



Ignitable Liquid Identification Test No. 21-5436 Summary Report

Each sample set consisted of three items: two nylon bags that each contained a carpet remnant to which an ignitable liquid had been added (Items 1 and 2), and one nylon bag that contained a control sample of the carpet substrate (Item 3). Data were returned from 283 participants and are compiled into the following tables:

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This report contains the data received from the participants in this test. Since these participants are located in many countries around the world, and it is their option how the samples are to be used (e.g., training exercise, known or blind proficiency testing, research and development of new techniques, etc.), the results compiled in the Summary Report are not intended to be an overview of the quality of work performed in the profession and cannot be interpreted as such. The Summary Comments are included for the benefit of participants to assist with maintaining or enhancing the quality of their results. These comments are not intended to reflect the general state of the art within the profession.

Participant results are reported using a randomly assigned "WebCode". This code maintains participant's anonymity, provides linking of the various report sections, and will change with every report.

Manufacturer's Information

Each sample set consisted of three items: two nylon bags that contained a carpet remnant to which an ignitable liquid had been added, and one nylon bag that contained a sample of the carpet substrate. Participants were requested to identify and indicate the ASTM class for any ignitable liquid(s) detected in the submitted items.

SUBSTRATE PREPARATION: The carpet was prepared by cutting it into 2x2 inch squares and then removing any loose materials.

ITEMS 1 and 2 (SAMPLE PREPARATION): The ignitable liquid used for Item 1 and Item 2 was a product labeled as Gamsol Odorless Mineral Spirits. It was purchased in 2021 from an online art supplier. After adding 50 μl of the ignitable liquid to the substrate, it was immediately heat-sealed in a nylon bag. This bag was then placed in a larger, pre-labeled nylon bag and heat-sealed. After sealing, each bag was inspected to determine if it contained an adequate amount of headspace. Each item was prepared separately and stored in different locations until the complete sample sets were packaged.

ITEM 3 (NEGATIVE CONTROL): The sample was packaged in the same way as described for Items 1 and 2, but no ignitable liquid was added to the carpet substrate.

SAMPLE SET ASSEMBLY: Once verification was completed, all sample sets were prepared. Prior to packing items into sample pack boxes, each item was again inspected to ensure it contained an adequate amount of headspace. For each sample set, an Item 1, 2, and 3 were each placed into a pre-labeled sample pack box. This process was repeated until all of the sample sets were prepared.

VERIFICATION: Laboratories that conducted predistribution analysis of the items classified the ignitable liquid in Items 1 and 2 as belonging to Isoparaffinic Products. The liquid was classified using the ASTM classification scheme.

**Source: ASTM E 1618-11, Standard Test Method for Ignitable Liquid Residues in Extracts from Fire Debris Samples by Gas Chromatography-Mass Spectrometry, Table 1.*

Summary Comments

This test was designed to allow participants to assess their ability in the extraction and identification of ignitable liquids on carpet remnants packaged in nylon bags. Participants were provided with three items: two nylon bags that each contained a carpet remnant to which an ignitable liquid had been added (Items 1 and 2), and one nylon bag that contained a control sample of the carpet substrate (Item 3). The carpet remnants in the Item 1 and Item 2 bags contained a product labeled as Gamsol™ Odorless Mineral Spirits (Refer to the Manufacturer's Information for preparation details).

Of the 283 participants who reported results for Item 1 and Item 2, 277 (97.9%) classified the ignitable liquid on both items as belonging to the Isoparaffinic Products class. Of the remaining 6 participants, 3 classified it to the Naphthenic Paraffinic Products class, one classified it to the Normal Alkanes Products class, one classified it to Others-Miscellaneous class, and one classified it to the Petroleum Distillates (including De-Aromatized) class. In addition, the majority of the participants that reported the ignitable liquid as an Isoparaffinic Product classified the subclass as Medium.

The most common extraction technique used was heated passive headspace concentration with carbon/charcoal absorbent and solvent desorption. The most common identification technique used was GC/MS.

Ignitable Liquid Identification

Indicate the ASTM E 1618-14 class or classes for any ignitable substances detected in the submitted items.

TABLE 1a - Item 1

WebCode	Item 1: Class	SubClass
287GJA	Isoparaffinic Products	Medium
28L9LK	Isoparaffinic Products	Medium
29GRML	Isoparaffinic Products	medium
2AT38Q	Isoparaffinic Products	
2E62L6	Isoparaffinic Products	medium
2E62PC	Isoparaffinic Products	Medium
2KD6YY	Isoparaffinic Products	Medium
2PKQNG	Isoparaffinic Products	medium
2PQFZL	Isoparaffinic Products	medium
2QWEYG	Isoparaffinic Products	medium
2RU76F	Isoparaffinic Products	Medium
2W6JME	Isoparaffinic Products	Medium
2XZCTE	Isoparaffinic Products	medium
36RE4N	Isoparaffinic Products	medium
37L3MK	Isoparaffinic Products	medium
39N3KV	Naphthenic Paraffinic Products	Medium
3D3FPP	Isoparaffinic Products	Medium
3DKR4N	Isoparaffinic Products	medium
3MUG2E	Isoparaffinic Products	medium
3VNWYD	Isoparaffinic Products	Medium
3XUHPY	Isoparaffinic Products	Medium
3YMHGH	Isoparaffinic Products	Medium
3ZXGEX	Isoparaffinic Products	medium-heavy
47LJ3U	Isoparaffinic Products	Medium
49AN4E	Isoparaffinic Products	MEDIUM
4QP3DW	Isoparaffinic Products	Medium
4R2YKL	Isoparaffinic Products	Medium
4U7AWP	Isoparaffinic Products	Medium
4UP9V9	Isoparaffinic Products	Medium
4YFP4R	Isoparaffinic Products	Medium
4ZDZYV	Isoparaffinic Products	Medium
649824	Isoparaffinic Products	medium
6B9LPQ	Isoparaffinic Products	Medium
6CMXJP	Isoparaffinic Products	Medium
6LNK92	Isoparaffinic Products	C-9 to C-14 Medium Product Range
6LQ4HX	Isoparaffinic Products	Medium

TABLE 1a - Item 1

WebCode	Item 1: Class	SubClass
6RJ9B2	Isoparaffinic Products	medium range
6VE7EY	Isoparaffinic Products	Medium (C10 -C13)
6WU9L8	Isoparaffinic Products	Medium
6XKHGU	Isoparaffinic Products	medium
74QFQY	Isoparaffinic Products	Medium
789M4Z	Isoparaffinic Products	medium
78PWYL	Isoparaffinic Products	Medium
7DVKFU	Isoparaffinic Products	Medium
7GDDFF	Isoparaffinic Products	Medium
7H8DRT	Isoparaffinic Products	Medium
7M2XLG	Isoparaffinic Products	Medium
7R89GB	Isoparaffinic Products	Medium
7T89KH	Isoparaffinic Products	Medium
7TBLE7	Isoparaffinic Products	medium
7VDNZZ	Isoparaffinic Products	Medium
7WQLJ6	Isoparaffinic Products	Medium
7XY976	Isoparaffinic Products	Medium
7ZMDPG	Isoparaffinic Products	medium
87UTMQ	Isoparaffinic Products	Heavy
883RXY	Isoparaffinic Products	Medium
8D7EKD	Isoparaffinic Products	Medium
8WK487	Isoparaffinic Products	Medium
929BYE	Isoparaffinic Products	medium
96B4Y4	Isoparaffinic Products	Heavy (C9-C14)
9738LJ	Isoparaffinic Products	Medium
998WNT	Isoparaffinic Products	Medium
9BJE6D	Isoparaffinic Products	Heavy
9BW2MR	Isoparaffinic Products	Medium range
9N6AHA	Isoparaffinic Products	Medium
9PGE6T	Isoparaffinic Products	medium
9WYUPP	Isoparaffinic Products	Medium
9XUXDC	Isoparaffinic Products	Medium
9YLNAW	Isoparaffinic Products	medium
A24ACJ	Isoparaffinic Products	Medium
A2Q7WC	Isoparaffinic Products	Medium
A3LY2Q	Isoparaffinic Products	medium
A8TRRF	Isoparaffinic Products	Medium
A9MHXU	Isoparaffinic Products	Medium

TABLE 1a - Item 1

WebCode	Item 1: Class	SubClass
ABFR3B	Isoparaffinic Products	Medium
ACLUTU	Isoparaffinic Products	medium
AHC47D	Isoparaffinic Products	
AJ7D99	Isoparaffinic Products	Medium
ALXTPQ	Isoparaffinic Products	Medium
ATDKYP	Isoparaffinic Products	medium
ATEP7K	Isoparaffinic Products	medium
AZWU3R	Isoparaffinic Products	Medium
B2P264	Others - Miscellaneous	Medium
B4QBRQ	Isoparaffinic Products	Medium (C8-C13)
B8QD22	Isoparaffinic Products	Medium
BC43HP	Isoparaffinic Products	Medium (C8-C13)
BERRNM	Isoparaffinic Products	medium
BM7GMV	Isoparaffinic Products	medium range
BNJD6Z	Isoparaffinic Products	Medium
BRGGX2	Isoparaffinic Products	Medium
C3VRN4	Isoparaffinic Products	Medium (C10-C13)
C84DC2	Isoparaffinic Products	Medium
C8LF6V	Isoparaffinic Products	Medium
CAGWLY	Isoparaffinic Products	Medium
CBPGG8	Isoparaffinic Products	Medium
CDRWUJ	Isoparaffinic Products	Medium
CEAXPY	Isoparaffinic Products	medium
CEPRC8	Isoparaffinic Products	medium
CHLV69	Isoparaffinic Products	Medium (C10 - C13)
CQHBQC	Isoparaffinic Products	Medium
CRFU6U	Isoparaffinic Products	
D9F8UM	Isoparaffinic Products	Medium
DB38RH	Isoparaffinic Products	medium
DNR29H	Isoparaffinic Products	medium
DP79RE	Isoparaffinic Products	Heavy
DRR8MN	Isoparaffinic Products	Medium
DU2PWX	Isoparaffinic Products	Medium
DVB8ZH	Isoparaffinic Products	Medium
E4YF3K	Isoparaffinic Products	Medium
E77MG7	Isoparaffinic Products	Medium
E9QRTB	Isoparaffinic Products	medium
EEYV4H	Isoparaffinic Products	Medium

TABLE 1a - Item 1

WebCode	Item 1: Class	SubClass
EFCMUE	Isoparaffinic Products	medium
EGKU4Y	Isoparaffinic Products	Medium
EGPKJB	Isoparaffinic Products	Medium Range
EJ8GRF	Isoparaffinic Products	medium
EJCXQE	Isoparaffinic Products	Medium
EPZ2QB	Isoparaffinic Products	Medium
EUAR6W	Isoparaffinic Products	Medium
EXERG9	Isoparaffinic Products	Medium
F3JMGG	Isoparaffinic Products	Medium
F7LGJT	Isoparaffinic Products	Medium
F8F62N	Isoparaffinic Products	Medium
F8V9RA	Isoparaffinic Products	Medium
FJ3JUP	Isoparaffinic Products	Medium
FLBLQL	Isoparaffinic Products	Medium (C8-C13)
FRG3GA	Isoparaffinic Products	medium
FVJ3EL	Isoparaffinic Products	Medium
FYK779	Isoparaffinic Products	Medium
G7GE9E	Isoparaffinic Products	Medium
GBC992	Isoparaffinic Products	Medium
GBTDHY	Isoparaffinic Products	Heavy
GGKCGN	Isoparaffinic Products	Medium
GHRWZH	Isoparaffinic Products	Medium
GJ8ZTN	Normal Alkanes Products	Medium
GRHFJW	Isoparaffinic Products	Medium
GT9KVG	Petroleum Distillates (including De-Aromatized)	C11-C20
GVZ37V	Isoparaffinic Products	Medium
GWB4TU	Isoparaffinic Products	Medium C10-C12
GYF4XF	Isoparaffinic Products	
H2XNHA	Isoparaffinic Products	Medium
H3E9F8	Isoparaffinic Products	Medium
HJHCUQ	Isoparaffinic Products	Medium to heavy
HLB47W	Isoparaffinic Products	Medium
HP4ERU	Isoparaffinic Products	medium
HT88ME	Isoparaffinic Products	medium
HW7JJE	Isoparaffinic Products	Medium
HYC2PM	Isoparaffinic Products	Medium
J628AV	Isoparaffinic Products	Medium
JGVMYW	Isoparaffinic Products	medium

TABLE 1a - Item 1

WebCode	Item 1: Class	SubClass
JKAPUN	Isoparaffinic Products	moyen
JQEP8Y	Isoparaffinic Products	medium
JVQNEX	Isoparaffinic Products	medium
JWNM2C	Isoparaffinic Products	medium
JYU72T	Isoparaffinic Products	Medium
K9E742	Isoparaffinic Products	Medium
KBGN6X	Isoparaffinic Products	Medium
KCCM2B	Isoparaffinic Products	Medium
KN4V3X	Isoparaffinic Products	medium to heavy
KPYMZQ	Isoparaffinic Products	medium
KR43LB	Isoparaffinic Products	
KTZTDB	Isoparaffinic Products	Medium
LEZB6N	Isoparaffinic Products	medium
LFBXWB	Isoparaffinic Products	Medium
LHC9KX	Isoparaffinic Products	Medium
LKL9RQ	Isoparaffinic Products	Medium
LLUFUJ	Isoparaffinic Products	Medium
LLXP3H	Isoparaffinic Products	medium
LNG3M7	Isoparaffinic Products	Medium
LPXY9E	Isoparaffinic Products	Medium
LQRMRA	Isoparaffinic Products	
LX6Z8K	Isoparaffinic Products	Medium
LX8JFG	Isoparaffinic Products	medium range
M3VPA9	Isoparaffinic Products	Medium
MH7DEW	Isoparaffinic Products	medium
MLTVWH	Isoparaffinic Products	medium
MUNTPC	Isoparaffinic Products	medium
N3C6WP	Isoparaffinic Products	Medium
N4M4DD	Isoparaffinic Products	Medium
N626KL	Isoparaffinic Products	Medium
N6Y7BQ	Isoparaffinic Products	Medium (C10 to C12)
NDGEYM	Isoparaffinic Products	C10 - C13
NE6K7K	Isoparaffinic Products	medium
NGZ2MM	Isoparaffinic Products	medium
NH8FR9	Isoparaffinic Products	Medium
NL6X7M	Isoparaffinic Products	medium
NMLLEM	Isoparaffinic Products	Medium
NQHHD9	Isoparaffinic Products	Medium

TABLE 1a - Item 1

WebCode	Item 1: Class	SubClass
NX27PQ	Isoparaffinic Products	Medium
NX2FR2	Isoparaffinic Products	Medium
P2FZ6M	Isoparaffinic Products	medium
PB349F	Isoparaffinic Products	medium to heavy
PBGFZU	Isoparaffinic Products	Medium
PCEJYB	Isoparaffinic Products	Medium
PJGH3Q	Isoparaffinic Products	Medium
PP7XQX	Isoparaffinic Products	medium
PRTTHR	Isoparaffinic Products	Medium (C8-C13)
PW2GVT	Isoparaffinic Products	medium
Q2AF2X	Isoparaffinic Products	Medium
Q2EE62	Isoparaffinic Products	Medium
Q4U444	Isoparaffinic Products	Medium
QBCEDY	Isoparaffinic Products	Medium
QCAL37	Isoparaffinic Products	Medium
QGNH98	Isoparaffinic Products	medium
QWVMPR	Isoparaffinic Products	medium
QYMCHL	Isoparaffinic Products	Medium
R33DRX	Isoparaffinic Products	
R6MDUY	Isoparaffinic Products	medium
R8DE29	Isoparaffinic Products	Medium
RC9C67	Isoparaffinic Products	medium
RHD2T6	Isoparaffinic Products	
RPVJZL	Isoparaffinic Products	medium in the range of C10-C12
RPX8L7	Isoparaffinic Products	medium
RZJ6VJ	Isoparaffinic Products	medium
T3H46F	Isoparaffinic Products	Isoparaffinic Hydrocarbon Products
T3HCLR	Isoparaffinic Products	Medium
T4A8RV	Isoparaffinic Products	Medium
TC7XGC	Isoparaffinic Products	medium
TGE7Z2	Isoparaffinic Products	Medium
TTPUUK	Isoparaffinic Products	Medium to Heavy
TU3A4R	Isoparaffinic Products	Medium (C10-C13)
TUKCWL	Isoparaffinic Products	Medium
TZDCC3	Isoparaffinic Products	medium
TZRM8Z	Isoparaffinic Products	Medium
U9HJR2	Isoparaffinic Products	medium
UDUN43	Isoparaffinic Products	Medium

TABLE 1a - Item 1

WebCode	Item 1: Class	SubClass
UMHHHJ	Isoparaffinic Products	Medium
URUHNJ	Isoparaffinic Products	medium
V7DFDK	Isoparaffinic Products	Medium
V9WWJP	Isoparaffinic Products	Medium
VA82VR	Isoparaffinic Products	Medium
WCR9UE	Isoparaffinic Products	Medium
WDN3GK	Isoparaffinic Products	Medium
WDQNG8	Isoparaffinic Products	Medium Range
WE2LPH	Isoparaffinic Products	Medium
WEZZPW	Isoparaffinic Products	Medium
WH2WLH	Isoparaffinic Products	Medium
WHYBLV	Isoparaffinic Products	Medium
WNK422	Isoparaffinic Products	Medium
WQN273	Isoparaffinic Products	Medium
WV2MDN	Naphthenic Paraffinic Products	Medium
WV74BM	Isoparaffinic Products	medium
WV7PZT	Isoparaffinic Products	Medium
WV9ML6	Isoparaffinic Products	Medium
WW33ML	Isoparaffinic Products	medium
WXBNL3	Isoparaffinic Products	
WYLRTY	Isoparaffinic Products	Medium
WZ2EHL	Isoparaffinic Products	Medium
X2BFT7	Isoparaffinic Products	medium
X6PTUT	Isoparaffinic Products	Heavy
X8UM84	Isoparaffinic Products	Medium
X9NCPZ	Isoparaffinic Products	Medium
XCRZBG	Isoparaffinic Products	Medium
XGK43Z	Isoparaffinic Products	Medium
XHYXK	Isoparaffinic Products	Medium
XJ6XYZ	Isoparaffinic Products	Medium
XM74CK	Isoparaffinic Products	C10-C13
XN48A3	Isoparaffinic Products	Medium
XTBZX7	Isoparaffinic Products	Medium
XWEQ9R	Isoparaffinic Products	medium
Y4BERH	Isoparaffinic Products	medium
Y63U8E	Isoparaffinic Products	Medium
Y9263E	Isoparaffinic Products	Medium
YBAXUD	Isoparaffinic Products	Medium (C8-C13)

TABLE 1a - Item 1

WebCode	Item 1: Class	SubClass
YC3UGL	Isoparaffinic Products	Medium
YE9P9Y	Isoparaffinic Products	Medium
YKWEQN	Isoparaffinic Products	Medium
YKZ24V	Naphthenic Paraffinic Products	
YL9BVR	Isoparaffinic Products	Medium
YNJTEX	Isoparaffinic Products	Medium
YRZE86	Isoparaffinic Products	Medium
YTTU9L	Isoparaffinic Products	medium
YU6A3L	Isoparaffinic Products	Medium
YYX7DD	Isoparaffinic Products	Medium
ZAXT7B	Isoparaffinic Products	Medium
ZBPWRP	Isoparaffinic Products	medium
ZF2ZKD	Isoparaffinic Products	medium
ZJZD4W	Isoparaffinic Products	
ZQYZY3	Isoparaffinic Products	Medium
ZTBFPX	Isoparaffinic Products	Medium
ZUXCV3	Isoparaffinic Products	Medium
ZVTUW4	Isoparaffinic Products	Medium
ZZ98XQ	Isoparaffinic Products	Medium

Response Summary		Total Participants: 283
Item 1: Class		
Isoparaffinic Products	277 (97.9%)	Totals may add up to more than the total number of participants because participants can report multiple ignitable substance classes detected.
Naphthenic Paraffinic Products	3 (1.1%)	
Normal Alkanes Products	1 (0.4%)	
Others - Miscellaneous	1 (0.4%)	
Petroleum Distillates (including De-Aromatized)	1 (0.4%)	

Ignitable Liquid Identification

Indicate the ASTM E 1618-14 class or classes for any ignitable substances detected in the submitted items.

TABLE 1b- Item 2

WebCode	Item 2: Class	SubClass
287GJA	Isoparaffinic Products	Medium
28L9LK	Isoparaffinic Products	Medium
29GRML	Isoparaffinic Products	medium
2AT38Q	Isoparaffinic Products	
2E62L6	Isoparaffinic Products	medium
2E62PC	Isoparaffinic Products	Medium
2KD6YY	Isoparaffinic Products	Medium
2PKQNG	Isoparaffinic Products	medium
2PQFZL	Isoparaffinic Products	medium
2QWEYG	Isoparaffinic Products	medium
2RU76F	Isoparaffinic Products	Medium
2W6JME	Isoparaffinic Products	Medium
2XZCTE	Isoparaffinic Products	medium
36RE4N	Isoparaffinic Products	medium
37L3MK	Isoparaffinic Products	medium
39N3KV	Naphthenic Paraffinic Products	Medium
3D3FPP	Isoparaffinic Products	Medium
3DKR4N	Isoparaffinic Products	medium
3MUG2E	Isoparaffinic Products	medium
3VNWYD	Isoparaffinic Products	Medium
3XUHPY	Isoparaffinic Products	Medium
3YMHGH	Isoparaffinic Products	Medium
3ZXGEX	Isoparaffinic Products	medium-heavy
47LJ3U	Isoparaffinic Products	Medium
49AN4E	Isoparaffinic Products	MEDIUM
4QP3DW	Isoparaffinic Products	Medium
4R2YKL	Isoparaffinic Products	Medium
4U7AWP	Isoparaffinic Products	Medium
4UP9V9	Isoparaffinic Products	Medium
4YFP4R	Isoparaffinic Products	Medium
4ZDZYV	Isoparaffinic Products	Medium
649824	Isoparaffinic Products	medium
6B9LPQ	Isoparaffinic Products	Medium
6CMXJP	Isoparaffinic Products	Medium
6LNK92	Isoparaffinic Products	C-9 to C-14 Medium Product Range
6LQ4HX	Isoparaffinic Products	Medium
6RJ9B2	Isoparaffinic Products	medium range
6VE7EY	Isoparaffinic Products	Medium (C10 - C13)
6WU9L8	Isoparaffinic Products	Medium
6XKHGU	Isoparaffinic Products	medium

TABLE 1b- Item 2

WebCode	Item 2: Class	SubClass
74QFQY	Isoparaffinic Products	Medium
789M4Z	Isoparaffinic Products	medium
78PWYL	Isoparaffinic Products	Medium
7DVKFU	Isoparaffinic Products	Medium
7GDDEF	Isoparaffinic Products	Medium
7H8DRT	Isoparaffinic Products	Medium
7M2XLG	Isoparaffinic Products	Medium
7R89GB	Isoparaffinic Products	Medium
7T89KH	Isoparaffinic Products	Medium
7TBLE7	Isoparaffinic Products	medium
7VDNZZ	Isoparaffinic Products	Medium
7WQLJ6	Isoparaffinic Products	Medium
7XY976	Isoparaffinic Products	Medium
7ZMDPG	Isoparaffinic Products	medium
87UTMQ	Isoparaffinic Products	Heavy
883RXY	Isoparaffinic Products	Medium
8D7EKD	Isoparaffinic Products	Medium
8WK487	Isoparaffinic Products	Medium
929BYE	Isoparaffinic Products	medium
96B4Y4	Isoparaffinic Products	Heavy (C9-C14)
9738LJ	Isoparaffinic Products	Medium
998WNT	Isoparaffinic Products	Medium
9BJE6D	Isoparaffinic Products	Heavy
9BW2MR	Isoparaffinic Products	Medium range
9N6AHA	Isoparaffinic Products	Medium
9PGE6T	Isoparaffinic Products	medium
9WYUPP	Isoparaffinic Products	Medium
9XUXDC	Isoparaffinic Products	Medium
9YLNAW	Isoparaffinic Products	medium
A24ACJ	Isoparaffinic Products	Medium
A2Q7WC	Isoparaffinic Products	Medium
A3LY2Q	Isoparaffinic Products	medium
A8TRRF	Isoparaffinic Products	Medium
A9MHXU	Isoparaffinic Products	Medium
ABFR3B	Isoparaffinic Products	Medium
ACLU TU	Isoparaffinic Products	medium
AHC47D	Isoparaffinic Products	
AJ7D99	Isoparaffinic Products	Medium
ALXTPQ	Isoparaffinic Products	Medium
ATDKYP	Isoparaffinic Products	medium
ATEP7K	Isoparaffinic Products	medium
AZWU3R	Isoparaffinic Products	Medium
B2P264	Others - Miscellaneous	Medium

TABLE 1b- Item 2

WebCode	Item 2: Class	SubClass
B4QBRQ	Isoparaffinic Products	Medium (C8-C13)
B8QD22	Isoparaffinic Products	Medium
BC43HP	Isoparaffinic Products	Medium (C8-C13)
BERRNM	Isoparaffinic Products	medium
BM7GMV	Isoparaffinic Products	medium range
BNJD6Z	Isoparaffinic Products	Medium
BRGGX2	Isoparaffinic Products	Medium
C3VRN4	Isoparaffinic Products	Medium (C10-C13)
C84DC2	Isoparaffinic Products	Medium
C8LF6V	Isoparaffinic Products	Medium
CAGWLY	Isoparaffinic Products	Medium
CBPGG8	Isoparaffinic Products	Medium
CDRWUJ	Isoparaffinic Products	Medium
CEAXPY	Isoparaffinic Products	medium
CEPRC8	Isoparaffinic Products	medium
CHLV69	Isoparaffinic Products	Medium (C10 - C13)
CQHBQC	Isoparaffinic Products	Medium
CRFU6U	Isoparaffinic Products	
D9F8UM	Isoparaffinic Products	Medium
DB38RH	Isoparaffinic Products	medium
DNR29H	Isoparaffinic Products	medium
DP79RE	Isoparaffinic Products	Heavy
DRR8MN	Isoparaffinic Products	Medium
DU2PWX	Isoparaffinic Products	Medium
DVB8ZH	Isoparaffinic Products	Medium
E4YF3K	Isoparaffinic Products	Medium
E77MG7	Isoparaffinic Products	Medium
E9QRTB	Isoparaffinic Products	medium
EEYV4H	Isoparaffinic Products	Medium
EFCMUE	Isoparaffinic Products	medium
EGKU4Y	Isoparaffinic Products	Medium
EGPKJB	Isoparaffinic Products	Medium Range
EJ8GRF	Isoparaffinic Products	medium
EJCXQE	Isoparaffinic Products	Medium
EPZ2QB	Isoparaffinic Products	Medium
EUAR6W	Isoparaffinic Products	Medium
EXERG9	Isoparaffinic Products	Medium
F3JMGG	Isoparaffinic Products	Medium
F7LGJT	Isoparaffinic Products	Medium
F8F62N	Isoparaffinic Products	Medium
F8V9RA	Isoparaffinic Products	Medium
FJ3JUP	Isoparaffinic Products	Medium
FLBLQL	Isoparaffinic Products	Medium (C8-C13)

TABLE 1b- Item 2

WebCode	Item 2: Class	SubClass
FRG3GA	Isoparaffinic Products	medium
FVJ3EL	Isoparaffinic Products	Medium
FYK779	Isoparaffinic Products	Medium
G7GE9E	Isoparaffinic Products	Medium
GBC992	Isoparaffinic Products	Medium
GBTDHY	Isoparaffinic Products	Heavy
GGKCGN	Isoparaffinic Products	Medium
GHRWZH	Isoparaffinic Products	Medium
GJ8ZTN	Normal Alkanes Products	Medium
GRHFJW	Isoparaffinic Products	Medium
GT9KVG	Petroleum Distillates (including De-Aromatized)	C11-C20
GVZ37V	Isoparaffinic Products	Medium
GWB4TU	Isoparaffinic Products	Medium C10-C12
GYF4XF	Isoparaffinic Products	
H2XNHA	Isoparaffinic Products	Medium
H3E9F8	Isoparaffinic Products	Medium
HJHCUQ	Isoparaffinic Products	Medium to heavy
HLB47W	Isoparaffinic Products	Medium
HP4ERU	Isoparaffinic Products	medium
HT88ME	Isoparaffinic Products	medium
HW7JJE	Isoparaffinic Products	Medium
HYC2PM	Isoparaffinic Products	Medium
J628AV	Isoparaffinic Products	Medium
JGVMYW	Isoparaffinic Products	medium
JKAPUN	Isoparaffinic Products	moyen
JQEP8Y	Isoparaffinic Products	medium
JVQNEX	Isoparaffinic Products	medium
JWNM2C	Isoparaffinic Products	medium
JYU72T	Isoparaffinic Products	Medium
K9E742	Isoparaffinic Products	Medium
KBGN6X	Isoparaffinic Products	Medium
KCCM2B	Isoparaffinic Products	Medium
KN4V3X	Isoparaffinic Products	medium to heavy
KPYMZQ	Isoparaffinic Products	medium
KR43LB	Isoparaffinic Products	
KTZTDB	Isoparaffinic Products	Medium
LEZB6N	Isoparaffinic Products	medium
LFBXWB	Isoparaffinic Products	Medium
LHC9KX	Isoparaffinic Products	Medium
LKL9RQ	Isoparaffinic Products	Medium
LLUFUJ	Isoparaffinic Products	Medium
LLXP3H	Isoparaffinic Products	medium
LNG3M7	Isoparaffinic Products	Medium

TABLE 1b- Item 2

WebCode	Item 2: Class	SubClass
LPXY9E	Isoparaffinic Products	Medium
LQRMRA	Isoparaffinic Products	
LX6Z8K	Isoparaffinic Products	Medium
LX8JFG	Isoparaffinic Products	medium range
M3VPA9	Isoparaffinic Products	Medium
MH7DEW	Isoparaffinic Products	medium
MLTVWH	Isoparaffinic Products	medium
MUNTPC	Isoparaffinic Products	medium
N3C6WP	Isoparaffinic Products	Medium
N4M4DD	Isoparaffinic Products	Medium
N626KL	Isoparaffinic Products	Medium
N6Y7BQ	Isoparaffinic Products	Medium (C10 to C12)
NDGEYM	Isoparaffinic Products	C10 - C13
NE6K7K	Isoparaffinic Products	medium
NGZ2MM	Isoparaffinic Products	medium
NH8FR9	Isoparaffinic Products	Medium
NL6X7M	Isoparaffinic Products	medium
NMLLEM	Isoparaffinic Products	Medium
NQHHD9	Isoparaffinic Products	Medium
NX27PQ	Isoparaffinic Products	Medium
NX2FR2	Isoparaffinic Products	Medium
P2FZ6M	Isoparaffinic Products	medium
PB349F	Isoparaffinic Products	medium to heavy
PBGFZU	Isoparaffinic Products	Medium
PCEJYB	Isoparaffinic Products	Medium
PJGH3Q	Isoparaffinic Products	Medium
PP7XQX	Isoparaffinic Products	medium
PRTTHR	Isoparaffinic Products	Medium (C8-C13)
PW2GVT	Isoparaffinic Products	medium
Q2AF2X	Isoparaffinic Products	Medium
Q2EE62	Isoparaffinic Products	Medium
Q4U444	Isoparaffinic Products	Medium
QBCEDY	Isoparaffinic Products	Medium
QCAL37	Isoparaffinic Products	Medium
QGNH98	Isoparaffinic Products	medium
QWVMPR	Isoparaffinic Products	medium
QYMCHL	Isoparaffinic Products	Medium
R33DRX	Isoparaffinic Products	
R6MDUY	Isoparaffinic Products	medium
R8DE29	Isoparaffinic Products	Medium
RC9C67	Isoparaffinic Products	medium
RHD2T6	Isoparaffinic Products	
RPVJZL	Isoparaffinic Products	medium in the range of C10-C12

TABLE 1b- Item 2

WebCode	Item 2: Class	SubClass
RPX8L7	Isoparaffinic Products	medium
RZJ6VJ	Isoparaffinic Products	medium
T3H46F	Isoparaffinic Products	Isoparaffinic Hydrocarbon Products
T3HCLR	Isoparaffinic Products	Medium
T4A8RV	Isoparaffinic Products	Medium
TC7XGC	Isoparaffinic Products	medium
TGE7Z2	Isoparaffinic Products	Medium
TTPUUK	Isoparaffinic Products	Medium to Heavy
TU3A4R	Isoparaffinic Products	Medium (C10-C13)
TUKCWL	Isoparaffinic Products	Medium
TZDCC3	Isoparaffinic Products	medium
TZRM8Z	Isoparaffinic Products	Medium
U9HJR2	Isoparaffinic Products	medium
UDUN43	Isoparaffinic Products	Medium
UMHHHJ	Isoparaffinic Products	Medium
URUHNJ	Isoparaffinic Products	medium
V7DFDK	Isoparaffinic Products	Medium
V9WWJP	Isoparaffinic Products	Medium
VA82VR	Isoparaffinic Products	Medium
WCR9UE	Isoparaffinic Products	Medium
WDN3GK	Isoparaffinic Products	Medium
WDQNG8	Isoparaffinic Products	Medium Range
WE2LPH	Isoparaffinic Products	Medium
WEZZPW	Isoparaffinic Products	Medium
WH2WLH	Isoparaffinic Products	Medium
WHYBLV	Isoparaffinic Products	Medium
WNK422	Isoparaffinic Products	Medium
WQN273	Isoparaffinic Products	Medium
WV2MDN	Naphthenic Paraffinic Products	Medium
WV74BM	Isoparaffinic Products	medium
WV7PZT	Isoparaffinic Products	Medium
WV9ML6	Isoparaffinic Products	Medium
WW33ML	Isoparaffinic Products	medium
WXBNL3	Isoparaffinic Products	
WYLRTY	Isoparaffinic Products	Medium
WZ2EHL	Isoparaffinic Products	Medium
X2BFT7	Isoparaffinic Products	medium
X6PTUT	Isoparaffinic Products	Heavy
X8UM84	Isoparaffinic Products	Medium
X9NCPZ	Isoparaffinic Products	Medium
XCRZBG	Isoparaffinic Products	Medium
XGK43Z	Isoparaffinic Products	Medium
XHYXXK	Isoparaffinic Products	Medium

TABLE 1b- Item 2

WebCode	Item 2: Class	SubClass
XJ6XYZ	Isoparaffinic Products	Medium
XM74CK	Isoparaffinic Products	C10-C13
XN48A3	Isoparaffinic Products	Medium
XTBZX7	Isoparaffinic Products	Medium
XWEQ9R	Isoparaffinic Products	medium
Y4BERH	Isoparaffinic Products	medium
Y63U8E	Isoparaffinic Products	Medium
Y9263E	Isoparaffinic Products	Medium
YBAXUD	Isoparaffinic Products	Medium (C8-C13)
YC3UGL	Isoparaffinic Products	Medium
YE9P9Y	Isoparaffinic Products	Medium
YKWEQN	Isoparaffinic Products	Medium
YKZ24V	Naphthenic Paraffinic Products	
YL9BVR	Isoparaffinic Products	Medium
YNJTEX	Isoparaffinic Products	Medium
YRZE86	Isoparaffinic Products	Medium
YTTU9L	Isoparaffinic Products	medium
YU6A3L	Isoparaffinic Products	Medium
YYX7DD	Isoparaffinic Products	Medium
ZAXT7B	Isoparaffinic Products	Medium
ZBPWRP	Isoparaffinic Products	medium
ZF2ZKD	Isoparaffinic Products	medium
ZJZD4W	Isoparaffinic Products	
ZQZY3	Isoparaffinic Products	Medium
ZTBFPX	Isoparaffinic Products	Medium
ZUXCV3	Isoparaffinic Products	Medium
ZVTUW4	Isoparaffinic Products	Medium
ZZ98XQ	Isoparaffinic Products	Medium

Response Summary

Total Participants: 283

Item 2: Class

Isoparaffinic Products	277 (97.9%)	Totals may add up to more than the total number of participants because participants can report multiple ignitable substance classes detected.
Naphthenic Paraffinic Products	3 (1.1%)	
Normal Alkanes Products	1 (0.4%)	
Others - Miscellaneous	1 (0.4%)	
Petroleum Distillates (including De-Aromatized)	1 (0.4%)	

Recovery Techniques

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
287GJA	✓			✓ 66	16hrs	Carbon/Charcoal	CS2
28L9LK	✓			✓ 70	16.5 hrs	Carbon/Charcoal	TCE/ether
29GRML	✓			✓ 72	4 hours	Carbon/Charcoal	Carbon disulfide
2AT38Q	✓			✓ 90	10 mins		
2E62L6	✓			✓ 60	<24 hours	Carbon/Charcoal	CS2
2E62PC	✓			✓ 80	2 hours	Carbon/Charcoal	CS2
2KD6YY	✓			✓ 60	16 Hours	Carbon/Charcoal	Carbon Disulfide
2PKQNG	✓			✓ 65	16 hours	Carbon/Charcoal	CS2
2PQFZL	✓			✓ 70	16 hours	Carbon/Charcoal	Carbon Disulfide
2QWEYG	✓			✓ 80	16	Carbon/Charcoal	carbon disulfide
2RU76F	✓			✓ 65	16 hours	Carbon/Charcoal	CS2
Other Recovery Technique: Heated static headspace was performed on Item 1 and Item 2 before the passive headspace technique, 65 C, ~ 20 min., 0.5 mL injection volume							
2W6JME	✓			✓ 70	4 hours	Carbon/Charcoal	Carbon disulfide
2XZCTE	✓			✓ 80	5 hours	Carbon/Charcoal	Diethyl Ether
36RE4N	✓			60		Carbon/Charcoal	Pentane
37L3MK	✓		✓		~24 hours	Carbon/Charcoal	CS2
39N3KV	✓		✓		3min, 30s	SPME DCP	Thermal
3D3FPP		✓		✓ 90	0.1 minutes		
Other Recovery Technique: SPME							
3DKR4N	✓			✓ ~60	~16 hours	Carbon/Charcoal	Carbon Disulfide
3MUG2E	✓			✓ 70	3 hours	Carbon/Charcoal	carbon disulfide
3VNWYD				✓ 90	10 minutes		
Other Recovery Technique: Solvent Extraction - Hexane							
3XUHPY	✓			70		Tenax	Thermal
3YMHGH	✓			✓ 65	16 hours	Carbon/Charcoal	Dichloromethane
3ZXGEX	✓			✓ 80	24 hours	Carbon/Charcoal	Carbon Disulfide
47LJ3U	✓			✓ 70	10 hours	Carbon/Charcoal	Ethyl ether
Other Recovery Technique: Static Headspace Analysis							
49AN4E	✓			✓ 60	16 hours	Carbon/Charcoal	CS2
4QP3DW	✓			✓ 76	~19 hours	Carbon/Charcoal	Carbon Disulfide
4R2YKL	✓			✓ 65	16 Hours	Carbon/Charcoal	CS2

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
4U7AWP	✓			✓ 90			n-hexane
4UP9V9	✓			✓ 80	3 hours	Carbon/Charcoal	Carbon Disulfide
Other Recovery Technique: Heated Headspace Analysis on GC/FID							
4YFP4R	✓			✓ 60	16 hours	Carbon/Charcoal	CS2
4ZDZYV	✓			✓ 80	2 Hrs	Carbon/Charcoal	CS2
649824	✓			✓ 70	16 hours	Carbon/Charcoal	Carbon disulfide
6B9LPQ	✓			✓ 75	~ 6 hours	Carbon/Charcoal	Carbon Disulfide
6CMXJP	✓			✓ 70	5 min	SPME(black)	Thermal
Other Recovery Technique: Solvent extraction							
6LNK92	✓			✓ 60	Overnight	Carbon/Charcoal	Carbon Disulfide
6LQ4HX	✓			✓ 65	~16 hours	Carbon/Charcoal	carbon disulfide
6RJ9B2	✓			✓ 60	16 hours	Carbon/Charcoal	Carbon Disulfide
6VE7EY							
Other Recovery Technique: Direct headspace injection and solvent extraction (Hexane)							
6WU9L8	✓			✓ 90	15 min	PDMS	Thermal
Other Recovery Technique: Static or direct headspace							
6XKHGU	✓			✓ 60	16 hours	Carbon/Charcoal	carbon disulfide
74QFQY	✓			✓ 65	16 Hours	Carbon/Charcoal	Carbon Disulfide
789M4Z	✓			✓ 65	~15 hours	Carbon/Charcoal	CS2
78PWYL	✓			✓ ~70	~16 hours	Carbon/Charcoal	Carbon Disulfide
7DVKFU							
Other Recovery Technique: Passive Headspace 130 Celsius)							
7GDFFF	✓			✓ 68	10 hours	Carbon/Charcoal	CS2
Other Recovery Technique: Direct Headspace							
7H8DRT	✓			✓ 70	~16 hours	Carbon/Charcoal	carbon disulfide
7M2XLG	✓			✓ 80	2 hours	Carbon/Charcoal	n-Pentane
7R89GB	✓			✓ 60	overnight	Carbon/Charcoal	CS2
7T89KH	✓		✓	✓ 80	1 hour, 15 min and spme carbox pdms 30 min		Thermal
7TBLE7	✓			✓ approximately 90	approximately 13 hours	Carbon/Charcoal	carbon disulfide
7VDNZZ				✓ 90	5 hrs	Carbon/Charcoal	CS2
7WQLJ6	✓			✓ 60	3 hours		Thermal
7XY976	✓			✓ 50	~16 hours	Carbon/Charcoal	Carbon Disulfide
7ZMDPG	✓			✓ 70	16 hours	Carbon/Charcoal	CS2
Other Recovery Technique: Simple headspace techniques							

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
87UTMQ	✓			✓ 65	16 hours	Carbon/Charcoal	Carbon Disulfide
883RXY	✓			✓ 60	16 hours	Carbon/Charcoal	Pentane
8D7EKD	✓			✓ 70	16.5	Carbon/Charcoal	Diethyl ether
8WK487	✓			✓ 60	16 hours	Carbon/Charcoal	CS2
929BYE	✓		✓		~24 hours	Carbon/Charcoal	Carbon Disulfide (CS2)
96B4Y4				✓ 70	15 min	SPME PDMS	
9738LJ		✓		✓ 100		TENAX	Thermal
998WNT	✓			✓ 65	16 hours	Carbon/Charcoal	CS2
9BJE6D	✓			✓ 60	10 minutos		
9BW2MR	✓			✓ 70	10 hours	Carbon/Charcoal	Ethyl Ether
Other Recovery Technique: Static headspace extraction at 70C for 30 mins.							
9N6AHA	✓			✓ 65	16 hours	Carbon/Charcoal	Carbon disulfide
Other Recovery Technique: Static Headspace - 60 deg C, ~10-20 min, 0.2mL inj vol							
9PGE6T	✓			✓ 76	4	Carbon/Charcoal	carbon disulfide
9WYUPP		✓	✓	✓ 80	N/A	TENAX TA	
Other Recovery Technique: SPME and Solvent Extraction (n-Hexane)							
9XUXDC	✓			✓ 70	3	Carbon/Charcoal	Carbon disulfide
9YLNAW	✓			✓ 80	8 h	Carbon/Charcoal	dichloromethane/ butanol
A24ACJ	✓		✓		5min	spme	Thermal
A2Q7WC	✓		✓		8 hours	Carbon/Charcoal	Carbon Disulfide
Other Recovery Technique: direct headspace injection							
A3LY2Q	✓			✓ 60	16 hours	Carbon/Charcoal	Dichloromethane / Toluene
A8TRRF	✓			✓ 80	17 hrs	Carbon/Charcoal	CS2
A9MHXU	✓			✓ 80	15min	PDMS/CAR	
Other Recovery Technique: SPME							
ABFR3B	✓			✓ 60-70	~18 hours	Carbon/Charcoal	carbon disulfide
ACLUTU	✓			✓ 80	15H	Carbon/Charcoal	PENTANE
AHC47D	✓			✓ 62	19 hours	Carbon/Charcoal	Carbon Disulfide
AJ7D99	✓			✓ 70		Carbon/Charcoal	Carbon Disulfide
ALXTPQ	✓			✓ 79	16 hours	Carbon/Charcoal	Carbon Disulfide
ATDKYP	✓			✓ 65	~16 hrs	Carbon/Charcoal	CS2
Other Recovery Technique: N/A							
A7EP7K	✓		✓		1hr	Carbon/Charcoal	Thermal

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
AZWU3R	✓			✓	~80	16 hours	Carbon/Charcoal carbon disulfide
B2P264	✓			✓	100		
Other Recovery Technique: Pentane solvent extraction							
B4QBRQ	✓			✓	65	15.5 Hours	Carbon/Charcoal Carbon Disulfide
B8QD22	✓		✓	✓	80	8 hours	Carbon/Charcoal, Tenax carbon disulfide
Other Recovery Technique: ATD							
BC43HP		✓	✓			5min	SPME Thermal
BERRNM	✓			✓	65	16 hours	Carbon/Charcoal Carbon Disulfide
BM7GMV	✓			✓	60	16 hours	Carbon/Charcoal carbon disulfide
BNJD6Z	✓		✓			16-24 hours	Carbon/Charcoal Dichloromethane
BRGGX2	✓			✓	70		Carbon/Charcoal CS2
C3VRN4							
C84DC2	✓			✓	80	16 hours	Carbon/Charcoal CS2
C8LF6V	✓			✓	~80	Overnight	Carbon/Charcoal Carbon Disulfide
CAGWLY	✓			✓	65	16 Hours	Carbon/Charcoal Carbon Disulfide
CBPGG8	✓				60	16	Carbon/Charcoal CS2
CDRWUJ	✓			✓	65	16 hours	Carbon/Charcoal carbon disulfide
CEXPY	✓			✓	70	12-16 hours	Carbon/Charcoal Carbon Disulfide
CEPRC8		✓	✓	✓	80, 100	20 min (80 C), ACS-16 h (100 C)	Tenax DKM (ACS), Thermal
Other Recovery Technique: ACS (Activated Charcoal Stripe)							
CHLV69	✓			✓	~65	~ 17.5 hours	Carbon/Charcoal Carbon disulfide
CQHBQC	✓			✓	~61	5 hours	Carbon/Charcoal CS2
CRFU6U	✓			✓	80	8 hours	Carbon/Charcoal
D9F8UM	✓			✓	82	16 hours	Carbon/Charcoal Carbon Disulfide
DB38RH	✓			✓	80	2 hours	Carbon/Charcoal carbon disulfide
DNR29H	✓			✓	75	4.25 hrs	Carbon/Charcoal carbon disulfide
DP79RE	✓			✓	70	16 Hours	Carbon/Charcoal Dichloromethane
DRR8MN	✓			✓	70	17	Carbon/Charcoal CS2
DU2PWX	✓			✓	60	16 hours	Tenax ATD Tubes Thermal
Other Recovery Technique: Repeat extraction was also completed; Passive headspace, 60°C for 3 hours using Tenax ATD Tubes followed by automated thermal desorption.							
DVB8ZH	✓			✓	~76	~17 hours	Carbon/Charcoal CS2
E4YF3K	✓			✓	60		Carbon/Charcoal Carbon disulfide

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption	
	Passive	Dynamic	Rm Temp	Heated (°C)				
E77MG7	✓			✓	65	16 hours	Carbon/Charcoal	Dichloromethane
E9QRTB	✓			✓	80	~17 hours	Carbon/Charcoal	Carbon Disulfide
EEYV4H	✓			✓	80		SPME (Carboxen-PDMS)	Thermal
EFCMUE	✓		✓			2h	SPME(black)	Thermal
EGKU4Y	✓			✓	60	16 hours	Carbon/Charcoal	Carbon disulfide
EGPKJB	✓			✓	80	2 hours	Carbon/Charcoal	n-Pentane
EJ8GRF	✓			✓	65	16 hours	Carbon/Charcoal	CS2
EJCXQE	✓			✓	65	20 min	SPME(CAR/PDMS)	Thermal
EPZ2QB	✓			✓	65	17 hours	Carbon/Charcoal	Carbon disulfide
EUAR6W	✓			✓	75	4 Hours	Carbon/Charcoal	Carbon Disulfide
EXERG9	✓			✓	80	4	Carbon/Charcoal	Carbon Disulfide
F3JMGG	✓			✓	75	15 hours	Carbon/Charcoal, spme	pentane, Thermal
F7LGJT	✓			✓	80	5 hours	Carbon/Charcoal	carbon disulfide
F8F62N	✓			✓	60	16 hours	Carbon/Charcoal	carbon disulfide
F8V9RA	✓			✓	70	16 Hours	Carbon/Charcoal	Carbon Disulfide
FJ3JUP		✓		✓	90	20 min	Tenax tube	Thermal
FLBLQL	✓			✓	110			Thermal
FRG3GA	✓			✓	80	16 hours	Carbon/Charcoal	CS2
FVJ3EL	✓			✓	~80	16 hours	Carbon/Charcoal	carbon disulfide
FYK779	✓			✓	69	16 hours	Carbon/Charcoal	Carbon Disulfide
G7GE9E	✓			✓	76	4 hours	Carbon/Charcoal	carbon disulfide
GBC992	✓			✓	65	overnight	Carbon/Charcoal	carbon disulfide
GBTDHY	✓			✓	60	48 hours	Carbon/Charcoal	Pentane
GGKCGN	✓			✓	80			
GHRWZH				✓	70	16 hours	Carbon/Charcoal	Carbon disulfide
GJ8ZTN		✓		✓	50	20 min	Tenax-TD	Thermal
GRHFJW	✓			✓	60	16 hours	Carbon/Charcoal	Carbon disulfide
GT9KVG	✓			✓	70	24 hours	Carbon/Charcoal	Carbondisulfide
GVZ37V	✓		✓			2 days	Tenax-TA	Thermal

Other Recovery Technique: SPME-GCMS

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
GWB4TU		✓	✓			Markes Material Emission/Soil Gas C3-AAXX-5304	Thermal
GYF4XF	✓			✓ 67-71	18 hours	Carbon/Charcoal	carbon disulfide
H2XNHA	✓			✓ ~70	~16 hours	Carbon/Charcoal	Carbon Disulfide
H3E9F8	✓			✓ 65	14 hours	Carbon/Charcoal	carbon disulfide
HJHCUQ	✓			✓ 70	14.5 hours	Carbon/Charcoal	carbon disulfide
HLB47W	✓			✓ 70	12-16 Hours	Carbon/Charcoal	Carbon Disulfide
HP4ERU	✓			✓ 40	10 min	SPME (DVB/CAR/PDMS)	Thermal
HT88ME	✓	✓		✓ 80		Carbon/Charcoal	hexane
HW7JJE		✓		100	N/A	Tenax	Thermal
HYC2PM	✓			✓ 70	16 hours	Carbon/Charcoal	Carbon Disulfide
J628AV	✓			✓ 70	22h	Carbon/Charcoal	Toluene, Dichloromethane
JGVMYW	✓			✓ 63	21 hours	Carbon/Charcoal	carbon disulfide
JKAPUN	✓			✓ 90	5 hours	Carbon/Charcoal	CS2
JQEP8Y	✓			✓ 65	16 hours	Carbon/Charcoal	carbon disulfide
JVQNEX	✓			✓ 60	16 hours	Carbon/Charcoal	CS2/PCE int std
JWNM2C	✓			✓ 65	16 hours	Carbon/Charcoal	Carbon disulfide
JYU72T	✓			✓ 80	4 hours	Carbon/Charcoal	Pentane
K9E742	✓			✓ 70	16.5hrs	Carbon/Charcoal	TCE:Ethyl Ether
KBGN6X	✓			✓ 80	18 hrs	Carbon/Charcoal	carbon disulfide
Other Recovery Technique: Headspace							
KCCM2B	✓			✓ 80	2 hours 9 minutes	Carbon/Charcoal	carbon disulfide
KN4V3X	✓		✓		15 min	SPME	Thermal
KPYMZQ	✓			✓ 40-70	16 hours	Carbon/Charcoal	Carbon Disulfide
KR43LB	✓			✓ 65	17 hours	Carbon/Charcoal	carbon disulfide
KTZTDB	✓			✓ 76.5	2.2 hours	Carbon/Charcoal	carbon disulfide
LEZB6N	✓			✓ ~90	~16hrs	Carbon/Charcoal	carbon disulfide
LFBXWB	✓		✓	✓ 60	2hrs and overnight	Carbon/Charcoal	toluene and CS2
LHC9KX	✓			✓ 60		Carbon/Charcoal	CS2
LKL9RQ	✓			✓ 70	3 hours	Carbon/Charcoal	Carbon Disulfide

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
LLUFUJ	✓			✓ 80	8 hours	Carbon/Charcoal	Dichloromethane and Butan-1-ol
LLXP3H	✓			✓ 90	16 Hours	Carbon/Charcoal	CS2
LNG3M7	✓			✓ 65	16 Hours	Carbon/Charcoal	Carbon Disulfide
LPXY9E							Extraction with n_Hexane
LQRMRA	✓			✓ 65	16 hours	Carbon/Charcoal	CS2
LX6Z8K	✓			✓ 60	16 hours	Carbon/Charcoal	CS2
Other Recovery Technique: N/A							
LX8JFG	✓			✓ 65	~16hrs	Carbon/Charcoal	carbon disulfide
M3VPA9	✓			✓ 66	16 hours	Carbon/Charcoal	Carbon Disulfide
MH7DEW	✓			✓ ~65	~17 hrs	Carbon/Charcoal	CS2
MLTVWH	✓			✓ 90		Tenax	Thermal
MUNTPC	✓			✓ 70	~16 hours	Carbon/Charcoal	Carbon Disulfide
N3C6WP	✓			✓ 80		Carbon/Charcoal	CS2
N4M4DD	✓			✓ 70	16 hrs	Carbon/Charcoal	CS2
N626KL	✓			✓ 80	Overnight	Carbon/Charcoal	Carbon Disulfide
N6Y7BQ	✓		✓	✓ 82.5		Carbon/Charcoal	DCM
NDGEYM	✓			✓ 70	48 hours	Carbon/Charcoal	Diethyl ether
Other Recovery Technique: Solvent extraction with diethyl ether							
NE6K7K	✓			✓ 80	overnight	Carbon/Charcoal	CS2C26
NGZ2MM	✓			✓ 65	16 hours	Carbon/Charcoal	Carbon Disulfide
NH8FR9	✓			✓ 77	2 hours	Carbon/Charcoal	Carbon disulfide
NL6X7M	✓			✓ 65	~17 hours	Carbon/Charcoal	carbon disulfide
NMLLEM	✓			✓ 80	16 hours	Carbon/Charcoal	CS2
NQHHD9	✓			✓ 77.5	3 hrs	Carbon/Charcoal	carbon disulfide
NX27PQ	✓			✓ 80	4 hours	Carbon/Charcoal	Pentane
Other Recovery Technique: Heated Headspace Analysis							
NX2FR2	✓			✓ ~64	15 hours	Carbon/Charcoal	CS2
P2FZ6M	✓			✓ 80	4 hours	Carbon/Charcoal	pentane
PB349F	✓			80			
PBGFZU	✓			✓ 80	15h	Carbon/Charcoal	carbon disulfide
Other Recovery Technique: Headspace							
PCEJYB	✓			✓ ~76	~17 h	Carbon/Charcoal	CS2

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
PJGH3Q	✓		✓		24 hours	Carbon/Charcoal	carbon disulfide
PP7XQX	✓			✓ 70	16 hrs	Carbon/Charcoal	CS2
Other Recovery Technique: simple heated headspace (15 min); ~0.5uL headspace sample							
PRTTHR	Other Recovery Technique: n-pentane extraction						
PW2GVT	✓			✓ 80	12-16 h	Carbon/Charcoal	CS2
Q2AF2X		✓		✓ 80	4 mins	Charcoal	pentane
Q2EE62	✓			✓ 65	16	Carbon/Charcoal	CS2
Q4U444	✓			✓ 60	5 min	SPME	Thermal
Other Recovery Technique: solvent extraction with Hexane							
QBCEDY	✓			✓ 75		Carbon/Charcoal	pentane
QCAL37	✓			✓ 80	2 hours	Carbon/Charcoal	Carbon Disulfide
QGNH98	✓			✓ 70	12 hours	Carbon/Charcoal	Ethyl Ether
Other Recovery Technique: Direct (Static) Headspace Analysis							
QWVMPR	✓			✓ 65	15	Carbon/Charcoal	carbon disulfided
QYMCHL	✓			✓ 66	16 hours	Carbon/Charcoal	CS2
R33DRX	✓			✓ 95	24 hrs	Carbon/Charcoal	Dichloromethane
R6MDUY	✓			✓ 80	~16 hours	Carbon/Charcoal	carbon disulfide
R8DE29	✓			✓ 75	4 hours	Carbon/Charcoal	CS2
RC9C67	✓			✓ 75	12 hours	Carbon/Charcoal	CS2
RHD2T6	✓			✓ 80-90	2 hours	Carbon/Charcoal	Carbon disulfide
RPVJZL	✓			✓ 80 and 95	15 min	SPME:65µm DVB-PDMS	Thermal
RPX8L7	✓			✓ 60-70	16 hours	Carbon/Charcoal	Carbon Disulfide
RZJ6VJ	✓			✓ 65	16 hours	Carbon/Charcoal	carbon disulfide
T3H46F	✓			✓ 75		Headspace	
T3HCLR	✓			✓ 85	4 hours	Carbon/Charcoal	Pentane:CS2 1:1
T4A8RV	✓			90		Carbon/Charcoal	CS2
TC7XGC	✓			✓ 75	13h	Tenax TA	Thermal
TGE7Z2	✓		✓		10 minutes	solid-phase microextraction (carbox/PDMS)	Thermal
Other Recovery Technique: solvent extraction with hexane							
TTPUUK	✓			✓ 60	16 hours	Carbon/Charcoal	Carbon disulfide
TU3A4R	✓			✓ ~65	~19 hours	Carbon/Charcoal	carbon disulfide

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
TUKCWL	✓			✓ 69	14 Hours	Carbon/Charcoal	Carbon Disulfide
TZDCC3	✓			✓ 77	3 hours	Carbon/Charcoal	carbon disulfide
TZRM8Z	✓			✓ 73	2.3 Hours	Carbon/Charcoal	Carbon Disulfide
U9HJR2	✓			✓ 65	16 hours	Carbon/Charcoal	Carbon disulfide
UDUN43	✓			✓ 76.4	2.5 hours	Carbon/Charcoal	CS2
UMHHHJ	✓			✓ ~65	16 hours	Carbon/Charcoal	carbon disulfide
URUHNJ	✓			✓ 70	3 hours	Carbon/Charcoal	pentane
V7DFDK	✓			✓ 110	45min		
Other Recovery Technique: solvent extraction with n-pentan							
V9WWJP	✓			✓ 60	15 hours	Carbon/Charcoal	carbon disulfide
VA82VR	✓			✓ 80	2 hours	Carbon/Charcoal	Pentane
WCR9UE		✓	✓	✓ 130		Tenax	Thermal
WDN3GK	✓			✓ 80	16 hours	Carbon/Charcoal	carbon disulfide
Other Recovery Technique: Headspace Analysis							
WDQNG8	✓			✓ 65	16 hours	Carbon/Charcoal	Carbon Disulfide
WE2LPH	✓			✓ 80	4 hours	Carbon/Charcoal	Pentane
WEZZPW	✓			✓ 80	8hr	Carbon/Charcoal	CS2
WH2WLH	✓			80	4 hours	Carbon/Charcoal	Pentane
WHYBLV	✓			✓ 50	5 min	PDMS	Thermal
Other Recovery Technique: SPME							
WNK422	✓			✓ 60	16 hours	Carbon/Charcoal	CS2
WQN273	✓			✓ 82	16,33 hrs	Carbon/Charcoal	Carbon disulfide
Other Recovery Technique: Does not apply							
WV2MDN	✓			✓ 80	8 Hours	Carbon/Charcoal	Acetone
WV74BM	✓			✓ 70	16 hours	Carbon/Charcoal	Pentane
WV7PZT		✓		✓ 80	5 min.	Carbon/Charcoal	pentane
WV9ML6	✓			✓ 70	17 hours	Carbon/Charcoal	CS2
WW33ML	✓		✓		~18 hours	Carbon/Charcoal	carbon disulfide
WXBNL3	✓			✓ 80-90	2 hours	Carbon/Charcoal	Pentane
WYLRTY	✓			✓ 63	16 hours	Carbon/Charcoal	Carbon Disulfide
WZ2EHL	✓		✓		20.75 hours	Carbon/Charcoal	Carbon disulfide
X2BFT7	✓			✓ 68	~4hrs	Carbon/Charcoal	Pentane
X6PTUT	✓			✓ 70	16 hours	Carbon/Charcoal	DCM

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
X8UM84	✓			✓ 65	~18 hours	Carbon/Charcoal	Carbon Disulfide
X9NCPZ	✓			✓ 75	4 hours	Carbon/Charcoal	Carbon Disulfide
XCRZBG				✓ 100	10minutes	Tenax	
XGK43Z	✓			✓ 66	16 Hours	Carbon/Charcoal	Carbon Disulfide
XHYXK	✓			✓ 70	15 hours	Carbon/Charcoal	Carbon Disulfide
XJ6XYZ	✓			✓ 75		Carbon/Charcoal	Carbon Disulfide
XM74CK	✓			✓ 70	16 hours	Carbon/Charcoal	Pentane
XN48A3	✓			✓ 76	~17 hours	Carbon/Charcoal	CS2
XTBZX7	✓			✓ 90	5 sec (Item 1, 2, 3); 20 min (Item 3)	solid phase microextraction (DVB/CAR/PDMS fiber)	Thermal
Other Recovery Technique: solvent extraction using diethyl ether as solvent							
XWEQ9R	✓			✓ 65	16 hours	Carbon/Charcoal	carbon disulfide
Y4BERH	✓		✓		48 hours	Carbon/Charcoal	CS2
Other Recovery Technique: N/A							
Y63U8E	✓			✓ 80	16	Carbon/Charcoal	CS2
Y9263E	✓			✓ 80	16 hours	Carbon/Charcoal	carbon disulfide
YBAXUD	✓			✓ 70	2 days	Carbon/Charcoal	Diethyl Ether
Other Recovery Technique: Solvent extraction - diethyl ether							
YC3UGL	✓		✓		48 Hours	Carbon/Charcoal	CS2
Other Recovery Technique: Simple headspace sampling							
YE9P9Y	✓			✓ 64	approximately 16 hours	Carbon/Charcoal	Carbon Disulfide
YKWEQN	✓			✓ 85			
YKZ24V	✓			✓ 65	16 hours	Carbon/Charcoal	Carbon Disulfide
YL9BVR	✓			✓ 65	16	Carbon/Charcoal	CS2
YNJTEX	✓			✓ 60.0	16 hours	Carbon/Charcoal	CS2
YRZE86	✓			✓ ~68	~4 hours	Carbon/Charcoal	Pentane
YTTU9L	✓			✓ 65	approx. 17 hours	Carbon/Charcoal	CS2
Other Recovery Technique: static headspace							
YU6A3L	✓			✓ 60	About 14 hours	Carbon/Charcoal	Carbon Disulfide
YYX7DD	✓			✓ 80	approximately 18 hours	Carbon/Charcoal	Carbon Disulfide
ZAXT7B	✓			✓ ~80	Overnight	Carbon/Charcoal	CS2/C26
ZBPWRP	✓			✓ 80	16 Hours	Carbon/Charcoal	Carbon Disulfide

TABLE 2

WebCode	Adsorption Headspace		Adsorption Temp		Adsorption Duration	Adsorbent	Desorption
	Passive	Dynamic	Rm Temp	Heated (°C)			
ZF2ZKD	✓			✓ 95			
ZJZD4W	✓			✓ 74	16.5 hours	Carbon/Charcoal	Carbon disulfide
ZQYZY3	✓			✓ 70	16 hours	Carbon/Charcoal	CS2
ZTBFPX	✓			✓ 76	17 hours	Carbon/Charcoal	Carbon Disulfide
ZUXCV3	✓			✓ 70	16 hours	Carbon/Charcoal	CS2
ZVTUW4	✓			✓ 60	16 hours	Carbon/Charcoal	Carbon Disulfide
ZZ98XQ	✓			✓ 60	19 hours	Carbon/Charcoal	carbon disulfide

Response Summary

Participants	Adsorption Headspace		Adsorption Temp		Adsorbent		Desorption	
	Passive	Dynamic	Rm Temp	Heated	Carbon/Charcoal	Other	Thermal	Solvent
283	261	13	25	253	231	36	32	233

Identification Techniques

TABLE 3

WebCode	GC	GC/MS	Other	WebCode	GC	GC/MS	Other	WebCode	GC	GC/MS	Other
287GJA		✓		4ZDZYV		✓		96B4Y4		✓	
28L9LK		✓		649824		✓		9738LJ		✓	
29GRML		✓		6B9LPQ		✓		998WNT		✓	
2AT38Q		✓		6CMXJP		✓		9BJE6D		✓	
2E62L6		✓		6LNK92		✓		9BW2MR		✓	
2E62PC		✓		6LQ4HX		✓		9N6AHA		✓	
2KD6YY		✓		6RJ9B2		✓		9PGE6T		✓	
2PKQNG		✓		6VE7EY		✓		9WYUPP		✓	GC/ATD
2PQFZL		✓		6WU9L8		✓		9XUXDC		✓	
2QWEYG		✓		6XKHGU		✓		9YLNAW		✓	
2RU76F		✓		74QFQY		✓	GC/FID	A24ACJ		✓	
2W6JME		✓		789M4Z		✓		A2Q7WC		✓	
2XZCTE		✓		78PWYL		✓		A3LY2Q		✓	
36RE4N		✓		7DVKFU	✓	✓		A8TRRF		✓	
37L3MK		✓		7GDDFF		✓		A9MHXU		✓	
39N3KV		✓		7H8DRT	✓	✓	assess any unavoidable odor	ABFR3B		✓	
3D3FPP		✓						ACLUTU		✓	
3DKR4N		✓		7M2XLG		✓		AHC47D		✓	
3MUG2E		✓		7R89GB		✓		AJ7D99		✓	
3VNWYD		✓		7T89KH		✓		ALXTPQ		✓	
3XUHPY		✓		7TBLE7	✓	✓		ATDKYP		✓	
3YMHGH		✓		7VDNZZ		✓		ATEP7K		✓	
3ZYGEX		✓		7WQLJ6		✓		AZWU3R		✓	
47LJ3U		✓		7XY976		✓		B2P264	✓		
49AN4E		✓		7ZMDPG		✓		B4QBRQ		✓	
4QP3DW		✓		87UTMQ		✓		B8QD22	✓	✓	ATD-GC-MS
4R2YKL		✓		883RXY		✓		BC43HP		✓	
4U7AWP		✓		8D7EKD		✓		BERRNM		✓	
4UP9V9	✓	✓		8WK487		✓		BM7GMV		✓	
4YFP4R		✓		929BYE		✓		BNJD6Z		✓	

TABLE 3

WebCode	GC	GC/MS	Other	WebCode	GC	GC/MS	Other	WebCode	GC	GC/MS	Other
BRGGX2		✓		EXERG9		✓		JKAPUN		✓	
C3VRN4			Passive Headspace GCMS	F3JMGG		✓		JQEP8Y		✓	
				F7LGJT		✓		JVQNEX		✓	
C84DC2		✓		F8F62N		✓		JWNM2C		✓	
C8LF6V		✓		F8V9RA		✓		JYU72T		✓	
CAGWLY		✓		FJ3JUP		✓		K9E742		✓	
CBPGG8		✓		FLBLQL			ATD-GC/MS	KBGN6X		✓	
CDRWUJ		✓		FRG3GA		✓		KCCM2B		✓	
CEAXPY	✓	✓		FVJ3EL		✓		KN4V3X		✓	
CEPRC8		✓	TD-GC-MS	FYK779		✓		KPYMZQ		✓	
CHLV69		✓		G7GE9E		✓		KR43LB		✓	
CQHBQC		✓		GBC992		✓		KTZTDB		✓	
CRFU6U		✓		GBTDHY		✓		LEZB6N	✓	✓	
D9F8UM		✓		GGKCGN	✓	✓		LFBXWB		✓	
DB38RH		✓		GHRWZH	✓	✓	Odor assessment	LHC9KX		✓	
DNR29H		✓		GJ8ZTN		✓		LKL9RQ	✓	✓	
DP79RE		✓		GRHFJW		✓		LLUFUJ		✓	
DRR8MN		✓		GT9KVG	✓	✓		LLXP3H		✓	
DU2PWX		✓		GVZ37V	✓	✓		LNG3M7		✓	
DVB8ZH		✓		GWB4TU		✓		LPXY9E		✓	
E4YF3K		✓		GYF4XF		✓		LQRMRA		✓	
E77MG7		✓		H2XNHA		✓		LX6Z8K		✓	
E9QRTB		✓		H3E9F8		✓		LX8JFG		✓	
EEYV4H		✓		HJHCUQ		✓		M3VPA9		✓	
EFCMUE		✓		HLB47W	✓	✓		MH7DEW		✓	
EGKU4Y		✓		HP4ERU		✓		MLTVWH		✓	
EGPKJB		✓		HT88ME		✓		MUNTPC	✓	✓	odor assessment
EJ8GRF		✓		HW7JJE		✓		N3C6WP		✓	
EJCXQE		✓		HYC2PM		✓		N4M4DD		✓	
EPZ2QB		✓		J628AV		✓		N626KL		✓	
EUAR6W	✓	✓		JGVMYW		✓					

TABLE 3

WebCode	GC	GC/MS	Other	WebCode	GC	GC/MS	Other	WebCode	GC	GC/MS	Other
N6Y7BQ		✓		RPVJZL	✓	✓		WV7PZT		✓	
NDGEYM		✓		RPX8L7		✓		WV9ML6		✓	
NE6K7K		✓		RZJ6VJ		✓		WW33ML		✓	GC/FID
NGZ2MM		✓		T3H46F		✓		WXBNL3		✓	
NH8FR9		✓		T3HCLR		✓		WYLRTY		✓	
NL6X7M		✓		T4A8RV	✓	✓		WZ2EHL	✓	✓	GC-FID
NMLLEM		✓		TC7XGC		✓		X2BFT7		✓	
NQHHD9		✓		TGE7Z2		✓		X6PTUT		✓	
NX27PQ		✓		TTPUUK		✓		X8UM84		✓	
NX2FR2		✓		TU3A4R		✓		X9NCPZ		✓	
P2FZ6M		✓		TUKCWL		✓		XCRZBG		✓	
PB349F		✓		TZDCC3		✓		XGK43Z		✓	
PBGFZU		✓		TZRM8Z		✓		XHYXK		✓	
PCEJYB		✓		U9HJR2		✓		XJ6XYZ		✓	
PJGH3Q		✓		UDUN43		✓		XM74CK	✓	✓	
PP7XQX		✓		UMHHHJ		✓		XN48A3		✓	
PRTTHR		✓		URUHNJ		✓		XTBZX7		✓	
PW2GVT		✓		V7DFDK		✓		XWEQ9R		✓	
Q2AF2X		✓		V9WWJP		✓		Y4BERH		✓	
Q2EE62		✓		VA82VR		✓		Y63U8E		✓	
Q4U444		✓		WCR9UE		✓		Y9263E		✓	
QBCEDY		✓		WDN3GK		✓		YBAXUD		✓	
QCAL37		✓		WDQNG8		✓		YC3UGL		✓	
QGNH98		✓		WE2LPH		✓		YE9P9Y		✓	
QWVMPR		✓		WEZZPW		✓		YKWEQN		✓	
QYMCHL		✓		WH2WLH		✓		YKZ24V		✓	
R33DRX		✓		WHYBLV		✓		YL9BVR		✓	
R6MDUY		✓		WNK422		✓		YNJTEX		✓	
R8DE29		✓		WQN273		✓		YRZE86		✓	
RC9C67		✓		WV2MDN		✓		YTTU9L		✓	
RHD2T6		✓		WV74BM		✓		YU6A3L		✓	

TABLE 3

WebCode	GC	GC/MS	Other	WebCode	GC	GC/MS	Other	WebCode	GC	GC/MS	Other
YYX7DD		✓									
ZAXT7B		✓									
ZBPWRP		✓									
ZF2ZKD		✓									
ZJZD4W		✓									
ZQYZY3		✓									
ZTBFPX		✓									
ZUXCV3		✓									
ZVTUW4		✓									
ZZ98XQ		✓									

Response Summary		
Participants	GC	GC/MS
283	20	280

Conclusions

TABLE 4

WebCode	Conclusions
287GJA	Item #1: the presence of a Medium Isoparaffinic product was detected in this sample. Item #2: the presence of a Medium Isoparaffinic product was detected in this sample. Item #3: no ignitable liquids detected in this sample.
28L9LK	Analysis by Gas Chromatography/Mass Spectrometry of the carpet square and plastic (Item 1A) reveals the presence of a medium isoparaffinic product. Examples of medium isoparaffinic products include: some paint thinners, some charcoal starters, and some copier toners. Analysis by Gas Chromatography/Mass Spectrometry of the carpet square and plastic (Item 1B) reveals the presence of a medium isoparaffinic product. Examples of medium isoparaffinic products include: some paint thinners, some charcoal starters, and some copier toners. Analysis by Gas Chromatography/Mass Spectrometry of the carpet square and plastic (Item 1C) fails to reveal the presence of any ignitable liquids. The procedure employed does not detect the presence of light volatiles such as certain alcohols and acetone.
29GRML	For Item 1: Item 1 contained a medium isoparaffinic product. Examples of which include some charcoal starters, some paint thinners, and some copier toners. For Item 2: Item 2 contained a medium isoparaffinic product. Examples of which include some charcoal starters, some paint thinners, and some copier toners. No ignitable liquids were detected in item 3.
2AT38Q	For Item 1 and Item 2, I found the traces of Isoparaffinic Products.
2E62L6	ITEMS: 1: a sealed cardboard box identified as "2021 CTS Forensic Testing Program Test No. 21-5436: IGNITABLE LIQUID IDENTIFICATION Sample Pack: IL" containing: 1-1: a heat-sealed nylon bag containing unburned carpet identified as "Test No. 21-5436 Item 1", 1-2: a heat-sealed nylon bag containing unburned carpet identified as "Test No. 21-5436 Item 2", 1-3: a heat-sealed nylon bag containing unburned carpet identified as "Test No. 21-5436 Item 3". RESULTS: Gas chromatography and mass spectrometry were used to analyze the samples in items #1-1, #1-2, and #1-3. A medium range isoparaffinic product was present in items #1-1 and #1-2. Common products containing a medium range isoparaffinic are: some charcoal starters, some paint thinners, and some copier toners. No ignitable liquids were identified in item #1-3.
2E62PC	Item 1). An ignitable liquid was identified. The ignitable liquid is a Medium Isoparaffinic Product. Examples of such products include some charcoal starter fluids and mineral spirit products. Item 2). An ignitable liquid was identified. The ignitable liquid is a Medium Isoparaffinic Product. Examples of such products include some charcoal starter fluids and mineral spirit products. Item 3). No ignitable liquid was identified besides background or matrix compounds.
2KD6YY	RESULTS OF ANALYSIS: Item 1.1 was extracted by passive adsorption/elution and analyzed by gas chromatography-mass spectrometry. Item 1.2 was extracted by passive adsorption/elution and analyzed by gas chromatography-mass spectrometry. Item 1.3 was extracted by passive adsorption/elution and analyzed by gas chromatography-mass spectrometry. Item 1: Not analyzed. Item 1.1: A medium isoparaffinic product was identified in the heat-sealed fire debris bag containing a heat-sealed fire debris bag containing an approximately 2" x 2" square of unburned red carpet. Examples of medium isoparaffinic products are charcoal starters, paint thinners and copier toners. Item 1.2: A medium isoparaffinic product was identified in the heat-sealed fire debris bag containing a heat-sealed fire debris bag containing an approximately 2" x 2" square of unburned red carpet. Examples of medium isoparaffinic products are charcoal starters, paint thinners and copier toners. Item 1.3: No ignitable liquids were identified in the heat-sealed fire debris bag containing a heat-sealed fire debris bag containing an approximately 2" x 2" square of unburned red carpet. (control) A charcoal strip preserved in a glass vial was retained with each item of evidence to be returned to the submitting agency.
2PKQNG	Exhibits 1 and 2 contained a medium isoparaffinic product, which is an ignitable liquid. Examples of medium isoparaffinic products include some charcoal starters, paint thinners, and solvent cleaners. No ignitable liquids were identified in Exhibit 3.
2PQFZL	Item 1, Carpet sample from the Basement: A medium isoparaffinic product was identified in this

TABLE 4

WebCode	Conclusions
	sample. Examples of medium isoparaffinic products include, but are not limited to charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils and gun oils. Item 2, Carpet sample from the Front Door: A medium isoparaffinic product was identified in this sample. Examples of medium isoparaffinic products include, but are not limited to charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils and gun oils. Item 3 was analyzed for quality control purposes.
2QWEYG	Residues of a medium isoparaffinic product were identified on Items 1 through 3. It should be noted that the levels of isoparaffinic product identified on Item 3 were significantly less than those identified on Items 1 and 2. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. Items 1 through 3 were analyzed using a passive adsorption/elution technique followed by analysis with gas chromatography/mass spectrometry (GC/MS).
2RU76F	Item 1 and Item 2 were sampled for ignitable liquid residues using a static headspace technique on August 18, 2021 and a passive charcoal adsorption technique on August 19, 2021. Item 3 was also sampled for ignitable liquid residues using a passive charcoal adsorption technique on August 19, 2021. The samples were analyzed using gas chromatography with mass spectrometry. A medium isoparaffinic product, an ignitable liquid, was identified in Item 1 and Item 2. Examples of medium isoparaffinic products include some charcoal starters, paint thinners, and copier toners. No ignitable liquid residues were identified in Item 3 (substrate control).
2W6JME	An ignitable liquid classified as a medium isoparaffinic product was identified in Item 1 and Item 2. Examples of products that contain medium isoparaffinic products include, but are not limited to, some specialty solvents. No recognizable ignitable liquid was identified in Item 3.
2XZCTE	Items 1 and 2 contain components identifiable as a medium isoparaffinic product similar to if not "Isopar L". Item 3 failed to reveal the presence of an identifiable ignitable liquid
36RE4N	Items 1 and 2 were found to contain a medium isoparaffinic product (a petroleum product). Examples of a medium isoparaffinic product include but are not limited to some specialty solvents and some fabric and furniture protection products. No ignitable liquids were detected in Item 3.
37L3MK	An isoparaffinic product in the medium range was identified in item 1. Examples of isoparaffinic products in the medium range include, but are not limited to, some charcoal starters, some paint thinners and some copier toners. An isoparaffinic product in the medium range was identified in item 2. Examples of isoparaffinic products in the medium range include, but are not limited to, some charcoal starters, some paint thinners and some copier toners. No ignitable liquid residues were identified in item 3.
39N3KV	Item 1: Findings: Branched alkanes, some n-alkanes, cycloalkanes, alkenes (C9-C13). Assessment: Due to the findings it is most probable that the carpet sample contained a naphthenic paraffinic product (e.g. cyclohexane-based solvent, charcoal starter, insecticide vehicles, lamp oil). Item 2: Findings: see Item 1. Assessment: see Item 1, less concentrated than Item 1. Item 3: No ignitable liquids were detected. Conclusion: We detected a naphthenic paraffinic product on item 1 as well as on item 2. This product is an ignitable liquid and may be used to initiate or accelerate an arson.
3D3FPP	Sample 1 and Sample 2 both tested "positive" for the presence of an Ignitable Liquid. Based on the comparison to reference materials, this analysis satisfied the requirements to indicate the presence of a Isoparaffinic Product.
3DKR4N	Instrumental analysis of exhibits #1 and 2 revealed medium isoparaffinic product. No ignitable liquid was detected in exhibit #3.
3MUG2E	An ignitable liquid classified as a medium isoparaffinic product was identified in Item 1 and Item 2. Examples of medium isoparaffinic products include, but are not limited to, some specialty solvents. No recognizable ignitable liquids were identified in Item 3.
3VNWYD	On analysis: i). An isoparaffinic products was detected on Item 1 subclass (Medium (C8-C13). ii). An isoparaffinic products was detected on Item 2 subclass (Medium (C8-C13). iii). No ignitable liquid was detected on item 3.
3XUHPY	Item 1 and 2: Volatile components have been identified wich originate from a medium isoparaffinic

TABLE 4

WebCode	Conclusions
	product. Item 3: No ignitable liquids have been identified.
3YMHGH	Item 1: GC-MS analysis identified residues of a medium isoparaffinic (branched alkane) product. Item 2: GC-MS analysis identified residues of a medium isoparaffinic (branched alkane) product. Item 3: GC-MS analysis did not identify any ignitable liquid residues.
3ZXGEX	By mean of physical study and chemical analysis a flammable/combustible substance was detected in Item 1 and 2 within the classification of isoparaffinic products, medium to heavy. This classification includes some charcoal starters, some paint thinner and some specialty solvents. No substance was detected in Item 3.
47LJ3U	Analysis of exhibits IL (Item 1) and IL (Item 2) detected the presence of a medium-range isoparaffinic product (examples include: certain "kerosene" products, certain fabric protection products, certain paint thinners, etc.). Analysis of exhibit IL (Item 3) failed to detect the presence of any ignitable liquids.
49AN4E	Items 1-2 (Exhibits 1-2): A medium isoparaffinic product was detected. Examples of which include charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils and gun oils. Item 3 (Exhibit 3): No ignitable liquid was detected.
4QP3DW	Evidence addressed in this report was received into the laboratory on August 03, 2021. Analysis for ignitable liquid residues using Diffusive Flammable Liquid Extraction trapping, followed by Gas Chromatography/Mass Selective Detection: Item(s) #1 and #2: Medium Isoparaffinic Product, examples of which include (but are not limited to) charcoal starter fluids, paint thinners, lamp oils and copier toners. Item #3: No ignitable liquid residues identified. All Evidence will be returned to the vault for PT. Ignitable liquid residue does not necessarily lead to the conclusion that a fire was incendiary in nature. In addition, negative results do not preclude the possibility that ignitable liquids were present.
4R2YKL	GCMS analysis of Item 001-01 disclosed the presence of a Medium Isoparaffinic Product. Examples of a Medium Isoparaffinic Product include, but are not limited to, some charcoal starters and some paint thinners. GCMS analysis of Item 001-02 disclosed the presence of a Medium Isoparaffinic Product. Examples of a Medium Isoparaffinic Product include, but are not limited to, some charcoal starters and some paint thinners. GCMS analysis of Item 001-03 (Comparison Blank) failed to disclose the presence of an ignitable liquid.
4U7AWP	On examination and analysis, I found that Item 1 and Item 2 was found to contain Isoparaffinic Products (subclass : medium).
4UP9V9	Results/Opinions/Interpretations of Fire Debris Analysis: Items #1 and #2: The volatile contents were recovered using heated headspace recovery method and analyzed by gas chromatography, and were extracted by passive headspace adsorption using an activated charcoal strip recovery method and analyzed by gas chromatography/mass spectrometry. A medium isoparaffinic product (e.g. industrial solvents, charcoal starters, paint thinners, etc.) was detected. Item # 3: The volatile contents were recovered using heated headspace recovery method and analyzed by gas chromatography, and were extracted by passive headspace adsorption using an activated charcoal strip recovery method and analyzed by gas chromatography/mass spectrometry. The item was analyzed as a comparison sample, with no ignitable liquid residue identified.
4YFP4R	1). A medium isoparaffinic product was detected in Exhibits 1 and 2, uses of which include, but are not limited to, some charcoal starters, some paint thinners, some copier toners, and some specialty solvents. Medium isoparaffinic products are ignitable liquids and could act as a fire accelerant. 2). No ignitable liquid, or its residue, was detected in Exhibit 3.
4ZDZYV	1). By means of physical study and chemical analysis an ignitable substance was detected on Item #1 and Item #2 within the classification of Medium Isoparaffinic Product. This classification may include: Industrial Solvents, Charcoal Starters and Paint Thinners.
649824	Analysis of Items 1 and 2 each disclosed the presence of an ignitable liquid from the medium isoparaffinic products class. Examples of this class include some charcoal starters, some paint thinners, and some copier toners. Analysis conducted on Item 3 did not identify the presence of an ignitable liquid. Item 3 was submitted as a substrate control sample.
6B9LPQ	Items 1 and 2 were found to contain a medium-range isoparaffinic product. Examples of medium

TABLE 4

WebCode	Conclusions
	range isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some solvent cleaners. No ignitable liquids were detected in item 3.
6CMXJP	These samples were analyzed using GC/MS. Because Item 1 and 2 were composed of branched chained alkanes(C8~C13) with no normal alkanes, cycloparaffins and naphthalenes, isoparaffinic products in the medium range were identified in both Item 1 and Item 2.
6LNK92	Item 1, Suspect Ignition Site in Basement, C-9 to C-14 isoparaffinic product consistent with synthetic kerosene. Item 2, Carpet Sample from Area by Front Door, C-9 to C-14 isoparaffinic product consistent with synthetic kerosene.
6LQ4HX	An isoparaffinic product in the medium range was identified in Items 1 and 2, examples of which include some charcoal starters, some paint thinners, and some copier toners. There were no ignitable liquids identified in Item 3.
6RJ9B2	It was determined utilizing passive headspace concentration extraction with activated charcoal strip and gas chromatography/mass spectrometry that item 1 and item 2 exhibited the presence of an isoparaffinic class ignitable liquid in the medium range.
6VE7EY	Carpet samples Item 1 and Item 2 contain ignitable material from the same origin.
6WU9L8	Item 1 and item 2 were extracted by passive Solid phase microextraction (SPME) method with heating. The headspace above the sample adsorbed on the polymer-coated fused fiber was then analyzed by gas chromatography-mass spectrometry. A Medium isoparaffinic products was detected in item 1 and item 2. We had also used other technique, the static or direct headspace, this method consists of extracting a quantity 1 ml of the vapor phase directly with a gas syringe, and analyzed by GC-MS.
6XKHGU	Item 1: A medium isoparaffinic product was identified in the heat-sealed bag containing a piece of red carpet. Item 2: A medium isoparaffinic product was identified in the heat-sealed bag containing a piece of red carpet. Item 3: No ignitable liquids were identified in the heat-sealed bag containing a piece of red carpet. (Comparison) Examples of medium isoparaffinic products are some charcoal starters, paint thinners, and copier toners.
74QFQY	Sample Preparation: (1) Passive Headspace Extraction. Analytical Methods: (1) Gas Chromatography/Flame Ionization Detection, (2) Gas Chromatography/Mass Selective Detection. Item 1: An isoparaffinic product was identified. Examples of this type of product include charcoal starters, paint thinners, and solvent cleaners. Item 2: An isoparaffinic product was identified. Examples of this type of product include charcoal starters, paint thinners, and solvent cleaners. Item 3: No ignitable liquids were identified.
789M4Z	A Medium Isoparaffinic Product was identified in Specimens #1 and #2. Examples of Medium Isoparaffinic Products include charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. No ignitable liquids were detected in Specimen #3. The specimens were extracted by Passive Headspace Concentration extraction with activated charcoal and analyzed by Gas Chromatography/Mass Spectrometry.
78PWYL	Item 1 was determined to contain the following: Medium Isoparaffinic Products examples of which include charcoal starters, paint thinners, mineral spirits, solvent cleaners, and gun oils. Item 2 was determined to contain the following: Medium Isoparaffinic Products examples of which include charcoal starters, paint thinners, mineral spirits, solvent cleaners, and gun oils. Item 3 was submitted as a comparative sample. This sample was analyzed and the results were used in evaluating possible matrix influences on Items 001 & 002. For comparison purposes only.
7DVKFU	Item 1: Medium Isoparaffinic Products were found. Such Products could be found among others in mineral spirit, some cleaning solvents or some industrial solvents (Soltrol 130 isoparaffin). Item 2: Medium Isoparaffinic Products were found. Such Products could be found among others in mineral spirit, some cleaning solvents or some industrial solvents (Soltrol 130 isoparaffin).
7GDDEF	Items 1 and 2 were analyzed for the presence of ignitable liquid residues. A Medium Isoparaffinic Product was detected in each item. Examples include some charcoal starters, some paint thinners and some lamp oils. Item 3 was submitted for comparison purposes.

TABLE 4

WebCode	Conclusions
7H8DRT	The following methodologies were used in the examination of this case: visual examination, odor assessment, GC-FID and GC-MS. Examination of Items #1 and 2 revealed the presence of an isoparaffinic product. Isoparaffinic products include some charcoal starters and some paint thinners. Examination of Item #3 failed to reveal the presence of ignitable liquids.
7M2XLG	Medium isoparaffinic product residues were detected in Items 001-1 and 001-2. No common ignitable liquid residues were detected in Item 001-3.
7R89GB	An isoparaffinic product was identified in items 1 and 2. Examples of commercial products within this class include, but not limited to, some Charcoal Starters, Paint Thinners, Copier Toners, Mineral Spirits, Solvent Cleaners, Kerosene, Lamp Oils, and Gun Oils. No ignitable liquids were identified in item 3.
7T89KH	In the Item 1 is detected branched alkanes, decane, 2,2,8-trimethyl; decane 2,3,5-trimethyl; hexane 2,2,5,5-tetramethyl; undecane 2,9-dimethyl; dodecane 2,7,10-trimethyl; decane 3,7-dimethyl; octane 2,6-dimethyl and decane 5-ethyl-5-methyl. In the Item 2 is detected branched alkanes, decane 2,2,8-trimethyl; decane 2,3,5-trimethyl; hexane 2,2,5-trimethyl; octane 2,6-dimethyl; nonane 3-methyl-5-propyl; decane 3,3,5-trimethyl; decane 2,2,8-trimethyl and decane-5-ethyl-5-methyl. Item 1 and Item 2 have a very similar chromatographic profile, the carpet not being an interfering matrix. Isoparaffinic products consist almost exclusively of branched alkanes. The composition is different from, or does not show enough characteristics of crude oil, and is governed by the production process(es) employed. N-alkanes cycloalkanes and aromatics are absent or present in insignificant amounts. For this reason, it is concluded that Item 1 and 2 are isoparaffinic products.
7TBLE7	An isoparaffinic product was identified in Item 1-1 and Item 1-2. Some examples of an isoparaffinic product would include some brands of specialty solvents and mineral spirits. No ignitable liquids were detected in Item 1-3.
7VDNZZ	The analysis done in the laboratory enable the detection of a medium isoparaffinic product on item-1 and item-2. Example of medium isoparaffinic product are some specialty solvent, some kerosene, etc.
7WQLJ6	Item 1: Medium volatility branched alkanes were detected in the contents of this item. Branched alkanes of this type can be found in a variety of products including some paint thinners, some fabric/furniture protectors and some specialty/industrial solvents. Item 2: Medium volatility branched alkanes were detected in the contents of this item. Branched alkanes of this type can be found in a variety of products including some paint thinners, some fabric/furniture protectors and some specialty/industrial solvents. Item 3 (Control): The contents of this item were examined for the presence of ignitable liquid residues, and none were found.
7XY976	An ignitable liquid residue consistent with a medium isoparaffinic product was identified in item #1. Examples of the isoparaffinic product class of ignitable liquids include some charcoal lighter fuels, some paint thinners, some copier fluids, some mineral spirits, some solvent cleaners, and some lamp oils. An ignitable liquid residue consistent with a medium isoparaffinic product was identified in item #2. Examples of the isoparaffinic product class of ignitable liquids include some charcoal lighter fuels, some paint thinners, some copier fluids, some mineral spirits, some solvent cleaners, and some lamp oils. No ignitable liquid residues were detected in item #3.
7ZMDPG	1: Volatile residues from Exhibits 1 (carpet sample taken from suspected attempted ignition site in the basement), 2 (carpet sample taken from area by the front door), and 3 (carpet substrate intended as a comparison blank) were collected using passive headspace concentration techniques as well as simple headspace techniques and analyzed using gas chromatography-mass spectrometry for the presence of ignitable liquid residues. 2: A medium range isoparaffinic product was identified in Exhibits 1 and 2. Ignitable liquids belonging to this class are commercially available as some charcoal starters, some paint thinners, and some copier toners. 3: No ignitable liquid residue classifications were identified in Exhibit 3.
87UTMQ	A heavy Isoparaffinic product was detected in the extracts from Item #1 and Item #2. Examples of heavy Isoparaffinic products include some commercial specialty solvents, some personal care products and some industrial lubricants. No ignitable liquids were detected in the extract of Item #3.
883RXY	A medium isoparaffinic product was detected in Item 1 and Item 2.

TABLE 4

WebCode	Conclusions
8D7EKD	Analysis by Gas Chromatography/Mass Spectrometry of the carpet sample (Item 1) reveals the presence of an isoparaffinic product. Examples of isoparaffinic products include some charcoal starters, some paint thinners, and some copier toners. Analysis by Gas Chromatography/Mass Spectrometry of the carpet sample (Item 2) reveals the presence of an isoparaffinic product. Examples of isoparaffinic products include some charcoal starters, some paint thinners, and some copier toners. Analysis by Gas Chromatography/Mass Spectrometry of the carpet sample (Item 3) fails to reveal the presence of any ignitable liquids.
8WK487	Items 1-1-1-1-2, 1-2-1-1-2, and 1-3-1-1-2 (ACS sample extracts) from the carpet sample taken from the suspected attempted ignition site in the basement (item 1-1-1-1), the carpet sample taken from the area by the front door (item 1-2-1-1), and the carpet substrate intended as a comparison blank (item 1-3-1-1) were not analyzed. A Medium Isoparaffinic Product was detected in the ACS sample extract (item 1-1-1-1-1) from the carpet sample taken from the suspected attempted ignition site from the basement (item 1-1-1-1). Examples of medium Isoparaffinic Product ignitable liquids are charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils and gun oils. A Medium Isoparaffinic Product was detected in the ACS sample extract (item 1-2-1-1-1) from the carpet sample taken from the area by the front door (item 1-2-1-1). Examples of medium Isoparaffinic Product ignitable liquids are charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils and gun oils. No ignitable liquid residues were detected in the ACS sample extract (item 1-3-1-1-1) from the carpet substrate intended as a comparison blank (item 1-3-1-1).
929BYE	An isoparaffinic product in the medium range was identified in items 1 and 2. Examples of isoparaffinic products in the medium range include, but are not limited to, some charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils and gun oils.
96B4Y4	A Isoparaffinic product was present on item 1. A Isoparaffinic product was present on item 2.
9738LJ	Ignitable Liquid Residues were detected on Item 1 and Item 2, which were similar in composition. The liquids were both Isoparaffinic Products, which is a class of liquids that includes some charcoal starters and paint thinners, along with other products.
998WNT	A Medium Isoparaffinic Product was identified in Specimens #1 and #2. Examples of Medium Isoparaffinic Products include charcoal starters, paint thinners, and kerosene. No ignitable liquids were detected in Specimen #3. The specimens were extracted by Passive Headspace Concentration extraction with activated charcoal and analyzed by Gas Chromatography/Mass Spectrometry. Disclaimer: The absence of an ignitable liquid does not rule out the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that may have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background material.
9BJE6D	[No Conclusions Reported.]
9BW2MR	Analysis of IL Item 1 and IL Item 2 detected the presence of a medium range isoparaffinic product (examples: some camping fuels, some charcoal starters, some paint thinners, etc.). Analysis of IL Item 3 failed to detect the presence of an ignitable liquid.
9N6AHA	On August 26, 2021, Items 1 and 2 were sampled using a static headspace technique and all items were sampled using a passive charcoal adsorption technique. The samples were analyzed using gas chromatography with mass spectrometry. A Medium Isoparaffinic Product, an ignitable liquid, was identified in Items 1 and 2. Examples of medium isoparaffinic products include some charcoal starters, paint thinners, and copier toners. No ignitable liquid residues were identified in Item 3.
9PGE6T	The volatile contents of Items 1, 2, and 3 were extracted using a passive carbon adsorption/elution technique and analyzed by gas chromatography-mass spectrometry (GC-MS). A medium isoparaffinic product was identified in Items 1 and 2 (Identification). Isoparaffinic products include, but are not limited to, some copier toners, charcoal starters, and mineral spirits. No ignitable liquid residues were detected in Item 3 (Not Detected).
9WYUUP	Item No.1 and Item No.2: Isoparaffinic hydrocarbons class with Medium carbon range (C8-C11). Item No.3: No ignitable liquid product detected.

TABLE 4

WebCode	Conclusions
9XUXDC	An ignitable liquid classified as a medium isoparaffinic product was identified in Item 1 and Item 2. Examples of medium isoparaffinic products include, but are not limited to, some specialty solvents. No recognizable ignitable liquids were identified in Item 3.
9YLNAW	A medium isoparaffinic product has been identified in item 1 and in item 2. We can't see any difference between item 1 and item 2.
A24ACJ	[No Conclusions Reported.]
A2Q7WC	Items 1 and 2 were analyzed for the presence of ignitable liquid residues. A Medium Isoparaffinic product was detected in each Item. Examples include special industrial solvents, charcoal starters, and paint thinners. Item 3 was a sample submitted for comparison.
A3LY2Q	Lab item 1: Medium isoparaffinic product residue was identified. Examples of this include but are not limited to some charcoal starters, some paint thinners, and some copier toners. Lab item 2: Medium isoparaffinic product residue was identified. Examples of this include but are not limited to some charcoal starters, some paint thinners, and some copier toners. Lab item 3: No Ignitable Liquids were identified. This item is listed as a comparison or control sample. This comparison or control sample was analyzed, and the results were used in evaluating possible matrix influences.
A8TRRF	Item 01 was analyzed by gas chromatography/mass spectrometry and determined to contain a medium isoparaffinic product ASTM class ignitable liquid. Examples of this ASTM class are some charcoal starters, paint thinners, and some copier toners. Item 02 was analyzed by gas chromatography/mass spectrometry and determined to contain a medium isoparaffinic product ASTM class ignitable liquid. Examples of this ASTM class are some charcoal starters, paint thinners, and some copier toners. Item 03 was analyzed by gas chromatography/mass spectrometry; however, ignitable liquids could not be detected.
A9MHXU	It has been detected flammable liquid in the samples. These liquids can be found in some solvents and in other products like charcoal starters.
ABFR3B	A residue of a medium isoparaffinic product was detected in Item 1 and Item 2. Examples of medium isoparaffinic products include charcoal starters, paint thinners, copier toners, mineral spirits, solvents cleaners, kerosene, lamp oils, and gun oils. No ignitable liquids were detected in Item 3. The samples were extracted by passive adsorption-elution techniques and analyzed by gas chromatography with mass spectrometry.
ACLUTU	[No Conclusions Reported.]
AHC47D	An Isoparaffinic product was identified in Lab Items 1 and 2. No ignitable liquids were identified in Lab Item 3. Negative results do not preclude the possibility that ignitable liquids were present at the fire scene. Samples of recovered materials from this case have been preserved with the evidence. Analysis method: Carbon trap followed by Gas Chromatography/Mass Spectrometry.
AJ7D99	Item 1: Ignitable liquid residues containing an isoparaffinic product. Item 2: Ignitable liquid residues containing an isoparaffinic product. Isoparaffinic products in this range include, but are not limited to, low-odor solvents, some paint thinners, some charcoal lighter fluids, some charcoal starters, some polishes, paint, stain, and varnish transfer solvents, some lubricants, and some insect sprays. Item 3: No ignitable liquid residues were detected.
ALXTPQ	GC/MS (gas chromatography/mass spectrometry) analysis of concentrated headspace vapors from item #1 revealed the presence of compounds having retention times and mass ions characteristic of components of a medium isoparaffinic product. Medium isoparaffinic products include some charcoal starters, paint thinners and some copier toners. GC/MS (gas chromatography/mass spectrometry) analysis of concentrated headspace vapors from item #2 revealed the presence of compounds having retention times and mass ions characteristic of components of a medium isoparaffinic product. Medium isoparaffinic products include some charcoal starters, paint thinners and some copier toners.
ATDKYP	Items 1, 2, and 3 were extracted using a passive adsorption-elution technique. The Item 1, 2, and 3 extracts were examined using Gas Chromatography-Mass Spectrometry (GC-MS). The Item 1 and 2 extracts each contained a medium isoparaffinic product which can be found in, but is not limited to, some insect sprays and upholstery cleaning solvents. No ignitable liquids were identified in Item 3.

TABLE 4

WebCode	Conclusions
ATEP7K	[No Conclusions Reported.]
AZWU3R	Item 1.1: Passive Headspace Concentration/Gas Chromatography-Mass Spectrometry disclosed the following: Medium (C8-C13) Isoparaffinic Product. Examples of a Medium (C8-C13) Isoparaffinic Product include some charcoal starters, some paint thinners, and some copier toners. Item 1.2: Passive Headspace Concentration/Gas Chromatography-Mass Spectrometry disclosed the following: Medium (C8-C13) Isoparaffinic Product. Examples of a Medium (C8-C13) Isoparaffinic Product include some charcoal starters, some paint thinners, and some copier toners. Item 1.3: Passive Headspace Concentration/Gas Chromatography-Mass Spectrometry disclosed the following: No ignitable liquids/ignitable liquid residues identified. The identification of an ignitable liquid/ignitable liquid residue does not necessarily lead to the conclusion that a fire was incendiary in nature. The absence of an ignitable liquid/ignitable liquid residue does not preclude the possibility that ignitable liquids were present.
B2P264	The chromatographic analyses were performed with GC coupled with FID. The analysis of the extracts of ITEM 1 and ITEM 2 obtained by the pentane solvent extraction method revealed the presence of exactly the same chemical compound (in these two ITEMS). The chromatograms are perfectly superimposable. The chemical compound belongs to the compounds of types Medium Others Miscellaneous. The analysis by headspace methods of ITEM 1 and ITEM 2 also revealed the presence of exactly the same chemical compound (in these two ITEMS). The chromatograms are perfectly superimposable. The chemical compound belongs to the compounds of types Medium Others Miscellaneous. The analysis by steam distillation of ITEM 1 and ITEM 2 did not reveal the presence of any polar compounds.
B4QBRQ	A Medium Isoparaffinic Product was identified in Specimens #1 and #2. Examples of Medium Isoparaffinic Products include charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. No ignitable liquids were detected in Specimen #3. The specimens were extracted by Passive Headspace Concentration extraction with activated charcoal and analyzed by Gas Chromatography/Mass Spectrometry. Disclaimer: The absence of an ignitable liquid does not rule out the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that may have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background material.
B8QD22	Sample 1 and sample 2 contain ignitable liquid residues with the same composition.
BC43HP	Item 1 contained isoparaffinic products, in the range of C8-C13. Item 2 contained isoparaffinic products, in the range of C8-C13. Item 3 was examined as a comparison sample for Item 1 and Item 2.
BERRNM	METHODS: Items 1, 2, and 3 were extracted using a passive adsorption-elution technique. The Item 1, 2, and 3 extracts were examined using Gas Chromatography-Mass Spectrometry (GC-MS). RESULTS AND INTERPRETATIONS: The Item 1 and 2 extracts each contained a medium isoparaffinic product which can be found in, but is not limited to, some paint thinners and lamp oils. No ignitable liquids were identified in the Item 3 extract.
BM7GMV	It was determined utilizing passive headspace concentration extraction with activated charcoal strip and Gas Chromatography/Mass Spectrometry that items 001 and 002 exhibited the presence of an isoparaffinic product in the medium range.
BNJD6Z	I formed the opinion based on the techniques used that: The exhibit collected of the carpet sample from the basement (item 1) was found to contain medium isoparaffinic product class ignitable liquid residues. The exhibit collected of the carpet sample from the area by the front door (item 2) was found to contain medium isoparaffinic product class ignitable liquid residues. Examples of medium isoparaffinic products include some formulations of the following: charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils and gun oils.
BRGGX2	A similar medium isoparaffinic solvent was present in Items 1 and 2. Products in this range include, but are not limited to, some types of paint thinners, charcoal starters, and solvent cleaners. No ignitable liquid residues were detected in the comparison sample, Item 3.
C3VRN4	Ignitable liquids were detected on both Item 1 and Item 2. It appears that both Item 1 and Item 2

TABLE 4

WebCode	Conclusions
	contain medium isoparaffinic products.
C84DC2	Item 1: Carpet Sample (Basement): An isoparaffinic product within the medium range (C10 to C12) was detected in Item 1 based on the ASTM 1618 classification scheme. Examples of products include: Charcoal Starters, Paint Thinners, Copier Toners, Mineral Spirits, Solvent Cleaners, Kerosene, Lamp Oils, and Gun Oils. Item 2: Carpet Sample (Front Door): An isoparaffinic product within the medium range (C10 to C12) was detected in Item 2 based on the ASTM 1618 classification scheme. Examples of products include: Charcoal Starters, Paint Thinners, Copier Toners, Mineral Spirits, Solvent Cleaners, Kerosene, Lamp Oils, and Gun Oils. The products in Item 1 and Item 2 appear to be the same source material. Control Sample: Carpet Sample: Items 3 was provided for background substrate and was negative for the presence of accelerants.
C8LF6V	Item 1: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). A Medium Isoparaffinic product was identified. Examples of this type ignitable liquid include: some charcoal starters, some paint thinners and some copier toners. Item 2: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). A Medium Isoparaffinic product was identified. Examples of this type ignitable liquid include: some charcoal starters, some paint thinners and some copier toners. Item 3: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). Ignitable liquids were not identified in the sample. Date of receipt of evidence: 08/03/21. Date(s) of performance of the laboratory activity: 08/18/21, 08/19/21, 08/20/21, 08/23/21.
CAGWLY	Exhibits 1 and 2 each contained a medium isoparaffinic product, which is an ignitable liquid. Examples of medium isoparaffinic products include some charcoal starters, some paint thinners, and some camping fuels. No ignitable liquids were identified in Exhibit 3.
CBPGG8	Within the limits of the applied methodology and after considering item 3 intended as a comparison blank: the presence of a Medium Isoparaffinic Product was detected in item 1 and in item 2. The product detected could correspond in particular to some charcoal starters, paint thinners, mineral spirits, solvent cleaners, kerosene and lamp oils. Based on the analytical results obtained, it is not possible to differentiate the two Medium Isoparaffinic Products detected. Thus, it cannot be excluded that the two detected products come from the same source.
CDRWUJ	An isoparaffinic product was detected in item 1 and item 2. No ignitable liquids were detected in item 3. Examples of isoparaffinic products include, but are not limited to, aviation gasolines, lighter fluids, charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, gun oils, spot cleaners, penetrating oils and insecticide solvents/propellants.
CEAXPY	Items 1.1, 2.1, and 3.1 were analyzed with a gas chromatograph-flame ionization detector (GC-FID) and a gas chromatograph-mass spectrometer (GC-MS) for the identification of ignitable liquids. Items 1.1 and 2.1 were each found to contain a medium isoparaffinic product. Examples include, but are not limited to, some charcoal starters, some paint thinners, some lamp oils, and some mineral spirits. Item 3.1 was used as a control.
CEPRC8	Item 1: The results of the examination extremely strongly support that Item 1 contain ignitable liquid (Level +4). Item 2: The results of the examination extremely strongly support that Item 2 contain ignitable liquid (Level +4).
CHLV69	A medium isoparaffinic product class ignitable liquid residues was detected in the vinyl bag containing the carpet sample from the suspected attempted ignition site (Item 1), and in the vinyl bag containing the carpet sample from the area by the front door (Item 2). Examples of commercial products containing isoparaffinic include some charcoal starters, some odorless solvents, some odorless paint thinners, some insecticide or polish solvents, some copier toner, and some lamp oils. Although the ignitable residues detected in items 1 and 2 are similar, the same ignitable liquid can be distributed as different commercial products. No ignitable liquids were detected in the vinyl bag containing the carpet sample intended as a comparison blank (Item 3). The analysis includes testing for the presence of the following classes of ignitable liquids/residues: gasoline, and light, medium and heavy subclasses of petroleum distillates, isoparaffinic products, naphthenic-paraffinic products, aromatic products, normal alkanes products, oxygenate solvent (not including light volatile organic compounds,

TABLE 4

WebCode	Conclusions
	such as methanol, ethanol, isopropanol, and acetone), and other-miscellaneous (ASTM E1618).
CQHBQC	Item 001: Contains a medium isoparaffinic product, examples of which include charcoal starters, mineral spirits and paint thinners. Item 002: Contains a medium isoparaffinic product, examples of which include charcoal starters, mineral spirits and paint thinners. Item 003: No ignitable liquids were detected/identified
CRFU6U	The analysis revealed the presence in item 1 and item 2 of an isoparaffinic class product. This product recovered consisting of a mix of branched chain aliphatic compounds (isoparaffins). No ignitable liquids were detected in item 3.
D9F8UM	1). In the sample received and labeled as item 1, it was detected the presence of one mixture which can be classified in the scheme proposed by the ASTM E 1618-14 Standard Methods as Medium Isoparaffinic Product. Examples of the product detected are some industrial solvents and some charcoal starters. 2). In the sample received and labeled as item 2, it was detected the presence of one mixture which can be classified in the scheme proposed by the ASTM E 1618-14 Standard Methods as Medium Isoparaffinic Product. Examples of the product detected are some industrial solvents and some charcoal starters. 3). In the sample received and labeled as item 3, it were not detected any mixture which can be classified in the scheme proposed by the ASTM E 1618-14 Standard Method. 4). The isoparaffinic products are ignitable liquids. Ignitable liquid may start or accelerate a fire.
DB38RH	A medium isoparaffinic product was identified in items 1 and 2. Medium isoparaffinic products include, but are not limited to, some charcoal starters, paint thinners, and copier toners. No common ignitable liquid was identified in item 3. Some conditions that could lead to this result are: A). No common ignitable liquid was present in the material analyzed. B). An ignitable liquid was present but below quantities required for a positive identification. C). An uncommon ignitable liquid was present.
DNR29H	Items 1 and 2 were found to contain a medium-range isoparaffinic product. Examples include, but are not limited to, some charcoal starters, some paint thinners, and some mineral spirits. No ignitable liquids were identified in item 3.
DP79RE	Items 1 and 2 consist of red carpet squares. These items were found to contain a heavy isoparaffinic product.
DRR8MN	Item 1) A medium (C9-C14) isoparaffinic product was identified in the sample. Item 2) A medium (C9-C14) isoparaffinic product was identified in the sample. Item 3) No ignitable liquids/or ignitable liquid residues were identified in the sample.
DU2PWX	Item 1: Medium volatility branched alkanes were detected in the contents of this item. Medium volatility branched alkanes can be found in a variety of products including some charcoal starters, specialised cleaning products, industrial solvents and fabric/furniture protector products. Item 2: Medium volatility branched alkanes were detected in the contents of this item. Medium volatility branched alkanes can be found in a variety of products including some charcoal starters, specialised cleaning products, industrial solvents and fabric/furniture protector products. Item 3: This item was submitted as a control (comparison) item. The contents of this item were examined for the presence of ignitable liquid residues, and none were found.
DVB8ZH	Evidence addressed in this report was received into the laboratory on August 3, 2021. Analysis for ignitable liquid residues using Diffusive Flammable Liquid Extraction trapping, followed by Gas Chromatography/Mass Selective Detection: Items #1 and #2: Medium Isoparaffinic Product, examples of which include (but are not limited to) charcoal starter fluids, paint thinners, lamp oils and copier toners. Item #3: No Ignitable Liquid Residues Identified. All Evidence will be returned to the submitter. Ignitable liquid residue does not necessarily lead to the conclusion that a fire was incendiary in nature. In addition, negative results do not preclude the possibility that ignitable liquids were present.
E4YF3K	RESULTS OF ANALYSIS: Items 1, 2, and 3 were extracted by passive adsorption/elution and analyzed by gas chromatography-mass spectrometry. Item 1: A medium isoparaffinic product was identified in the fire debris bag. Item 2: A medium isoparaffinic product was identified in the fire debris bag. Item 3: No ignitable liquids were identified in the fire debris bag. (Comparison) Examples of medium

TABLE 4

WebCode	Conclusions
E77MG7	isoparaffinic products include some charcoal starters, paint thinners, and copier toners. Item 1: GC-MS analysis identified residues of a medium isoparaffinic (branched alkane) product. Item 2: GC-MS analysis identified residues of a medium isoparaffinic (branched alkane) product. Item 3: GC-MS analysis did not identify any ignitable liquid residues.
E9QRTB	Item 01 was analyzed by gas chromatography/mass spectrometry and determined to contain a medium isoparaffinic product ASTM class ignitable liquid. Examples of this ASTM class are some charcoal starters, paint thinners, and some copier toners. Item 02 was analyzed by gas chromatography/mass spectrometry and determined to contain a medium isoparaffinic product ASTM class ignitable liquid. Examples of this ASTM class are some charcoal starters, paint thinners, and some copier toners. Item 03 was analyzed by gas chromatography/mass spectrometry; however, ignitable liquids could not be detected.
EEYV4H	[No Conclusions Reported.]
EFCMUE	We detected isoparaffins from the Item 1 and Item 2, and which were exhibited in range of C8 to C13.
EGKU4Y	Items 2-1-1-1-2, 2-2-1-1-2, and 2-3-1-1-2 (ACS sample extracts) from the carpet sample taken from suspected attempted ignition site in the basement (item 2-1-1-1), the carpet sample taken from area by the front door (item 2-2-1-1), and carpet substrate intended as comparison blank (item 2-3-1-1) were not analyzed. A Medium Isoparaffinic Product was detected in the ACS sample extract (item 2-1-1-1-1) from the carpet sample taken from suspected attempted ignition site in the basement (item 2-1-1-1). Examples of Medium Isoparaffinic Products are charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. A Medium Isoparaffinic Product was detected in the ACS sample extract (item 2-2-1-1-1) from the carpet sample taken from area by the front door (item 2-2-1-1). Examples of Medium Isoparaffinic Products are charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. No ignitable liquid residues were detected in the ACS sample extract (item 2-3-1-1) from the carpet substrate intended as comparison blank (item 2-3-1-1).
EGPKJB	A medium range (C10 – C13) isoparaffinic product residue was detected in Item 001-1 and 001-2. No common ignitable liquid residues were detected in the comparison sample, Item 001-3.
EJ8GRF	An isoparaffinic product was detected in Item 1 and Item 2. No ignitable liquids were detected in Item 3.
EJCXQE	[No Conclusions Reported.]
EPZ2QB	A medium isoparaffinic product was identified in item 1. A medium isoparaffinic product was identified in item 2. Examples of medium isoparaffinic products include some odorless charcoal starters, paint thinners and cleaning solvents. No ignitable liquids were detected in item 3 comparison sample.
EUAR6W	Description of Evidence: Item #1: Sealed arson bag with a piece of red carpet. Item #2: Sealed arson bag with a piece of red carpet. Item #3: Sealed arson bag with a piece of red carpet. Results/Opinions/Interpretations of Fire Debris Analysis: Item #1, Item #2, and Item #3: The volatile contents were recovered using heated headspace recovery method and analyzed by gas chromatography, and were extracted by passive headspace adsorption using an activated charcoal strip recovery method and analyzed by gas chromatography/mass spectrometry. For Item #1 and Item #2, a medium petroleum product (e.g. special/ industrial solvents, charcoal starters, paint thinners, etc.) was detected. Item #3 was analyzed as a comparison sample. Disposition of Evidence: The unanalyzed portions of the activated charcoal strips are being returned to the submitting agency along with the submitted evidence.
EXERG9	Item 1: An ignitable liquid was identified. This liquid is a medium isoparaffinic product. Examples of isoparaffinic products include some charcoal starters, some paint thinners, some copier toners, and some industrial solvents. Item 2: An ignitable liquid was identified. This liquid is a medium isoparaffinic product. Examples of isoparaffinic products include some charcoal starters, some paint thinners, some copier toners, and some industrial solvents. Item 3: No ignitable liquids, other than background or matrix compounds, were detected.

TABLE 4

WebCode	Conclusions
F3JMGG	[No Conclusions Reported.]
F7LGJT	Gas chromatographic analysis (GC-MS): Heated Headspace Concentration [Items #01.01 - #01.03] and Passive Headspace Concentration [Items #01.01 - #01.03]) of the submitted material yielded the following results and conclusions: Item #01.01 and Item #01.02: A medium isoparaffinic product was identified. Examples of medium isoparaffinic products of the type detected, include but not limited to, some mineral spirits, some charcoal lighter fluids, and some industrial solvents (i.e. cleaning fluids). Item #01.03: No ignitable liquid residue was identified.
F8F62N	Items 1A and 1B were analyzed utilizing Gas Chromatography/Mass Spectrometry (GC/MS). These items each contain an ignitable liquid in the medium isoparaffinic class. Examples of medium isoparaffinic products include some charcoal starters, some paint thinners, and some copier toners. Item 1C was analyzed utilizing Gas Chromatography/Mass Spectrometry (GC/MS). No ignitable liquids were identified. It should be noted that ignitable liquids may evaporate or can be totally consumed during a fire. A negative finding of ignitable liquids does not preclude its presence during a fire. The results apply only to the sample(s) received. The evidence, including the sample used in analysis, will be returned to the submitting agency.
F8V9RA	001Q1: A medium isoparaffinic product was identified. 002Q2: A medium isoparaffinic product was identified. 003K1: Analyzed for comparison. Examples of a medium isoparaffinic product include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners.
FJ3JUP	Both Item 1 (Carpet sample taken from suspected attempted ignition site in the basement) and Item 2 (Carpet sample taken from area by the front door) were found to contain medium isoparaffinic product. According to ASTM E1618-19 Ignitable Liquid Classification Scheme, examples of these medium isoparaffinic product includes but are not limited to charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. No ignitable liquid was detected in Item 3 (carpet sample that was intended as a comparison blank in a nylon evidence bag).
FLBLQL	Items 1, 2, and 3 were examined for the presence of hydrocarbon fire accelerants e.g. petrol, white spirit, paraffin oil, diesel oil. No such hydrocarbon fire accelerants were detected in these items. However, partly evaporated medium isoparaffinic products vapours were detected in Items 1 and 2. Medium isoparaffinic products are flammable hydrocarbons. Examples of medium isoparaffinic products include some paint thinners, some copier toners and some charcoal starters.
FRG3GA	1). Laboratory items 1 and 2: A medium isoparaffinic product was identified. Examples of medium isoparaffinic products include, but are not limited to, some paint thinners, some charcoal starters, and some copier toners. 2). Laboratory item 3 (Comparison Sample for items 1 and 2): No ignitable liquids were identified.
FVJ3EL	Items 1.1 and 1.2: Passive Headspace Concentration/Gas Chromatography-Mass Spectrometry disclosed the following: Medium (C8-C13) Isoparaffinic Product. Examples of a Medium (C8-C13) Isoparaffinic Product include some charcoal starters, some paint thinners, and some copier toners. Item 1.3: Passive Headspace Concentration/Gas Chromatography-Mass Spectrometry disclosed the following: No ignitable liquids/ignitable liquid residues identified. The identification of an ignitable liquid/ignitable liquid residue does not necessarily lead to the conclusion that a fire was incendiary in nature. The absence of an ignitable liquid/ignitable liquid residue does not preclude the possibility that ignitable liquids were present.
FYK779	001Q1: A medium isoparaffinic product was identified. Examples of a medium isoparaffinic product include, but are not limited to, some charcoal starters, some paint thinners, some copier toners, some mineral spirits, some solvent cleaners, some kerosenes, some gun oils, and some lamp oils. 002Q2: A medium isoparaffinic product was identified. Examples of a medium isoparaffinic product include, but are not limited to, some charcoal starters, some paint thinners, some copier toners, some mineral spirits, some solvent cleaners, some kerosenes, some gun oils, and some lamp oils. 003K1: Analyzed for comparison.
G7GE9E	Items 1 and 2 contain an isoparaffinic product. Examples of these include, but are not limited to, charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. No ignitable liquids were detected in item 3 (comparison blank).

TABLE 4

WebCode	Conclusions
GBC992	Exhibits 1 and 2 contained a medium isoparaffinic product, which is an ignitable liquid. Examples of this type of product include some charcoal starters, some paint thinners, and some camping fuels. No ignitable liquids were identified in Exhibit 3.
GBTDHY	Items 1 through 3 were examined using passive headspace adsorption, and the extracts recovered were examined by Gas Chromatography/Mass Spectrometry. An ignitable liquid classified as Heavy Isoparaffinic Products was detected in Item 1. An ignitable liquid classified as Heavy Isoparaffinic Products was detected in Item 2. No ignitable liquids were detected in Item 3.
GGKCGN	In the sample nr 1 and 2 were detected isoparaffinic hydrocarbon mixture which is classified as an ignitable liquid.
GHRWZH	Examination of Items 1 and 2 revealed the presence of an isoparaffinic product. Isoparaffinic products include some charcoal starters and some paint thinners. Examination of Item 3 failed to reveal the presence of ignitable liquids.
GJ8ZTN	Item1 sample contains flammable hydrocarbon, which is Normal Alkane Medium carbon number. Item2 sample contains flammable hydrocarbon, which is Normal Alkane Medium carbon number. Item1 sample and Item2 sample are identical. Item3 sample is negative flammable hydrocarbon.
GRHFJW	Item 1 and Item 2: An ignitable liquid in the medium isoparaffinic class was identified. Examples of products in the medium isoparaffinic class include some types of kerosene, some charcoal starters and some mineral spirits. Item 3: No ignitable liquids were identified.
GT9KVG	A flammable liquid was detected in the Items labelled 1 and 2. The liquid is assessed to be a kerosene product. The identified liquid in Item 1 and 2 is assessed as identical.
GVZ37V	Traces of an organic mixture containing medium isoparaffinic products were found in both Items 1 and 2. Nothing of significance pertaining to ignitable liquid residues was found in Item 3, the carpet substrate intended as a comparison blank.
GWB4TU	Item 1: Medium Isoparaffinic product detected. Item 2: Medium Isoparaffinic product detected. Item 3: No common ignitable liquid residues were detected. Item 1 and 2 were found to contain the same medium Isoparaffinic product. Products identified in this ignitable liquid category include charcoal starters, copier toners and paint thinners. Comparison with inhouse standards of these products has not identified a source for the medium Isoparaffinic product identified in items 1 and 2.
GYF4XF	Instrumental analysis of Items 1 and 2 revealed the presence of an isoparaffin product. Products in this range include, but are not limited to: some charcoal starters, some copier fluids, some aviation gasoline, some lamp oils, some solvents for insecticides and polishes and some camping fuels. Instrumental analysis of Item 3 did not reveal the presence of any ignitable liquid residue. This result does not eliminate the possibility that an ignitable liquid was used. Results were confirmed by the following instrumentation: Gas Chromatograph/Mass Spectrometer.
H2XNHA	Item 1 was determined to contain the following: Medium Isoparaffinic Products examples of which include charcoal starters, paint thinners, mineral spirits, solvent cleaners, and gun oils. Item 2 was determined to contain the following: Medium Isoparaffinic Products examples of which include charcoal starters, paint thinners, mineral spirits, solvent cleaners, and gun oils. Item 3 was submitted as a comparative sample. This sample was analyzed and the results were used in evaluating possible matrix influences on Items 1 and 2. For comparison purposes only.
H3E9F8	A medium isoparaffinic product was identified in Item 1 and Item 2. Examples of medium isoparaffinic products include some charcoal starters, some mineral spirits and some cleaning solvents. No ignitable liquids were identified in Item 3 (comparison sample).
HJHCUQ	Items #1 and #2 tested positive for the presence of isoparaffinic products in the medium to heavy range. Items in this classification include but are not limited to some charcoal starters, some copier toners, and some commercial specialty products.
HLB47W	Items 1.1, 2.1, and 3.1 were analyzed with a gas chromatograph-flame ionization detector (GC-FID) and a gas chromatograph-mass spectrometer (GC-MS) for the identification of ignitable liquids. Items 1.1 and 2.1 were each found to contain a medium isoparaffinic product. Examples include, but are not limited to, some charcoal starters, some paint thinners, some mineral spirits, and some solvent

TABLE 4

WebCode	Conclusions
	cleaners. Item 3.1 was used as a control.
HP4ERU	The sample was analyzed by gas chromatography-mass spectrometry for presence of ignitable liquids. Item #1: Instrumental analysis detected high levels of isoparaffins without alkanes, cycloalkanes, alkylbenzenes. The ignitable liquid identified as medium isoparaffinic products. Item #2: Instrumental analysis detected high levels of isoparaffins without alkanes, cycloalkanes, alkylbenzenes. The ignitable liquid identified as medium isoparaffinic products. Item #3: No ignitable liquids were detected in the sample.
HT88ME	The carpet sample taken from suspected attempted ignition site in the basement (Item 1), and the Carpet sample taken from area by the front door (Item 2) were found to contain an ignitable liquid composed mainly of branched alkanes which can be classified as an isoparaffinic products.
HW7JJE	In my opinion residues of a medium isoparaffinic flammable liquid have been detected from items 1 and 2.
HYC2PM	Exhibits 1-2 were each analyzed and determined to contain a medium isoparaffinic product. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, some copier toners, and some specialty solvents. Exhibit 3 was analyzed, and no common ignitable liquid residue was identified. This conclusion is based upon gas chromatography-mass spectrometry (GC-MS) analysis of concentrated headspace vapors from each sample.
J628AV	Examination of item 1: The item comprised a nylon bag containing a section of red carpet. A medium isoparaffinic product was detected from the item. Medium isoparaffinic products include some charcoal starters, paint thinners and copier toners. Examination of item 2: The item comprised a nylon bag containing a section of red carpet. A medium isoparaffinic product was detected from the item. Medium isoparaffinic products include some charcoal starters, paint thinners and copier toners. Examination of item 3: The item comprised a nylon bag containing a section of red carpet. No ignitable liquid residues were detected from the item.
JGVMYW	Item 1: The square piece of burgundy carpet contains a medium isoparaffinic ignitable liquid residue. Examples of this type of liquid can include, but are not limited to, some charcoal starters, paint thinners and copier toners. Item 2: The square piece of burgundy carpet contains a medium isoparaffinic ignitable liquid residue. Examples of this type of liquid can include, but are not limited to, some charcoal starters, paint thinners and copier toners. Item 3: An ignitable liquid residue was not detected on the square piece of burgundy carpet.
JKAPUN	The analysis performed in our laboratory on Item 01 enabled the detection of an isoparaffinic (medium). The analysis performed in our laboratory on Item 02 enabled the detection of an isoparaffinic (medium). The analysis performed in our laboratory on Item 03 did not show the presence of any ignitable liquid in the substrate.
JQEP8Y	Exhibits 1 and 2 contained a medium isoparaffinic product, which is an ignitable liquid. Examples of medium isoparaffinic products include some charcoal starters, some paint thinners and some camping fuels. No ignitable liquids were identified in Exhibit 3.
JVQNEX	A medium Isoparaffinic solvent was present in Item 1 and Item 2. No ignitable liquid residues were detected in Item 3.
JWNM2C	METHODS: Items 1, 2, and 3 were extracted using a passive adsorption-elution technique. The Item 1, 2, and 3 extracts were examined using Gas Chromatography-Mass Spectrometry (GC-MS). RESULTS AND INTERPRETATIONS: The Item 1 and 2 extracts each contained a medium isoparaffinic product which can be found in, but is not limited to, some commercial solvents and dry cleaning solvents. No ignitable liquids were identified in the Item 3 extract.
JYU72T	A medium isoparaffinic product was identified in Item 1 and Item 2. Examples of a medium isoparaffinic product include but are not limited to, some charcoal starters and some paint thinners. No ignitable liquids were detected in Item 3.
K9E742	Analysis by Gas Chromatography/Mass Spectrometry of the carpet square and plastic (Item 1A) reveals the presence of an isoparaffinic product. Examples of isoparaffinic products include: some dry cleaning solvents, some paint thinners, and some charcoal starters. Analysis by Gas Chromatography/Mass Spectrometry of the carpet square and plastic (Item 1B) reveals the presence

TABLE 4

WebCode	Conclusions
	of an isoparaffinic product. Examples of isoparaffinic products include: some dry cleaning solvents, some paint thinners, and some charcoal starters. Analysis by Gas Chromatography/Mass Spectrometry of the carpet square and plastic (Item 1C) fails to reveal the presence of any ignitable liquids. The procedure employed does not detect the presence of light volatiles such as certain alcohols and acetone.
KBGN6X	Residues of a medium isoparaffinic product were identified on Items 1 and 2. Medium isoparaffinic products include, but are not limited to, some charcoal starter fluids, some paint thinners, some mineral spirits, and some lamp oils. Medium isoparaffinic products are considered ignitable liquids. No ignitable liquid residues were identified on Item 3.
KCCM2B	A medium isoparaffinic product was identified in item 1 and item 2. Medium isoparaffinic products include, but are not limited to, some charcoal starters, paint thinners, and copier toners. No common ignitable liquid was identified in item 3. Some conditions which could lead to this result are: A). No common ignitable liquid was present in the material analyzed. B). An ignitable liquid was present but below quantities required for a positive identification. C). An uncommon ignitable liquid was present. The activated charcoal strips prepared by the laboratory for the analysis of items 1, 2, and 3 were packaged for return in items 1, 2, and 3, respectively.
KN4V3X	Isoparaffinic product was detected in items 1 and 2. no ignitable was detected in item 3.
KPYMZQ	Analysis of items 01 and 02 revealed the presence of an isoparaffinic product, examples of which include some specialty solvents, some charcoal starter fluids, some copier toners, and some commercial specialty solvents.
KR43LB	1: Analysis indicates the presence of an isoparaffinic product. 2: Analysis indicates the presence of an isoparaffinic product. 3: No ignitable liquids were detected. Isoparaffinic products include, but are not limited to, aviation gasolines, lighter fluids, charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, gun oils, spot cleaners, penetrating oils and insecticide solvents/propellants.
KTZTDB	Item 1 and item 2 each contain a medium-range isoparaffinic product. Examples include, but are not limited to, charcoal starters, paint thinners, and lamp oils. Item 3 was evaluated as a comparison sample.
LEZB6N	An isoparaffinic product was identified in Item 1-1 ("Test No. 21-5436 Item 1") and Item 1-2 ("Test No. 21-5436 Item 2"). Some examples of isoparaffinic products would include some brands of charcoal lighter fluids, paint thinners, mineral spirits and specialty products. No ignitable liquids were detected in Item 1-3 ("Test No. 21-5436 Item 3").
LFBXWB	EXHIBIT # AGENCY # DESCRIPTION: 1) Item 1: One piece of red carpet. Examination reveals the presence of an ignitable liquid residue in the Medium Range of the Isoparaffinic Products Class. Refer to the attached Ignitable Liquid Classification System. 2) Item 2: One piece of red carpet. Examination reveals the presence of an ignitable liquid residue in the Medium Range of the Isoparaffinic Products Class. Refer to the attached Ignitable Liquid Classification System. 3) Item 3: One piece of red carpet. No ignitable liquid residue as defined by the attached Ignitable Liquid Classification System was detected.
LHC9KX	A medium isoparaffinic profile was detected within the contents of items 1 and 2. Examples of products with a medium isoparaffinic profile include but are not limited to charcoal starters, paint thinners, and solvent cleaners. No significant peaks, and therefore no ignitable liquid profile, were identified within the contents of item 3.
LKL9RQ	Item # 1, 2: The volatile contents were recovered using heated headspace recovery method and analyzed by gas chromatography, and were extracted by passive headspace adsorption using an activated charcoal strip recovery method and analyzed by gas chromatography/mass spectrometry. A medium petroleum product (e.g. industrial solvents, specialty products, charcoal starters, etc.) was detected. Item # 3: The volatile contents were recovered using heated headspace recovery method and analyzed by gas chromatography, and were extracted by passive headspace adsorption using an activated charcoal strip recovery method and analyzed by gas chromatography/mass spectrometry. The item was analyzed as a comparison sample.

TABLE 4

WebCode	Conclusions
LLUFUJ	A medium isoparaffinic Product in the range of C10 to C13 was detected on Items 1 and 2. Examples of isoparaffinic products include charcoal starters, paint thinner, solvent cleaners and lamp oils.
LLXP3H	items (1,2) contain product comprised almost exclusively of branched chain aliphatic compounds (iso paraffin).
LNG3M7	GC/MS analysis of Item 001-01 disclosed the presence of a Medium Isoparaffinic Product. Examples of a Medium Isoparaffinic Product include, but are not limited to, some charcoal starters and some paint thinners. GC/MS analysis of Item 001-02 disclosed the presence of a Medium Isoparaffinic Product. Examples of a Medium Isoparaffinic Product include, but are not limited to, some charcoal starters and some paint thinners. GC/MS analysis of Item 001-03 failed to disclose the presence of an ignitable liquid.
LPXY9E	On analysis, i found both Item 1 and Item 2 to bear traces of Isoparaffinic Products (Medium Subclass). I did not found any ignitable hydrocarbon traces on Item 3.
LQRMRA	Analysis of the samples for ignitable liquids gave the following results: Sample # Analysis Results 1: Analysis indicates the presence of an isoparaffinic product. 2: Analysis indicates the presence of an isoparaffinic product. 3: No ignitable liquids were detected. Examples of isoparaffinic products include, but are not limited to, aviation gasolines, lighter fluids, charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, gun oils, spot cleaners, penetrating oils and insecticide solvents/propellants.
LX6Z8K	Analysis identified the presence of a Medium Isoparaffinic Product. Some examples of a Medium Isoparaffinic Product may include Exxon Isopar L, some charcoal starters, some paint thinners, and some copier toners.
LX8JFG	An isoparaffinic product in the medium range was identified in Item #1 and Item #2. Examples of this include some paint thinners, some charcoal starters, and some copier toners. There were not any ignitable liquids identified in Item #3.
M3VPA9	Item 1: A medium isoparaffinic product found. Some examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. Item 2: A medium isoparaffinic product found. Some examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. Item 3: No ignitable liquids of evidentiary value found. The volatile components found are consistent with products produced when natural or synthetic materials are subjected to heating or burning.
MH7DEW	An ignitable liquid residue in the Isoparaffinic Product class in the medium range was detected in two of the plastic bags containing carpet swatches (Items 1 and 2). Although the ignitable liquid residues detected in these two items appear consistent, the possibility that they could have been from different commercial products cannot be eliminated. Examples of medium isoparaffinic products include charcoal starters, painter thinners, solvent cleaners, lamp oils, and gun oils. This list is not all-inclusive. Based on the examination of the comparison blank sample (Item 3), the carpet was not the source of the ignitable liquid residue detected. These samples were extracted by adsorption/elution and analyzed by gas chromatography/mass spectrometry. The analysis includes testing for the presence of the following classes of ignitable liquid/residues: gasoline, light, medium, and heavy subclasses of petroleum distillates, isoparaffinic products, naphthenic-paraffinic products, aromatic products, normal alkanes products, oxygenate solvents (not including light volatile organic compounds, such as methanol, ethanol, isopropanol, and acetone) and other miscellaneous (ASTM E1618).
MLTVWH	item 1: flammable liquid detected. Brancked alkanes (range from n-C10 to n-C13) without signifiant amount of cycloalkanes and n-alkanes. The product is identified as a medium isoparaffinic product (paint thinner, charcoal lighter, cleaning solvent ...). item 2: flammable liquid detected. Brancked alkanes (range from n-C10 to n-C13) without signifiant amount of cycloalkanes and n-alkanes. The product is identified as a medium isoparaffinic product (paint thinner, charcoal lighter, cleaning solvent ...)
MUNTPC	Examination of Items #1 and #2 revealed the presence of an isoparaffinic product. Isoparaffinic products include some charcoal starters and some paint thinners. Examination of Item #3 failed to

TABLE 4

WebCode	Conclusions
	reveal the presence of ignitable liquids.
N3C6WP	Item #1: Carpet Sample From Basement: A medium isoparaffinic product was found in item #1. Examples of isoparaffinic products in this range are some charcoal lighters, some paint thinners, and some copier toners. Item #2: Carpet Sample by Front Door: A medium isoparaffinic product was found in item #2. Examples of isoparaffinic products in this range are some charcoal lighters, some paint thinners, and some copier toners. Item #3: Carpet Comparison Blank: No ignitable liquid was detected on item #3.
N4M4DD	1.1) Medium (C8-C13) Isoparaffinic Product was identified in the sample. 1.2) Medium (C8-C13) Isoparaffinic Product was identified in the sample. 1.3) No ignitable liquids/or ignitable liquid residues were identified in the sample.
N626KL	Item 1: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). A Medium Isoparaffinic product was identified. Examples of this type ignitable liquid include: some charcoal starters, some paint thinners and some copier toners. Item 2: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). A Medium Isoparaffinic product was identified. Examples of this type ignitable liquid include: some charcoal starters, some paint thinners and some copier toners. Item 3: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). Ignitable liquids were not identified in the sample. Date of receipt of evidence: 08/03/21. Date(s) of performance of the laboratory activity: 9/14/21, 9/15/21, 9/16/21, 9/17/21, 9/20/21. The evidence will be returned to the submitting agency.
N6Y7BQ	A medium isoparaffinic product was detected in item 1, which was described as a carpet sample taken from a suspected ignition site in the basement, and in item 2, which was described as a carpet sample taken from an area by the front door. Examples of such products can include charcoal starters, paint thinners, mineral spirits, solvent cleaners, kerosene, lamp oils and gun oils. No ignitable liquid residues were detected on the carpet substrate (item 3).
NDGEYM	An isoparaffinic/medium petroleum distillate product was detected on Item 1 and Item 2, which was probably a kerosene based product or a similar type of speciality product. No flammable liquid was detected on Item 3. This could mean that there was none present, or any originally present may have evaporated to below the detectable level.
NE6K7K	Item 1: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). A Medium Isoparaffinic product was identified. Examples of this type ignitable liquid include: some charcoal starters, some paint thinners and some copier toners. Item 2: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). A Medium Isoparaffinic product was identified. Examples of this type ignitable liquid include: some charcoal starters, some paint thinners and some copier toners.
NGZ2MM	A medium range isoparaffinic product was identified in Exhibits 1 and 2. Medium range isoparaffinic products are ignitable liquids. Examples of medium range isoparaffinic products include kerosene, some charcoal starters, and some paint thinners. Exhibit 3 was analyzed for the presence of ignitable liquids with negative results.
NH8FR9	Ignitable liquid residues classified as medium-range isoparaffinic products were found in Item 1 and Item 2. Examples of this class include, but are not limited to, charcoal lighter fluids, mineral spirits, and paint thinners. Item 3 was evaluated as a comparison sample. No ignitable liquid residues were identified in this exhibit.
NL6X7M	Exhibits 1 and 2 each contained a medium isoparaffinic product, which are ignitable liquids. Examples of medium isoparaffinic products include some charcoal starters, paint thinners, and copier toners. No ignitable liquids were identified in Exhibit 3.
NMLLEM	Item 1 contained a section (approximately 5cm x 5cm) of red carpet. A speciality hydrocarbon product (e.g. charcoal lighter, copier toner etc) was present in this item. Item 2 contained a section (approximately 5cm x 5cm) of red carpet. A speciality hydrocarbon product (e.g. charcoal lighter, copier toner etc) was present in this item. Item 3 contained a section (approximately 5cm x 5cm) of

TABLE 4

WebCode	Conclusions
	red carpet. No accelerant was detected in this item.
NQHHD9	Items 1 and 2 were found to contain a medium range isoparaffinic product. Examples of products that contain medium range isoparaffinic products includes (but would not be limited to) charcoal starters and paint thinners. No ignitable liquid residue was detected in Item 3.
NX27PQ	A medium Isoparaffinic product was identified in Item 1 and in Item 2. Examples of medium Isoparaffinic products include, but are not limited to, some charcoal starters and some paint thinners. No ignitable liquid residues were detected in Item 3. Items 1, 2, and 3 were examined visually and using gas chromatography/mass spectroscopy (GC/MS). Headspace analysis and passive adsorption/elution extraction was performed on Items 1, 2, and 3. The activated charcoal strips used to collect volatile organic compounds with an adsorption/elution technique are contained in separate plastic vials, placed in separate, heat-sealed fire debris bags, and were repackaged inside the original items.
NX2FR2	Item 001: Contains a medium isoparaffinic product, examples of which include mineral spirits, paint thinners, and specialty solvents. Item 002: Contains a medium isoparaffinic product, examples of which include mineral spirits, paint thinners, and specialty solvents. Item 003: No ignitable liquids were detected/identified.
P2FZ6M	A medium isoparaffinic product was identified in Items 1 and 2. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters and paint thinners. No ignitable liquids were detected in Item 3. Items 1, 2, and 3 were examined visually and using gas chromatography/mass spectroscopy (GC/MS). Passive adsorption/elution extraction was performed on Items 1, 2, and 3. The activated charcoal strips used to collect volatile organic compounds with the adsorption/elution technique are contained in separate plastic vials, placed in separate, heat sealed fire debris bags, and each was repackaged in the original item.
PB349F	GC/MS analysis of item 1 and 2 revealed in high amount the presence of isoparaffinic products. The isoparaffinic product detected groups together a class of flammable products with various applications (barbecue lighters, paint thinners, inks for copiers, etc.). These are more or less flammable products that can be easily obtained on the market for some. The chromatographic profiles of items 1 and 2 are similar.
PBGFZU	Residues of a medium isoparaffinic product were identified on Items 1 and 2. Medium isoparaffinic products include, but are not limited to, some charcoal starter fluids, some paint thinners, some mineral spirits, and some lamp oils. Medium isoparaffinic products are considered ignitable liquids. No ignitable liquid residues were identified on Item 3.
PCEJYB	Evidence addressed in this report was received into the laboratory on August 3, 2021. Analysis for ignitable liquid residues using Diffusive Flammable Liquid Extraction trapping, followed by Gas Chromatography/Mass Selective Detection: Items #1 and #2: Medium Isoparaffinic Product, examples of which include (but are not limited to) charcoal starter fluids, paint thinners, lamp oils and copier toners. Item #3: No Ignitable Liquid Residues Identified. All Evidence has already been returned to the PT Vault. Ignitable liquid residue does not necessarily lead to the conclusion that a fire was incendiary in nature. In addition, negative results do not preclude the possibility that ignitable liquids were present.
PJGH3Q	A medium isoparaffinic ignitable liquid was detected in Items 1 and 2. Examples of medium isoparaffinic products are charcoal lighter fluids, paint thinners, and copier toners. No ignitable liquid was detected in Item #3.
PP7XQX	1: Volatile residues from Exhibits 1 (carpet sample taken from suspected ignition site in the basement), 2 (carpet sample taken from area by the front door), and 3 (carpet substrate intended as a comparison blank) were collected using simple heated headspace and passive headspace concentration techniques, and were analyzed for the presence of ignitable liquid residues. Exhibit 3 was analyzed as a negative control for Exhibits 1 and 2. 2: A medium-range isoparaffinic product was identified in the concentrated headspace vapors from Exhibits 1 and 2. Some examples of commercial products in this classification would include some charcoal starters, paint thinners, and copier toner. 3: No ignitable liquid residues were identified in the concentrated headspace vapors from Exhibit 3.

TABLE 4

WebCode	Conclusions
PRTTHR	1). A medium isoparaffinic product was identified in item 1 and item 2. Examples of medium isoparaffinic product include but not limited to paint thinners, solvent cleaners and lamp oils. 2). No ignitable liquid residue was identified in item 3.
PW2GVT	Item 1 was found to contain compounds classified as Isoparaffinic products according to ASTM E1618-19. Item 2 was found to contain compounds classified as Isoparaffinic products according to ASTM E1618-19. Item 3 No Ignitable Liquid residue were identified (Not Identified).
Q2AF2X	Item 001-001: A medium range Isoparaffinic product was identified. Item 001-002: A medium range Isoparaffinic product was identified. Item 001-003: No ignitable liquids were identified.
Q2EE62	Items 1 and 2 extracts each contain a medium isoparaffinic product. Examples of medium isoparaffinic products may include but are not limited to some copier toners, some charcoal starters and some paint thinners. Item 3 extract: No ignitable liquids were identified. The absence of an ignitable liquid residue does not preclude the possibility that ignitable liquids were present at the fire scene. Item 3: comparison sample for items 1 and 2.
Q4U444	Item 1 and item 2 are almost same. They contain isoparaffinic products (medium).
QBCEDY	[No Conclusions Reported.]
QCAL37	A medium isoparaffinic product was identified in items 1 and 2. Medium isoparaffinic products include, but are not limited to, some charcoal starters, paint thinners and copier toners. No common ignitable liquid was identified in item 3. Some conditions which could lead to this result are: A). No common ignitable liquid was present in the material analyzed. B). An ignitable liquid was present but below quantities required for a positive identification. C). An uncommon ignitable liquid was present.
QGNH98	Analysis of exhibit IL Item 1 and Item 2 detected the presence of a medium range isoparaffin product (examples: certain "kerosene" products, certain wax removers, certain paint thinners, etc.). Analysis of exhibit IL Item 3 failed to detect the presence of an ignitable liquid. Exhibit IL Item 1, Item 2, and Item 3 were initially extracted using direct heated headspace sampling and then were further extracted by passive headspace adsorption onto activated charcoal strips. The extracts were analyzed by gas chromatography-mass spectrometry. Portions of the activated charcoal strips from these extractions, designated IL Item 1-a, IL Item 2-a, and IL Item 3-a, were preserved for return to the submitting agency.
QWVMPR	Item 1 and Item 2 contained a medium isoparaffinic product which included but not limited to charcoal starters, paint thinners, mineral spirits, kerosene, lamp oils, and solvent cleaners. Item 3 revealed no ignitable liquid residues were detected in the comparison sample.
QYMCHL	Item #1: the presence of a Medium Isoparaffinic Product was detected in this sample. Item #2: the presence of a Medium Isoparaffinic Product was detected in this sample. Item #3: No ignitable liquids were detected in this sample.
R33DRX	Item 1 and Item 2 were identified as Isoparaffinic products.
R6MDUY	Item 1 Carpet sample taken from basement. Analysis Result: The carpet sample contains a medium isoparaffinic product. Examples of medium isoparaffinic products include some charcoal starters and some paint thinners. Item 2 Carpet sample taken from front door area. Analysis Result: The carpet sample contains a medium isoparaffinic product. Examples of medium isoparaffinic products include some charcoal starters and some paint thinners. Item 3 Carpet substrate: Analysis Result: No ignitable liquids were identified in the carpet substrate. Analysis performed using passive headspace concentration with activated charcoal and gas chromatography with mass spectrometry. The untested portion of the charcoal strip(s) used in the examinations in this case are contained in glass vials in the respective container(s).
R8DE29	The volatile contents of Items 1, 2, and 3 were extracted using a passive carbon adsorption/elution technique and analyzed by gas chromatography-mass spectrometry (GC-MS). A medium isoparaffinic product was identified in Items 1 and 2 (Identification). Medium isoparaffinic products include but are not limited to some charcoal starters, some paint thinners, and some solvent cleaners. No ignitable liquid residues were identified in Item 3 (Not Identified).
RC9C67	A medium isoparaffinic product was detected in Items 1 and 2. Medium isoparaffinic products

TABLE 4

WebCode	Conclusions
	include, but are not limited to, some charcoal starters, paint thinners, copier toners, mineral spirit substitutes, solvent cleaners, kerosene substitutes, lamp oils and other specialty application solvents and thinners. No ignitable liquids were detected in Item 3.
RHD2T6	Items 1 and 2: An isoparaffinic product was detected. Examples of an isoparaffinic product include aviation gas, some charcoal starters, some paint thinners, some copier fluids, and some commercial specialty solvents. Item 3: Negative: no ignitable liquids were detected. The absence of detectable levels of ignitable liquid residues can be due to several factors, including destruction by the inherent nature of fire, evaporation prior to collection and analysis, fire suppression activities, improper packaging of sample, or lack of use of ignitable liquids.
RPVJZL	Medium Isoparaffinic Products in the range of C10 to C12 was identified in the Items: 01 and 02. example of commercial products that contain Medium Isoparaffinic products include some charcoal starters, some paint thinner, some copier toners, some mineral spirits, some solvents cleaners, some lamp oils, and some gun oils.
RPX8L7	Item 1 RESULTS: A medium isoparaffinic product found. Some examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. Item 2 RESULTS: A medium isoparaffinic product found. Some examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. Item 3 RESULTS: No ignitable liquids found.
RZJ6VJ	Exhibits 1 and 2 each contained an isoparaffinic product. Examples of isoparaffinic products include kerosene, some charcoal starters, and some lamp oils. Isoparaffinic products are ignitable liquids. No ignitable liquids were identified in Exhibit 3.
T3H46F	[No Conclusions Reported.]
T3HCLR	Item 1 contained residues consistent with the isoparaffinic products class of ignitable liquids. Examples of this class of ignitable liquids include: some charcoal starters, some copier toners, some aviation gasolines, some lamp oils and some specialty/industrial solvents. Item 2 contained residues consistent with the isoparaffinic products class of ignitable liquids. Examples of this class of ignitable liquids include: some charcoal starters, some copier toners, some aviation gasolines, some lamp oils and some specialty/industrial solvents. No ignitable liquid residues were detected in Item 3.
T4A8RV	[No Conclusions Reported.]
TC7XGC	In Item 1, an ignitable liquid was found, belonging to the class "isoparaffinic products" subclass: medium. Volatility range: C10-C13. In item 2, an ignitable liquid was found, belonging to the class "isoparaffinic products" subclass: medium. Volatility range: C10-C13. The composition of ignitable liquids found in item 1 and item 2 is exactly the same. Ignitable liquids with such composition are available on the market as, e.g., specialty / industrial solvents, paint thinners, charcoal starters. Such liquids are relatively rare, which means that the hypothesis that liquids found in item 1 and item 2 have the same source (were spilled on the same occasion) is much more probable than the hypothesis that they come from two independent incidents.
TGE7Z2	According to ASTM E1618-06, Ignitable Liquid Classification Scheme (Table 1), Item 1, 2, and 3 were analyzed by gas chromatograph/mass spectrometer with using solid-phase microextraction and solvent extraction recovery techniques for cross-validation. Similar ignitable liquids with Medium Isoparaffinic Products were identified in both Item 1 and 2.
TTPUUK	Item 1 Result: An isoparaffinic ignitable liquid was detected. Examples: Isoparaffin specialty products, some charcoal starters, some copier fluids, some aviation fuels and some solvents for insecticides and polish. Item 2 Result: An isoparaffinic ignitable liquid was detected. Examples: Isoparaffin specialty products, some charcoal starters, some copier fluids, some aviation fuels and some solvents for insecticides and polish. Item 3 Result: Comparison Sample.
TU3A4R	An ignitable liquid residue in the Medium Isoparaffinic Product category was detected within the plastic bag containing the carpet sample from the suspected attempted ignition site (Item 1). Examples of commercial products containing isoparaffinic ignitable liquids include charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. The same type of ignitable liquid residue in the Medium Isoparaffinic Product category was detected within the

TABLE 4

WebCode	Conclusions
TUKCWL	<p>plastic bag containing the carpet sample from the area by the front door (Item 2). Although the ignitable liquid residues detected in both Items 1 and 2 appear to be of the same type, it cannot be assumed that they are from the same commercial product. No ignitable liquid was detected within the plastic bag containing the carpet sample intended as a comparison blank (Item 3).</p> <p>Item 1 was subjected to adsorption-elution extraction followed by gas chromatographic/mass spectrometric (GC/MS) analysis. GC/MS analysis shows the presence of a medium isoparaffinic product ignitable liquid. Examples of this class of ignitable liquid could include (but are not limited to): charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene lamp oils, and gun oils. Item 2 was subjected to adsorption-elution extraction followed by gas chromatographic/mass spectrometric (GC/MS) analysis. GC/MS analysis shows the presence of a medium isoparaffinic product ignitable liquid. Examples of this class of ignitable liquid could include (but are not limited to): charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene lamp oils, and gun oils. Item 3 was subjected to adsorption-elution extraction followed by gas chromatographic/mass spectrometric (GC/MS) analysis. No ignitable liquids were identified in Item 3.</p>
TZDCC3	Items 1 and 2 were found to contain a medium range isoparaffinic product. Examples include mineral spirits and solvent cleaners. Item 3 was analyzed for comparison purposes only.
TZRM8Z	Item 1 contains a medium range isoparaffinic solvent. Item 2 contains a medium range isoparaffinic solvent. Item 3 was submitted as a comparison.
U9HJR2	<p>METHODS: Items 1, 2, and 3 were extracted using a passive adsorption-elution technique. The Item 1, 2, and 3 extracts were examined using Gas Chromatography-Mass Spectrometry (GC-MS).</p> <p>RESULTS AND INTERPRETATIONS: The Item 1 and 2 extracts each contained a medium isoparaffinic product which can be found in, but is not limited to, some insect sprays and commercial solvents. No ignitable liquids were identified in the Item 3 extract.</p>
UDUN43	Results and Conclusions: Items 1 and 2 contain a medium isoparaffinic product. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some solvent cleaners. No ignitable liquids were identified in item 3, reported to be a comparison blank.
UMHHHJ	Lab Item 1: Carpet sample taken from suspected attempted ignition site in the basement. Analysis confirmed a medium isoparaffinic product. Lab Item 2: Carpet sample taken from area by the front door. Analysis confirmed a medium isoparaffinic product. Lab Item 3: Carpet substrate intended as a comparison blank. No ignitable liquids were identified. Submitted as a control sample and tested for substrate background products and interferences.
URUHNJ	A medium isoparaffinic product was detected in the carpet samples (items 1 and 2). Examples of commercial products that may contain a medium isoparaffinic product may include: charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, gun oils. The carpet sample (item 3) was submitted as comparison blank.
V7DFDK	Compounds detected in Item 1 and Item 2 present indistinguishable chromatogram patterns. They may have the same origin. According to our experience, the highlighted chromatographic pattern fit with a class H solvent isopar. Isopar H is a solvent used in industrial, professional, and consumer applications such as manufacturing process solvent, metal working, agrochemical formulations, polymers processing, cleaning agents and coatings. They can also be assigned to some charcoal starter and some weathered alkylate gasoline.
V9WWJP	Analysis of Item 1 revealed the presence of an isoparaffinic product. Examples of this class are charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. Analysis of Item 2 revealed the presence of an isoparaffinic product. Examples of this class are charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils.
VA82VR	I detected medium range isoparaffinic product residues in the pieces of carpet-like material (Items 001-1 and 001-2). Some examples that may contain this class of compounds are isopar fluids, charcoal starters, copier fluids, insecticide carriers, polishes, and stain guard carriers. I did not detect

TABLE 4

WebCode	Conclusions
	any common ignitable liquid residues in the piece of carpet-like material (Item 001-3).
WCR9UE	ITEM DESCRIPTION RESULTS: 1: Carpet sample from basement. A medium isoparaffinic product identified. 2: Carpet sample from front door. A medium isoparaffinic product identified. 3: Comparison carpet sample. No ignitable liquid identified.
WDN3GK	Residues of a medium isoparaffinic product were identified on Items 1 and 2. Medium isoparaffinic products include, but are not limited to, some charcoal starter fluids, some paint thinners, some mineral spirits, and some lamp oils. Medium isoparaffinic products are considered ignitable liquids. No ignitable liquid residues were identified on Item 3.
WDQNG8	An isoparaffinic product in the medium range was identified in Item #1 and Item #2. Examples of this include some charcoal starters, some paint thinners, and some copier toners. There were no ignitable liquids identified in Item #3.
WE2LPH	A medium isoparaffinic product was detected in Items 1 and 2. Examples of medium isoparaffinic products include, but are not limited to, some solvent cleaners and some mineral spirits. No ignitable liquid residues were detected in Item 3.
WEZZPW	[No Conclusions Reported.]
WH2WLH	A medium isoparaffinic product was identified in Item 1 and Item 2. Examples of a medium isoparaffinic product include but are not limited to some charcoal starters and some paint thinners. No ignitable liquids were detected in Item 3. Items 1 – 3 were examined visually and using gas chromatography/mass spectroscopy (GC/MS). Passive adsorption/elution extraction was performed on Items 1 – 3. The activated charcoal strips used to collect volatile organic compounds with an adsorption/elution technique are contained in separate plastic vials, placed in separate, heat-sealed fire debris bags, and each was repackaged inside the original item.
WHYBLV	Both items 1 and 2 contain medium to medium/heavy isoparaffinic ignitable liquids.
WNK422	Items #1 and #2: A medium range isoparaffinic product was detected. Examples of medium isoparaffinic products include some charcoal starters, some paint thinners, and some solvent cleaners.
WQN273	1). In the sample received and labeled as item 1, it was detected the presence of one mixture which can be classified in the scheme proposed by the ASTM E 1618-19 Standard Methods as medium isoparaffinic products. 2), In the sample received and labeled as item 2, it was detected the presence of one mixture which can be classified in the scheme proposed by the ASTM E 1618-19 Standard Methods as medium isoparaffinic products. 3). In the sample received and labeled as item 3, it were not detected any mixture which can be classified in the scheme proposed by the ASTM E 1618-19 Standard Method. 4). The medium Isoparaffinic Products are a ignitables liquids. Ignitable liquid may start or accelerate a fire. The identification of an ignitable liquids residue in the item 1 and 2, does not necessarily lead to the conclusion that a fire was incendiary in nature. Further investigation may reveal a legitimate reason for the presence of ignitable liquid residues.
WV2MDN	Analysis of item 1 revealed the presence of Naphthenic paraffinic products. Analysis results indicated that item 2 also contained Naphthenic paraffinic products. No ignitable liquids were identified in item 3.
WV74BM	A medium isoparaffinic product was detected in items 1 and 2. Some examples of medium isoparaffinic products include charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. Even though the ignitable liquid residues detected in items 1 and 2 were classified the same, they could have originated from different commercial preparations. No ignitable liquid residue was detected in item 3.
WV7PZT	Item 001-001: Residues of a medium isoparaffinic product were identified. Item 001-002: Residues of a medium isoparaffinic product were identified. Item 001-003: No ignitable liquid residues were identified.
WV9ML6	Items 1 & 2: A medium range isoparaffinic product was identified. Medium isoparaffinic products are ignitable liquids and examples include, but are not limited to, charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils.
WW33ML	CTS Items 1 and 2 contained medium isoparaffinic products. Examples of medium isoparaffinic

TABLE 4

WebCode	Conclusions
	products include, but are not limited to, some charcoal starters, some paint thinners, and some mineral spirits. No ignitable liquids were detected in CTS Item 3.
WXBNL3	Item 1: Isoparaffinic product was detected. Item 2: Isoparaffinic product was detected. Item 3: No ignitable liquids were detected. Isoparaffinic product: Examples of an isoparaffinic product include aviation gas, some charcoal starters, some paint thinners, some copier fluids, and some commercial specialty solvents. Negative: The absence of detectable levels of ignitable liquid residues can be due to several factors, including destruction by the inherent nature of fire, evaporation prior to collection and analysis, fire suppression activities, improper packaging of sample, or lack of use of ignitable liquids.
WYLRTY	Item 1: A medium isoparaffinic product found. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. Item 2: A medium isoparaffinic product found. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. Item 3: No ignitable liquids of evidentiary value found. The volatile components found are consistent with products produced when natural or synthetic materials are subjected to heating or burning.
WZ2EHL	CTS Items # 1 and 2 contain a medium isoparaffinic product. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. No ignitable liquids were detected in CTS Item #3.
X2BFT7	Item 1 (LIMS #1-1): An ignitable liquid classified as a medium isoparaffinic product was detected. Examples of medium isoparaffinic products include charcoal starters, paint thinners, or furniture protectant. Item 2 (LIMS #1-2): An ignitable liquid classified as a medium isoparaffinic product was detected. Examples of medium isoparaffinic products include charcoal starters, paint thinners, or furniture protectant. Item 3 (LIMS #1-3): An ignitable liquid was not detected. Carbon strips, for archive, produced from items 1 - 3 and from a bag blank were booked as item 4.
X6PTUT	Items 1 and 2 were found to contain a heavy isoparaffinic product. Examples of a heavy isoparaffinic product may include, but are not limited to commercial specialty solvents. These items were processed using passive headspace concentration with activated charcoal strips and analyzed using a gas chromatograph/mass spectrometer.
X8UM84	A medium Isoparaffinic was identified in Specimens #001 and #002. Examples of a medium Isoparaffinic product include paint thinners, charcoal starters, and copier toners. No ignitable liquids were detected in Specimen #003. All specimens were extracted by Passive Headspace Concentration extraction with activated charcoal and analyzed by Gas Chromatography/Mass Spectrometry. Disclaimer: The absence of an ignitable liquid does not rule out the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that may have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background material.
X9NCPZ	A medium isoparaffinic product was detected in Items 1 and 2. Medium isoparaffinic products include, but are not limited to, some charcoal starters, paint thinners, copier toners, mineral spirit substitutes, solvent cleaners, kerosene substitutes, lamp oils and other specialty application solvents and thinners. No ignitable liquids were detected in Item 3.
XCRZBG	The vapour detected with item 1 was very similar to the vapour detected with item 2. However, it is not possible to determine if they are from the same source or not. The vapour detected with item 3 was different from the vapour detected with items 1 and 2.
XGK43Z	Item 1: A medium isoparaffinic product found. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. Item 2: A medium isoparaffinic product found. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. Item 3: No ignitable liquids found.
XHYYXK	Item #1: Ignitable liquid residue containing an Isoparaffinic product. Item #2: Ignitable liquid residue containing an Isoparaffinic product. Item #3: No ignitable liquid residue identified.
XJ6XYZ	A medium isoparaffinic product was detected in Items 1 and 2. Medium isoparaffinic products

TABLE 4

WebCode	Conclusions
	include, but are not limited to, some charcoal starters, paint thinners, copier toners, mineral spirit substitutes, solvent cleaners, kerosene substitutes, lamp oils and other specialty application solvents and thinners. No ignitable liquids were detected in Item 3.
XM74CK	Examination and analysis performed on items 1 and 2 revealed the presence of a medium petroleum distillate (an ignitable liquid). Examination and analysis performed on item 3 did not reveal the presence of ignitable liquids.
XN48A3	Evidence addressed in this report was received into the laboratory on August 3, 2021. Analysis for ignitable liquid residues using Diffusive Flammable Liquid Extraction trapping, followed by Gas Chromatography/Mass Selective Detection: Item(s) #1 and #2: Medium Isoparaffinic Products, examples of which include (but are not limited to) charcoal starter fluids, paint thinners, lamp oils and copier toners. Item #3: No ignitable liquid residues identified. All Evidence will be returned to the PT vault. Ignitable liquid residue does not necessarily lead to the conclusion that a fire was incendiary in nature. In addition, negative results do not preclude the possibility that ignitable liquids were present.
XTBZX7	The carpet samples submitted as Items 1 and 2 likely contain residue of ignitable liquid classified as medium isoparaffinic product. Medium isoparaffinic products are for example some charcoal starters, paint thinners, paint/varnish removers, mineral spirits, solvents, solvent cleaners, heating fuels, fabric/furniture protectors, lamp oils and gun oils. Medium isoparaffinic products are present for example in some copier toners and insecticides.
XWEQ9R	The above items were examined in accordance with [Laboratory] methods and procedures based upon ASTM International standard test methods and practices. The samples were extracted using passive headspace sampling and analyzed via gas chromatography-mass spectrometry. An extract generated from each item will be returned with the evidence (Items 1A, 2A, and 3A). Item #1 and Item #2: An ignitable liquid residue was detected; a medium isoparaffinic product. Medium isoparaffinic products may originate from some charcoal starters, some paint thinners, some mineral spirits, and some lamp oils. Item #3: No ignitable liquid residues were detected. Item 3 was submitted as a comparison sample for Items 1 and 2.
Y4BERH	Items 1 and 2 contained a medium isoparaffinic ignitable liquid. Examples include charcoal lighter starter, paint thinners, and solvents. No ignitable liquid was detected in item 3.
Y63U8E	Item 1: Carpet Sample from Basement: An isoparaffinic product in the medium range (C10 to C13) was detected in Item 1 based on the ASTM1618 classification scheme. Examples of this class include Lamp Oils, Gun Oils, Charcoal Starters, Paint Thinners, Copier Toners, Mineral Spirits, Kerosene, and Solvent Cleaners. Item 2: Carpet Sample from Front Door: An isoparaffinic product in the medium range (C10 to C13) was detected in Item 2 based on the ASTM1618 classification scheme. Examples of this class include Lamp Oils, Gun Oils, Charcoal Starters, Paint Thinners, Copier Toners, Mineral Spirits, Kerosene, and Solvent Cleaners. Item 3: Carpet Comparison Blank: No ignitable residues were detected in Item 3.
Y9263E	Item 1: Carpet sample (possible ignition site): A medium range (C10-C13) isoparaffinic product was identified in the sample. This identification is based on the ASTM 1618 Classification Scheme. Examples of commercial products of this class include: Paint thinners, mineral spirits, lamp oils, and gun oils. Item 2: Carpet sample (front door): A medium range (C10-C13) isoparaffinic product was identified in the sample. This identification is based on the ASTM 1618 Classification Scheme. Examples of commercial products of this class include: Paint thinners, mineral spirits, lamp oils, and gun oils. The products identified in Items 1 and 2 appear to be from the same source. Item 3: Carpet sample (comparison): Item 3 was submitted for substrate comparison to the other two samples. No ignitable liquids were detected in Item 3.
YBAXUD	Items 1 & 2: A medium isoparaffinic product was detected on both of the items (2 x carpet samples), probably a kerosene or a kerosene based product. Item 3: No ignitable or combustible liquid was detected on the carpet. This may mean there was never any present, or that any liquid had evaporated below the detectable limit.
YC3UGL	1: Volatile residues from Exhibits 1 (carpet sample taken from suspected attempted ignition site in the basement), 2 (carpet sample taken from area by the front door), and 3 (carpet substrate intended as a comparison blank) were collected using direct and passive headspace concentration techniques and

TABLE 4

WebCode	Conclusions
	analyzed using gas chromatography/mass spectrometry for the presence of ignitable liquid residues. 2: A medium range isoparaffinic product was identified in the concentrated headspace vapors of Exhibits 1 and 2. Ignitable liquids belonging to this class are commercially available as some charcoal starters, some paint thinners, and some copier toners. 3: No ignitable liquid residues were identified in the concentrated headspace vapors of Exhibit 3.
YE9P9Y	1). A medium isoparaffinic product found. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. 2). A medium isoparaffinic product found. Examples of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. 3). No ignitable liquids found.
YKWEQN	Both items contain traces of the same isoparaffinic solvent.
YKZ24V	Napthenic-paraffinic product found.
YL9BVR	Items 1 and 2 extracts each contain a medium isoparaffinic product. Examples of medium isoparaffinic products may include but are not limited to some copier toners, some charcoal starters and some paint thinners. Item 3 extract: No ignitable liquids were identified. The absence of an ignitable liquid residue does not preclude the possibility that ignitable liquids were present at the fire scene. Item 3: comparison sample for items 1 and 2.
YNJTEX	1). A medium isoparaffinic product was detected in Exhibits ITEM 1 and ITEM 2. Uses of medium isoparaffinic products include, but are not limited to, some charcoal starters, some paint thinners, and some copier toners. Medium isoparaffinic products are ignitable liquids and could act as a fire accelerant. 2). No ignitable liquid, or its residue, was detected in Exhibit ITEM 3.
YRZE86	Item 1 (LIMS #1-1): contained an ignitable liquid classified as a medium isoparaffinic product. Examples of medium isoparaffinic products include but are not limited to some charcoal lighter fluids and some paint thinners. Item 2 (LIMS #1-2): contained an ignitable liquid classified as a medium isoparaffinic product. Examples of medium isoparaffinic products include but are not limited to some charcoal lighter fluids and some paint thinners. Item 3 (LIMS #1-3): no recognizable ignitable liquids were identified.
YTTU9L	Item #1: An ignitable liquid consistent with a medium (C10-C13) isoparaffinic product was identified. Examples of a medium isoparaffinic product include: charcoal starters, paint thinners, copier fluids, lamp oils, mineral spirits, gun oils, solvent cleaners, and camping fuel. Item #2: An ignitable liquid consistent with a medium (C10-C13) isoparaffinic product was identified. Examples of a medium isoparaffinic product include: charcoal starters, paint thinners, copier fluids, lamp oils, mineral spirits, gun oils, solvent cleaners, and camping fuel.
YU6A3L	Analysis of Item 1 revealed the presence of an isoparaffinic product. Examples of this class are charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. Analysis of Item 2 revealed the presence of an isoparaffinic product. Examples of this class are charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils.
YYX7DD	The following items were analyzed for the presence of ignitable liquids: Item 1.1 Item #1: Sealed nylon bag containing carpet. The sample of item 1.1 contained a medium isoparaffinic product. Examples of medium isoparaffinic products include some paint thinners and some charcoal starters. Item 1.2 Item #2: Sealed nylon bag containing carpet. The sample of item 1.2 contained a medium isoparaffinic product. Examples of medium isoparaffinic products include some paint thinners and some charcoal starters. Item 1.3 Item #3: Sealed nylon bag containing carpet. No ignitable liquids were identified in the item 1.3 sample. Analysis performed using passive headspace concentration with activated charcoal and gas chromatography with mass spectrometry. The untested portion of the charcoal strip(s) used in the examinations in this case are contained in glass vials in the respective container(s).
ZAXT7B	Item 1: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). A Medium Isoparaffinic product was identified. Examples of this type ignitable liquid include: some charcoal starters, some paint thinners and some copier toners. Item 2: The submitted sample was analyzed using a passive headspace technique and

TABLE 4

WebCode	Conclusions
	gas chromatography-mass spectrometry (GC-MS). A Medium Isoparaffinic product was identified. Examples of this type ignitable liquid include: some charcoal starters, some paint thinners and some copier toners. Item 3: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). Ignitable liquids were not identified in the sample.
ZBPWRP	1). Laboratory items #1 and #2: A medium isoparaffinic product was identified. Examples of medium isoparaffinic products include, but are not limited to, charcoal starters, paint thinners, and copier toners. 2). Laboratory item #3 (Comparison Sample): No ignitable liquids were identified.
ZF2ZKD	Items 1 & 2 contain an (medium) isoparaffinic product.
ZJZD4W	Instrumental analysis of Item 1 revealed the presence of an isoparaffin product. Products in this range include, but are not limited to: some charcoal starters, some copier fluids, some aviation gasoline, some lamp oils, some solvents for insecticides and polishes and some camping fuels. Instrumental analysis of Item 2 revealed the presence of an isoparaffin product. Products in this range include, but are not limited to: some charcoal starters, some copier fluids, some aviation gasoline, some lamp oils, some solvents for insecticides and polishes and some camping fuels. Instrumental analysis of Item 3 did not reveal the presence of any ignitable liquid residue. This result does not eliminate the possibility that an ignitable liquid was used. Results were confirmed by the following instrumentation: Gas Chromatograph/Mass Spectrometer.
ZQZY3	Items 1, 2, and 3 were examined using passive headspace adsorption. The extracts recovered from items 1, 2, and 3 were examined by gas chromatography/mass spectrometry (GC/MS). The extracts from items 1 and 2 were found to contain a volatile mixture which was identified as a medium isoparaffinic product. Examples of isoparaffinic products include some commercial solvents, some charcoal lighters, and some copier toners. No common ignitable liquid residues were detected in the extract from item 3. This does not preclude the possibility that an ignitable liquid may have been present at an earlier time. Ignitable liquids are volatile compounds that could have evaporated, been consumed in a fire, environmentally altered or removed, or are otherwise indistinguishable from background materials.
ZTBFPX	Instrumental analysis of exhibits Item 1 and Item 2 revealed the presence of an isoparaffin product. Products in this range include, but are not limited to: some charcoal starters, some copier fluids, some aviation gasoline, some lamp oils, some solvents for insecticides and polishes and some camping fuels. Instrumental analysis of exhibit Item 3 did not reveal the presence of any ignitable liquid residue. This result does not eliminate the possibility that an ignitable liquid was used. Results were confirmed by the following instrumentation: Gas Chromatograph/Mass Spectrometer.
ZUXCV3	Items 1 through 3 were examined using passive headspace adsorption. The extracts recovered from Items 1 through 3 were examined by gas chromatography/mass spectrometry. Items 1 and 2 were found to contain a volatile mixture identified as a medium isoparaffinic product. Examples of such mixtures include some charcoal lighters, some paint thinners and some organic solvents. No common ignitable liquid residues were detected in the comparison sample (Item 3).
ZVTUW4	Item 1A and 1B were analyzed utilizing Gas Chromatography/Mass Spectrometry (GC/MS). These items contain an ignitable liquid in the medium isoparaffinic class. Examples of medium isoparaffinic products include some charcoal starters, some paint thinners, and some copier toners. Item 1C was analyzed utilizing Gas Chromatography/Mass Spectrometry (GC/MS). No ignitable liquids were identified. It should be noted that ignitable liquids may evaporate or can be totally consumed during a fire. A negative finding of ignitable liquids does not preclude its presence during a fire.
ZZ98XQ	Items 1 and 2 (Exhibits 1 and 2): A medium isoparaffinic product was detected. Examples of this class of ignitable liquids include charcoal starters, paint thinners, copier toners, mineral spirits, solvent cleaners, kerosene, lamp oils, and gun oils. Item 3 (Exhibit 3): No ignitable liquid was detected.

Additional Comments

TABLE 5

WebCode	Additional Comments
28L9LK	Item 1A was removed from bag 1. Item 1B was removed from bag 2. Item 1C was removed from bag 3.
2E62L6	NOTE: Although an ignitable liquid was identified in the submitted sample(s), further investigation may reveal a legitimate reason for the presence of an ignitable liquid. NOTE: A finding of no ignitable liquids identified does not preclude the possibility that ignitable liquids were present in the sample(s). Explanations for a finding of no ignitable liquids may be, but are not limited to: not present in the sample, does not meet current ASTM requirements, evaporation of the volatile compounds, complete consumption in a fire, environmental alteration, masked by background material, or a limitation of the reference material available to this laboratory. NOTE: An activated charcoal strip was used to collect a sample from each item submitted for analysis. These charcoal strips are preserved in the laboratory for 5 years for potential additional analysis. Charcoal strips associated with death investigations will be preserved indefinitely.
2XZCTE	Examination of the component ratios indicates that Item 1 is present in a somewhat evaporated state when compared to Item 2.
37L3MK	Identification of an ignitable liquid in a fire scene does not necessarily lead to the conclusion that a fire was incendiary in nature. Further investigation may reveal a legitimate reason for the presence of ignitable liquid residue. The absence of an ignitable liquid residue does not preclude the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that could have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background materials. Items 1, 2, and 3 were extracted using a passive adsorption-elution technique and were analyzed using gas chromatography/mass spectrometry (GC/MS). Both the analyzed and unanalyzed portions of the charcoal strips will be returned to the submitting agency along with the original evidence.
3DKR4N	We have an information sheet similar to Table I in ASTM E-1618 "Ignitable Liquid Classification Scheme with Examples of Known Products for Each Class", which we send along with the report.
3YMHGH	Item 1: Isoparaffinic products are highly refined, petroleum-based liquids. Examples are listed in our interpretive guidance document. Item 2: Isoparaffinic products are highly refined, petroleum-based liquids. Examples are listed in our interpretive guidance document. Item 3: This sample was used as a reference for comparison purposes.
49AN4E	Caprolactum was detected in Item 3 (Exhibit 3).
6WU9L8	The identification of an ignitable liquid residue does not necessarily lead to the conclusion that a fire was incendiary in nature. The absence of an ignitable liquid residue does not preclude the possibility that ignitable liquids were present.
789M4Z	for specimens where no ignitable liquids are detected, this disclaimer is reported: Disclaimer: The absence of an ignitable liquid does not rule out the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that may have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background material.
7R89GB	Isopar L was used as a reference comparison.
929BYE	Identification of an ignitable liquid residue in a fire scene does not necessarily lead to the conclusion that a fire was incendiary in nature. Further investigation could reveal a legitimate reason for the presence of ignitable liquid residues. The absence of an ignitable liquid residue does not preclude the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that could have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background materials. Items 1, 2, and 3 were extracted using a passive adsorption-elution technique and were analyzed using gas chromatography/mass

TABLE 5

WebCode	Additional Comments
	spectrometry (GC/MS). Both analyzed and unanalyzed portions of the charcoal strips will be returned to the submitting agency along with the original evidence.
9YLNAW	Branched alkanes have been identified in Item 1 and Item 2. Item 3 is free of relevant compound.
A9MHXU	Both samples contain the same chemical compounds consequently both of them might be a same product.
AJ7D99	Item 3: Comparison sample.
ALXTPQ	A medium isoparaffinic product was detected in item 1. A medium isoparaffinic product was detected in item 2.
B8QD22	Chromatograms received from sample 1 and 2 prepared by various methods showed the same pattern.
C84DC2	Conclusions and caveats below are based on ASTM 1618-14. The identification of an ignitable liquid residue in a fire scene does not necessarily lead to the conclusion that a fire was incendiary in nature. Further investigation may reveal a legitimate reason for the presence of ignitable liquids. The absence of an ignitable liquid residue does not preclude the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that may have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background materials. Chain of Custody records and details of the GC-MS analysis may be provided upon request. Test No. 21-5436 Data Sheet, continued.
CDRWUJ	Failure to identify an ignitable liquid in any samples of fire debris should not be interpreted to mean that an ignitable liquid could not have been present. It means only that none could be recovered from the debris and or detected during analysis. These opinions are based upon my knowledge, skills, experience, training, education, and personal observations as well as facts and data perceived by or made known to me, which facts and data are of the type reasonably relied upon by experts in my particular field in forming opinions or inferences.
CEPRC8	Item 1 and 2: Example of products: Paint Thinner, Charcoal Starter, Lamp Oil.
D9F8UM	In the Item 3 it was detected the chromatograph peak of Nylon (sample container material described as nylon evidence bag).
DP79RE	These items were processed using passive headspace concentration with an activated charcoal strip and analyzed using a gas chromatograph/mass spectrometer. Examples of a heavy isoparaffinic product may include but are not limited to commercial specialty solvents.
E77MG7	Item 1: Isoparaffinic products are highly refined, petroleum-based liquids. Examples are listed in our interpretive guidance document. Item 2: Isoparaffinic products are highly refined, petroleum-based liquids. Examples are listed in our interpretive guidance document. Item 3: This sample was used as a reference for comparison purposes.
FLBLQL	SPME-GC/MS analysis also carried out on Items 1-3.
GGKCGN	That kind of isoparaffinic hydrocarbon mixture can be originated from e.g. industrial solvent, thinners, fabric furniture protector, Mineral Spirit or LabChem Kerosene. In our country this kind of product are used e.g. as cleaners, waxes for cars, and lampoils.
GT9KVG	No flammable liquids was detected in the sample labelled Item 3.
GWB4TU	Although an ignitable liquid type or class has been nominated, it must be noted that some commercial products incorporate similar liquids into their products, either within their specific formulation (e.g. degreasers, carburettor cleaners, etc), or as "carrier" for the key compounds (e.g. some aerosol or liquid products).
HP4ERU	Note: The identification of an ignitable residue from the fire debris from a fire scene does not necessarily lead to the conclusion that a fire was incendiary in nature. Further investigation may reveal

TABLE 5

WebCode	Additional Comments
	a legitimate reason for the presence liquid residues. We don't have so standard samples, of which chromatograms could be fit exactly with those chromatograms which resulted the testing of Item# 1 and Item#2, so we can not identify the commercial product we have found in the mentioned items.
HYC2PM	No differences were observed in the data between Exhibits 1 and 2.
JVQNEX	A medium isoparaffinic solvent includes some charcoal starters, some paint thinners, mineral spirits, and other proprietary formulations. Isopar L was the standard used as the comparison standard.
JYU72T	Item 1, Item 2, and Item 3 were examined visually and using gas chromatography/mass spectrometry (GC/MS). Passive adsorption/elution extraction was performed on Item 1, Item 2, and Item 3. The activated charcoal strips used to collect volatile organic compounds with an adsorption/elution technique are contained in separate plastic vials placed in separate, heat-sealed fire debris bags and each was repackaged inside the original item.
K9E742	Agency item 1 is Item 1A in my report. Agency item 2 is Item 1B in my report. Agency item 3 is Item 1C in my report.
KN4V3X	we are using ASTM E 1618-19 scheme for the the interpretation of the analysis result.
KPYMZQ	The product identified is further classified as a medium range product.
LFBXWB	A copy of the Ignitable Liquid Classification System is attached to every report.
LKL9RQ	The unanalyzed portion of the activated charcoal strips are being returned to the submitting agency along with the submitted evidence.
LLXP3H	fld reported 3 ignitable liquids of class (petroleum distillates) in specific.
LQRMRA	An isoparaffinic product was detected in sample 1 and 2. No ignitable liquids were present in sample 3. Failure to identify an ignitable liquid in any samples of fire debris should not be interpreted to mean that an ignitable liquid could not have been present. It means only that none could be recovered from the debris and or detected during analysis.
LX6Z8K	Analysis identified the presence of a Medium Isoparaffinic Product. Some examples of a Medium Isoparaffinic Product may include Exxon Isopar L, some charcoal starters, some paint thinners, and some copier toners.
NE6K7K	Item 3: The submitted sample was analyzed using a passive headspace technique and gas chromatography-mass spectrometry (GC-MS). Ignitable liquids were not identified in the sample.
NGZ2MM	Nylon bags are not ideal for fire debris evidence because they tend to leak.
NMLLEM	This laboratory does not employ the ASTM classification scheme.
PB349F	The profile of item 3 is the profil of the carpet.
R8DE29	An Explanation of Terms section would be added to the report that provides definitions to Identification and Not Identified.
RHD2T6	Item 1: UB red carpet square: Pattern resembles an isoparaffinic product and extracted ions are a good fit or isopar criteria. Overlay with known isopar looks good, so call made. Cut open plastic bag to expose carpet and put into can from laboratory supplies for heating. Item 2: UB red carpet square: Pattern resembles an isoparaffinic product and extracted ions are a good fit or isopar criteria. Overlay with known isopar looks good, so call made. Cut open plastic bag to expose carpet and put into can from laboratory supplies for heating. Item 3: UB red carpet square: Some peaks present, but abundance is low and no ignitable liquid criteria are met. No call made. Some solvent show-through, but abundance is very low. Analysis not affected. Cut open plastic bag to expose carpet and put into can from laboratory supplies for heating.
V9WWJP	The activated charcoal strip extracts were packaged with the original items and stored in the Fire

TABLE 5

WebCode	Additional Comments
	Debris Unit. Upon completion of the proficiency test, after results are released, the items and their activated charcoal strips will be disposed of. Ignitable liquid classification is based on ASTM E1618 Standard Test Method for Ignitable Liquid Residues in Extracts from Fire Debris Samples by Gas Chromatography-Mass Spectrometry and/or the laboratory's internal policy and procedures.
WCR9UE	The identification of an ignitable liquid in an item does not necessarily lead to the conclusion that a fire was deliberately set. Medium isoparaffinic products are ignitable liquids that may be found in commercial products such as charcoal lighter fluids, paint thinners, and copier toners.
WE2LPH	Items 1, 2, and 3 were examined visually and using gas chromatography/mass spectrometry (GC/MS). Passive adsorption/elution extraction were performed on the items. The activated charcoal strips used to collect volatile organic compounds with an adsorption/elution technique are contained in separate plastic vials, placed in separate, heat-sealed fire debris bags, and each was repackaged inside the original item.
WQN273	A medium isoparaffinic product like that found in some paint thinners, copier toners, mineral spirits, solvent cleaners, lamp oils or kerosenes was presents on Item 1 and 2.
WV9ML6	Note: The identification of an ignitable liquid in an item does not necessarily lead to the conclusion that a fire was deliberately set. Methods of Analysis: Items extracted using activated charcoal strip and analyzed by gas chromatography-mass spectrometry (GC-MS), which is a standard instrumental technique.
XCRZBG	A high level of vapour was detected with items 1 and 2.
XGK43Z	The following statement is found at the end of my report: The identification of an ignitable liquid residue in a fire scene does not necessarily lead to the conclusion that a fire was incendiary in nature. Further investigation may reveal a legitimate reason for the presence of ignitable liquid residues. The absence of an ignitable liquid residue does not preclude the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that may have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background materials.
XHYYXK	Isoparaffinic products include, but are not limited to, solvents for paints, printing inks, and cleaning agents.
XTBZX7	1). ASTM standard E1618-19 was used for the classification of ignitable liquids. 2). For Items 1 and 2: the majority of the chromatographic pattern of medium isoparaffinic product residue is in the carbon number range of C10 to C13. 3). We would write as a conclusion in our report that the carpet samples submitted as Items 1 and 2 likely contain residue of ignitable liquid classified as medium isoparaffinic product, because we did not have in our ignitable liquid database any chromatograms of reference ignitable liquids, which were similar enough to the chromatograms of Items 1 and 2 to give an opinion, that these items definitely contain medium isoparaffinic product residue. 4). The medium isoparaffinic product residues from Items 1 and 2 may have a common source for the following reasons. 4a). The similarities between the total ion chromatograms of the medium isoparaffinic product residues from the solvent extracts/headspaces of Items 1 and 2. 4b). The similarities between the chromatographic patterns of alkanes of the medium isoparaffinic product residues on the extracted ion chromatograms (m/z 57) of the solvent extracts/headspaces of Items 1 and 2. 4c). The similarities between the chromatographic patterns of cycloalkanes of the medium isoparaffinic product residues on the extracted ion chromatograms (m/z 83 and 97) of the solvent extracts/headspaces of Items 1 and 2. 4d). The similarities between the chromatographic patterns of alkenes of the medium isoparaffinic product residues on the extracted ion chromatograms (m/z 55) of the solvent extracts/headspaces of Items 1 and 2. 4e). Aromatic hydrocarbons and oxygenated compounds are absent or present in insignificant amounts in the medium isoparaffinic product residues from Items 1 and 2.
Y9263E	Conclusions based on ASTM 1618-14: The identification of an ignitable liquid residue in a fire scene does not necessarily lead to the conclusion that a fire was incendiary in nature. Further investigation

TABLE 5

WebCode	Additional Comments
	could reveal a legitimate reason for the presence of ignitable liquid residues. The absence of an ignitable liquid residue does not preclude the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that could have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background materials. Chain of Custody and GC-MS analysis details may be provide upon request Test No.: 21-5436.
YE9P9Y	The following statement is included on Fire Debris reports: The identification of an ignitable liquid residue in a fire scene does not necessarily lead to the conclusion that a fire was incendiary in nature. Further investigation may reveal a legitimate reason for the presence of ignitable liquid residues. The absence of an ignitable liquid residue does not preclude the possibility that ignitable liquids were present at the fire scene. Ignitable liquids are volatile compounds that may have evaporated, been totally consumed in a fire, environmentally altered or removed, or otherwise indistinguishable from background materials.
ZBPWRP	Qualifier: 1). The identification of an ignitable liquid residue on tested evidence does not necessarily lead to the conclusion that a fire was incendiary in nature. Further investigation may reveal a legitimate reason for the presence of ignitable liquid residues.

-End of Report-
(Appendix may follow)

Test No. 21-5436: Ignitable Liquid Identification

DATA MUST BE SUBMITTED BY **Oct. 4, 2021, 11:59 p.m.** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: K34FGL

The Accreditation Release section can be accessed by using the "Continue to Final Submission" button above. This information can be entered at any time prior to submitting to CTS.

Scenario:

Police are investigating a suspected attempted arson of a nearby residence. It appears that someone tried to start a fire in a basement. Investigators identified two spills of unidentified liquid and collected pieces of carpet near the suspected attempted ignition site in the basement and area by the front door. The samples were immediately sealed within nylon evidence bags. The police are requesting that you identify any ignitable liquid(s) that may be present on the carpet samples.

For laboratories that do not process evidence in nylon bags, please utilize the following method to transfer the items to a sampling container consistent with fire debris submission in your laboratory:

Cut open 3 sides of the inner and outer bags containing the sample and place both opened bags and its contents into your laboratory container. Do not separate the sample (cloth, wood, etc.) from the bags when transferring to the laboratory container.

Items Submitted (Sample Pack II):

- Item 1: Carpet sample taken from suspected attempted ignition site in the basement sealed in a Nylon evidence bag.
- Item 2: Carpet sample taken from area by the front door sealed in a Nylon evidence bag.
- Item 3: Carpet substrate intended as a comparison blank sealed in a Nylon evidence bag.

1.) Using the ASTM E 1618-19 Ignitable Liquid Classification Scheme, indicate the class for any ignitable liquid(s) detected in the submitted items.

With the exception of the gasoline class, there are three subclasses for each major class based on n-alkane range: **Light** (C4-C9), **Medium** (C8-C13) and **Heavy** (C9-C20+). When the carbon range does not fit clearly into one of the previous categories (e.g. "light to medium", "medium to heavy"), report the carbon number range. Typical chromatograms for some of the classes/subclasses may be found in the published ASTM standard.

Item 1

Class

Subclass

Item 2

Class

Subclass

2.) Ignitable Liquid Recovery Techniques

Adsorption Headspace

a) Method

Passive

Dynamic

b) Adsorption Temperature

Room Temperature

Heated (Temperature: °C)

c) Adsorption Duration

d) Adsorbent:

Carbon/Charcoal

Other:

e) Desorption:

Solvent:

Thermal

Other Recovery Techniques:

Specify:

3.) Ignitable Liquid Identification Techniques

GC

GC/MS

Other (specify):

Please note: Any additional formatting applied in the free form spaces below will not transfer to the Summary Report and may cause your information to be illegible. This includes additional spacing and returns that present your responses in lists and tabular formats.

4.) What would be the wording of the Conclusions in your report?

5.) Additional Comments

RELEASE OF DATA TO ACCREDITATION BODIES

The Accreditation Release is accessed by pressing the "Continue to Final Submission" button online and can be completed at any time prior to submission to CTS.

CTS submits external proficiency test data directly to ASCLD/LAB, ANAB, and/or A2LA. Please select one of the following statements to ensure your data is handled appropriately.

- This participant's data is intended for submission to ASCLD/LAB, ANAB, and/or A2LA. (Accreditation Release section below must be completed.)
- This participant's data is **not** intended for submission to ASCLD/LAB, ANAB, and/or A2LA.

Have the laboratory's designated individual complete the following steps **only if your laboratory is accredited in this testing/calibration discipline** by one or more of the following Accreditation Bodies.

Step 1: Provide the applicable Accreditation Certificate Number(s) for your laboratory.

ANAB Certificate No.
(Include ASCLD/LAB Certificate here)

A2LA Certificate No.

Step 2: Complete the Laboratory Identifying Information in its entirety.

Authorized Contact Person and Title

Laboratory Name

Location (City/State)