








**Worklist: 6464**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
M2023-2827	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-2895	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-2907	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-3055	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2133	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2141	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2142	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2144	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2145	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2163	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2169	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2170	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2248	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2250	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2257	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2258	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2259	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2260	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2262	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2263	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2264	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

**Worklist: 6464**

cg

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
P2023-2284	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2313	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2313	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2328	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2337	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2382	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-2405	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: 08/11/2023

Plate lot#: 230119

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

Instant Buffer I

**Blank Blood Lot:** Lampire 23A52594

**LCMS-QQQ ID:** 069901

Analyst: Celena Shrum

Plate Retest Date: 07/19/2023- external control used

**Mobile phase B:** 0.1% Formic Acid in MeOH

Ethyl Acetate LC Methanol

**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. Using a calibrated pipette, pipette **250µL blood** into wells of analytical (standards) plate. **Pipette ID: 16**
- 3. Pipette **250µL 0.5 M ammonium hydroxide** in wells of analytical plate.
- 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 5. Transfer **200-450µL of blood+base and** mixture to corresponding wells of SLE+ plate.  
Amount transferred: 250µl
- 6. 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*
- 7. Wait 5 minutes.
- 8. Add **900uL ethyl acetate.**
- 9. Wait 5 minutes.
- 10. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 11. Add **900uL ethyl acetate.**
- 12. Wait 5 minutes.
- 13. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 14. Remove plate containing eluate.
- 15. Add 50µl of 1% HCl in MeOH to all wells in the run and place ACT cover on top of plate prior to drying.
- 16. Place on SPE Dry and evaporate to dryness at approx. 35°C.
- 17. 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: M2023-2717-2, P2023-1718-1, P2023-2004-1, P2023-2079-1, and P2023-2121-1 were also included in the run.

	1	2	3	4	5	6	7	8	9	10	11	12
A									P2023-2141-1	P2023-2250-2	P2023-2284-1	NEG
B									P2023-2142-1	P2023-2257-1	P2023-2313-1	External Control
C									P2023-2144-1	P2023-2258-1	P2023-2313-2	P2023-1718-1
D								M2023-2827-1	P2023-2145-1	P2023-2259-1	P2023-2328-1	P2023-2004-1
E								M2023-2895-1	P2023-2163-1	P2023-2260-1	P2023-2337-1	P2023-2079-1
F								M2023-2907-3	P2023-2169-1	P2023-2262-1	P2023-2382-1	P2023-2121-1
G								M2023-3055-2	P2023-2170-1	P2023-2263-1	P2023-2405-1	
H								P2023-2133-1	P2023-2248-1	P2023-2264-1	M2023-2717-2	CAL



# AM #25 Multi-Drug Screen. Results



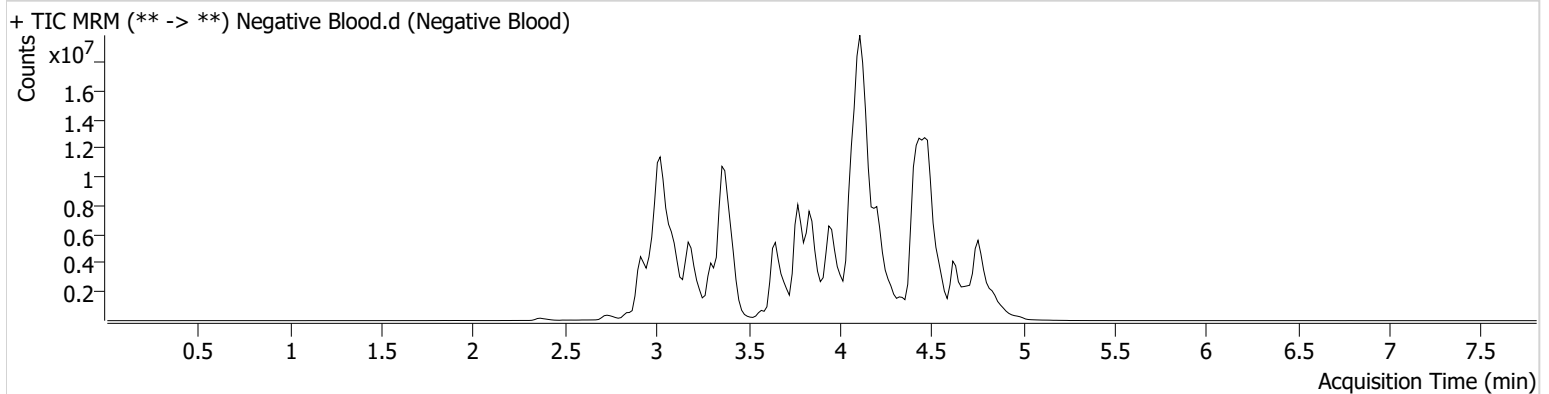
**Batch results** G:\TOX\Pocatello\Falco\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 25.batch.bin  
**Calibration Last Update** 8/21/2023 10:56:55 AM

**Instrument** Falco (069901)  
**Type** Sample  
**Acq. Method** AM 25 MDS.m  
**Sample Position** P2-A12  
**Injection Volume** 5  
**Acq. Date-Time** 8/11/2023 8:01:45 PM  
**Sample Info.**

**Data File** Negative Blood.d  
**Sample** Negative Blood  
**Operator** Celena Shrum  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram





# AM #25 Multi-Drug Screen. Results

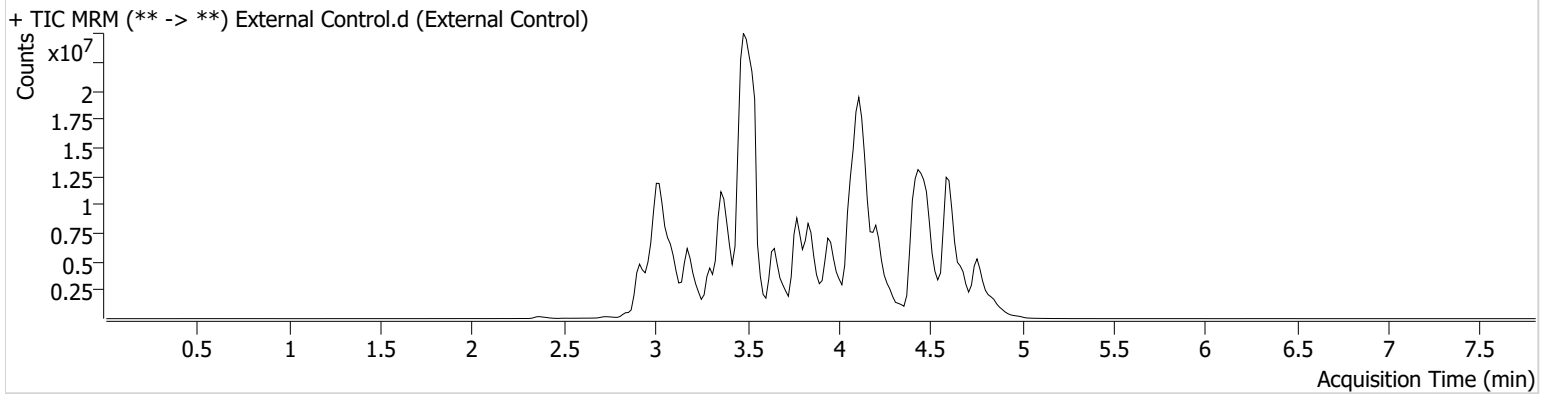
**Batch results** G:\TOX\Pocatello\Falco\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 25.batch.bin  
**Calibration Last Update** 8/21/2023 10:56:55 AM

**Instrument** Falco (069901)  
**Type** Sample  
**Acq. Method** AM 25 MDS.m  
**Sample Position** P2-B12  
**Injection Volume** 5  
**Acq. Date-Time** 8/11/2023 8:10:11 PM  
**Sample Info.**

**Data File** External Control.d  
**Sample** External Control  
**Operator** Celena Shrum  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Alprazolam	4.591	25591212	738.00	91.6	975.03	8891632	163.6202 ng/ml
Tramadol	3.485	145594315	∞	2.7 <b>High</b>	715.32	82802943	62.7887 ng/ml



# 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: 072123)**

*100 µL of 1mg/mL stock of each drug was added to 9800 µL of LC MeOH.*

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	220776	N/A
Tramadol	Cerilliant	FE10051901	12/31/2024
Alprazolam	Cerilliant	FE06102008	06/30/2025
Prepared:	07/21/2023		
Expires:	07/21/2024		
Prepared By:	Tamara Salazar		

**Blood External Control Solution (Lot: WS072123)**

*100 µL of methanol external control solution was added to 9900 µL of blood.*

*Approximately 100 ng/mL of each compound.*

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Blood	Lampire	23A52594
Methanol External Control Solution		072123
Prepared:	07/21/2023	
Expires:	07/21/2024	
Prepared by:	Tamara Salazar	



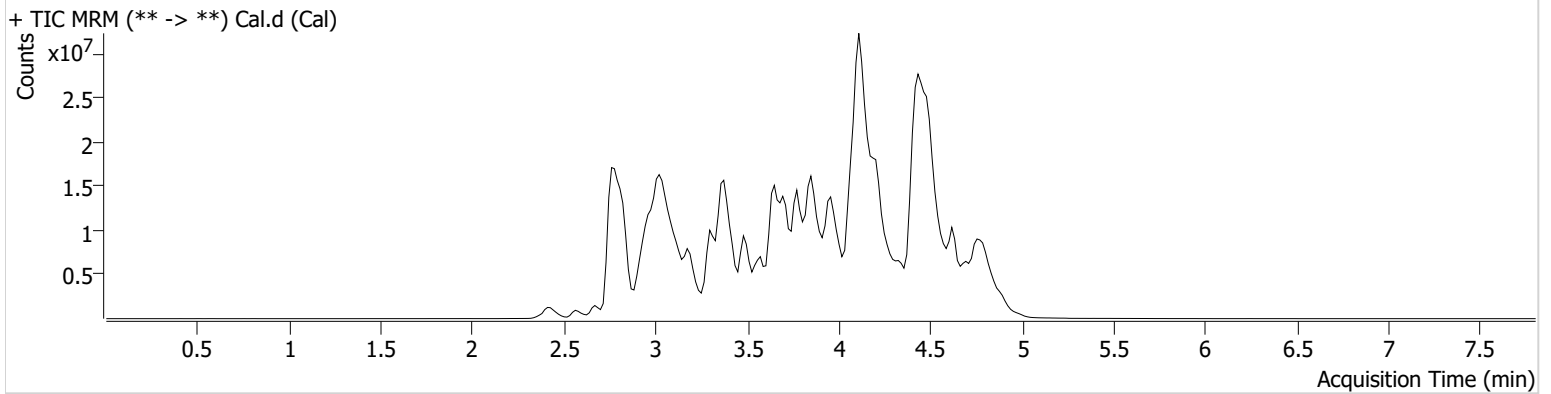
# AM #25 Multi-Drug Screen. Results

**Batch results** G:\TOX\Pocatello\Falco\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 25.batch.bin  
**Calibration Last Update** 8/21/2023 10:56:55 AM

**Instrument** Falco (069901) **Data File** Cal.d  
**Type** Cal **Sample** Cal  
**Acq. Method** AM 25 MDS.m **Operator** Celena Shrum  
**Sample Position** P2-H12 **Comment**  
**Injection Volume** 5  
**Acq. Date-Time** 8/11/2023 7:53:10 PM  
**Sample Info.**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
10-OH-Carbamazepine	3.779	5217359	461.13	116.8	447.95	35115430	10.0000 ng/ml
6-MAM	3.004	81404	21698.76	81.8	1923.39	1241207	10.0000 ng/ml
7-aminoclonazepam	3.591	854171	292.48	92.4	290.61	3314567	10.0000 ng/ml
7-aminoflunitrazepam	3.791	1602374	186.17	17.8	126.40	3314567	10.0000 ng/ml
9-Hydroxyrisperidone	3.968	10728085	480.15	2.8	176984.99	33337028	10.0000 ng/ml
Acetyl Fentanyl	4.004	481992	359.81	72.3	69152.66	48699875	10.0000 ng/ml
Acetyl Norfentanyl	2.951	638763	4011.00	41.2	144.56	48699875	10.0000 ng/ml
a-hydroxyalprazolam	4.496	328574	139.26	46.2	99.83	3314567	10.0000 ng/ml
alpha-hydroxymidazolam	4.571	2735598	246.46	56.6	1446.50	3314567	10.0000 ng/ml
Alpha-PHP	3.918	6052385	13633.97	31.2	842.22	48699875	10.0000 ng/ml
alpha-PVP	3.642	8605374	9204.07	46.8	1352.19	19208461	10.0000 ng/ml
Alprazolam	4.591	3034975	180.45	93.3	498.11	17253710	10.0000 ng/ml
Amitriptyline	4.487	2148360	66.71	62.7	77.97	5941506	10.0000 ng/ml
Amphetamine	2.955	4880580	1902.83	243.0	1227.57	19208461	10.0000 ng/ml
Benzoyllecgonine	3.406	431677	1977.43	20.7	101.81	510884	10.0000 ng/ml
Brompheniramine	4.097	92874	41.08	840.3	160.00	81793999	10.0000 ng/ml
Buprenorphine	4.920	1902036	53.08	10.9	62593.10	4479320	10.0000 ng/ml
Bupropion	3.873	7175545	1206.85	63.7	1869.11	26636134	10.0000 ng/ml
Carbamazepine	4.228	13626639	712.19	91.1	656.76	998665	10.0000 ng/ml
Carisoprodol	4.211	1265965	565987.96	56.4	91.93	5571179	10.0000 ng/ml
Chlordiazepoxide	4.716	1913647	281.82	62.3	363.88	17253710	10.0000 ng/ml
Chlorpheniramine	4.008	7890812	3670.62	0.3	7.50	14795901	10.0000 ng/ml
Chlorpromazine	4.697	1251601	520127.43	134.9	12977.56	4728361	10.0000 ng/ml
Citalopram	4.111	4293510	1403.85	34.2	1001756.17	81793999	10.0000 ng/ml
Clomipramine	4.698	1707604	2981.43	82.6	2126.43	81793999	10.0000 ng/ml
Clonazepam	4.420	2582634	1064.85	26.3	186807.31	998665	10.0000 ng/ml
Clonazolam	4.356	1676995	184233.47	23.3	155712.97	17253710	10.0000 ng/ml
Clozapine	4.464	7403376	965.09	71.3	558.32	26361220	10.0000 ng/ml
Cocaethylene	3.850	8283123	1326.31	40.0	676730.77	26744146	10.0000 ng/ml
Cocaine	3.651	6481097	861344.38	19.1	822.94	26744146	10.0000 ng/ml

# AM #25 Multi-Drug Screen. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Codeine	2.931	576335	611.17	80.7	352.70	12340592	10.0000 ng/ml
Cyclobenzaprine	4.410	3010098	1066.38	7.9	71.92	5941506	10.0000 ng/ml
Desipramine	4.411	4750351	9619.63	41.0	472.58	5941506	10.0000 ng/ml
Dextromethorphan	4.133	3358028	1221.60	73.3	275021.50	14795901	10.0000 ng/ml
Dextroprphan	3.440	3811018	550.19	42.5	228.36	14795901	10.0000 ng/ml
Diazepam	4.824	1835034	289.05	89.3	466.24	17253710	10.0000 ng/ml
Dihydrocodeine	2.824	1956045	261.59	50.2	216.25	12340592	10.0000 ng/ml
Diphenhydramine	4.088	15197121	494762.26	23.4	912.05	81793999	10.0000 ng/ml
DMT	3.045	137121	427.09	439.6	1215.31	14795901	10.0000 ng/ml
Doxepin	4.209	2716409	530.92	37.6	64.60	33329461	10.0000 ng/ml
Doxylamine	3.715	14584108	141115.99	87.4	61533.50	14795901	10.0000 ng/ml
Duloxetine	4.362	66199	2511.47	910.4	4011.80	843005	10.0000 ng/ml
EDDP	4.116	2485914	208.03	58.9	915.06	5419088	10.0000 ng/ml
Estazolam	4.516	10337080	2092.28	45.5	955.03	17253710	10.0000 ng/ml
Etizolam	4.602	361259	86862.84	341.5	217167.35	17253710	10.0000 ng/ml
Fentanyl	4.218	325063	62.14	67.2	332.94	23781004	10.0000 ng/ml
Flualprazolam	4.465	648445	93182.85	200.0	4996.45	17253710	10.0000 ng/ml
Flunitrazepam	4.544	2716259	497.89	35.2	208651.44	17253710	10.0000 ng/ml
Fluorofentanyl	4.263	787387	14176.71	89.4	569.69	23781004	10.0000 ng/ml
Fluoxetine	4.360	2007149	1094.74	6.3	101.95	1846396	10.0000 ng/ml
Flurazepam	4.308	3814573	33479.07	28.9	303149.79	17253710	10.0000 ng/ml
Hydrocodone	3.129	2393268	2313.06	32.9	291.88	12340592	10.0000 ng/ml
Hydromorphone	2.567	1994517	872.39	79.5	10858.25	752017	10.0000 ng/ml
Hydroxyzine	4.600	2508937	303.96	82.0	619.15	26361220	10.0000 ng/ml
Imipramine	4.455	5698861	320.69	60.4	66.05	5941506	10.0000 ng/ml
Ketamine	3.719	5681931	5101.12	42.6	180.49	15104651	10.0000 ng/ml
Lamotrigine	3.655	505940	1817.00	69.7	6224.82	81793999	10.0000 ng/ml
Levamisole	3.089	5088214	447.77	75.5	501.88	26744146	10.0000 ng/ml
Levetiracetam	2.679	2577298	319.20	150.6	1077.46	81793999	10.0000 ng/ml
Lorazepam	4.420	753460	9701.00	243.9	∞	17253710	10.0000 ng/ml
Maprotiline	4.487	1300924	82.77	68.1	174.56	5941506	10.0000 ng/ml
MDA	3.060	2526726	206.26	43.6	125.15	49681362	10.0000 ng/ml
MDEA	3.289	5405499	2029.73	50.1	368.71	49681362	10.0000 ng/ml
MDMA	3.136	6234290	4660.45	50.2	599.39	49681362	10.0000 ng/ml
Meperidine	3.687	4629827	2328.62	44.1	1096.74	14795901	10.0000 ng/ml
Meprobamate	3.689	746929	1600.01	19.4	121.21	5571179	10.0000 ng/ml
Methadone	4.437	10226180	956965.15	37.9	515.23	5419088	10.0000 ng/ml
Methamphetamine	3.062	6858961	1410.67	45.1	1624.47	49681362	10.0000 ng/ml
Methocarbamol	3.595	1160480	1019.78	79.1	268.40	5419088	10.0000 ng/ml
Methylphenidate	3.580	16905532	690.90	23.8	240.80	21667796	10.0000 ng/ml
Metoprolol	3.485	897428	193.82	122.9	161.22	14795901	10.0000 ng/ml
Midazolam	4.742	729059	526.74	87.9	118685.02	17253710	10.0000 ng/ml
Mirtazapine	4.180	5636012	1670217.42	231.3	18831.13	14795901	10.0000 ng/ml
Mitragynine	4.307	655749	183564.14	194.3	329811.92	14795901	10.0000 ng/ml
Morphine	2.400	488363	660.80	85.0	984.39	752017	10.0000 ng/ml
Norbuprenorphine	3.876	75729	53379.22	137.1	9300.91	4479320	10.0000 ng/ml
Nordiazepam	4.688	1083202	519.50	70.8	150.72	17253710	10.0000 ng/ml
Norfentanyl	3.381	10337386	5563.18	39.3	1034.97	48699875	10.0000 ng/ml
Norhydrocodone	2.993	202012	35.69	40.3	63.58	752017	10.0000 ng/ml
Norketamine	3.827	934290	180.47	538.0	1699.58	15104651	10.0000 ng/ml
Normeperidine	3.658	10692212	624.54	53.4	760.42	81793999	10.0000 ng/ml
Noroxycodone	2.931	2304306	422.17	28.7	151.36	15104651	10.0000 ng/ml
Nortriptyline	4.457	1326306	444.60	64.6	178.60	5941506	10.0000 ng/ml
O-desmethyl-tramadol	2.965	10988268	15923.34	5.5	∞	81793999	10.0000 ng/ml
O-desmethylvenlafaxine	3.316	2679147	666.05	606.7	7735.83	15796815	10.0000 ng/ml
Olanzapine	3.958	845960	158750.87	59.2	1117.24	998665	10.0000 ng/ml
Oxazepam	4.500	3385310	669.76	78.1	426.77	17884893	10.0000 ng/ml
Oxycodone	3.005	4518845	459.26	26.4	1042.66	15104651	10.0000 ng/ml
Oxymorphone	2.427	3612667	329.13	15.7	608324.42	752017	10.0000 ng/ml



# AM #25 Multi-Drug Screen. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Paroxetine	4.372	269462	37.74	28.4	11003.72	1846396	10.0000 ng/ml
Phenazepam	4.617	1462756	492673.50	70.7	1339.06	17253710	10.0000 ng/ml
Phencyclidine	3.965	8611056	8094.79	56.7	901.56	14795901	10.0000 ng/ml
Phentermine	3.215	1889732	110.64	7.8	39.32	21667796	10.0000 ng/ml
Phenytoin	4.119	1914747	708.05	76.8	428.89	998665	10.0000 ng/ml
Primidone	3.505	1944417	675171.99	104.0	88.64	998665	10.0000 ng/ml
Promethazine	4.424	7450401	4848.83	34.9	246.18	81793999	10.0000 ng/ml
Pseudoephedrine	2.786	83446339	18396.27	26.1	24835.70	49681362	10.0000 ng/ml
Quetiapine	4.631	6248581	358.72	55.5	834977.99	60465936	10.0000 ng/ml
Risperidone	4.169	8247087	263988.82	10.5	428.96	33337028	10.0000 ng/ml
Sertraline	4.607	435122	3584.24	98.6	352.11	1846396	10.0000 ng/ml
Sufentanil	4.615	338960	74560.49	69.1	280.93	48699875	10.0000 ng/ml
Tapentadol	3.505	5866708	1844.40	43.4	1309.93	15104651	10.0000 ng/ml
Temazepam	4.638	3152678	306.50	40.7	73.70	17253710	10.0000 ng/ml
Topiramate	3.864	45856	18379.95	15.0	3089.25	134939	10.0000 ng/ml
Tramadol	3.485	22905442	∞	1.8	138.37	81793999	10.0000 ng/ml
Trazodone	4.784	10137138	2343863.99	64.9	1197499.67	33329461	10.0000 ng/ml
Venlafaxine	3.854	10463827	698.98	30.7	1852.40	15796815	10.0000 ng/ml
Zaleplon	4.330	5477906	28393.57	77.8	1596.22	60465936	10.0000 ng/ml
Zolpidem	4.422	14575922	3917597.35	29.5	1447.61	60465936	10.0000 ng/ml
Zopiclone	4.338	1667948	256112.87	62.7	212522.65	6870579	10.0000 ng/ml

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

Extraction Date: 08/11/2023  
Plate lot#: 220802  
**Mobile phase A:** 10mM Amm Form  
**Blank Blood Lot:** Lampire 23A52594  
**LCMS-QQQ ID:** 069901

Analyst: Celena Shrum  
Plate Retest Date: 07/23/2023- external control used  
**Mobile phase B:** 0.1% Formic Acid in MeOH  
**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 (if applicable): 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 or 1000µl hydrolyzed urine** into the appropriate wells of analytical (standards) plate. **Pipette ID: #42**
- 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 5. Pipette **500µL 0.1% formic acid in water to blood samples and 500µl of saturated phosphate buffer to urine samples** to the appropriate wells of the analytical plate.
- 6. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 7. Transfer **800µL of blood+acid mixture or urine+acid** to corresponding wells of SLE+ plate.
- 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)** Manifold ID: 067104
- 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. **SPE Dry ID: 067103**
- 16. 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<sup>2</sup> 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:

	1	2	3	4	5	6
a	cal 1ng	QC 2	P2023-2141-1	P2023-2250-2	P2023-2284-1	P2023-2405-1
b	cal 3 ng	Blood NC	P2023-2142-1	P2023-2257-1	P2023-2313-1	
c	cal 5 ng	External Control	P2023-2144-1	P2023-2258-1	P2023-2313-2	
d	cal 10ng	M2023-2827-1	P2023-2145-1	P2023-2259-1	P2023-2328-1	
e	cal 25 ng	M2023-2895-1	P2023-2163-1	P2023-2260-1	P2023-2337-1	
f	cal 50 ng	M2023-2907-3	P2023-2169-1	P2023-2262-1	P2023-2382-1	
g	cal 100 ng	M2023-3055-2	P2023-2170-1	P2023-2263-1	P2023-2405-1*	
h	QC 1	P2023-2133-1	P2023-2248-1*	P2023-2264-1	P2023-2248-1	

\*Moved during SLE portion of the extraction



# AM #26 Cannabinoids Screen Results



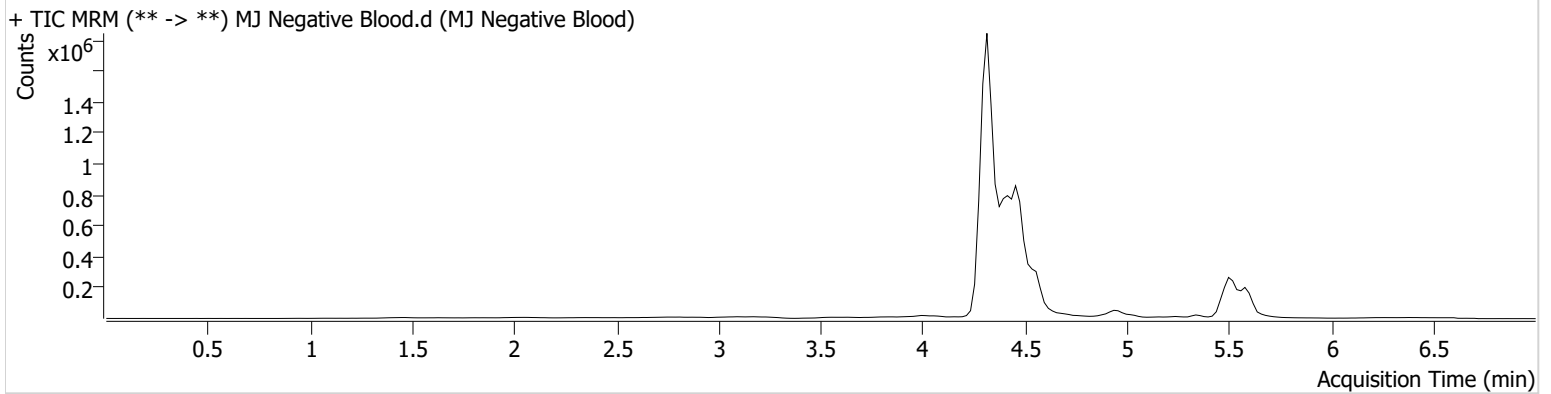
**Batch results** D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/22/2023 8:48:51 AM

**Instrument** Falco (069901)  
**Type** Sample  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-B2  
**Injection Volume** 10  
**Acq. Date-Time** 8/11/2023 3:31:25 PM  
**Sample Info.**

**Data File** MJ Negative Blood.d  
**Sample** MJ Negative Blood  
**Operator** Celena Shrum  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



# AM #26 Cannabinoids Screen Results



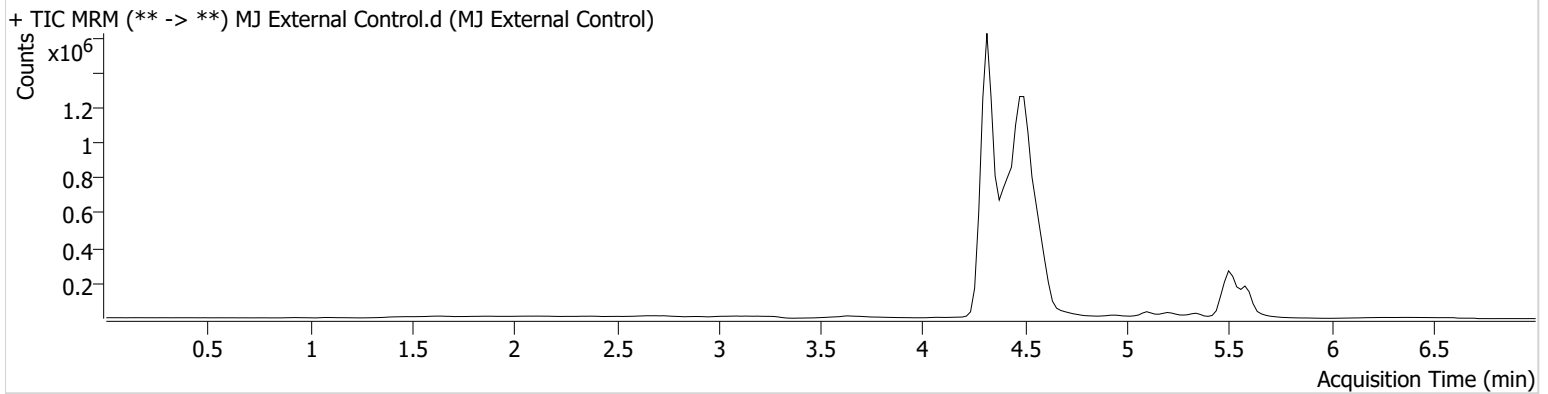
**Batch results** D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/22/2023 8:48:51 AM

**Instrument** Falco (069901)  
**Type** Sample  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-C2  
**Injection Volume** 10  
**Acq. Date-Time** 8/11/2023 3:39:11 PM  
**Sample Info.**

**Data File** MJ External Control.d  
**Sample** MJ External Control  
**Operator** Celena Shrum  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC-COOH	4.496	1528399	∞	146.7	834.33	5287551	15.4373 ng/ml



# Idaho State Police Forensic Services

## AM #26 Screening of THC and Metabolites and AM #27 Confirmation of THC and Metabolites Blood External Control Prep Sheet

### Methanol External Control Solution (Lot: WS101322)

100 µL of 100 µg/mL C-THC in 9900 µL MeOH

*Approximate concentration 1ug/mL.*

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	215245	-
C-THC	Cerilliant	FE08011801	08/31/2023
Prepared:	10/13/2022		
Expires:	08/31/2023		
Prepared By:	Celena Shrum		

### Blood External Control Solution (Lot: 071423)

200 ul of methanol external control solution was added to 9800 ul of blood.

*Approximately 20ng/mL*

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Blood	Lampire	23A52594
Methanol External Control Solution	-	WS101322
Prepared:	07/14/2023	
Expires:	08/31/2023	
Prepared by:	Celena Shrum	



# AM #26 Cannabinoids Screen Results

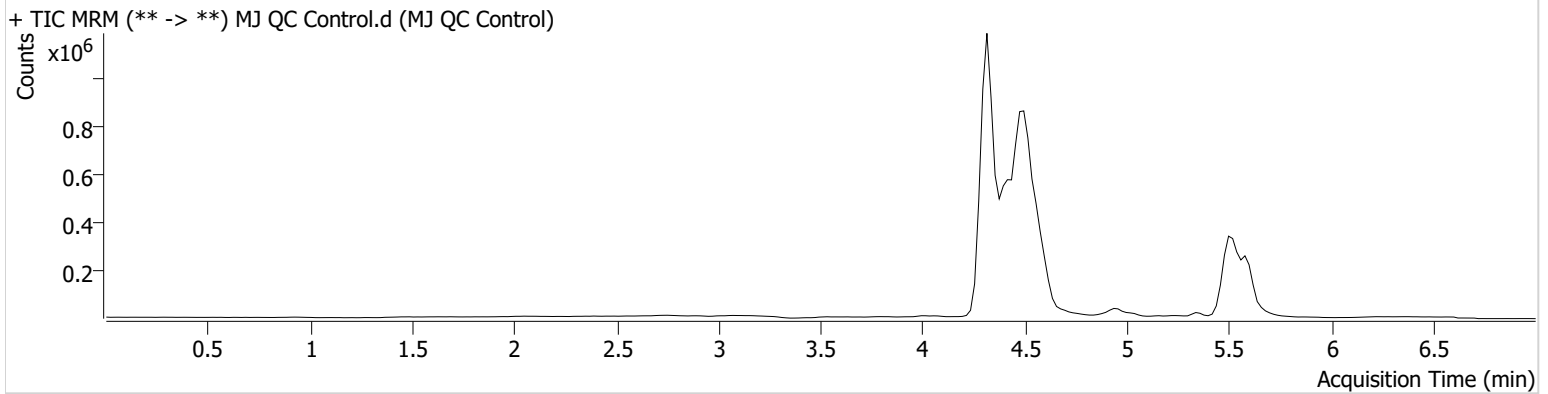
**Batch results** D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/22/2023 8:48:51 AM

**Instrument** Falco (069901)  
**Type** QC  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-H1  
**Injection Volume** 10  
**Acq. Date-Time** 8/11/2023 3:15:16 PM  
**Sample Info.**

**Data File** MJ QC Control.d  
**Sample** MJ QC Control  
**Operator** Celena Shrum  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.469	8297	∞	244.5	∞	159896	4.8219 ng/ml
THC-COOH	4.496	1014199	∞	147.5	608.70	3675209	14.7101 ng/ml
THC-OH	4.322	56727	55.04	729.3	∞	6599986	4.1726 ng/ml



# AM #26 Cannabinoids Screen Results

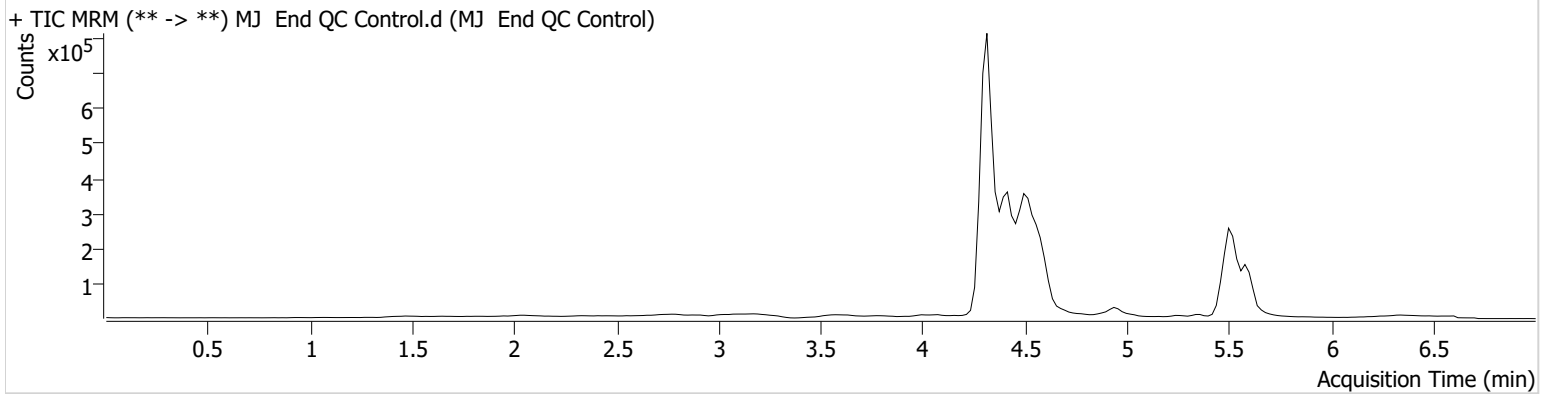
Batch results D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
Calibration Last Update 8/22/2023 8:48:51 AM

Instrument Falco (069901)  
Type QC  
Acq. Method AM 26 THC.m  
Sample Position P1-A2  
Injection Volume 10  
Acq. Date-Time 8/11/2023 7:18:44 PM  
Sample Info.

Data File MJ End QC Control.d  
Sample MJ End QC Control  
Operator Celena Shrum  
Comment

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



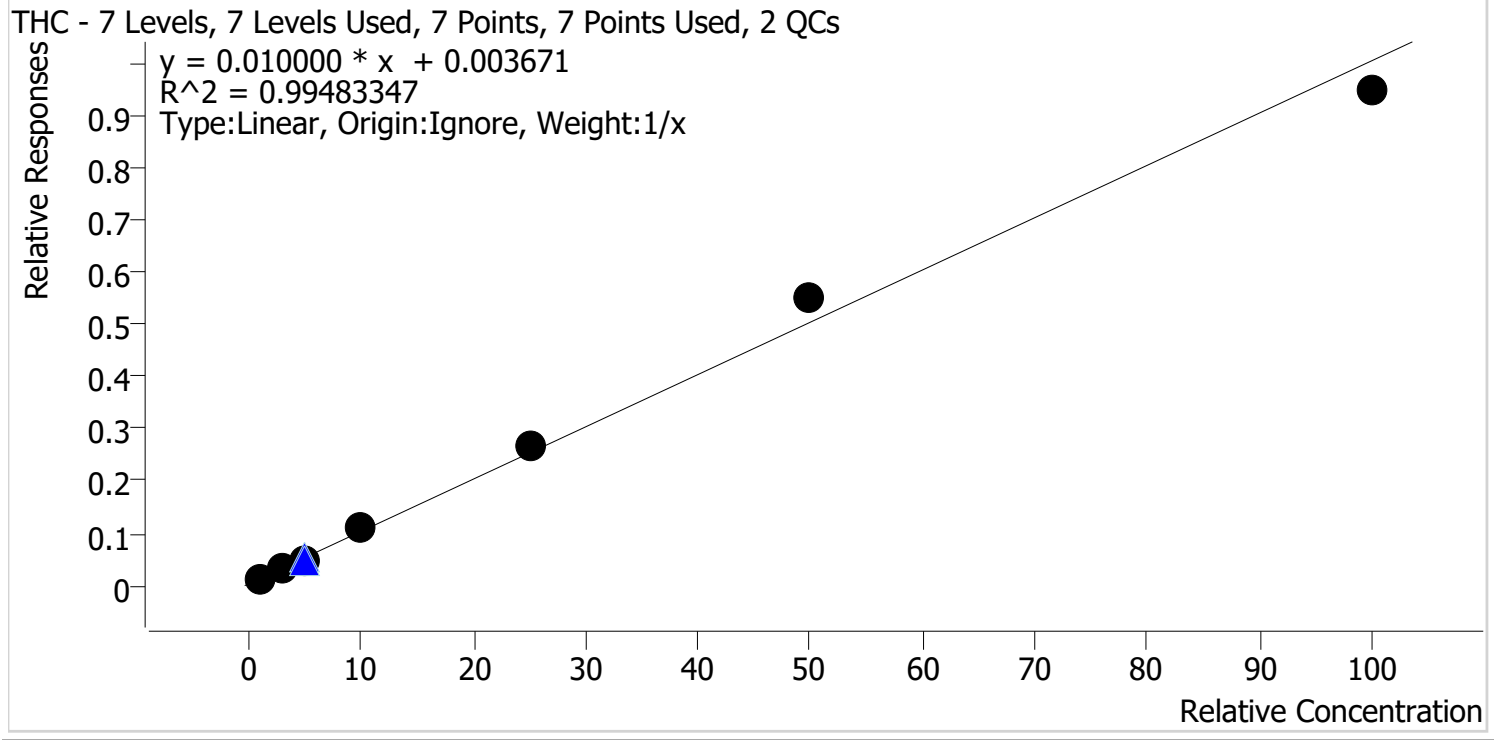
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.469	7940	18.05	179.7 <b>Low</b>	38.39	177061	4.1172 ng/ml
THC-COOH	4.516	451657	∞	151.2	∞	1374485	17.6325 ng/ml
THC-OH	4.322	36296	∞	717.4	∞	4386384	4.0140 ng/ml

CS



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
**Last Cal. Update** 8/22/2023 8:48 AM  
**Analyst Name** ISP\Datastor  
**Analyte** THC **Internal Standard** THC-D3



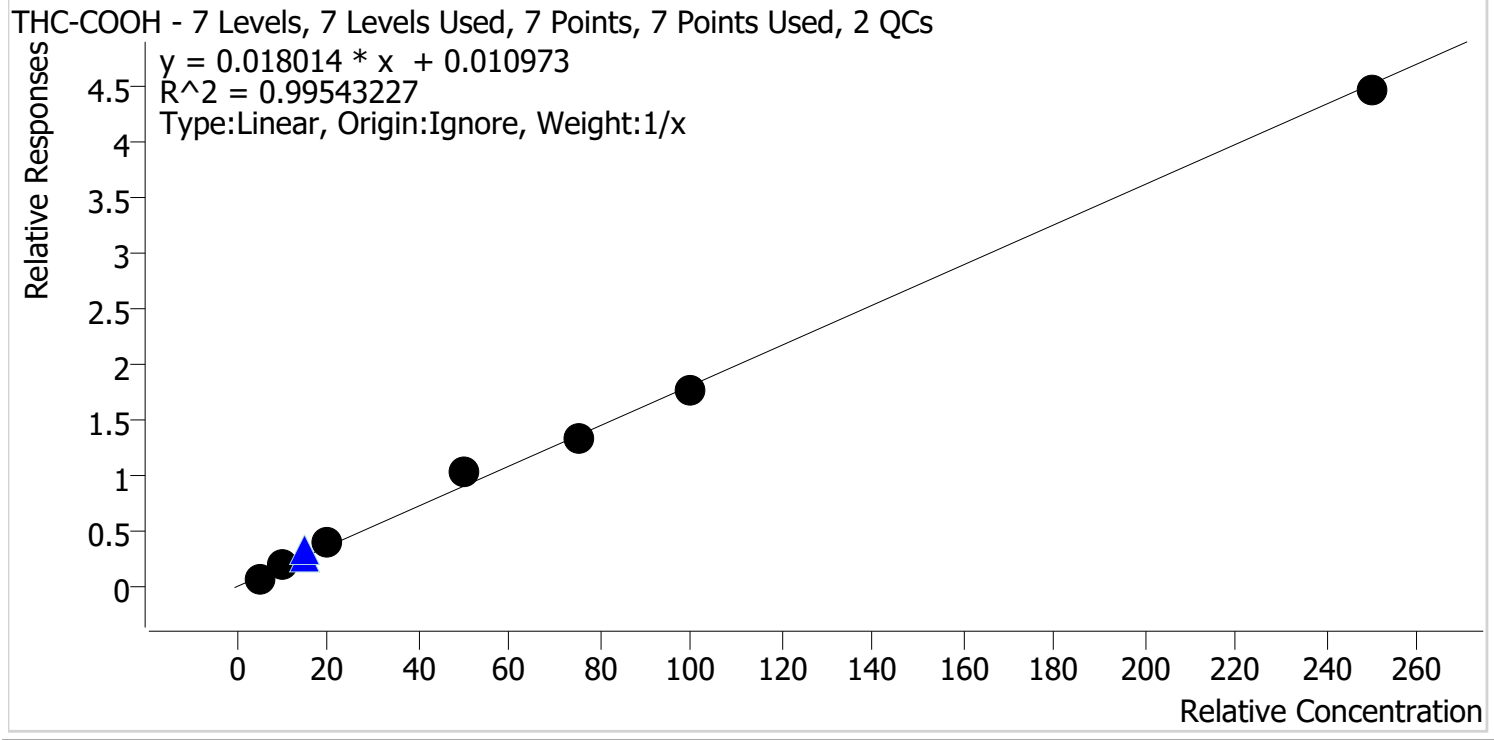
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	1.0	1.0	95.5
MJ Cal 2	2	✓	3.0	2.9	97.9
MJ Cal 3	3	✓	5.0	4.6	92.1
MJ Cal 4	4	✓	10.0	10.7	106.9
MJ Cal 5	5	✓	25.0	26.1	104.3
MJ Cal 6	6	✓	50.0	54.5	108.9
MJ Cal 7	7	✓	100.0	94.3	94.3

CS



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
**Last Cal. Update** 8/22/2023 8:48 AM  
**Analyst Name** ISP\Datastor  
**Analyte** THC-COOH **Internal Standard** THC-COOH-D9



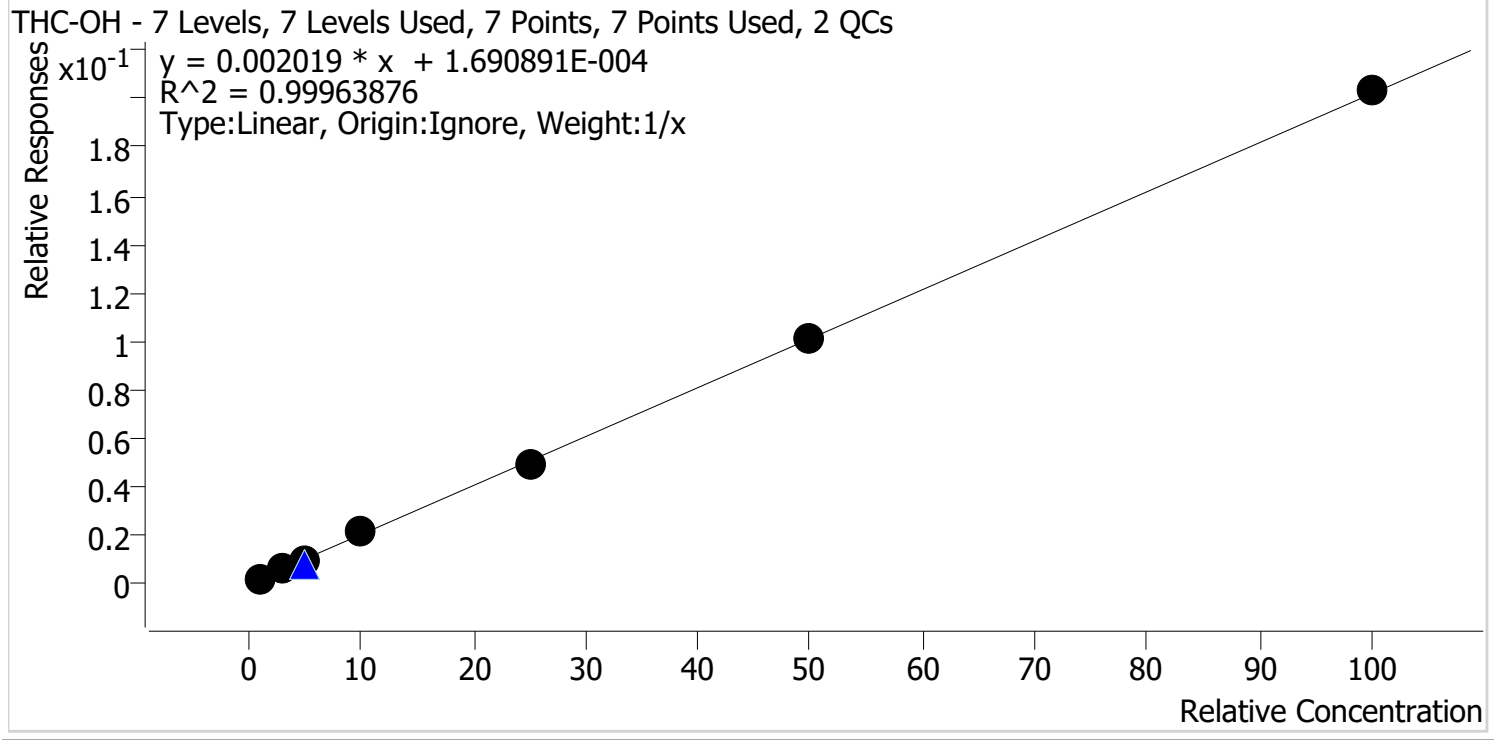
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	5.0	3.8	76.7
MJ Cal 2	2	✓	10.0	10.6	105.7
MJ Cal 3	3	✓	20.0	22.1	110.7
MJ Cal 4	4	✓	50.0	57.2	114.4
MJ Cal 5	5	✓	75.0	73.0	97.3
MJ Cal 6	6	✓	100.0	96.7	96.7
MJ Cal 7	7	✓	250.0	246.7	98.7

CS



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
**Last Cal. Update** 8/22/2023 8:48 AM  
**Analyst Name** ISP\Datastor  
**Analyte** THC-OH **Internal Standard** THC-OH-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	1.0	1.0	97.7
MJ Cal 2	2	✓	3.0	3.1	101.7
MJ Cal 3	3	✓	5.0	5.0	100.0
MJ Cal 4	4	✓	10.0	10.4	104.0
MJ Cal 5	5	✓	25.0	24.0	96.1
MJ Cal 6	6	✓	50.0	49.9	99.9
MJ Cal 7	7	✓	100.0	100.6	100.6





# AM #26 Cannabinoids Screen Results

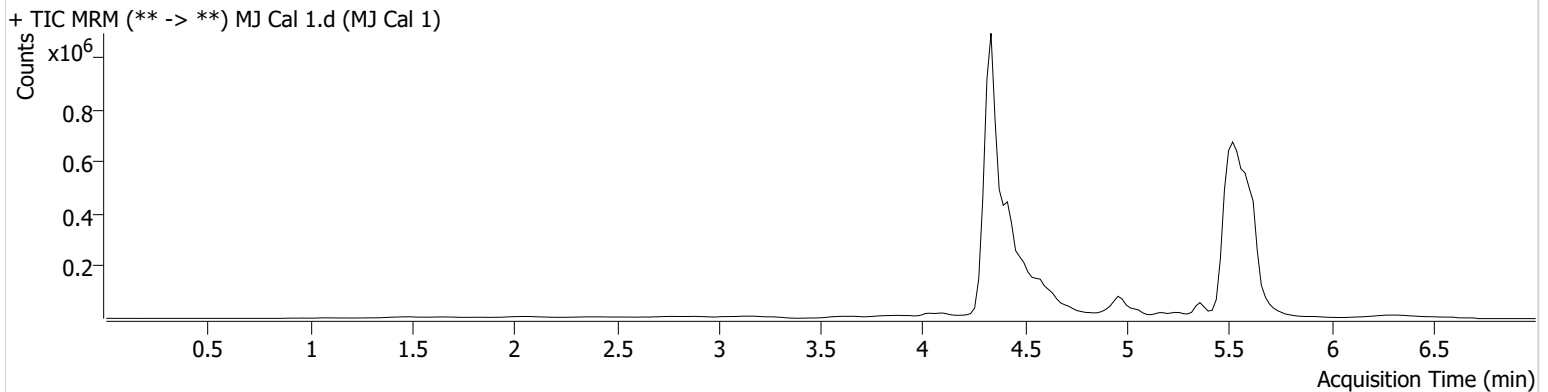
Batch results D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
Calibration Last Update 8/22/2023 8:48:51 AM

Instrument Falco (069901)  
Type Cal  
Acq. Method AM 26 THC.m  
Sample Position P1-A1  
Injection Volume 10  
Acq. Date-Time 8/11/2023 2:22:05 PM  
Sample Info.

Data File MJ Cal 1.d  
Sample MJ Cal 1  
Operator Celena Shrum  
Comment

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.570	5000	∞	690.1 High	∞	378082	0.9554 ng/ml
THC-COOH	4.516	87719	∞	166.2	∞	1095943	3.8341 ng/ml
THC-OH	4.342	12724	∞	860.2	∞	5943003	0.9765 ng/ml



# AM #26 Cannabinoids Screen Results

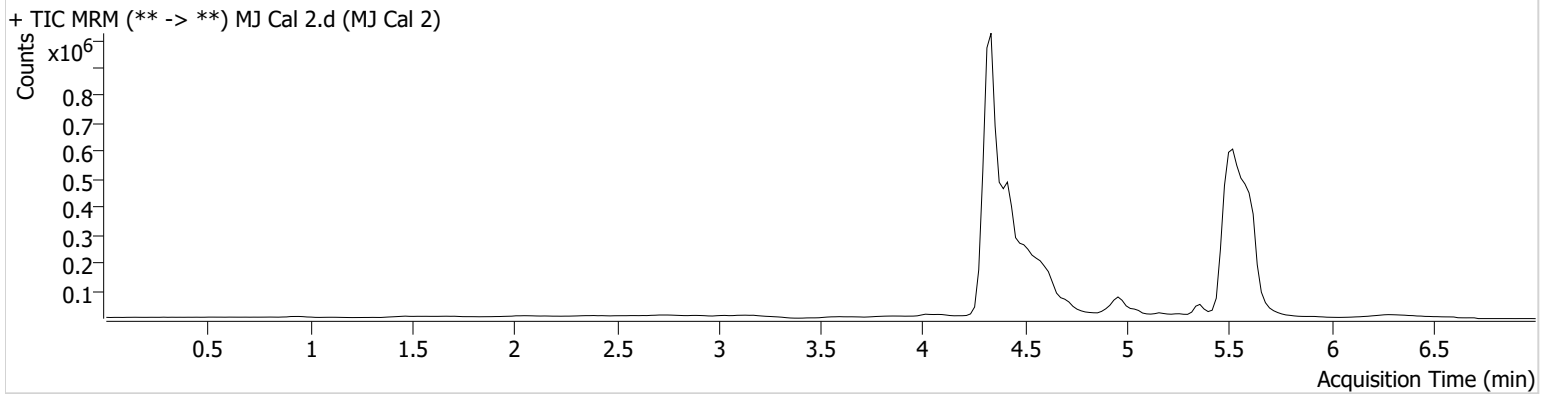
**Batch results** D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/22/2023 8:48:51 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-B1  
**Injection Volume** 10  
**Acq. Date-Time** 8/11/2023 2:29:49 PM  
**Sample Info.**

**Data File** MJ Cal 2.d  
**Sample** MJ Cal 2  
**Operator** Celena Shrum  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.550	14021	25.91	255.6	∞	424325	2.9374 ng/ml
THC-COOH	4.516	233190	∞	188.6	∞	1158271	10.5671 ng/ml
THC-OH	4.342	37074	∞	657.9	128.02	5854612	3.0521 ng/ml



# AM #26 Cannabinoids Screen Results

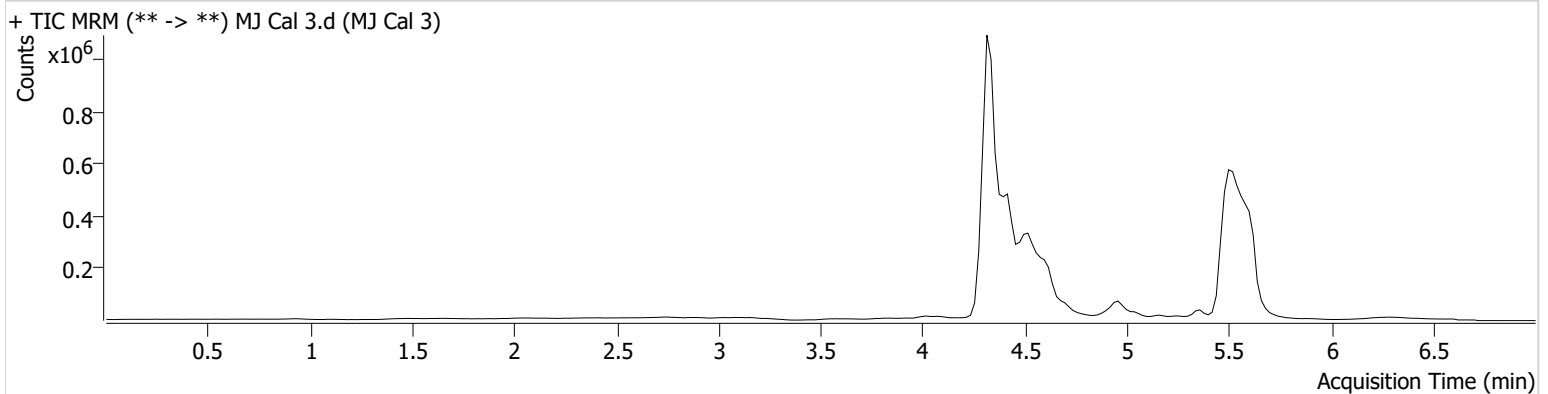
**Batch results** D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/22/2023 8:48:51 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-C1  
**Injection Volume** 10  
**Acq. Date-Time** 8/11/2023 2:37:24 PM  
**Sample Info.**

**Data File** MJ Cal 3.d  
**Sample** MJ Cal 3  
**Operator** Celena Shrum  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.469	24007	∞	165.5 <b>Low</b>	∞	482815	4.6052 ng/ml
THC-COOH	4.516	472685	201.22	172.2	∞	1153641	22.1365 ng/ml
THC-OH	4.342	60850	∞	683.1	∞	5928105	4.9994 ng/ml



# AM #26 Cannabinoids Screen Results

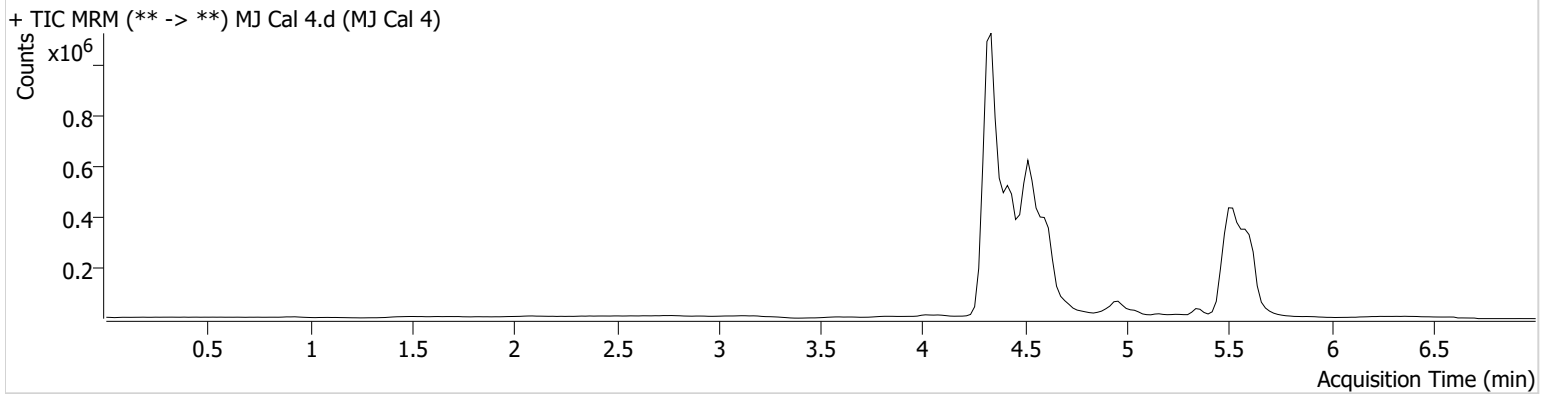
Batch results D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
Calibration Last Update 8/22/2023 8:48:51 AM

Instrument Falco (069901)  
Type Cal  
Acq. Method AM 26 THC.m  
Sample Position P1-D1  
Injection Volume 10  
Acq. Date-Time 8/11/2023 2:44:58 PM  
Sample Info.

Data File MJ Cal 4.d  
Sample MJ Cal 4  
Operator Celena Shrum  
Comment

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.570	29429	∞	104.1 <b>Low</b>	∞	266130	10.6911 ng/ml
THC-COOH	4.516	1224252	∞	157.3	∞	1176047	57.1794 ng/ml
THC-OH	4.342	126754	327.69	658.6	∞	5984894	10.4043 ng/ml



# AM #26 Cannabinoids Screen Results

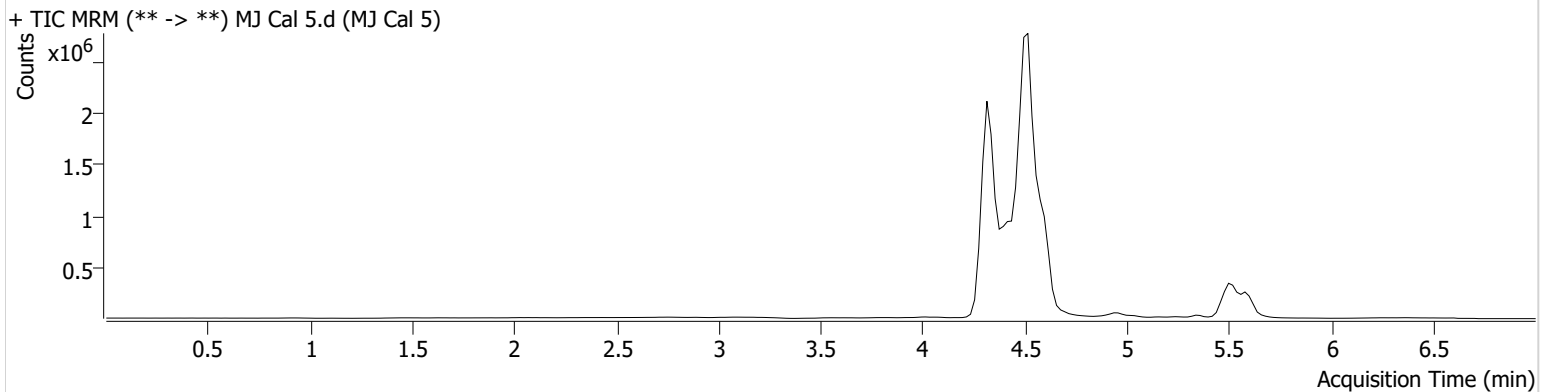
Batch results D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
Calibration Last Update 8/22/2023 8:48:51 AM

Instrument Falco (069901)  
Type Cal  
Acq. Method AM 26 THC.m  
Sample Position P1-E1  
Injection Volume 10  
Acq. Date-Time 8/11/2023 2:52:32 PM  
Sample Info.

Data File MJ Cal 5.d  
Sample MJ Cal 5  
Operator Celena Shrum  
Comment

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.489	68641	∞	49.6 <b>Low</b>	42.71	259504	26.0844 ng/ml
THC-COOH	4.516	5602362	∞	146.6	∞	4227898	72.9510 ng/ml
THC-OH	4.322	427925	∞	731.8	∞	8790723	24.0227 ng/ml

# AM #26 Cannabinoids Screen Results



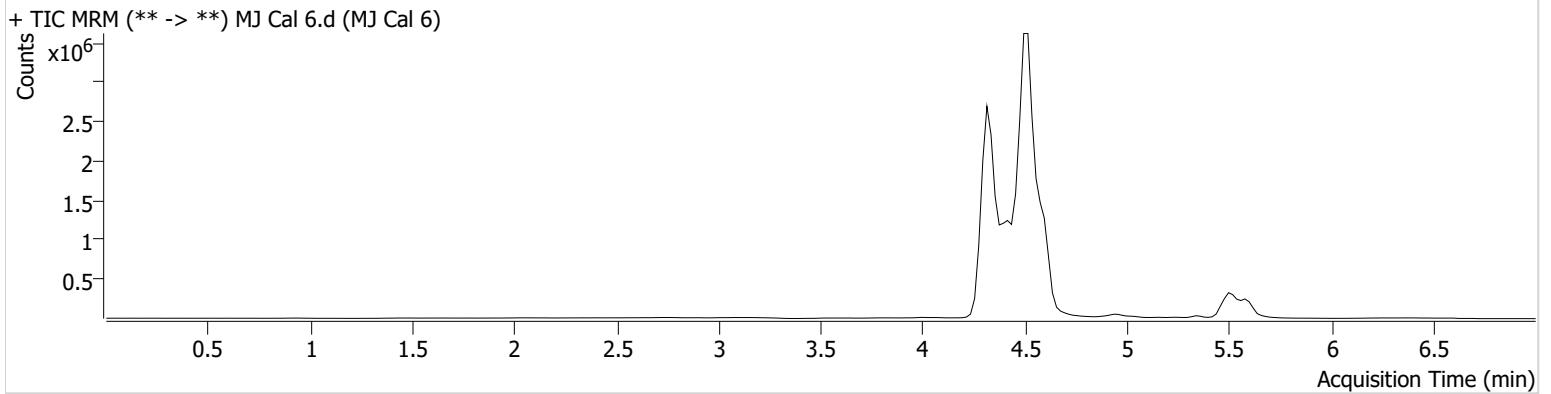
**Batch results** D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 8/22/2023 8:48:51 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-F1  
**Injection Volume** 10  
**Acq. Date-Time** 8/11/2023 3:00:07 PM  
**Sample Info.**

**Data File** MJ Cal 6.d  
**Sample** MJ Cal 6  
**Operator** Celena Shrum  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.489	126495	∞	38.7 <b>Low</b>	∞	230691	54.4677 ng/ml
THC-COOH	4.516	7604739	∞	147.6	∞	4339463	96.6755 ng/ml
THC-OH	4.322	901707	∞	719.9	∞	8926033	49.9423 ng/ml



# AM #26 Cannabinoids Screen Results

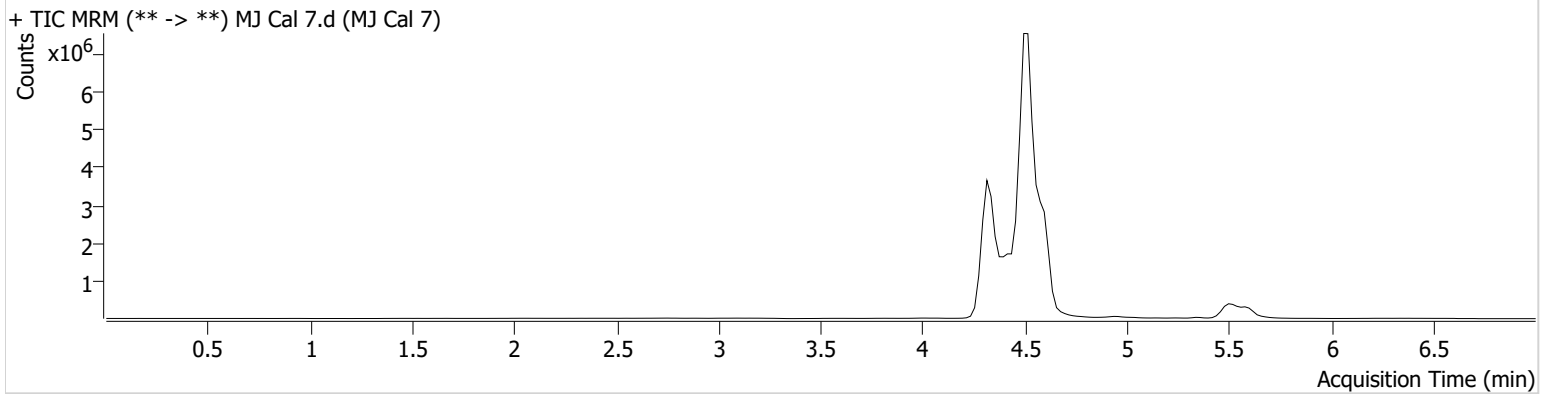
Batch results D:\MassHunter\Data\2023\AM 25 26\081123 AM 25 26 CS\QuantResults\AM 26.batch.bin  
Calibration Last Update 8/22/2023 8:48:51 AM

Instrument Falco (069901)  
Type Cal  
Acq. Method AM 26 THC.m  
Sample Position P1-G1  
Injection Volume 10  
Acq. Date-Time 8/11/2023 3:07:41 PM  
Sample Info.

Data File MJ Cal 7.d  
Sample MJ Cal 7  
Operator Celena Shrum  
Comment

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.469	133205	∞	43.6 <b>Low</b>	∞	140774	94.2587 ng/ml
THC-COOH	4.496	17407133	∞	147.7	∞	3908041	246.6565 ng/ml
THC-OH	4.322	1691331	5094.17	723.5	∞	8318544	100.6026 ng/ml