

Cover Page

Order ID : P5026

Project ID : Hamilton

Client : Tully Construction Co., Inc.

Lab Sample Number

P5026-01
P5026-02
P5026-03
P5026-04
P5026-05
P5026-06
P5026-07
P5026-08

Client Sample Number

SOIL-1-HAM
SOIL-1-HAM
SOIL-1-HAM-TPH2
SOIL-1-HAM-GRAB
SOIL-1-HAM
SOIL-1-HAM
SOIL-1-HAM-TPH2
SOIL-1-HAM-GRAB

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: 12/5/2024

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 #: P5026

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: KETAN PATEL

Date: 12/05/2024

LAB CHRONICLE

OrderID:	P5026	OrderDate:	11/27/2024 11:24:00 AM
Client:	Tully Construction Co., Inc.	Project:	Hamilton
Contact:	Dean Devoe	Location:	L61,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5026-03	SOIL-1-HAM-TPH2	SOIL	TPH GC	8015D	11/27/24	12/02/24	12/02/24	11/27/24
P5026-07	SOIL-1-HAM-TPH2	SOIL	TPH GC	8015D	11/27/24	12/02/24	12/02/24	11/27/24



QC SUMMARY

SOIL TPH GC SURROGATE RECOVERY

Lab Name: Chemtech Client: Tully Construction Co., Inc.
Lab Code: CHEM Case No.: P5026 SAS No.: P5026 SDG No.: P5026

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FG014907.D	85				0
PIBLK-FG014914.D	87				0
PIBLK-FG014921.D	90				0
SOIL-1-HAM-TPH2	49				0
SOIL-1-HAM-TPH2	71				0
SOIL-1-HAM-TPH2MS	64				0
SOIL-1-HAM-TPH2MSD	61				0
PB165318BL	82				0
PB165318BS	83				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:** P5026 **SAS No :** P5026 **SDG No:** P5026
Client SampleID : SOIL-1-HAM-TPH2MS **Datafile:** FG014918.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
Petroleum Hydrocarbons	15208	11300	17811	43%	*	68-131

SOIL TPH GC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Tully Construction Co., Inc.
Lab Code: CHEM **Cas No:** P5026 **SAS No :** P5026 **SDG No:** P5026
Client SampleID : SOIL-1-HAM-TPH2MSD **Datafile:** FG014919.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
Petroleum Hydrocarbons	15203	11300	16997	38%	*	68-131

MS/MSD % Recovery RPD : 13.1

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

Lab Name: Chemtech **Client:** Tully Construction Co., Inc.
Lab Code: CHEM **Cas No:** P5026 **SAS No :** P5026 **SDG No:** P5026
Matrix Spike - EPA Sample No : PB165318BS **Datafile:** FG014917.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
Petroleum Hydrocarbons	11326	0	8837	78	68-131

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165318BL

Lab Name: CHEMTECH

Contract: TULL02

Lab Code: CHEM Case No.: P5026

SAS No.: P5026 SDG NO.: P5026

Lab File ID: FG014916.D

Lab Sample ID: PB165318BL

Instrument ID: FG

Date Extracted: 12/02/2024

Matrix: (soil/water) Soil

Date Analyzed: 12/02/24

Level: (low/med) low

Time Analyzed: 16:40

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
SOIL-1-HAM-TPH2	P5026-03	FG014912.D	12/02/24
SOIL-1-HAM-TPH2	P5026-07	FG014913.D	12/02/24
PB165318BS	PB165318BS	FG014917.D	12/02/24
SOIL-1-HAM-TPH2MS	P5026-07MS	FG014918.D	12/02/24
SOIL-1-HAM-TPH2MSD	P5026-07MSD	FG014919.D	12/02/24

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	11/27/24	
Project:	Hamilton		Date Received:	11/27/24	
Client Sample ID:	SOIL-1-HAM-TPH2		SDG No.:	P5026	
Lab Sample ID:	P5026-03		Matrix:	SOIL	
Analytical Method:	8015D TPH		% Solid:	88.8	Decanted:
Sample Wt/Vol:	30.04	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
FG014912.D	1	12/02/24 09:00	12/02/24 14:18	PB165318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	43.6		0.36	3.19	mg/Kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	9.82		37 - 130	49%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014912.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 14:18
Operator : YP\AJ
Sample : P5026-03
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
SOIL-1-HAM-TPH2

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
Quant Time: Dec 03 01:54:42 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	1132710	9.816 ug/mlm
Target Compounds			

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014912.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 14:18
Operator : YP\AJ
Sample : P5026-03
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2

Manual Integrations

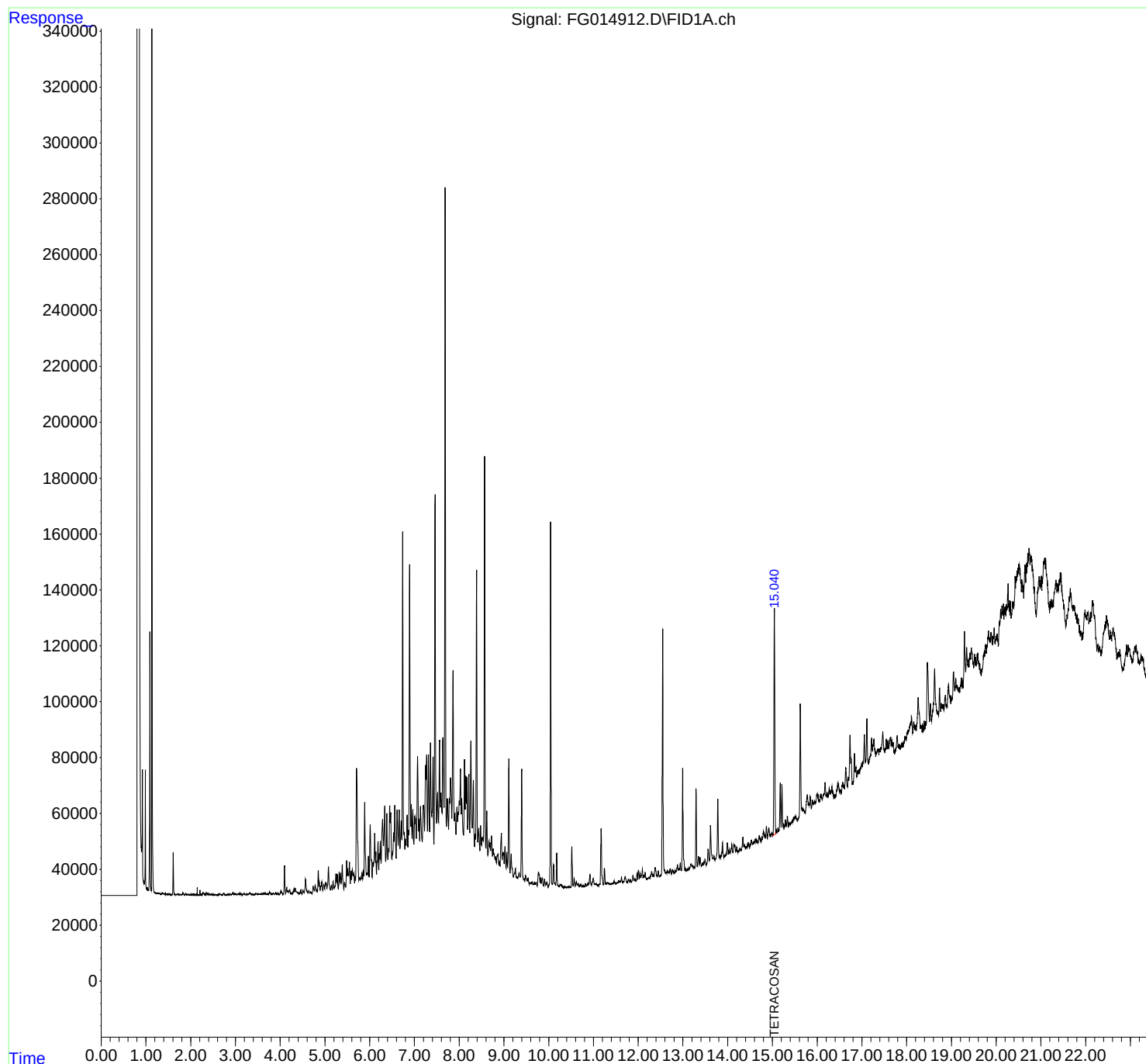
APPROVED

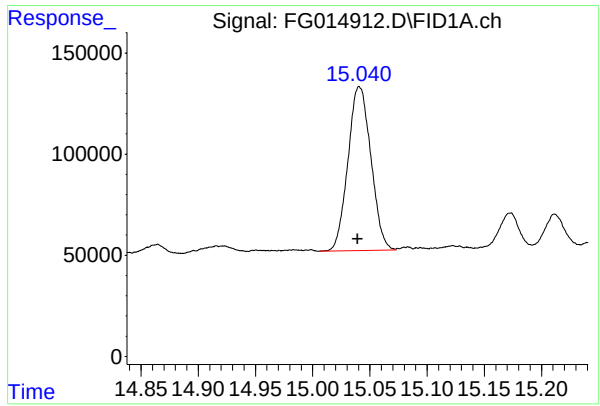
Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
Quant Time: Dec 03 01:54:42 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: 1132710
Conc: 9.82 ug/ml

Instrument :
FID_G
ClientSampleId :
SOIL-1-HAM-TPH2

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

rteres

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12022
Data File : FG014912.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 14:18
Sample : P5026-03
Misc :
ALS Vial : 13 Sample Multiplier: 1

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

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	1.917	1.900	1.925	BV	41	-55	-0.00%	-0.000%
2	1.943	1.925	1.952	PV	99	793	0.03%	0.001%
3	1.959	1.952	1.981	VV	98	1112	0.04%	0.001%
4	1.983	1.981	2.019	PV	81	1239	0.04%	0.001%
5	2.056	2.019	2.087	PV	286	6157	0.20%	0.004%
6	2.095	2.087	2.100	VV	142	696	0.02%	0.001%
7	2.116	2.100	2.135	VV	170	1682	0.05%	0.001%
8	2.145	2.135	2.150	VV	1902	2388	0.08%	0.002%
9	2.154	2.150	2.175	VV	135	1243	0.04%	0.001%
10	2.207	2.175	2.228	VV	1576	3161	0.10%	0.002%
11	2.230	2.228	2.237	VV	82	376	0.01%	0.000%
12	2.247	2.237	2.261	VV	149	1209	0.04%	0.001%
13	2.275	2.261	2.335	VV	939	18430	0.59%	0.013%
14	2.349	2.335	2.370	VV	834	10143	0.32%	0.007%
15	2.385	2.370	2.399	VV	626	7825	0.25%	0.006%
16	2.404	2.399	2.414	VV	328	2330	0.07%	0.002%
17	2.418	2.414	2.445	VV	224	3322	0.11%	0.002%
18	2.466	2.445	2.495	VV	257	3919	0.12%	0.003%
19	2.498	2.495	2.517	VV	180	1252	0.04%	0.001%
20	2.520	2.517	2.525	VV	101	390	0.01%	0.000%
21	2.531	2.525	2.535	VV	130	465	0.01%	0.000%
22	2.543	2.535	2.576	VV	169	2093	0.07%	0.002%
23	2.581	2.576	2.597	PV	148	1089	0.03%	0.001%
24	2.626	2.597	2.636	PV	210	2959	0.09%	0.002%
25	2.651	2.636	2.683	VV	420	5126	0.16%	0.004%
26	2.694	2.683	2.720	VV	127	1941	0.06%	0.001%
27	2.742	2.720	2.766	VV	548	9326	0.30%	0.007%
28	2.772	2.766	2.788	VV	87	778	0.02%	0.001%
29	2.789	2.788	2.812	VV	134	829	0.03%	0.001%
30	2.828	2.812	2.845	VV	179	2090	0.07%	0.002%
31	2.856	2.845	2.865	VV	239	2151	0.07%	0.002%
32	2.869	2.865	2.879	VV	244	1108	0.04%	0.001%
33	2.887	2.879	2.891	VV	138	669	0.02%	0.000%
34	2.900	2.891	2.911	VV	152	1264	0.04%	0.001%
35	2.932	2.911	2.951	VV	554	9209	0.29%	0.007%
36	2.953	2.951	2.972	VV	510	3718	0.12%	0.003%

					riteres				
37	2.988	2.972	2.998	VV	374	4431	0.14%	0.003%	
38	3.010	2.998	3.041	VV	372	5766			
39	3.055	3.041	3.071	VV	384	4027			
40	3.095	3.071	3.114	VV	494	7513			
41	3.120	3.114	3.162	VV	344	3945			
42	3.167	3.162	3.174	VV	105	594			
43	3.188	3.174	3.218	VV	395	6103	0.19%	0.004%	
44	3.222	3.218	3.238	VV	174	1865	0.06%	0.001%	
45	3.244	3.238	3.264	VV	145	1591	0.05%	0.001%	
46	3.276	3.264	3.288	VV	180	2169	0.07%	0.002%	
47	3.314	3.288	3.321	VV	614	7274	0.23%	0.005%	
48	3.326	3.321	3.358	VV	490	6399	0.20%	0.005%	
49	3.364	3.358	3.377	VV	177	1328	0.04%	0.001%	
50	3.381	3.377	3.409	VV	127	1216	0.04%	0.001%	
51	3.422	3.409	3.427	VV	126	910	0.03%	0.001%	
52	3.457	3.427	3.476	VV	385	6728	0.21%	0.005%	
53	3.489	3.476	3.510	VV	344	4650	0.15%	0.003%	
54	3.529	3.510	3.547	VV	246	3974	0.13%	0.003%	
55	3.556	3.547	3.576	VV	236	3357	0.11%	0.002%	
56	3.595	3.576	3.617	VV	323	5081	0.16%	0.004%	
57	3.629	3.617	3.653	VV	647	9067	0.29%	0.007%	
58	3.663	3.653	3.697	VV	465	7604	0.24%	0.006%	
59	3.709	3.697	3.713	VV	306	2342	0.07%	0.002%	
60	3.718	3.713	3.731	VV	289	2111	0.07%	0.002%	
61	3.733	3.731	3.741	VV	213	816	0.03%	0.001%	
62	3.762	3.741	3.796	VV	972	15799	0.50%	0.012%	
63	3.801	3.796	3.813	VV	439	1291	0.04%	0.001%	
64	3.845	3.813	3.861	VV	478	7435	0.24%	0.005%	
65	3.866	3.861	3.880	VV	279	2325	0.07%	0.002%	
66	3.898	3.880	3.937	VV	561	10906	0.35%	0.008%	
67	3.950	3.937	3.978	VV	537	6565	0.21%	0.005%	
68	4.017	3.978	4.066	PV	1195	26188	0.83%	0.019%	
69	4.096	4.066	4.125	PV	10375	108128	3.44%	0.079%	
70	4.145	4.125	4.165	VV	2400	33871	1.08%	0.025%	
71	4.177	4.165	4.198	VV	1237	20234	0.64%	0.015%	
72	4.213	4.198	4.234	VV	1691	23712	0.75%	0.017%	
73	4.250	4.234	4.268	VV	496	7595	0.24%	0.006%	
74	4.310	4.268	4.323	VV	2011	32111	1.02%	0.023%	
75	4.339	4.323	4.371	VV	2078	36760	1.17%	0.027%	
76	4.377	4.371	4.397	VV	797	10007	0.32%	0.007%	
77	4.400	4.397	4.424	VV	539	4536	0.14%	0.003%	
78	4.461	4.424	4.487	PV	1358	21244	0.68%	0.015%	
79	4.509	4.487	4.534	VV	1383	21614	0.69%	0.016%	
80	4.567	4.534	4.596	VV	5279	88853	2.83%	0.065%	
81	4.604	4.596	4.621	VV	1012	10097	0.32%	0.007%	
82	4.641	4.621	4.665	VV	1151	17582	0.56%	0.013%	
83	4.681	4.665	4.713	VV	608	11231	0.36%	0.008%	
84	4.738	4.713	4.763	VV	2681	43274	1.38%	0.032%	
85	4.782	4.763	4.810	VV	3142	54650	1.74%	0.040%	
86	4.819	4.810	4.833	VV	1265	13756	0.44%	0.010%	
87	4.852	4.833	4.867	VV	8416	91552	2.91%	0.067%	
88	4.876	4.867	4.895	VV	4073	44621	1.42%	0.032%	
89	4.931	4.895	4.954	VV	4242	89221	2.84%	0.065%	

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

90	4.974	4.954	4.996	VV	3174	59358	1.89%	0.043%
91	5.011	4.996	5.022	VV	3865	47498		
92	5.030	5.022	5.045	VV	3856	43129		
93	5.080	5.045	5.123	VV	9524	185235		
94	5.144	5.123	5.163	VV	2856	50567		
95	5.183	5.163	5.201	VV	4348	62195		
96	5.218	5.201	5.226	VV	2505	31735	1.01%	0.023%
97	5.246	5.226	5.262	VV	6995	104097	3.31%	0.076%
98	5.277	5.262	5.299	VV	6917	96983	3.09%	0.071%
99	5.320	5.299	5.333	VV	7630	95705	3.05%	0.070%
100	5.351	5.333	5.367	VV	7172	106537	3.39%	0.078%
101	5.388	5.367	5.424	VV	10200	176298	5.61%	0.128%
102	5.439	5.424	5.466	VV	3880	70123	2.23%	0.051%
103	5.487	5.466	5.499	VV	11630	145142	4.62%	0.106%
104	5.510	5.499	5.522	VV	8542	100241	3.19%	0.073%
105	5.528	5.522	5.533	VV	6506	43139	1.37%	0.031%
106	5.549	5.533	5.567	VV	11051	152088	4.84%	0.111%
107	5.583	5.567	5.596	VV	7746	102349	3.26%	0.075%
108	5.611	5.596	5.630	VV	8355	139716	4.45%	0.102%
109	5.646	5.630	5.662	VV	7088	114650	3.65%	0.083%
110	5.676	5.662	5.686	VV	5592	66717	2.12%	0.049%
111	5.708	5.686	5.759	VV	44593	960924	30.58%	0.700%
112	5.772	5.759	5.790	VV	5357	91930	2.93%	0.067%
113	5.802	5.790	5.814	VV	5491	73933	2.35%	0.054%
114	5.828	5.814	5.847	VV	7129	118740	3.78%	0.086%
115	5.860	5.847	5.870	VV	7909	93639	2.98%	0.068%
116	5.889	5.870	5.925	VV	32287	521466	16.60%	0.380%
117	5.935	5.925	5.957	VV	6926	125578	4.00%	0.091%
118	5.972	5.957	5.988	VV	13076	172536	5.49%	0.126%
119	6.012	5.988	6.032	VV	24149	411632	13.10%	0.300%
120	6.036	6.032	6.055	VV	11791	124464	3.96%	0.091%
121	6.074	6.055	6.084	VV	10852	149705	4.76%	0.109%
122	6.113	6.084	6.131	VV	21191	391267	12.45%	0.285%
123	6.137	6.131	6.153	VV	13730	141686	4.51%	0.103%
124	6.168	6.153	6.172	VV	11241	102913	3.28%	0.075%
125	6.187	6.172	6.203	VV	18220	255283	8.13%	0.186%
126	6.217	6.203	6.227	VV	13872	163489	5.20%	0.119%
127	6.239	6.227	6.256	VV	18207	257152	8.18%	0.187%
128	6.288	6.256	6.310	VV	25958	637823	20.30%	0.464%
129	6.338	6.310	6.357	VV	30931	610811	19.44%	0.445%
130	6.384	6.357	6.408	VV	28114	509309	16.21%	0.371%
131	6.424	6.408	6.431	VV	15678	199363	6.35%	0.145%
132	6.448	6.431	6.460	VV	30759	414143	13.18%	0.302%
133	6.471	6.460	6.496	VV	28414	452864	14.41%	0.330%
134	6.512	6.496	6.518	VV	14117	167485	5.33%	0.122%
135	6.535	6.518	6.546	VV	21145	305953	9.74%	0.223%
136	6.562	6.546	6.592	VV	31039	591711	18.83%	0.431%
137	6.613	6.592	6.639	VV	29366	618829	19.70%	0.451%
138	6.661	6.639	6.678	VV	29347	521894	16.61%	0.380%
139	6.706	6.678	6.719	VV	25238	499736	15.91%	0.364%
140	6.739	6.719	6.766	VV	128752	1591017	50.64%	1.159%
141	6.772	6.766	6.786	VV	21338	233576	7.43%	0.170%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2

1.89% 0.043%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

					rters			
142	6.798	6.786	6.815	VV	18830	301859	9.61%	0.220%
143	6.838	6.815	6.853	VV	27455	495658	15.74%	0.220%
144	6.866	6.853	6.873	VV	22044	230031	7.22%	0.220%
145	6.893	6.873	6.920	VV	116866	1649874	52.14%	0.220%
146	6.930	6.920	6.949	VV	31207	446596	14.17%	0.260%
147	6.965	6.949	6.990	VV	29297	546766	17.85%	0.260%
148	7.006	6.990	7.016	VV	26944	356433	11.34%	0.260%
149	7.025	7.016	7.043	VV	25918	381964	12.16%	0.278%
150	7.072	7.043	7.095	VV	48101	1021920	32.53%	0.744%
151	7.105	7.095	7.118	VV	25853	310739	9.89%	0.226%
152	7.135	7.118	7.177	VV	30433	809866	25.78%	0.590%
153	7.197	7.177	7.202	VV	30748	381728	12.15%	0.278%
154	7.208	7.202	7.228	VV	30887	425911	13.56%	0.310%
155	7.251	7.228	7.262	VV	44973	729038	23.20%	0.531%
156	7.273	7.262	7.293	VV	48854	707599	22.52%	0.515%
157	7.314	7.293	7.340	VV	48818	936039	29.79%	0.682%
158	7.360	7.340	7.385	VV	52982	973486	30.98%	0.709%
159	7.417	7.385	7.437	VV	48008	996391	31.71%	0.726%
160	7.462	7.437	7.497	VV	141957	2161105	68.78%	1.574%
161	7.517	7.497	7.540	VV	35135	746646	23.76%	0.544%
162	7.562	7.540	7.579	VV	53820	898987	28.61%	0.655%
163	7.592	7.579	7.617	VV	34803	732827	23.32%	0.534%
164	7.635	7.617	7.663	VV	54841	1113820	35.45%	0.811%
165	7.688	7.663	7.717	VV	251740	3141892	100.00%	2.288%
166	7.738	7.717	7.764	VV	32809	783702	24.94%	0.571%
167	7.781	7.764	7.790	VV	32985	448572	14.28%	0.327%
168	7.808	7.790	7.836	VV	40475	969454	30.86%	0.706%
169	7.864	7.836	7.892	VV	78686	1520387	48.39%	1.107%
170	7.905	7.892	7.930	VV	27544	557588	17.75%	0.406%
171	7.951	7.930	7.967	VV	29847	564512	17.97%	0.411%
172	7.981	7.967	7.989	VV	27908	361165	11.50%	0.263%
173	8.003	7.989	8.012	VV	32055	415275	13.22%	0.302%
174	8.030	8.012	8.047	VV	43362	734052	23.36%	0.535%
175	8.058	8.047	8.098	VV	32868	810932	25.81%	0.591%
176	8.121	8.098	8.135	VV	46887	724406	23.06%	0.528%
177	8.148	8.135	8.161	VV	41004	554010	17.63%	0.403%
178	8.173	8.161	8.190	VV	40474	566949	18.04%	0.413%
179	8.217	8.190	8.237	VV	41468	837731	26.66%	0.610%
180	8.263	8.237	8.298	VV	53458	1188514	37.83%	0.866%
181	8.318	8.298	8.344	VV	39345	733493	23.35%	0.534%
182	8.359	8.344	8.368	VV	20059	262471	8.35%	0.191%
183	8.390	8.368	8.415	VV	114550	1500385	47.75%	1.093%
184	8.437	8.415	8.463	VV	21895	538556	17.14%	0.392%
185	8.480	8.463	8.501	VV	22937	417233	13.28%	0.304%
186	8.515	8.501	8.541	VV	18680	430969	13.72%	0.314%
187	8.569	8.541	8.598	VV	154988	2016785	64.19%	1.469%
188	8.618	8.598	8.642	VV	28098	505136	16.08%	0.368%
189	8.666	8.642	8.677	VV	17454	321869	10.24%	0.234%
190	8.689	8.677	8.705	VV	16673	254681	8.11%	0.185%
191	8.724	8.705	8.746	VV	19277	391891	12.47%	0.285%
192	8.762	8.746	8.776	VV	14638	239961	7.64%	0.175%
193	8.784	8.776	8.808	VV	12699	230025	7.32%	0.168%
194	8.819	8.808	8.833	VV	11822	158650	5.05%	0.116%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 12/03/2024

					Instrument : FID_G ClientSampleId : SOIL-1-HAM-TPH2			
195	8.864	8.833	8.888	VV	12619	368164	11.72%	0.268%
196	8.899	8.888	8.913	VV	9945	141465		
197	8.944	8.913	8.962	VV	20138	426060	13.00%	0.252%
198	8.980	8.962	9.007	VV	12986	326890	10.00%	0.166%
199	9.024	9.007	9.049	VV	15214	292182	9.00%	0.048%
200	9.064	9.049	9.082	VV	13054	197577	6.00%	0.110%
201	9.111	9.082	9.138	VV	46739	687532	21.88%	0.501%
202	9.163	9.138	9.213	VV	12514	345538	11.00%	0.252%
203	9.258	9.213	9.282	VV	7404	228352	7.27%	0.166%
204	9.294	9.282	9.309	VV	4385	65271	2.08%	0.048%
205	9.340	9.309	9.362	VV	5853	151690	4.83%	0.110%
206	9.398	9.362	9.439	VV	42883	606808	19.31%	0.442%
207	9.448	9.439	9.464	VV	3525	47426	1.51%	0.035%
208	9.483	9.464	9.516	VV	4868	116985	3.72%	0.085%
209	9.540	9.516	9.568	VV	3807	89526	2.85%	0.065%
210	9.585	9.568	9.590	VV	1999	24466	0.78%	0.018%
211	9.599	9.590	9.613	VV	2124	27586	0.88%	0.020%
212	9.632	9.613	9.653	VV	2450	48339	1.54%	0.035%
213	9.660	9.653	9.668	VV	1672	14469	0.46%	0.011%
214	9.682	9.668	9.707	VV	2289	42398	1.35%	0.031%
215	9.723	9.707	9.743	VV	2156	35967	1.14%	0.026%
216	9.772	9.743	9.807	VV	5726	145058	4.62%	0.106%
217	9.818	9.807	9.834	VV	3727	45890	1.46%	0.033%
218	9.858	9.834	9.886	VV	3710	75553	2.40%	0.055%
219	9.907	9.886	9.927	VV	3301	51239	1.63%	0.037%
220	9.939	9.927	9.949	VV	1758	20216	0.64%	0.015%
221	9.960	9.949	9.990	VV	2174	31486	1.00%	0.023%
222	10.045	9.990	10.081	VV	130542	1391235	44.28%	1.013%
223	10.109	10.081	10.156	VV	8455	139425	4.44%	0.102%
224	10.181	10.156	10.208	VV	12625	152547	4.86%	0.111%
225	10.211	10.208	10.229	VV	808	8556	0.27%	0.006%
226	10.254	10.229	10.271	VV	1261	22563	0.72%	0.016%
227	10.283	10.271	10.302	VV	1237	15875	0.51%	0.012%
228	10.315	10.302	10.334	VV	439	5818	0.19%	0.004%
229	10.355	10.334	10.396	PV	457	9754	0.31%	0.007%
230	10.418	10.396	10.435	VV	253	3491	0.11%	0.003%
231	10.451	10.435	10.477	VV	318	5118	0.16%	0.004%
232	10.480	10.477	10.487	VV	144	658	0.02%	0.000%
233	10.519	10.487	10.547	PV	14614	164324	5.23%	0.120%
234	10.571	10.547	10.592	VV	3191	48351	1.54%	0.035%
235	10.618	10.592	10.637	VV	2014	31944	1.02%	0.023%
236	10.657	10.637	10.679	VV	1305	21697	0.69%	0.016%
237	10.717	10.679	10.747	VV	1065	20412	0.65%	0.015%
238	10.767	10.747	10.799	PV	695	8728	0.28%	0.006%
239	10.821	10.799	10.853	VV	1084	18884	0.60%	0.014%
240	10.872	10.853	10.887	VV	1174	16121	0.51%	0.012%
241	10.898	10.887	10.902	VV	1191	8972	0.29%	0.007%
242	10.922	10.902	10.955	VV	4288	62751	2.00%	0.046%
243	10.996	10.955	11.021	VV	2747	58959	1.88%	0.043%
244	11.041	11.021	11.107	VV	695	23837	0.76%	0.017%
245	11.138	11.107	11.147	PV	625	7543	0.24%	0.005%
246	11.171	11.147	11.224	VV	20333	264194	8.41%	0.192%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

rterres							SOIL-1-HAM-TPH2	
247	11.245	11.224	11.284	VV	6050	77874	2.48%	0.057%
248	11.311	11.284	11.333	VV	807	18094	Manual Integrat	
249	11.347	11.333	11.366	VV	619	7068		
250	11.378	11.366	11.387	VV	260	1947		
251	11.408	11.387	11.420	VV	477	6036	Reviewed By :Yog	
252	11.437	11.420	11.442	VV	390	4119	Supervised By :Ar	
253	11.460	11.442	11.499	VV	1357	22899	0.73%	0.017%
254	11.533	11.499	11.543	PV	523	8186	0.26%	0.006%
255	11.571	11.543	11.584	VV	1041	18766	0.60%	0.014%
256	11.601	11.584	11.609	VV	889	11601	0.37%	0.008%
257	11.626	11.609	11.656	VV	2455	36163	1.15%	0.026%
258	11.712	11.656	11.755	VV	2298	61028	1.94%	0.044%
259	11.783	11.755	11.801	VV	1295	17607	0.56%	0.013%
260	11.821	11.801	11.843	VV	1164	15316	0.49%	0.011%
261	11.881	11.843	11.907	PV	2466	39767	1.27%	0.029%
262	11.924	11.907	11.930	VV	885	10489	0.33%	0.008%
263	11.933	11.930	11.954	VV	890	7494	0.24%	0.005%
264	11.977	11.954	11.991	VV	2823	32345	1.03%	0.024%
265	12.007	11.991	12.025	VV	3597	43627	1.39%	0.032%
266	12.043	12.025	12.059	VV	2692	35237	1.12%	0.026%
267	12.091	12.059	12.109	VV	3995	63201	2.01%	0.046%
268	12.124	12.109	12.137	VV	1704	21198	0.67%	0.015%
269	12.155	12.137	12.191	VV	2604	36121	1.15%	0.026%
270	12.202	12.191	12.208	VV	198	1407	0.04%	0.001%
271	12.237	12.208	12.254	VV	652	9383	0.30%	0.007%
272	12.300	12.254	12.320	VV	2473	48363	1.54%	0.035%
273	12.332	12.320	12.349	VV	1408	17166	0.55%	0.013%
274	12.376	12.349	12.425	VV	3633	84997	2.71%	0.062%
275	12.448	12.425	12.476	VV	2110	26336	0.84%	0.019%
276	12.546	12.476	12.616	PV	88548	1089168	34.67%	0.793%
277	12.626	12.616	12.637	VV	1077	11886	0.38%	0.009%
278	12.655	12.637	12.670	VV	1667	23946	0.76%	0.017%
279	12.680	12.670	12.687	VV	898	8320	0.26%	0.006%
280	12.715	12.687	12.744	VV	2069	38433	1.22%	0.028%
281	12.765	12.744	12.814	PV	1614	29543	0.94%	0.022%
282	12.825	12.814	12.841	VV	1006	10373	0.33%	0.008%
283	12.877	12.841	12.898	VV	2942	51993	1.65%	0.038%
284	12.912	12.898	12.921	VV	1324	15855	0.50%	0.012%
285	12.940	12.921	12.964	VV	3360	47709	1.52%	0.035%
286	12.993	12.964	13.042	VV	36826	476426	15.16%	0.347%
287	13.058	13.042	13.077	VV	671	8325	0.26%	0.006%
288	13.090	13.077	13.098	VV	291	2372	0.08%	0.002%
289	13.131	13.098	13.144	PV	706	9454	0.30%	0.007%
290	13.178	13.144	13.204	VV	2097	48058	1.53%	0.035%
291	13.209	13.204	13.222	VV	1190	10276	0.33%	0.007%
292	13.240	13.222	13.260	VV	755	10956	0.35%	0.008%
293	13.292	13.260	13.319	VV	28329	314742	10.02%	0.229%
294	13.346	13.319	13.365	VV	3852	64569	2.06%	0.047%
295	13.382	13.365	13.417	VV	3306	46891	1.49%	0.034%
296	13.439	13.417	13.451	VV	818	11687	0.37%	0.009%
297	13.467	13.451	13.472	VV	1276	11007	0.35%	0.008%
298	13.493	13.472	13.515	VV	2150	32074	1.02%	0.023%
299	13.561	13.515	13.590	PV	5411	89866	2.86%	0.065%

300	13.615	13.590	13.667	VV	13576	227935	7.25%	0.166%
301	13.672	13.667	13.677	VV	1375	7565		
302	13.692	13.677	13.712	VV	2032	26174		
303	13.723	13.712	13.732	VV	992	9614		
304	13.777	13.732	13.814	VV	21870	303694		
305	13.836	13.814	13.846	VV	1130	17820		
306	13.881	13.846	13.917	VV	5579	93895	2.99%	0.068%
307	13.931	13.917	13.940	VV	615	6028	0.19%	0.004%
308	13.960	13.940	13.968	VV	1024	12217	0.39%	0.009%
309	13.990	13.968	14.013	VV	4962	70650	2.25%	0.051%
310	14.031	14.013	14.050	VV	2269	31183	0.99%	0.023%
311	14.091	14.050	14.117	VV	3703	73633	2.34%	0.054%
312	14.142	14.117	14.152	VV	3255	42868	1.36%	0.031%
313	14.160	14.152	14.181	VV	3046	33179	1.06%	0.024%
314	14.199	14.181	14.223	VV	2077	27963	0.89%	0.020%
315	14.232	14.223	14.236	VV	407	2133	0.07%	0.002%
316	14.278	14.236	14.300	VV	890	18827	0.60%	0.014%
317	14.337	14.300	14.357	PV	4808	71396	2.27%	0.052%
318	14.376	14.357	14.395	VV	1474	25862	0.82%	0.019%
319	14.416	14.395	14.425	VV	664	10062	0.32%	0.007%
320	14.446	14.425	14.452	VV	879	10695	0.34%	0.008%
321	14.464	14.452	14.487	VV	1880	20868	0.66%	0.015%
322	14.528	14.487	14.549	PV	2262	38854	1.24%	0.028%
323	14.555	14.549	14.562	VV	866	6167	0.20%	0.004%
324	14.583	14.562	14.593	VV	1305	18271	0.58%	0.013%
325	14.621	14.593	14.632	VV	2047	32490	1.03%	0.024%
326	14.637	14.632	14.643	VV	1023	5512	0.18%	0.004%
327	14.651	14.643	14.672	VV	1233	12412	0.40%	0.009%
328	14.678	14.672	14.682	VV	476	1768	0.06%	0.001%
329	14.705	14.682	14.744	VV	2696	48988	1.56%	0.036%
330	14.800	14.744	14.817	VV	3289	73484	2.34%	0.054%
331	14.822	14.817	14.842	VV	1825	20505	0.65%	0.015%
332	14.864	14.842	14.886	VV	4559	55780	1.78%	0.041%
333	14.916	14.886	14.943	PV	3470	64512	2.05%	0.047%
334	14.950	14.943	14.962	VV	1077	8977	0.29%	0.007%
335	14.965	14.962	14.969	VV	717	2710	0.09%	0.002%
336	14.984	14.969	14.992	VV	939	9581	0.30%	0.007%
337	14.998	14.992	15.006	VV	822	4001	0.13%	0.003%
338	15.041	15.006	15.072	VV	81139	1131601	36.02%	0.824%
339	15.083	15.072	15.101	VV	1440	15203	0.48%	0.011%
340	15.122	15.101	15.144	VV	1731	23145	0.74%	0.017%
341	15.173	15.144	15.192	VV	17373	209271	6.66%	0.152%
342	15.212	15.192	15.234	VV	16520	196658	6.26%	0.143%
343	15.243	15.234	15.261	VV	2222	26134	0.83%	0.019%
344	15.288	15.261	15.311	VV	3125	51299	1.63%	0.037%
345	15.333	15.311	15.355	VV	4001	52969	1.69%	0.039%
346	15.376	15.355	15.397	PV	1250	17665	0.56%	0.013%
347	15.413	15.397	15.419	VV	1114	10865	0.35%	0.008%
348	15.436	15.419	15.442	VV	1616	15505	0.49%	0.011%
349	15.449	15.442	15.454	VV	1541	8669	0.28%	0.006%
350	15.482	15.454	15.490	VV	2301	37543	1.19%	0.027%
351	15.495	15.490	15.510	VV	2179	23674	0.75%	0.017%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

rterres							SOIL-1-HAM-TPH2	
352	15.519	15.510	15.546	VV	2463	36926	1.18%	0.027%
353	15.553	15.546	15.565	VV	940	8690	0.00%	0.000%
354	15.621	15.565	15.674	VV	41406	633014	20.00%	0.000%
355	15.682	15.674	15.688	VV	3404	27025	0.00%	0.000%
							Manual Integration	
356	15.694	15.688	15.710	VV	3192	35284	1.00%	0.000%
357	15.718	15.710	15.735	VV	2244	29923	0.00%	0.000%
358	15.780	15.735	15.808	VV	7767	220786	7.03%	0.161%
359	15.820	15.808	15.828	VV	4056	46418	1.48%	0.034%
360	15.845	15.828	15.868	VV	6254	108334	3.45%	0.079%
361	15.906	15.868	15.919	VV	4239	102118	3.25%	0.074%
362	15.946	15.919	15.955	VV	3904	74512	2.37%	0.054%
363	15.963	15.955	15.970	VV	3668	30818	0.98%	0.022%
364	15.992	15.970	16.004	VV	5981	99785	3.18%	0.073%
365	16.007	16.004	16.049	VV	5716	111026	3.53%	0.081%
366	16.054	16.049	16.060	VV	3310	21443	0.68%	0.016%
367	16.083	16.060	16.116	VV	5212	136929	4.36%	0.100%
368	16.137	16.116	16.144	VV	4586	65354	2.08%	0.048%
369	16.176	16.144	16.220	VV	8524	229909	7.32%	0.167%
370	16.231	16.220	16.242	VV	3610	45350	1.44%	0.033%
371	16.268	16.242	16.284	VV	5658	106110	3.38%	0.077%
372	16.293	16.284	16.307	VV	4428	56713	1.81%	0.041%
373	16.328	16.307	16.346	VV	5812	101646	3.24%	0.074%
374	16.356	16.346	16.364	VV	3337	31388	1.00%	0.023%
375	16.369	16.364	16.375	VV	2483	13747	0.44%	0.010%
376	16.380	16.375	16.387	VV	1653	10145	0.32%	0.007%
377	16.414	16.387	16.419	VV	1873	29292	0.93%	0.021%
378	16.434	16.419	16.438	VV	3350	30616	0.97%	0.022%
379	16.468	16.438	16.504	VV	5681	154253	4.91%	0.112%
380	16.513	16.504	16.534	VV	2829	39743	1.26%	0.029%
381	16.566	16.534	16.584	VV	4944	98532	3.14%	0.072%
382	16.592	16.584	16.614	VV	3730	53862	1.71%	0.039%
383	16.637	16.614	16.674	VV	9870	206728	6.58%	0.151%
384	16.691	16.674	16.705	VV	5884	79837	2.54%	0.058%
385	16.733	16.705	16.749	VV	20330	328719	10.46%	0.239%
386	16.758	16.749	16.782	VV	11551	158412	5.04%	0.115%
387	16.788	16.782	16.794	VV	2655	16847	0.54%	0.012%
388	16.799	16.794	16.804	VV	3040	16023	0.51%	0.012%
389	16.832	16.804	16.851	VV	12898	212754	6.77%	0.155%
390	16.863	16.851	16.887	VV	7752	130439	4.15%	0.095%
391	16.908	16.887	16.914	VV	6088	88288	2.81%	0.064%
392	16.922	16.914	16.939	VV	5834	83523	2.66%	0.061%
393	16.959	16.939	16.964	VV	6358	83635	2.66%	0.061%
394	16.997	16.964	17.014	VV	7519	206904	6.59%	0.151%
395	17.053	17.014	17.075	VV	17662	404921	12.89%	0.295%
396	17.110	17.075	17.139	VV	22760	471584	15.01%	0.343%
397	17.141	17.139	17.150	VV	7473	47125	1.50%	0.034%
398	17.217	17.150	17.233	VV	15088	498310	15.86%	0.363%
399	17.270	17.233	17.308	VV	14044	498756	15.87%	0.363%
400	17.343	17.308	17.352	VV	9680	232411	7.40%	0.169%
401	17.356	17.352	17.378	VV	9791	143039	4.55%	0.104%
402	17.387	17.378	17.392	VV	9459	72499	2.31%	0.053%
403	17.466	17.392	17.502	VV	14983	676207	21.52%	0.492%
404	17.508	17.502	17.515	VV	7931	60731	1.93%	0.044%

					rters			
405	17.538	17.515	17.561	VV	11681	258889	8.24%	0.189%
406	17.579	17.561	17.600	VV	10604	216286		
407	17.642	17.600	17.652	VV	11547	310510		
408	17.668	17.652	17.682	VV	9987	163033		
409	17.698	17.682	17.727	VV	9033	192020		
410	17.743	17.727	17.749	VV	6118	69661		
411	17.787	17.749	17.814	VV	10711	304643	9.70%	0.222%
412	17.829	17.814	17.839	VV	7204	97826	3.11%	0.071%
413	17.850	17.839	17.860	VV	6803	79224	2.52%	0.058%
414	17.867	17.860	17.875	VV	6417	52993	1.69%	0.039%
415	17.883	17.875	17.910	VV	7007	132144	4.21%	0.096%
416	17.958	17.910	17.980	VV	8823	306214	9.75%	0.223%
417	18.003	17.980	18.016	VV	9740	186811	5.95%	0.136%
418	18.025	18.016	18.034	VV	10241	108975	3.47%	0.079%
419	18.081	18.034	18.085	VV	12293	330755	10.53%	0.241%
420	18.107	18.085	18.137	VV	14529	369599	11.76%	0.269%
421	18.160	18.137	18.192	VV	12344	342424	10.90%	0.249%
422	18.197	18.192	18.215	VV	10690	136011	4.33%	0.099%
423	18.255	18.215	18.305	VV	19720	743750	23.67%	0.542%
424	18.310	18.305	18.315	VV	9289	52087	1.66%	0.038%
425	18.324	18.315	18.343	VV	9176	144632	4.60%	0.105%
426	18.357	18.343	18.374	VV	9430	152382	4.85%	0.111%
427	18.391	18.374	18.412	VV	10320	193988	6.17%	0.141%
428	18.428	18.412	18.437	VV	9906	130354	4.15%	0.095%
429	18.462	18.437	18.508	VV	30602	835437	26.59%	0.608%
430	18.528	18.508	18.557	VV	15377	347409	11.06%	0.253%
431	18.578	18.557	18.583	VV	12244	169562	5.40%	0.123%
432	18.623	18.583	18.684	VV	26560	974961	31.03%	0.710%
433	18.690	18.684	18.695	VV	11137	74581	2.37%	0.054%
434	18.700	18.695	18.712	VV	10947	103725	3.30%	0.076%
435	18.734	18.712	18.758	VV	19148	385375	12.27%	0.281%
436	18.776	18.758	18.789	VV	13254	223614	7.12%	0.163%
437	18.804	18.789	18.810	VV	12314	155453	4.95%	0.113%
438	18.817	18.810	18.832	VV	12464	150307	4.78%	0.109%
439	18.864	18.832	18.899	VV	15379	503404	16.02%	0.367%
440	18.937	18.899	18.962	VV	18706	568870	18.11%	0.414%
441	18.966	18.962	18.984	VV	14369	170977	5.44%	0.125%
442	18.994	18.984	19.002	VV	14056	139713	4.45%	0.102%
443	19.048	19.002	19.072	VV	22016	693251	22.06%	0.505%
444	19.096	19.072	19.117	VV	19260	459475	14.62%	0.335%
445	19.122	19.117	19.151	VV	16493	318688	10.14%	0.232%
446	19.176	19.151	19.184	VV	15237	285962	9.10%	0.208%
447	19.222	19.184	19.234	VV	18191	475296	15.13%	0.346%
448	19.246	19.234	19.258	VV	16985	230258	7.33%	0.168%
449	19.291	19.258	19.319	VV	34378	847383	26.97%	0.617%
450	19.339	19.319	19.374	VV	28035	778649	24.78%	0.567%
451	19.381	19.374	19.394	VV	23280	266503	8.48%	0.194%
452	19.413	19.394	19.427	VV	25447	472522	15.04%	0.344%
453	19.447	19.427	19.498	VV	27138	1009372	32.13%	0.735%
454	19.515	19.498	19.530	VV	24127	422671	13.45%	0.308%
455	19.541	19.530	19.553	VV	22942	285403	9.08%	0.208%
456	19.558	19.553	19.566	VV	21260	166855	5.31%	0.122%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2

8.24% 0.189%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

					riteres			
457	19.575	19.566	19.581	VV	23657	196793	6.26%	0.143%
458	19.588	19.581	19.610	VV	23668	383977	12.58%	0.143%
459	19.614	19.610	19.626	VV	20674	181638	5.75%	0.143%
460	19.634	19.626	19.649	VV	19633	244942	7.71%	0.143%
461	19.658	19.649	19.668	VV	17344	191558	6.00%	0.143%
462	19.713	19.668	19.719	VV	21959	539851	17.28%	0.143%
463	19.733	19.719	19.744	VV	23147	335787	10.69%	0.245%
464	19.754	19.744	19.759	VV	24635	209804	6.68%	0.153%
465	19.770	19.759	19.785	VV	25028	381878	12.15%	0.278%
466	19.795	19.785	19.802	VV	24972	242378	7.71%	0.177%
467	19.829	19.802	19.850	VV	29722	785828	25.01%	0.572%
468	19.855	19.850	19.862	VV	26792	183841	5.85%	0.134%
469	19.869	19.862	19.874	VV	27050	188575	6.00%	0.137%
470	19.889	19.874	19.907	VV	28572	540686	17.21%	0.394%
471	19.916	19.907	19.924	VV	27016	253990	8.08%	0.185%
472	19.954	19.924	19.979	VV	29590	875487	27.86%	0.638%
473	19.997	19.979	20.004	VV	25910	365833	11.64%	0.266%
474	20.022	20.004	20.033	VV	26775	444235	14.14%	0.324%
475	20.038	20.033	20.050	VV	24912	245388	7.81%	0.179%
476	20.069	20.050	20.075	VV	30466	408046	12.99%	0.297%
477	20.081	20.075	20.085	VV	31147	182348	5.80%	0.133%
478	20.098	20.085	20.117	VV	35024	619782	19.73%	0.451%
479	20.129	20.117	20.137	VV	35952	409661	13.04%	0.298%
480	20.141	20.137	20.150	VV	33839	266893	8.49%	0.194%
481	20.163	20.150	20.173	VV	36236	462295	14.71%	0.337%
482	20.187	20.173	20.200	VV	34514	542892	17.28%	0.395%
483	20.210	20.200	20.217	VV	34990	333948	10.63%	0.243%
484	20.227	20.217	20.236	VV	35172	373803	11.90%	0.272%
485	20.254	20.236	20.258	VV	39081	492850	15.69%	0.359%
486	20.266	20.258	20.293	VV	42422	759527	24.17%	0.553%
487	20.302	20.293	20.309	VV	36227	317592	10.11%	0.231%
488	20.317	20.309	20.336	VV	35731	529472	16.85%	0.386%
489	20.382	20.336	20.394	VV	35056	1154332	36.74%	0.841%
490	20.423	20.394	20.431	VV	43861	843836	26.86%	0.615%
491	20.442	20.431	20.455	VV	43310	602422	19.17%	0.439%
492	20.465	20.455	20.478	VV	45137	603197	19.20%	0.439%
493	20.486	20.478	20.492	VV	45760	362419	11.54%	0.264%
494	20.516	20.492	20.528	VV	47277	992433	31.59%	0.723%
495	20.533	20.528	20.549	VV	45791	570689	18.16%	0.416%
496	20.555	20.549	20.564	VV	41235	335787	10.69%	0.245%
497	20.574	20.564	20.595	VV	41259	728993	23.20%	0.531%
498	20.605	20.595	20.615	VV	38909	453281	14.43%	0.330%
499	20.645	20.615	20.662	VV	45874	1158219	36.86%	0.843%
500	20.674	20.662	20.685	VV	45929	622426	19.81%	0.453%
501	20.690	20.685	20.697	VV	46280	305810	9.73%	0.223%
502	20.705	20.697	20.711	VV	49466	402144	12.80%	0.293%
503	20.734	20.711	20.755	VV	50974	1281180	40.78%	0.933%
504	20.778	20.755	20.782	VV	48033	755496	24.05%	0.550%
505	20.786	20.782	20.804	VV	47668	595711	18.96%	0.434%
506	20.809	20.804	20.847	VV	44035	1042335	33.18%	0.759%
507	20.852	20.847	20.894	VV	36135	842351	26.81%	0.613%
508	20.933	20.894	20.937	VV	35105	777560	24.75%	0.566%
509	20.960	20.937	20.980	VV	38888	940687	29.94%	0.685%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

						Instrument : FID_G		
						ClientSampleId : SOIL-1-HAM-TPH2		
rterres								
510	20.998	20.980	21.004	VV	38362	531662	16.92%	0.387%
511	21.012	21.004	21.019	VV	38361	323604	10.00%	0.387%
512	21.026	21.019	21.036	VV	37507	367460	11.00%	0.387%
513	21.058	21.036	21.074	VV	43433	914203	29.00%	0.387%
514	21.081	21.074	21.098	VV	44235	622444	19.00%	0.387%
515	21.107	21.098	21.122	VV	44106	599132	19.00%	0.387%
Manual IntegrationsAPPROVED								
516	21.127	21.122	21.141	VV	38298	408729	13.01%	0.298%
517	21.145	21.141	21.176	VV	35771	663209	21.11%	0.483%
518	21.181	21.176	21.193	VV	26731	252061	8.02%	0.184%
519	21.203	21.193	21.211	VV	27879	287567	9.15%	0.209%
520	21.233	21.211	21.249	VV	28266	597049	19.00%	0.435%
521	21.254	21.249	21.260	VV	27035	179797	5.72%	0.131%
522	21.272	21.260	21.279	VV	27582	302226	9.62%	0.220%
523	21.324	21.279	21.329	VV	33094	892800	28.42%	0.650%
524	21.337	21.329	21.344	VV	34176	304377	9.69%	0.222%
525	21.350	21.344	21.359	VV	33163	279729	8.90%	0.204%
526	21.372	21.359	21.390	VV	32592	580215	18.47%	0.423%
527	21.414	21.390	21.421	VV	33871	603037	19.19%	0.439%
528	21.430	21.421	21.445	VV	36029	495019	15.76%	0.360%
529	21.451	21.445	21.464	VV	35894	362468	11.54%	0.264%
530	21.469	21.464	21.512	VV	30990	762763	24.28%	0.555%
531	21.518	21.512	21.540	VV	23728	358465	11.41%	0.261%
532	21.544	21.540	21.555	VV	18080	149807	4.77%	0.109%
533	21.583	21.555	21.593	VV	19383	396839	12.63%	0.289%
534	21.632	21.593	21.643	VV	25650	669552	21.31%	0.488%
535	21.656	21.643	21.667	VV	28424	384605	12.24%	0.280%
536	21.677	21.667	21.716	VV	26507	670200	21.33%	0.488%
537	21.735	21.716	21.747	VV	21480	378718	12.05%	0.276%
538	21.753	21.747	21.766	VV	21033	225364	7.17%	0.164%
539	21.776	21.766	21.785	VV	18343	201943	6.43%	0.147%
540	21.793	21.785	21.801	VV	17477	163857	5.22%	0.119%
541	21.813	21.801	21.827	VV	17657	246978	7.86%	0.180%
542	21.838	21.827	21.857	VV	15751	246962	7.86%	0.180%
543	21.865	21.857	21.878	VV	13280	141392	4.50%	0.103%
544	21.885	21.878	21.896	VV	10892	111703	3.56%	0.081%
545	21.903	21.896	21.915	VV	10734	106997	3.41%	0.078%
546	21.924	21.915	21.938	VV	9886	114922	3.66%	0.084%
547	21.970	21.938	21.978	VV	16574	309583	9.85%	0.225%
548	21.985	21.978	22.000	VV	17523	214331	6.82%	0.156%
549	22.007	22.000	22.015	VV	15643	129394	4.12%	0.094%
550	22.021	22.015	22.027	VV	15383	108922	3.47%	0.079%
551	22.036	22.027	22.048	VV	16370	192909	6.14%	0.140%
552	22.056	22.048	22.070	VV	15924	196651	6.26%	0.143%
553	22.089	22.070	22.097	VV	13954	204861	6.52%	0.149%
554	22.105	22.097	22.112	VV	15766	125747	4.00%	0.092%
555	22.126	22.112	22.132	VV	15459	175033	5.57%	0.127%
556	22.146	22.132	22.195	VV	19354	623983	19.86%	0.454%
557	22.201	22.195	22.225	VV	13693	196614	6.26%	0.143%
558	22.231	22.225	22.251	VV	5569	56394	1.79%	0.041%
559	22.262	22.251	22.285	VV	2577	34395	1.09%	0.025%
560	22.291	22.285	22.294	PV	387	988	0.03%	0.001%

rteres

FG112024.M Tue Dec 03 04:18:40 2024

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	11/27/24	
Project:	Hamilton		Date Received:	11/27/24	
Client Sample ID:	SOIL-1-HAM-TPH2		SDG No.:	P5026	
Lab Sample ID:	P5026-07		Matrix:	SOIL	
Analytical Method:	8015D TPH		% Solid:	74.4	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
FG014913.D	1	12/02/24 09:00	12/02/24 15:15	PB165318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	11.3		0.43	3.80	mg/Kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	14.2		37 - 130	71%	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\FG120224\
Data File : FG014913.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 15:15
Operator : YP\AJ
Sample : P5026-07
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
SOIL-1-HAM-TPH2

Integration File: autoint1.e
Quant Time: Dec 03 01:55:25 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...	15.040	1634875	14.167 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

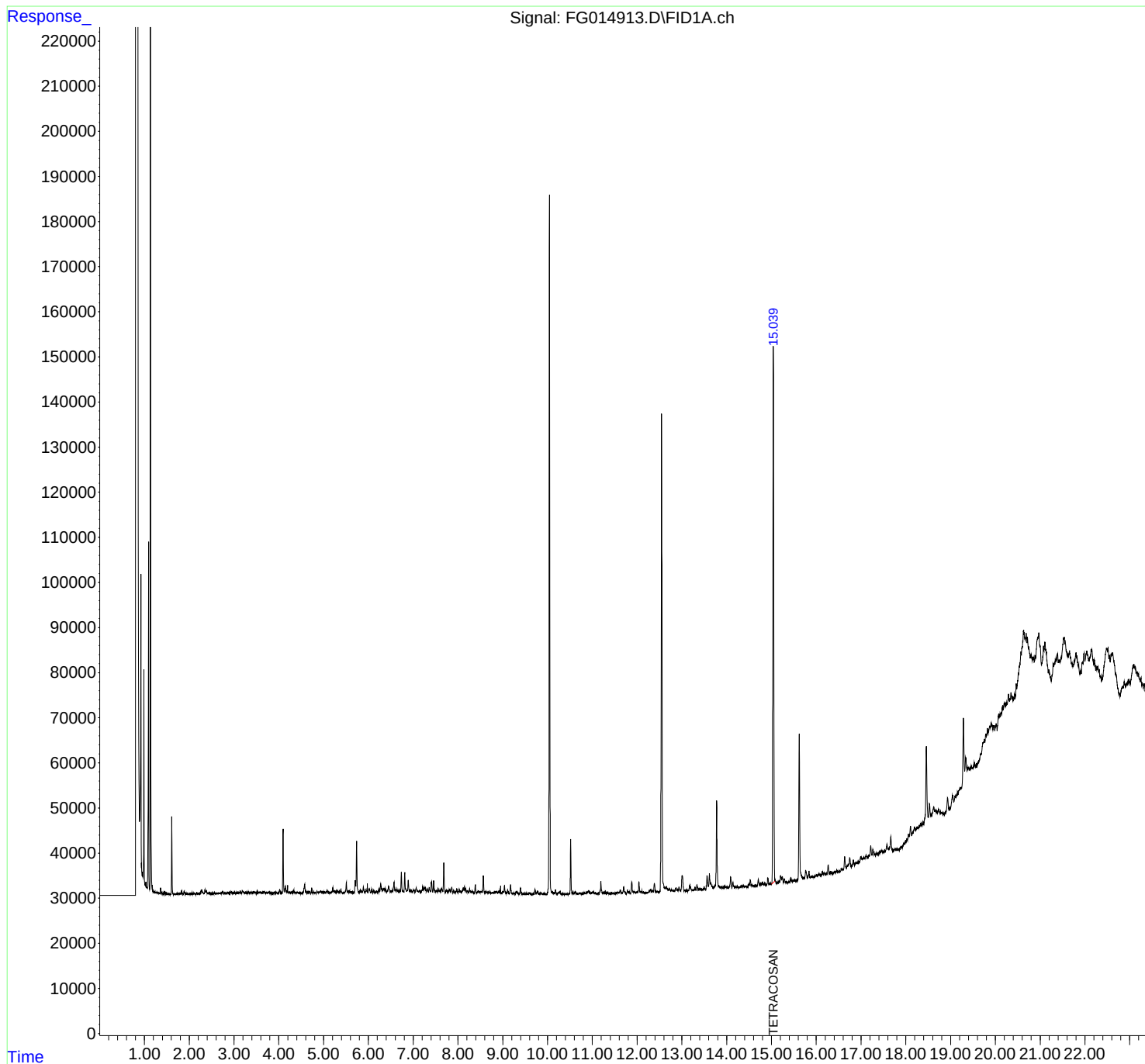
(m)=manual int.

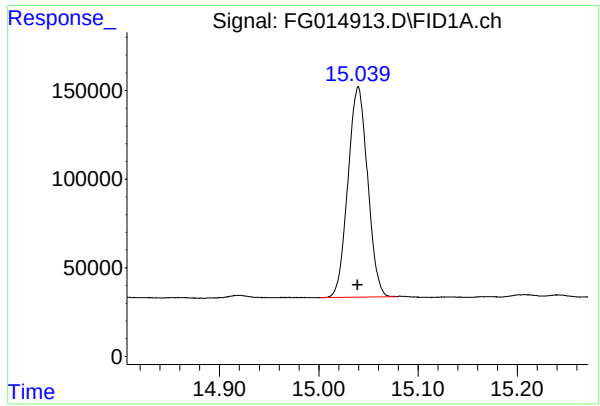
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014913.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 15:15
Operator : YP\AJ
Sample : P5026-07
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
SOIL-1-HAM-TPH2

Integration File: autoint1.e
Quant Time: Dec 03 01:55:25 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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.040 min
Delta R.T.: 0.000 min
Response: 1634875
Conc: 14.17 ug/ml

Instrument :
FID_G
ClientSampleId :
SOIL-1-HAM-TPH2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014913.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 15:15
Sample : P5026-07
Misc :
ALS Vial : 14 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	1.931	1.900	1.936	BV	63	-447	-0.03%	-0.001%
2	1.942	1.936	1.956	PV	81	788	0.05%	0.003%
3	1.961	1.956	1.983	VV	133	963	0.06%	0.003%
4	1.996	1.983	2.015	PV	99	1089	0.07%	0.004%
5	2.019	2.015	2.034	VV	98	623	0.04%	0.002%
6	2.036	2.034	2.040	VV	106	220	0.01%	0.001%
7	2.060	2.040	2.085	PV	251	3868	0.23%	0.012%
8	2.088	2.085	2.095	VV	110	487	0.03%	0.002%
9	2.097	2.095	2.104	VV	168	627	0.04%	0.002%
10	2.109	2.104	2.118	VV	152	1029	0.06%	0.003%
11	2.122	2.118	2.128	VV	111	597	0.04%	0.002%
12	2.130	2.128	2.143	VV	122	875	0.05%	0.003%
13	2.152	2.143	2.155	VV	101	644	0.04%	0.002%
14	2.161	2.155	2.172	VV	113	862	0.05%	0.003%
15	2.198	2.172	2.214	VV	201	2938	0.18%	0.009%
16	2.216	2.214	2.223	VV	125	494	0.03%	0.002%
17	2.228	2.223	2.235	VV	95	675	0.04%	0.002%
18	2.254	2.235	2.260	VV	308	2704	0.16%	0.009%
19	2.268	2.260	2.338	VV	937	20718	1.25%	0.067%
20	2.349	2.338	2.370	VV	1001	11959	0.72%	0.039%
21	2.382	2.370	2.403	VV	736	9265	0.56%	0.030%
22	2.407	2.403	2.423	VV	245	2274	0.14%	0.007%
23	2.432	2.423	2.454	VV	263	3731	0.22%	0.012%
24	2.457	2.454	2.475	VV	270	2046	0.12%	0.007%
25	2.519	2.475	2.532	VV	206	4363	0.26%	0.014%
26	2.539	2.532	2.543	VV	147	728	0.04%	0.002%
27	2.546	2.543	2.550	VV	187	518	0.03%	0.002%
28	2.569	2.550	2.580	VV	228	2816	0.17%	0.009%
29	2.584	2.580	2.590	VV	167	893	0.05%	0.003%
30	2.593	2.590	2.603	VV	191	1315	0.08%	0.004%
31	2.624	2.603	2.641	VV	273	4125	0.25%	0.013%
32	2.648	2.641	2.664	VV	232	2427	0.15%	0.008%
33	2.671	2.664	2.679	VV	195	1687	0.10%	0.005%
34	2.683	2.679	2.689	VV	213	1038	0.06%	0.003%
35	2.693	2.689	2.706	VV	253	2308	0.14%	0.007%
36	2.710	2.706	2.718	VV	191	1388	0.08%	0.004%

					rt	er		
37	2.743	2.718	2.782	VV	575	11675	0.70%	0.038%
38	2.790	2.782	2.801	VV	233	2404	0.14%	0.008%
39	2.807	2.801	2.818	VV	250	1956	0.12%	0.006%
40	2.853	2.818	2.871	VV	344	8114	0.49%	0.026%
41	2.873	2.871	2.882	VV	290	1399	0.08%	0.005%
42	2.894	2.882	2.905	VV	310	3369	0.20%	0.011%
43	2.933	2.905	2.962	VV	545	12190	0.73%	0.039%
44	2.967	2.962	2.974	VV	281	1888	0.11%	0.006%
45	2.978	2.974	2.985	VV	307	1650	0.10%	0.005%
46	2.995	2.985	3.037	VV	382	8614	0.52%	0.028%
47	3.053	3.037	3.069	VV	474	6293	0.38%	0.020%
48	3.073	3.069	3.089	VV	323	3299	0.20%	0.011%
49	3.100	3.089	3.105	VV	295	2660	0.16%	0.009%
50	3.108	3.105	3.111	VV	287	949	0.06%	0.003%
51	3.115	3.111	3.122	VV	266	1659	0.10%	0.005%
52	3.135	3.122	3.143	VV	742	3919	0.24%	0.013%
53	3.149	3.143	3.155	VV	360	2018	0.12%	0.006%
54	3.160	3.155	3.170	VV	296	2252	0.14%	0.007%
55	3.186	3.170	3.226	VV	757	15513	0.93%	0.050%
56	3.231	3.226	3.250	VV	384	4435	0.27%	0.014%
57	3.264	3.250	3.279	VV	318	4815	0.29%	0.016%
58	3.284	3.279	3.303	VV	297	4019	0.24%	0.013%
59	3.314	3.303	3.341	VV	418	7958	0.48%	0.026%
60	3.346	3.341	3.354	VV	313	2064	0.12%	0.007%
61	3.370	3.354	3.374	VV	344	3448	0.21%	0.011%
62	3.382	3.374	3.392	VV	338	3029	0.18%	0.010%
63	3.395	3.392	3.407	VV	342	2629	0.16%	0.008%
64	3.417	3.407	3.432	VV	313	4335	0.26%	0.014%
65	3.440	3.432	3.447	VV	445	3722	0.22%	0.012%
66	3.455	3.447	3.466	VV	470	4867	0.29%	0.016%
67	3.470	3.466	3.475	VV	424	2086	0.13%	0.007%
68	3.489	3.475	3.498	VV	436	4888	0.29%	0.016%
69	3.503	3.498	3.519	VV	434	4483	0.27%	0.014%
70	3.527	3.519	3.545	VV	399	5037	0.30%	0.016%
71	3.548	3.545	3.555	VV	345	2007	0.12%	0.006%
72	3.594	3.555	3.613	VV	406	11502	0.69%	0.037%
73	3.619	3.613	3.633	VV	364	3831	0.23%	0.012%
74	3.639	3.633	3.652	VV	371	3597	0.22%	0.012%
75	3.666	3.652	3.699	VV	590	11575	0.70%	0.037%
76	3.719	3.699	3.750	VV	351	9276	0.56%	0.030%
77	3.767	3.750	3.784	VV	364	6595	0.40%	0.021%
78	3.789	3.784	3.800	VV	320	2814	0.17%	0.009%
79	3.807	3.800	3.829	VV	316	4736	0.28%	0.015%
80	3.874	3.829	3.886	VV	317	8478	0.51%	0.027%
81	3.895	3.886	3.914	VV	371	4990	0.30%	0.016%
82	3.921	3.914	3.929	VV	313	2545	0.15%	0.008%
83	3.944	3.929	3.974	VV	342	7050	0.42%	0.023%
84	4.020	3.974	4.066	VV	1085	22767	1.37%	0.073%
85	4.071	4.066	4.074	VV	274	1109	0.07%	0.004%
86	4.095	4.074	4.123	VV	14404	137787	8.29%	0.444%
87	4.145	4.123	4.189	VV	1784	35382	2.13%	0.114%
88	4.196	4.189	4.202	VV	1511	4899	0.29%	0.016%
89	4.204	4.202	4.209	VV	526	2221	0.13%	0.007%

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90	4.214	4.209	4.237	VV	539	7315	0.44%	0.024%
91	4.239	4.237	4.246	VV	395	1826	0.11%	0.006%
92	4.249	4.246	4.260	VV	390	2824	0.17%	0.009%
93	4.266	4.260	4.271	VV	345	2118	0.13%	0.007%
94	4.308	4.271	4.320	VV	536	11902	0.72%	0.038%
95	4.335	4.320	4.359	VV	904	12993	0.78%	0.042%
96	4.369	4.359	4.390	VV	403	6561	0.39%	0.021%
97	4.406	4.390	4.436	VV	497	9495	0.57%	0.031%
98	4.461	4.436	4.494	VV	382	10764	0.65%	0.035%
99	4.517	4.494	4.534	VV	388	7404	0.45%	0.024%
100	4.578	4.534	4.599	VV	2262	42104	2.53%	0.136%
101	4.607	4.599	4.627	VV	707	9440	0.57%	0.030%
102	4.637	4.627	4.644	VV	415	3853	0.23%	0.012%
103	4.661	4.644	4.672	VV	531	7480	0.45%	0.024%
104	4.691	4.672	4.710	VV	663	10358	0.62%	0.033%
105	4.735	4.710	4.765	VV	1432	20133	1.21%	0.065%
106	4.779	4.765	4.804	VV	523	9360	0.56%	0.030%
107	4.818	4.804	4.833	VV	375	5094	0.31%	0.016%
108	4.852	4.833	4.866	VV	722	9607	0.58%	0.031%
109	4.878	4.866	4.894	VV	532	7726	0.46%	0.025%
110	4.909	4.894	4.917	VV	438	5681	0.34%	0.018%
111	4.933	4.917	4.956	VV	755	13240	0.80%	0.043%
112	4.968	4.956	4.999	VV	506	11187	0.67%	0.036%
113	5.012	4.999	5.049	VV	506	13213	0.79%	0.043%
114	5.079	5.049	5.122	VV	943	23171	1.39%	0.075%
115	5.181	5.122	5.186	VV	539	14441	0.87%	0.046%
116	5.205	5.186	5.235	VV	1461	24532	1.48%	0.079%
117	5.245	5.235	5.257	VV	729	8196	0.49%	0.026%
118	5.278	5.257	5.297	VV	717	13965	0.84%	0.045%
119	5.319	5.297	5.336	VV	813	13648	0.82%	0.044%
120	5.349	5.336	5.366	VV	584	8956	0.54%	0.029%
121	5.386	5.366	5.424	VV	1153	20388	1.23%	0.066%
122	5.451	5.424	5.464	VV	387	8114	0.49%	0.026%
123	5.486	5.464	5.491	VV	745	8576	0.52%	0.028%
124	5.509	5.491	5.535	VV	2666	33585	2.02%	0.108%
125	5.548	5.535	5.566	VV	874	10847	0.65%	0.035%
126	5.582	5.566	5.600	VV	785	11276	0.68%	0.036%
127	5.607	5.600	5.622	VV	557	6380	0.38%	0.021%
128	5.628	5.622	5.641	VV	497	5275	0.32%	0.017%
129	5.646	5.641	5.662	VV	517	5718	0.34%	0.018%
130	5.672	5.662	5.685	VV	414	4956	0.30%	0.016%
131	5.706	5.685	5.722	VV	3090	41327	2.49%	0.133%
132	5.738	5.722	5.787	VV	11752	132189	7.95%	0.426%
133	5.822	5.787	5.833	VV	811	16324	0.98%	0.053%
134	5.836	5.833	5.844	VV	662	3953	0.24%	0.013%
135	5.861	5.844	5.872	VV	650	9761	0.59%	0.031%
136	5.889	5.872	5.923	VV	1701	28325	1.70%	0.091%
137	5.948	5.923	5.962	VV	1143	17606	1.06%	0.057%
138	5.968	5.962	5.987	VV	826	11537	0.69%	0.037%
139	6.020	5.987	6.056	VV	1176	30811	1.85%	0.099%
140	6.074	6.056	6.098	VV	1095	17939	1.08%	0.058%
141	6.112	6.098	6.136	VV	956	15089	0.91%	0.049%

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142	6.139	6.136	6.154	VV	561	4905	0.30%	0.016%
143	6.187	6.154	6.201	VV	787	15764	0.95%	0.051%
144	6.217	6.201	6.226	VV	726	8461	0.51%	0.027%
145	6.240	6.226	6.256	VV	1213	15799	0.95%	0.051%
146	6.276	6.256	6.313	VV	2366	47599	2.86%	0.153%
147	6.337	6.313	6.348	VV	1344	23133	1.39%	0.074%
148	6.357	6.348	6.370	VV	1221	14258	0.86%	0.046%
149	6.383	6.370	6.409	VV	1300	21025	1.26%	0.068%
150	6.427	6.409	6.434	VV	813	10378	0.62%	0.033%
151	6.451	6.434	6.489	VV	1605	37849	2.28%	0.122%
152	6.507	6.489	6.518	VV	851	12332	0.74%	0.040%
153	6.533	6.518	6.547	VV	939	13524	0.81%	0.044%
154	6.573	6.547	6.591	VV	2719	42178	2.54%	0.136%
155	6.621	6.591	6.638	VV	1103	27174	1.63%	0.087%
156	6.660	6.638	6.677	VV	918	17591	1.06%	0.057%
157	6.699	6.677	6.717	VV	866	17412	1.05%	0.056%
158	6.737	6.717	6.783	VV	4920	69383	4.17%	0.223%
159	6.813	6.783	6.858	VV	4887	75167	4.52%	0.242%
160	6.891	6.858	6.921	VV	3128	54147	3.26%	0.174%
161	6.929	6.921	6.946	VV	887	11637	0.70%	0.037%
162	6.961	6.946	6.986	VV	877	16878	1.02%	0.054%
163	7.005	6.986	7.011	VV	897	11272	0.68%	0.036%
164	7.016	7.011	7.042	VV	933	14113	0.85%	0.045%
165	7.069	7.042	7.096	VV	1486	30638	1.84%	0.099%
166	7.104	7.096	7.119	VV	822	9118	0.55%	0.029%
167	7.134	7.119	7.165	VV	889	18876	1.14%	0.061%
168	7.170	7.165	7.174	VV	523	2638	0.16%	0.008%
169	7.215	7.174	7.232	VV	1866	37238	2.24%	0.120%
170	7.270	7.232	7.292	VV	1634	44456	2.67%	0.143%
171	7.314	7.292	7.338	VV	1326	24963	1.50%	0.080%
172	7.358	7.338	7.388	VV	1490	28939	1.74%	0.093%
173	7.412	7.388	7.438	VV	2885	47530	2.86%	0.153%
174	7.460	7.438	7.496	VV	3059	47071	2.83%	0.152%
175	7.516	7.496	7.537	VV	831	16662	1.00%	0.054%
176	7.559	7.537	7.579	VV	1383	23962	1.44%	0.077%
177	7.602	7.579	7.615	VV	868	16568	1.00%	0.053%
178	7.634	7.615	7.661	VV	1314	27246	1.64%	0.088%
179	7.686	7.661	7.726	VV	7043	87003	5.23%	0.280%
180	7.747	7.726	7.762	VV	1043	17640	1.06%	0.057%
181	7.808	7.762	7.838	VV	1095	36663	2.21%	0.118%
182	7.862	7.838	7.889	VV	1599	29694	1.79%	0.096%
183	7.905	7.889	7.926	VV	804	13797	0.83%	0.044%
184	7.952	7.926	7.956	VV	627	9832	0.59%	0.032%
185	7.974	7.956	8.012	VV	1313	27289	1.64%	0.088%
186	8.029	8.012	8.044	VV	1200	16923	1.02%	0.054%
187	8.059	8.044	8.079	VV	753	12830	0.77%	0.041%
188	8.117	8.079	8.130	VV	1450	29110	1.75%	0.094%
189	8.143	8.130	8.160	VV	1775	23994	1.44%	0.077%
190	8.173	8.160	8.198	VV	1362	20367	1.23%	0.066%
191	8.216	8.198	8.237	VV	956	15906	0.96%	0.051%
192	8.261	8.237	8.282	VV	1329	21731	1.31%	0.070%
193	8.290	8.282	8.304	VV	630	7506	0.45%	0.024%
194	8.317	8.304	8.351	VV	936	15997	0.96%	0.052%

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195	8.356	8.351	8.370	VV	421	4417	0.27%	0.014%
196	8.388	8.370	8.422	VV	2158	30314	1.82%	0.098%
197	8.441	8.422	8.446	VV	660	7362	0.44%	0.024%
198	8.460	8.446	8.471	VV	788	9972	0.60%	0.032%
199	8.477	8.471	8.490	VV	627	6371	0.38%	0.021%
200	8.501	8.490	8.516	VV	655	8635	0.52%	0.028%
201	8.536	8.516	8.546	VV	689	10785	0.65%	0.035%
202	8.568	8.546	8.599	VV	4199	52797	3.18%	0.170%
203	8.628	8.599	8.652	VV	714	17472	1.05%	0.056%
204	8.667	8.652	8.684	VV	553	8938	0.54%	0.029%
205	8.690	8.684	8.700	VV	524	4824	0.29%	0.016%
206	8.706	8.700	8.709	VV	528	2736	0.16%	0.009%
207	8.713	8.709	8.739	VV	545	7878	0.47%	0.025%
208	8.751	8.739	8.757	VV	377	3812	0.23%	0.012%
209	8.763	8.757	8.779	VV	385	4461	0.27%	0.014%
210	8.803	8.779	8.823	VV	534	11099	0.67%	0.036%
211	8.835	8.823	8.849	VV	671	8416	0.51%	0.027%
212	8.864	8.849	8.886	VV	697	11437	0.69%	0.037%
213	8.902	8.886	8.915	VV	695	9426	0.57%	0.030%
214	8.932	8.915	8.964	VV	860	16831	1.01%	0.054%
215	8.974	8.964	8.984	VV	413	4531	0.27%	0.015%
216	9.005	8.984	9.017	VV	678	10955	0.66%	0.035%
217	9.040	9.017	9.089	VV	1982	33211	2.00%	0.107%
218	9.110	9.089	9.146	VV	1048	17523	1.05%	0.056%
219	9.176	9.146	9.222	VV	2124	34984	2.10%	0.113%
220	9.226	9.222	9.238	VV	303	2420	0.15%	0.008%
221	9.252	9.238	9.273	VV	348	5883	0.35%	0.019%
222	9.301	9.273	9.335	VV	529	14112	0.85%	0.045%
223	9.342	9.335	9.358	VV	358	3321	0.20%	0.011%
224	9.398	9.358	9.434	VV	1499	23057	1.39%	0.074%
225	9.442	9.434	9.453	VV	217	2020	0.12%	0.007%
226	9.456	9.453	9.476	VV	167	1912	0.12%	0.006%
227	9.481	9.476	9.497	VV	209	1725	0.10%	0.006%
228	9.501	9.497	9.506	VV	144	543	0.03%	0.002%
229	9.511	9.506	9.529	VV	129	1343	0.08%	0.004%
230	9.536	9.529	9.557	VV	164	1959	0.12%	0.006%
231	9.593	9.557	9.649	VV	429	10597	0.64%	0.034%
232	9.654	9.649	9.659	VV	75	459	0.03%	0.001%
233	9.671	9.659	9.679	VV	159	1401	0.08%	0.005%
234	9.683	9.679	9.691	VV	177	939	0.06%	0.003%
235	9.721	9.691	9.750	VV	1215	17358	1.04%	0.056%
236	9.777	9.750	9.807	VV	750	13207	0.79%	0.043%
237	9.850	9.807	9.886	VV	399	10692	0.64%	0.034%
238	9.904	9.886	9.943	VV	258	6428	0.39%	0.021%
239	9.956	9.943	9.977	VV	173	2569	0.15%	0.008%
240	10.044	9.977	10.094	VV	154747	1641828	98.78%	5.286%
241	10.112	10.094	10.132	VV	637	11177	0.67%	0.036%
242	10.141	10.132	10.158	VV	381	4889	0.29%	0.016%
243	10.180	10.158	10.230	VV	1128	18949	1.14%	0.061%
244	10.252	10.230	10.267	VV	607	8398	0.51%	0.027%
245	10.281	10.267	10.317	VV	824	11458	0.69%	0.037%
246	10.327	10.317	10.366	VV	200	3748	0.23%	0.012%

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247	10.372	10.366	10.379	VV	82	516	0.03%	0.002%
248	10.414	10.379	10.419	PV	121	1624	0.10%	0.005%
249	10.429	10.419	10.434	VV	182	1135	0.07%	0.004%
250	10.449	10.434	10.467	VV	147	1986	0.12%	0.006%
251	10.476	10.467	10.481	VV	240	1518	0.09%	0.005%
252	10.484	10.481	10.494	VV	226	1450	0.09%	0.005%
253	10.519	10.494	10.545	VV	12232	132136	7.95%	0.425%
254	10.570	10.545	10.585	VV	529	8575	0.52%	0.028%
255	10.600	10.585	10.604	VV	368	3307	0.20%	0.011%
256	10.619	10.604	10.644	VV	596	9285	0.56%	0.030%
257	10.658	10.644	10.676	VV	268	3469	0.21%	0.011%
258	10.681	10.676	10.688	VV	80	566	0.03%	0.002%
259	10.704	10.688	10.726	VV	312	4471	0.27%	0.014%
260	10.729	10.726	10.735	VV	197	1151	0.07%	0.004%
261	10.740	10.735	10.754	VV	244	2130	0.13%	0.007%
262	10.763	10.754	10.789	VV	165	2815	0.17%	0.009%
263	10.808	10.789	10.834	VV	313	6240	0.38%	0.020%
264	10.872	10.834	10.884	VV	514	9593	0.58%	0.031%
265	10.897	10.884	10.908	VV	617	7072	0.43%	0.023%
266	10.921	10.908	10.964	VV	821	16317	0.98%	0.053%
267	10.993	10.964	11.004	VV	436	6735	0.41%	0.022%
268	11.019	11.004	11.044	VV	589	9068	0.55%	0.029%
269	11.055	11.044	11.089	VV	351	5534	0.33%	0.018%
270	11.096	11.089	11.101	VV	119	658	0.04%	0.002%
271	11.107	11.101	11.124	VV	204	1484	0.09%	0.005%
272	11.192	11.124	11.229	VV	2842	46637	2.81%	0.150%
273	11.243	11.229	11.277	VV	387	8657	0.52%	0.028%
274	11.299	11.277	11.316	VV	388	6692	0.40%	0.022%
275	11.319	11.316	11.332	VV	313	2434	0.15%	0.008%
276	11.351	11.332	11.367	VV	308	4629	0.28%	0.015%
277	11.375	11.367	11.387	VV	167	1580	0.10%	0.005%
278	11.404	11.387	11.419	VV	188	2238	0.13%	0.007%
279	11.432	11.419	11.451	VV	218	3017	0.18%	0.010%
280	11.455	11.451	11.506	VV	213	4394	0.26%	0.014%
281	11.514	11.506	11.519	VV	105	672	0.04%	0.002%
282	11.565	11.519	11.587	VV	362	9091	0.55%	0.029%
283	11.591	11.587	11.605	VV	320	2958	0.18%	0.010%
284	11.626	11.605	11.667	VV	846	14358	0.86%	0.046%
285	11.701	11.667	11.760	VV	1554	26582	1.60%	0.086%
286	11.785	11.760	11.806	VV	789	11598	0.70%	0.037%
287	11.822	11.806	11.844	VV	414	4681	0.28%	0.015%
288	11.881	11.844	11.912	PV	2601	35791	2.15%	0.115%
289	11.914	11.912	11.921	VV	374	1626	0.10%	0.005%
290	11.931	11.921	11.959	VV	380	6230	0.37%	0.020%
291	11.979	11.959	11.993	VV	308	4177	0.25%	0.013%
292	12.011	11.993	12.016	VV	385	3468	0.21%	0.011%
293	12.041	12.016	12.070	VV	2444	32161	1.93%	0.104%
294	12.081	12.070	12.093	VV	258	3084	0.19%	0.010%
295	12.109	12.093	12.129	VV	535	5051	0.30%	0.016%
296	12.148	12.129	12.169	VV	164	2212	0.13%	0.007%
297	12.176	12.169	12.197	VV	91	394	0.02%	0.001%
298	12.237	12.197	12.250	PV	168	2152	0.13%	0.007%
299	12.299	12.250	12.327	VV	695	17575	1.06%	0.057%

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300	12.349	12.327	12.364	VV	539	7117	0.43%	0.023%
301	12.386	12.364	12.439	VV	2001	29774	1.79%	0.096%
302	12.445	12.439	12.475	VV	164	1945	0.12%	0.006%
303	12.487	12.475	12.492	VV	84	514	0.03%	0.002%
304	12.547	12.492	12.611	VV	106134	1330446	80.05%	4.284%
305	12.624	12.611	12.639	VV	1000	15228	0.92%	0.049%
306	12.654	12.639	12.694	VV	1217	26734	1.61%	0.086%
307	12.715	12.694	12.750	VV	757	16495	0.99%	0.053%
308	12.764	12.750	12.799	VV	486	8977	0.54%	0.029%
309	12.804	12.799	12.807	VV	184	845	0.05%	0.003%
310	12.811	12.807	12.842	VV	233	3273	0.20%	0.011%
311	12.866	12.842	12.909	VV	805	18168	1.09%	0.058%
312	12.938	12.909	12.970	VV	958	16685	1.00%	0.054%
313	13.008	12.970	13.044	VV	3515	72982	4.39%	0.235%
314	13.050	13.044	13.053	VV	138	669	0.04%	0.002%
315	13.060	13.053	13.074	VV	203	1896	0.11%	0.006%
316	13.087	13.074	13.091	VV	123	771	0.05%	0.002%
317	13.095	13.091	13.113	VV	87	571	0.03%	0.002%
318	13.174	13.113	13.219	PV	1268	27532	1.66%	0.089%
319	13.225	13.219	13.250	VV	234	2669	0.16%	0.009%
320	13.256	13.250	13.266	VV	151	971	0.06%	0.003%
321	13.291	13.266	13.312	VV	737	9024	0.54%	0.029%
322	13.337	13.312	13.373	VV	1234	19596	1.18%	0.063%
323	13.390	13.373	13.402	VV	262	3349	0.20%	0.011%
324	13.409	13.402	13.417	VV	195	1544	0.09%	0.005%
325	13.422	13.417	13.453	VV	240	3857	0.23%	0.012%
326	13.463	13.453	13.474	VV	161	1484	0.09%	0.005%
327	13.498	13.474	13.531	VV	712	9504	0.57%	0.031%
328	13.561	13.531	13.590	VV	3105	51046	3.07%	0.164%
329	13.614	13.590	13.636	VV	3549	54423	3.27%	0.175%
330	13.647	13.636	13.708	VV	1412	34564	2.08%	0.111%
331	13.744	13.708	13.752	VV	866	14967	0.90%	0.048%
332	13.775	13.752	13.866	VV	19549	264512	15.91%	0.852%
333	13.883	13.866	13.916	VV	391	9207	0.55%	0.030%
334	13.958	13.916	13.973	VV	414	10365	0.62%	0.033%
335	13.993	13.973	13.998	VV	425	5180	0.31%	0.017%
336	14.001	13.998	14.033	VV	377	5203	0.31%	0.017%
337	14.038	14.033	14.046	VV	223	1383	0.08%	0.004%
338	14.089	14.046	14.119	VV	2499	40567	2.44%	0.131%
339	14.138	14.119	14.196	VV	1272	23380	1.41%	0.075%
340	14.199	14.196	14.211	VV	272	1816	0.11%	0.006%
341	14.218	14.211	14.229	VV	193	1523	0.09%	0.005%
342	14.233	14.229	14.239	VV	189	1002	0.06%	0.003%
343	14.244	14.239	14.250	VV	147	986	0.06%	0.003%
344	14.256	14.250	14.274	VV	169	1964	0.12%	0.006%
345	14.285	14.274	14.294	VV	124	958	0.06%	0.003%
346	14.302	14.294	14.307	PV	67	345	0.02%	0.001%
347	14.365	14.307	14.412	VV	310	12828	0.77%	0.041%
348	14.430	14.412	14.446	VV	138	1871	0.11%	0.006%
349	14.493	14.446	14.507	PV	502	8620	0.52%	0.028%
350	14.526	14.507	14.586	VV	1540	26766	1.61%	0.086%
351	14.612	14.586	14.642	VV	282	5679	0.34%	0.018%

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352	14.656	14.642	14.676	VV	169	2073	0.12%	0.007%
353	14.704	14.676	14.744	VV	1558	25738	1.55%	0.083%
354	14.762	14.744	14.776	VV	500	7489	0.45%	0.024%
355	14.801	14.776	14.844	VV	709	17472	1.05%	0.056%
356	14.860	14.844	14.884	VV	389	5262	0.32%	0.017%
357	14.919	14.884	14.954	PV	1576	24963	1.50%	0.080%
358	14.967	14.954	15.001	VV	300	6472	0.39%	0.021%
359	15.040	15.001	15.109	VV	118818	1662110	100.00%	5.352%
360	15.132	15.109	15.151	VV	351	6371	0.38%	0.021%
361	15.171	15.151	15.183	VV	461	6822	0.41%	0.022%
362	15.207	15.183	15.226	VV	1626	27355	1.65%	0.088%
363	15.242	15.226	15.265	VV	1482	20081	1.21%	0.065%
364	15.287	15.265	15.322	VV	886	13791	0.83%	0.044%
365	15.329	15.322	15.357	VV	186	2409	0.14%	0.008%
366	15.385	15.357	15.407	VV	159	2379	0.14%	0.008%
367	15.435	15.407	15.484	PV	937	14419	0.87%	0.046%
368	15.534	15.484	15.561	VV	141	4126	0.25%	0.013%
369	15.619	15.561	15.732	VV	32446	470786	28.32%	1.516%
370	15.764	15.732	15.800	VV	1875	37433	2.25%	0.121%
371	15.837	15.800	15.872	VV	1663	24506	1.47%	0.079%
372	15.896	15.872	15.926	VV	469	7590	0.46%	0.024%
373	15.941	15.926	15.954	VV	151	2306	0.14%	0.007%
374	16.009	15.954	16.019	VV	340	9423	0.57%	0.030%
375	16.072	16.019	16.111	VV	404	15288	0.92%	0.049%
376	16.137	16.111	16.162	VV	990	16470	0.99%	0.053%
377	16.176	16.162	16.214	VV	469	9692	0.58%	0.031%
378	16.232	16.214	16.239	VV	306	3806	0.23%	0.012%
379	16.265	16.239	16.299	VV	2041	30950	1.86%	0.100%
380	16.327	16.299	16.369	VV	569	9499	0.57%	0.031%
381	16.408	16.369	16.427	PV	359	5109	0.31%	0.016%
382	16.456	16.427	16.491	VV	425	9397	0.57%	0.030%
383	16.505	16.491	16.532	VV	128	2043	0.12%	0.007%
384	16.561	16.532	16.592	PV	578	11709	0.70%	0.038%
385	16.634	16.592	16.670	VV	2957	51857	3.12%	0.167%
386	16.749	16.670	16.777	VV	2267	60414	3.63%	0.195%
387	16.827	16.777	16.857	VV	1562	30706	1.85%	0.099%
388	16.884	16.857	16.894	VV	652	11718	0.71%	0.038%
389	16.995	16.894	17.029	VV	1636	69398	4.18%	0.223%
390	17.054	17.029	17.081	VV	1197	32697	1.97%	0.105%
391	17.110	17.081	17.141	VV	1594	41753	2.51%	0.134%
392	17.216	17.141	17.241	VV	3224	90409	5.44%	0.291%
393	17.265	17.241	17.312	VV	2077	58502	3.52%	0.188%
394	17.457	17.312	17.511	VV	1195	110864	6.67%	0.357%
395	17.577	17.511	17.616	VV	2216	76190	4.58%	0.245%
396	17.663	17.616	17.719	VV	3570	85284	5.13%	0.275%
397	17.759	17.719	17.795	VV	465	14581	0.88%	0.047%
398	17.806	17.795	17.816	VV	175	1422	0.09%	0.005%
399	17.911	17.816	17.919	PV	143	3293	0.20%	0.011%
400	18.058	17.919	18.077	PV	1806	73410	4.42%	0.236%
401	18.104	18.077	18.131	VV	3263	65420	3.94%	0.211%
402	18.193	18.131	18.211	VV	2297	78545	4.73%	0.253%
403	18.254	18.211	18.269	VV	1889	58655	3.53%	0.189%
404	18.293	18.269	18.305	VV	1716	34735	2.09%	0.112%

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405	18.333	18.305	18.354	VV	2054	52125	3.14%	0.168%
406	18.386	18.354	18.402	VV	1806	47064	2.83%	0.152%
407	18.457	18.402	18.502	VV	18184	375286	22.58%	1.208%
408	18.529	18.502	18.559	VV	4852	108877	6.55%	0.351%
409	18.621	18.559	18.642	VV	3454	126371	7.60%	0.407%
410	18.658	18.642	18.680	VV	2471	51633	3.11%	0.166%
411	18.692	18.680	18.701	VV	1897	21775	1.31%	0.070%
412	18.733	18.701	18.757	VV	2067	56124	3.38%	0.181%
413	18.766	18.757	18.801	VV	1106	24184	1.46%	0.078%
414	18.804	18.801	18.832	VV	659	8858	0.53%	0.029%
415	18.879	18.832	18.896	VV	275	5345	0.32%	0.017%
416	18.933	18.896	18.986	PV	2986	59201	3.56%	0.191%
417	19.045	18.986	19.074	PV	2438	70326	4.23%	0.226%
418	19.101	19.074	19.110	VV	1949	31658	1.90%	0.102%
419	19.154	19.110	19.165	VV	2129	60661	3.65%	0.195%
420	19.286	19.165	19.314	VV	17412	459595	27.65%	1.480%
421	19.337	19.314	19.376	VV	8245	239319	14.40%	0.771%
422	19.391	19.376	19.417	VV	5545	129883	7.81%	0.418%
423	19.429	19.417	19.439	VV	4974	63927	3.85%	0.206%
424	19.464	19.439	19.484	VV	5256	130921	7.88%	0.422%
425	19.530	19.484	19.562	VV	5365	216546	13.03%	0.697%
426	19.574	19.562	19.583	VV	4653	52647	3.17%	0.170%
427	19.756	19.583	19.767	VV	8284	668838	40.24%	2.154%
428	19.784	19.767	19.800	VV	9167	172180	10.36%	0.554%
429	19.822	19.800	19.847	VV	10137	263063	15.83%	0.847%
430	19.871	19.847	19.887	VV	10241	233672	14.06%	0.752%
431	19.904	19.887	19.944	VV	10604	336746	20.26%	1.084%
432	19.972	19.944	19.987	VV	9463	229153	13.79%	0.738%
433	20.017	19.987	20.038	VV	9430	273081	16.43%	0.879%
434	20.077	20.038	20.096	VV	10912	339373	20.42%	1.093%
435	20.108	20.096	20.119	VV	10559	145199	8.74%	0.468%
436	20.129	20.119	20.142	VV	10883	148677	8.95%	0.479%
437	20.165	20.142	20.177	VV	12003	238377	14.34%	0.768%
438	20.200	20.177	20.229	VV	12241	368064	22.14%	1.185%
439	20.293	20.229	20.317	VV	13319	631191	37.98%	2.032%
440	20.348	20.317	20.367	VV	13161	369359	22.22%	1.189%
441	20.380	20.367	20.407	VV	12075	275902	16.60%	0.888%
442	20.426	20.407	20.438	VV	12209	211117	12.70%	0.680%
443	20.466	20.438	20.477	VV	13921	298647	17.97%	0.962%
444	20.571	20.477	20.579	VV	20181	1007648	60.62%	3.244%
445	20.631	20.579	20.664	VV	24327	1138239	68.48%	3.665%
446	20.687	20.664	20.706	VV	23204	554899	33.39%	1.787%
447	20.715	20.706	20.777	VV	22000	833640	50.16%	2.684%
448	20.800	20.777	20.822	VV	17206	453873	27.31%	1.461%
449	20.832	20.822	20.843	VV	16463	202805	12.20%	0.653%
450	20.857	20.843	20.872	VV	16269	282599	17.00%	0.910%
451	20.886	20.872	20.896	VV	16377	221561	13.33%	0.713%
452	20.969	20.896	21.032	VV	20672	1453016	87.42%	4.678%
453	21.074	21.032	21.082	VV	16727	435586	26.21%	1.402%
454	21.106	21.082	21.186	VV	17290	872217	52.48%	2.808%
455	21.192	21.186	21.249	VV	10432	336861	20.27%	1.085%
456	21.290	21.249	21.306	VV	10699	313544	18.86%	1.010%

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457	21.388	21.306	21.411	VV	12179	690271	41.53%	2.223%
458	21.419	21.411	21.430	VV	10342	116367	7.00%	0.375%
459	21.437	21.430	21.447	VV	10024	103949	6.25%	0.335%
460	21.465	21.447	21.473	VV	10549	158455	9.53%	0.510%
461	21.538	21.473	21.604	VV	14353	961270	57.83%	3.095%
462	21.614	21.604	21.626	VV	9871	125184	7.53%	0.403%
463	21.655	21.626	21.732	VV	10191	527304	31.72%	1.698%
464	21.802	21.732	21.894	VV	8425	592415	35.64%	1.907%
465	21.909	21.894	21.917	VV	3486	44953	2.70%	0.145%
466	21.980	21.917	22.002	VV	6614	259000	15.58%	0.834%
467	22.041	22.002	22.091	VV	6594	286712	17.25%	0.923%
468	22.140	22.091	22.199	VV	6031	287956	17.32%	0.927%
469	22.210	22.199	22.241	VV	2997	51291	3.09%	0.165%
470	22.251	22.241	22.274	VV	1029	13497	0.81%	0.043%
471	22.288	22.274	22.301	VBA	913	34406	2.07%	0.111%
			Sum of corrected areas:				31058157	

FG112024.M Tue Dec 03 04:20:29 2024



CALIBRATION SUMMARY

TPH GC INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: TULL02
 ProjectID: Hamilton
 Lab Code: CHEM Case No.: P5026 SAS No.: P5026 SDG No.: P5026

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: Hamilton
Lab Code: CHEM Case No.: P5026 SAS No.: P5026 SDG No.: P5026
DataFile: FG014908.D Analyst Name: YP\AJ Analyst Date: 12-02-2024

Conc. (PPM)	Area Count	RF	Average RF	%D
850	89588067	105398	117055	9.959

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
 Data File : FG014908.D
 Signal(s) : FID1A.ch
 Acq On : 02 Dec 2024 12:23
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 50 PPM TRPH STD

Integration File: autoint1.e
 Quant Time: Dec 03 01:51:47 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	5621018	48.710 ug/ml
Target Compounds			
1) N-OCTANE	2.052	6716384	50.655 ug/ml
2) N-DECANE	4.566	6845619	51.301 ug/ml
3) N-DODECANE	6.739	6906455	50.194 ug/ml
4) N-TETRADECANE	8.570	6728487	50.471 ug/ml
5) N-HEXADECANE	10.181	6673092	49.581 ug/ml
6) N-OCTADECANE	11.628	6703837	48.831 ug/ml
7) N-EICOSANE	12.940	6512370	49.143 ug/ml
8) N-DOCOSANE	14.140	6221982	48.225 ug/ml
10) N-TETRACOSANE	15.245	6035855	47.662 ug/ml
11) N-HEXACOSANE	16.266	5817615	47.284 ug/ml
12) N-OCTACOSANE	17.218	5597879	46.271 ug/ml
13) N-TRIACONTANE	18.105	5397754	45.016 ug/ml
14) N-DOTRIACONTANE	18.937	4902948	42.151 ug/ml
15) N-TETRATRIACONTANE	19.721	3772849	37.406 ug/ml
16) N-HEXATRIACONTANE	20.460	2444856	30.148 ug/ml
17) N-OCTATRIACONTANE	21.208	1497064	21.676 ug/ml
18) N-TETRACONTANE	22.140	813021	13.179 ug/ml

(f)=RT Delta > 1/2 Window

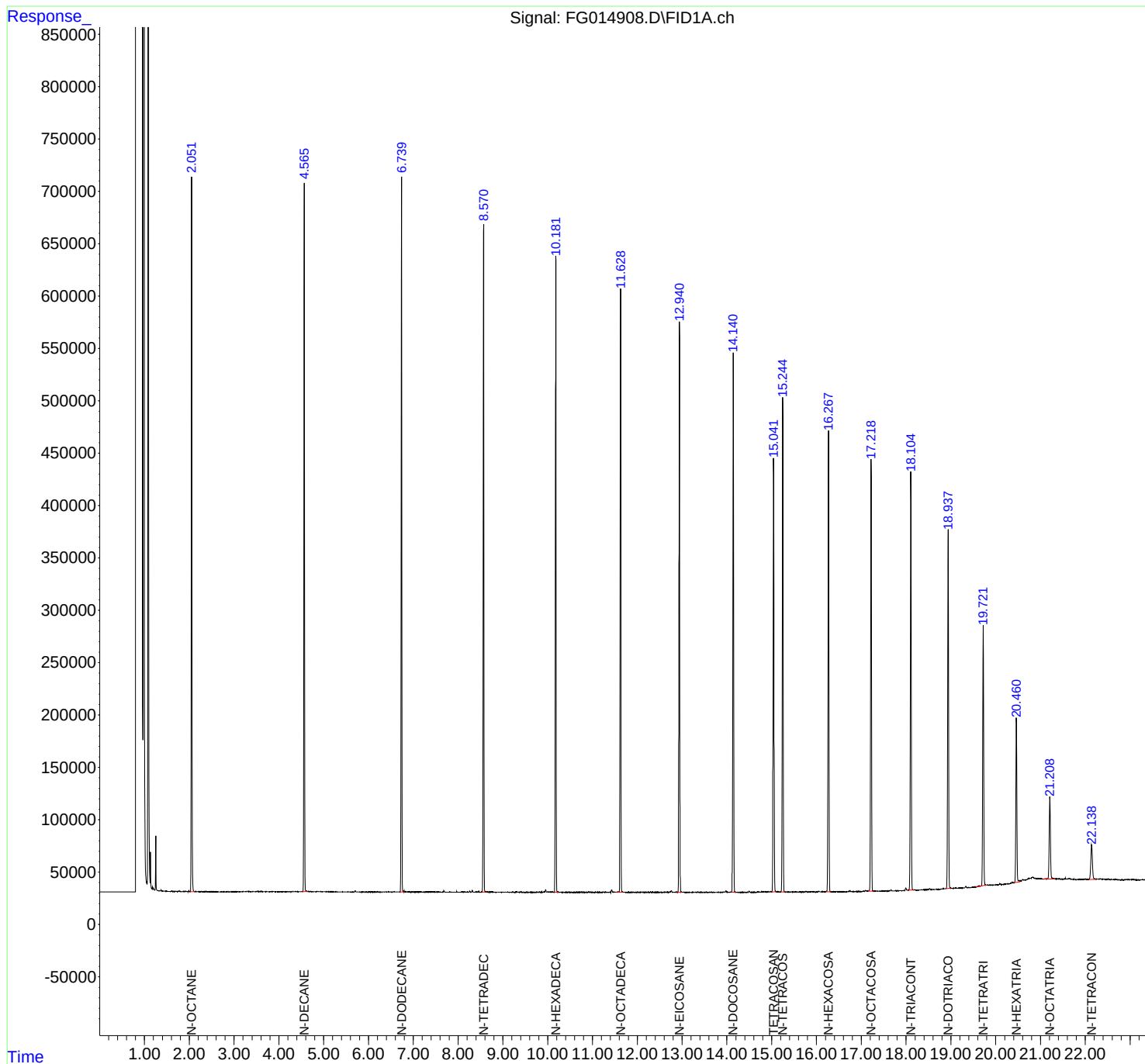
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014908.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 12:23
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Integration File: autoint1.e
Quant Time: Dec 03 01:51:47 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\FG120224\
Data File : FG014908.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 12:23
Sample : 50 PPM TRPH STD
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	2.052	2.021	2.128	BB	683002	6716384	97.25%	7.054%
2	4.566	4.525	4.639	BB	674690	6845619	99.12%	7.190%
3	6.739	6.704	6.809	BB	682729	6906455	100.00%	7.254%
4	8.570	8.534	8.634	BB	637709	6728487	97.42%	7.067%
5	10.181	10.144	10.238	BB	606600	6673092	96.62%	7.009%
6	11.628	11.530	11.680	BB	574686	6703837	97.07%	7.041%
7	12.940	12.895	12.996	BB	544309	6512370	94.29%	6.840%
8	14.140	14.100	14.199	BB	514417	6221982	90.09%	6.535%
9	15.041	15.000	15.110	BBA	414072	5621018	81.39%	5.904%
10	15.245	15.205	15.297	BB	470469	6035855	87.39%	6.340%
11	16.266	16.210	16.331	BB	435489	5817615	84.23%	6.110%
12	17.218	17.144	17.280	BB	411937	5597879	81.05%	5.880%
13	18.105	18.033	18.174	BB	399116	5397754	78.16%	5.669%
14	18.937	18.889	18.994	BB	342360	4902948	70.99%	5.150%
15	19.721	19.551	19.790	BB	248412	3772849	54.63%	3.963%
16	20.460	20.401	20.539	BV	157217	2444856	35.40%	2.568%
17	21.208	21.057	21.331	BB	78034	1497064	21.68%	1.572%
18	22.140	22.066	22.244	BB	33330	813021	11.77%	0.854%
Sum of corrected areas:							95209085	

FG112024.M Tue Dec 03 03:33:05 2024

TPH GC CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: TULL02
ProjectID: Hamilton
Lab Code: CHEM Case No.: P5026 SAS No.: P5026 SDG No.: P5026
DataFile: FG014915.D Analyst Name: YP\AJ Analyst Date: 12-02-2024

Conc. (PPM)	Area Count	RF	Average RF	%D
850	99256327	116772	117055	0.242

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
 Data File : FG014915.D
 Signal(s) : FID1A.ch
 Acq On : 02 Dec 2024 16:12
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 50 PPM TRPH STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/03/2024
 Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
 Quant Time: Dec 03 01:56:46 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	5829821	50.519 ug/ml
Target Compounds			
1) N-OCTANE	2.053	6484191	48.904 ug/ml
2) N-DECANE	4.568	6667420	49.965 ug/ml
3) N-DODECANE	6.740	6763161	49.153 ug/ml
4) N-TETRADECANE	8.572	6639240	49.801 ug/ml
5) N-HEXADECANE	10.183	6656293	49.457 ug/ml
6) N-OCTADECANE	11.630	6763732	49.268 ug/ml
7) N-EICOSANE	12.942	6645449	50.147 ug/ml
8) N-DOCOSANE	14.142	6443658	49.943 ug/ml
10) N-TETRACOSANE	15.247	6330559	49.989 ug/ml
11) N-HEXACOSANE	16.270	6172363	50.167 ug/ml
12) N-OCTACOSANE	17.220	6017015	49.736 ug/ml
13) N-TRIACONTANE	18.109	5904426	49.241 ug/ml
14) N-DOTRIACONTANE	18.941	5604296	48.181 ug/mlm
15) N-TETRATRIACONTANE	19.726	4957789	49.154 ug/ml
16) N-HEXATRIACONTANE	20.464	3969475	48.949 ug/ml
17) N-OCTATRIACONTANE	21.212	3576548	51.786 ug/ml
18) N-TETRACONTANE	22.147	3660712	59.341 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014915.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 16:12
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

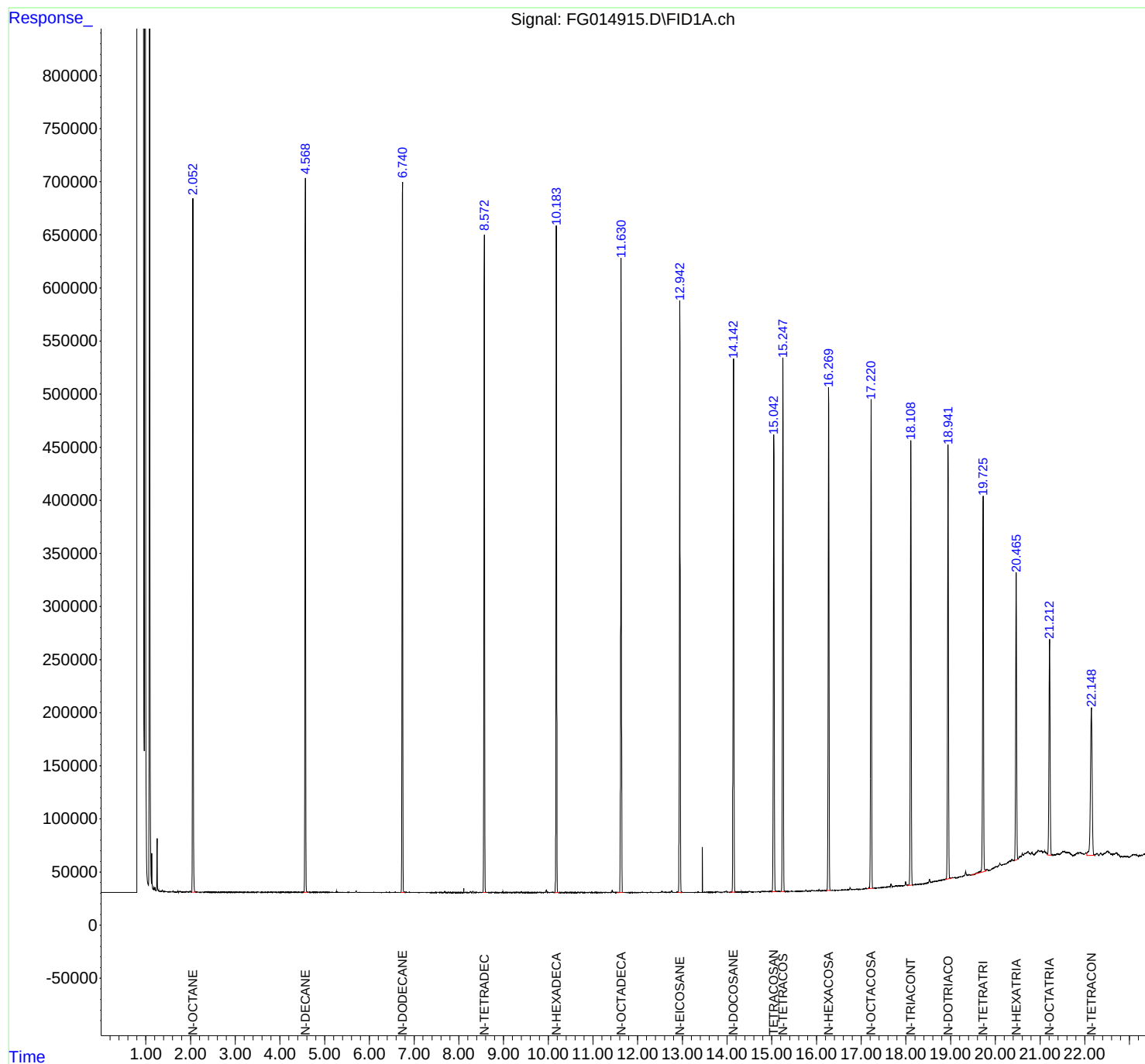
Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
Quant Time: Dec 03 01:56:46 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\FG12022
Data File : FG014915.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 16:12
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

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	2.053	2.021	2.127	PB	652851	6484191	95.87%	6.171%
2	4.568	4.532	4.623	BB	672063	6667420	98.58%	6.346%
3	6.740	6.704	6.792	BB	669063	6763161	99.99%	6.437%
4	8.572	8.535	8.611	BB	619131	6639240	98.16%	6.319%
5	10.183	10.145	10.240	BB	625223	6656293	98.41%	6.335%
6	11.630	11.538	11.675	BB	597324	6763732	100.00%	6.437%
7	12.942	12.892	12.995	BB	557413	6645449	98.25%	6.325%
8	14.142	14.060	14.195	BB	500741	6443658	95.27%	6.133%
9	15.043	15.000	15.110	BBA	429476	5829821	86.19%	5.549%
10	15.247	15.192	15.301	BB	502691	6330559	93.60%	6.025%
11	16.270	16.211	16.311	BB	473395	6172363	91.26%	5.875%
12	17.220	17.139	17.277	BB	460569	6017015	88.96%	5.727%
13	18.109	18.030	18.145	BB	415604	5904426	87.30%	5.620%
14	18.941	18.568	18.984	BV	408020	5586464	82.59%	5.317%
15	19.726	19.449	19.790	BV	354091	4957789	73.30%	4.719%
16	20.464	20.425	20.502	PV	270295	3969475	58.69%	3.778%
17	21.212	21.161	21.262	VV	203255	3576548	52.88%	3.404%
18	22.147	22.042	22.226	VV	138729	3660712	54.12%	3.484%
Sum of corrected areas:						105068317		

FG112024.M Tue Dec 03 03:36:06 2024

TPH GC CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: TULL02
ProjectID: Hamilton
Lab Code: CHEM Case No.: P5026 SAS No.: P5026 SDG No.: P5026
DataFile: FG014922.D Analyst Name: YP\AJ Analyst Date: 12-02-2024

Conc. (PPM)	Area Count	RF	Average RF	%D
850	101500676	119413	117055	2.014

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
 Data File : FG014922.D
 Signal(s) : FID1A.ch
 Acq On : 02 Dec 2024 19:31
 Operator : YP\AJ
 Sample : 50 PPM TRPH STD
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 50 PPM TRPH STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/03/2024
 Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
 Quant Time: Dec 03 02:02:05 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...	15.044	5976607	51.791 ug/ml
Target Compounds			
1) N-OCTANE	2.053	6615641	49.895 ug/ml
2) N-DECANE	4.567	6801502	50.970 ug/ml
3) N-DODECANE	6.740	6917023	50.271 ug/ml
4) N-TETRADECANE	8.572	6809689	51.080 ug/ml
5) N-HEXADECANE	10.183	6839517	50.818 ug/ml
6) N-OCTADECANE	11.630	6946482	50.599 ug/ml
7) N-EICOSANE	12.942	6831968	51.555 ug/ml
8) N-DOCOSANE	14.143	6614044	51.264 ug/ml
10) N-TETRACOSANE	15.248	6494395	51.283 ug/ml
11) N-HEXACOSANE	16.270	6323102	51.392 ug/ml
12) N-OCTACOSANE	17.220	6151227	50.845 ug/ml
13) N-TRIACONTANE	18.107	6056342	50.508 ug/ml
14) N-DOTRIACONTANE	18.942	5727924	49.244 ug/ml
15) N-TETRATRIACONTANE	19.724	4935488	48.933 ug/ml
16) N-HEXATRIACONTANE	20.462	4111736	50.703 ug/mlm
17) N-OCTATRIACONTANE	21.211	3729216	53.997 ug/ml
18) N-TETRACONTANE	22.144	3595380	58.282 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014922.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 19:31
Operator : YP\AJ
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

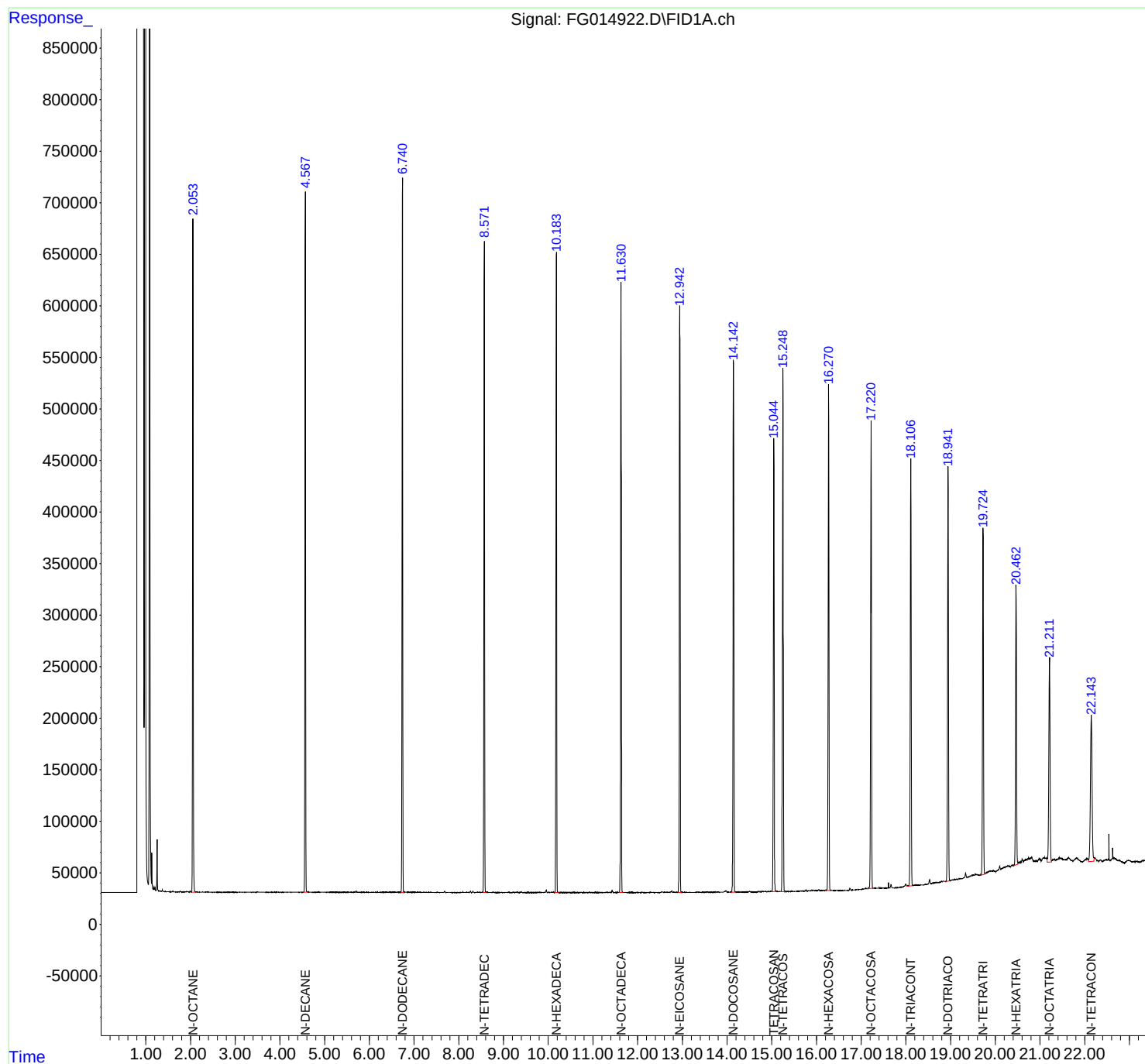
Instrument :
FID_G
ClientSampleId :
50 PPM TRPH STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
Quant Time: Dec 03 02:02:05 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



riteres

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12022
Data File : FG014922.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 19:31
Sample : 50 PPM TRPH STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

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	2.053	2.017	2.121	BB	651982	6615641	95.24%	6.157%
2	4.567	4.521	4.627	BB	680184	6801502	97.91%	6.330%
3	6.740	6.700	6.790	BB	693238	6917023	99.58%	6.438%
4	8.572	8.536	8.614	BB	631304	6809689	98.03%	6.338%
5	10.183	10.143	10.235	BB	619549	6839517	98.46%	6.365%
6	11.630	11.589	11.680	BB	591570	6946482	100.00%	6.465%
7	12.942	12.902	12.994	BB	568315	6831968	98.35%	6.358%
8	14.143	14.071	14.187	BB	512919	6614044	95.21%	6.156%
9	15.044	15.000	15.110	BBA	439769	5976607	86.04%	5.562%
10	15.248	15.175	15.296	BB	508360	6494395	93.49%	6.044%
11	16.270	16.200	16.320	BB	490433	6323102	91.03%	5.885%
12	17.220	17.120	17.276	BB	453604	6151227	88.55%	5.725%
13	18.107	18.024	18.150	VV	414655	6056342	87.19%	5.637%
14	18.942	18.894	18.987	VV	402326	5727924	82.46%	5.331%
15	19.724	19.681	19.772	VV	335666	4935488	71.05%	4.593%
16	20.462	20.401	20.505	BV	270450	4082947	58.78%	3.800%
17	21.211	21.157	21.257	VV	197724	3729216	53.68%	3.471%
18	22.144	22.086	22.204	VV	141707	3595380	51.76%	3.346%
Sum of corrected areas:						107448494		

FG112024.M Tue Dec 03 03:41:06 2024

Analytical Sequence

Client: Tully Construction Co., Inc.

SDG No.: P5026

Project: Hamilton

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	02 Dec 2024 11:54	FG014907.D	15.037	
50 PPM TRPH STD	50 PPM TRPH STD	02 Dec 2024 12:23	FG014908.D	15.041	
SOIL-1-HAM-TPH2	P5026-03	02 Dec 2024 14:18	FG014912.D	15.041	
SOIL-1-HAM-TPH2	P5026-07	02 Dec 2024 15:15	FG014913.D	15.040	
PIBLK02	LBLK02	02 Dec 2024 15:43	FG014914.D	15.041	
50 PPM TRPH STD	50 PPM TRPH STD	02 Dec 2024 16:12	FG014915.D	15.043	
PB165318BL	PB165318BL	02 Dec 2024 16:40	FG014916.D	15.040	
PB165318BS	PB165318BS	02 Dec 2024 17:09	FG014917.D	15.039	
SOIL-1-HAM-TPH2MS	P5026-07MS	02 Dec 2024 17:37	FG014918.D	15.040	
SOIL-1-HAM-TPH2MSD	P5026-07MSD	02 Dec 2024 18:05	FG014919.D	15.039	
PIBLK03	LBLK03	02 Dec 2024 19:02	FG014921.D	15.041	
50 PPM TRPH STD	50 PPM TRPH STD	02 Dec 2024 19:31	FG014922.D	15.044	



QC SAMPLE DATA

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:		
Project:	Hamilton		Date Received:		
Client Sample ID:	PB165318BL		SDG No.:	P5026	
Lab Sample ID:	PB165318BL		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
FG014916.D	1	12/02/24 09:00	12/02/24 16:40	PB165318

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	16.3		37 - 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\FG120224\
Data File : FG014916.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 16:40
Operator : YP\AJ
Sample : PB165318BL
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB165318BL

Integration File: autoint1.e
Quant Time: Dec 03 01:57:47 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	1880472	16.295 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

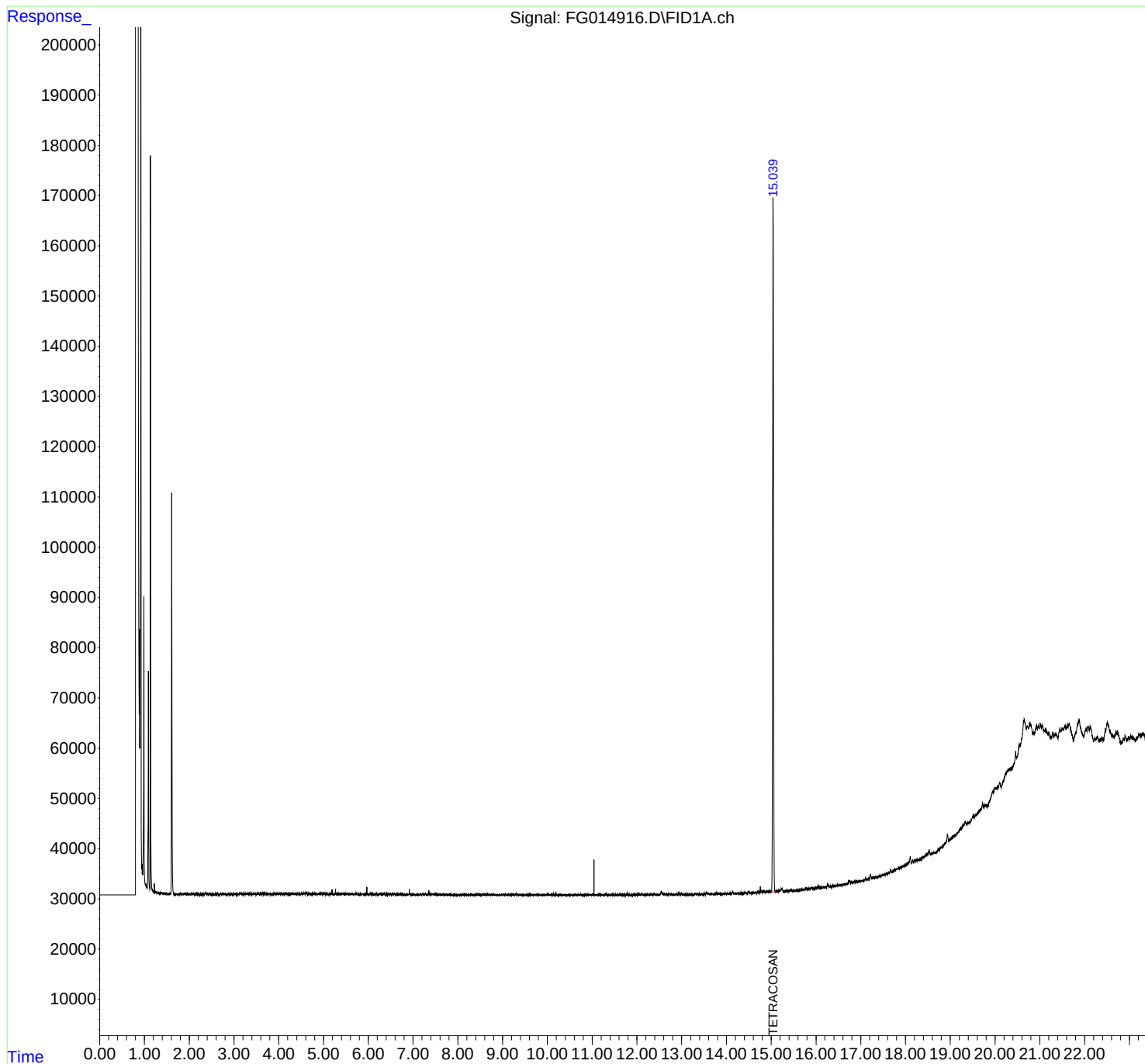
(m)=manual int.

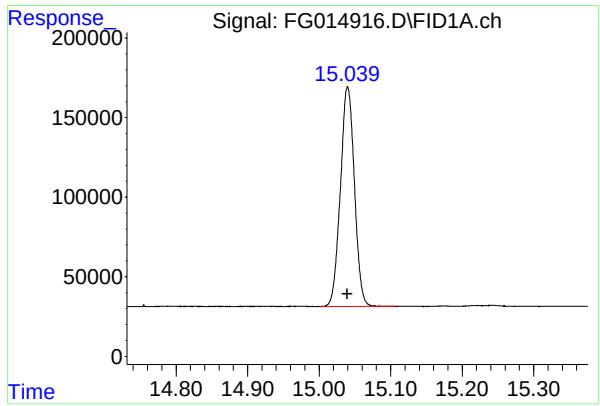
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014916.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 16:40
Operator : YP\AJ
Sample : PB165318BL
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB165318BL

Integration File: autoint1.e
Quant Time: Dec 03 01:57:47 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: 1880472
Conc: 16.30 ug/ml

Instrument :
FID_G
ClientSampleId :
PB165318BL

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014916.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 16:40
Sample : PB165318BL
Misc :
ALS Vial : 15 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	15.108	BB	138184	1880472	100.00%	100.000%
Sum of corrected areas:						1880472		

FG112024.M Tue Dec 03 03:36:54 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	12/02/24	
Project:	Hamilton		Date Received:	12/02/24	
Client Sample ID:	PIBLK-FG014907.D		SDG No.:	P5026	
Lab Sample ID:	I.BLK-FG014907.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
FG014907.D	1		12/02/24	FG120224

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	17.0		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\FG120224\
Data File : FG014907.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 11:54
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 03 01:51:17 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...	15.037	1964893	17.027 ug/ml

Target Compounds

(f)=RT Delta > 1/2 Window

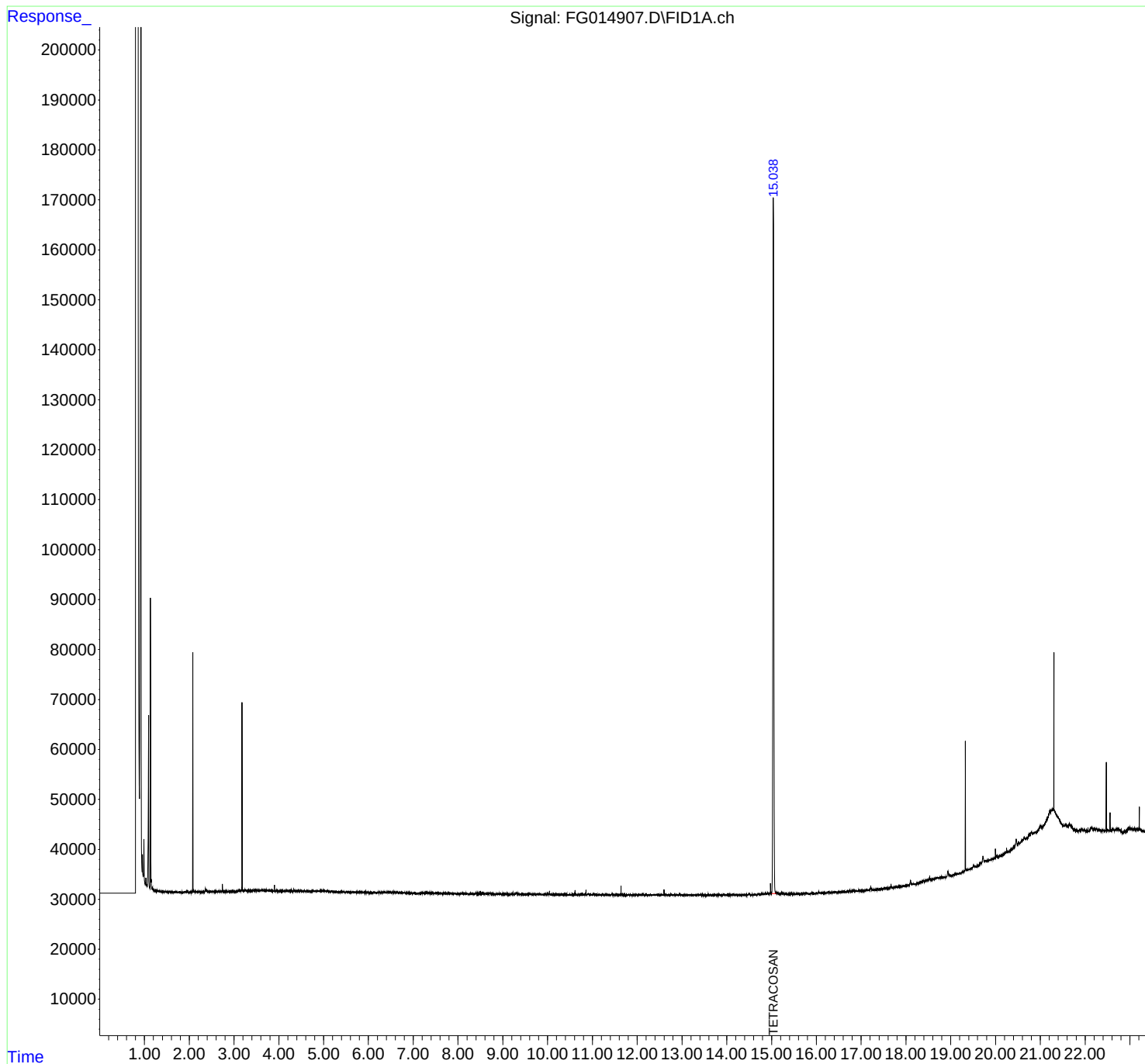
(m)=manual int.

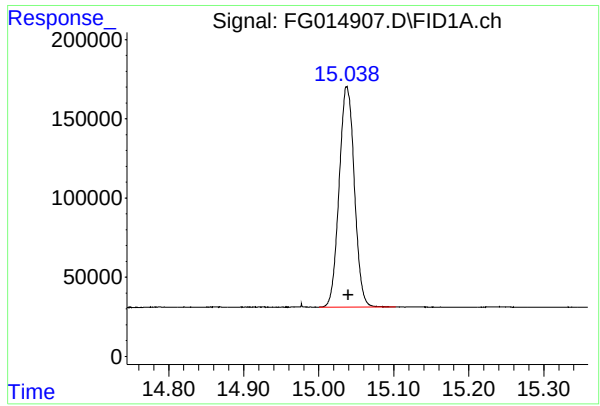
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014907.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 11:54
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Dec 03 01:51:17 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.: 15.037 min

Delta R.T.: -0.002 min

Response: 1964893

Conc: 17.03 ug/ml

Instrument :

FID_G

ClientSampleId :

I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014907.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 11:54
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	15.037	15.000	15.103	BB	139272	1964893	100.00%	100.000%
Sum of corrected areas:						1964893		

FG112024.M Tue Dec 03 03:29:44 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	12/02/24	
Project:	Hamilton		Date Received:	12/02/24	
Client Sample ID:	PIBLK-FG014914.D		SDG No.:	P5026	
Lab Sample ID:	I.BLK-FG014914.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
FG014914.D	1		12/02/24	FG120224

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	17.5		29 - 130	87%	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\FG120224\
Data File : FG014914.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 15:43
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 03 01:56:02 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	2017084	17.479 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

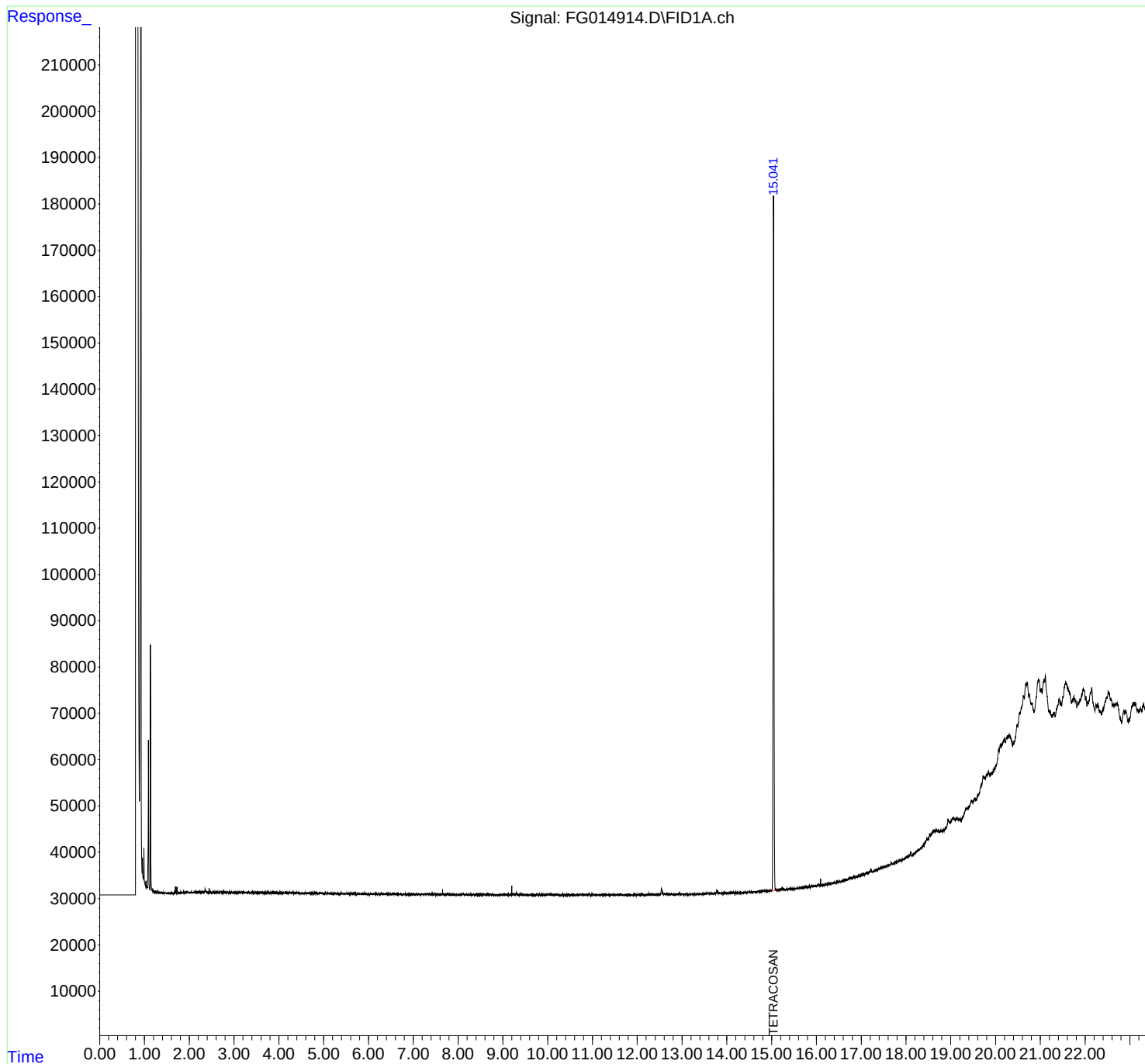
(m)=manual int.

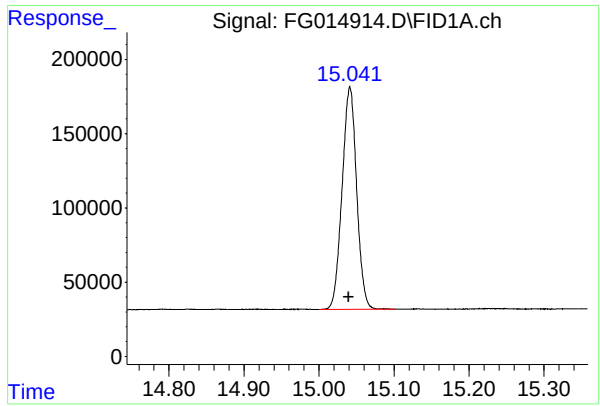
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014914.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 15:43
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Dec 03 01:56:02 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: 2017084

Conc: 17.48 ug/ml

Instrument :

FID_G

ClientSampleId :

I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014914.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 15:43
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	15.103	BB	149447	2017084	100.00%	100.000%
Sum of corrected areas:						2017084		

FG112024.M Tue Dec 03 03:35:02 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	12/02/24	
Project:	Hamilton		Date Received:	12/02/24	
Client Sample ID:	PIBLK-FG014921.D		SDG No.:	P5026	
Lab Sample ID:	I.BLK-FG014921.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
FG014921.D	1		12/02/24	FG120224

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	17.9		29 - 130	90%	SPK: 20

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014921.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 19:02
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 03 02:01:29 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	2070711	17.944 ug/ml
Target Compounds			

(f)=RT Delta > 1/2 Window

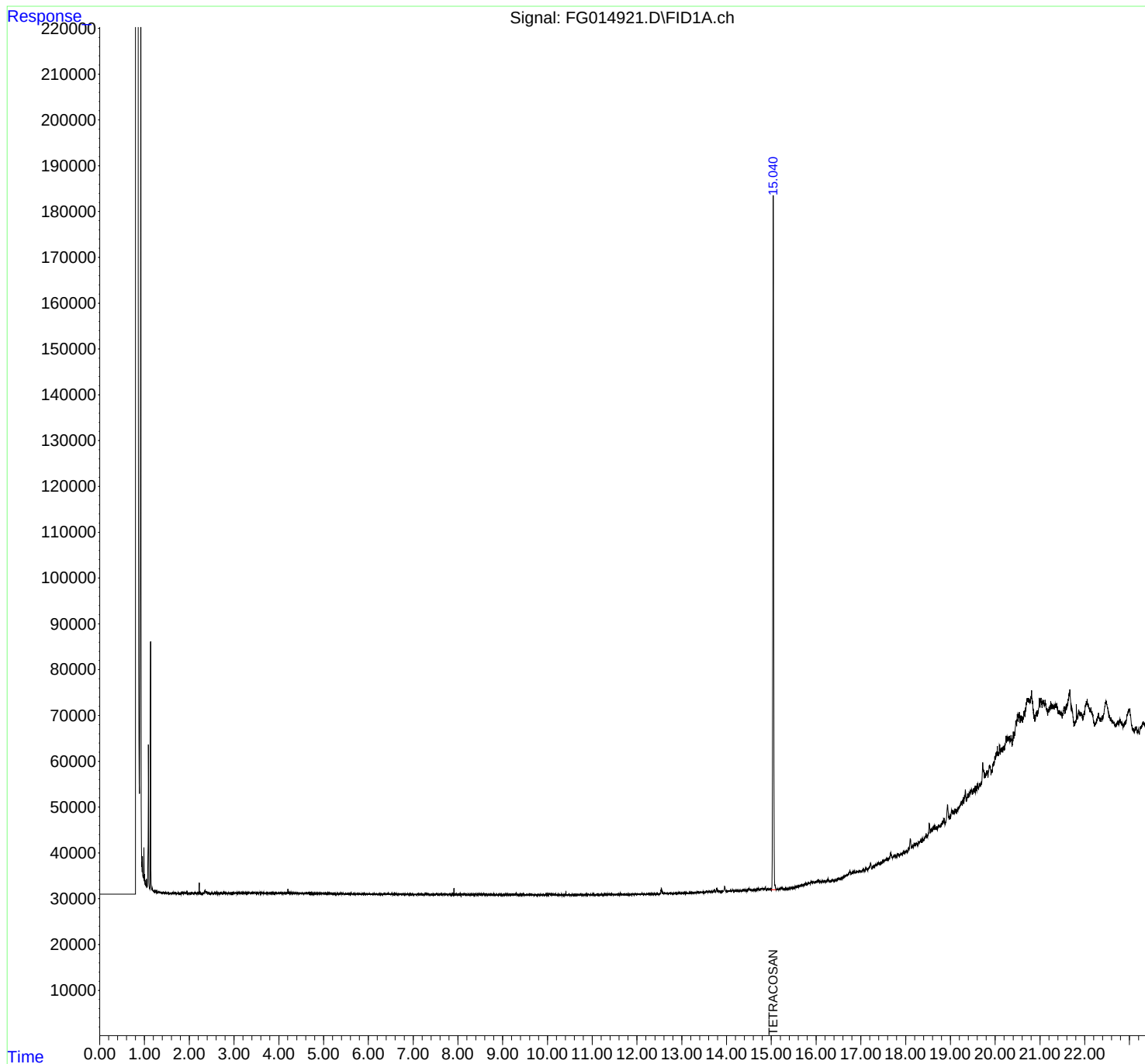
(m)=manual int.

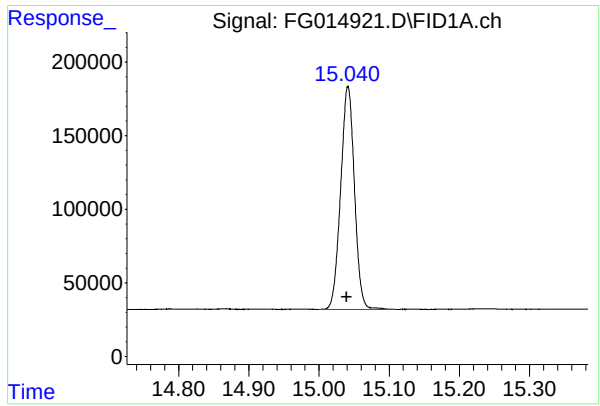
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014921.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 19:02
Operator : YP\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
I.BLK

Integration File: autoint1.e
Quant Time: Dec 03 02:01:29 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: 2070711
Conc: 17.94 ug/ml

Instrument :
FID_G
ClientSampleId :
I.BLK

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014921.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 19:02
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	151383	2070711	100.00%	100.000%
Sum of corrected areas:						2070711		

FG112024.M Tue Dec 03 03:39:32 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:		
Project:	Hamilton		Date Received:		
Client Sample ID:	PB165318BS		SDG No.:	P5026	
Lab Sample ID:	PB165318BS		Matrix:	SOIL	
Analytical Method:	8015D TPH		% Solid:	100	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
FG014917.D	1	12/02/24 09:00	12/02/24 17:09	PB165318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	8.84		0.32	2.83	mg/Kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	16.6		37 - 130	83%	SPK: 20

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
 Data File : FG014917.D
 Signal(s) : FID1A.ch
 Acq On : 02 Dec 2024 17:09
 Operator : YP\AJ
 Sample : PB165318BS
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 PB165318BS

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/03/2024
 Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
 Quant Time: Dec 03 01:58:22 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	1915432	16.598 ug/ml
Target Compounds			
1) N-OCTANE	2.055	1657095	12.498 ug/ml
2) N-DECANE	4.566	2113868	15.841 ug/ml
3) N-DODECANE	6.738	2163614	15.725 ug/ml
4) N-TETRADECANE	8.569	2167249	16.257 ug/ml
5) N-HEXADECANE	10.181	2174644	16.158 ug/ml
6) N-OCTADECANE	11.627	2205640	16.066 ug/ml
7) N-EICOSANE	12.939	2215361	16.717 ug/ml
8) N-DOCOSANE	14.139	2131429	16.520 ug/ml
10) N-TETRACOSANE	15.244	2099830	16.581 ug/ml
11) N-HEXACOSANE	16.266	2053880	16.693 ug/ml
12) N-OCTACOSANE	17.216	1997971	16.515 ug/mlm
13) N-TRIACONTANE	18.106	1975836	16.478 ug/ml
14) N-DOTRIACONTANE	18.938	1837125	15.794 ug/ml
15) N-TETRATRIACONTANE	19.721	1638291	16.243 ug/mlm
16) N-HEXATRIACONTANE	20.460	1192660	14.707 ug/ml
17) N-OCTATRIACONTANE	21.208	866460	12.546 ug/ml
18) N-TETRACONTANE	22.144	616238	9.989 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014917.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 17:09
Operator : YP\AJ
Sample : PB165318BS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :

FID_G

Client SampleId :

PB165318BS

Manual Integrations

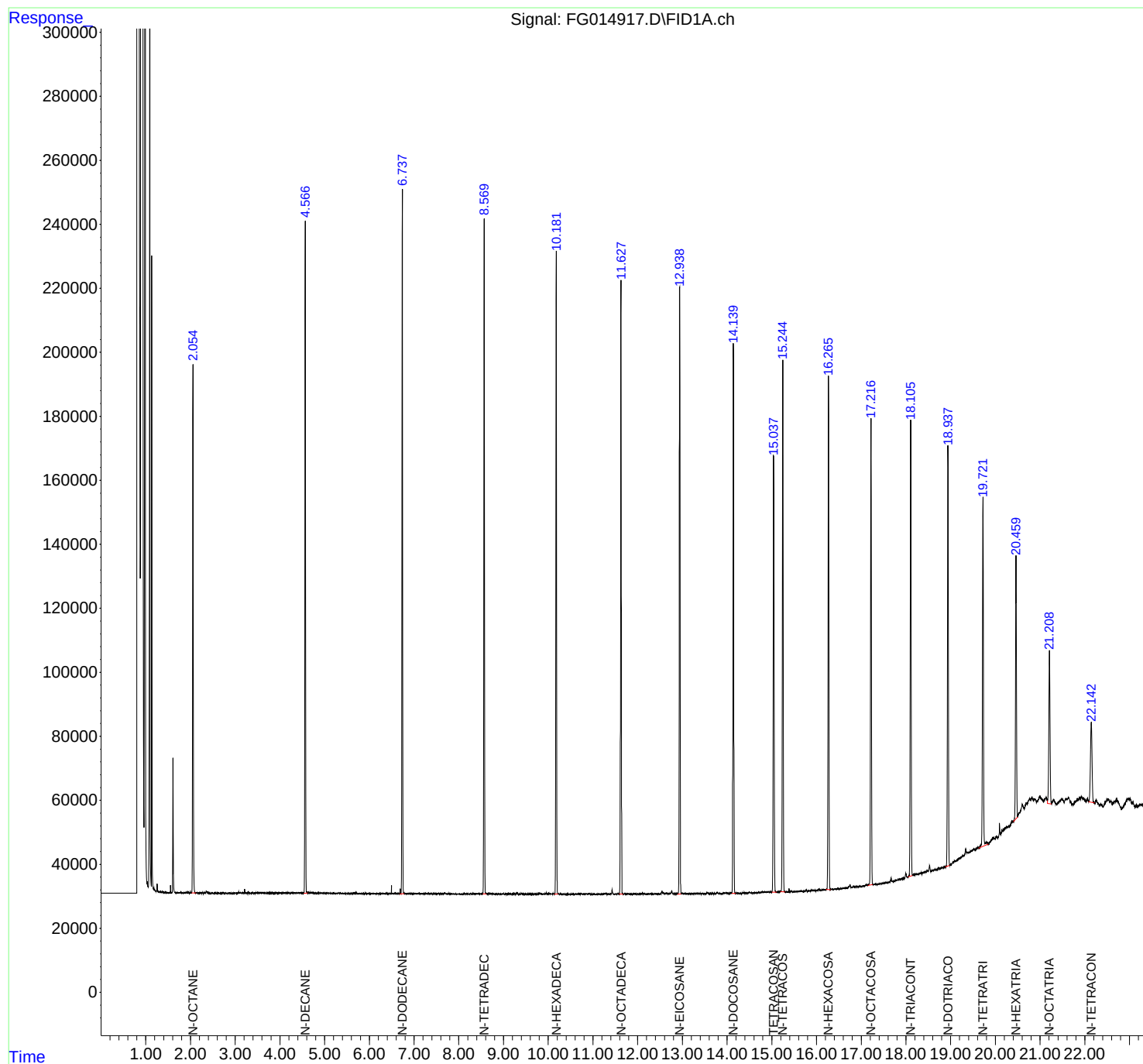
APPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
Quant Time: Dec 03 01:58:22 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 :

PB165318BS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12022
Data File : FG014917.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 17:09
Sample : PB165318BS
Misc :
ALS Vial : 16 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	2.025	2.115	BB	164803	1657095	74.80%	5.026%
2	4.566	4.534	4.621	BB	209912	2113868	95.42%	6.411%
3	6.738	6.683	6.783	BB	219681	2163614	97.66%	6.562%
4	8.569	8.536	8.619	BB	210653	2167249	97.83%	6.573%
5	10.181	10.140	10.222	BB	200965	2174644	98.16%	6.596%
6	11.627	11.585	11.676	BB	191622	2205640	99.56%	6.690%
7	12.939	12.898	12.975	BB	189669	2215361	100.00%	6.719%
8	14.139	14.102	14.189	BB	171647	2131429	96.21%	6.465%
9	15.039	15.000	15.105	BB	135871	1915432	86.46%	5.810%
10	15.244	15.190	15.294	BB	166210	2099830	94.79%	6.369%
11	16.266	16.218	16.313	BB	159602	2053880	92.71%	6.230%
12	17.217	17.064	17.253	BB	145210	2003479	90.44%	6.077%
13	18.106	18.048	18.145	BB	142194	1975836	89.19%	5.993%
14	18.938	18.882	18.977	BB	131124	1837125	82.93%	5.572%
15	19.721	19.421	19.778	BB	108719	1580309	71.33%	4.793%
16	20.460	20.401	20.498	BV	81548	1192660	53.84%	3.617%
17	21.208	21.166	21.259	VV	47703	866460	39.11%	2.628%
18	22.144	22.091	22.224	PV	24959	616238	27.82%	1.869%
Sum of corrected areas:						32970150		

FG112024.M Tue Dec 03 03:38:41 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	11/27/24	
Project:	Hamilton		Date Received:	11/27/24	
Client Sample ID:	SOIL-1-HAM-TPH2MS		SDG No.:	P5026	
Lab Sample ID:	P5026-07MS		Matrix:	SOIL	
Analytical Method:	8015D TPH		% Solid:	74.4	Decanted:
Sample Wt/Vol:	30.05	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
FG014918.D	1	12/02/24 08:00	12/02/24 17:37	PB165318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	17.8		0.43	3.80	mg/Kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	12.9		37 - 130	64%	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\FG120224\
 Data File : FG014918.D
 Signal(s) : FID1A.ch
 Acq On : 02 Dec 2024 17:37
 Operator : YP\AJ
 Sample : P5026-07MS
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 SOIL-1-HAM-TPH2MS

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/03/2024
 Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
 Quant Time: Dec 03 01:59:10 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...	15.040	1485885	12.876 ug/ml
Target Compounds			
1) N-OCTANE	2.055	1577076	11.894 ug/ml
2) N-DECANE	4.566	1901337	14.249 ug/ml
3) N-DODECANE	6.737	1998981	14.528 ug/ml
4) N-TETRADECANE	8.569	2043935	15.332 ug/ml
5) N-HEXADECANE	10.181	2041547	15.169 ug/ml
6) N-OCTADECANE	11.626	2064667	15.039 ug/ml
7) N-EICOSANE	12.938	2061572	15.557 ug/ml
8) N-DOCOSANE	14.140	1979639	15.344 ug/ml
10) N-TETRACOSANE	15.244	1942368	15.338 ug/ml
11) N-HEXACOSANE	16.266	1913168	15.550 ug/ml
12) N-OCTACOSANE	17.217	1859497	15.370 ug/ml
13) N-TRIACONTANE	18.104	1854348	15.465 ug/ml
14) N-DOTRIACONTANE	18.937	1805624	15.523 ug/ml
15) N-TETRATRIACONTANE	19.721	1646426	16.323 ug/mlm
16) N-HEXATRIACONTANE	20.461	1483598	18.295 ug/ml
17) N-OCTATRIACONTANE	21.209	1421176	20.578 ug/ml
18) N-TETRACONTANE	22.145	1298565	21.050 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014918.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 17:37
Operator : YP\AJ
Sample : P5026-07MS
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :

FID_G

Client SampleId :

SOIL-1-HAM-TPH2MS

Manual Integrations

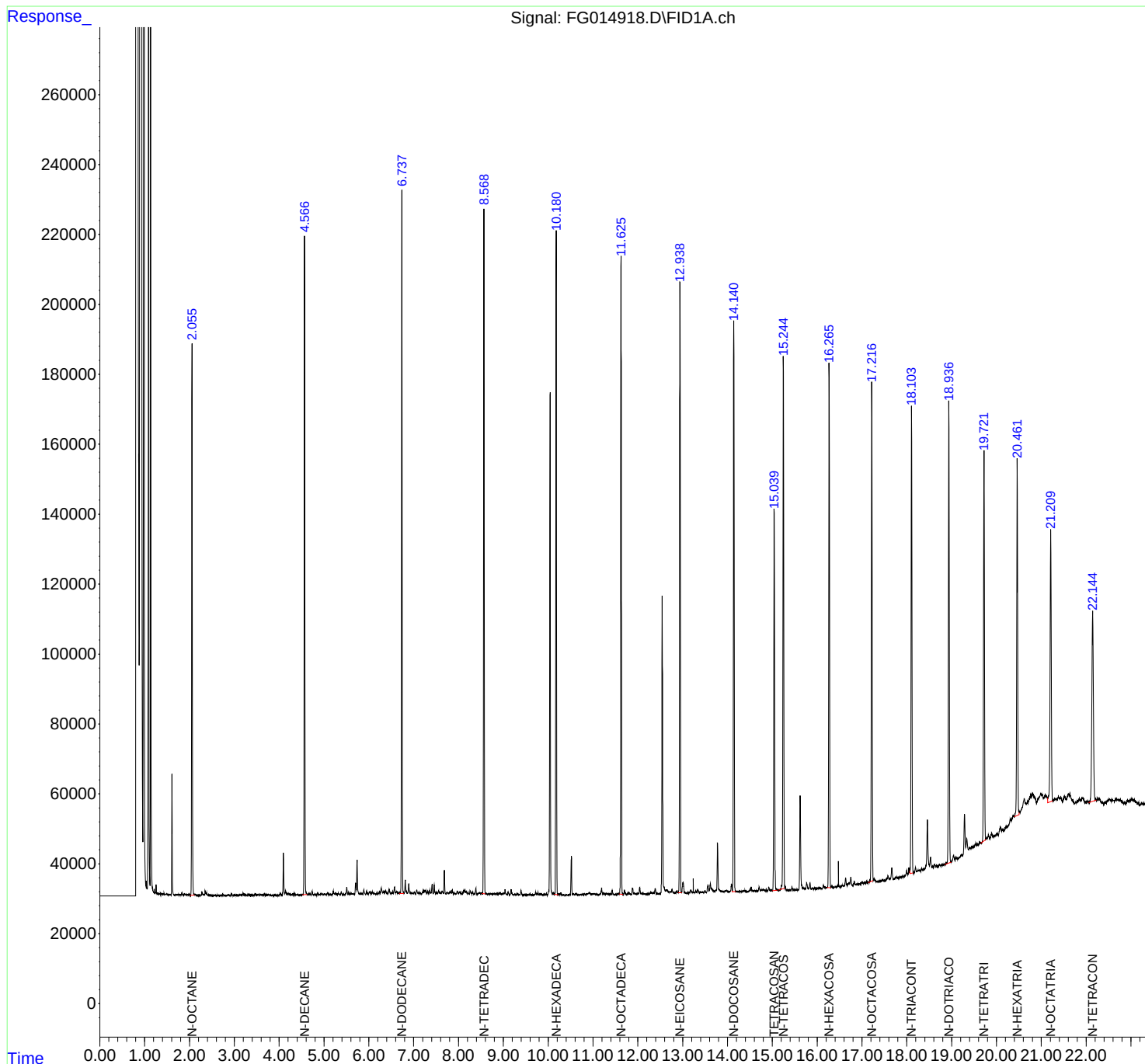
APPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
Quant Time: Dec 03 01:59:10 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



rteres

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2MS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12022
Data File : FG014918.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 17:37
Sample : P5026-07MS
Misc :
ALS Vial : 17 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	1.947	1.934	1.979	PV	238	2760	0.13%	0.006%
2	1.994	1.979	2.023	PV	319	3482	0.17%	0.007%
3	2.055	2.023	2.111	PV	157689	1582823	76.30%	3.291%
4	2.115	2.111	2.182	VV	242	6058	0.29%	0.013%
5	2.209	2.182	2.215	PV	183	1995	0.10%	0.004%
6	2.219	2.215	2.229	VV	125	766	0.04%	0.002%
7	2.235	2.229	2.239	VV	108	376	0.02%	0.001%
8	2.273	2.239	2.320	VV	905	17959	0.87%	0.037%
9	2.322	2.320	2.333	VV	244	1619	0.08%	0.003%
10	2.348	2.333	2.368	VV	1383	16358	0.79%	0.034%
11	2.380	2.368	2.425	VV	842	13363	0.64%	0.028%
12	2.437	2.425	2.456	VV	238	2583	0.12%	0.005%
13	2.460	2.456	2.483	VV	114	1573	0.08%	0.003%
14	2.494	2.483	2.507	VV	146	1182	0.06%	0.002%
15	2.514	2.507	2.534	VV	127	1411	0.07%	0.003%
16	2.543	2.534	2.560	VV	160	1097	0.05%	0.002%
17	2.565	2.560	2.577	PV	92	654	0.03%	0.001%
18	2.584	2.577	2.590	VV	61	395	0.02%	0.001%
19	2.618	2.590	2.625	VV	153	1978	0.10%	0.004%
20	2.629	2.625	2.638	VV	164	780	0.04%	0.002%
21	2.644	2.638	2.666	VV	165	1383	0.07%	0.003%
22	2.687	2.666	2.700	VV	151	1246	0.06%	0.003%
23	2.704	2.700	2.711	VV	142	684	0.03%	0.001%
24	2.715	2.711	2.723	VV	143	707	0.03%	0.001%
25	2.746	2.723	2.774	VV	356	5624	0.27%	0.012%
26	2.787	2.774	2.793	VV	141	901	0.04%	0.002%
27	2.797	2.793	2.823	VV	137	1178	0.06%	0.002%
28	2.840	2.823	2.844	VV	181	1431	0.07%	0.003%
29	2.859	2.844	2.892	VV	221	4069	0.20%	0.008%
30	2.903	2.892	2.908	VV	190	1276	0.06%	0.003%
31	2.935	2.908	2.974	VV	453	9231	0.44%	0.019%
32	2.978	2.974	2.995	VV	166	1721	0.08%	0.004%
33	3.004	2.995	3.027	VV	215	3095	0.15%	0.006%
34	3.031	3.027	3.037	VV	128	639	0.03%	0.001%
35	3.056	3.037	3.076	VV	343	4936	0.24%	0.010%
36	3.124	3.076	3.147	VV	212	6579	0.32%	0.014%

					retention			
37	3.190	3.147	3.211	VV	559	9940	0.48%	0.021%
38	3.215	3.211	3.221	VV	263	1350		
39	3.225	3.221	3.277	VV	232	6264		
40	3.282	3.277	3.294	VV	200	1701		
41	3.313	3.294	3.354	VV	359	7859		
42	3.358	3.354	3.385	VV	182	2649		
43	3.387	3.385	3.397	VV	174	928	0.04%	0.002%
44	3.414	3.397	3.418	VV	208	1767	0.09%	0.004%
45	3.435	3.418	3.445	VV	224	2843	0.14%	0.006%
46	3.462	3.445	3.477	VV	338	5149	0.25%	0.011%
47	3.487	3.477	3.504	VV	313	3924	0.19%	0.008%
48	3.509	3.504	3.513	VV	219	1120	0.05%	0.002%
49	3.539	3.513	3.545	VV	264	4605	0.22%	0.010%
50	3.553	3.545	3.558	VV	258	1726	0.08%	0.004%
51	3.564	3.558	3.567	VV	249	1202	0.06%	0.002%
52	3.586	3.567	3.602	VV	268	4757	0.23%	0.010%
53	3.605	3.602	3.616	VV	239	1694	0.08%	0.004%
54	3.627	3.616	3.650	VV	260	4113	0.20%	0.009%
55	3.668	3.650	3.701	VV	513	8987	0.43%	0.019%
56	3.705	3.701	3.714	VV	246	1463	0.07%	0.003%
57	3.721	3.714	3.729	VV	229	1674	0.08%	0.003%
58	3.736	3.729	3.739	VV	186	907	0.04%	0.002%
59	3.743	3.739	3.749	VV	202	942	0.05%	0.002%
60	3.765	3.749	3.785	VV	266	4230	0.20%	0.009%
61	3.791	3.785	3.819	VV	187	2795	0.13%	0.006%
62	3.823	3.819	3.830	VV	181	910	0.04%	0.002%
63	3.843	3.830	3.872	VV	181	3062	0.15%	0.006%
64	3.901	3.872	3.906	VV	250	3153	0.15%	0.007%
65	3.912	3.906	3.936	VV	207	2927	0.14%	0.006%
66	3.943	3.936	3.969	VV	202	2594	0.13%	0.005%
67	3.973	3.969	3.980	VV	152	595	0.03%	0.001%
68	3.984	3.980	3.990	VV	134	639	0.03%	0.001%
69	4.022	3.990	4.060	VV	893	14185	0.68%	0.029%
70	4.062	4.060	4.067	VV	242	556	0.03%	0.001%
71	4.095	4.067	4.124	VV	12268	122593	5.91%	0.255%
72	4.144	4.124	4.197	VV	1433	30555	1.47%	0.064%
73	4.207	4.197	4.227	VV	540	8093	0.39%	0.017%
74	4.233	4.227	4.237	VV	356	1845	0.09%	0.004%
75	4.244	4.237	4.265	VV	399	5068	0.24%	0.011%
76	4.269	4.265	4.275	VV	250	1398	0.07%	0.003%
77	4.308	4.275	4.322	VV	423	8910	0.43%	0.019%
78	4.336	4.322	4.372	VV	727	12704	0.61%	0.026%
79	4.376	4.372	4.394	VV	274	2875	0.14%	0.006%
80	4.407	4.394	4.454	VV	399	8389	0.40%	0.017%
81	4.463	4.454	4.492	VV	302	4707	0.23%	0.010%
82	4.508	4.492	4.537	VV	298	6427	0.31%	0.013%
83	4.566	4.537	4.634	VV	188319	1918786	92.49%	3.989%
84	4.640	4.634	4.647	VV	412	2894	0.14%	0.006%
85	4.660	4.647	4.676	VV	507	6698	0.32%	0.014%
86	4.690	4.676	4.715	VV	656	8813	0.42%	0.018%
87	4.736	4.715	4.765	VV	1339	17309	0.83%	0.036%
88	4.785	4.765	4.800	VV	421	7023	0.34%	0.015%
89	4.805	4.800	4.809	VV	313	1606	0.08%	0.003%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

90	4.813	4.809	4.831	VV	310	3367	0.16%	0.007%
91	4.852	4.831	4.865	VV	759	9244		
92	4.876	4.865	4.895	VV	623	7881		
93	4.930	4.895	4.961	VV	576	16612		
94	4.970	4.961	4.975	VV	450	3474		
95	4.982	4.975	4.994	VV	392	3932		
96	5.009	4.994	5.029	VV	446	8152	0.39%	0.017%
97	5.033	5.029	5.049	VV	376	4051	0.20%	0.008%
98	5.080	5.049	5.119	VV	921	20008	0.96%	0.042%
99	5.130	5.119	5.155	VV	336	6188	0.30%	0.013%
100	5.158	5.155	5.164	VV	275	1399	0.07%	0.003%
101	5.182	5.164	5.192	VV	459	5966	0.29%	0.012%
102	5.206	5.192	5.235	VV	1328	19770	0.95%	0.041%
103	5.248	5.235	5.261	VV	595	8240	0.40%	0.017%
104	5.275	5.261	5.296	VV	665	9786	0.47%	0.020%
105	5.319	5.296	5.339	VV	710	11526	0.56%	0.024%
106	5.348	5.339	5.364	VV	476	6355	0.31%	0.013%
107	5.386	5.364	5.422	VV	1128	18539	0.89%	0.039%
108	5.438	5.422	5.462	VV	356	6324	0.30%	0.013%
109	5.485	5.462	5.490	VV	683	7910	0.38%	0.016%
110	5.509	5.490	5.533	VV	2449	31166	1.50%	0.065%
111	5.547	5.533	5.565	VV	801	10929	0.53%	0.023%
112	5.583	5.565	5.596	VV	717	9574	0.46%	0.020%
113	5.610	5.596	5.627	VV	556	8922	0.43%	0.019%
114	5.644	5.627	5.664	VV	526	9807	0.47%	0.020%
115	5.675	5.664	5.685	VV	416	4435	0.21%	0.009%
116	5.705	5.685	5.723	VV	3659	48075	2.32%	0.100%
117	5.739	5.723	5.793	VV	10221	121784	5.87%	0.253%
118	5.817	5.793	5.850	VV	738	18208	0.88%	0.038%
119	5.858	5.850	5.870	VV	595	6493	0.31%	0.014%
120	5.889	5.870	5.925	VV	1645	28843	1.39%	0.060%
121	5.948	5.925	5.959	VV	1082	14802	0.71%	0.031%
122	5.970	5.959	5.990	VV	912	12207	0.59%	0.025%
123	6.022	5.990	6.028	VV	1130	19297	0.93%	0.040%
124	6.030	6.028	6.053	VV	985	9653	0.47%	0.020%
125	6.077	6.053	6.097	VV	1136	18455	0.89%	0.038%
126	6.112	6.097	6.153	VV	930	20393	0.98%	0.042%
127	6.165	6.153	6.169	VV	559	4646	0.22%	0.010%
128	6.185	6.169	6.200	VV	792	11725	0.57%	0.024%
129	6.215	6.200	6.227	VV	789	9445	0.46%	0.020%
130	6.240	6.227	6.256	VV	1077	14483	0.70%	0.030%
131	6.277	6.256	6.312	VV	2234	47014	2.27%	0.098%
132	6.336	6.312	6.351	VV	1376	25313	1.22%	0.053%
133	6.365	6.351	6.371	VV	1064	11404	0.55%	0.024%
134	6.381	6.371	6.409	VV	1394	21804	1.05%	0.045%
135	6.427	6.409	6.432	VV	819	9825	0.47%	0.020%
136	6.451	6.432	6.488	VV	1702	38297	1.85%	0.080%
137	6.504	6.488	6.518	VV	779	12271	0.59%	0.026%
138	6.533	6.518	6.549	VV	995	15481	0.75%	0.032%
139	6.574	6.549	6.593	VV	2437	39126	1.89%	0.081%
140	6.610	6.593	6.615	VV	1077	13151	0.63%	0.027%
141	6.619	6.615	6.637	VV	1110	12629	0.61%	0.026%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

					nteres			
142	6.662	6.637	6.679	VV	963	19297	0.93%	0.040%
143	6.704	6.679	6.709	VV	926	14133	0.93%	0.040%
144	6.737	6.709	6.789	VV	201518	2025010	97.32%	4.308%
145	6.813	6.789	6.852	VV	4431	67485	3.32%	0.100%
146	6.864	6.852	6.872	VV	787	8975	0.87%	0.025%
147	6.891	6.872	6.919	VV	3364	48729	2.24%	0.074%
148	6.928	6.919	6.946	VV	875	11856	0.57%	0.025%
149	6.963	6.946	6.985	VV	892	16349	0.79%	0.034%
150	7.019	6.985	7.045	VV	960	26613	1.28%	0.055%
151	7.068	7.045	7.092	VV	1555	28923	1.39%	0.060%
152	7.104	7.092	7.119	VV	822	10812	0.52%	0.022%
153	7.136	7.119	7.170	VV	832	19477	0.94%	0.040%
154	7.215	7.170	7.232	VV	1637	35546	1.71%	0.074%
155	7.251	7.232	7.257	VV	1349	17756	0.86%	0.037%
156	7.270	7.257	7.295	VV	1580	25739	1.24%	0.054%
157	7.314	7.295	7.340	VV	1315	23662	1.14%	0.049%
158	7.359	7.340	7.384	VV	1492	25771	1.24%	0.054%
159	7.412	7.384	7.438	VV	3090	48746	2.35%	0.101%
160	7.459	7.438	7.499	VV	3050	48130	2.32%	0.100%
161	7.516	7.499	7.537	VV	868	15579	0.75%	0.032%
162	7.558	7.537	7.580	VV	1373	24408	1.18%	0.051%
163	7.588	7.580	7.617	VV	827	16246	0.78%	0.034%
164	7.633	7.617	7.660	VV	1293	25203	1.21%	0.052%
165	7.685	7.660	7.719	VV	7244	86935	4.19%	0.181%
166	7.745	7.719	7.769	VV	964	21691	1.05%	0.045%
167	7.778	7.769	7.788	VV	733	7830	0.38%	0.016%
168	7.806	7.788	7.812	VV	1090	12857	0.62%	0.027%
169	7.817	7.812	7.838	VV	1027	13098	0.63%	0.027%
170	7.862	7.838	7.892	VV	1654	30543	1.47%	0.064%
171	7.905	7.892	7.930	VV	805	13898	0.67%	0.029%
172	7.945	7.930	7.952	VV	594	6819	0.33%	0.014%
173	7.974	7.952	7.999	VV	1314	24713	1.19%	0.051%
174	8.003	7.999	8.010	VV	693	4149	0.20%	0.009%
175	8.029	8.010	8.045	VV	1131	17142	0.83%	0.036%
176	8.055	8.045	8.089	VV	711	15297	0.74%	0.032%
177	8.117	8.089	8.130	VV	1390	25539	1.23%	0.053%
178	8.143	8.130	8.159	VV	1786	22878	1.10%	0.048%
179	8.173	8.159	8.197	VV	1258	20088	0.97%	0.042%
180	8.215	8.197	8.239	VV	988	16615	0.80%	0.035%
181	8.261	8.239	8.285	VV	1380	23796	1.15%	0.049%
182	8.292	8.285	8.302	VV	663	6123	0.30%	0.013%
183	8.316	8.302	8.342	VV	1062	16763	0.81%	0.035%
184	8.348	8.342	8.368	VV	511	6581	0.32%	0.014%
185	8.388	8.368	8.418	VV	2098	29506	1.42%	0.061%
186	8.441	8.418	8.446	VV	587	8285	0.40%	0.017%
187	8.458	8.446	8.471	VV	838	10480	0.51%	0.022%
188	8.477	8.471	8.494	VV	669	7751	0.37%	0.016%
189	8.510	8.494	8.519	VV	662	8904	0.43%	0.019%
190	8.569	8.519	8.609	VV	196255	2072012	99.88%	4.308%
191	8.622	8.609	8.649	VV	713	12505	0.60%	0.026%
192	8.670	8.649	8.679	VV	532	8127	0.39%	0.017%
193	8.684	8.679	8.700	VV	486	5823	0.28%	0.012%
194	8.711	8.700	8.737	VV	541	9777	0.47%	0.020%

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195	8.757	8.737	8.774	VV	476	8293	0.40%	0.017%
196	8.799	8.774	8.824	VV	494	12483		
197	8.837	8.824	8.857	VV	511	8466		
198	8.867	8.857	8.884	VV	490	6480		
199	8.901	8.884	8.913	VV	650	8827		
200	8.932	8.913	8.967	VV	821	16384		
201	8.977	8.967	8.988	VV	499	5176	0.25%	0.011%
202	9.007	8.988	9.020	VV	661	10362	0.50%	0.022%
203	9.040	9.020	9.087	VV	1766	28621	1.38%	0.060%
204	9.109	9.087	9.144	VV	992	16720	0.81%	0.035%
205	9.177	9.144	9.215	VV	1725	30427	1.47%	0.063%
206	9.221	9.215	9.228	VV	294	1971	0.09%	0.004%
207	9.248	9.228	9.278	VV	311	7592	0.37%	0.016%
208	9.314	9.278	9.334	VV	539	11759	0.57%	0.024%
209	9.337	9.334	9.370	VV	285	4484	0.22%	0.009%
210	9.396	9.370	9.442	VV	1562	22085	1.06%	0.046%
211	9.446	9.442	9.459	VV	175	1557	0.08%	0.003%
212	9.463	9.459	9.467	VV	167	702	0.03%	0.001%
213	9.474	9.467	9.504	VV	185	3083	0.15%	0.006%
214	9.510	9.504	9.523	VV	151	1522	0.07%	0.003%
215	9.531	9.523	9.537	VV	186	1061	0.05%	0.002%
216	9.544	9.537	9.552	VV	182	1158	0.06%	0.002%
217	9.595	9.552	9.624	VV	389	8842	0.43%	0.018%
218	9.632	9.624	9.652	VV	207	2346	0.11%	0.005%
219	9.657	9.652	9.665	VV	138	949	0.05%	0.002%
220	9.699	9.665	9.704	VV	226	3688	0.18%	0.008%
221	9.722	9.704	9.747	VV	948	13004	0.63%	0.027%
222	9.776	9.747	9.797	VV	841	13771	0.66%	0.029%
223	9.801	9.797	9.807	VV	227	1258	0.06%	0.003%
224	9.818	9.807	9.837	VV	308	4511	0.22%	0.009%
225	9.853	9.837	9.890	VV	405	7140	0.34%	0.015%
226	9.914	9.890	9.922	VV	307	4141	0.20%	0.009%
227	9.926	9.922	9.942	VV	308	2894	0.14%	0.006%
228	9.958	9.942	9.982	VV	571	6810	0.33%	0.014%
229	10.044	9.982	10.092	PV	143398	1471249	70.92%	3.059%
230	10.112	10.092	10.134	VV	712	13205	0.64%	0.027%
231	10.141	10.134	10.147	VV	372	2536	0.12%	0.005%
232	10.181	10.147	10.232	VV	189942	2052932	98.96%	4.268%
233	10.253	10.232	10.270	VV	536	7977	0.38%	0.017%
234	10.282	10.270	10.309	VV	744	8969	0.43%	0.019%
235	10.314	10.309	10.335	VV	134	1714	0.08%	0.004%
236	10.346	10.335	10.360	VV	141	1365	0.07%	0.003%
237	10.364	10.360	10.398	VV	66	717	0.03%	0.001%
238	10.407	10.398	10.412	VV	124	456	0.02%	0.001%
239	10.422	10.412	10.429	VV	142	897	0.04%	0.002%
240	10.447	10.429	10.465	VV	115	1683	0.08%	0.003%
241	10.481	10.465	10.490	VV	205	2132	0.10%	0.004%
242	10.518	10.490	10.550	VV	11142	121302	5.85%	0.252%
243	10.561	10.550	10.586	VV	424	6844	0.33%	0.014%
244	10.619	10.586	10.655	VV	516	12091	0.58%	0.025%
245	10.660	10.655	10.683	VV	243	2002	0.10%	0.004%
246	10.703	10.683	10.722	PV	258	3469	0.17%	0.007%

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					retention			
247	10.732	10.722	10.771	VV	243	4728	0.23%	0.010%
248	10.805	10.771	10.814	VV	297	4685		
249	10.822	10.814	10.828	VV	246	1916		
250	10.830	10.828	10.837	VV	207	926		
251	10.852	10.837	10.860	VV	287	2960		
252	10.873	10.860	10.882	VV	460	4644		
253	10.898	10.882	10.905	VV	531	5655	0.27%	0.012%
254	10.921	10.905	10.936	VV	756	10072	0.49%	0.021%
255	10.945	10.936	10.968	VV	412	5186	0.25%	0.011%
256	10.990	10.968	11.006	VV	332	5775	0.28%	0.012%
257	11.018	11.006	11.045	VV	473	7404	0.36%	0.015%
258	11.054	11.045	11.090	VV	286	4402	0.21%	0.009%
259	11.103	11.090	11.106	VV	97	682	0.03%	0.001%
260	11.112	11.106	11.126	VV	118	788	0.04%	0.002%
261	11.139	11.126	11.152	VV	151	1939	0.09%	0.004%
262	11.193	11.152	11.225	VV	2009	33637	1.62%	0.070%
263	11.246	11.225	11.279	VV	516	10606	0.51%	0.022%
264	11.294	11.279	11.312	VV	492	6690	0.32%	0.014%
265	11.319	11.312	11.339	VV	257	3244	0.16%	0.007%
266	11.348	11.339	11.360	VV	302	3007	0.14%	0.006%
267	11.377	11.360	11.389	VV	284	3068	0.15%	0.006%
268	11.399	11.389	11.404	VV	203	1497	0.07%	0.003%
269	11.430	11.404	11.454	VV	1420	17899	0.86%	0.037%
270	11.458	11.454	11.465	VV	193	906	0.04%	0.002%
271	11.474	11.465	11.504	VV	166	2879	0.14%	0.006%
272	11.566	11.504	11.581	VV	341	8004	0.39%	0.017%
273	11.626	11.581	11.672	VV	182779	2074532	100.00%	4.313%
274	11.702	11.672	11.750	VV	1398	23870	1.15%	0.050%
275	11.753	11.750	11.760	VV	116	487	0.02%	0.001%
276	11.784	11.760	11.807	VV	891	11871	0.57%	0.025%
277	11.817	11.807	11.851	VV	402	4728	0.23%	0.010%
278	11.883	11.851	11.912	PV	1868	27691	1.33%	0.058%
279	11.918	11.912	11.955	VV	394	7263	0.35%	0.015%
280	11.959	11.955	11.964	VV	189	842	0.04%	0.002%
281	11.977	11.964	11.991	VV	269	3357	0.16%	0.007%
282	12.018	11.991	12.022	VV	369	4174	0.20%	0.009%
283	12.042	12.022	12.079	VV	2035	28428	1.37%	0.059%
284	12.084	12.079	12.099	VV	251	2594	0.13%	0.005%
285	12.107	12.099	12.140	VV	415	5143	0.25%	0.011%
286	12.146	12.140	12.169	VV	196	1673	0.08%	0.003%
287	12.179	12.169	12.184	VV	115	597	0.03%	0.001%
288	12.190	12.184	12.204	VV	76	507	0.02%	0.001%
289	12.233	12.204	12.254	PV	144	2800	0.13%	0.006%
290	12.276	12.254	12.280	VV	397	4331	0.21%	0.009%
291	12.297	12.280	12.329	VV	594	12172	0.59%	0.025%
292	12.348	12.329	12.365	VV	548	7523	0.36%	0.016%
293	12.386	12.365	12.445	VV	1584	26626	1.28%	0.055%
294	12.454	12.445	12.473	VV	141	1306	0.06%	0.003%
295	12.545	12.473	12.615	VV	85243	1054083	50.81%	2.192%
296	12.627	12.615	12.640	VV	1109	14888	0.72%	0.031%
297	12.652	12.640	12.702	VV	1173	28130	1.36%	0.058%
298	12.726	12.702	12.740	VV	659	12562	0.61%	0.026%
299	12.763	12.740	12.801	VV	1383	21945	1.06%	0.046%

Instrument :

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300	12.814	12.801	12.837	VV	316	5026	0.24%	0.010%
301	12.869	12.837	12.901	VV	808	16272		
302	12.938	12.901	12.975	VV	175208	2071811	99.83%	4.133%
303	13.008	12.975	13.092	VV	3156	70748	0.45%	0.012%
304	13.102	13.092	13.110	VV	170	975	0.17%	0.006%
305	13.117	13.110	13.129	VV	109	818	0.13%	0.006%
306	13.146	13.129	13.156	PV	247	2433	0.12%	0.005%
307	13.178	13.156	13.227	VV	939	20796	1.00%	0.043%
308	13.234	13.227	13.249	VV	2860	4939	0.24%	0.010%
309	13.292	13.249	13.315	VV	727	11627	0.56%	0.024%
310	13.336	13.315	13.373	VV	1081	18371	0.89%	0.038%
311	13.388	13.373	13.399	VV	314	3642	0.18%	0.008%
312	13.408	13.399	13.413	VV	206	1493	0.07%	0.003%
313	13.423	13.413	13.449	VV	248	4366	0.21%	0.009%
314	13.465	13.449	13.479	VV	206	2749	0.13%	0.006%
315	13.497	13.479	13.515	VV	649	8241	0.40%	0.017%
316	13.563	13.515	13.594	VV	2367	44866	2.16%	0.093%
317	13.616	13.594	13.640	VV	2689	43966	2.12%	0.091%
318	13.645	13.640	13.715	VV	1225	32031	1.54%	0.067%
319	13.745	13.715	13.751	VV	730	11902	0.57%	0.025%
320	13.776	13.751	13.870	VV	14216	207071	9.98%	0.431%
321	13.878	13.870	13.920	VV	365	8933	0.43%	0.019%
322	13.933	13.920	13.955	VV	421	7589	0.37%	0.016%
323	13.958	13.955	13.964	VV	417	1907	0.09%	0.004%
324	13.982	13.964	14.022	VV	629	13156	0.63%	0.027%
325	14.027	14.022	14.038	VV	158	1334	0.06%	0.003%
326	14.043	14.038	14.046	VV	186	695	0.03%	0.001%
327	14.089	14.046	14.107	VV	2310	34932	1.68%	0.073%
328	14.140	14.107	14.187	VV	163839	1988064	95.83%	4.133%
329	14.199	14.187	14.214	VV	260	3091	0.15%	0.006%
330	14.231	14.214	14.251	VV	232	3341	0.16%	0.007%
331	14.265	14.251	14.284	VV	203	2859	0.14%	0.006%
332	14.286	14.284	14.305	VV	158	1058	0.05%	0.002%
333	14.333	14.305	14.342	VV	284	3802	0.18%	0.008%
334	14.347	14.342	14.367	VV	254	3322	0.16%	0.007%
335	14.390	14.367	14.397	VV	345	4370	0.21%	0.009%
336	14.401	14.397	14.444	VV	154	2678	0.13%	0.006%
337	14.449	14.444	14.458	VV	25	146	0.01%	0.000%
338	14.497	14.458	14.509	PV	495	7324	0.35%	0.015%
339	14.526	14.509	14.585	VV	1392	22990	1.11%	0.048%
340	14.613	14.585	14.623	VV	262	4065	0.20%	0.008%
341	14.627	14.623	14.632	VV	229	988	0.05%	0.002%
342	14.649	14.632	14.677	VV	284	3430	0.17%	0.007%
343	14.704	14.677	14.727	VV	1361	19367	0.93%	0.040%
344	14.735	14.727	14.746	VV	362	3317	0.16%	0.007%
345	14.766	14.746	14.782	VV	483	8193	0.39%	0.017%
346	14.800	14.782	14.844	VV	637	14555	0.70%	0.030%
347	14.863	14.844	14.887	VV	376	5323	0.26%	0.011%
348	14.921	14.887	14.957	VV	1170	20092	0.97%	0.042%
349	14.968	14.957	15.002	VV	304	5877	0.28%	0.012%
350	15.040	15.002	15.077	VV	108954	1487824	71.72%	3.093%
351	15.084	15.077	15.118	VV	650	10290	0.50%	0.021%

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SOIL-1-HAM-TPH2MS

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352	15.137	15.118	15.155	VV	349	5469	0.26%	0.011%	
353	15.173	15.155	15.182	VV	423	5023			
354	15.244	15.182	15.275	VV	152738	1975924	95		
355	15.288	15.275	15.311	VV	1331	17164			
356	15.315	15.311	15.330	VV	205	2227			
357	15.334	15.330	15.357	VV	197	2340			
358	15.381	15.357	15.407	VV	176	2831	0.14%	0.006%	
359	15.436	15.407	15.477	PV	887	13409	0.65%	0.028%	
360	15.505	15.477	15.522	VV	195	3342	0.16%	0.007%	
361	15.532	15.522	15.545	VV	204	1544	0.07%	0.003%	
362	15.619	15.545	15.707	VV	27053	399847	19.27%	0.831%	
363	15.714	15.707	15.738	VV	362	5219	0.25%	0.011%	
364	15.764	15.738	15.802	VV	1924	34689	1.67%	0.072%	
365	15.838	15.802	15.869	VV	1885	28513	1.37%	0.059%	
366	15.899	15.869	15.956	VV	427	8958	0.43%	0.019%	
367	15.963	15.956	15.970	PV	99	452	0.02%	0.001%	
368	16.001	15.970	16.009	VV	176	3013	0.15%	0.006%	
369	16.012	16.009	16.016	VV	147	517	0.02%	0.001%	
370	16.019	16.016	16.025	VV	131	656	0.03%	0.001%	
371	16.031	16.025	16.035	VV	145	617	0.03%	0.001%	
372	16.056	16.035	16.066	VV	297	3844	0.19%	0.008%	
373	16.071	16.066	16.115	VV	275	3040	0.15%	0.006%	
374	16.137	16.115	16.161	PV	778	11250	0.54%	0.023%	
375	16.176	16.161	16.205	VV	391	5017	0.24%	0.010%	
376	16.266	16.205	16.305	VV	149597	1919801	92.54%	3.992%	
377	16.326	16.305	16.369	VV	579	8557	0.41%	0.018%	
378	16.374	16.369	16.384	VV	90	429	0.02%	0.001%	
379	16.411	16.384	16.432	PV	313	4476	0.22%	0.009%	
380	16.456	16.432	16.490	VV	416	13514	0.65%	0.028%	
381	16.499	16.490	16.517	VV	137	1402	0.07%	0.003%	
382	16.531	16.517	16.535	PV	99	604	0.03%	0.001%	
383	16.568	16.535	16.597	VV	453	9395	0.45%	0.020%	
384	16.633	16.597	16.672	VV	2403	41194	1.99%	0.086%	
385	16.694	16.672	16.702	VV	631	9100	0.44%	0.019%	
386	16.749	16.702	16.783	VV	2365	45154	2.18%	0.094%	
387	16.794	16.783	16.799	VV	99	757	0.04%	0.002%	
388	16.828	16.799	16.849	VV	1183	16399	0.79%	0.034%	
389	16.859	16.849	16.864	VV	95	721	0.03%	0.001%	
390	16.878	16.864	16.904	VV	267	4063	0.20%	0.008%	
391	16.908	16.904	16.929	VV	190	1614	0.08%	0.003%	
392	16.949	16.929	16.954	VV	163	1890	0.09%	0.004%	
393	16.960	16.954	16.966	VV	156	785	0.04%	0.002%	
394	16.997	16.966	17.035	VV	497	11654	0.56%	0.024%	
395	17.053	17.035	17.077	VV	397	6980	0.34%	0.015%	
396	17.108	17.077	17.132	VV	704	12468	0.60%	0.026%	
397	17.217	17.132	17.250	VV	142742	1884061	90.82%	3.917%	
398	17.267	17.250	17.319	VV	1173	24354	1.17%	0.051%	
399	17.326	17.319	17.330	VV	118	627	0.03%	0.001%	
400	17.340	17.330	17.376	VV	207	2659	0.13%	0.006%	
401	17.412	17.376	17.417	VV	197	2178	0.11%	0.005%	
402	17.421	17.417	17.430	VV	140	732	0.04%	0.002%	
403	17.462	17.430	17.476	VV	333	6088	0.29%	0.013%	
404	17.482	17.476	17.492	VV	217	1352	0.07%	0.003%	

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0.26% 0.011%

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Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

405	17.502	17.492	17.521	VV	194	2097	0.10%	0.004%
406	17.578	17.521	17.609	PV	1337	28454		
407	17.664	17.609	17.703	VV	3405	58396		
408	17.755	17.703	17.772	VV	420	7868		
409	17.775	17.772	17.807	VV	306	4358		
410	17.812	17.807	17.816	VV	162	510		
411	17.848	17.816	17.860	PV	115	1632	0.08%	0.003%
412	17.966	17.860	17.971	PV	250	6449	0.31%	0.013%
413	17.995	17.971	18.023	VV	1638	25457	1.23%	0.053%
414	18.057	18.023	18.069	VV	1604	27795	1.34%	0.058%
415	18.104	18.069	18.140	VV	133354	1869254	90.10%	3.886%
416	18.156	18.140	18.168	VV	512	6950	0.34%	0.014%
417	18.192	18.168	18.218	VV	1774	28571	1.38%	0.059%
418	18.253	18.218	18.271	VV	715	17440	0.84%	0.036%
419	18.279	18.271	18.289	VV	513	5177	0.25%	0.011%
420	18.295	18.289	18.303	VV	484	3252	0.16%	0.007%
421	18.329	18.303	18.362	VV	822	18067	0.87%	0.038%
422	18.386	18.362	18.390	VV	510	6602	0.32%	0.014%
423	18.458	18.390	18.505	VV	14345	266764	12.86%	0.555%
424	18.528	18.505	18.558	VV	3360	55889	2.69%	0.116%
425	18.619	18.558	18.644	VV	1046	25544	1.23%	0.053%
426	18.662	18.644	18.694	VV	365	5799	0.28%	0.012%
427	18.727	18.694	18.760	VV	507	8598	0.41%	0.018%
428	18.778	18.760	18.783	VV	161	1556	0.08%	0.003%
429	18.791	18.783	18.800	VV	186	1680	0.08%	0.003%
430	18.824	18.800	18.830	VV	183	2140	0.10%	0.004%
431	18.835	18.830	18.844	VV	134	902	0.04%	0.002%
432	18.882	18.844	18.892	PV	393	4819	0.23%	0.010%
433	18.937	18.892	18.984	VV	132226	1801805	86.85%	3.746%
434	19.043	18.984	19.072	VV	1551	32685	1.58%	0.068%
435	19.092	19.072	19.127	VV	761	15710	0.76%	0.033%
436	19.143	19.127	19.157	VV	305	4514	0.22%	0.009%
437	19.212	19.157	19.232	VV	725	22677	1.09%	0.047%
438	19.286	19.232	19.313	VV	12063	214155	10.32%	0.445%
439	19.336	19.313	19.372	VV	4878	111319	5.37%	0.231%
440	19.402	19.372	19.427	VV	1930	55080	2.66%	0.115%
441	19.466	19.427	19.480	VV	1849	54431	2.62%	0.113%
442	19.533	19.480	19.556	VV	2290	84667	4.08%	0.176%
443	19.570	19.556	19.597	VV	2030	45942	2.21%	0.096%
444	19.625	19.597	19.654	VV	2265	65942	3.18%	0.137%
445	19.722	19.654	19.760	VV	113695	1776587	85.64%	3.694%
446	19.782	19.760	19.795	VV	2763	52307	2.52%	0.109%
447	19.819	19.795	19.851	VV	3250	90268	4.35%	0.188%
448	19.890	19.851	19.917	VV	3244	105665	5.09%	0.220%
449	19.920	19.917	19.940	VV	2494	32562	1.57%	0.068%
450	20.001	19.940	20.010	VV	2527	96477	4.65%	0.201%
451	20.015	20.010	20.039	VV	2562	39711	1.91%	0.083%
452	20.090	20.039	20.109	VV	3953	133629	6.44%	0.278%
453	20.123	20.109	20.141	VV	3168	58335	2.81%	0.121%
454	20.150	20.141	20.159	VV	2923	30989	1.49%	0.064%
455	20.163	20.159	20.167	VV	2820	13428	0.65%	0.028%
456	20.198	20.167	20.205	VV	3339	68723	3.31%	0.143%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2MS

0.10% 0.004%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

rteres								
457	20.211	20.205	20.215	VV	3410	20961	1.01%	0.044%
458	20.241	20.215	20.249	VV	3504	67684		
459	20.306	20.249	20.326	VV	5211	196289		
460	20.376	20.326	20.395	VV	5792	220401	10.36%	0.447%
461	20.461	20.395	20.502	VV	106862	1826993	88.31%	3.680%
462	20.512	20.502	20.527	VV	6272	92110	2.07%	0.089%
463	20.621	20.527	20.668	VV	9313	643447	31.02%	1.338%
464	20.699	20.668	20.704	VV	8155	167645	8.08%	0.349%
465	20.766	20.704	20.783	VV	9514	422186	20.35%	0.878%
466	20.805	20.783	20.835	VV	9686	290772	14.02%	0.605%
467	20.843	20.835	20.895	VV	8814	283513	13.67%	0.589%
468	20.987	20.895	20.996	VV	8639	468655	22.59%	0.974%
469	21.008	20.996	21.054	VV	8483	278061	13.40%	0.578%
470	21.092	21.054	21.108	VV	7705	241953	11.66%	0.503%
471	21.122	21.108	21.147	VV	7320	165872	8.00%	0.345%
472	21.209	21.147	21.257	VV	83002	1769865	85.31%	3.680%
473	21.261	21.257	21.263	VV	5336	19750	0.95%	0.041%
474	21.324	21.263	21.348	VV	5522	276433	13.33%	0.575%
475	21.383	21.348	21.415	VV	5694	214935	10.36%	0.447%
476	21.428	21.415	21.475	VV	5134	173505	8.36%	0.361%
477	21.517	21.475	21.555	VV	5041	220332	10.62%	0.458%
478	21.605	21.555	21.624	VV	5284	197312	9.51%	0.410%
479	21.637	21.624	21.741	VV	5084	243275	11.73%	0.506%
480	21.774	21.741	21.794	VV	2195	65008	3.13%	0.135%
481	21.845	21.794	21.863	VV	2580	92246	4.45%	0.192%
482	21.918	21.863	21.979	VV	2492	138115	6.66%	0.287%
483	22.018	21.979	22.068	VV	1019	42953	2.07%	0.089%
484	22.145	22.068	22.227	VV	54621	1333446	64.28%	2.772%
485	22.249	22.227	22.273	VV	544	9016	0.43%	0.019%
486	22.292	22.273	22.300	PBA	331	16606	0.80%	0.035%
Sum of corrected areas:						48096532		

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

FG112024.M Tue Dec 03 04:22:27 2024

Report of Analysis

Client:	Tully Construction Co., Inc.		Date Collected:	11/27/24	
Project:	Hamilton		Date Received:	11/27/24	
Client Sample ID:	SOIL-1-HAM-TPH2MSD		SDG No.:	P5026	
Lab Sample ID:	P5026-07MSD		Matrix:	SOIL	
Analytical Method:	8015D TPH		% Solid:	74.4	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
FG014919.D	1	12/02/24 08:00	12/02/24 18:05	PB165318

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
PHC	Petroleum Hydrocarbons	17.0		0.43	3.80	mg/Kg
SURROGATES						
16416-32-3	TETRACOSANE-d50	12.3		37 - 130	61%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
 Data File : FG014919.D
 Signal(s) : FID1A.ch
 Acq On : 02 Dec 2024 18:05
 Operator : YP\AJ
 Sample : P5026-07MSD
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 FID_G
 ClientSampleId :
 SOIL-1-HAM-TPH2MSD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/03/2024
 Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
 Quant Time: Dec 03 01:59:58 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	1413139	12.246 ug/ml
Target Compounds			
1) N-OCTANE	2.055	1506551	11.362 ug/ml
2) N-DECANE	4.566	1813568	13.591 ug/ml
3) N-DODECANE	6.737	1902261	13.825 ug/ml
4) N-TETRADECANE	8.568	1946642	14.602 ug/ml
5) N-HEXADECANE	10.179	1946915	14.466 ug/ml
6) N-OCTADECANE	11.625	1972628	14.369 ug/ml
7) N-EICOSANE	12.938	1963276	14.815 ug/ml
8) N-DOCOSANE	14.139	1884879	14.609 ug/ml
10) N-TETRACOSANE	15.243	1855915	14.655 ug/ml
11) N-HEXACOSANE	16.265	1824155	14.826 ug/ml
12) N-OCTACOSANE	17.215	1782261	14.732 ug/ml
13) N-TRIACONTANE	18.104	1784398	14.881 ug/ml
14) N-DOTRIACONTANE	18.937	1755468	15.092 ug/ml
15) N-TETRATRIACONTANE	19.720	1599590	15.859 ug/mlm
16) N-HEXATRIACONTANE	20.461	1410799	17.397 ug/ml
17) N-OCTATRIACONTANE	21.208	1368753	19.819 ug/ml
18) N-TETRACONTANE	22.144	1263345	20.479 ug/mlm

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG120224\
Data File : FG014919.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 18:05
Operator : YP\AJ
Sample : P5026-07MSD
Misc :
ALS Vial : 18 Sample Multiplier: 1

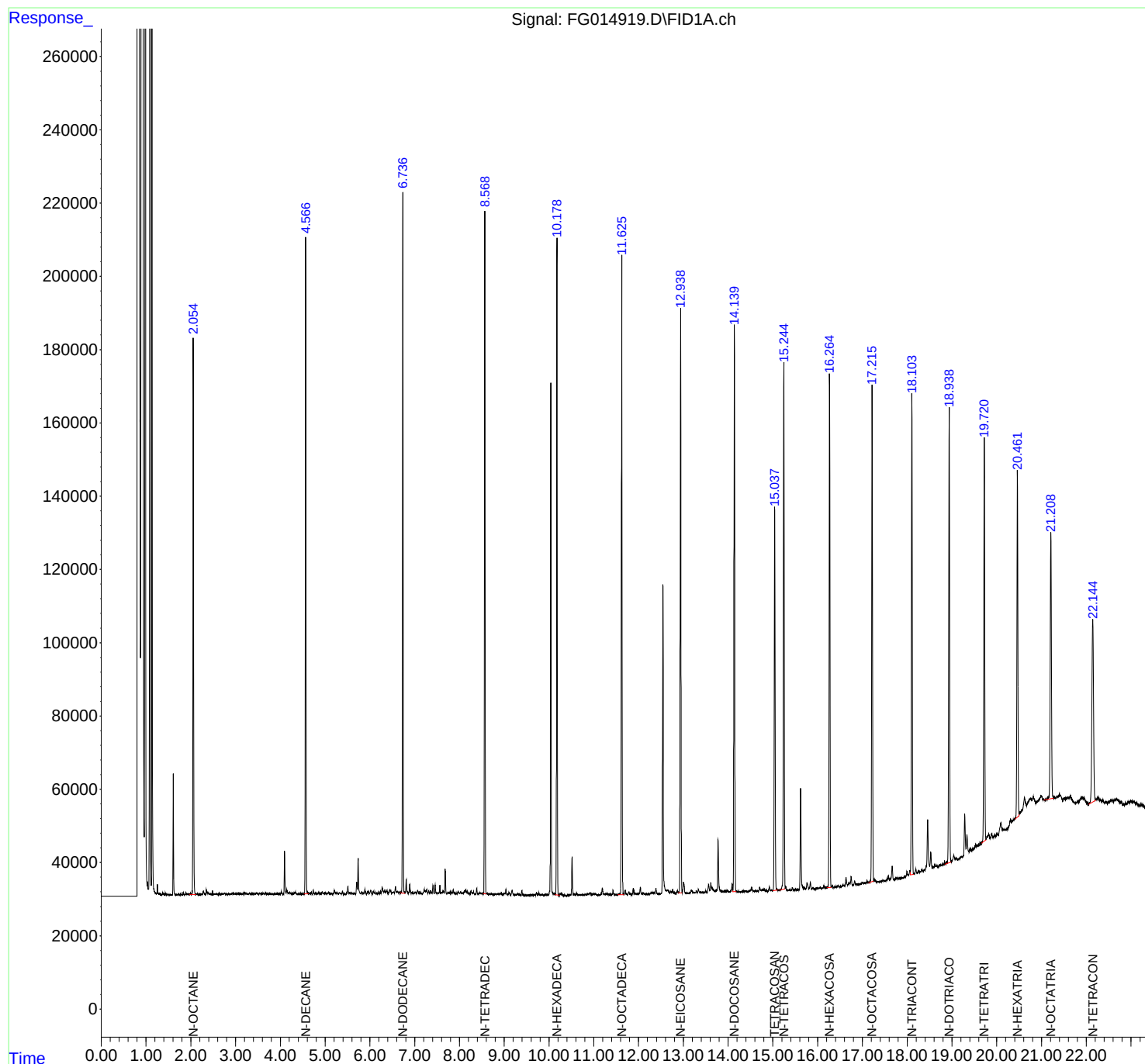
Instrument :
FID_G
ClientSampleId :
SOIL-1-HAM-TPH2MSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

Integration File: autoint1.e
Quant Time: Dec 03 01:59:58 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



nteres

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2MSD

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG12022
Data File : FG014919.D
Signal(s) : FID1A.ch
Acq On : 02 Dec 2024 18:05
Sample : P5026-07MSD
Misc :
ALS Vial : 18 Sample Multiplier: 1

Reviewed By :Yogesh Patel 12/03/2024
Supervised By :Ankita Jodhani 12/03/2024

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	1.924	1.906	1.935	BV	94	134	0.01%	0.000%
2	1.944	1.935	1.979	PV	190	2833	0.14%	0.006%
3	1.993	1.979	2.025	PV	294	3170	0.16%	0.007%
4	2.055	2.025	2.121	PV	151957	1509119	75.03%	3.287%
5	2.127	2.121	2.139	VV	183	1552	0.08%	0.003%
6	2.145	2.139	2.171	VV	148	1765	0.09%	0.004%
7	2.176	2.171	2.188	VV	112	745	0.04%	0.002%
8	2.193	2.188	2.217	VV	98	1289	0.06%	0.003%
9	2.221	2.217	2.238	VV	100	623	0.03%	0.001%
10	2.273	2.238	2.325	VV	816	17590	0.87%	0.038%
11	2.348	2.325	2.368	VV	1358	16427	0.82%	0.036%
12	2.382	2.368	2.411	VV	810	12062	0.60%	0.026%
13	2.415	2.411	2.421	VV	203	825	0.04%	0.002%
14	2.437	2.421	2.443	VV	249	2067	0.10%	0.005%
15	2.451	2.443	2.457	VV	191	1347	0.07%	0.003%
16	2.470	2.457	2.483	VV	173	2324	0.12%	0.005%
17	2.487	2.483	2.493	VV	1010	1316	0.07%	0.003%
18	2.507	2.493	2.522	VV	154	1788	0.09%	0.004%
19	2.527	2.522	2.535	VV	164	895	0.04%	0.002%
20	2.538	2.535	2.546	VV	169	858	0.04%	0.002%
21	2.546	2.546	2.565	VV	162	1468	0.07%	0.003%
22	2.569	2.565	2.573	VV	151	694	0.03%	0.002%
23	2.580	2.573	2.598	VV	198	2127	0.11%	0.005%
24	2.603	2.598	2.607	VV	166	834	0.04%	0.002%
25	2.613	2.607	2.621	VV	189	1420	0.07%	0.003%
26	2.625	2.621	2.642	VV	265	2077	0.10%	0.005%
27	2.652	2.642	2.659	VV	209	1765	0.09%	0.004%
28	2.663	2.659	2.667	VV	184	764	0.04%	0.002%
29	2.671	2.667	2.675	VV	201	699	0.03%	0.002%
30	2.683	2.675	2.687	VV	188	1143	0.06%	0.002%
31	2.702	2.687	2.719	VV	277	3499	0.17%	0.008%
32	2.749	2.719	2.784	VV	449	9991	0.50%	0.022%
33	2.790	2.784	2.802	VV	208	1770	0.09%	0.004%
34	2.816	2.802	2.825	VV	216	2415	0.12%	0.005%
35	2.848	2.825	2.854	VV	327	4035	0.20%	0.009%
36	2.863	2.854	2.881	VV	301	3963	0.20%	0.009%

37	2.886	2.881	2.892	VV	220	1218	0.06%	0.003%
38	2.896	2.892	2.908	VV	219	2085		
39	2.912	2.908	2.917	VV	276	1250		
40	2.934	2.917	2.957	VV	452	8205		
41	2.960	2.957	2.967	VV	333	1669		
42	2.968	2.967	2.988	VV	317	3404		
43	3.009	2.988	3.026	VV	329	6122	0.30%	0.013%
44	3.036	3.026	3.041	VV	285	2250	0.11%	0.005%
45	3.054	3.041	3.090	VV	442	8564	0.43%	0.019%
46	3.100	3.090	3.109	VV	317	2798	0.14%	0.006%
47	3.122	3.109	3.126	VV	290	2568	0.13%	0.006%
48	3.130	3.126	3.151	VV	343	3919	0.19%	0.009%
49	3.155	3.151	3.171	VV	218	2583	0.13%	0.006%
50	3.192	3.171	3.219	VV	664	12588	0.63%	0.027%
51	3.222	3.219	3.233	VV	371	2813	0.14%	0.006%
52	3.238	3.233	3.248	VV	353	2571	0.13%	0.006%
53	3.255	3.248	3.280	VV	279	4923	0.24%	0.011%
54	3.288	3.280	3.294	VV	296	2157	0.11%	0.005%
55	3.312	3.294	3.342	VV	473	8982	0.45%	0.020%
56	3.346	3.342	3.364	VV	283	3251	0.16%	0.007%
57	3.372	3.364	3.401	VV	300	5504	0.27%	0.012%
58	3.419	3.401	3.432	VV	329	4661	0.23%	0.010%
59	3.435	3.432	3.440	VV	273	1166	0.06%	0.003%
60	3.460	3.440	3.489	VV	405	9965	0.50%	0.022%
61	3.494	3.489	3.510	VV	358	4052	0.20%	0.009%
62	3.516	3.510	3.523	VV	308	2451	0.12%	0.005%
63	3.526	3.523	3.532	VV	321	1529	0.08%	0.003%
64	3.535	3.532	3.558	VV	377	5088	0.25%	0.011%
65	3.560	3.558	3.575	VV	318	2743	0.14%	0.006%
66	3.594	3.575	3.602	VV	366	5040	0.25%	0.011%
67	3.607	3.602	3.621	VV	318	3125	0.16%	0.007%
68	3.637	3.621	3.655	VV	341	6076	0.30%	0.013%
69	3.667	3.655	3.710	VV	569	11462	0.57%	0.025%
70	3.715	3.710	3.726	VV	317	2456	0.12%	0.005%
71	3.730	3.726	3.748	VV	257	3310	0.16%	0.007%
72	3.767	3.748	3.788	VV	350	6273	0.31%	0.014%
73	3.792	3.788	3.802	VV	245	1990	0.10%	0.004%
74	3.805	3.802	3.817	VV	283	2090	0.10%	0.005%
75	3.819	3.817	3.857	VV	292	5454	0.27%	0.012%
76	3.862	3.857	3.867	VV	253	1357	0.07%	0.003%
77	3.870	3.867	3.883	VV	271	2259	0.11%	0.005%
78	3.901	3.883	3.917	VV	315	5179	0.26%	0.011%
79	3.919	3.917	3.941	VV	277	3439	0.17%	0.007%
80	3.946	3.941	3.965	VV	271	3032	0.15%	0.007%
81	4.021	3.965	4.055	VV	965	19538	0.97%	0.043%
82	4.095	4.055	4.125	VV	11898	123134	6.12%	0.268%
83	4.144	4.125	4.172	VV	1419	25253	1.26%	0.055%
84	4.176	4.172	4.181	VV	609	2742	0.14%	0.006%
85	4.184	4.181	4.202	VV	524	5904	0.29%	0.013%
86	4.208	4.202	4.228	VV	623	8089	0.40%	0.018%
87	4.238	4.228	4.271	VV	411	8746	0.43%	0.019%
88	4.277	4.271	4.281	VV	371	1877	0.09%	0.004%
89	4.306	4.281	4.319	VV	480	8933	0.44%	0.019%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

90	4.336	4.319	4.375	VV	818	15723	0.78%	0.034%
91	4.377	4.375	4.395	VV	327	3460		
92	4.407	4.395	4.432	VV	447	7593		
93	4.437	4.432	4.442	VV	243	1641		
94	4.447	4.442	4.452	VV	290	1539		
95	4.459	4.452	4.494	VV	430	7031		
96	4.507	4.494	4.514	VV	358	3276	0.16%	0.007%
97	4.519	4.514	4.535	VV	385	3658	0.18%	0.008%
98	4.566	4.535	4.600	VV	179294	1821552	90.57%	3.968%
99	4.604	4.600	4.635	VV	824	11902	0.59%	0.026%
100	4.642	4.635	4.651	VV	469	3851	0.19%	0.008%
101	4.665	4.651	4.675	VV	493	6031	0.30%	0.013%
102	4.690	4.675	4.717	VV	698	10340	0.51%	0.023%
103	4.735	4.717	4.764	VV	1315	18216	0.91%	0.040%
104	4.792	4.764	4.812	VV	489	10744	0.53%	0.023%
105	4.814	4.812	4.828	VV	419	3392	0.17%	0.007%
106	4.830	4.828	4.839	VV	354	1942	0.10%	0.004%
107	4.851	4.839	4.865	VV	818	8689	0.43%	0.019%
108	4.875	4.865	4.898	VV	630	8967	0.45%	0.020%
109	4.935	4.898	4.962	VV	690	18366	0.91%	0.040%
110	4.975	4.962	4.995	VV	528	8794	0.44%	0.019%
111	5.005	4.995	5.020	VV	519	6615	0.33%	0.014%
112	5.032	5.020	5.043	VV	437	5058	0.25%	0.011%
113	5.079	5.043	5.127	VV	908	23064	1.15%	0.050%
114	5.149	5.127	5.165	VV	381	7114	0.35%	0.015%
115	5.205	5.165	5.232	VV	1245	25357	1.26%	0.055%
116	5.243	5.232	5.257	VV	605	8280	0.41%	0.018%
117	5.275	5.257	5.299	VV	681	11640	0.58%	0.025%
118	5.319	5.299	5.338	VV	656	10903	0.54%	0.024%
119	5.348	5.338	5.362	VV	509	6243	0.31%	0.014%
120	5.387	5.362	5.428	VV	1109	19190	0.95%	0.042%
121	5.441	5.428	5.468	VV	335	6446	0.32%	0.014%
122	5.483	5.468	5.492	VV	655	7649	0.38%	0.017%
123	5.508	5.492	5.535	VV	2347	30569	1.52%	0.067%
124	5.549	5.535	5.566	VV	789	9981	0.50%	0.022%
125	5.581	5.566	5.600	VV	668	10038	0.50%	0.022%
126	5.606	5.600	5.625	VV	565	7028	0.35%	0.015%
127	5.645	5.625	5.662	VV	548	10138	0.50%	0.022%
128	5.674	5.662	5.685	VV	435	4779	0.24%	0.010%
129	5.705	5.685	5.723	VV	3517	46773	2.33%	0.102%
130	5.738	5.723	5.794	VV	10041	117174	5.83%	0.255%
131	5.815	5.794	5.845	VV	719	16550	0.82%	0.036%
132	5.857	5.845	5.873	VV	552	8295	0.41%	0.018%
133	5.889	5.873	5.924	VV	1594	26539	1.32%	0.058%
134	5.949	5.924	5.959	VV	1072	14453	0.72%	0.031%
135	5.970	5.959	5.988	VV	899	11135	0.55%	0.024%
136	6.017	5.988	6.053	VV	1116	27990	1.39%	0.061%
137	6.075	6.053	6.094	VV	995	16254	0.81%	0.035%
138	6.112	6.094	6.130	VV	902	14155	0.70%	0.031%
139	6.136	6.130	6.157	VV	519	7024	0.35%	0.015%
140	6.182	6.157	6.202	VV	718	14295	0.71%	0.031%
141	6.216	6.202	6.224	VV	740	7810	0.39%	0.017%

Instrument :

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ClientSampleId :

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0.78% 0.034%

Manual IntegrationsAPPROVED

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142	6.240	6.224	6.257	VV	1067	15689	0.78%	0.034%
143	6.275	6.257	6.313	VV	2027	44603		
144	6.334	6.313	6.352	VV	1335	24402		
145	6.362	6.352	6.368	VV	1004	9240		
146	6.381	6.368	6.411	VV	1363	23142		
147	6.425	6.411	6.433	VV	840	8836		
148	6.448	6.433	6.489	VV	1560	36318	1.81%	0.079%
149	6.503	6.489	6.518	VV	860	11838	0.59%	0.026%
150	6.533	6.518	6.550	VV	902	14672	0.73%	0.032%
151	6.573	6.550	6.592	VV	2421	36381	1.81%	0.079%
152	6.620	6.592	6.639	VV	1052	24585	1.22%	0.054%
153	6.658	6.639	6.680	VV	902	17511	0.87%	0.038%
154	6.737	6.680	6.788	VV	191710	1940684	96.49%	4.227%
155	6.812	6.788	6.855	VV	4302	65039	3.23%	0.142%
156	6.865	6.855	6.870	VV	731	6164	0.31%	0.013%
157	6.891	6.870	6.919	VV	3064	46161	2.30%	0.101%
158	6.927	6.919	6.949	VV	793	12161	0.60%	0.026%
159	6.961	6.949	6.986	VV	812	13385	0.67%	0.029%
160	7.005	6.986	7.044	VV	845	23124	1.15%	0.050%
161	7.067	7.044	7.093	VV	1331	26153	1.30%	0.057%
162	7.103	7.093	7.117	VV	764	8856	0.44%	0.019%
163	7.133	7.117	7.167	VV	802	17862	0.89%	0.039%
164	7.214	7.167	7.231	VV	1597	34417	1.71%	0.075%
165	7.250	7.231	7.258	VV	1226	17608	0.88%	0.038%
166	7.269	7.258	7.290	VV	1490	22163	1.10%	0.048%
167	7.312	7.290	7.338	VV	1179	22959	1.14%	0.050%
168	7.358	7.338	7.386	VV	1409	24925	1.24%	0.054%
169	7.411	7.386	7.439	VV	2755	44364	2.21%	0.097%
170	7.459	7.439	7.497	VV	2870	43567	2.17%	0.095%
171	7.516	7.497	7.535	VV	810	13781	0.69%	0.030%
172	7.564	7.535	7.576	VV	2521	22352	1.11%	0.049%
173	7.587	7.576	7.618	VV	746	17278	0.86%	0.038%
174	7.631	7.618	7.663	VV	1223	24029	1.19%	0.052%
175	7.684	7.663	7.718	VV	6712	82114	4.08%	0.179%
176	7.747	7.718	7.763	VV	939	18630	0.93%	0.041%
177	7.776	7.763	7.788	VV	690	9258	0.46%	0.020%
178	7.807	7.788	7.813	VV	1054	13020	0.65%	0.028%
179	7.817	7.813	7.837	VV	948	11457	0.57%	0.025%
180	7.861	7.837	7.888	VV	1584	28273	1.41%	0.062%
181	7.903	7.888	7.924	VV	730	12307	0.61%	0.027%
182	7.946	7.924	7.959	VV	611	10698	0.53%	0.023%
183	7.973	7.959	7.998	VV	1225	20196	1.00%	0.044%
184	8.003	7.998	8.013	VV	668	5134	0.26%	0.011%
185	8.029	8.013	8.044	VV	1039	14931	0.74%	0.033%
186	8.053	8.044	8.086	VV	728	14216	0.71%	0.031%
187	8.117	8.086	8.130	VV	1352	24823	1.23%	0.054%
188	8.143	8.130	8.160	VV	1657	22162	1.10%	0.048%
189	8.172	8.160	8.198	VV	1256	19084	0.95%	0.042%
190	8.215	8.198	8.236	VV	921	14170	0.70%	0.031%
191	8.260	8.236	8.279	VV	1304	20917	1.04%	0.046%
192	8.290	8.279	8.299	VV	636	6831	0.34%	0.015%
193	8.316	8.299	8.352	VV	977	18420	0.92%	0.040%
194	8.360	8.352	8.367	VV	390	3383	0.17%	0.007%

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195	8.387	8.367	8.411	VV	1982	25849	1.29%	0.056%
196	8.457	8.411	8.492	VV	749	25701		
197	8.504	8.492	8.521	VV	637	8922		
198	8.568	8.521	8.603	VV	186753	1969064	97.17%	4.257%
199	8.618	8.603	8.651	VV	702	13459		
200	8.666	8.651	8.671	VV	433	4705		
201	8.677	8.671	8.684	VV	440	3176	0.16%	0.007%
202	8.689	8.684	8.710	VV	453	6173	0.31%	0.013%
203	8.713	8.710	8.740	VV	463	6567	0.33%	0.014%
204	8.755	8.740	8.759	VV	414	4022	0.20%	0.009%
205	8.763	8.759	8.771	VV	355	2322	0.12%	0.005%
206	8.774	8.771	8.780	VV	338	1646	0.08%	0.004%
207	8.799	8.780	8.823	VV	490	10033	0.50%	0.022%
208	8.835	8.823	8.852	VV	507	6806	0.34%	0.015%
209	8.861	8.852	8.886	VV	451	7356	0.37%	0.016%
210	8.901	8.886	8.915	VV	586	7815	0.39%	0.017%
211	8.929	8.915	8.958	VV	767	13055	0.65%	0.028%
212	9.003	8.958	9.017	VV	612	15094	0.75%	0.033%
213	9.039	9.017	9.088	VV	1732	29091	1.45%	0.063%
214	9.108	9.088	9.138	VV	917	15244	0.76%	0.033%
215	9.176	9.138	9.235	VV	1509	31021	1.54%	0.068%
216	9.259	9.235	9.279	VV	341	6564	0.33%	0.014%
217	9.315	9.279	9.359	VV	504	15098	0.75%	0.033%
218	9.396	9.359	9.429	VV	1407	20440	1.02%	0.045%
219	9.435	9.429	9.447	VV	138	1292	0.06%	0.003%
220	9.449	9.447	9.466	VV	185	983	0.05%	0.002%
221	9.469	9.466	9.487	VV	139	1053	0.05%	0.002%
222	9.488	9.487	9.504	VV	130	710	0.04%	0.002%
223	9.508	9.504	9.527	VV	68	865	0.04%	0.002%
224	9.533	9.527	9.555	VV	147	1282	0.06%	0.003%
225	9.592	9.555	9.617	PV	341	5700	0.28%	0.012%
226	9.621	9.617	9.631	VV	143	1070	0.05%	0.002%
227	9.641	9.631	9.647	VV	138	972	0.05%	0.002%
228	9.667	9.647	9.685	VV	174	2590	0.13%	0.006%
229	9.720	9.685	9.750	VV	881	13455	0.67%	0.029%
230	9.776	9.750	9.802	VV	775	12407	0.62%	0.027%
231	9.816	9.802	9.833	VV	329	4083	0.20%	0.009%
232	9.849	9.833	9.895	VV	300	6460	0.32%	0.014%
233	9.927	9.895	9.943	VV	259	5343	0.27%	0.012%
234	9.960	9.943	9.981	VV	471	5886	0.29%	0.013%
235	10.043	9.981	10.099	VV	139535	1409613	70.09%	3.070%
236	10.111	10.099	10.132	VV	680	9583	0.48%	0.021%
237	10.139	10.132	10.148	VV	325	2859	0.14%	0.006%
238	10.179	10.148	10.229	VV	179353	1954397	97.17%	4.257%
239	10.248	10.229	10.265	VV	605	7527	0.37%	0.016%
240	10.280	10.265	10.307	VV	709	8929	0.44%	0.019%
241	10.313	10.307	10.327	VV	146	1203	0.06%	0.003%
242	10.332	10.327	10.336	VV	110	462	0.02%	0.001%
243	10.345	10.336	10.377	VV	121	1285	0.06%	0.003%
244	10.383	10.377	10.404	VV	42	466	0.02%	0.001%
245	10.418	10.404	10.430	PV	98	793	0.04%	0.002%
246	10.482	10.430	10.487	VV	214	3305	0.16%	0.007%

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1.29% 0.056%

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					rt	er	es	
247	10.517	10.487	10.551	VV	10558	116045	5.77%	0.253%
248	10.567	10.551	10.590	VV	401	7049		
249	10.619	10.590	10.644	VV	521	10127		
250	10.647	10.644	10.652	VV	202	986		
251	10.658	10.652	10.679	VV	220	2532		
252	10.703	10.679	10.717	VV	238	3440		
253	10.728	10.717	10.749	VV	220	3145	0.16%	0.007%
254	10.761	10.749	10.777	VV	170	2111	0.10%	0.005%
255	10.806	10.777	10.814	VV	274	3912	0.19%	0.009%
256	10.823	10.814	10.837	VV	241	2742	0.14%	0.006%
257	10.847	10.837	10.860	VV	322	3391	0.17%	0.007%
258	10.871	10.860	10.885	VV	456	5189	0.26%	0.011%
259	10.897	10.885	10.905	VV	508	4580	0.23%	0.010%
260	10.918	10.905	10.936	VV	734	10440	0.52%	0.023%
261	10.944	10.936	10.969	VV	401	5607	0.28%	0.012%
262	11.018	10.969	11.102	VV	507	19314	0.96%	0.042%
263	11.108	11.102	11.127	PV	93	992	0.05%	0.002%
264	11.192	11.127	11.224	VV	1927	34444	1.71%	0.075%
265	11.245	11.224	11.277	VV	444	9556	0.48%	0.021%
266	11.293	11.277	11.320	VV	451	7929	0.39%	0.017%
267	11.324	11.320	11.328	VV	169	735	0.04%	0.002%
268	11.348	11.328	11.386	VV	304	6812	0.34%	0.015%
269	11.399	11.386	11.408	VV	222	1945	0.10%	0.004%
270	11.429	11.408	11.468	VV	1314	17272	0.86%	0.038%
271	11.478	11.468	11.520	VV	182	3138	0.16%	0.007%
272	11.531	11.520	11.537	VV	139	874	0.04%	0.002%
273	11.563	11.537	11.582	VV	330	6367	0.32%	0.014%
274	11.625	11.582	11.671	VV	174621	1974903	98.19%	4.302%
275	11.701	11.671	11.760	VV	1288	23085	1.15%	0.050%
276	11.783	11.760	11.807	VV	850	12201	0.61%	0.027%
277	11.817	11.807	11.839	VV	408	4919	0.24%	0.011%
278	11.881	11.839	11.919	PV	1802	29302	1.46%	0.064%
279	11.922	11.919	11.930	VV	357	2376	0.12%	0.005%
280	11.935	11.930	11.954	VV	338	3690	0.18%	0.008%
281	11.980	11.954	11.994	VV	295	4985	0.25%	0.011%
282	12.013	11.994	12.017	VV	347	3081	0.15%	0.007%
283	12.041	12.017	12.070	VV	1995	27082	1.35%	0.059%
284	12.084	12.070	12.096	VV	288	3646	0.18%	0.008%
285	12.107	12.096	12.134	VV	520	6352	0.32%	0.014%
286	12.144	12.134	12.183	VV	201	2717	0.14%	0.006%
287	12.188	12.183	12.209	VV	65	722	0.04%	0.002%
288	12.231	12.209	12.245	VV	125	2059	0.10%	0.004%
289	12.298	12.245	12.325	VV	572	16180	0.80%	0.035%
290	12.345	12.325	12.367	VV	513	8046	0.40%	0.018%
291	12.386	12.367	12.420	VV	1693	23669	1.18%	0.052%
292	12.428	12.420	12.449	VV	236	2623	0.13%	0.006%
293	12.454	12.449	12.477	VV	130	1316	0.07%	0.003%
294	12.481	12.477	12.489	VV	91	380	0.02%	0.001%
295	12.544	12.489	12.613	VV	84460	1041511	51.78%	2.269%
296	12.626	12.613	12.637	VV	1003	13687	0.68%	0.030%
297	12.653	12.637	12.691	VV	1131	25752	1.28%	0.056%
298	12.718	12.691	12.742	VV	606	14989	0.75%	0.033%
299	12.762	12.742	12.805	VV	1214	20161	1.00%	0.044%

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300	12.810	12.805	12.840	VV	266	3786	0.19%	0.008%
301	12.867	12.840	12.901	VV	735	15471		
302	12.938	12.901	12.972	VV	160012	1972407	98	
303	13.005	12.972	13.046	VV	3088	63685		
304	13.051	13.046	13.120	VV	196	4574		
305	13.141	13.120	13.145	PV	186	1192		
306	13.149	13.145	13.155	VV	175	910	0.05%	0.002%
307	13.178	13.155	13.229	VV	909	21227	1.06%	0.046%
308	13.230	13.229	13.272	VV	221	3761	0.19%	0.008%
309	13.289	13.272	13.312	VV	687	8867	0.44%	0.019%
310	13.335	13.312	13.369	VV	1120	17887	0.89%	0.039%
311	13.387	13.369	13.404	VV	318	4938	0.25%	0.011%
312	13.422	13.404	13.434	VV	233	3546	0.18%	0.008%
313	13.443	13.434	13.460	VV	249	2941	0.15%	0.006%
314	13.465	13.460	13.478	VV	198	1582	0.08%	0.003%
315	13.497	13.478	13.520	VV	581	8044	0.40%	0.018%
316	13.524	13.520	13.530	VV	160	567	0.03%	0.001%
317	13.563	13.530	13.592	VV	2453	44093	2.19%	0.096%
318	13.614	13.592	13.639	VV	2725	44838	2.23%	0.098%
319	13.645	13.639	13.712	VV	1272	32988	1.64%	0.072%
320	13.743	13.712	13.752	VV	762	13749	0.68%	0.030%
321	13.775	13.752	13.863	VV	14489	207724	10.33%	0.452%
322	13.867	13.863	13.874	VV	384	2284	0.11%	0.005%
323	13.882	13.874	13.887	VV	454	2807	0.14%	0.006%
324	13.893	13.887	13.917	VV	381	5352	0.27%	0.012%
325	13.942	13.917	13.952	VV	387	7154	0.36%	0.016%
326	13.956	13.952	13.965	VV	343	2466	0.12%	0.005%
327	13.979	13.965	14.034	VV	610	13873	0.69%	0.030%
328	14.089	14.034	14.106	VV	2302	35991	1.79%	0.078%
329	14.139	14.106	14.185	VV	154916	1893838	94.16%	4.125%
330	14.192	14.185	14.215	VV	293	3797	0.19%	0.008%
331	14.229	14.215	14.240	VV	274	2583	0.13%	0.006%
332	14.246	14.240	14.263	VV	165	1788	0.09%	0.004%
333	14.269	14.263	14.285	VV	170	1621	0.08%	0.004%
334	14.289	14.285	14.307	VV	93	882	0.04%	0.002%
335	14.330	14.307	14.340	VV	313	3976	0.20%	0.009%
336	14.343	14.340	14.352	VV	262	1569	0.08%	0.003%
337	14.376	14.352	14.402	VV	390	6911	0.34%	0.015%
338	14.405	14.402	14.420	VV	177	1490	0.07%	0.003%
339	14.429	14.420	14.448	VV	168	1838	0.09%	0.004%
340	14.458	14.448	14.466	VV	168	1169	0.06%	0.003%
341	14.497	14.466	14.507	VV	476	7724	0.38%	0.017%
342	14.525	14.507	14.565	VV	1271	22284	1.11%	0.049%
343	14.572	14.565	14.585	VV	265	2487	0.12%	0.005%
344	14.605	14.585	14.644	VV	298	6671	0.33%	0.015%
345	14.652	14.644	14.677	VV	207	2442	0.12%	0.005%
346	14.703	14.677	14.724	VV	1233	18970	0.94%	0.041%
347	14.728	14.724	14.747	VV	421	4212	0.21%	0.009%
348	14.766	14.747	14.777	VV	504	7285	0.36%	0.016%
349	14.804	14.777	14.844	VV	630	15756	0.78%	0.034%
350	14.859	14.844	14.887	VV	339	4444	0.22%	0.010%
351	14.920	14.887	14.955	PV	1203	19692	0.98%	0.043%

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2MSD

0.19% 0.008%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

						SOIL-1-HAM-TPH2M		
352	14.967	14.955	14.995	VV	301	5115	0.25%	0.011%
353	15.039	14.995	15.075	VV	104286	1418220	70.00%	3.996%
354	15.083	15.075	15.113	VV	625	9875	0.00%	0.002%
355	15.134	15.113	15.157	VV	327	6196	0.00%	0.007%
						Manual Integration		
356	15.173	15.157	15.181	VV	426	4542	0.00%	0.002%
357	15.243	15.181	15.274	VV	144487	1882096	93.00%	3.996%
358	15.287	15.274	15.317	VV	1230	16428	0.82%	0.036%
359	15.320	15.317	15.329	VV	164	1121	0.06%	0.002%
360	15.333	15.329	15.371	VV	170	3108	0.15%	0.007%
361	15.384	15.371	15.410	VV	212	2140	0.11%	0.005%
362	15.434	15.410	15.474	PV	842	12184	0.61%	0.027%
363	15.503	15.474	15.527	VV	207	4030	0.20%	0.009%
364	15.535	15.527	15.544	VV	131	977	0.05%	0.002%
365	15.559	15.544	15.575	VV	156	1909	0.09%	0.004%
366	15.582	15.575	15.587	VV	101	744	0.04%	0.002%
367	15.619	15.587	15.734	VV	27666	394848	19.63%	0.860%
368	15.764	15.734	15.800	VV	1866	35983	1.79%	0.078%
369	15.837	15.800	15.867	VV	1993	30500	1.52%	0.066%
370	15.891	15.867	15.918	VV	426	7338	0.36%	0.016%
371	15.922	15.918	15.927	VV	143	617	0.03%	0.001%
372	15.936	15.927	15.964	VV	158	2123	0.11%	0.005%
373	15.981	15.964	15.994	VV	266	2852	0.14%	0.006%
374	16.004	15.994	16.017	VV	210	2372	0.12%	0.005%
375	16.058	16.017	16.062	VV	369	6479	0.32%	0.014%
376	16.066	16.062	16.089	VV	302	3977	0.20%	0.009%
377	16.094	16.089	16.112	VV	153	1398	0.07%	0.003%
378	16.139	16.112	16.162	PV	794	12764	0.63%	0.028%
379	16.174	16.162	16.192	VV	385	4877	0.24%	0.011%
380	16.197	16.192	16.204	VV	192	1023	0.05%	0.002%
381	16.265	16.204	16.306	VV	139164	1834463	91.21%	3.996%
382	16.326	16.306	16.353	VV	603	8447	0.42%	0.018%
383	16.363	16.353	16.381	PV	95	1052	0.05%	0.002%
384	16.411	16.381	16.426	VV	315	4755	0.24%	0.010%
385	16.456	16.426	16.490	VV	451	9261	0.46%	0.020%
386	16.494	16.490	16.503	VV	163	802	0.04%	0.002%
387	16.518	16.503	16.528	VV	93	927	0.05%	0.002%
388	16.563	16.528	16.599	VV	517	9986	0.50%	0.022%
389	16.633	16.599	16.670	VV	2484	39810	1.98%	0.087%
390	16.690	16.670	16.695	VV	595	6797	0.34%	0.015%
391	16.712	16.695	16.719	VV	773	9449	0.47%	0.021%
392	16.721	16.719	16.725	VV	761	2587	0.13%	0.006%
393	16.747	16.725	16.779	VV	2521	37492	1.86%	0.082%
394	16.784	16.779	16.789	VV	120	606	0.03%	0.001%
395	16.827	16.789	16.854	VV	1252	18925	0.94%	0.041%
396	16.877	16.854	16.885	VV	319	4109	0.20%	0.009%
397	16.890	16.885	16.897	VV	230	1476	0.07%	0.003%
398	16.906	16.897	16.922	VV	201	2290	0.11%	0.005%
399	16.927	16.922	16.930	VV	115	394	0.02%	0.001%
400	16.947	16.930	16.952	VV	196	1928	0.10%	0.004%
401	16.959	16.952	16.968	VV	200	1265	0.06%	0.003%
402	16.995	16.968	17.035	PV	560	13081	0.65%	0.028%
403	17.055	17.035	17.073	VV	429	7005	0.35%	0.015%
404	17.107	17.073	17.137	VV	671	14523	0.72%	0.032%

					Instrument : FID_G			
					ClientSampleId : SOIL-1-HAM-TPH2MSD			
Sl. No.	Time	Area	Conc	Unit	Area	Conc	Area	Conc
405	17.215	17.137	17.250	VV	135634	1804052	89.70%	3.930%
406	17.264	17.250	17.282	VV	1140	15426	Manual IntegrationsAPPROVED	
407	17.293	17.282	17.319	VV	591	7638		
408	17.329	17.319	17.334	VV	195	1250	Reviewed By :Yogesh Patel 12/03/2024	
409	17.343	17.334	17.362	VV	133	1540	Supervised By :Ankita Jodhani 12/03/2024	
410	17.383	17.362	17.387	VV	109	881		
411	17.404	17.387	17.419	VV	163	2092	0.10%	0.005%
412	17.424	17.419	17.431	VV	163	767	0.04%	0.002%
413	17.456	17.431	17.485	PV	356	6590	0.33%	0.014%
414	17.498	17.485	17.504	VV	164	1473	0.07%	0.003%
415	17.578	17.504	17.615	VV	1234	31233	1.55%	0.068%
416	17.664	17.615	17.717	VV	3841	65092	3.24%	0.142%
417	17.749	17.717	17.764	PV	371	5700	0.28%	0.012%
418	17.778	17.764	17.837	VV	309	6522	0.32%	0.014%
419	17.843	17.837	17.860	VV	116	831	0.04%	0.002%
420	17.897	17.860	17.911	PV	145	2278	0.11%	0.005%
421	17.943	17.911	17.950	PV	179	2223	0.11%	0.005%
422	17.960	17.950	17.965	VV	212	1468	0.07%	0.003%
423	17.995	17.965	18.024	VV	1521	23540	1.17%	0.051%
424	18.059	18.024	18.069	VV	1496	22284	1.11%	0.049%
425	18.104	18.069	18.142	VV	131082	1792683	89.13%	3.905%
426	18.191	18.142	18.216	VV	1372	22848	1.14%	0.050%
427	18.252	18.216	18.267	VV	466	7185	0.36%	0.016%
428	18.280	18.267	18.293	VV	328	3732	0.19%	0.008%
429	18.334	18.293	18.355	VV	611	11531	0.57%	0.025%
430	18.380	18.355	18.393	VV	395	5305	0.26%	0.012%
431	18.456	18.393	18.502	VV	13857	246723	12.27%	0.537%
432	18.526	18.502	18.557	VV	4620	70406	3.50%	0.153%
433	18.586	18.557	18.594	VV	325	6132	0.30%	0.013%
434	18.619	18.594	18.641	VV	903	15242	0.76%	0.033%
435	18.663	18.641	18.674	VV	356	4781	0.24%	0.010%
436	18.678	18.674	18.683	VV	146	462	0.02%	0.001%
437	18.732	18.683	18.751	VV	399	5627	0.28%	0.012%
438	18.755	18.751	18.759	VV	54	251	0.01%	0.001%
439	18.792	18.759	18.807	PV	218	3321	0.17%	0.007%
440	18.834	18.807	18.847	VV	704	2747	0.14%	0.006%
441	18.880	18.847	18.894	PV	492	6591	0.33%	0.014%
442	18.937	18.894	18.989	VV	123587	1749745	87.00%	3.811%
443	19.041	18.989	19.069	VV	1575	32158	1.60%	0.070%
444	19.092	19.069	19.135	VV	519	9980	0.50%	0.022%
445	19.215	19.135	19.220	PV	252	6659	0.33%	0.015%
446	19.224	19.220	19.228	VV	210	797	0.04%	0.002%
447	19.284	19.228	19.314	VV	11664	187666	9.33%	0.409%
448	19.334	19.314	19.371	VV	5654	105534	5.25%	0.230%
449	19.404	19.371	19.428	VV	1424	38389	1.91%	0.084%
450	19.467	19.428	19.477	VV	1157	30717	1.53%	0.067%
451	19.529	19.477	19.551	VV	1866	65550	3.26%	0.143%
452	19.574	19.551	19.596	VV	1703	41435	2.06%	0.090%
453	19.600	19.596	19.604	VV	1423	6509	0.32%	0.014%
454	19.624	19.604	19.641	VV	1866	36917	1.84%	0.080%
455	19.647	19.641	19.655	VV	1767	14559	0.72%	0.032%
456	19.721	19.655	19.761	VV	111909	1719063	85.47%	3.744%

Parameters									
457	19.784	19.761	19.796	VV	2913	56218	2.80%	0.122%	
458	19.821	19.796	19.851	VV	3316	92867			
459	19.890	19.851	19.922	VV	2910	103038			
460	19.930	19.922	19.939	VV	2062	20135			
461	19.961	19.939	19.980	VV	2304	51466			
462	20.007	19.980	20.027	VV	2435	63398			
463	20.093	20.027	20.117	VV	5105	191431	9.52%	0.417%	
464	20.122	20.117	20.149	VV	3433	58869	2.93%	0.128%	
465	20.156	20.149	20.163	VV	2771	22640	1.13%	0.049%	
466	20.169	20.163	20.177	VV	2801	23342	1.16%	0.051%	
467	20.182	20.177	20.186	VV	2659	13110	0.65%	0.029%	
468	20.204	20.186	20.209	VV	2720	36477	1.81%	0.079%	
469	20.308	20.209	20.328	VV	4698	241746	12.02%	0.527%	
470	20.350	20.328	20.355	VV	4323	68306	3.40%	0.149%	
471	20.386	20.355	20.394	VV	4637	100885	5.02%	0.220%	
472	20.399	20.394	20.404	VV	4444	27518	1.37%	0.060%	
473	20.461	20.404	20.499	VV	99298	1675575	83.31%	3.650%	
474	20.620	20.499	20.669	VV	9257	692825	34.45%	1.509%	
475	20.698	20.669	20.702	VV	7624	143874	7.15%	0.313%	
476	20.758	20.702	20.783	VV	8307	385857	19.18%	0.840%	
477	20.813	20.783	20.872	VV	8483	406259	20.20%	0.885%	
478	20.994	20.872	21.042	VV	7801	711392	35.37%	1.550%	
479	21.052	21.042	21.069	VV	6425	101599	5.05%	0.221%	
480	21.077	21.069	21.094	VV	6253	92063	4.58%	0.201%	
481	21.208	21.094	21.273	VV	78206	2011247	100.00%	4.381%	
482	21.293	21.273	21.304	VV	5916	105532	5.25%	0.230%	
483	21.310	21.304	21.320	VV	5600	55529	2.76%	0.121%	
484	21.345	21.320	21.365	VV	5958	151419	7.53%	0.330%	
485	21.396	21.365	21.420	VV	6013	191001	9.50%	0.416%	
486	21.425	21.420	21.477	VV	5652	165762	8.24%	0.361%	
487	21.509	21.477	21.540	VV	4482	162944	8.10%	0.355%	
488	21.586	21.540	21.612	VV	4394	178524	8.88%	0.389%	
489	21.643	21.612	21.747	VV	4306	259801	12.92%	0.566%	
490	21.769	21.747	21.774	VV	1913	30513	1.52%	0.066%	
491	21.794	21.774	21.802	VV	2027	32809	1.63%	0.071%	
492	21.823	21.802	21.833	VV	2002	36671	1.82%	0.080%	
493	21.881	21.833	21.893	VV	2530	81836	4.07%	0.178%	
494	21.906	21.893	21.952	VV	2626	83814	4.17%	0.183%	
495	21.957	21.952	22.056	VV	2159	55732	2.77%	0.121%	
496	22.144	22.056	22.209	VV	49961	1278617	63.57%	2.785%	
497	22.218	22.209	22.225	VV	537	5072	0.25%	0.011%	
498	22.258	22.225	22.295	VV	738	19217	0.96%	0.042%	
Sum of corrected areas:						45909096			

Instrument :

FID_G

ClientSampleId :

SOIL-1-HAM-TPH2MSD

2.80% 0.122%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/03/2024

Supervised By :Ankita Jodhani 12/03/2024

FG112024.M Tue Dec 03 04:23:38 2024

Manual Integration Report

Sample ID	ClientID ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
P5026-03		FG014912.D	FG120224	TETRACOSANE-d50 (SURROGA	Ankita	12/3/2024 9:09:48 AM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FG014915.D	FG120224	N-DOTRIACONTANE	Ankita	12/3/2024 9:09:50 AM	Peak Integrated by Software incorrectly
PB165318BS		FG014917.D	FG120224	N-OCTACOSANE	Ankita	12/3/2024 9:09:51 AM	Peak Integrated by Software incorrectly
PB165318BS		FG014917.D	FG120224	N-TETRATRIACONTANE	Ankita	12/3/2024 9:09:51 AM	Peak Integrated by Software incorrectly
P5026-07MS		FG014918.D	FG120224	N-TETRATRIACONTANE	Ankita	12/3/2024 9:09:53 AM	Peak Integrated by Software incorrectly
P5026-07MSD		FG014919.D	FG120224	N-TETRACONTANE	Ankita	12/3/2024 9:09:55 AM	Peak Integrated by Software incorrectly
P5026-07MSD		FG014919.D	FG120224	N-TETRATRIACONTANE	Ankita	12/3/2024 9:09:55 AM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FG014922.D	FG120224	N-HEXATRIACONTANE	Ankita	12/3/2024 9:09:56 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 # FG120224

Review By	yogesh	Review On	12/2/2024 2:52:09 PM
Supervise By	Ankita	Supervise On	12/3/2024 9:10:02 AM
SubDirectory	FG120224	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	FG014906.D	02 Dec 2024 11:26	YP\AJ	Ok
2	I.BLK	FG014907.D	02 Dec 2024 11:54	YP\AJ	Ok
3	50 PPM TRPH STD	FG014908.D	02 Dec 2024 12:23	YP\AJ	Ok
4	RT MARKER	FG014909.D	02 Dec 2024 12:53	YP\AJ	Ok
5	P5025-03	FG014910.D	02 Dec 2024 13:21	YP\AJ	Dilution
6	P5025-07	FG014911.D	02 Dec 2024 13:50	YP\AJ	Ok
7	P5026-03	FG014912.D	02 Dec 2024 14:18	YP\AJ	Ok,M
8	P5026-07	FG014913.D	02 Dec 2024 15:15	YP\AJ	Ok
9	I.BLK	FG014914.D	02 Dec 2024 15:43	YP\AJ	Ok
10	50 PPM TRPH STD	FG014915.D	02 Dec 2024 16:12	YP\AJ	Ok,M
11	PB165318BL	FG014916.D	02 Dec 2024 16:40	YP\AJ	Ok
12	PB165318BS	FG014917.D	02 Dec 2024 17:09	YP\AJ	Ok,M
13	P5026-07MS	FG014918.D	02 Dec 2024 17:37	YP\AJ	Ok,M
14	P5026-07MSD	FG014919.D	02 Dec 2024 18:05	YP\AJ	Ok,M
15	P5025-03	FG014920.D	02 Dec 2024 18:34	YP\AJ	Ok
16	I.BLK	FG014921.D	02 Dec 2024 19:02	YP\AJ	Ok
17	50 PPM TRPH STD	FG014922.D	02 Dec 2024 19:31	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 # FG120224

Review By	yogesh	Review On	12/2/2024 2:52:09 PM
Supervise By	Ankita	Supervise On	12/3/2024 9:10:02 AM
SubDirectory	FG120224	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	
ICV/I.BLK	PP23962,PP23967
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG014906.D	02 Dec 2024 11:26		YP\AJ	Ok
2	I.BLK		FG014907.D	02 Dec 2024 11:54		YP\AJ	Ok
3	50 PPM TRPH STD		FG014908.D	02 Dec 2024 12:23		YP\AJ	Ok
4	RT MARKER		FG014909.D	02 Dec 2024 12:53		YP\AJ	Ok
5	P5025-03		FG014910.D	02 Dec 2024 13:21	Need 5x dilution	YP\AJ	Dilution
6	P5025-07		FG014911.D	02 Dec 2024 13:50		YP\AJ	Ok
7	P5026-03		FG014912.D	02 Dec 2024 14:18		YP\AJ	Ok,M
8	P5026-07		FG014913.D	02 Dec 2024 15:15		YP\AJ	Ok
9	I.BLK		FG014914.D	02 Dec 2024 15:43		YP\AJ	Ok
10	50 PPM TRPH STD		FG014915.D	02 Dec 2024 16:12		YP\AJ	Ok,M
11	PB165318BL		FG014916.D	02 Dec 2024 16:40		YP\AJ	Ok
12	PB165318BS		FG014917.D	02 Dec 2024 17:09		YP\AJ	Ok,M
13	P5026-07MS		FG014918.D	02 Dec 2024 17:37		YP\AJ	Ok,M
14	P5026-07MSD		FG014919.D	02 Dec 2024 18:05		YP\AJ	Ok,M
15	P5025-03		FG014920.D	02 Dec 2024 18:34		YP\AJ	Ok
16	I.BLK		FG014921.D	02 Dec 2024 19:02		YP\AJ	Ok
17	50 PPM TRPH STD		FG014922.D	02 Dec 2024 19:31		YP\AJ	Ok,M

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/2/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 11/27/2024
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: 11/28/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133667

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
P5022-01	TAPIAL2-SB02D-13-11242 4-00-T1	1	1.15	8.70	9.85	9.23	92.9	
P5025-01	SOIL-WEST	2	1.18	8.43	9.61	8.41	85.8	
P5025-03	SOIL-WEST-TPH2	3	1.17	8.60	9.77	8.54	85.7	
P5025-04	SOIL-WEST-GRAB	4	1.16	8.49	9.65	8.43	85.6	
P5025-05	SOIL-EAST	5	1.15	8.73	9.88	7.85	76.7	
P5025-07	SOIL-EAST-TPH2	6	1.11	8.70	9.81	7.76	76.4	
P5025-08	SOIL-EAST-GRAB	7	1.15	8.82	9.97	9.39	93.4	
P5026-01	SOIL-1-HAM	8	1.13	8.65	9.78	8.00	79.4	
P5026-03	SOIL-1-HAM-TPH2	9	1.17	8.50	9.67	8.72	88.8	
P5026-04	SOIL-1-HAM-GRAB	10	1.18	8.42	9.6	8.66	88.8	
P5026-05	SOIL-1-HAM	11	1.15	8.81	9.96	8.00	77.8	
P5026-07	SOIL-1-HAM-TPH2	12	1.19	8.50	9.69	7.51	74.4	
P5026-08	SOIL-1-HAM-GRAB	13	1.14	8.75	9.89	7.7	75.0	
P5045-01	SU-04-11222024	14	1.19	8.50	9.69	8.96	91.4	
P5045-02	SU-04-11222024-E2	15	1.13	8.74	9.87	8.49	84.2	
P5046-01	HD-01-11272024	16	1.17	8.57	9.74	8.8	89.0	
P5046-02	HD-01-11272024-E2	17	1.16	8.83	9.99	9.00	88.8	
P5048-01	MH-746-WC	18	1.17	8.65	9.82	9.18	92.6	
P5048-02	MH-746-EPH	19	1.15	8.80	9.95	8.91	88.2	
P5048-03	MH-746--VOC	20	1.15	8.36	9.51	8.48	87.7	

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

WORKLIST(Hardcopy Internal Chain)

133667

WorkList Name : %1-112724

WorkList ID : 185820

Department : Wet-Chemistry

Date : 11-27-2024 08:06:01

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5022-01	TAPIAL2-SB02D-13-112424-00.	Solid	Percent Solids	Cool 4 deg C	WEST04	L41	11/24/2024	Chemtech -SO
P5025-01	SOIL-WEST	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5025-03	SOIL-WEST-TPH2	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5025-04	SOIL-WEST-GRAB	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5025-05	SOIL-EAST	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5025-07	SOIL-EAST-TPH2	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5025-08	SOIL-EAST-GRAB	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5026-01	SOIL-1-HAM	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5026-03	SOIL-1-HAM-TPH2	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5026-04	SOIL-1-HAM-GRAB	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5026-05	SOIL-1-HAM	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5026-07	SOIL-1-HAM-TPH2	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5026-08	SOIL-1-HAM-GRAB	Solid	Percent Solids	Cool 4 deg C	TULL02	L61	11/27/2024	Chemtech -SO
P5045-01	SU-04-11222024	Solid	Percent Solids	Cool 4 deg C	PSEG05	L51	11/27/2024	Chemtech -SO
P5045-02	SU-04-11222024-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L51	11/27/2024	Chemtech -SO
P5046-01	HD-01-11272024	Solid	Percent Solids	Cool 4 deg C	PSEG05	L51	11/27/2024	Chemtech -SO
P5046-02	HD-01-11272024-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L51	11/27/2024	Chemtech -SO
P5048-01	MH-746-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/27/2024	Chemtech -SO
P5048-02	MH-746-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/27/2024	Chemtech -SO
P5048-03	MH-746-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/27/2024	Chemtech -SO

Date/Time 11/27/24 16:10

Raw Sample Received by: go woc

Raw Sample Relinquished by: [Signature]

Date/Time 11/27/24

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: go woc

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: 12/02/2024

Extraction Start Time: 09:00

Extraction End Date: 12/02/2024

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	EP2566
Sand	N/A	E2865
Methylene Chloride	N/A	E3829
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
12/21/24	RP (Ext. Lab)	M. P. Postill
12:05	Preparation Group	Analysis Group

Analytical Method: M3541-ASE Extraction-14

Concentration Date: 12/02/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB165318BL	PB165318BL	TPH GC	30.01	N/A	ritesh	Evelyn	1			U1-1
PB165318BS	PB165318BS	TPH GC	30.02	N/A	ritesh	Evelyn	1			2
P5025-03	SOIL-WEST-TPH2	TPH GC	30.06	N/A	ritesh	Evelyn	1			3
P5025-07	SOIL-EAST-TPH2	TPH GC	30.02	N/A	ritesh	Evelyn	1			4
P5026-03	SOIL-1-HAM-TPH2	TPH GC	30.04	N/A	ritesh	Evelyn	1			5
P5026-07	SOIL-1-HAM-TPH2	TPH GC	30.03	N/A	ritesh	Evelyn	1			6
P5026-07MS	SOIL-1-HAM-TPH2MS	TPH GC	30.05	N/A	ritesh	Evelyn	1			U6-1
P5026-07MS D	SOIL-1-HAM-TPH2MSD	TPH GC	30.06	N/A	ritesh	Evelyn	1			2

* Extracts relinquished on the same date as received.

8
12/2/24

16319

WORKLIST(Hardcopy Internal Chain)

WorkList Name : P5025T WorkList ID : 185882 Department : Extraction Date : 12-02-2024 08:53:34

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5025-03	SOIL-WEST-TPH2	Solid	TPH GC	Cool 4 deg C	TULL02	L61	11/27/2024	8015D
P5025-07	SOIL-EAST-TPH2	Solid	TPH GC	Cool 4 deg C	TULL02	L61	11/27/2024	8015D
P5026-03	SOIL-1-HAM-TPH2	Solid	TPH GC	Cool 4 deg C	TULL02	L61	11/27/2024	8015D
P5026-07	SOIL-1-HAM-TPH2	Solid	TPH GC	Cool 4 deg C	TULL02	L61	11/27/2024	8015D

Date/Time 12/2/24 8:55
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Date/Time 12/2/24 8:15
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Prep Standard - Chemical Standard Summary

Order ID : P5026

Test : TPH GC

Prepbatch ID : PB165318,

Sequence ID/Qc Batch ID: FG120224,

Standard ID :

EP2560,EP2566,PP23454,PP23935,PP23961,PP23962,PP23963,PP23964,PP23965,PP23966,PP23967,

Chemical ID :

E2865,E3551,E3759,E3822,E3827,E3828,E3829,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	EP2566	11/22/2024	01/03/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	Evelyn Huang 11/22/2024

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								
FROM 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								
FROM 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
<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)	24J0862003	05/18/2025	11/18/2024 / Rajesh	11/04/2024 / Rajesh	E3829

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

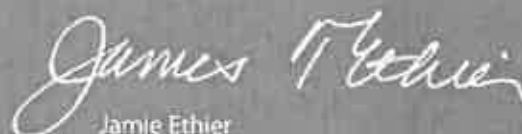
Certificate of Analysis

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

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

CERTIFICATE OF ANALYSIS

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

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

COMMENTS

QC: PhC Irma Belmares

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

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

RC-02-01, Ed. 3

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



Material No.: 9266-A4
Batch No.: 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 HeptachlorEpoxide) 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	≤ 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 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

$\frac{RS}{11/7}$

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

11/6/24

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

 **avantors[™]**

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 Heptachlor Epoxide) 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 3829



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

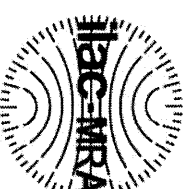
Bellefonte, PA 16823-8812

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 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:

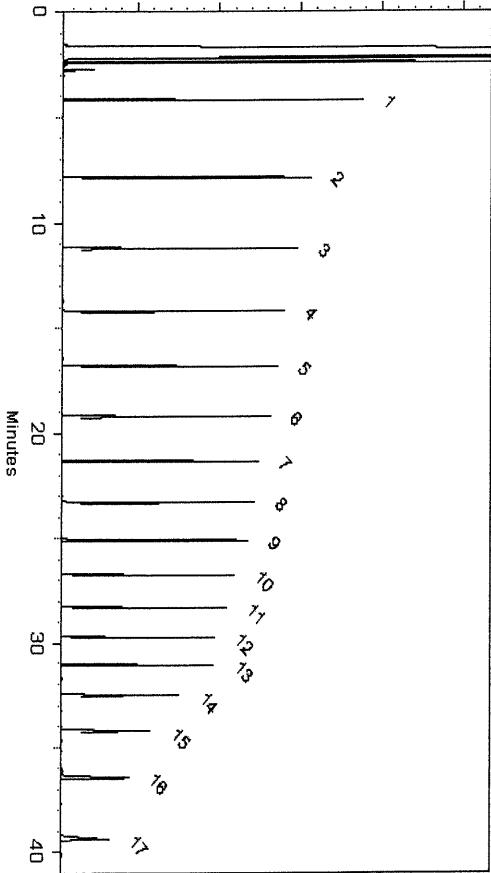
250°C

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

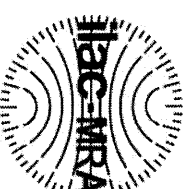
Bellefonte, PA 16823-8812

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:

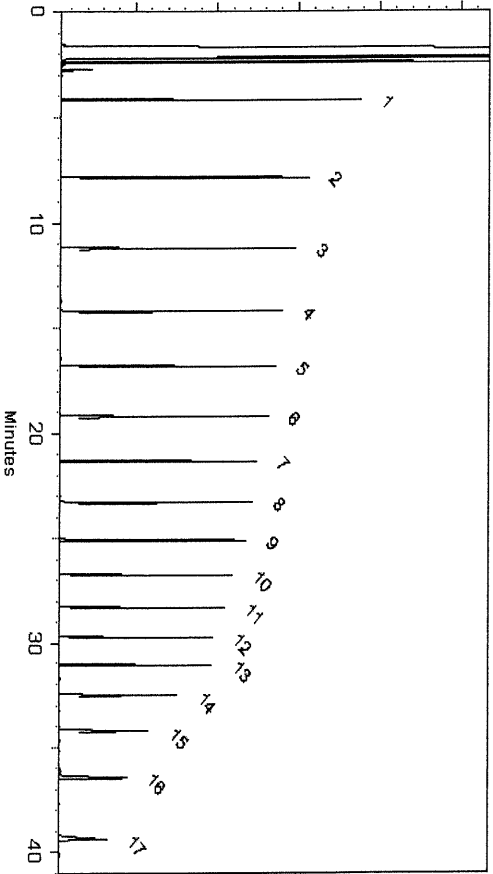
250°C

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

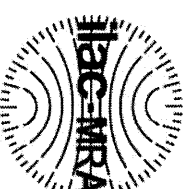
Bellefonte, PA 16823-8812

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
15	n-Hexatriacontane (C36) CAS # 630-06-8 Purity 99%	(Lot U25B014)	504.0 µg/mL	+/- 2.9936 +/- 12.5216 +/- 15.0093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Octatriacontane (C38) CAS # 7194-85-6 Purity 97%	(Lot 0000127235)	504.4 µg/mL	+/- 2.9960 +/- 12.5316 +/- 15.0212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetracontane (C40) CAS # 4181-95-7 Purity 98%	(Lot PADGI)	504.7 µg/mL	+/- 2.9978 +/- 12.5390 +/- 15.0301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

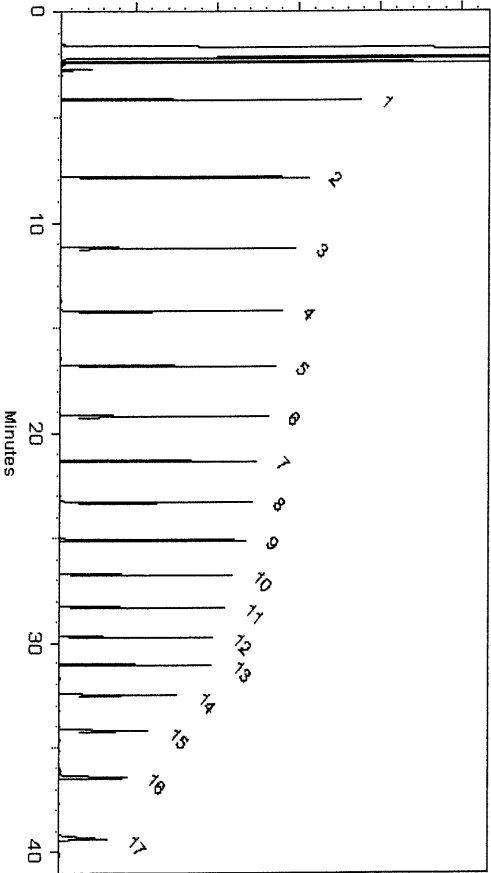
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Brittany Federinko

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle

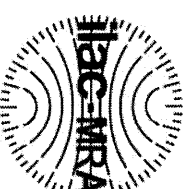
Bellefonte, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31266

Lot No.: A0186840

Description : Florida TRPH Standard

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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2029

Storage: 25°C nominal

Handling: Sonicate prior to use.

Ship: Ambient

CERTIFIED VALUES

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

P11948 } 7.8
P11962 } 07/11/16

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

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

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

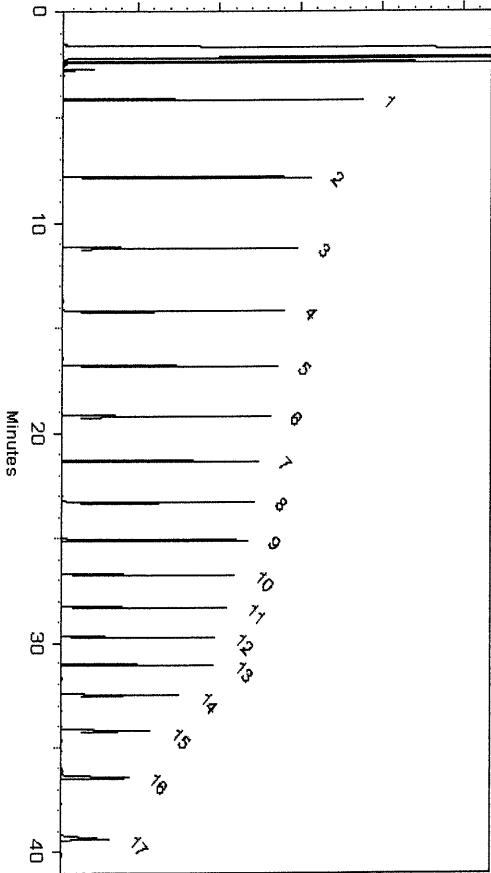
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Brittany Federinko

Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022

Balance: 1128360905

Christie Mills

Christie Mills - Operations Tech II - ARM QC

Date Passed: 01-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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

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.

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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 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

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 200.0

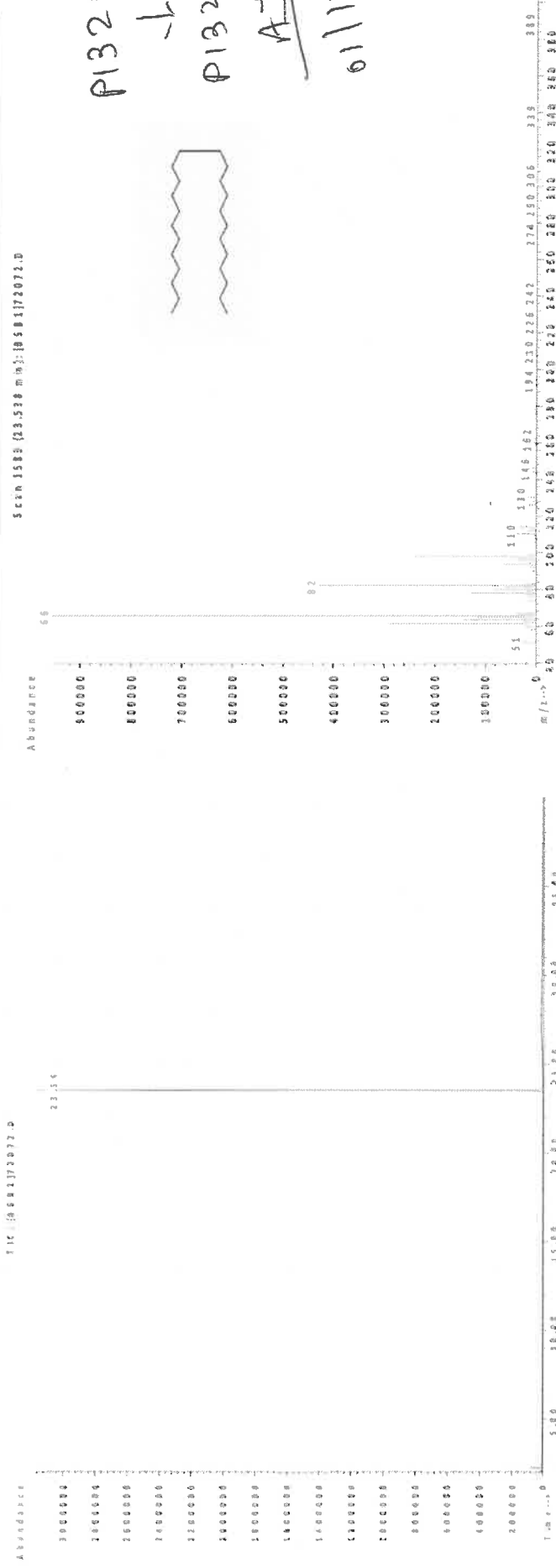
Formulated By:	Prashant Chauhan	101122	DATE
Reviewed By:	Pedro L. Renteria	101122	DATE

SDS Information

Expanded Uncertainty (Solvent Safety Info. On Attached pg.)
Actual Conc (µg/mL) (+/-) (µg/mL) CAS# OSHA PEL (TWA) LD50

Compound	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
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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.



P13205
P13214
AJ
61/17/24

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

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

Certified By: _____
Andrea Schaible
Chemist

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

P13215

↓

P13224

AJ
01/31/24

*Not a certified value

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

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



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



ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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

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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

Part # 10009R
Lot # 070716
Shelf Life 070716

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

Solvent(s): Methylene chloride
Lot# 78782

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

070716
070716

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

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

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

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

Peak No. Name FID RT (min)

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

Qualitative Quantitative

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

Part # 10009R Lot # 041219 1 of 2

Formulator
Reviewer

Actual
Concentration
Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

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

Solvent(s):
Methylene chloride
Lot#
105345

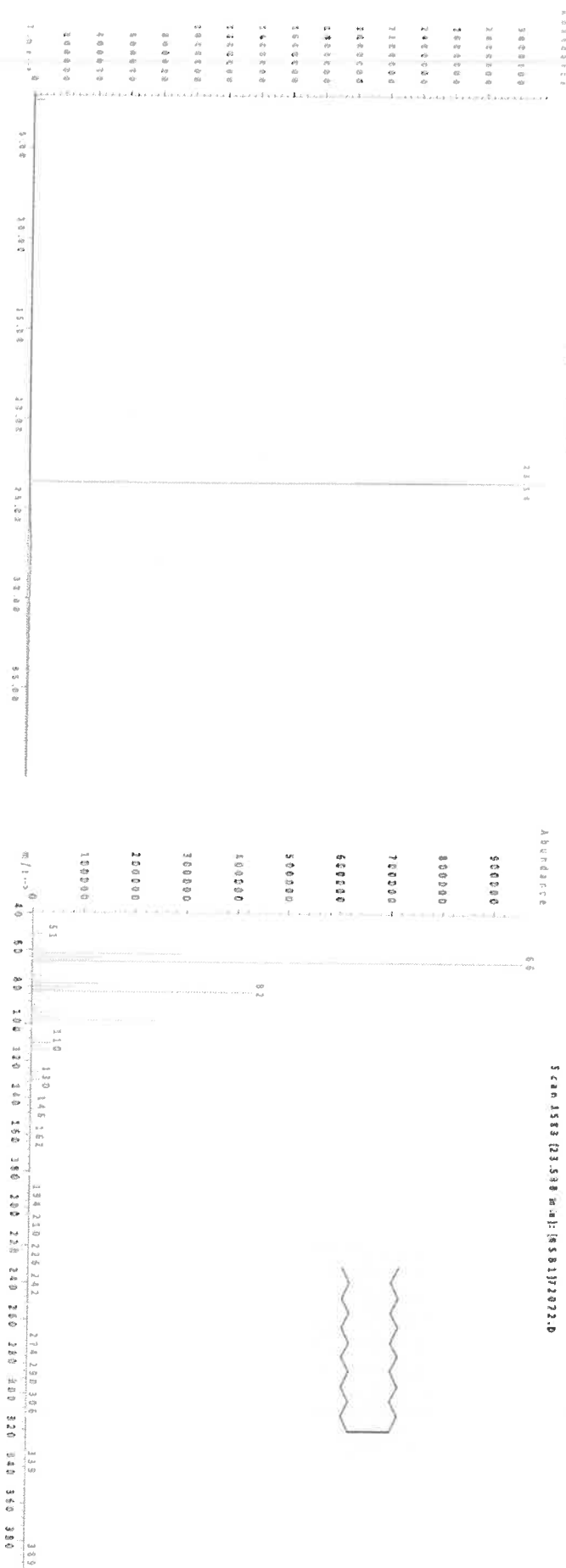
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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

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

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



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

ABSOLUTE STANDARDS, INC.

ISO - 17034



Certificate of Analysis



Certified Reference Material (CRM)

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

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

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

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

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

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

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

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

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

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

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

Minimum Sample Size: 0.5 uL for analytical applications.

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

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

Page 1 of 2



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



ABSOLUTE STANDARDS, INC.

ISO - 17034

Understanding the Certified Weight Report

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Absolute Standards, Inc.
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www.absolutestandards.com

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Methylene chloride
Lot# 78782

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

070716
070716

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

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

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

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

Peak No. Name FID RT (min)

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

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

Part # 10009R Lot # 041219 1 of 2

Formulator
Reviewer

Actual
Concentration
Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

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

Solvent(s):
Methylene chloride
Lot#
105345

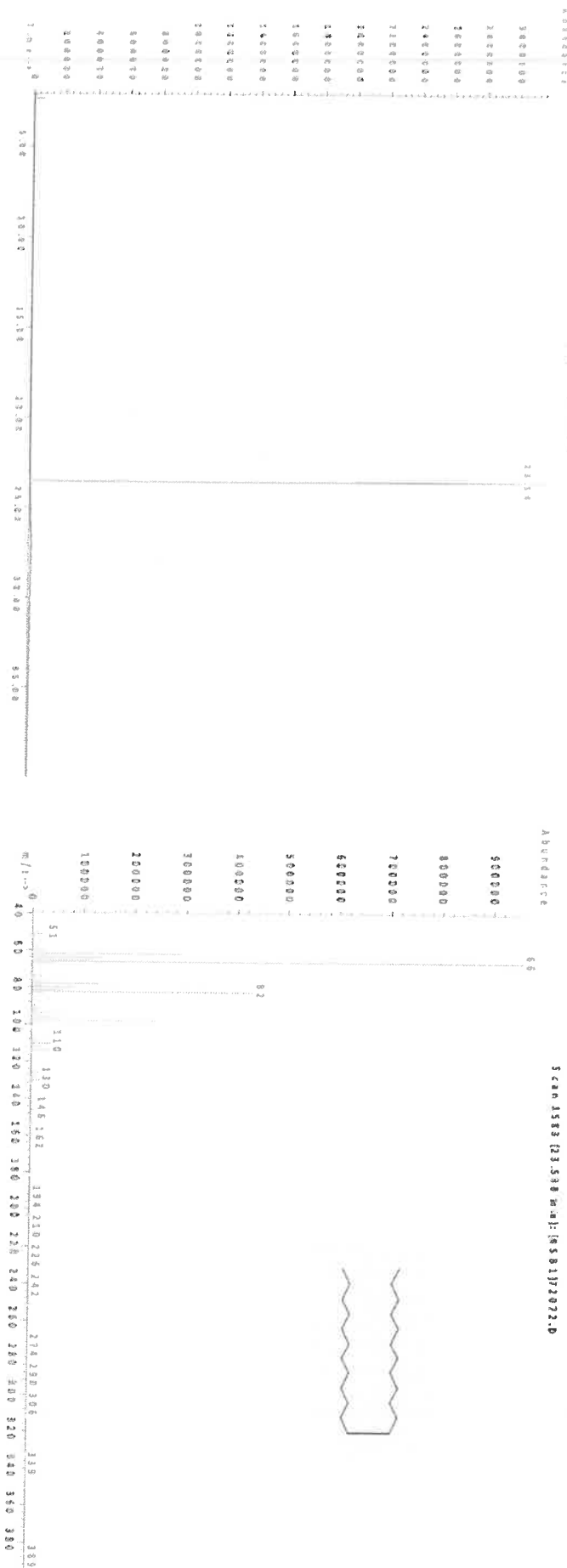
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	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

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



ABSOLUTE STANDARDS, INC.

ISO - 17034



Understanding the Certified Weight Report



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

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

Part # 10009R
Lot # 070716
Description: CLP Priority Pollutant Internal Standards
GC/MS Calibration - 6 components
070721
Expiration Date:
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 4000
NIST Test ID#: 822-275872-11
Weight(s) shown below were combined and diluted to (mL): 500.0
Balance Uncertainty: 0.058
Peak Uncertainty: 0.058

Solvent(s): Methylene chloride
Lot# 78782

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

DATE: 070716
DATE: 070716

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

Compound	SMW	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty (%)	Target Weight (µg)	Actual Weight (µg)	Actual Conc (µg/mL)	Expanded Uncertainty (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-1845M07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	15.4	2055-02-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-2339M031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	15.2	1146-85-2	10 ppm (50mg/m3/8h)	or-rat 400mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	15.2	15067-28-2	N/A	or-rat 500mg/kg
4. Phenanthrene-d10	248	PR-2305M081711PM1	4000	98	0.2	2.04093	2.04136	4000.8	15.4	1517-25-2	N/A	N/A
5. Chrysene-d12	92	I-19280	4000	98	0.2	2.04093	2.04159	4001.3	15.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04156	4001.2	15.4	1503-58-3	N/A	N/A

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

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

Peak Data:

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

Qualitative Quantitative

3rd Party Comparison

Analyte	Sup/Abs Dev (%)
1,4-Dichlorobenzene-d4	2.55
Naphthalene-d8	2.43
Acenaphthene-d10	2.74
Phenanthrene-d10	0.65
Chrysene-d12	1.93
Perylene-d12	-1.72
Total	-0.56

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

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 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





CERTIFIED WEIGHT REPORT

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

Solvent(s):
Methylene chloride
Lot#
105345

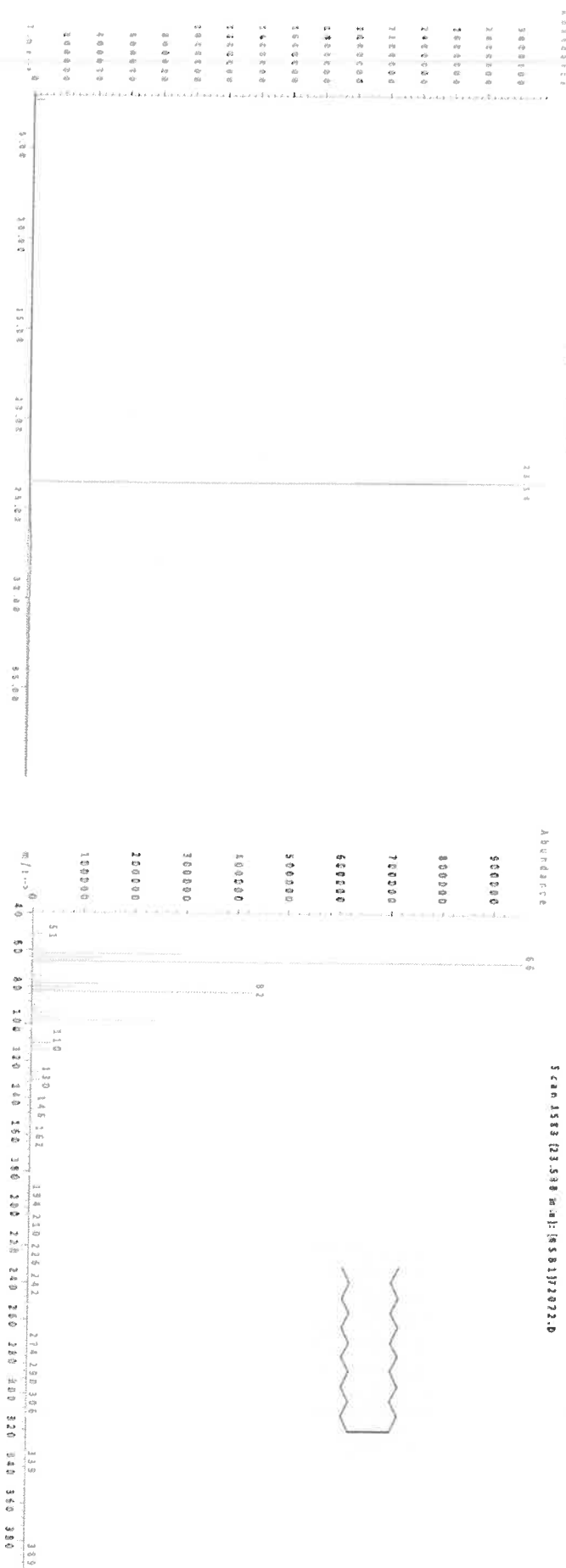
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13436
07/24/24
X.F.

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

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

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



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N., and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (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#	OSHA PEL (TWA)	LD50
1. 1,4-Dichlorobenzene-d4	118	PR-1845M07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	15.4	2055-02-1	N/A	or-rat 500mg/kg
2. Naphthalene-d8	223	PR-2339M031612HP1	4000	99	0.2	2.02032	2.02084	4001.0	15.2	1146-85-2	10 ppm (50mg/m3/8h)	or-rat 400mg/kg
3. Acenaphthene-d10	2	PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	15.2	15067-28-2	N/A	or-rat 500mg/kg
4. Phenanthrene-d10	248	PR-2305M081711PM1	4000	98	0.2	2.04093	2.04135	4000.8	15.4	1517-25-2	N/A	N/A
5. Chrysene-d12	92	I-19290	4000	98	0.2	2.04093	2.04150	4001.3	15.4	1719-03-5	N/A	N/A
6. Perylene-d12	247	PR-24113	4000	98	0.2	2.04093	2.04155	4001.2	15.4	1503-58-3	N/A	N/A

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

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

Peak No. Name FID RT (min)

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

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

Part # 10009R Lot # 041219

Formulator
Reviewer

Actual
Concentration
Uncertainty
Values

Health &
Safety

3rd Party
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



CERTIFIED WEIGHT REPORT

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

Solvent(s):
Methylene chloride

Lot#
105345

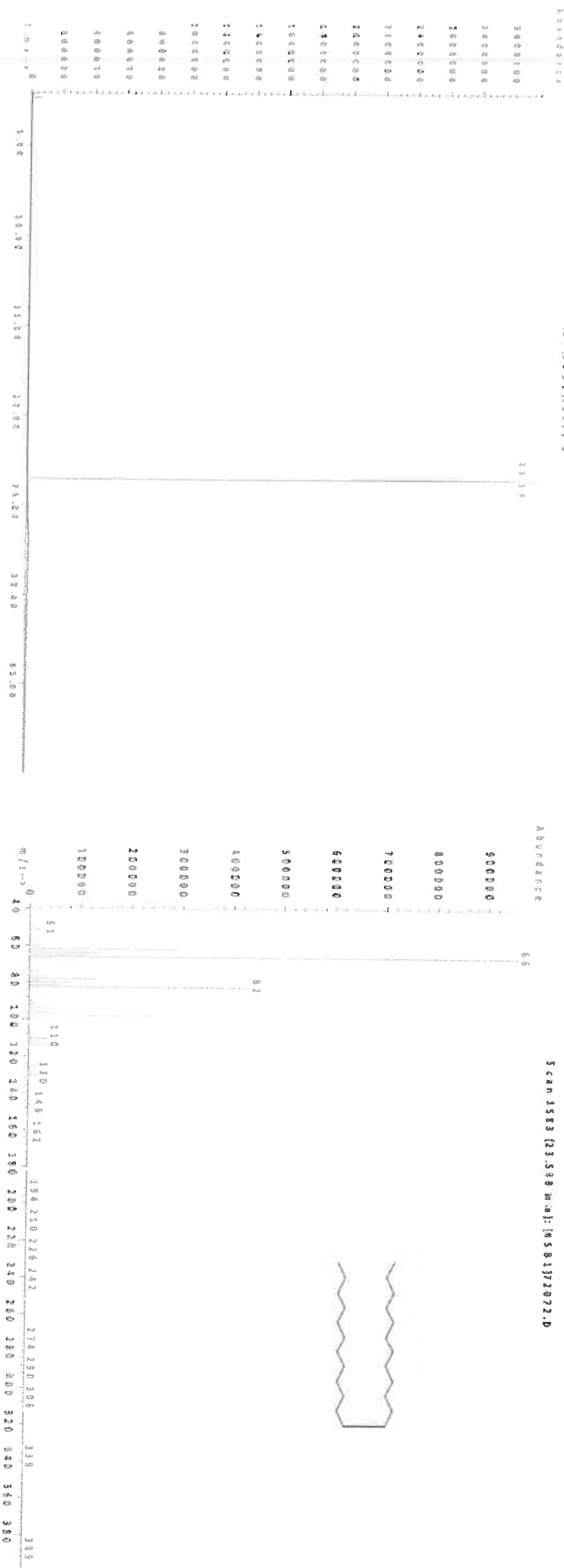
Expiration Date: **101132**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **6UB3**
Weight(s) shown below were combined and diluted to (mL): **200.0**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

P13437
13496
07/24/24

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

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
----------	-----	------------	----------------------	------------	------------------------	-----------	------------------	------------------	---------------------	------------------------------------	--	------

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



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



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Tully Construction Co. IncADDRESS: 104th St & 164th DriveCITY: Queens STATE: NY ZIP: _____ATTENTION: Dean Devoe

PHONE: _____

FAX: _____

CLIENT PROJECT INFORMATION

PROJECT NAME: _____

PROJECT NO.: _____ LOCATION: _____

PROJECT MANAGER: _____

e-mail: _____

PHONE: _____

FAX: _____

CLIENT BILLING INFORMATION

BILL TO: _____ PO#: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

ATTENTION: _____ PHONE: _____

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*

HARDCOPY (DATA PACKAGE): _____ DAYS*

EDD: _____ DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

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

1 Vol's
 2 Svor & PCB
 3 TEL
 4 Corrosivity
 5 Ignitability
 6 Reactivity
 7 Reactivity
 8 Mercury
 9 TPH

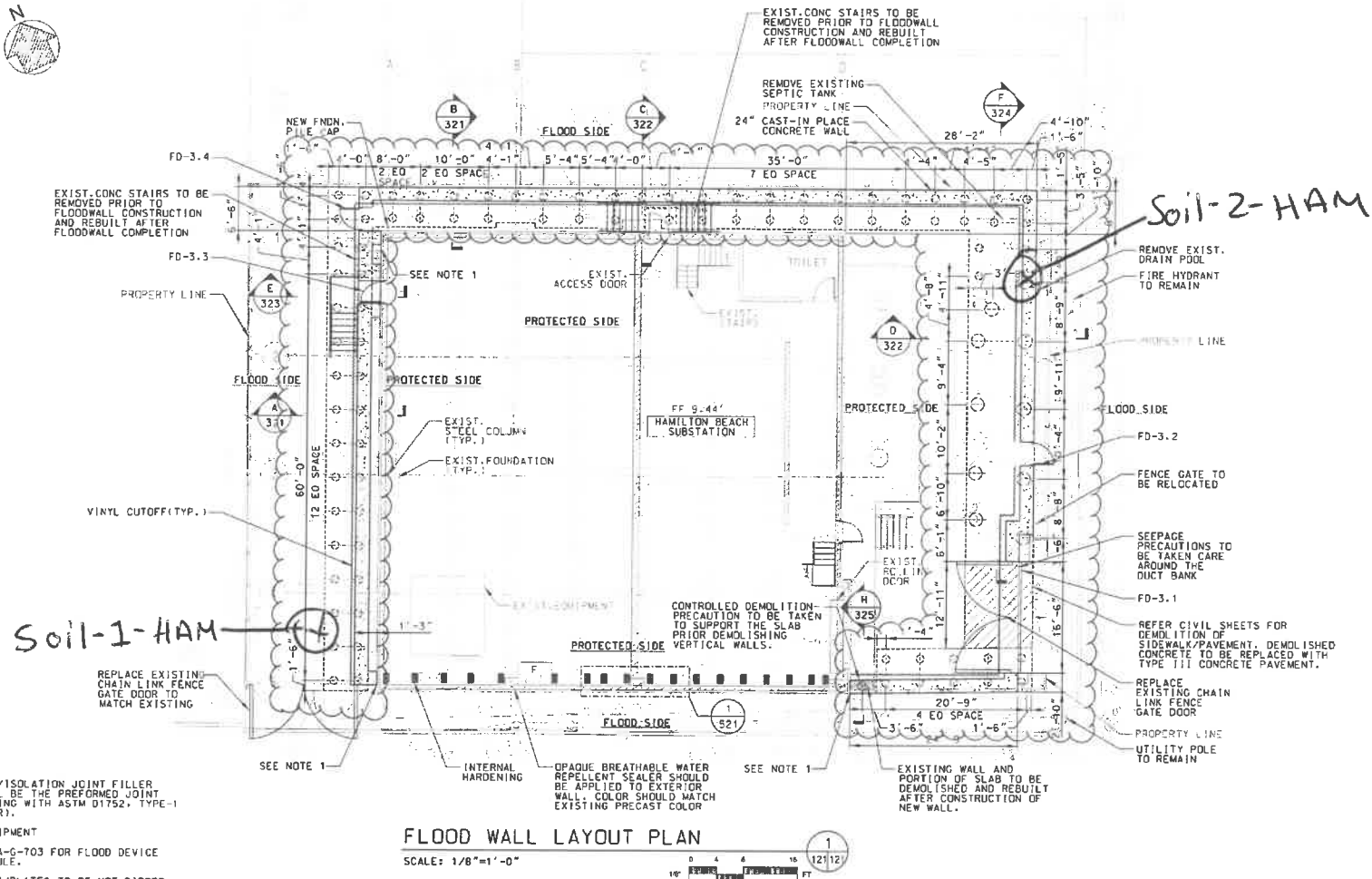
PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		E/F	E	E	E	E	E	E	E	E	
1.	SOIL-1-HAM	SOL	X		11-27-24	1042	7		X	X	X	X	X	X	X	X	
2.	SOIL-1-HAM			X		1045	4	X									0.0 ppm
3.	SOIL-1-HAM-TPH2		X			1050	1									X	
4.	SOIL-2-HAM		X			1110	7		X	X	X	X	X	X	X	X	
5.	SOIL-2-HAM			X		1112	4	X									0.0 ppm
6.	SOIL-2-HAM-TPH2		X			1115	1									X	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. <u>DM</u>	DATE/TIME: <u>1130</u> <u>11-27-24</u>	RECEIVED BY: 1. _____	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP _____ °C
RELINQUISHED BY SAMPLER: 2. _____	DATE/TIME: _____	RECEIVED BY: 2. _____	Comments: <u>Collected 8:1 composite sample + (2) 5:1</u> <u>Composite sample for sampling protocol</u>
RELINQUISHED BY SAMPLER: 3. <u>DM</u>	DATE/TIME: <u>1400</u> <u>11-27-24</u>	RECEIVED BY: 3. _____	<u>PID calibration 11-27-24</u>
Page <u>1</u> of <u>1</u>		CLIENT: ☐ Hand Delivered ☐ Other _____	Shipment Complete
		CHEMTECH: ☐ Picked Up ☒ Field Sampling	☐ YES ☐ NO



NOTES:

1. THE EXPANSION/ISOLATION JOINT FILLER MATERIAL SHALL BE THE PREFORMED JOINT FILLER COMPLYING WITH ASTM D1752, TYPE-1 (SPONGE RUBBER).
2. F - FIXED EQUIPMENT
3. REFER P36343-6-C-703 FOR FLOOD DEVICE OPENING SCHEDULE.
4. ALL HSS/ANGLES/PLATES TO BE HOT DIPPED GALVANIZED SECTIONS.

FLOOD WALL LAYOUT PLAN

SCALE: 1/8"=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 OR ARCHITECT. THE DRAWING NUMBER, SCALE, DATE, TITLE, PROJECT NAME, AND A SIGNATURE OF THE ENGINEER OR ARCHITECT SHALL BE PLACED IN THE BOTTOM RIGHT CORNER OF THE DRAWING.

CONTRACT P-36343
FLOOD MITIGATION AT TWENTY SIX (26) SUBSTATIONS
IN THE BOROUGH OF BROOKLYN, MANHATTAN AND QUEENS
**HAMILTON BEACH
SUBSTATION FLOOD
WALL PLAN**



DRAWN BY	R. NUTHAN	<i>Nathan</i>	DATE	04/15/2024
DESIGNED BY	KUDAY	<i>Kuday</i>	DRAWING	STRUCTURAL
CHECKED BY	DINAKAR KN	<i>Dinakar</i>	PROJECT NO.	P36343-HAM-CS-121
APPROVED BY	C. JEDRICH, PE	<i>Jedrich</i>	REVISION	

REVISION	DESCRIPTION	DATE	APPROVED

REVISIONS

SDSIGN&FILEEXPANDEDSSPECS

PRINT AS OF SDATES&OFSPLOTTINGS

USERSNAME



Environmental Laboratory

www.chemtech.net | EMAIL: PM@chemtech.net

Project Name: _____

Chemtech Order ID: _____

Service Order #: _____

Sampler Name: Jeremy N
Client Project Coordinator & Phone: _____

Work Order #: _____

Dean D

Labor WBS #: _____

Page #: 1 of 1

Facility/Site: Hamilton Beach Sub

Date: 11-27-24

Site Address: 144th Street &

Arrive Time: 1030

144th Drive, Queens NY

Depart Time: 1130

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): 2-3 °C PID Readings (range): 0-0 PPM Odor: Y (N) Color: Y (N)

Sample Description: wet sand, rocks.

Field Observations: very wet sand, (2) unique locations

Grid/Area Composite Map:

QA Control # A3041134

See

Affirmed

Map

Sampler Signature: JM

Supervisor Review/Date: _____

Client Signature: _____

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 : P5026 TULL02

Order Date : 11/27/2024 11:24:00 AM

Project Mgr :

Client Name : Tully Construction Co., Inc.

Project Name : Hamilton

Report Type : Level 1

Client Contact : Dean Devoe

Receive DateTime : 11/27/2024 2:00:00 PM

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
P5026-04	SOIL-1-HAM-GRAB	Solid	11/27/2024	10:45					
					VOC-TCLVOA-10		8260D	5 Bus. Days	
P5026-08	SOIL-1-HAM-GRAB	Solid	11/27/2024	11:12					
					VOC-TCLVOA-10		8260D	5 Bus. Days	

Relinquished By :

Date / Time :

DM
11-27-24 1435

Received By :

Date / Time :

Sam
11/27/24 14:35 RJL
A22

Storage Area : VOA Refridgerator Room