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FORENSIC TESTING PROGRAM

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Blood Cannabinoids Analysis
Test No. 25-5662 Summary Report

Each participant received a sample pack consisting of three human whole blood samples potentially containing cannabinoids and were asked to analyze using their existing protocols. Data were returned from 36 participants and are compiled into the following tables:

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 pack contained three human whole blood samples potentially containing cannabinoids. Participants were asked to analyze the blood samples and report the presence of cannabinoids and associated quantitative data, including uncertainty and methods used.

SAMPLE PREPARATION: A stock solution of each cannabinoid was used to spike items. These solutions were obtained in sealed ampoules and were not opened until item preparation. Items were prepared at separate times using the following procedure.

ITEM PREPARATION: A predetermined amount of one or more cannabinoid stock solutions were added to human whole blood containing an appropriate amount of sodium fluoride and potassium oxalate; this mixture was stirred continuously as 5 mL was pipetted into each vial. The vials were sealed and inverted to mix the preservatives in the vials with the blood solution. All vials were stored in a refrigerator immediately after item preparation and stored there until the sample packs were prepared.

VERIFICATION: Predistribution results were consistent with each other and the manufacturer's preparation information.

SAMPLE PACK ASSEMBLY: One of each item was placed into a Department of Transportation regulated shipping container. The sample packs were then returned to the refrigerator until shipment.

Item 1 Drug(s)	Item 2 Drug(s)	Item 3 Drug(s)
THC (10 ng/mL)	THC (80 ng/mL)	THC (30 ng/mL)
Carboxy-THC (30 ng/mL)	Carboxy-THC (20 ng/mL)	Carboxy-THC (110 ng/mL)
Hydroxy-THC (5 ng/mL)	Hydroxy-THC (7 ng/mL)	Hydroxy-THC (15 ng/mL)

Please note that the preparation concentration listed is the value used for calculations during the test preparation phase and may not necessarily represent the final concentration of the samples. It is advised to wait for the Grand Mean statistics available in the Summary and Individual Reports before evaluating performance.

Summary Comments

This test was designed to allow participants to assess their proficiency in the examination for the presence and concentration of cannabinoids in blood. Participants were supplied with three samples; each item included one vial of blood spiked with varying concentrations of specific cannabinoids in case-like ranges. The preparation concentrations of each item are as follows: Item 1 contained 10 ng/mL tetrahydrocannabinol (THC), 30 ng/mL Carboxy-THC, and 5 ng/mL Hydroxy-THC. Item 2 contained 80 ng/mL THC, 20 ng/mL Carboxy-THC, and 7 ng/mL Hydroxy-THC. Item 3 contained 30 ng/mL THC, 110 ng/mL Carboxy-THC, and 15 ng/mL Hydroxy-THC. Refer to the Manufacturer's Information for preparation details.

A total of 36 participants returned results.

Of these, 30 screened all three items for the presence of cannabinoids, four did not screen any items, and two screened only Item 1. For Item 1, 29 participants indicated that cannabinoids were detected and 30 participants indicated that cannabinoids were detected in Items 2 and 3.

For Item 1, 32 participants (91.4%) confirmed the presence of THC and/or Carboxy-THC, and 20 (57.1%) confirmed the presence of Hydroxy-THC. Two participants did not detect any cannabinoids utilizing confirmatory methods.

For Item 2, 34 participants (97.1%) confirmed the presence of THC, 32 (91.4%) confirmed Carboxy-THC, and 21 (60%) confirmed the presence of Hydroxy-THC. One participant did not detect any cannabinoids utilizing confirmatory methods.

For Item 3, 34 participants (97.1%) confirmed the presence of THC, 33 (94.3%) confirmed Carboxy-THC, and 22 (62.9%) confirmed the presence of Hydroxy-THC. One participant did not detect any cannabinoids utilizing confirmatory methods.

For all three items, the most common screening method was immunoassay, and LC/MS/MS was reported most frequently for confirmatory testing and quantitation. The majority of the population used a single determination for their quantitative analysis reporting procedures. The raw data was used to calculate the grand mean and standard deviation for each item and are supplied to assist the participants and accrediting bodies in determining the acceptability of results. If a participant did not report raw data but indicated their result was a single determination, it was added to the raw data table for statistical purposes. Participants with extreme data have been marked with an "X" and their results were excluded from the calculations of the grand mean and standard deviation. Extreme data has been determined using the Critical Value of h defined within ASTM E 691-23, and calculated for each analyte as ± (CrH * STD) from the grand mean.

Four participants' data were marked as extreme in statistical analysis of the raw data. The breakdown of extreme data is as follows: one in Item 1 (Carboxy-THC), two in Item 2 (THC and Hydroxy-THC) and two in Item 3 (THC and Carboxy-THC).

Cannabinoid Screening Results - Item 1

TABLE 1A

Were cannabinoids detected?

WebCode	Response	WebCode	Response
2MFPH6	Yes, Cannabinoids were detected.	P77WNY	Yes, Cannabinoids were detected.
3WXQD6	Yes, Cannabinoids were detected.	P9BPHX	Yes, Cannabinoids were detected.
3X9QCK	No screening performed	PRQYJY	Yes, Cannabinoids were detected.
4VJJP3	No, Cannabinoids were not detected.	R9KFJD	No screening performed
7QXD7X	Yes, Cannabinoids were detected.	TAUH7C	Yes, Cannabinoids were detected.
7U273H	No, Cannabinoids were not detected.	TE6VMB	No screening performed
8A63WZ	Yes, Cannabinoids were detected.	TTBR7D	No, Cannabinoids were not detected.
8P2KLY	Yes, Cannabinoids were detected.	U7UT3A	Yes, Cannabinoids were detected.
9C7QPV	Yes, Cannabinoids were detected.	U86VQU	Yes, Cannabinoids were detected.
9QQ7UF	Yes, Cannabinoids were detected.	VG8BCT	Yes, Cannabinoids were detected.
AJ9W4Y	Yes, Cannabinoids were detected.	X28DZ8	No screening performed
BUY8RV	Yes, Cannabinoids were detected.	YYVX77	Yes, Cannabinoids were detected.
F4RAWM	Yes, Cannabinoids were detected.	YZFRME	Yes, Cannabinoids were detected.
GFJZHR	Yes, Cannabinoids were detected.	Z2G2D4	Yes, Cannabinoids were detected.
HKQ9XL	Yes, Cannabinoids were detected.	ZH2RD4	Yes, Cannabinoids were detected.
JEZYNN	Yes, Cannabinoids were detected.		
JV4Q86	Yes, Cannabinoids were detected.		
JWJPMM	Yes, Cannabinoids were detected.		
LNEUGK	Yes, Cannabinoids were detected.		
LR3243	Yes, Cannabinoids were detected.		
MVLWWR	Yes, Cannabinoids were detected.		

Cannabinoid Screening Response Summary for Item 1	**Participants: 36**

Were cannabinoids detected in this Item?

Response	Total
Yes	29
No	3
No Screening	4
No Response	0

Confirmatory Results - Item 1

TABLE 1B

Item Contents and Preparation Concentration: THC (10 ng/mL)
Carboxy THC (30 ng/mL)
Hydroxy THC (5 ng/mL)

What cannabinoids were detected in Item 1?

WebCode	Analytes Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2MFPH6	THC		8	± 2	ng/mL
	Carboxy THC		23	± 5	ng/mL
	Hydroxy THC		3.9	± 0.7	ng/mL
3WXQD6	THC		0.0068	0.0013	mg/L
	Carboxy THC		0.023	0.005	mg/L
	Hydroxy THC		0.0042	0.0007	mg/L
3X9QCK	No Drugs/Metabolites detected utilizing confirmatory methods.				
4VJJP3	No Drugs/Metabolites detected utilizing confirmatory methods.				
7QXD7X	THC		8.1	1.7	ng/mL
	Carboxy THC	✓			
7U273H	THC		9.4	1.6	ng/mL
	Carboxy THC		34	7	ng/mL
	Hydroxy THC		4.7	1.1	ng/mL
8A63WZ	THC		8	± 2	ng/mL
	Carboxy THC		25	± 5	ng/mL
	Hydroxy THC		4.3	± 0.7	ng/mL
8P2KLY	THC		7.4	1.5	ng/mL
	Carboxy THC		22.3	4.7	ng/mL
	Hydroxy THC		4.03	0.85	ng/mL
9C7QPV	THC		8.80	1.8	
	Carboxy THC	✓			
9QQ7UF	THC		9		ng/ml
	Carboxy THC		23		ng/ml
	Hydroxy THC		11		ng/ml
AJ9W4Y	THC		7.0	1.4	ng/mL
	Carboxy THC		20	3	ng/mL
	Hydroxy THC		3.4	0.6	ng/mL

TABLE 1B: Confirmatory Results - Item 1

What cannabinoids were detected in Item 1?					
WebCode	**Analytes Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
BUY8RV	THC		8	2	ng/mL
	Carboxy THC		25	5	ng/mL
	Hydroxy THC		4.2	0.7	ng/mL
F4RAWM	THC		8.0	1.6	ng/ml
	Carboxy THC	✓			
GFJZHR	THC		0.0074	0.0014	mg/L
	Carboxy THC		0.019	0.004	mg/L
	Hydroxy THC		0.0032	0.0006	mg/L
HKQ9XL	THC	✓			
	Carboxy THC	✓			
	Hydroxy THC	✓			
JEZYNN	THC		10	± 2	ng/mL
	Carboxy THC		27	± 6	ng/mL
	Hydroxy THC		4.6	± 0.8	ng/mL
JV4Q86	Carboxy THC	✓			
JWJPMM	THC		7.4	1.5	ng/mL
	Carboxy THC		23	5	ng/mL
	Hydroxy THC		3.2	0.6	ng/mL
LNEUGK	THC		8.4	1.9	ng/mL
	Carboxy THC		19	5	ng/mL
	Hydroxy THC		3.8	0.8	ng/mL
LR3243	THC		6.7	15%	µg/L
	Carboxy THC		24	12%	µg/L
	Hydroxy THC		3.8	12%	µg/L
MVLWWR	THC		10.569	2.1	ng/mL
P77WNY	THC		9.9	2.6	ng/mL
	Carboxy THC		27		ng/mL
P9BPHX	THC		8.2	31.2	%
	Carboxy THC		25	17.2	%
	Hydroxy THC		4.2	19.6	%
PRQYJY	THC		6.8	1.2	ng/mL
	Carboxy THC		20	4	ng/mL
	Hydroxy THC		3.3	0.6	ng/mL

TABLE 1B: Confirmatory Results - Item 1

What cannabinoids were detected in Item 1?					
WebCode	**Analytes Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
R9KFJD	THC		8.3	1.1	ng/mL
	Carboxy THC		20.9	3.6	ng/mL
	Hydroxy THC		3.5	0.6	ng/mL
TAUH7C	THC		8.3		ng/mL
	Carboxy THC		24		ng/mL
	Hydroxy THC		3.7		ng/mL
TE6VMB	THC		8.0	+/-20%	ng/mL
	Carboxy THC	✓			
U7UT3A	THC		8.9	1.8	ng/mL
	Carboxy THC	✓			
U86VQU	THC		9.1	2.4	ng/mL
	Carboxy THC		21		ng/mL
VG8BCT	THC		9.68	1.83	ng/mL
	Carboxy THC		27.67	5.53	ng/mL
X28DZ8	THC		8.4	2.5	ng/mL
	Carboxy THC		24.0	6.5	
	Hydroxy THC		4.2	1.1	ng/mL
YYVX77	THC		8.98	1.80	ng/mL
	Carboxy THC		23.70	5.93	ng/mL
	Hydroxy THC		4.02	.81	ng/mL
YZFRME	THC		9.15		µg/L
	Carboxy THC		25.27		µg/L
Z2G2D4	THC		8.8	+/-1.8	ng/mL
	Carboxy THC	✓	Positive		
ZH2RD4	THC		8.2	1.7	ng/ml
	Carboxy THC	✓			

Confirmatory Response Summary for Item 1	**Participants: 35**
THC:	32 (91.4%)
Carboxy-THC:	32 (91.4%)
Hydroxy-THC:	20 (57.1%)
No Drugs/Metabolites Detected Utilizing Confirmatory Methods:	2 (5.7%)

Raw Data - Item 1

TABLE 1C

Item 1 Raw Data - THC
Preparation concentration: 10 ng/mL

WebCode	List of Raw Data determinations (ng/mL)			Participant Mean
2MFPH6	8.0990			8.0990
3WXQD6	6.8430			6.8430
7QXD7X	8.1000	8.8000		8.4500
7U273H	9.4400			9.4400
8A63WZ	8.5790			8.5790
8P2KLY	7.4450			7.4450
9C7QPV	8.8700	8.8500		8.8600
AJ9W4Y	7.0000			7.0000
BUY8RV	8.7500			8.7500
F4RAWM	8.0500	8.1300		8.0900
GFJZHR	7.4050			7.4050
JEZYNN	10.049			10.050
JWJPMM	7.4000			7.4000
LNEUGK	8.7500	8.1300		8.4400
LR3243	6.7950	6.7190		6.7570
MVLWWR	11.264	10.067	10.377	10.570
P77WNY	9.9600			9.9600
P9BPHX	8.4100	7.9100		8.1600
PRQYJY	6.8300			6.8300
R9KFJD	8.3400			8.3400
TAUH7C	8.3475			8.3480
TE6VMB	8.4600	8.0600		8.2600
U7UT3A	8.9600	9.1600		9.0600
U86VQU	9.1100			9.1100
VG8BCT	9.6800			9.6800
X28DZ8	8.4049			8.4050
YYVX77	8.9850			8.9850
YZFRME	9.3300	8.9700		9.1500
Z2G2D4	8.8900	9.0600		8.9750
ZH2RD4	8.3800	8.2100		8.2950

Statistical Analysis for Item 1 - THC

Grand Mean	8.46	Number of Participants Included	30
Standard Deviation	0.98	Number of Participants Excluded	0
		by Critical H value of	2.642

TABLE 1C: Raw Data - Item 1

Item 1 Raw Data - Carboxy-THC
Preparation concentration: 30 ng/mL

WebCode	List of Raw Data determinations (ng/mL)		Participant Mean	
2MFPH6	23.093		23.090	
3WXQD6	22.752		22.750	
7U273H	34.640		34.640	X
8A63WZ	25.815		25.820	
8P2KLY	22.293		22.290	
9C7QPV	25.410	25.270	25.340	
AJ9W4Y	20.420		20.420	
BUY8RV	25.046		25.050	
F4RAWM	23.800	23.700	23.750	
GFJZHR	18.700		18.700	
JEZYNN	27.583		27.580	
JWJPMM	23.000		23.000	
LNEUGK	19.460		19.460	
LR3243	24.795	25.140	24.970	
P77WNY	27.730		27.730	
P9BPHX	24.930	24.740	24.840	
PRQYJY	20.240		20.240	
R9KFJD	20.980		20.980	
TAUH7C	24.383		24.380	
TE6VMB	24.200	23.340	23.770	
U7UT3A	23.180	23.160	23.170	
U86VQU	21.350		21.350	
VG8BCT	27.670		27.670	
X28DZ8	24.022		24.020	
YYVX77	23.703		23.700	
YZFRME	25.070	25.470	25.270	
Z2G2D4	24.030	24.000	24.020	
ZH2RD4	24.710	24.730	24.720	

Statistical Analysis for Item 1 - Carboxy-THC

Grand Mean	23.63	Number of Participants Included	27
Standard Deviation	2.37	Number of Participants Excluded	1
		by Critical H value of	2.623

TABLE 1C: Raw Data - Item 1

Item 1 Raw Data - Hydroxy-THC
Preparation concentration: 5 ng/mL

WebCode	List of Raw Data determinations (ng/mL)		Participant Mean
2MFPH6	3.9570		3.9570
3WXQD6	4.2080		4.2080
7U273H	4.7300		4.7300
8A63WZ	4.3120		4.3120
8P2KLY	4.0250		4.0250
AJ9W4Y	3.3500		3.3500
BUY8RV	4.2930		4.2930
GFJZHR	3.1750		3.1750
JEZYNN	4.6920		4.6920
JWJPMM	3.2000		3.2000
LNEUGK	3.8200		3.8200
LR3243	3.8770	3.8660	3.8720
P9BPHX	4.2300	4.2500	4.2400
PRQYJY	3.3000		3.3000
R9KFJD	3.5800		3.5800
TAUH7C	3.7925		3.7930
X28DZ8	4.2331		4.2330
YYVX77	4.0220		4.0220

Statistical Analysis for Item 1 - Hydroxy-THC

Grand Mean	3.93	Number of Participants Included	18
Standard Deviation	0.47	Number of Participants Excluded	0
		by Critical H value of	2.528

Reporting Procedures - Item 1

TABLE 1D - Item 1

Quantitative Reporting Procedures	
WebCode	***If quantitative analysis was performed, the reported concentrations are:***
2MFPH6	A single determination.
3WXQD6	A single determination.
7QXD7X	A single determination.
7U273H	A single determination.
8A63WZ	A single determination.
8P2KLY	A single determination.
9C7QPV	A single determination.
9QQ7UF	The mean of duplicate/several determinations.
AJ9W4Y	A single determination.
BUY8RV	A single determination.
F4RAWM	Lower truncated value of duplicate testing
GFJZHR	A single determination.
JEZYNN	A single determination.
JWJPMM	A single determination.
LNEUGK	A single determination.
LR3243	The mean of duplicate/several determinations.
MVLWWR	The mean of duplicate/several determinations.
P77WNY	A single determination.
P9BPHX	The mean of duplicate/several determinations.
PRQYJY	A single determination.
R9KFJD	A single determination.
TAUH7C	A single determination.
TE6VMB	Lowest of 2 full volume results
U7UT3A	Full volume analysis quantification
U86VQU	A single determination.
VG8BCT	A single determination.
X28DZ8	A single determination.
YYVX77	A single determination.
YZFRME	The mean of duplicate/several determinations.
Z2G2D4	Lower of two analyses.
ZH2RD4	Lower truncated value of duplicate testing

Response Summary for Item 1	Participants: 31
A single determination:	21 (67.7%)
The mean of duplicate/several determinations:	5 (16.1%)
Other:	5 (16.1%)

Methods of Analysis - Item 1

TABLE 1E - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
2MFPH6	Immunoassay LC/MS/MS	✓	✓	✓
3WXQD6	Immunoassay LC/MS/MS	✓	✓	✓
3X9QCK	GC/MS		✓	
4VJJP3	Immunoassay LC-QTOF-MS GC/MS	✓ ✓	 ✓	
7QXD7X	GC/MS/MS	✓	✓	
7U273H	Immunoassay LC/MS/MS	✓	✓	
8A63WZ	Immunoassay LC/MS/MS	✓	✓	✓
8P2KLY	Immunoassay LC/MS/MS	✓	✓	✓
9C7QPV	GC/MS/MS	✓	✓	✓
9QQ7UF	LC-Orbitrap LC/MS/MS	✓	✓	✓
AJ9W4Y	Immunoassay LC/MS/MS	✓	✓	✓
BUY8RV	Immunoassay LC/MS/MS	✓	✓	✓
F4RAWM	GC/MS/MS	✓	✓	✓
GFJZHR	Immunoassay LC/MS/MS	✓	✓	✓
HKQ9XL	Immunoassay GC/MS	✓	✓	
JEZYNN	Immunoassay LC/MS/MS	✓	✓	✓
JV4Q86	Immunoassay GC/MS	✓	✓	
JWJPMM	Immunoassay LC/MS/MS	✓	✓	✓
LNEUGK	Immunoassay LC/MS/MS	✓	✓	✓

TABLE 1E: Methods of Analysis - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
LR3243	LC/MS/MS			✓
MVLWWR	LC/MS/MS	✓	✓	✓
P77WNY	LC/MS/MS	✓	✓	✓
P9BPHX	LC/MS/MS	✓	✓	✓
PRQYJY	LC/QTOF GC/MS	✓	✓	✓
R9KFJD	LC/MS/MS		✓	✓
TAUH7C	LC/MS/MS			✓
TE6VMB	GCMS/MS		✓	✓
TTBR7D	Immunoassay LC-QTOF-MS	✓ ✓		
U7UT3A	GC/MS/MS	✓	✓	
U86VQU	LC/MS/MS	✓	✓	✓
VG8BCT	LC/MS/MS GC/MS	✓	✓	✓
X28DZ8	LC/MS/MS		✓	✓
YYVX77	LC/MS/MS	✓	✓	✓
YZFRME	LC/MS/MS		✓	✓
Z2G2D4	GC/MS/MS	✓	✓	✓
ZH2RD4	GC/MS/MS	✓	✓	✓

Response Summary for Item 1 - Methods of Analysis **Participants: 36**

	Screening	Confirmatory	Quantitation
Immunoassay:	15	0	0
GC/MS:	0	6	2
LC/MS:	0	0	0
LC/MS/MS:	6	20	21
Other:	10	7	5

Additional Comments for Item 1

TABLE 1F

WebCode	Item Comments
2MFPH6	Following a positive cannabinoid screen, confirmation/quantitation of d9-tetrahydrocannabinol (THC), 11-nor-9-carboxy-d9-tetrahydrocannabinol (carboxy-THC), and 11-hydroxy-d9-tetrahydrocannabinol (11-OH-THC) is performed using THC-D3, carboxy-THC-D3, and 11-OH-THC-D3 as internal standards, respectively. LOD for THC and 11-OH-THC is 0.5 ng/mL; LOD for carboxy-THC is 2.5 ng/mL. LOQ for THC and 11-OH-THC is 1 ng/mL; LOQ for carboxy-THC is 5 ng/mL. Target drug results quantitating below the LOQ but greater than the LOD are reported as "present, less than [LOQ value]."
3X9QCK	A (THC) tetrahidrocannabinol signal was observed near the signal-to-noise ratio (S/N) in sample Item-1. Due to its proximity to the S/N threshold and because the response is at the limit of detection (LOD), with no clearly defined chromatographic signal, this compound is not reported. Limit of detecction: (Carboxy THC) 11-nor-9-carboxy-delta-9-tetrahydrocannabinol 20 ng/mL. (Hydroxy THC) 11-hydroxy-delta-9-tetrahydrocannabinol 20 ng/mL. (THC) tetrahydrocannabinol 20 ng/mL
7U273H	THC: Internal Standard: THC-D3 Limit of Detection: 1 ng/mL Hydroxy THC (11-OH-THC): Internal Standard: 11-OH-THC-D3 Limit of Detection: 1 ng/mL Carboxy THC (THCCOOH): Internal Standard: THCCOOH-D9 Limit of Detection: 4 ng/mL
8A63WZ	Cannabinoid confirmation panel includes d-9-THC, carboxy-THC and hydroxy-THC. LOD for d-9-THC and hydroxy-THC is 0.5 ng/ml and LOQ is 1 ng/ml. LOD for carboxy-THC is 2.5 ng/ml and LOQ is 5 ng/ml. D-9-THC-D3, COOH-THC-D3 and 11-OH-THC-D3 used as internal standards.
AJ9W4Y	Analysis by high performance liquid chromatography/tandem mass spectrometry in whole blood for: Cannabinoids confirmation panel: Analyte Quantitative Range (ng/mL) Delta-9-THC 0.5 – 50 11-hydroxy-Delta-9-THC 0.5 – 50 11-nor-9-carboxy-Delta-9-THC 5.0 – 500 Measurement uncertainty is reported at a 95.45% level of confidence for all quantitative blood drug analyses. Analysis by immunoassay screening in whole blood for: Assay Cutoff* (ng/mL) Meth /Amphetamines 20 Barbiturates 50 Benzodiazepines 10 Buprenorphine 1 Cannabinoids 10 Benzoylecgonine 50 Dextromethorphan 5 Fentanyl 1 Meprobamate 100 Methadone 10 Opiates 10 Opioids 10 Phencyclidine 5 TCA 25 Tramadol 5 Zolpidem 10 * Results within 20% of these concentrations are also reported as preliminarily positive.
BUY8RV	The sample was screened only for cannabinoids using ELISA. Cannabinoid confirmation/quantitation panel includes: d9-tetrahydrocannabinol (THC), 11-nor-9-carboxy-d9-tetrahydrocannabinol (carboxy-THC), and 11-hydroxy-d9-tetrahydrocannabinol (11-OH-THC). The following internal standards are used: THC D-3, carboxy-THC D3, and 11-OH-THC D3. For THC and 11-OH-THC the LOD is 0.5 ng/mL and the LOQ is 1 ng/mL. For carboxy-THC the LOD is 2.5 ng/mL and the LOQ is 5 ng/mL.
HKQ9XL	Internal standards used were D3-THC and D9-THC-COOH. Cut off for all three analytes (THC, THC-OH, and THC-COOH) is 1 ng/ml.
JEZYNN	Sample screened via ELISA for cannabinoids only. Following a positive cannabinoid screen, confirmation/quantitation of d9-THC, carboxy-d9-THC, and hydroxy-d9-THC performed using d9-THC-D3, carboxy-d9-THC-D3, and hydroxy-d9-THC-D3, respectively, as internal standards. LOD for d9-THC and hydroxy-d9-THC is 0.5 ng/mL; LOQ is 1 ng/mL. LOD for carboxy-d9-THC is 2.5 ng/mL; LOQ is 5 ng/mL.
JV4Q86	used THC-D3 as an internal standard
LNEUGK	For 11-OH-THC and THCA a single determination was used for reporting, for THC an average of two concentrations was used. Second date of analysis was performed on 2025-12-04. Internal Standards: THC-D3, THC-11-OH-D3, THCA-D3 LOD: THC/11-OH-THC= 1.0 ng/mL; THCA= 5.0 ng/mL

TABLE 1F: Additional Comments for Item 1

WebCode	Item Comments
LR3243	As per laboratory protocol, this would be reported as 6.7 µg/L, less a deduction of 30% in accordance with the [State Regulation]; i.e. would have been reported to the customer as THC (not less than) 4.6 µg/L. Individual carboxy-THC results were within the calibration range for this analyte. As carboxy-THC is not covered by the [State Legislation], no deduction would be made, and this would be reported to the customer as carboxy-THC 24 µg/L. Individual hydroxy-THC results were within the calibration range for this analyte. As hydroxy-THC is not covered by the [State Legislation], no deduction would be made, and this would be reported to the customer as hydroxy-THC 3.8 µg/L.
P9BPHX	Additional testing date : 2025-11-13
TE6VMB	Analysis by GCMS/MS also took place on 11/25/25. Our calibration line for THC is from 1ng/L to 100ng/mL. We use a D3THC internal standard. Our cutoff for reporting THC is 2ng/mL Our calibration line for CTHC is from 5ng/mL to 100ng/mL. We use a D9CTHC internal standard. Our cutoff for reporting THC qualitatively is 5ng/mL.
TTBR7D	Immunoassay screening gave a weak presumptive positive for Methamphetamine/MDMA. This was not confirmed by LCMSMS.
U7UT3A	Analysis performed at full volume (500 uL) and reduced volume (250 uL). The second set of data was multiplied for the raw data values. To report a value, 2 tests were performed.
X28DZ8	THC and Hydroxy THC reported from 10-27-25 analysis. Carboxy THC reported from 12-1-25 analysis.
Z2G2D4	The internal standards THC d3 and COOH d9 were added and used in the calculations. The calibration range for THC is 1 ng/mL to 100 ng/mL, and for COOH-THC it is 5 ng/mL to 100 ng/mL. The reporting range of THC is 2 ng/mL to 100 ng/mL and qualitative only for COOH-THC.

Cannabinoid Screening Results - Item 2

TABLE 2A

Were cannabinoids detected?

WebCode	Response	WebCode	Response
2MFPH6	Yes, Cannabinoids were detected.	P77WNY	Yes, Cannabinoids were detected.
3WXQD6	Yes, Cannabinoids were detected.	P9BPHX	Yes, Cannabinoids were detected.
3X9QCK	No screening performed	PRQYJY	Yes, Cannabinoids were detected.
4VJJP3	Yes, Cannabinoids were detected.	R9KFJD	No screening performed
7QXD7X	Yes, Cannabinoids were detected.	TAUH7C	Yes, Cannabinoids were detected.
7U273H	Yes, Cannabinoids were detected.	TE6VMB	No screening performed
8A63WZ	Yes, Cannabinoids were detected.	TTBR7D	Yes, Cannabinoids were detected.
8P2KLY	Yes, Cannabinoids were detected.	U7UT3A	Yes, Cannabinoids were detected.
9C7QPV	Yes, Cannabinoids were detected.	U86VQU	Yes, Cannabinoids were detected.
9QQ7UF	Yes, Cannabinoids were detected.	VG8BCT	Yes, Cannabinoids were detected.
AJ9W4Y	Yes, Cannabinoids were detected.	X28DZ8	No screening performed
BUY8RV	Yes, Cannabinoids were detected.	YYVX77	Yes, Cannabinoids were detected.
F4RAWM	Yes, Cannabinoids were detected.	YZFRME	Yes, Cannabinoids were detected.
GFJZHR	Yes, Cannabinoids were detected.	Z2G2D4	Yes, Cannabinoids were detected.
HKQ9XL	Yes, Cannabinoids were detected.	ZH2RD4	Yes, Cannabinoids were detected.
JEZYNN	Yes, Cannabinoids were detected.		
JV4Q86	No screening performed		
JWJPMM	Yes, Cannabinoids were detected.		
LNEUGK	No screening performed		
LR3243	Yes, Cannabinoids were detected.		
MVLWWR	Yes, Cannabinoids were detected.		

Cannabinoid Screening Response Summary for Item 2	**Participants: 36**

Were cannabinoids detected in this Item?

Response	Total
Yes	30
No	0
No Screening	6
No Response	0

Confirmatory Results - Item 2

TABLE 2B

Item Contents and Preparation Concentration: THC (80 ng/mL)
Carboxy THC (20 ng/mL)
Hydroxy THC (7 ng/mL)

What cannabinoids were detected in Item 2?					
WebCode	**Analytes Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
2MFPH6	THC		64	± 12	ng/mL
	Carboxy THC		17	± 4	ng/mL
	Hydroxy THC		5	± 1	ng/mL
3WXQD6	THC		0.089	0.017	mg/L
	Carboxy THC		0.018	0.004	mg/L
	Hydroxy THC		0.0066	0.0012	mg/L
3X9QCK	THC	✓			
4VJJP3	THC		69	15	ng/ml
	Carboxy THC		14	4	ng/ml
	Hydroxy THC		6.0	1.3	ng/ml
7QXD7X	THC		63	13	
	Carboxy THC	✓			
7U273H	THC		>50		ng/mL
	Carboxy THC		21	4	ng/mL
	Hydroxy THC		6.6	1.5	ng/mL
8A63WZ	THC		66	± 12	ng/mL
	Carboxy THC		17	± 4	ng/mL
	Hydroxy THC		6	± 2	ng/mL
8P2KLY	THC		>50		ng/mL
	Carboxy THC		16.1	3.4	ng/mL
	Hydroxy THC		5.9	1.2	ng/mL
9C7QPV	THC		65	13	
	Carboxy THC	✓			
9QQ7UF	THC		70		ng/ml
	Carboxy THC		17		ng/ml
	Hydroxy THC		14		ng/ml
AJ9W4Y	THC		>ULOQ		
	Carboxy THC		15	2	ng/mL
	Hydroxy THC		5.1	0.9	ng/mL

TABLE 2B: Confirmatory Results - Item 2

What cannabinoids were detected in Item 2?					
WebCode	**Analytes Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
BUY8RV	THC		64	12	ng/mL
	Carboxy THC		18	4	ng/mL
	Hydroxy THC		6	2	ng/mL
F4RAWM	THC		63	13	ng/ml
	Carboxy THC	✓			
GFJZHR	THC		0.069	0.013	mg/L
	Carboxy THC		0.014	0.003	mg/L
	Hydroxy THC		0.0047	0.0008	mg/L
HKQ9XL	THC	✓			
	Carboxy THC	✓			
	Hydroxy THC	✓			
JEZYNN	THC		76	± 14	ng/mL
	Carboxy THC		19	± 4	ng/mL
	Hydroxy THC		6	± 2	ng/mL
JV4Q86	No Drugs/Metabolites detected utilizing confirmatory methods.				
JWJPMM	THC		65	13	ng/mL
	Carboxy THC		18	4	ng/mL
	Hydroxy THC		5.3	1.1	ng/mL
LR3243	THC		>25	15%	µg/L
	Carboxy THC		18	12%	µg/L
	Hydroxy THC		5.7	12%	µg/L
MVLWWR	THC		51.312	2.5	ng/mL
P77WNY	THC		68	18	ng/mL
	Carboxy THC		17		ng/mL
P9BPHX	THC		61	31.2	%
	Carboxy THC		18	17.2	%
	Hydroxy THC		6.0	19.6	%
PRQYJY	THC		>30		ng/mL
	Carboxy THC		<20		ng/mL
	Hydroxy THC		5.0	0.9	ng/mL
R9KFJD	THC		67.9	9.0	ng/mL
	Carboxy THC		15.5	2.6	ng/mL
	Hydroxy THC		5.8	1.0	ng/mL

TABLE 2B: Confirmatory Results - Item 2

What cannabinoids were detected in Item 2?

WebCode	Analytes Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
TAUH7C	THC		70		ng/mL
	Carboxy THC		19		ng/mL
	Hydroxy THC		6.2		ng/mL
TE6VMB	THC		63	+/-20%	ng/mL
	Carboxy THC	✓			
TTBR7D	THC		69	15	ng/mL
	Carboxy THC		18	5	ng/mL
	Hydroxy THC		8.1	1.8	ng/mL
U7UT3A	THC		73	15	ng/mL
	Carboxy THC	✓			
U86VQU	THC		62	16	ng/mL
	Carboxy THC		14		ng/mL
VG8BCT	THC		74.05	14.06	ng/mL
	Carboxy THC		19.13	3.82	ng/mL
X28DZ8	THC		62	19	ng/mL
	Carboxy THC		16.3	4.4	ng/mL
	Hydroxy THC		6.3	1.6	ng/mL
YYVX77	THC		77.26	15.46	ng/mL
	Carboxy THC		17.98	4.50	ng/mL
	Hydroxy THC		6.37	1.28	ng/mL
YZFRME	THC		73.88		µg/L
	Carboxy THC		18.65		µg/L
Z2G2D4	THC		68	+/-14	ng/mL
	Carboxy THC	✓	Positive		
ZH2RD4	THC		63	13	ng/ml
	Carboxy THC	✓			

Confirmatory Response Summary for Item 2	**Participants: 35**
THC:	34 (97.1%)
Carboxy-THC:	32 (91.4%)
Hydroxy-THC:	21 (60.0%)
No Drugs/Metabolites Detected Utilizing Confirmatory Methods:	1 (2.9%)

Raw Data - Item 2

TABLE 2C

Item 2 Raw Data - THC
Preparation concentration: 80 ng/mL

WebCode	List of Raw Data determinations (ng/mL)			Participant Mean	
2MFPH6	64.955			64.960	
3WXQD6	89.235			89.240	X
4VJJP3	69.410			69.410	
7QXD7X	63.000	65.000		64.000	
7U273H	68.080			68.080	
8A63WZ	66.795			66.800	
8P2KLY	60.388			60.390	
9C7QPV	66.460	65.880		66.170	
AJ9W4Y	54.170			54.170	
BUY8RV	64.929			64.930	
F4RAWM	63.440	63.720		63.580	
GFJZHR	69.440			69.440	
JEZYNN	76.695			76.700	
JWJPMM	65.000			65.000	
LR3243	52.134	50.434		51.280	
MVLWWR	50.913	50.558	52.465	51.310	
P77WNY	68.920			68.920	
P9BPHX	60.620	60.890		60.760	
PRQYJY	52.890			52.890	
R9KFJD	67.980			67.980	
TAUH7C	70.796			70.800	
TE6VMB	67.080	63.460		65.270	
TTBR7D	66.700	71.910		69.310	
U7UT3A	73.280	74.080		73.680	
U86VQU	62.660			62.660	
VG8BCT	74.050			74.050	
X28DZ8	62.998			63.000	
YYVX77	77.268			77.270	
YZFRME	73.550	74.220		73.890	
Z2G2D4	72.100	68.680		70.390	

TABLE 2C: Raw Data - Item 2

Item 2 Raw Data - THC
Preparation concentration: 80 ng/mL

WebCode	List of Raw Data determinations (ng/mL)		Participant Mean
ZH2RD4	63.740	66.130	64.940

Statistical Analysis for Item 2 - THC

Grand Mean	65.73	Number of Participants Included	30
Standard Deviation	6.84	Number of Participants Excluded	1
		by Critical H value of	2.642

TABLE 2C: Raw Data - Item 2

Item 2 Raw Data - Carboxy-THC
Preparation concentration: 20 ng/mL

WebCode	List of Raw Data determinations (ng/mL)		Participant Mean
2MFPH6	17.749		17.750
3WXQD6	17.977		17.980
4VJJP3	14.970		14.970
7U273H	21.600		21.600
8A63WZ	17.942		17.940
8P2KLY	16.148		16.150
9C7QPV	18.660	19.030	18.850
AJ9W4Y	14.660		14.660
BUY8RV	18.889		18.890
F4RAWM	17.650	17.660	17.660
GFJZHR	14.440		14.440
JEZYNN	19.529		19.530
JWJPMM	18.000		18.000
LR3243	18.820	18.151	18.490
P77WNY	17.490		17.490
P9BPHX	17.490	17.690	17.590
PRQYJY	13.900		13.900
R9KFJD	15.520		15.520
TAUH7C	19.694		19.690
TE6VMB	18.560	17.800	18.180
TTBR7D	15.240	20.830	18.040
U7UT3A	18.020	17.920	17.970
U86VQU	14.010		14.010
VG8BCT	19.130		19.130
X28DZ8	16.307		16.310
YYVX77	17.986		17.990
YZFRME	18.750	18.550	18.650
Z2G2D4	17.240	16.850	17.050
ZH2RD4	18.260	18.500	18.380

Statistical Analysis for Item 2 - Carboxy-THC

Grand Mean	17.48	Number of Participants Included	29
Standard Deviation	1.83	Number of Participants Excluded	0
		by Critical H value of	2.637

TABLE 2C: Raw Data - Item 2

Item 2 Raw Data - Hydroxy-THC
Preparation concentration: 7 ng/mL

WebCode	List of Raw Data determinations (ng/mL)		Participant Mean	
2MFPH6	5.9360		5.9360	
3WXQD6	6.5600		6.5600	
4VJJP3	6.0900		6.0900	
7U273H	6.6700		6.6700	
8A63WZ	6.4700		6.4700	
8P2KLY	5.9200		5.9200	
AJ9W4Y	5.1400		5.1400	
BUY8RV	6.2950		6.2950	
GFJZHR	4.7200		4.7200	
JEZYNN	6.9780		6.9780	
JWJPMM	5.3000		5.3000	
LR3243	5.8080	5.6090	5.7090	
P9BPHX	5.9200	5.9900	5.9550	
PRQYJY	5.0900		5.0900	
R9KFJD	5.8000		5.8000	
TAUH7C	6.2526		6.2530	
TTBR7D	6.5400	9.8500	8.1950	X
X28DZ8	6.3375		6.3380	
YYVX77	6.3740		6.3740	

Statistical Analysis for Item 2 - Hydroxy-THC

Grand Mean	5.98	Number of Participants Included	18
Standard Deviation	0.60	Number of Participants Excluded	1
		by Critical H value of	2.528

Reporting Procedures - Item 2

TABLE 2D - Item 2

Quantitative Reporting Procedures	
WebCode	***If quantitative analysis was performed, the reported concentrations are:***
2MFPH6	A single determination.
3WXQD6	A single determination.
4VJJP3	A single determination.
7QXD7X	A single determination.
7U273H	A single determination.
8A63WZ	A single determination.
8P2KLY	A single determination.
9C7QPV	A single determination.
9QQ7UF	The mean of duplicate/several determinations.
AJ9W4Y	A single determination.
BUY8RV	A single determination.
F4RAWM	Lower truncated value of duplicate testing
GFJZHR	A single determination.
JEZYNN	A single determination.
JWJPMM	A single determination.
LR3243	The mean of duplicate/several determinations.
MVLWWR	The mean of duplicate/several determinations.
P77WNY	A single determination.
P9BPHX	The mean of duplicate/several determinations.
PRQYJY	A single determination.
R9KFJD	A single determination.
TAUH7C	A single determination.
TE6VMB	Lowest of 2 full volume results
TTBR7D	The mean of duplicate/several determinations.
U7UT3A	Full volume analysis quantification
U86VQU	A single determination.
VG8BCT	A single determination.
X28DZ8	A single determination.
YYVX77	A single determination.
YZFRME	The mean of duplicate/several determinations.
Z2G2D4	Lower of two analyses.

TABLE 2D: Reporting Procedures - Item 2

Quantitative Reporting Procedures	
WebCode	***If quantitative analysis was performed, the reported concentrations are:***
ZH2RD4	Lower truncated value of duplicate testing

Response Summary for Item 2	**Participants: 32**
A single determination:	21 (65.6%)
The mean of duplicate/several determinations:	6 (18.8%)
Other:	5 (15.6%)

Methods of Analysis - Item 2

TABLE 2E - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
2MFPH6	Immunoassay LC/MS/MS	✓	✓	✓
3WXQD6	Immunoassay LC/MS/MS	✓	✓	✓
3X9QCK	GC/MS		✓	
4VJJP3	Immunoassay LC-QTOF-MS LC/MS/MS	✓ ✓	✓	✓
7QXD7X	GC/MS/MS	✓	✓	
7U273H	Immunoassay LC/MS/MS	✓	✓	
8A63WZ	Immunoassay LC/MS/MS	✓	✓	✓
8P2KLY	Immunoassay LC/MS/MS	✓	✓	✓
9C7QPV	GC/MS/MS	✓	✓	✓
9QQ7UF	LC-Orbitrap LC/MS/MS	✓	✓	✓
AJ9W4Y	Immunoassay LC/MS/MS	✓	✓	✓
BUY8RV	Immunoassay LC/MS/MS	✓	✓	✓
F4RAWM	GC/MS/MS	✓	✓	✓
GFJZHR	Immunoassay LC/MS/MS	✓	✓	✓
HKQ9XL	Immunoassay GC/MS	✓	✓	
JEZYNN	Immunoassay LC/MS/MS	✓	✓	✓
JV4Q86	GC/MS		✓	
JWJPMM	Immunoassay LC/MS/MS	✓	✓	✓
LR3243	LC/MS/MS			✓
MVLWWR	LC/MS/MS	✓	✓	✓

TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
P77WNY	LC/MS/MS	✓	✓	✓
P9BPHX	LC/MS/MS	✓	✓	✓
PRQYJY	LC/QTOF GC/MS	✓	✓	✓
R9KFJD	LC/MS/MS		✓	✓
TAUH7C	LC/MS/MS			✓
TE6VMB	GCMS/MS		✓	✓
TTBR7D	Immunoassay LC/MS/MS	✓	✓	✓
U7UT3A	GC/MS/MS	✓	✓	
U86VQU	LC/MS/MS	✓	✓	✓
VG8BCT	LC/MS/MS GC/MS	✓	✓	✓
X28DZ8	LC/MS/MS		✓	✓
YYVX77	LC/MS/MS	✓	✓	✓
YZFRME	LC/MS/MS		✓	✓
Z2G2D4	GC/MS/MS	✓	✓	✓
ZH2RD4	GC/MS/MS	✓	✓	✓

Response Summary for Item 2 - Methods of Analysis			Participants: 35
	Screening	Confirmatory	Quantitation
Immunoassay:	13	0	0
GC/MS:	0	5	2
LC/MS:	0	0	0
LC/MS/MS:	6	21	22
Other:	9	7	5

Additional Comments for Item 2

TABLE 2F

WebCode	Item Comments
2MFPH6	Following a positive cannabinoid screen, confirmation/quantitation of d9-tetrahydrocannabinol (THC), 11-nor-9-carboxy-d9-tetrahydrocannabinol (carboxy-THC), and 11-hydroxy-d9-tetrahydrocannabinol (11-OH-THC) is performed using THC-D3, carboxy-THC-D3, and 11-OH-THC-D3 as internal standards, respectively. LOD for THC and 11-OH-THC is 0.5 ng/mL; LOD for carboxy-THC is 2.5 ng/mL. LOQ for THC and 11-OH-THC is 1 ng/mL; LOQ for carboxy-THC is 5 ng/mL. Target drug results quantitating below the LOQ but greater than the LOD are reported as "present, less than [LOQ value]."
3X9QCK	A (Carboxy THC) 11-nor-9-carboxy-delta-9-tetrahydrocannabinol signal was observed near the signal-to-noise ratio (S/N) in sample Item-2. Due to its proximity to the S/N threshold and because the response is at the limit of detection (LOD), with no clearly defined chromatographic signal, this compound is not reported. Limit of detecction: (Carboxy THC) 11-nor-9-carboxy-delta-9-tetrahydrocannabinol 20 ng/mL. (Hydroxy THC) 11-hydroxy-delta-9-tetrahydrocannabinol 20 ng/mL. (THC) tetrahydrocannabinol 20 ng/mL
4VJJP3	Internal standards- THC-D3, 11-OH-THC-D3, THCA-D3. LOQ 1 ng/ml for THC and 11-OH-THC, 5 ng/ml for THCA.
7U273H	THC: Internal Standard: THC-D3 Limit of Detection: 1 ng/mL Upper Limit of Quantitation: 50 ng/mL Hydroxy THC (11-OH-THC): Internal Standard: 11-OH-THC-D3 Limit of Detection: 1 ng/mL Carboxy THC (THCCOOH): Internal Standard: THCCOOH-D9 Limit of Detection: 4 ng/mL
8A63WZ	Cannabinoid confirmation panel includes d-9-THC, carboxy-THC and hydroxy-THC. LOD for d-9-THC and hydroxy-THC is 0.5 ng/ml and LOQ is 1 ng/ml. LOD for carboxy-THC is 2.5 ng/ml and LOQ is 5 ng/ml. D-9-THC-D3, COOH-THC-D3 and 11-OH-THC-D3 used as internal standards.
AJ9W4Y	Analysis by high performance liquid chromatography/tandem mass spectrometry in whole blood for: Cannabinoids confirmation panel: Analyte Quantitative Range (ng/mL) Delta-9-THC 0.5 – 50 11-hydroxy-Delta-9-THC 0.5 – 50 11-nor-9-carboxy-Delta-9-THC 5.0 – 500 Measurement uncertainty is reported at a 95.45% level of confidence for all quantitative blood drug analyses. Analysis by immunoassay screening in whole blood for: Assay Cutoff* (ng/mL) Meth /Amphetamines 20 Barbiturates 50 Benzodiazepines 10 Buprenorphine 1 Cannabinoids 10 Benzoylecgonine 50 Dextromethorphan 5 Fentanyl 1 Meprobamate 100 Methadone 10 Opiates 10 Opioids 10 Phencyclidine 5 TCA 25 Tramadol 5 Zolpidem 10 * Results within 20% of these concentrations are also reported as preliminarily positive.
BUY8RV	The sample was screened only for cannabinoids using ELISA. Cannabinoid confirmation/quantitation panel includes: d9-tetrahydrocannabinol (THC), 11-nor-9-carboxy-d9-tetrahydrocannabinol (carboxy-THC), and 11-hydroxy-d9-tetrahydrocannabinol (11-OH-THC). The following internal standards are used: THC D-3, carboxy-THC D3, and 11-OH-THC D3. For THC and 11-OH-THC the LOD is 0.5 ng/mL and the LOQ is 1 ng/mL. For carboxy-THC the LOD is 2.5 ng/mL and the LOQ is 5 ng/mL.
HKQ9XL	Internal standards used were D3-THC and D9-THC-COOH. Cut off for all three analytes (THC, THC-OH, and THC-COOH) is 1 ng/ml.
JEZYNN	Sample screened via ELISA for cannabinoids only. Following a positive cannabinoid screen, confirmation/quantitation of d9-THC, carboxy-d9-THC, and hydroxy-d9-THC performed using d9-THC-D3, carboxy-d9-THC-D3, and hydroxy-d9-THC-D3, respectively, as internal standards. LOD for d9-THC and hydroxy-d9-THC is 0.5 ng/mL; LOQ is 1 ng/mL. LOD for carboxy-d9-THC is 2.5 ng/mL; LOQ is 5 ng/mL.
JV4Q86	used THC-D3 as an internal standard
LNEUGK	This item not analyzed.

TABLE 2F: Additional Comments for Item 2

WebCode	Item Comments
LR3243	Individual results for THC were greater than upper limit of quantitation of 25 µg/L. As per laboratory protocol, this would be reported as greater than the upper Limit of quantitation, less a deduction of 30% in accordance with the [State Regulation]; i.e. would have been reported to the customer as THC >17 µg/L. Individual carboxy-THC results were within the calibration range for this analyte. As carboxy-THC is not covered by the [State Legislation], no deduction would be made, and this would be reported to the customer as carboxy-THC 18 µg/L. Individual hydroxy-THC results were within the calibration range for this analyte. As hydroxy-THC is not covered by the [State Legislation], no deduction would be made, and this would be reported to the customer as hydroxy-THC 5.7 µg/L.
P9BPHX	Additional testing date: 2025-11-13
PRQYJY	THC above ULOQ and COOH below LLOQ
TE6VMB	Analysis by GCMS/MS also took place on 11/25/25. Our calibration line for THC is from 1ng/L to 100ng/mL. We use a D3THC internal standard. Our cutoff for reporting THC is 2ng/mL Our calibration line for CTHC is from 5ng/mL to 100ng/mL. We use a D9CTHC internal standard. Our cutoff for reporting THC qualitatively is 5ng/mL.
TTBR7D	Second analysis date: 2025-11-13
U7UT3A	Analysis performed at full volume (500 uL) and reduced volume (250 uL). The second set of data was multiplied for the raw data values. To report a value, 2 tests were performed.
X28DZ8	THC and Hydroxy THC reported from 10-27-25 analysis. Carboxy THC reported from 12-1-25 analysis.
Z2G2D4	The internal standards THC d3 and COOH d9 were added and used in the calculations. The calibration range for THC is 1 ng/mL to 100 ng/mL, and for COOH-THC it is 5 ng/mL to 100 ng/mL. The reporting range of THC is 2 ng/mL to 100 ng/mL and qualitative only for COOH-THC.

Cannabinoid Screening Results - Item 3

TABLE 3A

Were cannabinoids detected?

WebCode	Response	WebCode	Response
2MFPH6	Yes, Cannabinoids were detected.	P77WNY	Yes, Cannabinoids were detected.
3WXQD6	Yes, Cannabinoids were detected.	P9BPHX	Yes, Cannabinoids were detected.
3X9QCK	No screening performed	PRQYJY	Yes, Cannabinoids were detected.
4VJJP3	Yes, Cannabinoids were detected.	R9KFJD	No screening performed
7QXD7X	Yes, Cannabinoids were detected.	TAUH7C	Yes, Cannabinoids were detected.
7U273H	Yes, Cannabinoids were detected.	TE6VMB	No screening performed
8A63WZ	Yes, Cannabinoids were detected.	TTBR7D	Yes, Cannabinoids were detected.
8P2KLY	Yes, Cannabinoids were detected.	U7UT3A	Yes, Cannabinoids were detected.
9C7QPV	Yes, Cannabinoids were detected.	U86VQU	Yes, Cannabinoids were detected.
9QQ7UF	Yes, Cannabinoids were detected.	VG8BCT	Yes, Cannabinoids were detected.
AJ9W4Y	Yes, Cannabinoids were detected.	X28DZ8	No screening performed
BUY8RV	Yes, Cannabinoids were detected.	YYVX77	Yes, Cannabinoids were detected.
F4RAWM	Yes, Cannabinoids were detected.	YZFRME	Yes, Cannabinoids were detected.
GFJZHR	Yes, Cannabinoids were detected.	Z2G2D4	Yes, Cannabinoids were detected.
HKQ9XL	Yes, Cannabinoids were detected.	ZH2RD4	Yes, Cannabinoids were detected.
JEZYNN	Yes, Cannabinoids were detected.		
JV4Q86	No screening performed		
JWJPMM	Yes, Cannabinoids were detected.		
LNEUGK	No screening performed		
LR3243	Yes, Cannabinoids were detected.		
MVLWWR	Yes, Cannabinoids were detected.		

Cannabinoid Screening Response Summary for Item 3	**Participants: 36**

Were cannabinoids detected in this Item?

Response	Total
Yes	30
No	0
No Screening	6
No Response	0

Confirmatory Results - Item 3

TABLE 3B

Item Contents and Preparation Concentration: THC (30 ng/mL)
Carboxy THC (110 ng/mL)
Hydroxy THC (15 ng/mL)

What cannabinoids were detected in Item 3?

WebCode	Analytes Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2MFPH6	THC		24	± 5	ng/mL
	Carboxy THC		97	± 19	ng/mL
	Hydroxy THC		13	± 3	ng/mL
3WXQD6	THC		0.023	0.004	mg/L
	Carboxy THC		0.10	0.02	mg/L
	Hydroxy THC		0.014	0.002	mg/L
3X9QCK	THC	✓			
	Carboxy THC	✓			
	Hydroxy THC	✓			
4VJJP3	THC		25	6	ng/mL
	Carboxy THC		82	21	ng/mL
	Hydroxy THC		13	3	ng/mL
7QXD7X	THC		23	5	ng/mL
	Carboxy THC	✓			
7U273H	THC		27	5	ng/mL
	Carboxy THC		130	30	ng/mL
	Hydroxy THC		15	4	ng/mL
8A63WZ	THC		24	± 5	ng/mL
	Carboxy THC		98	± 19	ng/mL
	Hydroxy THC		13	± 3	ng/mL
8P2KLY	THC		21.7	4.3	ng/mL
	Carboxy THC		90	19	ng/mL
	Hydroxy THC		12.8	2.7	ng/mL
9C7QPV	THC		24	5	
	Carboxy THC	✓			
9QQ7UF	THC		23		ng/ml
	Carboxy THC		100		ng/ml
	Hydroxy THC		31		ng/ml

TABLE 3B: Confirmatory Results - Item 3

What cannabinoids were detected in Item 3?					
WebCode	**Analytes Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
AJ9W4Y	THC		21	4	ng/mL
	Carboxy THC		83	14	ng/mL
	Hydroxy THC		12	2	ng/mL
BUY8RV	THC		23	4	ng/mL
	Carboxy THC		94	18	ng/mL
	Hydroxy THC		13	3	ng/mL
F4RAWM	THC		22	5	ng/ml
	Carboxy THC	✓			
GFJZHR	THC		0.022	0.004	mg/L
	Carboxy THC		0.075	0.016	mg/L
	Hydroxy THC		0.010	0.002	mg/L
HKQ9XL	THC	✓			
	Carboxy THC	✓			
	Hydroxy THC	✓			
JEZYNN	THC		29	± 5	ng/mL
	Carboxy THC		0.10	± 0.03	µg/mL
	Hydroxy THC		14	± 3	ng/mL
JV4Q86	No Drugs/Metabolites detected utilizing confirmatory methods.				
JWJPMM	THC		24	5	ng/mL
	Carboxy THC		93	19	ng/mL
	Hydroxy THC		12	2	ng/mL
LR3243	THC		22	15%	µg/L
	Carboxy THC		94	12%	µg/L
	Hydroxy THC		13	12%	µg/L
MVLWWR	THC		19.720	2.2	ng/mL
P77WNY	THC		31	8	ng/mL
	Carboxy THC		96		ng/mL
P9BPHX	THC		23	31.2	%
	Carboxy THC		93	17.2	%
	Hydroxy THC		13	19.6	%
PRQYJY	THC		20	3.4	ng/mL
	Carboxy THC		84	16.8	ng/mL
	Hydroxy THC		10	1.7	ng/mL

TABLE 3B: Confirmatory Results - Item 3

What cannabinoids were detected in Item 3?					
WebCode	**Analytes Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
R9KFJD	THC		22.1	3.0	ng/mL
	Carboxy THC		83.1	13.9	ng/mL
	Hydroxy THC		11.8	1.9	ng/mL
TAUH7C	THC		25		ng/mL
	Carboxy THC		100		ng/mL
	Hydroxy THC		12		ng/mL
TE6VMB	THC		24	+/-20%	ng/mL
	Carboxy THC	✓			
TTBR7D	THC		24	5	ng/mL
	Carboxy THC		97	24	ng/mL
	Hydroxy THC		14	3	ng/mL
U7UT3A	THC		27	6	ng/mL
	Carboxy THC	✓			
U86VQU	THC		24	6	ng/mL
	Carboxy THC		80		ng/mL
VG8BCT	THC		27.21	5.16	ng/mL
	Carboxy THC		110.25	22.05	ng/mL
X28DZ8	THC		23.4	7.0	ng/mL
	Carboxy THC		81	22	ng/mL
	Hydroxy THC		12.9	3.1	ng/mL
YYVX77	THC		26.59	5.32	ng/mL
	Carboxy THC		95.41	23.86	ng/mL
	Hydroxy THC		13.40	2.68	ng/mL
YZFRME	THC		26.98		µg/L
	Carboxy THC		102.3		µg/L
Z2G2D4	THC		24	+/-5	ng/mL
	Carboxy THC	✓	Positive		
ZH2RD4	THC		23	5	ng/ml
	Carboxy THC	✓			

Confirmatory Response Summary for Item 3	Participants: 35
THC:	34 (97.1%)
Carboxy-THC:	33 (94.3%)
Hydroxy-THC:	22 (62.9%)
No Drugs/Metabolites Detected Utilizing Confirmatory Methods:	1 (2.9%)

Raw Data - Item 3

TABLE 3C

Item 3 Raw Data - THC
Preparation concentration: 30 ng/mL

WebCode	List of Raw Data determinations (ng/mL)			Participant Mean	
2MFPH6	24.248			24.250	
3WXQD6	22.930			22.930	
4VJJP3	25.480			25.480	
7QXD7X	23.000	24.000		23.500	
7U273H	27.860			27.860	
8A63WZ	24.329			24.330	
8P2KLY	21.670			21.670	
9C7QPV	24.720	24.820		24.770	
AJ9W4Y	21.020			21.020	
BUY8RV	23.460			23.460	
F4RAWM	23.010	22.860		22.940	
GFJZHR	21.970			21.970	
JEZYNN	29.134			29.130	
JWJPMM	24.000			24.000	
LR3243	22.434	22.182		22.310	
MVLWWR	20.223	19.646	19.292	19.720	
P77WNY	31.280			31.280	X
P9BPHX	23.300	22.330		22.820	
PRQYJY	20.630			20.630	
R9KFJD	22.140			22.140	
TAUH7C	25.430			25.430	
TE6VMB	24.630	24.040		24.340	
TTBR7D	21.950	26.120		24.040	
U7UT3A	27.360	26.980		27.170	
U86VQU	24.400			24.400	
VG8BCT	27.210			27.210	
X28DZ8	23.464			23.460	
YYVX77	26.596			26.600	
YZFRME	26.910	27.040		26.980	
Z2G2D4	24.770	25.060		24.920	

TABLE 3C: Raw Data - Item 3

Item 3 Raw Data - THC
Preparation concentration: 30 ng/mL

WebCode	List of Raw Data determinations (ng/mL)		Participant Mean
ZH2RD4	23.090	23.420	23.260

Statistical Analysis for Item 3 - THC

Grand Mean	24.09	Number of Participants Included	30
Standard Deviation	2.22	Number of Participants Excluded	1
		by Critical H value of	2.642

TABLE 3C: Raw Data - Item 3

Item 3 Raw Data - Carboxy-THC
Preparation concentration: 110 ng/mL

WebCode	List of Raw Data determinations (ng/mL)		Participant Mean	
2MFPH6	97.056		97.060	
3WXQD6	100.33		100.30	
4VJJP3	82.840		82.840	
7U273H	130.26		130.30	X
8A63WZ	98.041		98.040	
8P2KLY	89.554		89.550	
9C7QPV	94.240	94.460	94.350	
AJ9W4Y	83.410		83.410	
BUY8RV	94.415		94.420	
F4RAWM	91.490	90.430	90.960	
GFJZHR	74.720		74.720	
JEZYNN	107.66		107.70	
JWJPMM	93.000		93.000	
LR3243	93.745	95.867	94.810	
P77WNY	96.700		96.700	
P9BPHX	92.210	93.030	92.620	
PRQYJY	84.520		84.520	
R9KFJD	83.140		83.140	
TAUH7C	100.18		100.20	
TE6VMB	100.59	92.39	96.490	
TTBR7D	82.430	111.600	97.020	
U7UT3A	91.690	95.060	93.380	
U86VQU	80.960		80.960	
VG8BCT	110.25		110.30	
X28DZ8	81.684		81.680	
YYVX77	95.418		95.420	
YZFRME	100.40	104.20	102.30	
Z2G2D4	91.220	88.160	89.690	
ZH2RD4	87.260	86.850	87.060	

Statistical Analysis for Item 3 - Carboxy-THC

Grand Mean	92.59	Number of Participants Included	28
Standard Deviation	8.23	Number of Participants Excluded	1
		by Critical H value of	2.630

TABLE 3C: Raw Data - Item 3

Item 3 Raw Data - Hydroxy-THC
Preparation concentration: 15 ng/mL

WebCode	List of Raw Data determinations (ng/mL)		Participant Mean
2MFPH6	13.445		13.450
3WXQD6	14.200		14.200
4VJJP3	13.630		13.630
7U273H	15.590		15.590
8A63WZ	13.678		13.680
8P2KLY	12.760		12.760
AJ9W4Y	11.730		11.730
BUY8RV	13.005		13.010
GFJZHR	10.100		10.100
JEZYNN	14.683		14.680
JWJPMM	12.000		12.000
LR3243	13.571	13.257	13.410
P9BPHX	12.830	12.810	12.820
PRQYJY	10.980		10.980
R9KFJD	11.870		11.870
TAUH7C	12.993		12.990
TTBR7D	13.370	14.950	14.160
X28DZ8	12.934		12.930
YYVX77	13.403		13.400

Statistical Analysis for Item 3 - Hydroxy-THC

Grand Mean	13.02	Number of Participants Included	19
Standard Deviation	1.29	Number of Participants Excluded	0
		by Critical H value of	2.543

Reporting Procedures - Item 3

TABLE 3D - Item 3

Quantitative Reporting Procedures	
WebCode	***If quantitative analysis was performed, the reported concentrations are:***
2MFPH6	A single determination.
3WXQD6	A single determination.
4VJJP3	A single determination.
7QXD7X	A single determination.
7U273H	A single determination.
8A63WZ	A single determination.
8P2KLY	A single determination.
9C7QPV	A single determination.
9QQ7UF	The mean of duplicate/several determinations.
AJ9W4Y	A single determination.
BUY8RV	A single determination.
F4RAWM	Lower truncated value of duplicate testing
GFJZHR	A single determination.
JEZYNN	A single determination.
JWJPMM	A single determination.
LR3243	The mean of duplicate/several determinations.
MVLWWR	The mean of duplicate/several determinations.
P77WNY	A single determination.
P9BPHX	The mean of duplicate/several determinations.
PRQYJY	A single determination.
R9KFJD	A single determination.
TAUH7C	A single determination.
TE6VMB	Lowest of 2 full volume results
TTBR7D	The mean of duplicate/several determinations.
U7UT3A	Full volume analysis quantification
U86VQU	A single determination.
VG8BCT	A single determination.
X28DZ8	A single determination.
YYVX77	A single determination.
YZFRME	The mean of duplicate/several determinations.
Z2G2D4	Lower of two analyses.

TABLE 3D: Reporting Procedures - Item 3

WebCode	Quantitative Reporting Procedures *If quantitative analysis was performed, the reported concentrations are:*
ZH2RD4	Lower truncated value of duplicate testing

Response Summary for Item 3	Participants: 32
A single determination:	21 (65.6%)
The mean of duplicate/several determinations:	6 (18.8%)
Other:	5 (15.6%)

Methods of Analysis - Item 3

TABLE 3E - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
2MFPH6	Immunoassay LC/MS/MS	✓	✓	✓
3WXQD6	Immunoassay LC/MS/MS	✓	✓	✓
3X9QCK	GC/MS		✓	
4VJJP3	Immunoassay QTOFMSMS LC/MS/MS	✓ ✓	✓	✓
7QXD7X	GC/MS/MS	✓	✓	
7U273H	Immunoassay LC/MS/MS	✓	✓	
8A63WZ	Immunoassay LC/MS/MS	✓	✓	✓
8P2KLY	Immunoassay LC/MS/MS	✓	✓	✓
9C7QPV	GC/MS/MS	✓	✓	✓
9QQ7UF	LC-Orbitrap LC/MS/MS	✓	✓	✓
AJ9W4Y	Immunoassay LC/MS/MS	✓	✓	✓
BUY8RV	Immunoassay LC/MS/MS	✓	✓	✓
F4RAWM	GC/MS/MS	✓	✓	✓
GFJZHR	Immunoassay LC/MS/MS	✓	✓	✓
HKQ9XL	Immunoassay GC/MS	✓	✓	
JEZYNN	Immunoassay LC/MS/MS	✓	✓	✓
JV4Q86	GC/MS		✓	
JWJPMM	Immunoassay LC/MS/MS	✓	✓	✓
LR3243	LC/MS/MS			✓
MVLWWR	LC/MS/MS	✓	✓	✓

TABLE 3E: Methods of Analysis - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
P77WNY	LC/MS/MS	✓	✓	✓
P9BPHX	LC/MS/MS	✓	✓	✓
PRQYJY	LC/QTOF GC/MS	✓	✓	✓
R9KFJD	LC/MS/MS		✓	✓
TAUH7C	LC/MS/MS			✓
TE6VMB	GCMS/MS		✓	✓
TTBR7D	Immunoassay LC/MS/MS	✓	✓	✓
U7UT3A	GC/MS/MS	✓	✓	
U86VQU	LC/MS/MS	✓	✓	✓
VG8BCT	LC/MS/MS GC/MS	✓	✓	✓
X28DZ8	LC/MS/MS		✓	✓
YYVX77	LC/MS/MS	✓	✓	✓
YZFRME	LC/MS/MS		✓	✓
Z2G2D4	GC/MS/MS	✓	✓	✓
ZH2RD4	GC/MS/MS	✓	✓	✓

Response Summary for Item 3 - Methods of Analysis			Participants: 35
	Screening	Confirmatory	Quantitation
Immunoassay:	13	0	0
GC/MS:	0	5	2
LC/MS:	0	0	0
LC/MS/MS:	6	21	22
Other:	9	7	5

Additional Comments for Item 3

TABLE 3F

WebCode	Item Comments
2MFPH6	Following a positive cannabinoid screen, confirmation/quantitation of d9-tetrahydrocannabinol (THC), 11-nor-9-carboxy-d9-tetrahydrocannabinol (carboxy-THC), and 11-hydroxy-d9-tetrahydrocannabinol (11-OH-THC) is performed using THC-D3, carboxy-THC-D3, and 11-OH-THC-D3 as internal standards, respectively. LOD for THC and 11-OH-THC is 0.5 ng/mL; LOD for carboxy-THC is 2.5 ng/mL. LOQ for THC and 11-OH-THC is 1 ng/mL; LOQ for carboxy-THC is 5 ng/mL. Target drug results quantitating below the LOQ but greater than the LOD are reported as "present, less than [LOQ value]."
3X9QCK	Limit of detecction: (Carboxy THC) 11-nor-9-carboxy-delta-9-tetrahydrocannabinol 20 ng/mL. (Hydroxy THC) 11-hydroxy-delta-9-tetrahydrocannabinol 20 ng/mL. (THC) tetrahydrocannabinol 20 ng/mL
4VJJP3	IS for QTOF was Mepivacaine. IS for LCMSMS was THC D3, 11-OH-THC D3 and THCAD3 with the LLOQ being 1, 1, 5 ng/mL respectively. QTOF was a screen the case went through but this screen is not used for cannabinoids.
7U273H	THC: Internal Standard: THC-D3 Limit of Detection: 1 ng/mL Hydroxy THC (11-OH-THC): Internal Standard: 11-OH-THC-D3 Limit of Detection: 1 ng/mL Carboxy THC (THCCOOH): Internal Standard: THCCOOH-D9 Limit of Detection: 4 ng/mL
8A63WZ	Cannabinoid confirmation panel includes d-9-THC, carboxy-THC and hydroxy-THC. LOD for d-9-THC and hydroxy-THC is 0.5 ng/ml and LOQ is 1 ng/ml. LOD for carboxy-THC is 2.5 ng/ml and LOQ is 5 ng/ml. D-9-THC-D3, COOH-THC-D3 and 11-OH-THC-D3 used as internal standards.
AJ9W4Y	Analysis by high performance liquid chromatography/tandem mass spectrometry in whole blood for: Cannabinoids confirmation panel: Analyte Quantitative Range (ng/mL) Delta-9-THC 0.5 – 50 11-hydroxy-Delta-9-THC 0.5 – 50 11-nor-9-carboxy-Delta-9-THC 5.0 – 500 Measurement uncertainty is reported at a 95.45% level of confidence for all quantitative blood drug analyses. Analysis by immunoassay screening in whole blood for: Assay Cutoff* (ng/mL) Meth /Amphetamines 20 Barbiturates 50 Benzodiazepines 10 Buprenorphine 1 Cannabinoids 10 Benzoylecgonine 50 Dextromethorphan 5 Fentanyl 1 Meprobamate 100 Methadone 10 Opiates 10 Opioids 10 Phencyclidine 5 TCA 25 Tramadol 5 Zolpidem 10 * Results within 20% of these concentrations are also reported as preliminarily positive.
BUY8RV	The sample was screened only for cannabinoids using ELISA. Cannabinoid confirmation/quantitation panel includes: d9-tetrahydrocannabinol (THC), 11-nor-9-carboxy-d9-tetrahydrocannabinol (carboxy-THC), and 11-hydroxy-d9-tetrahydrocannabinol (11-OH-THC). The following internal standards are used: THC D-3, carboxy-THC D3, and 11-OH-THC D3. For THC and 11-OH-THC the LOD is 0.5 ng/mL and the LOQ is 1 ng/mL. For carboxy-THC the LOD is 2.5 ng/mL and the LOQ is 5 ng/mL.
HKQ9XL	Internal standards used were D3-THC and D9-THC-COOH. Cut off for all three analytes (THC, THC-OH, and THC-COOH) is 1 ng/ml.
JEZYNN	Sample screened via ELISA for cannabinoids only. Following a positive cannabinoid screen, confirmation/quantitation of d9-THC, carboxy-d9-THC, and hydroxy-d9-THC performed using d9-THC-D3, carboxy-d9-THC-D3, and hydroxy-d9-THC-D3, respectively, as internal standards. LOD for d9-THC and hydroxy-d9-THC is 0.5 ng/mL; LOQ is 1 ng/mL. LOD for carboxy-d9-THC is 2.5 ng/mL; LOQ is 5 ng/mL.
JV4Q86	used THC-D3 as an internal standard
LNEUGK	This item not analyzed

TABLE 3F: Additional Comments for Item 3

WebCode	Item Comments
LR3243	As per laboratory protocol, this would be reported as 22 µg/L, less a deduction of 30% in accordance with the [State Regulation]; i.e. would have been reported to the customer as THC (not less than) 15 µg/L. Individual carboxy-THC results were within the calibration range for this analyte. As carboxy-THC is not covered by the [State Legislation], no deduction would be made, and this would be reported to the customer as carboxy-THC 94 µg/L. Individual hydroxy-THC results were within the calibration range for this analyte. As hydroxy-THC is not covered by the [State Legislation], no deduction would be made, and this would be reported to the customer as hydroxy-THC 13 µg/L.
P9BPHX	Additional testing date: 2025-11-13
TE6VMB	Analysis by GCMS/MS also took place on 11/25/25. Our calibration line for THC is from 1ng/L to 100ng/mL. We use a D3THC internal standard. Our cutoff for reporting THC is 2ng/mL Our calibration line for CTHC is from 5ng/mL to 100ng/mL. We use a D9CTHC internal standard. Our cutoff for reporting THC qualitatively is 5ng/mL.
TTBR7D	Second analysis date: 2025-11-13
U7UT3A	Analysis performed at full volume (500 uL) and reduced volume (250 uL). The second set of data was multiplied for the raw data values. To report a value, 2 tests were performed.
X28DZ8	THC and Hydroxy THC reported from 10-27-25 analysis. Carboxy THC reported from 12-1-25 analysis.
YYVX77	Item 3 screened positive for Nordiazepam. Benzodiazepine confirmation testing on 11/17/25 confirmed negative.
Z2G2D4	The internal standards THC d3 and COOH d9 were added and used in the calculations. The calibration range for THC is 1 ng/mL to 100 ng/mL, and for COOH-THC it is 5 ng/mL to 100 ng/mL. The reporting range of THC is 2 ng/mL to 100 ng/mL and qualitative only for COOH-THC.

Additional Comments

TABLE 4

WebCode	Additional Comments
F4RAWM	Samples received 11/14/25 for notes to be taken and analyzed on 11/17/25.
VG8BCT	Hydroxy THC is not in our confirmation method so it is not reported.
Z2G2D4	Forensic Services Technician, [Name], opened evidence on 11/06/25 and took notes. [Initials] 11/17/25
ZH2RD4	Evidence received 11/4/25, evidence wrote up by [Name] on 11/18/25.

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 25-5662: Blood Cannabinoids Analysis

DATA MUST BE SUBMITTED BY **Dec. 22, 2025, 11:59 p.m. EST** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A WebCode: NXVFED

Scenario:
Investigators have submitted three tubes of blood from separate cases to be examined; each was taken from a person suspected of being under the influence of cannabinoids. Using your laboratory's procedures, analyze each tube and report the concentration of any cannabinoid(s) present.

-Samples may contain methanol and acetonitrile as artifacts from production.

Items Submitted (Sample Pack BCAN):
Item 1: One vial of blood from Case 1
Item 2: One vial of blood from Case 2
Item 3: One vial of blood from Case 3

Screening Results for Item 1:

1-1). Were cannabinoids detected for Item 1?

- ○ No screening was performed for this item.
- ○ No, cannabinoids were not detected.
- ○ Yes, cannabinoids were detected.

Confirmatory Results and Quantitative Analysis for Item 1:

1-2). Was confirmatory analysis performed for this item? ○ Yes ○ No

1-3). What cannabinoid(s) were detected in Item 1? If quantitative determinations were performed, please record raw data in the provided spaces in ng/mL.

☐ No drugs/metabolites detected utilizing confirmatory methods.

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
	☐			( )

Raw Data (ng/mL):

1-4). If quantitative analysis was performed, are the reported concentrations above

- ○ A single determination?
- ○ The mean of duplicate / several determinations?
- ○ Other? (Specify):

1-5). For quantitative analysis, select the date analysis was performed (if analyzed across multiple days, report the first analysis date here and include additional dates in the Additional Comments section below).

Methods of Analysis for Item 1:

1-6). Please select the analysis method(s) performed and check whether it was used for screening, confirmatory testing, and/or quantitation.

Please list each method only once.

Method Used	Screening	Confirmatory	Quantitation
	☐	☐	☐

Additional Comments for Item 1:

1-7). Please include any relevant information such as internal standard(s) used, limits of detection, etc.

Note: *Please use appropriate punctuation to indicate the end of sentences, sections, and statements in the free-form space below. Extra spacing and returns used for separation within your text will not transfer and may cause your information to be illegible in the Summary Report. The use of lists and tabular formats to deliver information is also cautioned against, as these do not transfer.*

Screening Results for Item 2:

2-1). Were cannabinoids detected for Item 2?

- ○ No screening was performed for this item.
- ○ No, cannabinoids were not detected.
- ○ Yes, cannabinoids were detected.

Confirmatory Results and Quantitative Analysis for Item 2:

2-2). Was confirmatory analysis performed for this item? ○ Yes ○ No

2-3). What cannabinoid(s) were detected in Item 2? If quantitative determinations were performed, please record raw data in the provided spaces in ng/mL.

☐ No drugs/metabolites detected utilizing confirmatory methods.

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
	☐			( )

Raw Data (ng/mL):

2-4). If quantitative analysis was performed, are the reported concentrations above

- ○ A single determination?
- ○ The mean of duplicate / several determinations?
- ○ Other? (Specify):

2-5). For quantitative analysis, select the date analysis was performed (if analyzed across multiple days, report the first analysis date here and include additional dates in the Additional Comments section below).

Methods of Analysis for Item 2:

2-6). Please select the analysis method(s) performed and check whether it was used for screening, confirmatory testing, and/or quantitation.

Please list each method only once.

Method Used	Screening	Confirmatory	Quantitation
	☐	☐	☐

Additional Comments for Item 2:

2-7). Please include any relevant information such as internal standard(s) used, limits of detection, etc.

Note: *Please use appropriate punctuation to indicate the end of sentences, sections, and statements in the free-form space below. Extra spacing and returns used for separation within your text will not transfer and may cause your information to be illegible in the Summary Report. The use of lists and tabular formats to deliver information is also cautioned against, as these do not transfer.*

Screening Results for Item 3:

3-1). Were cannabinoids detected for Item 3?

- ○ No screening was performed for this item.
- ○ No, cannabinoids were not detected.
- ○ Yes, cannabinoids were detected.

Confirmatory Results and Quantitative Analysis for Item 3:

3-2). Was confirmatory analysis performed for this item? ○ Yes ○ No

3-3). What cannabinoid(s) were detected in Item 3? If quantitative determinations were performed, please record raw data in the provided spaces in ng/mL.

☐ No drugs/metabolites detected utilizing confirmatory methods.

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
	☐			( )

Raw Data (ng/mL):

3-4). If quantitative analysis was performed, are the reported concentrations above

- ○ A single determination?
- ○ The mean of duplicate / several determinations?
- ○ Other? (Specify):

3-5). For quantitative analysis, select the date analysis was performed (if analyzed across multiple days, report the first analysis date here and include additional dates in the Additional Comments section below).

Methods of Analysis for Item 3:

3-6). Please select the analysis method(s) performed and check whether it was used for screening, confirmatory testing, and/or quantitation.

Please list each method only once.

Method Used	Screening	Confirmatory	Quantitation
	☐	☐	☐

Additional Comments for Item 3:

3-7). Please include any relevant information such as internal standard(s) used, limits of detection, etc.

Note: *Please use appropriate punctuation to indicate the end of sentences, sections, and statements in the free-form space below. Extra spacing and returns used for separation within your text will not transfer and may cause your information to be illegible in the Summary Report. The use of lists and tabular formats to deliver information is also cautioned against, as these do not transfer.*

Date Samples Received:

Additional Comments on Test

Note: *Please use appropriate punctuation to indicate the end of sentences, sections, and statements in the free-form space below. Extra spacing and returns used for separation within your text will not transfer and may cause your information to be illegible in the Summary Report. The use of lists and tabular formats to deliver information is also cautioned against, as these do not transfer.*

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

A2LA Certificate No.

Step 2: Complete the Laboratory Identifying Information in its entirety

Authorized Contact Person and Title

Laboratory Name

Location (City/State)