REVIEWED
By Tamara Salazar at 9:48 am, Aug 11, 2022

8/1/2022

Worklist: 6046

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2022-2715	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-2716	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-2728	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-2756	3	BLOOD	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-2800	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-2873	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-2918	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1998	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1999	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2000	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2009	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2024	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2048	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2053	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2080	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2081	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2082	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2083	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2084	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2085	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2086	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

Worklist: 6046

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
P2022-2098	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2120	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2121	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2124	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2154	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2162	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2185	1	CSGEN*	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2188	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

*Listed as CS General but it is a blood collection kit.- This was changed in LIMS by CS.

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

Extraction Date: 08/01/2022
Plate lot#: 211015
Mobile phase A: 10mM Amm Form
Instant Buffer I
Blank Blood Lot: Lampire 22B52015-1
LCMS-QQQ ID: 069901

Analyst: Celena Shrum
Plate Retest Date: 04/15/2022
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: 42**
☐ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. (SKIPPED PER DEVIATION)
☒ 4. Pipette **250µL 0.5 M ammonium hydroxide** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **200-450µL of blood+base and** mixture to corresponding wells of SLE+ plate.
Amount transferred: 300µl
☒ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).
(Load at 85-100 PSI- Selector to the right). *Manifold ID: 067104*
☒ 8. Wait 5 minutes.
☒ 9. Add **900uL ethyl acetate.**
☒ 10. Wait 5 minutes.
☒ 11. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 12. Add **900uL ethyl acetate.**
☒ 13. Wait 5 minutes.
☒ 14. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 15. Remove plate containing eluate.
☒ 16. Add 50µl of 1% HCl in MeOH to all wells in the run and place ACT cover on top of plate prior to drying.
☒ 17. Place on SPE Dry and evaporate to dryness at approx. 35°C.
☒ 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: Per the method, an external control was included in the run since it was after the plate re-test date. The run included 3 samples from a previous batch (P2022-1972-1, P2022-1973-1, and P2022-1986-1). The negative control had to be reinjected as an incorrect position was specified for the first injection.

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 Date: 2/10/2022
Title: Laboratory Manager

Quality Review

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

	1	2	3	4	5	6	7	8	9	10	11	12
A	CAL	M2022-2800-3	P2022-2048-1	P2022-2086-1	P2022-2188-1							
B	CAL	M2022-2873-2	P2022-2053-3	P2022-2098-1	P2022-1972-1							
C	Blood NC	M2022-2918-2	P2022-2080-1	P2022-2120-1	P2022-1973-1							
D	External Ctrl.	P2022-1998-1	P2022-2081-1	P2022-2121-1	P2022-1986-1							
E	M2022-2715-2	P2022-1999-1	P2022-2082-1	P2022-2124-1								
F	M2022-2716-3	P2022-2000-1	P2022-2083-1	P2022-2154-1								
G	M2022-2728-3	P2022-2009-1	P2022-2084-1	P2022-2162-1								
H	M2022-2756-3	P2022-2024-1	P2022-2085-1	P2022-2185-1								

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 µL of 1mg/mL stock was added to each drug to 9600 µL 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: WS042222)

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

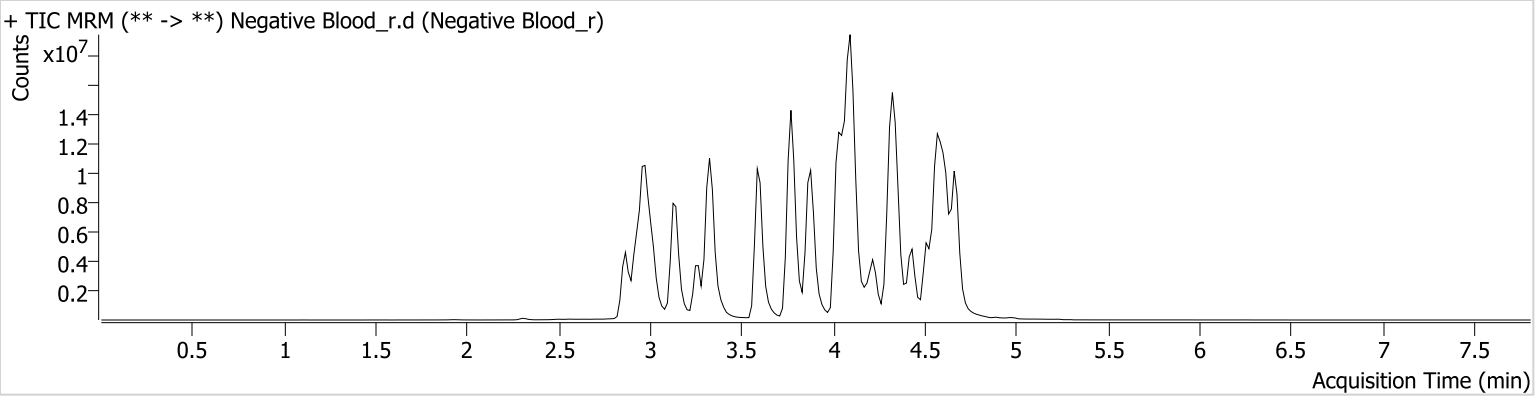
Component	*Source*	*Source Lot Number*
Negative Blood	Lampire	22B52016-2
Methanol External Control Solution		042222
Prepared:	04/22/2022	
Expires:	04/22/2023	
Prepared by:	Celena Shrum	

AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update	8/10/2022 10:18:09 AM

Instrument	Falco (069901)	**Data File**	Negative Blood_r.d
Type	Sample	**Sample**	Negative Blood_r
Acq. Method	AM 25 MDS.m	**Operator**	Celena Shrum
Sample Position	P2-C1	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/1/2022 9:27:01 PM		
Sample Info.			

Sample Chromatogram

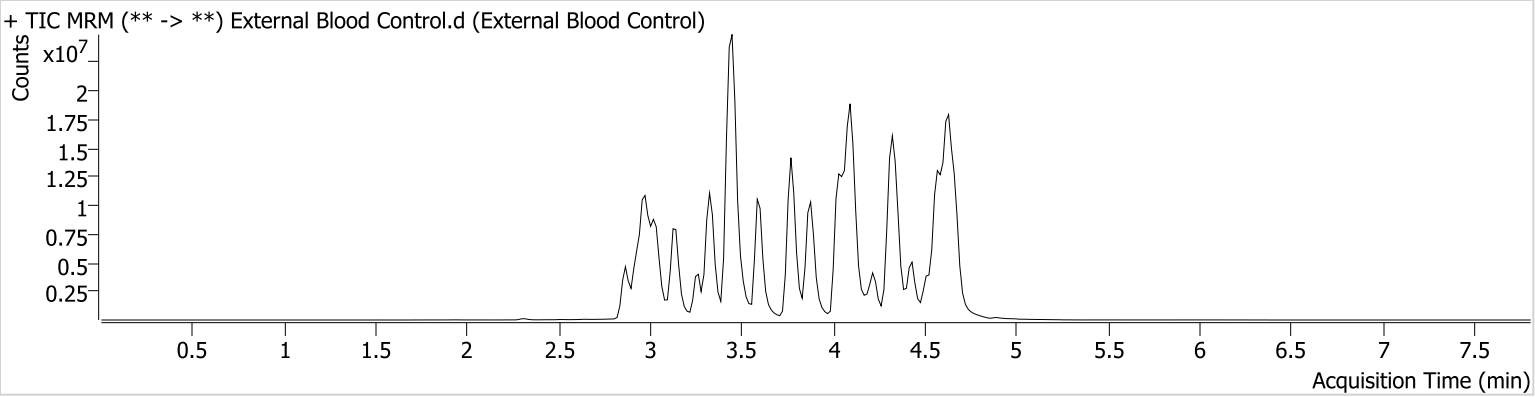


AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update	8/10/2022 10:18:09 AM

Instrument	Falco (069901)	**Data File**	External Blood Control.d
Type	Sample	**Sample**	External Blood Control
Acq. Method	AM 25 MDS.m	**Operator**	Celena Shrum
Sample Position	P2-D1	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/1/2022 8:10:56 PM		
Sample Info.			

Sample Chromatogram



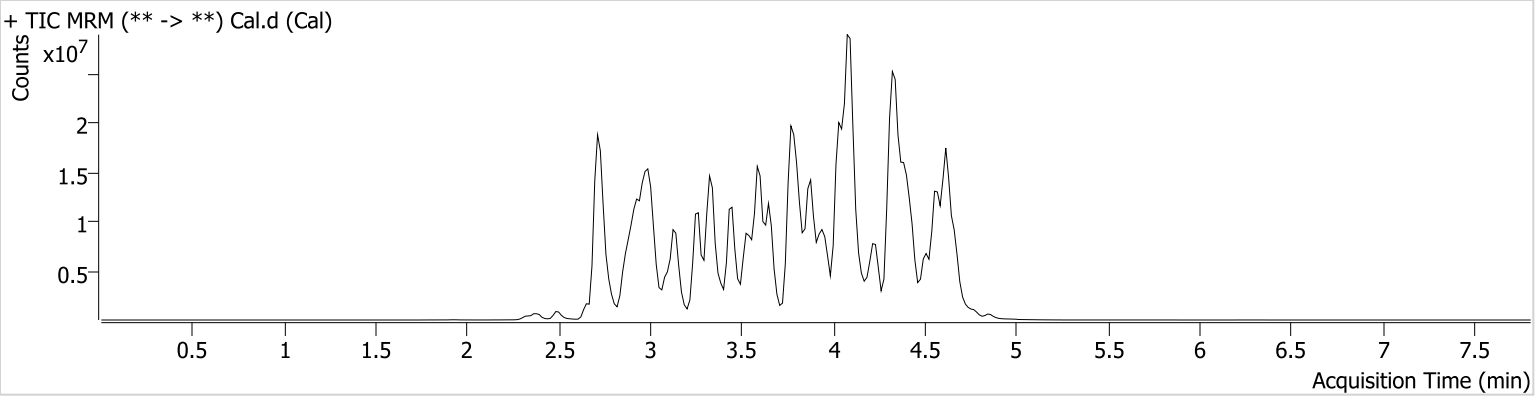
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.636	14529464	237.34	2164.26	22157452	55.5717
Buprenorphine	4.612	8307569	2356857.43	196389.42	4329843	80.7196
Hydrocodone	3.037	11298683	8499378.72	14276.12	11144630	61.2054
Tramadol	3.453	96344587	∞	418.77	49753896	40.9477

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 8/10/2022 10:18:09 AM

Instrument	Falco (069901)	**Data File**	Cal.d
Type	Cal	**Sample**	Cal
Acq. Method	AM 25 MDS.m	**Operator**	Celena Shrum
Sample Position	P2-B1	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/1/2022 7:53:40 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.778	3268904	172.93	304.32	21667835	10.0000
6-MAM	2.941	59003	50491.54	20480.12	1587482	10.0000
7-aminoclonazepam	3.605	1015514	197.94	340.50	4076144	10.0000
7-aminoflunitrazepam	3.805	1885112	209.21	95.49	4076144	10.0000
9-Hydroxyrisperidone	3.874	9249893	11805.60	374558.68	33462496	10.0000
Acetyl Fentanyl	3.879	509350	479.99	212898.94	36783648	10.0000
Acetyl Norfentanyl	2.919	383435	1715.71	151.86	36783648	10.0000
a-hydroxyalprazolam	4.525	89971	29.41	28.85	4076144	10.0000
alpha-hydroxymidazolam	4.600	1429181	630.93	224.23	4076144	10.0000
Alpha-PHP	3.840	4505613	3863.34	3347.61	36783648	10.0000
alpha-PVP	3.564	6354134	1986.92	412.51	13876146	10.0000
Alprazolam	4.636	1403367	121.53	149.62	11893101	10.0000
Amitriptyline	4.439	2998580	219.44	243.44	10912445	10.0000
Amphetamine	2.908	4767720	673.74	643.90	13876146	10.0000
Benzoylecgonine	3.405	277438	251.26	30.34	506443	10.0000
Brompheniramine	4.033	138088	187.99	810.43	47899849	10.0000
Buprenorphine	4.612	877044	275878.58	86348.35	3689762	10.0000
Bupropion	3.794	6155217	810.48	∞	23150180	10.0000
Carbamazepine	4.242	9866275	7569.06	∞	374371	10.0000
Carisoprodol	4.240	1158717	9700.42	96.78	7098722	10.0000
Chlordiazepoxide	4.745	423515	98.23	1366.45	11893101	10.0000
Chlorpheniramine	3.945	8823765	852.62	9266.54	47899849	10.0000
Chlorpromazine	4.618	3480735	1925920.56	565.89	16535023	10.0000
Citalopram	4.063	3878663	5180.66	924.52	47899849	10.0000
Clomipramine	4.634	5084317	12639.58	15428.21	47899849	10.0000
Clonazepam	4.450	302816	157.68	31368.19	11893101	10.0000
Clonazolam	4.385	805567	1854.63	218979.62	11893101	10.0000
Clozapine	4.309	4660223	1072.95	245621.03	18854889	10.0000
Cocaethylene	3.802	5749702	7066.14	1375.06	27767993	10.0000
Cocaine	3.604	4908319	934.08	1346.86	27767993	10.0000
Codeine	2.854	402436	8797.68	954.30	10348480	10.0000
Cyclobenzaprine	4.363	3618127	413.48	179.21	10912445	10.0000
Desipramine	4.379	7905422	1140.91	460.42	10912445	10.0000
Dextromethorphan	4.085	2356607	306.68	549.58	13799421	10.0000

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrorphan	3.392	3076730	1402.47	517.43	13799421	10.0000
Diazepam	4.853	703314	501.85	1200.40	11893101	10.0000
Dihydrocodeine	2.776	1196096	556.30	821.07	10348480	10.0000
Diphenhydramine	4.039	12752911	949.88	752.01	47899849	10.0000
Doxepin	4.161	3335505	479.86	188.08	27195334	10.0000
Doxylamine	3.652	12435451	13314.17	507.98	13799421	10.0000
Duloxetine	4.330	113517	2716.02	10937.86	1711761	10.0000
EDDP	4.099	1617928	429.98	371.86	3720786	10.0000
Estazolam	4.545	2962305	458.18	350.30	11893101	10.0000
Etizolam	4.646	290819	∞	548248.15	11893101	10.0000
Fentanyl	4.109	397078	206.03	1497.01	26105510	10.0000
Flualprazolam	4.509	632046	57488.13	2096.37	11893101	10.0000
Flunitrazepam	4.573	689803	395.70	347.04	11893101	10.0000
Fluoxetine	4.328	3830958	∞	365.91	7605386	10.0000
Flurazepam	4.199	3348648	351.75	1128.47	11893101	10.0000
Hydrocodone	3.037	1714150	986.18	1172.26	10348480	10.0000
Hydromorphone	2.490	1372429	445.93	552.49	306559	10.0000
Hydroxyzine	4.507	3280446	2012.51	2270.84	47899849	10.0000
Imipramine	4.392	8784250	1863.62	1040.01	10912445	10.0000
Ketamine	3.548	4663751	931.82	183.02	13529953	10.0000
Lamotrigine	3.608	273666	257357.02	93933.51	47899849	10.0000
Levamisole	2.996	3079471	9831.66	208.77	27767993	10.0000
Levetiracetam	2.662	1563545	1284.52	830.63	47899849	10.0000
Lorazepam	4.449	154445	135.85	56.99	11893101	10.0000
Maprotiline	4.439	2191655	133.43	440.83	10912445	10.0000
MDA	3.013	2806674	723.11	204.07	32723931	10.0000
MDEA	3.257	5098125	∞	1165.19	32723931	10.0000
MDMA	3.104	6838368	705.75	207.50	32723931	10.0000
Meperidine	3.608	2474772	247.20	325.60	13799421	10.0000
Meprobamate	3.688	930109	550.86	87.97	7098722	10.0000
Methadone	4.404	7509051	923.41	30696.39	3720786	10.0000
Methamphetamine	3.014	7481619	169.90	190.24	32723931	10.0000
Methocarbamol	3.594	452719	399.57	98.15	3720786	10.0000
Methylphenidate	3.533	15234643	133.64	6003.12	25237826	10.0000
Metoprolol	3.453	883478	177.00	811.88	13799421	10.0000
Midazolam	4.771	701970	676.40	1189.08	11893101	10.0000
Mirtazapine	3.976	4283732	1860.29	2701.40	13799421	10.0000
Mitragynine	4.214	592806	308593.51	20438.83	13799421	10.0000
Morphine	2.339	298331	∞	272.30	306559	10.0000
Norbuprenorphine	3.844	118688	71731.18	41405.60	3689762	10.0000
Nordiazepam	4.717	960734	326.20	1801.68	11893101	10.0000
Norfentanyl	3.348	8714228	8714.00	373.12	36783648	10.0000
Norhydrocodone	2.947	107819	215.96	102.54	306559	10.0000
Norketamine	3.657	864389	233.53	3260.08	13529953	10.0000
Normeperidine	3.610	2260835	320.55	265.97	47899849	10.0000
Noroxycodone	2.899	1410007	108.12	164.22	13529953	10.0000
Nortriptyline	4.425	2196274	195908.92	441.99	10912445	10.0000
O-desmethyl-tramadol	2.933	10187891	548.06	149.22	47899849	10.0000
O-desmethylvenlafaxine	3.268	2054626	205.73	9355.84	11032773	10.0000
Olanzapine	3.834	2424523	1256625.83	2275.47	374371	10.0000
Oxazepam	4.530	753021	233.73	338.97	3225649	10.0000
Oxycodone	2.943	2884002	632.05	437.93	13529953	10.0000
Oxymorphone	2.395	1554149	∞	4497.99	306559	10.0000
Paroxetine	4.340	504749	292.24	268.74	7605386	10.0000
Phenazepam	4.661	827996	148454.23	324.73	11893101	10.0000
Phencyclidine	3.932	8088972	719.86	285.07	13799421	10.0000
Phentermine	3.168	1882967	89.63	24.60	25237826	10.0000
Phenytoin	4.133	595508	1014.11	162.89	374371	10.0000
Primidone	3.488	1719571	7435.02	202.77	374371	10.0000
Promethazine	4.346	9801260	19743.65	3002.18	47899849	10.0000

Cal

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Pseudoephedrine	2.723	55299013	10623.97	1712.69	32723931	10.0000
Quetiapine	4.491	4142872	2250264.77	1545.00	39212487	10.0000
Risperidone	4.075	6432412	139582.32	98692.00	33462496	10.0000
Sertraline	4.559	1464580	5799.36	4101.83	7605386	10.0000
Sufentanil	4.460	328493	977.53	339.00	36783648	10.0000
Tapentadol	3.457	6369099	431.50	406.40	13529953	10.0000
Temazepam	4.683	2164482	445.72	109.79	11893101	10.0000
Topiramate	3.847	43324	27684.38	∞	226150	10.0000
Tramadol	3.438	22651917	∞	49.07	47899849	10.0000
Trazodone	4.614	6367331	926.55	726.23	27195334	10.0000
Venlafaxine	3.806	8571187	2771.90	285.75	7605386	10.0000
Zaleplon	4.360	1289594	616987.26	414.21	39212487	10.0000
Zolpidem	4.344	9127047	51464.41	10549.04	39212487	10.0000
Zopiclone	4.183	601628	47344.47	146906.11	3130875	10.0000

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

Extraction Date: 08/01/2022
Plate lot#: 220309
Mobile phase A: 10mM Amm Form
Blank Blood Lot: Lampire 22B52015-1
LCMS-QQQ ID: 069901

Analyst: Celena Shrum
Plate Retest Date: 09/09/2022
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. Using a calibrated pipette, add **1000µl blood (calibrated pipette)** into the appropriate wells of analytical (standards) plate. **Pipette ID: #42**
☒ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 4. Pipette **500µL 0.1% formic acid in water blood sample** of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **800µL of blood+acid** mixture to corresponding wells of SLE+ plate.
☒ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). ***(Load at 85-100 PSI- Selector to the right)*** Manifold ID: 067104
☒ 8. Wait 5 minutes.
☒ 9. Add **2.25mL MTBE. (*Add in 3 increments of 750uL)***
☒ 10. Wait 5 minutes.
☒ 11. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 12. Add **2.25mL Hexane. (*Add in 3 increments of 750uL)***
☒ 13. Wait 5 minutes.
☒ 14. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. *SPE Dry ID: 067103*
☒ 16. Reconstitute in **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 ≥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: M2022-2728-3 was reinjected due to ISTD RT shifts and M2022-2756-3 was reinjected due to low ISTD responses.

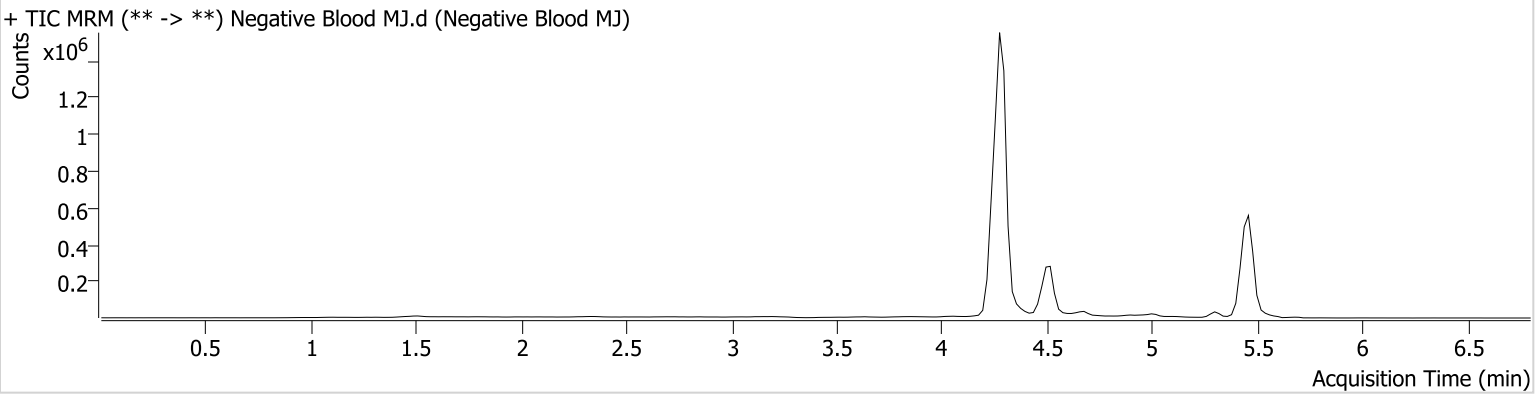
	1	2	3	4	5	6
a	cal 1ng	QC 2	M2022-2918-2	P2022-2080-1	P2022-2120-1	
b	cal 3 ng	Neg. Ctrl.	P2022-1998-1	P2022-2081-1	P2022-2121-1	
c	cal 5 ng	M2022-2715-2	P2022-1999-1	P2022-2082-1	P2022-2124-1	
d	cal 10ng	M2022-2716-3	P2022-2000-1	P2022-2083-1	P2022-2154-1	
e	cal 25 ng	M2022-2728-3	P2022-2009-1	P2022-2084-1	P2022-2162-1	
f	cal 50 ng	M2022-2756-3	P2022-2024-1	P2022-2085-1	P2022-2185-1	
g	cal 100 ng	M2022-2800-3	P2022-2048-1	P2022-2086-1	P2022-2188-1	
h	QC 1	M2022-2873-2	P2022-2053-3	P2022-2098-1		

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update	8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	Negative Blood MJ.d
Type	Sample	**Sample**	Negative Blood MJ
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-B2	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 3:00:21 PM		
Sample Info.			

Sample Chromatogram

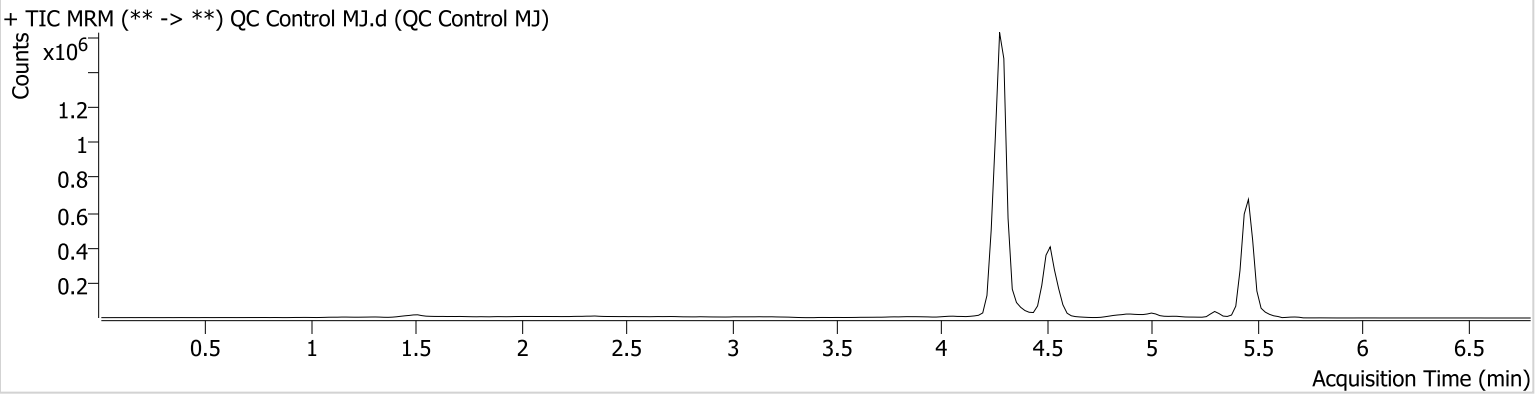


AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update	8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	QC Control MJ.d
Type	QC	**Sample**	QC Control MJ
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-H1	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 2:45:11 PM		
Sample Info.			

Sample Chromatogram



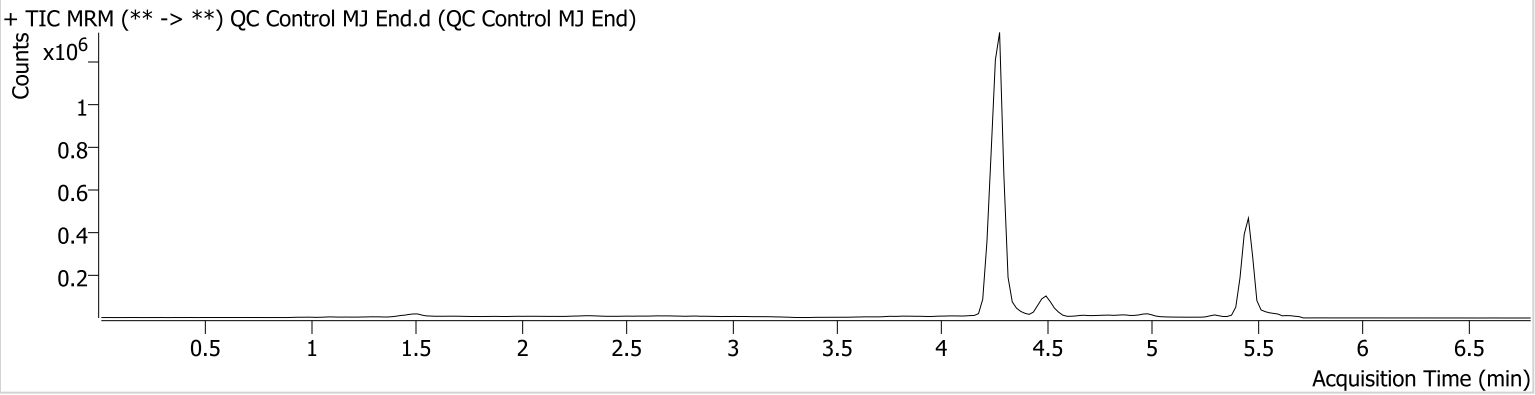
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	11081	328975	4.7069	ng/ml
THC-COOH	4.536	192406	1239800	14.7259	ng/ml
THC-OH	4.302	46833	6072270	4.5286	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	QC Control MJ End.d
Type	QC	**Sample**	QC Control MJ End
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-A2	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 7:02:38 PM		
Sample Info.			

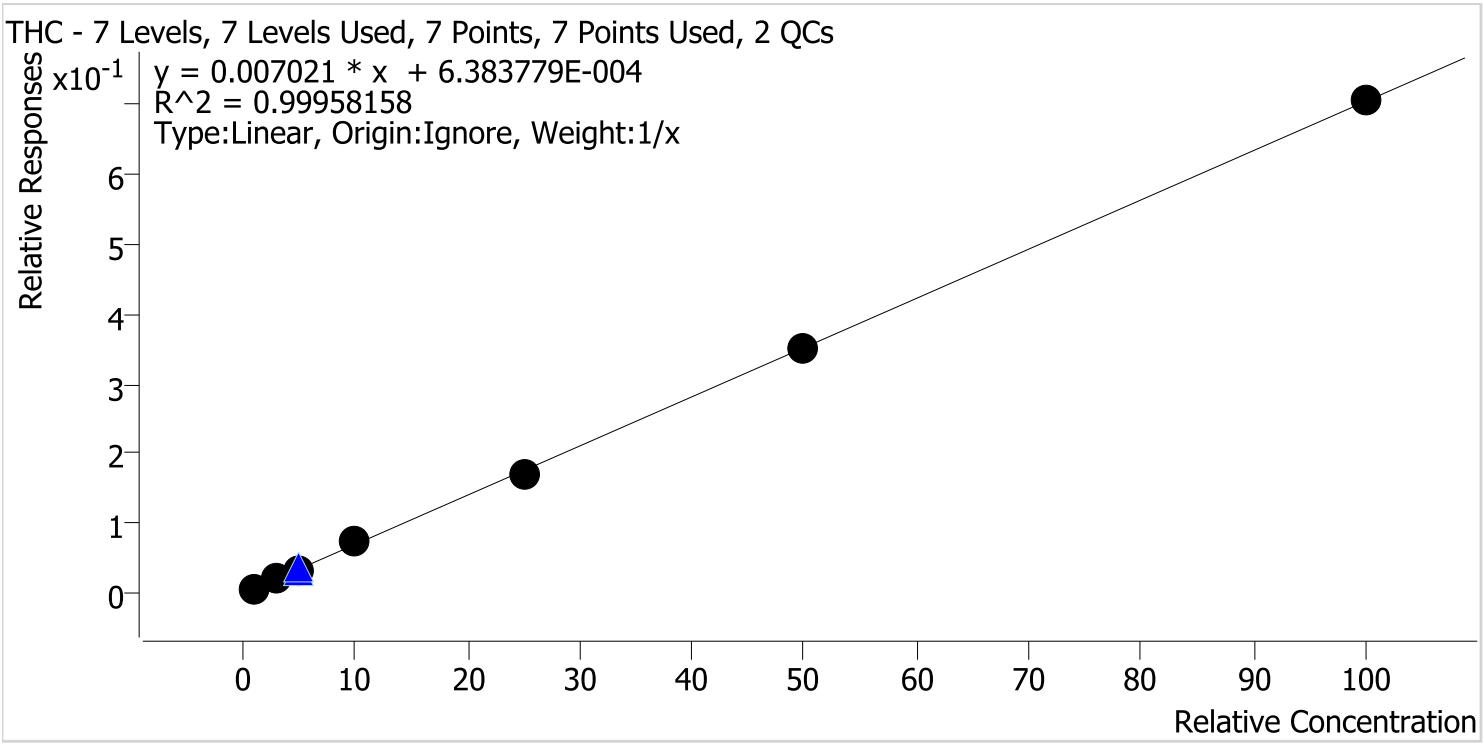
Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.449	9129	227264	5.6309	ng/ml
THC-COOH	4.536	46751	356973	12.4513	ng/ml
THC-OH	4.282	38021	5327801	4.2021	ng/ml

AM #26 Cannabinoids Screen Calibration Curve Report

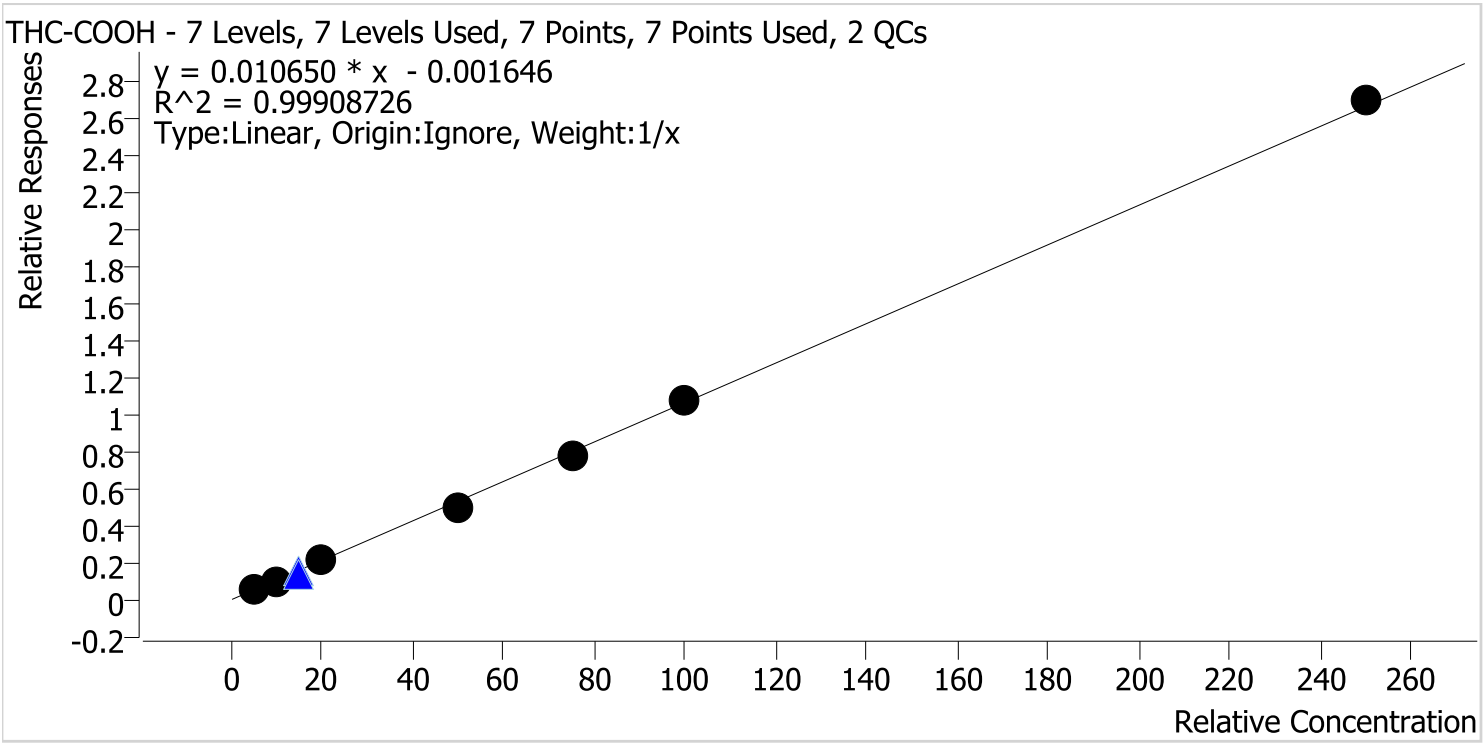
Batch results	D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Last Cal. Update	8/1/2022 8:57 PM
Analyst Name	ISP\datastor
Analyte	THC
Internal Standard	THC-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	1.0	101.3
Cal 2 MJ	2	✔	3.0	3.0	99.1
Cal 3 MJ	3	✔	5.0	4.8	95.0
Cal 4 MJ	4	✔	10.0	10.7	106.6
Cal 5 MJ	5	✔	25.0	24.4	97.7
Cal 6 MJ	6	✔	50.0	50.0	100.1
Cal 7 MJ	7	✔	100.0	100.1	100.1

AM #26 Cannabinoids Screen Calibration Curve Report

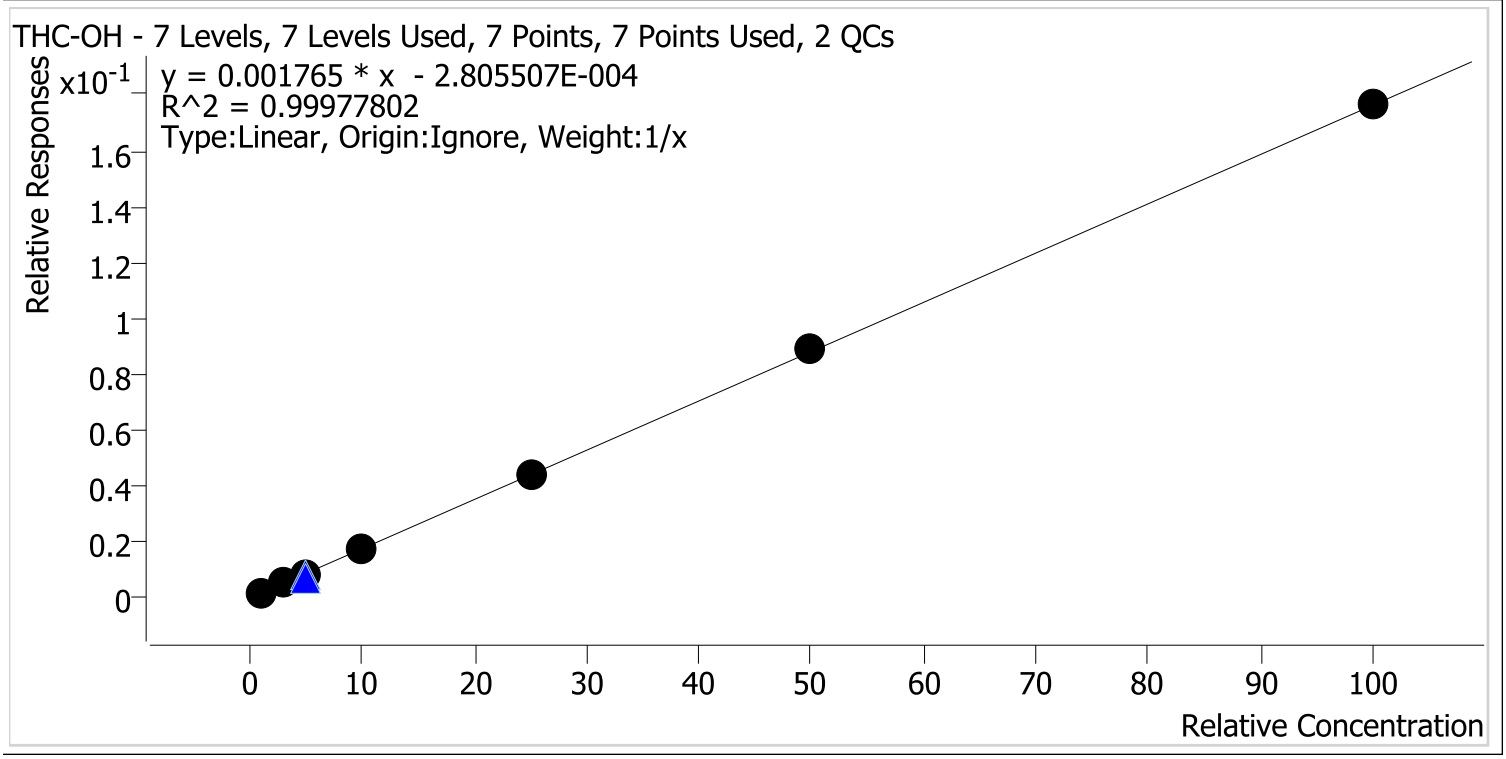
Batch results	D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Last Cal. Update	8/1/2022 8:57 PM
Analyst Name	ISP\datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-D9



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	5.0	5.6	111.7
Cal 2 MJ	2	✔	10.0	9.5	95.1
Cal 3 MJ	3	✔	20.0	19.6	98.0
Cal 4 MJ	4	✔	50.0	47.2	94.4
Cal 5 MJ	5	✔	75.0	73.5	97.9
Cal 6 MJ	6	✔	100.0	101.7	101.7
Cal 7 MJ	7	✔	250.0	253.0	101.2

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Last Cal. Update	8/1/2022 8:57 PM
Analyst Name	ISP\datastor
Analyte	THC-OH
Internal Standard	THC-OH-D3



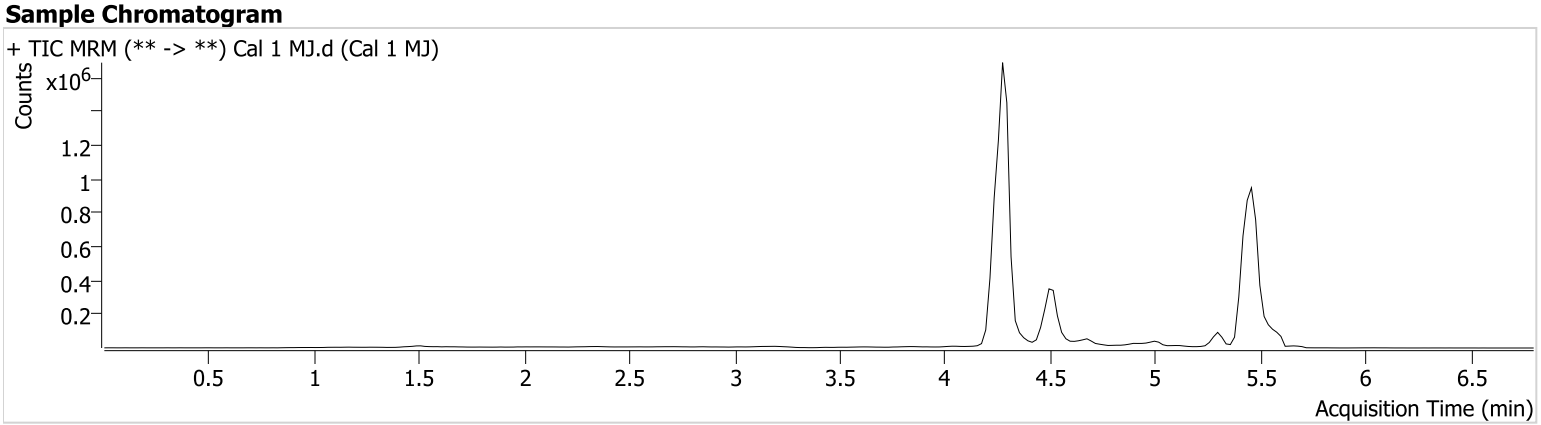
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	1.1	108.2
Cal 2 MJ	2	✔	3.0	3.0	99.8
Cal 3 MJ	3	✔	5.0	4.7	93.7
Cal 4 MJ	4	✔	10.0	9.7	97.4
Cal 5 MJ	5	✔	25.0	25.0	100.1
Cal 6 MJ	6	✔	50.0	50.4	100.7
Cal 7 MJ	7	✔	100.0	100.1	100.1

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	Cal 1 MJ.d
Type	Cal	**Sample**	Cal 1 MJ
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-A1	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 1:52:02 PM		
Sample Info.			

Sample Chromatogram



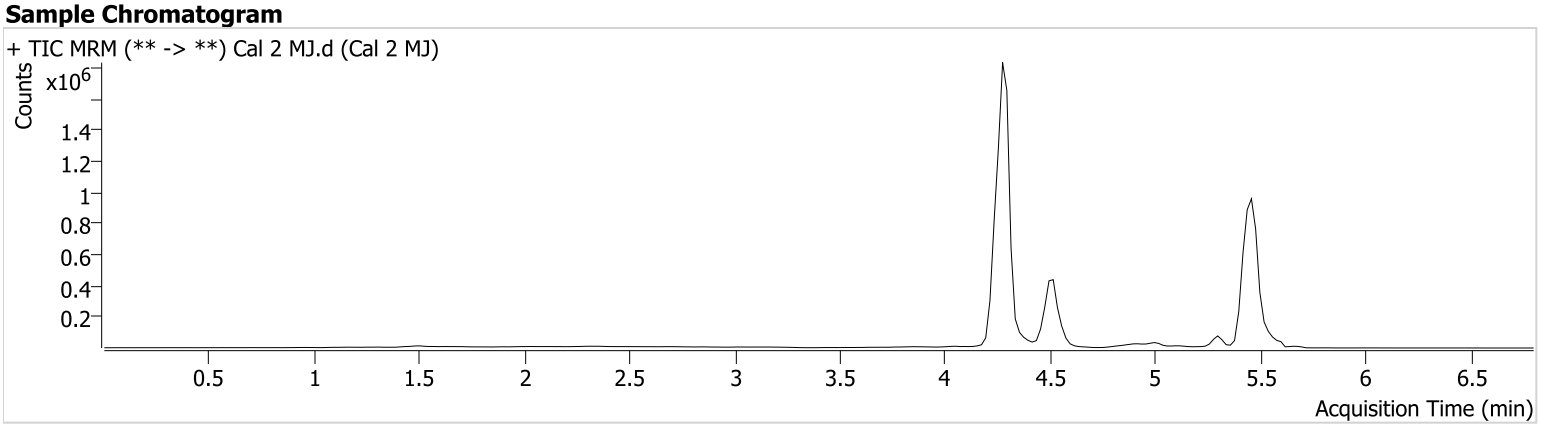
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	5.489	5924	764209	1.0132	ng/ml	Low
THC-COOH	4.536	76881	1329187	5.5854	ng/ml	
THC-OH	4.302	12710	7802524	1.0819	ng/ml	Low

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	Cal 2 MJ.d
Type	Cal	**Sample**	Cal 2 MJ
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-B1	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 1:59:46 PM		
Sample Info.			

Sample Chromatogram



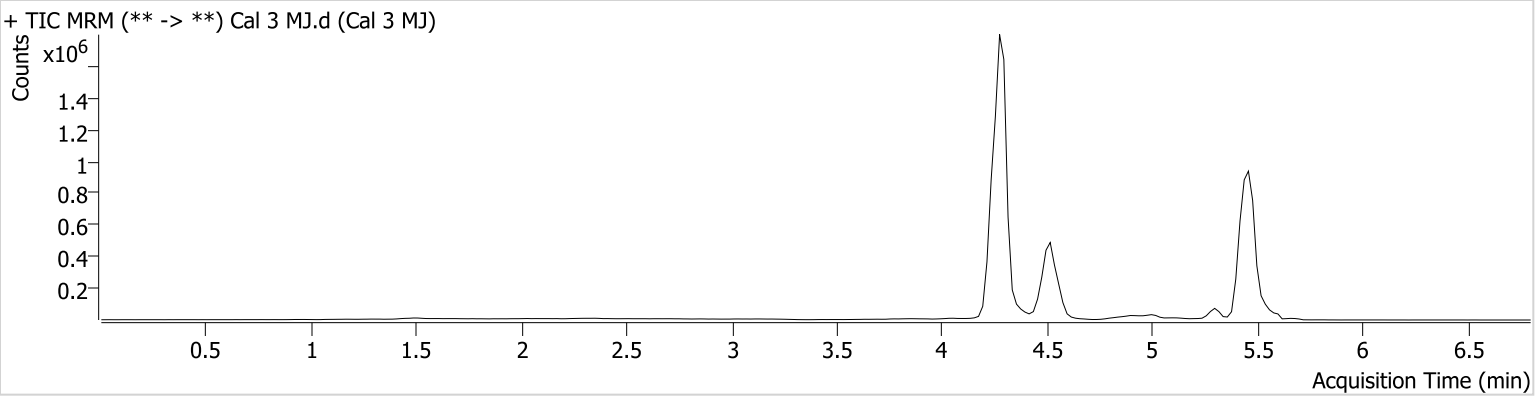
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	5.489	15033	698939	2.9726	ng/ml	**Low**
THC-COOH	4.536	154714	1553528	9.5053	ng/ml	
THC-OH	4.302	38036	7600642	2.9942	ng/ml	**Low**

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	Cal 3 MJ.d
Type	Cal	**Sample**	Cal 3 MJ
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-C1	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 2:07:20 PM		
Sample Info.			

Sample Chromatogram



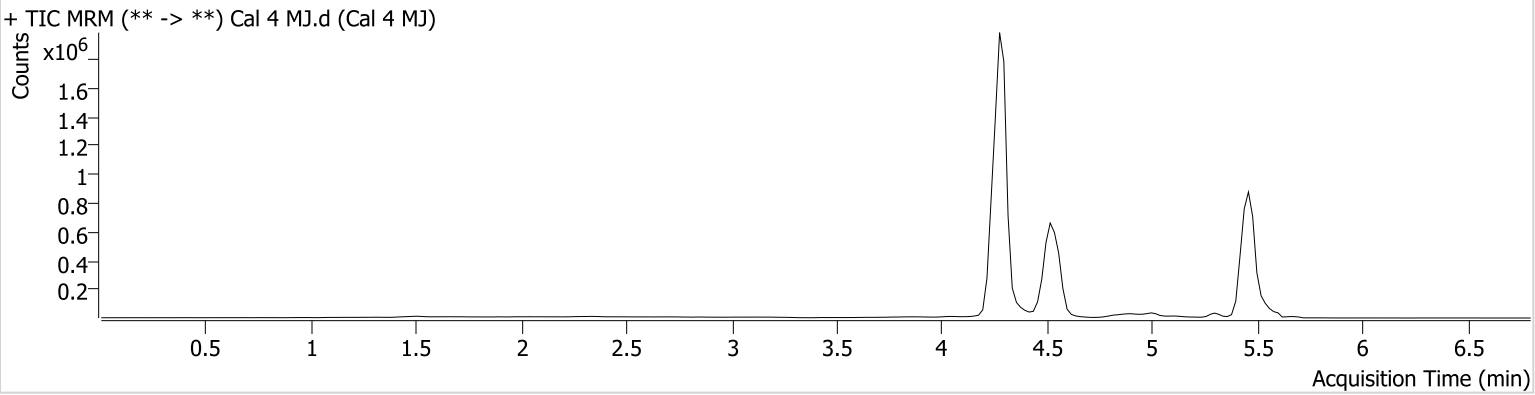
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	23581	693500	4.7524	ng/ml
THC-COOH	4.536	312380	1507878	19.6060	ng/ml
THC-OH	4.302	63003	7890772	4.6826	ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update	8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	Cal 4 MJ.d
Type	Cal	**Sample**	Cal 4 MJ
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-D1	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 2:14:54 PM		
Sample Info.			

Sample Chromatogram



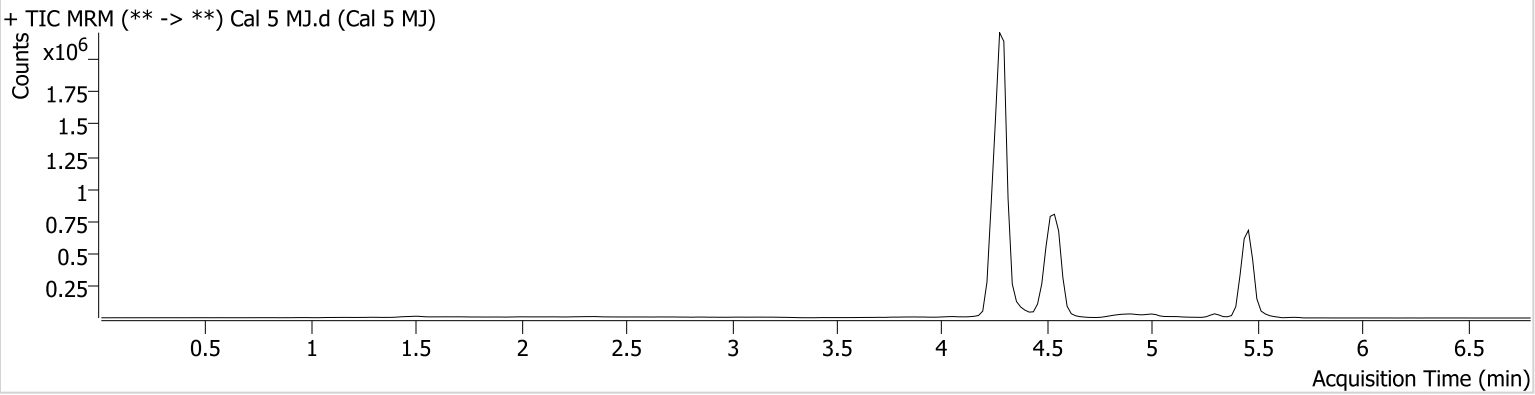
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	41526	550194	10.6596	ng/ml
THC-COOH	4.536	717590	1432217	47.1983	ng/ml
THC-OH	4.302	125958	7450463	9.7372	ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update	8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	Cal 5 MJ.d
Type	Cal	**Sample**	Cal 5 MJ
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-E1	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 2:22:28 PM		
Sample Info.			

Sample Chromatogram



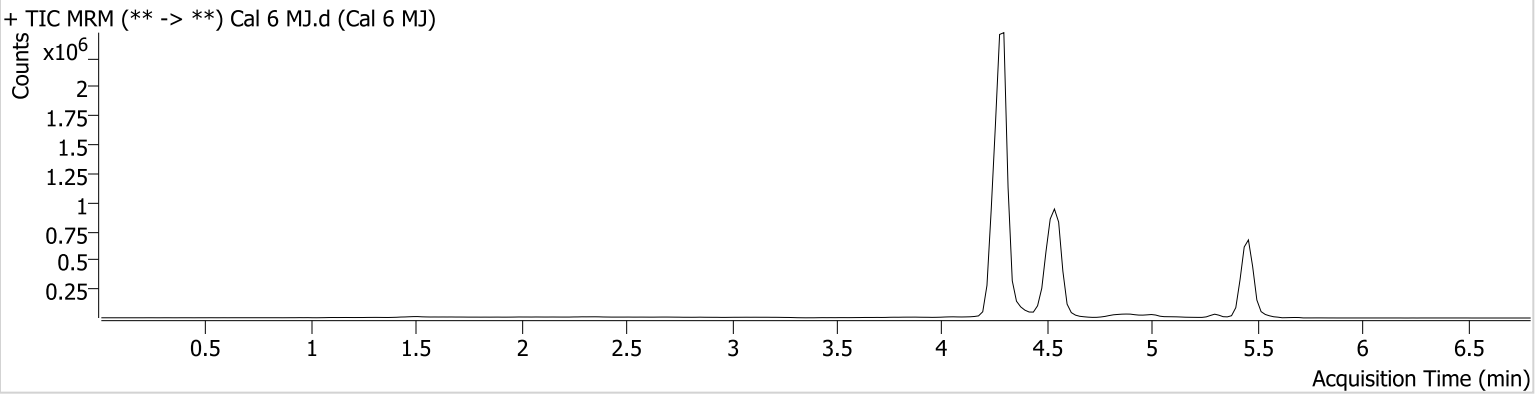
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	63197	367034	24.4348	ng/ml
THC-COOH	4.536	1063834	1362720	73.4541	ng/ml
THC-OH	4.302	313410	7137740	25.0359	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	Cal 6 MJ.d
Type	Cal	**Sample**	Cal 6 MJ
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-F1	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 2:30:03 PM		
Sample Info.			

Sample Chromatogram



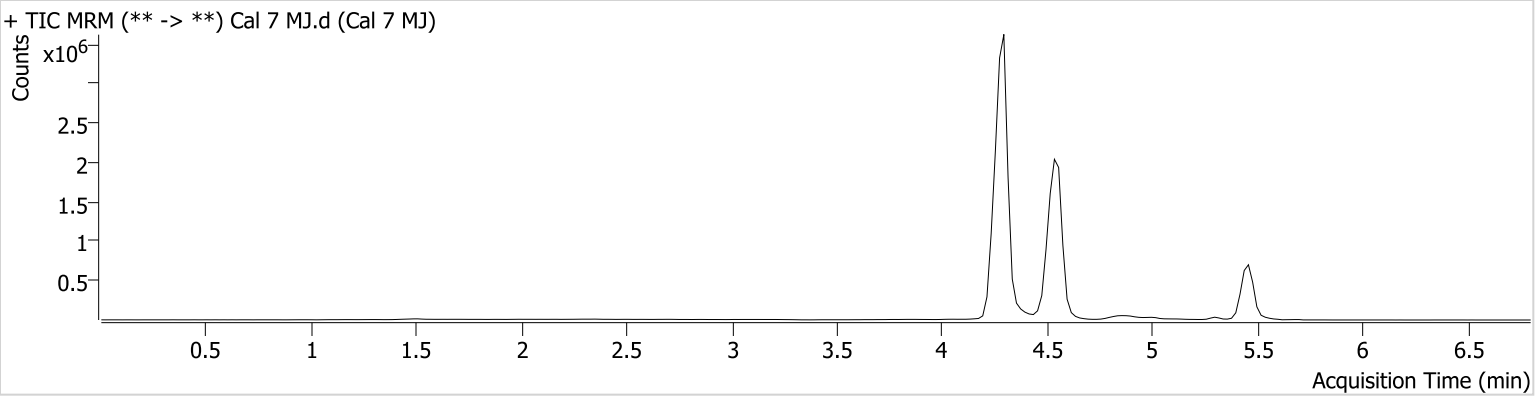
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	116706	331591	50.0416	ng/ml
THC-COOH	4.536	1342547	1241506	101.6893	ng/ml
THC-OH	4.302	557575	6291130	50.3722	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080122 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/1/2022 8:57:28 PM

Instrument	Falco (069901)	**Data File**	Cal 7 MJ.d
Type	Cal	**Sample**	Cal 7 MJ
Acq. Method	AM 26 THC.m	**Operator**	Celena Shrum
Sample Position	P1-G1	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/1/2022 2:37:37 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	226414	321804	100.1257	ng/ml
THC-COOH	4.536	3183686	1182428	252.9617	ng/ml
THC-OH	4.302	1076511	6102887	100.0961	ng/ml