REVIEWED
By Tamara Salazar at 9:33 am, Feb 24, 2020

2/12/2020

Worklist: 3998

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2020-0146	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0198	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0206	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0249	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0260	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0297	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0313	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0319	4	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0385	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0464	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0498	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-0525	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0296	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0385	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0386	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0394	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0405	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0406	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0408	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0409	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0410	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

Worklist: 3998

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
P2020-0459	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0462	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0463	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0465	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-0497	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

Idaho State Police
Forensic Services
Toxicology Discipline

Request for Departure from an Analytical Method

Date of Request
01/13/2020

Forensic Scientist
Celena Shrum

Analytical Methods
Toxicology AM #25, Toxicology AM #26/27, and AM #28

Deviation

The expiration dates listed for the current batch of PinPoint ToxBox extraction plates are as follows:
*MDS (batch IDP-107-190725)- Expiration is 1/25/2020
*THC (batch IDP-108-190716)- Expiration is 1/16/2020
*MDQ P1 (batch IDP-111-190729)- Expiration is 1/29/2020
*MDQ P2 (batch IDP-112-190730)- Expiration is 1/30/2020

I am issuing a deviation to allow for the use of the remaining plates of these batches. The controls will be used to evaluate if the plate is working as intended. In addition, at least one external control must be included for each run.

Celena Shrum

Date: 01/13/2020
Celena Shrum
Toxicology Discipline Lead

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AM# 25: Multi-Drug Screen in Blood by LC-MS/MS

Extraction Date: 02/18/20 Analyst: Sarah Pickle
Plate lot#: IDP-107-190725 Plate Expiration: 01/25/2020

Mobile phase A: 10mM Amm Form **Mobile phase B:** 0.1% Formic Acid in MeOH
0.5M Ammonium Hydroxide Ethyl Acetate LC Methanol
Blank Blood Lot: Hemostat 445283-3 **Column**: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)
LCMS-QQQ ID: 069901

Pre-Analytic:

☒ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
☒ 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☒ 2. Pipette **250 µL blood (calibrated pipette)** in wells of analytical (standards) plate. **Pipette ID: #16**
☒ 3. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes. *Shaker ID: 067105*
☒ 4. Pipette **250 µL of 0.5 M ammonium hydroxide** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
☒ 6. Transfer **300 µL of blood+base** mixture to corresponding wells of SLE+ plate.
☒ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). ***(Load at 85-100 PSI- Selector to the right)*** *Manifold ID: 067104*
☒ 8. Wait 5 minutes.
☒ 9. Add **900 µL ethyl acetate.**
☒ 10. Wait 5 minutes.
☒ 11. Apply positive pressure for approx. 10-15 seconds. ***(12-15 PSI- Selector to the left).***
☒ 12. Add **900 µL ethyl acetate.**
☒ 13. Wait 5 minutes.
☒ 14. Apply positive pressure for approx. 10-15 seconds. ***(12-15 PSI- Selector to the left).***
☒ 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. *SPE Dry ID: 067103*
☒ 16. Reconstitute in **100 µL 100% LC MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

☒ 1. Open quantitation software and create a new quantitation batch.
Batch Name: AM 25 Worklist path: D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP
☒ 2. Make necessary changes to integration limits
☒ 3. Evaluate samples, S/N of primary transition >5 and S/N of secondary transition >3 or evaluation of peak symmetry and resolution. Within +/- 2% or 0.1 min RT of administrative control. Calculated concentration 5 or greater or 2-5 for discretionary range.
☒ 4. Did all QCs pass for each analyte? Y / N _____
☒ 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: *Did not evaluate amitriptyline and maprotiline.*

Idaho State Police
Forensic Services

AM #25 Blood Multi-Drug Screen by LCMS-QQQ
And
AM #28 Blood Multi-Drug Confirmatory Analysis by LCMS-QQQ---Panel 1

Methanol External Control Solution (Lot: 031319)

100 ul of 1mg/mL stock was added to each drug to 9700 ul of LC MeOH.
**Made for the AM 28 urine validation*

Component	***Source***	***Source Lot Number***	***Expiration Date***
Methanol (LCMS)	Fisher	184782	
O-desmethyl Tramadol	Cerilliant	FN01241702	04/30/2022
Amphetamine	Cerilliant	FE04061701	06/30/2022
Alprazolam	Cerilliant	FE07061604	07/31/2021
Prepared:	03/13/19		
Prepared By:	Tamara Salazar		
Expires:	03/13/2020		

Blood External Control Solution (Lot: WS010820)

100 ul of methanol external control solution was added to 9900 ul of blood.
Approximately 100ng/mL of each compound.

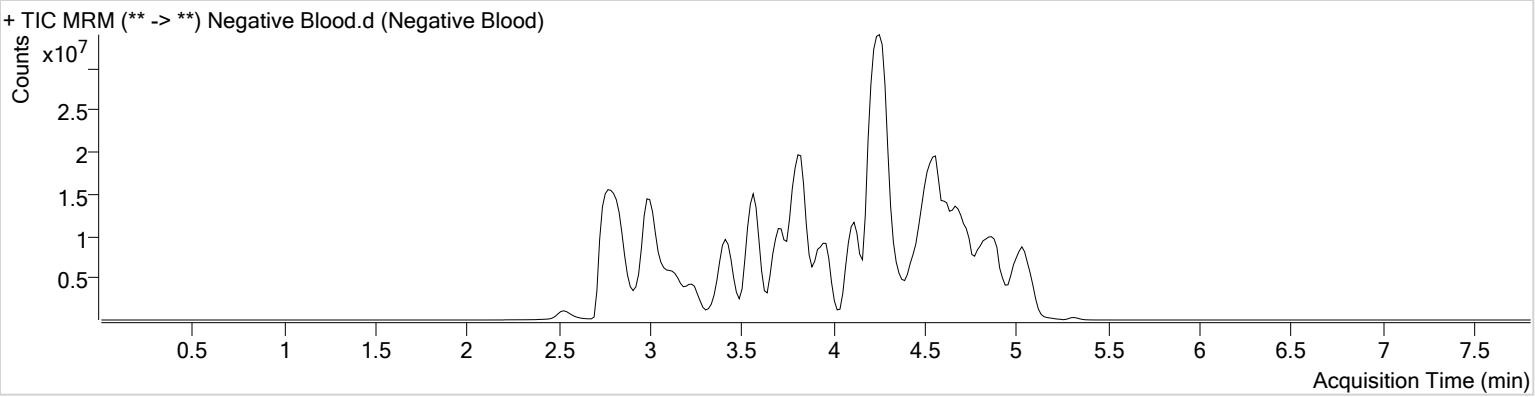
Component	***Source***	***Source Lot Number***
Negative Blood	Hemostat	445283-3
Methanol External Control Solution		031319
Prepared:	01/08/2020	
Prepared by:	Tamara Salazar	
Expires:	03/13/2020	

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 25.batch.bin
Calibration Last Update 2/20/2020 8:11:09 AM

Instrument	Falco	**Data File**	Negative Blood.d
Type	Sample	**Sample**	Negative Blood
Acq. Method	am 25 all.m	**Operator**	Sarah Pickle
Sample Position	P1-A5	**Comment**	
Injection Volume	5		
Acq. Date-Time	2/18/2020 4:40:49 PM		
Sample Info.			

Sample Chromatogram

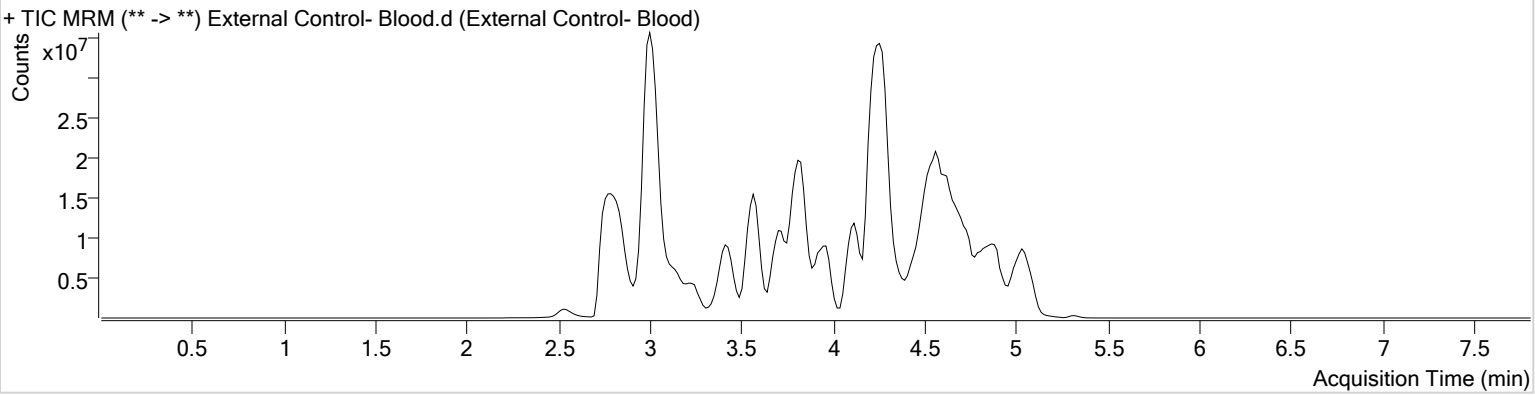


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 25.batch.bin
Calibration Last Update 2/20/2020 8:11:09 AM

Instrument	Falco	**Data File**	External Control- Blood.d
Type	Sample	**Sample**	External Control- Blood
Acq. Method	am 25 all.m	**Operator**	Sarah Pickle
Sample Position	P1-B5	**Comment**	
Injection Volume	5		
Acq. Date-Time	2/18/2020 4:49:08 PM		
Sample Info.			

Sample Chromatogram



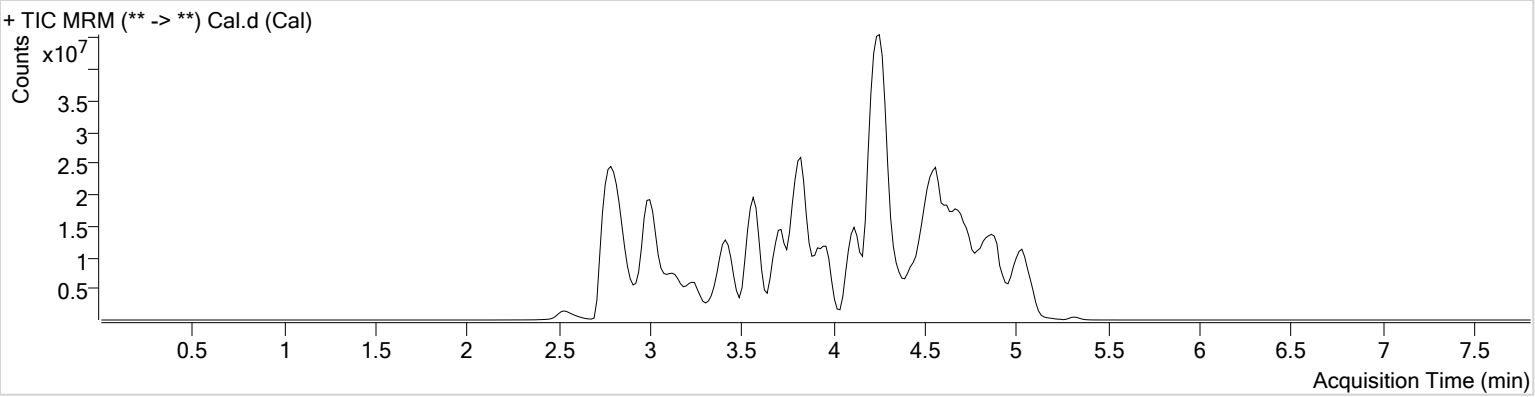
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.615	11368261	∞	177747.59	2896975	103.8770
Amphetamine	2.995	19590371	15869.58	∞	4993236	108.2745
O-desmethyl-tramadol	3.025	65090703	35231.96	4041.43	43189681	78.2818

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 25.batch.bin
Calibration Last Update 2/20/2020 8:11:09 AM

Instrument	Falco	**Data File**	Cal.d
Type	Cal	**Sample**	Cal
Acq. Method	am 25 all.m	**Operator**	Sarah Pickle
Sample Position	P1-B1	**Comment**	
Injection Volume	5		
Acq. Date-Time	2/18/2020 4:32:21 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	3.303	48254	153.69	19100.18	1351153	10.0000
7-aminoclonazepam	3.582	164252	574.26	50.94	691377	10.0000
7-aminoflunitrazepam	3.796	879497	55.41	43.07	6465551	10.0000
Acetyl Fentanyl	4.484	502150	∞	44798.14	38620534	10.0000
Acetyl Norfentanyl	2.991	292253	601.74	272.62	13801569	10.0000
a-hydroxyalprazolam	4.499	71772	24.68	175.92	401174	10.0000
alpha-hydroxymidazolam	4.606	815694	∞	546.13	5160827	10.0000
alpha-PVP	3.896	4976243	∞	∞	22082659	10.0000
Alprazolam	4.625	1153410	∞	130.61	3053189	10.0000
* Amitriptyline	4.890	1475284	1.19 Low	25.78	9068446	10.0000
Amphetamine	2.995	1907875	∞	∞	5265208	10.0000
Benzoylecgonine	3.367	1016636	821.63	4578.03	4825009	10.0000
Buprenorphine	5.331	325313	213.59	936.27	1456392	10.0000
Bupropion	4.187	3670594	∞	893.41	13547590	10.0000
Carbamazepine	4.234	4000328	∞	423.61	25679735	10.0000
Carisoprodol	4.186	494898	288.17	48.81	2649947	10.0000
Chlordiazepoxide	4.734	215587	∞	284.17	8086427	10.0000
Chlorpheniramine	4.184	18586	74.44	∞	56227643	10.0000
Citalopram	4.331	3713087	1739.52	∞	15775295	10.0000
Clonazepam	4.455	144876	34.87	4365.02	259138	10.0000
Cocaine	3.856	6040939	∞	1149.22	28983916	10.0000
Codeine	3.228	457154	46647.55	1042.79	2228519	10.0000
Cyclobenzaprine	4.752	3039617	55028.80	105.99	11966950	10.0000
Desipramine	4.677	5409528	169373.03	1956.96	31073762	10.0000
Dextromethorphan	4.416	2954506	295394.04	∞	14126038	10.0000
Dextrorphan	3.600	2498812	8802.11	2918.24	16466384	10.0000
Diazepam	4.843	568698	∞	213.71	2782227	10.0000
Dihydrocodeine	3.015	1220592	1593.26	244.93	6669657	10.0000
Diphenhydramine	4.294	8053545	654.58	644.72	56227643	10.0000
Doxepin	4.553	2223369	505.59	∞	14826827	10.0000
Doxylamine	3.829	11468651	∞	∞	49425128	10.0000
EDDP	4.260	5535496	∞	49741.11	37564323	10.0000
Estazolam	4.535	2165853	∞	279.76	6654851	10.0000
Etizolam	4.651	185770	909.67	259875.73	6654851	10.0000

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Fentanyl	4.728	308362	117.00	140643.39	21459515	10.0000
Flunitrazepam	4.578	573353	39194.93	90.91	117430	10.0000
Fluoxetine	4.532	3501940	2433.99	1715.38	15656188	10.0000
Flurazepam	4.726	3031442	1919697.26	130172.39	117430	10.0000
Hydrocodone	3.504	963854	∞	82.64	7341696	10.0000
Hydromorphone	2.851	691530	37.77	32.03	2389285	10.0000
Imipramine	4.813	6315293	∞	∞	24494444	10.0000
Ketamine	4.157	3598081	565.75	∞	18187077	10.0000
Lamotrigine	3.663	257110	226.99	137.00	15197886	10.0000
Levamisole	3.345	4057471	∞	381.14	28983916	10.0000
Lorazepam	4.439	38040	10.31	4.26 **Low**	259138	10.0000
MDA	3.161	1180139	189.87	224.66	5558469	10.0000
MDEA	3.406	4638601	2728.47	4183.33	23335958	10.0000
MDMA	3.268	5378955	1996549.45	2918.72	3806987	10.0000
Meperidine	3.909	2939011	2359.08	1706.21	15197886	10.0000
Meprobamate	3.652	114587	378.76	13.90	564315	10.0000
Methadone	4.625	6998115	265014.87	396.18	33183475	10.0000
Methamphetamine	3.116	2805718	∞	∞	14972117	10.0000
Methocarbamol	3.556	169598	65.41	∞	15197886	10.0000
Methylphenidate	3.727	10552334	∞	1339.18	49149313	10.0000
Metoprolol	3.584	572880	377.67	∞	15197886	10.0000
Midazolam	4.790	480321	∞	306.96	5568676	10.0000
Mirtazapine	4.708	3398985	∞	10504.58	15197886	10.0000
Mitragynine	4.725	634306	2219.66	∞	14826827	10.0000
Morphine	2.608	353736	394.88	542.26	205654	10.0000
Norbuprenorphine	4.127	41008	10872.61	11271.45	229395	10.0000
Nordiazepam	4.707	150536	7727.52	57.94	571267	10.0000
Norfentanyl	3.451	5443942	326951.83	528.58	24847101	10.0000
Norhydrocodone	3.139	56048	∞	9.21	1546068	10.0000
Normeperidine	3.758	2406099	∞	1507.16	8613329	10.0000
Noroxycodone	3.046	807159	∞	∞	2488072	10.0000
Nortriptyline	4.724	1920254	225288.00	∞	4531412	10.0000
O-desmethyl-tramadol	3.005	9540591	6575.61	246.58	49556128	10.0000
Olanzapine	4.409	1738144	355648.90	14120.84	92597	10.0000
Oxazepam	4.504	115879	94.19	∞	874202	10.0000
Oxycodone	3.181	2421380	∞	∞	10468537	10.0000
Oxymorphone	2.545	1400962	∞	172.13	5659317	10.0000
Paroxetine	4.729	355529	∞	∞	7491363	10.0000
Phenazepam	4.651	258360	162.81	4173.18	1285039	10.0000
Phencyclidine	4.128	5815167	299.39	∞	26861982	10.0000
Phentermine	3.269	497030	∞	∞	11536029	10.0000
Phenytoin	4.125	19442	8365.61	∞	92597	10.0000
Promethazine	4.919	11063938	5266.59	792.21	41246089	10.0000
Pseudoephedrine	2.795	45577017	14958.57	16073.51	145026879	10.0000
Quetiapine	4.864	5009698	200128.65	20667.48	6916962	10.0000
Sertraline	4.945	1471392	280.57	837.09	7491363	10.0000
Sufentanil	5.060	403444	126480.81	236.36	28373437	10.0000
Tapentadol	3.575	3919777	∞	∞	20895411	10.0000
Temazepam	4.673	802086	∞	56.46	4525477	10.0000
Tramadol	3.585	9061888	∞	27.23	44352753	10.0000
Trazodone	5.017	5503135	∞	609.10	28117887	10.0000
Venlafaxine	3.982	7924464	∞	203.69	44673499	10.0000
Zaleplon	4.365	1289739	25488.44	233.07	2996893	10.0000
Zolpidem	4.564	9958279	2003.54	2913.18	51395196	10.0000
Zopiclone	4.573	263330	55613.09	∞	1495616	10.0000

*Did not evaluate

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AM# 26: THC and Metabolites Screen in Blood by LC-MS/MS

Extraction Date: 02/18/20 Analyst: Sarah Pickle

Plate lot#: IDP-108-190716 Plate Expiration: 01/16/20

Mobile phase A: 10mM Ammonium Formate
0.1% Formic Acid in Water
Blank Blood Lot: Hemostat 445283-3
LCMS-QQQ ID: 069901

Mobile phase B: 0.1% Formic acid in MeOH
MTBE Hexane
Column: Phenomenex Phenyl Hexyl (4.6x50mm: 2.6 um)

Pre-Analytic:

☒ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
☒ 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☒ 2. Pipette **1000 µL blood (calibrated pipette)** in wells of analytical (standards) plate. **Pipette ID: 3382167**
☒ 3. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes. *Shaker ID: 067105*
☒ 4. Pipette **500 µL 0.1% formic acid** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
☒ 6. Transfer 8**00 µL of blood+base** mixture to corresponding wells of SLE+ plate.
☒ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). ***(Load at 85-100 PSI- Selector to the right)*** Manifold ID: 067104
☒ 8. Wait 5 minutes.
☒ 9. Add **2.25 mL MTBE** (add in 3 increments of 750 µL).
☒ 10. Wait 5 minutes.
☒ 11. Apply positive pressure for approx. 10-15 seconds. ***(12-15 PSI- Selector to the left).***
☒ 12. Add **2.25 mL hexane** (add in 3 increments of 750 µL).
☒ 13. Wait 5 minutes.
☒ 14. Apply positive pressure for approx. 10-15 seconds. ***(12-15 PSI- Selector to the left).***
☒ 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. *SPE Dry ID: 067103*
☒ 16. Reconstitute in **100 µL 100% LCMS MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

☒ 1. Create batch and process data.
Worklist path: D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP
Batch Name: AM 26 updated
☒ 2. Calculated sample concentration of 3 ng/mL or greater for THC and THC-OH, a calculated sample concentration of 10 ng/mL or greater for Carboxy-THC.
☒ 3. Retention time within +/- 2% or +/-0.100 min whichever is greater of the average retention time of the calibrators.
☒ 4. Did all QCs pass for each analyte? Y / N
☒ 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: *THC-OH not evaluated*

Idaho State Police Forensic Services

AM #26 Blood THC and Metabolites Screen by LCMS-QQQ and AM #27 Quantitative Analysis of THC and Metabolites in Blood by LCMS-QQQ

Methanol External Control Solution (Lot: WS011620)

10 µL of 1mg/mL THC, 100 µL of 100 µg/mL THC-OH, C-THC in 9790 µL MeOH
Approximate concentration 1µg/mL.

Component	***Source***	***Source Lot Number***	***Expiration Date***
Methanol (LCMS)	Fisher	193941	
THC	Cerilliant	FE09101501	11/30/2020
C-THC	Cerilliant	FE07171501	09/30/2020
THC-OH	Cerilliant	FE07221601	07/31/2021
Prepared:	01/16/2020		
Prepared By:	Tamara Salazar		
Expires:	09/30/2020		

Blood External Control Solution (Lot: 021320)

200 µL of methanol external control solution was added to 9800 µL of blood.
Approximately 20 ng/mL of each compound.

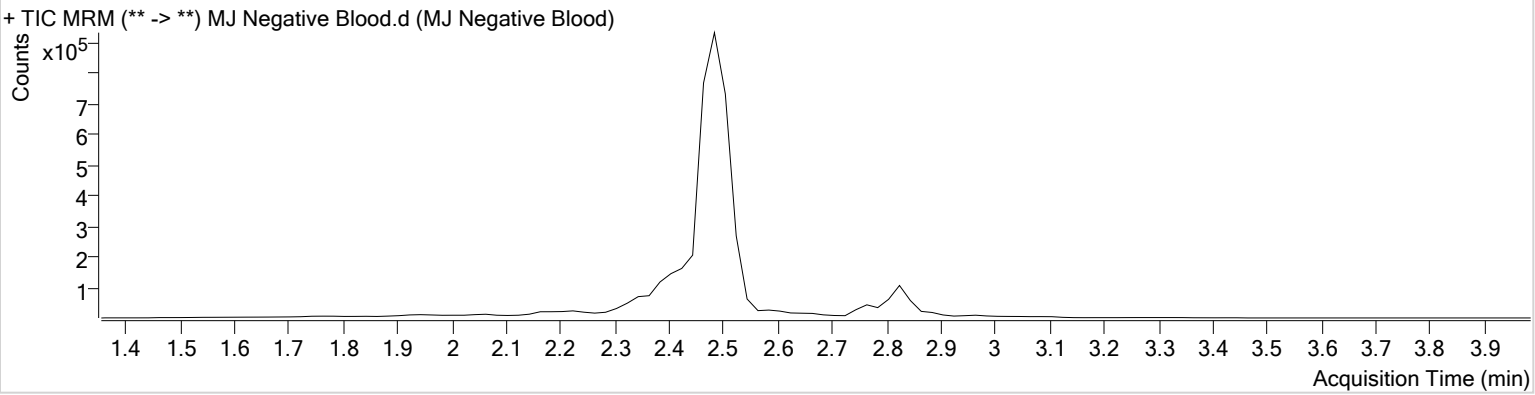
Component	***Source***	***Source Lot Number***
Negative Blood	Hemostat	445283-3
Methanol External Control Solution	-	WS011620
Prepared:	02/13/2020	
Prepared by:	Celena Shrum	
Expires:	09/30/2020	

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ Negative Blood.d
Type	Sample	**Sample**	MJ Negative Blood
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-A2	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 1:04:18 PM		
Sample Info.			

Sample Chromatogram

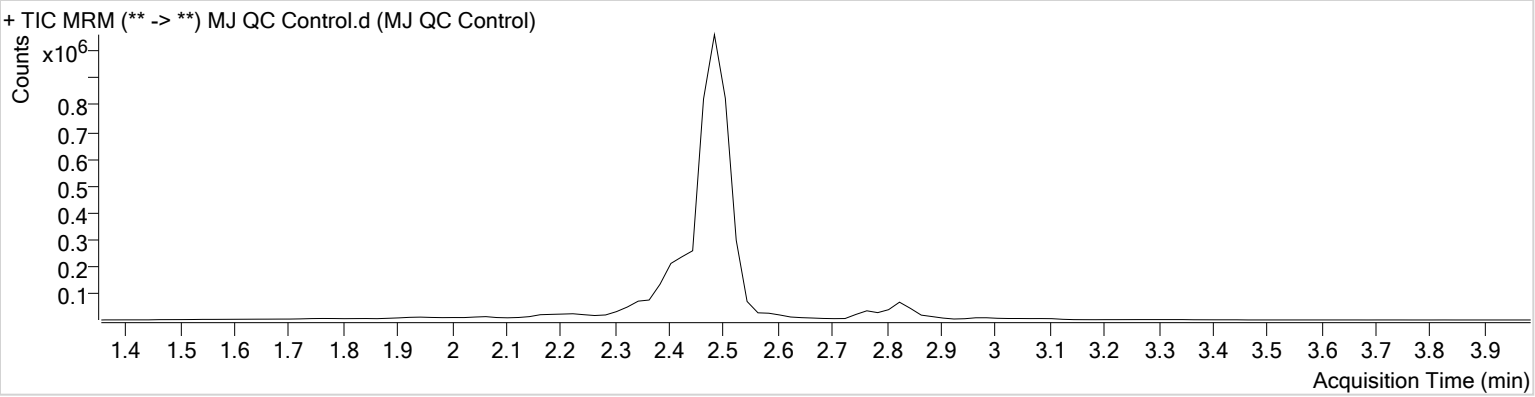


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ QC Control.d
Type	Sample	**Sample**	MJ QC Control
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-H1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 12:51:16 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.839	4448	128815	4.6391	ng/ml
THC-COOH	2.425	102912	407883	16.9244	ng/ml

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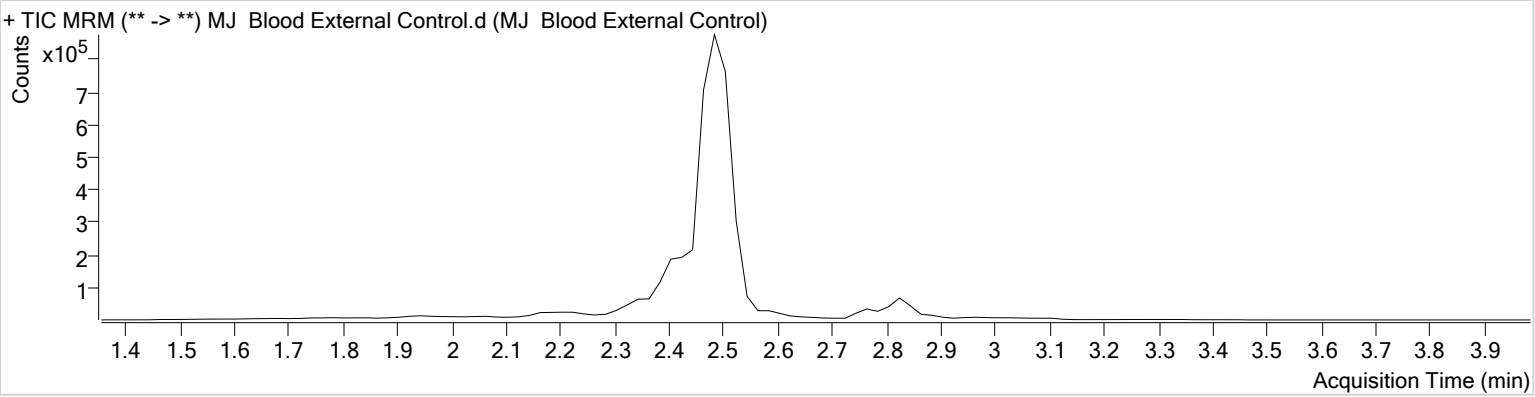
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ Blood External Control.d
Type	Sample	**Sample**	MJ Blood External Control
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-B2	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 1:10:51 PM		
Sample Info.			

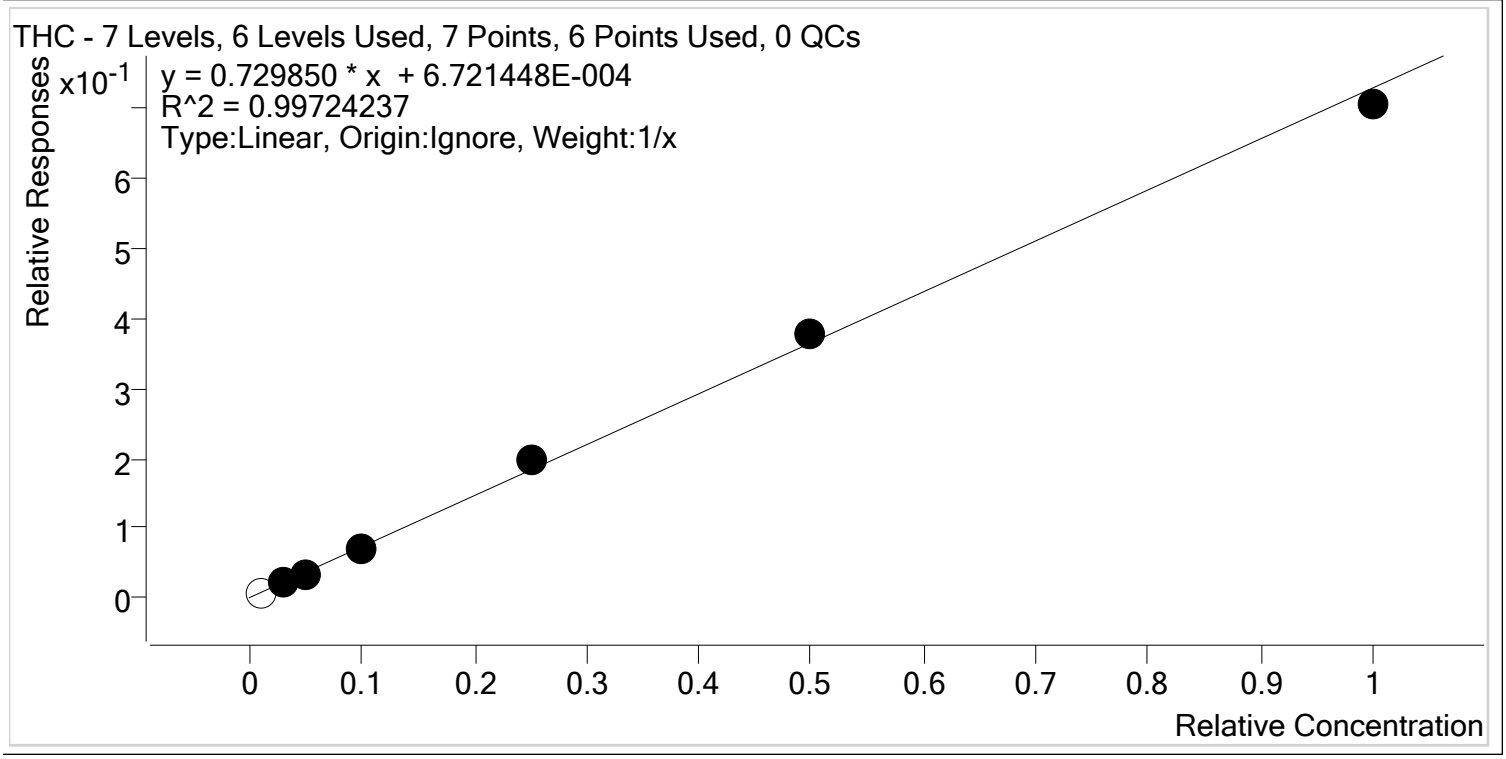
Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	16491	119938	18.7465 ng/ml
THC-COOH	2.425	93838	361345	17.4103 ng/ml

AM #26 Cannabinoids Screen Calibration Curve Report

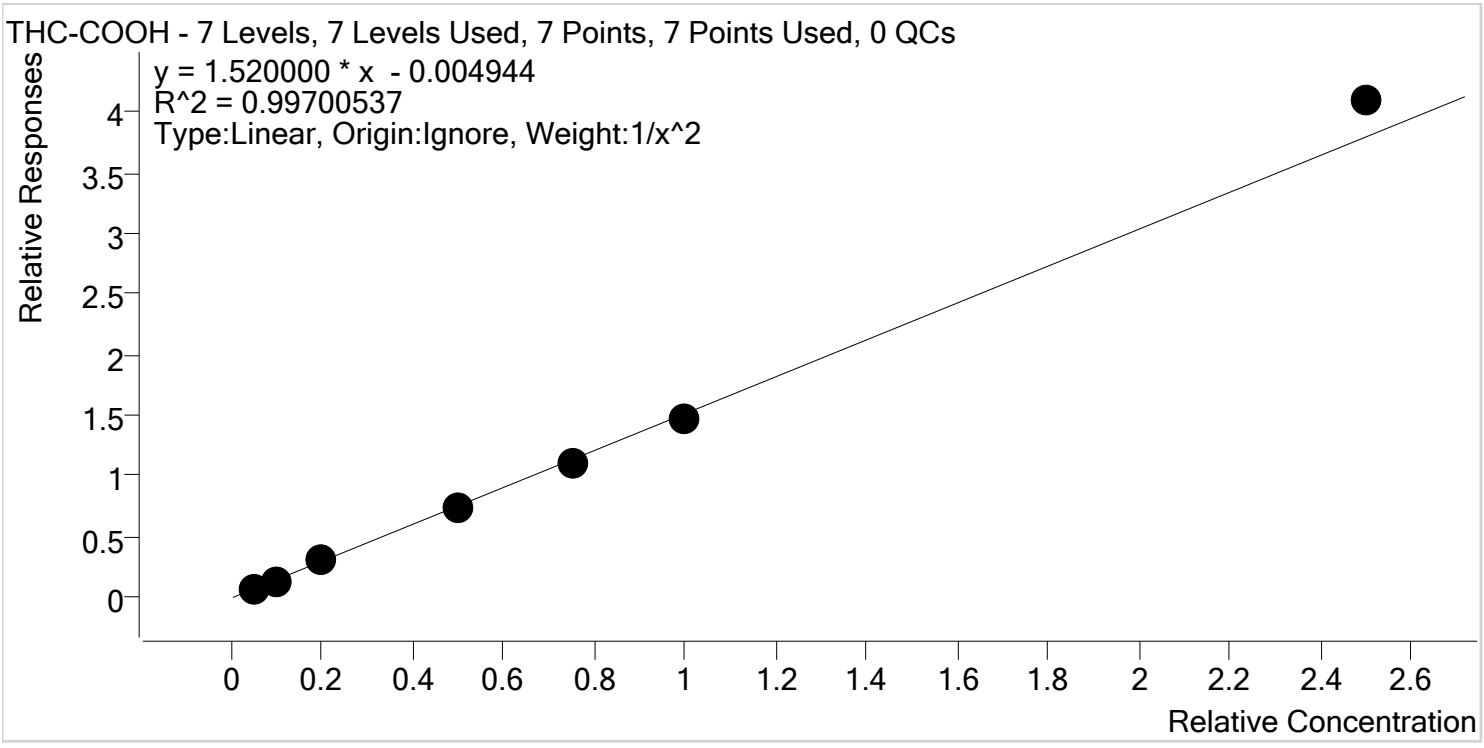
Batch results	D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Last Cal. Update	2/20/2020 8:18 AM
Analyst Name	ISP\datastor
Analyte	THC
Internal Standard	THC-d3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✗	1.0	0.9	94.0
MJ Cal 2	2	✔	3.0	3.0	99.7
MJ Cal 3	3	✔	5.0	4.8	95.5
MJ Cal 4	4	✔	10.0	9.6	95.7
MJ Cal 5	5	✔	25.0	27.2	108.8
MJ Cal 6	6	✔	50.0	51.8	103.5
MJ Cal 7	7	✔	100.0	96.7	96.7

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Last Cal. Update 2/20/2020 8:18 AM
Analyst Name ISP\datastor
Analyte THC-COOH **Internal Standard** THC-COOH-d9



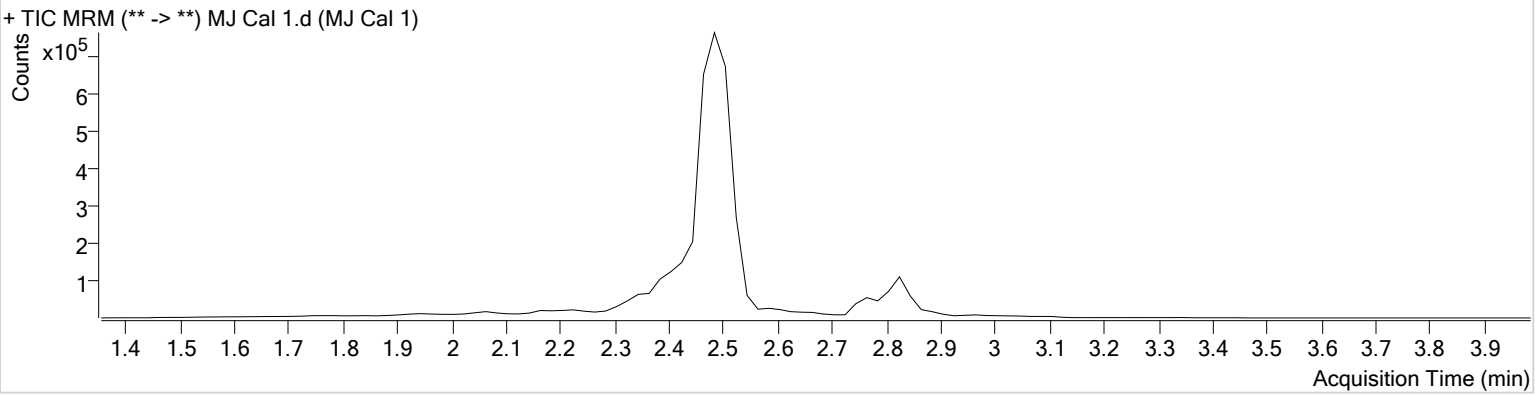
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	5.0	5.1	101.5
MJ Cal 2	2	✔	10.0	9.6	96.1
MJ Cal 3	3	✔	20.0	20.7	103.7
MJ Cal 4	4	✔	50.0	48.7	97.4
MJ Cal 5	5	✔	75.0	72.3	96.3
MJ Cal 6	6	✔	100.0	97.1	97.1
MJ Cal 7	7	✔	250.0	269.6	107.9

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ Cal 1.d
Type	Cal	**Sample**	MJ Cal 1
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-A1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 12:05:19 PM		
Sample Info.			

Sample Chromatogram



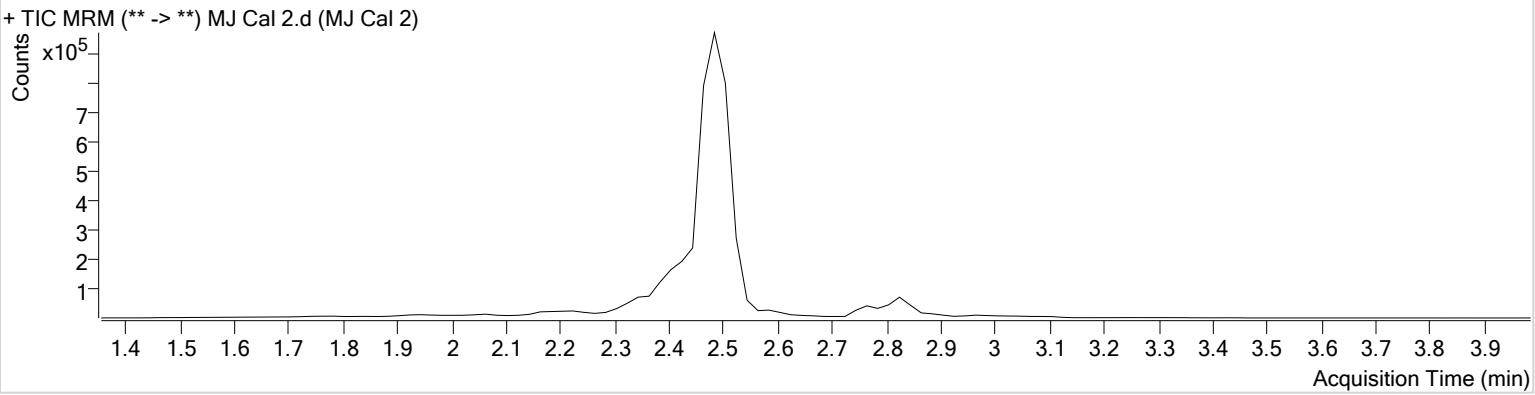
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	2.839	1748	232026	0.9402	ng/ml	**Low**
THC-COOH	2.425	21695	300466	5.0755	ng/ml	

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ Cal 2.d
Type	Cal	**Sample**	MJ Cal 2
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-B1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 12:12:08 PM		
Sample Info.			

Sample Chromatogram



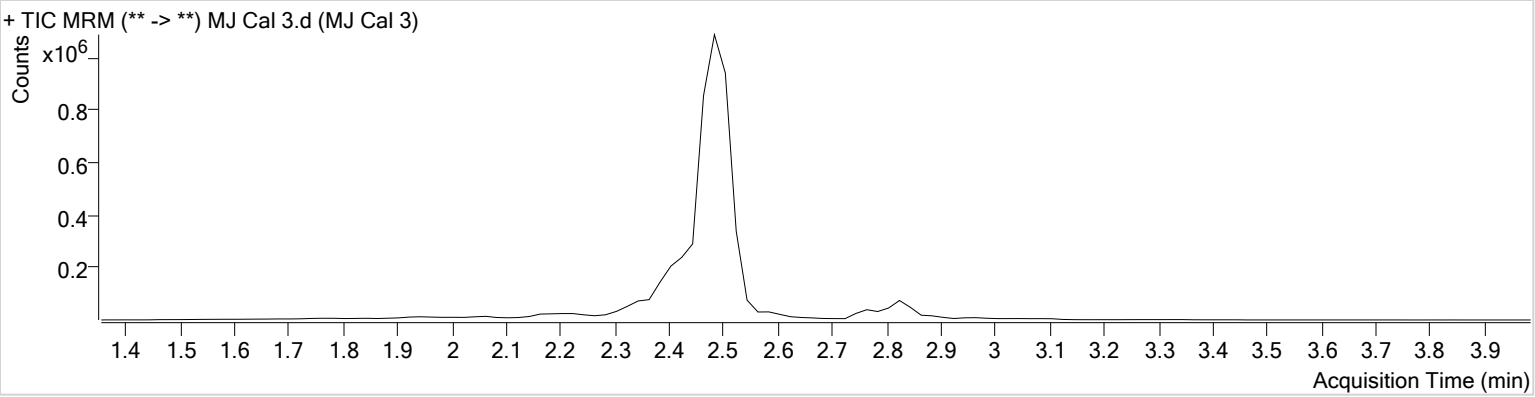
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	2.839	3389	150562	2.9916	ng/ml	**Low**
THC-COOH	2.425	49147	348141	9.6127	ng/ml	

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ Cal 3.d
Type	Cal	**Sample**	MJ Cal 3
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-C1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 12:18:41 PM		
Sample Info.			

Sample Chromatogram



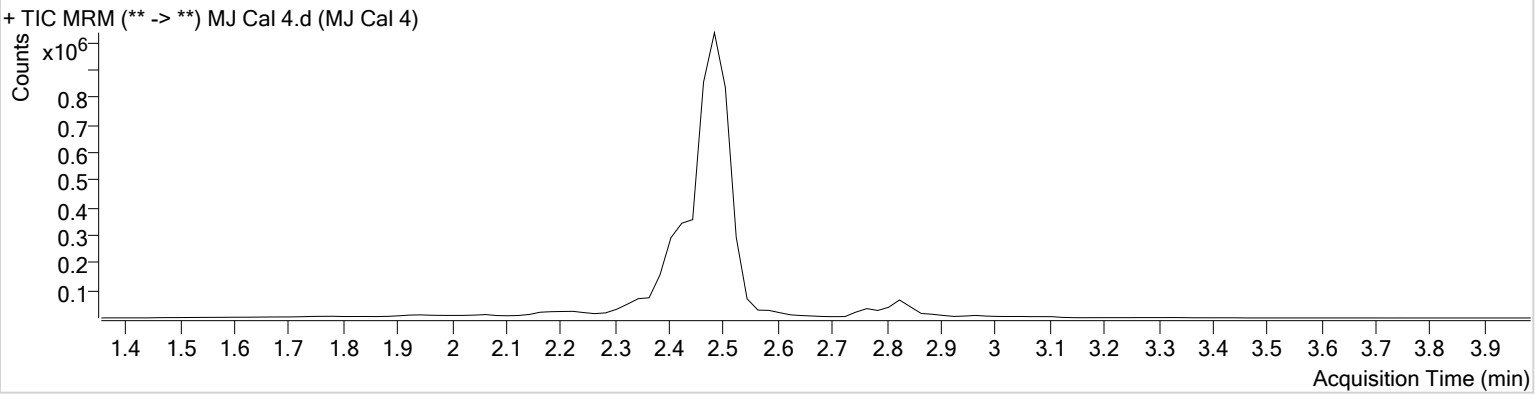
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.839	5686	160005	4.7765	ng/ml
THC-COOH	2.425	121629	392077	20.7343	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ Cal 4.d
Type	Cal	**Sample**	MJ Cal 4
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-D1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 12:25:13 PM		
Sample Info.			

Sample Chromatogram



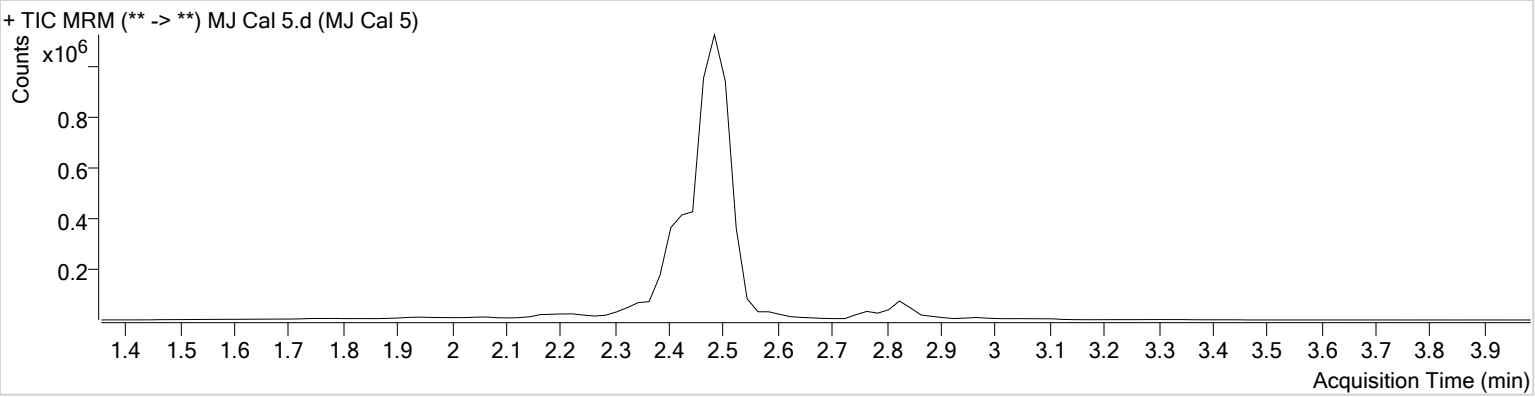
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.839	9398	133214	9.5738	ng/ml
THC-COOH	2.425	267280	363474	48.7033	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ Cal 5.d
Type	Cal	**Sample**	MJ Cal 5
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-E1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 12:31:45 PM		
Sample Info.			

Sample Chromatogram



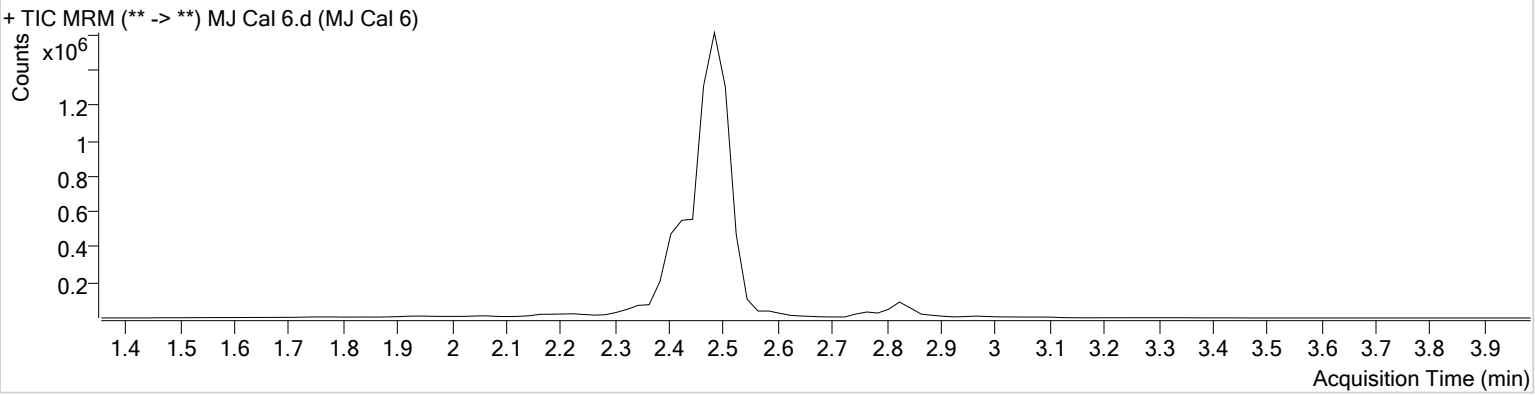
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	24500	123004	27.1987 ng/ml
THC-COOH	2.425	387556	354449	72.2598 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ Cal 6.d
Type	Cal	**Sample**	MJ Cal 6
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-F1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 12:38:15 PM		
Sample Info.			

Sample Chromatogram



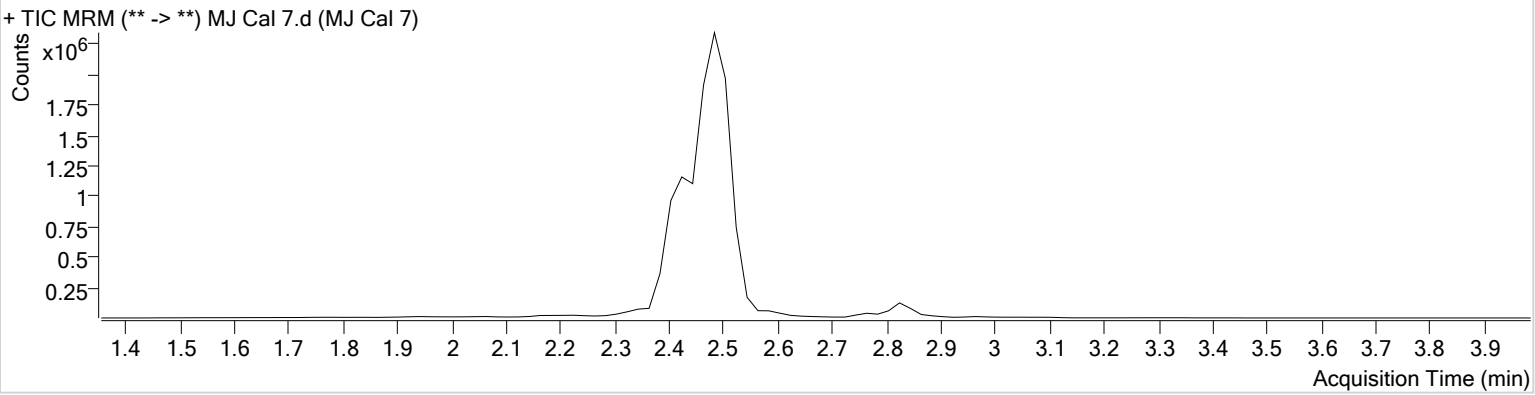
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	52654	139139	51.7579 ng/ml
THC-COOH	2.425	564172	383615	97.0800 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021820 AM 25 26 SP\QuantResults\AM 26 updated.batch.bin
Calibration Last Update 2/20/2020 8:18:57 AM

Instrument	Falco	**Data File**	MJ Cal 7.d
Type	Cal	**Sample**	MJ Cal 7
Acq. Method	am 26 test.m	**Operator**	Sarah Pickle
Sample Position	P4-G1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/18/2020 12:44:46 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.839	103523	146540	96.7014	ng/ml
THC-COOH	2.425	1565739	382479	269.6450	ng/ml