

Cover Page

Order ID : P5112

Project ID : 10th Street & 2nd Avenue

Client : Tully Construction Co., Inc.

Lab Sample Number

P5112-01
P5112-02

Client Sample Number

10TH-ST-SOIL
10TH-ST-SOIL

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: 12/10/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- ORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P5112

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 Castody

✓

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: KETAN PATEL

Date: 12/10/2024

LAB CHRONICLE

OrderID:	P5112	OrderDate:	12/5/2024 10:43:00 AM
Client:	Tully Construction Co., Inc.	Project:	10th Street & 2nd Avenue
Contact:	Dean Devoe	Location:	L51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5112-01	10TH-ST-SOIL	SOIL			12/05/24			12/05/24
			PCB	8082A		12/06/24	12/06/24	
			TPH GC	8015D		12/06/24	12/09/24	



QC SUMMARY

SOIL TPH GC SURROGATE RECOVERY

Lab Name: Chemtech Client: Tully Construction Co., Inc.
Lab Code: CHEM Case No.: P5112 SAS No.: P5112 SDG No.: P5112

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FG014924.D	79				0
PIBLK-FG014932.D	92				0
PIBLK-FG014935.D	82				0
PIBLK-FG014939.D	85				0
10TH-ST-SOIL	91				0
10TH-ST-SOILMS	68				0
10TH-ST-SOILMSD	69				0
PB165424BL	80				0
PB165424BS	88				0

QC LIMITS

TETRACOSANE-d50

For Water : 29-130

For Soil : 37-130

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate Diluted Out

SOIL TPH GC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Tully Construction Co., Inc.
Lab Code: CHEM **Cas No:** P5112 **SAS No :** P5112 **SDG No:** P5112
Client SampleID : 10TH-ST-SOILMS **Datafile:** FG014930.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
Petroleum Hydrocarbons	12391	101000	77900	-186%	*	68-131

SOIL TPH GC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Tully Construction Co., Inc.
Lab Code: CHEM **Cas No:** P5112 **SAS No :** P5112 **SDG No:** P5112
Client SampleID : 10TH-ST-SOILMSD **Datafile:** FG014931.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
Petroleum Hydrocarbons	12371	101000	75700	-205%	*	68-131

MS/MSD % Recovery RPD : 9.72

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

Lab Name: Chemtech **Client:** Tully Construction Co., Inc.
Lab Code: CHEM **Cas No:** P5112 **SAS No :** P5112 **SDG No:** P5112
Matrix Spike - EPA Sample No : PB165424BS **Datafile:** FG014928.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
Petroleum Hydrocarbons	11330	0	8697	77	68-131

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165424BL

Lab Name: CHEMTECH

Contract: TULL02

Lab Code: CHEM Case No.: P5112

SAS No.: P5112 SDG NO.: P5112

Lab File ID: FG014927.D

Lab Sample ID: PB165424BL

Instrument ID: Fg

Date Extracted: 12/06/2024

Matrix: (soil/water) Soil

Date Analyzed: 12/06/24

Level: (low/med) low

Time Analyzed: 13:44

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB165424BS	PB165424BS	FG014928.D	12/06/24
10TH-ST-SOILMS	P5112-01MS	FG014930.D	12/06/24
10TH-ST-SOILMSD	P5112-01MSD	FG014931.D	12/06/24
10TH-ST-SOIL	P5112-01	FG014938.D	12/09/24

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	12/05/24	
Project:	10th Street & 2nd Avenue		Date Received:	12/05/24	
Client Sample ID:	10TH-ST-SOIL		SDG No.:	P5112	
Lab Sample ID:	P5112-01		Matrix:	SOIL	
Analytical Method:	8015D TPH		% Solid:	91.4	Decanted:
Sample Wt/Vol:	30.06	Units: g	Final Vol:	1	mL
Soil Aliquot Vol:		uL	Test:	TPH GC	
Extraction Type:			Injection Volume :		
GPC Factor :		PH :			
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG014938.D	5	12/06/24 09:01	12/09/24 10:32	PB165424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	92.7		1.74	15.5	mg/Kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	3.64		37 - 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\FG120924\
Data File : FG014938.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 10:32
Operator : YP\AJ
Sample : P5112-01 5X
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10TH-ST-SOIL

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
Quant Time: Dec 10 01:42:19 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
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...	15.042	420208	3.641 ug/mlm
Target Compounds			

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
Data File : FG014938.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 10:32
Operator : YP\AJ
Sample : P5112-01 5X
Misc :
ALS Vial : 11 Sample Multiplier: 1

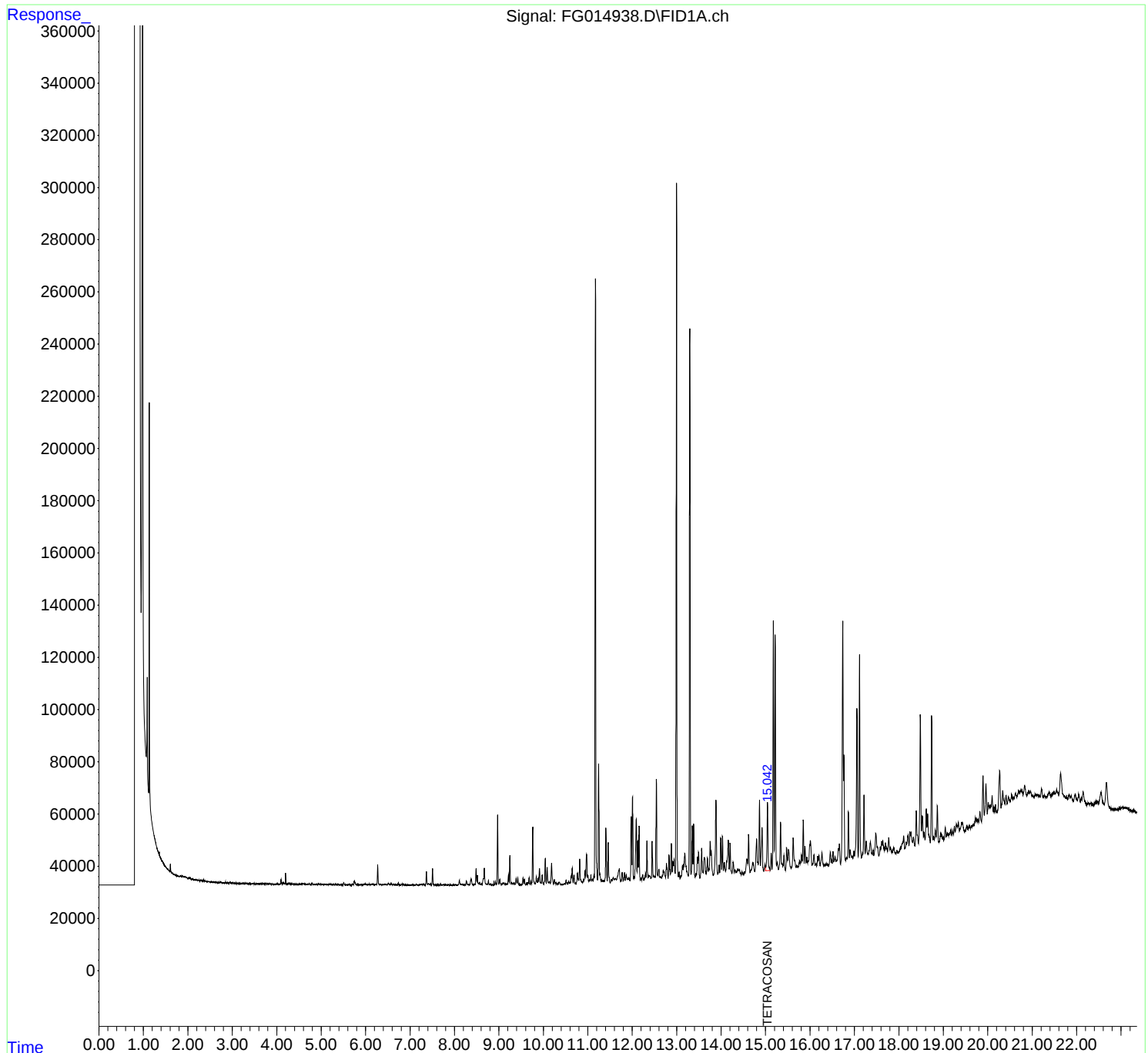
Instrument :
FID_G
ClientSampleId :
10TH-ST-SOIL

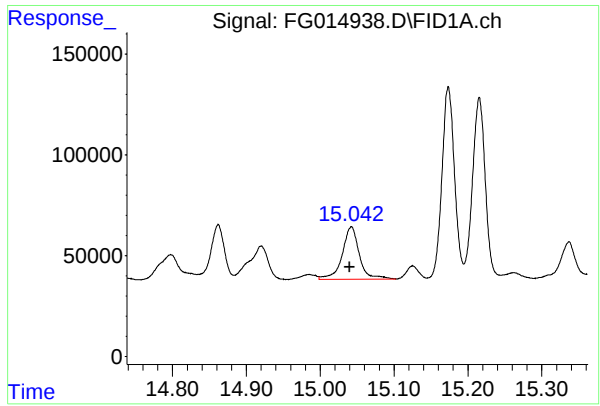
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
Quant Time: Dec 10 01:42:19 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.042 min
Delta R.T.: 0.002 min
Response: 420208
Conc: 3.64 ug/ml

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOIL

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 12/10/2024

Supervised By :Ankita Jodhani 12/10/2024

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOIL

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12092

Data File : FG014938.D

Signal(s) : FID1A.ch

Acq On : 09 Dec 2024 10:32

Sample : P5112-01 5X

Misc :

ALS Vial : 11 Sample Multiplier: 1

Reviewed By :Yogesh Patel 12/10/2024

Supervised By :Ankita Jodhani 12/10/2024

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M

Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.941	1.936	1.984	VV	207	2748	0.09%	0.005%
2	1.991	1.984	2.007	PV	139	471	0.02%	0.001%
3	2.010	2.007	2.033	PV	78	520	0.02%	0.001%
4	2.053	2.033	2.082	VV	217	3261	0.11%	0.005%
5	2.087	2.082	2.093	PV	121	522	0.02%	0.001%
6	2.099	2.093	2.109	VV	147	634	0.02%	0.001%
7	2.112	2.109	2.118	VV	87	361	0.01%	0.001%
8	2.120	2.118	2.175	VV	104	1715	0.06%	0.003%
9	2.180	2.175	2.222	PV	96	1125	0.04%	0.002%
10	2.228	2.222	2.241	PV	82	479	0.02%	0.001%
11	2.249	2.241	2.272	VV	118	1052	0.04%	0.002%
12	2.288	2.272	2.318	PV	319	5473	0.19%	0.009%
13	2.350	2.318	2.434	VV	653	13353	0.45%	0.022%
14	2.439	2.434	2.453	PV	109	757	0.03%	0.001%
15	2.462	2.453	2.492	VV	179	2462	0.08%	0.004%
16	2.496	2.492	2.520	VV	114	1492	0.05%	0.002%
17	2.527	2.520	2.531	PV	104	630	0.02%	0.001%
18	2.536	2.531	2.547	VV	107	929	0.03%	0.002%
19	2.551	2.547	2.575	VV	107	961	0.03%	0.002%
20	2.580	2.575	2.606	VV	85	769	0.03%	0.001%
21	2.622	2.606	2.666	PV	166	2860	0.10%	0.005%
22	2.677	2.666	2.710	VV	93	1639	0.06%	0.003%
23	2.730	2.710	2.777	VV	345	6506	0.22%	0.011%
24	2.792	2.777	2.807	VV	134	1112	0.04%	0.002%
25	2.810	2.807	2.816	VV	132	377	0.01%	0.001%
26	2.823	2.816	2.830	PV	128	789	0.03%	0.001%
27	2.835	2.830	2.842	VV	145	888	0.03%	0.001%
28	2.844	2.842	2.854	VV	386	1102	0.04%	0.002%
29	2.858	2.854	2.887	VV	142	1891	0.06%	0.003%
30	2.891	2.887	2.910	VV	110	1107	0.04%	0.002%
31	2.915	2.910	2.921	VV	140	587	0.02%	0.001%
32	2.956	2.921	2.989	PV	364	7626	0.26%	0.013%
33	3.007	2.989	3.034	VV	232	4201	0.14%	0.007%
34	3.055	3.034	3.082	PV	201	3415	0.12%	0.006%
35	3.084	3.082	3.096	VV	251	1060	0.04%	0.002%
36	3.102	3.096	3.123	VV	193	1884	0.06%	0.003%

					retention	Area	Area%	Area%
37	3.127	3.123	3.144	VV	174	1209	0.04%	0.002%
38	3.170	3.144	3.175	VV	205	1817	0.04%	0.002%
39	3.192	3.175	3.217	VV	198	3009	0.04%	0.002%
40	3.228	3.217	3.271	VV	227	4715	0.04%	0.002%
41	3.279	3.271	3.291	VV	204	1524	0.04%	0.002%
42	3.295	3.291	3.299	VV	114	659	0.04%	0.002%
43	3.308	3.299	3.328	VV	265	3069	0.10%	0.005%
44	3.333	3.328	3.364	VV	272	2685	0.09%	0.004%
45	3.373	3.364	3.396	VV	189	2066	0.07%	0.003%
46	3.399	3.396	3.405	VV	193	680	0.02%	0.001%
47	3.407	3.405	3.423	VV	142	953	0.03%	0.002%
48	3.429	3.423	3.434	PV	114	528	0.02%	0.001%
49	3.438	3.434	3.445	VV	93	553	0.02%	0.001%
50	3.452	3.445	3.475	VV	131	1784	0.06%	0.003%
51	3.485	3.475	3.520	VV	180	3483	0.12%	0.006%
52	3.527	3.520	3.547	VV	174	2256	0.08%	0.004%
53	3.551	3.547	3.574	VV	152	2265	0.08%	0.004%
54	3.578	3.574	3.587	VV	135	807	0.03%	0.001%
55	3.594	3.587	3.602	VV	188	1129	0.04%	0.002%
56	3.625	3.602	3.652	VV	204	3905	0.13%	0.007%
57	3.670	3.652	3.694	VV	268	4111	0.14%	0.007%
58	3.702	3.694	3.717	VV	230	1776	0.06%	0.003%
59	3.720	3.717	3.731	VV	153	951	0.03%	0.002%
60	3.736	3.731	3.744	VV	144	833	0.03%	0.001%
61	3.755	3.744	3.765	VV	202	1801	0.06%	0.003%
62	3.770	3.765	3.785	VV	221	1585	0.05%	0.003%
63	3.788	3.785	3.795	VV	170	670	0.02%	0.001%
64	3.801	3.795	3.835	VV	122	2338	0.08%	0.004%
65	3.855	3.835	3.878	VV	178	2312	0.08%	0.004%
66	3.896	3.878	3.913	VV	220	3062	0.10%	0.005%
67	3.918	3.913	3.938	VV	162	1372	0.05%	0.002%
68	3.957	3.938	3.970	VV	135	1464	0.05%	0.002%
69	3.992	3.970	4.013	PV	211	2647	0.09%	0.004%
70	4.027	4.013	4.068	VV	248	3897	0.13%	0.006%
71	4.097	4.068	4.131	VV	1967	24902	0.85%	0.041%
72	4.149	4.131	4.234	VV	793	26738	0.91%	0.045%
73	4.239	4.234	4.245	VV	257	1454	0.05%	0.002%
74	4.266	4.245	4.280	VV	368	6449	0.22%	0.011%
75	4.286	4.280	4.307	VV	392	5370	0.18%	0.009%
76	4.334	4.307	4.360	VV	362	8040	0.27%	0.013%
77	4.365	4.360	4.376	VV	198	1670	0.06%	0.003%
78	4.380	4.376	4.397	VV	259	2191	0.07%	0.004%
79	4.410	4.397	4.417	VV	204	2004	0.07%	0.003%
80	4.423	4.417	4.447	VV	212	3060	0.10%	0.005%
81	4.452	4.447	4.456	VV	171	806	0.03%	0.001%
82	4.470	4.456	4.492	VV	215	3255	0.11%	0.005%
83	4.497	4.492	4.510	VV	184	1614	0.05%	0.003%
84	4.532	4.510	4.548	VV	204	3338	0.11%	0.006%
85	4.565	4.548	4.579	VV	458	5423	0.18%	0.009%
86	4.590	4.579	4.625	VV	379	7861	0.27%	0.013%
87	4.633	4.625	4.663	VV	314	4426	0.15%	0.007%
88	4.672	4.663	4.687	VV	207	2776	0.09%	0.005%
89	4.691	4.687	4.704	VV	265	1810	0.06%	0.003%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOIL

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

90	4.721	4.704	4.727	VV	271	2820	0.10%	0.005%
91	4.734	4.727	4.761	VV	364	4432		
92	4.766	4.761	4.770	VV	131	594		
93	4.793	4.770	4.835	VV	555	10556		
94	4.846	4.835	4.863	VV	189	2398		
95	4.867	4.863	4.870	VV	180	633		
96	4.875	4.870	4.893	VV	192	2053	0.07%	0.003%
97	4.937	4.893	4.960	VV	351	7272	0.25%	0.012%
98	4.965	4.960	4.969	VV	258	1052	0.04%	0.002%
99	4.975	4.969	5.000	VV	229	3623	0.12%	0.006%
100	5.005	5.000	5.009	VV	194	803	0.03%	0.001%
101	5.019	5.009	5.046	VV	221	3420	0.12%	0.006%
102	5.051	5.046	5.055	VV	174	714	0.02%	0.001%
103	5.068	5.055	5.100	VV	289	4574	0.16%	0.008%
104	5.108	5.100	5.139	VV	144	2615	0.09%	0.004%
105	5.142	5.139	5.162	VV	141	1463	0.05%	0.002%
106	5.185	5.162	5.200	VV	362	4469	0.15%	0.007%
107	5.204	5.200	5.207	VV	252	846	0.03%	0.001%
108	5.211	5.207	5.246	VV	304	4155	0.14%	0.007%
109	5.250	5.246	5.257	VV	142	668	0.02%	0.001%
110	5.279	5.257	5.300	VV	222	3573	0.12%	0.006%
111	5.322	5.300	5.347	VV	308	4423	0.15%	0.007%
112	5.356	5.347	5.364	VV	173	1172	0.04%	0.002%
113	5.386	5.364	5.427	VV	327	5288	0.18%	0.009%
114	5.449	5.427	5.464	VV	165	1869	0.06%	0.003%
115	5.465	5.464	5.474	VV	112	497	0.02%	0.001%
116	5.477	5.474	5.490	VV	239	944	0.03%	0.002%
117	5.509	5.490	5.539	VV	930	11046	0.37%	0.018%
118	5.551	5.539	5.566	VV	141	1350	0.05%	0.002%
119	5.575	5.566	5.595	VV	127	1425	0.05%	0.002%
120	5.619	5.595	5.628	VV	137	1599	0.05%	0.003%
121	5.636	5.628	5.670	PV	179	2210	0.08%	0.004%
122	5.703	5.670	5.725	VV	406	5479	0.19%	0.009%
123	5.743	5.725	5.755	VV	1479	15894	0.54%	0.026%
124	5.762	5.755	5.793	VV	979	11499	0.39%	0.019%
125	5.818	5.793	5.828	VV	252	3088	0.10%	0.005%
126	5.893	5.828	5.926	VV	277	7165	0.24%	0.012%
127	5.954	5.926	5.964	VV	313	4225	0.14%	0.007%
128	5.969	5.964	5.982	VV	365	3500	0.12%	0.006%
129	5.996	5.982	6.012	VV	473	6002	0.20%	0.010%
130	6.016	6.012	6.032	VV	334	3019	0.10%	0.005%
131	6.039	6.032	6.059	VV	256	2988	0.10%	0.005%
132	6.072	6.059	6.077	VV	208	1348	0.05%	0.002%
133	6.084	6.077	6.107	VV	365	2927	0.10%	0.005%
134	6.135	6.107	6.153	VV	422	8395	0.28%	0.014%
135	6.166	6.153	6.204	VV	471	8585	0.29%	0.014%
136	6.218	6.204	6.227	VV	296	3453	0.12%	0.006%
137	6.239	6.227	6.253	VV	422	4811	0.16%	0.008%
138	6.274	6.253	6.317	VV	7803	84341	2.86%	0.140%
139	6.323	6.317	6.359	VV	489	7031	0.24%	0.012%
140	6.378	6.359	6.382	VV	262	2556	0.09%	0.004%
141	6.387	6.382	6.400	VV	255	2477	0.08%	0.004%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOIL

0.10% 0.005%

Manual IntegrationsAPPROVED

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142	6.425	6.400	6.435	VV	348	5094	0.17%	0.008%
143	6.454	6.435	6.484	VV	450	7871	0.17%	0.008%
144	6.509	6.484	6.554	VV	637	15087	0.17%	0.008%
145	6.575	6.554	6.619	VV	967	16015	0.17%	0.008%
146	6.622	6.619	6.639	VV	229	2384	0.08%	0.004%
147	6.649	6.639	6.654	VV	264	1812	0.12%	0.006%
148	6.657	6.654	6.677	VV	207	2292	0.12%	0.006%
149	6.684	6.677	6.714	VV	229	3443	0.39%	0.019%
150	6.737	6.714	6.780	VV	738	11423	0.02%	0.001%
151	6.786	6.780	6.792	VV	113	589	0.26%	0.013%
152	6.816	6.792	6.834	VV	620	7777	0.17%	0.009%
153	6.839	6.834	6.874	VV	472	5151	0.13%	0.007%
154	6.894	6.874	6.916	VV	254	3949	0.02%	0.001%
155	6.920	6.916	6.926	VV	117	645	0.06%	0.003%
156	6.933	6.926	6.959	VV	137	1805	0.04%	0.002%
157	6.966	6.959	6.987	VV	111	1089	0.12%	0.006%
158	7.018	6.987	7.040	PV	259	3674	0.17%	0.008%
159	7.058	7.040	7.077	VV	358	4931	0.08%	0.004%
160	7.080	7.077	7.111	VV	157	2471	0.05%	0.002%
161	7.121	7.111	7.127	VV	186	1375	0.15%	0.008%
162	7.141	7.127	7.165	VV	330	4504	0.08%	0.004%
163	7.171	7.165	7.194	VV	197	2339	0.24%	0.012%
164	7.225	7.194	7.244	VV	376	7057	0.06%	0.003%
165	7.249	7.244	7.253	VV	337	1798	0.27%	0.013%
166	7.271	7.253	7.293	VV	441	8052	0.25%	0.012%
167	7.309	7.293	7.339	VV	417	7473	1.97%	0.097%
168	7.370	7.339	7.397	VV	5323	58105	0.45%	0.022%
169	7.411	7.397	7.446	VV	707	13271	0.27%	0.013%
170	7.459	7.446	7.487	VV	552	7961	2.24%	0.110%
171	7.508	7.487	7.540	VV	6496	65901	0.16%	0.008%
172	7.553	7.540	7.579	VV	267	4605	0.04%	0.002%
173	7.582	7.579	7.591	VV	190	1170	0.07%	0.003%
174	7.595	7.591	7.615	VV	206	1924	0.11%	0.005%
175	7.632	7.615	7.648	VV	253	3158	0.03%	0.001%
176	7.654	7.648	7.658	VV	202	819	0.30%	0.015%
177	7.685	7.658	7.709	VV	551	8732	0.06%	0.003%
178	7.719	7.709	7.724	VV	212	1731	0.25%	0.012%
179	7.741	7.724	7.783	VV	326	7432	0.10%	0.005%
180	7.805	7.783	7.817	VV	175	2954	0.08%	0.004%
181	7.822	7.817	7.844	VV	201	2210	0.18%	0.009%
182	7.864	7.844	7.890	VV	339	5303	0.12%	0.006%
183	7.909	7.890	7.929	VV	274	3622	0.04%	0.002%
184	7.940	7.929	7.954	PV	130	1061	0.15%	0.008%
185	7.978	7.954	8.006	VV	273	4563	0.13%	0.006%
186	8.018	8.006	8.044	VV	269	3853	0.02%	0.001%
187	8.051	8.044	8.057	VV	111	636	0.03%	0.002%
188	8.062	8.057	8.076	VV	145	998	1.11%	0.055%
189	8.112	8.076	8.161	VV	1896	32809	0.21%	0.010%
190	8.175	8.161	8.201	VV	363	6111	0.16%	0.008%
191	8.215	8.201	8.241	VV	321	4649	0.93%	0.046%
192	8.270	8.241	8.307	VV	1743	27472	0.13%	0.006%
193	8.317	8.307	8.330	VV	322	3896	0.79%	0.039%
194	8.368	8.330	8.374	VV	2113	23343		

Instrument :

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195	8.383	8.374	8.430	VV	2297	28690	0.97%	0.048%
196	8.443	8.430	8.465	VV	453	7279		
197	8.488	8.465	8.504	VV	6545	73131		
198	8.516	8.504	8.535	VV	3846	41106		
199	8.541	8.535	8.555	VV	730	8712		
200	8.567	8.555	8.589	VV	1177	15048		
201	8.592	8.589	8.596	VV	299	1223	0.04%	0.002%
202	8.613	8.596	8.623	VV	463	5929	0.20%	0.010%
203	8.673	8.623	8.717	VV	6578	124012	4.21%	0.207%
204	8.727	8.717	8.745	VV	517	7424	0.25%	0.012%
205	8.766	8.745	8.793	VV	1835	22546	0.77%	0.038%
206	8.815	8.793	8.836	VV	530	8992	0.31%	0.015%
207	8.842	8.836	8.863	VV	251	3087	0.10%	0.005%
208	8.922	8.863	8.946	VV	1420	23686	0.80%	0.039%
209	8.973	8.946	8.999	VV	27094	275202	9.34%	0.458%
210	9.020	8.999	9.064	VV	2259	37753	1.28%	0.063%
211	9.090	9.064	9.102	VV	1018	15539	0.53%	0.026%
212	9.113	9.102	9.129	VV	901	12045	0.41%	0.020%
213	9.137	9.129	9.151	VV	568	6034	0.20%	0.010%
214	9.169	9.151	9.184	VV	608	9000	0.31%	0.015%
215	9.216	9.184	9.230	VV	3997	50952	1.73%	0.085%
216	9.248	9.230	9.275	VV	11444	125197	4.25%	0.209%
217	9.288	9.275	9.324	VV	1130	22702	0.77%	0.038%
218	9.341	9.324	9.359	VV	1065	14881	0.51%	0.025%
219	9.388	9.359	9.410	VV	2650	38458	1.31%	0.064%
220	9.427	9.410	9.468	VV	2852	39405	1.34%	0.066%
221	9.488	9.468	9.501	PV	382	4979	0.17%	0.008%
222	9.511	9.501	9.515	VV	284	2158	0.07%	0.004%
223	9.544	9.515	9.560	VV	2831	35878	1.22%	0.060%
224	9.575	9.560	9.605	VV	2382	30584	1.04%	0.051%
225	9.627	9.605	9.644	VV	980	13532	0.46%	0.023%
226	9.680	9.644	9.702	VV	2945	44136	1.50%	0.074%
227	9.722	9.702	9.738	VV	1749	21509	0.73%	0.036%
228	9.763	9.738	9.817	VV	22337	256565	8.71%	0.427%
229	9.843	9.817	9.860	VV	3251	42827	1.45%	0.071%
230	9.885	9.860	9.896	VV	2696	36848	1.25%	0.061%
231	9.915	9.896	9.937	VV	6321	85482	2.90%	0.142%
232	9.944	9.937	9.956	VV	1046	10142	0.34%	0.017%
233	9.975	9.956	10.003	VV	4018	53801	1.83%	0.090%
234	10.044	10.003	10.067	VV	10141	128182	4.35%	0.214%
235	10.088	10.067	10.120	VV	6796	88212	2.99%	0.147%
236	10.122	10.120	10.126	VV	954	3131	0.11%	0.005%
237	10.140	10.126	10.157	VV	1216	17188	0.58%	0.029%
238	10.187	10.157	10.229	VV	8357	130067	4.42%	0.217%
239	10.250	10.229	10.270	VV	1982	28918	0.98%	0.048%
240	10.285	10.270	10.313	VV	984	15051	0.51%	0.025%
241	10.355	10.313	10.429	VV	1000	25611	0.87%	0.043%
242	10.458	10.429	10.470	PV	302	3903	0.13%	0.007%
243	10.482	10.470	10.488	VV	315	2826	0.10%	0.005%
244	10.511	10.488	10.537	VV	1714	24606	0.84%	0.041%
245	10.539	10.537	10.550	VV	600	3331	0.11%	0.006%
246	10.567	10.550	10.599	VV	1265	21557	0.73%	0.036%

Instrument :

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10TH-ST-SOIL

0.97% 0.048%

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247	10.624	10.599	10.634	VV	3033	38789
248	10.650	10.634	10.672	VV	6221	78797
249	10.690	10.672	10.729	VV	3486	47923
250	10.768	10.729	10.799	VV	4244	78411
251	10.818	10.799	10.880	VV	9596	141889
252	10.904	10.880	10.915	VV	1585	23580
253	10.939	10.915	10.951	VV	5068	70204
254	10.973	10.951	10.992	VV	11289	166446
255	11.001	10.992	11.018	VV	3218	35271
256	11.043	11.018	11.055	VV	1484	27808
257	11.071	11.055	11.088	VV	3318	41211
258	11.102	11.088	11.123	VV	1609	28030
259	11.138	11.123	11.146	VV	2977	29415
260	11.173	11.146	11.219	VV	232465	2541722
261	11.246	11.219	11.267	VV	45812	508016
262	11.272	11.267	11.290	VV	3581	34878
263	11.300	11.290	11.314	VV	1297	14668
264	11.323	11.314	11.334	VV	956	9874
265	11.349	11.334	11.372	VV	1037	18547
266	11.408	11.372	11.439	VV	21051	255517
267	11.460	11.439	11.504	VV	15394	184363
268	11.534	11.504	11.546	PV	1177	17979
269	11.569	11.546	11.597	VV	1821	41634
270	11.621	11.597	11.646	VV	1623	37792
271	11.711	11.646	11.742	VV	5384	160528
272	11.775	11.742	11.799	VV	3653	54106
273	11.825	11.799	11.845	VV	3562	50640
274	11.865	11.845	11.909	VV	2765	57049
275	11.924	11.909	11.945	VV	1665	24109
276	11.977	11.945	11.991	VV	24986	283964
277	12.008	11.991	12.030	VV	32460	355579
278	12.042	12.030	12.052	VV	1988	20572
279	12.091	12.052	12.108	VV	23961	382872
280	12.124	12.108	12.139	VV	15447	179323
281	12.155	12.139	12.182	VV	21182	254011
282	12.199	12.182	12.213	VV	1305	14667
283	12.235	12.213	12.257	VV	2533	35959
284	12.297	12.257	12.310	VV	2825	47957
285	12.331	12.310	12.354	VV	15420	183610
286	12.365	12.354	12.377	VV	2164	24329
287	12.388	12.377	12.421	VV	2189	41976
288	12.448	12.421	12.470	VV	15166	181072
289	12.479	12.470	12.494	VV	1969	24030
290	12.505	12.494	12.517	VV	1676	20886
291	12.542	12.517	12.574	VV	38790	465295
292	12.598	12.574	12.618	VV	4209	70659
293	12.627	12.618	12.640	VV	1430	17015
294	12.649	12.640	12.663	VV	1217	14199
295	12.700	12.663	12.712	VV	3920	67652
296	12.721	12.712	12.750	VV	3279	49271
297	12.769	12.750	12.807	VV	6332	116258
298	12.826	12.807	12.859	VV	9585	144276
299	12.880	12.859	12.898	VV	13959	181973

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOIL

1.32% 0.065%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024

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2.38% 0.117%

5.65% 0.277%

1.20% 0.059%

0.94% 0.046%

1.40% 0.069%

0.95% 0.047%

1.00% 0.049%

86.28% 4.234%

17.25% 0.846%

1.18% 0.058%

0.50% 0.024%

0.34% 0.016%

0.63% 0.031%

8.67% 0.426%

6.26% 0.307%

0.61% 0.030%

1.41% 0.069%

1.28% 0.063%

5.45% 0.267%

1.84% 0.090%

1.72% 0.084%

1.94% 0.095%

0.82% 0.040%

9.64% 0.473%

12.07% 0.592%

0.70% 0.034%

13.00% 0.638%

6.09% 0.299%

8.62% 0.423%

0.50% 0.024%

1.22% 0.060%

1.63% 0.080%

6.23% 0.306%

0.83% 0.041%

1.42% 0.070%

6.15% 0.302%

0.82% 0.040%

0.71% 0.035%

15.80% 0.775%

2.40% 0.118%

0.58% 0.028%

0.48% 0.024%

2.30% 0.113%

1.67% 0.082%

3.95% 0.194%

4.90% 0.240%

6.18% 0.303%

							Instrument : FID_G	
							ClientSampleId : 10TH-ST-SOIL	
	rteres							
300	12.914	12.898	12.927	VV	6877	99073	3.36%	0.165%
							Manual IntegrationsAPPROVED	
301	12.941	12.927	12.963	VV	7845	114302	3.36%	0.165%
302	12.997	12.963	13.035	VV	266457	2945792	100.00%	0.000%
303	13.055	13.035	13.074	VV	2959	38797	2.39%	0.117%
304	13.092	13.074	13.102	VV	1393	15773	8.99%	0.441%
305	13.131	13.102	13.143	VV	5319	80768	80.01%	3.926%
306	13.159	13.143	13.167	VV	5810	70372	8.54%	0.419%
307	13.182	13.167	13.265	VV	9921	264835	8.66%	0.425%
308	13.295	13.265	13.322	VV	211095	2357010	2.39%	0.117%
309	13.350	13.322	13.365	VV	20285	251691	8.99%	0.441%
310	13.381	13.365	13.414	VV	20991	255137	80.01%	3.926%
311	13.433	13.414	13.446	VV	1934	27705	8.54%	0.419%
312	13.467	13.446	13.477	VV	8285	98455	8.66%	0.425%
313	13.490	13.477	13.521	VV	10102	137149	2.39%	0.117%
314	13.561	13.521	13.587	PV	11433	169882	3.34%	0.164%
315	13.618	13.587	13.629	VV	7877	129349	4.66%	0.228%
316	13.630	13.629	13.654	VV	7399	71319	5.77%	0.283%
317	13.691	13.654	13.708	VV	7549	120510	4.39%	0.215%
318	13.722	13.708	13.730	VV	3337	40152	2.42%	0.119%
319	13.753	13.730	13.768	VV	13763	210408	4.09%	0.201%
320	13.777	13.768	13.825	VV	10048	146871	1.36%	0.067%
321	13.883	13.825	13.923	VV	29469	513777	7.14%	0.350%
322	13.953	13.923	13.968	VV	4569	67962	4.99%	0.245%
323	13.991	13.968	14.012	VV	14733	202361	17.44%	0.856%
324	14.030	14.012	14.051	VV	15388	189051	2.31%	0.113%
325	14.073	14.051	14.101	VV	5358	99471	6.87%	0.337%
326	14.161	14.101	14.181	VV	13693	324720	6.42%	0.315%
327	14.201	14.181	14.241	VV	12632	178820	3.38%	0.166%
328	14.273	14.241	14.293	VV	5030	85370	11.02%	0.541%
329	14.311	14.293	14.334	VV	2081	39072	6.07%	0.298%
330	14.343	14.334	14.351	VV	1435	13181	2.90%	0.142%
331	14.381	14.351	14.400	VV	2264	53891	1.33%	0.065%
332	14.412	14.400	14.434	VV	2114	28817	0.45%	0.022%
333	14.438	14.434	14.454	VV	783	5170	1.83%	0.090%
334	14.471	14.454	14.486	PV	1023	11562	0.98%	0.048%
335	14.492	14.486	14.510	VV	339	3024	0.18%	0.009%
336	14.525	14.510	14.538	VV	921	10037	0.39%	0.019%
337	14.576	14.538	14.598	VV	5820	134092	0.10%	0.005%
338	14.617	14.598	14.650	VV	15201	211043	0.34%	0.017%
339	14.668	14.650	14.677	VV	1478	17480	4.55%	0.223%
340	14.721	14.677	14.754	VV	4166	120832	7.16%	0.352%
341	14.798	14.754	14.834	VV	13146	290365	0.59%	0.029%
342	14.862	14.834	14.884	VV	28029	373287	4.10%	0.201%
343	14.920	14.884	14.956	VV	17387	328600	9.86%	0.484%
344	14.985	14.956	15.001	VV	3111	53668	12.67%	0.622%
345	15.042	15.001	15.104	VV	26782	455986	11.15%	0.547%
346	15.125	15.104	15.145	VV	7150	88322	1.82%	0.089%
347	15.173	15.145	15.195	VV	96052	1141869	15.48%	0.760%
348	15.215	15.195	15.245	VV	90653	1094459	3.00%	0.147%
349	15.262	15.245	15.289	VV	3515	60388	38.76%	1.902%
350	15.337	15.289	15.362	VV	18793	283595	37.15%	1.823%
351	15.368	15.362	15.387	VV	2833	37171	2.05%	0.101%
							9.63%	0.472%
351	15.368	15.362	15.387	VV	2833	37171	1.26%	0.062%

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352	15.412	15.387	15.446	VV	5807	93878
353	15.473	15.446	15.498	PV	8653	136850
354	15.516	15.498	15.571	VV	7905	175521
355	15.620	15.571	15.680	VV	12227	265206
356	15.695	15.680	15.710	VV	1189	18386
357	15.714	15.710	15.733	VV	1115	12949
358	15.765	15.733	15.780	VV	3273	60068
359	15.807	15.780	15.825	VV	5315	97946
360	15.848	15.825	15.868	VV	18698	251669
361	15.885	15.868	15.908	VV	8553	122125
362	15.929	15.908	15.944	VV	4314	64282
363	15.963	15.944	15.968	VV	2671	36444
364	16.007	15.968	16.044	VV	10427	283828
365	16.088	16.044	16.117	VV	4904	99101
366	16.129	16.117	16.151	VV	1255	20356
367	16.172	16.151	16.184	VV	4174	51804
368	16.201	16.184	16.229	VV	4476	65484
369	16.268	16.229	16.306	VV	5292	104884
370	16.339	16.306	16.364	VV	637	14937
371	16.379	16.364	16.400	VV	845	10500
372	16.407	16.400	16.422	VV	428	3048
373	16.457	16.422	16.475	PV	5191	84149
374	16.485	16.475	16.498	VV	2103	21968
375	16.517	16.498	16.536	VV	5351	67766
376	16.562	16.536	16.584	VV	3302	65897
377	16.594	16.584	16.605	VV	1813	20687
378	16.638	16.605	16.645	VV	6256	92782
379	16.660	16.645	16.686	VV	8024	109618
380	16.736	16.686	16.753	PV	93470	1351732
381	16.762	16.753	16.803	VV	41687	463734
382	16.820	16.803	16.839	VV	2283	41706
383	16.863	16.839	16.886	VV	19629	260168
384	16.903	16.886	16.943	VV	4990	108243
385	16.952	16.943	16.965	VV	2509	26200
386	16.985	16.965	17.002	VV	4186	65853
387	17.056	17.002	17.083	VV	58749	907049
388	17.113	17.083	17.160	VV	79295	1017840
389	17.182	17.160	17.190	VV	3009	40673
390	17.214	17.190	17.241	VV	25039	336691
391	17.265	17.241	17.313	VV	7282	171650
392	17.358	17.313	17.400	VV	6657	202260
393	17.418	17.400	17.434	VV	3450	49157
394	17.480	17.434	17.508	VV	9602	232989
395	17.519	17.508	17.550	VV	4218	69016
396	17.581	17.550	17.590	VV	4068	61314
397	17.614	17.590	17.629	VV	5980	111057
398	17.639	17.629	17.657	VV	6381	82763
399	17.666	17.657	17.682	VV	3804	47749
400	17.698	17.682	17.717	VV	5207	82692
401	17.726	17.717	17.742	VV	3430	43212
402	17.771	17.742	17.799	VV	7106	141577
403	17.810	17.799	17.829	VV	3189	46369
404	17.836	17.829	17.854	VV	1859	22050

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOIL

3.19% 0.156%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024

Supervised By :Ankita Jodhani 12/10/2024

2.04% 0.100%

3.32% 0.163%

8.54% 0.419%

4.15% 0.203%

2.18% 0.107%

1.24% 0.061%

9.64% 0.473%

3.36% 0.165%

0.69% 0.034%

1.76% 0.086%

2.22% 0.109%

3.56% 0.175%

0.51% 0.025%

0.36% 0.017%

0.10% 0.005%

2.86% 0.140%

0.75% 0.037%

2.30% 0.113%

2.24% 0.110%

0.70% 0.034%

3.15% 0.155%

3.72% 0.183%

45.89% 2.252%

15.74% 0.772%

1.42% 0.069%

8.83% 0.433%

3.67% 0.180%

0.89% 0.044%

2.24% 0.110%

30.79% 1.511%

34.55% 1.695%

1.38% 0.068%

11.43% 0.561%

5.83% 0.286%

6.87% 0.337%

1.67% 0.082%

7.91% 0.388%

2.34% 0.115%

2.08% 0.102%

3.77% 0.185%

2.81% 0.138%

1.62% 0.080%

2.81% 0.138%

1.47% 0.072%

4.81% 0.236%

1.57% 0.077%

0.75% 0.037%

405	17.887	17.854	17.915	VV	2851	70653	2.40%	0.118%
406	17.926	17.915	17.934	VV	866	8442		
407	17.956	17.934	17.980	VV	1669	27599		
408	17.992	17.980	18.000	VV	945	9489		
409	18.034	18.000	18.049	VV	2723	52323		
410	18.079	18.049	18.083	VV	4065	69959		
411	18.107	18.083	18.140	VV	6684	140569	4.77%	0.234%
412	18.165	18.140	18.179	VV	4022	71325	2.42%	0.119%
413	18.206	18.179	18.227	VV	6766	143008	4.85%	0.238%
414	18.249	18.227	18.258	VV	7895	105894	3.59%	0.176%
415	18.271	18.258	18.314	VV	7082	180794	6.14%	0.301%
416	18.327	18.314	18.357	VV	5733	107424	3.65%	0.179%
417	18.391	18.357	18.438	VV	15428	339403	11.52%	0.565%
418	18.482	18.438	18.508	VV	51906	861533	29.25%	1.435%
419	18.528	18.508	18.552	VV	13027	258216	8.77%	0.430%
420	18.566	18.552	18.590	VV	6769	122598	4.16%	0.204%
421	18.615	18.590	18.631	VV	15604	247848	8.41%	0.413%
422	18.648	18.631	18.707	VV	13697	314308	10.67%	0.524%
423	18.737	18.707	18.765	VV	51033	700953	23.80%	1.168%
424	18.776	18.765	18.783	VV	3764	39299	1.33%	0.065%
425	18.820	18.783	18.839	VV	6870	158879	5.39%	0.265%
426	18.865	18.839	18.896	VV	16056	269537	9.15%	0.449%
427	18.938	18.896	18.954	VV	5455	123704	4.20%	0.206%
428	18.963	18.954	18.983	VV	4641	68694	2.33%	0.114%
429	18.993	18.983	19.012	VV	3400	52617	1.79%	0.088%
430	19.044	19.012	19.069	VV	7162	164561	5.59%	0.274%
431	19.097	19.069	19.116	VV	4904	119009	4.04%	0.198%
432	19.141	19.116	19.149	VV	4779	84081	2.85%	0.140%
433	19.171	19.149	19.188	VV	6111	117107	3.98%	0.195%
434	19.210	19.188	19.228	VV	5342	111256	3.78%	0.185%
435	19.250	19.228	19.268	VV	7184	133606	4.54%	0.223%
436	19.295	19.268	19.317	VV	7876	194534	6.60%	0.324%
437	19.339	19.317	19.364	VV	8318	191640	6.51%	0.319%
438	19.416	19.364	19.425	VV	8093	243408	8.26%	0.405%
439	19.434	19.425	19.482	VV	7783	198899	6.75%	0.331%
440	19.497	19.482	19.502	VV	4817	54124	1.84%	0.090%
441	19.525	19.502	19.557	VV	6297	181247	6.15%	0.302%
442	19.590	19.557	19.612	VV	6169	183355	6.22%	0.305%
443	19.630	19.612	19.643	VV	6131	106016	3.60%	0.177%
444	19.723	19.643	19.740	VV	8874	404490	13.73%	0.674%
445	19.750	19.740	19.773	VV	8160	155189	5.27%	0.258%
446	19.783	19.773	19.799	VV	7722	115917	3.93%	0.193%
447	19.825	19.799	19.858	VV	10739	308770	10.48%	0.514%
448	19.893	19.858	19.919	VV	24399	531473	18.04%	0.885%
449	19.958	19.919	19.989	VV	21302	586325	19.90%	0.977%
450	20.010	19.989	20.030	VV	13895	302579	10.27%	0.504%
451	20.043	20.030	20.059	VV	12516	205291	6.97%	0.342%
452	20.097	20.059	20.123	VV	16126	500818	17.00%	0.834%
453	20.139	20.123	20.157	VV	11886	218263	7.41%	0.364%
454	20.173	20.157	20.208	VV	12640	326460	11.08%	0.544%
455	20.268	20.208	20.299	VV	25342	873249	29.64%	1.455%
456	20.337	20.299	20.385	VV	17400	714405	24.25%	1.190%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOIL

2.40% 0.118%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024

Supervised By :Ankita Jodhani 12/10/2024

457	20.411	20.385	20.435	VV	15396	412293	14.00%	0.687%
458	20.466	20.435	20.505	VV	14684	558535	18.00%	0.687%
459	20.537	20.505	20.560	VV	15203	470677	15.00%	0.687%
460	20.573	20.560	20.582	VV	13979	179405	6.00%	0.687%
461	20.623	20.582	20.652	VV	15663	616446	20.00%	0.687%
462	20.692	20.652	20.707	VV	16347	501668	17.00%	0.687%
463	20.727	20.707	20.749	VV	16216	401059	13.61%	0.668%
464	20.765	20.749	20.794	VV	16548	425146	14.43%	0.708%
465	20.830	20.794	20.879	VV	17955	811884	27.56%	1.352%
466	20.918	20.879	20.943	VV	15577	572995	19.45%	0.954%
467	20.958	20.943	20.993	VV	15409	435058	14.77%	0.725%
468	20.999	20.993	21.007	VV	13703	116576	3.96%	0.194%
469	21.012	21.007	21.039	VV	13432	254194	8.63%	0.423%
470	21.076	21.039	21.100	VV	13773	491559	16.69%	0.819%
471	21.107	21.100	21.114	VV	13637	113993	3.87%	0.190%
472	21.120	21.114	21.134	VV	13566	161084	5.47%	0.268%
473	21.145	21.134	21.159	VV	13348	191035	6.49%	0.318%
474	21.166	21.159	21.180	VV	13057	165737	5.63%	0.276%
475	21.209	21.180	21.254	VV	15598	598378	20.31%	0.997%
476	21.274	21.254	21.331	VV	13018	571147	19.39%	0.951%
477	21.382	21.331	21.388	VV	13837	444597	15.09%	0.741%
478	21.390	21.388	21.418	VV	13670	230772	7.83%	0.384%
479	21.432	21.418	21.440	VV	12748	170464	5.79%	0.284%
480	21.492	21.440	21.497	VV	13371	442318	15.02%	0.737%
481	21.501	21.497	21.518	VV	13260	162298	5.51%	0.270%
482	21.550	21.518	21.601	VV	14546	653005	22.17%	1.088%
483	21.641	21.601	21.718	VV	20225	1039475	35.29%	1.731%
484	21.729	21.718	21.758	VV	11351	261271	8.87%	0.435%
485	21.774	21.758	21.796	VV	10755	235411	7.99%	0.392%
486	21.832	21.796	21.853	VV	11567	364367	12.37%	0.607%
487	21.857	21.853	21.862	VV	10482	55822	1.89%	0.093%
488	21.878	21.862	21.910	VV	10895	295535	10.03%	0.492%
489	21.917	21.910	21.931	VV	9322	109543	3.72%	0.182%
490	21.967	21.931	21.993	VV	11395	376914	12.79%	0.628%
491	21.999	21.993	22.017	VV	9438	134568	4.57%	0.224%
492	22.045	22.017	22.078	VV	11093	353972	12.02%	0.590%
493	22.082	22.078	22.085	VV	8391	37341	1.27%	0.062%
494	22.112	22.085	22.117	VV	9087	167229	5.68%	0.279%
495	22.148	22.117	22.227	VV	11634	571231	19.39%	0.952%
496	22.234	22.227	22.242	VV	6771	62608	2.13%	0.104%
497	22.255	22.242	22.260	VV	6955	72754	2.47%	0.121%
498	22.267	22.260	22.287	VV	6881	107761	3.66%	0.179%
499	22.290	22.287	22.300	VV	6710	51545	1.75%	0.086%

Sum of corrected areas: 60034730

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOIL

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024

Supervised By :Ankita Jodhani 12/10/2024

FG112024.M Tue Dec 10 03:28:03 2024



CALIBRATION SUMMARY

TPH GC INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: TULL02
 ProjectID: 10th Street & 2nd Avenue
 Lab Code: CHEM Case No.: P5112 SAS No.: P5112 SDG No.: P5112

Calibration Sequence : FG112024			Test : TPH GC	
Concentration (PPM)	Area Count	Reference Factor	File ID	
1700	191243670	112496	FG014888.D	
850	93606491	110125	FG014889.D	
340	38457325	113110	FG014890.D	
170	21518915	126582	FG014891.D	
85	10451945	122964	FG014892.D	
AVG RF : 117055		% RSD : 6.191	AVG RT : 15.0408	

TPH GC CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: TULL02
ProjectID: 10th Street & 2nd Avenue
Lab Code: CHEM Case No.: P5112 SAS No.: P5112 SDG No.: P5112
DataFile: FG014925.D Analyst Name: YP\AJ Analyst Date: 12-06-2024

Conc. (PPM)	Area Count	RF	Average RF	%D
850	92827022	109208	117055	6.704

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
 Data File : FG014925.D
 Signal(s) : FID1A.ch
 Acq On : 06 Dec 2024 10:50
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 50 PPM TRPH STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/09/2024
 Supervised By :Ankita Jodhani 12/09/2024

Integration File: Sample.e
 Quant Time: Dec 06 22:00:25 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
 Quant Title :
 QLast Update : Thu Nov 21 02:41:43 2024
 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...	15.043	5248752	45.484 ug/ml
Target Compounds			
1) N-OCTANE	2.052	5537513	41.764 ug/ml
2) N-DECANE	4.566	6147118	46.066 ug/ml
3) N-DODECANE	6.739	6191371	44.997 ug/ml
4) N-TETRADECANE	8.571	6182364	46.374 ug/ml
5) N-HEXADECANE	10.182	6141739	45.633 ug/ml
6) N-OCTADECANE	11.629	6193567	45.114 ug/ml
7) N-EICOSANE	12.941	6179450	46.631 ug/ml
8) N-DOCOSANE	14.142	5898419	45.717 ug/ml
10) N-TETRACOSANE	15.247	5773619	45.591 ug/ml
11) N-HEXACOSANE	16.269	5621581	45.691 ug/ml
12) N-OCTACOSANE	17.221	5523860	45.659 ug/mlm
13) N-TRIACONTANE	18.109	5615853	46.835 ug/ml
14) N-DOTRIACONTANE	18.941	5470671	47.032 ug/ml
15) N-TETRATRIACONTANE	19.726	5052909	50.097 ug/ml
16) N-HEXATRIACONTANE	20.466	4403166	54.297 ug/ml
17) N-OCTATRIACONTANE	21.214	3785413	54.810 ug/ml
18) N-TETRACONTANE	22.148	3108409	50.388 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014925.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 10:50
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

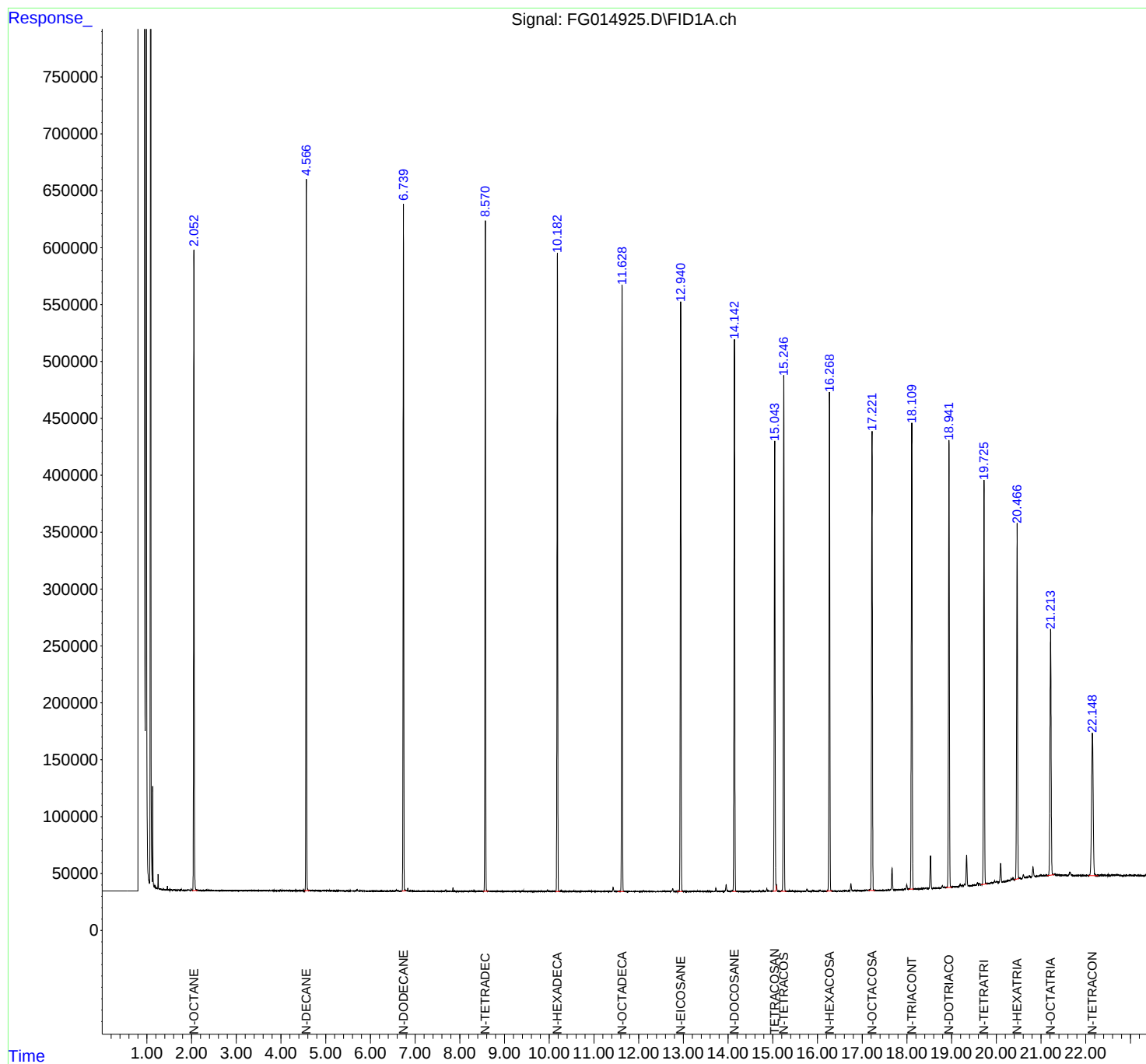
Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: Sample.e
Quant Time: Dec 06 22:00:25 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Instrument :

FID_G

LabSampleId :

50 PPM TRPH STD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12062
Data File : FG014925.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 10:50
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.052	2.021	2.130	BV	563287	5537513	89.41%	5.646%
2	4.566	4.523	4.640	BB	624859	6147118	99.25%	6.267%
3	6.739	6.705	6.801	BB	603125	6191371	99.96%	6.312%
4	8.571	8.523	8.634	BB	587375	6182364	99.82%	6.303%
5	10.182	10.139	10.241	BB	560567	6141739	99.16%	6.262%
6	11.629	11.532	11.676	BB	532199	6193567	100.00%	6.315%
7	12.941	12.859	12.985	BB	516407	6179450	99.77%	6.300%
8	14.142	14.104	14.183	VB	485196	5898419	95.23%	6.014%
9	15.043	15.000	15.074	BV	395681	5248752	84.75%	5.351%
10	15.247	15.173	15.310	BB	453409	5773619	93.22%	5.887%
11	16.269	16.199	16.330	BB	438357	5621581	90.76%	5.732%
12	17.221	17.070	17.290	BB	403741	5529274	89.27%	5.637%
13	18.109	18.035	18.152	BB	409832	5615853	90.67%	5.726%
14	18.941	18.874	19.006	BB	392297	5470671	88.33%	5.578%
15	19.726	19.662	19.796	BB	355071	5052909	81.58%	5.152%
16	20.466	20.400	20.508	BV	312561	4403166	71.09%	4.489%
17	21.214	21.140	21.290	BB	214887	3785413	61.12%	3.859%
18	22.148	22.061	22.276	BV	124966	3108409	50.19%	3.169%
Sum of corrected areas:							98081189	

FG112024.M Fri Dec 06 22:45:52 2024

TPH GC CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: TULL02
ProjectID: 10th Street & 2nd Avenue
Lab Code: CHEM Case No.: P5112 SAS No.: P5112 SDG No.: P5112
DataFile: FG014933.D Analyst Name: YP\AJ Analyst Date: 12-06-2024

Conc. (PPM)	Area Count	RF	Average RF	%D
850	99918765	117551	117055	0.424

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
 Data File : FG014933.D
 Signal(s) : FID1A.ch
 Acq On : 06 Dec 2024 16:34
 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: Dec 06 22:03:33 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
 Quant Title :
 QLast Update : Thu Nov 21 02:41:43 2024
 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...	15.045	5363328	46.477 ug/ml
Target Compounds			
1) N-OCTANE	2.052	5557295	41.913 ug/ml
2) N-DECANE	4.567	6259391	46.908 ug/ml
3) N-DODECANE	6.740	6325658	45.973 ug/ml
4) N-TETRADECANE	8.572	6319581	47.403 ug/ml
5) N-HEXADECANE	10.183	6290476	46.739 ug/ml
6) N-OCTADECANE	11.630	6336260	46.154 ug/ml
7) N-EICOSANE	12.943	6326235	47.739 ug/ml
8) N-DOCOSANE	14.143	6068711	47.037 ug/ml
10) N-TETRACOSANE	15.249	5961064	47.072 ug/ml
11) N-HEXACOSANE	16.271	5853921	47.579 ug/ml
12) N-OCTACOSANE	17.222	5793871	47.891 ug/ml
13) N-TRIACONTANE	18.110	6000605	50.043 ug/ml
14) N-DOTRIACONTANE	18.943	5972357	51.345 ug/ml
15) N-TETRATRIACONTANE	19.727	5684130	56.355 ug/ml
16) N-HEXATRIACONTANE	20.468	5285254	65.174 ug/ml
17) N-OCTATRIACONTANE	21.218	4907541	71.058 ug/ml
18) N-TETRACONTANE	22.157	4976415	80.669 ug/ml

(f)=RT Delta > 1/2 Window

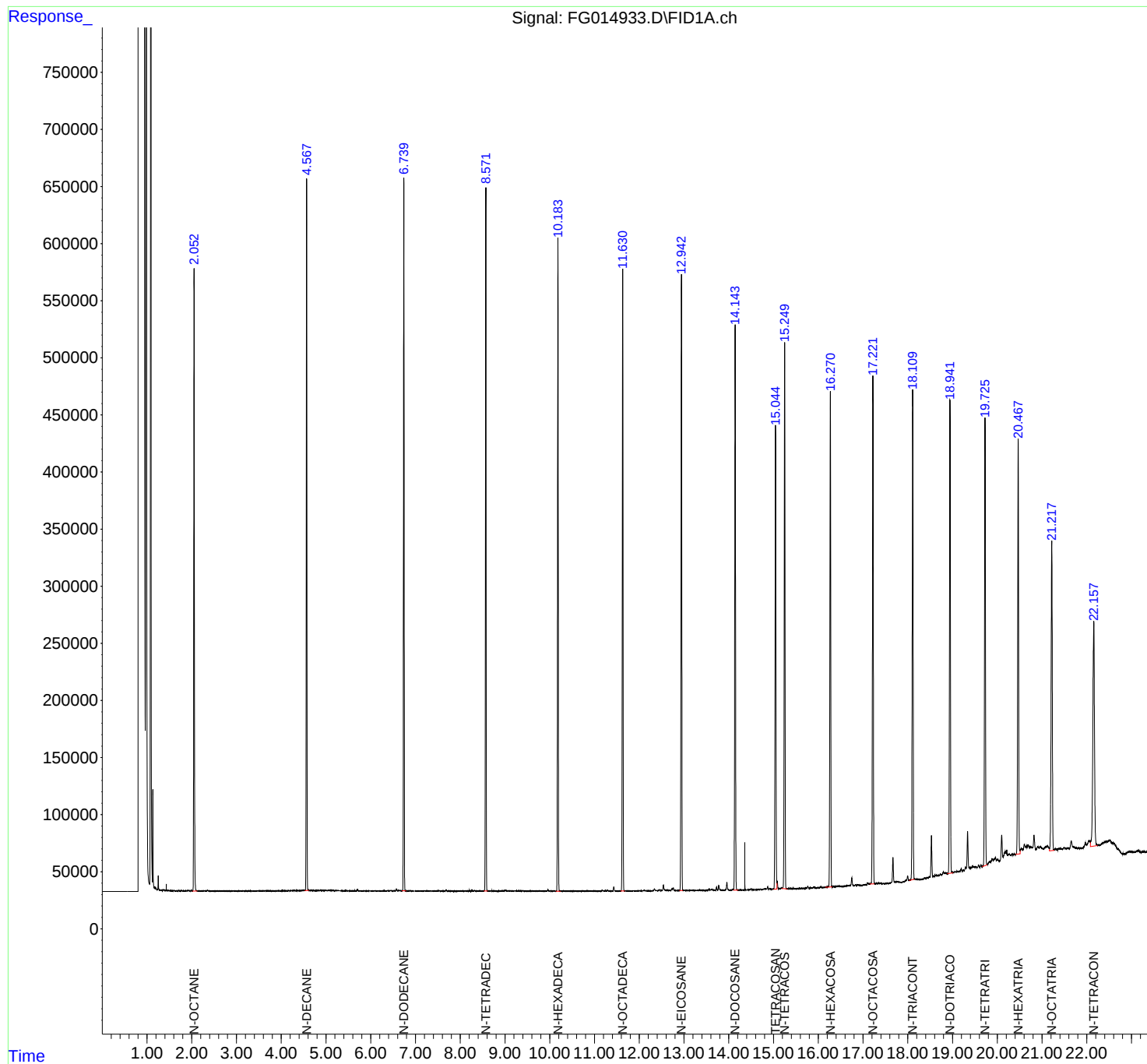
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014933.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:34
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: Dec 06 22:03:33 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
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\FG120624\
Data File : FG014933.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:34
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.052	2.018	2.117	BB	544365	5557295	87.71%	5.278%
2	4.567	4.521	4.620	BB	623969	6259391	98.79%	5.945%
3	6.740	6.696	6.792	BB	623755	6325658	99.83%	6.008%
4	8.572	8.525	8.614	BB	615395	6319581	99.74%	6.003%
5	10.183	10.134	10.237	BB	572698	6290476	99.28%	5.975%
6	11.630	11.581	11.676	BB	544310	6336260	100.00%	6.018%
7	12.943	12.893	12.978	BV	538588	6326235	99.84%	6.009%
8	14.143	14.107	14.214	VB	494486	6068711	95.78%	5.764%
9	15.045	15.000	15.075	BV	405608	5363328	84.65%	5.094%
10	15.249	15.191	15.314	BB	477935	5961064	94.08%	5.662%
11	16.271	16.158	16.316	BB	432879	5853921	92.39%	5.560%
12	17.222	17.147	17.256	BB	443714	5793871	91.44%	5.503%
13	18.110	18.030	18.149	PB	426766	6000605	94.70%	5.700%
14	18.943	18.881	19.017	BB	412001	5972357	94.26%	5.673%
15	19.727	19.657	19.765	PV	391374	5684130	89.71%	5.399%
16	20.468	20.401	20.512	BV	363388	5285254	83.41%	5.020%
17	21.218	21.166	21.268	VV	270756	4907541	77.45%	4.661%
18	22.157	22.081	22.241	VV	196720	4976415	78.54%	4.727%
Sum of corrected areas:						105282091		

FG112024.M Fri Dec 06 22:52:31 2024

TPH GC CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: TULL02
ProjectID: 10th Street & 2nd Avenue
Lab Code: CHEM Case No.: P5112 SAS No.: P5112 SDG No.: P5112
DataFile: FG014936.D Analyst Name: YP\AJ Analyst Date: 12-09-2024

Conc. (PPM)	Area Count	RF	Average RF	%D
850	113494485	133523	117055	14.069

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
 Data File : FG014936.D
 Signal(s) : FID1A.ch
 Acq On : 09 Dec 2024 09:28
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 50 PPM TRPH STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/10/2024
 Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
 Quant Time: Dec 10 01:41:30 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
 Quant Title :
 QLast Update : Thu Nov 21 02:41:43 2024
 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...	15.046	6360424	55.117 ug/ml
Target Compounds			
1) N-OCTANE	2.050	6135115	46.271 ug/ml
2) N-DECANE	4.567	7347348	55.061 ug/ml
3) N-DODECANE	6.740	7452272	54.161 ug/ml
4) N-TETRADECANE	8.572	7452156	55.899 ug/ml
5) N-HEXADECANE	10.184	7413040	55.079 ug/ml
6) N-OCTADECANE	11.632	7474722	54.446 ug/ml
7) N-EICOSANE	12.944	7470168	56.371 ug/ml
8) N-DOCOSANE	14.145	7148572	55.407 ug/ml
10) N-TETRACOSANE	15.251	7024528	55.469 ug/ml
11) N-HEXACOSANE	16.273	6883332	55.946 ug/ml
12) N-OCTACOSANE	17.223	6813937	56.323 ug/ml
13) N-TRIACONTANE	18.112	6997720	58.359 ug/ml
14) N-DOTRIACONTANE	18.945	6885322	59.194 ug/ml
15) N-TETRATRIACONTANE	19.729	6377598	63.230 ug/ml
16) N-HEXATRIACONTANE	20.468	5675393	69.985 ug/ml
17) N-OCTATRIACONTANE	21.217	4842991	70.123 ug/mlm
18) N-TETRACONTANE	22.155	4100271	66.466 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
Data File : FG014936.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 09:28
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

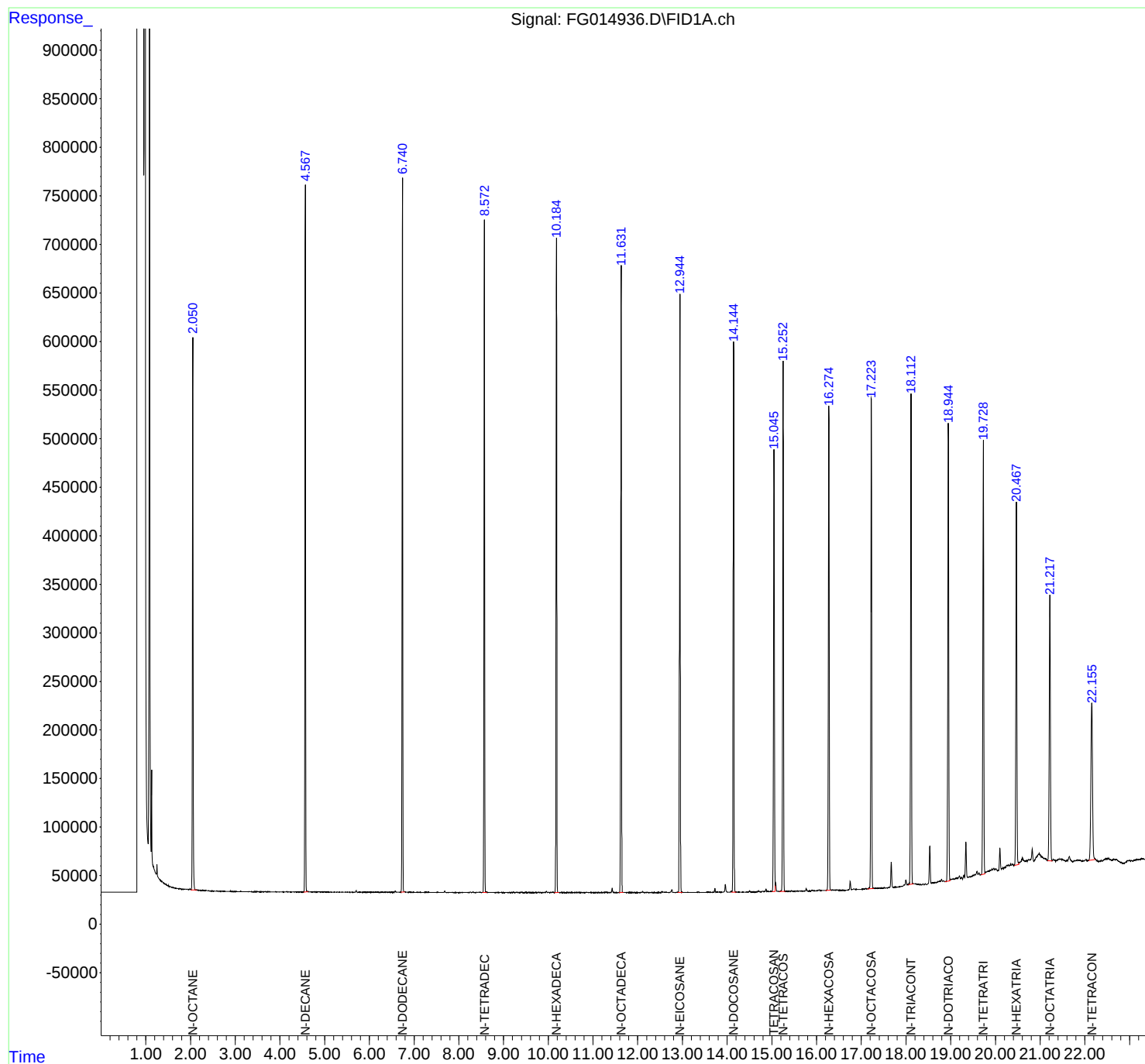
Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
Quant Time: Dec 10 01:41:30 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Instrument :
FID_G
LabSampleId :
50 PPM TRPH STD
Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12092
Data File : FG014936.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 09:28
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.050	2.015	2.135	BB	568946	6135115	82.08%	5.120%
2	4.567	4.525	4.627	BB	728281	7347348	98.30%	6.132%
3	6.740	6.701	6.794	BB	735760	7452272	99.70%	6.220%
4	8.572	8.524	8.624	BB	692311	7452156	99.70%	6.220%
5	10.184	10.136	10.239	BB	675013	7413040	99.17%	6.187%
6	11.632	11.583	11.685	BB	644823	7474722	100.00%	6.239%
7	12.944	12.895	12.998	BB	614638	7470168	99.94%	6.235%
8	14.145	14.106	14.205	VB	565858	7148572	95.64%	5.966%
9	15.046	15.000	15.076	BV	454302	6360424	85.09%	5.309%
10	15.251	15.165	15.303	BB	544229	7024528	93.98%	5.863%
11	16.273	16.199	16.316	BB	497526	6883332	92.09%	5.745%
12	17.223	17.134	17.283	BB	505355	6813937	91.16%	5.687%
13	18.112	18.052	18.167	BB	503083	6997720	93.62%	5.840%
14	18.945	18.871	18.982	BV	470089	6885322	92.11%	5.747%
15	19.729	19.674	19.764	PV	444987	6377598	85.32%	5.323%
16	20.468	20.423	20.521	PV	372384	5675393	75.93%	4.737%
17	21.217	21.139	21.267	BV	272719	4803070	64.26%	4.009%
18	22.155	22.084	22.234	PV	161611	4100271	54.86%	3.422%
Sum of corrected areas:						119814987		

FG112024.M Tue Dec 10 01:56:40 2024

TPH GC CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: TULL02
ProjectID: 10th Street & 2nd Avenue
Lab Code: CHEM Case No.: P5112 SAS No.: P5112 SDG No.: P5112
DataFile: FG014940.D Analyst Name: YP\AJ Analyst Date: 12-09-2024

Conc. (PPM)	Area Count	RF	Average RF	%D
850	94843821	111581	117055	4.676

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
 Data File : FG014940.D
 Signal(s) : FID1A.ch
 Acq On : 09 Dec 2024 11:29
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 50 PPM TRPH STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/10/2024
 Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
 Quant Time: Dec 10 01:43:04 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
 Quant Title :
 QLast Update : Thu Nov 21 02:41:43 2024
 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...	15.043	5181875	44.904 ug/mlm
Target Compounds			
1) N-OCTANE	2.052	4924988	37.144 ug/ml
2) N-DECANE	4.567	5911782	44.303 ug/ml
3) N-DODECANE	6.739	6000319	43.609 ug/ml
4) N-TETRADECANE	8.571	5999183	45.000 ug/ml
5) N-HEXADECANE	10.184	5969196	44.351 ug/ml
6) N-OCTADECANE	11.630	6033358	43.947 ug/ml
7) N-EICOSANE	12.943	6055105	45.693 ug/ml
8) N-DOCOSANE	14.142	5820440	45.113 ug/ml
10) N-TETRACOSANE	15.249	5751935	45.420 ug/ml
11) N-HEXACOSANE	16.271	5676308	46.135 ug/ml
12) N-OCTACOSANE	17.222	5668476	46.855 ug/ml
13) N-TRIACONTANE	18.111	5881145	49.047 ug/ml
14) N-DOTRIACONTANE	18.945	5828611	50.110 ug/ml
15) N-TETRATRIACONTANE	19.727	5505436	54.583 ug/ml
16) N-HEXATRIACONTANE	20.467	4982262	61.438 ug/ml
17) N-OCTATRIACONTANE	21.216	4575596	66.252 ug/ml
18) N-TETRACONTANE	22.150	4259681	69.050 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
Data File : FG014940.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 11:29
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

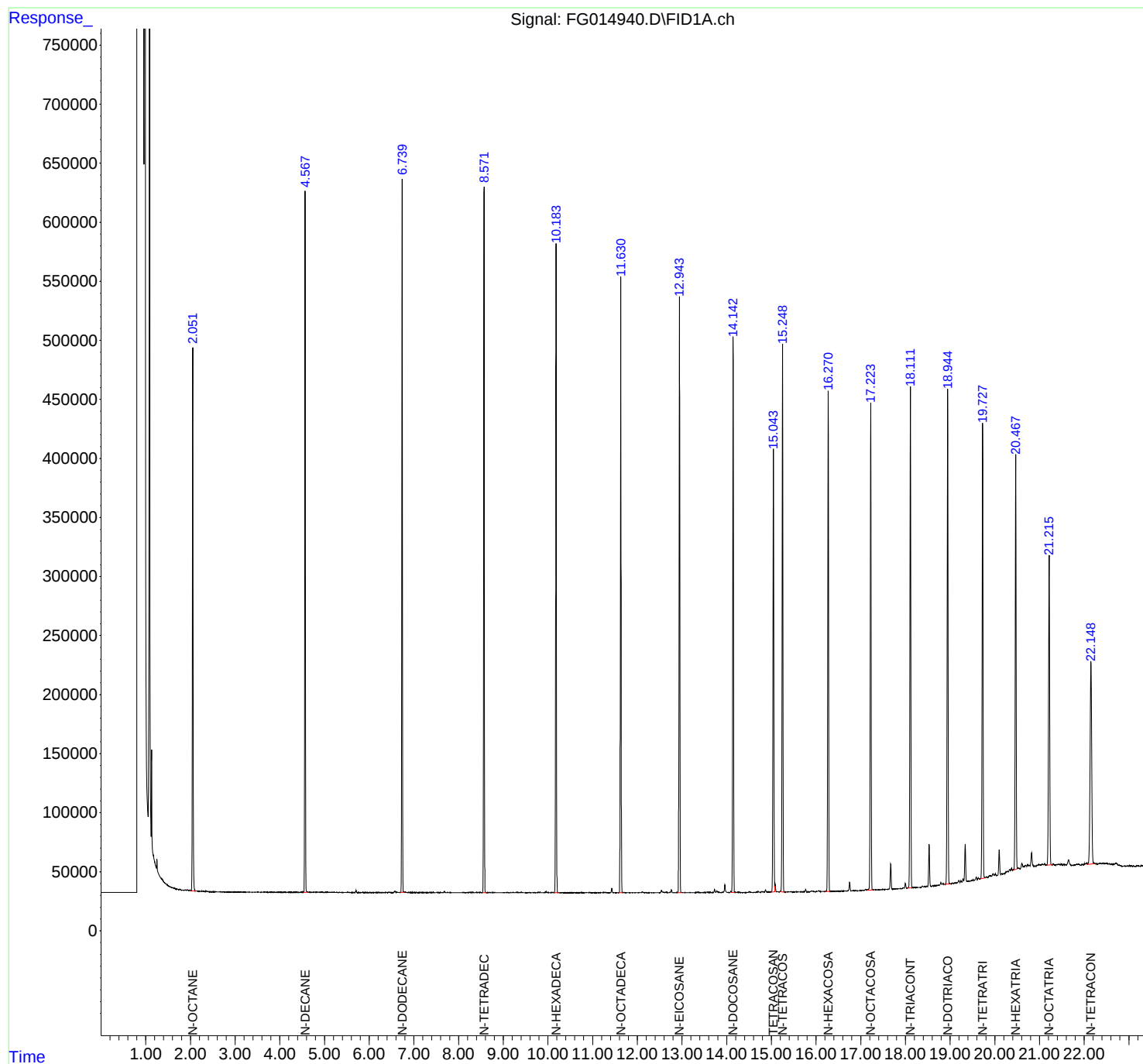
Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
Quant Time: Dec 10 01:43:04 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



rters

Instrument :
FID_G
LabSampleId :
50 PPM TRPH STD
Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12092
Data File : FG014940.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 11:29
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.052	2.015	2.135	BB	460018	4924988	81.34%	4.924%
2	4.567	4.532	4.630	BB	594542	5911782	97.63%	5.910%
3	6.739	6.705	6.796	BB	601811	6000319	99.10%	5.999%
4	8.571	8.538	8.625	BB	597178	5999183	99.08%	5.998%
5	10.184	10.134	10.231	BB	549977	5969196	98.58%	5.968%
6	11.630	11.581	11.675	BB	521834	6033358	99.64%	6.032%
7	12.943	12.901	13.001	BB	504207	6055105	100.00%	6.053%
8	14.142	14.106	14.185	VB	470988	5820440	96.12%	5.819%
9	15.044	15.000	15.075	BV	374925	5183554	85.61%	5.182%
10	15.249	15.184	15.305	BB	464147	5751935	94.99%	5.750%
11	16.271	16.200	16.320	BB	422972	5676308	93.74%	5.675%
12	17.222	17.138	17.288	BB	413034	5668476	93.61%	5.667%
13	18.111	18.030	18.152	PB	424231	5881145	97.13%	5.880%
14	18.945	18.880	19.004	BB	418215	5828611	96.26%	5.827%
15	19.727	19.661	19.788	BV	385521	5505436	90.92%	5.504%
16	20.467	20.400	20.508	BV	350770	4982262	82.28%	4.981%
17	21.216	21.162	21.281	PV	261969	4575596	75.57%	4.574%
18	22.150	22.067	22.251	VV	170081	4259681	70.35%	4.259%
Sum of corrected areas:						100027375		

FG112024.M Tue Dec 10 01:59:27 2024

Analytical Sequence

Client: Tully Construction Co., Inc.

SDG No.: P5112

Project: 10th Street & 2nd Avenue

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 15.0408					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	LBLK01	06 Dec 2024 10:21	FG014924.D	15.040	
50 PPM TRPH STD	50 PPM TRPH STD	06 Dec 2024 10:50	FG014925.D	15.043	
PB165424BL	PB165424BL	06 Dec 2024 13:44	FG014927.D	15.043	
PB165424BS	PB165424BS	06 Dec 2024 14:12	FG014928.D	15.039	
10TH-ST-SOILMS	P5112-01MS	06 Dec 2024 15:09	FG014930.D	15.042	
10TH-ST-SOILMSD	P5112-01MSD	06 Dec 2024 15:37	FG014931.D	15.043	
PIBLK02	LBLK02	06 Dec 2024 16:05	FG014932.D	15.042	
50 PPM TRPH STD	50 PPM TRPH STD	06 Dec 2024 16:34	FG014933.D	15.045	
PIBLK03	LBLK03	09 Dec 2024 08:59	FG014935.D	15.041	
50 PPM TRPH STD	50 PPM TRPH STD	09 Dec 2024 09:28	FG014936.D	15.046	
10TH-ST-SOIL	P5112-01	09 Dec 2024 10:32	FG014938.D	15.042	
PIBLK04	LBLK04	09 Dec 2024 11:00	FG014939.D	15.042	
50 PPM TRPH STD	50 PPM TRPH STD	09 Dec 2024 11:29	FG014940.D	15.044	



QC SAMPLE DATA

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:		
Project:	10th Street & 2nd Avenue		Date Received:		
Client Sample ID:	PB165424BL		SDG No.:	P5112	
Lab Sample ID:	PB165424BL		Matrix:	SOIL	
Analytical Method:	8015D TPH		% Solid:	100	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	1	mL
Soil Aliquot Vol:		uL	Test:	TPH GC	
Extraction Type:			Injection Volume :		
GPC Factor :		PH :			
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG014927.D	1	12/06/24 09:01	12/06/24 13:44	PB165424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	0.32	U	0.32	2.83	mg/Kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	16.0		37 - 130	80%	SPK: 20

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014927.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 13:44
Operator : YP\AJ
Sample : PB165424BL
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB165424BL

Integration File: Sample.e
Quant Time: Dec 06 22:01:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
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...	15.043	1847179	16.007 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

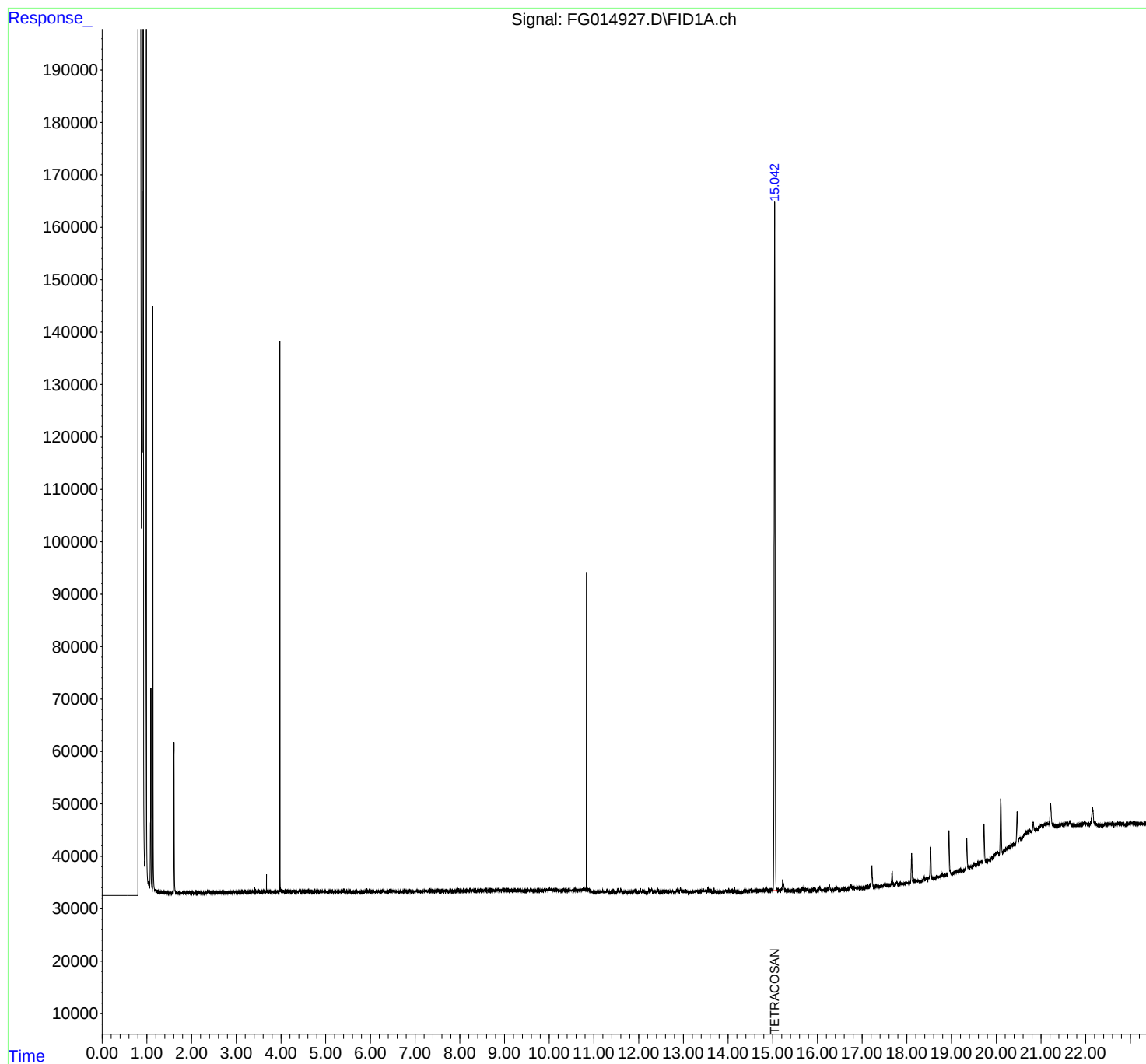
(m)=manual int.

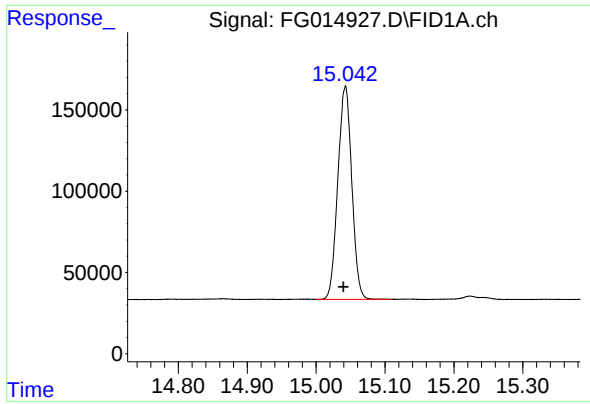
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014927.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 13:44
Operator : YP\AJ
Sample : PB165424BL
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB165424BL

Integration File: Sample.e
Quant Time: Dec 06 22:01:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.043 min
Delta R.T.: 0.003 min
Response: 1847179
Conc: 16.01 ug/ml

Instrument :
FID_G
ClientSampleId :
PB165424BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014927.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 13:44
Sample : PB165424BL
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.043	15.000	15.110	BBA	131200	1847179	100.00%	100.000%
Sum of corrected areas:						1847179		

FG112024.M Fri Dec 06 22:48:41 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	12/06/24	
Project:	10th Street & 2nd Avenue		Date Received:	12/06/24	
Client Sample ID:	PIBLK-FG014924.D		SDG No.:	P5112	
Lab Sample ID:	I.BLK-FG014924.D		Matrix:	Water	
Analytical Method:	8015D TPH		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1	mL
Soil Aliquot Vol:		uL	Test:	TPH GC	
Extraction Type:			Injection Volume :		
GPC Factor :		PH :			
Prep Method :	SW3510				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG014924.D	1		12/06/24	FG120624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
PHC	Petroleum Hydrocarbons	0.0090	U	0.0090	0.085	mg/L
SURROGATES						
16416-32-3	TETRACOSANE-d50	15.9		29 - 130	79%	SPK: 20

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014924.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 10:21
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: Dec 06 22:00:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
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...	15.040	1831630	15.872 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

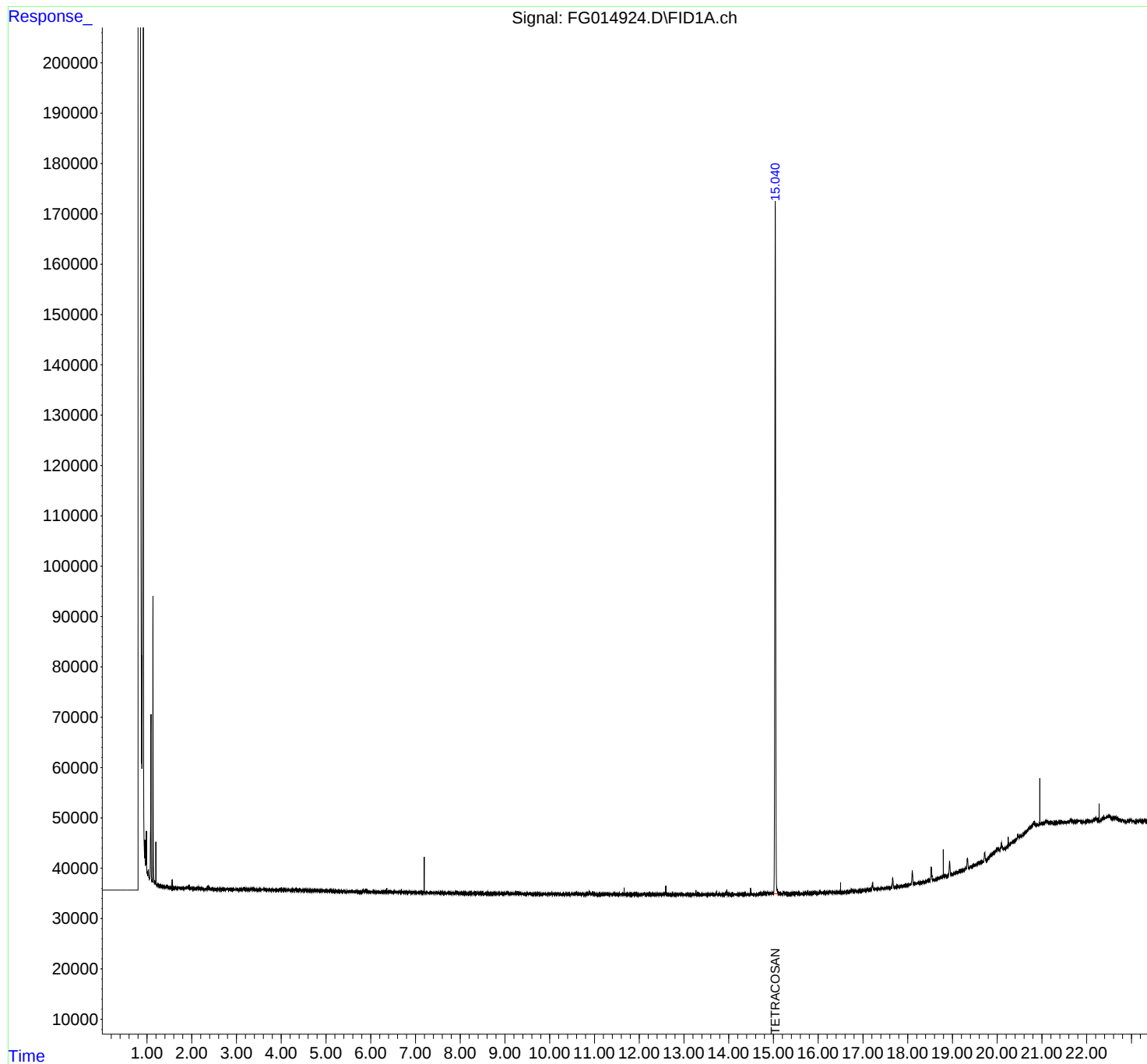
(m)=manual int.

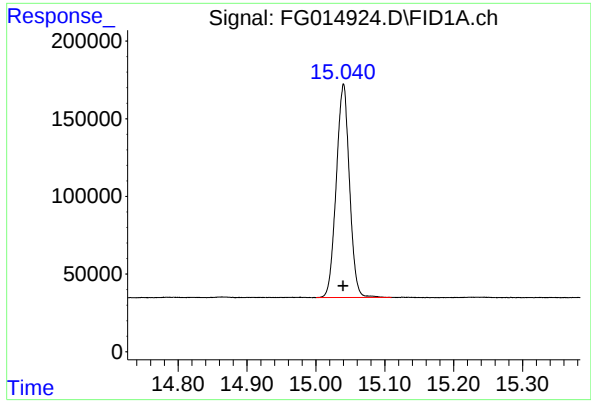
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014924.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 10:21
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: Sample.e
Quant Time: Dec 06 22:00:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.040 min
Delta R.T.: 0.000 min
Response: 1831630
Conc: 15.87 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014924.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 10:21
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.040	15.000	15.110	BBA	137563	1831630	100.00%	100.000%
Sum of corrected areas:						1831630		

FG112024.M Fri Dec 06 22:39:12 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	12/06/24	
Project:	10th Street & 2nd Avenue		Date Received:	12/06/24	
Client Sample ID:	PIBLK-FG014932.D		SDG No.:	P5112	
Lab Sample ID:	I.BLK-FG014932.D		Matrix:	Water	
Analytical Method:	8015D TPH		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	1	mL
Soil Aliquot Vol:		uL	Test:	TPH GC	
Extraction Type:			Injection Volume :		
GPC Factor :		PH :			
Prep Method :	SW3510				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG014932.D	1		12/06/24	FG120624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
PHC	Petroleum Hydrocarbons	0.0090	U	0.0090	0.085	mg/L
SURROGATES						
16416-32-3	TETRACOSANE-d50	18.4		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_G\Data\FG120624\
Data File : FG014932.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:05
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: Dec 06 22:03:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
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...	15.041	2122482	18.393 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

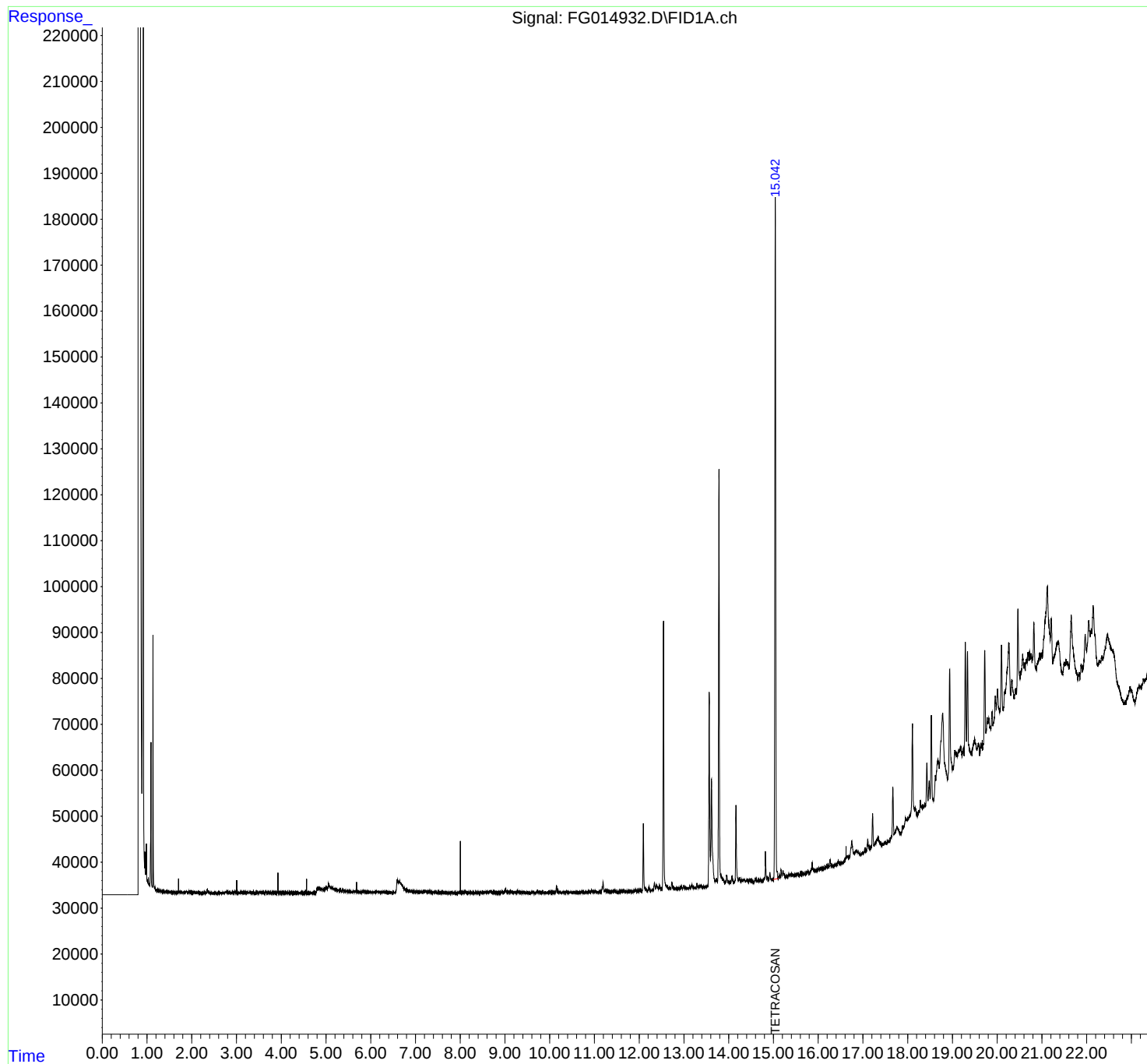
(m)=manual int.

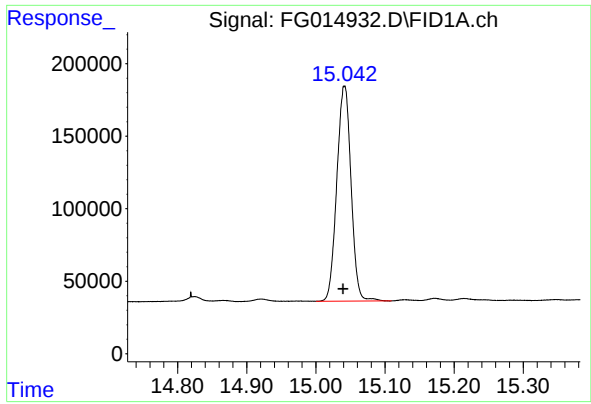
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014932.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:05
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: Sample.e
Quant Time: Dec 06 22:03:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.041 min
Delta R.T.: 0.002 min
Response: 2122482
Conc: 18.39 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014932.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:05
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.042	15.000	15.110	BBA	148504	2122482	100.00%	100.000%
Sum of corrected areas:						2122482		

FG112024.M Fri Dec 06 22:50:43 2024

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	12/09/24
Project:	10th Street & 2nd Avenue	Date Received:	12/09/24
Client Sample ID:	PIBLK-FG014935.D	SDG No.:	P5112
Lab Sample ID:	I.BLK-FG014935.D	Matrix:	Water
Analytical Method:	8015D TPH	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TPH GC
GPC Factor :		Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG014935.D	1		12/09/24	FG120924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
PHC	Petroleum Hydrocarbons	0.0090	U	0.0090	0.085	mg/L
SURROGATES						
16416-32-3	TETRACOSANE-d50	16.3		29 - 130	82%	SPK: 20

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
Data File : FG014935.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 08:59
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Dec 10 01:41:11 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
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...	15.041	1880598	16.297 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

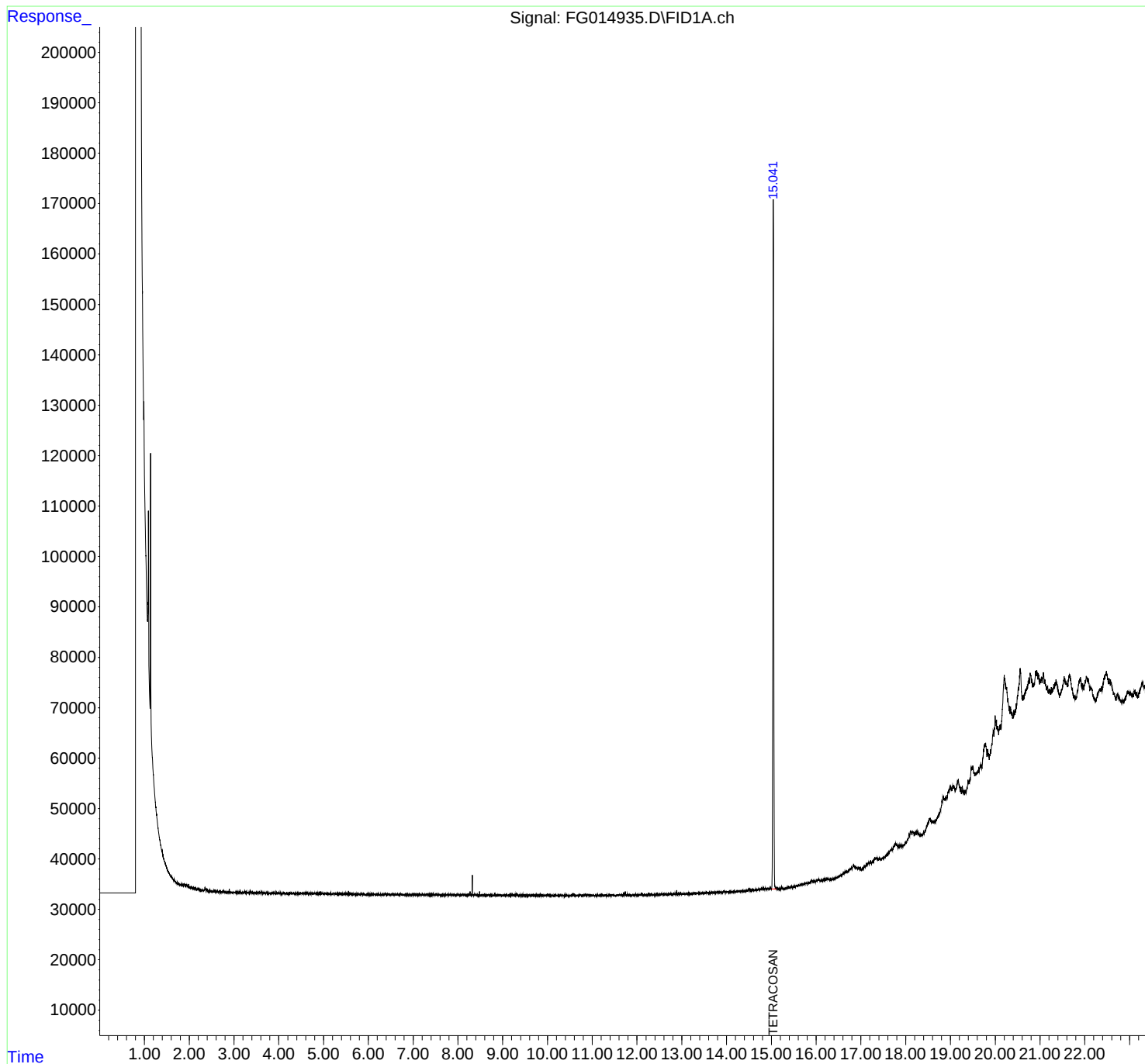
(m)=manual int.

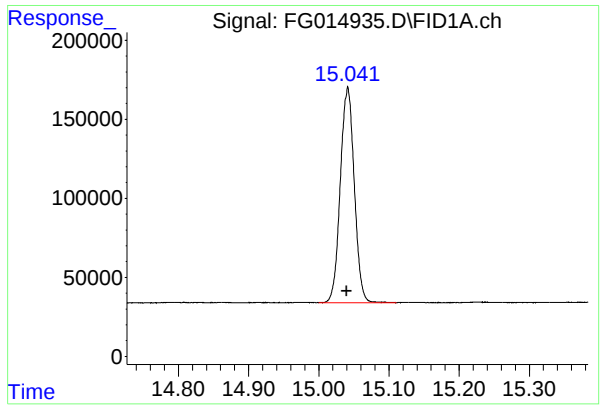
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
Data File : FG014935.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 08:59
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Dec 10 01:41:11 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.041 min
Delta R.T.: 0.002 min
Response: 1880598
Conc: 16.30 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
Data File : FG014935.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 08:59
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.041	15.000	15.110	BBA	136633	1880598	100.00%	100.000%
Sum of corrected areas:						1880598		

FG112024.M Tue Dec 10 01:54:15 2024

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	12/09/24
Project:	10th Street & 2nd Avenue	Date Received:	12/09/24
Client Sample ID:	PIBLK-FG014939.D	SDG No.:	P5112
Lab Sample ID:	I.BLK-FG014939.D	Matrix:	Water
Analytical Method:	8015D TPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	1 mL
Extraction Type:		Test:	TPH GC
GPC Factor :	PH :	Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG014939.D	1		12/09/24	FG120924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
PHC	Petroleum Hydrocarbons	0.0090	U	0.0090	0.085	mg/L
SURROGATES						
16416-32-3	TETRACOSANE-d50	16.9		29 - 130	85%	SPK: 20

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
Data File : FG014939.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 11:00
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Dec 10 01:42:43 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
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...	15.042	1955700	16.947 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

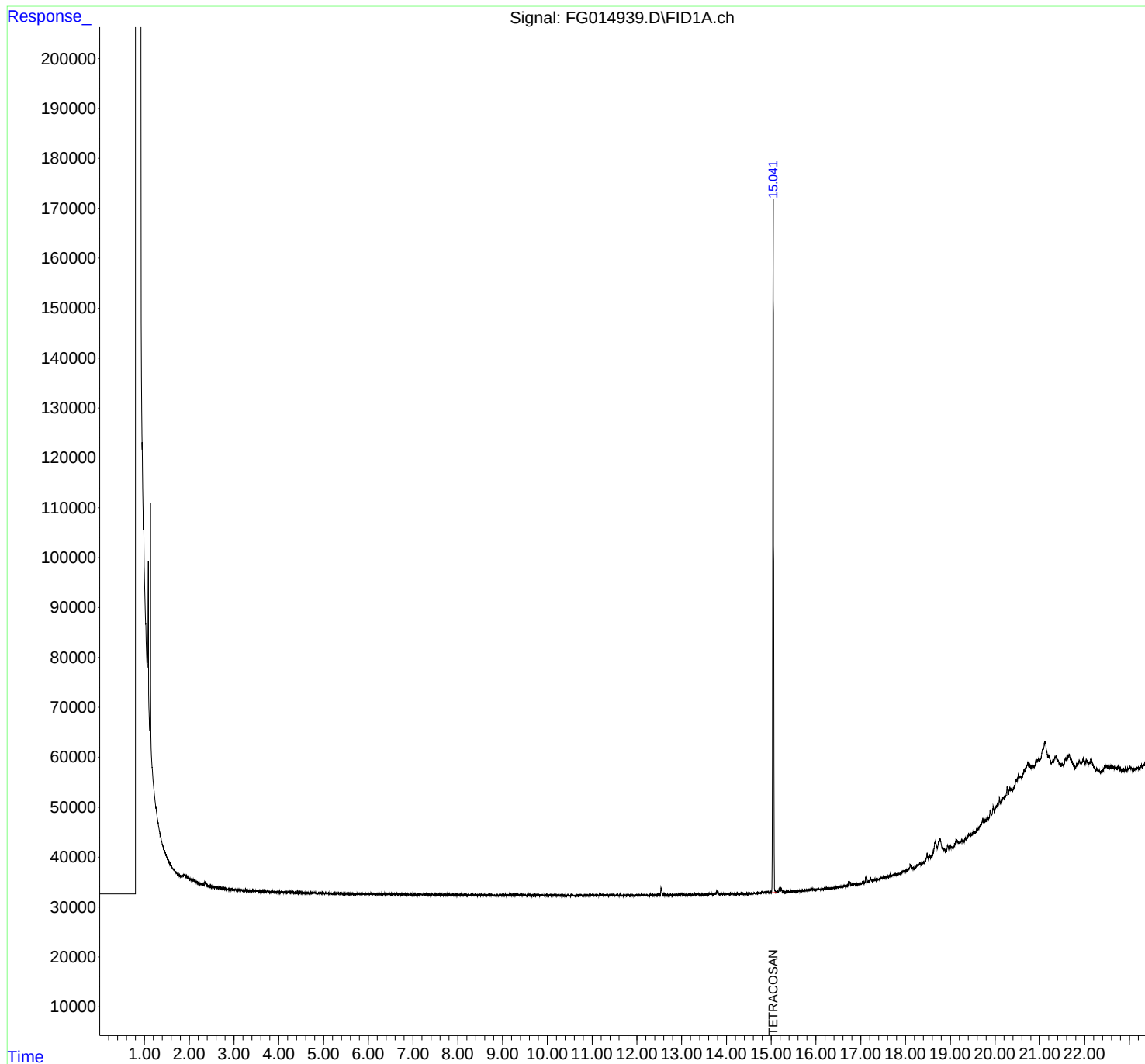
(m)=manual int.

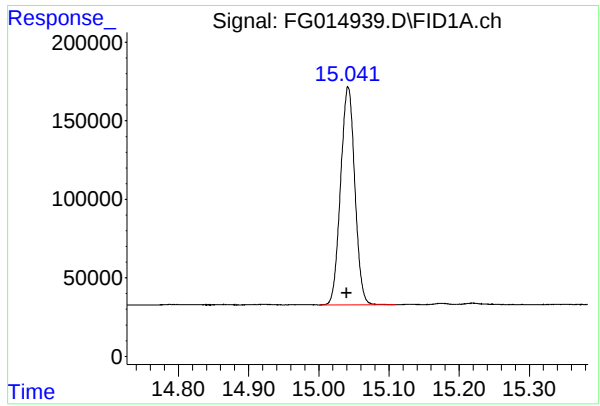
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
Data File : FG014939.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 11:00
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Dec 10 01:42:43 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.042 min
Delta R.T.: 0.002 min
Response: 1955700
Conc: 16.95 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120924\
Data File : FG014939.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 11:00
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	15.042	15.000	15.110	BBA	138444	1955700	100.00%	100.000%
Sum of corrected areas:						1955700		

FG112024.M Tue Dec 10 01:58:09 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:		
Project:	10th Street & 2nd Avenue		Date Received:		
Client Sample ID:	PB165424BS		SDG No.:	P5112	
Lab Sample ID:	PB165424BS		Matrix:	SOIL	
Analytical Method:	8015D TPH		% Solid:	100	Decanted:
Sample Wt/Vol:	30.01	Units: g	Final Vol:	1	mL
Soil Aliquot Vol:		uL	Test:	TPH GC	
Extraction Type:			Injection Volume :		
GPC Factor :		PH :			
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG014928.D	1	12/06/24 09:01	12/06/24 14:12	PB165424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	8.70		0.32	2.83	mg/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\FG120624\
 Data File : FG014928.D
 Signal(s) : FID1A.ch
 Acq On : 06 Dec 2024 14:12
 Operator : YP\AJ
 Sample : PB165424BS
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 PB165424BS

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/09/2024
 Supervised By :Ankita Jodhani 12/09/2024

Integration File: Sample.e
 Quant Time: Dec 06 22:01:35 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
 Quant Title :
 QLast Update : Thu Nov 21 02:41:43 2024
 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...	15.039	2025872	17.555 ug/ml
Target Compounds			
1) N-OCTANE	2.055	1962095	14.798 ug/ml
2) N-DECANE	4.564	2282094	17.102 ug/ml
3) N-DODECANE	6.735	2318723	16.852 ug/ml
4) N-TETRADECANE	8.567	2313625	17.355 ug/ml
5) N-HEXADECANE	10.179	2301637	17.101 ug/ml
6) N-OCTADECANE	11.625	2315128	16.864 ug/ml
7) N-EICOSANE	12.938	2308414	17.420 ug/ml
8) N-DOCOSANE	14.138	2200904	17.059 ug/ml
10) N-TETRACOSANE	15.243	2147090	16.954 ug/ml
11) N-HEXACOSANE	16.265	2078664	16.895 ug/ml
12) N-OCTACOSANE	17.218	2001294	16.542 ug/ml
13) N-TRIACONTANE	18.104	1932488	16.116 ug/ml
14) N-DOTRIACONTANE	18.939	1699055	14.607 ug/ml
15) N-TETRATRIACONTANE	19.722	1256235	12.455 ug/ml
16) N-HEXATRIACONTANE	20.462	754106	9.299 ug/ml
17) N-OCTATRIACONTANE	21.210	426900	6.181 ug/ml
18) N-TETRACONTANE	22.145	249084	4.038 ug/mlm

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014928.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 14:12
Operator : YP\AJ
Sample : PB165424BS
Misc :
ALS Vial : 6 Sample Multiplier: 1

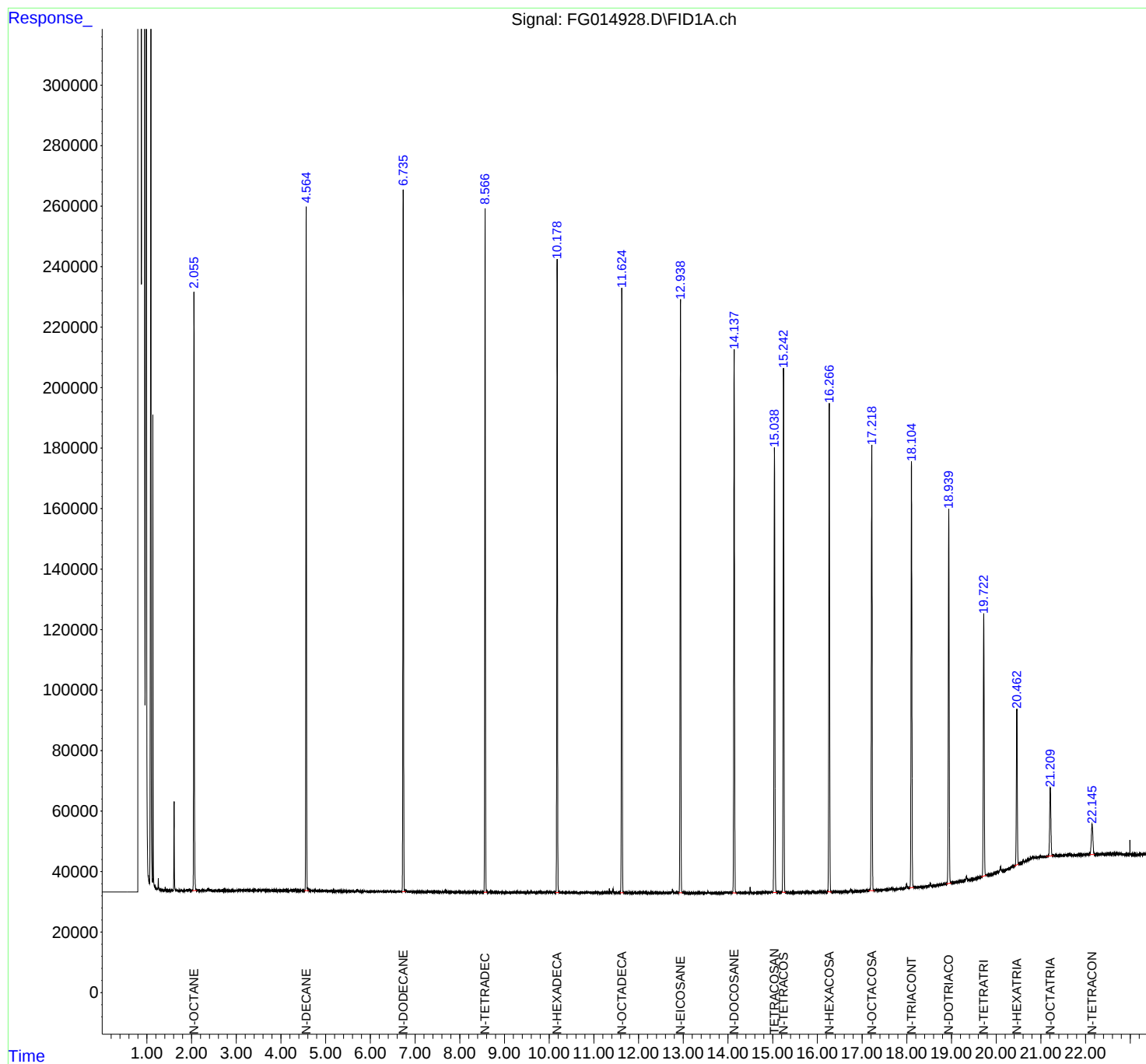
Instrument :
FID_G
ClientSampleId :
PB165424BS

Manual Integrations
APPROVED

Reviewed By : Yogesh Patel 12/09/2024
Supervised By : Ankita Jodhani 12/09/2024

Integration File: Sample.e
Quant Time: Dec 06 22:01:35 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Instrument :

FID_G

ClientSampleId :

PB165424BS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12062
Data File : FG014928.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 14:12
Sample : PB165424BS
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	2.055	2.011	2.119	BB	197932	1962095	84.62%	6.023%
2	4.564	4.524	4.628	BB	226051	2282094	98.42%	7.005%
3	6.735	6.705	6.792	BB	232155	2318723	100.00%	7.118%
4	8.567	8.532	8.617	BB	225736	2313625	99.78%	7.102%
5	10.179	10.135	10.226	BB	208822	2301637	99.26%	7.065%
6	11.625	11.584	11.670	BB	199352	2315128	99.84%	7.107%
7	12.938	12.894	12.980	BB	196060	2308414	99.56%	7.086%
8	14.138	14.102	14.190	BB	179813	2200904	94.92%	6.756%
9	15.039	15.000	15.102	BB	146671	2025872	87.37%	6.219%
10	15.243	15.206	15.295	BB	173037	2147090	92.60%	6.591%
11	16.265	16.224	16.316	BB	160953	2078664	89.65%	6.381%
12	17.218	17.147	17.278	BB	146855	2001294	86.31%	6.143%
13	18.104	18.051	18.159	BB	140686	1932488	83.34%	5.932%
14	18.939	18.880	18.996	BB	123640	1699055	73.28%	5.216%
15	19.722	19.665	19.780	BB	86587	1256235	54.18%	3.856%
16	20.462	20.407	20.504	BB	51443	754106	32.52%	2.315%
17	21.210	21.121	21.274	BB	22570	426900	18.41%	1.310%
18	22.144	22.069	22.236	BB	9958	251825	10.86%	0.773%
Sum of corrected areas:						32576149		

FG112024.M Fri Dec 06 22:49:46 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	12/05/24	
Project:	10th Street & 2nd Avenue		Date Received:	12/05/24	
Client Sample ID:	10TH-ST-SOILMS		SDG No.:	P5112	
Lab Sample ID:	P5112-01MS		Matrix:	SOIL	
Analytical Method:	8015D TPH		% Solid:	91.4	Decanted:
Sample Wt/Vol:	30.02	Units: g	Final Vol:	1	mL
Soil Aliquot Vol:		uL	Test:	TPH GC	
Extraction Type:			Injection Volume :		
GPC Factor :		PH :			
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG014930.D	1	12/06/24 09:01	12/06/24 15:09	PB165424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	77.9	E	0.35	3.10	mg/Kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	13.7		37 - 130	68%	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\FG120624\
 Data File : FG014930.D
 Signal(s) : FID1A.ch
 Acq On : 06 Dec 2024 15:09
 Operator : YP\AJ
 Sample : P5112-01MS
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 10TH-ST-SOILMS

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/09/2024
 Supervised By :Ankita Jodhani 12/09/2024

Integration File: Sample.e
 Quant Time: Dec 06 22:02:21 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
 Quant Title :
 QLast Update : Thu Nov 21 02:41:43 2024
 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...	15.042	1578811	13.681 ug/mlm
Target Compounds			
1) N-OCTANE	2.054	1574349	11.874 ug/ml
2) N-DECANE	4.565	1910413	14.317 ug/ml
3) N-DODECANE	6.736	2020045	14.681 ug/ml
4) N-TETRADECANE	8.568	2085211	15.641 ug/ml
5) N-HEXADECANE	10.180	2470900	18.359 ug/ml
6) N-OCTADECANE	11.626	2249008	16.382 ug/ml
7) N-EICOSANE	12.941	2873231	21.682 ug/ml
8) N-DOCOSANE	14.141	3207144	24.858 ug/ml
10) N-TETRACOSANE	15.225	6382646	50.401 ug/mlm
11) N-HEXACOSANE	16.269	2304819	18.733 ug/ml
12) N-OCTACOSANE	17.221	3154655	26.076 ug/ml
13) N-TRIACONTANE	18.110	2781438	23.196 ug/ml
14) N-DOTRIACONTANE	18.941	2247174	19.319 ug/ml
15) N-TETRATRIACONTANE	19.725	1815274	17.997 ug/ml
16) N-HEXATRIACONTANE	20.467	1446129	17.833 ug/ml
17) N-OCTATRIACONTANE	21.216	1586558	22.972 ug/ml
18) N-TETRACONTANE	22.153	1899210	30.787 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014930.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 15:09
Operator : YP\AJ
Sample : P5112-01MS
Misc :
ALS Vial : 8 Sample Multiplier: 1

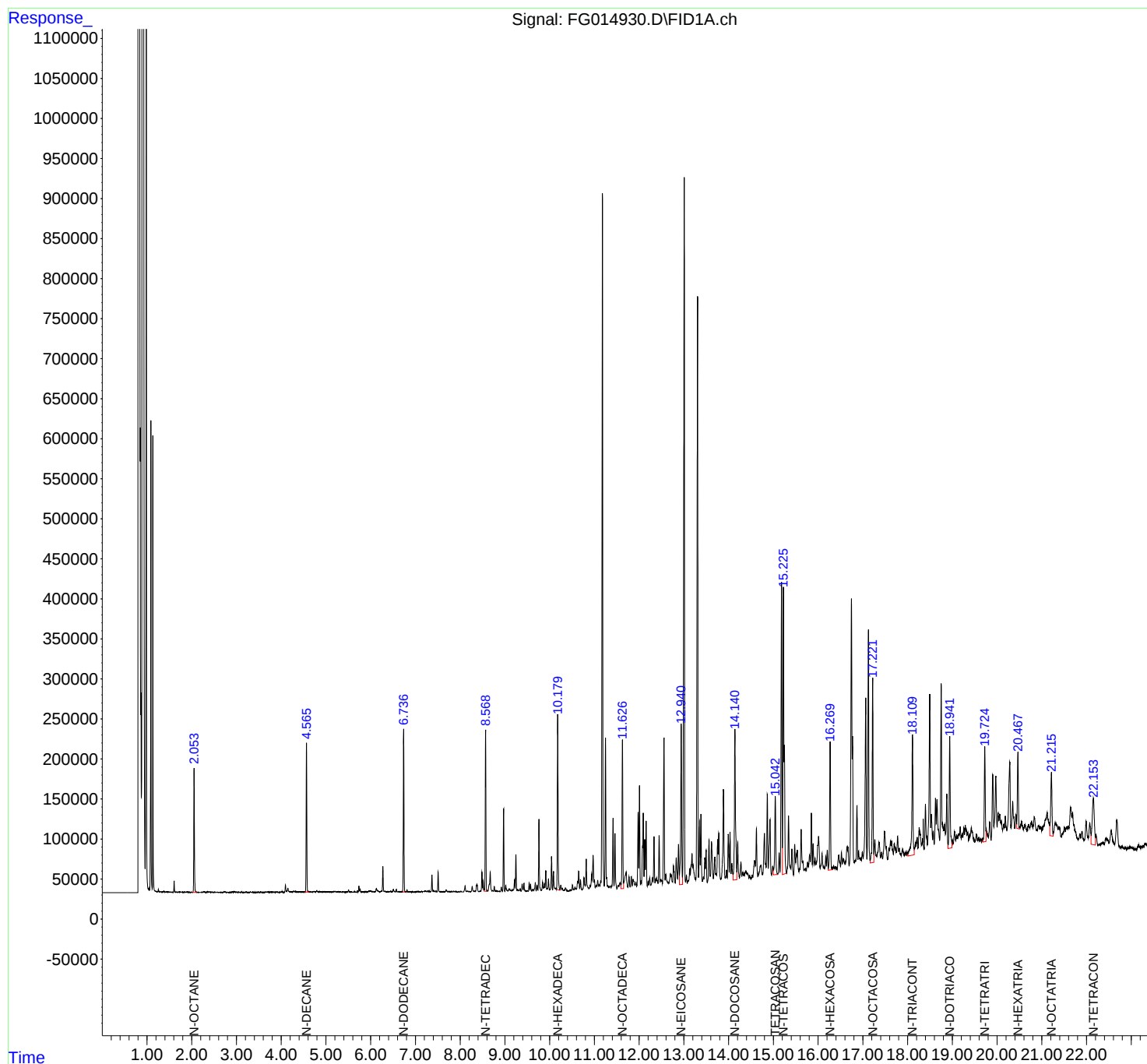
Instrument :
FID_G
ClientSampleId :
10TH-ST-SOILMS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: Sample.e
Quant Time: Dec 06 22:02:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOILMS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12062
Data File : FG014930.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 15:09
Sample : P5112-01MS
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.927	1.900	1.930	BV	78	16	0.00%	0.000%
2	1.944	1.930	1.978	VV	190	2298	0.02%	0.001%
3	1.993	1.978	2.021	PV	407	4045	0.04%	0.002%
4	2.054	2.021	2.114	PV	155310	1579064	14.16%	0.627%
5	2.121	2.114	2.141	VV	233	2556	0.02%	0.001%
6	2.149	2.141	2.162	VV	185	1646	0.01%	0.001%
7	2.167	2.162	2.175	VV	116	572	0.01%	0.000%
8	2.191	2.175	2.197	VV	116	737	0.01%	0.000%
9	2.201	2.197	2.208	VV	99	562	0.01%	0.000%
10	2.246	2.208	2.255	VV	285	3053	0.03%	0.001%
11	2.270	2.255	2.325	VV	1336	22701	0.20%	0.009%
12	2.346	2.325	2.365	VV	1138	12842	0.12%	0.005%
13	2.380	2.365	2.385	VV	461	4592	0.04%	0.002%
14	2.397	2.385	2.413	VV	489	6081	0.05%	0.002%
15	2.417	2.413	2.439	VV	322	3381	0.03%	0.001%
16	2.452	2.439	2.493	VV	485	9012	0.08%	0.004%
17	2.496	2.493	2.501	VV	178	694	0.01%	0.000%
18	2.512	2.501	2.544	VV	172	3267	0.03%	0.001%
19	2.551	2.544	2.563	VV	121	1049	0.01%	0.000%
20	2.569	2.563	2.580	VV	148	959	0.01%	0.000%
21	2.589	2.580	2.598	VV	132	738	0.01%	0.000%
22	2.622	2.598	2.644	PV	386	5192	0.05%	0.002%
23	2.649	2.644	2.663	VV	206	1649	0.01%	0.001%
24	2.668	2.663	2.673	VV	158	623	0.01%	0.000%
25	2.690	2.673	2.710	VV	214	2620	0.02%	0.001%
26	2.734	2.710	2.787	VV	930	17643	0.16%	0.007%
27	2.791	2.787	2.796	VV	150	498	0.00%	0.000%
28	2.800	2.796	2.807	VV	102	460	0.00%	0.000%
29	2.827	2.807	2.835	PV	241	2695	0.02%	0.001%
30	2.850	2.835	2.877	VV	269	4325	0.04%	0.002%
31	2.911	2.877	2.919	VV	411	6811	0.06%	0.003%
32	2.954	2.919	2.991	VV	954	22814	0.20%	0.009%
33	3.007	2.991	3.030	VV	678	9249	0.08%	0.004%
34	3.052	3.030	3.071	VV	469	7056	0.06%	0.003%
35	3.086	3.071	3.109	VV	366	5245	0.05%	0.002%
36	3.120	3.109	3.141	VV	504	4154	0.04%	0.002%

					rters			
37	3.186	3.141	3.223	VV	495	10991	0.10%	0.004%
38	3.227	3.223	3.236	VV	293	1770		
39	3.243	3.236	3.250	VV	381	1827		
40	3.259	3.250	3.263	VV	204	1077		
41	3.268	3.263	3.273	VV	156	741		
42	3.312	3.273	3.354	VV	754	14309		
43	3.360	3.354	3.372	VV	208	1490	0.01%	0.001%
44	3.377	3.372	3.386	VV	159	738	0.01%	0.000%
45	3.389	3.386	3.412	VV	136	1208	0.01%	0.000%
46	3.435	3.412	3.438	VV	216	2110	0.02%	0.001%
47	3.455	3.438	3.512	VV	321	8892	0.08%	0.004%
48	3.538	3.512	3.561	VV	279	5641	0.05%	0.002%
49	3.566	3.561	3.592	VV	212	2095	0.02%	0.001%
50	3.630	3.592	3.645	VV	288	5550	0.05%	0.002%
51	3.667	3.645	3.689	VV	718	10080	0.09%	0.004%
52	3.712	3.689	3.744	VV	224	4937	0.04%	0.002%
53	3.763	3.744	3.786	VV	489	7901	0.07%	0.003%
54	3.795	3.786	3.815	VV	235	3003	0.03%	0.001%
55	3.821	3.815	3.828	VV	179	889	0.01%	0.000%
56	3.844	3.828	3.875	VV	219	3927	0.04%	0.002%
57	3.898	3.875	3.912	VV	609	7154	0.06%	0.003%
58	3.919	3.912	3.938	VV	304	2956	0.03%	0.001%
59	3.947	3.938	3.977	VV	274	3111	0.03%	0.001%
60	3.996	3.977	4.004	VV	435	4224	0.04%	0.002%
61	4.022	4.004	4.051	VV	845	10137	0.09%	0.004%
62	4.054	4.051	4.067	VV	85	544	0.00%	0.000%
63	4.095	4.067	4.117	VV	9292	93677	0.84%	0.037%
64	4.151	4.117	4.199	VV	5100	93520	0.84%	0.037%
65	4.207	4.199	4.240	VV	883	16211	0.15%	0.006%
66	4.269	4.240	4.275	VV	1018	14835	0.13%	0.006%
67	4.288	4.275	4.301	VV	1269	16638	0.15%	0.007%
68	4.305	4.301	4.318	VV	935	8533	0.08%	0.003%
69	4.332	4.318	4.392	VV	1172	27967	0.25%	0.011%
70	4.403	4.392	4.419	VV	601	7743	0.07%	0.003%
71	4.424	4.419	4.431	VV	463	2899	0.03%	0.001%
72	4.435	4.431	4.442	VV	397	2411	0.02%	0.001%
73	4.457	4.442	4.477	VV	432	8133	0.07%	0.003%
74	4.479	4.477	4.489	VV	372	2258	0.02%	0.001%
75	4.510	4.489	4.534	VV	450	9735	0.09%	0.004%
76	4.565	4.534	4.596	VV	186781	1916872	17.19%	0.761%
77	4.602	4.596	4.629	VV	1109	14933	0.13%	0.006%
78	4.655	4.629	4.672	VV	588	13549	0.12%	0.005%
79	4.681	4.672	4.702	VV	613	9040	0.08%	0.004%
80	4.732	4.702	4.767	VV	1307	26241	0.24%	0.010%
81	4.794	4.767	4.837	VV	2102	39504	0.35%	0.016%
82	4.850	4.837	4.867	VV	803	11450	0.10%	0.005%
83	4.873	4.867	4.897	VV	619	8081	0.07%	0.003%
84	4.907	4.897	4.915	VV	374	3601	0.03%	0.001%
85	4.937	4.915	4.965	VV	1253	22483	0.20%	0.009%
86	4.971	4.965	4.977	VV	601	4176	0.04%	0.002%
87	4.980	4.977	4.997	VV	610	5501	0.05%	0.002%
88	5.032	4.997	5.045	VV	497	12177	0.11%	0.005%
89	5.067	5.045	5.104	VV	759	16729	0.15%	0.007%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOILMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

90	5.119	5.104	5.135	VV	401	5693	0.05%	0.002%
91	5.148	5.135	5.157	VV	316	3671		
92	5.183	5.157	5.194	VV	1103	16205		
93	5.204	5.194	5.241	VV	1198	19616		
94	5.260	5.241	5.304	VV	946	18888		
95	5.323	5.304	5.340	VV	879	11075		
96	5.350	5.340	5.364	VV	491	5502	0.05%	0.002%
97	5.384	5.364	5.427	VV	835	13235	0.12%	0.005%
98	5.452	5.427	5.459	VV	285	3487	0.03%	0.001%
99	5.472	5.459	5.485	VV	273	3574	0.03%	0.001%
100	5.506	5.485	5.538	VV	3089	33912	0.30%	0.013%
101	5.548	5.538	5.562	VV	314	3893	0.03%	0.002%
102	5.578	5.562	5.618	VV	415	6945	0.06%	0.003%
103	5.635	5.618	5.682	VV	853	11646	0.10%	0.005%
104	5.704	5.682	5.720	PV	1818	20833	0.19%	0.008%
105	5.737	5.720	5.756	VV	7777	83824	0.75%	0.033%
106	5.764	5.756	5.794	VV	4062	38321	0.34%	0.015%
107	5.811	5.794	5.867	VV	540	12747	0.11%	0.005%
108	5.896	5.867	5.919	VV	757	12676	0.11%	0.005%
109	5.949	5.919	5.958	VV	1338	15472	0.14%	0.006%
110	5.975	5.958	5.983	VV	1543	16864	0.15%	0.007%
111	5.994	5.983	6.006	VV	1610	17237	0.15%	0.007%
112	6.017	6.006	6.043	VV	1157	18081	0.16%	0.007%
113	6.048	6.043	6.063	VV	583	5976	0.05%	0.002%
114	6.076	6.063	6.103	VV	632	12809	0.11%	0.005%
115	6.127	6.103	6.154	VV	4583	76233	0.68%	0.030%
116	6.164	6.154	6.197	VV	1991	31052	0.28%	0.012%
117	6.212	6.197	6.223	VV	890	11109	0.10%	0.004%
118	6.238	6.223	6.250	VV	1625	18895	0.17%	0.008%
119	6.272	6.250	6.307	VV	32247	326360	2.93%	0.130%
120	6.322	6.307	6.351	VV	1457	21197	0.19%	0.008%
121	6.389	6.351	6.404	VV	716	15080	0.14%	0.006%
122	6.421	6.404	6.435	VV	698	9453	0.08%	0.004%
123	6.453	6.435	6.485	VV	1333	22621	0.20%	0.009%
124	6.506	6.485	6.541	VV	3725	53352	0.48%	0.021%
125	6.572	6.541	6.607	VV	3567	50651	0.45%	0.020%
126	6.625	6.607	6.638	VV	509	7624	0.07%	0.003%
127	6.649	6.638	6.665	VV	567	6849	0.06%	0.003%
128	6.681	6.665	6.692	VV	669	8413	0.08%	0.003%
129	6.697	6.692	6.708	VV	681	5500	0.05%	0.002%
130	6.736	6.708	6.789	VV	204137	2030841	18.21%	0.806%
131	6.811	6.789	6.834	VV	3104	33443	0.30%	0.013%
132	6.845	6.834	6.875	VV	610	11030	0.10%	0.004%
133	6.890	6.875	6.918	VV	903	10888	0.10%	0.004%
134	6.935	6.918	6.982	VV	618	9207	0.08%	0.004%
135	6.994	6.982	7.000	VV	143	902	0.01%	0.000%
136	7.019	7.000	7.034	VV	897	8556	0.08%	0.003%
137	7.053	7.034	7.091	VV	1261	21200	0.19%	0.008%
138	7.142	7.091	7.156	VV	976	17905	0.16%	0.007%
139	7.182	7.156	7.193	VV	860	13263	0.12%	0.005%
140	7.215	7.193	7.234	VV	1828	29180	0.26%	0.012%
141	7.241	7.234	7.255	VV	985	11833	0.11%	0.005%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOILMS

0.05% 0.002%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

142	7.273	7.255	7.290	VV	1471	21704	0.19%	0.009%
143	7.309	7.290	7.337	VV	1228	21550	0.08%	0.004%
144	7.368	7.337	7.392	VV	21629	225101	0.05%	0.002%
145	7.406	7.392	7.443	VV	1826	35004	0.03%	0.002%
146	7.459	7.443	7.483	VV	1691	22424	0.06%	0.003%
147	7.507	7.483	7.538	VV	25062	245943	0.46%	0.021%
148	7.550	7.538	7.569	VV	683	8840	0.08%	0.004%
149	7.581	7.569	7.596	VV	442	5575	0.05%	0.002%
150	7.607	7.596	7.619	VV	341	3809	0.03%	0.002%
151	7.633	7.619	7.651	VV	435	6798	0.06%	0.003%
152	7.687	7.651	7.726	VV	3007	51687	0.46%	0.021%
153	7.742	7.726	7.789	VV	999	20349	0.18%	0.008%
154	7.812	7.789	7.833	VV	829	12534	0.11%	0.005%
155	7.837	7.833	7.842	VV	225	1182	0.01%	0.000%
156	7.861	7.842	7.884	VV	1175	15066	0.14%	0.006%
157	7.902	7.884	7.928	VV	823	11602	0.10%	0.005%
158	7.933	7.928	7.949	VV	154	1098	0.01%	0.000%
159	7.972	7.949	7.992	PV	708	8381	0.08%	0.003%
160	8.015	7.992	8.044	VV	974	15249	0.14%	0.006%
161	8.054	8.044	8.076	VV	194	2458	0.02%	0.001%
162	8.110	8.076	8.134	VV	7748	106723	0.96%	0.042%
163	8.137	8.134	8.155	VV	964	9817	0.09%	0.004%
164	8.171	8.155	8.196	VV	924	15209	0.14%	0.006%
165	8.212	8.196	8.232	VV	785	10165	0.09%	0.004%
166	8.268	8.232	8.304	VV	6918	97830	0.88%	0.039%
167	8.317	8.304	8.329	VV	1252	14224	0.13%	0.006%
168	8.340	8.329	8.345	VV	874	7369	0.07%	0.003%
169	8.366	8.345	8.373	VV	8451	81034	0.73%	0.032%
170	8.381	8.373	8.421	VV	8760	98537	0.88%	0.039%
171	8.443	8.421	8.459	VV	1345	18426	0.17%	0.007%
172	8.487	8.459	8.502	VV	24769	275455	2.47%	0.109%
173	8.514	8.502	8.533	VV	14028	147270	1.32%	0.058%
174	8.568	8.533	8.596	VV	202420	2113469	18.95%	0.839%
175	8.608	8.596	8.620	VV	1409	16949	0.15%	0.007%
176	8.672	8.620	8.713	VV	24523	445899	4.00%	0.177%
177	8.727	8.713	8.744	VV	1542	22276	0.20%	0.009%
178	8.763	8.744	8.784	VV	6621	71119	0.64%	0.028%
179	8.812	8.784	8.847	VV	1640	29367	0.26%	0.012%
180	8.859	8.847	8.888	VV	574	9521	0.09%	0.004%
181	8.921	8.888	8.945	VV	5624	67950	0.61%	0.027%
182	8.971	8.945	8.997	VV	103220	1034858	9.28%	0.411%
183	9.019	8.997	9.059	VV	7954	121302	1.09%	0.048%
184	9.090	9.059	9.101	VV	3459	48720	0.44%	0.019%
185	9.111	9.101	9.126	VV	3422	38252	0.34%	0.015%
186	9.137	9.126	9.150	VV	1825	19210	0.17%	0.008%
187	9.172	9.150	9.181	VV	2068	27930	0.25%	0.011%
188	9.216	9.181	9.229	VV	14692	191277	1.72%	0.076%
189	9.246	9.229	9.272	VV	46322	486172	4.36%	0.193%
190	9.286	9.272	9.301	VV	2970	34643	0.31%	0.014%
191	9.310	9.301	9.323	VV	1398	16382	0.15%	0.007%
192	9.340	9.323	9.359	VV	3415	42543	0.38%	0.017%
193	9.386	9.359	9.409	VV	9251	128529	1.15%	0.051%
194	9.426	9.409	9.471	VV	10354	127571	1.14%	0.051%

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195	9.485	9.471	9.502	VV	654	7822	0.07%	0.003%
196	9.513	9.502	9.519	VV	689	5907		
197	9.542	9.519	9.559	VV	10555	119494		
198	9.574	9.559	9.607	VV	8969	104458		
199	9.625	9.607	9.642	VV	3013	34459		
200	9.679	9.642	9.700	VV	10744	152660		
201	9.719	9.700	9.737	VV	7885	90381	0.81%	0.036%
202	9.762	9.737	9.816	VV	90193	981652	8.80%	0.390%
203	9.842	9.816	9.868	VV	11578	172095	1.54%	0.068%
204	9.884	9.868	9.895	VV	9594	106490	0.95%	0.042%
205	9.913	9.895	9.935	VV	24610	319676	2.87%	0.127%
206	9.944	9.935	9.954	VV	3642	36814	0.33%	0.015%
207	9.974	9.954	10.002	VV	15564	203315	1.82%	0.081%
208	10.042	10.002	10.065	VV	43517	507703	4.55%	0.202%
209	10.086	10.065	10.124	VV	24895	336871	3.02%	0.134%
210	10.140	10.124	10.153	VV	3920	57517	0.52%	0.023%
211	10.180	10.153	10.229	VV	219953	2551227	22.88%	1.013%
212	10.249	10.229	10.272	VV	7383	109709	0.98%	0.044%
213	10.284	10.272	10.311	VV	3568	47804	0.43%	0.019%
214	10.355	10.311	10.429	VV	3917	90970	0.82%	0.036%
215	10.458	10.429	10.463	PV	1067	11549	0.10%	0.005%
216	10.475	10.463	10.487	VV	1269	15761	0.14%	0.006%
217	10.510	10.487	10.529	VV	7738	100922	0.90%	0.040%
218	10.537	10.529	10.548	VV	2281	21765	0.20%	0.009%
219	10.565	10.548	10.591	VV	4755	74729	0.67%	0.030%
220	10.624	10.591	10.632	VV	11907	152314	1.37%	0.060%
221	10.649	10.632	10.671	VV	24269	319420	2.86%	0.127%
222	10.688	10.671	10.726	VV	13617	183601	1.65%	0.073%
223	10.767	10.726	10.798	VV	16279	299265	2.68%	0.119%
224	10.817	10.798	10.879	VV	39320	553296	4.96%	0.220%
225	10.902	10.879	10.913	VV	6263	86561	0.78%	0.034%
226	10.938	10.913	10.949	VV	20306	266859	2.39%	0.106%
227	10.971	10.949	10.991	VV	43155	652219	5.85%	0.259%
228	11.000	10.991	11.017	VV	12737	131895	1.18%	0.052%
229	11.044	11.017	11.056	VV	6260	113483	1.02%	0.045%
230	11.073	11.056	11.090	VV	12197	163036	1.46%	0.065%
231	11.103	11.090	11.123	VV	6223	109086	0.98%	0.043%
232	11.140	11.123	11.147	VV	10845	116109	1.04%	0.046%
233	11.180	11.147	11.220	VV	861811	9974876	89.44%	3.960%
234	11.247	11.220	11.267	VV	189185	2072014	18.58%	0.823%
235	11.272	11.267	11.290	VV	15367	138869	1.25%	0.055%
236	11.298	11.290	11.312	VV	4678	50966	0.46%	0.020%
237	11.322	11.312	11.333	VV	3609	37459	0.34%	0.015%
238	11.349	11.333	11.370	VV	4311	71516	0.64%	0.028%
239	11.384	11.370	11.391	VV	4161	41322	0.37%	0.016%
240	11.417	11.391	11.438	VV	89028	1011598	9.07%	0.402%
241	11.460	11.438	11.503	VV	69352	823484	7.38%	0.327%
242	11.534	11.503	11.548	PV	4655	76479	0.69%	0.030%
243	11.577	11.548	11.592	VV	7563	154511	1.39%	0.061%
244	11.626	11.592	11.652	VV	185394	2252836	20.20%	0.894%
245	11.710	11.652	11.744	VV	20642	638597	5.73%	0.254%
246	11.775	11.744	11.797	VV	14060	207894	1.86%	0.083%

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				rters				
247	11.826	11.797	11.846	VV	14351	203922	1.83%	0.081%
248	11.863	11.846	11.909	VV	10854	253296		
249	11.927	11.909	11.946	VV	6769	98045		
250	11.977	11.946	11.992	VV	94060	1100520		
251	12.008	11.992	12.030	VV	127356	1394340	12.45%	0.596%
252	12.042	12.030	12.052	VV	8001	82957		
253	12.092	12.052	12.109	VV	92558	1500369	13.45%	0.596%
254	12.125	12.109	12.139	VV	59309	675017	6.05%	0.268%
255	12.156	12.139	12.182	VV	82339	980347	8.79%	0.389%
256	12.199	12.182	12.214	VV	6607	69903	0.63%	0.028%
257	12.236	12.214	12.260	VV	11005	164736	1.48%	0.065%
258	12.298	12.260	12.312	VV	11168	189063	1.70%	0.075%
259	12.333	12.312	12.355	VV	62369	741245	6.65%	0.294%
260	12.366	12.355	12.375	VV	8305	82772	0.74%	0.033%
261	12.391	12.375	12.422	VV	10365	200842	1.80%	0.080%
262	12.447	12.422	12.469	VV	62741	739843	6.63%	0.294%
263	12.481	12.469	12.497	VV	7563	110515	0.99%	0.044%
264	12.505	12.497	12.521	VV	6317	74520	0.67%	0.030%
265	12.556	12.521	12.580	VV	184180	2410112	21.61%	0.957%
266	12.596	12.580	12.643	VV	14144	303539	2.72%	0.121%
267	12.652	12.643	12.664	VV	3789	42372	0.38%	0.017%
268	12.699	12.664	12.711	VV	14601	241759	2.17%	0.096%
269	12.722	12.711	12.748	VV	12816	186077	1.67%	0.074%
270	12.768	12.748	12.781	VV	24243	307327	2.76%	0.122%
271	12.785	12.781	12.807	VV	16416	147864	1.33%	0.059%
272	12.829	12.807	12.860	VV	33466	560131	5.02%	0.222%
273	12.881	12.860	12.901	VV	50183	675679	6.06%	0.268%
274	12.941	12.901	12.969	VV	200293	2871451	25.75%	1.140%
275	13.009	12.969	13.037	VV	882920	11152108	100.00%	4.427%
276	13.058	13.037	13.077	VV	11323	140924	1.26%	0.056%
277	13.093	13.077	13.104	VV	4664	53680	0.48%	0.021%
278	13.132	13.104	13.144	VV	18860	262641	2.36%	0.104%
279	13.182	13.144	13.196	VV	37799	774930	6.95%	0.308%
280	13.206	13.196	13.254	VV	23809	507439	4.55%	0.201%
281	13.259	13.254	13.268	VV	6038	48509	0.43%	0.019%
282	13.306	13.268	13.327	VV	720438	8882466	79.65%	3.526%
283	13.352	13.327	13.367	VV	77933	955578	8.57%	0.379%
284	13.383	13.367	13.416	VV	85935	1026086	9.20%	0.407%
285	13.436	13.416	13.448	VV	7579	100715	0.90%	0.040%
286	13.468	13.448	13.480	VV	31446	365441	3.28%	0.145%
287	13.497	13.480	13.522	VV	40955	550810	4.94%	0.219%
288	13.562	13.522	13.588	PV	53315	736864	6.61%	0.293%
289	13.619	13.588	13.659	VV	50217	1014129	9.09%	0.403%
290	13.691	13.659	13.710	VV	31260	506073	4.54%	0.201%
291	13.719	13.710	13.731	VV	10694	123340	1.11%	0.049%
292	13.756	13.731	13.768	VV	52728	760832	6.82%	0.302%
293	13.780	13.768	13.821	VV	60503	815047	7.31%	0.324%
294	13.885	13.821	13.925	VV	114661	1994972	17.89%	0.792%
295	13.953	13.925	13.968	VV	13642	194966	1.75%	0.077%
296	13.993	13.968	14.013	VV	57768	822767	7.38%	0.327%
297	14.032	14.013	14.052	VV	60942	719184	6.45%	0.286%
298	14.074	14.052	14.099	VV	21246	360222	3.23%	0.143%
299	14.141	14.099	14.183	VV	188049	3221467	28.89%	1.279%

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300	14.203	14.183	14.242	VV	46715	682463	6.12%	0.271%
301	14.275	14.242	14.295	VV	21736	346491		
302	14.315	14.295	14.336	VV	8366	159193		
303	14.345	14.336	14.353	VV	5907	55213		
304	14.387	14.353	14.409	VV	10104	258289		
305	14.416	14.409	14.421	VV	7076	46264		
306	14.426	14.421	14.454	VV	6473	87114	0.78%	0.035%
307	14.470	14.454	14.502	VV	4541	50321	0.45%	0.020%
308	14.527	14.502	14.540	VV	4123	44845	0.40%	0.018%
309	14.579	14.540	14.600	VV	22235	511939	4.59%	0.203%
310	14.621	14.600	14.652	VV	61748	844361	7.57%	0.335%
311	14.670	14.652	14.676	VV	5451	59945	0.54%	0.024%
312	14.723	14.676	14.755	VV	15839	476133	4.27%	0.189%
313	14.800	14.755	14.838	VV	54538	1168042	10.47%	0.464%
314	14.864	14.838	14.886	VV	103312	1400415	12.56%	0.556%
315	14.924	14.886	14.959	VV	71345	1390785	12.47%	0.552%
316	14.987	14.959	15.004	VV	12854	225272	2.02%	0.089%
317	15.042	15.004	15.093	VV	99980	1671647	14.99%	0.664%
318	15.129	15.093	15.148	VV	28441	389917	3.50%	0.155%
319	15.183	15.148	15.201	VV	365096	4784848	42.91%	1.900%
320	15.225	15.201	15.240	VV	359915	4667329	41.85%	1.853%
321	15.247	15.240	15.297	VV	162496	1812500	16.25%	0.720%
322	15.339	15.297	15.390	VV	73468	1267685	11.37%	0.503%
323	15.413	15.390	15.447	VV	32035	485525	4.35%	0.193%
324	15.477	15.447	15.501	VV	37771	587824	5.27%	0.233%
325	15.516	15.501	15.524	VV	25798	303706	2.72%	0.121%
326	15.536	15.524	15.572	VV	29791	457404	4.10%	0.182%
327	15.622	15.572	15.646	VV	55390	946284	8.49%	0.376%
328	15.653	15.646	15.681	VV	14906	237749	2.13%	0.094%
329	15.696	15.681	15.704	VV	5056	63802	0.57%	0.025%
330	15.711	15.704	15.716	VV	5547	36095	0.32%	0.014%
331	15.723	15.716	15.734	VV	5411	53261	0.48%	0.021%
332	15.765	15.734	15.782	VV	13666	260883	2.34%	0.104%
333	15.809	15.782	15.826	VV	22533	421381	3.78%	0.167%
334	15.850	15.826	15.871	VV	74244	1052522	9.44%	0.418%
335	15.889	15.871	15.911	VV	36459	525413	4.71%	0.209%
336	15.932	15.911	15.947	VV	17837	283963	2.55%	0.113%
337	16.010	15.947	16.048	VV	44235	1365660	12.25%	0.542%
338	16.088	16.048	16.146	VV	22938	554085	4.97%	0.220%
339	16.172	16.146	16.187	VV	19176	270393	2.42%	0.107%
340	16.207	16.187	16.228	VV	25930	366947	3.29%	0.146%
341	16.269	16.228	16.325	VV	161563	2382241	21.36%	0.946%
342	16.349	16.325	16.366	VV	4524	90349	0.81%	0.036%
343	16.379	16.366	16.389	VV	4536	49951	0.45%	0.020%
344	16.404	16.389	16.423	VV	4213	64221	0.58%	0.025%
345	16.462	16.423	16.480	VV	18716	383250	3.44%	0.152%
346	16.487	16.480	16.501	VV	10269	103821	0.93%	0.041%
347	16.522	16.501	16.541	VV	21996	319740	2.87%	0.127%
348	16.559	16.541	16.591	VV	13495	329622	2.96%	0.131%
349	16.644	16.591	16.656	VV	26871	587257	5.27%	0.233%
350	16.666	16.656	16.694	VV	27545	425055	3.81%	0.169%
351	16.746	16.694	16.763	VV	336989	5419514	48.60%	2.152%

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352	16.770	16.763	16.809	VV	165298	1797429	16.12%	0.714%
353	16.823	16.809	16.830	VV	10495	118762		
354	16.869	16.830	16.891	VV	78434	1142955	10.41%	0.461%
355	16.907	16.891	16.924	VV	21652	326743	2.18%	0.096%
356	16.929	16.924	16.948	VV	12691	164050	3.31%	0.146%
357	16.960	16.948	16.971	VV	11833	154704	32.97%	1.460%
358	16.991	16.971	17.011	VV	20166	368713	37.99%	1.682%
359	17.066	17.011	17.091	VV	211793	3676351		
360	17.126	17.091	17.166	VV	297309	4236655		
361	17.221	17.166	17.247	VV	236210	3427128	30.73%	1.361%
362	17.268	17.247	17.311	VV	33729	790941	7.09%	0.314%
363	17.364	17.311	17.397	VV	29621	1048716	9.40%	0.416%
364	17.420	17.397	17.441	VV	16900	352609	3.16%	0.140%
365	17.486	17.441	17.514	VV	43290	1160780	10.41%	0.461%
366	17.522	17.514	17.554	VV	24406	379415	3.40%	0.151%
367	17.582	17.554	17.597	VV	22014	409547	3.67%	0.163%
368	17.618	17.597	17.630	VV	30747	498331	4.47%	0.198%
369	17.644	17.630	17.682	VV	30006	690984	6.20%	0.274%
370	17.704	17.682	17.720	VV	26245	484647	4.35%	0.192%
371	17.730	17.720	17.751	VV	20436	344751	3.09%	0.137%
372	17.777	17.751	17.804	VV	35332	772368	6.93%	0.307%
373	17.815	17.804	17.837	VV	20006	332920	2.99%	0.132%
374	17.844	17.837	17.856	VV	13417	136365	1.22%	0.054%
375	17.892	17.856	17.937	VV	18103	695386	6.24%	0.276%
376	17.961	17.937	17.981	VV	15058	339234	3.04%	0.135%
377	18.001	17.981	18.012	VV	13409	235993	2.12%	0.094%
378	18.038	18.012	18.042	VV	18211	279004	2.50%	0.111%
379	18.110	18.042	18.150	VV	160718	3317197	29.75%	1.317%
380	18.174	18.150	18.182	VV	24153	411296	3.69%	0.163%
381	18.214	18.182	18.233	VV	31591	766825	6.88%	0.304%
382	18.259	18.233	18.312	VV	43374	1489836	13.36%	0.591%
383	18.338	18.312	18.347	VV	29608	544348	4.88%	0.216%
384	18.350	18.347	18.366	VV	41000	242894	2.18%	0.096%
385	18.398	18.366	18.442	VV	71823	1723799	15.46%	0.684%
386	18.495	18.442	18.516	VV	209130	3958198	35.49%	1.571%
387	18.529	18.516	18.559	VV	59036	1166372	10.46%	0.463%
388	18.572	18.559	18.594	VV	37888	645566	5.79%	0.256%
389	18.624	18.594	18.640	VV	77887	1388274	12.45%	0.551%
390	18.657	18.640	18.717	VV	76522	2191760	19.65%	0.870%
391	18.751	18.717	18.772	VV	220075	3520692	31.57%	1.398%
392	18.778	18.772	18.814	VV	46986	1030504	9.24%	0.409%
393	18.827	18.814	18.850	VV	44846	836486	7.50%	0.332%
394	18.877	18.850	18.903	VV	82360	1514243	13.58%	0.601%
395	18.941	18.903	18.989	VV	154226	2983881	26.76%	1.185%
396	19.000	18.989	19.016	VV	23724	353488	3.17%	0.140%
397	19.049	19.016	19.073	VV	34552	923259	8.28%	0.367%
398	19.098	19.073	19.120	VV	28635	761909	6.83%	0.302%
399	19.154	19.120	19.158	VV	31012	674482	6.05%	0.268%
400	19.176	19.158	19.200	VV	39683	820651	7.36%	0.326%
401	19.221	19.200	19.236	VV	29665	595763	5.34%	0.237%
402	19.256	19.236	19.274	VV	38269	744571	6.68%	0.296%
403	19.290	19.274	19.327	VV	41570	1105253	9.91%	0.439%
404	19.344	19.327	19.366	VV	32390	669565	6.00%	0.266%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOILMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

					rters			
405	19.383	19.366	19.393	VV	27761	416424	3.73%	0.165%
406	19.423	19.393	19.487	VV	37420	1661280		
407	19.493	19.487	19.502	VV	21624	190866		
408	19.538	19.502	19.563	VV	29138	863516		
409	19.596	19.563	19.621	VV	24482	746469		
410	19.634	19.621	19.652	VV	23440	397810		
411	19.670	19.652	19.681	VV	22655	371032	3.33%	0.147%
412	19.725	19.681	19.751	VV	136662	2591854	23.24%	1.029%
413	19.758	19.751	19.776	VV	33441	460335	4.13%	0.183%
414	19.781	19.776	19.807	VV	28596	479473	4.30%	0.190%
415	19.835	19.807	19.866	VV	42424	1124612	10.08%	0.446%
416	19.904	19.866	19.929	VV	101244	2206841	19.79%	0.876%
417	19.971	19.929	20.002	VV	97948	2632005	23.60%	1.045%
418	20.022	20.002	20.042	VV	52212	1130644	10.14%	0.449%
419	20.061	20.042	20.084	VV	50474	1131200	10.14%	0.449%
420	20.092	20.084	20.124	VV	42044	894091	8.02%	0.355%
421	20.150	20.124	20.166	VV	38010	868261	7.79%	0.345%
422	20.184	20.166	20.219	VV	47765	1216544	10.91%	0.483%
423	20.283	20.219	20.309	VV	114674	3490020	31.29%	1.386%
424	20.349	20.309	20.367	VV	65475	1658524	14.87%	0.658%
425	20.374	20.367	20.396	VV	46047	677817	6.08%	0.269%
426	20.424	20.396	20.439	VV	48658	1054987	9.46%	0.419%
427	20.467	20.439	20.500	VV	126936	2557649	22.93%	1.015%
428	20.549	20.500	20.593	VV	39449	1891735	16.96%	0.751%
429	20.620	20.593	20.676	VV	35336	1531306	13.73%	0.608%
430	20.700	20.676	20.706	VV	34292	566581	5.08%	0.225%
431	20.709	20.706	20.717	VV	33953	220823	1.98%	0.088%
432	20.722	20.717	20.733	VV	32202	286623	2.57%	0.114%
433	20.768	20.733	20.802	VV	37290	1410962	12.65%	0.560%
434	20.833	20.802	20.881	VV	42833	1648095	14.78%	0.654%
435	20.886	20.881	20.899	VV	27261	286523	2.57%	0.114%
436	20.928	20.899	20.950	VV	31839	908667	8.15%	0.361%
437	20.968	20.950	21.006	VV	30464	935633	8.39%	0.371%
438	21.076	21.006	21.080	VV	38412	1408415	12.63%	0.559%
439	21.118	21.080	21.177	VV	46953	2273162	20.38%	0.902%
440	21.216	21.177	21.254	VV	97687	2400498	21.53%	0.953%
441	21.304	21.254	21.311	VV	33698	949298	8.51%	0.377%
442	21.319	21.311	21.364	VV	32597	935320	8.39%	0.371%
443	21.388	21.364	21.434	VV	28206	985921	8.84%	0.391%
444	21.473	21.434	21.477	VV	20466	479929	4.30%	0.191%
445	21.507	21.477	21.526	VV	26628	679533	6.09%	0.270%
446	21.553	21.526	21.573	VV	27100	723635	6.49%	0.287%
447	21.595	21.573	21.604	VV	27939	484768	4.35%	0.192%
448	21.646	21.604	21.671	VV	51036	1624198	14.56%	0.645%
449	21.688	21.671	21.712	VV	44586	945486	8.48%	0.375%
450	21.719	21.712	21.818	VV	28930	1111446	9.97%	0.441%
451	21.855	21.818	21.871	VV	16723	426949	3.83%	0.170%
452	21.894	21.871	21.948	VV	19316	617298	5.54%	0.245%
453	21.990	21.948	22.037	VV	31698	935548	8.39%	0.371%
454	22.072	22.037	22.102	VV	29443	775473	6.95%	0.308%
455	22.153	22.102	22.196	VV	60101	2004581	17.97%	0.796%
456	22.214	22.196	22.257	VV	13143	273816	2.46%	0.109%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOILMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

					rters		
457	22.270	22.257	22.276	PV	985	6561	
458	22.282	22.276	22.287	VV	982	4210	
459	22.291	22.287	22.301	VBA	481	29933	
				Sum of corrected areas:	2518		

FG112024.M Fri Dec 06 22:58:26 2024

Instrument :
FID_G
ClientSampleId :
10TH-ST-SOILMS
0.06% 0.003%

Manual IntegrationsAPPROVED
Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	12/05/24
Project:	10th Street & 2nd Avenue	Date Received:	12/05/24
Client Sample ID:	10TH-ST-SOILMSD	SDG No.:	P5112
Lab Sample ID:	P5112-01MSD	Matrix:	SOIL
Analytical Method:	8015D TPH	% Solid:	91.4
Sample Wt/Vol:	30.07	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TPH GC
GPC Factor :		Injection Volume :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG014931.D	1	12/06/24 09:01	12/06/24 15:37	PB165424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	75.7	E	0.35	3.09	mg/Kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	13.9		37 - 130	69%	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\FG120624\
 Data File : FG014931.D
 Signal(s) : FID1A.ch
 Acq On : 06 Dec 2024 15:37
 Operator : YP\AJ
 Sample : P5112-01MSD
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 10TH-ST-SOILMSD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/09/2024
 Supervised By :Ankita Jodhani 12/09/2024

Integration File: Sample.e
 Quant Time: Dec 06 22:02:45 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
 Quant Title :
 QLast Update : Thu Nov 21 02:41:43 2024
 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...	15.042	1600184	13.867 ug/mlm
Target Compounds			
1) N-OCTANE	2.053	1624641	12.253 ug/ml
2) N-DECANE	4.565	1950937	14.620 ug/ml
3) N-DODECANE	6.737	2085712	15.158 ug/ml
4) N-TETRADECANE	8.569	2154287	16.159 ug/ml
5) N-HEXADECANE	10.181	2634996	19.578 ug/ml
6) N-OCTADECANE	11.627	2325477	16.939 ug/ml
7) N-EICOSANE	12.942	2951924	22.276 ug/ml
8) N-DOCOSANE	14.142	3288037	25.485 ug/ml
10) N-TETRACOSANE	15.226	6593722	52.067 ug/mlm
11) N-HEXACOSANE	16.269	2315382	18.819 ug/ml
12) N-OCTACOSANE	17.220	3222661	26.638 ug/ml
13) N-TRIACONTANE	18.110	2693206	22.461 ug/ml
14) N-DOTRIACONTANE	18.943	2242968	19.283 ug/ml
15) N-TETRATRIACONTANE	19.727	1827654	18.120 ug/ml
16) N-HEXATRIACONTANE	20.468	1468381	18.107 ug/ml
17) N-OCTATRIACONTANE	21.216	1457993	21.111 ug/ml
18) N-TETRACONTANE	22.151	2086192	33.818 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120624\
Data File : FG014931.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 15:37
Operator : YP\AJ
Sample : P5112-01MSD
Misc :
ALS Vial : 9 Sample Multiplier: 1

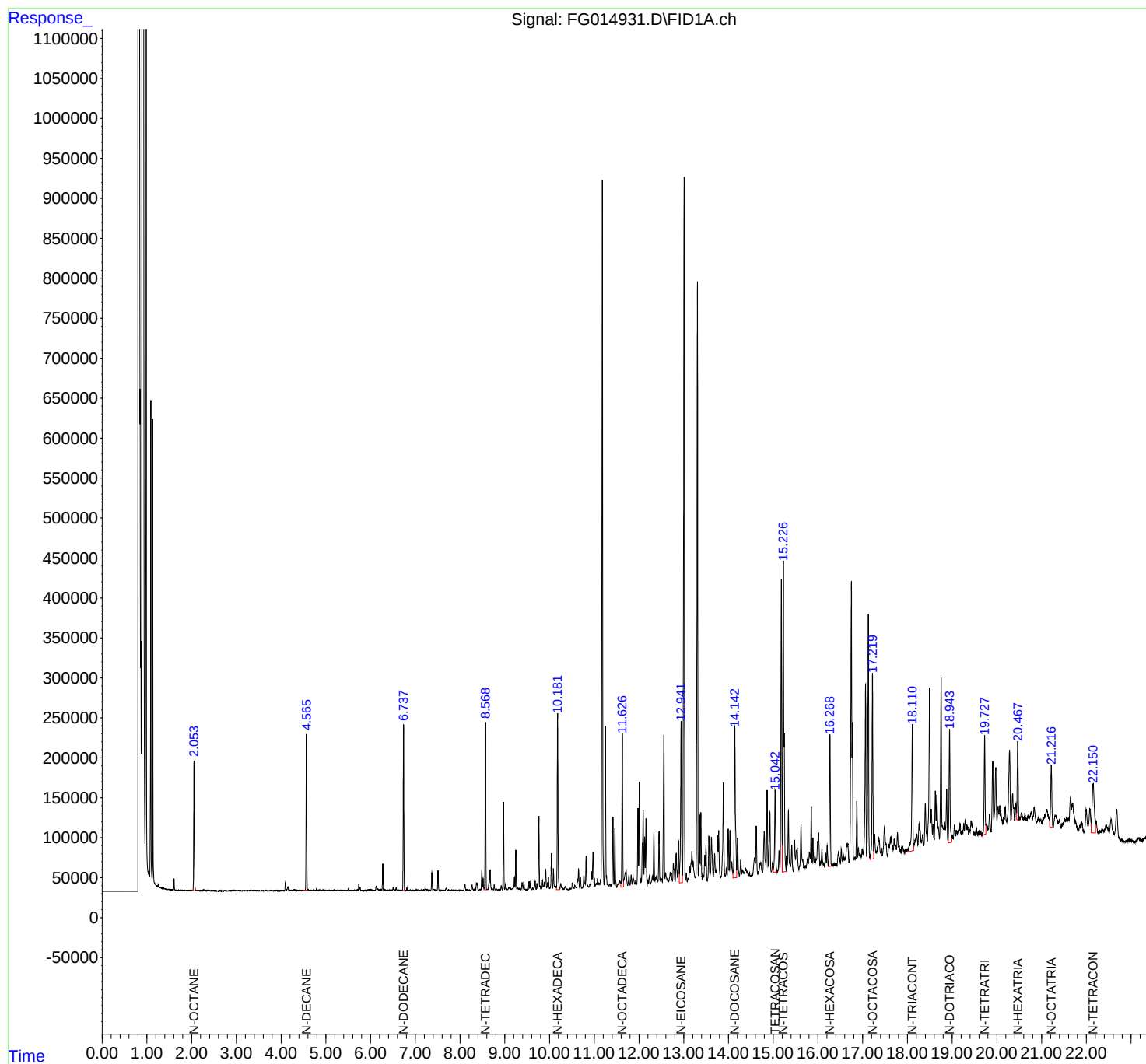
Instrument :
FID_G
ClientSampleId :
10TH-ST-SOILMSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: Sample.e
Quant Time: Dec 06 22:02:45 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Quant Title :
QLast Update : Thu Nov 21 02:41:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



rtres

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOILMSD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12062
Data File : FG014931.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 15:37
Sample : P5112-01MSD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\FG112024.M
Title :

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	1.924	1.906	1.932	BV	46	201	0.00%	0.000%
2	1.942	1.932	1.975	VV	249	2445	0.02%	0.001%
3	1.995	1.975	2.018	VV	417	4817	0.04%	0.002%
4	2.053	2.018	2.114	PV	162693	1628707	14.22%	0.664%
5	2.120	2.114	2.139	VV	233	2588	0.02%	0.001%
6	2.143	2.139	2.176	VV	177	2485	0.02%	0.001%
7	2.182	2.176	2.200	PV	170	1164	0.01%	0.000%
8	2.205	2.200	2.216	VV	97	745	0.01%	0.000%
9	2.221	2.216	2.227	VV	217	736	0.01%	0.000%
10	2.230	2.227	2.234	VV	97	328	0.00%	0.000%
11	2.243	2.234	2.255	VV	175	1510	0.01%	0.001%
12	2.267	2.255	2.331	VV	1495	25073	0.22%	0.010%
13	2.344	2.331	2.366	VV	1111	13105	0.11%	0.005%
14	2.382	2.366	2.388	VV	476	5112	0.04%	0.002%
15	2.394	2.388	2.410	VV	426	5140	0.04%	0.002%
16	2.415	2.410	2.438	VV	345	4205	0.04%	0.002%
17	2.448	2.438	2.487	VV	489	7836	0.07%	0.003%
18	2.496	2.487	2.500	VV	178	1182	0.01%	0.000%
19	2.505	2.500	2.514	VV	186	1274	0.01%	0.001%
20	2.527	2.514	2.535	VV	193	1626	0.01%	0.001%
21	2.537	2.535	2.563	VV	213	1560	0.01%	0.001%
22	2.566	2.563	2.578	VV	142	875	0.01%	0.000%
23	2.585	2.578	2.596	VV	85	786	0.01%	0.000%
24	2.603	2.596	2.609	VV	140	702	0.01%	0.000%
25	2.623	2.609	2.659	VV	400	6246	0.05%	0.003%
26	2.661	2.659	2.675	VV	169	823	0.01%	0.000%
27	2.684	2.675	2.692	PV	144	1027	0.01%	0.000%
28	2.695	2.692	2.710	VV	178	1075	0.01%	0.000%
29	2.734	2.710	2.773	VV	899	16510	0.14%	0.007%
30	2.782	2.773	2.789	VV	150	717	0.01%	0.000%
31	2.797	2.789	2.802	VV	129	603	0.01%	0.000%
32	2.805	2.802	2.812	VV	114	470	0.00%	0.000%
33	2.821	2.812	2.838	VV	246	2333	0.02%	0.001%
34	2.853	2.838	2.872	VV	240	3647	0.03%	0.001%
35	2.890	2.872	2.896	VV	260	2385	0.02%	0.001%
36	2.913	2.896	2.919	VV	509	4977	0.04%	0.002%

					retention			
37	2.953	2.919	2.992	VV	991	22922	0.20%	0.009%
38	3.007	2.992	3.040	VV	741	10376	0.08%	0.004%
39	3.050	3.040	3.068	VV	522	5447	0.04%	0.002%
40	3.071	3.068	3.076	VV	199	845	0.01%	0.000%
41	3.091	3.076	3.108	VV	343	4269	0.01%	0.000%
42	3.119	3.108	3.154	VV	271	4091	0.01%	0.000%
43	3.160	3.154	3.165	VV	149	789	0.01%	0.000%
44	3.182	3.165	3.221	VV	500	9564	0.08%	0.004%
45	3.231	3.221	3.266	VV	234	4021	0.04%	0.002%
46	3.289	3.266	3.296	VV	171	1976	0.02%	0.001%
47	3.312	3.296	3.352	VV	700	11047	0.10%	0.005%
48	3.366	3.352	3.380	VV	204	2078	0.02%	0.001%
49	3.387	3.380	3.396	VV	395	1082	0.01%	0.000%
50	3.407	3.396	3.411	VV	143	694	0.01%	0.000%
51	3.457	3.411	3.473	VV	330	8661	0.08%	0.004%
52	3.489	3.473	3.508	VV	286	3830	0.03%	0.002%
53	3.512	3.508	3.517	VV	171	706	0.01%	0.000%
54	3.526	3.517	3.530	VV	207	1364	0.01%	0.001%
55	3.538	3.530	3.543	VV	233	1525	0.01%	0.001%
56	3.551	3.543	3.584	VV	214	3830	0.03%	0.002%
57	3.594	3.584	3.607	VV	199	1898	0.02%	0.001%
58	3.628	3.607	3.648	VV	390	5805	0.05%	0.002%
59	3.666	3.648	3.692	VV	669	10747	0.09%	0.004%
60	3.707	3.692	3.711	VV	263	2264	0.02%	0.001%
61	3.716	3.711	3.721	VV	233	1215	0.01%	0.000%
62	3.725	3.721	3.740	VV	271	1886	0.02%	0.001%
63	3.761	3.740	3.787	VV	596	9020	0.08%	0.004%
64	3.793	3.787	3.817	VV	294	3290	0.03%	0.001%
65	3.820	3.817	3.831	VV	212	1046	0.01%	0.000%
66	3.842	3.831	3.868	VV	301	3533	0.03%	0.001%
67	3.898	3.868	3.915	VV	594	8284	0.07%	0.003%
68	3.925	3.915	3.938	VV	293	2575	0.02%	0.001%
69	3.947	3.938	3.978	VV	268	3144	0.03%	0.001%
70	3.995	3.978	4.005	VV	394	4354	0.04%	0.002%
71	4.017	4.005	4.063	VV	766	10532	0.09%	0.004%
72	4.095	4.063	4.117	PV	10186	100549	0.88%	0.041%
73	4.154	4.117	4.196	VV	5481	99300	0.87%	0.040%
74	4.204	4.196	4.243	VV	897	18255	0.16%	0.007%
75	4.266	4.243	4.273	VV	999	12630	0.11%	0.005%
76	4.287	4.273	4.308	VV	1283	21741	0.19%	0.009%
77	4.310	4.308	4.318	VV	919	5348	0.05%	0.002%
78	4.333	4.318	4.355	VV	1260	19114	0.17%	0.008%
79	4.363	4.355	4.387	VV	533	9150	0.08%	0.004%
80	4.401	4.387	4.443	VV	616	15552	0.14%	0.006%
81	4.454	4.443	4.458	VV	453	3562	0.03%	0.001%
82	4.465	4.458	4.473	VV	479	3585	0.03%	0.001%
83	4.479	4.473	4.497	VV	394	4708	0.04%	0.002%
84	4.512	4.497	4.523	VV	500	6311	0.06%	0.003%
85	4.565	4.523	4.595	VV	196256	1981872	17.30%	0.808%
86	4.603	4.595	4.625	VV	1145	14578	0.13%	0.006%
87	4.649	4.625	4.669	VV	661	14268	0.12%	0.006%
88	4.684	4.669	4.707	VV	575	10642	0.09%	0.004%
89	4.732	4.707	4.762	VV	1432	25753	0.22%	0.011%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOILMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

90	4.794	4.762	4.833	VV	2134	41286	0.36%	0.017%
91	4.850	4.833	4.868	VV	853	13288		
92	4.873	4.868	4.912	VV	611	11188		
93	4.936	4.912	4.959	VV	1267	22354		
94	4.976	4.959	4.999	VV	618	11980		
95	5.024	4.999	5.043	VV	503	11526		
96	5.067	5.043	5.092	VV	793	15847	0.14%	0.006%
97	5.114	5.092	5.130	VV	425	7761	0.07%	0.003%
98	5.146	5.130	5.156	VV	340	4418	0.04%	0.002%
99	5.183	5.156	5.195	VV	1139	17360	0.15%	0.007%
100	5.203	5.195	5.234	VV	1167	17977	0.16%	0.007%
101	5.239	5.234	5.245	VV	357	1918	0.02%	0.001%
102	5.260	5.245	5.300	VV	993	17718	0.15%	0.007%
103	5.321	5.300	5.342	VV	953	12156	0.11%	0.005%
104	5.354	5.342	5.365	VV	523	5265	0.05%	0.002%
105	5.383	5.365	5.434	VV	848	13924	0.12%	0.006%
106	5.447	5.434	5.464	VV	329	4414	0.04%	0.002%
107	5.468	5.464	5.473	VV	359	1665	0.01%	0.001%
108	5.476	5.473	5.485	VV	321	1881	0.02%	0.001%
109	5.507	5.485	5.533	VV	3153	34638	0.30%	0.014%
110	5.550	5.533	5.570	VV	330	5429	0.05%	0.002%
111	5.581	5.570	5.599	VV	393	4066	0.04%	0.002%
112	5.610	5.599	5.621	VV	160	1228	0.01%	0.001%
113	5.640	5.621	5.673	VV	925	11580	0.10%	0.005%
114	5.677	5.673	5.681	PV	111	245	0.00%	0.000%
115	5.704	5.681	5.720	VV	1805	20587	0.18%	0.008%
116	5.737	5.720	5.753	VV	8475	84207	0.74%	0.034%
117	5.766	5.753	5.799	VV	4104	43880	0.38%	0.018%
118	5.811	5.799	5.872	VV	604	12303	0.11%	0.005%
119	5.895	5.872	5.922	VV	747	11869	0.10%	0.005%
120	5.949	5.922	5.960	VV	1403	16299	0.14%	0.007%
121	5.971	5.960	5.984	VV	1384	16081	0.14%	0.007%
122	5.995	5.984	6.007	VV	1604	17644	0.15%	0.007%
123	6.016	6.007	6.049	VV	1216	20080	0.18%	0.008%
124	6.052	6.049	6.059	VV	518	2845	0.02%	0.001%
125	6.074	6.059	6.082	VV	612	7162	0.06%	0.003%
126	6.091	6.082	6.103	VV	687	7081	0.06%	0.003%
127	6.127	6.103	6.153	VV	5505	86286	0.75%	0.035%
128	6.163	6.153	6.195	VV	2006	32495	0.28%	0.013%
129	6.214	6.195	6.222	VV	911	11984	0.10%	0.005%
130	6.238	6.222	6.253	VV	1783	21654	0.19%	0.009%
131	6.273	6.253	6.304	VV	33905	336362	2.94%	0.137%
132	6.322	6.304	6.349	VV	1465	22301	0.19%	0.009%
133	6.386	6.349	6.402	VV	731	14991	0.13%	0.006%
134	6.424	6.402	6.437	VV	701	10002	0.09%	0.004%
135	6.453	6.437	6.486	VV	1362	22118	0.19%	0.009%
136	6.506	6.486	6.539	VV	4109	55626	0.49%	0.023%
137	6.547	6.539	6.551	VV	902	6302	0.06%	0.003%
138	6.572	6.551	6.610	VV	3684	49120	0.43%	0.020%
139	6.625	6.610	6.639	VV	482	7142	0.06%	0.003%
140	6.650	6.639	6.668	VV	593	7470	0.07%	0.003%
141	6.698	6.668	6.710	VV	719	14135	0.12%	0.006%

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0.36% 0.017%

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rteres									
142	6.737	6.710	6.788	VV	207576	2094353	18.29%	0.854%	
143	6.812	6.788	6.835	VV	3401	35471			
144	6.846	6.835	6.874	VV	576	10898			
145	6.890	6.874	6.916	VV	900	10522			
146	6.933	6.916	6.981	PV	613	9483			
147	6.986	6.981	6.990	PV	114	386			
148	7.019	6.990	7.035	VV	902	10125	0.09%	0.004%	
149	7.054	7.035	7.096	VV	1341	23275	0.20%	0.009%	
150	7.105	7.096	7.111	VV	348	2739	0.02%	0.001%	
151	7.142	7.111	7.158	VV	973	15177	0.13%	0.006%	
152	7.177	7.158	7.190	VV	1053	13914	0.12%	0.006%	
153	7.216	7.190	7.233	VV	2161	32807	0.29%	0.013%	
154	7.240	7.233	7.255	VV	1096	13096	0.11%	0.005%	
155	7.273	7.255	7.292	VV	1447	23084	0.20%	0.009%	
156	7.310	7.292	7.337	VV	1208	20962	0.18%	0.009%	
157	7.369	7.337	7.392	VV	22610	231483	2.02%	0.094%	
158	7.407	7.392	7.445	VV	1751	35549	0.31%	0.014%	
159	7.460	7.445	7.484	VV	1631	20956	0.18%	0.009%	
160	7.507	7.484	7.540	VV	25143	252674	2.21%	0.103%	
161	7.552	7.540	7.577	VV	655	9717	0.08%	0.004%	
162	7.581	7.577	7.597	VV	380	3407	0.03%	0.001%	
163	7.608	7.597	7.616	VV	274	2621	0.02%	0.001%	
164	7.633	7.616	7.657	VV	430	8214	0.07%	0.003%	
165	7.688	7.657	7.726	VV	3048	51267	0.45%	0.021%	
166	7.743	7.726	7.788	VV	1019	19264	0.17%	0.008%	
167	7.815	7.788	7.834	VV	828	12325	0.11%	0.005%	
168	7.860	7.834	7.884	VV	1189	16685	0.15%	0.007%	
169	7.902	7.884	7.928	VV	851	11158	0.10%	0.005%	
170	7.931	7.928	7.957	PV	118	1170	0.01%	0.000%	
171	7.972	7.957	7.992	VV	749	7739	0.07%	0.003%	
172	8.016	7.992	8.043	VV	993	14314	0.12%	0.006%	
173	8.060	8.043	8.075	VV	153	1835	0.02%	0.001%	
174	8.111	8.075	8.135	VV	7993	110902	0.97%	0.045%	
175	8.142	8.135	8.158	VV	997	10435	0.09%	0.004%	
176	8.172	8.158	8.196	VV	911	13960	0.12%	0.006%	
177	8.211	8.196	8.233	VV	749	9844	0.09%	0.004%	
178	8.269	8.233	8.303	VV	6951	98073	0.86%	0.040%	
179	8.316	8.303	8.332	VV	1215	15173	0.13%	0.006%	
180	8.341	8.332	8.348	VV	837	7097	0.06%	0.003%	
181	8.367	8.348	8.373	VV	8736	80877	0.71%	0.033%	
182	8.381	8.373	8.424	VV	9309	102183	0.89%	0.042%	
183	8.443	8.424	8.463	VV	1254	20094	0.18%	0.008%	
184	8.488	8.463	8.503	VV	25540	279735	2.44%	0.114%	
185	8.516	8.503	8.533	VV	14772	151437	1.32%	0.062%	
186	8.569	8.533	8.596	VV	209917	2181003	19.04%	0.889%	
187	8.608	8.596	8.621	VV	1367	17142	0.15%	0.007%	
188	8.651	8.621	8.656	VV	9654	117886	1.03%	0.048%	
189	8.673	8.656	8.716	VV	25381	341939	2.99%	0.139%	
190	8.728	8.716	8.745	VV	1629	21319	0.19%	0.009%	
191	8.764	8.745	8.786	VV	6980	73375	0.64%	0.030%	
192	8.814	8.786	8.828	VV	1579	23742	0.21%	0.010%	
193	8.838	8.828	8.847	VV	635	5410	0.05%	0.002%	
194	8.856	8.847	8.886	VV	609	9683	0.08%	0.004%	

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195	8.922	8.886	8.947	VV	5718	70777	0.62%	0.029%
196	8.972	8.947	8.998	VV	110292	1068164		
197	9.020	8.998	9.060	VV	8380	118228		
198	9.090	9.060	9.101	VV	3596	48997		
199	9.112	9.101	9.128	VV	3511	41118		
200	9.138	9.128	9.152	VV	1887	20152		
201	9.170	9.152	9.183	VV	2074	29975	0.26%	0.012%
202	9.216	9.183	9.230	VV	15440	196195	1.71%	0.080%
203	9.247	9.230	9.273	VV	50235	505127	4.41%	0.206%
204	9.288	9.273	9.305	VV	2966	36708	0.32%	0.015%
205	9.310	9.305	9.325	VV	1366	14552	0.13%	0.006%
206	9.341	9.325	9.358	VV	3588	41599	0.36%	0.017%
207	9.387	9.358	9.411	VV	9477	133329	1.16%	0.054%
208	9.426	9.411	9.472	VV	10328	127891	1.12%	0.052%
209	9.486	9.472	9.499	VV	571	6337	0.06%	0.003%
210	9.513	9.499	9.520	VV	678	6290	0.05%	0.003%
211	9.543	9.520	9.559	VV	10951	122450	1.07%	0.050%
212	9.575	9.559	9.606	VV	9090	106825	0.93%	0.044%
213	9.626	9.606	9.643	VV	2849	34688	0.30%	0.014%
214	9.680	9.643	9.701	VV	10974	157044	1.37%	0.064%
215	9.720	9.701	9.737	VV	8155	93925	0.82%	0.038%
216	9.763	9.737	9.814	VV	92472	1015037	8.86%	0.414%
217	9.843	9.814	9.860	VV	12173	154995	1.35%	0.063%
218	9.864	9.860	9.871	VV	4252	27192	0.24%	0.011%
219	9.884	9.871	9.896	VV	9963	105988	0.93%	0.043%
220	9.915	9.896	9.935	VV	25625	325299	2.84%	0.133%
221	9.945	9.935	9.953	VV	3833	37486	0.33%	0.015%
222	9.955	9.953	9.958	VV	7300	12890	0.11%	0.005%
223	9.975	9.958	10.000	VV	16092	201471	1.76%	0.082%
224	10.043	10.000	10.066	VV	45394	532110	4.65%	0.217%
225	10.087	10.066	10.117	VV	26601	330057	2.88%	0.135%
226	10.140	10.117	10.153	VV	4004	77048	0.67%	0.031%
227	10.181	10.153	10.232	VV	220464	2638431	23.04%	1.076%
228	10.250	10.232	10.273	VV	7705	113009	0.99%	0.046%
229	10.285	10.273	10.311	VV	3734	48998	0.43%	0.020%
230	10.328	10.311	10.334	VV	1343	14180	0.12%	0.006%
231	10.357	10.334	10.383	VV	4103	72596	0.63%	0.030%
232	10.387	10.383	10.431	VV	770	7175	0.06%	0.003%
233	10.457	10.431	10.466	PV	1000	11846	0.10%	0.005%
234	10.476	10.466	10.489	VV	1318	15770	0.14%	0.006%
235	10.510	10.489	10.530	VV	8197	107940	0.94%	0.044%
236	10.537	10.530	10.549	VV	2423	22627	0.20%	0.009%
237	10.566	10.549	10.590	VV	4959	75173	0.66%	0.031%
238	10.625	10.590	10.633	VV	12180	161631	1.41%	0.066%
239	10.649	10.633	10.672	VV	25357	330326	2.88%	0.135%
240	10.689	10.672	10.728	VV	14367	191067	1.67%	0.078%
241	10.767	10.728	10.799	VV	16616	310473	2.71%	0.127%
242	10.817	10.799	10.879	VV	41027	572446	5.00%	0.233%
243	10.903	10.879	10.914	VV	5987	86400	0.75%	0.035%
244	10.939	10.914	10.950	VV	21302	277613	2.42%	0.113%
245	10.972	10.950	10.992	VV	45539	670804	5.86%	0.274%
246	11.001	10.992	11.018	VV	12825	136852	1.19%	0.056%

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				rters				
247	11.044	11.018	11.058	VV	6617	118487	1.03%	0.048%
248	11.075	11.058	11.092	VV	12276	169686		
249	11.105	11.092	11.124	VV	6555	110139		
250	11.141	11.124	11.148	VV	11054	121711		
251	11.181	11.148	11.220	VV	883814	10309777	96	
252	11.249	11.220	11.268	VV	201882	2160373	18	
253	11.273	11.268	11.291	VV	16102	144011	1.26%	0.059%
254	11.299	11.291	11.312	VV	4887	49235	0.43%	0.020%
255	11.323	11.312	11.334	VV	3524	39043	0.34%	0.016%
256	11.349	11.334	11.371	VV	4534	74387	0.65%	0.030%
257	11.385	11.371	11.393	VV	4383	45599	0.40%	0.019%
258	11.418	11.393	11.440	VV	88727	1047622	9.15%	0.427%
259	11.461	11.440	11.505	VV	74168	869422	7.59%	0.355%
260	11.534	11.505	11.548	PV	4738	79151	0.69%	0.032%
261	11.571	11.548	11.594	VV	7858	164399	1.44%	0.067%
262	11.627	11.594	11.653	VV	190964	2325477	20.30%	0.948%
263	11.695	11.653	11.699	VV	17553	342205	2.99%	0.140%
264	11.711	11.699	11.746	VV	20803	324314	2.83%	0.132%
265	11.775	11.746	11.798	VV	14803	214874	1.88%	0.088%
266	11.825	11.798	11.847	VV	14311	208329	1.82%	0.085%
267	11.867	11.847	11.912	VV	11686	266809	2.33%	0.109%
268	11.928	11.912	11.947	VV	7118	98855	0.86%	0.040%
269	11.978	11.947	11.993	VV	97316	1139748	9.95%	0.465%
270	12.009	11.993	12.031	VV	130001	1438610	12.56%	0.587%
271	12.041	12.031	12.053	VV	8418	86940	0.76%	0.035%
272	12.094	12.053	12.110	VV	94360	1550587	13.54%	0.632%
273	12.126	12.110	12.140	VV	60750	698187	6.10%	0.285%
274	12.157	12.140	12.183	VV	83481	1008334	8.80%	0.411%
275	12.200	12.183	12.216	VV	6443	72828	0.64%	0.030%
276	12.237	12.216	12.260	VV	11917	171677	1.50%	0.070%
277	12.300	12.260	12.312	VV	11321	191045	1.67%	0.078%
278	12.333	12.312	12.355	VV	65372	773921	6.76%	0.316%
279	12.368	12.355	12.376	VV	8059	85957	0.75%	0.035%
280	12.392	12.376	12.423	VV	10753	206110	1.80%	0.084%
281	12.448	12.423	12.469	VV	66124	765097	6.68%	0.312%
282	12.484	12.469	12.498	VV	7934	115318	1.01%	0.047%
283	12.502	12.498	12.523	VV	6607	79065	0.69%	0.032%
284	12.557	12.523	12.580	VV	186901	2485288	21.70%	1.013%
285	12.596	12.580	12.642	VV	13713	308206	2.69%	0.126%
286	12.652	12.642	12.666	VV	3745	46917	0.41%	0.019%
287	12.699	12.666	12.711	VV	14388	240122	2.10%	0.098%
288	12.723	12.711	12.749	VV	12971	190355	1.66%	0.078%
289	12.769	12.749	12.808	VV	24990	470615	4.11%	0.192%
290	12.831	12.808	12.861	VV	37182	570041	4.98%	0.232%
291	12.882	12.861	12.902	VV	53032	699168	6.10%	0.285%
292	12.942	12.902	12.969	VV	201983	2951924	25.77%	1.204%
293	13.009	12.969	13.038	VV	879299	11453794	100.00%	4.670%
294	13.058	13.038	13.079	VV	11209	141867	1.24%	0.058%
295	13.095	13.079	13.106	VV	5025	56511	0.49%	0.023%
296	13.133	13.106	13.144	VV	19358	266533	2.33%	0.109%
297	13.183	13.144	13.197	VV	38516	790696	6.90%	0.322%
298	13.210	13.197	13.251	VV	25674	508851	4.44%	0.207%
299	13.259	13.251	13.269	VV	6305	63667	0.56%	0.026%

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300	13.307	13.269	13.328	VV	748937	9113273	79.57%	3.716%
301	13.353	13.328	13.368	VV	82960	981581	Manual IntegrationsAPPROVED	
302	13.384	13.368	13.417	VV	86009	1061519		
303	13.436	13.417	13.449	VV	7012	98679		
304	13.469	13.449	13.482	VV	32533	381488		
305	13.498	13.482	13.523	VV	44350	559841		
306	13.562	13.523	13.588	PV	55214	755611	6.60%	0.308%
307	13.619	13.588	13.661	VV	54474	1053907	9.20%	0.430%
308	13.691	13.661	13.711	VV	33284	520327	4.54%	0.212%
309	13.719	13.711	13.732	VV	10723	122649	1.07%	0.050%
310	13.756	13.732	13.768	VV	55377	765149	6.68%	0.312%
311	13.781	13.768	13.821	VV	61561	830349	7.25%	0.339%
312	13.886	13.821	13.927	VV	120728	2038855	17.80%	0.831%
313	13.953	13.927	13.969	VV	13277	188851	1.65%	0.077%
314	13.994	13.969	14.014	VV	62429	843617	7.37%	0.344%
315	14.033	14.014	14.054	VV	60226	736274	6.43%	0.300%
316	14.075	14.054	14.101	VV	20617	364017	3.18%	0.148%
317	14.142	14.101	14.184	VV	188463	3289905	28.72%	1.341%
318	14.204	14.184	14.243	VV	49620	688265	6.01%	0.281%
319	14.274	14.243	14.296	VV	21825	343313	3.00%	0.140%
320	14.313	14.296	14.333	VV	8779	149437	1.30%	0.061%
321	14.346	14.333	14.354	VV	5743	64058	0.56%	0.026%
322	14.389	14.354	14.422	VV	9613	293910	2.57%	0.120%
323	14.430	14.422	14.456	VV	6297	82060	0.72%	0.033%
324	14.471	14.456	14.508	VV	3648	41444	0.36%	0.017%
325	14.527	14.508	14.540	VV	4039	37030	0.32%	0.015%
326	14.583	14.540	14.601	VV	21622	512187	4.47%	0.209%
327	14.621	14.601	14.655	VV	61744	849310	7.42%	0.346%
328	14.671	14.655	14.678	VV	4677	49062	0.43%	0.020%
329	14.708	14.678	14.714	VV	14677	224182	1.96%	0.091%
330	14.724	14.714	14.758	VV	16033	249417	2.18%	0.102%
331	14.799	14.758	14.839	VV	54345	1171554	10.23%	0.478%
332	14.864	14.839	14.886	VV	105592	1413684	12.34%	0.576%
333	14.926	14.886	14.959	VV	76926	1413093	12.34%	0.576%
334	14.986	14.959	15.008	VV	12588	231421	2.02%	0.094%
335	15.043	15.008	15.097	VV	103947	1682746	14.69%	0.686%
336	15.131	15.097	15.149	VV	28284	378256	3.30%	0.154%
337	15.183	15.149	15.203	VV	366105	4927120	43.02%	2.009%
338	15.227	15.203	15.241	VV	390153	4889015	42.68%	1.993%
339	15.246	15.241	15.295	VV	174230	1731995	15.12%	0.706%
340	15.340	15.295	15.388	VV	76480	1268128	11.07%	0.517%
341	15.415	15.388	15.451	VV	33714	515953	4.50%	0.210%
342	15.478	15.451	15.501	PV	39417	590125	5.15%	0.241%
343	15.537	15.501	15.572	VV	28923	759509	6.63%	0.310%
344	15.622	15.572	15.650	VV	57101	970770	8.48%	0.396%
345	15.656	15.650	15.683	VV	14401	200319	1.75%	0.082%
346	15.703	15.683	15.707	VV	4542	55936	0.49%	0.023%
347	15.719	15.707	15.739	VV	4986	81682	0.71%	0.033%
348	15.766	15.739	15.783	VV	12738	233772	2.04%	0.095%
349	15.809	15.783	15.828	VV	22250	404637	3.53%	0.165%
350	15.852	15.828	15.872	VV	78627	1052505	9.19%	0.429%
351	15.889	15.872	15.913	VV	39004	524766	4.58%	0.214%

					rters			
352	15.933	15.913	15.953	VV	17836	289721	2.53%	0.118%
353	15.961	15.953	15.966	VV	11744	89669	0.00%	0.000%
354	16.012	15.966	16.049	VV	44664	1222317	10.00%	0.000%
355	16.090	16.049	16.122	VV	22117	456493	3.00%	0.000%
356	16.129	16.122	16.144	VV	4753	52285	0.00%	0.000%
357	16.172	16.144	16.188	VV	18140	255157	2.00%	0.000%
358	16.207	16.188	16.230	VV	26922	355827	3.11%	0.145%
359	16.269	16.230	16.304	VV	164792	2345373	20.48%	0.956%
360	16.314	16.304	16.325	VV	2381	22241	0.19%	0.009%
361	16.347	16.325	16.365	VV	3560	55685	0.49%	0.023%
362	16.380	16.365	16.392	VV	3193	40152	0.35%	0.016%
363	16.409	16.392	16.427	VV	3412	44551	0.39%	0.018%
364	16.463	16.427	16.502	VV	18059	433424	3.78%	0.177%
365	16.523	16.502	16.543	VV	20807	286191	2.50%	0.117%
366	16.560	16.543	16.568	VV	11486	140903	1.23%	0.057%
367	16.572	16.568	16.591	VV	12007	133511	1.17%	0.054%
368	16.649	16.591	16.660	VV	25912	601611	5.25%	0.245%
369	16.671	16.660	16.697	VV	26167	348563	3.04%	0.142%
370	16.748	16.697	16.763	VV	353336	5395129	47.10%	2.200%
371	16.772	16.763	16.807	VV	174999	1804727	15.76%	0.736%
372	16.824	16.807	16.843	VV	7936	148132	1.29%	0.060%
373	16.870	16.843	16.891	VV	78080	1010658	8.82%	0.412%
374	16.907	16.891	16.926	VV	19212	290063	2.53%	0.118%
375	16.930	16.926	16.948	VV	10237	119777	1.05%	0.049%
376	16.961	16.948	16.974	VV	10174	143020	1.25%	0.058%
377	16.988	16.974	17.008	VV	17477	279661	2.44%	0.114%
378	17.065	17.008	17.092	VV	222100	3652620	31.89%	1.489%
379	17.128	17.092	17.164	VV	310318	4221195	36.85%	1.721%
380	17.220	17.164	17.248	VV	235712	3385599	29.56%	1.380%
381	17.269	17.248	17.307	VV	33594	681292	5.95%	0.278%
382	17.363	17.307	17.405	VV	27773	1033382	9.02%	0.421%
383	17.421	17.405	17.441	VV	15469	246700	2.15%	0.101%
384	17.485	17.441	17.519	VV	40364	1091605	9.53%	0.445%
385	17.523	17.519	17.556	VV	20160	266828	2.33%	0.109%
386	17.583	17.556	17.597	VV	19130	323661	2.83%	0.132%
387	17.621	17.597	17.634	VV	27366	486889	4.25%	0.199%
388	17.644	17.634	17.682	VV	27556	559754	4.89%	0.228%
389	17.703	17.682	17.723	VV	24630	451205	3.94%	0.184%
390	17.729	17.723	17.753	VV	17321	266020	2.32%	0.108%
391	17.778	17.753	17.807	VV	32363	682847	5.96%	0.278%
392	17.815	17.807	17.835	VV	15551	224544	1.96%	0.092%
393	17.843	17.835	17.854	VV	10414	106324	0.93%	0.043%
394	17.894	17.854	17.944	VV	14028	539657	4.71%	0.220%
395	17.963	17.944	17.979	VV	10946	191854	1.68%	0.078%
396	17.998	17.979	18.013	VV	10061	181941	1.59%	0.074%
397	18.110	18.013	18.140	VV	165145	3224906	28.16%	1.315%
398	18.149	18.140	18.155	VV	15563	131265	1.15%	0.054%
399	18.178	18.155	18.189	VV	20940	378303	3.30%	0.154%
400	18.212	18.189	18.234	VV	27412	584944	5.11%	0.239%
401	18.261	18.234	18.314	VV	39151	1307015	11.41%	0.533%
402	18.340	18.314	18.369	VV	25521	633854	5.53%	0.258%
403	18.400	18.369	18.445	VV	64734	1545471	13.49%	0.630%
404	18.496	18.445	18.518	VV	207655	3826628	33.41%	1.560%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOILMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Parameters							Instrument :	
							FID_G	
							ClientSampleId :	
							10TH-ST-SOILMSD	
405	18.532	18.518	18.560	VV	55826	1073170	9.37%	0.438%
406	18.573	18.560	18.597	VV	36599	609210		
407	18.624	18.597	18.642	VV	78589	1302557		
408	18.659	18.642	18.717	VV	73504	1890888		
409	18.754	18.717	18.777	VV	219037	3380381		
410	18.780	18.777	18.800	VV	34460	452138		
411	18.827	18.800	18.848	VV	38457	945134	8.25%	0.385%
412	18.878	18.848	18.911	VV	79406	1517453	13.25%	0.619%
413	18.943	18.911	18.992	VV	153311	2807833	24.51%	1.145%
414	19.007	18.992	19.025	VV	19702	359205	3.14%	0.146%
415	19.053	19.025	19.076	VV	31605	735644	6.42%	0.300%
416	19.095	19.076	19.120	VV	26001	597978	5.22%	0.244%
417	19.155	19.120	19.163	VV	27009	632874	5.53%	0.258%
418	19.178	19.163	19.198	VV	33037	589578	5.15%	0.240%
419	19.226	19.198	19.239	VV	25537	575849	5.03%	0.235%
420	19.259	19.239	19.274	VV	33319	565632	4.94%	0.231%
421	19.291	19.274	19.311	VV	36958	706585	6.17%	0.288%
422	19.315	19.311	19.337	VV	31272	437818	3.82%	0.179%
423	19.348	19.337	19.373	VV	28127	524390	4.58%	0.214%
424	19.384	19.373	19.400	VV	24608	374621	3.27%	0.153%
425	19.424	19.400	19.483	VV	34696	1351593	11.80%	0.551%
426	19.492	19.483	19.514	VV	19352	341848	2.98%	0.139%
427	19.540	19.514	19.576	VV	25908	766233	6.69%	0.312%
428	19.583	19.576	19.587	VV	20524	137161	1.20%	0.056%
429	19.599	19.587	19.620	VV	21465	378955	3.31%	0.155%
430	19.639	19.620	19.658	VV	20067	398898	3.48%	0.163%
431	19.667	19.658	19.674	VV	17978	174595	1.52%	0.071%
432	19.680	19.674	19.687	VV	18649	132950	1.16%	0.054%
433	19.727	19.687	19.754	VV	140283	2487222	21.72%	1.014%
434	19.762	19.754	19.782	VV	28929	437958	3.82%	0.179%
435	19.790	19.782	19.802	VV	24615	282476	2.47%	0.115%
436	19.839	19.802	19.874	VV	40989	1200045	10.48%	0.489%
437	19.908	19.874	19.933	VV	106096	2130305	18.60%	0.869%
438	19.976	19.933	20.002	VV	98222	2456302	21.45%	1.002%
439	20.028	20.002	20.048	VV	49271	1158956	10.12%	0.473%
440	20.064	20.048	20.086	VV	49858	984370	8.59%	0.401%
441	20.094	20.086	20.124	VV	40162	781186	6.82%	0.319%
442	20.153	20.124	20.166	VV	34999	787601	6.88%	0.321%
443	20.185	20.166	20.219	VV	47264	1187296	10.37%	0.484%
444	20.283	20.219	20.313	VV	117161	3505814	30.61%	1.429%
445	20.353	20.313	20.369	VV	63146	1569050	13.70%	0.640%
446	20.375	20.369	20.396	VV	45453	620956	5.42%	0.253%
447	20.425	20.396	20.441	VV	50326	1097051	9.58%	0.447%
448	20.468	20.441	20.503	VV	127749	2545548	22.22%	1.038%
449	20.546	20.503	20.553	VV	37375	989737	8.64%	0.404%
450	20.557	20.553	20.584	VV	37548	614089	5.36%	0.250%
451	20.588	20.584	20.600	VV	30139	280587	2.45%	0.114%
452	20.626	20.600	20.656	VV	36890	1057063	9.23%	0.431%
453	20.670	20.656	20.678	VV	29775	380151	3.32%	0.155%
454	20.706	20.678	20.731	VV	33162	995998	8.70%	0.406%
455	20.766	20.731	20.795	VV	37160	1272635	11.11%	0.519%
456	20.799	20.795	20.806	VV	31100	203227	1.77%	0.083%

Instrument :

FID_G

ClientSampleId :

10TH-ST-SOILMSD

9.37% 0.438%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024

Supervised By :Ankita Jodhani 12/09/2024

Instrument : FID_G									
ClientSampleId : 10TH-ST-SOILMSD									
457	20.834	20.806	20.878	VV	42518	1450518	12.66%	0.591%	
458	20.881	20.878	20.886	VV	24160	107463			
459	20.902	20.886	20.907	VV	24944	302135			
460	20.928	20.907	20.955	VV	28948	772308			
461	20.972	20.955	20.978	VV	26769	344041			
462	20.980	20.978	21.003	VV	26360	369096			
463	21.044	21.003	21.048	VV	26751	665919	5.81%	0.272%	
464	21.068	21.048	21.075	VV	30260	456817	3.99%	0.186%	
465	21.081	21.075	21.085	VV	30818	183875	1.61%	0.075%	
466	21.121	21.085	21.180	VV	37948	1777358	15.52%	0.725%	
467	21.216	21.180	21.258	VV	92929	2150437	18.77%	0.877%	
468	21.302	21.258	21.307	VV	28722	655305	5.72%	0.267%	
469	21.314	21.307	21.326	VV	27960	312465	2.73%	0.127%	
470	21.329	21.326	21.369	VV	27537	597952	5.22%	0.244%	
471	21.375	21.369	21.380	VV	19874	128124	1.12%	0.052%	
472	21.395	21.380	21.437	VV	23081	629026	5.49%	0.256%	
473	21.510	21.437	21.540	VV	23036	1146311	10.01%	0.467%	
474	21.553	21.540	21.578	VV	23526	484110	4.23%	0.197%	
475	21.601	21.578	21.613	VV	23592	455188	3.97%	0.186%	
476	21.647	21.613	21.675	VV	48929	1422861	12.42%	0.580%	
477	21.691	21.675	21.750	VV	41539	1391631	12.15%	0.567%	
478	21.757	21.750	21.811	VV	19359	484259	4.23%	0.197%	
479	21.815	21.811	21.833	VV	8746	106051	0.93%	0.043%	
480	21.858	21.833	21.878	VV	12601	280450	2.45%	0.114%	
481	21.901	21.878	21.949	VV	15276	403672	3.52%	0.165%	
482	21.996	21.949	22.042	VV	31221	920887	8.04%	0.375%	
483	22.079	22.042	22.106	VV	31936	824893	7.20%	0.336%	
484	22.151	22.106	22.207	VV	62643	2150659	18.78%	0.877%	
485	22.222	22.207	22.258	VV	15416	270562	2.36%	0.110%	
486	22.268	22.258	22.273	PV	775	6186	0.05%	0.003%	
487	22.282	22.273	22.293	VV	1445	9034	0.08%	0.004%	
Sum of corrected areas:						245249041			

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

FG112024.M Fri Dec 06 22:59:22 2024

Manual Integration Report

Sample ID	ClientID ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
50 PPM TRPH STD		FG014925.D	FG120624	N-OCTACOSANE	Ankita	12/9/2024 10:19:11 AM	Peak Integrated by Software incorrectly
PB165424BS		FG014928.D	FG120624	N-TETRACONTANE	Ankita	12/9/2024 10:19:12 AM	Peak Integrated by Software incorrectly
P5112-01		FG014929.D	FG120624	TETRACOSANE-d50 (SURROGA	Ankita	12/9/2024 10:19:13 AM	Peak Integrated by Software incorrectly
P5112-01MS		FG014930.D	FG120624	N-TETRACOSANE	Ankita	12/9/2024 10:19:15 AM	Peak Integrated by Software incorrectly
P5112-01MS		FG014930.D	FG120624	TETRACOSANE-d50 (SURROGA	Ankita	12/9/2024 10:19:15 AM	Peak Integrated by Software incorrectly
P5112-01MSD		FG014931.D	FG120624	N-TETRACOSANE	Ankita	12/9/2024 10:19:16 AM	Peak Integrated by Software incorrectly
P5112-01MSD		FG014931.D	FG120624	TETRACOSANE-d50 (SURROGA	Ankita	12/9/2024 10:19:16 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		FG014936.D	FG120924	N-OCTATRIACONTANE	Ankita	12/10/2024 10:26:05 AM	Peak Integrated by Software incorrectly
P5112-01		FG014938.D	FG120924	TETRACOSANE-d50 (SURROGA	Ankita	12/10/2024 10:26:06 AM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FG014940.D	FG120924	TETRACOSANE-d50 (SURROGA	Ankita	12/10/2024 10:26:08 AM	Peak Integrated by Software incorrectly

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG112024

Review By	yogesh	Review On	11/20/2024 3:16:01 PM
Supervise By	Ankita	Supervise On	11/21/2024 10:01:12 AM
SubDirectory	FG112024	HP Acquire Method	HP Processing Method FG112024
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23962,PP23967		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG014886.D	20 Nov 2024 15:42	YP\AJ	Ok
2	I.BLK	FG014887.D	20 Nov 2024 16:39	YP\AJ	Ok
3	100 TRPH STD	FG014888.D	20 Nov 2024 17:36	YP\AJ	Ok
4	50 TRPH STD	FG014889.D	20 Nov 2024 18:32	YP\AJ	Ok
5	20 TRPH STD	FG014890.D	20 Nov 2024 19:01	YP\AJ	Ok
6	10 TRPH STD	FG014891.D	20 Nov 2024 19:29	YP\AJ	Ok
7	5 TRPH STD	FG014892.D	20 Nov 2024 19:58	YP\AJ	Ok
8	FG112024ICV	FG014893.D	20 Nov 2024 21:23	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG120624

Review By	yogesh	Review On	12/9/2024 11:01:00 AM
Supervise By	Ankita	Supervise On	12/9/2024 11:04:00 AM
SubDirectory	FG120624	HP Acquire Method	HP Processing Method FG112024
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM	PP23963		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23962,PP23967		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG014923.D	06 Dec 2024 09:53	YP\AJ	Ok
2	I.BLK	FG014924.D	06 Dec 2024 10:21	YP\AJ	Ok
3	50 PPM TRPH STD	FG014925.D	06 Dec 2024 10:50	YP\AJ	Ok,M
4	RT MARKER	FG014926.D	06 Dec 2024 11:18	YP\AJ	Ok
5	PB165424BL	FG014927.D	06 Dec 2024 13:44	YP\AJ	Ok
6	PB165424BS	FG014928.D	06 Dec 2024 14:12	YP\AJ	Ok,M
7	P5112-01	FG014929.D	06 Dec 2024 14:40	YP\AJ	Dilution
8	P5112-01MS	FG014930.D	06 Dec 2024 15:09	YP\AJ	Ok,M
9	P5112-01MSD	FG014931.D	06 Dec 2024 15:37	YP\AJ	Ok,M
10	I.BLK	FG014932.D	06 Dec 2024 16:05	YP\AJ	Ok
11	50 PPM TRPH STD	FG014933.D	06 Dec 2024 16:34	YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG120924

Review By	yogesh	Review On	12/9/2024 11:49:36 AM
Supervise By	Ankita	Supervise On	12/10/2024 10:26:13 AM
SubDirectory	FG120924	HP Acquire Method	HP Processing Method FG112024
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM	PP23963		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23962,PP23967		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG014934.D	09 Dec 2024 08:31	YP\AJ	Ok
2	I.BLK	FG014935.D	09 Dec 2024 08:59	YP\AJ	Ok
3	50 PPM TRPH STD	FG014936.D	09 Dec 2024 09:28	YP\AJ	Ok,M
4	RT MARKER	FG014937.D	09 Dec 2024 10:03	YP\AJ	Ok
5	P5112-01	FG014938.D	09 Dec 2024 10:32	YP\AJ	Ok,M
6	I.BLK	FG014939.D	09 Dec 2024 11:00	YP\AJ	Ok
7	50 PPM TRPH STD	FG014940.D	09 Dec 2024 11:29	YP\AJ	Ok,M

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG112024

Review By	yogesh	Review On	11/20/2024 3:16:01 PM
Supervise By	Ankita	Supervise On	11/21/2024 10:01:12 AM
SubDirectory	FG112024	HP Acquire Method	HP Processing Method FG112024

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23962,PP23967

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG014886.D	20 Nov 2024 15:42		YP\AJ	Ok
2	I.BLK		FG014887.D	20 Nov 2024 16:39		YP\AJ	Ok
3	100 TRPH STD		FG014888.D	20 Nov 2024 17:36		YP\AJ	Ok
4	50 TRPH STD		FG014889.D	20 Nov 2024 18:32		YP\AJ	Ok
5	20 TRPH STD		FG014890.D	20 Nov 2024 19:01		YP\AJ	Ok
6	10 TRPH STD		FG014891.D	20 Nov 2024 19:29		YP\AJ	Ok
7	5 TRPH STD		FG014892.D	20 Nov 2024 19:58		YP\AJ	Ok
8	FG112024ICV		FG014893.D	20 Nov 2024 21:23		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG120624

Review By	yogesh	Review On	12/9/2024 11:01:00 AM
Supervise By	Ankita	Supervise On	12/9/2024 11:04:00 AM
SubDirectory	FG120624	HP Acquire Method	HP Processing Method FG112024

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966
CCC Internal Standard/PEM	PP23963
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23962,PP23967

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG014923.D	06 Dec 2024 09:53		YP\AJ	Ok
2	I.BLK		FG014924.D	06 Dec 2024 10:21		YP\AJ	Ok
3	50 PPM TRPH STD		FG014925.D	06 Dec 2024 10:50		YP\AJ	Ok,M
4	RT MARKER		FG014926.D	06 Dec 2024 11:18		YP\AJ	Ok
5	PB165424BL		FG014927.D	06 Dec 2024 13:44		YP\AJ	Ok
6	PB165424BS		FG014928.D	06 Dec 2024 14:12		YP\AJ	Ok,M
7	P5112-01		FG014929.D	06 Dec 2024 14:40	need 5x dilution	YP\AJ	Dilution
8	P5112-01MS		FG014930.D	06 Dec 2024 15:09		YP\AJ	Ok,M
9	P5112-01MSD		FG014931.D	06 Dec 2024 15:37		YP\AJ	Ok,M
10	I.BLK		FG014932.D	06 Dec 2024 16:05		YP\AJ	Ok
11	50 PPM TRPH STD		FG014933.D	06 Dec 2024 16:34		YP\AJ	Ok

M : Manual Integration

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG120924

Review By	yogesh	Review On	12/9/2024 11:49:36 AM
Supervise By	Ankita	Supervise On	12/10/2024 10:26:13 AM
SubDirectory	FG120924	HP Acquire Method	HP Processing Method FG112024
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC	PP23963		
Internal Standard/PEM	PP23962,PP23967		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG014934.D	09 Dec 2024 08:31		YP\AJ	Ok
2	I.BLK		FG014935.D	09 Dec 2024 08:59		YP\AJ	Ok
3	50 PPM TRPH STD		FG014936.D	09 Dec 2024 09:28		YP\AJ	Ok,M
4	RT MARKER		FG014937.D	09 Dec 2024 10:03		YP\AJ	Ok
5	P5112-01		FG014938.D	09 Dec 2024 10:32		YP\AJ	Ok,M
6	I.BLK		FG014939.D	09 Dec 2024 11:00		YP\AJ	Ok
7	50 PPM TRPH STD		FG014940.D	09 Dec 2024 11:29		YP\AJ	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/6/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 12/05/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 12/06/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133767

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
P5112-01	10TH-ST-SOIL	1	1.15	8.38	9.53	8.81	91.4	
P5113-01	FES-SB406-4345	2	1.15	8.81	9.96	8.94	88.4	
P5113-02	FES-SB406-7375	3	1.15	8.61	9.76	7.93	78.7	
P5117-01	TAPIAL3-SB04I-10-12032 4-00-T1	4	1.15	8.59	9.74	9.37	95.7	
P5117-02	TAPIAL2-IDW-SOIL-12042 4-00-T2	5	1.15	8.38	9.53	7.84	79.8	
P5120-01	TAPIAL2-IDW-SOIL-12042 4-00-T2	6	1.15	8.38	9.53	7.84	79.8	
P5133-01	MOO-24-00374	9	1.15	8.35	9.5	9.14	95.7	
P5134-01	MOO-24-00373	10	1.00	1.00	2.00	2.00	100.0	debris
P5135-01	LAW-23-00193	11	1.16	8.44	9.6	9.05	93.5	
P5136-01	COMP-1	12	1.16	8.49	9.65	7.26	71.8	
P5137-01	LAW-OILY-STONES	13	1.00	1.00	2.00	2.00	100.0	oily stone
P5137-02	LAW-OILY-STONES-E2	14	1.00	1.00	2.00	2.00	100.0	oily stone
P5144-01	60400	15	1.00	1.00	2.00	2.00	100.0	wipe sample
P5147-01	EX-8-TPH-1	7	1.15	8.82	9.97	8.29	81.0	
P5147-02	EX-8-TPH-2	8	1.15	8.76	9.91	8.1	79.3	

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

WORKLIST(Hardcopy Internal Chain)

133767

WorkList Name : %1-120524

WorkList ID : 185988

Department : Wet-Chemistry

Date : 12-05-2024 08:21:57

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5112-01	10TH-ST-SOIL	Solid	Percent Solids	Cool 4 deg C	TULL02	L51	12/05/2024	Chemtech -SO
P5113-01	FES-SB406-4345	Solid	Percent Solids	Cool 4 deg C	TETRO6	L31	12/04/2024	Chemtech -SO
P5113-02	FES-SB406-7375	Solid	Percent Solids	Cool 4 deg C	TETRO6	L31	12/04/2024	Chemtech -SO
P5117-01	TAPIAL3-SB04I-10-120324-00-	Solid	Percent Solids	Cool 4 deg C	WEST04	L41	12/05/2024	Chemtech -SO
P5117-02	TAPIAL2-IDW-SOIL-120424-00-	Solid	Percent Solids	Cool 4 deg C	WEST04	L41	12/05/2024	Chemtech -SO
P5120-01	TAPIAL2-IDW-SOIL-120424-00-	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	11/27/2024	Chemtech -SO
P5133-01	MOO-24-00374	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5134-01	MOO-24-00373	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5135-01	LAW-23-00193	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	12/05/2024	Chemtech -SO
P5136-01	COMP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5137-01	LAW-OILY-STONES	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5137-02	LAW-OILY-STONES-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5147-01	EX-8-TPH-1	Solid	Percent Solids	Cool 4 deg C	ENTA05	L41	12/05/2024	Chemtech -SO
P5147-02	EX-8-TPH-2	Solid	Percent Solids	Cool 4 deg C	ENTA05	L41	12/05/2024	Chemtech -SO

Date/Time 12/05/24 15:40
 Raw Sample Received by: JD wdc
 Raw Sample Relinquished by: RJ cxt-(ab)

Date/Time 12/05/24 18:10
 Raw Sample Received by: RJ cxt-(ab)
 Raw Sample Relinquished by: JD wdc

SOP ID: M3541-ASE Extraction-14

Clean Up SOP #: N/A

Matrix: Solid

Weigh By: EH

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RS

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date: 12/06/2024

Extraction Start Time: 09:01

Extraction End Date: 12/06/2024

Extraction End Time: 12:00

Concentration By: EH

Supervisor By: rajesh

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

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Surrogate	1.0ML	20 PPM	PP23935
Spike Sol 1	1.0ML	20 PPM	PP23454
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	EP2560
Baked Na2SO4	N/A	EP2570
Sand	N/A	E2865
Methylene Chloride	N/A	E3845
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673.

KD Bath ID: N/A

KD Bath Temperature: N/A

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/6/24	RP (Ext Lab)	AJ (K-ST PCA Lab)
12:05	Preparation Group	Analysis Group

Analytical Method: M3541-ASE Extraction-14

Concentration Date: 12/06/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB165424BL	PB165424BL	TPH GC	30.03	N/A	ritesh	Evelyn	1			U4-1
PB165424BS	PB165424BS	TPH GC	30.01	N/A	ritesh	Evelyn	1			2
P5112-01	10TH-ST-SOIL	TPH GC	30.06	N/A	ritesh	Evelyn	1	E		3
P5112-01MS	10TH-ST-SOILMS	TPH GC	30.02	N/A	ritesh	Evelyn	1	E		4
P5112-01MS D	10TH-ST-SOILMSD	TPH GC	30.07	N/A	ritesh	Evelyn	1	E		5

* Extracts relinquished on the same date as received.

2
12/6/24

WORKLIST(Hardcopy Internal Chain)

WorkList Name : P5112T

WorkList ID : 186043

Department : Extraction

Date : 12-06-2024 08:24:14

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5112-01	10TH-ST-SOIL	Solid	TPH GC	Cool 4 deg C	TULL02	L51	12/05/2024	8015D
P5147-01	EX-8-TPH-1	Solid	Diesel Range Organics	Cool 4 deg C	ENTA05	L41	12/05/2024	8015D
P5147-02	EX-8-TPH-2	Solid	Diesel Range Organics	Cool 4 deg C	ENTA05	L41	12/05/2024	8015D

Date/Time 12/6/24 8:05
Raw Sample Received by: RJ (ser 163)
Raw Sample Relinquished by: JDCSM

Date/Time 12/6/24 9:15
Raw Sample Received by: JDCSM
Raw Sample Relinquished by: RJ (ser 163)

Prep Standard - Chemical Standard Summary

Order ID : P5112

Test : TPH GC

Prepbatch ID : PB165424,

Sequence ID/Qc Batch ID: Fg120624,FG120924,

Standard ID :

EP2560,EP2570,PP23454,PP23935,PP23961,PP23962,PP23963,PP23964,PP23965,PP23966,PP23967,

Chemical ID :

E2865,E3551,E3759,E3822,E3827,E3828,E3845,P11950,P11958,P11959,P11960,P13213,P13218,P13219,P13492,P13493,P13494,P13495,

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2560	11/14/2024	05/08/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/14/2024

FROM 8000.00000ml of E3827 + 8000.00000ml of E3828 = Final Quantity: 16000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2570	12/02/2024	01/03/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 12/02/2024

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3609	20 PPM DRO SPIKE SOLUTION (RESTEK)	PP23454	06/10/2024	12/08/2024	Yogesh Patel	None	None	Ankita Jodhani
								06/12/2024

FROM 1.00000ml of P11950 + 1.00000ml of P11960 + 48.00000ml of E3759 = 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	PP23935	11/01/2024	04/23/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/04/2024

FROM 1.00000ml of P13492 + 1.00000ml of P13493 + 1.00000ml of P13494 + 1.00000ml of P13495 + 196.00000ml of E3822 = Final Quantity: 200.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
433	100/100 PPM DRO (Restek)	PP23961	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024
<u>FROM</u>	1.00000ml of P11958 + 1.00000ml of P11959 + 1.00000ml of P13213 + 7.00000ml of E3828 = 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>
3796	100/100 PPM DRO STD (CPI)	PP23962	11/13/2024	02/14/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024
<u>FROM</u>	1.00000ml of P13213 + 1.00000ml of P13218 + 1.00000ml of P13219 + 7.00000ml of E3828 = 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)	PP23963	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/13/2024

FROM 0.50000ml of E3828 + 0.50000ml of PP23961 = 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)	PP23964	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/13/2024

FROM 0.80000ml of E3828 + 0.20000ml of PP23961 = 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)	PP23965	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/13/2024

FROM 0.90000ml of E3828 + 0.10000ml of PP23961 = 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)	PP23966	11/13/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/13/2024

FROM 0.90000ml of E3828 + 0.10000ml of PP23963 = 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>
3797	50 PPM DRO ICV STD (CPI)	PP23967	11/13/2024	02/14/2025	Yogesh Patel	None	None	Ankita Jodhani 11/13/2024
<u>FROM</u>	0.80000ml of E3828 + 0.50000ml of PP23962 = Final Quantity: 1.000 ml							

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	12/31/2024	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	01/03/2025	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)	24D1962005	12/08/2024	06/08/2024 / Rajesh	05/31/2024 / Rajesh	E3759

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)	24I2662006	04/23/2025	10/24/2024 / Rajesh	10/24/2024 / Rajesh	E3822

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	05/08/2025	11/08/2024 / Rajesh	11/07/2024 / Rajesh	E3827

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)	24G0862003	05/09/2025	11/09/2024 / Rajesh	11/04/2024 / Rajesh	E3828

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)	24H2762011	06/06/2025	12/06/2024 / Rajesh	11/11/2024 / Rajesh	E3845

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	12/10/2024	06/10/2024 / yogesh	07/11/2022 / Yogesh	P11950

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	05/13/2025	11/13/2024 / yogesh	07/11/2022 / Yogesh	P11958

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	05/13/2025	11/13/2024 / yogesh	07/11/2022 / Yogesh	P11959

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31266 / Florida TRPH Standard	A0186840	12/10/2024	06/10/2024 / yogesh	07/11/2022 / Yogesh	P11960

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	05/13/2025	11/13/2024 / yogesh	01/17/2024 / Ankita	P13213

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110400-05-01 / TRPH Standard (C8-C40), 500 mg/L, 1 ml	514983	02/14/2025	08/14/2024 / yogesh	01/31/2024 / Ankita	P13218

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110400-05-01 / TRPH Standard (C8-C40), 500 mg/L, 1 ml	514983	05/13/2025	11/13/2024 / yogesh	01/31/2024 / Ankita	P13219

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	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13492

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	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13493

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	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13494

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	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13495

Sand
Purified
Washed and Ignited



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

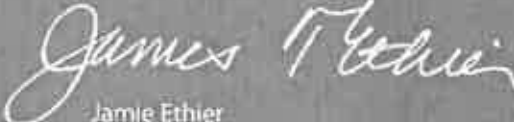
Certificate of Analysis

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

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

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

E 2865


Jamie Ethier
Vice President Global Quality

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

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



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

CERTIFICATE OF ANALYSIS

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

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

COMMENTS

QC: PhC Irma Belmares

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

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

RC-02-01, Ed. 3

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



Material No.: 9266-A4
Batch No.: 24D1962005
Manufactured Date: 2024-03-16
Expiration Date: 2025-06-15
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 Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	8
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	5
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.1 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	< 0.01 %

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24C16563

E 3759

Jamie Croak
Director Quality Operations, Bioscience Production

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



Material No.: 9266-A4

Batch No.: 24I2662006

Manufactured Date: 2024-08-29

Expiration Date: 2025-11-28

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	5
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.2 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	$< 5 \text{ ppm}$
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 3822

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

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

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

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3827

Rec'd by RS on ~~11/8/24~~ 11/7/24
RS
11/7

Jamie Croak

Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC

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

 **avantor**™



Material No.: 9266-A4

Batch No.: 24J0862003

Manufactured Date: 2024-09-12

Expiration Date: 2025-12-12

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	1
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	$< 0.01\%$

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3828



Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC

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



Material No.: 9266-A4

Batch No.: 24H2762011

Manufactured Date: 2024-06-05

Expiration Date: 2025-09-04

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	5
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	100.0%
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	$< 0.01\%$

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3845

Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

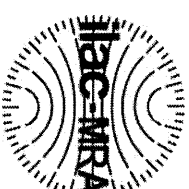
Bellefonte, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31266

Lot No.: A0186840

Description : Florida TRPH Standard

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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2029

Storage: 25°C nominal

Handling: Sonicate prior to use.

Ship: Ambient

CERTIFIED VALUES

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

P11948 } 7.8
P11962 } 07/11/16

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

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

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

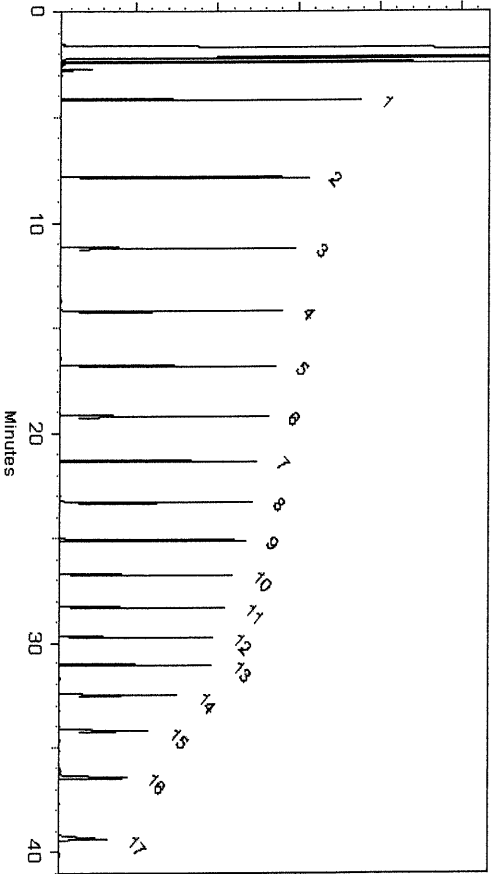
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills
Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

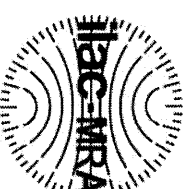
Bellefonte, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31266

Lot No.: A0186840

Description : Florida TRPH Standard

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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2029

Storage: 25°C nominal

Handling: Sonicate prior to use.

Ship: Ambient

CERTIFIED VALUES

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

P11948 } 7.8
P11962 } 07/11/16

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

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

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

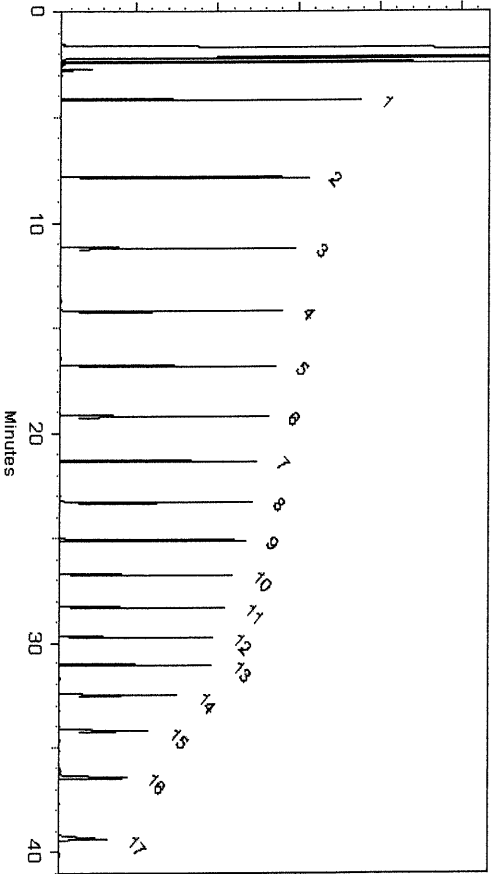
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Brittany Federinko

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

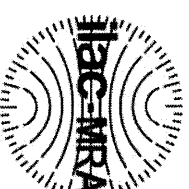
Bellefonte, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31266

Lot No.: A0186840

Description : Florida TRPH Standard

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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2029

Storage: 25°C nominal

Handling: Sonicate prior to use.

Ship: Ambient

CERTIFIED VALUES

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

P11948 } 7.8
P11962 } 07/11/16

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

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

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

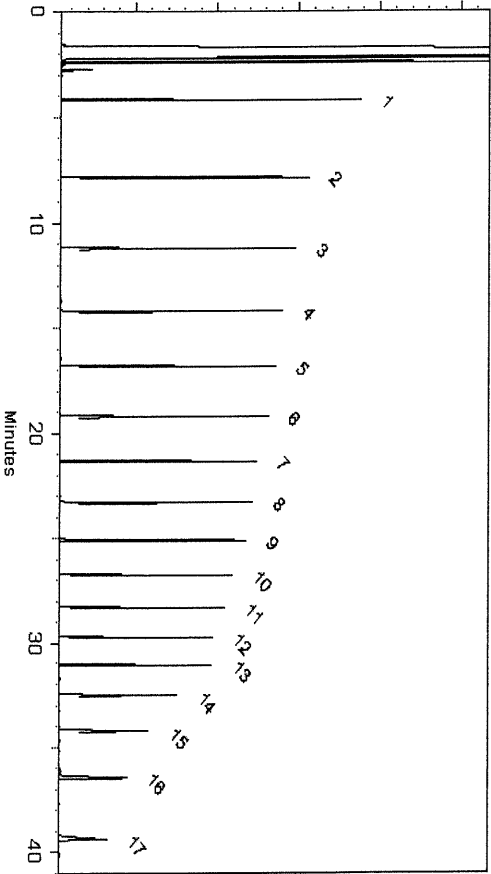
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills
Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

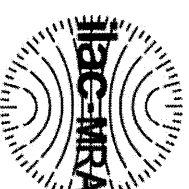
Bellefonte, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31266

Lot No.: A0186840

Description : Florida TRPH Standard

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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2029

Storage: 25°C nominal

Handling: Sonicate prior to use.

Ship: Ambient

CERTIFIED VALUES

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

P11948 } 7.8
P11962 } 07/11/16

8	n-Docosane (C22) CAS # 629-97-0 Purity 99%	(Lot MKCL8918)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Tetracosane (C24) CAS # 646-31-1 Purity 99%	(Lot MKCN2863)	503.5 µg/mL	+/- 2.9906 +/- 12.5092 +/- 14.9944	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Hexacosane (C26) CAS # 630-01-3 Purity 99%	(Lot MKCD4540)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Octacosane (C28) CAS # 630-02-4 Purity 99%	(Lot BCCG0084)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Triacontane (C30) CAS # 638-68-6 Purity 99%	(Lot MKCN9321)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Dotriacontane (C32) CAS # 544-85-4 Purity 99%	(Lot BCBW0661)	505.0 µg/mL	+/- 2.9995 +/- 12.5465 +/- 15.0390	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Tetratriacontane (C34) CAS # 14167-59-0 Purity 99%	(Lot OML4N)	504.5 µg/mL	+/- 2.9966 +/- 12.5340 +/- 15.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
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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:

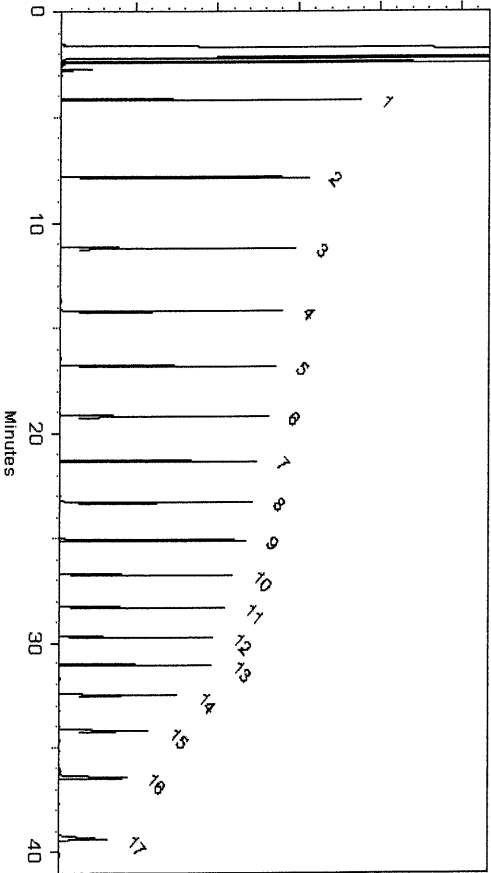
250°C

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

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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 CRM



CERTIFIED WEIGHT REPORT

Part Number:
Lot Number:
Description:

72072
101122
n-Tetracosane-d50

Solvent(s):
Methylene chloride

Lot#
105345

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test ID#:

101132
Ambient (20 °C)
1000
6UTB

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

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

200.0

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Assay (%D)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information		
										(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)

1. n-Tetracosane-d50

2072 PR-26606

1000

98.7

0.2

99.0

0.20471

0.20482

1000.6

4.1

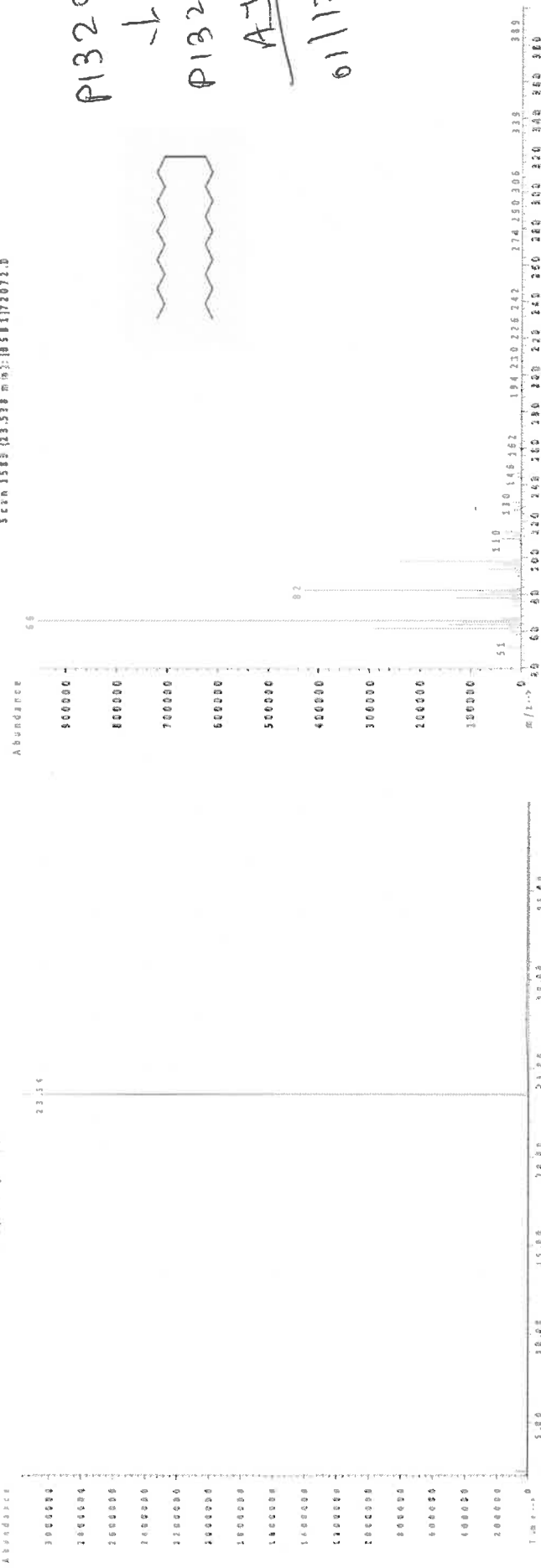
16416-32-3

N/A

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.

FIGURE 1: 101122-2



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 Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



5580 Skylane Blvd
Santa Rosa, CA 95403
(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received: _____

Certificate of Analysis

Page 1 of 1

Catalog No.: Lot No.: Storage:

Z-110400-05 514983 ≤-10 Degrees C

-01

Solvent:

Hexane

Exp. Date:

11/20/2028

Description:

TRPH Standard (C8-C40), 500 mg/L, 1 ml

Compound

CAS No.

Purity (%)

Compound Lot No.

Concentration, mg/L

decane (C10)

124-18-5

99.7

415.7.2P

498.5 ± 6.92

docosane (C22)

629-97-0

98.8

420.9.1P

499.4 ± 6.93

dodecane (C12)

112-40-3

99.7

416.9.3P

502 ± 6.97

dotriacontane (C32)

544-85-4

97

425.9.2.2P

499.6 ± 8.53

eicosane (C20)

112-95-8

99.8

419.7.1P

501 ± 6.95

hexacosane (C26)

630-01-3

99.3

422.7.2.1P

501 ± 6.95

hexatriacontane (C36)

630-06-8

98

427.29.1.1P

499.3 ± 8.53

n-hexadecane (C16)

544-76-3

99.45

368.27.1.1P

498.7 ± 6.91

octacosane (C28)

630-02-4

99.1

423.24.1P

500.5 ± 6.95

n-octadecane (C18)

593-45-3

99.5

418.29.1P

499.5 ± 6.92

octane (C8)

111-65-9

99.4

385.7.2.1P

498.5 ± 6.92

octatriacontane (C38)

7194-85-6

95

428.1.2P

500.2 ± 6.94

tetracontane (C40)

4181-95-7

97

429.7.2P

499.6 ± 6.93

n-tetracosane (C24)

646-31-1

99.5

421.7.1P

499.5 ± 6.93

n-tetradecane (C14)

629-59-4

99.3

417.9.1P

500 ± 6.94

tetratriacontane (C34)

14167-59-0

96.1

426.7.2.2P

499.7 ± 8.53

triacontane (C30)

638-68-6

99.5

424.7.1.1P

500 ± 6.94

Let the standard warm to room temperature and sonicate before opening.

P13215

↓

P13224

AJ
01/31/24

*Not a certified value

Andrea Schaible

Andrea Schaible
Chemist

Certified By: _____

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values
listed are determined gravimetrically.



5580 Skylane Blvd
Santa Rosa, CA 95403

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Date Received: _____

Certificate of Analysis

Page 1 of 1

Catalog No.: Lot No.: Storage:

Z-110400-05 514983 ≤ -10 Degrees C

Solvent:

Hexane

Exp. Date:

11/20/2028

Description:

TRPH Standard (C8-C40), 500 mg/L, 1 ml

-01

Compound

CAS No.

Purity (%)

Compound Lot No.

Concentration, mg/L

decane (C10)

124-18-5

99.7

415.7.2P

498.5 ± 6.92

docosane (C22)

629-97-0

98.8

420.9.1P

499.4 ± 6.93

dodecane (C12)

112-40-3

99.7

416.9.3P

502 ± 6.97

dotriacontane (C32)

544-85-4

97

425.9.2.2P

499.6 ± 8.53

eicosane (C20)

112-95-8

99.8

419.7.1P

501 ± 6.95

hexacosane (C26)

630-01-3

99.3

422.7.2.1P

501 ± 6.95

hexatriacontane (C36)

630-06-8

98

427.29.1.1P

499.3 ± 8.53

n-hexadecane (C16)

544-76-3

99.45

368.27.1.1P

498.7 ± 6.91

octacosane (C28)

630-02-4

99.1

423.24.1P

500.5 ± 6.95

n-octadecane (C18)

593-45-3

99.5

418.29.1P

499.5 ± 6.92

octane (C8)

111-65-9

99.4

385.7.2.1P

498.5 ± 6.92

octatriacontane (C38)

7194-85-6

95

428.1.2P

500.2 ± 6.94

tetracontane (C40)

4181-95-7

97

429.7.2P

499.6 ± 6.93

n-tetracosane (C24)

646-31-1

99.5

421.7.1P

499.5 ± 6.93

n-tetradecane (C14)

629-59-4

99.3

417.9.1P

500 ± 6.94

tetatriacontane (C34)

14167-59-0

96.1

426.7.2.2P

499.7 ± 8.53

triacontane (C30)

638-68-6

99.5

424.7.1.1P

500 ± 6.94

Let the standard warm to room temperature and sonicate before opening.

P 13215

↓

P 13224

AJ
01131124

*Not a certified value

Andrea Schaible

Andrea Schaible
Chemist

Certified By: _____

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values
listed are determined gravimetrically.

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 = aDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4

Peak No. Name FID RT (min)

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

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

Part # 10009R Lot # 041219 1 of 2

Formulator
Reviewer

Actual
Concentration

Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

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

Solvent(s):
Methylene chloride
Lot#
105345

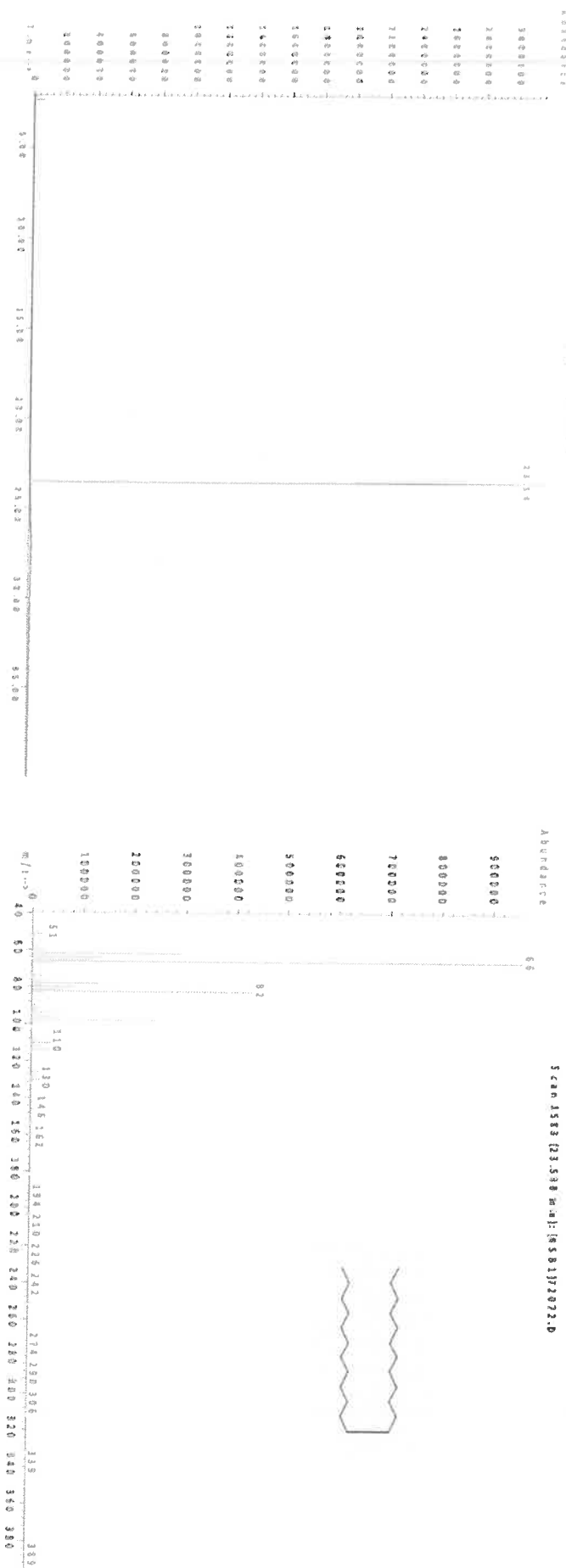
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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

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

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



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

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

Page 1 of 2



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



ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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

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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Methylene chloride
Lot# 78782

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

070716
070716

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

Compound	SMW	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (µg)	Actual Weight (µg)	Actual Conc (µg/mL)	Expanded Uncertainty (µg/mL)	CAS#	MSDS Information (Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-1845M07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	15.4	2055-02-1	N/A	N/A	or-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

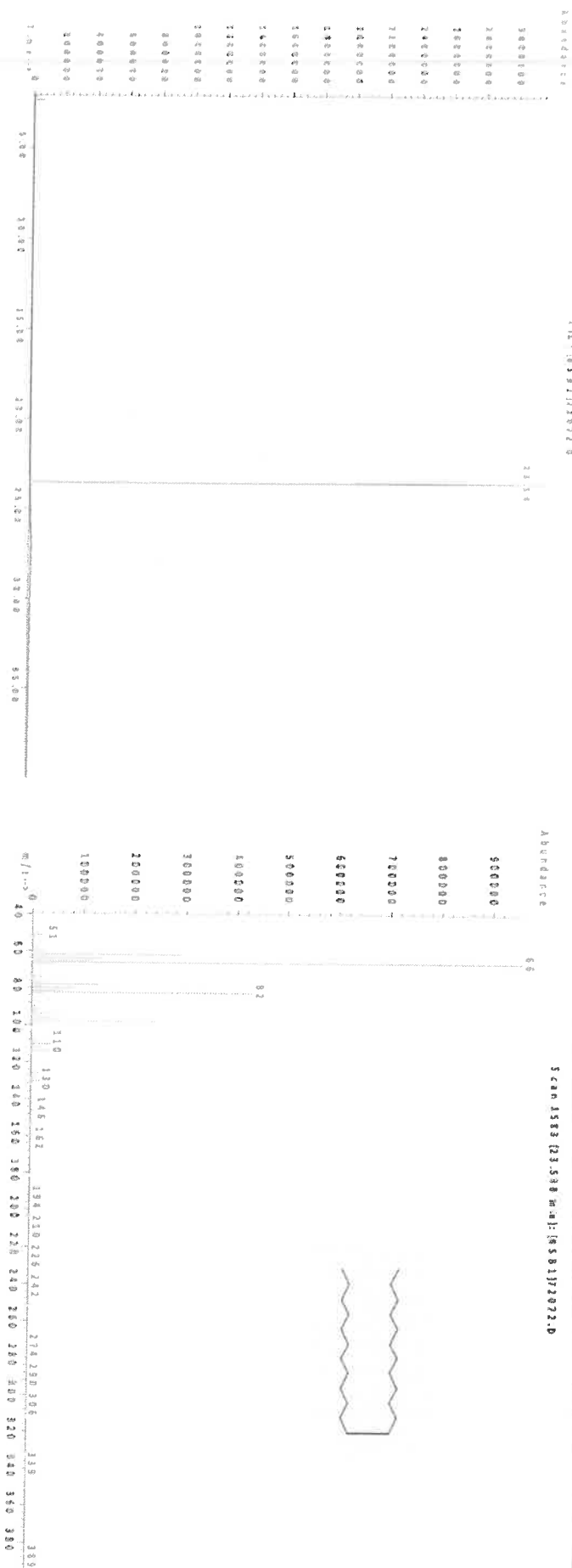
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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

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

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



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

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

Page 1 of 2



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



ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Methylene chloride
Lot# 78782

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

070716
070716

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

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

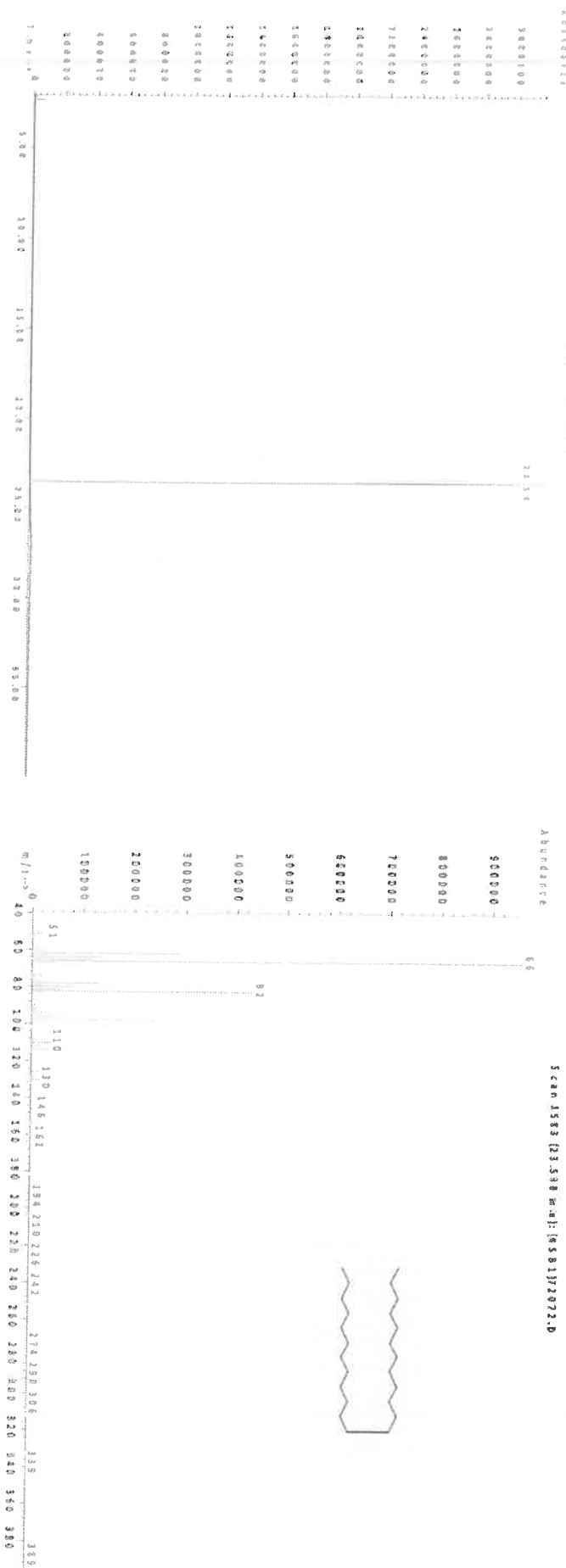
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

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, (1996).

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

Page 1 of 2



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



ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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

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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

Part # 10009R
Lot # 070716
Shelf Life Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
070721
Expiration Date: Ambient (20 °C)
Recommended Storage: 4000
Nominal Concentration (µg/mL): 822-275872-11
NIST Test ID#: 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	2.04136	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

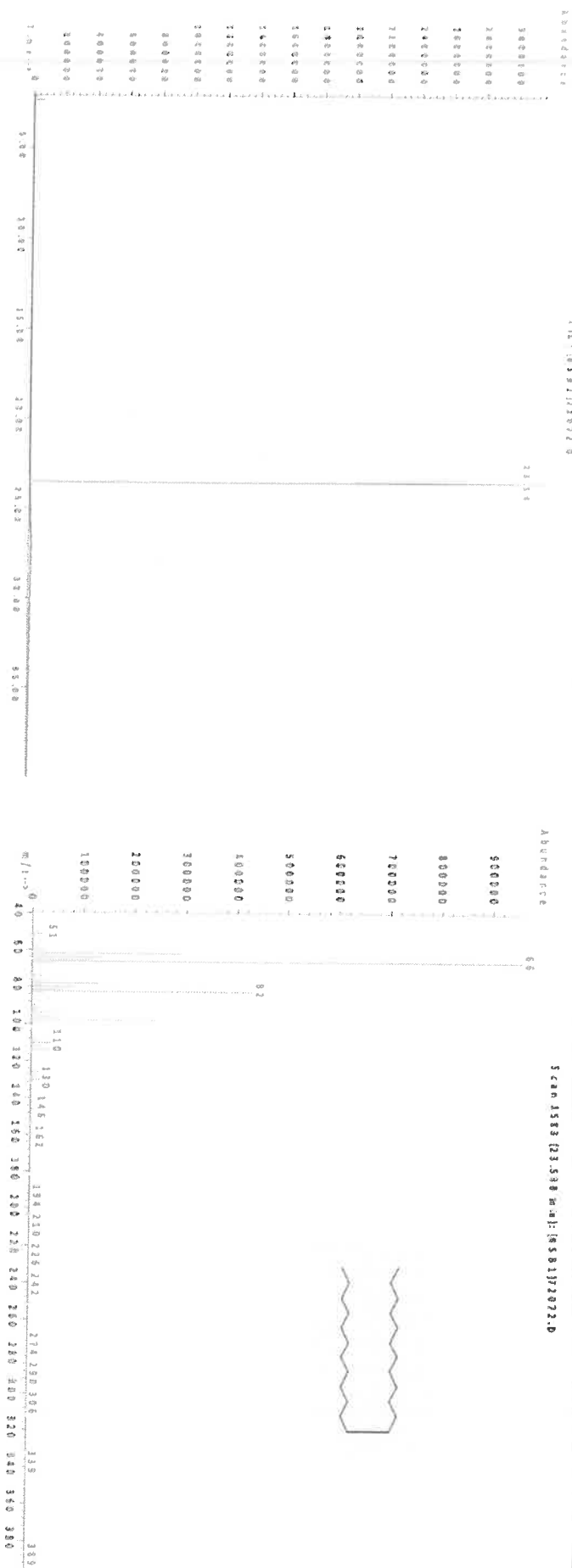
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

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
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1. n-Tetracosane-d50 2072 PR-26606 1000 98.7 0.2 99.0 0.20471 0.20482 1000.6 4.1 16416-32-3 N/A
Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



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



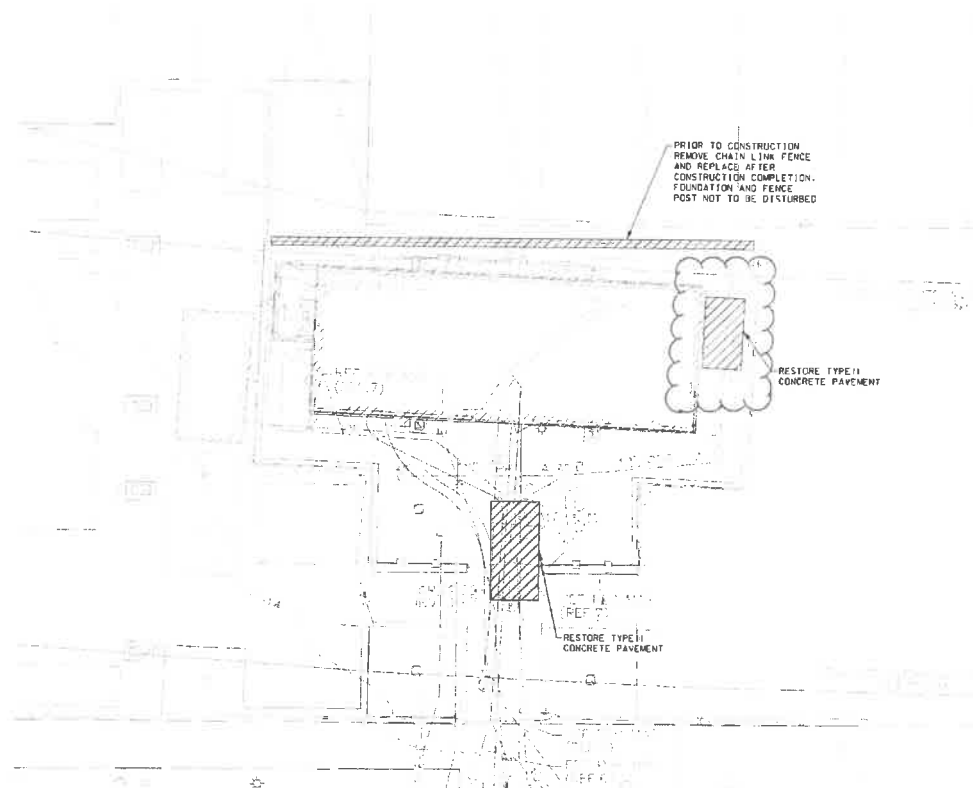
SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.
QUOTE NO. P5112
COC Number 2040992

CLIENT INFORMATION				CLIENT PROJECT INFORMATION				CLIENT BILLING INFORMATION									
REPORT TO BE SENT TO: COMPANY: Tully Construction ADDRESS: 10th St. & 2nd Ave CITY: Brooklyn STATE: NY ZIP: ATTENTION: FRANCO/DEAN DEVOE PHONE: (917) 391-8200 FAX:				PROJECT NAME: Covey Island Yacht Long Term Flood Mitigation 2024 PROJECT NO.: LOCATION: PROJECT MANAGER: e-mail: PHONE: FAX:				BILL TO: PO#: ADDRESS: CITY STATE: ZIP: ATTENTION: PHONE: ANALYSIS									
DATA TURNAROUND INFORMATION				DATA DELIVERABLE INFORMATION													
FAX (RUSH) DAYS* HARDCOPY (DATA PACKAGE): DAYS* EDD: DAYS* *TO BE APPROVED BY CHEMTECH STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS				☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data) ☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP ☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B + Raw Data ☐ Other ☐ EDD FORMAT				1 2 3 4 5 6 7 8 9									
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		E	E	E	E	E	E				
1.	10th St. - Soil	S.	X		12/5	0822	13	X	X	X	X	X	X				APU-000
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY																	
RELINQUISHED BY SAMPLER:		DATE/TIME: 0855		RECEIVED BY:		Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.5 °C											
1. [Signature]		12/5/24		1. [Signature]		Comments:											
RELINQUISHED BY SAMPLER:		DATE/TIME:		RECEIVED BY:													
2. [Signature]				2. [Signature]													
RELINQUISHED BY SAMPLER:		DATE/TIME: 1020		RECEIVED BY:		Page 1 of 1											
3. [Signature]		12/5/24		3. [Signature]		CLIENT: ☐ Hand Delivered ☐ Other CHEMTECH: ☐ Picked Up ☐ Field Sampling											
												Shipment Complete ☐ YES ☐ NO					



SITE PAVEMENT PLAN
SCALE: 1"=1'-0"



IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER / REGISTERED ARCHITECT. THE ALTERING ENGINEER ARCHITECT SHALL BE NOTED BY A REVISION NUMBER, DATE AND THE SIGNATURE OF THE ENGINEER ARCHITECT. THE DATE OF SIGNATURE SHALL BE THE DATE OF SIGNATURE AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISION	DESCRIPTION	DATE	APPROVED



CONTRACT P-36343
FLOOD MITIGATION AT TWENTY-SIX (26) STATIONS
IN THE BOROUGH OF BROOKLYN, MANHATTAN AND QUEENS
**10TH STREET SUBSTATION
SITE PAVEMENT PLAN**



DRAWN BY	B. HOSAMATH	DATE	12/08/2023
DRAWN BY	L. KARDOS, PE	DISCIPLINE	CIVIL
CHECKED BY	M. NAYAMATULLAH, PE	PROJECT NO.	P36343-10T-CG-101
APPROVED BY	S. KHONDKER, PE	REVISION	

Project Name: Covey Island Yard
Service Order #: Long Term Flood Mitigation 2024
Work Order #: _____
Labor WBS #: _____
Facility/Site: _____
Site Address: 10th St & 2nd Ave
Brooklyn NY

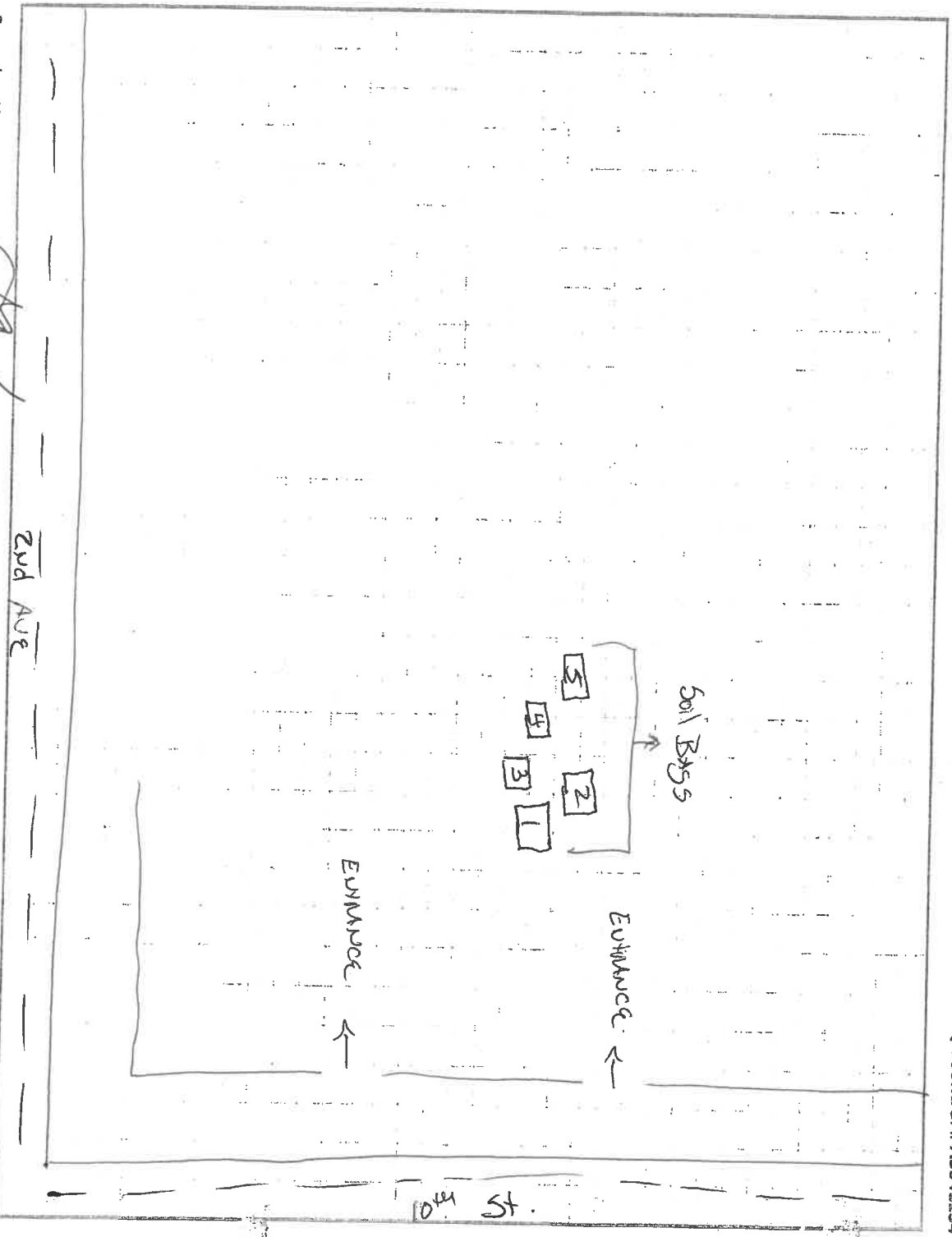
Chemtech Order ID: _____
Sampler Name: Collins Nelson
Client Project Coordinator & Phone: DEAN DEVOE (973) 391-8200
Page #: 1 of 1
Date: 12-5-24
Arrive Time: 0730
Depart Time: 0855

Waste Stream (circle one): drum / roll-off / soil pile / in-situ / linear construction / frac-tank
Sample Matrices (circle all that apply): Water ☒ Solid ☒ NAPL / Concrete / Wipe

Collection Depths: _____ Dimensions/CY: _____
Temp (range): _____ °C PID Readings (range): 0-0 PPM Odor: Y / ☒ N Color: Y / ☒ N
Sample Description: Brown, Dark Brown Soil
Field Observations: (5) Total Soil Bags inside station

Grid/Area Composite Map:

QA Control # A3041134



Sampler Signature: _____
Client Signature: _____

Supervisor Review/Date: _____
Date/Time Arrived at Lab: _____



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P5112	TULL02	Order Date : 12/5/2024 10:43:00 AM	Project Mgr :
Client Name : Tully Construction Co., Inc.		Project Name : 10th Street & 2nd Avenue	Report Type : Level 1
Client Contact : Dean Devoe		Receive DateTime : 12/5/2024 12:00:00 AM 10:20	EDD Type : Excel NY 375
Invoice Name : Tully Construction Co., Inc.		Purchase Order :	Hard Copy Date :
Invoice Contact : Dean Devoe			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P5112-01	10TH-ST-SOIL	Solid	12/05/2024	00:00					
				8:22	VOC-TCLVOA-10		8260D	5 Bus. Days	

Relinquished By : 

Date / Time : 12/5/24 1140

Received By : 

Date / Time : 12/5/24 11:40

Storage Area : VOA Refridgerator Room