









**Worklist: 6051**

<u>LAB_CASE</u>	<u>ITEM</u>	<u>ITEM_TYPE</u>	<u>DESCRIPTION</u>	
M2022-2772	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-2776	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-2777	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-2835	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-2995	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-3002	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2022-3139	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2212	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2215	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2217	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2221	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2222	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2223	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2224	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2237	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2240	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2250	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2252	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2293	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2298	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2321	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

**Worklist: 6051**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
P2022-2324	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2325	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2365	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2371	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2372	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2384	1	BLOOD	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2387	1	BLOOD	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2022-2406	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

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

Extraction Date: 8/3/2022

Plate lot#: 211015

**Mobile phase A:** 10mM Amm Form

**Blank Blood Lot:** Lampire 22B52015-1

**LCMS-QQQ ID:** 069901

Analyst: Amber Gerheart

Plate Retest Date: 4/15/2022 – okay 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 and urine** (if applicable) into 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: 300µL
- 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:

Negative blood reran due to incorrect plate position for original injection.



**Idaho State Police  
Forensic Services**

**Request for Departure from an Analytical Method or Quality Standard**

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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

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**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**

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Departure approved  
Comments:

Departure Not Approved  
Comments:

Approver: Rachel Cutler  
Title: Laboratory Manager



Date: 2/10/2022

**Quality Review**

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



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	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + QC_1	M2022-2995-1	P2022-2223-1	P2022-2321-2	P2022-2406-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
B	IS + QC_1	M2022-3002-2	P2022-2224-1	P2022-2324-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
C	Blood Negative	M2022-3139-1	P2022-2237-1	P2022-2325-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
D	Blood External	P2022-2212-1	P2022-2240-1	P2022-2365-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
E	M2022-2772-1	P2022-2215-1	P2022-2250-1	P2022-2371-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
F	M2022-2776-1	P2022-2217-1	P2022-2252-1	P2022-2372-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
G	M2022-2777-1	P2022-2221-1	P2022-2293-1	P2022-2384-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_1
H	M2022-2835-1	P2022-2222-1	P2022-2298-1	P2022-2387-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_1

All wells to contain 60 µl of residual DMSO

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# 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  $\mu$ L of 1mg/mL stock was added <sup>\*</sup>to each drug to 9600  $\mu$ L of LC MeOH.

\*of  
AS 4/3/2023

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: WS042222)

200  $\mu$ L of methanol external control solution was added to 9800  $\mu$ L of blood.  
Approximately 200 ng/mL of each compound.

Component	Source	Source Lot Number
Negative Blood	Lampire	22B52016-2
Methanol External Control Solution		042222
Prepared:	04/22/2022	
Expires:	04/22/2023	
Prepared by:	Celena Shrum	

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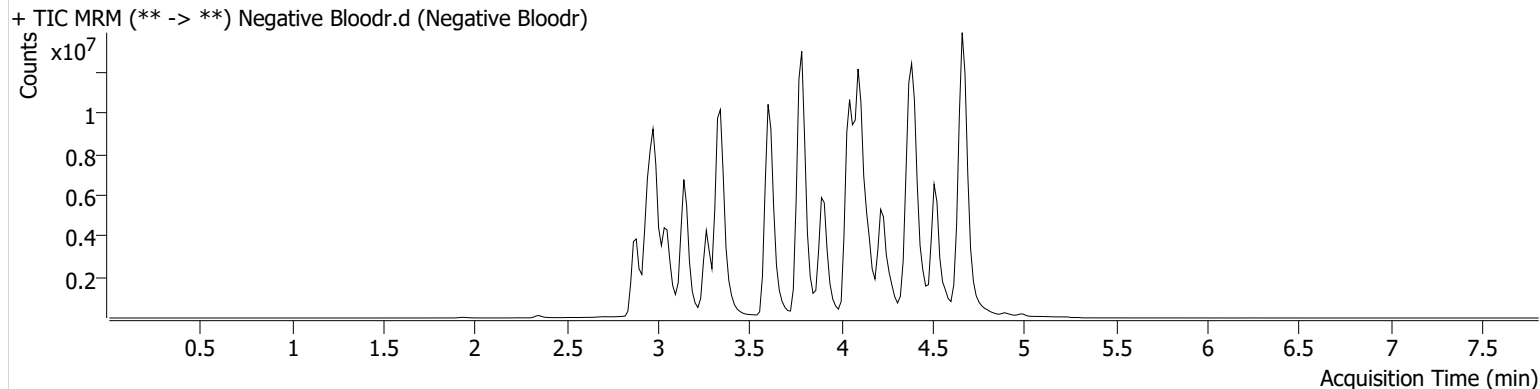


# AM #25 Multi-Drug Screen Results

**Batch results** C:\Users\agerheart\Desktop\080322 AM 25 26 AG\QuantResults\AM 25.batch.bin  
**Calibration Last Update** 8/8/2022 7:15:17 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	Negative Bloodr.d
<b>Type</b>	Sample	<b>Sample</b>	Negative Bloodr
<b>Acq. Method</b>	AM 25 MDS.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P2-C1	<b>Comment</b>	Rerun due to incorrect plate well position
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/4/2022 5:19:42 PM		
<b>Sample Info.</b>			

**Sample Chromatogram**



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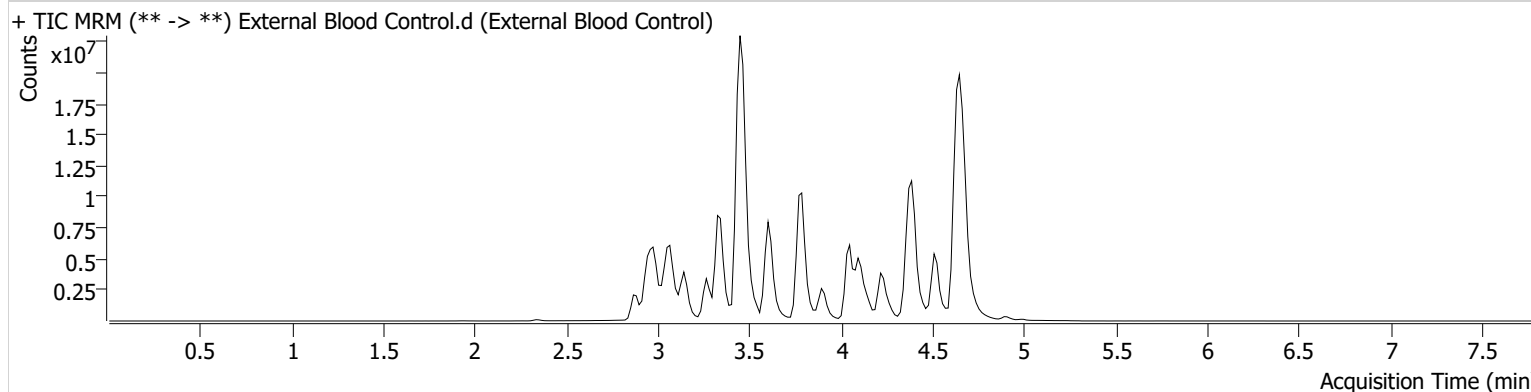


# AM #25 Multi-Drug Screen Results

**Batch results** C:\Users\agerheart\Desktop\080322 AM 25 26 AG\QuantResults\AM 25.batch.bin  
**Calibration Last Update** 8/8/2022 7:15:17 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	External Blood Control.d
<b>Type</b>	Sample	<b>Sample</b>	External Blood Control
<b>Acq. Method</b>	AM 25 MDS.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P2-D1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/4/2022 11:24:13 AM		

**Sample Chromatogram**



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.636	26992152	15633.10	3146.39	27829322	68.6700
Buprenorphine	4.719	1762276	718968.26	105347.74	861700	84.9605
Hydrocodone	3.067	9801348	3390.80	1417.90	8843054	73.3622
Tramadol	3.453	83959367	∞	518.31	18770398	71.7068



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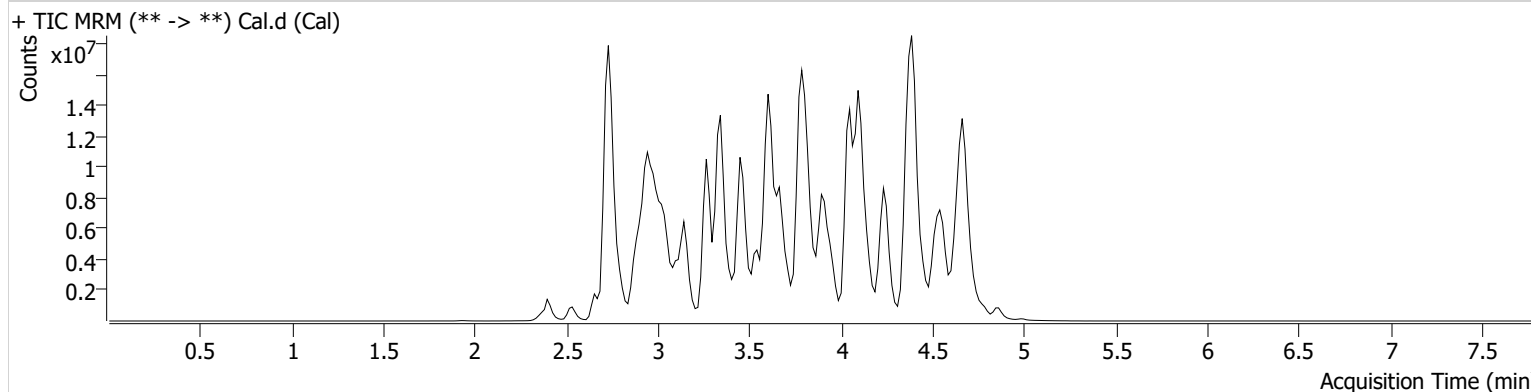


# AM #25 Multi-Drug Screen Results

**Batch results** C:\Users\agerheart\Desktop\080322 AM 25 26 AG\QuantResults\AM 25.batch.bin  
**Calibration Last Update** 8/8/2022 7:15:17 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	Cal.d
<b>Type</b>	Cal	<b>Sample</b>	Cal
<b>Acq. Method</b>	AM 25 MDS.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P2-B1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/4/2022 11:06:57 AM		

**Sample Chromatogram**



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.778	4550205	406.34	445.87	28679967	10.0000
6-MAM	2.956	68414	4701.86	19010.59	1855466	10.0000
7-aminoclonazepam	3.605	1525906	661.79	1425139.58	6372131	10.0000
7-aminoflunitrazepam	3.805	3213306	17036.88	1515.44	6372131	10.0000
9-Hydroxyrisperidone	3.905	4646813	3159420.77	114.30	20422754	10.0000
Acetyl Fentanyl	3.925	161899	172.21	47008.00	33682652	10.0000
Acetyl Norfentanyl	2.919	440376	2233.75	811.51	33682652	10.0000
a-hydroxyalprazolam	4.525	283320	132.67	290143.98	6372131	10.0000
alpha-hydroxymidazolam	4.616	2705160	309.13	391.88	6372131	10.0000
Alpha-PHP	3.855	2718020	812.27	4393.51	33682652	10.0000
alpha-PVP	3.580	4122156	3254.16	930.04	9190410	10.0000
Alprazolam	4.636	2653207	413.54	368.72	18784650	10.0000
Amitriptyline	4.455	434879	42.77	91.97	1529187	10.0000
Amphetamine	2.908	2640883	747.88	538.23	9190410	10.0000
Benzoylcegonine	3.405	323352	123.13	72.32	570072	10.0000
Brompheniramine	4.049	38120	322.20	7152.25	32167298	10.0000
Buprenorphine	4.719	412377	1628.52	9683.74	1713145	10.0000
Bupropion	3.810	2555908	214.67	274.89	9893917	10.0000
Carbamazepine	4.257	12372710	3525.37	2910.89	603631	10.0000
Carisoprodol	4.240	1556192	1584487.27	56.16	9302599	10.0000
Chlordiazepoxide	4.745	564320	115.74	829.87	18784650	10.0000
Chlorpheniramine	3.960	3123699	3244.98	2382.85	32167298	10.0000
Chlorpromazine	4.634	564054	412120.81	434.14	2385183	10.0000
Citalopram	4.079	1639552	2811.16	1456.46	32167298	10.0000
Clomipramine	4.650	680681	12877.90	1882.83	32167298	10.0000
Clonazepam	4.450	820181	219.98	210696.59	18784650	10.0000
Clonazolam	4.385	1434002	587560.08	193349.05	18784650	10.0000
Clozapine	4.355	1401561	826.38	1401.79	5224820	10.0000
Cocaehtylene	3.818	4616839	52302.86	675721.47	25247719	10.0000
Cocaine	3.619	4191469	2750539.32	565.69	25247719	10.0000
Codeine	2.884	466042	2848.76	1636898.88	11538756	10.0000
Cyclobenzaprine	4.378	515281	98.98	682.11	1529187	10.0000
Desipramine	4.394	980875	163.81	92.17	1529187	10.0000
Dextromethorphan	4.101	784666	486.86	206.94	4262218	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	2282922	349.80	605927.96	4262218	10.0000
Diazepam	4.868	1217657	1602.60	545.08	18784650	10.0000
Dihydrocodeine	2.792	1264510	447.99	677.34	11538756	10.0000
Diphenhydramine	4.054	4618159	153024.50	964.16	32167298	10.0000
Doxepin	4.176	625037	706.70	62.95	12040304	10.0000
Doxylamine	3.668	10238917	245.33	2435468.05	4262218	10.0000
Duloxetine	4.345	17674	8913.78	2485.86	238167	10.0000
EDDP	4.099	1274846	348938.85	631957.49	3102603	10.0000
Estazolam	4.545	6210904	590.47	1259.40	18784650	10.0000
Etizolam	4.662	403286	286790.25	2228.31	18784650	10.0000
Fentanyl	4.155	88681	33.68	33946.47	6366429	10.0000
Flualprazolam	4.509	1039121	524784.66	9155.17	18784650	10.0000
Flunitrazepam	4.573	1856081	845.74	322600.78	18784650	10.0000
Fluoxetine	4.343	628370	447.03	51.11	1345809	10.0000
Flurazepam	4.229	1565718	494.08	171.92	18784650	10.0000
Hydrocodone	3.067	1743293	547.51	502.16	11538756	10.0000
Hydromorphone	2.536	1509710	13518.50	410.85	285469	10.0000
Hydroxyzine	4.537	842762	2026.14	451.75	32167298	10.0000
Imipramine	4.408	1373011	402.92	287.91	1529187	10.0000
Ketamine	3.610	3173237	5785.65	36.31	14784832	10.0000
Lamotrigine	3.623	291703	268.11	273062.39	32167298	10.0000
Levamisole	3.027	2889393	16537.49	1032.55	25247719	10.0000
Levetiracetam	2.662	1634076	1599.43	1319.64	32167298	10.0000
Lorazepam	4.449	379998	104.56	∞	18784650	10.0000
Maprotiline	4.455	328957	22.63	107.40	1529187	10.0000
MDA	3.028	2202742	1296.65	251.17	15808292	10.0000
MDEA	3.257	3552053	4988.89	341.08	15808292	10.0000
MDMA	3.104	4847016	23760.83	585.34	15808292	10.0000
Meperidine	3.639	1629125	210.32	502.79	4262218	10.0000
Meprobamate	3.688	1191360	1275.27	715.14	9302599	10.0000
Methadone	4.420	2124942	296.82	203.73	3102603	10.0000
Methamphetamine	3.014	2708331	286.16	434.86	15808292	10.0000
Methocarbamol	3.594	519628	278.85	1573.31	3102603	10.0000
Methylphenidate	3.548	10020937	385.32	121.87	15745179	10.0000
Metoprolol	3.468	758908	6031.93	160780.87	4262218	10.0000
Midazolam	4.786	779020	655.09	707.72	18784650	10.0000
Mirtazapine	4.038	2133326	106308.78	1492801.61	4262218	10.0000
Mitragynine	4.244	199266	119094.05	330486.49	4262218	10.0000
Morphine	2.369	315940	1941.50	248.76	285469	10.0000
Norbuprenorphine	3.844	33795	12758.59	17953.48	1713145	10.0000
Nordiazepam	4.717	1127566	492.27	296.12	18784650	10.0000
Norfentanyl	3.348	7568950	21284.74	77.73	33682652	10.0000
Norhydrocodone	2.962	99373	532.77	2514.33	285469	10.0000
Norketamine	3.718	946576	181.90	983875.14	14784832	10.0000
Normeperidine	3.626	1139962	123.85	118.60	32167298	10.0000
Noroxycodone	2.914	1947824	150.10	321.84	14784832	10.0000
Nortriptyline	4.425	325261	197352.20	108.79	1529187	10.0000
O-desmethyl-tramadol	2.933	10253578	344599.65	353.73	32167298	10.0000
O-desmethylvenlafaxine	3.268	2123504	1507.88	∞	10680168	10.0000
Olanzapine	3.865	350122	279400.04	389.13	603631	10.0000
Oxazepam	4.530	1807212	388.48	152.26	8354239	10.0000
Oxycodone	2.958	3003984	1150.00	611.43	14784832	10.0000
Oxymorphone	2.395	2641313	∞	11469.12	285469	10.0000
Paroxetine	4.355	64379	104.48	40684.72	1345809	10.0000
Phenazepam	4.661	1439264	677.34	436.45	18784650	10.0000
Phencyclidine	3.948	4264865	764.26	388.36	4262218	10.0000
Phentermine	3.168	1042399	107.40	13.67	15745179	10.0000
Phenytoin	4.149	945103	2324.67	276.88	603631	10.0000
Primidone	3.488	2526807	2513954.44	443.08	603631	10.0000
Promethazine	4.361	1482109	518.85	170.94	32167298	10.0000

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# AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Pseudoephedrine	2.738	51511601	13655.68	850.27	15808292	10.0000
Quetiapine	4.552	2545965	4113296.92	648521.83	45072217	10.0000
Risperidone	4.106	2802151	1486320.11	1397.26	20422754	10.0000
Sertraline	4.575	268198	95094.38	935.56	1345809	10.0000
Sufentanil	4.521	47954	49401.86	22.32	33682652	10.0000
Tapentadol	3.457	5356514	734.03	470.97	14784832	10.0000
Temazepam	4.683	3337398	1797.71	213.84	18784650	10.0000
Topiramate	3.862	62155	30917.56	36804.04	358224	10.0000
Tramadol	3.453	20065508	∞	46.99	32167298	10.0000
Trazodone	4.691	3149976	6212.11	519.69	12040304	10.0000
Venlafaxine	3.821	6301077	1551.83	266.74	1345809	10.0000
Zaleplon	4.360	2176423	1492155.52	768.24	45072217	10.0000
Zolpidem	4.390	10297815	1590.01	1688.29	45072217	10.0000
Zopiclone	4.260	555451	252963.58	186.72	2700421	10.0000

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

**Extraction Date:** 8/3/2022

**Plate lot#:** 220309

**Mobile phase A:** 10mM Amm Form

**Blank Blood Lot:** Lampire 22B52015-1

**LCMS-QQ ID:** 069901

**Analyst:** Amber Gerheart

**Plate Retest Date:** 9/09/2022

**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: 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, add **1000µl blood and urine (if applicable) (calibrated pipette)** into the appropriate wells of analytical (standards) plate. **Pipette ID: 16**
- 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 5. Pipette **500µL 0.1% formic acid in water blood sample, 500 µL saturated phosphate buffer in urine** in wells of 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: 800µL
- 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,  $R^2$  values  $\geq 0.98$  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:

Instrument stopped due to high pressure. Problem was fixed and restarted with no further issues.

AS

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_1	M2022-3139-1	P2022-2237-1	P2022-2325-1	IS + QC_1
B	IS + Cal. 2	Blood Negative	P2022-2212-1	P2022-2240-1	P2022-2365-1	IS + Cal. 7
C	IS + Cal. 3	M2022-2772-1	P2022-2215-1	P2022-2250-1	P2022-2371-1	IS + Cal. 6
D	IS + Cal. 4	M2022-2776-1	P2022-2217-1	P2022-2252-1	P2022-2372-1	IS + Cal. 5
E	IS + Cal. 5	M2022-2777-1	P2022-2221-1	P2022-2293-1	P2022-2384-1	IS + Cal. 4
F	IS + Cal. 6	M2022-2835-1	P2022-2222-1	P2022-2298-1	P2022-2387-1	IS + Cal. 3
G	IS + Cal. 7	M2022-2995-1	P2022-2223-1	P2022-2321-2	P2022-2406-1	IS + Cal. 2
H	IS + QC_1	M2022-3002-2	P2022-2224-1	P2022-2324-1	IS + QC_1	IS + Cal. 1

All wells to contain 100 µl of residual DMSO

AG

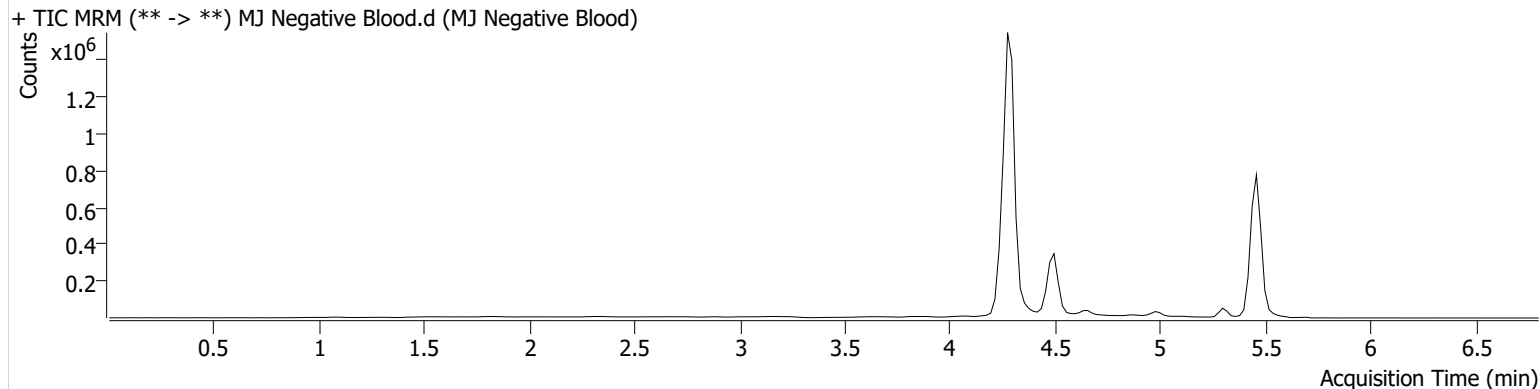


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	MJ Negative Blood.d
<b>Type</b>	Sample	<b>Sample</b>	MJ Negative Blood
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-B2	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/3/2022 9:22:42 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



AG

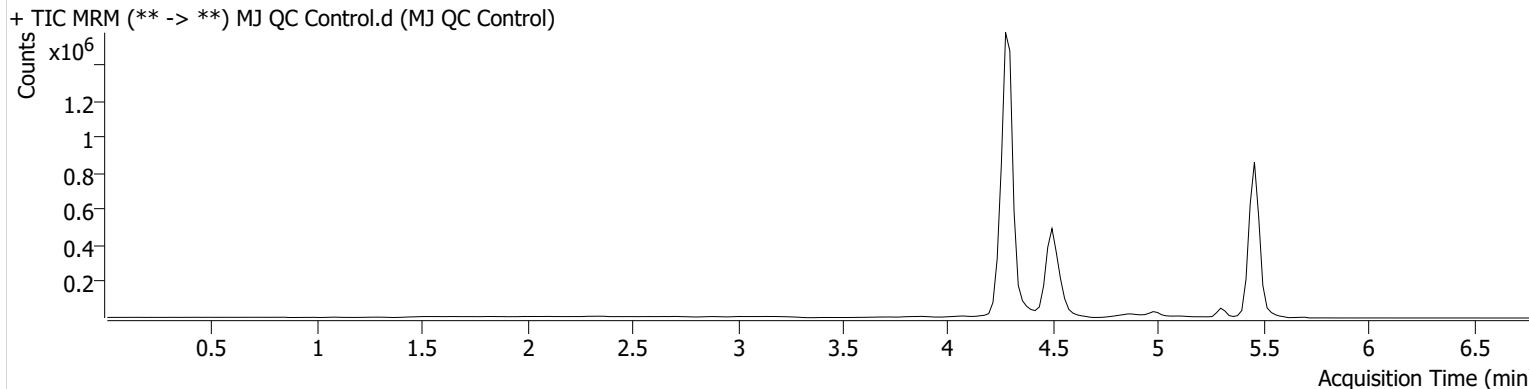


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	MJ QC Control.d
<b>Type</b>	QC	<b>Sample</b>	MJ QC Control
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-H1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/3/2022 9:07:32 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.469	9362	271941	4.5602 ng/ml
THC-COOH	4.516	220402	1497430	14.6395 ng/ml
THC-OH	4.302	44157	5610192	4.6593 ng/ml

AG

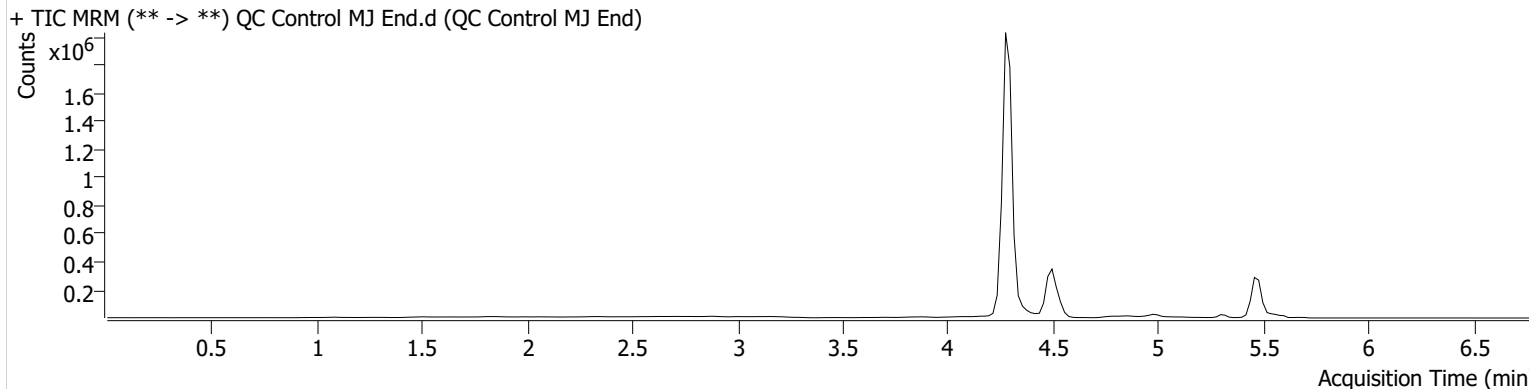


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	QC Control MJ End.d
<b>Type</b>	QC	<b>Sample</b>	QC Control MJ End
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-H1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/4/2022 10:15:54 AM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.469	3552	101177	4.6575 ng/ml
THC-COOH	4.516	116084	995237	11.7271 ng/ml
THC-OH	4.302	48451	6195674	4.6301 ng/ml

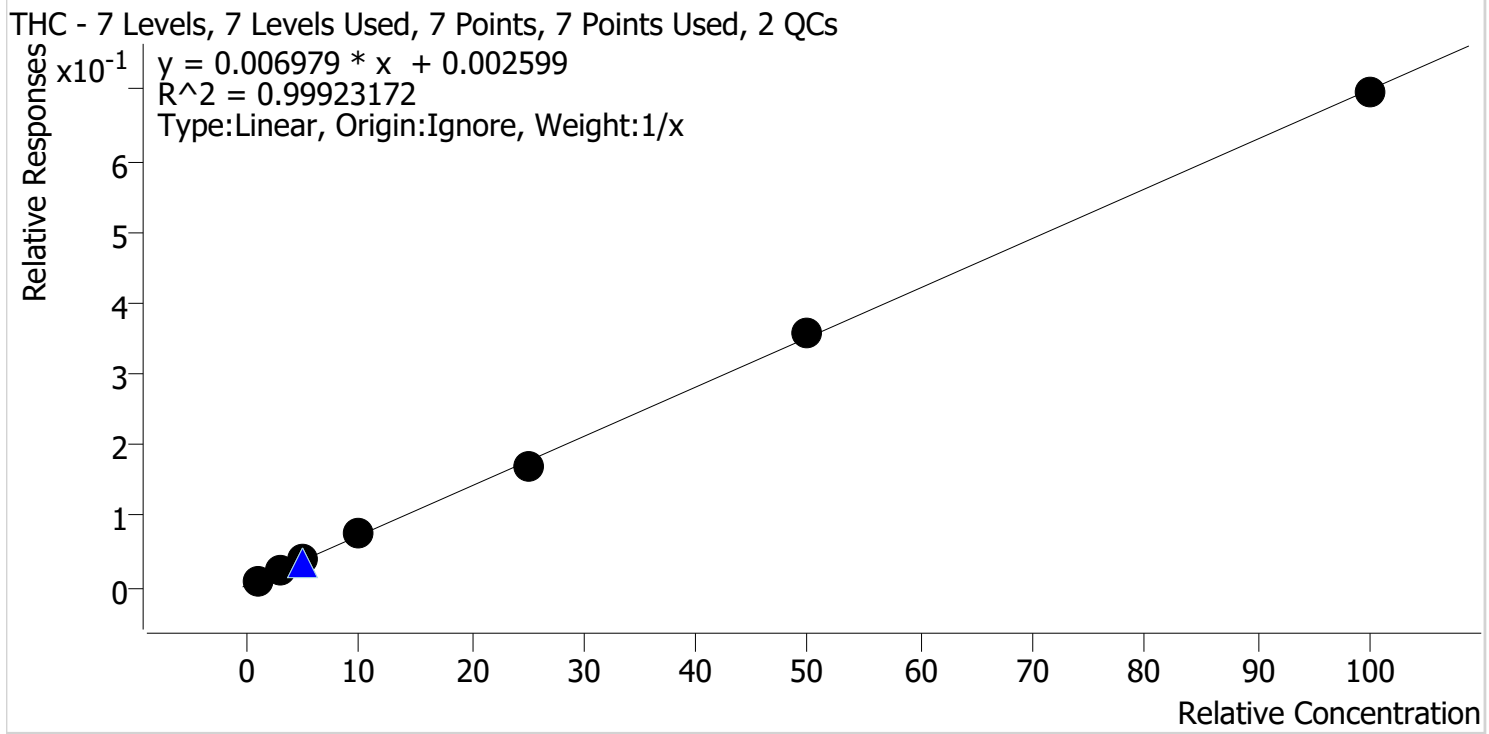


AS



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Last Cal. Update** 8/4/2022 1:26 PM  
**Analyst Name** ISP\datastor  
**Analyte** THC **Internal Standard** THC-D3



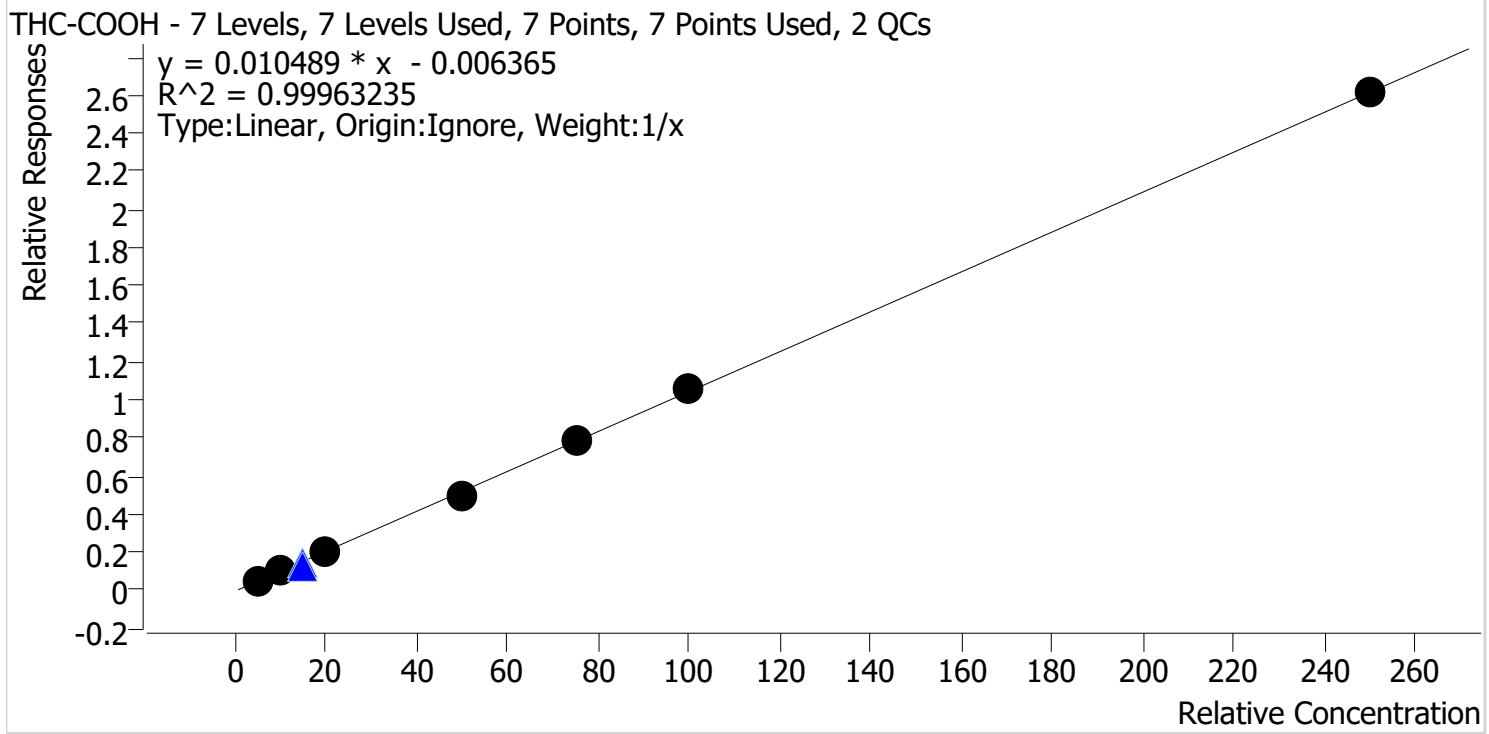
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✓	1.0	0.9	89.4
Cal 2 MJ	2	✓	3.0	3.1	102.6
Cal 3 MJ	3	✓	5.0	5.3	105.6
Cal 4 MJ	4	✓	10.0	10.6	105.5
Cal 5 MJ	5	✓	25.0	23.9	95.7
Cal 6 MJ	6	✓	50.0	50.9	101.8
Cal 7 MJ	7	✓	100.0	99.4	99.4

AS



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Last Cal. Update** 8/4/2022 1:26 PM  
**Analyst Name** ISP\datastor  
**Analyte** THC-COOH **Internal Standard** THC-COOH-D9



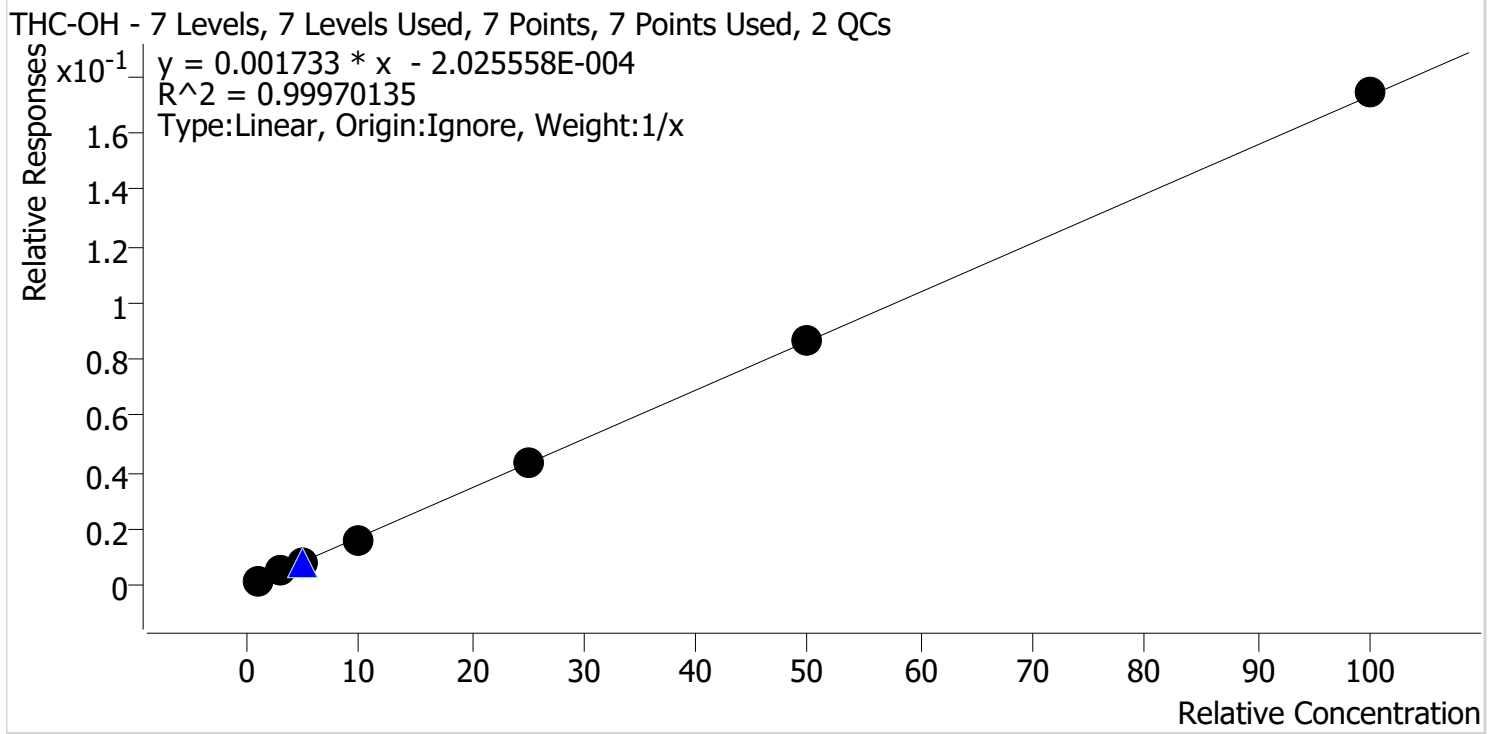
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✓	5.0	5.2	103.5
Cal 2 MJ	2	✓	10.0	9.8	98.3
Cal 3 MJ	3	✓	20.0	20.0	100.1
Cal 4 MJ	4	✓	50.0	47.9	95.9
Cal 5 MJ	5	✓	75.0	75.0	100.0
Cal 6 MJ	6	✓	100.0	102.2	102.2
Cal 7 MJ	7	✓	250.0	249.8	99.9

AS



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Last Cal. Update** 8/4/2022 1:26 PM  
**Analyst Name** ISP\datastor  
**Analyte** THC-OH **Internal Standard** THC-OH-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✓	1.0	1.1	110.6
Cal 2 MJ	2	✓	3.0	3.0	98.4
Cal 3 MJ	3	✓	5.0	4.8	95.1
Cal 4 MJ	4	✓	10.0	9.5	95.5
Cal 5 MJ	5	✓	25.0	24.9	99.6
Cal 6 MJ	6	✓	50.0	50.1	100.2
Cal 7 MJ	7	✓	100.0	100.6	100.6

AG

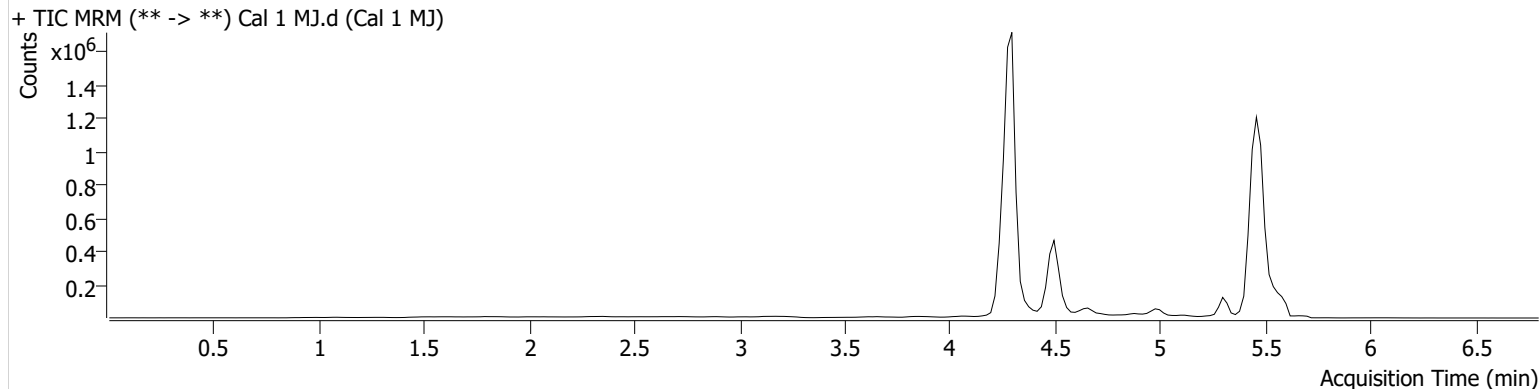


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	Cal 1 MJ.d
<b>Type</b>	Cal	<b>Sample</b>	Cal 1 MJ
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-A1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/3/2022 8:14:25 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	6470	732090	0.8939 ng/ml	Low
THC-COOH	4.536	78549	1638597	5.1771 ng/ml	
THC-OH	4.302	11662	6802533	1.1063 ng/ml	Low

AG

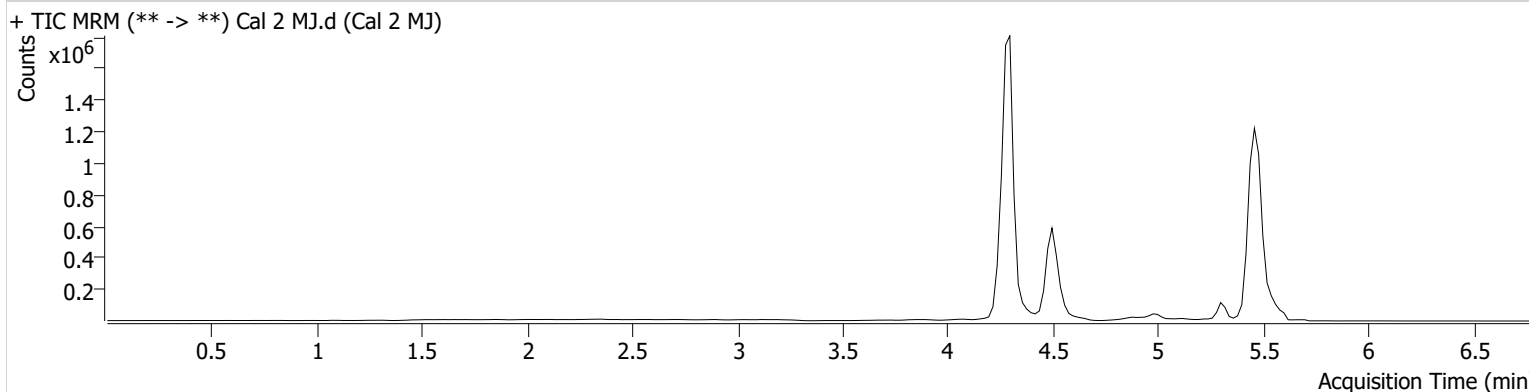


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	Cal 2 MJ.d
<b>Type</b>	Cal	<b>Sample</b>	Cal 2 MJ
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-B1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/3/2022 8:22:09 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.489	13447	558215	3.0790 ng/ml
THC-COOH	4.536	176989	1828547	9.8349 ng/ml
THC-OH	4.302	33047	6730559	2.9506 ng/ml <b>Low</b>

AG

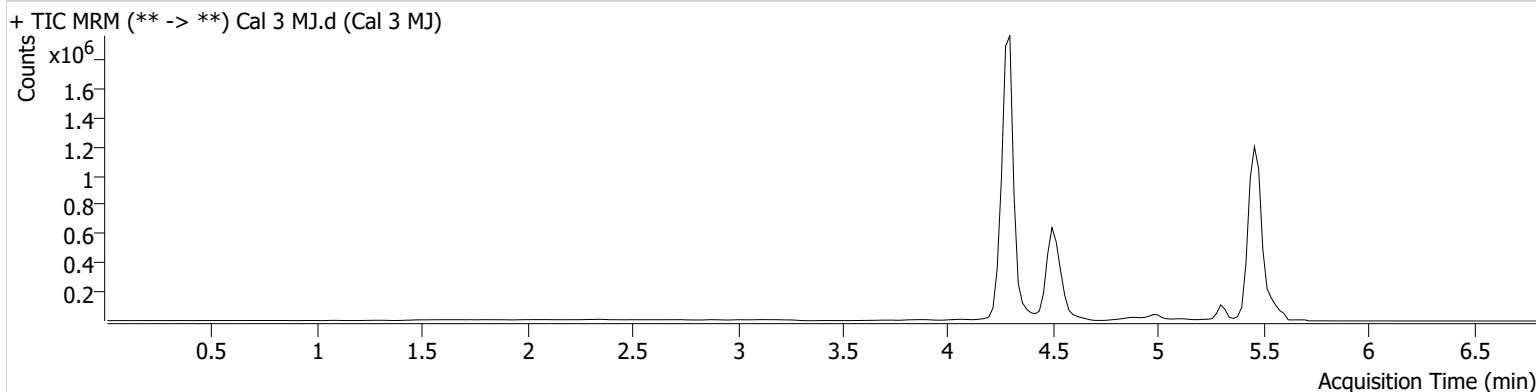


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	Cal 3 MJ.d
<b>Type</b>	Cal	<b>Sample</b>	Cal 3 MJ
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-C1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/3/2022 8:29:43 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.489	20710	524900	5.2807 ng/ml
THC-COOH	4.536	375774	1846061	20.0135 ng/ml
THC-OH	4.302	56550	7035296	4.7559 ng/ml

AG

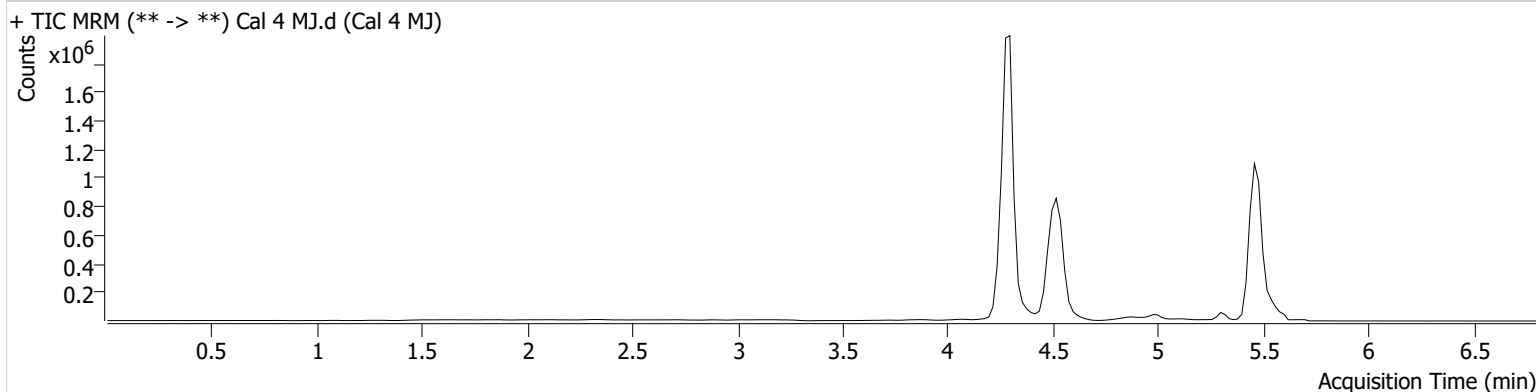


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	Cal 4 MJ.d
<b>Type</b>	Cal	<b>Sample</b>	Cal 4 MJ
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-D1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/3/2022 8:37:17 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.489	35217	461889	10.5518 ng/ml
THC-COOH	4.536	901248	1815295	47.9402 ng/ml
THC-OH	4.302	111809	6842668	9.5471 ng/ml

AG

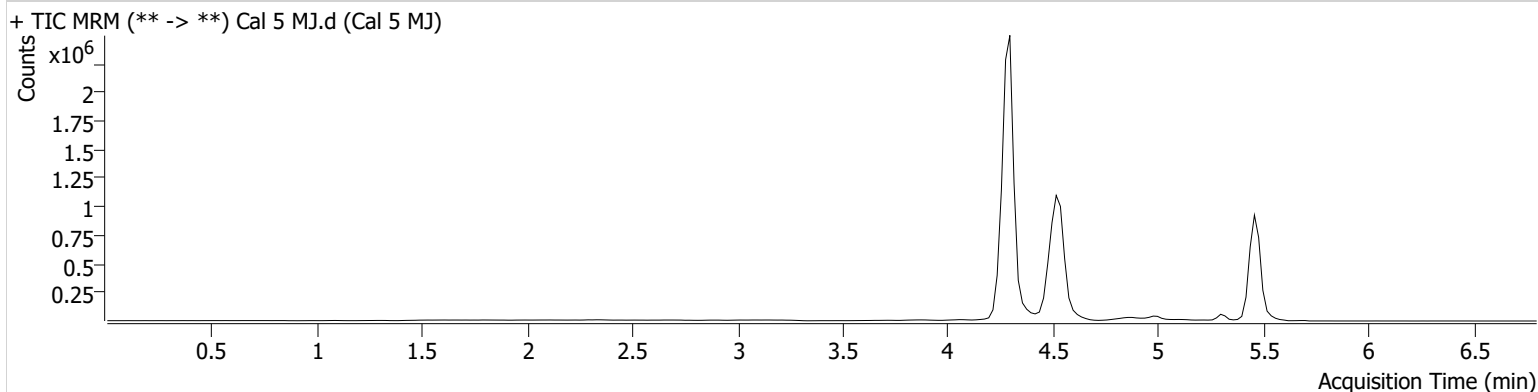


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	Cal 5 MJ.d
<b>Type</b>	Cal	<b>Sample</b>	Cal 5 MJ
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-E1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/3/2022 8:44:51 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.489	56029	330531	23.9148 ng/ml
THC-COOH	4.536	1335018	1710125	75.0337 ng/ml
THC-OH	4.302	293814	6843768	24.8940 ng/ml



AG

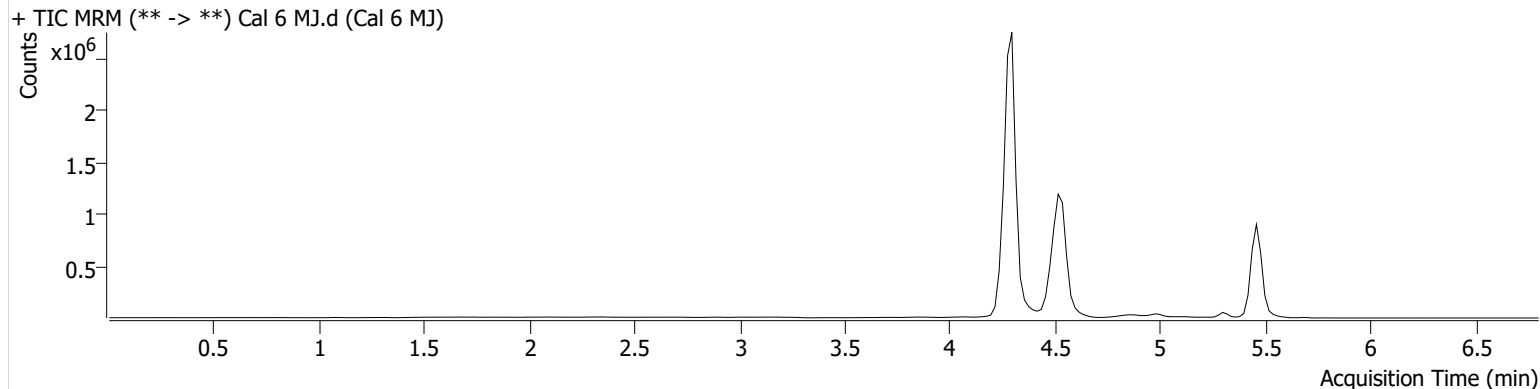


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	Cal 6 MJ.d
<b>Type</b>	Cal	<b>Sample</b>	Cal 6 MJ
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-F1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/3/2022 8:52:24 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.489	101952	284858	50.9070 ng/ml
THC-COOH	4.536	1579869	1482680	102.1952 ng/ml
THC-OH	4.302	512958	5922741	50.1009 ng/ml

AG

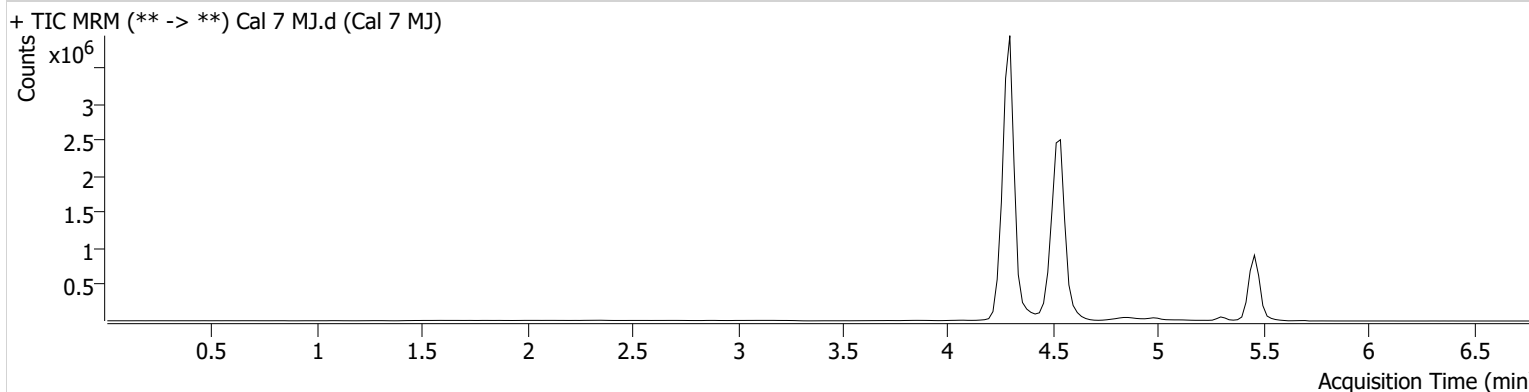


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2022\AM 25-26\080322 AM 25 26 AG\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/4/2022 1:26:14 PM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	Cal 7 MJ.d
<b>Type</b>	Cal	<b>Sample</b>	Cal 7 MJ
<b>Acq. Method</b>	AM 26 THC.m	<b>Operator</b>	Amber Gerheart
<b>Sample Position</b>	P1-G1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	8/3/2022 8:59:58 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.489	196607	282412	99.3728 ng/ml
THC-COOH	4.536	3733889	1428520	249.8054 ng/ml
THC-OH	4.302	1020472	5858483	100.6452 ng/ml