

REVIEWED

By Sarah Collins at 3:08 pm, Nov 14, 2022

TS

11/8/2022

Worklist: 6158








<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
M2022-2528	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-4186	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-4354	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-4360	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-4485	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2996	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2997	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3029	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3054	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3102	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3103	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3124	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3135	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3136	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3174	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3223	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
* P2022-3284	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3288	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3292	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3312	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3313	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

*AM 26 testing for cannabinoids was not completed due to limited sample amount.

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<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
P2022-3323	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3335	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3348	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3349	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3366	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3370	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-3373	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

**Idaho State Police
Forensic Services**

Request for Departure from an Analytical Method or Quality Standard

Deviation Number (assigned by QM): TOX-22-01

Date of Request: **2/3/2022**

Requestor/Discipline: Celena Shrum/Toxicology

Analytical Method/Quality Standard, Revision #: AM #25, AM #28, AM #29, Revision 13

Temporary or Permanent Deviation: Permanent

Scope of Deviation (record specific information, e.g. affected programs, evidence types, expected end date; etc): Deviation will remain in place until the change is made in the next method revision.

Deviation Request (Describe detailed instructions of the changes being made; include reference to specific section number(s) in the method manual): 4.1.4 (Place plate on shaking incubator at approximately 900 rpm for approximately 15 minutes) of AM #25, AM # 28, and AM #29 is being removed. The removal of this step was tested in the validation “Addition of Compounds/Modifications for the MDS” (approved on 2/2/2022) and it was determined that that step is not necessary and can be removed.

Technical Justification for Analytical Method Deviations: Refer to validation “Addition of Compounds/Modifications for the MDS” (approved on 2/2/2022)

Technical Review

Departure approved
Comments:

Departure Not Approved
Comments:

Approver: Rachel Cutler
Title: Laboratory Manager



Date: 2/10/2022

Quality Review

Quality Approver: Jason Crowe
Title: Quality Manager
Date: 2/10/2022



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

Extraction Date: 11/09/2022

Plate lot#: 2220315

Mobile phase A: 10mM Amm Form in LCMS Water

Blank Blood Lot: Lampire 22B52015-2

LCMS-QQQ ID: 069901

Analyst: Tamara Salazar

Plate Retest Date: 09-15-2022--ok with external control

Mobile phase B: 0.1% Formic Acid in MeOH

Blank Urine Lot: N/A

Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

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. **Urine Hydrolysis: In blank well, add 250µL urine, 40µL BG Turbo, and 100µL Instant Buffer I. Place on plate shaker for 5 minutes.**
- 3. Using a calibrated pipette, pipette 250µL blood or 250µL hydrolyzed urine in wells of analytical (standards) plate. Pipette ID: 42
- 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. -Skipped per deviation
- 5. Pipette **250µL 0.5 M ammonium hydroxide** in wells of analytical plate.
- 6. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 7. Transfer **200-450µL of blood+base and urine+base (if applicable)** mixture to corresponding wells of SLE+ plate. Amount transferred: 300uL
- 8. 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).*
- 9. Wait 5 minutes.
- 10. Add **900uL ethyl acetate.**
- 11. Wait 5 minutes.
- 12. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 13. Add **900uL ethyl acetate.**
- 14. Wait 5 minutes.
- 15. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 16. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
- 17. Add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying. This step is required for urine samples, but optional for blood samples.
- 18. Reconstitute in **100µL 20% 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.
- 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 of 5 or greater or 2-5 for discretionary range.
- 4. Did all QCs pass for each analyte? If no, describe issue in comments (below).
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

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	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-3373-1	P2022-3312-1	P2022-3124-1	M2022-4360-1
B	IS + Cal. 1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-3370-1	P2022-3292-1	P2022-3103-1	M2022-4354-1
C	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-3366-1	P2022-3288-1	P2022-3102-1	M2022-4186-1
D	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-3349-3	P2022-3284-1	P2022-3054-1	M2022-2528-1
E	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-3348-3	P2022-3223-1	P2022-3029-1	Ext Ctrl
F	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-3335-1	P2022-3174-1	P2022-2997-1	Neg Blood
G	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-3323-1	P2022-3136-1	P2022-2996-1	IS + Cal. 1
H	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-3313-1	P2022-3135-1	M2022-4485-2	IS + Cal. 1

All wells to contain 60 µl of residual DMSO



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: 042222)

100 μ L of 1mg/mL stock was added to each drug to 9700 μ L of LC MeOH.

Component	Source	Source Lot Number	Expiration Date
Methanol (LCMS)	Fisher	215245	N/A
Tramadol	Cerilliant	FE10051901	12/31/2024
Hydrocodone	Cerilliant	FE04241902	09/30/2024
Alprazolam	Cerilliant	FE06102008	06/30/2025
Buprenorphine	Cerilliant	FE03191903	06/31/2024
Prepared:	04/22/2022		
Expires:	04/22/2023		
Prepared By:	Celena Shrum		

Blood External Control Solution (Lot: WS101322)

50 μ L of methanol external control solution was added to 9950 μ L of blood.

Approximately 50 ng/mL of each compound.

Component	Source	Source Lot Number
Negative Blood	Lampire	22B52015-1
Methanol External Control Solution		042222
Prepared:	10/13/2022	
Expires:	04/22/2023	
Prepared by:	Celena Shrum	

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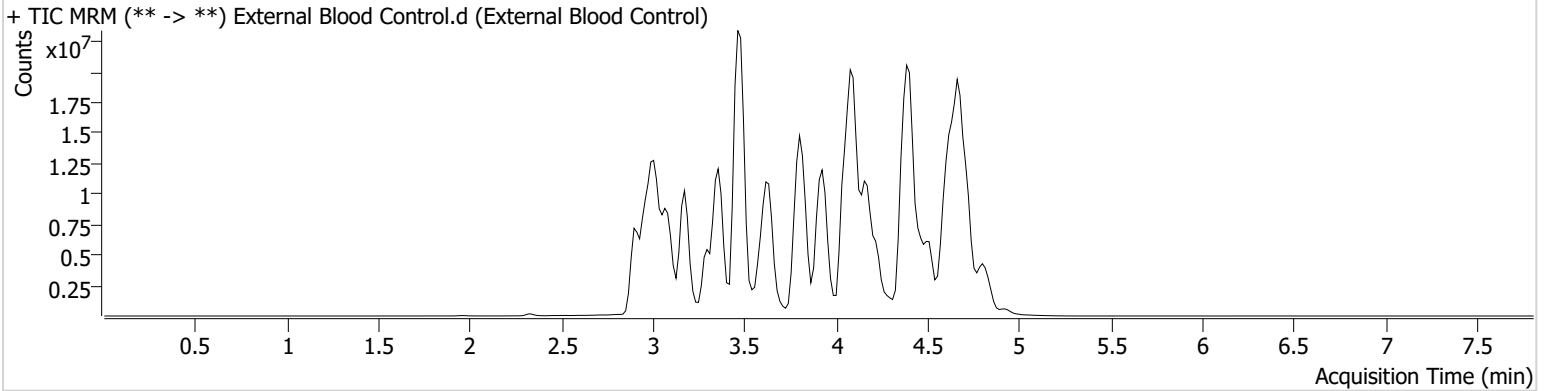


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 25.batch.bin
Calibration Last Update 11/14/2022 8:07:26 AM

Instrument Falco (069901) **Data File** External Blood Control.d
Type Sample **Sample** External Blood Control
Acq. Method AM 25 MDS.m **Operator** Tamara Salazar
Sample Position P2-E12 **Comment**
Injection Volume 5
Acq. Date-Time 11/9/2022 6:26:00 PM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.620	20860220	3628.40	1272.76	28932038	34.1194
Buprenorphine	4.811	8482005	1922861.69	423273.57	7796903	43.7511
Hydrocodone	3.083	12390822	40483.96	2240.29	16595444	35.5547
Tramadol	3.469	90690086	∞	346.98	61172833	23.6688

TS

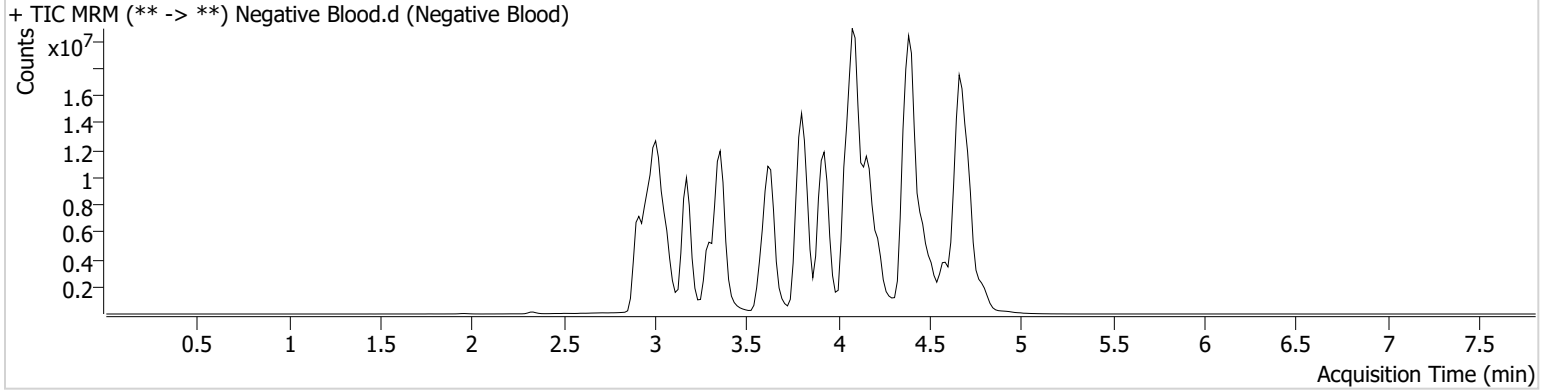


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 25.batch.bin
Calibration Last Update 11/14/2022 8:07:26 AM

Instrument	Falco (069901)	Data File	Negative Blood.d
Type	Sample	Sample	Negative Blood
Acq. Method	AM 25 MDS.m	Operator	Tamara Salazar
Sample Position	P2-F12	Comment	
Injection Volume	5		
Acq. Date-Time	11/9/2022 6:17:33 PM		
Sample Info.			

Sample Chromatogram



TS

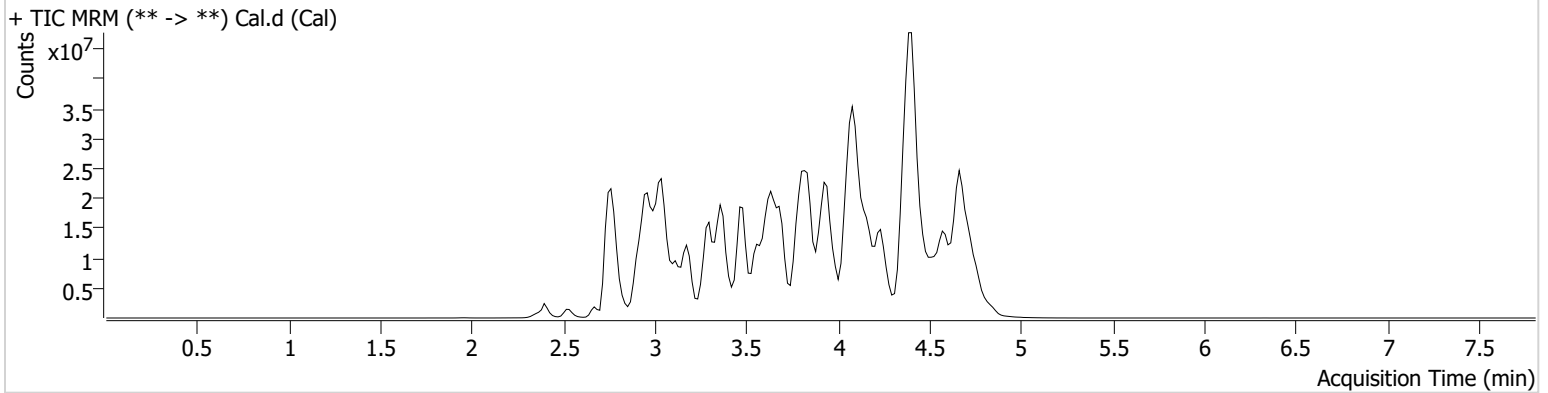


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 25.batch.bin
Calibration Last Update 11/14/2022 8:07:26 AM

Instrument Falco (069901) **Data File** Cal.d
Type Cal **Sample** Cal
Acq. Method AM 25 MDS.m **Operator** Tamara Salazar
Sample Position P2-G12 **Comment**
Injection Volume 5
Acq. Date-Time 11/9/2022 6:08:59 PM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.793	5915760	93.22	1150.61	30913256	10.0000
6-MAM	2.972	100647	50955.87	600.23	2678833	10.0000
7-aminoclonazepam	3.590	2478339	378.13	665.79	10140043	10.0000
7-aminoflunitrazepam	3.790	4201171	4003.02	5346.31	10140043	10.0000
9-Hydroxyrisperidone	3.921	15932922	13356302.84	148610.78	50086202	10.0000
Acetyl Fentanyl	3.940	958719	355.53	385424.41	46925996	10.0000
Acetyl Norfentanyl	2.934	738974	1279.40	631.34	46925996	10.0000
a-hydroxyalprazolam	4.510	326483	631.58	72.24	10140043	10.0000
alpha-hydroxymidazolam	4.585	3418271	199.81	263.06	10140043	10.0000
Alpha-PHP	3.886	6327579	23266.94	366.51	46925996	10.0000
alpha-PVP	3.610	8146149	518.96	757.92	23636429	10.0000
Alprazolam	4.605	4059042	2521.06	803.99	19208120	10.0000
Amitriptyline	4.470	4552474	221.97	468.13	16815506	10.0000
Amphetamine	2.954	6282303	2624.26	811.84	23636429	10.0000
Benzoyllecgonine	3.405	303397	194.83	323.20	552363	10.0000
Brompheniramine	4.080	294532	300.71	444.25	60359097	10.0000
Buprenorphine	4.811	1602775	16924.93	83219.48	6445926	10.0000
Bupropion	3.840	8729751	2140.06	617.57	31886627	10.0000
Carbamazepine	4.242	17979009	∞	3182.10	388825	10.0000
Carisoprodol	4.225	3342558	1014.84	141.35	12211304	10.0000
Chlordiazepoxide	4.745	1674773	158.79	2475.84	19208120	10.0000
Chlorpheniramine	3.991	18200014	7773.76	22.33	60359097	10.0000
Chlorpromazine	4.665	5036560	149125.00	3309.81	22246459	10.0000
Citalopram	4.094	6333944	455.35	491.98	60359097	10.0000
Clomipramine	4.665	7576344	29743.64	20697.83	60359097	10.0000
Clonazepam	4.450	878604	266.77	731.52	19208120	10.0000
Clonazolam	4.369	1997500	2942.65	261757.54	19208120	10.0000
Clozapine	4.401	8978584	1260.19	632.43	29578477	10.0000
Cocaeethylene	3.833	9738499	449413.86	3606091.78	43006771	10.0000
Cocaine	3.635	8679792	3088743.20	651.15	43006771	10.0000
Codeine	2.884	741855	1770.94	433.92	17124395	10.0000
Cyclobenzaprine	4.378	7073523	764.12	92.68	16815506	10.0000
Desipramine	4.394	11134885	1562.00	359.65	16815506	10.0000
Dextromethorphan	4.101	4532429	550.53	7496.62	24095017	10.0000

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AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrophan	3.408	5612733	232395.53	476.54	24095017	10.0000
Diazepam	4.853	1796123	1341.77	10074.12	19208120	10.0000
Dihydrocodeine	2.792	2321926	1031.50	602.36	17124395	10.0000
Diphenhydramine	4.071	22463363	11918.03	1066.87	60359097	10.0000
DMT	3.013	1119368	3746.60	2290.74	24095017	10.0000
Doxepin	4.192	4853367	422.86	407.11	46319360	10.0000
Doxylamine	3.683	25089137	9980.01	92499.92	24095017	10.0000
Duloxetine	4.345	159805	98209.25	23138.70	2398403	10.0000
EDDP	4.099	806517	312.85	95.02	1942934	10.0000
Estazolam	4.529	7254041	459.65	303.61	19208120	10.0000
Etizolam	4.615	527412	128831.14	9947.48	19208120	10.0000
Fentanyl	4.170	746232	635.35	2238.84	36261805	10.0000
Flualprazolam	4.478	1877433	2630.67	10582.14	19208120	10.0000
Flunitrazepam	4.558	2109843	421.64	487635.91	19208120	10.0000
Fluorofentanyl	4.215	1299228	2619.33	512.98	36261805	10.0000
Fluoxetine	4.343	6440196	2039.85	934.35	9962320	10.0000
Flurazepam	4.260	8728220	681.74	266.43	19208120	10.0000
Hydrocodone	3.083	3596078	1416.68	312.06	17124395	10.0000
Hydromorphone	2.521	2676566	81599.83	1170.69	448916	10.0000
Hydroxyzine	4.553	7832689	902.83	1082.84	60359097	10.0000
Imipramine	4.423	14101853	2023.30	89.60	16815506	10.0000
Ketamine	3.656	5973922	1722.84	145.82	22953229	10.0000
Lamotrigine	3.654	474222	770.02	1515.07	60359097	10.0000
Levamisole	3.042	5467643	1616.23	752.25	43006771	10.0000
Levetiracetam	2.677	1981278	834.46	1319.46	60359097	10.0000
Lorazepam	4.434	374330	174.68	55.21	19208120	10.0000
Maprotiline	4.470	3505038	225.66	183.44	16815506	10.0000
MDA	3.044	6425744	289.66	510.95	43813229	10.0000
MDEA	3.273	9799864	388.27	2929.04	43813229	10.0000
MDMA	3.120	13766849	2076.44	1915.27	43813229	10.0000
Meperidine	3.655	5295209	879.88	314.29	24095017	10.0000
Meprobamate	3.704	2371004	7828.58	147.04	12211304	10.0000
Methadone	4.420	17019784	423.97	807.44	1942934	10.0000
Methamphetamine	3.045	14845687	6203.08	845.61	43813229	10.0000
Methocarbamol	3.594	338391	209.41	234.20	1942934	10.0000
Methylphenidate	3.564	25088947	457.40	229.59	35013520	10.0000
Metoprolol	3.468	1753427	277.43	2426.20	24095017	10.0000
Midazolam	4.755	1432644	488.17	65153.71	19208120	10.0000
Mirtazapine	4.086	5733768	1795.12	59084.30	24095017	10.0000
Mitragynine	4.260	1444826	877939.55	1469353.71	24095017	10.0000
Morphine	2.354	469319	∞	140.32	448916	10.0000
Norbuprenorphine	3.859	207954	2016.55	457391.99	6445926	10.0000
Nordiazepam	4.701	1380757	163504.78	257.74	19208120	10.0000
Norfentanyl	3.379	15391894	17868.06	1086.74	46925996	10.0000
Norhydrocodone	2.977	186675	86.08	167.53	448916	10.0000
Norketamine	3.780	1607273	259.63	3387.21	22953229	10.0000
Normeperidine	3.641	4306145	1354.02	367.45	60359097	10.0000
Noroxycodone	2.914	3382033	∞	201.63	22953229	10.0000
Nortriptyline	4.441	4017800	567.14	514.25	16815506	10.0000
O-desmethyl-tramadol	2.963	18154011	22513.20	375.80	60359097	10.0000
O-desmethylvenlafaxine	3.299	3658566	945.40	10190.57	16727160	10.0000
Olanzapine	3.910	1862437	870378.75	33560.64	388825	10.0000
Oxazepam	4.515	2029742	985.17	309.26	10837170	10.0000
Oxycodone	2.973	6139911	3104.91	2593.05	22953229	10.0000
Oxymorphone	2.395	4884112	∞	629.63	448916	10.0000
Paroxetine	4.355	790979	534.92	2845.62	9962320	10.0000
Phenazepam	4.646	1614023	502.48	273.70	19208120	10.0000
Phencyclidine	3.948	12981547	497.58	2336.83	24095017	10.0000
Phentermine	3.199	3587957	1053.72	109.85	35013520	10.0000
Phenytion	4.133	674879	3527.58	235.07	388825	10.0000

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AM #25 Multi-Drug Screen Results



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Primidone	3.503	3344062	7281.67	564.11	388825	10.0000
Promethazine	4.376	16405577	875.59	588.51	60359097	10.0000
Pseudoephedrine	2.769	67242256	12346.50	2217.88	43813229	10.0000
Quetiapine	4.583	9095621	12142.19	612.39	57011063	10.0000
Risperidone	4.121	15932546	7074005.69	6076.63	50086202	10.0000
Sertraline	4.590	2079425	508254.75	1097.39	9962320	10.0000
Sufentanil	4.552	653772	267039.95	194.05	46925996	10.0000
Tapentadol	3.488	11881944	1616.48	423.84	22953229	10.0000
Temazepam	4.668	4222818	596.90	165.30	19208120	10.0000
Topiramate	3.877	155855	5006.43	24.09	643867	10.0000
Tramadol	3.469	37806539	1418.14	67.49	60359097	10.0000
Trazodone	4.737	11926927	1792.44	1243.80	46319360	10.0000
Venlafaxine	3.836	16169223	2690.54	409.11	9962320	10.0000
Zaleplon	4.329	2414693	4850.21	928.32	57011063	10.0000
Zolpidem	4.390	18971920	10383.28	1740.75	57011063	10.0000
Zopiclone	4.291	612524	350.12	263600.60	2731278	10.0000

AM# 26: Screening of THC and Metabolites in Blood and Urine by LC-MS/MS

Extraction Date: 11/09/2022

Plate lot#: 220802

Mobile phase A: 10mM Amm Form in LCMS Water

Blank Blood Lot: Lampire 22B52015-2

LCMS-QQQ ID: 069901

Analyst: Tamara Salazar

Plate Retest Date: 02/02/2023

Mobile phase B: 0.1% Formic acid in MeOH

Blank Urine Lot:

Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

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. Urine hydrolysis: add 1.5mL urine to blank plate, add 250µl 1N KOH. Shake and incubate at 40 degrees for 15 minutes.
- 3. Using a calibrated pipette, pipette 1000µL blood or 1000µL hydrolyzed urine in wells of analytical (standards) plate. Pipette ID: 42
- 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 5. Add 500µL of 0.1% formic acid in water to blood samples, and 500µL of saturated phosphate buffer to urine samples in the wells of the analytical plate.
- 6. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 7. Transfer 700-800µL of blood+acid or urine+acid mixture to corresponding wells of SLE+ plate. Amount transferred: 750 µL
- 8. 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*)
- 9. Wait 5 minutes.
- 10. Add 2.25mL MTBE. (*Add in 3 increments of 750uL*)
- 11. Wait 5 minutes.
- 12. Apply positive pressure for approx. 15 seconds. (*10-15 PSI- Selector to the left*).
- 13. Add 2.25mL Hexane. (*Add in 3 increments of 750uL*)
- 14. Wait 5 minutes.
- 15. Apply positive pressure for approx. 15 seconds. (*10-15 PSI- Selector to the left*).
- 16. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
- 17. Reconstitute in 100µL 100% MeOH and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Create batch and process data.
- 2. Make any necessary integration changes, R² values ≥0.98 for each analyte
- 3. RT +/- 2% or 0.100 min, whichever is greater
- 4. Confirmation testing on case samples with a response for THC and OH-THC of 3ng/mL or greater and/or Carboxy-THC at 10ng/mL or greater (analyst discretion between 5-10ng/mL) may be pursued.
- 5. Did all QCs pass for each analyte? (if not, describe in comments section)
- 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

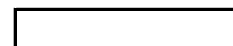
COMMENTS:

Analytical Plate Map

TS

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_1	P2022-2997-1	P2022-3174-1	P2022-3348-3	IS + QC_1
B	IS + Cal. 2	Neg Blood	P2022-3029-1	P2022-3223-1	P2022-3349-3	IS + Cal. 7
C	IS + Cal. 3	M2022-2528-1	P2022-3054-1	P2022-3288-1	P2022-3366-1	IS + Cal. 6
D	IS + Cal. 4	M2022-4186-1	P2022-3102-1	P2022-3292-1	P2022-3370-1	IS + Cal. 5
E	IS + Cal. 5	M2022-4354-1	P2022-3103-1	P2022-3312-1	P2022-3373-1	IS + Cal. 4
F	IS + Cal. 6	M2022-4360-1	P2022-3124-1	P2022-3313-1		IS + Cal. 3
G	IS + Cal. 7	M2022-4485-2	P2022-3135-1	P2022-3323-1		IS + Cal. 2
H	IS + QC_1	P2022-2996-1	P2022-3136-1	P2022-3335-1	IS + QC_1	IS + Cal. 1

All wells to contain 100 µl of residual DMSO



SLE Plate Map

TS

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_1	P2022-2997-1	P2022-3174-1	P2022-3348-3	P2022-3223-1
B	IS + Cal. 2	Neg Blood	P2022-3029-1*	P2022-3223-1*	P2022-3349-3	P2022-3373-1
C	IS + Cal. 3	M2022-2528-1	P2022-3054-1	P2022-3288-1	P2022-3366-1	
D	IS + Cal. 4	M2022-4186-1	P2022-3102-1*	P2022-3292-1	P2022-3370-1	
E	IS + Cal. 5	M2022-4354-1	P2022-3103-1	P2022-3312-1	P2022-3373-1*	
F	IS + Cal. 6	M2022-4360-1	P2022-3124-1	P2022-3313-1	M2022-4485-2	
G	IS + Cal. 7	M2022-4485-2*	P2022-3135-1	P2022-3323-1	P2022-3029-1	
H	IS + QC_1	P2022-2996-1	P2022-3136-1	P2022-3335-1	P2022-3102-1	

*Sample move due to blood clot in step 7 of the method.



TS

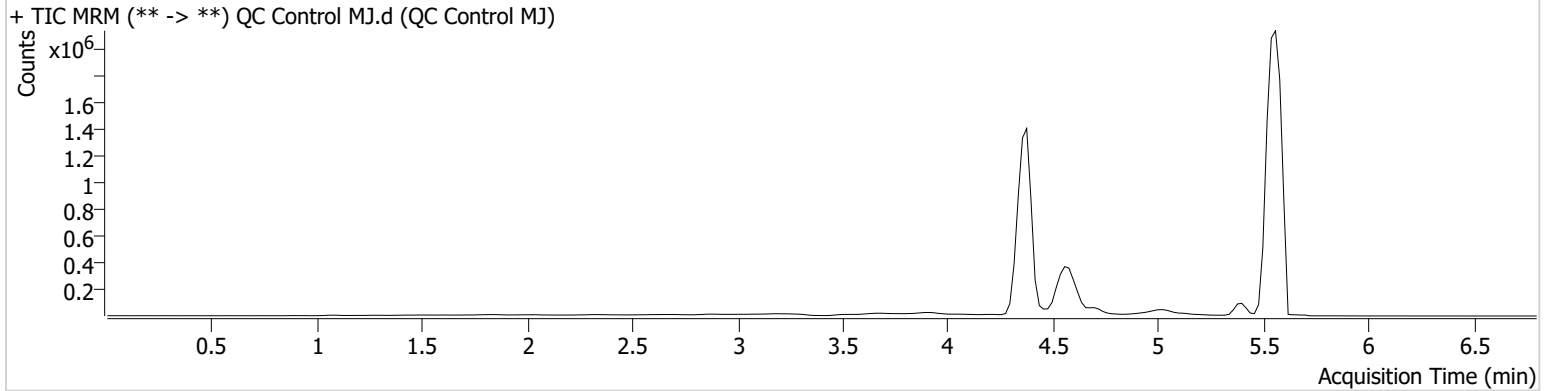


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	QC Control MJ.d
Type	QC	Sample	QC Control MJ
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-H1	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 1:23:11 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.530	13341	290852	4.9184 ng/ml
THC-COOH	4.596	226961	1432103	12.4114 ng/ml
THC-OH	4.382	55458	5928247	4.5877 ng/ml

TS

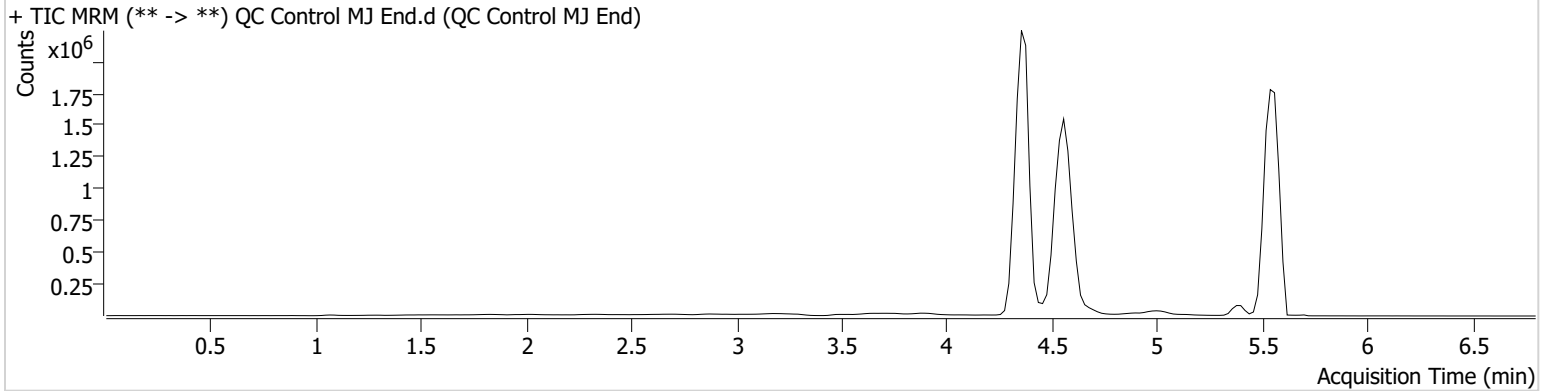


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	QC Control MJ End.d
Type	QC	Sample	QC Control MJ End
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-H1	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 5:17:53 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.509	10118	248397	4.3850 ng/ml
THC-COOH	4.576	918512	5842049	12.2996 ng/ml
THC-OH	4.382	99622	9118356	5.3468 ng/ml

TS

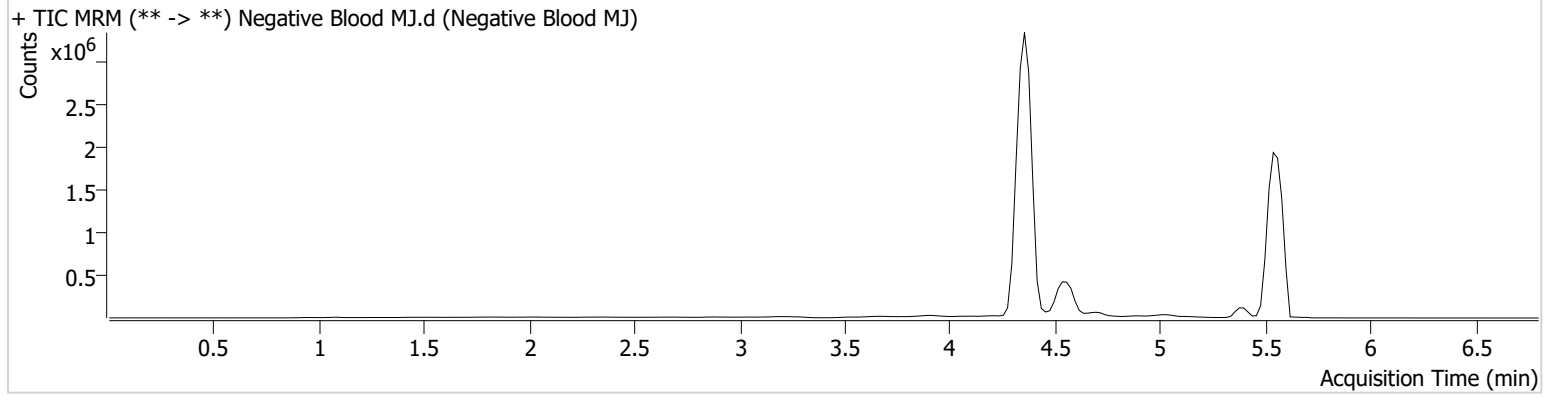


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	Negative Blood MJ.d
Type	Sample	Sample	Negative Blood MJ
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-B2	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 1:38:21 PM		
Sample Info.			

Sample Chromatogram

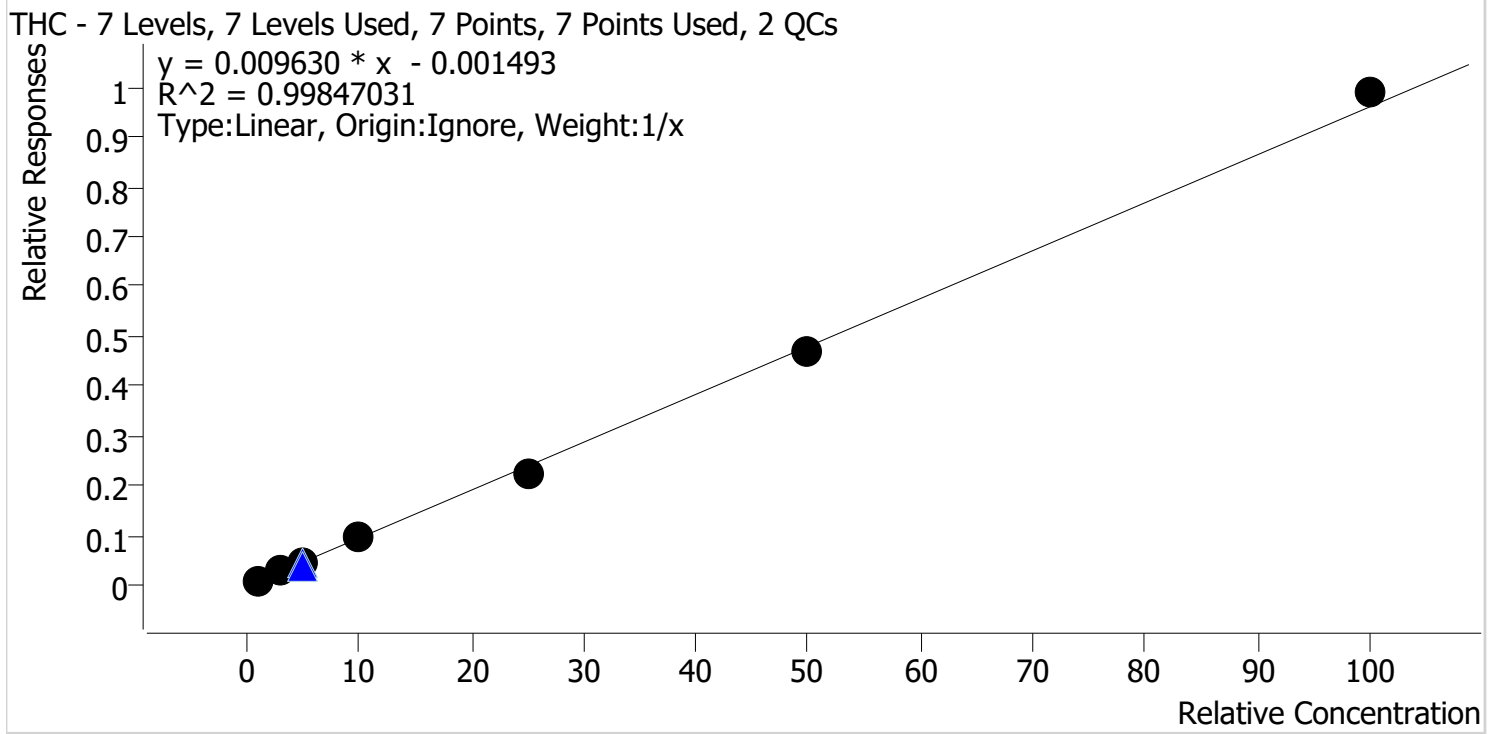


TS



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Last Cal. Update 11/10/2022 7:51 AM
Analyst Name ISP\Datastor
Analyte THC **Internal Standard** THC-D3



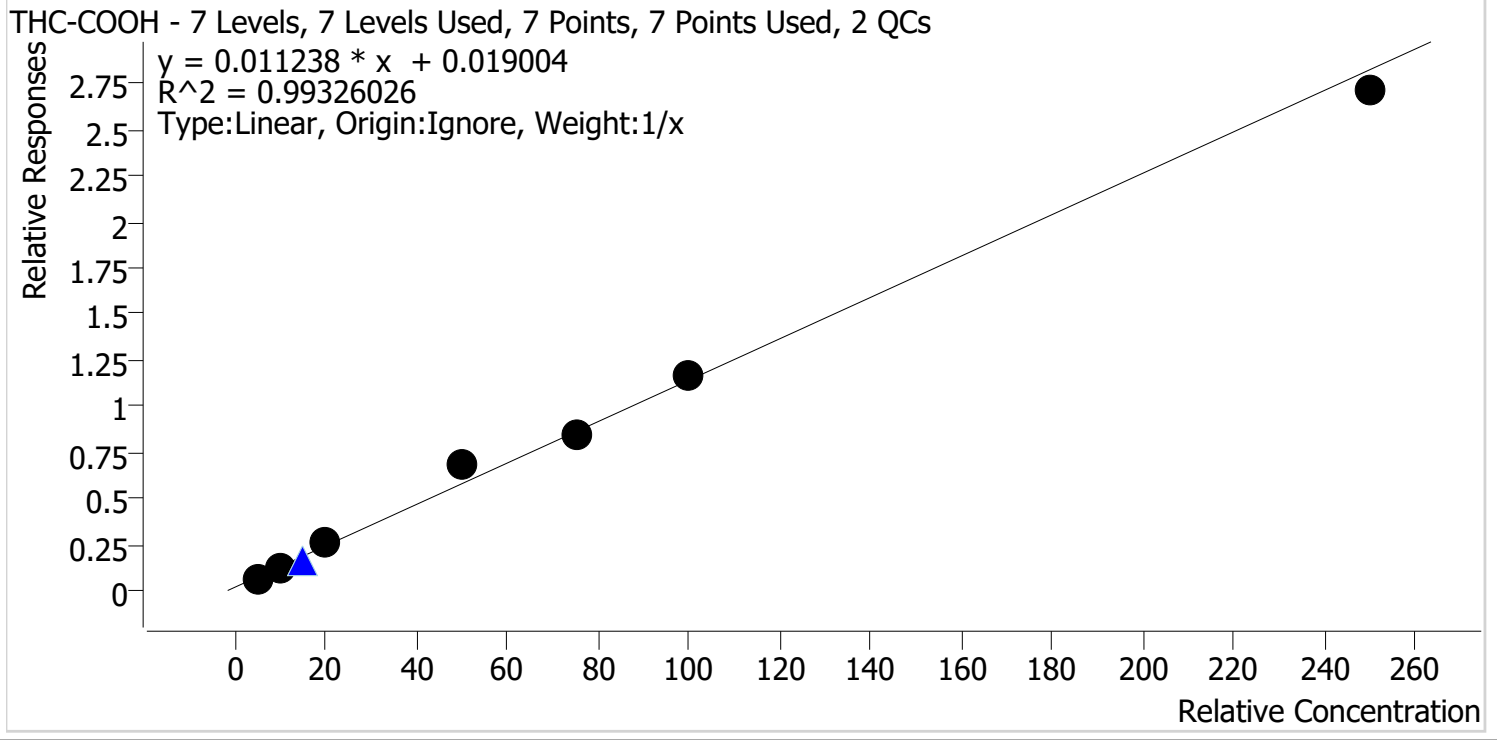
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✓	1.0	1.1	109.3
Cal 2 MJ	2	✓	3.0	3.0	99.1
Cal 3 MJ	3	✓	5.0	4.9	97.9
Cal 4 MJ	4	✓	10.0	10.0	100.3
Cal 5 MJ	5	✓	25.0	23.2	92.8
Cal 6 MJ	6	✓	50.0	48.9	97.7
Cal 7 MJ	7	✓	100.0	102.9	102.9

TS



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Last Cal. Update 11/10/2022 7:51 AM
Analyst Name ISP\Datastor
Analyte THC-COOH **Internal Standard** THC-COOH-D9



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✓	5.0	4.0	80.4
Cal 2 MJ	2	✓	10.0	9.9	99.0
Cal 3 MJ	3	✓	20.0	21.1	105.3
Cal 4 MJ	4	✓	50.0	59.7	119.5
Cal 5 MJ	5	✓	75.0	73.5	98.0
Cal 6 MJ	6	✓	100.0	102.0	102.0
Cal 7 MJ	7	✓	250.0	239.8	95.9

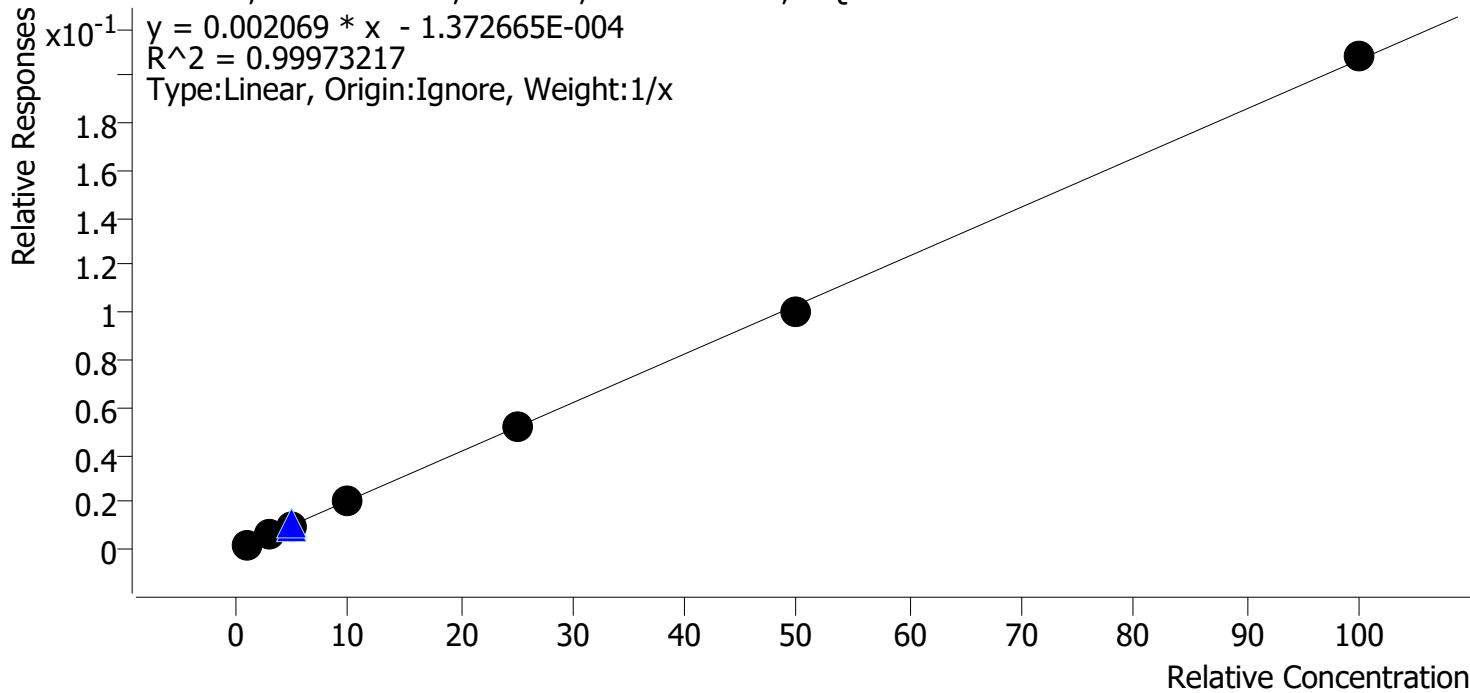
TS



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Last Cal. Update 11/10/2022 7:51 AM
Analyst Name ISP\Datastor
Analyte THC-OH **Internal Standard** THC-OH-D3

THC-OH - 7 Levels, 7 Levels Used, 7 Points, 7 Points Used, 2 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✓	1.0	1.0	101.1
Cal 2 MJ	2	✓	3.0	3.0	100.0
Cal 3 MJ	3	✓	5.0	4.8	96.5
Cal 4 MJ	4	✓	10.0	10.3	102.6
Cal 5 MJ	5	✓	25.0	25.3	101.2
Cal 6 MJ	6	✓	50.0	48.9	97.9
Cal 7 MJ	7	✓	100.0	100.7	100.7

TS



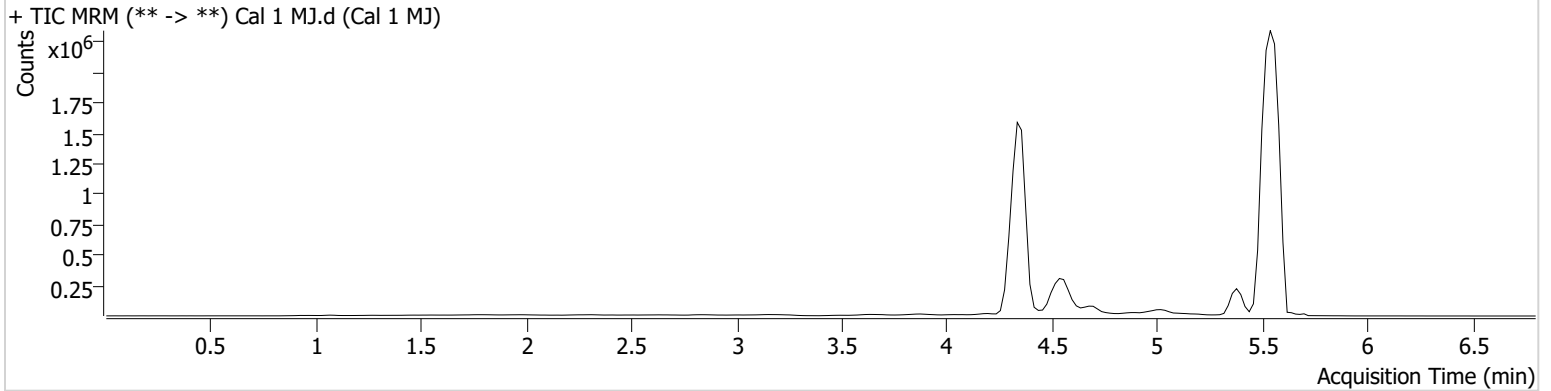
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	Cal 1 MJ.d
Type	Cal	Sample	Cal 1 MJ
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-A1	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 12:30:03 PM		

Sample Info.

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.590	4849	537128	1.0926 ng/ml	Low
THC-COOH	4.596	92966	1448314	4.0208 ng/ml	Low
THC-OH	4.362	14870	7606958	1.0111 ng/ml	Low

TS



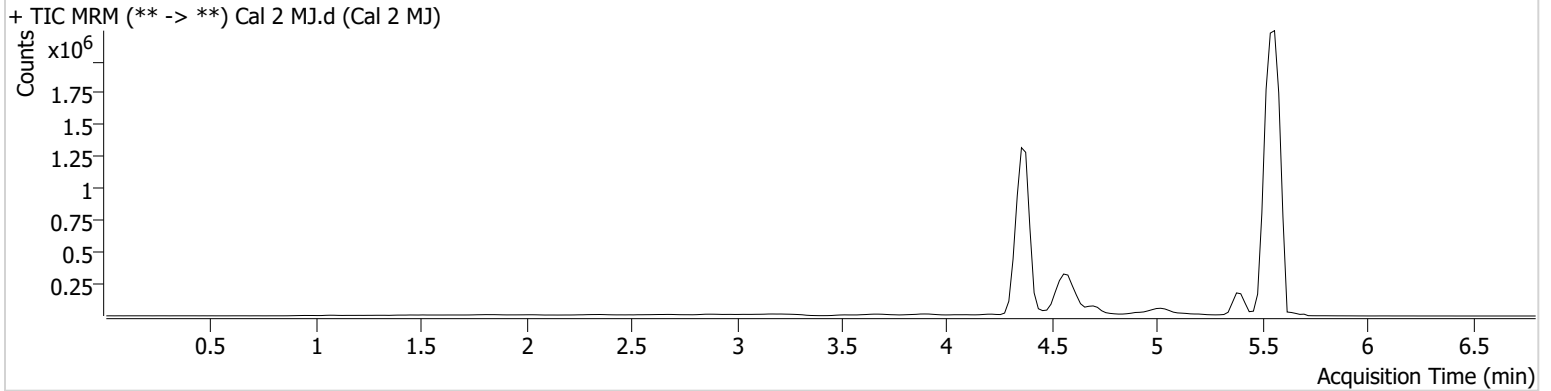
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	Cal 2 MJ.d
Type	Cal	Sample	Cal 2 MJ
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-B1	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 12:37:47 PM		

Sample Info.

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.509	16238	598455	2.9727 ng/ml	Low
THC-COOH	4.596	177108	1359949	9.8977 ng/ml	
THC-OH	4.382	35088	5778091	3.0014 ng/ml	

TS



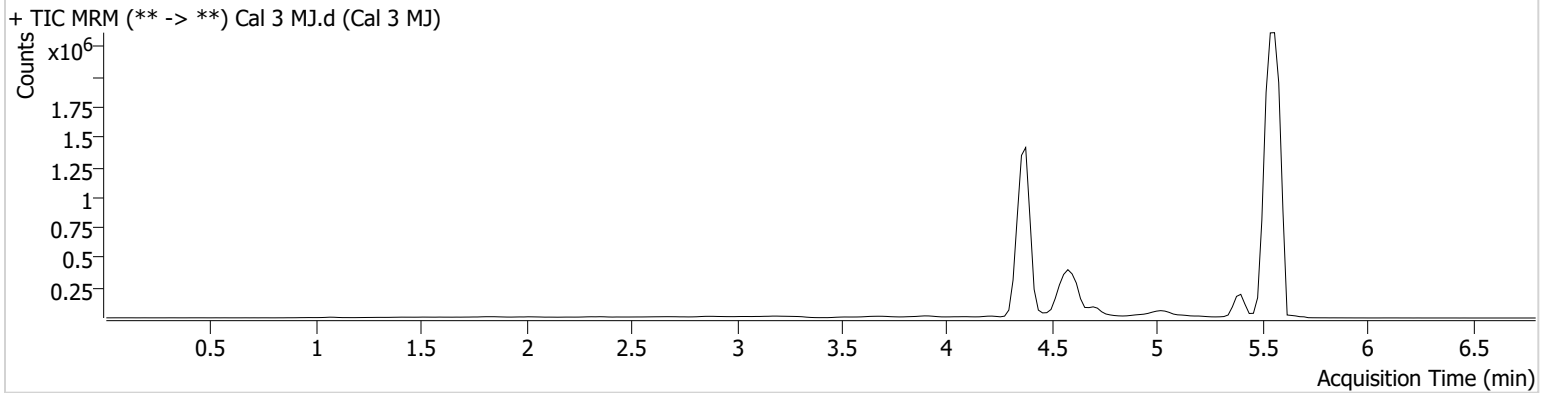
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	Cal 3 MJ.d
Type	Cal	Sample	Cal 3 MJ
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-C1	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 12:45:21 PM		

Sample Info.

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.509	23986	525726	4.8930 ng/ml
THC-COOH	4.596	342810	1341201	21.0536 ng/ml
THC-OH	4.382	53718	5457424	4.8237 ng/ml

TS

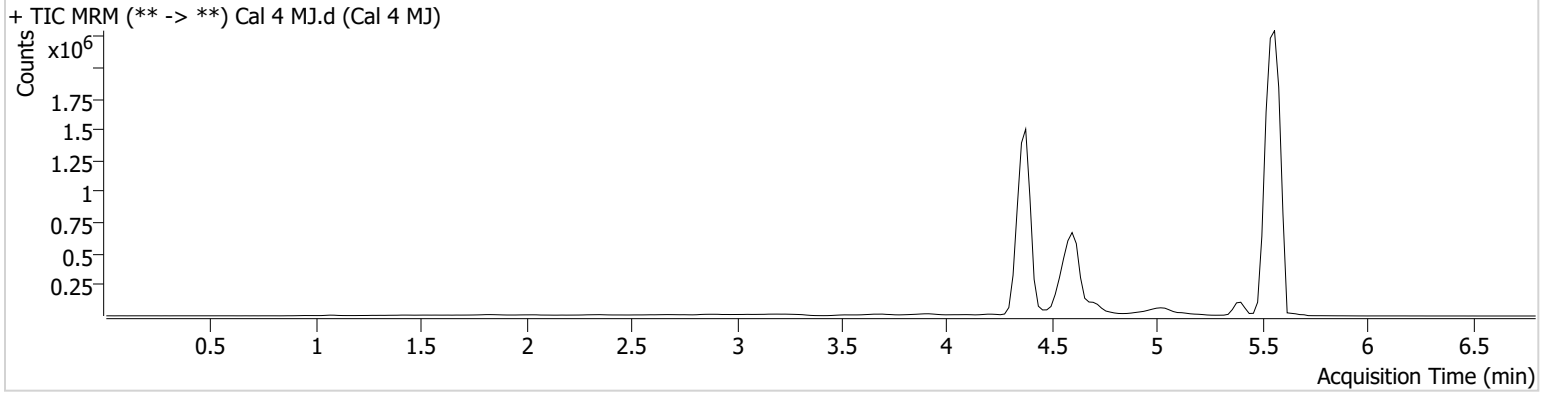


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	Cal 4 MJ.d
Type	Cal	Sample	Cal 4 MJ
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-D1	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 12:52:55 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.530	45709	480627	10.0311 ng/ml
THC-COOH	4.596	910879	1319761	59.7256 ng/ml
THC-OH	4.382	114233	5413729	10.2647 ng/ml

TS

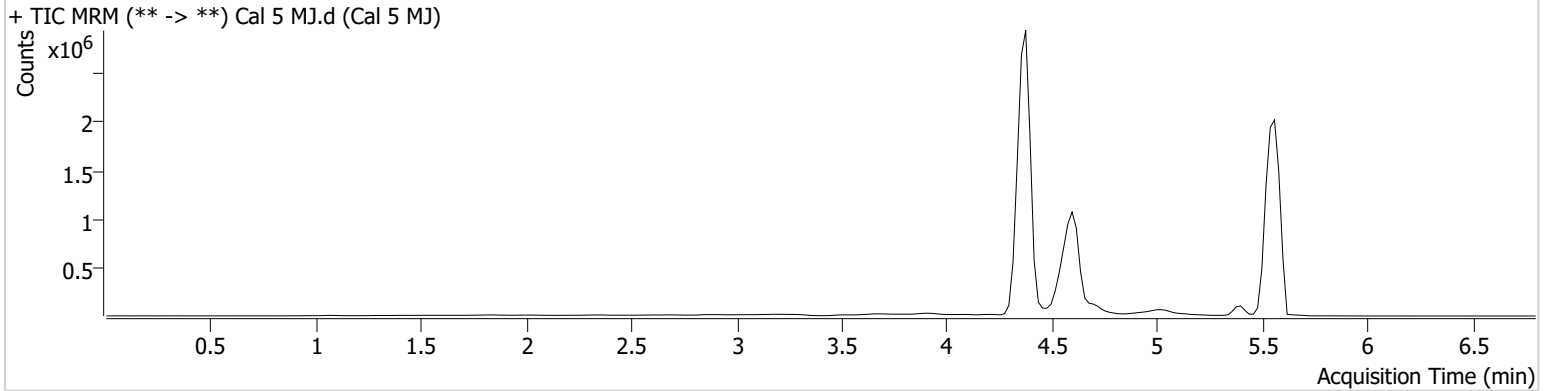


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	Cal 5 MJ.d
Type	Cal	Sample	Cal 5 MJ
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-E1	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 1:00:29 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.590	91465	412119	23.2026 ng/ml
THC-COOH	4.596	1443328	1708797	73.4704 ng/ml
THC-OH	4.382	441573	8458749	25.2970 ng/ml

TS

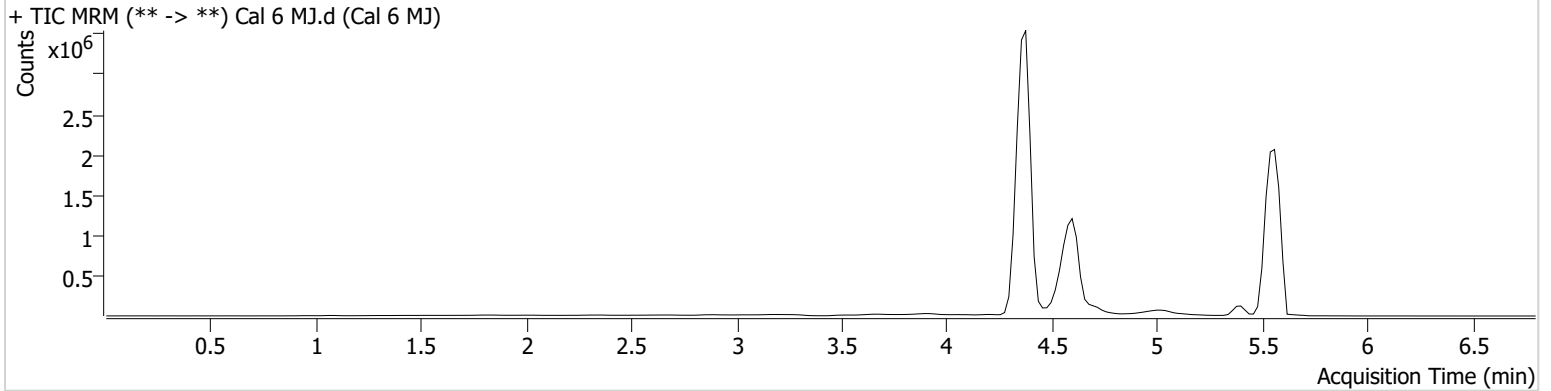


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	Cal 6 MJ.d
Type	Cal	Sample	Cal 6 MJ
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-F1	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 1:08:03 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.530	196897	419797	48.8619 ng/ml
THC-COOH	4.596	1920218	1648030	101.9916 ng/ml
THC-OH	4.382	883276	8736550	48.9304 ng/ml

TS

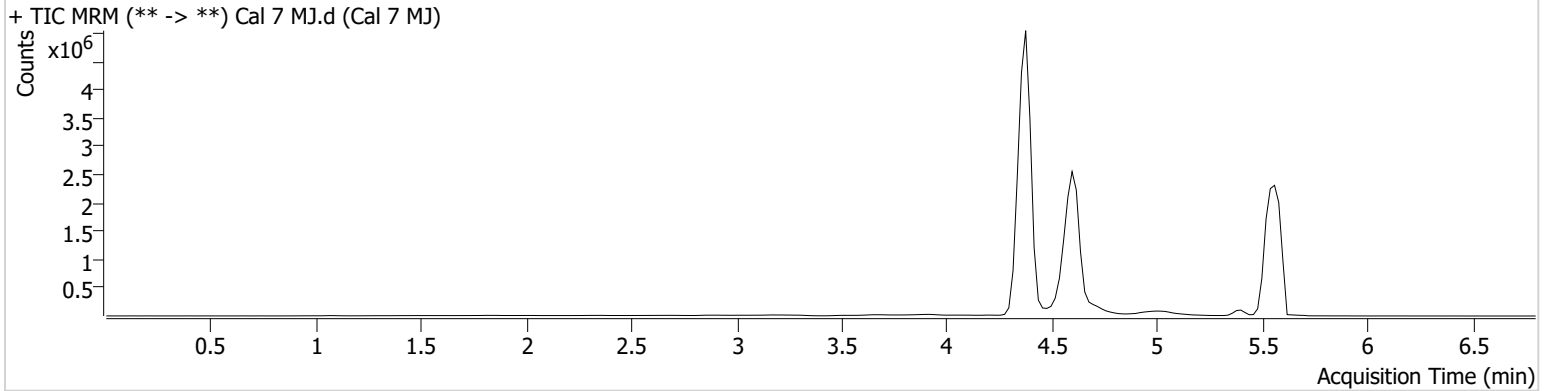


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\110922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 11/10/2022 7:51:13 AM

Instrument	Falco (069901)	Data File	Cal 7 MJ.d
Type	Cal	Sample	Cal 7 MJ
Acq. Method	AM 26 THC.m	Operator	Tamara Salazar
Sample Position	P1-G1	Comment	
Injection Volume	10		
Acq. Date-Time	11/9/2022 1:15:37 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.509	236865	239296	102.9462 ng/ml
THC-COOH	4.596	3957239	1457940	239.8403 ng/ml
THC-OH	4.382	1568904	7537173	100.6717 ng/ml