

Data Path : Z:\svoasrv\HPCHEM1\BNA\_M\Data\BM080223\  
 Data File : BM041238.D  
 Acq On : 02 Aug 2023 10:58  
 Operator : MA/JU  
 Sample : 03849-01  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023

Quant Time: Aug 03 03:05:35 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_M\Methods\8270-BM072823.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Aug 02 19:20:51 2023  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.793	152	160631	20.000	ng	0.00	
21) Naphthalene-d8	10.604	136	695123	20.000	ng	0.00	
39) Acenaphthene-d10	14.463	164	456459	20.000	ng	0.00	
64) Phenanthrene-d10	17.221	188	1025566	20.000	ng	0.00	
76) Chrysene-d12	21.427	240	686200	20.000	ng	0.00	
86) Perylene-d12	23.809	264	735875	20.000	ng	0.00	
System Monitoring Compounds							
5) 2-Fluorophenol	5.369	112	1108414	103.132	ng	0.00	
7) Phenol-d6	6.981	99	1512828	108.591	ng	0.00	
23) Nitrobenzene-d5	8.975	82	985526	65.933	ng	0.00	
42) 2,4,6-Tribromophenol	15.968	330	785937	121.730	ng	0.00	
45) 2-Fluorobiphenyl	13.080	172	2382630	65.939	ng	0.00	
79) Terphenyl-d14	19.862	244	3584221	94.440	ng	0.00	
Target Compounds							
71) Phenanthrene	17.268	178	346016	6.072	ng		99
72) Anthracene	17.357	178	317758	5.638	ng		99
75) Fluoranthene	19.292	202	1060057	16.559	ng		99
78) Pyrene	19.656	202	956157	19.925	ng		99
81) Benzo(a)anthracene	21.415	228	434067	9.331	ng		97
83) Chrysene	21.468	228	428378	9.521	ng		98
84) Bis(2-ethylhexyl)phtha...	21.333	149	71433	4.970	ng	#	98
87) Indeno(1,2,3-cd)pyrene	26.256	276	226629	4.189	ng	#	93
88) Benzo(b)fluoranthene	23.086	252	468641m	10.720	ng		
89) Benzo(k)fluoranthene	23.127	252	152811m	3.417	ng		
90) Benzo(a)pyrene	23.703	252	307968	7.332	ng		93
92) Benzo(g,h,i)perylene	27.015	276	235807	5.340	ng		98

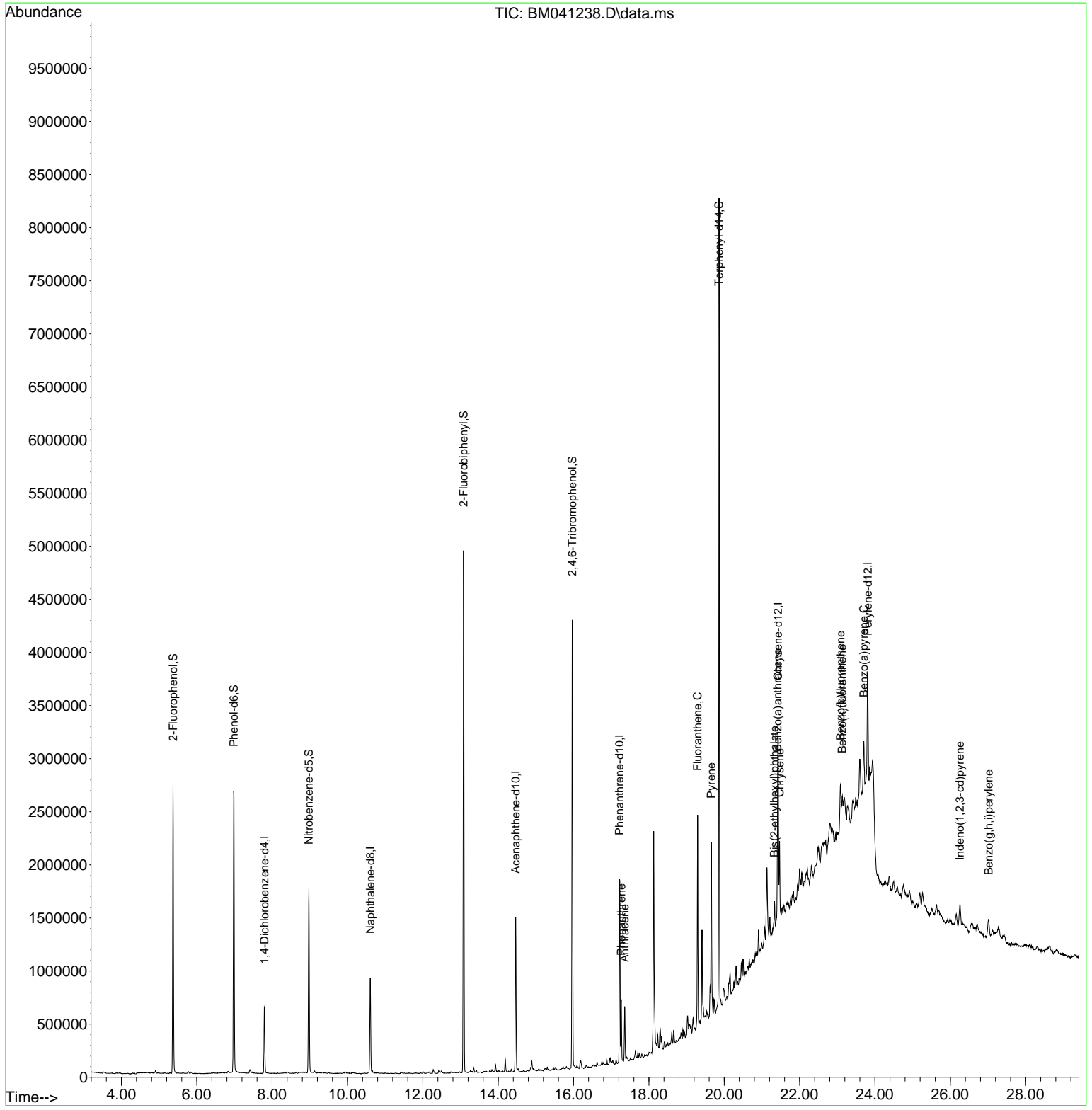
(#) = qualifier out of range (m) = manual integration (+) = signals summed

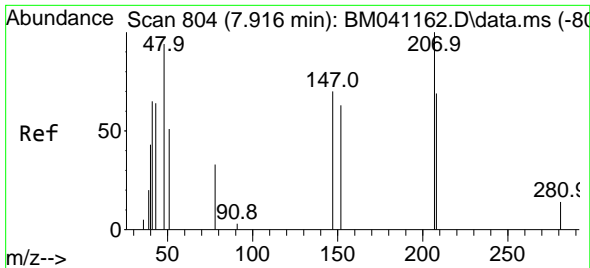
Data Path : Z:\svoasrv\HPCHEM1\BNA\_M\Data\BM080223\  
 Data File : BM041238.D  
 Acq On : 02 Aug 2023 10:58  
 Operator : MA/JU  
 Sample : 03849-01  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
 BNA\_M  
**ClientSampleId :**  
 GROVE-SOIL-0731

Quant Time: Aug 03 03:05:35 2023  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_M\Methods\8270-BM072823.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Aug 02 19:20:51 2023  
 Response via : Initial Calibration

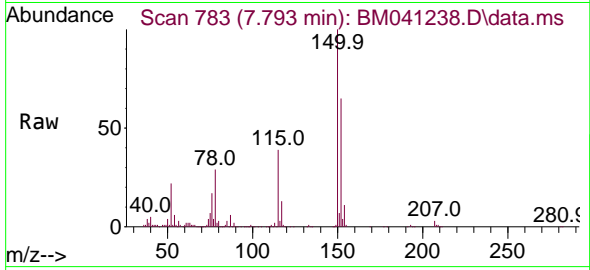
**Manual Integrations**  
**APPROVED**  
 Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023





#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 7.793 min Scan# 71  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

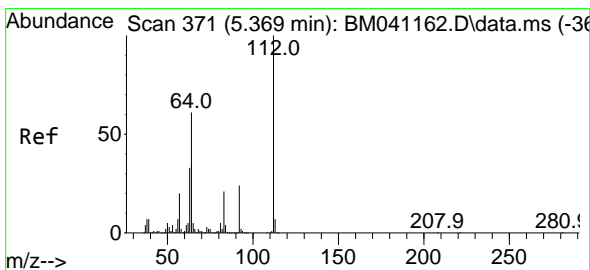
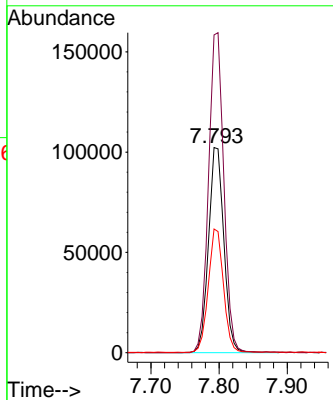
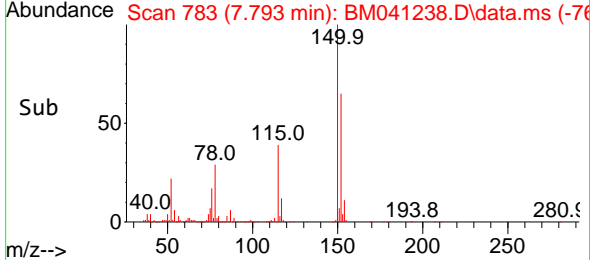
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



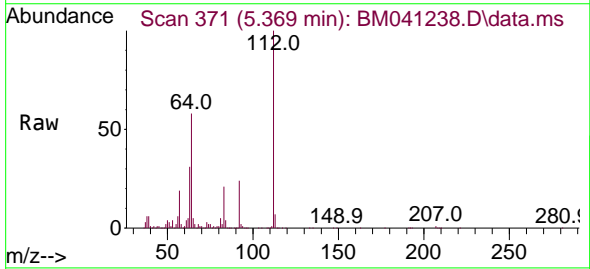
Tgt Ion:152 Resp: 16063  
 Ion Ratio Lower Upper  
 152 100  
 150 154.8 125.5 188.3  
 115 60.3 48.0 72.0

Manual Integrations  
 APPROVED

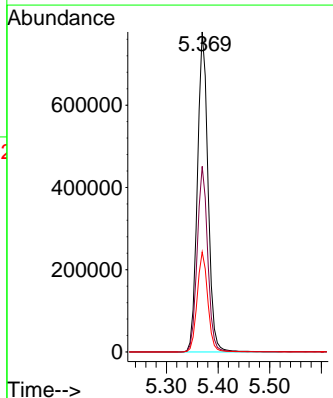
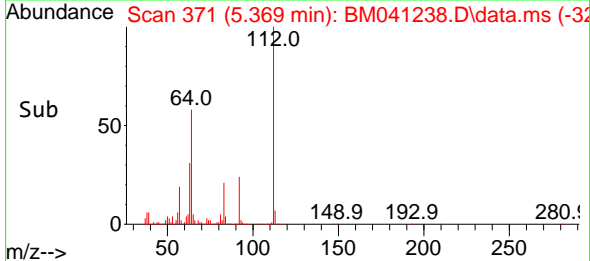
Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023

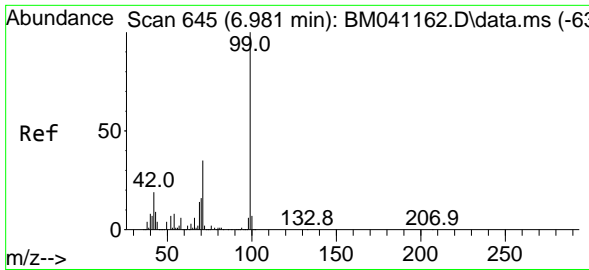


#5  
 2-Fluorophenol  
 Concen: 103.132 ng  
 RT: 5.369 min Scan# 371  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



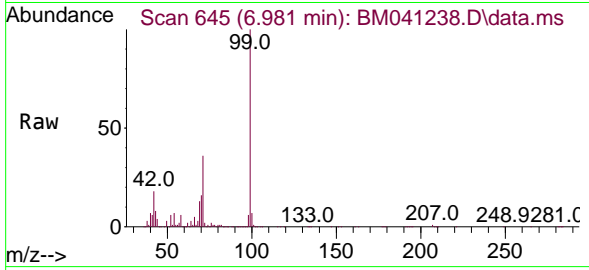
Tgt Ion:112 Resp: 1108414  
 Ion Ratio Lower Upper  
 112 100  
 64 58.0 48.5 72.7  
 63 31.3 26.5 39.7





#7  
Phenol-d6  
Concen: 108.591 ng  
RT: 6.981 min Scan# 645  
Delta R.T. -0.000 min  
Lab File: BM041238.D  
Acq: 02 Aug 2023 10:58

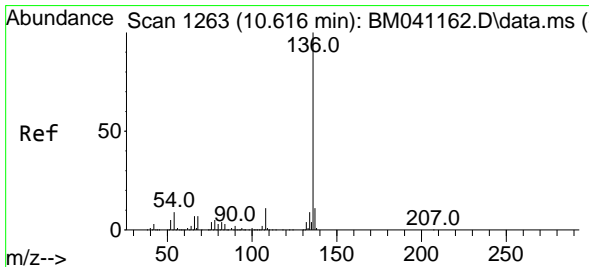
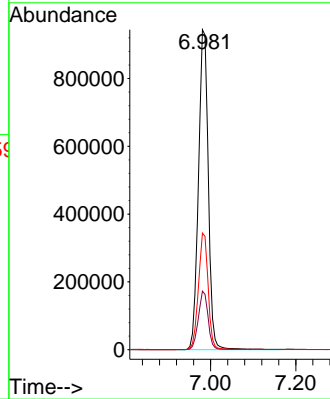
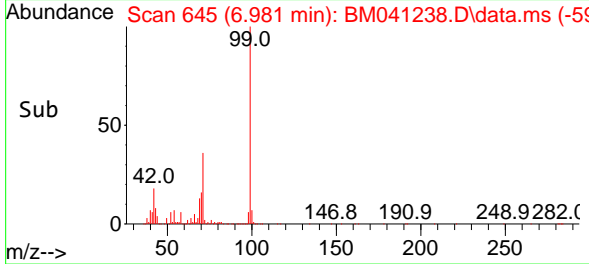
Instrument :  
BNA\_M  
ClientSampleId :  
GROVE-SOIL-0731



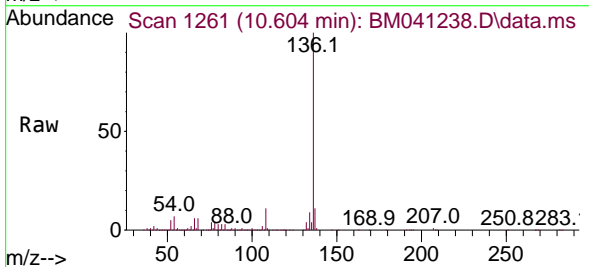
Tgt Ion: 99 Resp: 1512828  
Ion Ratio Lower Upper  
99 100  
42 18.3 15.4 23.0  
71 36.5 28.2 42.4

Manual Integrations  
APPROVED

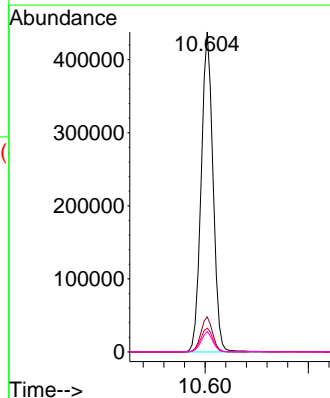
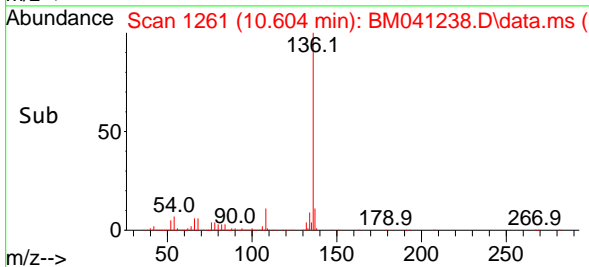
Reviewed By :Yogesh Patel 08/03/2023  
Supervised By :mohammad ahmed 08/03/2023

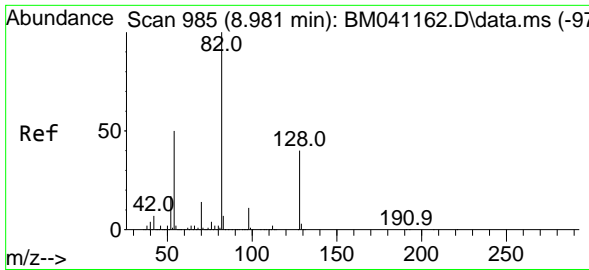


#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.604 min Scan# 1261  
Delta R.T. -0.000 min  
Lab File: BM041238.D  
Acq: 02 Aug 2023 10:58



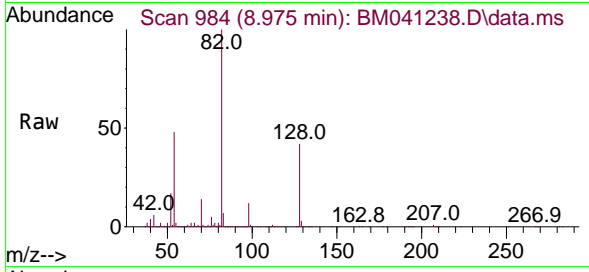
Tgt Ion:136 Resp: 695123  
Ion Ratio Lower Upper  
136 100  
137 11.0 8.8 13.2  
54 7.5 6.9 10.3  
68 6.4 5.4 8.2





#23  
 Nitrobenzene-d5  
 Concen: 65.933 ng  
 RT: 8.975 min Scan# 984  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

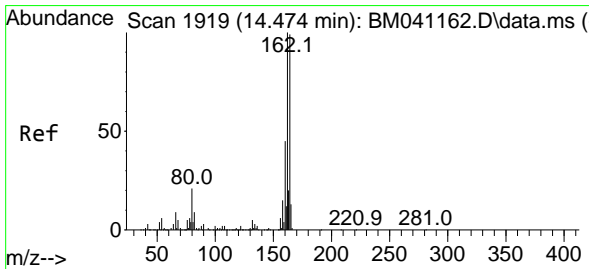
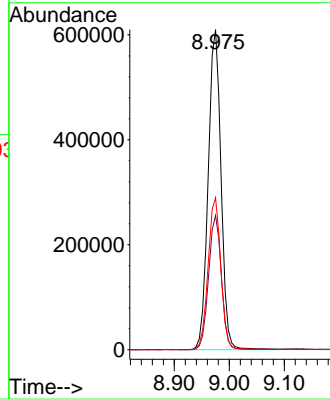
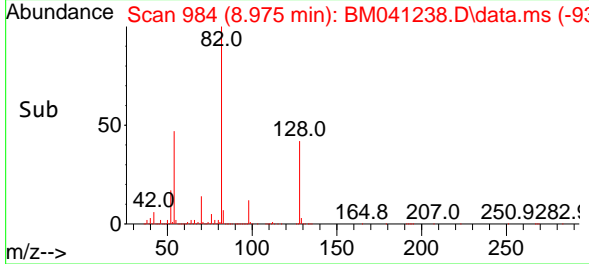
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



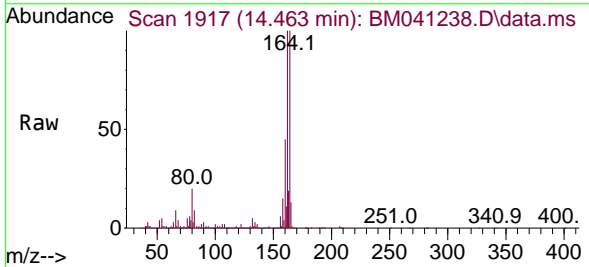
Tgt Ion: 82 Resp: 985520  
 Ion Ratio Lower Upper  
 82 100  
 128 42.0 31.8 47.6  
 54 47.5 40.1 60.1

Manual Integrations  
 APPROVED

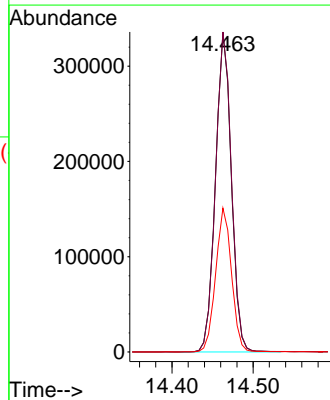
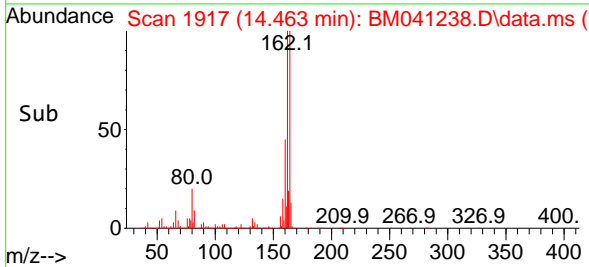
Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023

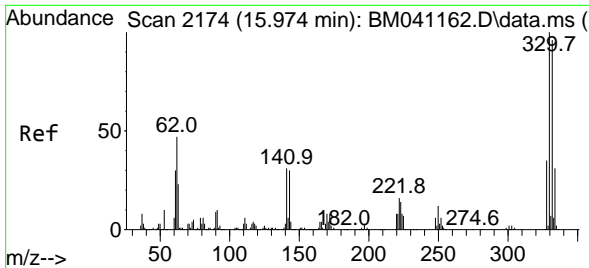


#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 14.463 min Scan# 1917  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



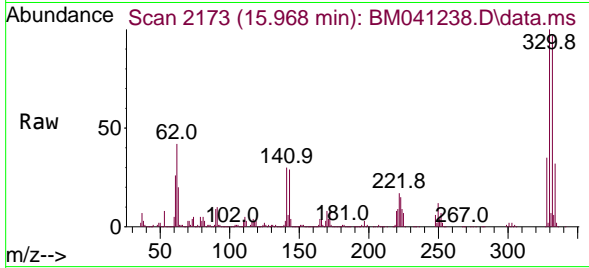
Tgt Ion:164 Resp: 456459  
 Ion Ratio Lower Upper  
 164 100  
 162 100.0 80.4 120.6  
 160 45.0 36.2 54.2





#42  
 2,4,6-Tribromophenol  
 Concen: 121.730 ng  
 RT: 15.968 min Scan# 2173  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

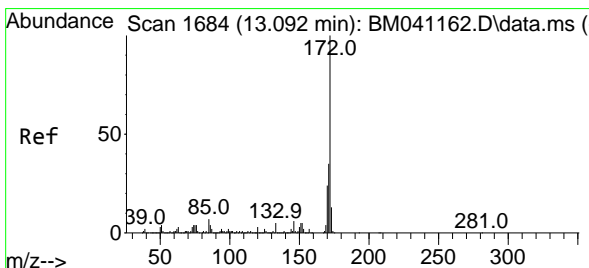
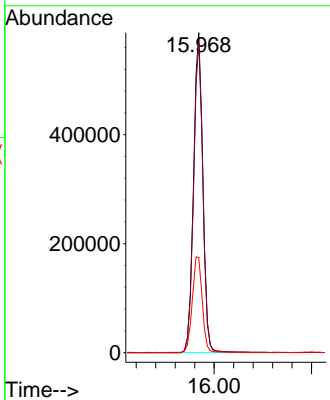
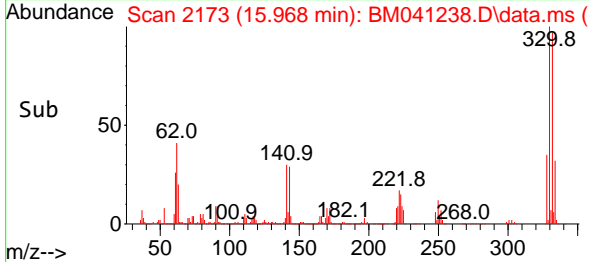
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



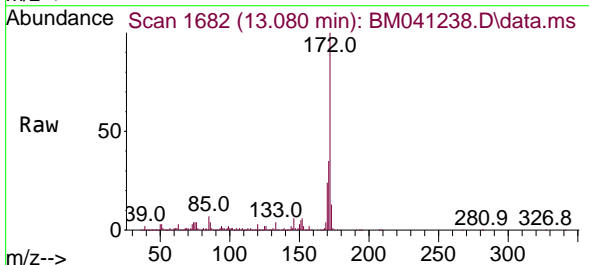
Tgt Ion:330 Resp: 78593  
 Ion Ratio Lower Upper  
 330 100  
 332 96.8 77.7 116.5  
 141 31.7 28.3 42.5

Manual Integrations  
**APPROVED**

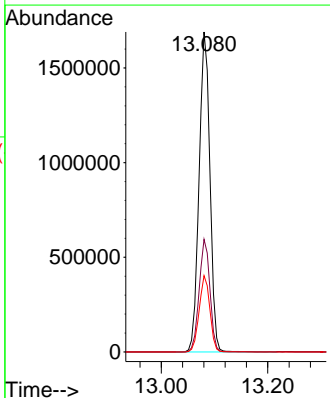
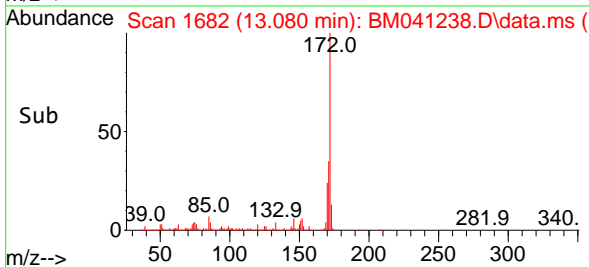
Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023

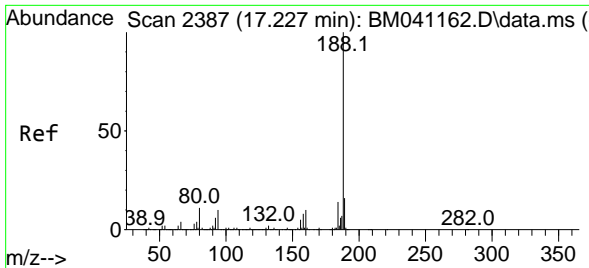


#45  
 2-Fluorobiphenyl  
 Concen: 65.939 ng  
 RT: 13.080 min Scan# 1682  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



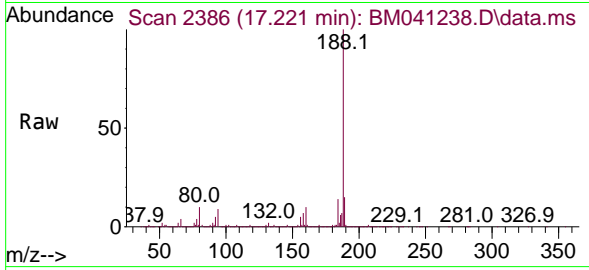
Tgt Ion:172 Resp: 2382630  
 Ion Ratio Lower Upper  
 172 100  
 171 35.2 28.1 42.1  
 170 23.9 18.9 28.3





#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 17.221 min Scan# 21  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

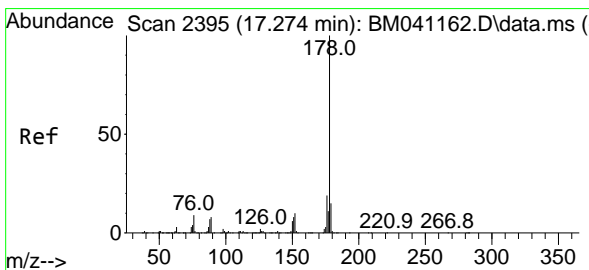
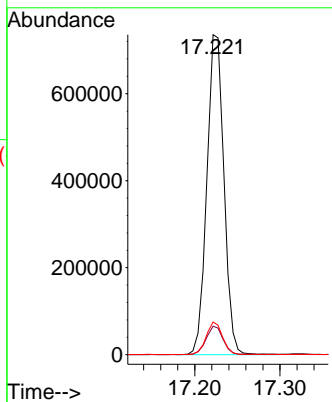
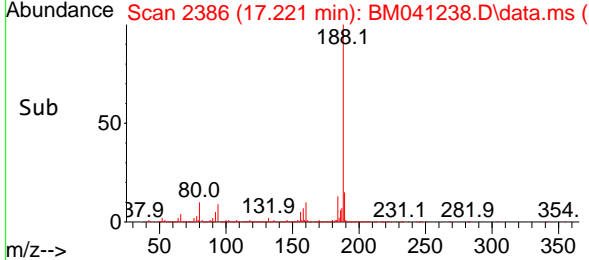
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



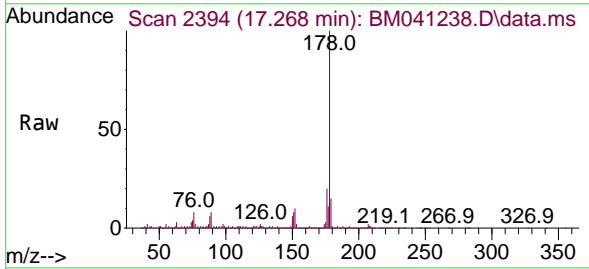
Tgt Ion:188 Resp: 102556  
 Ion Ratio Lower Upper  
 188 100  
 94 8.9 8.2 12.2  
 80 10.2 8.6 13.0

Manual Integrations  
 APPROVED

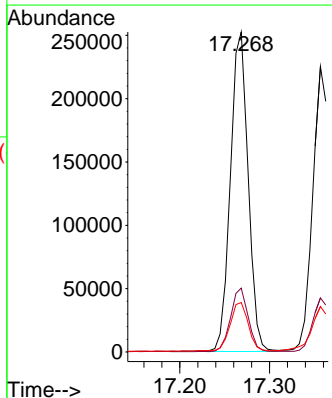
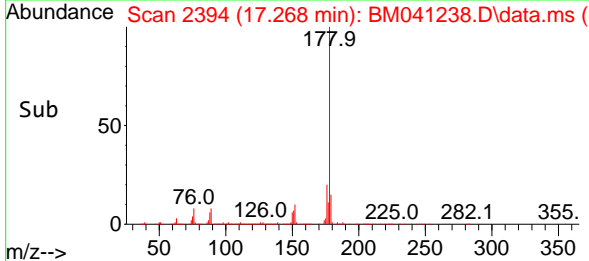
Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023

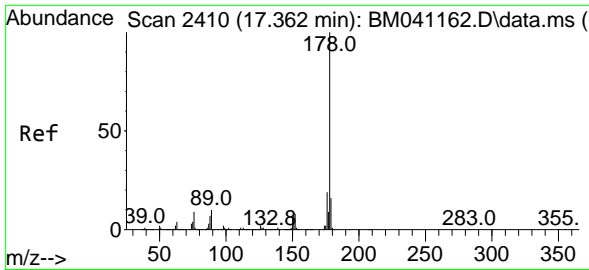


#71  
 Phenanthrene  
 Concen: 6.072 ng  
 RT: 17.268 min Scan# 2394  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



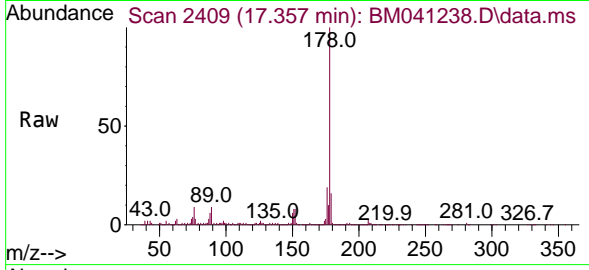
Tgt Ion:178 Resp: 346016  
 Ion Ratio Lower Upper  
 178 100  
 176 20.0 15.6 23.4  
 179 15.4 12.1 18.1





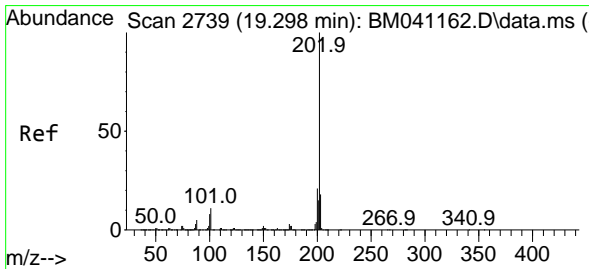
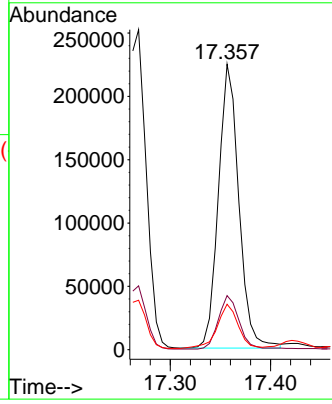
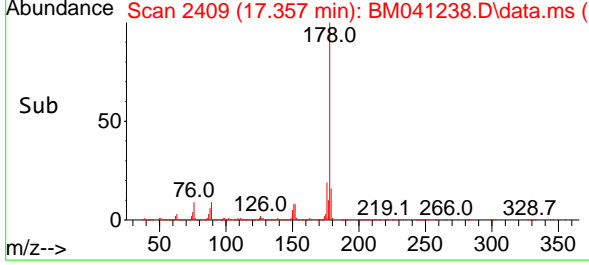
#72  
 Anthracene  
 Concen: 5.638 ng  
 RT: 17.357 min Scan# 2410  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

Instrument : BNA\_M  
 Client Sample Id : GROVE-SOIL-0731

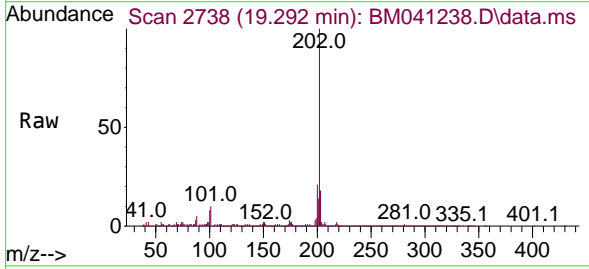


Tgt Ion:178 Resp: 317758  
 Ion Ratio Lower Upper  
 178 100  
 176 18.9 15.2 22.8  
 179 15.9 12.4 18.6

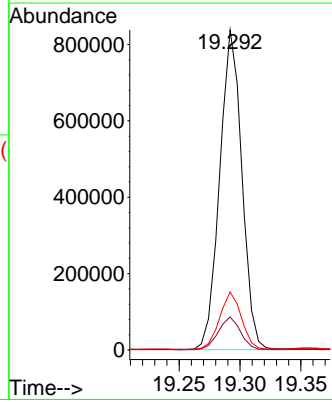
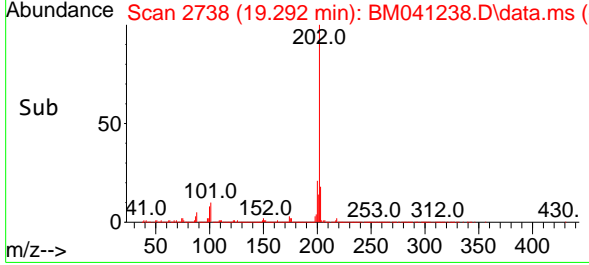
Manual Integrations  
**APPROVED**  
 Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023



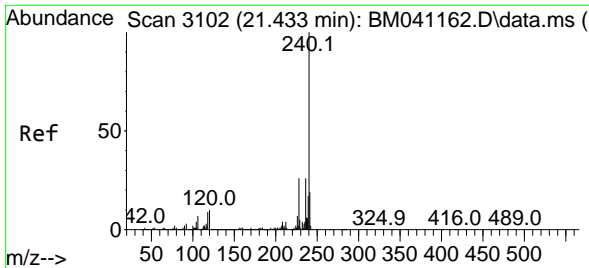
#75  
 Fluoranthene  
 Concen: 16.559 ng  
 RT: 19.292 min Scan# 2738  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



Tgt Ion:202 Resp: 1060057  
 Ion Ratio Lower Upper  
 202 100  
 101 10.3 0.0 30.8  
 203 18.1 0.0 37.6

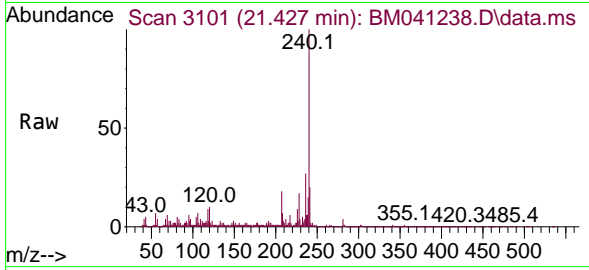






#76  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 21.427 min Scan# 3101  
 Delta R.T. -0.006 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

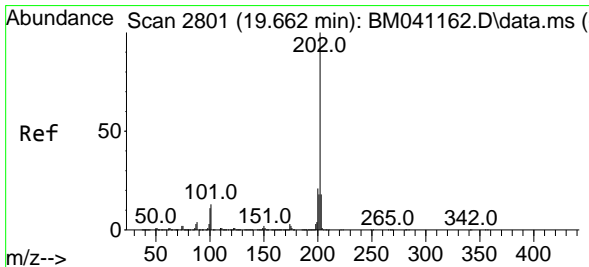
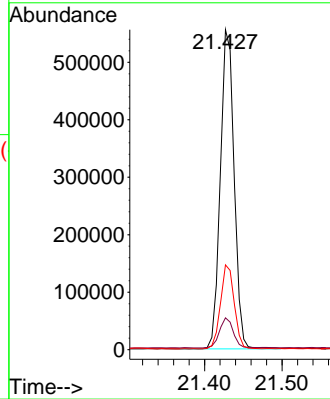
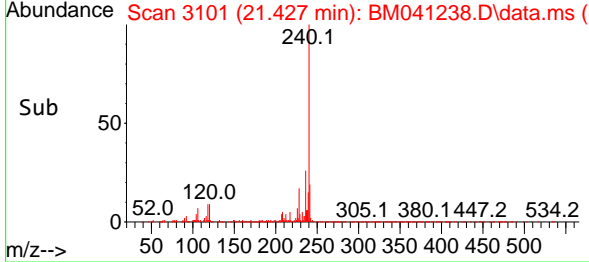
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



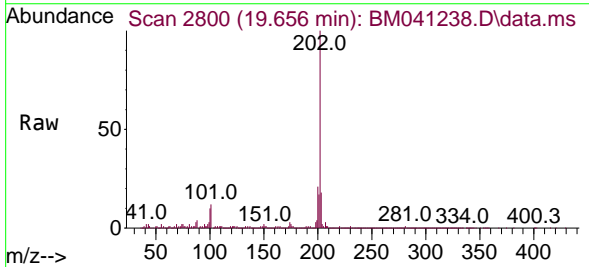
Tgt Ion:240 Resp: 686200  
 Ion Ratio Lower Upper  
 240 100  
 120 10.0 8.3 12.5  
 236 26.5 20.6 30.8

Manual Integrations  
 APPROVED

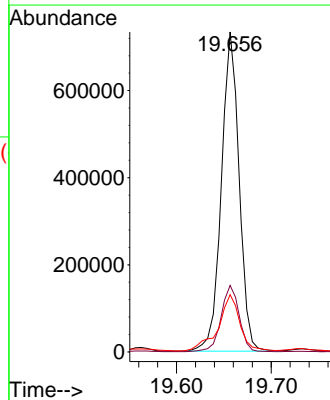
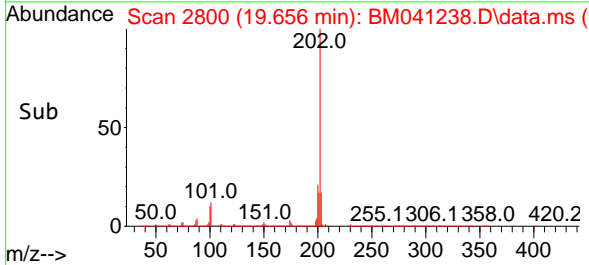
Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023

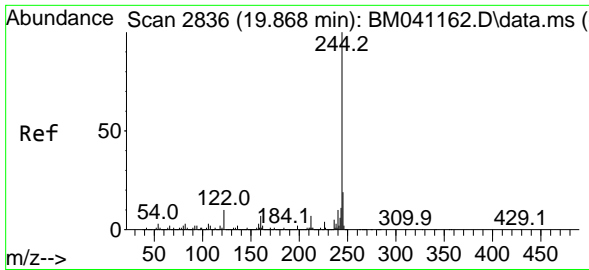


#78  
 Pyrene  
 Concen: 19.925 ng  
 RT: 19.656 min Scan# 2800  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



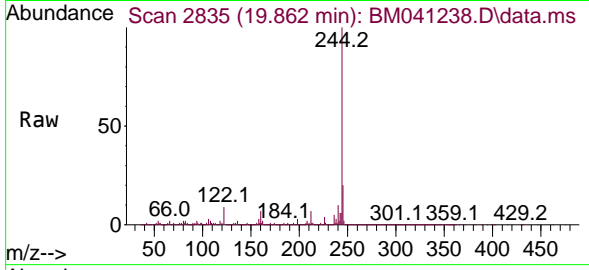
Tgt Ion:202 Resp: 956157  
 Ion Ratio Lower Upper  
 202 100  
 200 20.8 16.9 25.3  
 203 17.9 14.1 21.1





#79  
 Terphenyl-d14  
 Concen: 94.440 ng  
 RT: 19.862 min Scan# 21  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

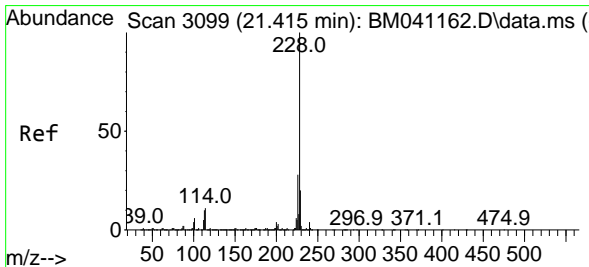
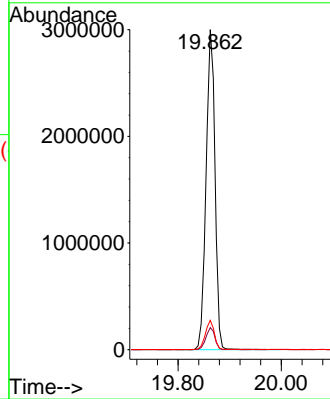
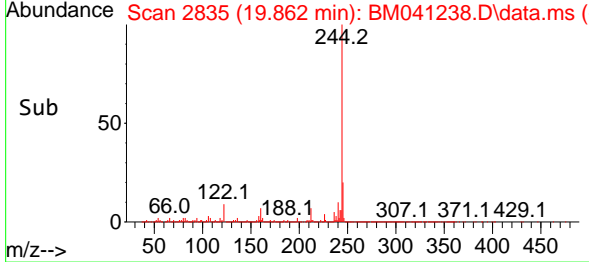
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



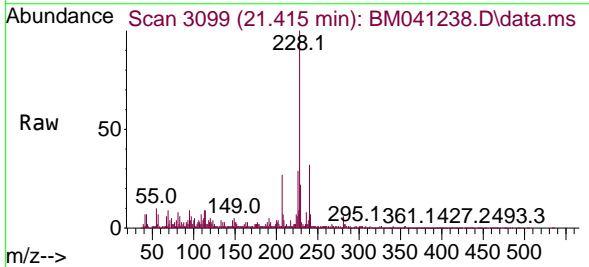
Tgt Ion:244 Resp: 358422  
 Ion Ratio Lower Upper  
 244 100  
 212 6.9 5.4 8.2  
 122 9.2 7.8 11.6

Manual Integrations  
 APPROVED

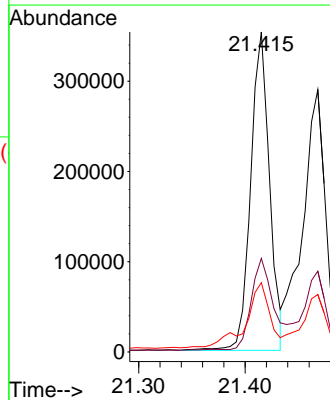
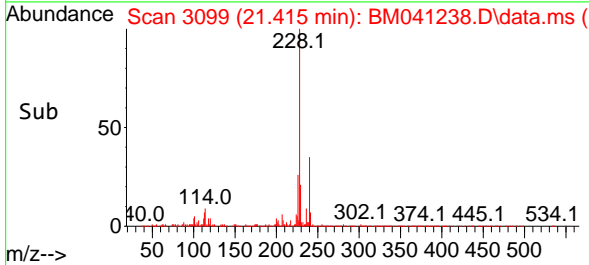
Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023

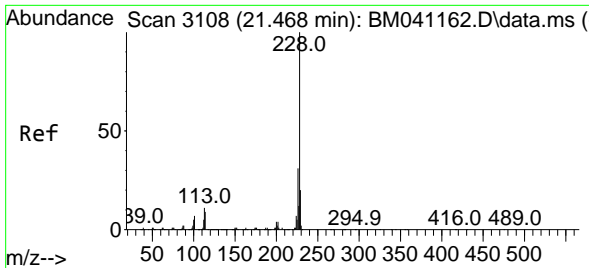


#81  
 Benzo(a)anthracene  
 Concen: 9.331 ng  
 RT: 21.415 min Scan# 3099  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



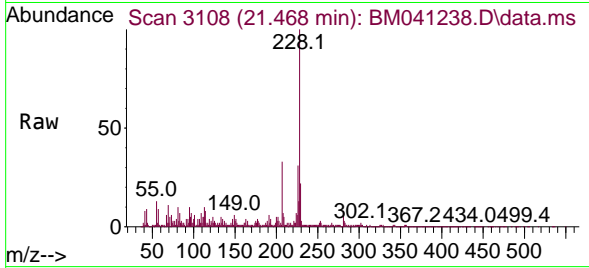
Tgt Ion:228 Resp: 434067  
 Ion Ratio Lower Upper  
 228 100  
 226 29.3 22.4 33.6  
 229 21.7 15.8 23.8





#83  
 Chrysene  
 Concen: 9.521 ng  
 RT: 21.468 min Scan# 3108  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

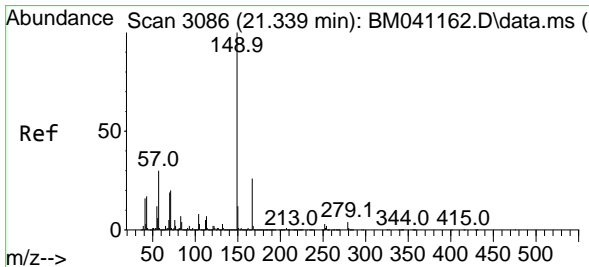
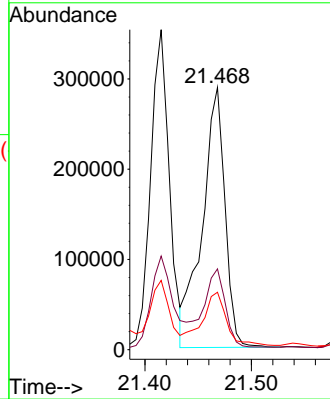
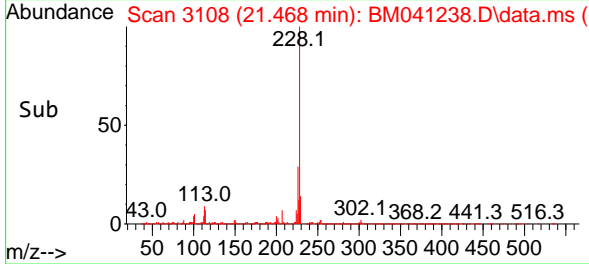
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



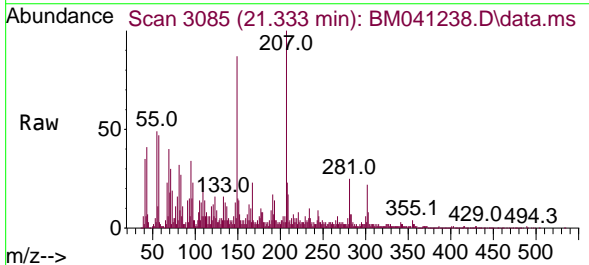
Tgt Ion: 228 Resp: 428378  
 Ion Ratio Lower Upper  
 228 100  
 226 30.8 24.5 36.7  
 229 21.9 15.8 23.8

Manual Integrations  
 APPROVED

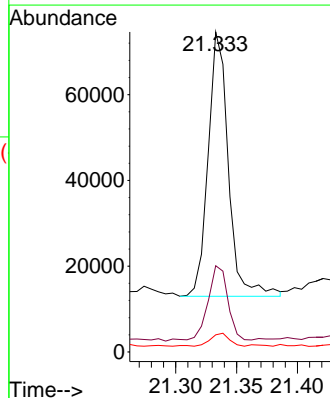
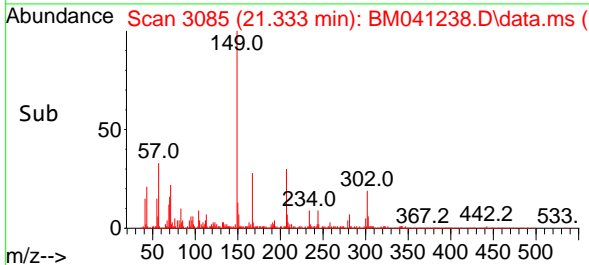
Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023

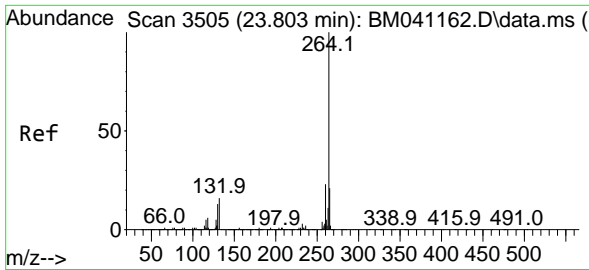


#84  
 Bis(2-ethylhexyl)phthalate  
 Concen: 4.970 ng  
 RT: 21.333 min Scan# 3085  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



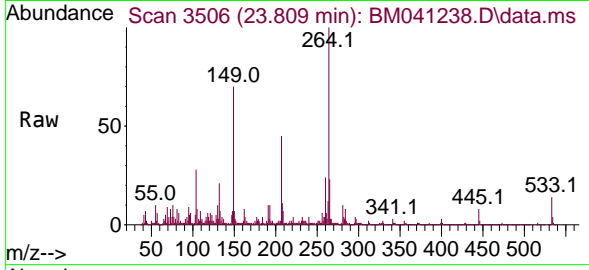
Tgt Ion: 149 Resp: 71433  
 Ion Ratio Lower Upper  
 149 100  
 167 27.0 21.0 31.6  
 279 5.4 3.1 4.7#





#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 23.809 min Scan# 3505  
 Delta R.T. 0.006 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

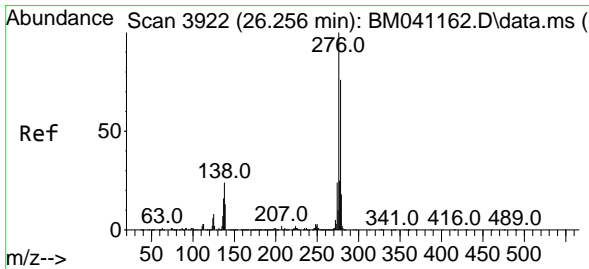
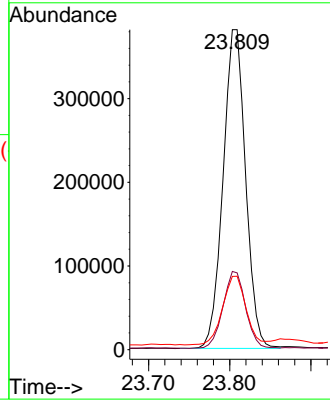
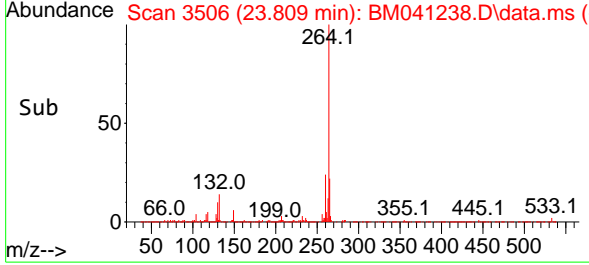
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



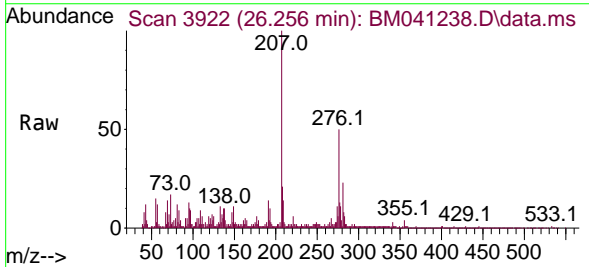
Tgt Ion:264 Resp: 73587  
 Ion Ratio Lower Upper  
 264 100  
 260 24.0 18.5 27.7  
 265 22.9 17.4 26.0

Manual Integrations  
 APPROVED

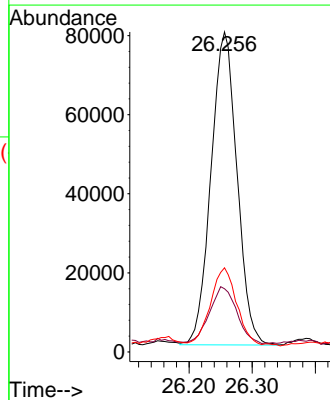
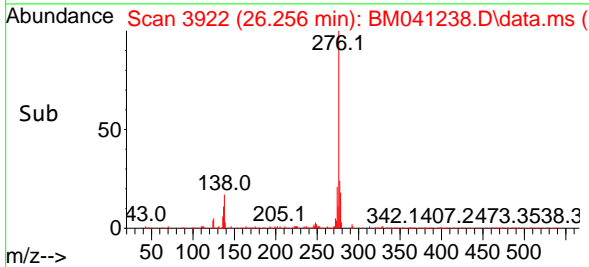
Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023

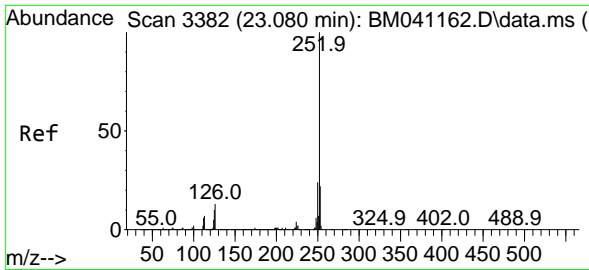


#87  
 Indeno(1,2,3-cd)pyrene  
 Concen: 4.189 ng  
 RT: 26.256 min Scan# 3922  
 Delta R.T. -0.006 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



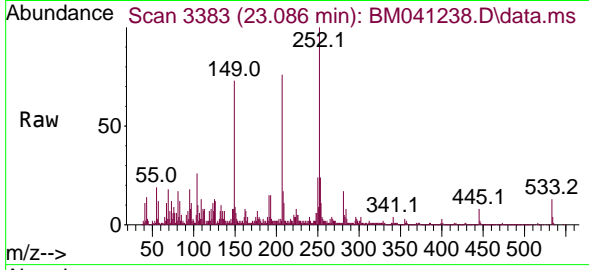
Tgt Ion:276 Resp: 226629  
 Ion Ratio Lower Upper  
 276 100  
 138 18.8 20.0 30.0#  
 277 25.7 20.1 30.1





#88  
 Benzo(b)fluoranthene  
 Concen: 10.720 ng m  
 RT: 23.086 min Scan# 31  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

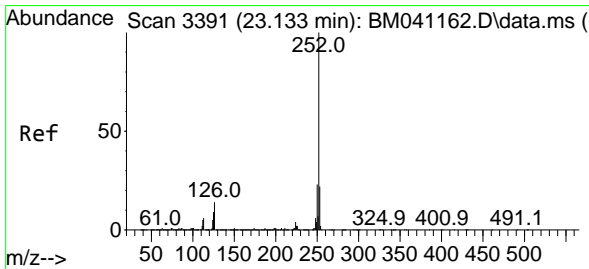
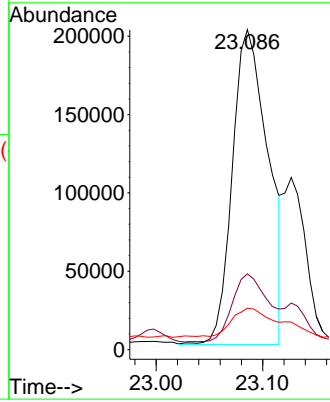
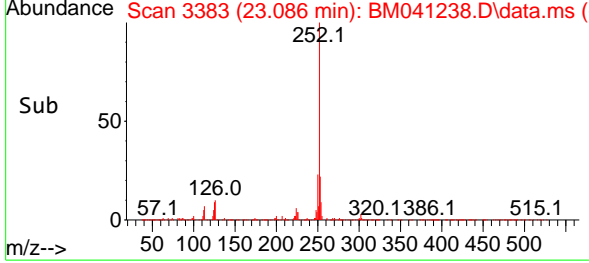
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



Tgt Ion:252 Resp: 46864  
 Ion Ratio Lower Upper  
 252 100  
 253 23.7 17.7 26.5  
 125 12.9 8.2 12.4

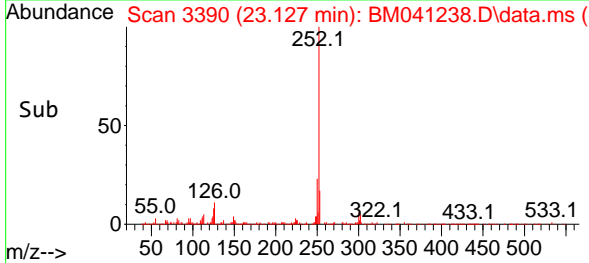
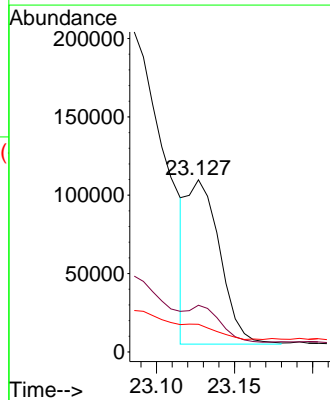
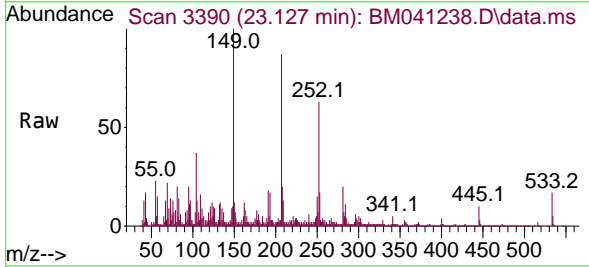
Manual Integrations  
 APPROVED

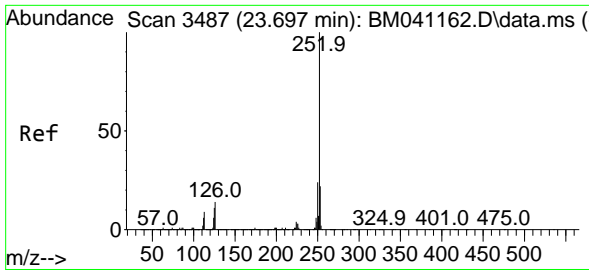
Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023



#89  
 Benzo(k)fluoranthene  
 Concen: 3.417 ng m  
 RT: 23.127 min Scan# 3390  
 Delta R.T. -0.006 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

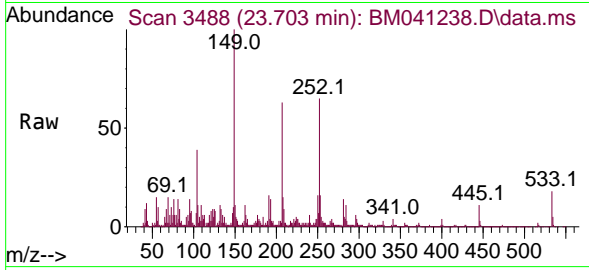
Tgt Ion:252 Resp: 152811  
 Ion Ratio Lower Upper  
 252 100  
 253 27.2 17.4 26.0#  
 125 16.1 7.6 11.4#





#90  
 Benzo(a)pyrene  
 Concen: 7.332 ng  
 RT: 23.703 min Scan# 3488  
 Delta R.T. 0.006 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58

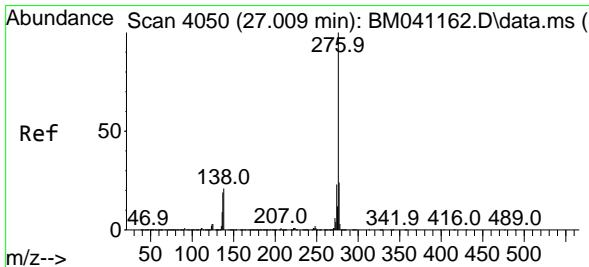
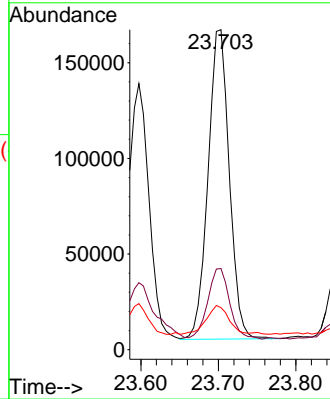
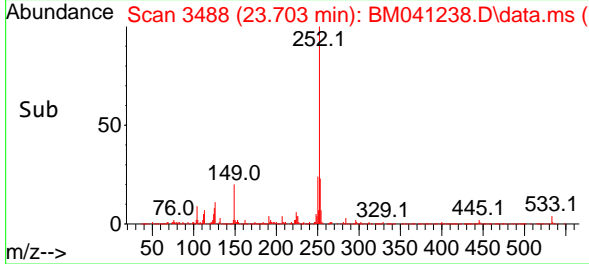
Instrument :  
 BNA\_M  
 ClientSampleId :  
 GROVE-SOIL-0731



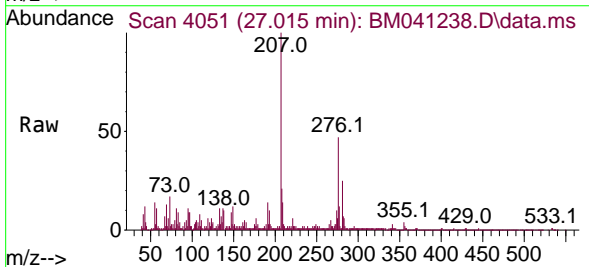
Tgt Ion: 252 Resp: 30796  
 Ion Ratio Lower Upper  
 252 100  
 253 25.4 17.3 25.9  
 125 13.1 9.0 13.4

Manual Integrations  
 APPROVED

Reviewed By :Yogesh Patel 08/03/2023  
 Supervised By :mohammad ahmed 08/03/2023



#92  
 Benzo(g,h,i)perylene  
 Concen: 5.340 ng  
 RT: 27.015 min Scan# 4051  
 Delta R.T. -0.000 min  
 Lab File: BM041238.D  
 Acq: 02 Aug 2023 10:58



Tgt Ion: 276 Resp: 235807  
 Ion Ratio Lower Upper  
 276 100  
 277 25.7 19.1 28.7  
 138 21.1 17.1 25.7

