294	16.806	16.783	16.845	HH	8758	242548	19.58%	1.824%
295	16.887	16.845	16.914	HH	10518	281237	22.70%	2.115%
296	16.931	16.914	16.961	HH	5750	151255	12.21%	1.138%
297	17.006	16.961	17.044	HH	5751	275268	22.22%	2.070%
298	17.078	17.044	17.089	HH	6473	163241	13.18%	1.228%
299	17.120	17.089	17.144	HH	7012	216096	17.45%	1.625%

					rteres			
300	17.182	17.144	17.221	HH	8482	320912	25.91%	2.413%
301	17.277	17.221	17.301	HH	11084	376794	30.42%	2.834%
302	17.325	17.301	17.337	HH	11249	202770	16.37%	1.525%
303	17.353	17.337	17.391	HH	13637	310992	25.11%	2.339%
304	17.434	17.391	17.461	HH	7435	300122	24.23%	2.257%
					Sum of corrected areas:	13297128		

FF071025.M Thu Jul 17 05:02:29 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/07/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-98	SDG No.:	Q2529
Lab Sample ID:	Q2529-05	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	86.9
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016166.D	1	07/16/25 10:00	07/16/25 14:47	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	4130		194	1910	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.5		37 - 130	58%	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\FF071625\
Data File : FF016166.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 14:47
Operator : YP\AJ
Sample : Q2529-05
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-98

Integration File: autoint1.e
Quant Time: Jul 17 03:37:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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	1121698	11.519 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

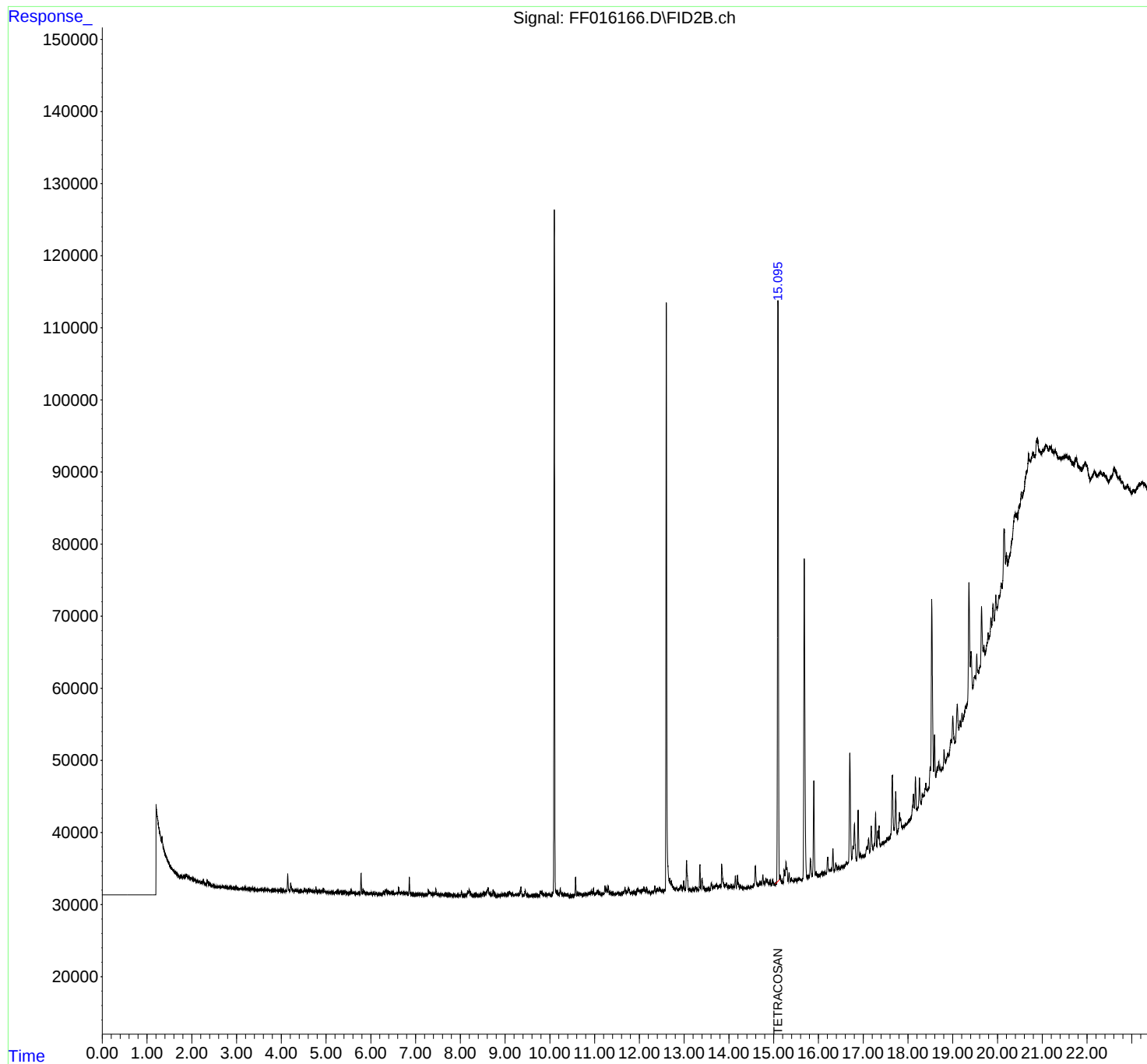
(m)=manual int.

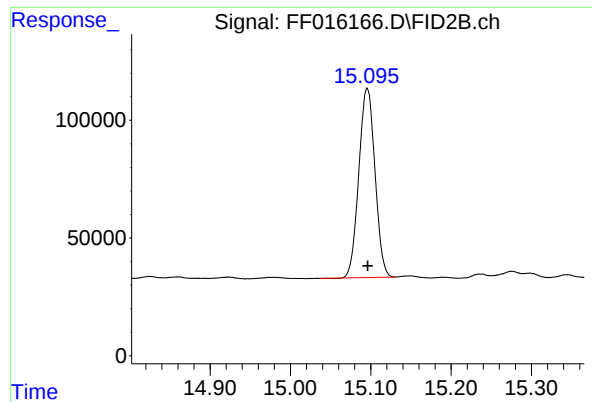
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016166.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 14:47
Operator : YP\AJ
Sample : Q2529-05
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-98

Integration File: autoint1.e
Quant Time: Jul 17 03:37:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.096 min
Delta R.T.: 0.000 min
Response: 1121698
Conc: 11.52 ug/ml

Instrument :
FID_F
ClientSampleId :
TP-98

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016166.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 14:47
Sample : Q2529-05
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.060	4.055	4.078	HH	621	7193	0.58%	0.053%
2	4.083	4.078	4.089	HH	553	3406	0.27%	0.025%
3	4.094	4.089	4.106	HH	582	5336	0.43%	0.039%
4	4.118	4.106	4.122	HH	544	5098	0.41%	0.038%
5	4.144	4.122	4.190	HH	2893	49475	3.99%	0.364%
6	4.210	4.190	4.277	HH	1635	45068	3.63%	0.332%
7	4.282	4.277	4.289	HH	527	3769	0.30%	0.028%
8	4.320	4.289	4.340	HH	734	18286	1.47%	0.135%
9	4.359	4.340	4.396	HH	628	19032	1.53%	0.140%
10	4.410	4.396	4.433	HH	640	11979	0.97%	0.088%
11	4.437	4.433	4.442	HH	534	2682	0.22%	0.020%
12	4.447	4.442	4.464	HH	490	5962	0.48%	0.044%
13	4.468	4.464	4.473	HH	471	2531	0.20%	0.019%
14	4.480	4.473	4.494	HH	505	5907	0.48%	0.044%
15	4.496	4.494	4.499	HH	502	1513	0.12%	0.011%
16	4.520	4.499	4.540	HH	772	15151	1.22%	0.112%
17	4.558	4.540	4.579	HH	725	13657	1.10%	0.101%
18	4.585	4.579	4.592	HH	519	3870	0.31%	0.029%
19	4.611	4.592	4.632	HH	891	15247	1.23%	0.112%
20	4.643	4.632	4.672	HH	614	12781	1.03%	0.094%
21	4.679	4.672	4.684	HH	545	3534	0.28%	0.026%
22	4.689	4.684	4.700	HH	500	4626	0.37%	0.034%
23	4.729	4.700	4.756	HH	555	15578	1.26%	0.115%
24	4.774	4.756	4.795	HH	1123	16772	1.35%	0.124%
25	4.803	4.795	4.822	HH	535	6915	0.56%	0.051%
26	4.845	4.822	4.858	HH	567	9954	0.80%	0.073%
27	4.868	4.858	4.880	HH	464	6002	0.48%	0.044%
28	4.887	4.880	4.898	HH	550	5074	0.41%	0.037%
29	4.927	4.898	4.951	HH	658	18107	1.46%	0.133%
30	4.953	4.951	4.965	HH	685	4523	0.36%	0.033%
31	4.968	4.965	5.012	HH	502	11419	0.92%	0.084%
32	5.018	5.012	5.026	HH	434	3004	0.24%	0.022%
33	5.031	5.026	5.034	HH	374	1713	0.14%	0.013%
34	5.037	5.034	5.045	HH	393	2421	0.20%	0.018%
35	5.051	5.045	5.054	HH	393	1803	0.15%	0.013%
36	5.069	5.054	5.077	HH	399	4757	0.38%	0.035%

					rteres			
37	5.081	5.077	5.092	HH	366	2857	0.23%	0.021%
38	5.097	5.092	5.112	HH	350	4026	0.32%	0.030%
39	5.117	5.112	5.123	HH	381	2214	0.18%	0.016%
40	5.127	5.123	5.138	HH	374	2932	0.24%	0.022%
41	5.152	5.138	5.157	HH	382	3819	0.31%	0.028%
42	5.162	5.157	5.170	HH	393	2733	0.22%	0.020%
43	5.175	5.170	5.179	HH	367	1644	0.13%	0.012%
44	5.184	5.179	5.205	HH	359	4710	0.38%	0.035%
45	5.209	5.205	5.219	HH	324	2337	0.19%	0.017%
46	5.247	5.219	5.255	HH	443	7395	0.60%	0.054%
47	5.266	5.255	5.303	HH	534	10382	0.84%	0.076%
48	5.328	5.303	5.362	HH	510	13121	1.06%	0.097%
49	5.366	5.362	5.387	HH	354	4372	0.35%	0.032%
50	5.406	5.387	5.457	HH	471	13814	1.11%	0.102%
51	5.463	5.457	5.485	HH	259	4083	0.33%	0.030%
52	5.488	5.485	5.510	HH	283	3297	0.27%	0.024%
53	5.555	5.510	5.582	HH	802	14981	1.21%	0.110%
54	5.588	5.582	5.609	HH	375	4480	0.36%	0.033%
55	5.616	5.609	5.626	HH	253	2253	0.18%	0.017%
56	5.629	5.626	5.633	HH	262	982	0.08%	0.007%
57	5.637	5.633	5.650	HH	271	2452	0.20%	0.018%
58	5.657	5.650	5.679	HH	240	3219	0.26%	0.024%
59	5.688	5.679	5.715	HH	262	4142	0.33%	0.031%
60	5.727	5.715	5.742	HH	210	2893	0.23%	0.021%
61	5.753	5.742	5.758	HH	264	1978	0.16%	0.015%
62	5.782	5.758	5.809	HH	2986	34282	2.76%	0.252%
63	5.827	5.809	5.868	HH	805	14467	1.17%	0.107%
64	5.876	5.868	5.885	HH	274	2418	0.19%	0.018%
65	5.891	5.885	5.906	HH	275	2391	0.19%	0.018%
66	5.914	5.906	5.927	HH	237	2348	0.19%	0.017%
67	5.934	5.927	5.969	HH	271	4787	0.39%	0.035%
68	5.986	5.969	6.004	HH	245	4197	0.34%	0.031%
69	6.011	6.004	6.043	HH	325	5525	0.45%	0.041%
70	6.048	6.043	6.053	HH	193	1055	0.09%	0.008%
71	6.067	6.053	6.089	HH	322	4793	0.39%	0.035%
72	6.094	6.089	6.100	HH	171	813	0.07%	0.006%
73	6.119	6.100	6.141	HH	356	5215	0.42%	0.038%
74	6.145	6.141	6.167	HH	180	1533	0.12%	0.011%
75	6.177	6.167	6.197	HH	160	2136	0.17%	0.016%
76	6.218	6.197	6.224	HH	166	1613	0.13%	0.012%
77	6.226	6.224	6.238	HH	149	914	0.07%	0.007%
78	6.287	6.238	6.309	HH	476	8961	0.72%	0.066%
79	6.325	6.309	6.334	HH	586	6578	0.53%	0.048%
80	6.340	6.334	6.381	HH	673	12528	1.01%	0.092%
81	6.395	6.381	6.412	HH	511	6862	0.55%	0.051%
82	6.416	6.412	6.452	HH	287	5388	0.43%	0.040%
83	6.476	6.462	6.483	HH	273	2622	0.21%	0.019%
84	6.502	6.483	6.539	HH	377	8537	0.69%	0.063%
85	6.546	6.539	6.553	HH	203	1330	0.11%	0.010%
86	6.558	6.553	6.562	HH	187	959	0.08%	0.007%
87	6.573	6.562	6.599	HH	299	4830	0.39%	0.036%
88	6.624	6.599	6.667	HH	1005	17045	1.37%	0.126%
89	6.675	6.667	6.682	HH	291	2172	0.18%	0.016%

					rteres			
90	6.684	6.682	6.687	HH	259	669	0.05%	0.005%
91	6.698	6.687	6.702	HH	345	2266	0.18%	0.017%
92	6.705	6.702	6.758	HH	305	7443	0.60%	0.055%
93	6.767	6.758	6.819	HH	214	6796	0.55%	0.050%
94	6.828	6.819	6.838	HH	138	1090	0.09%	0.008%
95	6.860	6.838	6.920	HH	2391	28496	2.30%	0.210%
96	6.929	6.920	6.937	HH	86	783	0.06%	0.006%
97	6.948	6.937	6.980	HH	191	1568	0.13%	0.012%
98	7.002	6.980	7.017	PH	139	1090	0.09%	0.008%
99	7.020	7.017	7.026	PH	1	-69	-0.01%	-0.001%
100	7.261	7.255	7.263	PH	5	-118	-0.01%	-0.001%
101	7.285	7.263	7.310	PH	741	9907	0.80%	0.073%
102	7.321	7.310	7.347	HH	286	4505	0.36%	0.033%
103	7.352	7.347	7.387	PH	157	1396	0.11%	0.010%
104	7.390	7.387	7.394	PH	59	34	0.00%	0.000%
105	7.400	7.394	7.406	PH	39	156	0.01%	0.001%
106	7.428	7.406	7.435	PH	232	2093	0.17%	0.015%
107	7.453	7.435	7.485	HH	768	8219	0.66%	0.061%
108	7.504	7.485	7.508	PH	68	188	0.02%	0.001%
109	8.026	8.000	8.094	PH	548	1532	0.12%	0.011%
110	8.164	8.138	8.181	PH	426	5573	0.45%	0.041%
111	8.197	8.181	8.212	HH	756	8845	0.71%	0.065%
112	8.227	8.212	8.259	HH	274	3043	0.25%	0.022%
113	8.513	8.465	8.534	PH	260	3382	0.27%	0.025%
114	8.551	8.534	8.564	HH	247	2621	0.21%	0.019%
115	8.619	8.564	8.664	HH	979	26011	2.10%	0.192%
116	8.679	8.664	8.703	HH	291	2413	0.19%	0.018%
117	8.733	8.703	8.800	PH	694	8597	0.69%	0.063%
118	8.988	8.967	9.020	PH	218	1829	0.15%	0.013%
119	9.032	9.020	9.075	PH	158	1609	0.13%	0.012%
120	9.095	9.075	9.144	HH	406	8042	0.65%	0.059%
121	9.159	9.144	9.198	HH	131	617	0.05%	0.005%
122	9.294	9.266	9.320	PH	99	1291	0.10%	0.010%
123	9.350	9.320	9.408	PH	1045	15500	1.25%	0.114%
124	9.450	9.408	9.477	PH	686	5646	0.46%	0.042%
125	9.785	9.763	9.810	PH	521	6247	0.50%	0.046%
126	9.828	9.810	9.854	HH	374	4850	0.39%	0.036%
127	10.099	10.033	10.159	PH	95038	994200	80.18%	7.322%
128	10.164	10.159	10.202	HH	401	4056	0.33%	0.030%
129	10.232	10.202	10.315	PH	858	13566	1.09%	0.100%
130	10.336	10.315	10.379	PH	141	-654	-0.05%	-0.005%
131	10.574	10.524	10.600	PH	2405	24037	1.94%	0.177%
132	10.620	10.600	10.642	PH	244	2814	0.23%	0.021%
133	10.675	10.642	10.695	PH	182	3355	0.27%	0.025%
134	10.708	10.695	10.735	HH	112	115	0.01%	0.001%
135	10.757	10.735	10.770	PH	133	558	0.05%	0.004%
136	10.787	10.770	10.802	HH	158	1386	0.11%	0.010%
137	10.835	10.802	10.845	PH	158	1829	0.15%	0.013%
138	10.876	10.845	10.894	HH	310	5380	0.43%	0.040%
139	10.900	10.894	10.912	HH	238	2099	0.17%	0.015%
140	10.926	10.912	10.945	HH	565	7280	0.59%	0.054%
141	10.972	10.945	11.007	HH	834	12723	1.03%	0.094%

					rteres			
142	11.046	11.007	11.055	PH	425	6452	0.52%	0.048%
143	11.073	11.055	11.095	HH	583	9011	0.73%	0.066%
144	11.107	11.095	11.149	HH	240	3631	0.29%	0.027%
145	11.194	11.149	11.209	HH	174	3733	0.30%	0.027%
146	11.229	11.209	11.244	HH	1273	14483	1.17%	0.107%
147	11.257	11.244	11.285	HH	1027	17172	1.38%	0.126%
148	11.305	11.285	11.332	HH	1148	18737	1.51%	0.138%
149	11.346	11.332	11.384	HH	261	6717	0.54%	0.049%
150	11.404	11.384	11.464	HH	213	7063	0.57%	0.052%
151	11.484	11.464	11.507	HH	205	4171	0.34%	0.031%
152	11.523	11.507	11.568	HH	263	6312	0.51%	0.046%
153	11.612	11.568	11.627	HH	284	6870	0.55%	0.051%
154	11.648	11.627	11.659	HH	504	6555	0.53%	0.048%
155	11.678	11.659	11.714	HH	1046	18485	1.49%	0.136%
156	11.721	11.714	11.735	HH	410	4322	0.35%	0.032%
157	11.759	11.735	11.815	HH	945	23690	1.91%	0.174%
158	11.833	11.815	11.855	HH	396	6921	0.56%	0.051%
159	11.873	11.855	11.902	HH	508	8536	0.69%	0.063%
160	11.951	11.902	11.972	HH	815	18663	1.51%	0.137%
161	11.981	11.972	12.012	HH	586	13129	1.06%	0.097%
162	12.034	12.012	12.050	HH	733	12000	0.97%	0.088%
163	12.068	12.050	12.082	HH	828	12137	0.98%	0.089%
164	12.100	12.082	12.136	HH	1028	23968	1.93%	0.177%
165	12.161	12.136	12.198	HH	1069	23254	1.88%	0.171%
166	12.217	12.198	12.240	HH	517	9469	0.76%	0.070%
167	12.259	12.240	12.269	HH	279	4073	0.33%	0.030%
168	12.285	12.269	12.305	HH	510	8179	0.66%	0.060%
169	12.348	12.305	12.374	HH	1225	26864	2.17%	0.198%
170	12.396	12.374	12.423	HH	938	19674	1.59%	0.145%
171	12.444	12.423	12.491	HH	946	30168	2.43%	0.222%
172	12.508	12.491	12.534	HH	665	15096	1.22%	0.111%
173	12.563	12.534	12.579	HH	794	16041	1.29%	0.118%
174	12.602	12.579	12.669	HH	82117	1054587	85.05%	7.767%
175	12.679	12.669	12.697	HH	2269	33647	2.71%	0.248%
176	12.711	12.697	12.799	HH	1844	74629	6.02%	0.550%
177	12.824	12.799	12.869	HH	886	33624	2.71%	0.248%
178	12.887	12.869	12.900	HH	911	14380	1.16%	0.106%
179	12.931	12.900	12.960	HH	1351	35860	2.89%	0.264%
180	12.991	12.960	13.025	HH	1974	43103	3.48%	0.317%
181	13.055	13.025	13.104	HH	4726	99172	8.00%	0.730%
182	13.111	13.104	13.145	HH	769	17138	1.38%	0.126%
183	13.155	13.145	13.170	HH	671	9407	0.76%	0.069%
184	13.192	13.170	13.224	HH	947	23475	1.89%	0.173%
185	13.248	13.224	13.325	HH	1051	49059	3.96%	0.361%
186	13.353	13.325	13.374	HH	4188	59634	4.81%	0.439%
187	13.399	13.374	13.430	HH	2261	50766	4.09%	0.374%
188	13.439	13.430	13.472	HH	1043	20369	1.64%	0.150%
189	13.497	13.472	13.505	HH	799	14799	1.19%	0.109%
190	13.550	13.505	13.575	HH	998	33617	2.71%	0.248%
191	13.606	13.575	13.635	HH	1643	40697	3.28%	0.300%
192	13.722	13.635	13.765	HH	1419	91322	7.36%	0.673%
193	13.790	13.765	13.822	HH	1233	39203	3.16%	0.289%
194	13.840	13.822	13.912	HH	4140	112250	9.05%	0.827%

					rteres			
195	13.944	13.912	13.972	HH	1701	47648	3.84%	0.351%
196	14.006	13.972	14.032	HH	1138	38669	3.12%	0.285%
197	14.053	14.032	14.074	HH	1448	29551	2.38%	0.218%
198	14.092	14.074	14.110	HH	1252	24176	1.95%	0.178%
199	14.143	14.110	14.167	HH	2622	52948	4.27%	0.390%
200	14.192	14.167	14.239	HH	2656	69946	5.64%	0.515%
201	14.260	14.239	14.280	HH	1315	28000	2.26%	0.206%
202	14.292	14.280	14.327	HH	1071	27608	2.23%	0.203%
203	14.344	14.327	14.363	HH	1029	20174	1.63%	0.149%
204	14.431	14.363	14.468	HH	1104	62945	5.08%	0.464%
205	14.511	14.468	14.534	HH	1159	41650	3.36%	0.307%
206	14.551	14.534	14.563	HH	1439	23487	1.89%	0.173%
207	14.590	14.563	14.664	HH	3961	123501	9.96%	0.910%
208	14.681	14.664	14.695	HH	1634	28247	2.28%	0.208%
209	14.716	14.695	14.736	HH	1855	39624	3.20%	0.292%
210	14.758	14.736	14.782	HH	2797	56382	4.55%	0.415%
211	14.790	14.782	14.803	HH	1658	19831	1.60%	0.146%
212	14.825	14.803	14.843	HH	2314	46864	3.78%	0.345%
213	14.860	14.843	14.900	HH	2167	60097	4.85%	0.443%
214	14.923	14.900	14.949	HH	2075	48870	3.94%	0.360%
215	14.977	14.949	15.020	HH	1953	69988	5.64%	0.515%
216	15.096	15.020	15.132	HH	82341	1239966	100.00%	9.132%
217	15.148	15.132	15.175	HH	2641	56280	4.54%	0.414%
218	15.191	15.175	15.210	HH	2008	38802	3.13%	0.286%
219	15.236	15.210	15.250	HH	3308	61419	4.95%	0.452%
220	15.276	15.250	15.322	HH	4501	143459	11.57%	1.057%
221	15.344	15.322	15.379	HH	3077	80031	6.45%	0.589%
222	15.398	15.379	15.440	HH	2365	75641	6.10%	0.557%
223	15.497	15.440	15.519	HH	2127	94938	7.66%	0.699%
224	15.544	15.519	15.575	HH	2243	71529	5.77%	0.527%
225	15.591	15.575	15.626	HH	2216	64129	5.17%	0.472%
226	15.683	15.626	15.752	HH	46195	939088	75.73%	6.916%
227	15.778	15.752	15.795	HH	2653	64537	5.20%	0.475%
228	15.822	15.795	15.857	HH	4952	131270	10.59%	0.967%
229	15.897	15.857	15.935	HH	15820	305195	24.61%	2.248%
230	15.948	15.935	15.984	HH	3238	83565	6.74%	0.615%
231	15.996	15.984	16.011	HH	2719	44009	3.55%	0.324%
232	16.023	16.011	16.034	HH	2711	35894	2.89%	0.264%
233	16.074	16.034	16.099	HH	3109	114630	9.24%	0.844%
234	16.143	16.099	16.170	HH	3127	127516	10.28%	0.939%
235	16.205	16.170	16.269	HH	5144	223049	17.99%	1.643%
236	16.287	16.269	16.299	HH	3646	63062	5.09%	0.464%
237	16.324	16.299	16.358	HH	6393	158174	12.76%	1.165%
238	16.388	16.358	16.427	HH	4434	157034	12.66%	1.157%
239	16.454	16.427	16.485	HH	3872	129050	10.41%	0.950%
240	16.525	16.485	16.558	HH	4049	168814	13.61%	1.243%
241	16.625	16.558	16.645	HH	4486	216314	17.45%	1.593%
242	16.702	16.645	16.745	HH	19548	532575	42.95%	3.922%
243	16.772	16.745	16.781	HH	6709	130385	10.52%	0.960%
244	16.804	16.781	16.850	HH	9816	292792	23.61%	2.156%
245	16.887	16.850	16.917	HH	11793	291784	23.53%	2.149%
246	16.932	16.917	16.952	HH	5825	116383	9.39%	0.857%

						rteres		
247	16.971	16.952	17.032	HH	5406	256223	20.66%	1.887%
248	17.080	17.032	17.090	HH	6548	207032	16.70%	1.525%
249	17.120	17.090	17.149	HH	7908	240435	19.39%	1.771%
250	17.180	17.149	17.221	HH	9554	318412	25.68%	2.345%
251	17.277	17.221	17.304	HH	11343	395855	31.92%	2.915%
252	17.326	17.304	17.339	HH	8895	166726	13.45%	1.228%
253	17.354	17.339	17.382	HH	9536	211102	17.02%	1.555%
254	17.436	17.382	17.454	HH	7218	306110	24.69%	2.254%
					Sum of corrected areas:	13578190		

FF071025.M Thu Jul 17 05:04:50 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/07/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-102	SDG No.:	Q2529
Lab Sample ID:	Q2529-06	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	95.6
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
FF016183.D	2	07/16/25 10:00	07/17/25 9:58	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	38600		353	3480	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	7.78		37 - 130	78%	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\FF071725\
Data File : FF016183.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 09:58
Operator : YP\AJ
Sample : Q2529-06 2X
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-102

Integration File: autoint1.e
Quant Time: Jul 18 04:09:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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...	15.089	757390	7.778 ug/mlm

Target Compounds

(f)=RT Delta > 1/2 Window

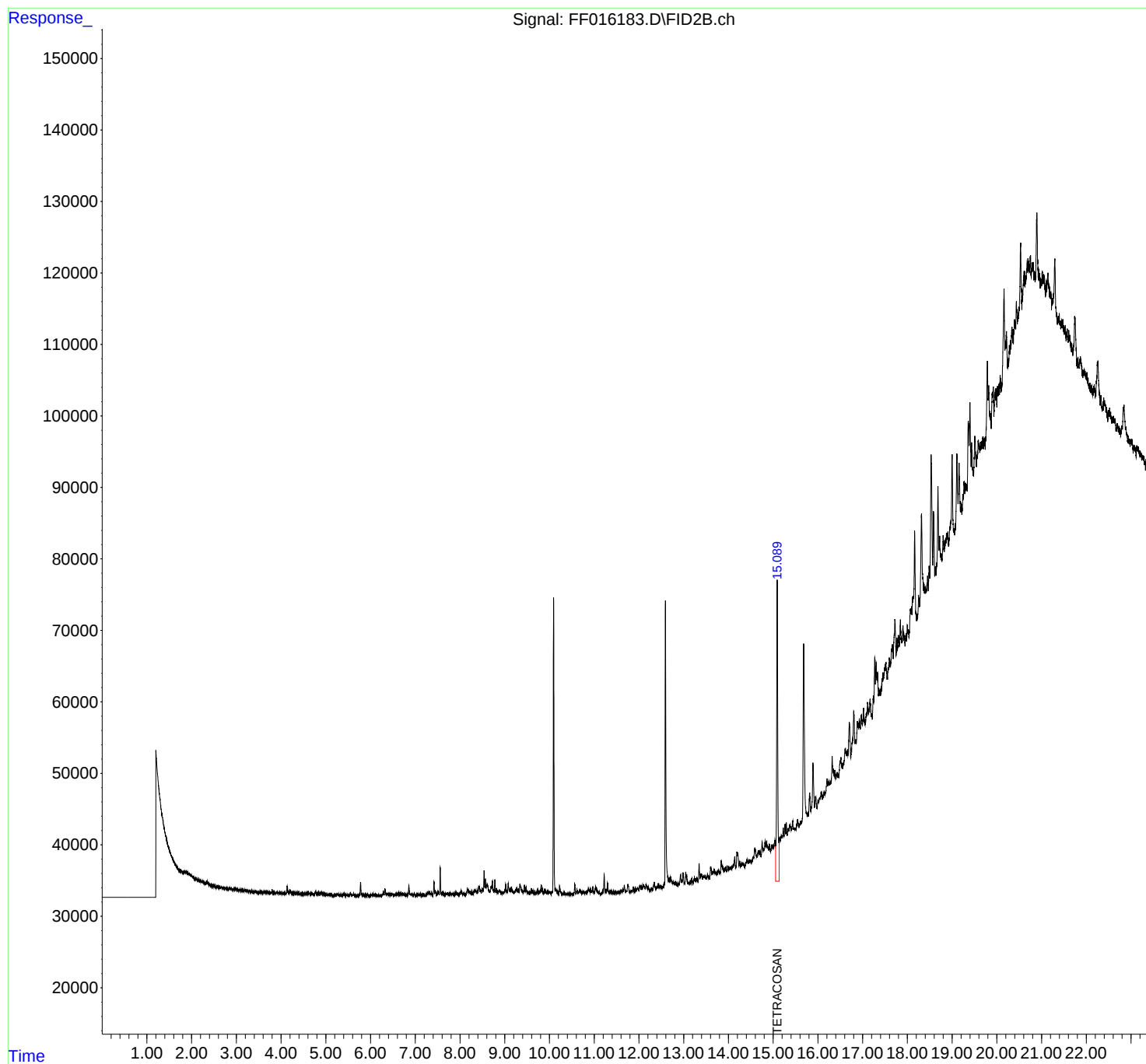
(m)=manual int.

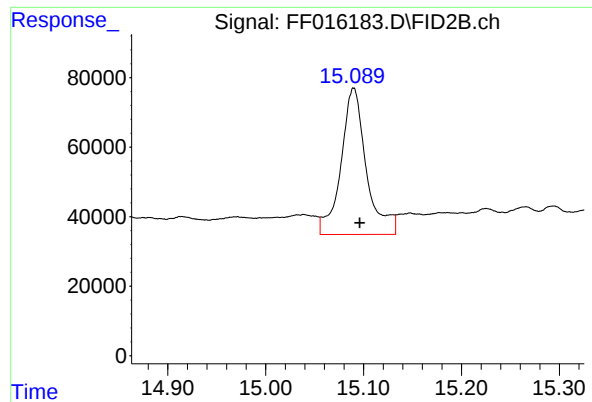
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
Data File : FF016183.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 09:58
Operator : YP\AJ
Sample : Q2529-06 2X
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-102

Integration File: autoint1.e
Quant Time: Jul 18 04:09:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.089 min
Delta R.T.: -0.007 min
Response: 757390
Conc: 7.78 ug/ml

Instrument :
FID_F
ClientSampleId :
TP-102

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
 Data File : FF016183.D
 Signal(s) : FID2B.ch
 Acq On : 17 Jul 2025 09:58
 Sample : Q2529-06 2X
 Misc :
 ALS Vial : 71 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
 Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.031	4.013	4.034	HH	601	6934	0.27%	0.011%
2	4.042	4.034	4.067	HH	616	11223	0.44%	0.017%
3	4.072	4.067	4.096	HH	609	9292	0.36%	0.014%
4	4.102	4.096	4.109	HH	571	4283	0.17%	0.007%
5	4.136	4.109	4.156	HH	1553	27025	1.05%	0.042%
6	4.161	4.156	4.176	HH	659	7348	0.29%	0.011%
7	4.196	4.176	4.221	HH	1044	21287	0.83%	0.033%
8	4.227	4.221	4.279	HH	728	21797	0.85%	0.034%
9	4.282	4.279	4.291	HH	554	3789	0.15%	0.006%
10	4.303	4.291	4.314	HH	642	8144	0.32%	0.013%
11	4.318	4.314	4.331	HH	682	5822	0.23%	0.009%
12	4.335	4.331	4.338	HH	578	2350	0.09%	0.004%
13	4.343	4.338	4.357	HH	600	6620	0.26%	0.010%
14	4.362	4.357	4.387	HH	670	10941	0.43%	0.017%
15	4.391	4.387	4.428	HH	593	12734	0.50%	0.020%
16	4.432	4.428	4.459	HH	526	9051	0.35%	0.014%
17	4.469	4.459	4.480	HH	602	6241	0.24%	0.010%
18	4.491	4.480	4.496	HH	529	4574	0.18%	0.007%
19	4.517	4.496	4.541	HH	599	14018	0.55%	0.022%
20	4.550	4.541	4.553	HH	525	3826	0.15%	0.006%
21	4.559	4.553	4.568	HH	560	4514	0.18%	0.007%
22	4.571	4.568	4.575	HH	534	2016	0.08%	0.003%
23	4.578	4.575	4.591	HH	522	4698	0.18%	0.007%
24	4.601	4.591	4.622	HH	781	10828	0.42%	0.017%
25	4.629	4.622	4.650	HH	552	8365	0.33%	0.013%
26	4.654	4.650	4.706	HH	531	15067	0.59%	0.023%
27	4.711	4.706	4.715	HH	501	2477	0.10%	0.004%
28	4.721	4.715	4.736	HH	501	5560	0.22%	0.009%
29	4.741	4.736	4.745	HH	500	2378	0.09%	0.004%
30	4.770	4.745	4.800	HH	811	18741	0.73%	0.029%
31	4.804	4.800	4.822	HH	504	6549	0.25%	0.010%
32	4.828	4.822	4.831	HH	617	2773	0.11%	0.004%
33	4.835	4.831	4.858	HH	640	8937	0.35%	0.014%
34	4.863	4.858	4.869	HH	526	3446	0.13%	0.005%
35	4.875	4.869	4.892	HH	592	7671	0.30%	0.012%
36	4.895	4.892	4.899	HH	541	2188	0.09%	0.003%

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37	4.926	4.899	4.961	HH	667	19382	0.75%	0.030%
38	4.965	4.961	4.988	HH	473	6571	0.26%	0.010%
39	4.994	4.988	5.026	HH	420	8599	0.33%	0.013%
40	5.042	5.026	5.064	HH	420	8542	0.33%	0.013%
41	5.077	5.064	5.099	HH	416	7360	0.29%	0.011%
42	5.115	5.099	5.144	HH	408	9556	0.37%	0.015%
43	5.150	5.144	5.204	HH	304	10425	0.41%	0.016%
44	5.238	5.204	5.245	HH	350	7120	0.28%	0.011%
45	5.255	5.245	5.272	HH	432	6165	0.24%	0.010%
46	5.316	5.272	5.338	HH	411	12931	0.50%	0.020%
47	5.365	5.338	5.373	HH	364	6386	0.25%	0.010%
48	5.401	5.373	5.431	HH	549	12757	0.50%	0.020%
49	5.435	5.431	5.446	HH	340	2501	0.10%	0.004%
50	5.453	5.446	5.463	HH	313	2918	0.11%	0.005%
51	5.484	5.463	5.501	HH	332	6347	0.25%	0.010%
52	5.506	5.501	5.511	HH	275	1573	0.06%	0.002%
53	5.516	5.511	5.527	HH	272	2436	0.09%	0.004%
54	5.549	5.527	5.574	HH	675	11682	0.45%	0.018%
55	5.580	5.574	5.591	HH	366	3151	0.12%	0.005%
56	5.594	5.591	5.602	HH	331	1877	0.07%	0.003%
57	5.608	5.602	5.619	HH	355	3557	0.14%	0.005%
58	5.624	5.619	5.646	HH	410	4964	0.19%	0.008%
59	5.649	5.646	5.661	HH	308	2576	0.10%	0.004%
60	5.664	5.661	5.676	HH	297	2107	0.08%	0.003%
61	5.681	5.676	5.699	HH	266	3178	0.12%	0.005%
62	5.718	5.699	5.727	HH	237	3476	0.14%	0.005%
63	5.777	5.727	5.806	HH	2120	33163	1.29%	0.051%
64	5.815	5.806	5.864	HH	512	11575	0.45%	0.018%
65	5.870	5.864	5.874	HH	280	1666	0.06%	0.003%
66	5.878	5.874	5.891	HH	329	2588	0.10%	0.004%
67	5.896	5.891	5.902	HH	267	1658	0.06%	0.003%
68	5.933	5.902	5.974	HH	504	12651	0.49%	0.020%
69	6.005	5.974	6.026	HH	406	9411	0.37%	0.015%
70	6.062	6.026	6.091	HH	469	12562	0.49%	0.019%
71	6.098	6.091	6.164	HH	417	13348	0.52%	0.021%
72	6.175	6.164	6.181	HH	320	2716	0.11%	0.004%
73	6.185	6.181	6.202	HH	316	3160	0.12%	0.005%
74	6.221	6.202	6.243	HH	307	6270	0.24%	0.010%
75	6.281	6.243	6.301	HH	687	13825	0.54%	0.021%
76	6.320	6.301	6.361	HH	1181	23935	0.93%	0.037%
77	6.371	6.361	6.398	HH	512	9287	0.36%	0.014%
78	6.427	6.398	6.449	HH	445	10599	0.41%	0.016%
79	6.467	6.449	6.484	HH	490	8122	0.32%	0.013%
80	6.492	6.484	6.538	HH	518	12445	0.48%	0.019%
81	6.572	6.538	6.600	HH	460	14140	0.55%	0.022%
82	6.618	6.600	6.641	HH	700	12071	0.47%	0.019%
83	6.649	6.641	6.659	HH	433	4357	0.17%	0.007%
84	6.671	6.659	6.677	HH	487	4408	0.17%	0.007%
85	6.698	6.677	6.715	HH	482	9867	0.38%	0.015%
86	6.724	6.715	6.746	HH	527	7950	0.31%	0.012%
87	6.751	6.746	6.764	HH	381	3826	0.15%	0.006%
88	6.778	6.764	6.801	HH	416	7622	0.30%	0.012%
89	6.822	6.801	6.833	HH	373	6046	0.24%	0.009%

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90	6.855	6.833	6.883	HH	1681	24696	0.96%	0.038%
91	6.900	6.883	6.930	HH	473	11116	0.43%	0.017%
92	6.936	6.930	6.957	HH	434	5791	0.23%	0.009%
93	6.982	6.957	6.998	HH	516	9761	0.38%	0.015%
94	7.019	6.998	7.024	HH	283	3688	0.14%	0.006%
95	7.036	7.024	7.041	HH	347	2933	0.11%	0.005%
96	7.047	7.041	7.056	HH	402	3072	0.12%	0.005%
97	7.059	7.056	7.072	HH	386	3136	0.12%	0.005%
98	7.105	7.072	7.138	HH	413	12224	0.48%	0.019%
99	7.148	7.138	7.166	HH	314	4661	0.18%	0.007%
100	7.190	7.166	7.204	HH	502	8090	0.31%	0.012%
101	7.217	7.204	7.226	HH	371	4286	0.17%	0.007%
102	7.252	7.226	7.257	HH	375	5952	0.23%	0.009%
103	7.281	7.257	7.286	HH	674	8614	0.34%	0.013%
104	7.290	7.286	7.303	HH	648	5849	0.23%	0.009%
105	7.319	7.303	7.337	HH	835	12805	0.50%	0.020%
106	7.353	7.337	7.384	HH	558	12357	0.48%	0.019%
107	7.418	7.384	7.435	HH	2182	30561	1.19%	0.047%
108	7.447	7.435	7.489	HH	947	18570	0.72%	0.029%
109	7.511	7.489	7.535	HH	924	17059	0.66%	0.026%
110	7.557	7.535	7.587	HH	4175	49536	1.93%	0.077%
111	7.602	7.587	7.619	HH	678	10061	0.39%	0.016%
112	7.629	7.619	7.665	HH	556	12307	0.48%	0.019%
113	7.687	7.665	7.696	HH	514	8342	0.32%	0.013%
114	7.699	7.696	7.704	HH	513	2447	0.10%	0.004%
115	7.733	7.704	7.747	HH	602	13148	0.51%	0.020%
116	7.754	7.747	7.768	HH	420	4771	0.19%	0.007%
117	7.787	7.768	7.812	HH	607	12933	0.50%	0.020%
118	7.817	7.812	7.837	HH	558	6851	0.27%	0.011%
119	7.864	7.837	7.877	HH	530	10695	0.42%	0.017%
120	7.882	7.877	7.896	HH	485	5316	0.21%	0.008%
121	7.912	7.896	7.944	HH	713	15348	0.60%	0.024%
122	7.966	7.944	7.977	HH	544	8955	0.35%	0.014%
123	7.997	7.977	8.002	HH	472	5905	0.23%	0.009%
124	8.025	8.002	8.057	HH	1006	21199	0.83%	0.033%
125	8.072	8.057	8.104	HH	541	12408	0.48%	0.019%
126	8.108	8.104	8.141	HH	474	9362	0.36%	0.014%
127	8.164	8.141	8.181	HH	1104	20489	0.80%	0.032%
128	8.192	8.181	8.204	HH	989	11389	0.44%	0.018%
129	8.217	8.204	8.243	HH	842	15742	0.61%	0.024%
130	8.261	8.243	8.284	HH	828	15004	0.58%	0.023%
131	8.320	8.284	8.338	HH	1090	24983	0.97%	0.039%
132	8.352	8.338	8.377	HH	1018	18832	0.73%	0.029%
133	8.393	8.377	8.403	HH	953	12141	0.47%	0.019%
134	8.419	8.403	8.429	HH	1555	19789	0.77%	0.031%
135	8.432	8.429	8.450	HH	1503	14591	0.57%	0.023%
136	8.459	8.450	8.476	HH	986	12886	0.50%	0.020%
137	8.498	8.476	8.519	HH	1181	25903	1.01%	0.040%
138	8.539	8.519	8.554	HH	3713	46821	1.82%	0.072%
139	8.567	8.554	8.585	HH	2574	34765	1.35%	0.054%
140	8.615	8.585	8.667	HH	1750	62084	2.42%	0.096%
141	8.696	8.667	8.707	HH	1521	27851	1.08%	0.043%

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142	8.724	8.707	8.758	HH	2281	43274	1.68%	0.067%
143	8.780	8.758	8.801	HH	2454	37209	1.45%	0.057%
144	8.815	8.801	8.837	HH	1153	19438	0.76%	0.030%
145	8.840	8.837	8.852	HH	745	5895	0.23%	0.009%
146	8.884	8.852	8.956	HH	928	42781	1.67%	0.066%
147	8.978	8.956	8.994	HH	811	16318	0.64%	0.025%
148	9.022	8.994	9.042	HH	1825	34107	1.33%	0.053%
149	9.047	9.042	9.055	HH	744	5607	0.22%	0.009%
150	9.078	9.055	9.104	HH	1964	37417	1.46%	0.058%
151	9.118	9.104	9.126	HH	1102	12802	0.50%	0.020%
152	9.143	9.126	9.178	HH	1305	32092	1.25%	0.050%
153	9.186	9.178	9.202	HH	788	9879	0.38%	0.015%
154	9.217	9.202	9.225	HH	796	10057	0.39%	0.016%
155	9.265	9.225	9.287	HH	1273	36709	1.43%	0.057%
156	9.299	9.287	9.316	HH	1128	16794	0.65%	0.026%
157	9.341	9.316	9.384	HH	1858	51634	2.01%	0.080%
158	9.390	9.384	9.404	HH	901	9709	0.38%	0.015%
159	9.440	9.404	9.462	HH	1734	37994	1.48%	0.059%
160	9.477	9.462	9.521	HH	1417	32126	1.25%	0.050%
161	9.537	9.521	9.561	HH	747	14800	0.58%	0.023%
162	9.593	9.561	9.610	HH	1220	22759	0.89%	0.035%
163	9.624	9.610	9.643	HH	1003	15024	0.58%	0.023%
164	9.655	9.643	9.660	HH	609	5824	0.23%	0.009%
165	9.678	9.660	9.695	HH	736	12653	0.49%	0.020%
166	9.730	9.695	9.759	HH	1065	26506	1.03%	0.041%
167	9.780	9.759	9.793	HH	862	14922	0.58%	0.023%
168	9.815	9.793	9.871	HH	1695	46427	1.81%	0.072%
169	9.896	9.871	9.931	HH	1157	29334	1.14%	0.045%
170	9.939	9.931	9.947	HH	711	6163	0.24%	0.010%
171	9.960	9.947	9.966	HH	866	8882	0.35%	0.014%
172	9.968	9.966	9.978	HH	833	5388	0.21%	0.008%
173	9.995	9.978	10.001	HH	712	9598	0.37%	0.015%
174	10.018	10.001	10.037	HH	783	14486	0.56%	0.022%
175	10.060	10.037	10.064	HH	770	10114	0.39%	0.016%
176	10.092	10.064	10.131	HH	41876	463709	18.05%	0.716%
177	10.138	10.131	10.203	HH	1018	34430	1.34%	0.053%
178	10.226	10.203	10.277	HH	1484	37276	1.45%	0.058%
179	10.291	10.277	10.312	HH	519	10484	0.41%	0.016%
180	10.331	10.312	10.349	HH	697	12370	0.48%	0.019%
181	10.355	10.349	10.376	HH	446	6779	0.26%	0.010%
182	10.398	10.376	10.414	HH	571	10521	0.41%	0.016%
183	10.441	10.414	10.445	HH	506	8128	0.32%	0.013%
184	10.451	10.445	10.462	HH	540	4938	0.19%	0.008%
185	10.466	10.462	10.474	HH	436	2995	0.12%	0.005%
186	10.506	10.474	10.511	HH	508	9472	0.37%	0.015%
187	10.530	10.511	10.541	HH	462	7438	0.29%	0.011%
188	10.566	10.541	10.587	HH	1731	27724	1.08%	0.043%
189	10.615	10.587	10.636	HH	996	21067	0.82%	0.033%
190	10.671	10.636	10.687	HH	931	22742	0.89%	0.035%
191	10.699	10.687	10.725	HH	987	17319	0.67%	0.027%
192	10.742	10.725	10.766	HH	789	16886	0.66%	0.026%
193	10.771	10.766	10.786	HH	712	7537	0.29%	0.012%
194	10.817	10.786	10.822	HH	815	14288	0.56%	0.022%

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195	10.825	10.822	10.843	HH	704	8342	0.32%	0.013%
196	10.870	10.843	10.906	HH	1302	35125	1.37%	0.054%
197	10.919	10.906	10.939	HH	1074	17607	0.69%	0.027%
198	10.945	10.939	10.951	HH	871	5674	0.22%	0.009%
199	10.967	10.951	11.002	HH	1484	30156	1.17%	0.047%
200	11.029	11.002	11.054	HH	1499	34153	1.33%	0.053%
201	11.063	11.054	11.091	HH	1050	18762	0.73%	0.029%
202	11.096	11.091	11.102	HH	660	4570	0.18%	0.007%
203	11.107	11.102	11.135	HH	691	11080	0.43%	0.017%
204	11.144	11.135	11.151	HH	510	4621	0.18%	0.007%
205	11.161	11.151	11.171	HH	596	6461	0.25%	0.010%
206	11.189	11.171	11.201	HH	953	13938	0.54%	0.022%
207	11.222	11.201	11.244	HH	3207	44451	1.73%	0.069%
208	11.250	11.244	11.272	HH	956	14961	0.58%	0.023%
209	11.298	11.272	11.338	HH	1952	43536	1.69%	0.067%
210	11.361	11.338	11.379	HH	863	18554	0.72%	0.029%
211	11.399	11.379	11.408	HH	794	12437	0.48%	0.019%
212	11.411	11.408	11.433	HH	770	11193	0.44%	0.017%
213	11.437	11.433	11.465	HH	783	12882	0.50%	0.020%
214	11.479	11.465	11.502	HH	760	14498	0.56%	0.022%
215	11.531	11.502	11.561	HH	834	24749	0.96%	0.038%
216	11.608	11.561	11.626	HH	947	30431	1.18%	0.047%
217	11.642	11.626	11.655	HH	1106	16102	0.63%	0.025%
218	11.672	11.655	11.704	HH	1709	33245	1.29%	0.051%
219	11.707	11.704	11.712	HH	893	3992	0.16%	0.006%
220	11.717	11.712	11.727	HH	864	7803	0.30%	0.012%
221	11.751	11.727	11.793	HH	1778	48100	1.87%	0.074%
222	11.798	11.793	11.801	HH	727	3438	0.13%	0.005%
223	11.829	11.801	11.841	HH	935	20170	0.79%	0.031%
224	11.875	11.841	11.897	HH	1373	34418	1.34%	0.053%
225	11.919	11.897	11.929	HH	1465	18088	0.70%	0.028%
226	11.955	11.929	11.965	HH	1199	22960	0.89%	0.035%
227	11.972	11.965	11.999	HH	1242	23661	0.92%	0.037%
228	12.026	11.999	12.043	HH	1677	37392	1.46%	0.058%
229	12.058	12.043	12.078	HH	1640	28556	1.11%	0.044%
230	12.099	12.078	12.119	HH	1697	36574	1.42%	0.056%
231	12.125	12.119	12.136	HH	1540	14318	0.56%	0.022%
232	12.156	12.136	12.169	HH	1803	30487	1.19%	0.047%
233	12.176	12.169	12.194	HH	1702	21345	0.83%	0.033%
234	12.207	12.194	12.240	HH	1558	33915	1.32%	0.052%
235	12.246	12.240	12.257	HH	1053	10452	0.41%	0.016%
236	12.280	12.257	12.305	HH	1297	32008	1.25%	0.049%
237	12.344	12.305	12.371	HH	2133	60566	2.36%	0.094%
238	12.388	12.371	12.408	HH	1344	29248	1.14%	0.045%
239	12.432	12.408	12.469	HH	1909	55694	2.17%	0.086%
240	12.481	12.469	12.489	HH	1447	16468	0.64%	0.025%
241	12.501	12.489	12.516	HH	1562	23353	0.91%	0.036%
242	12.534	12.516	12.544	HH	1478	23499	0.91%	0.036%
243	12.563	12.544	12.574	HH	2140	32348	1.26%	0.050%
244	12.592	12.574	12.660	HH	41422	572358	22.28%	0.884%
245	12.676	12.660	12.692	HH	2682	46727	1.82%	0.072%
246	12.707	12.692	12.746	HH	2847	76954	3.00%	0.119%

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247	12.749	12.746	12.764	HH	1989	22011	0.86%	0.034%
248	12.781	12.764	12.800	HH	2100	42395	1.65%	0.065%
249	12.818	12.800	12.859	HH	2172	68560	2.67%	0.106%
250	12.883	12.859	12.892	HH	1935	35818	1.39%	0.055%
251	12.928	12.892	12.953	HH	3057	84923	3.31%	0.131%
252	12.987	12.953	13.023	HH	3429	105935	4.12%	0.164%
253	13.047	13.023	13.093	HH	3533	110792	4.31%	0.171%
254	13.102	13.093	13.111	HH	2058	20743	0.81%	0.032%
255	13.126	13.111	13.141	HH	2092	36451	1.42%	0.056%
256	13.150	13.141	13.160	HH	2153	24363	0.95%	0.038%
257	13.181	13.160	13.217	HH	2632	75617	2.94%	0.117%
258	13.236	13.217	13.242	HH	2627	36930	1.44%	0.057%
259	13.244	13.242	13.268	HH	2646	37379	1.45%	0.058%
260	13.291	13.268	13.316	HH	2695	70806	2.76%	0.109%
261	13.345	13.316	13.373	HH	4660	110268	4.29%	0.170%
262	13.397	13.373	13.422	HH	3204	85545	3.33%	0.132%
263	13.437	13.422	13.448	HH	3015	44183	1.72%	0.068%
264	13.455	13.448	13.468	HH	2966	32946	1.28%	0.051%
265	13.480	13.468	13.510	HH	2952	70464	2.74%	0.109%
266	13.531	13.510	13.576	HH	3115	111048	4.32%	0.171%
267	13.605	13.576	13.631	HH	4219	117315	4.57%	0.181%
268	13.652	13.631	13.662	HH	3561	62858	2.45%	0.097%
269	13.682	13.662	13.700	HH	3882	82613	3.22%	0.128%
270	13.712	13.700	13.727	HH	3537	56011	2.18%	0.087%
271	13.741	13.727	13.752	HH	3493	48665	1.89%	0.075%
272	13.771	13.752	13.789	HH	3752	79271	3.09%	0.122%
273	13.796	13.789	13.814	HH	3639	52704	2.05%	0.081%
274	13.837	13.814	13.909	HH	5068	236069	9.19%	0.365%
275	13.936	13.909	13.965	HH	4246	130078	5.06%	0.201%
276	13.984	13.965	13.989	HH	4238	57025	2.22%	0.088%
277	13.993	13.989	14.027	HH	4202	90911	3.54%	0.140%
278	14.050	14.027	14.067	HH	4235	97943	3.81%	0.151%
279	14.085	14.067	14.097	HH	4371	76807	2.99%	0.119%
280	14.112	14.097	14.122	HH	4550	65549	2.55%	0.101%
281	14.140	14.122	14.164	HH	5682	120610	4.69%	0.186%
282	14.192	14.164	14.201	HH	6379	120638	4.70%	0.186%
283	14.207	14.201	14.234	HH	6050	106668	4.15%	0.165%
284	14.251	14.234	14.271	HH	5008	102279	3.98%	0.158%
285	14.301	14.271	14.307	HH	4667	99179	3.86%	0.153%
286	14.311	14.307	14.321	HH	4696	36852	1.43%	0.057%
287	14.326	14.321	14.331	HH	4616	28407	1.11%	0.044%
288	14.342	14.331	14.359	HH	4661	76675	2.98%	0.118%
289	14.424	14.359	14.444	HH	5269	242215	9.43%	0.374%
290	14.457	14.444	14.466	HH	5102	67664	2.63%	0.104%
291	14.484	14.466	14.512	HH	5195	137931	5.37%	0.213%
292	14.527	14.512	14.533	HH	5098	62106	2.42%	0.096%
293	14.554	14.533	14.562	HH	5621	96341	3.75%	0.149%
294	14.594	14.562	14.637	HH	6913	277702	10.81%	0.429%
295	14.666	14.637	14.686	HH	6530	178753	6.96%	0.276%
296	14.700	14.686	14.729	HH	6408	158031	6.15%	0.244%
297	14.753	14.729	14.773	HH	7777	177690	6.92%	0.274%
298	14.783	14.773	14.794	HH	6834	87826	3.42%	0.136%
299	14.820	14.794	14.838	HH	7875	192375	7.49%	0.297%

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300	14.852	14.838	14.869	HH	7779	136294	5.30%	0.210%
301	14.875	14.869	14.878	HH	7125	36453	1.42%	0.056%
302	14.882	14.878	14.898	HH	7109	85563	3.33%	0.132%
303	14.914	14.898	14.942	HH	7392	180184	7.01%	0.278%
304	14.970	14.942	14.989	HH	7339	195285	7.60%	0.302%
305	15.039	14.989	15.059	HH	8006	309336	12.04%	0.478%
306	15.090	15.059	15.122	HH	44503	796696	31.01%	1.230%
307	15.148	15.122	15.162	HH	8438	194470	7.57%	0.300%
308	15.178	15.162	15.184	HH	8534	107466	4.18%	0.166%
309	15.186	15.184	15.195	HH	8551	57464	2.24%	0.089%
310	15.201	15.195	15.206	HH	8503	51285	2.00%	0.079%
311	15.225	15.206	15.245	HH	9726	211570	8.23%	0.327%
312	15.265	15.245	15.279	HH	10229	195254	7.60%	0.302%
313	15.294	15.279	15.314	HH	10417	196390	7.64%	0.303%
314	15.338	15.314	15.352	HH	9650	216575	8.43%	0.334%
315	15.367	15.352	15.401	HH	10152	287424	11.19%	0.444%
316	15.411	15.401	15.416	HH	9657	80885	3.15%	0.125%
317	15.435	15.416	15.457	HH	10663	251136	9.77%	0.388%
318	15.466	15.457	15.471	HH	9707	79109	3.08%	0.122%
319	15.475	15.471	15.481	HH	9659	58103	2.26%	0.090%
320	15.496	15.481	15.513	HH	9700	179756	7.00%	0.278%
321	15.547	15.513	15.570	HH	10850	353204	13.75%	0.545%
322	15.610	15.570	15.634	HH	10604	395999	15.41%	0.612%
323	15.639	15.634	15.643	HH	10651	56217	2.19%	0.087%
324	15.682	15.643	15.763	HH	35483	1269842	49.42%	1.961%
325	15.777	15.763	15.787	HH	11902	162590	6.33%	0.251%
326	15.816	15.787	15.846	HH	14569	457677	17.81%	0.707%
327	15.889	15.846	15.922	HH	18784	676935	26.35%	1.045%
328	15.946	15.922	15.984	HH	14104	486407	18.93%	0.751%
329	16.002	15.984	16.014	HH	13536	238699	9.29%	0.369%
330	16.037	16.014	16.044	HH	13835	245126	9.54%	0.379%
331	16.072	16.044	16.106	HH	14733	523673	20.38%	0.809%
332	16.112	16.106	16.119	HH	14318	112940	4.40%	0.174%
333	16.141	16.119	16.161	HH	14879	361696	14.08%	0.559%
334	16.206	16.161	16.221	HH	16619	555886	21.64%	0.858%
335	16.242	16.221	16.266	HH	16210	429430	16.71%	0.663%
336	16.320	16.266	16.336	HH	19678	720802	28.05%	1.113%
337	16.343	16.336	16.365	HH	17959	304561	11.85%	0.470%
338	16.381	16.365	16.397	HH	17719	335945	13.08%	0.519%
339	16.404	16.397	16.412	HH	17044	144241	5.61%	0.223%
340	16.433	16.412	16.450	HH	17347	391659	15.24%	0.605%
341	16.455	16.450	16.469	HH	17223	199899	7.78%	0.309%
342	16.513	16.469	16.532	HH	19546	701523	27.30%	1.083%
343	16.542	16.532	16.557	HH	18774	273193	10.63%	0.422%
344	16.606	16.557	16.649	HH	20750	1083062	42.15%	1.673%
345	16.666	16.649	16.672	HH	20658	283542	11.04%	0.438%
346	16.703	16.672	16.736	HH	24457	840424	32.71%	1.298%
347	16.801	16.736	16.827	HH	26068	1229875	47.87%	1.899%
348	16.832	16.827	16.837	HH	21828	136521	5.31%	0.211%
349	16.842	16.837	16.858	HH	21910	271581	10.57%	0.419%
350	16.881	16.858	16.905	HH	24575	659897	25.68%	1.019%
351	16.909	16.905	16.913	HH	23980	110832	4.31%	0.171%

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352	16.925	16.913	16.951	HH	24790	552346	21.50%	0.853%
353	16.972	16.951	16.991	HH	25505	593770	23.11%	0.917%
354	17.021	16.991	17.056	HH	26450	973785	37.90%	1.504%
355	17.079	17.056	17.086	HH	25645	454700	17.70%	0.702%
356	17.091	17.086	17.095	HH	25806	132439	5.15%	0.205%
357	17.110	17.095	17.128	HH	27139	531045	20.67%	0.820%
358	17.136	17.128	17.143	HH	26269	226834	8.83%	0.350%
359	17.149	17.143	17.154	HH	26516	172593	6.72%	0.267%
360	17.166	17.154	17.191	HH	27703	593734	23.11%	0.917%
361	17.196	17.191	17.202	HH	25674	178549	6.95%	0.276%
362	17.209	17.202	17.215	HH	25622	198612	7.73%	0.307%
363	17.238	17.215	17.247	HH	28128	514490	20.02%	0.795%
364	17.270	17.247	17.286	HH	33513	706333	27.49%	1.091%
365	17.301	17.286	17.319	HH	32918	616069	23.98%	0.951%
366	17.332	17.319	17.356	HH	31436	663320	25.82%	1.024%
367	17.362	17.356	17.381	HH	28985	433745	16.88%	0.670%
368	17.391	17.381	17.404	HH	29064	404198	15.73%	0.624%
369	17.454	17.404	17.462	HH	31309	1044677	40.66%	1.613%
370	17.501	17.462	17.510	HH	32523	895619	34.86%	1.383%
371	17.520	17.510	17.555	HH	32804	868026	33.78%	1.341%
372	17.574	17.555	17.579	HH	32065	441248	17.17%	0.681%
373	17.598	17.579	17.611	HH	33439	628252	24.45%	0.970%
374	17.614	17.611	17.625	HH	32858	287918	11.21%	0.445%
375	17.665	17.625	17.683	HH	35225	1177303	45.82%	1.818%
376	17.721	17.683	17.747	HH	38831	1409778	54.87%	2.177%
377	17.766	17.747	17.776	HH	36286	596840	23.23%	0.922%
378	17.801	17.776	17.821	HH	36663	960875	37.40%	1.484%
379	17.843	17.821	17.864	HH	38776	959445	37.34%	1.482%
380	17.868	17.864	17.885	HH	36304	460865	17.94%	0.712%
381	17.901	17.885	17.915	HH	37913	665171	25.89%	1.027%
382	17.931	17.915	17.947	HH	36593	677452	26.37%	1.046%
383	17.972	17.947	17.980	HH	36876	726982	28.29%	1.123%
384	17.997	17.980	18.022	HH	38115	943306	36.71%	1.457%
385	18.026	18.022	18.035	HH	37357	277390	10.80%	0.428%
386	18.068	18.035	18.081	HH	40398	1080702	42.06%	1.669%
387	18.097	18.081	18.103	HH	40561	511670	19.91%	0.790%
388	18.162	18.103	18.202	HH	51241	2569327	100.00%	3.968%
389	18.213	18.202	18.221	HH	39530	454839	17.70%	0.702%
390	18.225	18.221	18.229	HH	39530	191582	7.46%	0.296%
391	18.249	18.229	18.269	HH	42255	970919	37.79%	1.499%
392	18.274	18.269	18.278	HH	41650	222226	8.65%	0.343%
393	18.317	18.278	18.354	HH	53698	2146763	83.55%	3.315%
394	18.359	18.354	18.371	HH	43769	434466	16.91%	0.671%
395	18.373	18.371	18.380	HH	43790	228535	8.89%	0.353%
396	18.385	18.380	18.391	HH	43211	286995	11.17%	0.443%
397	18.395	18.391	18.425	HH	43287	893062	34.76%	1.379%
398	18.451	18.425	18.456	HH	44978	809170	31.49%	1.250%
399	18.459	18.456	18.467	HH	44218	288553	11.23%	0.446%
400	18.485	18.467	18.500	HH	46221	900011	35.03%	1.390%
401	18.531	18.500	18.566	HH	61779	2081183	81.00%	3.214%
402	18.585	18.566	18.615	HH	53785	1469901	57.21%	2.270%
403	18.625	18.615	18.639	HH	46165	660382	25.70%	1.020%

Sum of corrected areas: 64751736

rteres

FF071025.M Fri Jul 18 05:05:31 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/07/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-101	SDG No.:	Q2529
Lab Sample ID:	Q2529-07	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89.7
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016168.D	1	07/16/25 10:00	07/16/25 15:47	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	30300		188	1860	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.5		37 - 130	57%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016168.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 15:47
Operator : YP\AJ
Sample : Q2529-07
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-101

Integration File: autoint1.e
Quant Time: Jul 17 03:37:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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...	15.097	1119759	11.499 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

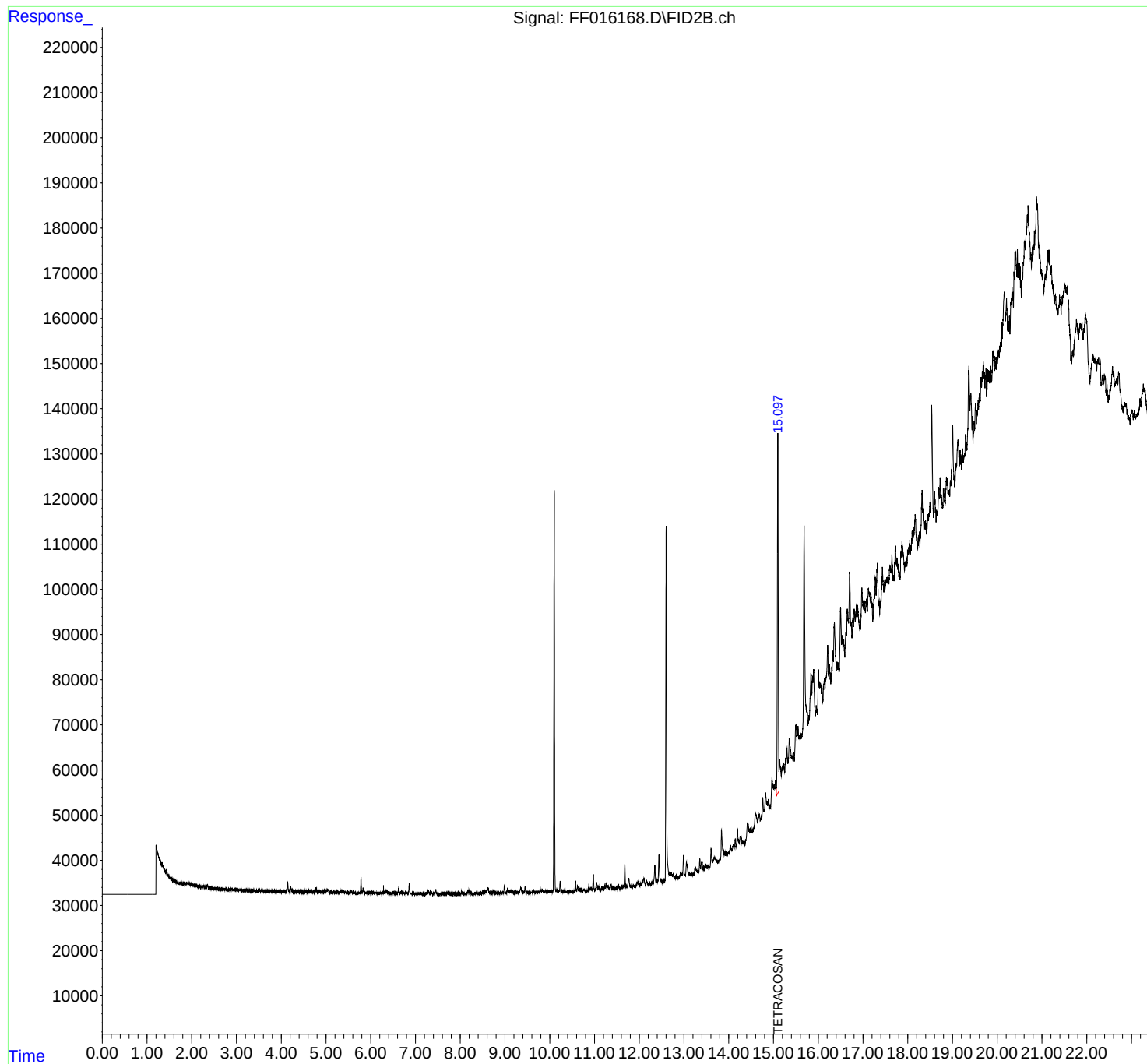
(m)=manual int.

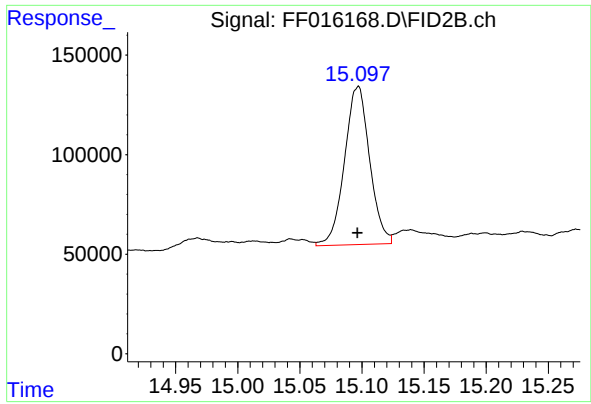
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016168.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 15:47
Operator : YP\AJ
Sample : Q2529-07
Misc :
ALS Vial : 74 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-101

Integration File: autoint1.e
Quant Time: Jul 17 03:37:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.097 min
Delta R.T.: 0.000 min
Response: 1119759
Conc: 11.50 ug/ml

Instrument :
FID_F
ClientSampleId :
TP-101

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
 Data File : FF016168.D
 Signal(s) : FID2B.ch
 Acq On : 16 Jul 2025 15:47
 Sample : Q2529-07
 Misc :
 ALS Vial : 74 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
 Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.324	4.291	4.342	HH	719	19003	0.50%	0.020%
2	4.352	4.342	4.359	HH	668	6155	0.16%	0.006%
3	4.375	4.359	4.395	HH	766	13712	0.36%	0.014%
4	4.405	4.395	4.415	HH	618	7244	0.19%	0.008%
5	4.419	4.415	4.456	HH	632	13728	0.36%	0.014%
6	4.461	4.456	4.470	HH	557	4410	0.12%	0.005%
7	4.521	4.470	4.536	HH	776	22016	0.58%	0.023%
8	4.562	4.536	4.593	HH	737	20087	0.53%	0.021%
9	4.612	4.593	4.637	HH	928	17582	0.46%	0.018%
10	4.645	4.637	4.664	HH	706	9491	0.25%	0.010%
11	4.677	4.664	4.699	HH	574	10976	0.29%	0.012%
12	4.704	4.699	4.722	HH	507	6026	0.16%	0.006%
13	4.743	4.722	4.757	HH	559	10199	0.27%	0.011%
14	4.776	4.757	4.825	HH	1473	33863	0.89%	0.036%
15	4.841	4.825	4.860	HH	643	12303	0.32%	0.013%
16	4.868	4.860	4.886	HH	621	8476	0.22%	0.009%
17	4.925	4.886	4.945	HH	638	19936	0.53%	0.021%
18	4.974	4.945	4.982	HH	779	15061	0.40%	0.016%
19	4.988	4.982	5.005	HH	778	10650	0.28%	0.011%
20	5.012	5.005	5.017	HH	837	5797	0.15%	0.006%
21	5.031	5.017	5.040	HH	919	11583	0.31%	0.012%
22	5.054	5.040	5.125	HH	1016	30274	0.80%	0.032%
23	5.129	5.125	5.144	HH	475	4771	0.13%	0.005%
24	5.152	5.144	5.156	HH	437	2860	0.08%	0.003%
25	5.161	5.156	5.167	HH	455	2638	0.07%	0.003%
26	5.171	5.167	5.183	HH	401	3706	0.10%	0.004%
27	5.188	5.183	5.217	HH	399	7402	0.20%	0.008%
28	5.241	5.217	5.250	HH	577	9188	0.24%	0.010%
29	5.264	5.250	5.301	HH	626	13449	0.36%	0.014%
30	5.328	5.301	5.378	HH	911	28802	0.76%	0.030%
31	5.388	5.378	5.397	HH	518	5365	0.14%	0.006%
32	5.405	5.397	5.417	HH	563	6228	0.16%	0.007%
33	5.422	5.417	5.444	HH	511	7176	0.19%	0.008%
34	5.447	5.444	5.479	HH	439	8115	0.21%	0.009%
35	5.486	5.479	5.520	HH	426	8821	0.23%	0.009%
36	5.528	5.520	5.532	HH	335	2272	0.06%	0.002%

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37	5.555	5.532	5.579	HH	920	15691	0.41%	0.016%
38	5.593	5.579	5.607	HH	456	6439	0.17%	0.007%
39	5.612	5.607	5.627	HH	377	4229	0.11%	0.004%
40	5.632	5.627	5.659	HH	407	5757	0.15%	0.006%
41	5.663	5.659	5.667	HH	244	1171	0.03%	0.001%
42	5.677	5.667	5.682	HH	299	2262	0.06%	0.002%
43	5.692	5.682	5.698	HH	307	2682	0.07%	0.003%
44	5.704	5.698	5.715	HH	298	2647	0.07%	0.003%
45	5.721	5.715	5.732	HH	304	2538	0.07%	0.003%
46	5.751	5.732	5.760	HH	332	4665	0.12%	0.005%
47	5.783	5.760	5.809	HH	3467	38954	1.03%	0.041%
48	5.830	5.809	5.869	HH	1436	23897	0.63%	0.025%
49	5.875	5.869	5.880	HH	348	2183	0.06%	0.002%
50	5.889	5.880	5.895	HH	350	2560	0.07%	0.003%
51	5.900	5.895	5.912	HH	332	2874	0.08%	0.003%
52	5.914	5.912	5.920	HH	286	1313	0.03%	0.001%
53	5.923	5.920	5.927	HH	280	1115	0.03%	0.001%
54	5.939	5.927	5.959	HH	319	5513	0.15%	0.006%
55	5.962	5.959	5.971	HH	293	2005	0.05%	0.002%
56	5.976	5.971	5.980	HH	279	1644	0.04%	0.002%
57	5.988	5.980	5.994	HH	355	2514	0.07%	0.003%
58	6.019	5.994	6.049	HH	400	10460	0.28%	0.011%
59	6.066	6.049	6.085	HH	449	7084	0.19%	0.007%
60	6.089	6.085	6.094	HH	278	1152	0.03%	0.001%
61	6.118	6.094	6.172	HH	475	12337	0.33%	0.013%
62	6.185	6.172	6.192	HH	236	2384	0.06%	0.003%
63	6.196	6.192	6.242	HH	274	6285	0.17%	0.007%
64	6.261	6.242	6.269	HH	369	4343	0.11%	0.005%
65	6.285	6.269	6.305	HH	1468	11394	0.30%	0.012%
66	6.326	6.305	6.334	HH	757	9255	0.24%	0.010%
67	6.342	6.334	6.383	HH	824	17137	0.45%	0.018%
68	6.395	6.383	6.420	HH	604	9643	0.25%	0.010%
69	6.426	6.420	6.439	HH	323	3153	0.08%	0.003%
70	6.440	6.439	6.444	HH	309	930	0.02%	0.001%
71	6.447	6.444	6.452	HH	287	1177	0.03%	0.001%
72	6.478	6.452	6.484	HH	415	5970	0.16%	0.006%
73	6.499	6.484	6.532	HH	546	10492	0.28%	0.011%
74	6.537	6.532	6.544	HH	244	1608	0.04%	0.002%
75	6.554	6.544	6.560	HH	265	2417	0.06%	0.003%
76	6.578	6.560	6.597	HH	307	5644	0.15%	0.006%
77	6.624	6.597	6.659	HH	1316	21353	0.56%	0.022%
78	6.673	6.659	6.691	HH	455	6807	0.18%	0.007%
79	6.703	6.691	6.715	HH	429	5242	0.14%	0.006%
80	6.717	6.715	6.732	HH	429	3599	0.10%	0.004%
81	6.739	6.732	6.764	HH	350	5029	0.13%	0.005%
82	6.790	6.764	6.800	HH	401	6857	0.18%	0.007%
83	6.806	6.800	6.837	HH	284	4459	0.12%	0.005%
84	6.860	6.837	6.919	HH	2397	32493	0.86%	0.034%
85	6.925	6.919	6.932	HH	166	1100	0.03%	0.001%
86	6.939	6.932	6.955	HH	221	2113	0.06%	0.002%
87	6.962	6.955	6.969	HH	148	801	0.02%	0.001%
88	6.973	6.969	6.987	HH	120	830	0.02%	0.001%
89	7.004	6.987	7.028	HH	151	2573	0.07%	0.003%

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90	7.033	7.028	7.045	HH	170	894	0.02%	0.001%
91	7.059	7.045	7.064	HH	178	1509	0.04%	0.002%
92	7.070	7.064	7.082	HH	194	1496	0.04%	0.002%
93	7.116	7.082	7.125	HH	162	2438	0.06%	0.003%
94	7.130	7.125	7.159	HH	141	1978	0.05%	0.002%
95	7.162	7.159	7.169	HH	101	505	0.01%	0.001%
96	7.172	7.169	7.187	HH	132	1052	0.03%	0.001%
97	7.193	7.187	7.214	HH	192	1554	0.04%	0.002%
98	7.226	7.214	7.230	HH	151	1112	0.03%	0.001%
99	7.244	7.230	7.265	HH	279	3843	0.10%	0.004%
100	7.284	7.265	7.318	HH	821	14600	0.39%	0.015%
101	7.322	7.318	7.344	HH	458	5194	0.14%	0.005%
102	7.349	7.344	7.355	HH	220	1456	0.04%	0.002%
103	7.363	7.355	7.400	HH	279	4163	0.11%	0.004%
104	7.428	7.400	7.437	HH	286	4137	0.11%	0.004%
105	7.454	7.437	7.480	HH	1074	13360	0.35%	0.014%
106	7.483	7.480	7.502	HH	154	1878	0.05%	0.002%
107	7.509	7.502	7.526	HH	213	1987	0.05%	0.002%
108	7.531	7.526	7.546	HH	83	571	0.02%	0.001%
109	7.567	7.546	7.589	PH	198	2733	0.07%	0.003%
110	7.605	7.589	7.619	HH	311	3590	0.09%	0.004%
111	7.627	7.619	7.648	HH	207	2850	0.08%	0.003%
112	7.657	7.648	7.663	HH	207	1148	0.03%	0.001%
113	7.678	7.663	7.697	HH	239	3254	0.09%	0.003%
114	7.700	7.697	7.709	HH	157	1061	0.03%	0.001%
115	7.722	7.709	7.727	HH	207	1964	0.05%	0.002%
116	7.737	7.727	7.755	HH	309	3693	0.10%	0.004%
117	7.770	7.755	7.775	HH	125	1135	0.03%	0.001%
118	7.795	7.775	7.800	HH	224	2055	0.05%	0.002%
119	7.805	7.800	7.836	HH	143	2128	0.06%	0.002%
120	7.851	7.836	7.859	HH	195	1740	0.05%	0.002%
121	7.865	7.859	7.885	HH	200	2053	0.05%	0.002%
122	7.891	7.885	7.894	HH	115	488	0.01%	0.001%
123	7.898	7.894	7.902	HH	106	399	0.01%	0.000%
124	7.911	7.902	7.921	HH	130	1089	0.03%	0.001%
125	7.925	7.921	7.937	HH	126	790	0.02%	0.001%
126	7.951	7.937	7.998	HH	235	4505	0.12%	0.005%
127	8.026	7.998	8.057	PH	677	9351	0.25%	0.010%
128	8.061	8.057	8.088	HH	117	1988	0.05%	0.002%
129	8.094	8.088	8.109	HH	143	1393	0.04%	0.001%
130	8.117	8.109	8.125	HH	123	1056	0.03%	0.001%
131	8.132	8.125	8.144	HH	151	1320	0.03%	0.001%
132	8.165	8.144	8.182	HH	688	10650	0.28%	0.011%
133	8.196	8.182	8.210	HH	971	11616	0.31%	0.012%
134	8.224	8.210	8.262	HH	651	10959	0.29%	0.012%
135	8.267	8.262	8.300	HH	280	3707	0.10%	0.004%
136	8.311	8.300	8.320	HH	232	2061	0.05%	0.002%
137	8.323	8.320	8.326	HH	238	693	0.02%	0.001%
138	8.341	8.326	8.346	HH	317	3157	0.08%	0.003%
139	8.351	8.346	8.377	HH	304	4214	0.11%	0.004%
140	8.382	8.377	8.387	HH	259	1370	0.04%	0.001%
141	8.391	8.387	8.415	HH	214	2743	0.07%	0.003%

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142	8.441	8.415	8.465	HH	400	7610	0.20%	0.008%
143	8.473	8.465	8.477	HH	235	1234	0.03%	0.001%
144	8.514	8.477	8.532	HH	571	12736	0.34%	0.013%
145	8.553	8.532	8.563	HH	571	8509	0.22%	0.009%
146	8.620	8.563	8.660	HH	1494	43912	1.16%	0.046%
147	8.675	8.660	8.708	HH	518	10310	0.27%	0.011%
148	8.736	8.708	8.780	HH	697	19075	0.50%	0.020%
149	8.784	8.780	8.801	HH	338	3705	0.10%	0.004%
150	8.809	8.801	8.829	HH	257	3517	0.09%	0.004%
151	8.848	8.829	8.881	HH	480	9749	0.26%	0.010%
152	8.895	8.881	8.937	HH	452	11396	0.30%	0.012%
153	8.951	8.937	8.966	HH	419	6398	0.17%	0.007%
154	8.986	8.966	9.016	HH	1956	26408	0.70%	0.028%
155	9.024	9.016	9.034	HH	429	4170	0.11%	0.004%
156	9.056	9.034	9.079	HH	1258	19833	0.52%	0.021%
157	9.095	9.079	9.117	HH	920	16062	0.42%	0.017%
158	9.133	9.117	9.146	HH	753	10860	0.29%	0.011%
159	9.163	9.146	9.196	HH	723	14639	0.39%	0.015%
160	9.231	9.196	9.260	HH	705	17624	0.47%	0.019%
161	9.282	9.260	9.300	HH	499	9983	0.26%	0.010%
162	9.311	9.300	9.320	HH	476	5145	0.14%	0.005%
163	9.352	9.320	9.424	HH	1248	44521	1.18%	0.047%
164	9.449	9.424	9.479	HH	1645	28350	0.75%	0.030%
165	9.487	9.479	9.517	HH	608	10117	0.27%	0.011%
166	9.543	9.517	9.572	HH	458	12051	0.32%	0.013%
167	9.597	9.572	9.615	HH	497	10399	0.27%	0.011%
168	9.632	9.615	9.673	HH	1062	21477	0.57%	0.023%
169	9.687	9.673	9.702	HH	491	7029	0.19%	0.007%
170	9.707	9.702	9.714	HH	431	2810	0.07%	0.003%
171	9.739	9.714	9.767	HH	559	13776	0.36%	0.014%
172	9.784	9.767	9.809	HH	1095	19625	0.52%	0.021%
173	9.827	9.809	9.866	HH	1067	25320	0.67%	0.027%
174	9.871	9.866	9.884	HH	641	5712	0.15%	0.006%
175	9.907	9.884	9.936	HH	797	19237	0.51%	0.020%
176	9.941	9.936	9.944	HH	509	2287	0.06%	0.002%
177	9.964	9.944	9.976	HH	603	10357	0.27%	0.011%
178	9.984	9.976	9.999	HH	621	8067	0.21%	0.008%
179	10.014	9.999	10.029	HH	662	9914	0.26%	0.010%
180	10.033	10.029	10.037	HH	409	1930	0.05%	0.002%
181	10.066	10.037	10.074	HH	906	13808	0.36%	0.015%
182	10.100	10.074	10.140	HH	89729	929581	24.55%	0.976%
183	10.155	10.140	10.197	HH	953	27869	0.74%	0.029%
184	10.233	10.197	10.288	HH	2851	59223	1.56%	0.062%
185	10.310	10.288	10.323	HH	585	11655	0.31%	0.012%
186	10.336	10.323	10.362	HH	813	14774	0.39%	0.016%
187	10.367	10.362	10.382	HH	548	6165	0.16%	0.006%
188	10.406	10.382	10.438	HH	623	17434	0.46%	0.018%
189	10.449	10.438	10.494	HH	558	17155	0.45%	0.018%
190	10.504	10.494	10.517	HH	596	7801	0.21%	0.008%
191	10.574	10.517	10.595	HH	2947	53613	1.42%	0.056%
192	10.623	10.595	10.649	HH	1738	36761	0.97%	0.039%
193	10.674	10.649	10.698	HH	1141	28241	0.75%	0.030%
194	10.709	10.698	10.734	HH	1052	18967	0.50%	0.020%

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195	10.765	10.734	10.778	HH	1032	23646	0.62%	0.025%
196	10.782	10.778	10.800	HH	892	10687	0.28%	0.011%
197	10.876	10.800	10.912	HH	1720	69094	1.83%	0.073%
198	10.926	10.912	10.942	HH	1394	21962	0.58%	0.023%
199	10.973	10.942	11.000	HH	4419	74446	1.97%	0.078%
200	11.005	11.000	11.017	HH	1115	10075	0.27%	0.011%
201	11.046	11.017	11.083	HH	2618	70176	1.85%	0.074%
202	11.092	11.083	11.141	HH	1713	43686	1.15%	0.046%
203	11.164	11.141	11.182	HH	1537	29596	0.78%	0.031%
204	11.191	11.182	11.205	HH	1240	16260	0.43%	0.017%
205	11.230	11.205	11.243	HH	1966	33214	0.88%	0.035%
206	11.257	11.243	11.289	HH	2397	51080	1.35%	0.054%
207	11.303	11.289	11.334	HH	1851	43184	1.14%	0.045%
208	11.372	11.334	11.409	HH	2130	70178	1.85%	0.074%
209	11.428	11.409	11.445	HH	1563	29644	0.78%	0.031%
210	11.450	11.445	11.466	HH	1325	15351	0.41%	0.016%
211	11.483	11.466	11.505	HH	1466	31162	0.82%	0.033%
212	11.507	11.505	11.515	HH	1256	7273	0.19%	0.008%
213	11.539	11.515	11.569	HH	1943	47543	1.26%	0.050%
214	11.586	11.569	11.595	HH	1401	21164	0.56%	0.022%
215	11.615	11.595	11.635	HH	1642	37883	1.00%	0.040%
216	11.678	11.635	11.737	HH	6701	160280	4.23%	0.168%
217	11.767	11.737	11.815	HH	3564	110120	2.91%	0.116%
218	11.836	11.815	11.855	HH	1894	41568	1.10%	0.044%
219	11.879	11.855	11.903	HH	2055	51933	1.37%	0.055%
220	11.947	11.903	11.960	HH	2629	70770	1.87%	0.074%
221	11.973	11.960	12.015	HH	2616	78336	2.07%	0.082%
222	12.035	12.015	12.050	HH	2586	49065	1.30%	0.052%
223	12.070	12.050	12.082	HH	2921	49181	1.30%	0.052%
224	12.101	12.082	12.139	HH	3451	97604	2.58%	0.103%
225	12.163	12.139	12.202	HH	3091	96406	2.55%	0.101%
226	12.216	12.202	12.254	HH	2476	71975	1.90%	0.076%
227	12.257	12.254	12.262	HH	2186	10919	0.29%	0.011%
228	12.285	12.262	12.305	HH	2632	63152	1.67%	0.066%
229	12.350	12.305	12.377	HH	6382	160510	4.24%	0.169%
230	12.394	12.377	12.413	HH	3149	63396	1.67%	0.067%
231	12.441	12.413	12.497	HH	8738	224966	5.94%	0.236%
232	12.508	12.497	12.526	HH	2992	49679	1.31%	0.052%
233	12.564	12.526	12.578	HH	3194	92567	2.45%	0.097%
234	12.602	12.578	12.668	HH	81540	1157811	30.58%	1.216%
235	12.683	12.668	12.698	HH	4859	80344	2.12%	0.084%
236	12.714	12.698	12.749	HH	4856	135979	3.59%	0.143%
237	12.764	12.749	12.802	HH	4419	125081	3.30%	0.131%
238	12.818	12.802	12.836	HH	4086	79271	2.09%	0.083%
239	12.841	12.836	12.868	HH	3749	70786	1.87%	0.074%
240	12.877	12.868	12.882	HH	3705	31567	0.83%	0.033%
241	12.886	12.882	12.895	HH	3684	28967	0.77%	0.030%
242	12.927	12.895	12.955	HH	4832	156493	4.13%	0.164%
243	12.992	12.955	13.017	HH	8666	213191	5.63%	0.224%
244	13.022	13.017	13.033	HH	4357	41291	1.09%	0.043%
245	13.057	13.033	13.095	HH	7117	212057	5.60%	0.223%
246	13.105	13.095	13.122	HH	4758	75789	2.00%	0.080%

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247	13.135	13.122	13.170	HH	4436	123259	3.26%	0.129%
248	13.212	13.170	13.220	HH	4575	131311	3.47%	0.138%
249	13.247	13.220	13.298	HH	5908	248082	6.55%	0.261%
250	13.316	13.298	13.332	HH	5374	105790	2.79%	0.111%
251	13.354	13.332	13.375	HH	7829	163788	4.33%	0.172%
252	13.395	13.375	13.427	HH	7073	199945	5.28%	0.210%
253	13.441	13.427	13.457	HH	6232	106596	2.82%	0.112%
254	13.490	13.457	13.515	HH	6668	212203	5.61%	0.223%
255	13.545	13.515	13.572	HH	6295	206684	5.46%	0.217%
256	13.576	13.572	13.580	HH	6064	27660	0.73%	0.029%
257	13.606	13.580	13.629	HH	10091	234039	6.18%	0.246%
258	13.634	13.629	13.640	HH	7307	50991	1.35%	0.054%
259	13.652	13.640	13.657	HH	7504	75350	1.99%	0.079%
260	13.680	13.657	13.760	HH	8242	472521	12.48%	0.496%
261	13.785	13.760	13.795	HH	7595	156630	4.14%	0.165%
262	13.838	13.795	13.873	HH	14308	467258	12.34%	0.491%
263	13.880	13.873	13.901	HH	9803	155035	4.10%	0.163%
264	13.914	13.901	13.929	HH	9305	151898	4.01%	0.160%
265	13.953	13.929	13.971	HH	9493	227252	6.00%	0.239%
266	13.984	13.971	13.989	HH	9272	100513	2.65%	0.106%
267	14.037	13.989	14.055	HH	10680	386756	10.22%	0.406%
268	14.060	14.055	14.064	HH	9991	52411	1.38%	0.055%
269	14.067	14.064	14.073	HH	9922	52512	1.39%	0.055%
270	14.109	14.073	14.125	HH	11091	329859	8.71%	0.346%
271	14.147	14.125	14.166	HH	12274	273712	7.23%	0.287%
272	14.194	14.166	14.234	HH	14384	495986	13.10%	0.521%
273	14.257	14.234	14.272	HH	12837	279574	7.38%	0.294%
274	14.280	14.272	14.299	HH	12527	193024	5.10%	0.203%
275	14.309	14.299	14.332	HH	11674	228975	6.05%	0.241%
276	14.341	14.332	14.346	HH	11654	93839	2.48%	0.099%
277	14.349	14.346	14.363	HH	11640	118161	3.12%	0.124%
278	14.379	14.363	14.384	HH	12068	142583	3.77%	0.150%
279	14.417	14.384	14.450	HH	15688	572368	15.12%	0.601%
280	14.462	14.450	14.477	HH	14296	226783	5.99%	0.238%
281	14.493	14.477	14.509	HH	14708	269564	7.12%	0.283%
282	14.527	14.509	14.542	HH	14486	282245	7.46%	0.296%
283	14.594	14.542	14.601	HH	17808	551187	14.56%	0.579%
284	14.607	14.601	14.646	HH	17761	460395	12.16%	0.484%
285	14.682	14.646	14.704	HH	17672	583443	15.41%	0.613%
286	14.711	14.704	14.717	HH	16642	131640	3.48%	0.138%
287	14.731	14.717	14.744	HH	17306	275648	7.28%	0.290%
288	14.761	14.744	14.778	HH	21443	403535	10.66%	0.424%
289	14.790	14.778	14.796	HH	18811	204032	5.39%	0.214%
290	14.820	14.796	14.843	HH	22489	589933	15.58%	0.620%
291	14.856	14.843	14.870	HH	20646	325777	8.61%	0.342%
292	14.887	14.870	14.914	HH	20870	525400	13.88%	0.552%
293	14.919	14.914	14.927	HH	19720	155294	4.10%	0.163%
294	14.968	14.927	14.989	HH	25751	837119	22.11%	0.879%
295	14.995	14.989	15.002	HH	23962	183335	4.84%	0.193%
296	15.013	15.002	15.031	HH	24149	417397	11.03%	0.438%
297	15.043	15.031	15.063	HH	25305	470080	12.42%	0.494%
298	15.097	15.063	15.124	HH	101976	1933890	51.08%	2.031%
299	15.139	15.124	15.175	HH	29805	862122	22.77%	0.906%

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300	15.199	15.175	15.214	HH	28275	642651	16.97%	0.675%
301	15.229	15.214	15.252	HH	29092	642234	16.96%	0.675%
302	15.273	15.252	15.282	HH	30138	521627	13.78%	0.548%
303	15.301	15.282	15.322	HH	32294	726152	19.18%	0.763%
304	15.355	15.322	15.402	HH	34530	1531343	40.45%	1.608%
305	15.412	15.402	15.422	HH	30660	365308	9.65%	0.384%
306	15.446	15.422	15.465	HH	31422	798805	21.10%	0.839%
307	15.503	15.465	15.525	HH	37769	1245469	32.90%	1.308%
308	15.549	15.525	15.566	HH	37169	873265	23.07%	0.917%
309	15.578	15.566	15.585	HH	35146	405940	10.72%	0.426%
310	15.589	15.585	15.594	HH	35051	172181	4.55%	0.181%
311	15.606	15.594	15.613	HH	35623	397864	10.51%	0.418%
312	15.617	15.613	15.624	HH	35005	232847	6.15%	0.245%
313	15.685	15.624	15.732	HH	81830	3140476	82.95%	3.299%
314	15.736	15.732	15.748	HH	41155	379624	10.03%	0.399%
315	15.751	15.748	15.770	HH	41126	532996	14.08%	0.560%
316	15.794	15.770	15.801	HH	39627	709489	18.74%	0.745%
317	15.837	15.801	15.856	HH	48940	1491108	39.39%	1.566%
318	15.876	15.856	15.881	HH	48232	690576	18.24%	0.725%
319	15.898	15.881	15.939	HH	49721	1561945	41.26%	1.641%
320	15.956	15.939	15.978	HH	41659	966025	25.52%	1.015%
321	16.007	15.978	16.032	HH	49680	1475152	38.96%	1.549%
322	16.044	16.032	16.072	HH	46738	1099814	29.05%	1.155%
323	16.082	16.072	16.099	HH	46384	724991	19.15%	0.761%
324	16.117	16.099	16.121	HH	46043	584685	15.44%	0.614%
325	16.138	16.121	16.154	HH	47693	917673	24.24%	0.964%
326	16.212	16.154	16.233	HH	55103	2347685	62.01%	2.466%
327	16.250	16.233	16.281	HH	50904	1422359	37.57%	1.494%
328	16.304	16.281	16.310	HH	50312	849587	22.44%	0.892%
329	16.326	16.310	16.340	HH	53808	939122	24.81%	0.986%
330	16.362	16.340	16.404	HH	60355	2119625	55.99%	2.226%
331	16.417	16.404	16.423	HH	51271	570671	15.07%	0.599%
332	16.426	16.423	16.438	HH	51127	459481	12.14%	0.483%
333	16.449	16.438	16.467	HH	51069	879657	23.24%	0.924%
334	16.499	16.467	16.523	HH	63611	1907236	50.38%	2.003%
335	16.527	16.523	16.532	HH	55767	311638	8.23%	0.327%
336	16.544	16.532	16.552	HH	57202	677611	17.90%	0.712%
337	16.561	16.552	16.566	HH	56117	451786	11.93%	0.475%
338	16.570	16.566	16.594	HH	56299	939665	24.82%	0.987%
339	16.649	16.594	16.679	HH	63104	2990513	78.99%	3.141%
340	16.703	16.679	16.737	HH	71047	2251796	59.48%	2.365%
341	16.740	16.737	16.754	HH	59762	585568	15.47%	0.615%
342	16.781	16.754	16.787	HH	60709	1187879	31.38%	1.248%
343	16.804	16.787	16.827	HH	62988	1481508	39.13%	1.556%
344	16.855	16.827	16.874	HH	63805	1732644	45.77%	1.820%
345	16.883	16.874	16.919	HH	63960	1656217	43.75%	1.740%
346	16.923	16.919	16.927	HH	59609	310824	8.21%	0.326%
347	16.931	16.927	16.935	HH	59369	285346	7.54%	0.300%
348	16.938	16.935	16.944	HH	59869	297467	7.86%	0.312%
349	16.976	16.944	17.006	HH	67831	2379527	62.85%	2.499%
350	17.027	17.006	17.036	HH	65102	1175072	31.04%	1.234%
351	17.038	17.036	17.055	HH	64823	729575	19.27%	0.766%

						rteres		
352	17.070	17.055	17.075	HH	64600	751198	19.84%	0.789%
353	17.088	17.075	17.099	HH	65368	916417	24.21%	0.963%
354	17.121	17.099	17.132	HH	67523	1319225	34.85%	1.386%
355	17.135	17.132	17.141	HH	66966	357392	9.44%	0.375%
356	17.151	17.141	17.172	HH	66792	1208791	31.93%	1.270%
357	17.181	17.172	17.201	HH	66397	1137520	30.05%	1.195%
358	17.206	17.201	17.219	HH	64490	677967	17.91%	0.712%
359	17.277	17.219	17.292	HH	70107	2898231	76.55%	3.044%
360	17.327	17.292	17.354	HH	73232	2544244	67.20%	2.672%
361	17.362	17.354	17.373	HH	64798	746413	19.72%	0.784%
362	17.436	17.373	17.467	HH	72335	3785899	100.00%	3.977%
363	17.485	17.467	17.496	HH	68992	1165101	30.77%	1.224%
					Sum of corrected areas:		95206167	

FF071025.M Thu Jul 17 05:06:24 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/08/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-89	SDG No.:	Q2529
Lab Sample ID:	Q2529-08	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	90.1
Sample Wt/Vol:	30.07	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
FF016169.D	1	07/16/25 10:00	07/16/25 16:17	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	5490		187	1850	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.1		37 - 130	51%	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\FF071625\
Data File : FF016169.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 16:17
Operator : YP\AJ
Sample : Q2529-08
Misc :
ALS Vial : 75 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-89

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/17/2025
Supervised By :mohammad ahmed 07/18/2025

Integration File: autoint1.e
Quant Time: Jul 17 03:38:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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	986731	10.133 ug/mlm
Target Compounds			

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016169.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 16:17
Operator : YP\AJ
Sample : Q2529-08
Misc :
ALS Vial : 75 Sample Multiplier: 1

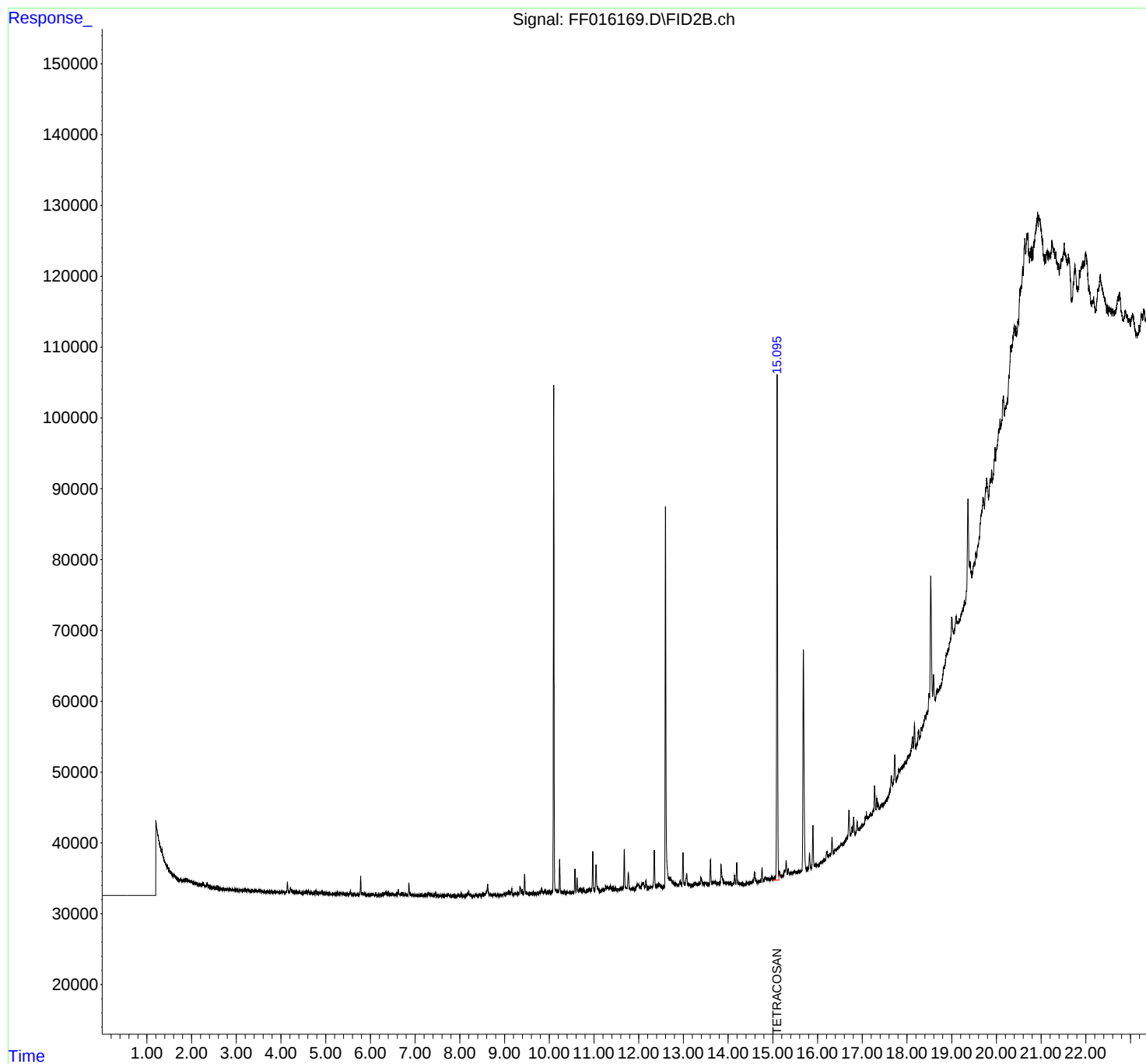
Instrument :
FID_F
ClientSampleId :
TP-89

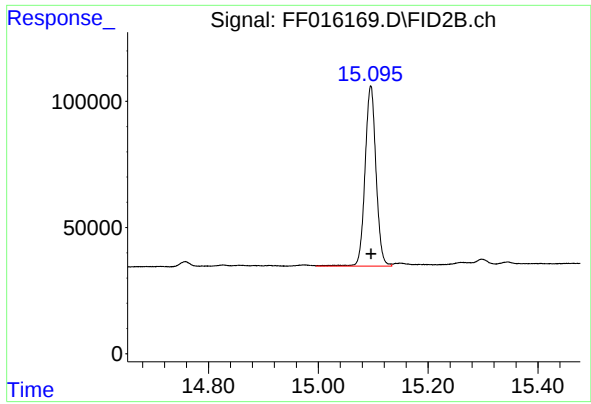
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/17/2025
Supervised By :mohammad ahmed 07/18/2025

Integration File: autoint1.e
Quant Time: Jul 17 03:38:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.095 min
Delta R.T.: 0.000 min
Response: 986731
Conc: 10.13 ug/ml

Instrument :
FID_F
ClientSampleId :
TP-89

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/17/2025
Supervised By :mohammad ahmed 07/18/2025

rtres

Instrument :

FID_F

ClientSampleId :

TP-89

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF07162
Data File : FF016169.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 16:17
Sample : Q2529-08
Misc :
ALS Vial : 75 Sample Multiplier: 1

Reviewed By :Yogesh Patel 07/17/2025

Supervised By :mohammad ahmed 07/18/2025

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.190	4.181	4.195	HH	508	3635	0.31%	0.020%
2	4.212	4.195	4.266	HH	1165	29527	2.55%	0.163%
3	4.269	4.266	4.273	HH	548	2141	0.19%	0.012%
4	4.276	4.273	4.316	HH	553	11795	1.02%	0.065%
5	4.329	4.316	4.351	HH	524	10166	0.88%	0.056%
6	4.369	4.351	4.394	HH	550	11845	1.02%	0.065%
7	4.412	4.394	4.425	HH	518	7996	0.69%	0.044%
8	4.429	4.425	4.435	HH	441	2380	0.21%	0.013%
9	4.440	4.435	4.461	HH	424	6000	0.52%	0.033%
10	4.467	4.461	4.484	HH	386	4913	0.42%	0.027%
11	4.490	4.484	4.508	HH	394	5216	0.45%	0.029%
12	4.525	4.508	4.537	HH	574	8006	0.69%	0.044%
13	4.543	4.537	4.546	HH	433	1965	0.17%	0.011%
14	4.557	4.546	4.587	HH	564	10998	0.95%	0.061%
15	4.592	4.587	4.596	HH	374	1991	0.17%	0.011%
16	4.613	4.596	4.651	HH	623	14799	1.28%	0.082%
17	4.655	4.651	4.676	HH	420	5429	0.47%	0.030%
18	4.685	4.676	4.718	HH	404	8213	0.71%	0.045%
19	4.726	4.718	4.730	HH	366	2152	0.19%	0.012%
20	4.736	4.730	4.761	HH	385	5991	0.52%	0.033%
21	4.773	4.761	4.817	HH	813	16007	1.38%	0.088%
22	4.831	4.817	4.835	HH	341	3381	0.29%	0.019%
23	4.844	4.835	4.849	HH	406	3006	0.26%	0.017%
24	4.856	4.849	4.876	HH	419	5916	0.51%	0.033%
25	4.896	4.876	4.907	HH	471	7818	0.68%	0.043%
26	4.921	4.907	4.941	HH	503	8029	0.69%	0.044%
27	4.959	4.941	4.994	HH	333	8572	0.74%	0.047%
28	5.052	4.994	5.121	HH	351	17493	1.51%	0.096%
29	5.142	5.121	5.197	HH	245	9101	0.79%	0.050%
30	5.202	5.197	5.221	HH	202	2579	0.22%	0.014%
31	5.267	5.221	5.297	HH	409	11263	0.97%	0.062%
32	5.332	5.297	5.360	HH	319	9097	0.79%	0.050%
33	5.411	5.360	5.477	HH	311	13576	1.17%	0.075%
34	5.554	5.477	5.581	HH	700	14519	1.26%	0.080%
35	5.591	5.581	5.603	HH	205	2171	0.19%	0.012%
36	5.615	5.603	5.629	HH	237	2420	0.21%	0.013%

					retention			
37	5.637	5.629	5.672	HH	194	3636	0.31%	0.020%
38	5.783	5.672	5.814	HH	2636	35729		
39	5.828	5.814	5.910	HH	411	10853		
40	5.944	5.910	5.974	HH	172	4366		
41	5.985	5.974	5.995	HH	197	1476		
42	6.015	5.995	6.047	HH	190	3932		
43	6.064	6.047	6.087	HH	223	2929	0.25%	0.016%
44	6.120	6.087	6.142	PH	196	3051	0.26%	0.017%
45	6.182	6.142	6.192	PH	113	1422	0.12%	0.008%
46	6.215	6.192	6.252	PH	134	2247	0.19%	0.012%
47	6.287	6.252	6.305	PH	374	5230	0.45%	0.029%
48	6.341	6.305	6.384	HH	383	12355	1.07%	0.068%
49	6.397	6.384	6.424	HH	402	6155	0.53%	0.034%
50	6.435	6.424	6.454	HH	175	2432	0.21%	0.013%
51	6.474	6.454	6.483	HH	186	2590	0.22%	0.014%
52	6.504	6.483	6.537	HH	299	5858	0.51%	0.032%
53	6.574	6.537	6.587	HH	189	3484	0.30%	0.019%
54	6.624	6.587	6.664	HH	850	13398	1.16%	0.074%
55	6.675	6.664	6.691	HH	153	2021	0.17%	0.011%
56	6.705	6.691	6.750	HH	205	5513	0.48%	0.030%
57	6.784	6.750	6.836	HH	255	6780	0.59%	0.037%
58	6.861	6.836	6.935	HH	1718	22760	1.97%	0.125%
59	6.947	6.935	6.966	HH	135	1138	0.10%	0.006%
60	6.978	6.966	7.012	PH	85	1062	0.09%	0.006%
61	7.019	7.012	7.042	PH	77	307	0.03%	0.002%
62	7.287	7.262	7.312	PH	352	5530	0.48%	0.030%
63	7.322	7.312	7.402	HH	236	4032	0.35%	0.022%
64	7.454	7.402	7.501	PH	394	4272	0.37%	0.024%
65	7.739	7.706	7.786	PH	243	2579	0.22%	0.014%
66	8.027	7.992	8.063	PH	368	1996	0.17%	0.011%
67	8.197	8.179	8.214	HH	598	6458	0.56%	0.036%
68	8.225	8.214	8.295	HH	145	-91	-0.01%	-0.000%
69	8.442	8.409	8.477	PH	187	826	0.07%	0.005%
70	8.517	8.477	8.532	PH	223	2626	0.23%	0.014%
71	8.550	8.532	8.563	HH	244	3384	0.29%	0.019%
72	8.621	8.563	8.669	HH	1539	32895	2.84%	0.181%
73	8.677	8.669	8.704	HH	180	2728	0.24%	0.015%
74	8.711	8.704	8.772	PH	133	2937	0.25%	0.016%
75	8.787	8.772	8.802	HH	209	1950	0.17%	0.011%
76	8.811	8.802	8.826	PH	116	643	0.06%	0.004%
77	8.849	8.826	8.876	PH	245	2367	0.20%	0.013%
78	8.950	8.928	8.959	PH	120	813	0.07%	0.004%
79	8.985	8.959	9.009	PH	231	4649	0.40%	0.026%
80	9.053	9.009	9.064	HH	263	6619	0.57%	0.036%
81	9.092	9.064	9.139	HH	562	16748	1.45%	0.092%
82	9.162	9.139	9.188	HH	977	14169	1.23%	0.078%
83	9.226	9.188	9.256	PH	310	8383	0.72%	0.046%
84	9.273	9.256	9.289	HH	336	4861	0.42%	0.027%
85	9.308	9.289	9.322	HH	309	4987	0.43%	0.027%
86	9.348	9.322	9.379	HH	1226	24668	2.13%	0.136%
87	9.393	9.379	9.412	HH	828	10498	0.91%	0.058%
88	9.449	9.412	9.474	HH	2989	40308	3.49%	0.222%
89	9.485	9.474	9.519	HH	496	9139	0.79%	0.050%

Instrument :

FID_F

ClientSampleId :

TP-89

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/17/2025

Supervised By :mohammad ahmed 07/18/2025

					riteres			
90	9.541	9.519	9.552	HH	278	4876	0.42%	0.027%
91	9.555	9.552	9.569	HH	517	1951		
92	9.597	9.569	9.616	HH	324	6969		
93	9.634	9.616	9.650	HH	414	6328		
94	9.658	9.650	9.672	HH	247	3024		
95	9.686	9.672	9.704	HH	328	4782		
96	9.738	9.704	9.760	HH	510	9614	0.83%	0.053%
97	9.785	9.760	9.804	HH	608	10532	0.91%	0.058%
98	9.828	9.804	9.861	HH	1042	22029	1.90%	0.121%
99	9.870	9.861	9.882	HH	461	5376	0.46%	0.030%
100	9.906	9.882	9.936	HH	790	17592	1.52%	0.097%
101	9.958	9.936	9.974	HH	586	10700	0.93%	0.059%
102	9.987	9.974	9.996	HH	614	6693	0.58%	0.037%
103	10.010	9.996	10.037	HH	684	11648	1.01%	0.064%
104	10.065	10.037	10.074	HH	690	10334	0.89%	0.057%
105	10.099	10.074	10.139	HH	71644	762755	65.96%	4.205%
106	10.147	10.139	10.177	HH	806	15810	1.37%	0.087%
107	10.186	10.177	10.209	HH	654	11823	1.02%	0.065%
108	10.232	10.209	10.284	HH	5058	71089	6.15%	0.392%
109	10.296	10.284	10.304	HH	413	4741	0.41%	0.026%
110	10.337	10.304	10.380	HH	638	19427	1.68%	0.107%
111	10.408	10.380	10.436	HH	511	13617	1.18%	0.075%
112	10.454	10.436	10.487	HH	405	12134	1.05%	0.067%
113	10.509	10.487	10.526	HH	479	9714	0.84%	0.054%
114	10.574	10.526	10.597	HH	3705	54104	4.68%	0.298%
115	10.622	10.597	10.649	HH	2459	42582	3.68%	0.235%
116	10.675	10.649	10.694	HH	966	20170	1.74%	0.111%
117	10.710	10.694	10.735	HH	1031	18388	1.59%	0.101%
118	10.765	10.735	10.804	HH	908	28170	2.44%	0.155%
119	10.878	10.804	10.911	HH	883	42712	3.69%	0.235%
120	10.926	10.911	10.938	HH	916	12851	1.11%	0.071%
121	10.973	10.938	11.012	HH	6195	95386	8.25%	0.526%
122	11.045	11.012	11.146	HH	4288	112502	9.73%	0.620%
123	11.193	11.146	11.207	HH	833	26223	2.27%	0.145%
124	11.228	11.207	11.242	HH	986	17096	1.48%	0.094%
125	11.260	11.242	11.279	HH	1318	23212	2.01%	0.128%
126	11.304	11.279	11.332	HH	1305	35899	3.10%	0.198%
127	11.367	11.332	11.411	HH	1456	49278	4.26%	0.272%
128	11.428	11.411	11.469	HH	1223	31786	2.75%	0.175%
129	11.482	11.469	11.512	HH	1085	22819	1.97%	0.126%
130	11.535	11.512	11.562	HH	935	24139	2.09%	0.133%
131	11.615	11.562	11.627	HH	1009	35227	3.05%	0.194%
132	11.677	11.627	11.736	HH	6396	130170	11.26%	0.718%
133	11.768	11.736	11.819	HH	3212	80115	6.93%	0.442%
134	11.838	11.819	11.856	HH	1001	20988	1.81%	0.116%
135	11.875	11.856	11.902	HH	1130	26355	2.28%	0.145%
136	11.919	11.902	11.932	HH	948	16123	1.39%	0.089%
137	11.972	11.932	12.017	HH	1664	69869	6.04%	0.385%
138	12.033	12.017	12.051	HH	1310	24221	2.09%	0.134%
139	12.108	12.051	12.142	HH	1754	80358	6.95%	0.443%
140	12.163	12.142	12.212	HH	2150	56368	4.87%	0.311%
141	12.232	12.212	12.254	HH	1151	26697	2.31%	0.147%

Instrument :

FID_F

ClientSampleId :

TP-89

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/17/2025

Supervised By :mohammad ahmed 07/18/2025

					rters			
142	12.284	12.254	12.306	HH	1248	36053	3.12%	0.199%
143	12.349	12.306	12.378	HH	6382	121000	10.00%	0.199%
144	12.395	12.378	12.422	HH	1475	36431	3.12%	0.199%
145	12.440	12.422	12.534	HH	1696	91144	3.12%	0.199%
146	12.559	12.534	12.574	HH	1366	29988	2.97%	0.253%
147	12.599	12.574	12.669	HH	54894	745173	64.23%	0.253%
148	12.681	12.669	12.701	HH	2641	45940	3.97%	0.253%
149	12.713	12.701	12.752	HH	2396	66940	5.79%	0.369%
150	12.763	12.752	12.798	HH	2116	48934	4.23%	0.270%
151	12.817	12.798	12.864	HH	1812	63570	5.50%	0.350%
152	12.871	12.864	12.894	HH	1533	26522	2.29%	0.146%
153	12.927	12.894	12.962	HH	2028	69739	6.03%	0.384%
154	12.992	12.962	13.039	HH	6057	126006	10.90%	0.695%
155	13.073	13.039	13.097	HH	3042	78387	6.78%	0.432%
156	13.110	13.097	13.177	HH	1619	70310	6.08%	0.388%
157	13.203	13.177	13.224	HH	1495	40100	3.47%	0.221%
158	13.249	13.224	13.281	HH	1775	55898	4.83%	0.308%
159	13.284	13.281	13.297	HH	1638	15899	1.37%	0.088%
160	13.315	13.297	13.337	HH	1620	37271	3.22%	0.205%
161	13.351	13.337	13.369	HH	1877	32794	2.84%	0.181%
162	13.397	13.369	13.426	HH	2471	70280	6.08%	0.387%
163	13.439	13.426	13.464	HH	1840	38329	3.31%	0.211%
164	13.486	13.464	13.532	HH	1807	67626	5.85%	0.373%
165	13.550	13.532	13.574	HH	1701	39514	3.42%	0.218%
166	13.606	13.574	13.635	HH	5092	100833	8.72%	0.556%
167	13.660	13.635	13.669	HH	1878	36734	3.18%	0.203%
168	13.680	13.669	13.697	HH	1828	30485	2.64%	0.168%
169	13.719	13.697	13.763	HH	1967	72176	6.24%	0.398%
170	13.791	13.763	13.812	HH	1773	50241	4.34%	0.277%
171	13.842	13.812	13.964	HH	4363	205615	17.78%	1.133%
172	13.988	13.964	14.021	HH	1804	59142	5.11%	0.326%
173	14.045	14.021	14.082	HH	1887	64137	5.55%	0.354%
174	14.086	14.082	14.093	HH	1634	10535	0.91%	0.058%
175	14.113	14.093	14.124	HH	1719	30234	2.61%	0.167%
176	14.144	14.124	14.166	HH	2837	54642	4.73%	0.301%
177	14.193	14.166	14.239	HH	4609	109322	9.45%	0.603%
178	14.251	14.239	14.268	HH	1770	29644	2.56%	0.163%
179	14.287	14.268	14.302	HH	1701	33814	2.92%	0.186%
180	14.307	14.302	14.328	HH	1692	24454	2.11%	0.135%
181	14.348	14.328	14.366	HH	1675	36589	3.16%	0.202%
182	14.424	14.366	14.477	HH	1876	114173	9.87%	0.629%
183	14.490	14.477	14.497	HH	1792	20635	1.78%	0.114%
184	14.524	14.497	14.537	HH	1912	43287	3.74%	0.239%
185	14.556	14.537	14.563	HH	2140	31280	2.70%	0.172%
186	14.589	14.563	14.657	HH	3341	131839	11.40%	0.727%
187	14.688	14.657	14.700	HH	1980	50204	4.34%	0.277%
188	14.712	14.700	14.729	HH	2024	34555	2.99%	0.190%
189	14.758	14.729	14.783	HH	3933	88221	7.63%	0.486%
190	14.827	14.783	14.842	HH	2602	80394	6.95%	0.443%
191	14.857	14.842	14.877	HH	2426	50800	4.39%	0.280%
192	14.884	14.877	14.901	HH	2350	32495	2.81%	0.179%
193	14.912	14.901	14.944	HH	2419	59136	5.11%	0.326%
194	14.974	14.944	15.006	HH	2614	88450	7.65%	0.488%

Instrument :

FID_F

ClientSampleId :

TP-89

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/17/2025

Supervised By :mohammad ahmed 07/18/2025

Instrument :

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TP-89

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/17/2025

Supervised By :mohammad ahmed 07/18/2025

					rt	Area	Area%	Height
195	15.096	15.006	15.136	HH	73666	1156381	100.00%	6.375%
196	15.149	15.136	15.181	HH	3309	81542		
197	15.185	15.181	15.216	HH	2816	57370		
198	15.262	15.216	15.279	HH	3597	120278	100.00%	
199	15.298	15.279	15.324	HH	4903	105842		
200	15.345	15.324	15.382	HH	3781	114516		
201	15.405	15.382	15.431	HH	3202	92114	7.97%	0.508%
202	15.494	15.431	15.522	HH	3443	178398	15.43%	0.983%
203	15.554	15.522	15.574	HH	3441	101524	8.78%	0.560%
204	15.584	15.574	15.603	HH	3323	59492	5.14%	0.328%
205	15.683	15.603	15.761	HH	34776	865297	74.83%	4.770%
206	15.777	15.761	15.794	HH	3843	75341	6.52%	0.415%
207	15.821	15.794	15.855	HH	6019	169142	14.63%	0.932%
208	15.896	15.855	15.932	HH	9888	263125	22.75%	1.451%
209	15.950	15.932	15.980	HH	4392	122292	10.58%	0.674%
210	16.009	15.980	16.017	HH	4350	95283	8.24%	0.525%
211	16.141	16.017	16.166	HH	5020	416177	35.99%	2.294%
212	16.204	16.166	16.231	HH	6253	217319	18.79%	1.198%
213	16.324	16.231	16.356	HH	8191	462832	40.02%	2.551%
214	16.392	16.356	16.411	HH	6492	211658	18.30%	1.167%
215	16.458	16.411	16.472	HH	6786	239860	20.74%	1.322%
216	16.523	16.472	16.550	HH	7233	329084	28.46%	1.814%
217	16.703	16.550	16.739	HH	12018	949853	82.14%	5.236%
218	16.771	16.739	16.788	HH	9664	263725	22.81%	1.454%
219	16.808	16.788	16.842	HH	11031	317052	27.42%	1.748%
220	16.886	16.842	16.922	HH	10451	451407	39.04%	2.488%
221	16.941	16.922	16.952	HH	9490	164141	14.19%	0.905%
222	17.014	16.952	17.027	HH	10042	441987	38.22%	2.437%
223	17.076	17.027	17.109	HH	11159	523917	45.31%	2.888%
224	17.118	17.109	17.132	HH	11037	148331	12.83%	0.818%
225	17.189	17.132	17.212	HH	11558	547075	47.31%	3.016%
226	17.277	17.212	17.303	HH	15437	689311	59.61%	3.800%
227	17.324	17.303	17.342	HH	13602	303949	26.28%	1.676%
228	17.352	17.342	17.386	HH	12912	332500	28.75%	1.833%
229	17.434	17.386	17.448	HH	12814	472908	40.90%	2.607%
230	17.467	17.448	17.477	HH	12842	221884	19.19%	1.223%

Sum of corrected areas: 18139988

FF071025.M Thu Jul 17 05:07:51 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/08/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-33	SDG No.:	Q2529
Lab Sample ID:	Q2529-09	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	90.5
Sample Wt/Vol:	30.04	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
FF016172.D	1	07/16/25 10:00	07/16/25 18:16	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	2700		186	1840	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.9		37 - 130	54%	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\FF071625\
Data File : FF016172.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 18:16
Operator : YP\AJ
Sample : Q2529-09
Misc :
ALS Vial : 76 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-33

Integration File: autoint1.e
Quant Time: Jul 17 03:38:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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	1060136	10.887 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

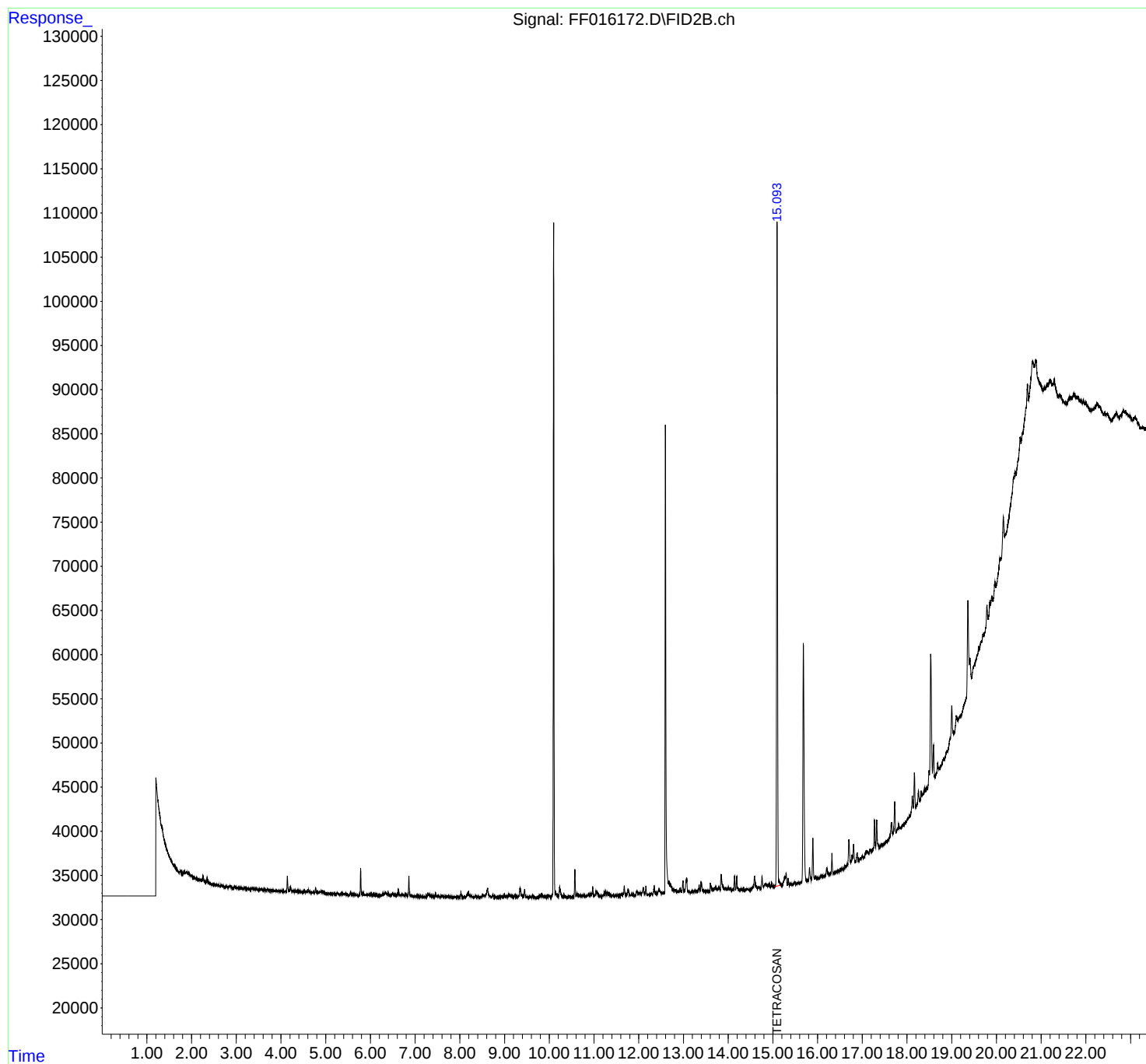
(m)=manual int.

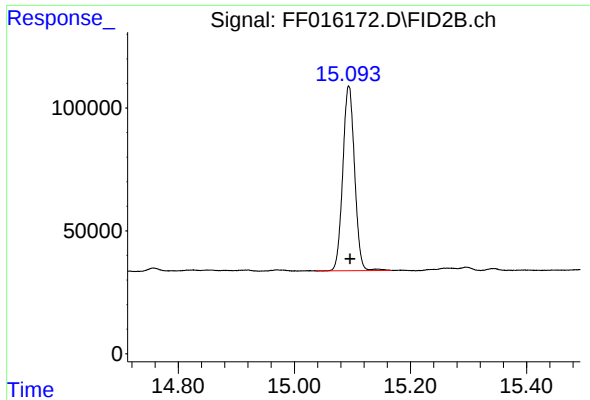
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016172.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 18:16
Operator : YP\AJ
Sample : Q2529-09
Misc :
ALS Vial : 76 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-33

Integration File: autoint1.e
Quant Time: Jul 17 03:38:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.094 min
Delta R.T.: -0.002 min
Response: 1060136
Conc: 10.89 ug/ml

Instrument :
FID_F
ClientSampleId :
TP-33

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016172.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 18:16
Sample : Q2529-09
Misc :
ALS Vial : 76 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.208	4.190	4.267	HH	1044	32552	2.94%	0.341%
2	4.274	4.267	4.281	HH	604	4740	0.43%	0.050%
3	4.285	4.281	4.300	HH	560	5753	0.52%	0.060%
4	4.306	4.300	4.312	HH	579	3512	0.32%	0.037%
5	4.321	4.312	4.326	HH	622	4539	0.41%	0.048%
6	4.330	4.326	4.336	HH	564	3057	0.28%	0.032%
7	4.358	4.336	4.370	HH	611	11331	1.02%	0.119%
8	4.373	4.370	4.394	HH	594	7855	0.71%	0.082%
9	4.406	4.394	4.415	HH	584	6404	0.58%	0.067%
10	4.422	4.415	4.434	HH	587	5681	0.51%	0.060%
11	4.437	4.434	4.450	HH	516	4561	0.41%	0.048%
12	4.464	4.450	4.467	HH	447	4447	0.40%	0.047%
13	4.476	4.467	4.481	HH	478	3690	0.33%	0.039%
14	4.489	4.481	4.503	HH	521	6054	0.55%	0.064%
15	4.521	4.503	4.541	HH	667	11527	1.04%	0.121%
16	4.561	4.541	4.574	HH	569	9443	0.85%	0.099%
17	4.580	4.574	4.589	HH	501	3963	0.36%	0.042%
18	4.610	4.589	4.632	HH	780	14420	1.30%	0.151%
19	4.636	4.632	4.640	HH	480	2266	0.20%	0.024%
20	4.646	4.640	4.674	HH	504	8747	0.79%	0.092%
21	4.696	4.674	4.702	HH	457	6568	0.59%	0.069%
22	4.737	4.702	4.757	HH	432	12463	1.12%	0.131%
23	4.774	4.757	4.804	HH	882	15941	1.44%	0.167%
24	4.809	4.804	4.815	HH	427	2779	0.25%	0.029%
25	4.818	4.815	4.822	HH	378	1504	0.14%	0.016%
26	4.833	4.822	4.845	HH	456	5303	0.48%	0.056%
27	4.861	4.845	4.892	HH	506	12311	1.11%	0.129%
28	4.899	4.892	4.905	HH	530	3728	0.34%	0.039%
29	4.925	4.905	4.975	HH	579	18245	1.65%	0.191%
30	4.979	4.975	5.002	HH	370	4854	0.44%	0.051%
31	5.012	5.002	5.027	HH	398	4192	0.38%	0.044%
32	5.032	5.027	5.044	HH	414	2851	0.26%	0.030%
33	5.049	5.044	5.059	HH	317	2410	0.22%	0.025%
34	5.065	5.059	5.083	HH	352	3906	0.35%	0.041%
35	5.088	5.083	5.098	HH	296	2168	0.20%	0.023%
36	5.109	5.098	5.115	HH	299	2662	0.24%	0.028%

					rteres			
37	5.126	5.115	5.141	HH	317	4145	0.37%	0.043%
38	5.147	5.141	5.157	HH	289	2228	0.20%	0.023%
39	5.161	5.157	5.175	HH	283	2559	0.23%	0.027%
40	5.189	5.175	5.222	HH	295	5993	0.54%	0.063%
41	5.261	5.222	5.279	HH	335	8909	0.80%	0.093%
42	5.284	5.279	5.304	HH	212	2666	0.24%	0.028%
43	5.308	5.304	5.314	HH	230	1114	0.10%	0.012%
44	5.328	5.314	5.340	HH	251	3240	0.29%	0.034%
45	5.344	5.340	5.349	HH	214	1174	0.11%	0.012%
46	5.357	5.349	5.365	HH	272	1974	0.18%	0.021%
47	5.371	5.365	5.385	HH	280	2482	0.22%	0.026%
48	5.405	5.385	5.419	HH	308	4119	0.37%	0.043%
49	5.430	5.419	5.441	HH	248	2509	0.23%	0.026%
50	5.448	5.441	5.453	HH	215	1204	0.11%	0.013%
51	5.478	5.453	5.518	HH	216	5312	0.48%	0.056%
52	5.522	5.518	5.527	HH	135	578	0.05%	0.006%
53	5.530	5.527	5.535	HH	87	542	0.05%	0.006%
54	5.554	5.535	5.574	HH	509	6272	0.57%	0.066%
55	5.579	5.574	5.583	HH	191	839	0.08%	0.009%
56	5.588	5.583	5.606	HH	226	2175	0.20%	0.023%
57	5.608	5.606	5.613	HH	141	521	0.05%	0.005%
58	5.619	5.613	5.633	HH	144	1618	0.15%	0.017%
59	5.638	5.633	5.656	HH	182	1669	0.15%	0.018%
60	5.666	5.656	5.675	HH	188	1259	0.11%	0.013%
61	5.678	5.675	5.707	HH	136	1762	0.16%	0.018%
62	5.713	5.707	5.728	HH	75	750	0.07%	0.008%
63	5.741	5.728	5.747	HH	115	831	0.07%	0.009%
64	5.781	5.747	5.807	HH	3161	32782	2.96%	0.344%
65	5.825	5.807	5.836	HH	392	4331	0.39%	0.045%
66	5.848	5.836	5.868	HH	306	3743	0.34%	0.039%
67	5.871	5.868	5.893	HH	186	1687	0.15%	0.018%
68	5.904	5.893	5.921	HH	194	1753	0.16%	0.018%
69	5.932	5.921	5.944	HH	153	1499	0.14%	0.016%
70	5.954	5.944	5.960	HH	131	934	0.08%	0.010%
71	5.981	5.960	5.990	HH	178	2136	0.19%	0.022%
72	5.993	5.990	6.000	HH	215	820	0.07%	0.009%
73	6.018	6.000	6.045	HH	256	3895	0.35%	0.041%
74	6.065	6.045	6.095	HH	233	3328	0.30%	0.035%
75	6.117	6.095	6.159	HH	215	3466	0.31%	0.036%
76	6.178	6.159	6.182	PH	80	572	0.05%	0.006%
77	6.187	6.182	6.204	HH	114	637	0.06%	0.007%
78	6.211	6.204	6.221	PH	87	592	0.05%	0.006%
79	6.224	6.221	6.235	HH	93	183	0.02%	0.002%
80	6.241	6.235	6.246	PH	60	190	0.02%	0.002%
81	6.285	6.246	6.310	PH	387	6665	0.60%	0.070%
82	6.322	6.310	6.328	HH	322	2760	0.25%	0.029%
83	6.339	6.328	6.374	HH	422	7902	0.71%	0.083%
84	6.392	6.374	6.415	HH	315	4826	0.44%	0.051%
85	6.422	6.415	6.462	HH	216	2258	0.20%	0.024%
86	6.497	6.462	6.544	PH	341	7545	0.68%	0.079%
87	6.548	6.544	6.552	HH	113	378	0.03%	0.004%
88	6.561	6.552	6.600	HH	195	3234	0.29%	0.034%
89	6.623	6.600	6.658	HH	816	11102	1.00%	0.116%

					rteres			
90	6.669	6.658	6.681	HH	194	1444	0.13%	0.015%
91	6.685	6.681	6.697	HH	139	1076	0.10%	0.011%
92	6.711	6.697	6.724	HH	213	2316	0.21%	0.024%
93	6.727	6.724	6.731	HH	192	597	0.05%	0.006%
94	6.734	6.731	6.750	HH	173	1390	0.13%	0.015%
95	6.753	6.750	6.762	HH	140	689	0.06%	0.007%
96	6.766	6.762	6.777	HH	150	917	0.08%	0.010%
97	6.789	6.777	6.821	HH	167	2585	0.23%	0.027%
98	6.830	6.821	6.835	PH	115	398	0.04%	0.004%
99	6.859	6.835	6.916	PH	2233	23764	2.14%	0.249%
100	6.920	6.916	6.934	PH	36	-160	-0.01%	-0.002%
101	7.280	7.261	7.301	PH	290	3233	0.29%	0.034%
102	7.305	7.301	7.356	HH	119	2067	0.19%	0.022%
103	7.452	7.428	7.477	PH	376	2445	0.22%	0.026%
104	8.195	8.176	8.212	HH	512	5341	0.48%	0.056%
105	8.223	8.212	8.256	HH	187	1001	0.09%	0.010%
106	8.618	8.539	8.659	PH	848	17884	1.61%	0.188%
107	9.074	9.068	9.081	PH	-32	-406	-0.04%	-0.004%
108	9.096	9.081	9.143	PH	240	2170	0.20%	0.023%
109	9.346	9.284	9.424	PH	921	11193	1.01%	0.117%
110	9.447	9.424	9.469	PH	740	6482	0.58%	0.068%
111	10.097	10.034	10.207	PH	76152	801243	72.29%	8.404%
112	10.230	10.207	10.315	PH	987	14098	1.27%	0.148%
113	10.572	10.523	10.599	PH	2940	28935	2.61%	0.303%
114	10.619	10.599	10.647	PH	349	3600	0.32%	0.038%
115	10.652	10.647	10.699	HH	74	1327	0.12%	0.014%
116	10.708	10.699	10.739	PH	88	-100	-0.01%	-0.001%
117	10.873	10.837	10.909	PH	202	3890	0.35%	0.041%
118	10.923	10.909	10.939	HH	210	2922	0.26%	0.031%
119	10.971	10.939	11.007	HH	1053	13132	1.18%	0.138%
120	11.043	11.007	11.057	PH	607	7685	0.69%	0.081%
121	11.070	11.057	11.094	HH	527	6182	0.56%	0.065%
122	11.228	11.135	11.243	PH	401	3207	0.29%	0.034%
123	11.259	11.243	11.289	HH	528	9057	0.82%	0.095%
124	11.304	11.289	11.362	HH	377	8908	0.80%	0.093%
125	11.366	11.362	11.387	HH	157	1233	0.11%	0.013%
126	11.483	11.465	11.519	PH	83	1248	0.11%	0.013%
127	11.612	11.563	11.631	PH	191	2714	0.24%	0.028%
128	11.648	11.631	11.656	HH	285	2905	0.26%	0.030%
129	11.677	11.656	11.714	HH	1143	15656	1.41%	0.164%
130	11.762	11.714	11.817	HH	654	15902	1.43%	0.167%
131	11.835	11.817	11.857	PH	203	2514	0.23%	0.026%
132	11.871	11.857	11.910	HH	286	3925	0.35%	0.041%
133	11.954	11.910	12.012	HH	544	17188	1.55%	0.180%
134	12.029	12.012	12.052	HH	337	6130	0.55%	0.064%
135	12.100	12.052	12.142	HH	938	25397	2.29%	0.266%
136	12.160	12.142	12.193	HH	1098	15207	1.37%	0.159%
137	12.228	12.193	12.242	HH	214	4693	0.42%	0.049%
138	12.259	12.242	12.266	HH	164	1883	0.17%	0.020%
139	12.287	12.266	12.307	HH	324	5651	0.51%	0.059%
140	12.347	12.307	12.381	HH	1161	22640	2.04%	0.237%
141	12.399	12.381	12.420	HH	441	7561	0.68%	0.079%

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142	12.446	12.420	12.494	HH	702	23515	2.12%	0.247%
143	12.505	12.494	12.544	HH	388	9173	0.83%	0.096%
144	12.562	12.544	12.575	HH	489	6922	0.62%	0.073%
145	12.597	12.575	12.667	HH	53137	676354	61.02%	7.094%
146	12.679	12.667	12.696	HH	1713	24790	2.24%	0.260%
147	12.709	12.696	12.762	HH	1399	40812	3.68%	0.428%
148	12.772	12.762	12.806	HH	796	17664	1.59%	0.185%
149	12.817	12.806	12.861	HH	698	18866	1.70%	0.198%
150	12.875	12.861	12.896	HH	502	9940	0.90%	0.104%
151	12.924	12.896	12.958	HH	841	23003	2.08%	0.241%
152	12.989	12.958	13.022	HH	1709	33092	2.99%	0.347%
153	13.071	13.022	13.124	HH	1993	59834	5.40%	0.628%
154	13.142	13.124	13.162	HH	422	9386	0.85%	0.098%
155	13.198	13.162	13.222	HH	530	15887	1.43%	0.167%
156	13.251	13.222	13.304	HH	654	25969	2.34%	0.272%
157	13.350	13.304	13.372	HH	1208	28589	2.58%	0.300%
158	13.396	13.372	13.429	HH	1502	34911	3.15%	0.366%
159	13.438	13.429	13.459	HH	693	10113	0.91%	0.106%
160	13.489	13.459	13.502	HH	572	13790	1.24%	0.145%
161	13.519	13.502	13.534	HH	606	9941	0.90%	0.104%
162	13.548	13.534	13.571	HH	666	12222	1.10%	0.128%
163	13.605	13.571	13.641	HH	1381	36794	3.32%	0.386%
164	13.650	13.641	13.672	HH	807	14578	1.32%	0.153%
165	13.710	13.672	13.764	HH	939	45682	4.12%	0.479%
166	13.792	13.764	13.821	HH	963	27864	2.51%	0.292%
167	13.842	13.821	13.915	HH	2392	74063	6.68%	0.777%
168	13.947	13.915	13.976	HH	886	29455	2.66%	0.309%
169	14.008	13.976	14.034	HH	991	27885	2.52%	0.292%
170	14.054	14.034	14.075	HH	897	19373	1.75%	0.203%
171	14.084	14.075	14.101	HH	749	10507	0.95%	0.110%
172	14.108	14.101	14.117	HH	669	6790	0.61%	0.071%
173	14.143	14.117	14.167	HH	2230	38890	3.51%	0.408%
174	14.191	14.167	14.239	HH	2183	49522	4.47%	0.519%
175	14.256	14.239	14.269	HH	774	12534	1.13%	0.131%
176	14.288	14.269	14.371	HH	781	40515	3.66%	0.425%
177	14.434	14.371	14.464	HH	812	39786	3.59%	0.417%
178	14.470	14.464	14.498	HH	729	14208	1.28%	0.149%
179	14.520	14.498	14.536	HH	917	17468	1.58%	0.183%
180	14.555	14.536	14.566	HH	1033	17373	1.57%	0.182%
181	14.588	14.566	14.650	HH	2185	69262	6.25%	0.726%
182	14.683	14.650	14.697	HH	979	26766	2.41%	0.281%
183	14.704	14.697	14.727	HH	970	16416	1.48%	0.172%
184	14.757	14.727	14.797	HH	2178	56245	5.07%	0.590%
185	14.824	14.797	14.838	HH	1413	30589	2.76%	0.321%
186	14.854	14.838	14.872	HH	1369	25958	2.34%	0.272%
187	14.881	14.872	14.894	HH	1232	15600	1.41%	0.164%
188	14.919	14.894	14.940	HH	1364	33240	3.00%	0.349%
189	14.970	14.940	15.007	HH	1480	47305	4.27%	0.496%
190	15.026	15.007	15.047	HH	1122	24880	2.24%	0.261%
191	15.094	15.047	15.131	HH	76225	1108378	100.00%	11.625%
192	15.142	15.131	15.171	HH	1735	37221	3.36%	0.390%
193	15.183	15.171	15.209	HH	1299	28044	2.53%	0.294%
194	15.263	15.209	15.280	HH	2167	73264	6.61%	0.768%

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195	15.296	15.280	15.321	HH	2527	47937	4.32%	0.503%
196	15.343	15.321	15.381	HH	1994	54297	4.90%	0.570%
197	15.395	15.381	15.426	HH	1386	35511	3.20%	0.372%
198	15.452	15.426	15.466	HH	1384	31692	2.86%	0.332%
199	15.493	15.466	15.521	HH	1537	47219	4.26%	0.495%
200	15.545	15.521	15.586	HH	1464	54880	4.95%	0.576%
201	15.623	15.586	15.629	HH	1528	37965	3.43%	0.398%
202	15.683	15.629	15.756	HH	28242	611078	55.13%	6.409%
203	15.773	15.756	15.787	HH	1758	31830	2.87%	0.334%
204	15.820	15.787	15.857	HH	3145	96157	8.68%	1.009%
205	15.895	15.857	15.929	HH	6515	141760	12.79%	1.487%
206	15.949	15.929	15.974	HH	2236	56264	5.08%	0.590%
207	15.996	15.974	16.026	HH	2073	61956	5.59%	0.650%
208	16.030	16.026	16.036	HH	2049	11910	1.07%	0.125%
209	16.079	16.036	16.098	HH	2173	79372	7.16%	0.833%
210	16.139	16.098	16.169	HH	2348	94558	8.53%	0.992%
211	16.204	16.169	16.238	HH	3132	110003	9.92%	1.154%
212	16.245	16.238	16.264	HH	2564	39851	3.60%	0.418%
213	16.276	16.264	16.295	HH	2595	47345	4.27%	0.497%
214	16.322	16.295	16.349	HH	4592	104165	9.40%	1.093%
215	16.389	16.349	16.421	HH	2798	114881	10.36%	1.205%
216	16.460	16.421	16.476	HH	2935	92587	8.35%	0.971%
217	16.522	16.476	16.546	HH	3147	123972	11.18%	1.300%
218	16.701	16.546	16.742	HH	6310	443858	40.05%	4.656%
219	16.769	16.742	16.783	HH	4602	103730	9.36%	1.088%
220	16.805	16.783	16.848	HH	5847	181533	16.38%	1.904%
221	16.885	16.848	16.916	HH	4889	172423	15.56%	1.808%
222	17.003	16.916	17.032	HH	4513	298830	26.96%	3.134%
223	17.078	17.032	17.091	HH	5047	164749	14.86%	1.728%
224	17.107	17.091	17.142	HH	5057	153105	13.81%	1.606%
225	17.176	17.142	17.196	HH	5260	162378	14.65%	1.703%
226	17.275	17.196	17.299	HH	8603	367241	33.13%	3.852%
227	17.322	17.299	17.376	HH	8511	299722	27.04%	3.144%
228	17.388	17.376	17.409	HH	5595	111442	10.05%	1.169%
229	17.433	17.409	17.453	HH	5854	149569	13.49%	1.569%
					Sum of corrected areas:		9534043	

FF071025.M Thu Jul 17 05:10:24 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/08/25
Project:	South River WM Replacement	Date Received:	07/08/25
Client Sample ID:	TP-30	SDG No.:	Q2529
Lab Sample ID:	Q2529-10	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	91.4
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
FF016173.D	1	07/16/25 10:00	07/16/25 18:46	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	4180		185	1820	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	12.2		37 - 130	61%	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\FF071625\
Data File : FF016173.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 18:46
Operator : YP\AJ
Sample : Q2529-10
Misc :
ALS Vial : 77 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-30

Integration File: autoint1.e
Quant Time: Jul 17 03:38:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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	1191748	12.239 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

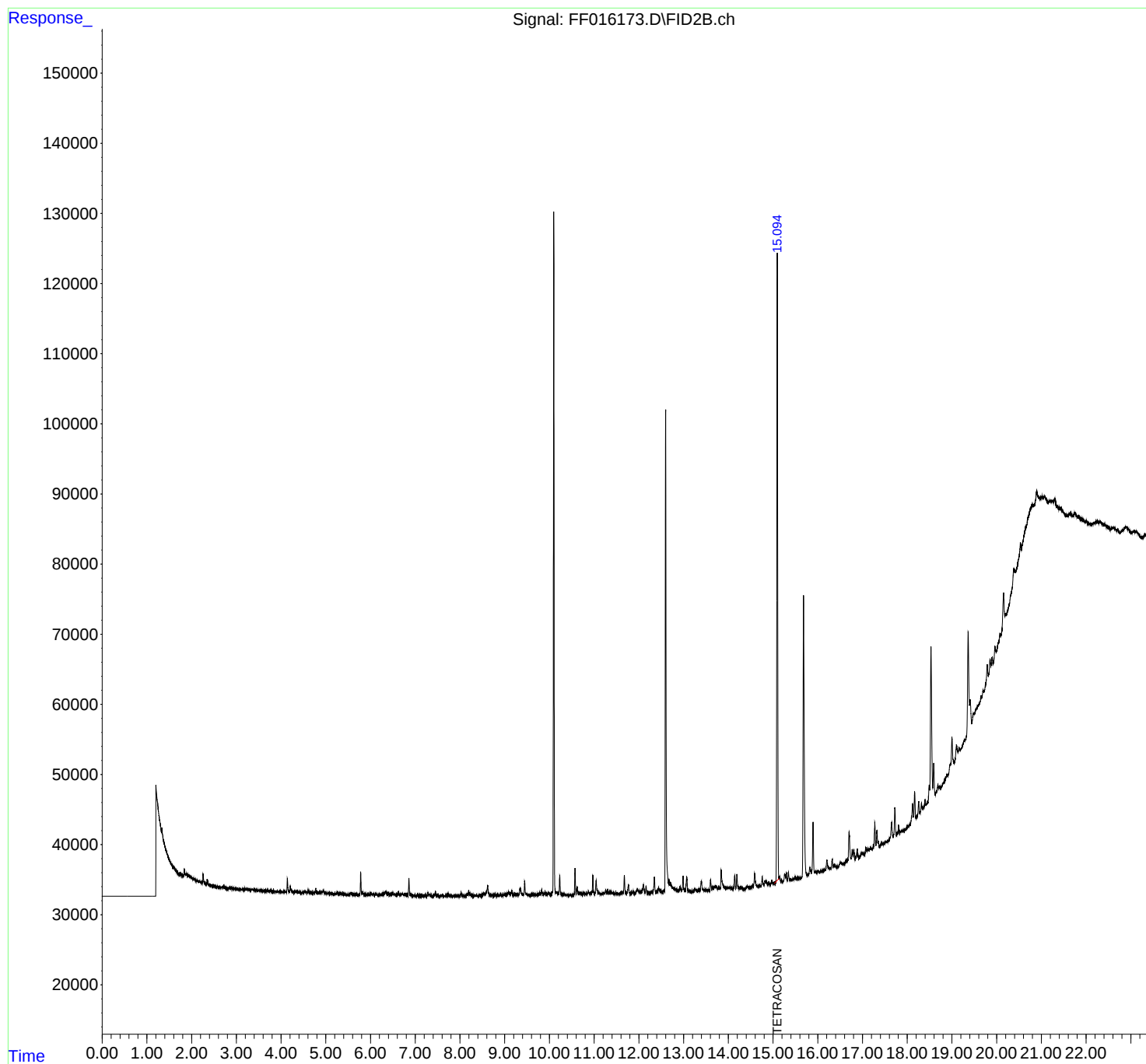
(m)=manual int.

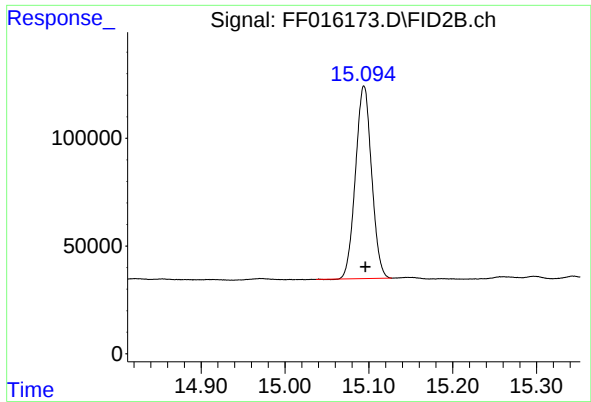
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016173.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 18:46
Operator : YP\AJ
Sample : Q2529-10
Misc :
ALS Vial : 77 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
TP-30

Integration File: autoint1.e
Quant Time: Jul 17 03:38:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.094 min
Delta R.T.: -0.002 min
Response: 1191748
Conc: 12.24 ug/ml

Instrument :
FID_F
ClientSampleId :
TP-30

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016173.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 18:46
Sample : Q2529-10
Misc :
ALS Vial : 77 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.206	4.189	4.292	HH	1424	48322	3.73%	0.335%
2	4.298	4.292	4.306	HH	633	4643	0.36%	0.032%
3	4.321	4.306	4.333	HH	741	10419	0.81%	0.072%
4	4.337	4.333	4.363	HH	725	11331	0.88%	0.079%
5	4.366	4.363	4.395	HH	623	10535	0.81%	0.073%
6	4.402	4.395	4.457	HH	579	19513	1.51%	0.135%
7	4.479	4.457	4.504	HH	545	13739	1.06%	0.095%
8	4.518	4.504	4.549	HH	753	16350	1.26%	0.113%
9	4.561	4.549	4.589	HH	727	14111	1.09%	0.098%
10	4.611	4.589	4.637	HH	860	18335	1.42%	0.127%
11	4.647	4.637	4.675	HH	629	12102	0.94%	0.084%
12	4.682	4.675	4.687	HH	480	3288	0.25%	0.023%
13	4.694	4.687	4.719	HH	485	8565	0.66%	0.059%
14	4.735	4.719	4.742	HH	481	6337	0.49%	0.044%
15	4.774	4.742	4.814	HH	1079	25908	2.00%	0.180%
16	4.821	4.814	4.825	HH	457	2953	0.23%	0.020%
17	4.829	4.825	4.839	HH	495	3715	0.29%	0.026%
18	4.846	4.839	4.850	HH	496	3060	0.24%	0.021%
19	4.857	4.850	4.862	HH	511	3428	0.26%	0.024%
20	4.897	4.862	4.904	HH	582	13586	1.05%	0.094%
21	4.942	4.904	4.975	HH	757	25615	1.98%	0.177%
22	4.979	4.975	4.999	HH	511	5997	0.46%	0.042%
23	5.009	4.999	5.025	HH	444	6404	0.49%	0.044%
24	5.028	5.025	5.032	HH	447	1608	0.12%	0.011%
25	5.034	5.032	5.042	HH	436	2407	0.19%	0.017%
26	5.050	5.042	5.061	HH	486	4536	0.35%	0.031%
27	5.072	5.061	5.109	HH	419	10879	0.84%	0.075%
28	5.116	5.109	5.154	HH	405	9429	0.73%	0.065%
29	5.159	5.154	5.164	HH	356	2060	0.16%	0.014%
30	5.172	5.164	5.184	HH	390	4177	0.32%	0.029%
31	5.188	5.184	5.200	HH	404	3680	0.28%	0.026%
32	5.204	5.200	5.207	HH	410	1557	0.12%	0.011%
33	5.211	5.207	5.225	HH	403	3658	0.28%	0.025%
34	5.265	5.225	5.300	HH	611	17798	1.38%	0.123%
35	5.305	5.300	5.310	HH	376	1955	0.15%	0.014%
36	5.325	5.310	5.347	HH	488	8126	0.63%	0.056%

					rteres			
37	5.360	5.347	5.365	HH	335	3336	0.26%	0.023%
38	5.369	5.365	5.377	HH	275	1822	0.14%	0.013%
39	5.380	5.377	5.389	HH	288	1869	0.14%	0.013%
40	5.391	5.389	5.394	HH	284	803	0.06%	0.006%
41	5.411	5.394	5.452	HH	404	10426	0.81%	0.072%
42	5.460	5.452	5.466	HH	275	1929	0.15%	0.013%
43	5.471	5.466	5.484	HH	263	2337	0.18%	0.016%
44	5.487	5.484	5.505	HH	286	2922	0.23%	0.020%
45	5.555	5.505	5.577	HH	564	12922	1.00%	0.090%
46	5.583	5.577	5.606	HH	330	4800	0.37%	0.033%
47	5.618	5.606	5.626	HH	266	2883	0.22%	0.020%
48	5.632	5.626	5.650	HH	256	3434	0.27%	0.024%
49	5.654	5.650	5.674	HH	261	2867	0.22%	0.020%
50	5.682	5.674	5.701	HH	273	3249	0.25%	0.023%
51	5.704	5.701	5.724	HH	192	2735	0.21%	0.019%
52	5.781	5.724	5.810	HH	3507	43902	3.39%	0.304%
53	5.826	5.810	5.874	HH	602	13811	1.07%	0.096%
54	5.877	5.874	5.882	HH	245	1211	0.09%	0.008%
55	5.888	5.882	5.895	HH	293	1997	0.15%	0.014%
56	5.897	5.895	5.906	HH	255	1349	0.10%	0.009%
57	5.910	5.906	5.914	HH	271	1136	0.09%	0.008%
58	5.918	5.914	5.923	HH	278	1187	0.09%	0.008%
59	5.946	5.923	5.970	HH	316	6969	0.54%	0.048%
60	5.977	5.970	5.989	HH	302	2997	0.23%	0.021%
61	6.011	5.989	6.044	HH	359	9931	0.77%	0.069%
62	6.064	6.044	6.097	HH	356	8413	0.65%	0.058%
63	6.117	6.097	6.149	HH	393	7984	0.62%	0.055%
64	6.156	6.149	6.175	HH	187	2945	0.23%	0.020%
65	6.182	6.175	6.202	HH	190	3050	0.24%	0.021%
66	6.208	6.202	6.247	HH	276	5294	0.41%	0.037%
67	6.286	6.247	6.305	HH	570	10365	0.80%	0.072%
68	6.338	6.305	6.380	HH	680	19822	1.53%	0.137%
69	6.395	6.380	6.454	HH	521	13581	1.05%	0.094%
70	6.469	6.454	6.484	HH	318	4829	0.37%	0.033%
71	6.502	6.484	6.550	HH	432	11527	0.89%	0.080%
72	6.576	6.550	6.600	HH	301	7115	0.55%	0.049%
73	6.623	6.600	6.654	HH	684	11975	0.93%	0.083%
74	6.675	6.654	6.690	HH	258	4892	0.38%	0.034%
75	6.705	6.690	6.750	HH	303	8884	0.69%	0.062%
76	6.786	6.750	6.804	HH	372	7656	0.59%	0.053%
77	6.809	6.804	6.824	HH	208	2096	0.16%	0.015%
78	6.858	6.824	6.902	HH	2490	32052	2.48%	0.222%
79	6.910	6.902	6.933	HH	174	2836	0.22%	0.020%
80	6.942	6.933	6.973	HH	167	2615	0.20%	0.018%
81	6.985	6.973	7.023	HH	127	2041	0.16%	0.014%
82	7.235	7.214	7.256	PH	222	1773	0.14%	0.012%
83	7.282	7.256	7.310	PH	488	8892	0.69%	0.062%
84	7.318	7.310	7.349	HH	302	4135	0.32%	0.029%
85	7.359	7.349	7.382	HH	139	1465	0.11%	0.010%
86	7.452	7.382	7.489	PH	697	11107	0.86%	0.077%
87	7.510	7.489	7.542	PH	136	1559	0.12%	0.011%
88	7.573	7.542	7.592	PH	138	1724	0.13%	0.012%
89	7.604	7.592	7.666	HH	167	3156	0.24%	0.022%

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90	7.676	7.666	7.697	HH	113	1187	0.09%	0.008%
91	7.737	7.697	7.784	HH	334	6250	0.48%	0.043%
92	7.792	7.784	7.835	HH	143	1146	0.09%	0.008%
93	8.025	7.994	8.069	PH	555	7054	0.55%	0.049%
94	8.079	8.069	8.094	PH	60	322	0.02%	0.002%
95	8.169	8.094	8.179	PH	374	5290	0.41%	0.037%
96	8.195	8.179	8.211	HH	866	10183	0.79%	0.071%
97	8.224	8.211	8.296	HH	367	7252	0.56%	0.050%
98	8.312	8.296	8.325	PH	166	1306	0.10%	0.009%
99	8.350	8.325	8.409	HH	226	5314	0.41%	0.037%
100	8.442	8.409	8.480	PH	293	4481	0.35%	0.031%
101	8.511	8.480	8.522	PH	299	4667	0.36%	0.032%
102	8.549	8.522	8.562	HH	387	7037	0.54%	0.049%
103	8.619	8.562	8.662	HH	1542	36817	2.84%	0.255%
104	8.677	8.662	8.747	HH	306	7770	0.60%	0.054%
105	8.783	8.747	8.807	HH	235	4990	0.39%	0.035%
106	8.812	8.807	8.822	HH	131	781	0.06%	0.005%
107	8.848	8.822	8.877	PH	245	3850	0.30%	0.027%
108	8.897	8.877	8.929	HH	281	4427	0.34%	0.031%
109	8.944	8.929	8.966	HH	206	2798	0.22%	0.019%
110	8.985	8.966	9.007	HH	487	6490	0.50%	0.045%
111	9.055	9.007	9.074	HH	346	10429	0.81%	0.072%
112	9.092	9.074	9.134	HH	626	15331	1.18%	0.106%
113	9.160	9.134	9.199	HH	834	15184	1.17%	0.105%
114	9.227	9.199	9.259	HH	361	9305	0.72%	0.064%
115	9.272	9.259	9.289	HH	379	4601	0.36%	0.032%
116	9.298	9.289	9.312	HH	249	3182	0.25%	0.022%
117	9.346	9.312	9.405	HH	1183	30504	2.36%	0.211%
118	9.416	9.405	9.422	HH	221	1969	0.15%	0.014%
119	9.447	9.422	9.470	HH	2137	27421	2.12%	0.190%
120	9.482	9.470	9.515	HH	406	7497	0.58%	0.052%
121	9.540	9.515	9.557	HH	251	4316	0.33%	0.030%
122	9.596	9.557	9.610	HH	240	4982	0.38%	0.035%
123	9.633	9.610	9.667	HH	393	7847	0.61%	0.054%
124	9.689	9.667	9.710	HH	217	4450	0.34%	0.031%
125	9.738	9.710	9.763	HH	341	6793	0.52%	0.047%
126	9.786	9.763	9.802	HH	537	8498	0.66%	0.059%
127	9.825	9.802	9.862	HH	784	16888	1.30%	0.117%
128	9.906	9.862	9.930	HH	537	14674	1.13%	0.102%
129	9.955	9.930	9.968	HH	419	6820	0.53%	0.047%
130	9.984	9.968	10.002	HH	439	7446	0.58%	0.052%
131	10.010	10.002	10.037	HH	368	5861	0.45%	0.041%
132	10.097	10.037	10.209	HH	97301	1052870	81.35%	7.296%
133	10.230	10.209	10.302	HH	2955	44058	3.40%	0.305%
134	10.334	10.302	10.354	HH	400	7859	0.61%	0.054%
135	10.363	10.354	10.383	HH	195	2642	0.20%	0.018%
136	10.400	10.383	10.435	HH	239	5106	0.39%	0.035%
137	10.453	10.435	10.487	HH	219	4357	0.34%	0.030%
138	10.498	10.487	10.522	HH	202	2944	0.23%	0.020%
139	10.572	10.522	10.598	HH	3961	49557	3.83%	0.343%
140	10.620	10.598	10.654	HH	1334	24379	1.88%	0.169%
141	10.673	10.654	10.690	HH	563	9451	0.73%	0.065%

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142	10.707	10.690	10.734	HH	427	9231	0.71%	0.064%
143	10.764	10.734	10.804	HH	538	14971	1.16%	0.104%
144	10.873	10.804	10.912	HH	544	26008	2.01%	0.180%
145	10.925	10.912	10.937	HH	632	7425	0.57%	0.051%
146	10.971	10.937	11.015	HH	3011	46806	3.62%	0.324%
147	11.043	11.015	11.147	HH	2270	60091	4.64%	0.416%
148	11.166	11.147	11.173	HH	352	4861	0.38%	0.034%
149	11.192	11.173	11.202	HH	414	6343	0.49%	0.044%
150	11.226	11.202	11.242	HH	461	9574	0.74%	0.066%
151	11.258	11.242	11.280	HH	925	14771	1.14%	0.102%
152	11.305	11.280	11.332	HH	712	17425	1.35%	0.121%
153	11.366	11.332	11.414	HH	642	24210	1.87%	0.168%
154	11.424	11.414	11.458	HH	540	11232	0.87%	0.078%
155	11.484	11.458	11.515	HH	666	12914	1.00%	0.089%
156	11.535	11.515	11.562	HH	455	9388	0.73%	0.065%
157	11.612	11.562	11.632	HH	570	17678	1.37%	0.122%
158	11.676	11.632	11.734	HH	3011	58784	4.54%	0.407%
159	11.767	11.734	11.814	HH	1561	38281	2.96%	0.265%
160	11.835	11.814	11.850	HH	565	9879	0.76%	0.068%
161	11.871	11.850	11.897	HH	688	13425	1.04%	0.093%
162	11.919	11.897	11.930	HH	434	7557	0.58%	0.052%
163	11.967	11.930	12.014	HH	922	37067	2.86%	0.257%
164	12.031	12.014	12.052	HH	735	13548	1.05%	0.094%
165	12.100	12.052	12.142	HH	1640	52060	4.02%	0.361%
166	12.161	12.142	12.205	HH	1482	28646	2.21%	0.199%
167	12.219	12.205	12.229	HH	501	6777	0.52%	0.047%
168	12.238	12.229	12.252	HH	527	6274	0.48%	0.043%
169	12.284	12.252	12.305	HH	623	16821	1.30%	0.117%
170	12.347	12.305	12.375	HH	2699	53986	4.17%	0.374%
171	12.395	12.375	12.414	HH	774	15050	1.16%	0.104%
172	12.440	12.414	12.532	HH	1150	53755	4.15%	0.372%
173	12.560	12.532	12.574	HH	817	17206	1.33%	0.119%
174	12.599	12.574	12.663	HH	69294	902711	69.75%	6.255%
175	12.677	12.663	12.695	HH	2261	38896	3.01%	0.270%
176	12.709	12.695	12.755	HH	1927	55580	4.29%	0.385%
177	12.761	12.755	12.792	HH	1238	24560	1.90%	0.170%
178	12.814	12.792	12.860	HH	1085	38605	2.98%	0.268%
179	12.873	12.860	12.888	HH	840	12898	1.00%	0.089%
180	12.923	12.888	12.960	HH	1393	41961	3.24%	0.291%
181	12.989	12.960	13.037	HH	2878	62822	4.85%	0.435%
182	13.071	13.037	13.104	HH	2709	61865	4.78%	0.429%
183	13.110	13.104	13.125	HH	843	10043	0.78%	0.070%
184	13.135	13.125	13.180	HH	759	22519	1.74%	0.156%
185	13.195	13.180	13.214	HH	757	14363	1.11%	0.100%
186	13.249	13.214	13.297	HH	1070	42824	3.31%	0.297%
187	13.304	13.297	13.331	HH	817	15712	1.21%	0.109%
188	13.348	13.331	13.370	HH	1062	21718	1.68%	0.150%
189	13.396	13.370	13.457	HH	2103	66420	5.13%	0.460%
190	13.480	13.457	13.537	HH	966	40878	3.16%	0.283%
191	13.549	13.537	13.579	HH	965	20734	1.60%	0.144%
192	13.603	13.579	13.625	HH	2332	42835	3.31%	0.297%
193	13.652	13.625	13.670	HH	1287	32096	2.48%	0.222%
194	13.722	13.670	13.765	HH	1475	71796	5.55%	0.498%

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195	13.793	13.765	13.819	HH	1316	37266	2.88%	0.258%
196	13.839	13.819	13.944	HH	3705	133037	10.28%	0.922%
197	13.953	13.944	13.970	HH	1266	18360	1.42%	0.127%
198	14.007	13.970	14.027	HH	1274	41208	3.18%	0.286%
199	14.040	14.027	14.081	HH	1307	38653	2.99%	0.268%
200	14.104	14.081	14.114	HH	1156	21681	1.68%	0.150%
201	14.144	14.114	14.167	HH	2945	58269	4.50%	0.404%
202	14.191	14.167	14.237	HH	3140	74079	5.72%	0.513%
203	14.254	14.237	14.272	HH	1283	25218	1.95%	0.175%
204	14.294	14.272	14.332	HH	1213	40859	3.16%	0.283%
205	14.341	14.332	14.360	HH	1109	17769	1.37%	0.123%
206	14.422	14.360	14.476	HH	1333	84430	6.52%	0.585%
207	14.486	14.476	14.505	HH	1288	21757	1.68%	0.151%
208	14.551	14.505	14.563	HH	1585	47397	3.66%	0.328%
209	14.589	14.563	14.652	HH	3272	107308	8.29%	0.744%
210	14.670	14.652	14.698	HH	1512	39716	3.07%	0.275%
211	14.709	14.698	14.732	HH	1490	29592	2.29%	0.205%
212	14.758	14.732	14.782	HH	2803	61491	4.75%	0.426%
213	14.790	14.782	14.798	HH	1728	16384	1.27%	0.114%
214	14.822	14.798	14.842	HH	2241	51913	4.01%	0.360%
215	14.854	14.842	14.900	HH	2136	65042	5.03%	0.451%
216	14.912	14.900	14.939	HH	1819	39258	3.03%	0.272%
217	14.971	14.939	15.015	HH	2255	87284	6.74%	0.605%
218	15.040	15.015	15.055	HH	2025	44433	3.43%	0.308%
219	15.094	15.055	15.130	HH	91820	1294268	100.00%	8.969%
220	15.147	15.130	15.172	HH	2804	63864	4.93%	0.443%
221	15.187	15.172	15.219	HH	2249	59257	4.58%	0.411%
222	15.260	15.219	15.284	HH	3118	101046	7.81%	0.700%
223	15.297	15.284	15.320	HH	3340	62118	4.80%	0.430%
224	15.344	15.320	15.394	HH	3402	115669	8.94%	0.802%
225	15.407	15.394	15.425	HH	2366	43875	3.39%	0.304%
226	15.448	15.425	15.457	HH	2433	43858	3.39%	0.304%
227	15.494	15.457	15.530	HH	2817	112395	8.68%	0.779%
228	15.551	15.530	15.574	HH	2661	68541	5.30%	0.475%
229	15.682	15.574	15.770	HH	42795	1016462	78.54%	7.044%
230	15.781	15.770	15.797	HH	3072	49867	3.85%	0.346%
231	15.823	15.797	15.859	HH	4169	133291	10.30%	0.924%
232	15.895	15.859	15.937	HH	10595	252372	19.50%	1.749%
233	15.953	15.937	15.976	HH	3534	78837	6.09%	0.546%
234	16.003	15.976	16.022	HH	3687	96176	7.43%	0.666%
235	16.030	16.022	16.038	HH	3513	33740	2.61%	0.234%
236	16.068	16.038	16.084	HH	3611	96588	7.46%	0.669%
237	16.134	16.084	16.160	HH	3805	169224	13.07%	1.173%
238	16.205	16.160	16.272	HH	5136	281825	21.77%	1.953%
239	16.286	16.272	16.299	HH	4032	63572	4.91%	0.441%
240	16.323	16.299	16.343	HH	5175	123859	9.57%	0.858%
241	16.356	16.343	16.372	HH	4465	74924	5.79%	0.519%
242	16.386	16.372	16.430	HH	4416	148797	11.50%	1.031%
243	16.450	16.430	16.468	HH	4330	95837	7.40%	0.664%
244	16.500	16.468	16.552	HH	4869	231473	17.88%	1.604%
245	16.562	16.552	16.585	HH	4714	91184	7.05%	0.632%
246	16.652	16.585	16.668	HH	5217	245170	18.94%	1.699%

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247	16.701	16.668	16.743	HH	9114	302843	23.40%	2.099%	
248	16.771	16.743	16.788	HH	6647	160058	12.37%	1.109%	
249	16.806	16.788	16.835	HH	6691	170012	13.14%	1.178%	
250	16.884	16.835	16.924	HH	6647	308579	23.84%	2.138%	
251	16.931	16.924	16.941	HH	5556	57890	4.47%	0.401%	
252	16.988	16.941	17.034	HH	6138	331624	25.62%	2.298%	
253	17.079	17.034	17.099	HH	6906	250606	19.36%	1.737%	
254	17.120	17.099	17.145	HH	6733	184506	14.26%	1.279%	
255	17.180	17.145	17.202	HH	6818	230858	17.84%	1.600%	
256	17.210	17.202	17.220	HH	6761	72211	5.58%	0.500%	
257	17.275	17.220	17.300	HH	10481	380579	29.40%	2.637%	
258	17.323	17.300	17.344	HH	9398	214687	16.59%	1.488%	
259	17.352	17.344	17.389	HH	7809	198697	15.35%	1.377%	
260	17.432	17.389	17.464	HH	7585	330903	25.57%	2.293%	
261	17.491	17.464	17.500	HHA	7588	169384	13.09%	1.174%	
					Sum of corrected areas:		14431169		

FF071025.M Thu Jul 17 05:11:21 2025



CALIBRATION SUMMARY

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Alliance

Contract: CAMP02

ProjectID: South River WM Replacement

Lab Code: ACE

SDG No.: Q2529

Calibration Sequence : FF071025		Test : Diesel Range Organics	
Concentration (PPM)	Area Count	Reference Factor	File ID
1000	104463293	104463	FF016130.D
500	56348110	112696	FF016131.D
200	23430036	117150	FF016132.D
100	12876046	128760	FF016133.D
50	5695447	113909	FF016134.D
AVG RF : 115396		% RSD : 7.638	AVG RT : 15.1002

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Alliance

Contract: CAMP02

ProjectID: South River WM Replacement

Lab Code: ACE

SDG No.: Q2529

Calibration Sequence : FG070925		Test : Diesel Range Organics	
Concentration (PPM)	Area Count	Reference Factor	File ID
1000	107457449	107457	FG016264.D
500	53927299	107855	FG016265.D
200	23004292	115021	FG016266.D
100	12319443	123194	FG016267.D
50	6076250	121525	FG016268.D
AVG RF : 115010		% RSD : 6.414	AVG RT : 15.201

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.: Q2529
DataFile: FF016163.D Analyst Name: YP\AJ Analyst Date: 07-16-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	64445768	128892	115396	11.695

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
 Data File : FF016163.D
 Signal(s) : FID2B.ch
 Acq On : 16 Jul 2025 12:40
 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 17 03:37:00 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
 Quant Title :
 QLast Update : Thu Jul 10 12:51:11 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	5462645	56.099 ug/ml
Target Compounds			
2) N-DECANE	4.611	6898379	55.429 ug/ml
3) N-DODECANE	6.790	6854288	56.249 ug/ml
4) N-TETRADECANE	8.625	6706664	55.786 ug/ml
5) N-HEXADECANE	10.236	6570228	56.483 ug/ml
6) N-OCTADECANE	11.683	6543683	56.310 ug/ml
7) N-EICOSANE	12.997	6447338	55.128 ug/ml
8) N-DOCOSANE	14.198	6199351	55.290 ug/ml
10) N-TETRACOSANE	15.306	6138965	55.351 ug/ml
11) N-HEXACOSANE	16.329	6068483	56.516 ug/ml
12) N-OCTACOSANE	17.283	6018389	55.968 ug/ml

(f)=RT Delta > 1/2 Window

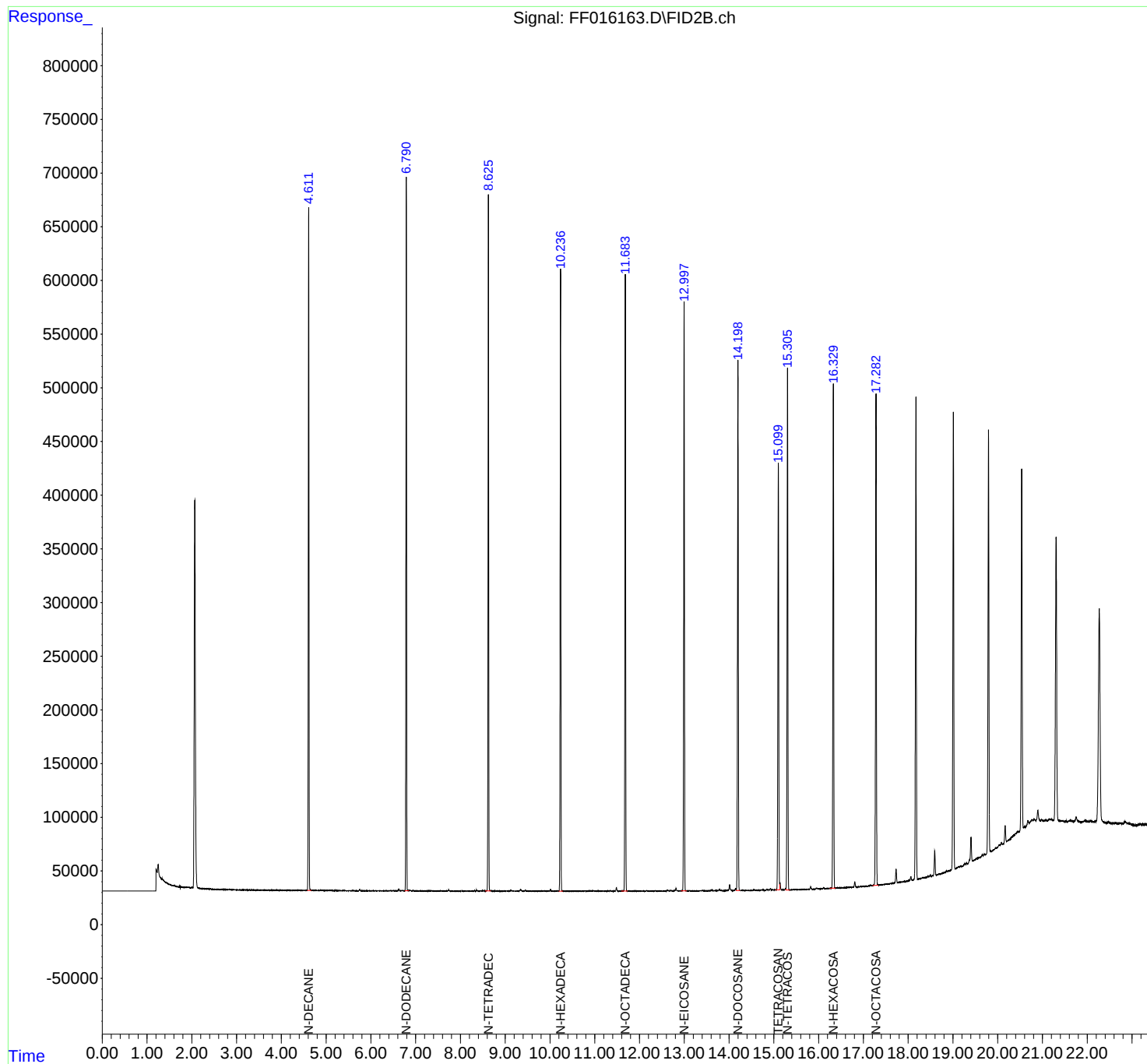
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016163.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 12:40
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 17 03:37:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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\FF071625\
Data File : FF016163.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 12:40
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.611	4.575	4.672	BB	636128	6898379	100.00%	9.868%
2	6.790	6.755	6.852	BB	664310	6854288	99.36%	9.805%
3	8.625	8.559	8.675	BB	648776	6706664	97.22%	9.594%
4	10.236	10.195	10.290	BB	578347	6570228	95.24%	9.398%
5	11.683	11.592	11.732	BB	573137	6543683	94.86%	9.360%
6	12.997	12.925	13.052	BB	549335	6447338	93.46%	9.223%
7	14.198	14.161	14.244	VB	491991	6199351	89.87%	8.868%
8	15.100	15.035	15.130	BV	397847	5462645	79.19%	7.814%
9	15.306	15.269	15.354	VB	484795	6138965	88.99%	8.781%
10	16.329	16.247	16.379	BB	468361	6068483	87.97%	8.681%
11	17.283	17.200	17.337	BB	456373	6018389	87.24%	8.609%
Sum of corrected areas:						69908413		

FF071025.M Thu Jul 17 04:50:59 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.: Q2529
DataFile: FF016171.D Analyst Name: YP\AJ Analyst Date: 07-16-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	57646303	115293	115396	0.089

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
 Data File : FF016171.D
 Signal(s) : FID2B.ch
 Acq On : 16 Jul 2025 17:16
 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 17 03:38:32 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
 Quant Title :
 QLast Update : Thu Jul 10 12:51:11 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...	15.097	4770505	48.991 ug/ml
Target Compounds			
2) N-DECANE	4.611	6193460	49.765 ug/ml
3) N-DODECANE	6.791	6261435	51.384 ug/ml
4) N-TETRADECANE	8.624	6169874	51.321 ug/ml
5) N-HEXADECANE	10.235	6039798	51.923 ug/ml
6) N-OCTADECANE	11.681	5955245	51.247 ug/ml
7) N-EICOSANE	12.995	5781462	49.434 ug/ml
8) N-DOCOSANE	14.195	5466856	48.757 ug/ml
10) N-TETRACOSANE	15.302	5344929	48.192 ug/ml
11) N-HEXACOSANE	16.326	5242291	48.822 ug/ml
12) N-OCTACOSANE	17.279	5190953	48.273 ug/ml

(f)=RT Delta > 1/2 Window

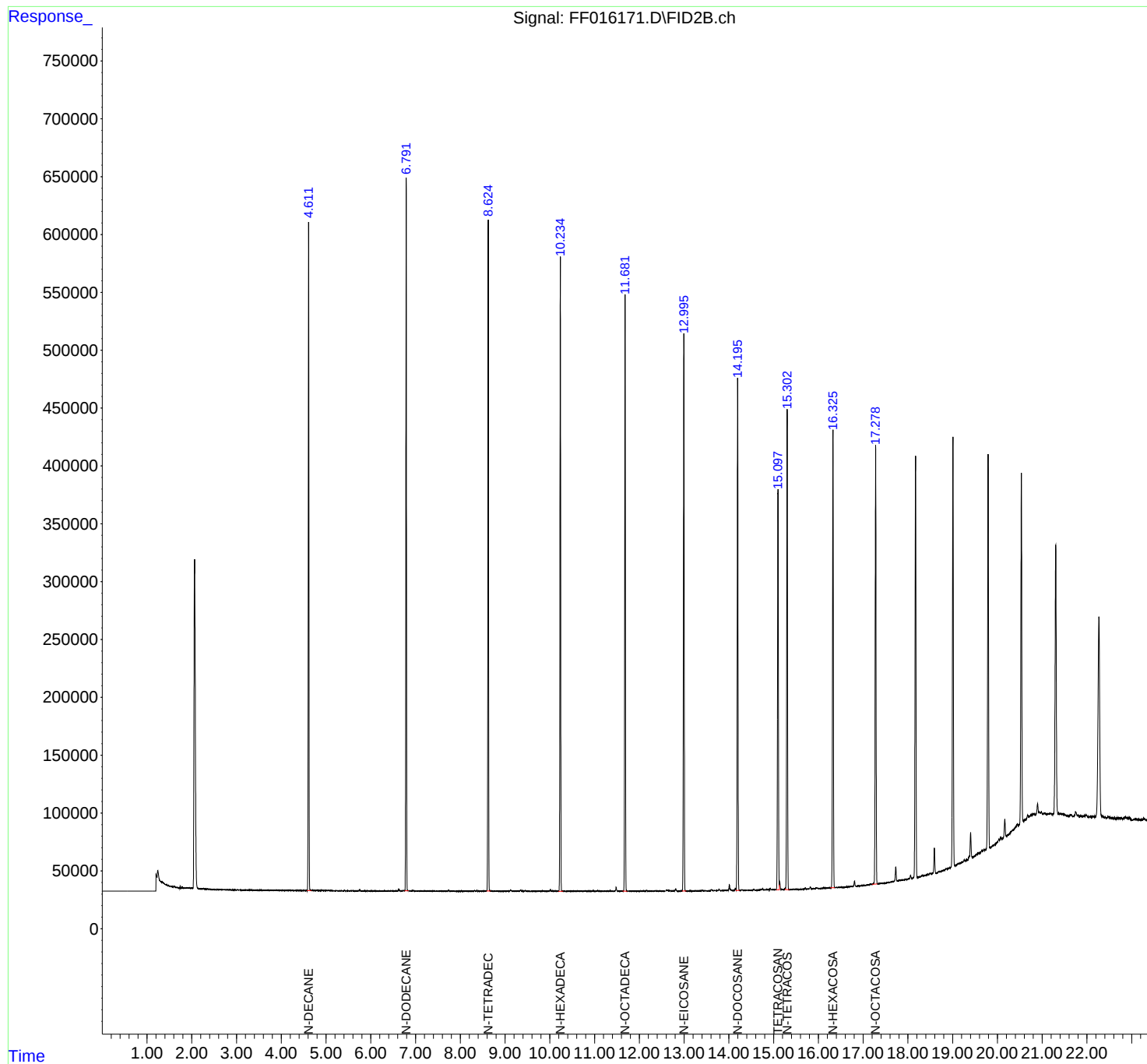
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016171.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 17:16
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 17 03:38:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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\FF071625\
Data File : FF016171.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 17:16
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.611	4.574	4.671	BB	577639	6193460	98.91%	9.923%
2	6.791	6.756	6.842	BB	615737	6261435	100.00%	10.032%
3	8.624	8.587	8.676	BB	579698	6169874	98.54%	9.885%
4	10.235	10.191	10.297	BB	547936	6039798	96.46%	9.677%
5	11.681	11.631	11.722	BB	514171	5955245	95.11%	9.541%
6	12.995	12.956	13.047	BB	482620	5781462	92.33%	9.263%
7	14.195	14.160	14.237	VB	442107	5466856	87.31%	8.759%
8	15.097	15.056	15.128	BV	346622	4770505	76.19%	7.643%
9	15.302	15.264	15.359	VB	414747	5344929	85.36%	8.563%
10	16.326	16.266	16.366	BB	396133	5242291	83.72%	8.399%
11	17.279	17.201	17.317	BV	378186	5190953	82.90%	8.317%
Sum of corrected areas:						62416807		

FF071025.M Thu Jul 17 04:53:06 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.: Q2529
DataFile: FF016178.D Analyst Name: YP\AJ Analyst Date: 07-16-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	63725868	127452	115396	10.448

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
 Data File : FF016178.D
 Signal(s) : FID2B.ch
 Acq On : 16 Jul 2025 22:44
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 41 Sample Multiplier: 1

Instrument :
 FID_F
 ClientSampleId :
 50 PPM TRPH STD

Integration File: autoint1.e
 Quant Time: Jul 17 04:44:17 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
 Quant Title :
 QLast Update : Thu Jul 10 12:51:11 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	5256551	53.983 ug/ml
Target Compounds			
2) N-DECANE	4.609	6916669	55.576 ug/ml
3) N-DODECANE	6.787	6904964	56.665 ug/ml
4) N-TETRADECANE	8.622	6823153	56.755 ug/ml
5) N-HEXADECANE	10.232	6604354	56.776 ug/ml
6) N-OCTADECANE	11.677	6514246	56.057 ug/ml
7) N-EICOSANE	12.991	6446710	55.122 ug/ml
8) N-DOCOSANE	14.193	6088493	54.301 ug/ml
10) N-TETRACOSANE	15.299	5959529	53.733 ug/ml
11) N-HEXACOSANE	16.324	5733957	53.401 ug/ml
12) N-OCTACOSANE	17.275	5733793	53.321 ug/ml

(f)=RT Delta > 1/2 Window

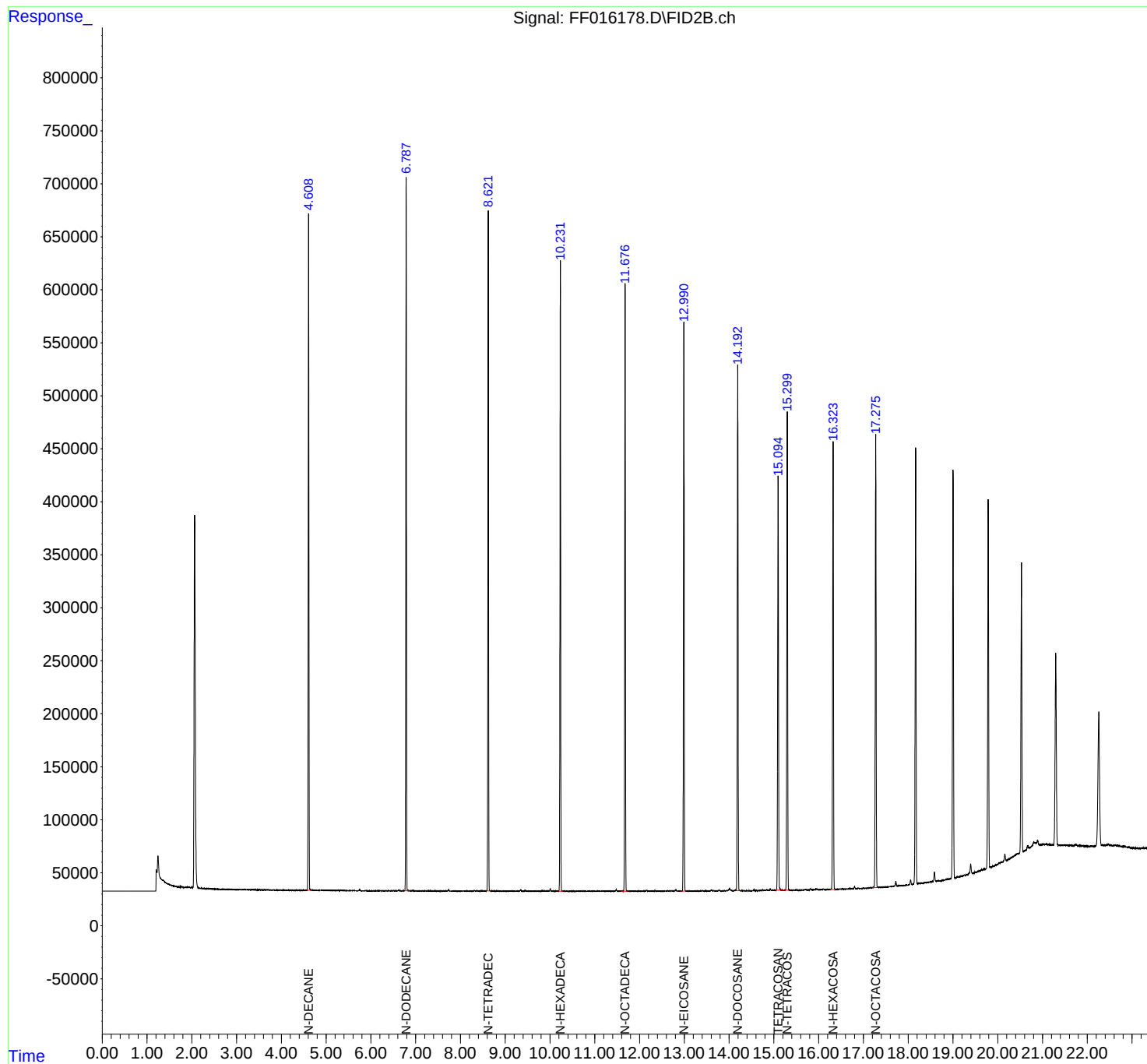
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016178.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 22:44
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 41 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Jul 17 04:44:17 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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\FF071625\
Data File : FF016178.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 22:44
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 41 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.609	4.572	4.679	BB	638346	6916669	100.00%	10.027%
2	6.787	6.754	6.852	BB	672406	6904964	99.83%	10.010%
3	8.622	8.582	8.674	BB	641845	6823153	98.65%	9.891%
4	10.232	10.192	10.289	BB	595955	6604354	95.48%	9.574%
5	11.677	11.587	11.730	BB	573924	6514246	94.18%	9.443%
6	12.991	12.905	13.037	BB	537200	6446710	93.21%	9.345%
7	14.193	14.155	14.240	VB	495709	6088493	88.03%	8.826%
8	15.094	15.034	15.167	BV	390762	5256551	76.00%	7.620%
9	15.299	15.167	15.340	PB	451207	5959529	86.16%	8.639%
10	16.324	16.247	16.370	BV	422978	5733957	82.90%	8.312%
11	17.275	17.200	17.320	BV	427143	5733793	82.90%	8.312%
Sum of corrected areas:						68982421		

FF071025.M Thu Jul 17 04:54:24 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.: Q2529
DataFile: FF016181.D Analyst Name: YP\AJ Analyst Date: 07-17-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	67327496	134655	115396	16.689

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
 Data File : FF016181.D
 Signal(s) : FID2B.ch
 Acq On : 17 Jul 2025 08:58
 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 18 04:08:55 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
 Quant Title :
 QLast Update : Thu Jul 10 12:51:11 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...	15.093	5498638	56.469 ug/ml
Target Compounds			
2) N-DECANE	4.607	6994328	56.200 ug/ml
3) N-DODECANE	6.787	7306410	59.960 ug/ml
4) N-TETRADECANE	8.621	7387034	61.445 ug/ml
5) N-HEXADECANE	10.230	7280039	62.585 ug/mlm
6) N-OCTADECANE	11.677	7205737	62.008 ug/ml
7) N-EICOSANE	12.991	6908572	59.072 ug/ml
8) N-DOCOSANE	14.192	6398734	57.068 ug/ml
10) N-TETRACOSANE	15.298	6145356	55.408 ug/ml
11) N-HEXACOSANE	16.322	5911188	55.051 ug/ml
12) N-OCTACOSANE	17.274	5790098	53.845 ug/ml

(f)=RT Delta > 1/2 Window

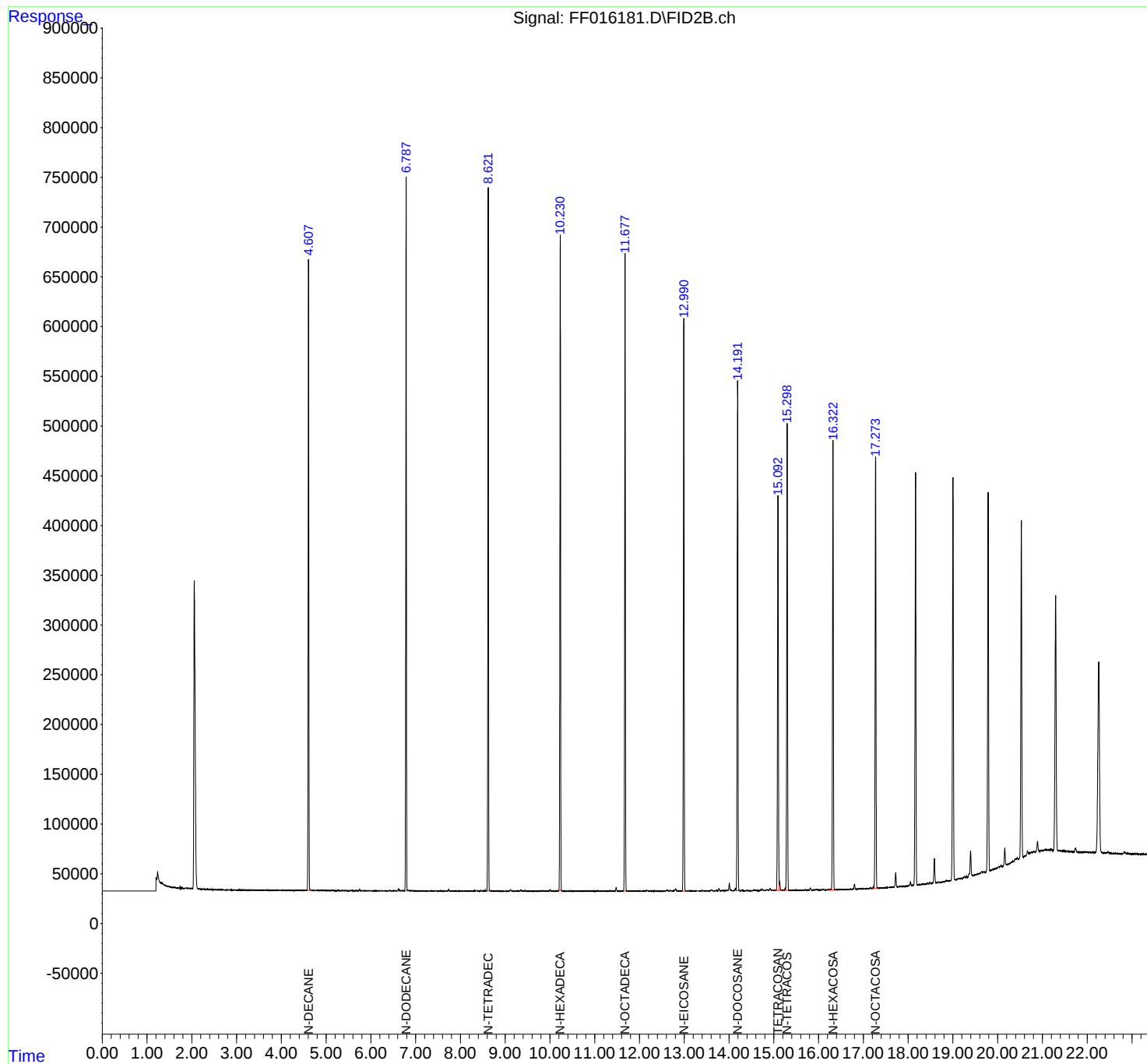
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
Data File : FF016181.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 08:58
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 18 04:08:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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\FF071725\
Data File : FF016181.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 08:58
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.607	4.570	4.679	BB	634311	6994328	94.68%	9.599%
2	6.787	6.745	6.839	BB	716731	7306410	98.91%	10.028%
3	8.621	8.584	8.682	BB	705810	7387034	100.00%	10.138%
4	10.231	10.194	10.280	BB	658801	7317246	99.06%	10.042%
5	11.677	11.635	11.737	BB	640260	7205737	97.55%	9.889%
6	12.991	12.947	13.049	BB	575532	6908572	93.52%	9.482%
7	14.192	14.157	14.245	VB	512766	6398734	86.62%	8.782%
8	15.093	14.979	15.123	BV	397144	5498638	74.44%	7.547%
9	15.298	15.162	15.350	PB	470247	6145356	83.19%	8.434%
10	16.322	16.215	16.370	BB	451116	5911188	80.02%	8.113%
11	17.274	17.200	17.337	BB	432914	5790098	78.38%	7.947%
Sum of corrected areas:						72863341		

FF071025.M Fri Jul 18 04:53:18 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.: Q2529
DataFile: FF016185.D Analyst Name: YP\AJ Analyst Date: 07-17-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	57422086	114844	115396	0.478

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
 Data File : FF016185.D
 Signal(s) : FID2B.ch
 Acq On : 17 Jul 2025 11:59
 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 18 04:09:44 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
 Quant Title :
 QLast Update : Thu Jul 10 12:51:11 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	4748188	48.762 ug/ml
Target Compounds			
2) N-DECANE	4.604	6119453	49.170 ug/ml
3) N-DODECANE	6.784	6200726	50.886 ug/ml
4) N-TETRADECANE	8.619	6152265	51.175 ug/ml
5) N-HEXADECANE	10.229	6025100	51.796 ug/ml
6) N-OCTADECANE	11.676	5942868	51.140 ug/ml
7) N-EICOSANE	12.989	5774761	49.377 ug/ml
8) N-DOCOSANE	14.191	5449448	48.602 ug/ml
10) N-TETRACOSANE	15.298	5331815	48.073 ug/ml
11) N-HEXACOSANE	16.321	5233498	48.740 ug/ml
12) N-OCTACOSANE	17.275	5192152	48.284 ug/ml

(f)=RT Delta > 1/2 Window

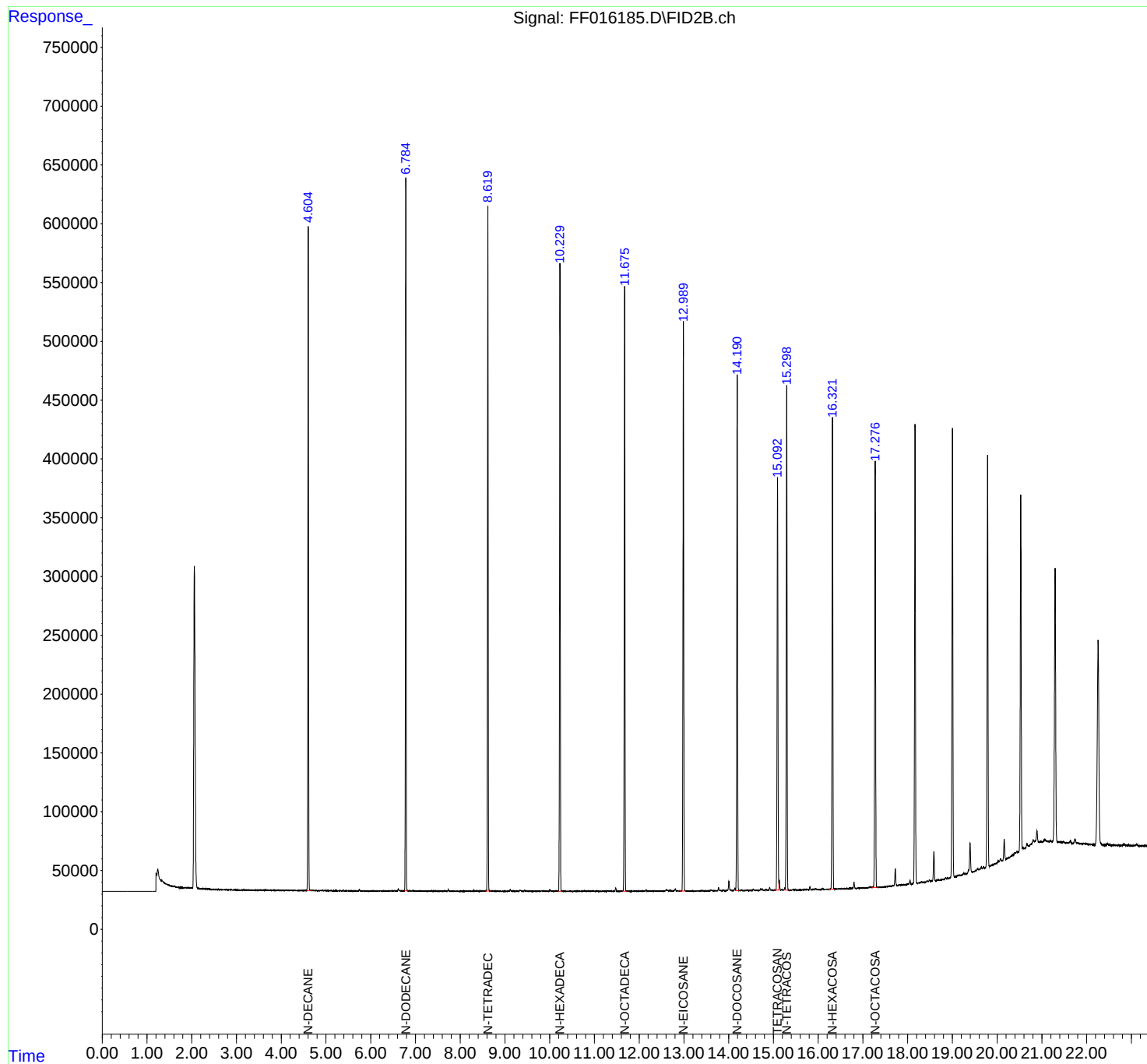
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
Data File : FF016185.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 11:59
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 18 04:09:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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\FF071725\
Data File : FF016185.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 11:59
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.604	4.567	4.675	BB	563900	6119453	98.69%	9.843%
2	6.784	6.747	6.835	BB	605326	6200726	100.00%	9.974%
3	8.619	8.560	8.685	BB	581846	6152265	99.22%	9.896%
4	10.229	10.192	10.282	BB	533789	6025100	97.17%	9.691%
5	11.676	11.625	11.722	BB	514423	5942868	95.84%	9.559%
6	12.989	12.900	13.047	BB	483843	5774761	93.13%	9.289%
7	14.191	14.155	14.228	VB	438501	5449448	87.88%	8.765%
8	15.092	15.024	15.123	BV	349839	4748188	76.57%	7.637%
9	15.298	15.262	15.345	VB	427915	5331815	85.99%	8.576%
10	16.321	16.245	16.367	BB	399602	5233498	84.40%	8.418%
11	17.275	17.200	17.335	BB	361605	5192152	83.73%	8.352%
Sum of corrected areas:						62170273		

FF071025.M Fri Jul 18 04:55:30 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.: Q2529
DataFile: FG016301.D Analyst Name: YP\AJ Analyst Date: 07-16-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	54750916	109502	115010	4.789

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
 Data File : FG016301.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 12:40
 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: Sample.e
 Quant Time: Jul 17 02:34:09 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Quant Title :
 QLast Update : Wed Jul 09 12:46:24 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	4879996	48.807 ug/ml
Target Compounds			
2) N-DECANE	4.669	5281701	45.858 ug/ml
3) N-DODECANE	6.854	5396519	46.545 ug/ml
4) N-TETRADECANE	8.695	5456436	46.228 ug/ml
5) N-HEXADECANE	10.315	5526060	47.776 ug/ml
6) N-OCTADECANE	11.770	5671140	48.315 ug/ml
7) N-EICOSANE	13.090	5714977	47.771 ug/ml
8) N-DOCOSANE	14.297	5551928	48.177 ug/ml
10) N-TETRACOSANE	15.409	5508796	48.216 ug/ml
11) N-HEXACOSANE	16.437	5387890	48.963 ug/ml
12) N-OCTACOSANE	17.395	5255469	48.327 ug/ml

(f)=RT Delta > 1/2 Window

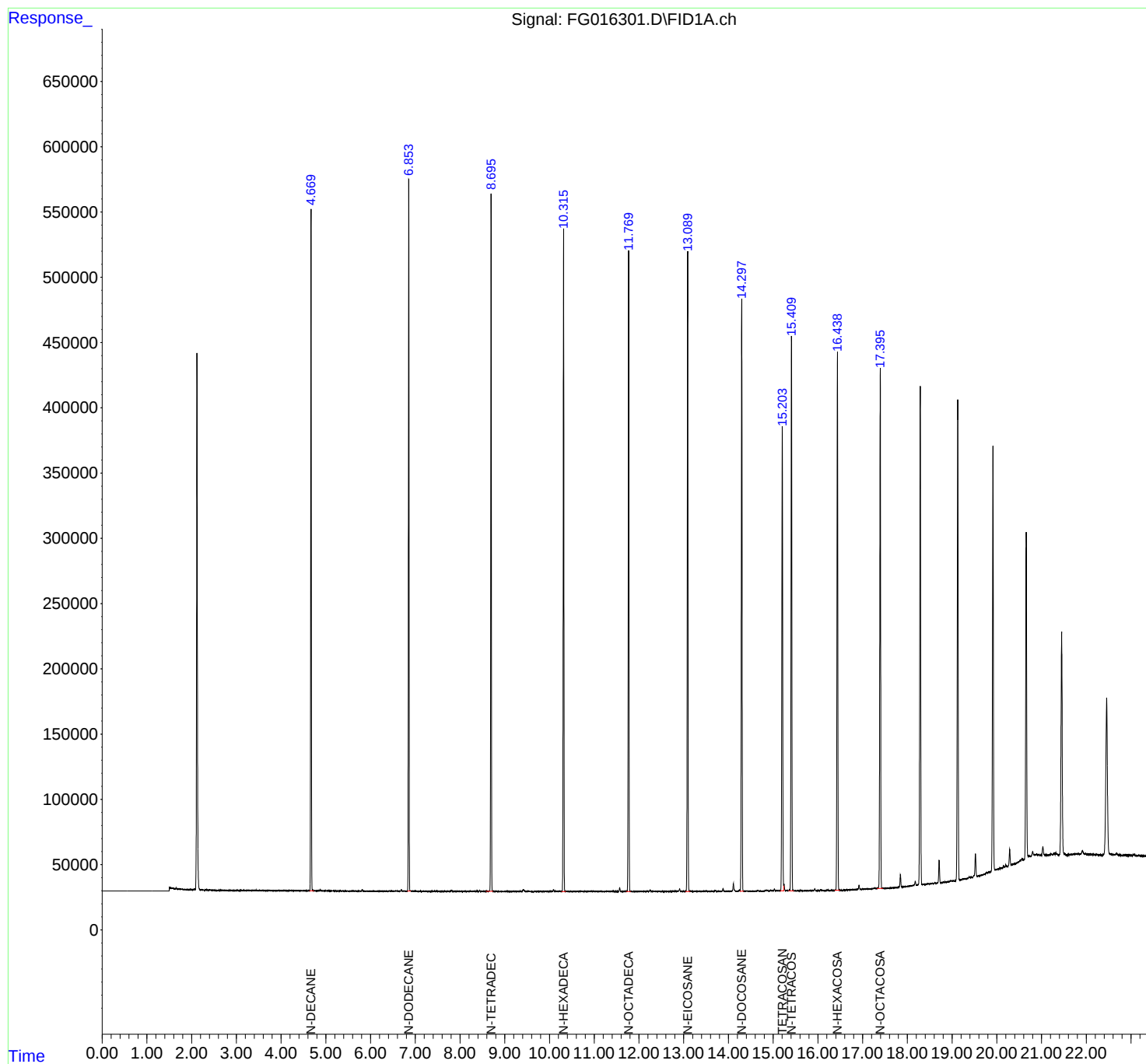
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016301.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 12:40
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: Sample.e
Quant Time: Jul 17 02:34:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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\FG071625\
Data File : FG016301.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 12:40
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.669	4.635	4.733	BB	521661	5281701	92.42%	8.857%
2	6.854	6.820	6.903	BB	545059	5396519	94.43%	9.050%
3	8.695	8.581	8.742	BB	533981	5456436	95.48%	9.150%
4	10.315	10.265	10.369	BB	506997	5526060	96.69%	9.267%
5	11.770	11.717	11.823	BB	490749	5671140	99.23%	9.510%
6	13.090	13.040	13.148	BB	490632	5714977	100.00%	9.584%
7	14.297	14.262	14.343	VB	453657	5551928	97.15%	9.310%
8	15.204	15.152	15.235	BV	355574	4879996	85.39%	8.184%
9	15.409	15.343	15.463	BB	424296	5508796	96.39%	9.238%
10	16.437	16.373	16.493	BB	411817	5387890	94.28%	9.035%
11	17.395	17.318	17.458	BB	398548	5255469	91.96%	8.813%
Sum of corrected areas:						59630913		

FG070925.M Thu Jul 17 03:09:37 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.: Q2529
DataFile: FG016309.D Analyst Name: YP\AJ Analyst Date: 07-16-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	56207865	112416	115010	2.255

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
 Data File : FG016309.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 17:16
 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: Sample.e
 Quant Time: Jul 17 02:35:47 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Quant Title :
 QLast Update : Wed Jul 09 12:46:24 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	4970369	49.711 ug/ml
Target Compounds			
2) N-DECANE	4.670	5496594	47.724 ug/ml
3) N-DODECANE	6.853	5598576	48.288 ug/ml
4) N-TETRADECANE	8.694	5637250	47.760 ug/ml
5) N-HEXADECANE	10.314	5691274	49.205 ug/ml
6) N-OCTADECANE	11.769	5815706	49.546 ug/ml
7) N-EICOSANE	13.089	5839934	48.816 ug/ml
8) N-DOCOSANE	14.297	5663520	49.146 ug/ml
10) N-TETRACOSANE	15.410	5601157	49.024 ug/ml
11) N-HEXACOSANE	16.437	5495684	49.943 ug/ml
12) N-OCTACOSANE	17.393	5368170	49.363 ug/ml

(f)=RT Delta > 1/2 Window

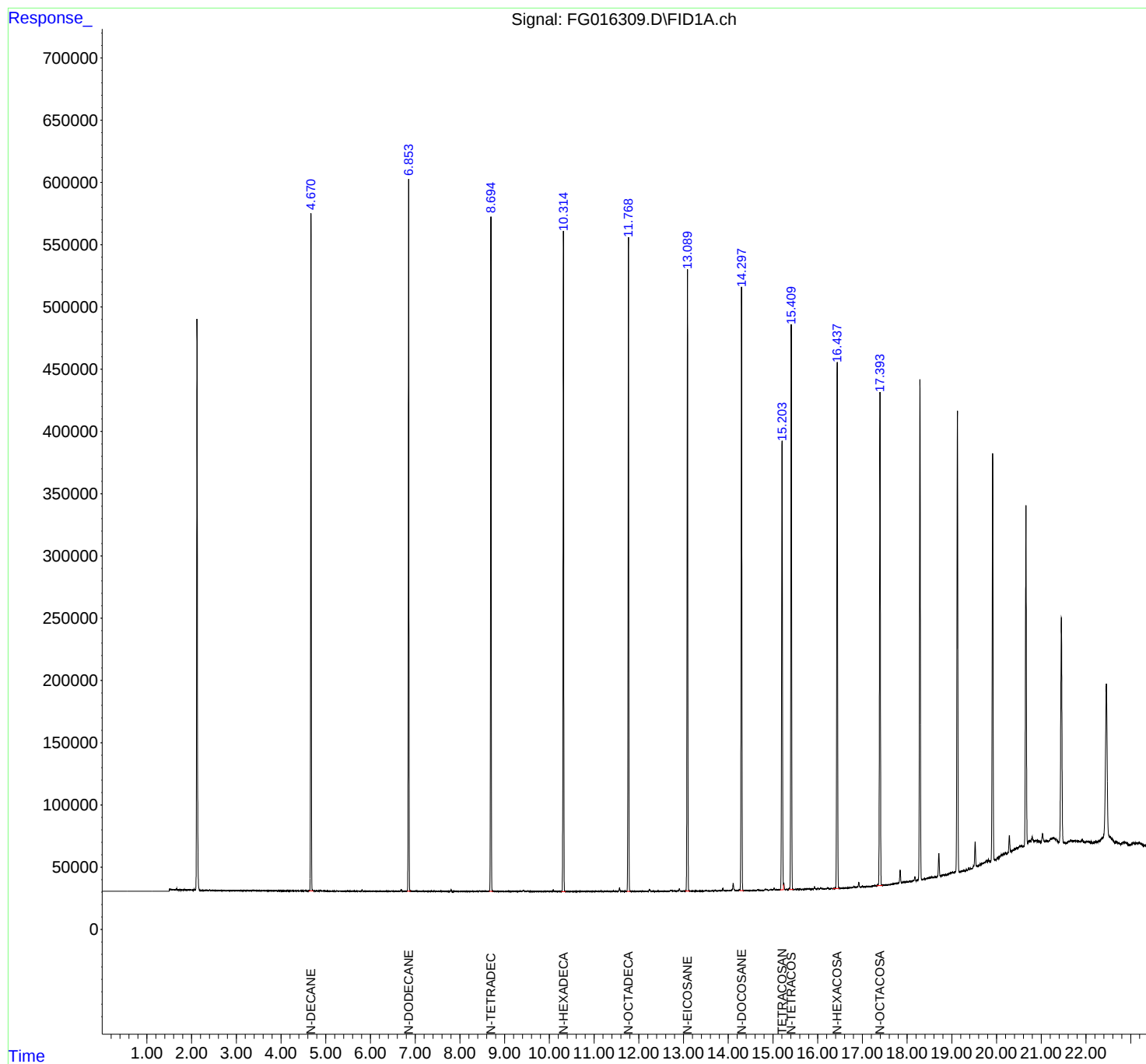
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016309.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 17:16
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: Sample.e
Quant Time: Jul 17 02:35:47 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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\FG071625\
Data File : FG016309.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 17:16
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.670	4.625	4.724	BB	544139	5496594	94.12%	8.985%
2	6.853	6.820	6.903	BB	570346	5598576	95.87%	9.151%
3	8.694	8.655	8.736	BB	541626	5637250	96.53%	9.214%
4	10.314	10.269	10.367	BB	527469	5691274	97.45%	9.303%
5	11.769	11.730	11.810	BB	525517	5815706	99.59%	9.506%
6	13.090	13.036	13.140	BB	498187	5839934	100.00%	9.546%
7	14.297	14.260	14.347	VB	484684	5663520	96.98%	9.257%
8	15.203	15.155	15.235	BV	359513	4970369	85.11%	8.124%
9	15.410	15.372	15.460	VB	450901	5601157	95.91%	9.155%
10	16.437	16.337	16.484	BB	421813	5495684	94.11%	8.983%
11	17.393	17.314	17.454	BV	396277	5368170	91.92%	8.775%
Sum of corrected areas:						61178232		

FG070925.M Thu Jul 17 03:11:53 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.: Q2529
DataFile: FG016314.D Analyst Name: YP\AJ Analyst Date: 07-16-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	56814336	113629	115010	1.201

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
 Data File : FG016314.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 20:45
 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: Sample.e
 Quant Time: Jul 17 02:36:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Quant Title :
 QLast Update : Wed Jul 09 12:46:24 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...	15.201	4963656	49.643 ug/ml
Target Compounds			
2) N-DECANE	4.669	5625808	48.846 ug/ml
3) N-DODECANE	6.852	5724424	49.374 ug/ml
4) N-TETRADECANE	8.693	5758251	48.785 ug/ml
5) N-HEXADECANE	10.313	5790605	50.063 ug/ml
6) N-OCTADECANE	11.768	5891686	50.194 ug/ml
7) N-EICOSANE	13.088	5886422	49.204 ug/ml
8) N-DOCOSANE	14.295	5679858	49.287 ug/ml
10) N-TETRACOSANE	15.407	5610681	49.107 ug/ml
11) N-HEXACOSANE	16.435	5483028	49.828 ug/ml
12) N-OCTACOSANE	17.392	5363573	49.321 ug/ml

(f)=RT Delta > 1/2 Window

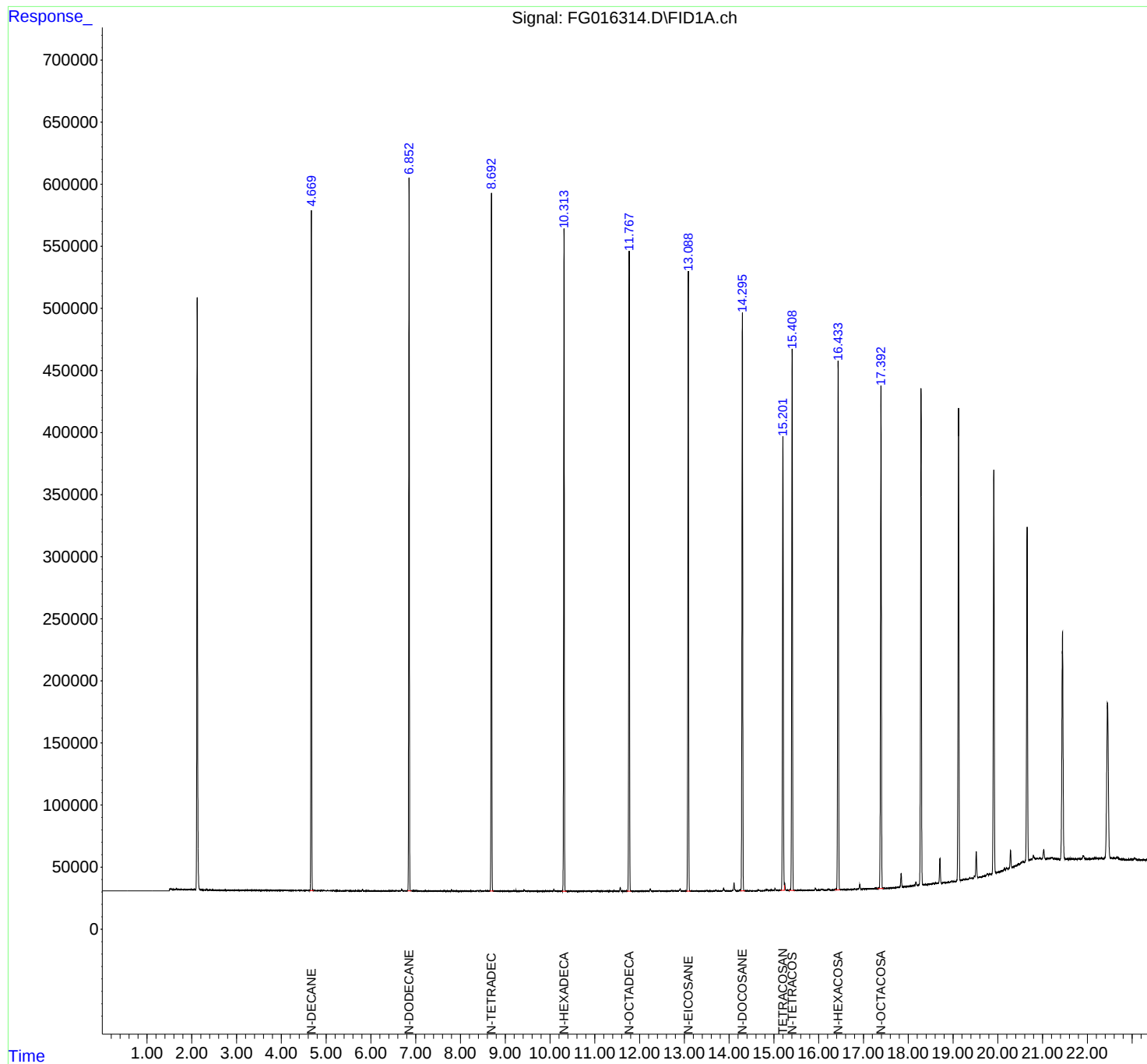
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016314.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 20:45
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: Sample.e
Quant Time: Jul 17 02:36:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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\FG071625\
Data File : FG016314.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 20:45
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.669	4.635	4.723	BB	547837	5625808	95.49%	9.106%
2	6.852	6.820	6.899	BB	573605	5724424	97.16%	9.266%
3	8.693	8.650	8.743	BB	560409	5758251	97.74%	9.321%
4	10.313	10.265	10.370	BB	533401	5790605	98.28%	9.373%
5	11.768	11.717	11.810	BB	512679	5891686	100.00%	9.537%
6	13.088	13.049	13.140	BB	498585	5886422	99.91%	9.528%
7	14.295	14.259	14.354	VB	465406	5679858	96.40%	9.194%
8	15.201	15.143	15.232	BV	364373	4963656	84.25%	8.035%
9	15.407	15.326	15.468	BB	432200	5610681	95.23%	9.082%
10	16.435	16.357	16.480	BB	421442	5483028	93.06%	8.875%
11	17.392	17.312	17.453	BB	404144	5363573	91.04%	8.682%
Sum of corrected areas:						61777991		

FG070925.M Thu Jul 17 03:13:02 2025

Analytical Sequence

Client: CDM Smith

SDG No.: Q2529

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 15.1002					
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	LBLK01	16 Jul 2025 12:08	FF016162.D	15.097	
50 PPM TRPH STD	50 PPM TRPH STD	16 Jul 2025 12:40	FF016163.D	15.100	
TP-95	Q2529-04	16 Jul 2025 14:18	FF016165.D	15.096	
TP-98	Q2529-05	16 Jul 2025 14:47	FF016166.D	15.096	
TP-101	Q2529-07	16 Jul 2025 15:47	FF016168.D	15.097	
TP-89	Q2529-08	16 Jul 2025 16:17	FF016169.D	15.095	
PIBLK02	LBLK02	16 Jul 2025 16:47	FF016170.D	15.096	
50 PPM TRPH STD	50 PPM TRPH STD	16 Jul 2025 17:16	FF016171.D	15.097	
TP-33	Q2529-09	16 Jul 2025 18:16	FF016172.D	15.094	
TP-30	Q2529-10	16 Jul 2025 18:46	FF016173.D	15.094	
PIBLK03	LBLK03	16 Jul 2025 20:45	FF016177.D	15.093	
50 PPM TRPH STD	50 PPM TRPH STD	16 Jul 2025 22:44	FF016178.D	15.094	
PIBLK04	LBLK04	17 Jul 2025 08:28	FF016180.D	15.090	
50 PPM TRPH STD	50 PPM TRPH STD	17 Jul 2025 08:58	FF016181.D	15.093	
TP-102	Q2529-06	17 Jul 2025 09:58	FF016183.D	15.089	
PIBLK05	LBLK05	17 Jul 2025 10:28	FF016184.D	15.092	
50 PPM TRPH STD	50 PPM TRPH STD	17 Jul 2025 11:59	FF016185.D	15.092	
PIBLK06	LBLK06	16 Jul 2025 12:08	FG016300.D	15.201	
50 PPM TRPH STD	50 PPM TRPH STD	16 Jul 2025 12:40	FG016301.D	15.204	
PB168878BL	PB168878BL	16 Jul 2025 14:18	FG016303.D	15.198	
PB168878BS	PB168878BS	16 Jul 2025 14:47	FG016304.D	15.199	
TP-91	Q2529-01	16 Jul 2025 15:17	FG016305.D	15.199	
TP-80	Q2529-02	16 Jul 2025 15:47	FG016306.D	15.200	
TP-79	Q2529-03	16 Jul 2025 16:17	FG016307.D	15.201	
PIBLK07	LBLK07	16 Jul 2025 16:47	FG016308.D	15.201	
50 PPM TRPH STD	50 PPM TRPH STD	16 Jul 2025 17:16	FG016309.D	15.203	
TP-23-99MS	Q2543-04MS	16 Jul 2025 18:46	FG016311.D	15.199	
TP-23-99MSD	Q2543-04MSD	16 Jul 2025 19:16	FG016312.D	15.199	
PIBLK08	LBLK08	16 Jul 2025 19:46	FG016313.D	15.198	
50 PPM TRPH STD	50 PPM TRPH STD	16 Jul 2025 20:45	FG016314.D	15.201	



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168878BL	SDG No.:	Q2529
Lab Sample ID:	PB168878BL	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100
Sample Wt/Vol:	30.02	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
FG016303.D	1	07/16/25 10:00	07/16/25 14:18	PB168878

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	17.6		37 - 130	88%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range
 P = Indicates >25% difference for detected concentrations between the two GC columns
 Q = indicates LCS control criteria did not meet requirements
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016303.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 14:18
Operator : YP\AJ
Sample : PB168878BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB168878BL

Integration File: Sample.e
Quant Time: Jul 17 02:34:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.198	1761209	17.615 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

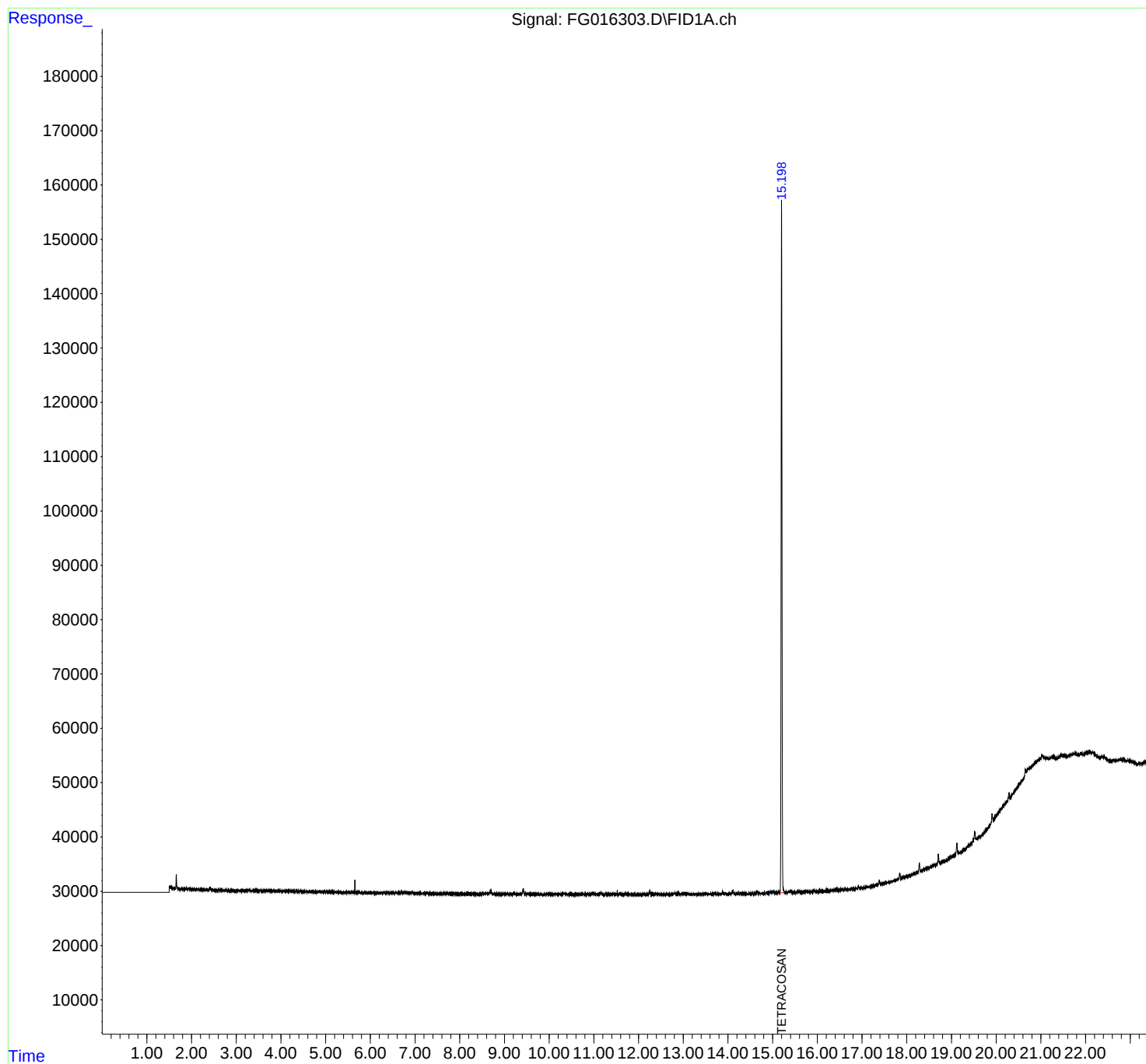
(m)=manual int.

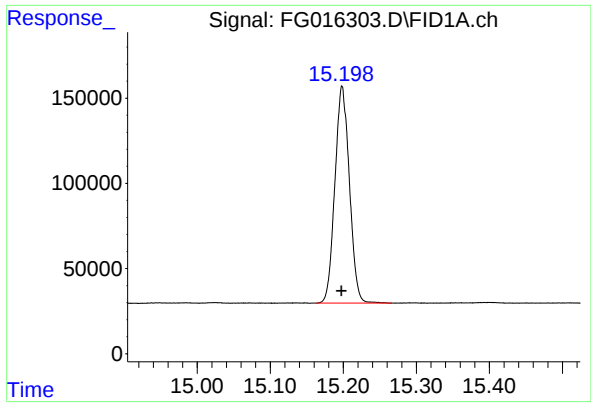
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016303.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 14:18
Operator : YP\AJ
Sample : PB168878BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB168878BL

Integration File: Sample.e
Quant Time: Jul 17 02:34:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.: 15.198 min
Delta R.T.: 0.000 min
Response: 1761209
Conc: 17.61 ug/ml

Instrument :
FID_G
ClientSampleId :
PB168878BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016303.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 14:18
Sample : PB168878BL
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.198	15.163	15.266	BB	127264	1761209	100.00%	100.000%
Sum of corrected areas:						1761209		

FG070925.M Thu Jul 17 03:10:29 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/16/25
Project:	South River WM Replacement	Date Received:	07/16/25
Client Sample ID:	PIBLK-FF016162.D	SDG No.:	Q2529
Lab Sample ID:	I.BLK-FF016162.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
FF016162.D	1		07/16/25	FF071625

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	19.6		29 - 130	98%	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\FF071625\
Data File : FF016162.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 12:08
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/17/2025
Supervised By :mohammad ahmed 07/18/2025

Integration File: autoint1.e
Quant Time: Jul 17 03:36:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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...	15.097	1913844	19.654 ug/mlm
Target Compounds			

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016162.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 12:08
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

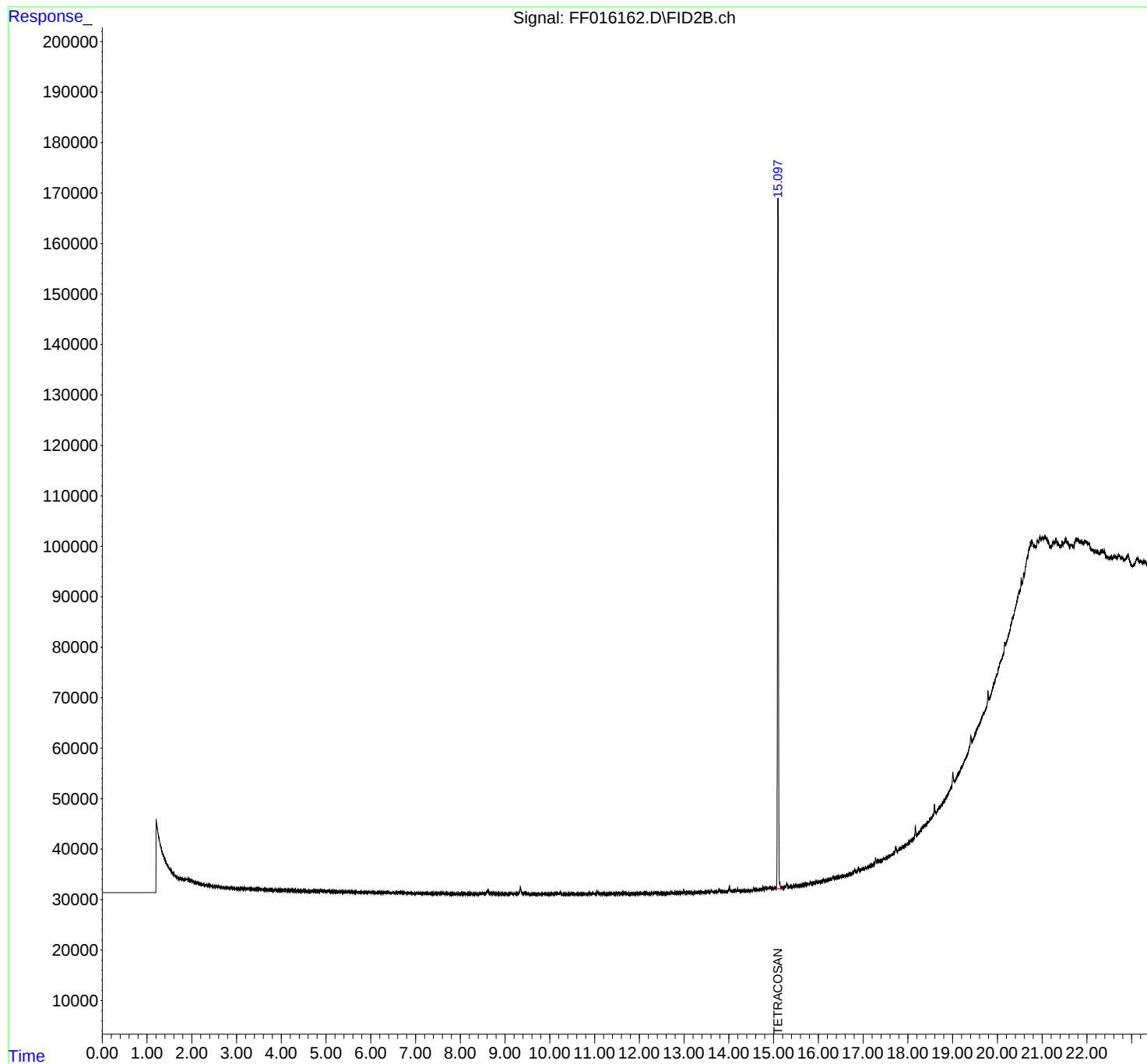
Instrument :
FID_F
ClientSampleId :
I.BLK

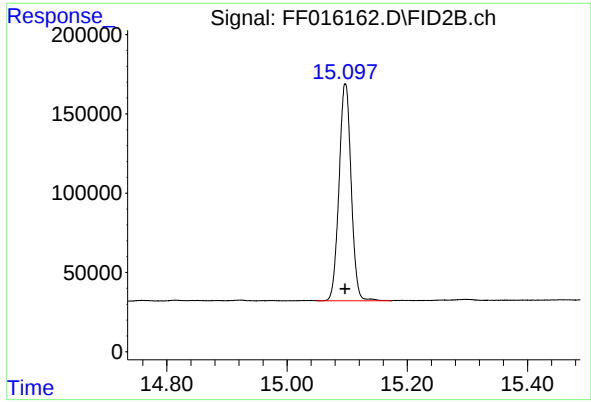
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/17/2025
Supervised By :mohammad ahmed 07/18/2025

Integration File: autoint1.e
Quant Time: Jul 17 03:36:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.097 min
Delta R.T.: 0.000 min
Response: 1913844
Conc: 19.65 ug/ml

Instrument :
FID_F
ClientSampleId :
I.BLK

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/17/2025
Supervised By :mohammad ahmed 07/18/2025

rteres

Instrument :
FID_F
LabSampleId :
I.BLK

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 07/17/2025
Supervised By :mohammad ahmed 07/18/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF07162
Data File : FF016162.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 12:08
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.097	15.042	15.172	BB	136602	1908721	100.00%	100.000%
Sum of corrected areas:						1908721		

FF071025.M Thu Jul 17 04:49:51 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/16/25
Project:	South River WM Replacement	Date Received:	07/16/25
Client Sample ID:	PIBLK-FF016170.D	SDG No.:	Q2529
Lab Sample ID:	I.BLK-FF016170.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
FF016170.D	1		07/16/25	FF071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	18.5		29 - 130	92%	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\FF071625\
Data File : FF016170.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 16:47
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 17 03:38:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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	1798771	18.473 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

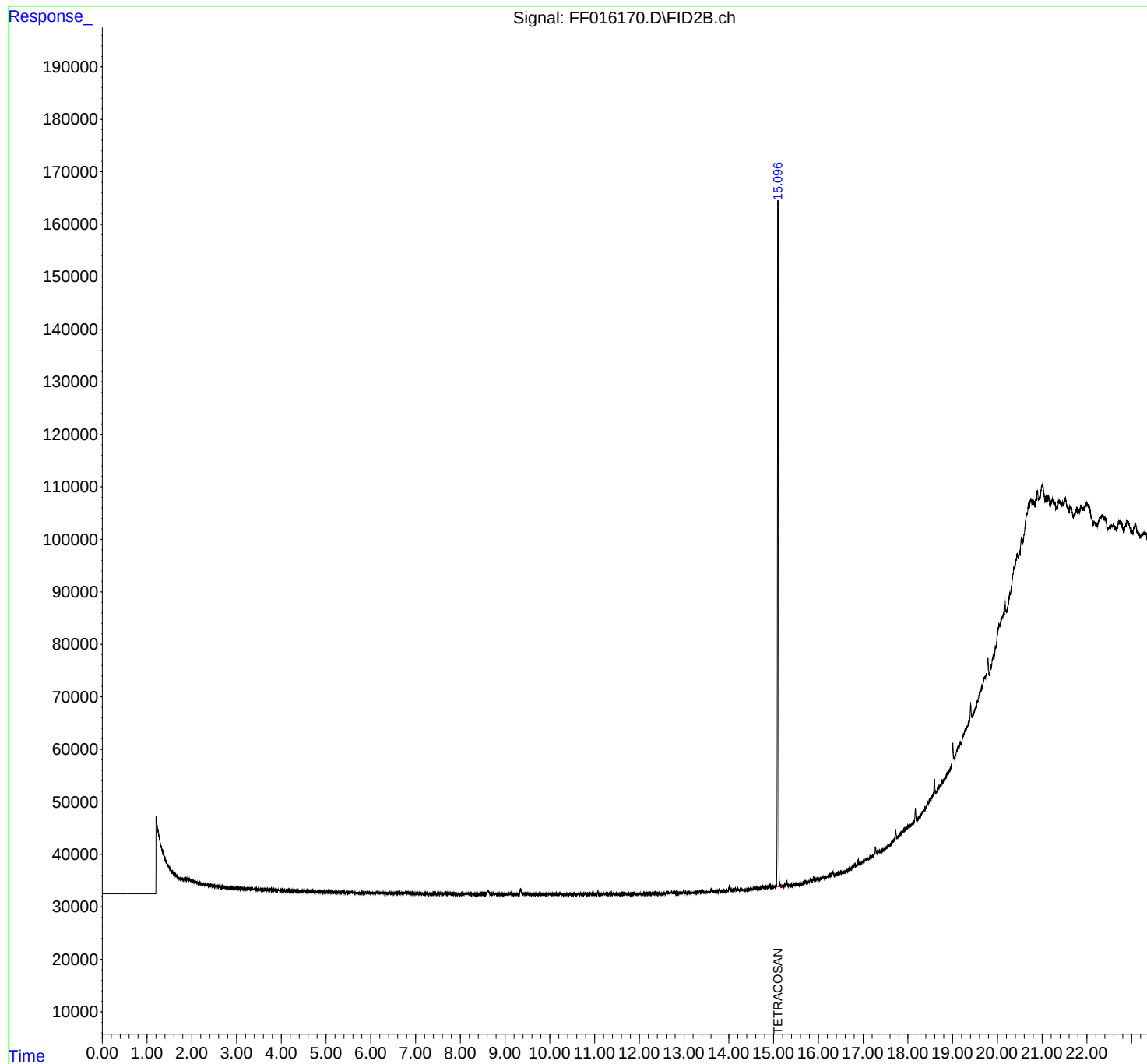
(m)=manual int.

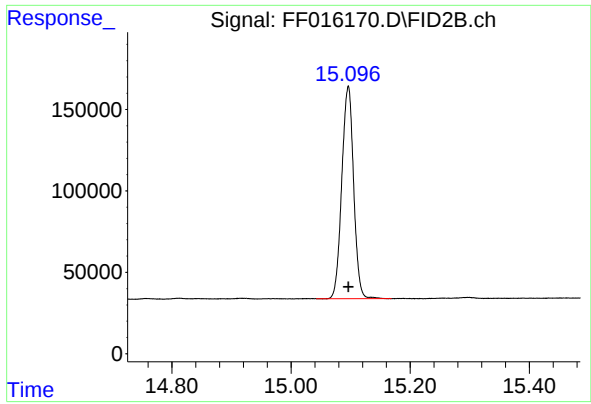
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016170.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 16:47
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 17 03:38:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.096 min
Delta R.T.: 0.000 min
Response: 1798771
Conc: 18.47 ug/ml

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016170.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 16:47
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.096	15.042	15.169	BB	130340	1798771	100.00%	100.000%
Sum of corrected areas:						1798771		

FF071025.M Thu Jul 17 04:52:16 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/16/25
Project:	South River WM Replacement	Date Received:	07/16/25
Client Sample ID:	PIBLK-FF016177.D	SDG No.:	Q2529
Lab Sample ID:	I.BLK-FF016177.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
FF016177.D	1		07/16/25	FF071625

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	20.2		29 - 130	101%	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\FF071625\
Data File : FF016177.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 20:45
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 17 03:39:41 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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	1968919	20.220 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

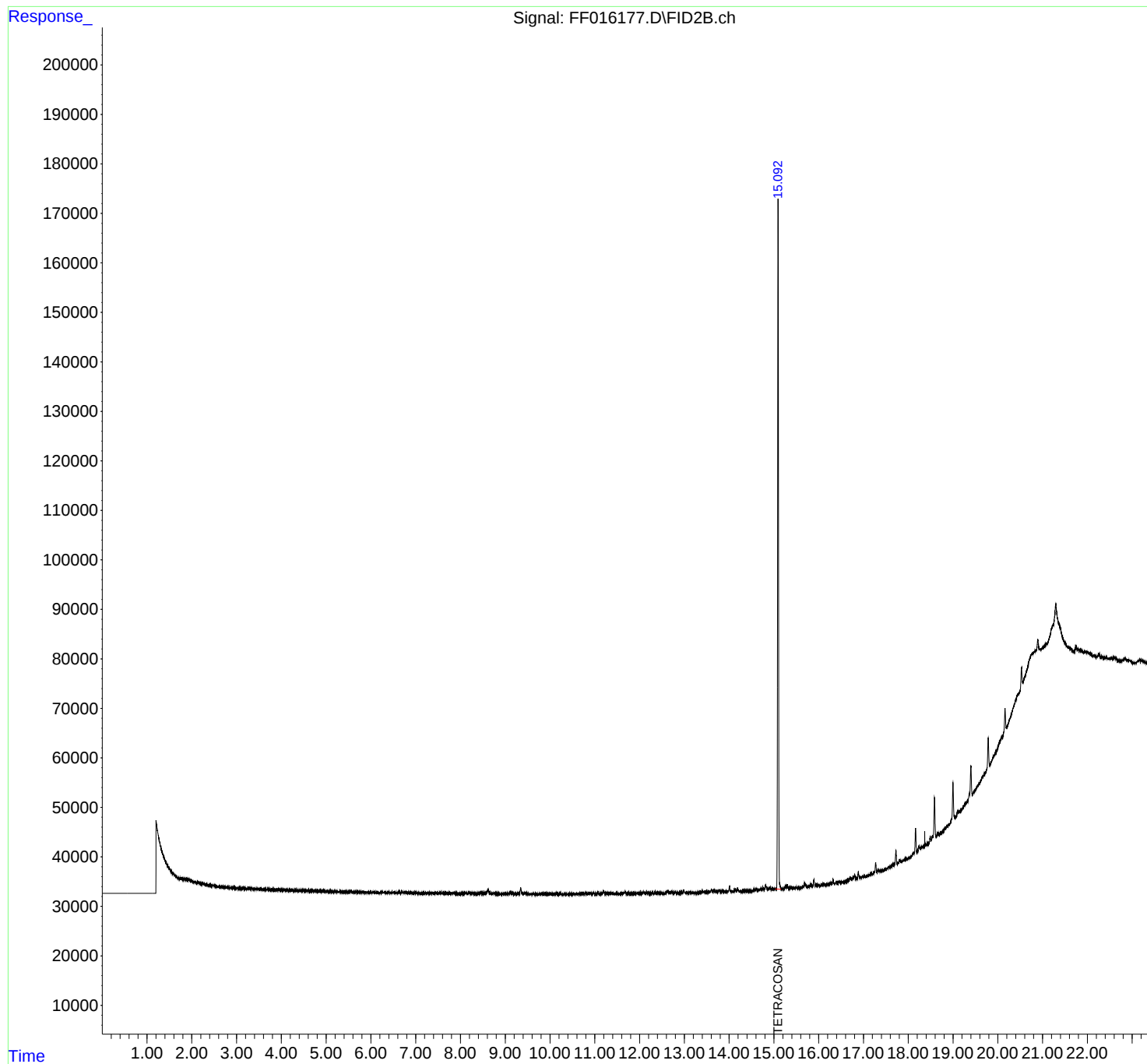
(m)=manual int.

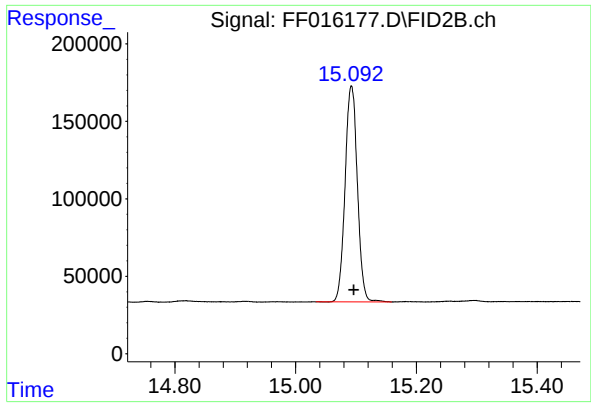
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016177.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 20:45
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 17 03:39:41 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: -0.004 min
Response: 1968919
Conc: 20.22 ug/ml

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071625\
Data File : FF016177.D
Signal(s) : FID2B.ch
Acq On : 16 Jul 2025 20:45
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.093	15.034	15.159	BB	139441	1968919	100.00%	100.000%
Sum of corrected areas:						1968919		

FF071025.M Thu Jul 17 04:53:45 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/17/25
Project:	South River WM Replacement	Date Received:	07/17/25
Client Sample ID:	PIBLK-FF016180.D	SDG No.:	Q2529
Lab Sample ID:	I.BLK-FF016180.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
FF016180.D	1		07/17/25	FF071725

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	22.3		29 - 130	112%	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\FF071725\
Data File : FF016180.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 08:28
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 18 04:08:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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...	15.090	2172833	22.314 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

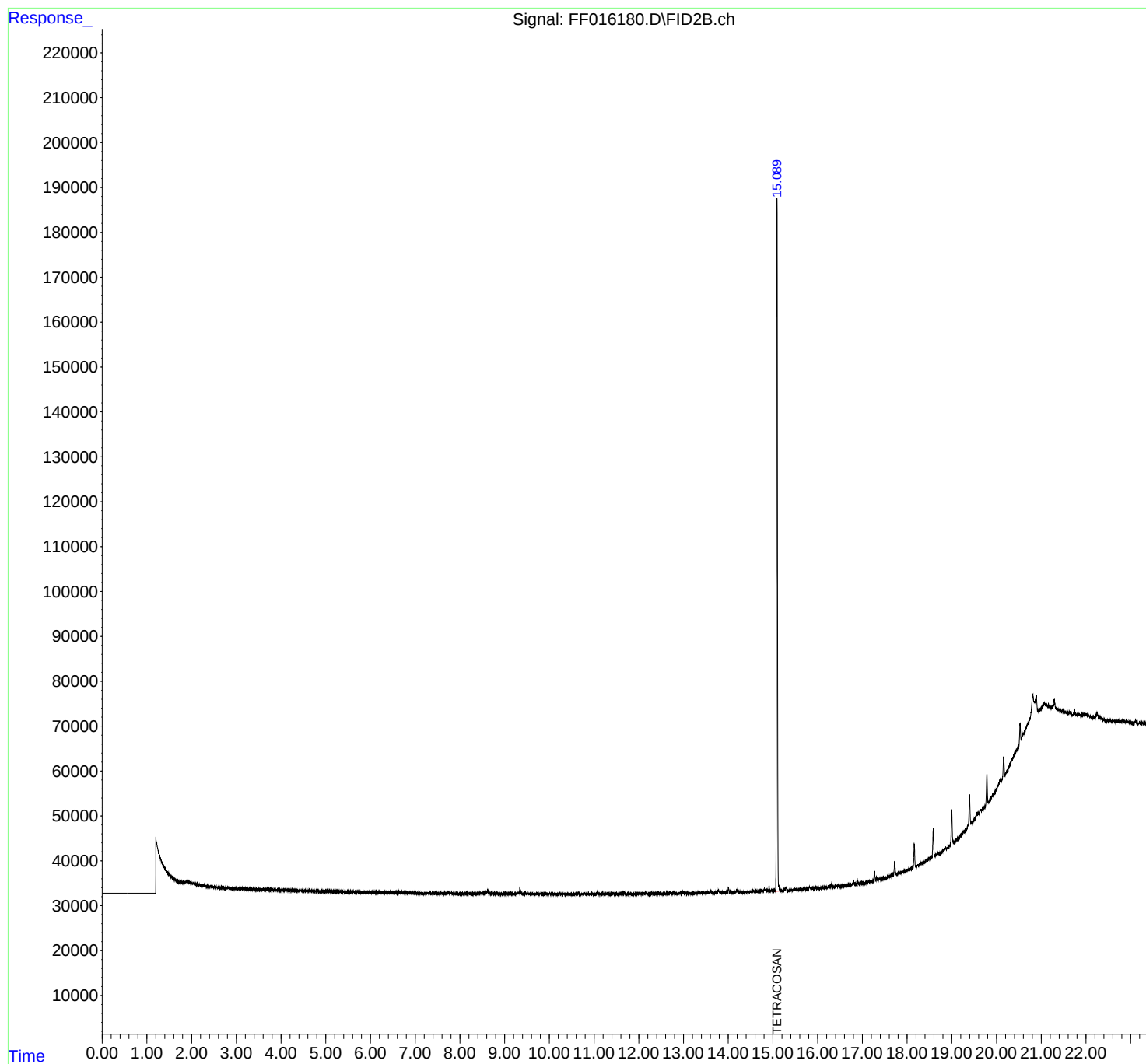
(m)=manual int.

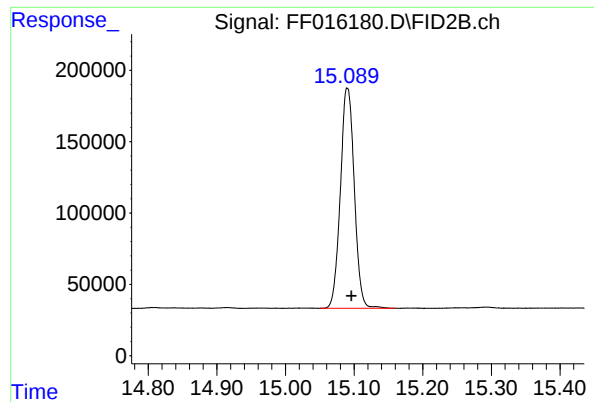
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
Data File : FF016180.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 08:28
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 18 04:08:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: 15.090 min
Delta R.T.: -0.006 min
Response: 2172833
Conc: 22.31 ug/ml

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
Data File : FF016180.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 08:28
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Title :

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.090	15.050	15.160	BB	154234	2172833	100.00%	100.000%
Sum of corrected areas:						2172833		

FF071025.M Fri Jul 18 04:52:13 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/17/25
Project:	South River WM Replacement	Date Received:	07/17/25
Client Sample ID:	PIBLK-FF016184.D	SDG No.:	Q2529
Lab Sample ID:	I.BLK-FF016184.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
FF016184.D	1		07/17/25	FF071725

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	22.3		29 - 130	111%	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\FF071725\
Data File : FF016184.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 10:28
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 18 04:09:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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	2166631	22.250 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

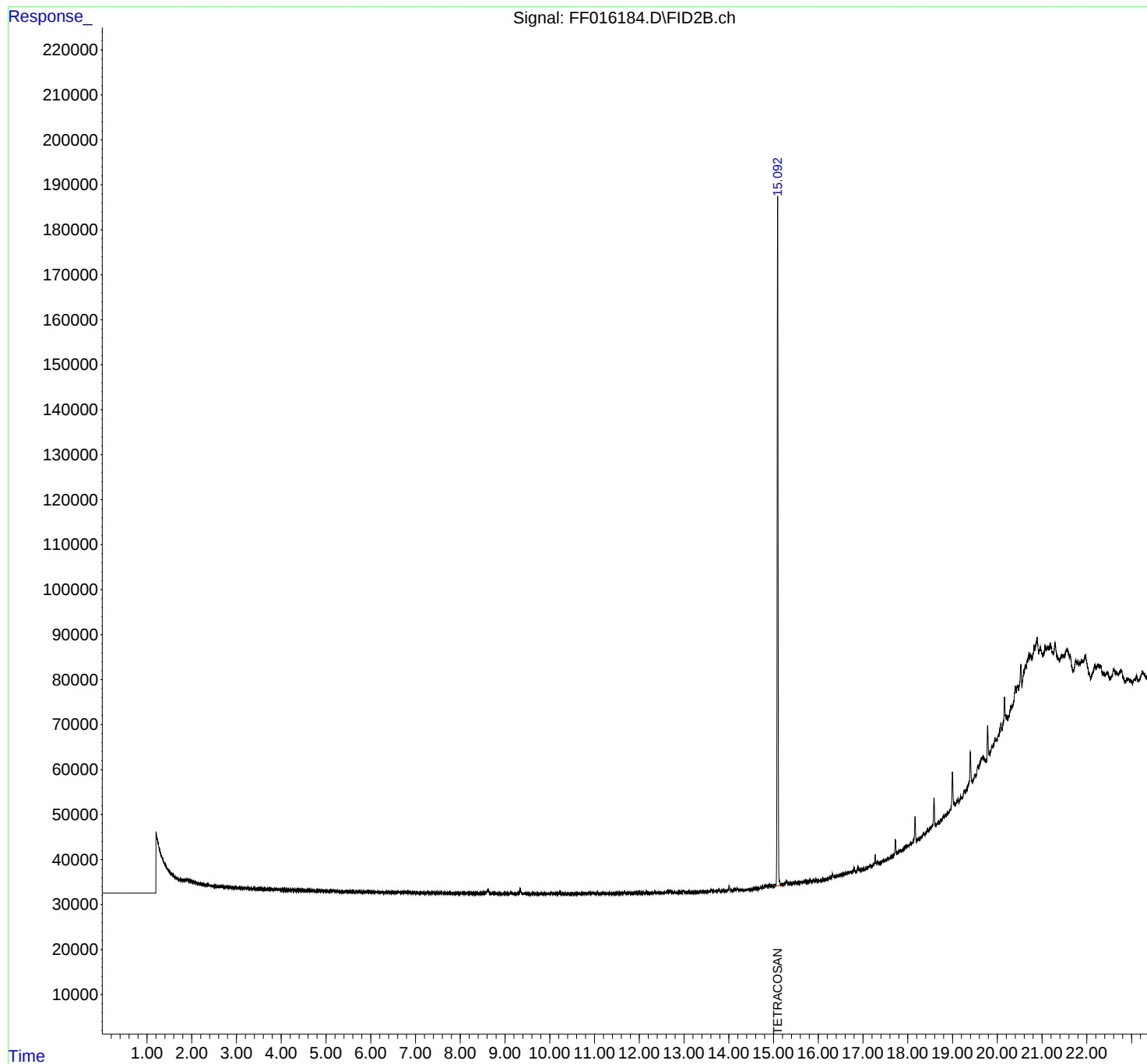
(m)=manual int.

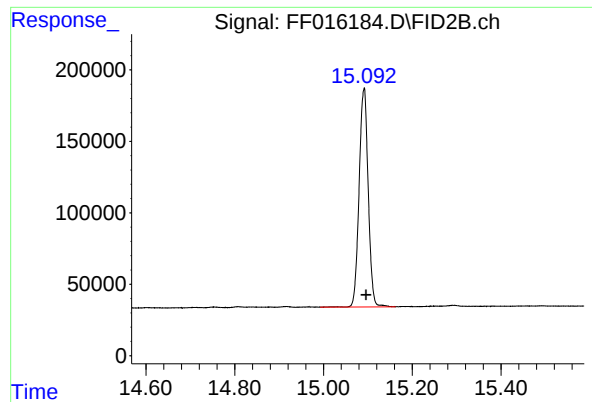
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
Data File : FF016184.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 10:28
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_F
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Jul 18 04:09:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.M
Quant Title :
QLast Update : Thu Jul 10 12:51:11 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.: -0.005 min
Response: 2166631
Conc: 22.25 ug/ml

Instrument :
FID_F
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_F\Data\FF071725\
Data File : FF016184.D
Signal(s) : FID2B.ch
Acq On : 17 Jul 2025 10:28
Sample : I.BLK
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_F\Method\FF071025.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	14.992	15.162	BV	153872	2166631	100.00%	100.000%
Sum of corrected areas:						2166631		

FF071025.M Fri Jul 18 04:53:50 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/16/25
Project:	South River WM Replacement	Date Received:	07/16/25
Client Sample ID:	PIBLK-FG016300.D	SDG No.:	Q2529
Lab Sample ID:	I.BLK-FG016300.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
FG016300.D	1		07/16/25	FG071625

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

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range
 P = Indicates >25% difference for detected concentrations between the two GC columns
 Q = indicates LCS control criteria did not meet requirements
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016300.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 12:08
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: Sample.e
Quant Time: Jul 17 02:33:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.201	1827698	18.280 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

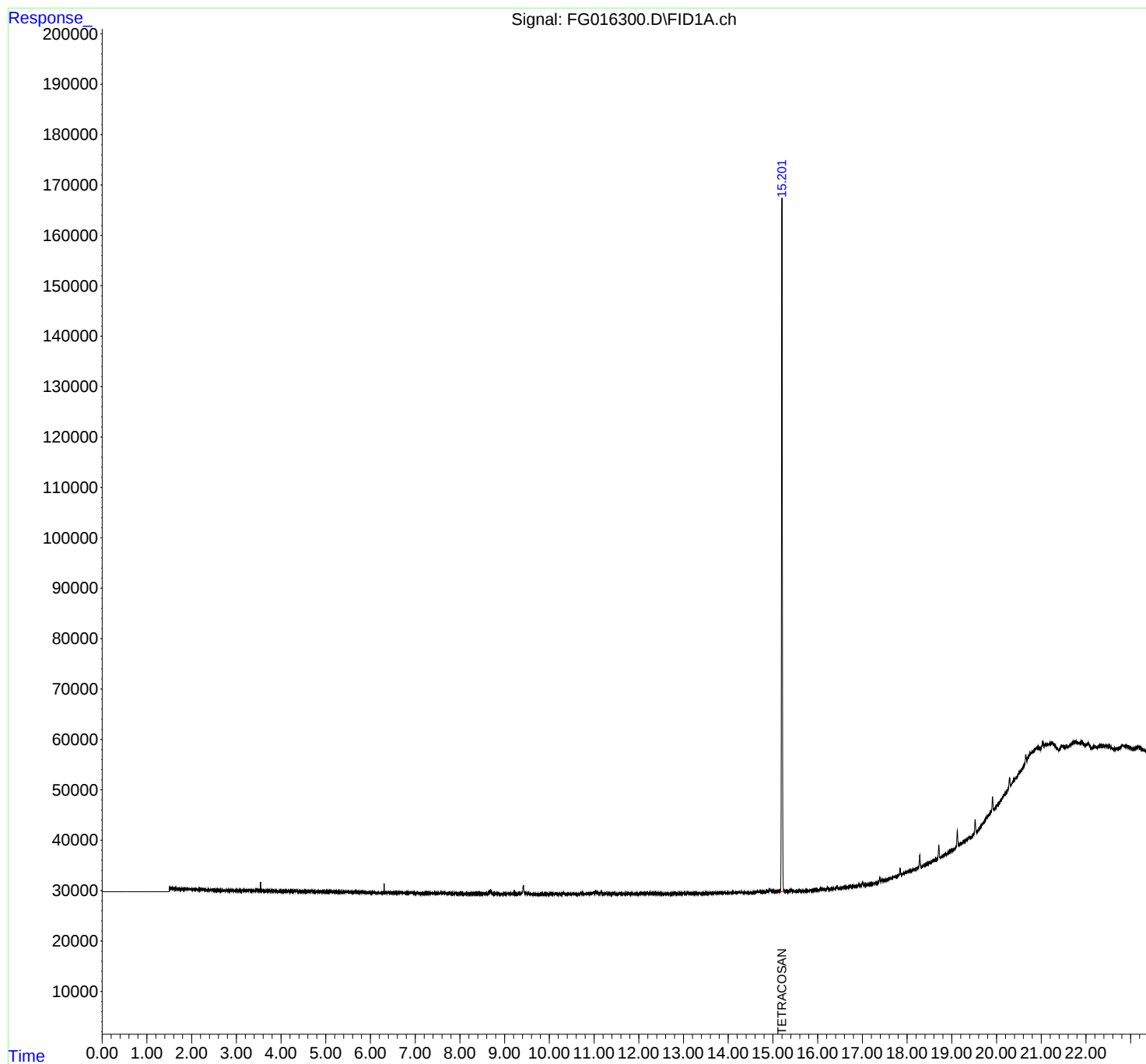
(m)=manual int.

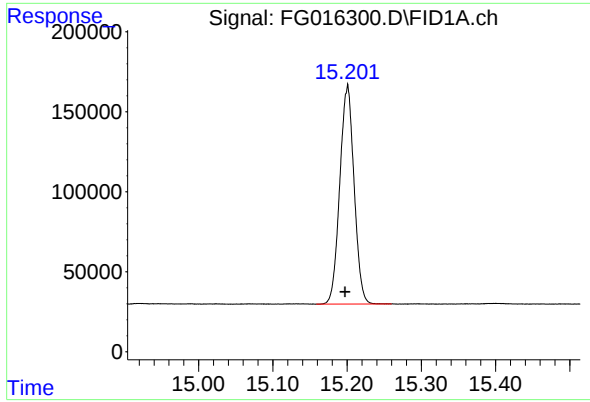
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016300.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 12:08
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: Sample.e
Quant Time: Jul 17 02:33:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.: 15.201 min
Delta R.T.: 0.003 min
Response: 1827698
Conc: 18.28 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016300.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 12:08
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.201	15.158	15.260	BB	137181	1827698	100.00%	100.000%
Sum of corrected areas:						1827698		

FG070925.M Thu Jul 17 03:09:02 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/16/25
Project:	South River WM Replacement	Date Received:	07/16/25
Client Sample ID:	PIBLK-FG016308.D	SDG No.:	Q2529
Lab Sample ID:	I.BLK-FG016308.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
FG016308.D	1		07/16/25	FG071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	18.7		29 - 130	93%	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\FG071625\
Data File : FG016308.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 16:47
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: Sample.e
Quant Time: Jul 17 02:35:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.201	1865649	18.659 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

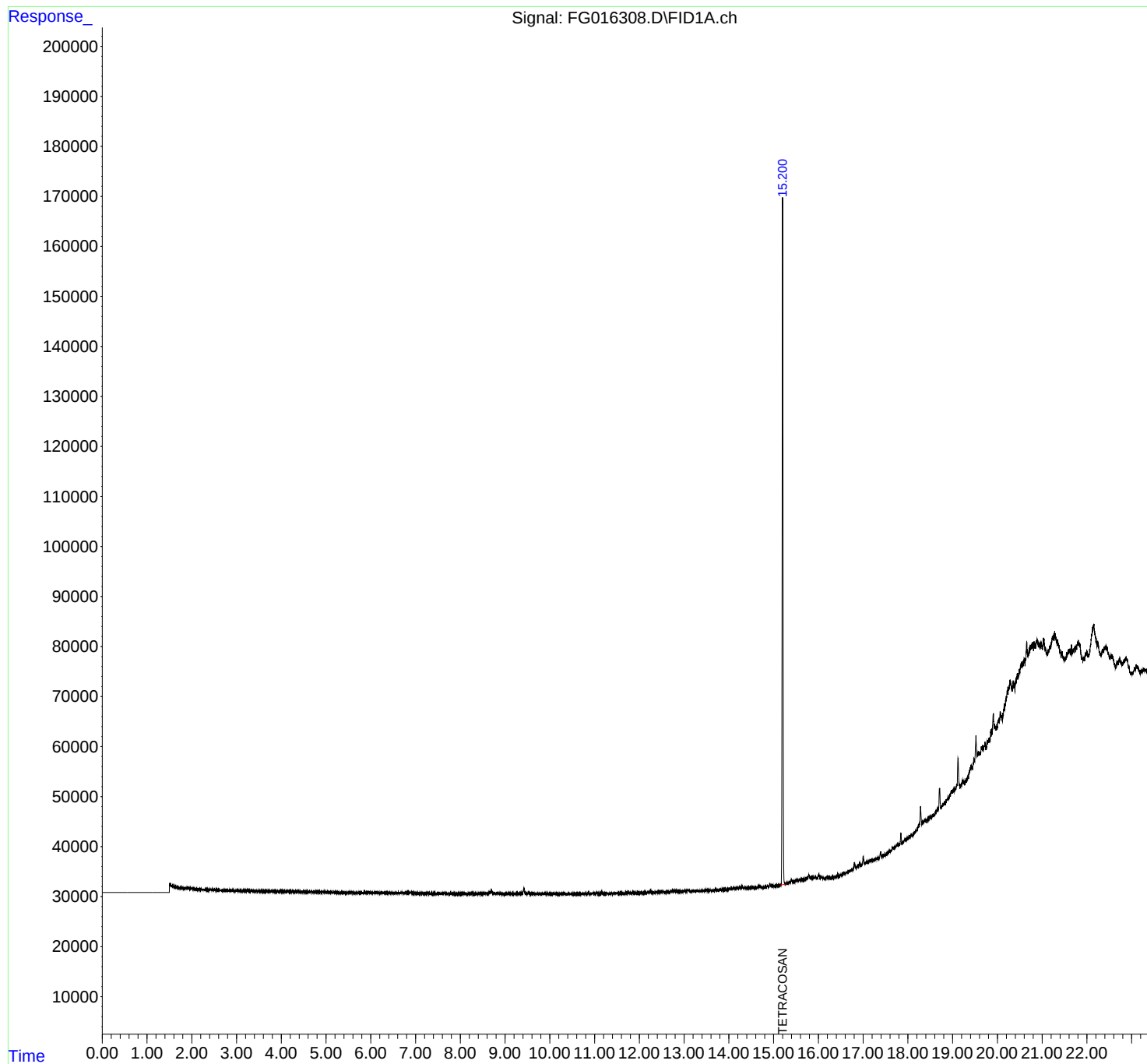
(m)=manual int.

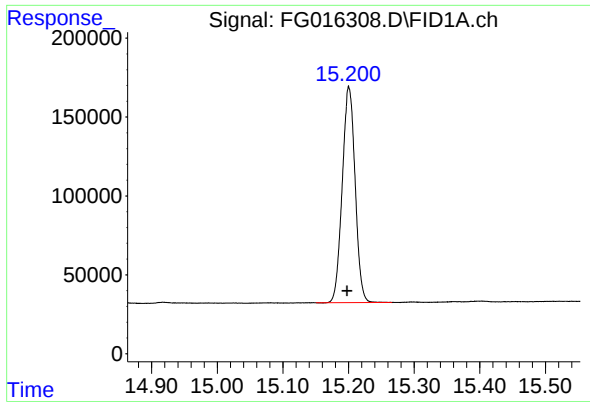
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016308.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 16:47
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: Sample.e
Quant Time: Jul 17 02:35:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.: 15.201 min
Delta R.T.: 0.003 min
Response: 1865649
Conc: 18.66 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016308.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 16:47
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.201	15.151	15.266	BB	136466	1865649	100.00%	100.000%
Sum of corrected areas:						1865649		

FG070925.M Thu Jul 17 03:11:17 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/16/25
Project:	South River WM Replacement	Date Received:	07/16/25
Client Sample ID:	PIBLK-FG016313.D	SDG No.:	Q2529
Lab Sample ID:	I.BLK-FG016313.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
FG016313.D	1		07/16/25	FG071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	18.6		29 - 130	93%	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\FG071625\
Data File : FG016313.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 19:46
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: Sample.e
Quant Time: Jul 17 02:36:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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...	15.198	1857827	18.581 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

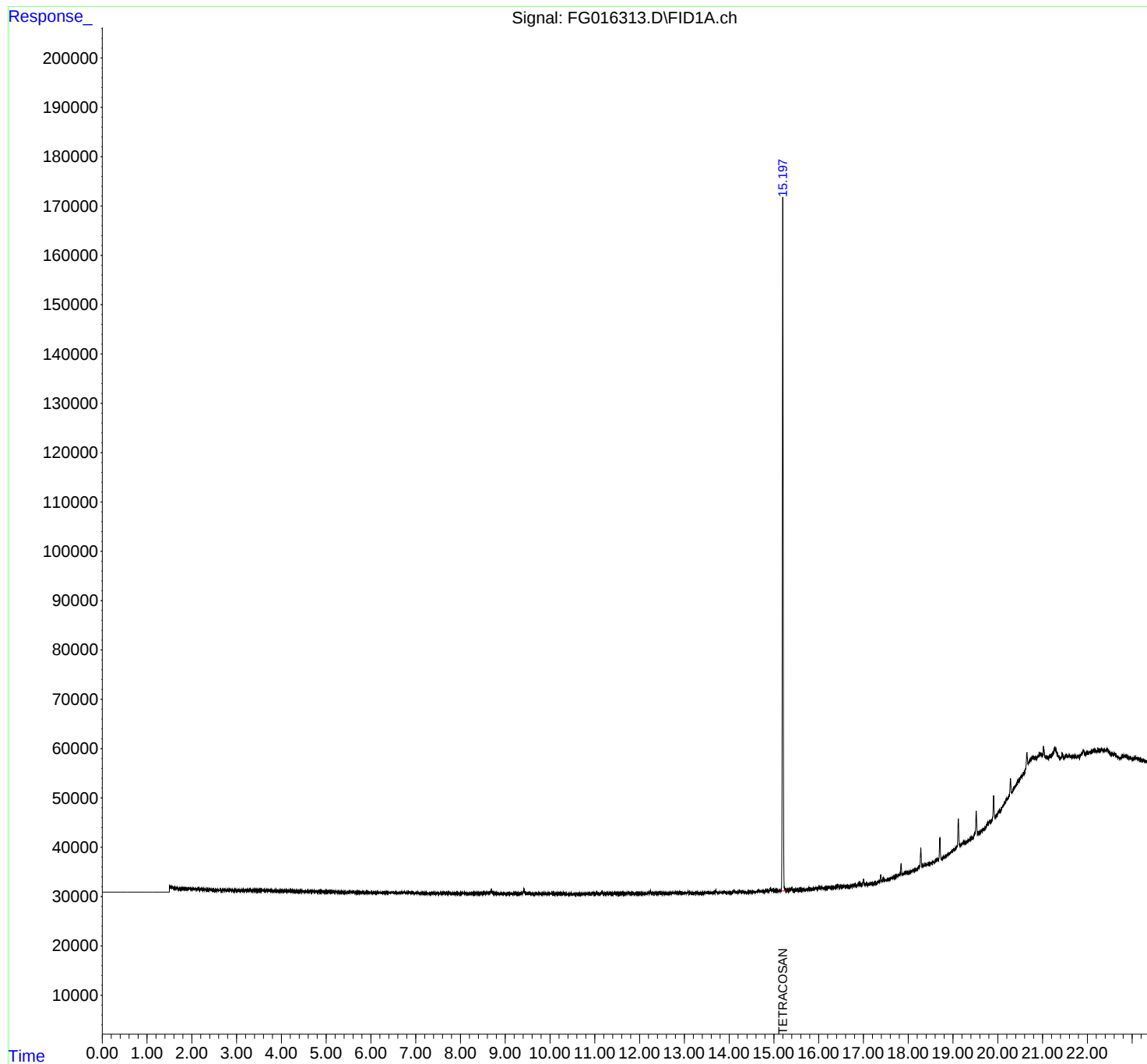
(m)=manual int.

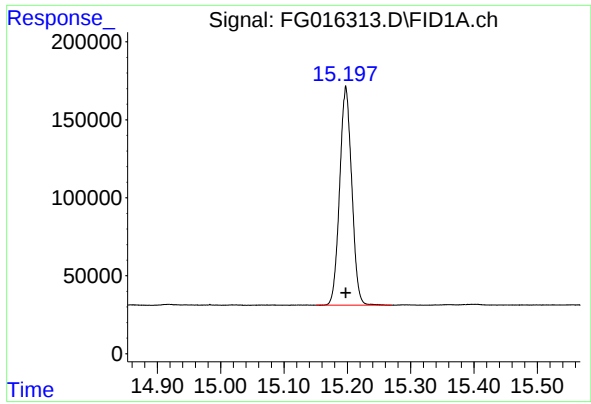
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016313.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 19:46
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: Sample.e
Quant Time: Jul 17 02:36:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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.: 15.198 min
Delta R.T.: 0.000 min
Response: 1857827
Conc: 18.58 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016313.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 19:46
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.198	15.151	15.270	BB	140486	1857827	100.00%	100.000%
Sum of corrected areas:						1857827		

FG070925.M Thu Jul 17 03:12:15 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168878BS	SDG No.:	Q2529
Lab Sample ID:	PB168878BS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:		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
FG016304.D	1	07/16/25 10:00	07/16/25 14:47	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	5500		169	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	17.0		37 - 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\FG071625\
 Data File : FG016304.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 14:47
 Operator : YP\AJ
 Sample : PB168878BS
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 PB168878BS

Integration File: Sample.e
 Quant Time: Jul 17 02:34:45 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Quant Title :
 QLast Update : Wed Jul 09 12:46:24 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	1697457	16.977 ug/ml
Target Compounds			
2) N-DECANE	4.669	1836085	15.942 ug/ml
3) N-DODECANE	6.851	1882697	16.238 ug/ml
4) N-TETRADECANE	8.691	1915701	16.230 ug/ml
5) N-HEXADECANE	10.311	1912454	16.534 ug/ml
6) N-OCTADECANE	11.765	1956667	16.670 ug/ml
7) N-EICOSANE	13.085	1999886	16.717 ug/ml
8) N-DOCOSANE	14.293	1934376	16.786 ug/ml
10) N-TETRACOSANE	15.404	1912707	16.741 ug/ml
11) N-HEXACOSANE	16.433	1832304	16.651 ug/ml
12) N-OCTACOSANE	17.390	1806547	16.612 ug/ml

(f)=RT Delta > 1/2 Window

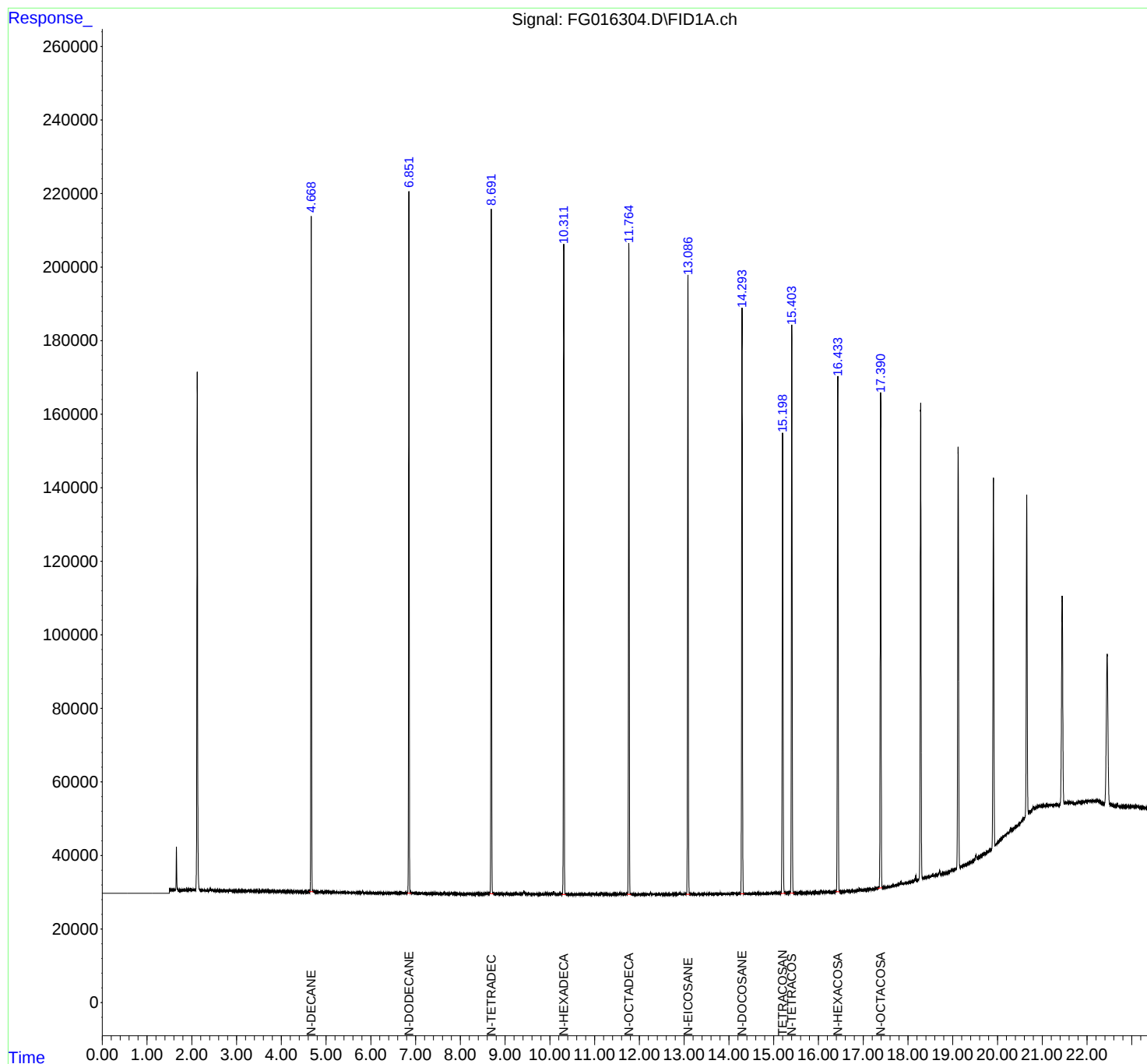
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016304.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 14:47
Operator : YP\AJ
Sample : PB168878BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB168878BS

Integration File: Sample.e
Quant Time: Jul 17 02:34:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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\FG071625\
Data File : FG016304.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 14:47
Sample : PB168878BS
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.669	4.627	4.715	BB	183525	1836085	91.81%	8.876%
2	6.851	6.817	6.901	BB	190610	1882697	94.14%	9.101%
3	8.691	8.652	8.740	BB	186063	1915701	95.79%	9.260%
4	10.311	10.268	10.355	BB	176669	1912454	95.63%	9.245%
5	11.765	11.720	11.814	BB	176295	1956667	97.84%	9.458%
6	13.085	13.042	13.135	BB	168456	1999886	100.00%	9.667%
7	14.293	14.258	14.346	BB	158803	1934376	96.72%	9.351%
8	15.199	15.160	15.267	BB	125109	1697457	84.88%	8.205%
9	15.404	15.366	15.458	BB	153345	1912707	95.64%	9.246%
10	16.433	16.387	16.474	BB	139188	1832304	91.62%	8.857%
11	17.390	17.321	17.426	BB	134776	1806547	90.33%	8.733%
Sum of corrected areas:						20686881		

FG070925.M Thu Jul 17 03:10:51 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/09/25
Project:	South River WM Replacement	Date Received:	07/09/25
Client Sample ID:	TP-23-99MS	SDG No.:	Q2529
Lab Sample ID:	Q2543-04MS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	85.4
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
FG016311.D	1	07/16/25 10:00	07/16/25 18:46	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	10600		198	1950	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	12.3		37 - 130	62%	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\FG071625\
 Data File : FG016311.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 18:46
 Operator : YP\AJ
 Sample : Q2543-04MS
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 TP-23-99MS

Integration File: Sample.e
 Quant Time: Jul 17 02:36:12 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Quant Title :
 QLast Update : Wed Jul 09 12:46:24 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	1231338	12.315 ug/ml
Target Compounds			
2) N-DECANE	4.668	1835317	15.935 ug/ml
3) N-DODECANE	6.851	1896351	16.356 ug/ml
4) N-TETRADECANE	8.691	1979191	16.768 ug/ml
5) N-HEXADECANE	10.311	1988906	17.195 ug/ml
6) N-OCTADECANE	11.765	2034632	17.334 ug/ml
7) N-EICOSANE	13.085	2091843	17.486 ug/ml
8) N-DOCOSANE	14.293	2035867	17.666 ug/ml
10) N-TETRACOSANE	15.405	2116925	18.528 ug/ml
11) N-HEXACOSANE	16.434	1950133	17.722 ug/ml
12) N-OCTACOSANE	17.390	1938925	17.829 ug/ml

(f)=RT Delta > 1/2 Window

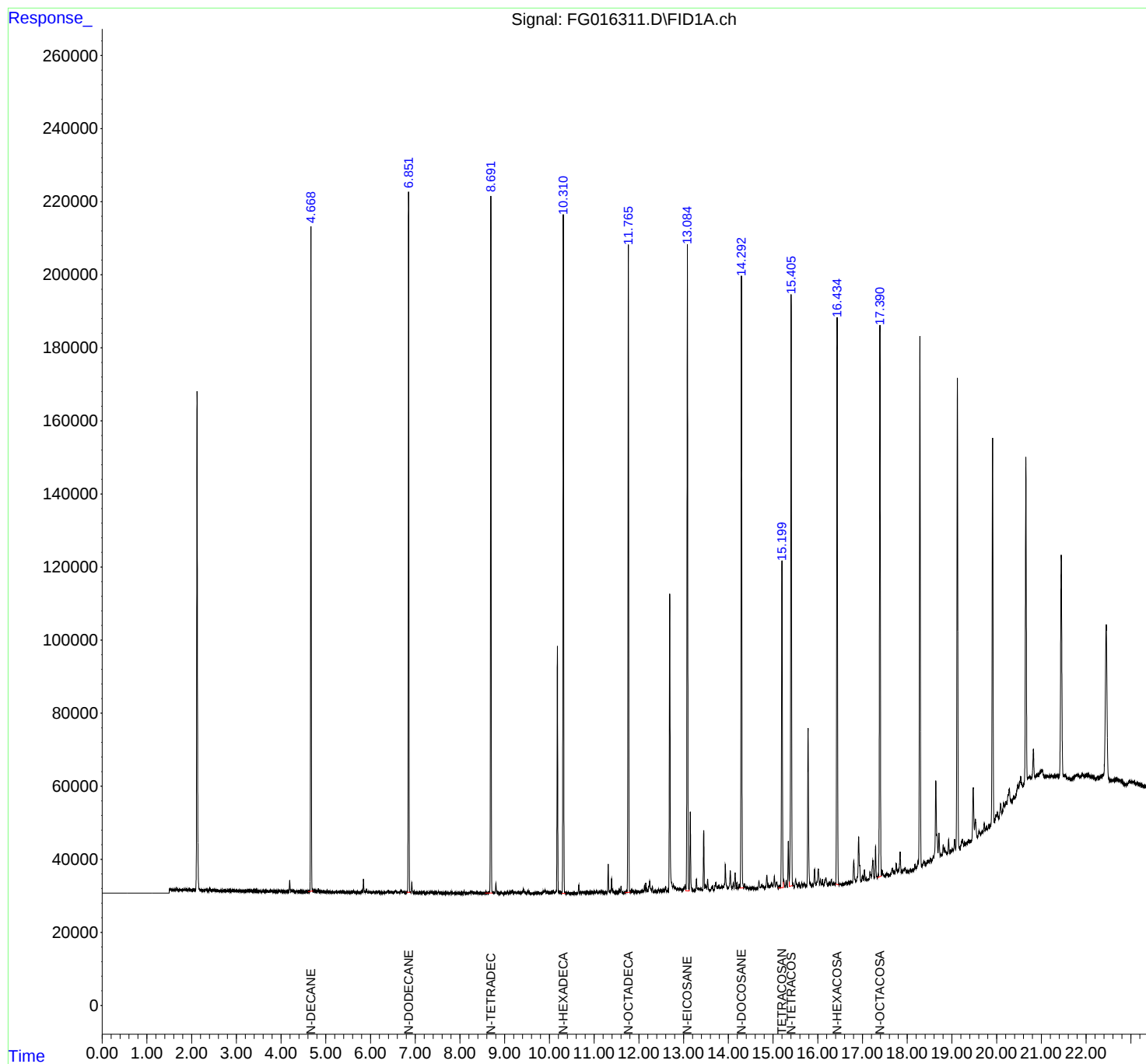
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016311.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 18:46
Operator : YP\AJ
Sample : Q2543-04MS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-23-99MS

Integration File: Sample.e
Quant Time: Jul 17 02:36:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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\FG071625\
 Data File : FG016311.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 18:46
 Sample : Q2543-04MS
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.249	4.235	4.312	HH	819	26151	1.19%	0.081%
2	4.322	4.312	4.327	HH	510	4159	0.19%	0.013%
3	4.337	4.327	4.344	HH	441	4328	0.20%	0.013%
4	4.355	4.344	4.364	HH	482	5079	0.23%	0.016%
5	4.373	4.364	4.379	HH	502	4070	0.18%	0.013%
6	4.399	4.379	4.405	HH	535	7731	0.35%	0.024%
7	4.410	4.405	4.414	HH	520	2466	0.11%	0.008%
8	4.419	4.414	4.435	HH	512	6001	0.27%	0.018%
9	4.440	4.435	4.454	HH	518	4837	0.22%	0.015%
10	4.469	4.454	4.512	HH	536	14767	0.67%	0.045%
11	4.517	4.512	4.524	HH	390	2586	0.12%	0.008%
12	4.544	4.524	4.563	HH	443	8790	0.40%	0.027%
13	4.583	4.563	4.601	HH	585	10483	0.48%	0.032%
14	4.606	4.601	4.610	HH	462	2162	0.10%	0.007%
15	4.623	4.610	4.639	HH	592	8686	0.39%	0.027%
16	4.668	4.639	4.699	HH	182452	1851913	83.98%	5.703%
17	4.705	4.699	4.727	HH	756	10527	0.48%	0.032%
18	4.746	4.727	4.753	HH	576	8183	0.37%	0.025%
19	4.758	4.753	4.764	HH	641	3668	0.17%	0.011%
20	4.768	4.764	4.802	HH	564	11236	0.51%	0.035%
21	4.804	4.802	4.809	HH	451	1610	0.07%	0.005%
22	4.833	4.809	4.856	HH	1236	18618	0.84%	0.057%
23	4.864	4.856	4.872	HH	485	3745	0.17%	0.012%
24	4.884	4.872	4.892	HH	440	4362	0.20%	0.013%
25	4.903	4.892	4.909	HH	486	4386	0.20%	0.014%
26	4.920	4.909	4.930	HH	388	4539	0.21%	0.014%
27	4.957	4.930	4.971	HH	414	8878	0.40%	0.027%
28	4.981	4.971	5.020	HH	420	10125	0.46%	0.031%
29	5.036	5.020	5.054	HH	470	7338	0.33%	0.023%
30	5.066	5.054	5.077	HH	335	4107	0.19%	0.013%
31	5.080	5.077	5.087	HH	328	1815	0.08%	0.006%
32	5.090	5.087	5.099	HH	366	2286	0.10%	0.007%
33	5.102	5.099	5.106	HH	302	1100	0.05%	0.003%
34	5.110	5.106	5.117	HH	307	1754	0.08%	0.005%
35	5.121	5.117	5.132	HH	308	2565	0.12%	0.008%
36	5.135	5.132	5.142	HH	339	1864	0.08%	0.006%

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37	5.146	5.142	5.154	HH	308	1928	0.09%	0.006%
38	5.164	5.154	5.176	HH	327	4014	0.18%	0.012%
39	5.179	5.176	5.185	HH	316	1542	0.07%	0.005%
40	5.188	5.185	5.207	HH	348	3391	0.15%	0.010%
41	5.220	5.207	5.252	HH	294	6480	0.29%	0.020%
42	5.255	5.252	5.259	HH	252	1015	0.05%	0.003%
43	5.276	5.259	5.293	HH	341	4931	0.22%	0.015%
44	5.304	5.293	5.309	HH	346	2807	0.13%	0.009%
45	5.325	5.309	5.342	HH	479	7179	0.33%	0.022%
46	5.347	5.342	5.352	HH	250	1291	0.06%	0.004%
47	5.375	5.352	5.409	HH	440	9943	0.45%	0.031%
48	5.424	5.409	5.460	HH	294	6715	0.30%	0.021%
49	5.474	5.460	5.482	HH	341	3603	0.16%	0.011%
50	5.486	5.482	5.537	HH	306	7043	0.32%	0.022%
51	5.543	5.537	5.546	HH	208	976	0.04%	0.003%
52	5.557	5.546	5.567	HH	281	2483	0.11%	0.008%
53	5.573	5.567	5.577	HH	239	984	0.04%	0.003%
54	5.588	5.577	5.595	HH	213	1896	0.09%	0.006%
55	5.615	5.595	5.640	HH	582	9684	0.44%	0.030%
56	5.648	5.640	5.666	HH	275	3469	0.16%	0.011%
57	5.678	5.666	5.700	HH	310	3973	0.18%	0.012%
58	5.710	5.700	5.721	HH	182	1810	0.08%	0.006%
59	5.724	5.721	5.729	HH	190	685	0.03%	0.002%
60	5.734	5.729	5.740	HH	189	1067	0.05%	0.003%
61	5.746	5.740	5.764	HH	235	2431	0.11%	0.007%
62	5.767	5.764	5.796	HH	251	3141	0.14%	0.010%
63	5.813	5.796	5.824	HH	681	7558	0.34%	0.023%
64	5.842	5.824	5.864	HH	3807	38783	1.76%	0.119%
65	5.873	5.864	5.894	HH	487	6034	0.27%	0.019%
66	5.911	5.894	5.947	HH	1153	15026	0.68%	0.046%
67	5.966	5.947	6.014	HH	435	11164	0.51%	0.034%
68	6.022	6.014	6.034	HH	224	1943	0.09%	0.006%
69	6.064	6.034	6.082	HH	354	6458	0.29%	0.020%
70	6.084	6.082	6.089	HH	238	716	0.03%	0.002%
71	6.094	6.089	6.110	HH	194	1783	0.08%	0.005%
72	6.127	6.110	6.163	HH	538	6857	0.31%	0.021%
73	6.178	6.163	6.242	HH	488	8643	0.39%	0.027%
74	6.249	6.242	6.259	HH	171	1079	0.05%	0.003%
75	6.266	6.259	6.271	HH	138	640	0.03%	0.002%
76	6.290	6.271	6.297	HH	179	1585	0.07%	0.005%
77	6.321	6.297	6.330	HH	161	2104	0.10%	0.006%
78	6.344	6.330	6.370	HH	262	4257	0.19%	0.013%
79	6.391	6.370	6.429	HH	723	14364	0.65%	0.044%
80	6.434	6.429	6.446	HH	257	2112	0.10%	0.007%
81	6.461	6.446	6.485	HH	436	6672	0.30%	0.021%
82	6.494	6.485	6.517	HH	286	3558	0.16%	0.011%
83	6.538	6.517	6.549	HH	372	4641	0.21%	0.014%
84	6.559	6.549	6.604	HH	518	10560	0.48%	0.033%
85	6.619	6.604	6.625	HH	235	2250	0.10%	0.007%
86	6.631	6.625	6.635	HH	238	1280	0.06%	0.004%
87	6.642	6.635	6.660	HH	258	3052	0.14%	0.009%
88	6.685	6.660	6.720	HH	820	14724	0.67%	0.045%
89	6.736	6.720	6.760	HH	338	5901	0.27%	0.018%

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90	6.766	6.760	6.778	HH	215	1925	0.09%	0.006%
91	6.785	6.778	6.813	HH	255	4485	0.20%	0.014%
92	6.851	6.813	6.897	HH	191144	1907114	86.48%	5.873%
93	6.922	6.897	6.990	HH	2912	35309	1.60%	0.109%
94	6.994	6.990	6.997	HH	175	573	0.03%	0.002%
95	7.003	6.997	7.032	HH	202	2915	0.13%	0.009%
96	7.038	7.032	7.051	HH	125	1082	0.05%	0.003%
97	7.059	7.051	7.095	HH	124	2299	0.10%	0.007%
98	7.109	7.095	7.114	HH	142	1099	0.05%	0.003%
99	7.130	7.114	7.180	HH	182	3918	0.18%	0.012%
100	7.183	7.180	7.194	HH	151	729	0.03%	0.002%
101	7.208	7.194	7.234	HH	125	1170	0.05%	0.004%
102	7.240	7.234	7.247	HH	83	434	0.02%	0.001%
103	7.263	7.247	7.289	PH	146	1384	0.06%	0.004%
104	7.303	7.289	7.330	PH	113	1482	0.07%	0.005%
105	7.343	7.330	7.369	PH	381	5775	0.26%	0.018%
106	7.379	7.369	7.404	HH	309	4549	0.21%	0.014%
107	7.408	7.404	7.414	HH	155	555	0.03%	0.002%
108	7.426	7.414	7.439	PH	147	1354	0.06%	0.004%
109	7.445	7.439	7.462	HH	106	707	0.03%	0.002%
110	7.472	7.462	7.487	PH	155	1232	0.06%	0.004%
111	7.492	7.487	7.503	PH	112	948	0.04%	0.003%
112	7.521	7.503	7.541	HH	510	5494	0.25%	0.017%
113	7.545	7.541	7.559	HH	132	541	0.02%	0.002%
114	7.565	7.559	7.609	HH	49	444	0.02%	0.001%
115	7.758	7.754	7.771	HH	63	66	0.00%	0.000%
116	7.803	7.771	7.825	PH	416	3793	0.17%	0.012%
117	8.095	8.073	8.140	PH	520	3356	0.15%	0.010%
118	8.226	8.197	8.246	PH	264	2039	0.09%	0.006%
119	8.265	8.246	8.290	PH	629	6698	0.30%	0.021%
120	8.382	8.363	8.410	PH	226	1427	0.06%	0.004%
121	8.414	8.410	8.421	HH	59	118	0.01%	0.000%
122	8.544	8.542	8.547	PH	25	-81	-0.00%	-0.000%
123	8.581	8.547	8.617	PH	277	3979	0.18%	0.012%
124	8.619	8.617	8.640	HH	130	1156	0.05%	0.004%
125	8.691	8.640	8.735	HH	190567	1975407	89.58%	6.083%
126	8.750	8.735	8.777	HH	244	2272	0.10%	0.007%
127	8.804	8.777	8.849	PH	2652	30323	1.38%	0.093%
128	8.924	8.905	8.969	PH	215	-515	-0.02%	-0.002%
129	9.060	9.038	9.077	PH	204	1974	0.09%	0.006%
130	9.086	9.077	9.094	PH	22	10	0.00%	0.000%
131	9.105	9.094	9.122	PH	190	1755	0.08%	0.005%
132	9.131	9.122	9.146	HH	168	1731	0.08%	0.005%
133	9.165	9.146	9.187	HH	699	8258	0.37%	0.025%
134	9.193	9.187	9.213	HH	147	1361	0.06%	0.004%
135	9.237	9.213	9.252	HH	273	2903	0.13%	0.009%
136	9.257	9.252	9.266	HH	76	252	0.01%	0.001%
137	9.269	9.266	9.281	PH	66	155	0.01%	0.000%
138	9.301	9.281	9.338	PH	403	5014	0.23%	0.015%
139	9.346	9.338	9.352	PH	111	246	0.01%	0.001%
140	9.382	9.352	9.394	PH	150	1866	0.08%	0.006%
141	9.420	9.394	9.478	HH	1047	18290	0.83%	0.056%

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142	9.524	9.489	9.550	PH	717	7783	0.35%	0.024%
143	9.762	9.748	9.795	PH	201	738	0.03%	0.002%
144	9.863	9.841	9.883	PH	590	6731	0.31%	0.021%
145	9.904	9.883	9.930	HH	870	12548	0.57%	0.039%
146	9.949	9.930	9.962	HH	353	3526	0.16%	0.011%
147	9.979	9.962	10.020	HH	160	1660	0.08%	0.005%
148	10.047	10.020	10.069	PH	355	4252	0.19%	0.013%
149	10.088	10.069	10.115	HH	792	7529	0.34%	0.023%
150	10.178	10.115	10.220	PH	67618	696349	31.58%	2.144%
151	10.225	10.220	10.229	HH	246	1090	0.05%	0.003%
152	10.245	10.229	10.277	HH	375	4527	0.21%	0.014%
153	10.311	10.277	10.358	PH	185098	1985015	90.01%	6.113%
154	10.656	10.634	10.685	PH	2187	23273	1.06%	0.072%
155	10.702	10.685	10.718	PH	234	1834	0.08%	0.006%
156	10.733	10.718	10.742	HH	251	2113	0.10%	0.007%
157	10.752	10.742	10.772	HH	304	3044	0.14%	0.009%
158	10.790	10.772	10.814	HH	227	2114	0.10%	0.007%
159	10.836	10.814	10.856	PH	234	2552	0.12%	0.008%
160	10.860	10.856	10.886	HH	159	1589	0.07%	0.005%
161	10.919	10.886	10.930	PH	237	2939	0.13%	0.009%
162	10.957	10.930	10.974	HH	337	5386	0.24%	0.017%
163	10.984	10.974	10.988	HH	207	1135	0.05%	0.003%
164	11.008	10.988	11.024	HH	498	6123	0.28%	0.019%
165	11.029	11.024	11.033	HH	218	841	0.04%	0.003%
166	11.054	11.033	11.092	HH	658	10020	0.45%	0.031%
167	11.121	11.092	11.144	PH	369	7293	0.33%	0.022%
168	11.158	11.144	11.174	HH	509	6239	0.28%	0.019%
169	11.189	11.174	11.228	HH	320	5585	0.25%	0.017%
170	11.238	11.228	11.241	PH	79	371	0.02%	0.001%
171	11.247	11.241	11.253	HH	162	624	0.03%	0.002%
172	11.256	11.253	11.262	HH	94	369	0.02%	0.001%
173	11.278	11.262	11.290	HH	212	2283	0.10%	0.007%
174	11.314	11.290	11.337	HH	7939	82699	3.75%	0.255%
175	11.347	11.337	11.362	HH	528	5638	0.26%	0.017%
176	11.390	11.362	11.409	HH	4001	47266	2.14%	0.146%
177	11.417	11.409	11.456	HH	798	11439	0.52%	0.035%
178	11.483	11.456	11.506	HH	340	6038	0.27%	0.019%
179	11.516	11.506	11.529	HH	190	2050	0.09%	0.006%
180	11.535	11.529	11.541	HH	120	929	0.04%	0.003%
181	11.563	11.541	11.582	HH	935	12210	0.55%	0.038%
182	11.601	11.582	11.657	HH	1779	22087	1.00%	0.068%
183	11.672	11.657	11.675	HH	94	516	0.02%	0.002%
184	11.695	11.675	11.713	HH	337	5250	0.24%	0.016%
185	11.728	11.713	11.735	HH	495	5318	0.24%	0.016%
186	11.765	11.735	11.824	HH	176984	2041064	92.56%	6.285%
187	11.841	11.824	11.861	HH	856	13292	0.60%	0.041%
188	11.868	11.861	11.897	HH	573	6997	0.32%	0.022%
189	11.923	11.897	11.944	HH	598	9805	0.44%	0.030%
190	11.960	11.944	11.982	HH	524	8551	0.39%	0.026%
191	11.994	11.982	12.016	HH	563	8173	0.37%	0.025%
192	12.023	12.016	12.026	HH	275	1464	0.07%	0.005%
193	12.072	12.026	12.089	HH	662	18262	0.83%	0.056%
194	12.125	12.089	12.139	HH	1994	28259	1.28%	0.087%

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195	12.156	12.139	12.174	HH	2749	33280	1.51%	0.102%
196	12.184	12.174	12.203	HH	976	12471	0.57%	0.038%
197	12.222	12.203	12.228	HH	1944	18961	0.86%	0.058%
198	12.242	12.228	12.269	HH	3300	51223	2.32%	0.158%
199	12.273	12.269	12.289	HH	1110	10926	0.50%	0.034%
200	12.304	12.289	12.332	HH	1802	24805	1.12%	0.076%
201	12.347	12.332	12.363	HH	542	7171	0.33%	0.022%
202	12.380	12.363	12.409	HH	823	15003	0.68%	0.046%
203	12.439	12.409	12.469	HH	1039	21997	1.00%	0.068%
204	12.484	12.469	12.505	HH	822	13414	0.61%	0.041%
205	12.530	12.505	12.542	HH	771	12732	0.58%	0.039%
206	12.552	12.542	12.561	HH	745	7498	0.34%	0.023%
207	12.599	12.561	12.619	HH	1751	33586	1.52%	0.103%
208	12.635	12.619	12.642	HH	624	7991	0.36%	0.025%
209	12.655	12.642	12.663	HH	804	9288	0.42%	0.029%
210	12.691	12.663	12.760	HH	81470	1026384	46.54%	3.161%
211	12.774	12.760	12.792	HH	2151	35842	1.63%	0.110%
212	12.802	12.792	12.844	HH	1647	41098	1.86%	0.127%
213	12.870	12.844	12.890	HH	1252	30779	1.40%	0.095%
214	12.919	12.890	12.962	HH	1345	44253	2.01%	0.136%
215	13.003	12.962	13.007	HH	1179	23508	1.07%	0.072%
216	13.030	13.007	13.049	HH	1999	37174	1.69%	0.114%
217	13.085	13.049	13.123	HH	176664	2119395	96.11%	6.526%
218	13.150	13.123	13.198	HH	22302	284377	12.90%	0.876%
219	13.209	13.198	13.225	HH	989	12332	0.56%	0.038%
220	13.249	13.225	13.262	HH	712	14301	0.65%	0.044%
221	13.288	13.262	13.325	HH	3837	67564	3.06%	0.208%
222	13.341	13.325	13.357	HH	1346	21958	1.00%	0.068%
223	13.368	13.357	13.382	HH	1167	16530	0.75%	0.051%
224	13.392	13.382	13.423	HH	1294	24889	1.13%	0.077%
225	13.450	13.423	13.472	HH	17091	202353	9.18%	0.623%
226	13.486	13.472	13.500	HH	2260	31603	1.43%	0.097%
227	13.504	13.500	13.520	HH	1798	17972	0.81%	0.055%
228	13.538	13.520	13.605	HH	3758	76497	3.47%	0.236%
229	13.625	13.605	13.635	HH	1680	21763	0.99%	0.067%
230	13.648	13.635	13.679	HH	2063	34356	1.56%	0.106%
231	13.721	13.679	13.767	HH	2949	93822	4.25%	0.289%
232	13.790	13.767	13.815	HH	2146	48939	2.22%	0.151%
233	13.827	13.815	13.835	HH	1513	16386	0.74%	0.050%
234	13.851	13.835	13.865	HH	1982	30931	1.40%	0.095%
235	13.878	13.865	13.894	HH	1938	29514	1.34%	0.091%
236	13.932	13.894	13.989	HH	7818	168862	7.66%	0.520%
237	14.044	13.989	14.082	HH	6212	142512	6.46%	0.439%
238	14.111	14.082	14.130	HH	2749	55953	2.54%	0.172%
239	14.151	14.130	14.177	HH	5588	88122	4.00%	0.271%
240	14.194	14.177	14.216	HH	2828	45159	2.05%	0.139%
241	14.242	14.216	14.259	HH	2475	46363	2.10%	0.143%
242	14.293	14.259	14.342	HH	166806	2107033	95.55%	6.488%
243	14.364	14.342	14.395	HH	2441	57124	2.59%	0.176%
244	14.419	14.395	14.434	HH	1600	33565	1.52%	0.103%
245	14.442	14.434	14.460	HH	1480	21195	0.96%	0.065%
246	14.475	14.460	14.494	HH	1449	26001	1.18%	0.080%

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247	14.504	14.494	14.510	HH	1262	12383	0.56%	0.038%
248	14.512	14.510	14.516	HH	1294	4262	0.19%	0.013%
249	14.546	14.516	14.567	HH	1482	40757	1.85%	0.126%
250	14.581	14.567	14.604	HH	1367	27934	1.27%	0.086%
251	14.607	14.604	14.619	HH	1310	11544	0.52%	0.036%
252	14.634	14.619	14.642	HH	1318	17078	0.77%	0.053%
253	14.656	14.642	14.661	HH	1435	14943	0.68%	0.046%
254	14.684	14.661	14.716	HH	3285	69801	3.17%	0.215%
255	14.746	14.716	14.770	HH	2157	59942	2.72%	0.185%
256	14.782	14.770	14.817	HH	1832	44600	2.02%	0.137%
257	14.861	14.817	14.907	HH	4730	135312	6.14%	0.417%
258	14.921	14.907	14.939	HH	1953	35545	1.61%	0.109%
259	14.964	14.939	14.997	HH	2691	77175	3.50%	0.238%
260	15.029	14.997	15.050	HH	4670	92792	4.21%	0.286%
261	15.078	15.050	15.128	HH	2988	99678	4.52%	0.307%
262	15.144	15.128	15.152	HH	1809	24848	1.13%	0.077%
263	15.199	15.152	15.232	HH	90645	1297593	58.84%	3.996%
264	15.240	15.232	15.274	HH	3689	65431	2.97%	0.201%
265	15.295	15.274	15.315	HH	3404	60693	2.75%	0.187%
266	15.342	15.315	15.363	HH	14166	196809	8.92%	0.606%
267	15.405	15.363	15.438	HH	163743	2205239	100.00%	6.791%
268	15.449	15.438	15.477	HH	2444	47243	2.14%	0.145%
269	15.505	15.477	15.557	HH	3602	119447	5.42%	0.368%
270	15.581	15.557	15.619	HH	2943	79982	3.63%	0.246%
271	15.642	15.619	15.669	HH	2893	66237	3.00%	0.204%
272	15.691	15.669	15.739	HH	2537	91318	4.14%	0.281%
273	15.783	15.739	15.867	HH	45007	744220	33.75%	2.292%
274	15.885	15.867	15.900	HH	2405	44862	2.03%	0.138%
275	15.928	15.900	15.961	HH	6512	136928	6.21%	0.422%
276	16.012	15.961	16.040	HH	6582	187893	8.52%	0.579%
277	16.059	16.040	16.083	HH	3421	72448	3.29%	0.223%
278	16.105	16.083	16.126	HH	3644	69926	3.17%	0.215%
279	16.182	16.126	16.216	HH	4142	163212	7.40%	0.503%
280	16.258	16.216	16.279	HH	2701	94382	4.28%	0.291%
281	16.303	16.279	16.328	HH	3656	85257	3.87%	0.263%
282	16.344	16.328	16.380	HH	2647	76710	3.48%	0.236%
283	16.433	16.380	16.476	HH	156848	2088071	94.69%	6.430%
284	16.498	16.476	16.503	HH	2527	38402	1.74%	0.118%
285	16.505	16.503	16.514	HH	2523	16398	0.74%	0.050%
286	16.520	16.514	16.527	HH	2456	19435	0.88%	0.060%
287	16.530	16.527	16.542	HH	2445	20036	0.91%	0.062%
288	16.561	16.542	16.584	HH	2499	59751	2.71%	0.184%
289	16.628	16.584	16.632	HH	2938	75183	3.41%	0.232%
290	16.635	16.632	16.649	HH	2934	27481	1.25%	0.085%
291	16.655	16.649	16.675	HH	2642	41687	1.89%	0.128%
292	16.695	16.675	16.713	HH	2899	62518	2.83%	0.193%
293	16.736	16.713	16.768	HH	3268	98112	4.45%	0.302%
294	16.805	16.768	16.856	HH	8893	254055	11.52%	0.782%
295	16.886	16.856	16.890	HH	4512	77559	3.52%	0.239%
296	16.915	16.890	16.974	HH	15342	381518	17.30%	1.175%
297	17.000	16.974	17.022	HH	4764	114052	5.17%	0.351%
298	17.044	17.022	17.064	HH	6408	121730	5.52%	0.375%
299	17.079	17.064	17.102	HH	4036	86423	3.92%	0.266%

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300	17.117	17.102	17.137	HH	3770	77904	3.53%	0.240%	
301	17.168	17.137	17.199	HH	5810	174888	7.93%	0.539%	
302	17.233	17.199	17.259	HH	9010	231460	10.50%	0.713%	
303	17.293	17.259	17.339	HH	12736	307639	13.95%	0.947%	
304	17.390	17.339	17.422	HH	155550	2163153	98.09%	6.661%	
305	17.440	17.422	17.491	HH	6238	214473	9.73%	0.660%	

Sum of corrected areas: 32474395

FG070925.M Thu Jul 17 03:26:09 2025

Report of Analysis

Client:	CDM Smith	Date Collected:	07/09/25
Project:	South River WM Replacement	Date Received:	07/09/25
Client Sample ID:	TP-23-99MSD	SDG No.:	Q2529
Lab Sample ID:	Q2543-04MSD	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	85.4
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
FG016312.D	1	07/16/25 10:00	07/16/25 19:16	PB168878

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	10600		198	1950	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.8		37 - 130	59%	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\FG071625\
 Data File : FG016312.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 19:16
 Operator : YP\AJ
 Sample : Q2543-04MSD
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 TP-23-99MSD

Integration File: Sample.e
 Quant Time: Jul 17 02:36:25 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Quant Title :
 QLast Update : Wed Jul 09 12:46:24 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	1174725	11.749 ug/ml
Target Compounds			
2) N-DECANE	4.668	1783984	15.489 ug/ml
3) N-DODECANE	6.850	1842142	15.889 ug/ml
4) N-TETRADECANE	8.691	1918503	16.254 ug/ml
5) N-HEXADECANE	10.311	1930838	16.693 ug/ml
6) N-OCTADECANE	11.764	1968114	16.767 ug/ml
7) N-EICOSANE	13.085	2027489	16.948 ug/ml
8) N-DOCOSANE	14.293	1976001	17.147 ug/ml
10) N-TETRACOSANE	15.404	2050695	17.949 ug/ml
11) N-HEXACOSANE	16.432	1908737	17.346 ug/ml
12) N-OCTACOSANE	17.390	1893213	17.409 ug/ml

(f)=RT Delta > 1/2 Window

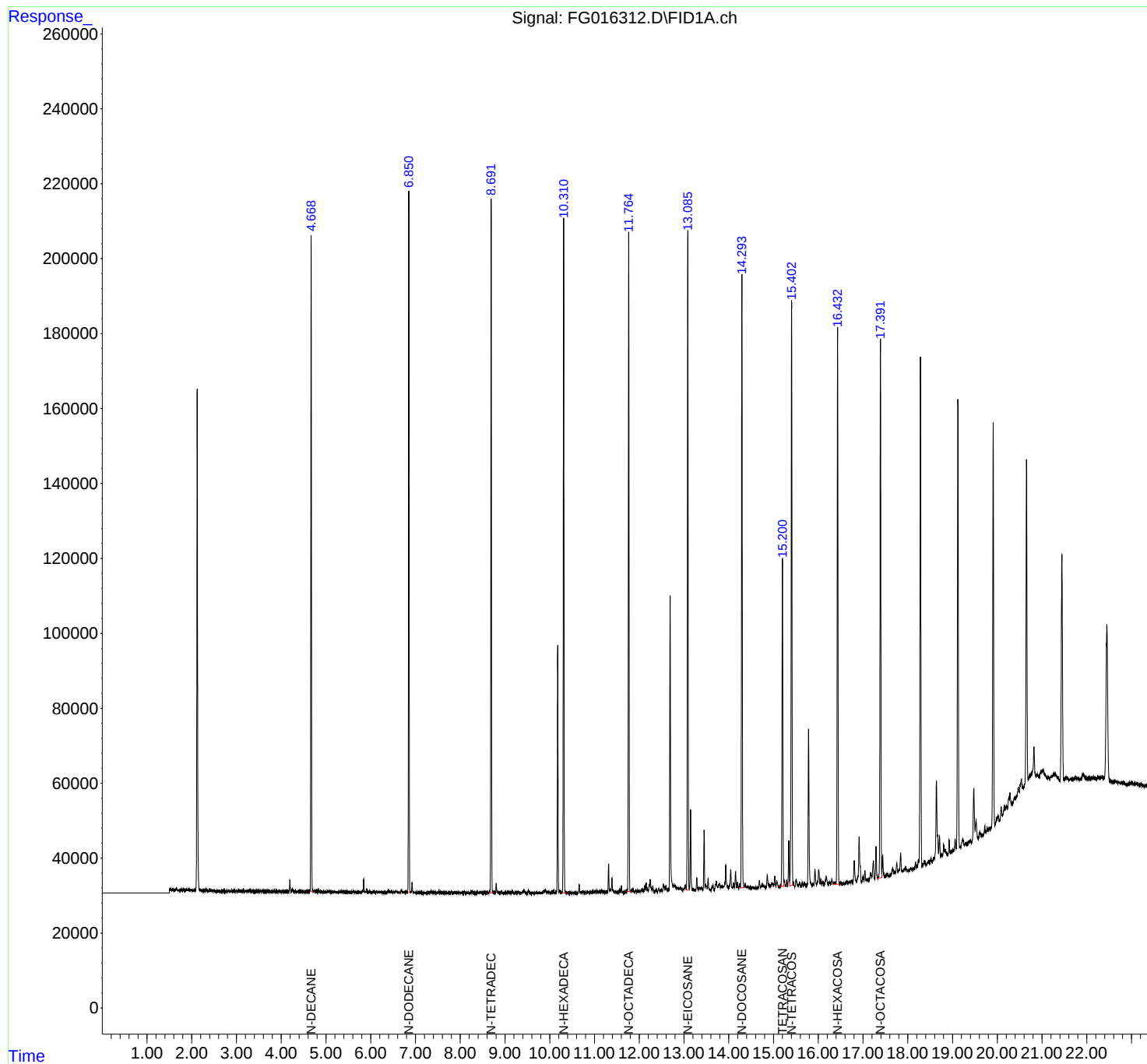
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG071625\
Data File : FG016312.D
Signal(s) : FID1A.ch
Acq On : 16 Jul 2025 19:16
Operator : YP\AJ
Sample : Q2543-04MSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
TP-23-99MSD

Integration File: Sample.e
Quant Time: Jul 17 02:36:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
Quant Title :
QLast Update : Wed Jul 09 12:46:24 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\FG071625\
 Data File : FG016312.D
 Signal(s) : FID1A.ch
 Acq On : 16 Jul 2025 19:16
 Sample : Q2543-04MSD
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG070925.M
 Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.038	4.035	4.050	HH	336	3109	0.15%	0.010%
2	4.055	4.050	4.075	HH	383	4516	0.21%	0.014%
3	4.079	4.075	4.088	HH	340	2450	0.11%	0.008%
4	4.092	4.088	4.104	HH	432	3301	0.15%	0.010%
5	4.114	4.104	4.128	HH	409	4785	0.22%	0.015%
6	4.138	4.128	4.147	HH	387	3844	0.18%	0.012%
7	4.150	4.147	4.168	HH	343	3679	0.17%	0.011%
8	4.193	4.168	4.220	HH	3357	38838	1.82%	0.120%
9	4.248	4.220	4.274	HH	770	16839	0.79%	0.052%
10	4.277	4.274	4.312	HH	475	8487	0.40%	0.026%
11	4.314	4.312	4.345	HH	389	6405	0.30%	0.020%
12	4.373	4.345	4.379	HH	367	6563	0.31%	0.020%
13	4.387	4.379	4.392	HH	409	2986	0.14%	0.009%
14	4.395	4.392	4.410	HH	420	4076	0.19%	0.013%
15	4.414	4.410	4.421	HH	402	2659	0.12%	0.008%
16	4.428	4.421	4.436	HH	414	3029	0.14%	0.009%
17	4.440	4.436	4.453	HH	407	3246	0.15%	0.010%
18	4.463	4.453	4.479	HH	342	4968	0.23%	0.015%
19	4.483	4.479	4.507	HH	322	5085	0.24%	0.016%
20	4.511	4.507	4.523	HH	326	2505	0.12%	0.008%
21	4.529	4.523	4.548	HH	382	3750	0.18%	0.012%
22	4.564	4.548	4.570	HH	312	3379	0.16%	0.010%
23	4.581	4.570	4.595	HH	467	5627	0.26%	0.017%
24	4.599	4.595	4.606	HH	300	1876	0.09%	0.006%
25	4.624	4.606	4.640	HH	492	7582	0.35%	0.023%
26	4.668	4.640	4.699	HH	174867	1795551	83.94%	5.535%
27	4.703	4.699	4.747	HH	585	12525	0.59%	0.039%
28	4.764	4.747	4.777	HH	486	7307	0.34%	0.023%
29	4.781	4.777	4.805	HH	490	6284	0.29%	0.019%
30	4.832	4.805	4.885	HH	1002	19673	0.92%	0.061%
31	4.891	4.885	4.897	HH	306	1839	0.09%	0.006%
32	4.904	4.897	4.916	HH	329	3023	0.14%	0.009%
33	4.928	4.916	4.938	HH	287	2916	0.14%	0.009%
34	4.958	4.938	4.965	HH	292	3956	0.18%	0.012%
35	4.986	4.965	4.996	HH	279	4390	0.21%	0.014%
36	5.000	4.996	5.009	HH	273	1449	0.07%	0.004%

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37	5.044	5.009	5.058	HH	350	7313	0.34%	0.023%
38	5.062	5.058	5.073	HH	240	1730	0.08%	0.005%
39	5.084	5.073	5.096	HH	283	2856	0.13%	0.009%
40	5.100	5.096	5.110	HH	239	1663	0.08%	0.005%
41	5.125	5.110	5.153	HH	275	5049	0.24%	0.016%
42	5.162	5.153	5.174	HH	229	2426	0.11%	0.007%
43	5.176	5.174	5.182	HH	228	928	0.04%	0.003%
44	5.187	5.182	5.237	HH	206	5065	0.24%	0.016%
45	5.252	5.237	5.269	HH	219	2875	0.13%	0.009%
46	5.285	5.269	5.291	HH	179	2012	0.09%	0.006%
47	5.327	5.291	5.361	HH	408	9410	0.44%	0.029%
48	5.372	5.361	5.391	HH	303	4193	0.20%	0.013%
49	5.395	5.391	5.405	HH	196	1355	0.06%	0.004%
50	5.413	5.405	5.432	HH	195	2308	0.11%	0.007%
51	5.436	5.432	5.441	HH	153	688	0.03%	0.002%
52	5.446	5.441	5.466	HH	183	2211	0.10%	0.007%
53	5.475	5.466	5.517	HH	323	4954	0.23%	0.015%
54	5.521	5.517	5.524	HH	123	372	0.02%	0.001%
55	5.529	5.524	5.537	HH	145	763	0.04%	0.002%
56	5.543	5.537	5.566	HH	172	1671	0.08%	0.005%
57	5.615	5.566	5.634	HH	564	8088	0.38%	0.025%
58	5.651	5.634	5.664	HH	216	2759	0.13%	0.009%
59	5.690	5.664	5.717	HH	148	2786	0.13%	0.009%
60	5.745	5.717	5.752	PH	178	1876	0.09%	0.006%
61	5.757	5.752	5.763	HH	132	520	0.02%	0.002%
62	5.769	5.763	5.794	HH	109	1298	0.06%	0.004%
63	5.812	5.794	5.825	PH	627	6033	0.28%	0.019%
64	5.842	5.825	5.862	HH	3583	35325	1.65%	0.109%
65	5.873	5.862	5.889	HH	351	4028	0.19%	0.012%
66	5.911	5.889	5.937	HH	957	11194	0.52%	0.035%
67	5.968	5.937	6.041	HH	339	10198	0.48%	0.031%
68	6.067	6.041	6.080	HH	275	4267	0.20%	0.013%
69	6.084	6.080	6.114	HH	162	2018	0.09%	0.006%
70	6.130	6.114	6.156	HH	390	4713	0.22%	0.015%
71	6.180	6.156	6.220	HH	394	5581	0.26%	0.017%
72	6.222	6.220	6.232	HH	61	166	0.01%	0.001%
73	6.242	6.232	6.262	PH	131	1271	0.06%	0.004%
74	6.267	6.262	6.273	HH	106	410	0.02%	0.001%
75	6.285	6.273	6.291	HH	124	820	0.04%	0.003%
76	6.294	6.291	6.305	HH	77	352	0.02%	0.001%
77	6.331	6.305	6.335	PH	99	980	0.05%	0.003%
78	6.343	6.335	6.364	HH	204	2388	0.11%	0.007%
79	6.392	6.364	6.446	HH	668	13351	0.62%	0.041%
80	6.460	6.446	6.485	HH	351	4723	0.22%	0.015%
81	6.489	6.485	6.494	HH	128	673	0.03%	0.002%
82	6.499	6.494	6.507	HH	171	878	0.04%	0.003%
83	6.542	6.507	6.547	HH	273	3488	0.16%	0.011%
84	6.568	6.547	6.597	HH	385	7114	0.33%	0.022%
85	6.618	6.597	6.631	HH	138	1741	0.08%	0.005%
86	6.641	6.631	6.664	HH	164	2298	0.11%	0.007%
87	6.684	6.664	6.701	HH	718	9113	0.43%	0.028%
88	6.706	6.701	6.725	HH	200	2217	0.10%	0.007%
89	6.732	6.725	6.746	HH	190	1549	0.07%	0.005%

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90	6.751	6.746	6.769	HH	151	1533	0.07%	0.005%
91	6.782	6.769	6.799	HH	156	1628	0.08%	0.005%
92	6.810	6.799	6.822	HH	166	1606	0.08%	0.005%
93	6.850	6.822	6.902	HH	187508	1846069	86.30%	5.691%
94	6.922	6.902	6.953	HH	2720	28043	1.31%	0.086%
95	6.961	6.953	6.986	HH	97	626	0.03%	0.002%
96	7.006	6.986	7.012	PH	126	605	0.03%	0.002%
97	7.018	7.012	7.036	HH	103	225	0.01%	0.001%
98	7.040	7.036	7.047	PH	-31	-241	-0.01%	-0.001%
99	7.058	7.047	7.068	PH	56	-34	-0.00%	-0.000%
100	7.076	7.068	7.092	PH	32	-354	-0.02%	-0.001%
101	7.097	7.092	7.120	PH	40	-297	-0.01%	-0.001%
102	7.131	7.120	7.161	PH	75	-638	-0.03%	-0.002%
103	7.185	7.161	7.204	PH	13	-1235	-0.06%	-0.004%
104	7.209	7.204	7.219	PH	14	-491	-0.02%	-0.002%
105	7.238	7.219	7.279	PH	11	-1989	-0.09%	-0.006%
106	7.304	7.279	7.309	PH	41	-858	-0.04%	-0.003%
107	7.313	7.309	7.324	PH	39	-288	-0.01%	-0.001%
108	7.342	7.324	7.369	PH	438	6299	0.29%	0.019%
109	7.376	7.369	7.394	HH	280	2709	0.13%	0.008%
110	7.404	7.394	7.431	HH	122	1313	0.06%	0.004%
111	7.434	7.431	7.437	PH	59	144	0.01%	0.000%
112	7.441	7.437	7.462	HH	92	-43	-0.00%	-0.000%
113	7.475	7.462	7.484	PH	52	7	0.00%	0.000%
114	7.490	7.484	7.505	PH	46	213	0.01%	0.001%
115	7.520	7.505	7.550	PH	421	4133	0.19%	0.013%
116	7.555	7.550	7.566	PH	27	-60	-0.00%	-0.000%
117	7.569	7.566	7.592	PH	43	-204	-0.01%	-0.001%
118	7.595	7.592	7.614	PH	-2	-696	-0.03%	-0.002%
119	7.637	7.614	7.657	PH	36	-719	-0.03%	-0.002%
120	7.669	7.657	7.694	PH	35	-324	-0.02%	-0.001%
121	7.696	7.694	7.699	PH	24	-146	-0.01%	-0.000%
122	7.702	7.699	7.734	PH	-50	-1183	-0.06%	-0.004%
123	7.739	7.734	7.751	PH	12	-287	-0.01%	-0.001%
124	7.758	7.751	7.768	PH	47	-235	-0.01%	-0.001%
125	7.773	7.768	7.780	PH	10	-359	-0.02%	-0.001%
126	7.802	7.780	7.823	PH	372	2630	0.12%	0.008%
127	7.829	7.823	7.847	PH	36	-1043	-0.05%	-0.003%
128	7.853	7.847	7.866	PH	8	-390	-0.02%	-0.001%
129	7.870	7.866	7.886	PH	10	-559	-0.03%	-0.002%
130	7.897	7.886	7.911	PH	-35	-1100	-0.05%	-0.003%
131	7.924	7.911	7.951	PH	31	-955	-0.04%	-0.003%
132	7.956	7.951	7.962	PH	13	-471	-0.02%	-0.001%
133	7.965	7.962	7.969	PH	-55	-323	-0.02%	-0.001%
134	7.982	7.969	8.006	PH	-23	-1702	-0.08%	-0.005%
135	8.020	8.006	8.034	PH	9	-870	-0.04%	-0.003%
136	8.039	8.034	8.045	PH	-27	-486	-0.02%	-0.001%
137	8.050	8.045	8.063	PH	-31	-884	-0.04%	-0.003%
138	8.094	8.063	8.129	PH	462	1737	0.08%	0.005%
139	8.138	8.129	8.144	PH	-61	-800	-0.04%	-0.002%
140	8.153	8.144	8.162	PH	-65	-927	-0.04%	-0.003%
141	8.173	8.162	8.192	PH	-63	-1844	-0.09%	-0.006%

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142	8.200	8.192	8.210	PH	-99	-1339	-0.06%	-0.004%
143	8.232	8.210	8.243	PH	191	1093	0.05%	0.003%
144	8.265	8.243	8.283	HH	634	5141	0.24%	0.016%
145	8.305	8.283	8.323	PH	69	-507	-0.02%	-0.002%
146	8.330	8.323	8.351	PH	-28	-1798	-0.08%	-0.006%
147	8.384	8.351	8.407	PH	128	-1408	-0.07%	-0.004%
148	8.412	8.407	8.422	PH	16	-312	-0.01%	-0.001%
149	8.440	8.422	8.457	PH	58	-309	-0.01%	-0.001%
150	8.463	8.457	8.502	PH	35	-1735	-0.08%	-0.005%
151	8.515	8.502	8.529	PH	70	-406	-0.02%	-0.001%
152	8.534	8.529	8.541	PH	-31	-516	-0.02%	-0.002%
153	8.546	8.541	8.556	PH	-52	-669	-0.03%	-0.002%
154	8.580	8.556	8.597	PH	244	1999	0.09%	0.006%
155	8.605	8.597	8.615	PH	67	388	0.02%	0.001%
156	8.620	8.615	8.646	HH	92	928	0.04%	0.003%
157	8.691	8.646	8.734	HH	184348	1918306	89.68%	5.913%
158	8.753	8.734	8.783	PH	210	1315	0.06%	0.004%
159	8.804	8.783	8.904	PH	2532	26059	1.22%	0.080%
160	8.922	8.904	8.969	PH	138	-2359	-0.11%	-0.007%
161	8.973	8.969	8.979	PH	-139	-801	-0.04%	-0.002%
162	8.999	8.979	9.034	PH	84	-964	-0.05%	-0.003%
163	9.061	9.034	9.086	PH	170	622	0.03%	0.002%
164	9.091	9.086	9.095	PH	7	-153	-0.01%	-0.000%
165	9.103	9.095	9.145	PH	95	1310	0.06%	0.004%
166	9.164	9.145	9.185	PH	623	6169	0.29%	0.019%
167	9.198	9.185	9.218	PH	76	148	0.01%	0.000%
168	9.231	9.218	9.252	PH	118	262	0.01%	0.001%
169	9.260	9.252	9.282	PH	-1	-1220	-0.06%	-0.004%
170	9.299	9.282	9.335	PH	276	829	0.04%	0.003%
171	9.360	9.335	9.366	PH	-33	-1272	-0.06%	-0.004%
172	9.381	9.366	9.389	PH	28	23	0.00%	0.000%
173	9.420	9.389	9.501	HH	685	10721	0.50%	0.033%
174	9.523	9.501	9.586	PH	641	5225	0.24%	0.016%
175	9.595	9.586	9.631	PH	-54	-3066	-0.14%	-0.009%
176	9.646	9.631	9.684	PH	-94	-4144	-0.19%	-0.013%
177	9.713	9.684	9.734	PH	49	-2027	-0.09%	-0.006%
178	9.763	9.734	9.792	PH	127	-1226	-0.06%	-0.004%
179	9.804	9.792	9.816	PH	-21	-791	-0.04%	-0.002%
180	9.822	9.816	9.840	PH	13	-820	-0.04%	-0.003%
181	9.861	9.840	9.884	PH	520	6584	0.31%	0.020%
182	9.903	9.884	9.931	HH	815	11756	0.55%	0.036%
183	9.945	9.931	9.967	HH	314	3156	0.15%	0.010%
184	9.983	9.967	10.011	PH	112	1156	0.05%	0.004%
185	10.043	10.011	10.069	PH	313	3643	0.17%	0.011%
186	10.088	10.069	10.112	PH	747	6810	0.32%	0.021%
187	10.178	10.112	10.217	PH	65846	673324	31.48%	2.076%
188	10.243	10.217	10.277	HH	338	5023	0.23%	0.015%
189	10.311	10.277	10.384	PH	180031	1926596	90.07%	5.939%
190	10.414	10.384	10.439	PH	163	569	0.03%	0.002%
191	10.461	10.439	10.477	PH	14	-1024	-0.05%	-0.003%
192	10.481	10.477	10.514	PH	12	-1904	-0.09%	-0.006%
193	10.525	10.514	10.576	PH	-22	-2803	-0.13%	-0.009%
194	10.581	10.576	10.626	PH	3	-1857	-0.09%	-0.006%

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195	10.656	10.626	10.691	PH	2197	22928	1.07%	0.071%
196	10.702	10.691	10.719	PH	197	2299	0.11%	0.007%
197	10.738	10.719	10.774	HH	256	4788	0.22%	0.015%
198	10.789	10.774	10.816	PH	206	1739	0.08%	0.005%
199	10.839	10.816	10.857	PH	231	2800	0.13%	0.009%
200	10.862	10.857	10.889	HH	166	1674	0.08%	0.005%
201	10.914	10.889	10.936	HH	196	3506	0.16%	0.011%
202	10.958	10.936	10.982	HH	371	5578	0.26%	0.017%
203	11.007	10.982	11.024	HH	426	6200	0.29%	0.019%
204	11.055	11.024	11.093	HH	580	9985	0.47%	0.031%
205	11.116	11.093	11.141	PH	398	6280	0.29%	0.019%
206	11.157	11.141	11.234	HH	489	12544	0.59%	0.039%
207	11.249	11.234	11.262	HH	192	1822	0.09%	0.006%
208	11.280	11.262	11.290	HH	231	2607	0.12%	0.008%
209	11.314	11.290	11.367	HH	7733	93254	4.36%	0.287%
210	11.389	11.367	11.457	HH	3913	57340	2.68%	0.177%
211	11.480	11.457	11.501	HH	258	5173	0.24%	0.016%
212	11.514	11.501	11.534	HH	209	2485	0.12%	0.008%
213	11.563	11.534	11.582	HH	899	11605	0.54%	0.036%
214	11.601	11.582	11.647	HH	1882	21227	0.99%	0.065%
215	11.700	11.647	11.715	PH	332	7087	0.33%	0.022%
216	11.764	11.715	11.815	HH	175448	1985880	92.84%	6.122%
217	11.842	11.815	11.889	HH	893	23548	1.10%	0.073%
218	11.924	11.889	11.943	HH	622	11906	0.56%	0.037%
219	11.960	11.943	11.979	HH	583	8685	0.41%	0.027%
220	11.994	11.979	12.022	HH	530	9666	0.45%	0.030%
221	12.043	12.022	12.057	HH	696	11791	0.55%	0.036%
222	12.072	12.057	12.096	HH	759	13983	0.65%	0.043%
223	12.124	12.096	12.138	HH	1971	26768	1.25%	0.083%
224	12.155	12.138	12.176	HH	2580	34666	1.62%	0.107%
225	12.183	12.176	12.202	HH	915	11137	0.52%	0.034%
226	12.244	12.202	12.287	HH	3559	90656	4.24%	0.279%
227	12.304	12.287	12.329	HH	1755	24643	1.15%	0.076%
228	12.346	12.329	12.359	HH	472	6739	0.32%	0.021%
229	12.381	12.359	12.404	HH	798	14643	0.68%	0.045%
230	12.439	12.404	12.461	HH	1032	21464	1.00%	0.066%
231	12.481	12.461	12.512	HH	824	18409	0.86%	0.057%
232	12.540	12.512	12.581	HH	2202	53727	2.51%	0.166%
233	12.598	12.581	12.624	HH	1977	32337	1.51%	0.100%
234	12.629	12.624	12.644	HH	786	8377	0.39%	0.026%
235	12.655	12.644	12.664	HH	861	9644	0.45%	0.030%
236	12.690	12.664	12.758	HH	79583	989348	46.25%	3.050%
237	12.775	12.758	12.794	HH	2239	41369	1.93%	0.128%
238	12.801	12.794	12.844	HH	1769	41932	1.96%	0.129%
239	12.870	12.844	12.893	HH	1258	32903	1.54%	0.101%
240	12.918	12.893	12.964	HH	1317	44194	2.07%	0.136%
241	13.030	12.964	13.047	HH	2067	60859	2.85%	0.188%
242	13.085	13.047	13.124	HH	176063	2060291	96.32%	6.351%
243	13.148	13.124	13.196	HH	22165	276856	12.94%	0.853%
244	13.207	13.196	13.229	HH	940	16241	0.76%	0.050%
245	13.244	13.229	13.257	HH	811	12111	0.57%	0.037%
246	13.286	13.257	13.324	HH	3931	69098	3.23%	0.213%

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247	13.340	13.324	13.355	HH	1340	21747	1.02%	0.067%
248	13.366	13.355	13.379	HH	1211	16335	0.76%	0.050%
249	13.391	13.379	13.423	HH	1269	26305	1.23%	0.081%
250	13.450	13.423	13.472	HH	16799	196573	9.19%	0.606%
251	13.486	13.472	13.518	HH	2184	46828	2.19%	0.144%
252	13.538	13.518	13.575	HH	3699	62159	2.91%	0.192%
253	13.585	13.575	13.606	HH	807	14274	0.67%	0.044%
254	13.625	13.606	13.634	HH	1529	20743	0.97%	0.064%
255	13.648	13.634	13.675	HH	1980	32491	1.52%	0.100%
256	13.720	13.675	13.761	HH	3092	93053	4.35%	0.287%
257	13.788	13.761	13.817	HH	2428	64595	3.02%	0.199%
258	13.850	13.817	13.867	HH	2002	48916	2.29%	0.151%
259	13.878	13.867	13.891	HH	1735	22566	1.05%	0.070%
260	13.932	13.891	13.987	HH	7219	165310	7.73%	0.510%
261	14.043	13.987	14.081	HH	6160	142459	6.66%	0.439%
262	14.110	14.081	14.127	HH	2445	51145	2.39%	0.158%
263	14.152	14.127	14.176	HH	5426	89691	4.19%	0.276%
264	14.193	14.176	14.217	HH	2729	47247	2.21%	0.146%
265	14.243	14.217	14.258	HH	2356	44479	2.08%	0.137%
266	14.293	14.258	14.344	HH	163555	2045644	95.63%	6.306%
267	14.364	14.344	14.389	HH	2464	50468	2.36%	0.156%
268	14.418	14.389	14.434	HH	1550	40747	1.90%	0.126%
269	14.441	14.434	14.457	HH	1465	18649	0.87%	0.057%
270	14.476	14.457	14.496	HH	1451	30846	1.44%	0.095%
271	14.509	14.496	14.519	HH	1336	17800	0.83%	0.055%
272	14.542	14.519	14.565	HH	1425	36510	1.71%	0.113%
273	14.581	14.565	14.617	HH	1374	39806	1.86%	0.123%
274	14.684	14.617	14.714	HH	3177	101041	4.72%	0.311%
275	14.749	14.714	14.771	HH	2184	63024	2.95%	0.194%
276	14.782	14.771	14.817	HH	1843	44094	2.06%	0.136%
277	14.860	14.817	14.906	HH	4794	132208	6.18%	0.408%
278	14.918	14.906	14.934	HH	1891	30925	1.45%	0.095%
279	14.966	14.934	14.998	HH	2657	83650	3.91%	0.258%
280	15.028	14.998	15.052	HH	4392	91135	4.26%	0.281%
281	15.074	15.052	15.119	HH	2982	89015	4.16%	0.274%
282	15.147	15.119	15.162	HH	1796	43784	2.05%	0.135%
283	15.199	15.162	15.231	HH	88774	1245837	58.24%	3.840%
284	15.241	15.231	15.272	HH	3351	62800	2.94%	0.194%
285	15.294	15.272	15.315	HH	3389	60531	2.83%	0.187%
286	15.341	15.315	15.362	HH	13920	191360	8.95%	0.590%
287	15.404	15.362	15.437	HH	156514	2139033	100.00%	6.594%
288	15.448	15.437	15.477	HH	2407	48411	2.26%	0.149%
289	15.503	15.477	15.557	HH	3474	117330	5.49%	0.362%
290	15.580	15.557	15.616	HH	2774	76153	3.56%	0.235%
291	15.642	15.616	15.669	HH	2844	68370	3.20%	0.211%
292	15.691	15.669	15.730	HH	2505	79365	3.71%	0.245%
293	15.783	15.730	15.859	HH	43309	723228	33.81%	2.229%
294	15.885	15.859	15.900	HH	2344	54134	2.53%	0.167%
295	15.927	15.900	15.962	HH	6303	135490	6.33%	0.418%
296	16.011	15.962	16.040	HH	6192	177523	8.30%	0.547%
297	16.058	16.040	16.084	HH	3444	74070	3.46%	0.228%
298	16.103	16.084	16.127	HH	3107	68765	3.21%	0.212%
299	16.182	16.127	16.216	HH	4176	160291	7.49%	0.494%

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300	16.259	16.216	16.282	HH	2802	100940	4.72%	0.311%
301	16.305	16.282	16.330	HH	3626	82403	3.85%	0.254%
302	16.346	16.330	16.387	HH	2685	87520	4.09%	0.270%
303	16.432	16.387	16.477	HH	149291	2023029	94.58%	6.236%
304	16.497	16.477	16.542	HH	2624	96130	4.49%	0.296%
305	16.562	16.542	16.584	HH	2505	60741	2.84%	0.187%
306	16.634	16.584	16.652	HH	2955	107935	5.05%	0.333%
307	16.661	16.652	16.674	HH	2655	35569	1.66%	0.110%
308	16.694	16.674	16.716	HH	2910	67947	3.18%	0.209%
309	16.739	16.716	16.765	HH	3116	85291	3.99%	0.263%
310	16.804	16.765	16.854	HH	8524	243520	11.38%	0.751%
311	16.914	16.854	16.969	HH	15001	433521	20.27%	1.336%
312	17.001	16.969	17.021	HH	4379	112538	5.26%	0.347%
313	17.043	17.021	17.067	HH	5933	121092	5.66%	0.373%
314	17.080	17.067	17.101	HH	3594	69801	3.26%	0.215%
315	17.123	17.101	17.133	HH	3464	65065	3.04%	0.201%
316	17.168	17.133	17.199	HH	5400	171754	8.03%	0.529%
317	17.232	17.199	17.259	HH	8561	217469	10.17%	0.670%
318	17.292	17.259	17.336	HH	12356	286931	13.41%	0.884%
319	17.390	17.336	17.421	HH	148006	2095145	97.95%	6.458%
320	17.440	17.421	17.494	HH	10121	268985	12.58%	0.829%
321	17.548	17.494	17.572	HH	5040	221342	10.35%	0.682%
322	17.597	17.572	17.617	HH	4797	126583	5.92%	0.390%
323	17.661	17.617	17.697	HH	6341	265587	12.42%	0.819%
324	17.705	17.697	17.717	HH	5434	64520	3.02%	0.199%
325	17.754	17.717	17.782	HH	7893	246459	11.52%	0.760%

Sum of corrected areas: 32440328

FG070925.M Thu Jul 17 03:31:57 2025

Manual Integration Report

Sample ID	ClientID ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
Q2473-04MS		FF016140.D	FF071025	N-OCTACOSANE	mohammad	7/11/2025 9:10:05 AM	Peak Integrated by Software incorrectly
Q2473-04MSD		FF016141.D	FF071025	N-HEXATRIACONTANE	mohammad	7/11/2025 9:10:05 AM	Peak Integrated by Software incorrectly
Q2473-04MSD		FF016141.D	FF071025	N-OCTACOSANE	mohammad	7/11/2025 9:10:05 AM	Peak Integrated by Software incorrectly
Q2486-01		FF016142.D	FF071025	TETRACOSANE-d50 (SURROGA	mohammad	7/11/2025 9:10:05 AM	Peak Integrated by Software incorrectly
.BLK		FF016144.D	FF071025	TETRACOSANE-d50 (SURROGA	mohammad	7/11/2025 9:10:05 AM	Peak Integrated by Software incorrectly

Manual Integration Report

Sample ID	ClientID ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
.BLK		FF016162.D	FF071625	TETRACOSANE-d50 (SURROGA	mohammad	7/18/2025 3:10:59 AM	Peak Integrated by Software incorrectly
Q2529-08		FF016169.D	FF071625	TETRACOSANE-d50 (SURROGA	mohammad	7/18/2025 3:10:59 AM	Peak Integrated by Software incorrectly
Q2543-02		FF016175.D	FF071625	TETRACOSANE-d50 (SURROGA	mohammad	7/18/2025 3:10:59 AM	Peak Integrated by Software incorrectly

Manual Integration Report

Sample ID	ClientId ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
50 PPM TRPH STD		FF016181.D	FF071725	N-HEXADECANE	 	 	Peak Integrated by Software incorrectly
Q2529-06		FF016183.D	FF071725	TETRACOSANE-d50 (SURROGA	 	 	Peak Integrated by Software incorrectly

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF071025

Review By	yogesh	Review On	7/10/2025 3:10:07 PM
Supervise By	mohammad	Supervise On	7/11/2025 9:10:05 AM
SubDirectory	FF071025	HP Acquire Method	HP Processing Method FF071025
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	FF016128.D	10 Jul 2025 08:46	YP\AJ	Ok
2	I.BLK	FF016129.D	10 Jul 2025 09:16	YP\AJ	Ok
3	100 TRPH STD	FF016130.D	10 Jul 2025 09:46	YP\AJ	Ok
4	50 TRPH STD	FF016131.D	10 Jul 2025 10:15	YP\AJ	Ok
5	20 TRPH STD	FF016132.D	10 Jul 2025 10:45	YP\AJ	Ok
6	10 TRPH STD	FF016133.D	10 Jul 2025 11:15	YP\AJ	Ok
7	5 TRPH STD	FF016134.D	10 Jul 2025 12:44	YP\AJ	Ok
8	FF071025ICV	FF016135.D	10 Jul 2025 13:13	YP\AJ	Ok
9	I.BLK	FF016136.D	10 Jul 2025 13:43	YP\AJ	Ok
10	50 PPM TRPH STD	FF016137.D	10 Jul 2025 15:12	YP\AJ	Ok
11	RT MARKER	FF016138.D	10 Jul 2025 15:42	YP\AJ	Ok
12	Q2473-04	FF016139.D	10 Jul 2025 16:12	YP\AJ	Ok
13	Q2473-04MS	FF016140.D	10 Jul 2025 16:42	YP\AJ	Ok,M
14	Q2473-04MSD	FF016141.D	10 Jul 2025 17:12	YP\AJ	Ok,M
15	Q2486-01	FF016142.D	10 Jul 2025 17:42	YP\AJ	Ok,M
16	Q2504-01	FF016143.D	10 Jul 2025 18:12	YP\AJ	Ok
17	I.BLK	FF016144.D	10 Jul 2025 18:41	YP\AJ	Ok,M
18	50 PPM TRPH STD	FF016145.D	10 Jul 2025 20:11	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF071625

Review By	yogesh	Review On	7/16/2025 1:35:39 PM
Supervise By	mohammad	Supervise On	7/18/2025 3:10:59 AM
SubDirectory	FF071625	HP Acquire Method	HP Processing Method FF071025
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	FF016161.D	16 Jul 2025 11:07	YP\AJ	Ok
2	I.BLK	FF016162.D	16 Jul 2025 12:08	YP\AJ	Ok,M
3	50 PPM TRPH STD	FF016163.D	16 Jul 2025 12:40	YP\AJ	Ok
4	RT MARKER	FF016164.D	16 Jul 2025 13:18	YP\AJ	Ok
5	Q2529-04	FF016165.D	16 Jul 2025 14:18	YP\AJ	Ok
6	Q2529-05	FF016166.D	16 Jul 2025 14:47	YP\AJ	Ok
7	Q2529-06	FF016167.D	16 Jul 2025 15:17	YP\AJ	Dilution
8	Q2529-07	FF016168.D	16 Jul 2025 15:47	YP\AJ	Ok
9	Q2529-08	FF016169.D	16 Jul 2025 16:17	YP\AJ	Ok,M
10	I.BLK	FF016170.D	16 Jul 2025 16:47	YP\AJ	Ok
11	50 PPM TRPH STD	FF016171.D	16 Jul 2025 17:16	YP\AJ	Ok
12	Q2529-09	FF016172.D	16 Jul 2025 18:16	YP\AJ	Ok
13	Q2529-10	FF016173.D	16 Jul 2025 18:46	YP\AJ	Ok
14	Q2543-01	FF016174.D	16 Jul 2025 19:16	YP\AJ	Ok
15	Q2543-02	FF016175.D	16 Jul 2025 19:46	YP\AJ	Ok,M
16	Q2543-03	FF016176.D	16 Jul 2025 20:16	YP\AJ	Ok
17	I.BLK	FF016177.D	16 Jul 2025 20:45	YP\AJ	Ok
18	50 PPM TRPH STD	FF016178.D	16 Jul 2025 22:44	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF071725

Review By	yogesh	Review On	7/17/2025 10:39:34 AM
Supervise By		Supervise On	
SubDirectory	FF071725	HP Acquire Method	HP Processing Method FF071025
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	FF016179.D	17 Jul 2025 07:00	YP\AJ	Ok
2	I.BLK	FF016180.D	17 Jul 2025 08:28	YP\AJ	Ok
3	50 PPM TRPH STD	FF016181.D	17 Jul 2025 08:58	YP\AJ	Ok,NS
4	RT MARKER	FF016182.D	17 Jul 2025 09:27	YP\AJ	Ok
5	Q2529-06	FF016183.D	17 Jul 2025 09:58	YP\AJ	Ok,NS
6	I.BLK	FF016184.D	17 Jul 2025 10:28	YP\AJ	Ok
7	50 PPM TRPH STD	FF016185.D	17 Jul 2025 11:59	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG070925

Review By	yogesh	Review On	7/9/2025 12:27:07 PM
Supervise By	mohammad	Supervise On	7/11/2025 1:37:09 AM
SubDirectory	FG070925	HP Acquire Method	HP Processing Method FG070925
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24468,PP24473		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG016262.D	09 Jul 2025 09:03	YP\AJ	Ok
2	I.BLK	FG016263.D	09 Jul 2025 09:32	YP\AJ	Ok
3	100 TRPH STD	FG016264.D	09 Jul 2025 10:02	YP\AJ	Ok
4	50 TRPH STD	FG016265.D	09 Jul 2025 11:05	YP\AJ	Ok
5	20 TRPH STD	FG016266.D	09 Jul 2025 11:34	YP\AJ	Ok
6	10 TRPH STD	FG016267.D	09 Jul 2025 12:04	YP\AJ	Ok
7	5 TRPH STD	FG016268.D	09 Jul 2025 12:34	YP\AJ	Ok
8	FG070925ICV	FG016269.D	09 Jul 2025 13:04	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG071625

Review By	yogesh	Review On	7/16/2025 1:37:53 PM
Supervise By	mohammad	Supervise On	7/18/2025 3:11:42 AM
SubDirectory	FG071625	HP Acquire Method	HP Processing Method FG070925
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	FG016299.D	16 Jul 2025 11:07	YP\AJ	Ok
2	I.BLK	FG016300.D	16 Jul 2025 12:08	YP\AJ	Ok
3	50 PPM TRPH STD	FG016301.D	16 Jul 2025 12:40	YP\AJ	Ok
4	RT MARKER	FG016302.D	16 Jul 2025 13:18	YP\AJ	Ok
5	PB168878BL	FG016303.D	16 Jul 2025 14:18	YP\AJ	Ok
6	PB168878BS	FG016304.D	16 Jul 2025 14:47	YP\AJ	Ok
7	Q2529-01	FG016305.D	16 Jul 2025 15:17	YP\AJ	Ok
8	Q2529-02	FG016306.D	16 Jul 2025 15:47	YP\AJ	Ok
9	Q2529-03	FG016307.D	16 Jul 2025 16:17	YP\AJ	Ok
10	I.BLK	FG016308.D	16 Jul 2025 16:47	YP\AJ	Ok
11	50 PPM TRPH STD	FG016309.D	16 Jul 2025 17:16	YP\AJ	Ok
12	Q2543-04	FG016310.D	16 Jul 2025 18:16	YP\AJ	Ok
13	Q2543-04MS	FG016311.D	16 Jul 2025 18:46	YP\AJ	Ok
14	Q2543-04MSD	FG016312.D	16 Jul 2025 19:16	YP\AJ	Ok
15	I.BLK	FG016313.D	16 Jul 2025 19:46	YP\AJ	Ok
16	50 PPM TRPH STD	FG016314.D	16 Jul 2025 20:45	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF071025

Review By	yogesh	Review On	7/10/2025 3:10:07 PM
Supervise By	mohammad	Supervise On	7/11/2025 9:10:05 AM
SubDirectory	FF071025	HP Acquire Method	HP Processing Method
			FF071025
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		FF016128.D	10 Jul 2025 08:46		YPIAJ	Ok
2	I.BLK		FF016129.D	10 Jul 2025 09:16		YPIAJ	Ok
3	100 TRPH STD		FF016130.D	10 Jul 2025 09:46		YPIAJ	Ok
4	50 TRPH STD		FF016131.D	10 Jul 2025 10:15		YPIAJ	Ok
5	20 TRPH STD		FF016132.D	10 Jul 2025 10:45		YPIAJ	Ok
6	10 TRPH STD		FF016133.D	10 Jul 2025 11:15		YPIAJ	Ok
7	5 TRPH STD		FF016134.D	10 Jul 2025 12:44		YPIAJ	Ok
8	FF071025ICV		FF016135.D	10 Jul 2025 13:13		YPIAJ	Ok
9	I.BLK		FF016136.D	10 Jul 2025 13:43		YPIAJ	Ok
10	50 PPM TRPH STD		FF016137.D	10 Jul 2025 15:12		YPIAJ	Ok
11	RT MARKER		FF016138.D	10 Jul 2025 15:42		YPIAJ	Ok
12	Q2473-04		FF016139.D	10 Jul 2025 16:12		YPIAJ	Ok
13	Q2473-04MS		FF016140.D	10 Jul 2025 16:42		YPIAJ	Ok,M
14	Q2473-04MSD		FF016141.D	10 Jul 2025 17:12		YPIAJ	Ok,M
15	Q2486-01		FF016142.D	10 Jul 2025 17:42		YPIAJ	Ok,M
16	Q2504-01		FF016143.D	10 Jul 2025 18:12		YPIAJ	Ok
17	I.BLK		FF016144.D	10 Jul 2025 18:41		YPIAJ	Ok,M
18	50 PPM TRPH STD		FF016145.D	10 Jul 2025 20:11		YPIAJ	Ok

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF071025

Review By	yogesh	Review On	7/10/2025 3:10:07 PM	
Supervise By	mohammad	Supervise On	7/11/2025 9:10:05 AM	
SubDirectory	FF071025	HP Acquire Method	HP Processing Method	FF071025
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			

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF071625

Review By	yogesh	Review On	7/16/2025 1:35:39 PM
Supervise By	mohammad	Supervise On	7/18/2025 3:10:59 AM
SubDirectory	FF071625	HP Acquire Method	HP Processing Method FF071025
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		FF016161.D	16 Jul 2025 11:07		YPIAJ	Ok
2	I.BLK		FF016162.D	16 Jul 2025 12:08		YPIAJ	Ok,M
3	50 PPM TRPH STD		FF016163.D	16 Jul 2025 12:40		YPIAJ	Ok
4	RT MARKER		FF016164.D	16 Jul 2025 13:18		YPIAJ	Ok
5	Q2529-04		FF016165.D	16 Jul 2025 14:18		YPIAJ	Ok
6	Q2529-05		FF016166.D	16 Jul 2025 14:47		YPIAJ	Ok
7	Q2529-06		FF016167.D	16 Jul 2025 15:17	need 2x dilution	YPIAJ	Dilution
8	Q2529-07		FF016168.D	16 Jul 2025 15:47		YPIAJ	Ok
9	Q2529-08		FF016169.D	16 Jul 2025 16:17		YPIAJ	Ok,M
10	I.BLK		FF016170.D	16 Jul 2025 16:47		YPIAJ	Ok
11	50 PPM TRPH STD		FF016171.D	16 Jul 2025 17:16		YPIAJ	Ok
12	Q2529-09		FF016172.D	16 Jul 2025 18:16		YPIAJ	Ok
13	Q2529-10		FF016173.D	16 Jul 2025 18:46		YPIAJ	Ok
14	Q2543-01		FF016174.D	16 Jul 2025 19:16		YPIAJ	Ok
15	Q2543-02		FF016175.D	16 Jul 2025 19:46		YPIAJ	Ok,M
16	Q2543-03		FF016176.D	16 Jul 2025 20:16		YPIAJ	Ok
17	I.BLK		FF016177.D	16 Jul 2025 20:45		YPIAJ	Ok
18	50 PPM TRPH STD		FF016178.D	16 Jul 2025 22:44		YPIAJ	Ok

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF071625

Review By	yogesh	Review On	7/16/2025 1:35:39 PM	
Supervise By	mohammad	Supervise On	7/18/2025 3:10:59 AM	
SubDirectory	FF071625	HP Acquire Method	HP Processing Method	FF071025
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			

M : Manual Integration

Instrument ID: FID_F

Daily Analysis Runlog For Sequence/QC Batch ID # FF071725

Review By	yogesh	Review On	7/17/2025 10:39:34 AM
Supervise By		Supervise On	
SubDirectory	FF071725	HP Acquire Method	HP Processing Method FF071025

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		FF016179.D	17 Jul 2025 07:00		YP\AJ	Ok
2	I.BLK		FF016180.D	17 Jul 2025 08:28		YP\AJ	Ok
3	50 PPM TRPH STD		FF016181.D	17 Jul 2025 08:58		YP\AJ	Ok,NS
4	RT MARKER		FF016182.D	17 Jul 2025 09:27		YP\AJ	Ok
5	Q2529-06		FF016183.D	17 Jul 2025 09:58		YP\AJ	Ok,NS
6	I.BLK		FF016184.D	17 Jul 2025 10:28		YP\AJ	Ok
7	50 PPM TRPH STD		FF016185.D	17 Jul 2025 11:59		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG070925

Review By	yogesh	Review On	7/9/2025 12:27:07 PM
Supervise By	mohammad	Supervise On	7/11/2025 1:37:09 AM
SubDirectory	FG070925	HP Acquire Method	HP Processing Method FG070925
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24467,PP24469,PP24470,PP24471,PP24472		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24468,PP24473		

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG016262.D	09 Jul 2025 09:03		YP\AJ	Ok
2	I.BLK		FG016263.D	09 Jul 2025 09:32		YP\AJ	Ok
3	100 TRPH STD		FG016264.D	09 Jul 2025 10:02		YP\AJ	Ok
4	50 TRPH STD		FG016265.D	09 Jul 2025 11:05		YP\AJ	Ok
5	20 TRPH STD		FG016266.D	09 Jul 2025 11:34		YP\AJ	Ok
6	10 TRPH STD		FG016267.D	09 Jul 2025 12:04		YP\AJ	Ok
7	5 TRPH STD		FG016268.D	09 Jul 2025 12:34		YP\AJ	Ok
8	FG070925ICV		FG016269.D	09 Jul 2025 13:04		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG071625

Review By	yogesh	Review On	7/16/2025 1:37:53 PM
Supervise By	mohammad	Supervise On	7/18/2025 3:11:42 AM
SubDirectory	FG071625	HP Acquire Method	HP Processing Method FG070925
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		FG016299.D	16 Jul 2025 11:07		YPIAJ	Ok
2	I.BLK		FG016300.D	16 Jul 2025 12:08		YPIAJ	Ok
3	50 PPM TRPH STD		FG016301.D	16 Jul 2025 12:40		YPIAJ	Ok
4	RT MARKER		FG016302.D	16 Jul 2025 13:18		YPIAJ	Ok
5	PB168878BL		FG016303.D	16 Jul 2025 14:18		YPIAJ	Ok
6	PB168878BS		FG016304.D	16 Jul 2025 14:47		YPIAJ	Ok
7	Q2529-01		FG016305.D	16 Jul 2025 15:17		YPIAJ	Ok
8	Q2529-02		FG016306.D	16 Jul 2025 15:47		YPIAJ	Ok
9	Q2529-03		FG016307.D	16 Jul 2025 16:17		YPIAJ	Ok
10	I.BLK		FG016308.D	16 Jul 2025 16:47		YPIAJ	Ok
11	50 PPM TRPH STD		FG016309.D	16 Jul 2025 17:16		YPIAJ	Ok
12	Q2543-04		FG016310.D	16 Jul 2025 18:16		YPIAJ	Ok
13	Q2543-04MS		FG016311.D	16 Jul 2025 18:46		YPIAJ	Ok
14	Q2543-04MSD		FG016312.D	16 Jul 2025 19:16		YPIAJ	Ok
15	I.BLK		FG016313.D	16 Jul 2025 19:46		YPIAJ	Ok
16	50 PPM TRPH STD		FG016314.D	16 Jul 2025 20:45		YPIAJ	Ok

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/9/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:10
In Date: 07/08/2025
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: 07/09/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136392

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
Q2519-01	TP-15	1	1.15	10.19	11.34	9.86	85.5	
Q2519-02	TP-15 EPH	2	1.19	10.75	11.94	10.4	85.7	
Q2519-03	TP-15 VOC	3	1.19	10.57	11.76	10.3	86.2	
Q2521-01	M1A	4	1.00	1.00	2.00	2.00	100.0	PILC
Q2521-02	M1B	5	1.00	1.00	2.00	2.00	100.0	PILC
Q2521-03	M2A	6	1.00	1.00	2.00	2.00	100.0	PILC
Q2521-04	M2B	7	1.00	1.00	2.00	2.00	100.0	PILC
Q2523-01	MOO-25-0190	8	1.15	10.15	11.3	10.95	96.6	
Q2523-02	PAD-070825-1	9	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q2523-03	PAD-070825-2	10	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q2524-01	OLD RETENTION BASIN 40TH	11	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q2526-01	LAW-25-0101	12	1.00	1.00	2.00	2.00	100.0	debris
Q2526-02	LAW-25-0101	13	1.00	1.00	2.00	2.00	100.0	debris
Q2526-03	LAW-25-0102	14	1.15	10.84	11.99	5.76	42.5	
Q2526-04	LAW-25-0102	15	1.15	11.15	12.3	6.73	50.0	
Q2527-01	AR520-0015	16	1.15	10.73	11.88	9.58	78.6	
Q2527-02	AR520-0015	17	1.19	10.03	11.22	10.7	94.8	
Q2527-03	LAW-PAD-070825	18	1.00	1.00	2.00	2.00	100.0	Concrete sample
Q2528-01	L4A	19	1.00	1.00	2.00	2.00	100.0	PILC
Q2528-02	L4B	20	1.00	1.00	2.00	2.00	100.0	PILC
Q2528-03	L5A	21	1.00	1.00	2.00	2.00	100.0	PILC
Q2528-04	L5B	22	1.00	1.00	2.00	2.00	100.0	PILC
Q2528-05	L6A	23	1.00	1.00	2.00	2.00	100.0	PILC
Q2528-06	L6B	24	1.00	1.00	2.00	2.00	100.0	PILC
Q2528-07	L7A	25	1.00	1.00	2.00	2.00	100.0	PILC
Q2528-08	L7B	26	1.00	1.00	2.00	2.00	100.0	PILC
Q2528-09	L8A	27	1.00	1.00	2.00	2.00	100.0	PILC
Q2528-10	L8B	28	1.00	1.00	2.00	2.00	100.0	PILC



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/9/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:10
In Date: 07/08/2025
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: 07/09/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136392

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
Q2528-11	L9A	29	1.00	1.00	2.00	2.00	100.0	PILC
Q2529-01	TP-91	30	1.18	9.93	11.11	10.21	90.9	
Q2529-02	TP-80	31	1.13	10.34	11.47	10.51	90.7	
Q2529-03	TP-79	32	1.15	10.84	11.99	10.97	90.6	
Q2529-04	TP-95	33	1.14	10.81	11.95	10.19	83.7	
Q2529-05	TP-98	34	1.18	10.80	11.98	10.56	86.9	
Q2529-06	TP-102	35	1.16	10.24	11.4	10.95	95.6	
Q2529-07	TP-101	36	1.18	10.78	11.96	10.85	89.7	
Q2529-08	TP-89	37	1.14	10.39	11.53	10.5	90.1	
Q2529-09	TP-33	38	1.16	10.36	11.52	10.54	90.5	
Q2529-10	TP-30	39	1.17	10.78	11.95	11.02	91.4	

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

WORKLIST(Hardcopy Internal Chain)

131342

WorkList Name : %1-070825

WorkList ID : 190583

Department : Wet-Chemistry

Date : 07-08-2025 09:34:59

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2519-01	TP-15	Solid	Percent Solids	Cool 4 deg C	PSEG03	O11	07/08/2025	Chemtech -SO
Q2519-02	TP-15 EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	O11	07/08/2025	Chemtech -SO
Q2519-03	TP-15 VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	O11	07/08/2025	Chemtech -SO
Q2521-01	M1A	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2521-02	M1B	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2521-03	M2A	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2521-04	M2B	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2523-01	MOO-25-0190	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2523-02	PAD-070825-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	O21	07/08/2025	Chemtech -SO
Q2523-03	PAD-070825-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	O21	07/08/2025	Chemtech -SO
Q2524-01	OLD RETENTION BASIN 40TH	Solid	Percent Solids	Cool 4 deg C	PSEG03	O21	07/08/2025	Chemtech -SO
Q2526-01	LAW-25-0101	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2526-02	LAW-25-0101	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2526-03	LAW-25-0102	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2526-04	LAW-25-0102	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2527-01	AR520-0015	Solid	Percent Solids	Cool 4 deg C	PSEG03	O13	07/08/2025	Chemtech -SO
Q2527-02	AR520-0015	Solid	Percent Solids	Cool 4 deg C	PSEG03	O22	07/08/2025	Chemtech -SO
Q2527-03	LAW-PAD-070825	Solid	Percent Solids	Cool 4 deg C	PSEG03	O22	07/08/2025	Chemtech -SO
Q2528-01	L4A	Solid	Percent Solids	Cool 4 deg C	PSEG03	O22	07/08/2025	Chemtech -SO
Q2528-02	L4B	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2528-03	L5A	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO

Date/Time 07/08/25 15:35

Raw Sample Received by: 886001

Raw Sample Relinquished by: CP SM

Date/Time 07/08/25

Raw Sample Received by: 17:15

Raw Sample Relinquished by: CP SM

WORKLIST(Hardcopy Internal Chain)

136392

WorkList Name : %1-070825

WorkList ID : 190583

Department : Wet-Chemistry

Date : 07-08-2025 09:34:59

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2528-04	L5B	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2528-05	L6A	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2528-06	L6B	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2528-07	L7A	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2528-08	L7B	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2528-09	L8A	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2528-10	L8B	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2528-11	L9A	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2529-01	TP-91	Solid	Percent Solids	Cool 4 deg C	PSEG03	O32	07/08/2025	Chemtech -SO
Q2529-02	TP-80	Solid	Percent Solids	Cool 4 deg C	CAMP02	O11	07/03/2025	Chemtech -SO
Q2529-03	TP-79	Solid	Percent Solids	Cool 4 deg C	CAMP02	O11	07/07/2025	Chemtech -SO
Q2529-04	TP-95	Solid	Percent Solids	Cool 4 deg C	CAMP02	O11	07/07/2025	Chemtech -SO
Q2529-05	TP-98	Solid	Percent Solids	Cool 4 deg C	CAMP02	O11	07/07/2025	Chemtech -SO
Q2529-06	TP-102	Solid	Percent Solids	Cool 4 deg C	CAMP02	O11	07/07/2025	Chemtech -SO
Q2529-07	TP-101	Solid	Percent Solids	Cool 4 deg C	CAMP02	O11	07/07/2025	Chemtech -SO
Q2529-08	TP-89	Solid	Percent Solids	Cool 4 deg C	CAMP02	O11	07/07/2025	Chemtech -SO
Q2529-09	TP-33	Solid	Percent Solids	Cool 4 deg C	CAMP02	O11	07/08/2025	Chemtech -SO
Q2529-10	TP-30	Solid	Percent Solids	Cool 4 deg C	CAMP02	O11	07/08/2025	Chemtech -SO

Date/Time 07/08/25 15:35

Raw Sample Received by: 88 woc

Raw Sample Relinquished by: OP SM

Date/Time 07/08/25 17:15

Raw Sample Received by: OP SM

Raw Sample Relinquished by: 88 woc

SOP ID: M3541-ASE Extraction-15

Clean Up SOP #: N/A

Extraction Start Date : 07/16/2025

Matrix : Solid

Extraction Start Time : 10:00

Weigh By: EH

Extraction By: RJ

Extraction End Date : 07/16/2025

Balance check: EH

Filter By: RJ

Extraction End Time : 13:10

Balance ID: EX-SC-2

pH Meter ID: N/A

Concentration By: EH

pH Strip Lot#: N/A

Hood ID: 3,7

Supervisor By : RUPESH

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

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	EP2626
Baked Na2SO4	N/A	EP2625
Methylene Chloride	N/A	E3954
Sand	N/A	E3951
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673.

KD Bath ID: N/A

Envap ID: NEVAP-02

KD Bath Temperature: N/A

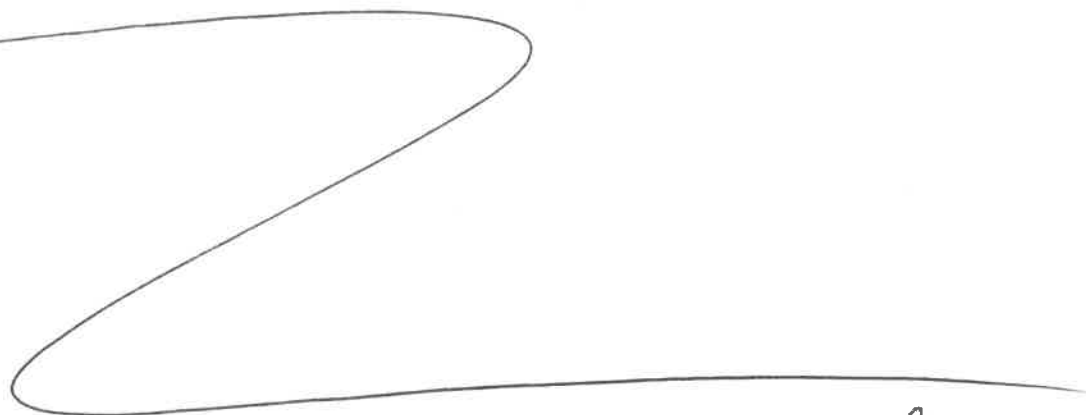
Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
7/16/25 13:15	RS (Ext Lab)	Y.P. Peshiy
	Preparation Group	Analysis Group

Analytical Method: M3541-ASE Extraction-15

Concentration Date: 07/16/2025

Sample ID	Client Sample ID	Test	g/ mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168878BL	PB168878BL	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1			U3-1
PB168878BS	PB168878BS	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1			2
Q2529-01	TP-91	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	E		3
Q2529-02	TP-80	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	E		4
Q2529-03	TP-79	Diesel Range Organics	30.08	N/A	ritesh	Evelyn	1	E		5
Q2529-04	TP-95	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	E		6
Q2529-05	TP-98	Diesel Range Organics	30.08	N/A	ritesh	Evelyn	1	E		U6-1
Q2529-06	TP-102	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	E		2
Q2529-07	TP-101	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	E		3
Q2529-08	TP-89	Diesel Range Organics	30.07	N/A	ritesh	Evelyn	1	E		4
Q2529-09	TP-33	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	E		5
Q2529-10	TP-30	Diesel Range Organics	30.01	N/A	ritesh	Evelyn	1	E		6
Q2543-01	TP-41	Diesel Range Organics	30.03	N/A	ritesh	Evelyn	1	E		U1-1
Q2543-02	TP-49	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	E		2
Q2543-03	TP-23	Diesel Range Organics	30.04	N/A	ritesh	Evelyn	1	E		3
Q2543-04	TP-23-99	Diesel Range Organics	30.06	N/A	ritesh	Evelyn	1	E		4
Q2543-04MS	TP-23-99MS	Diesel Range Organics	30.05	N/A	ritesh	Evelyn	1	E		5
Q2543-04MS D	TP-23-99MSD	Diesel Range Organics	30.02	N/A	ritesh	Evelyn	1	E		6



R_s
7/16

1656-78
10:00

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2843 WorkList ID : 190761 Department : Extraction Date : 07-16-2025 09:03:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2529-01	TP-91	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/03/2025	8015D
Q2529-02	TP-80	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/07/2025	8015D
Q2529-03	TP-79	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/07/2025	8015D
Q2529-04	TP-95	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/07/2025	8015D
Q2529-05	TP-98	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/07/2025	8015D
Q2529-06	TP-102	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/07/2025	8015D
Q2529-07	TP-101	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/07/2025	8015D
Q2529-08	TP-89	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/07/2025	8015D
Q2529-09	TP-33	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/08/2025	8015D
Q2529-10	TP-30	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O11	07/08/2025	8015D
Q2543-01	TP-41	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O42	07/08/2025	8015D
Q2543-02	TP-49	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O42	07/09/2025	8015D
Q2543-03	TP-23	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O42	07/09/2025	8015D
Q2543-04	TP-23-99	Solid	Diesel Range Organics	Cool 4 deg C	CAMP02	O42	07/09/2025	8015D

Date/Time 07/16/25 9:55
Raw Sample Received by: RS (ELA-046)
Raw Sample Relinquished by: SD (SM)

Date/Time 07/16/25 10:20
Raw Sample Received by: SD (SM)
Raw Sample Relinquished by: RS (ELA-046)

Prep Standard - Chemical Standard Summary

Order ID : Q2529

Test : Diesel Range Organics

Prepbatch ID : PB168878,

Sequence ID/Qc Batch ID: FF071725,FG071625,FF071625,

Standard ID :

EP2625,EP2626,PP24467,PP24468,PP24469,PP24470,PP24471,PP24472,PP24473,PP24583,PP24596,

Chemical ID :

E3551,E3926,E3930,E3931,E3949,E3951,E3954,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>
3923	Baked Sodium Sulfate	EP2625	07/15/2025	12/04/2025	RUPESHKUMAR SHAH	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel 07/15/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2626	07/15/2025	01/15/2026	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel 07/15/2025

FROM 8000.00000ml of E3949 + 8000.00000ml of E3954 = Final Quantity: 16000.000 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>
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 #
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)	24H2762008	04/18/2027	07/08/2025 / RITESHKUMAR	07/03/2025 / RUPESH	E3949

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)	25A2756718	12/31/2028	07/09/2025 / RUPESH	04/28/2020 / RUPESH	E3951

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)	25B1862001	03/19/2026	07/14/2025 / RUPESH	06/11/2025 / RUPESH	E3954

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



**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 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 (μeq/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)

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

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.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 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 %	<0.1 %
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

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

Reed on 7/2/25

E3949

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



Material	BDH9274-2.5KG
Material Description	BDH SAND STDD OTTAWA W+I 2.5KG
Grade	NOT APPLICABLE
Batch	25A2756718
Reassay Date	12/31/2028
CAS Number	14808-60-7
Molecular Formula	SiO ₂
Molecular Mass	60.09
Date of Manufacture	12/05/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	Beige granules.	Beige granules.
Moisture	<= 0.1 %	0.1 %
Particle Size 30-40 mesh	>= 80 %	99 %
CUSTOMER PART # BDH9274-2.5KG		

Received on 1/12/25.

E3951

Internal ID #: 793

Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	Analysis may have been rounded to significant digits in specification limits Product meets analytical specifications of the grades listed.

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



Material No.: 9266-A4
Batch No.: 25B1862001
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 ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 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

RS
7/14/25

E3954

Jamie Croak
Director Quality Operations, Bioscience Production



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

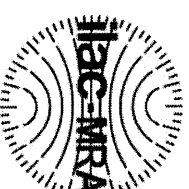
Bellefonte, PA 16823-8812

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
P11962
7.8
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:

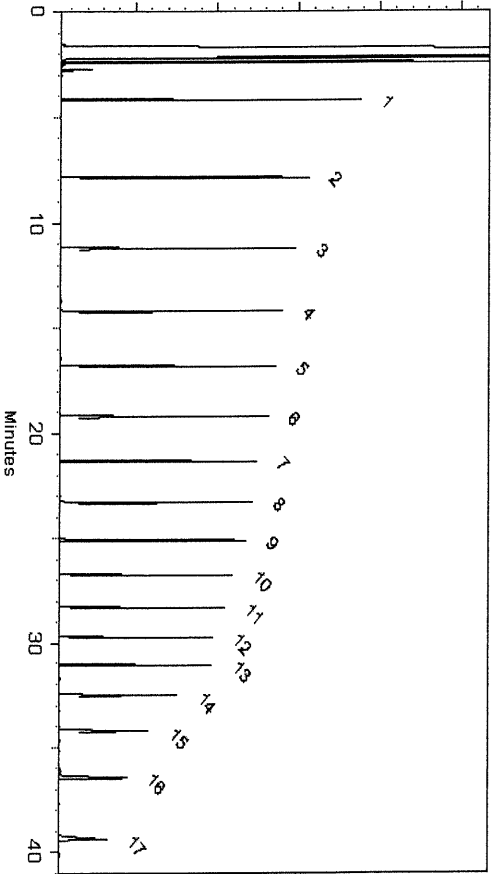
250°C

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

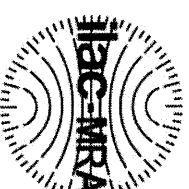
Bellefonte, PA 16823-8812

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 Unstressed Stressed
2	n-Decane (C10) CAS # 124-18-5 Purity 99%	503.0 µg/mL	+/- 2.9877 µg/mL +/- 12.4968 µg/mL +/- 14.9795 µg/mL	Gravimetric Unstressed Unstressed Stressed
3	n-Dodecane (C12) CAS # 112-40-3 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Unstressed Stressed
4	n-Tetradecane (C14) CAS # 629-59-4 Purity 99%	505.0 µg/mL	+/- 2.9995 µg/mL +/- 12.5465 µg/mL +/- 15.0390 µg/mL	Gravimetric Unstressed Unstressed Stressed
5	n-Hexadecane (C16) CAS # 544-76-3 Purity 98%	504.7 µg/mL	+/- 2.9978 µg/mL +/- 12.5390 µg/mL +/- 15.0301 µg/mL	Gravimetric Unstressed Unstressed Stressed
6	n-Octadecane (C18) CAS # 593-45-3 Purity 97%	504.4 µg/mL	+/- 2.9960 µg/mL +/- 12.5316 µg/mL +/- 15.0212 µg/mL	Gravimetric Unstressed Unstressed Stressed
7	n-Eicosane (C20) CAS # 112-95-8 Purity 99%	503.5 µg/mL	+/- 2.9906 µg/mL +/- 12.5092 µg/mL +/- 14.9944 µg/mL	Gravimetric Unstressed Unstressed Stressed

P11948 } 7.8
P11962 } 07/11/16

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

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

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

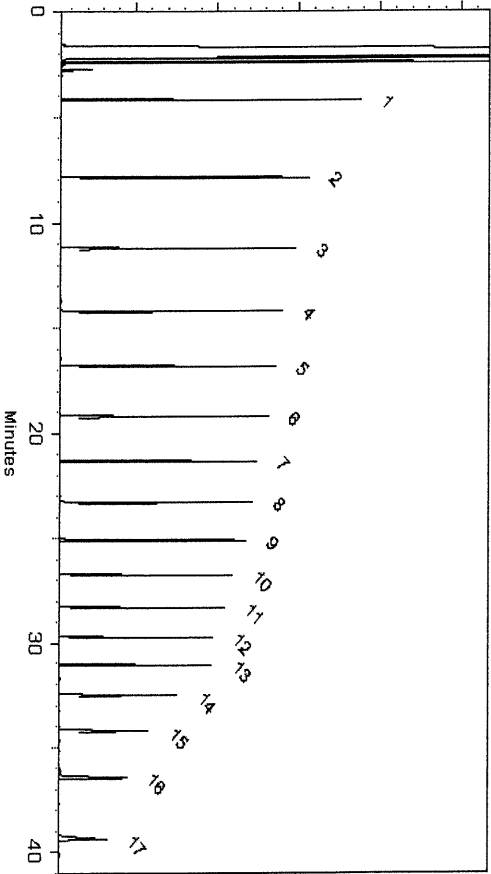
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Brittany Federinko

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Florida TRPH Standard

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

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

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

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

P13103 } Y.P.
↓
P13112 } 01/12/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Octane (C8)	111-65-9	SHBP9758	99%	504.4 µg/mL	+/- 13.0305
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	503.6 µg/mL	+/- 13.0098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	503.6 µg/mL	+/- 13.0098
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	504.0 µg/mL	+/- 13.0201
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	504.0 µg/mL	+/- 13.0201
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	504.1 µg/mL	+/- 13.0230
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	504.0 µg/mL	+/- 13.0204
8	n-Docosane (C22)	629-97-0	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.)

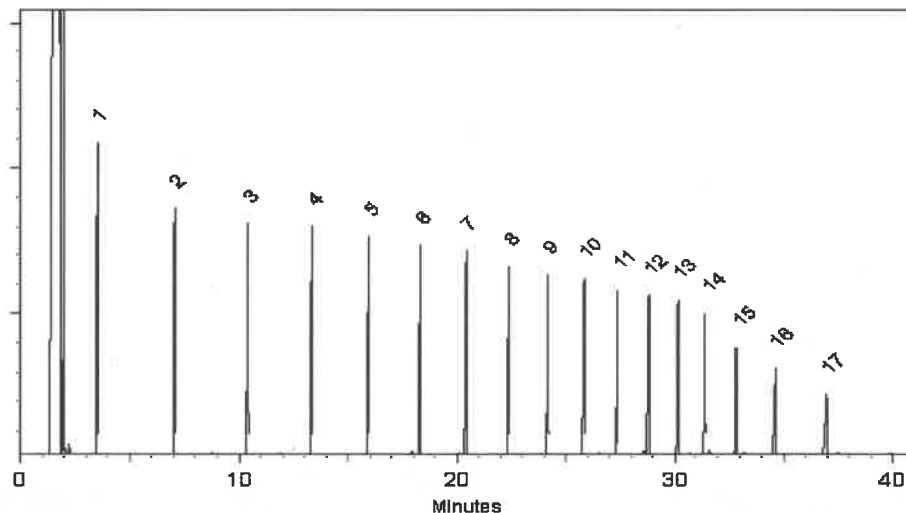
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl

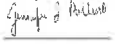


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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.



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Florida TRPH Standard

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

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

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

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

P13103 } Y.P.
↓
P13112 } 01/12/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Octane (C8)	111-65-9	SHBP9758	99%	504.4 µg/mL	+/- 13.0305
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	503.6 µg/mL	+/- 13.0098
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	503.6 µg/mL	+/- 13.0098
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	504.0 µg/mL	+/- 13.0201
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	504.0 µg/mL	+/- 13.0201
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	504.1 µg/mL	+/- 13.0230
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	504.0 µg/mL	+/- 13.0204
8	n-Docosane (C22)	629-97-0	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.)

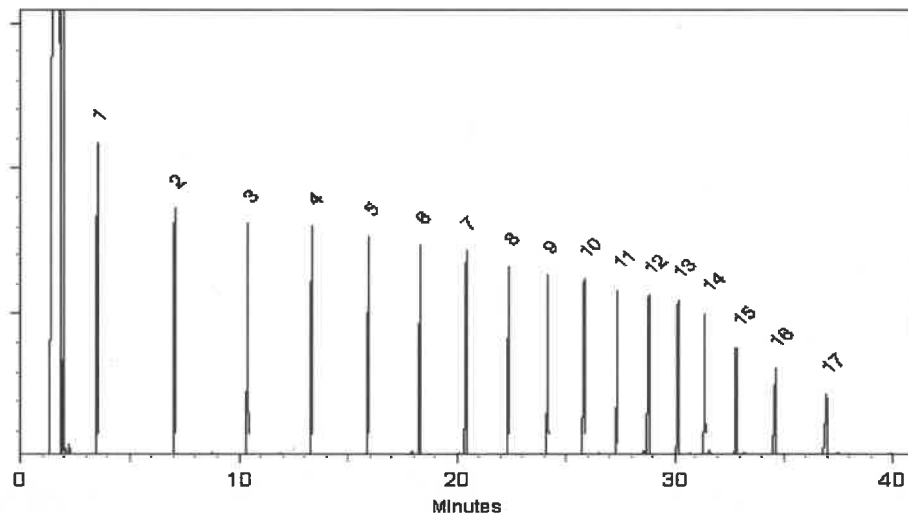
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl

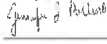


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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

Solvent(s): Methylene chloride
Lot# 78782

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

070716
070716

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

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

Run 35, "P10009R L070716 [4000µg/mL in MeCl2]"

Run Length: 40.00 min, 23900 points at 10 points/second.
Created: Sat, Jul 9, 2016 at 1:54:53 PM.
Sampled: Sequence "070716-GC/MS", Method "GC-MS".
Analyzed using Method "GC-MS".

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

Peak No. Name FID RT (min)

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

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

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

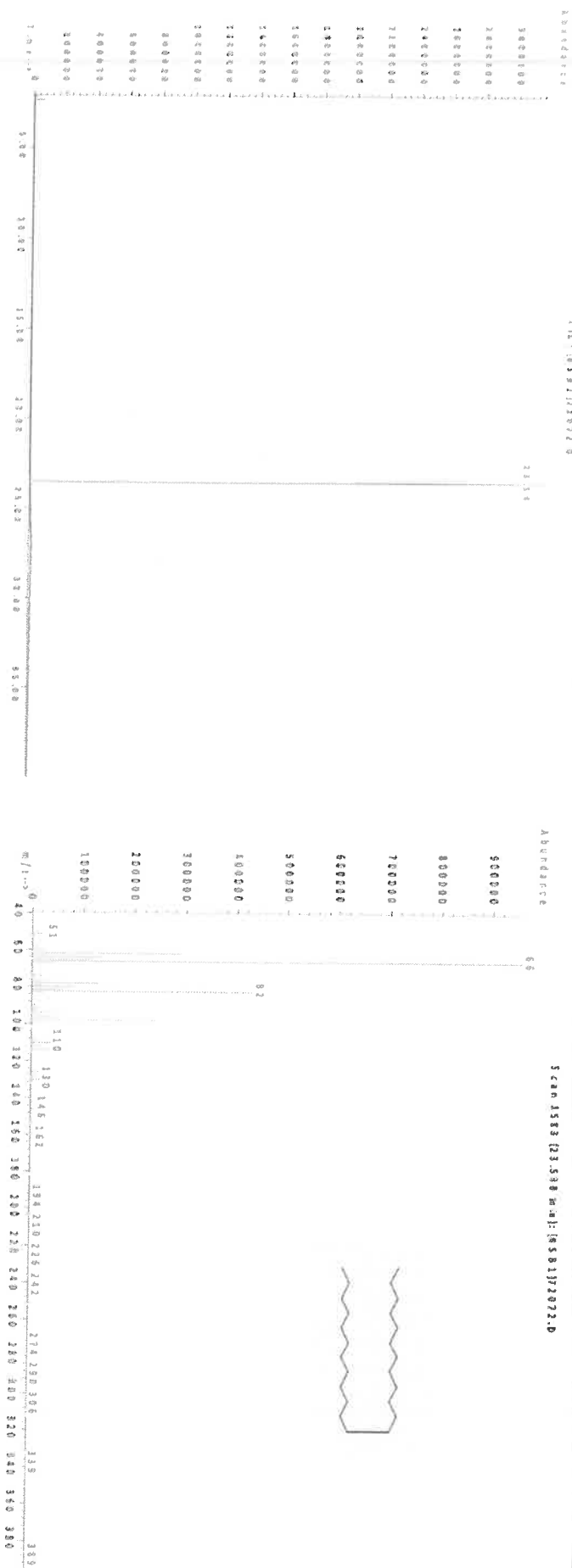
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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

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

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



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

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

Page 1 of 2



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-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	2.04159	4001.3	15.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04158	4001.2	15.4	1503-58-3	N/A	N/A

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

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

Peak No. Name FID RT (min)

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

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

Formulator
Reviewer

Actual
Concentration
Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

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

Solvent(s):
Methylene chloride
Lot#
105345

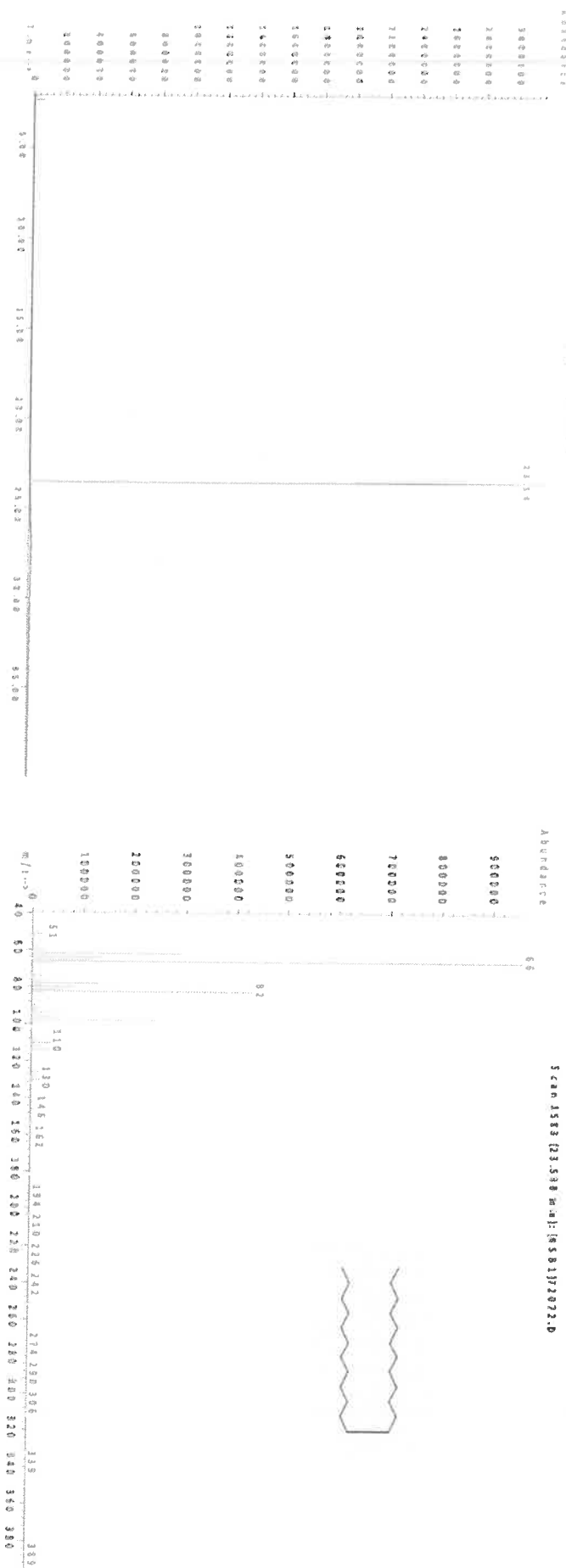
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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

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

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



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

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

Page 1 of 2



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#: 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	6.34
2	Naphthalene-d8	8.98
3	Acenaphthene-d10	12.97
4	Phenanthrene-d10	16.37
5	Chrysene-d12	22.62
6	Perylene-d12	25.75

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

Part # 10009R Lot # 041219 1 of 2

Formulator
Reviewer

Actual
Concentration

Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

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

Solvent(s):
Methylene chloride
Lot#
105345

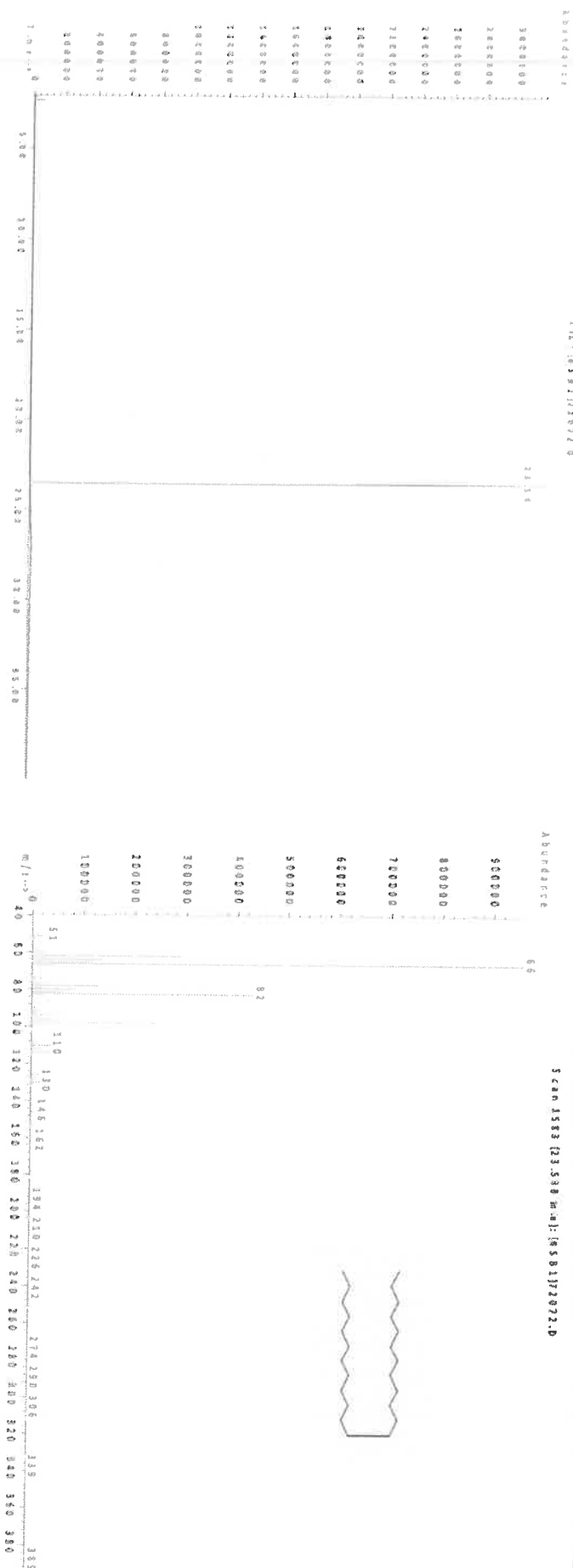
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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

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

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



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

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

Page 1 of 2



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



ABSOLUTE STANDARDS, INC.

ISO - 17034

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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Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Methylene chloride
Lot# 78782

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

070716
070716

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

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

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

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

Peak No. Name FID RT (min)

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

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

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

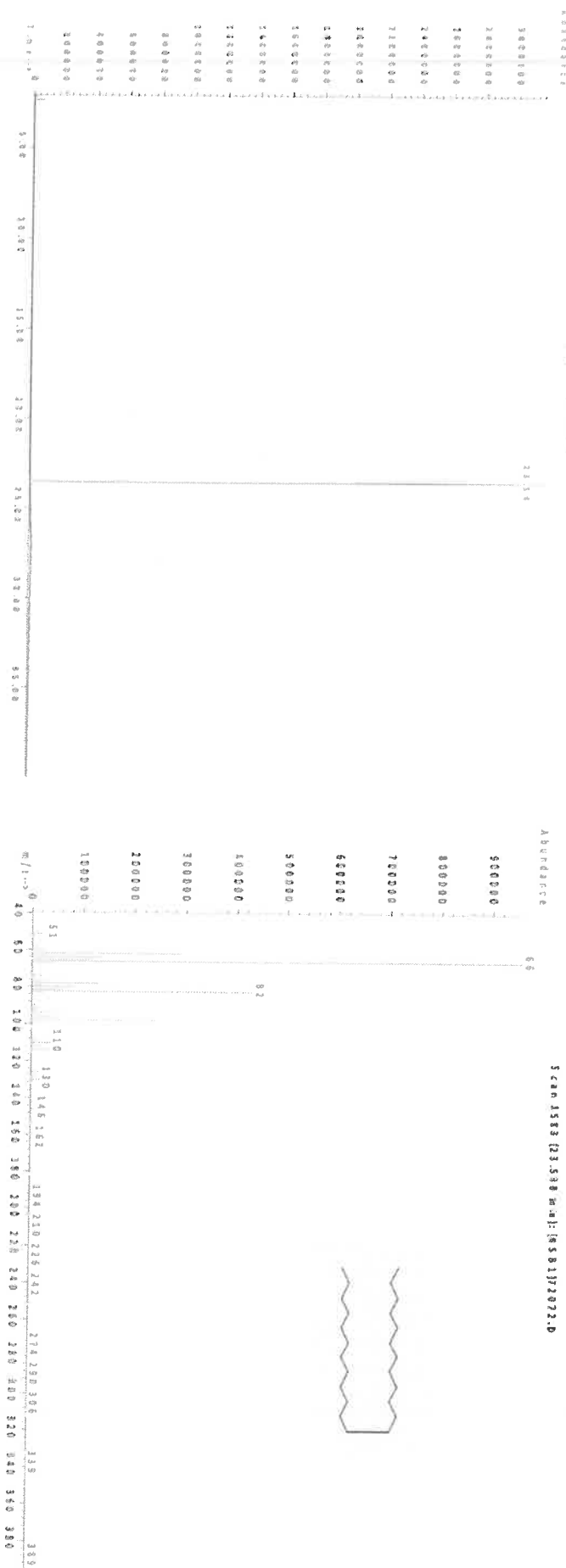
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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



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#: 5E-05 Balance Uncertainty
0.058 Mass Uncertainty

Solvent(s): Methylene chloride
Lot# 78782

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

070716
070716

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

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

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

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

Peak No. Name FID RT (min)

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

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

Part # 10009R Lot # 041219 1 of 2

Formulator
Reviewer

Actual
Concentration
Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

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

Solvent(s):
Methylene chloride
Lot#
105345

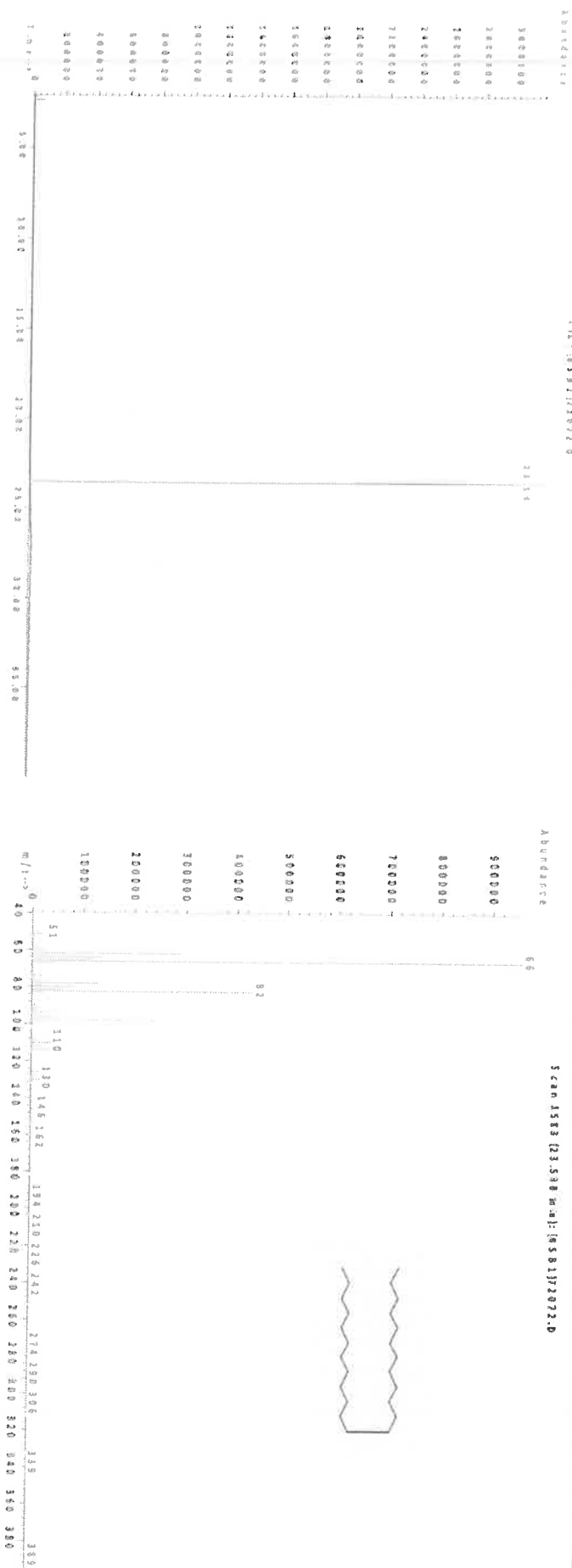
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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



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#: 5E-05 Balance Uncertainty
0.058 Mass Uncertainty

Solvent(s): Methylene chloride
Lot# 78782

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

070716
070716

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

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

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

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

Peak No. Name FID RT (min)

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

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

Part # 10009R Lot # 041219 1 of 2

Formulator
Reviewer

Actual
Concentration
Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

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

Solvent(s):
Methylene chloride
Lot#
105345

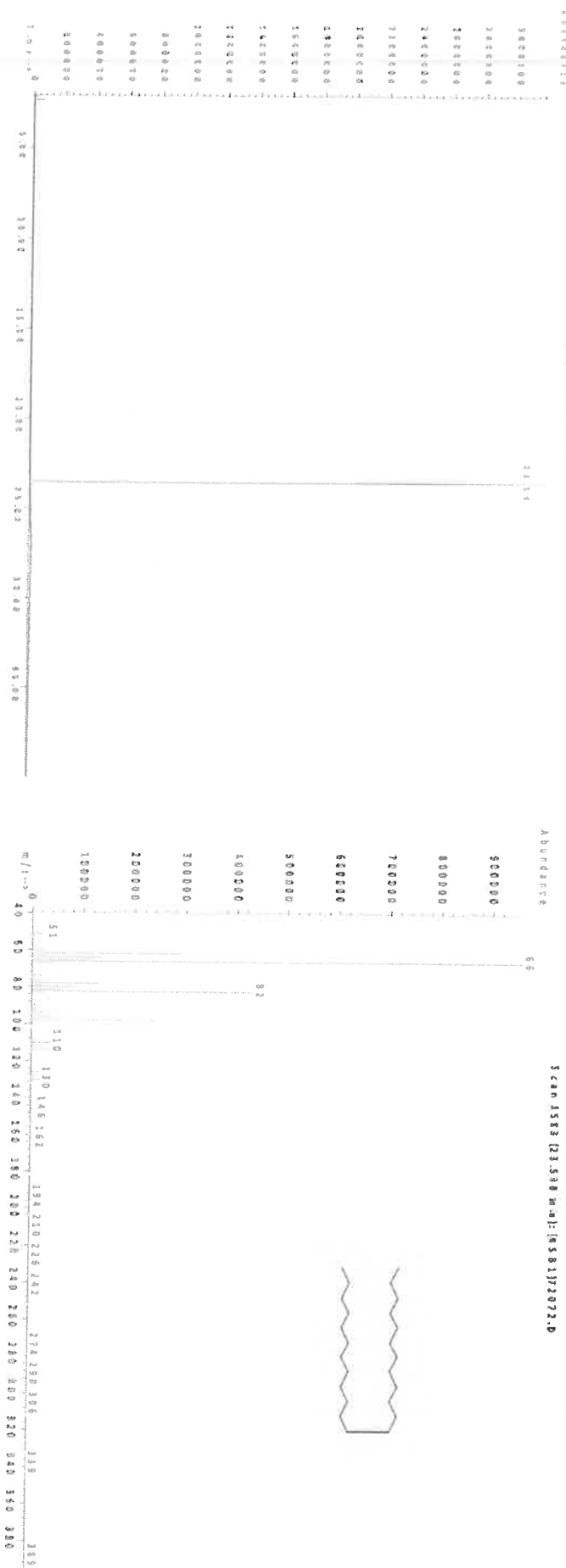
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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



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.)

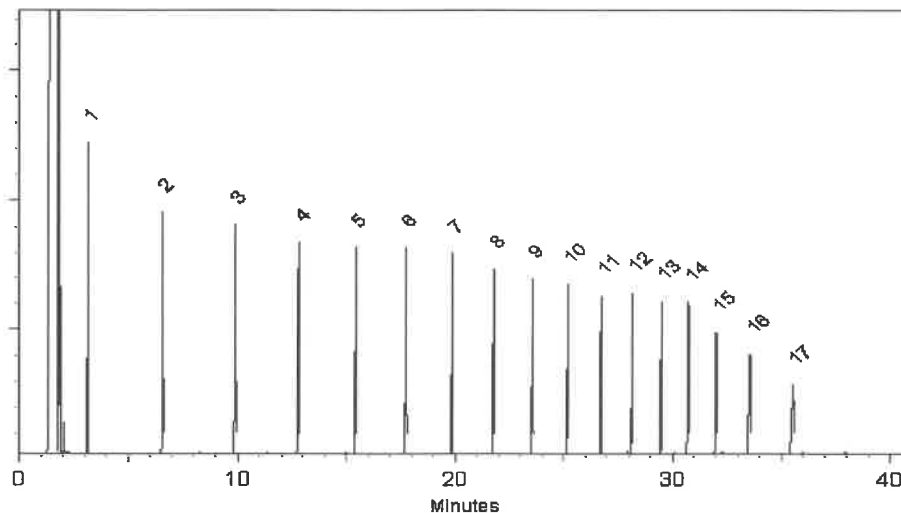
Inj. Temp:
250°C

Det. Temp:
330°C

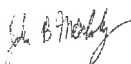
Det. Type:
FID

Split Vent:
2 ml/min.

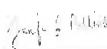
Inj. Vol
1µl



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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31266

Lot No.: 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.)

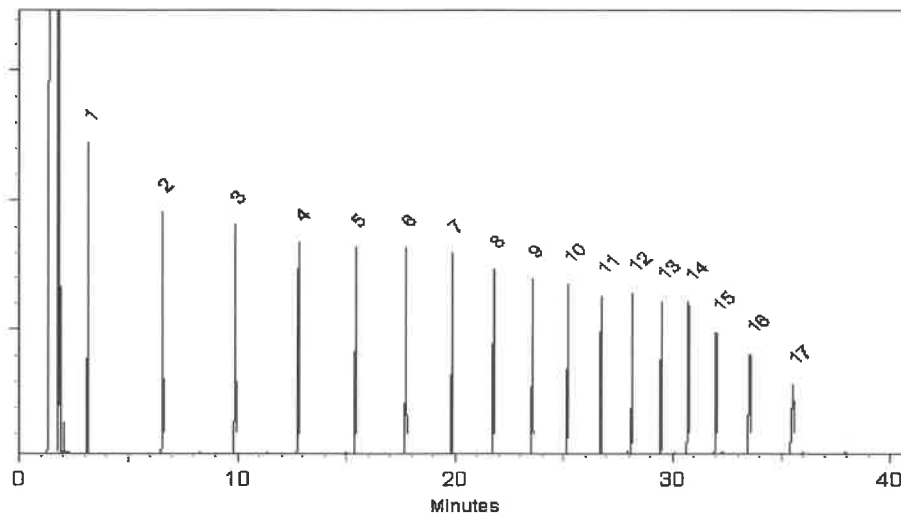
Inj. Temp:
250°C

Det. Temp:
330°C

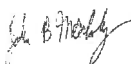
Det. Type:
FID

Split Vent:
2 ml/min.

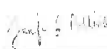
Inj. Vol
1µl



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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

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

CLIENT PROJECT INFORMATION

PROJECT NAME: SOUTH RIVER WM REPLACEMENT
PROJECT NO.: 302781 LOCATION: SOUTH RIVER, NJ
PROJECT MANAGER: FELIPE CONTRERAS
e-mail: ENCINAS.MA@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

1. TCL VOC 2. TCL SVOC 3. TAL METALS 4. PESTICIDES 5. HERBICIDES 6. PCB'S 7. DRUGS 8. GRO

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	TP-91	S	X		7/3/25	1335	6	X	X	X	X	X	X	X			E	
2.	TP-80	S	X		7/7/25	0830	6	X	X	X	X	X	X	X			E	
3.	TP-79	S	X		7/7/25	0930	6	X	X	X	X	X	X	X			E	
4.	TP-95	S	X		7/7/25	1025	6	X	X	X	X	X	X	X			E	
5.	TP-98	S	X		7/7/25	1100	6	X	X	X	X	X	X	X			E	
6.	TP-102	S	X		7/7/25	1200	6	X	X	X	X	X	X	X			E	
7.	TP-101	S	X		7/7/25	1505	6	X	X	X	X	X	X	X			E	
8.	TP-89	S	X		7/8/25	0810	6	X	X	X	X	X	X	X			E	
9.	TP-33	S	X		7/8/25	1015	6	X	X	X	X	X	X	X			E	
10.	TP-30	S	X		7/8/25	1145	6	X	X	X	X	X	X	X			E	

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

RELINQUISHED BY SAMPLER: 1. [Signature]	DATE/TIME: 7/8/25/1422	RECEIVED BY: 1. [Signature] 1422	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.0 °C
RELINQUISHED BY SAMPLER: 2. [Signature]	DATE/TIME:	RECEIVED BY: 2. [Signature]	Comments:
RELINQUISHED BY SAMPLER: 3. [Signature]	DATE/TIME: 1530 7825	RECEIVED BY: 3. [Signature]	Page ____ of CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete ☐ YES ☐ NO

Laboratory Certification

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



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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2529 CAMP02

Order Date : 7/8/2025 3:36:00 PM

Project Mgr :

Client Name : CDM Smith

Project Name : South River WM Replacem

Report Type : Level 2 *MR*

Client Contact : Marcie Ann Encinas

Receive DateTime : 7/8/2025 3:30:00 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
Q2529-01	TP-91	Solid	07/03/2025	13:35	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2529-02	TP-80	Solid	07/07/2025	08:30	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2529-03	TP-79	Solid	07/07/2025	09:30	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2529-04	TP-95	Solid	07/07/2025	10:25	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2529-05	TP-98	Solid	07/07/2025	11:00	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2529-06	TP-102	Solid	07/07/2025	12:00	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2529-07	TP-101	Solid	07/07/2025	15:05	VOC-TCLVOA-10		8260D		10 Bus. Days
Q2529-08	TP-89	Solid	07/08/2025	08:10					



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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2529 CAMP02
Client Name : CDM Smith
Client Contact : Marcie Ann Encinas
Invoice Name : CDM Smith
Invoice Contact : Marcie Ann Encinas

Order Date : 7/8/2025 3:36:00 PM
Project Name : South River WM Replacem
Receive DateTime : 7/8/2025 3:30:00 PM
Purchase Order :

Project Mgr :
Report Type : Level 2 *2-4*
EDD Type : EXCEL NOCLEANUP
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2529-09	TP-33	Solid	07/08/2025	10:15					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q2529-10	TP-30	Solid	07/08/2025	11:45					
					VOC-TCLVOA-10		8260D		10 Bus. Days

Relinquished By: *[Signature]*

Date / Time :

7-8-25 1615

Received By: *JC*

Date / Time :

7/8/25 1615

Storage Area : VOA Refridgerator Room