REVIEWED
By Anne Nord at 9:14 am, Sep 01, 2022

8/31/2022

Worklist: 6082

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2022-3050	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3083	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3106	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3122	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3219	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3220	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3328	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3376	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3400	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3402	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-3403	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2113	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2427	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2429	1	BCK	AM 25 Blood Multi-Drug Screen by LC-QQQ
P2022-2439	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2491	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2496	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2520	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2522	1	BCK	AM 25 Blood Multi-Drug Screen by LC-QQQ
P2022-2523	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2527	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

Worklist: 6082

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
P2022-2528	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2532	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2546	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2547	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2579	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2581	1	BLOOD	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2601	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2602	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2606	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-2634	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: 08/19/2022
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.

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

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	

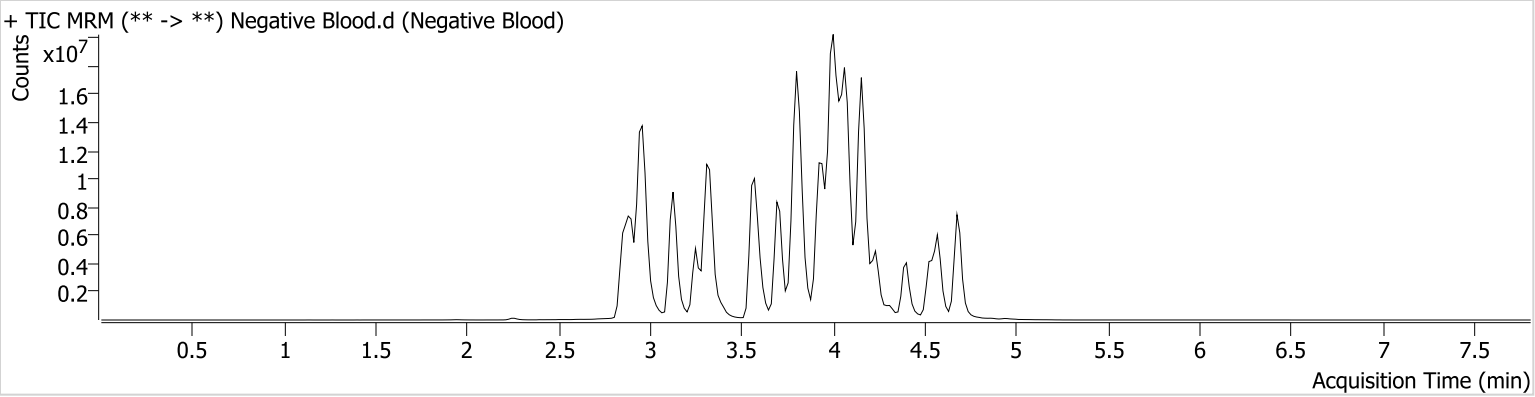
	1	2	3	4	5	6	7	8	9	10	11	12
A	CAL					M2022-3220-1	P2022-2429-1	P2022-2528-1	P2022-2606-1			
B					External Control	M2022-3328-1	P2022-2439-1	P2022-2532-1	P2022-2634-1			
C					Negative Control	M2022-3376-3	P2022-2491-1	P2022-2546-1				
D					M2022-3050-2	M2022-3400-2	P2022-2496-2	P2022-2547-1				
E					M2022-3083-1	M2022-3402-2	P2022-2520-1	P2022-2579-1				
F					M2022-3106-2	M2022-3403-3	P2022-2522-1	P2022-2581-1				
G					M2022-3122-2	P2022-2113-1	P2022-2523-3	P2022-2601-1				
H					M2022-3219-1	P2022-2427-1	P2022-2527-1	P2022-2602-1				

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 8/31/2022 12:42:24 PM

Instrument	Falco (069901)	**Data File**	Negative Blood.d
Type	Sample	**Sample**	Negative Blood
Acq. Method	AM 25 MDS.m	**Operator**	Celena Shrum
Sample Position	P2-C5	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/19/2022 8:58:44 PM		
Sample Info.			

Sample Chromatogram

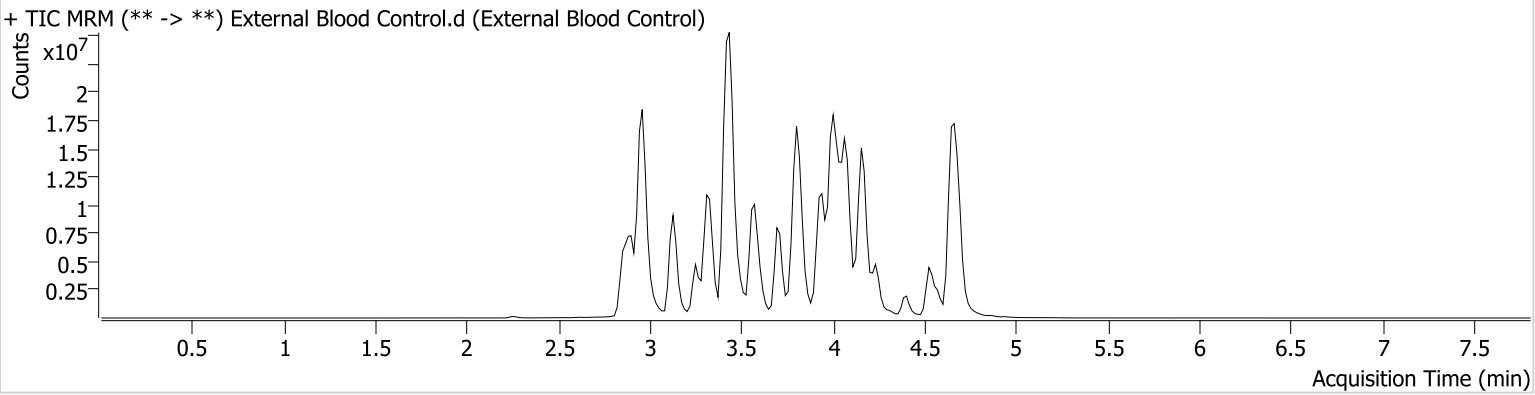


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 8/31/2022 12:42:24 PM

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-B5	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/19/2022 9:07:09 PM		
Sample Info.			

Sample Chromatogram



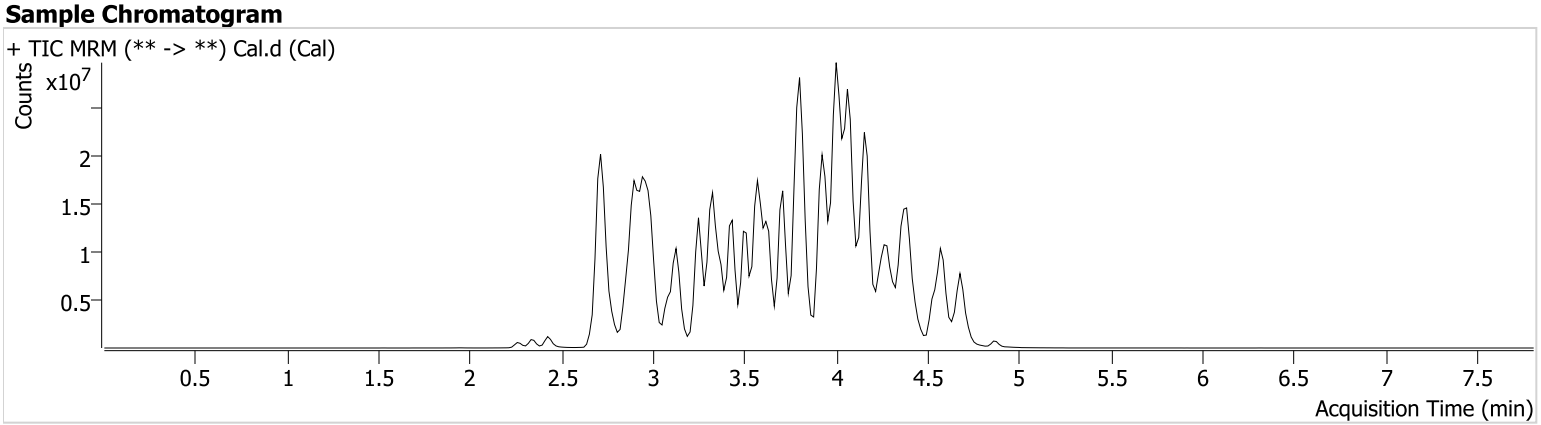
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.651	25787647	736.23	3342.62	25950136	56.8554
Buprenorphine	4.167	6260558	4612.28	85560.68	3412350	80.3556
Hydrocodone	2.960	10940671	80036.35	5494.59	12299401	64.9440
Tramadol	3.438	99793751	1755.15	784.94	49131047	39.5084

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 8/31/2022 12:42:24 PM

Instrument	Falco (069901)	**Data File**	Cal.d
Type	Cal	**Sample**	Cal
Acq. Method	AM 25 MDS.m	**Operator**	Celena Shrum
Sample Position	P2-A1	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/19/2022 8:50:10 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.793	3620081	109.72	206.78	22887641	10.0000
6-MAM	2.880	62757	45942.08	82146.09	1935886	10.0000
7-aminoclonazepam	3.605	1364513	597.26	1171.96	5307457	10.0000
7-aminoflunitrazepam	3.820	1862042	848.09	289.21	5307457	10.0000
9-Hydroxyrisperidone	3.813	9458560	782.53	135060.49	33152018	10.0000
Acetyl Fentanyl	3.771	540177	356.92	223149.91	37933742	10.0000
Acetyl Norfentanyl	2.904	525322	370.33	1216.52	37933742	10.0000
a-hydroxyalprazolam	4.541	160253	276.42	74016.02	5307457	10.0000
alpha-hydroxymidazolam	4.600	1903730	243.40	1086853.94	5307457	10.0000
Alpha-PHP	3.794	4858195	18602.95	1449.96	37933742	10.0000
alpha-PVP	3.518	7589452	1164.82	936.43	16825150	10.0000
Alprazolam	4.651	2285037	317.64	665.28	13073542	10.0000
Amitriptyline	4.409	2528996	268.76	163.66	9920047	10.0000
Amphetamine	2.892	5225187	1326.76	457.18	16825150	10.0000
Benzoylecgonine	3.421	390721	447275.43	29.91	743916	10.0000
Brompheniramine	4.018	155947	204.49	7061.17	49647534	10.0000
Buprenorphine	4.167	907887	104596.52	42468.83	3976386	10.0000
Bupropion	3.717	6977239	1471.39	721.49	25228618	10.0000
Carbamazepine	4.257	11261031	∞	∞	383360	10.0000
Carisoprodol	4.240	1410137	5914.20	169.27	8551719	10.0000
Chlordiazepoxide	4.729	456894	175.51	360299.21	13073542	10.0000
Chlorpheniramine	3.930	9539589	386.22	18.86	49647534	10.0000
Chlorpromazine	4.572	2425675	44919.75	347.70	11263567	10.0000
Citalopram	4.048	4362189	728.12	806.55	49647534	10.0000
Clomipramine	4.589	3741120	10296.94	10205.33	49647534	10.0000
Clonazepam	4.465	434092	158.74	110.20	13073542	10.0000
Clonazolam	4.400	955624	425597.50	180725.35	13073542	10.0000
Clozapine	4.170	5217699	1125.69	3149.69	20578832	10.0000
Cocaethylene	3.771	6136753	7112633.22	4719.03	31692469	10.0000
Cocaine	3.573	6433579	6034150.74	528.05	31692469	10.0000
Codeine	2.777	588858	464.43	867.29	12464404	10.0000
Cyclobenzaprine	4.332	3891560	1817.67	62.55	9920047	10.0000
Desipramine	4.363	7122139	951.30	483.78	9920047	10.0000
Dextromethorphan	4.053	2726199	455.76	612.89	15969182	10.0000

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrorphan	3.377	3474522	804.04	357.61	15969182	10.0000
Diazepam	4.868	934764	517.38	1114.77	13073542	10.0000
Dihydrocodeine	2.746	1128195	1244.90	453.59	12464404	10.0000
Diphenhydramine	4.024	13924396	5021.56	258393.01	49647534	10.0000
Doxepin	4.115	3126979	648.18	305.88	25694713	10.0000
Doxylamine	3.637	14619655	371.22	18226.24	15969182	10.0000
Duloxetine	4.314	93633	10067.95	21562.48	1456477	10.0000
EDDP	4.084	2189191	531.33	154.51	5387239	10.0000
Estazolam	4.561	3903668	501.68	454.84	13073542	10.0000
Etizolam	4.662	326466	237423.13	635402.35	13073542	10.0000
Fentanyl	3.985	409279	213.66	115445.52	27753191	10.0000
Flualprazolam	4.509	801989	522262.02	5369.57	13073542	10.0000
Flunitrazepam	4.589	991581	867.71	412.17	13073542	10.0000
Fluoxetine	4.313	3577086	1391383.92	220.73	4741650	10.0000
Flurazepam	4.106	3899794	11288.86	544.94	13073542	10.0000
Hydrocodone	2.960	1707231	832.53	851.26	12464404	10.0000
Hydromorphone	2.429	1756017	1174.32	1851.58	360768	10.0000
Hydroxyzine	4.430	3215355	611.34	1656.91	49647534	10.0000
Imipramine	4.361	8730294	1574.02	694.03	9920047	10.0000
Ketamine	3.379	5438454	688.61	382.97	16769500	10.0000
Lamotrigine	3.516	472611	2693.13	3195.14	49647534	10.0000
Levamisole	2.920	3382767	22024.97	986.00	31692469	10.0000
Levetiracetam	2.677	1861800	3065.59	1138.75	49647534	10.0000
Lorazepam	4.464	222807	491.75	41.53	13073542	10.0000
Maprotiline	4.393	1947602	172.65	819786.39	9920047	10.0000
MDA	3.013	3739728	1837.59	470.91	35945663	10.0000
MDEA	3.242	6069607	686.72	663.31	35945663	10.0000
MDMA	3.089	8025176	992.60	12083.85	35945663	10.0000
Meperidine	3.578	3311505	641.01	504.17	15969182	10.0000
Meprobamate	3.688	1123431	447.41	447.79	8551719	10.0000
Methadone	4.389	8092978	1193.28	511.86	5387239	10.0000
Methamphetamine	2.999	9691659	451.76	∞	35945663	10.0000
Methocarbamol	3.609	779037	509.72	829.78	5387239	10.0000
Methylphenidate	3.502	17060116	533.64	294.89	27410358	10.0000
Metoprolol	3.438	1031628	203.03	367.41	15969182	10.0000
Midazolam	4.663	810384	18266.35	152080.00	13073542	10.0000
Mirtazapine	3.714	4553871	3311.94	207543.65	15969182	10.0000
Mitragynine	4.121	703009	400859.66	1203774.46	15969182	10.0000
Morphine	2.263	398657	510.00	807.45	360768	10.0000
Norbuprenorphine	3.813	111782	68548.05	125587.12	3976386	10.0000
Nordiazepam	4.717	1027427	594.70	184.82	13073542	10.0000
Norfentanyl	3.333	10485527	9271.22	1091.86	37933742	10.0000
Norhydrocodone	2.931	116254	208.50	143.12	360768	10.0000
Norketamine	3.380	988625	342.61	2334.47	16769500	10.0000
Normeperidine	3.595	3944069	3312.67	241.32	49647534	10.0000
Noroxycodone	2.899	1525585	133.26	131.62	16769500	10.0000
Nortriptyline	4.394	1805543	16751.03	364.93	9920047	10.0000
O-desmethyl-tramadol	2.917	11735191	404.13	325.05	49647534	10.0000
O-desmethylvenlafaxine	3.253	2524856	462.43	6253.87	12871477	10.0000
Olanzapine	3.588	2636058	1224.03	12071.79	383360	10.0000
Oxazepam	4.546	897890	329.20	161.47	3740303	10.0000
Oxycodone	2.912	3420795	1244.97	1585.65	16769500	10.0000
Oxymorphone	2.335	1723662	344.19	280.26	360768	10.0000
Paroxetine	4.325	469801	281.59	133025.56	4741650	10.0000
Phenazepam	4.676	977831	133734.74	364192.65	13073542	10.0000
Phencyclidine	3.917	8387929	1054.48	787.84	15969182	10.0000
Phentermine	3.152	2127478	217.13	53.82	27410358	10.0000
Phenytoin	4.149	575259	528.05	141.52	383360	10.0000
Primidone	3.503	1880336	2083430.71	226.81	383360	10.0000
Promethazine	4.284	11359407	1283.84	301.53	49647534	10.0000

Cal

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Pseudoephedrine	2.723	55230990	5393.57	6933.88	35945663	10.0000
Quetiapine	4.276	4633518	11743.98	1451.28	39864460	10.0000
Risperidone	3.998	8244851	36850.74	5366.25	33152018	10.0000
Sertraline	4.544	896162	110545.87	3751.90	4741650	10.0000
Sufentanil	4.260	302194	939170.87	472.34	37933742	10.0000
Tapentadol	3.442	7317345	1124.47	434.06	16769500	10.0000
Temazepam	4.698	2327150	587.98	89.81	13073542	10.0000
Topiramate	3.862	66269	35672.53	22436.03	336428	10.0000
Tramadol	3.423	25524373	∞	85.64	49647534	10.0000
Trazodone	4.169	6778797	3544.05	541.43	25694713	10.0000
Venlafaxine	3.790	8877310	1647.67	581.10	4741650	10.0000
Zaleplon	4.375	1540277	751.75	793.68	39864460	10.0000
Zolpidem	3.942	9378401	4675.33	6138.38	39864460	10.0000
Zopiclone	3.814	783487	1233.59	93825.63	3345852	10.0000

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

Extraction Date: 08/19/2022
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:

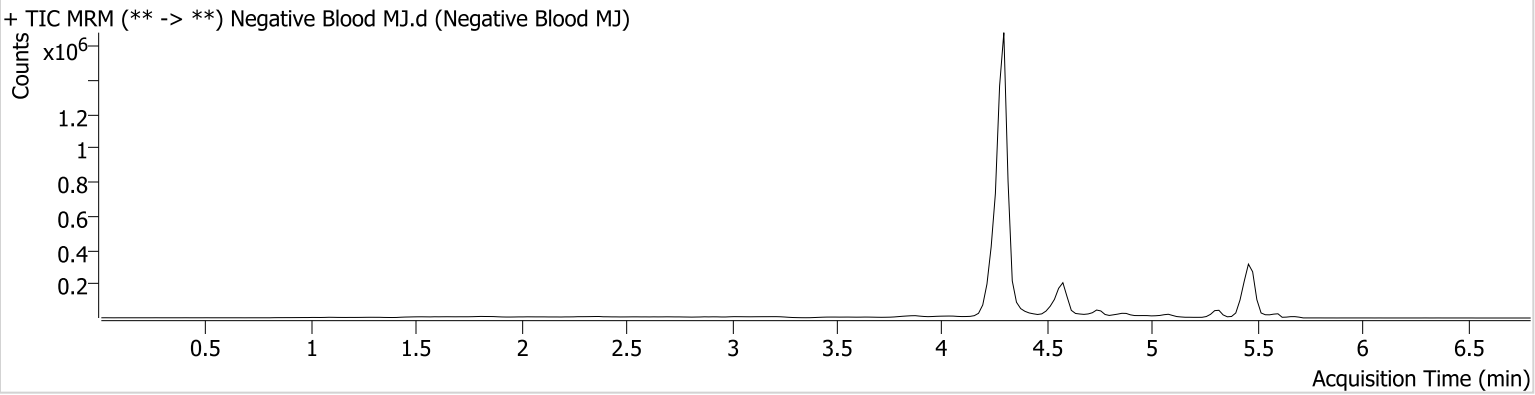
	1	2	3	4	5	6
a	cal 1ng	QC 2	M2022-3328-1	P2022-2491-1	P2022-2547-1	
b	cal 3 ng	Neg. Ctrl.	M2022-3376-3	P2022-2496-2	P2022-2579-1	
c	cal 5 ng	M2022-3050-2	M2022-3400-2	P2022-2520-1	P2022-2581-1	
d	cal 10ng	M2022-3083-1	M2022-3402-2	P2022-2523-3	P2022-2601-1	
e	cal 25 ng	M2022-3106-2	M2022-3403-3	P2022-2527-1	P2022-2602-1	
f	cal 50 ng	M2022-3122-2	P2022-2113-1	P2022-2528-1	P2022-2606-1	
g	cal 100 ng	M2022-3219-1	P2022-2427-1	P2022-2532-1	P2022-2634-1	
h	QC 1	M2022-3220-1	P2022-2439-1	P2022-2546-1		

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update	8/31/2022 12:44:45 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	8/19/2022 4:12:07 PM		
Sample Info.			

Sample Chromatogram

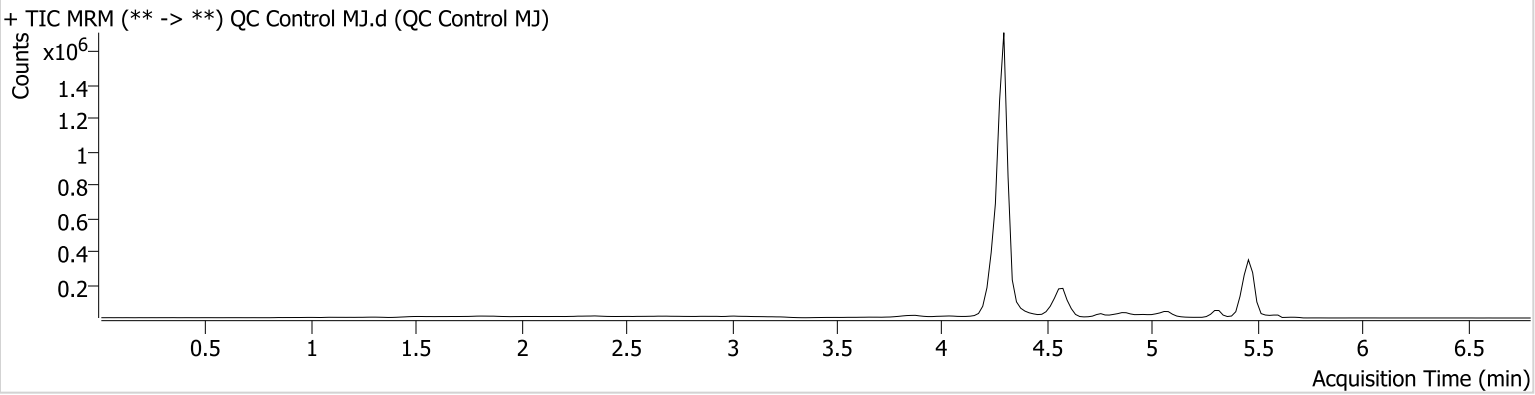


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/31/2022 12:44:45 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	8/19/2022 3:56:57 PM		
Sample Info.			

Sample Chromatogram



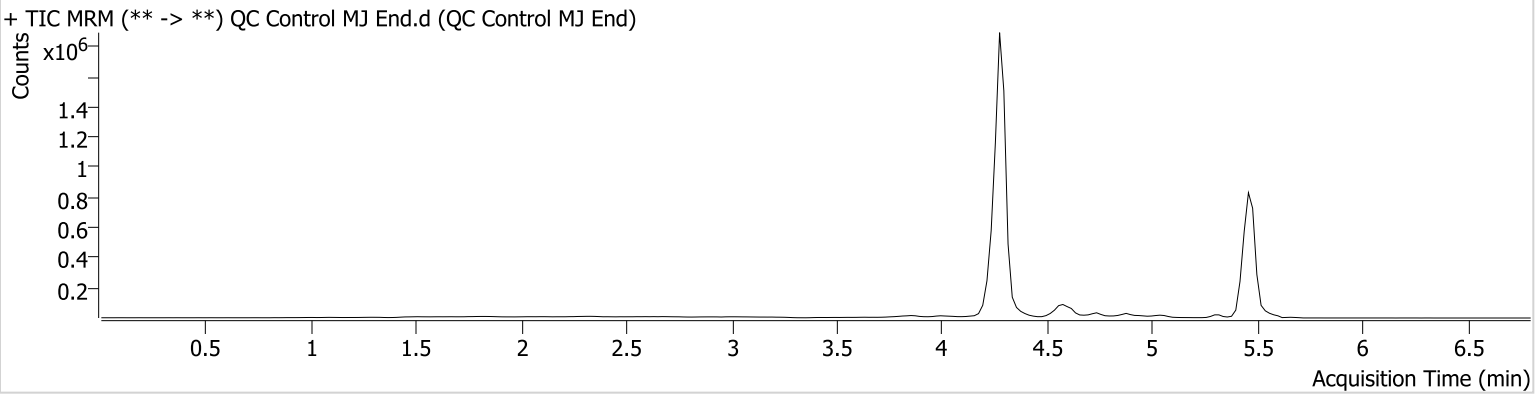
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.469	4248	172697	3.7798	ng/ml
THC-COOH	4.596	85042	642500	13.2531	ng/ml
THC-OH	4.302	46943	6214720	4.5436	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/31/2022 12:44:45 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	8/19/2022 7:59:08 PM		
Sample Info.			

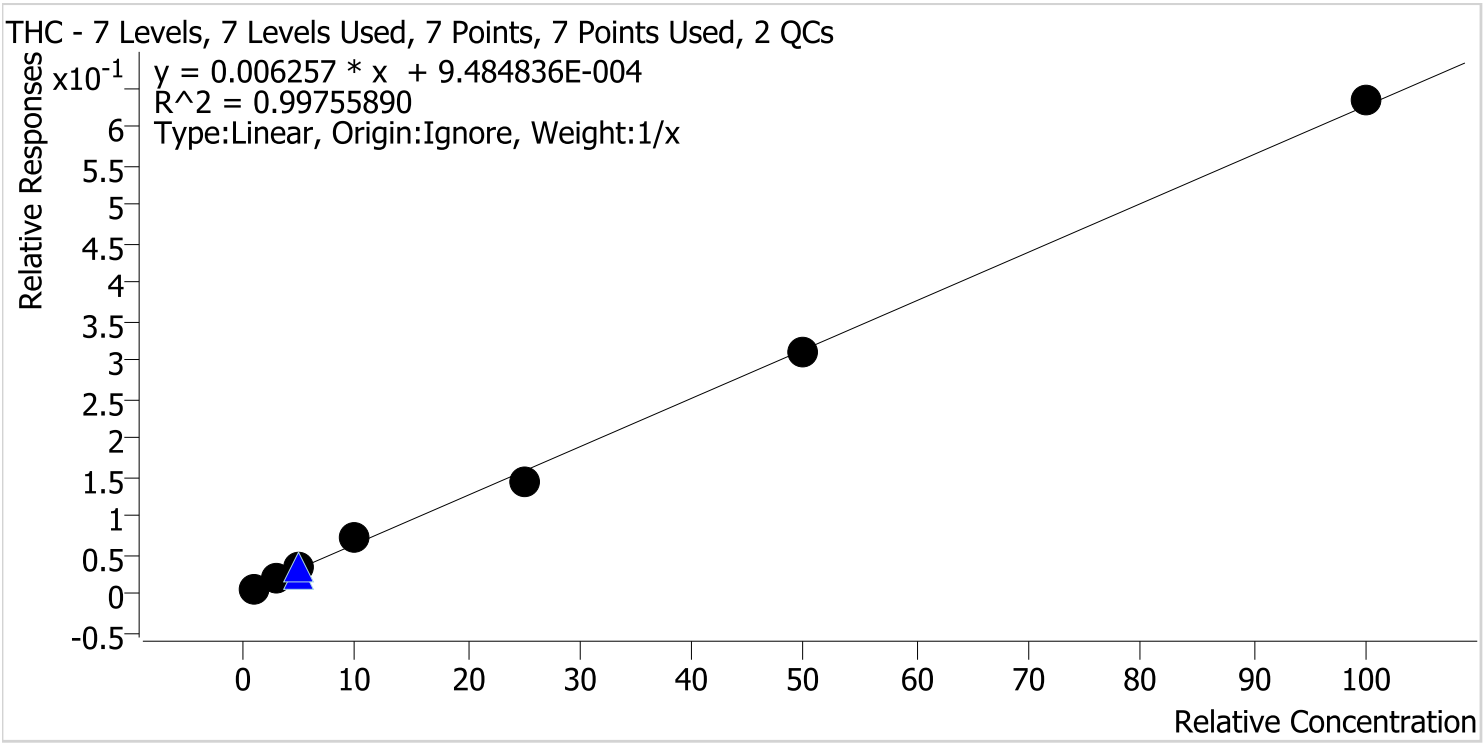
Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.449	11826	350989	5.2329	ng/ml
THC-COOH	4.596	73074	292988	26.1593	ng/ml
THC-OH	4.302	51779	6689233	4.6499	ng/ml

AM #26 Cannabinoids Screen Calibration Curve Report

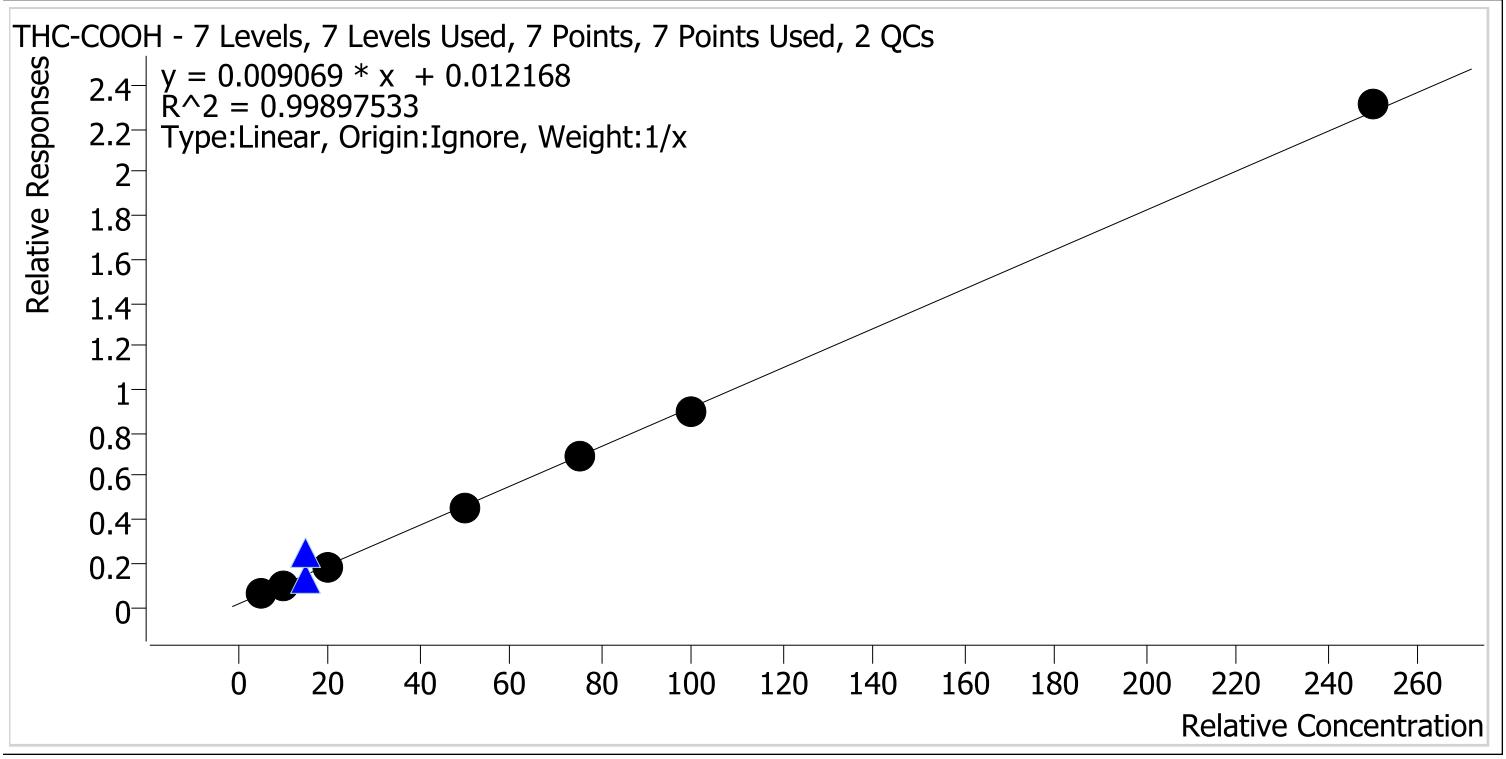
Batch results	D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Last Cal. Update	8/31/2022 12:44 PM
Analyst Name	ISP\datastor
Analyte	THC
Internal Standard	THC-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	0.9	86.6
Cal 2 MJ	2	✔	3.0	3.1	101.7
Cal 3 MJ	3	✔	5.0	5.4	107.5
Cal 4 MJ	4	✔	10.0	11.3	112.7
Cal 5 MJ	5	✔	25.0	22.9	91.5
Cal 6 MJ	6	✔	50.0	49.5	99.0
Cal 7 MJ	7	✔	100.0	101.1	101.1

AM #26 Cannabinoids Screen Calibration Curve Report

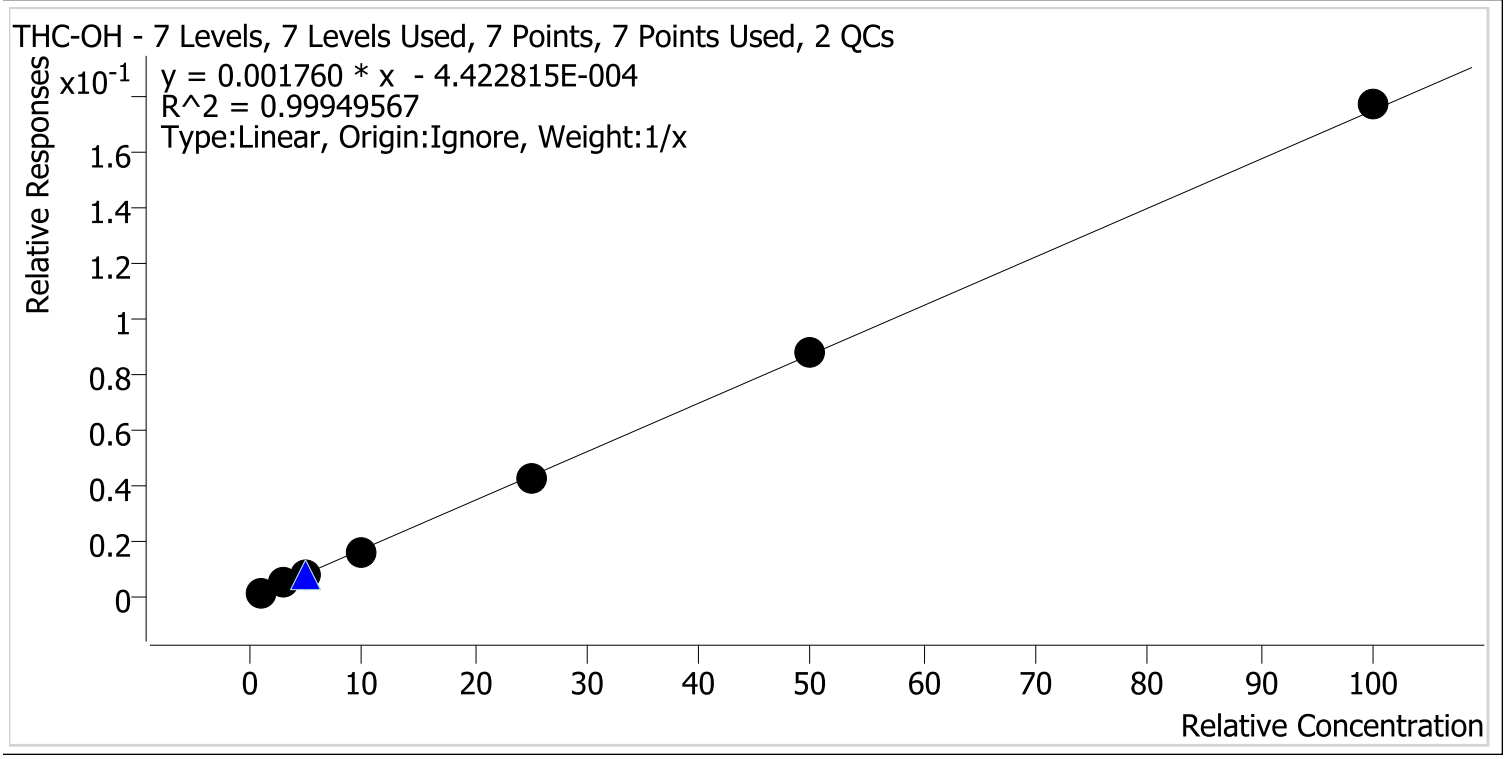
Batch results	D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Last Cal. Update	8/31/2022 12:44 PM
Analyst Name	ISP\datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-D9



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	5.0	5.7	114.7
Cal 2 MJ	2	✔	10.0	9.5	95.5
Cal 3 MJ	3	✔	20.0	18.3	91.6
Cal 4 MJ	4	✔	50.0	48.8	97.5
Cal 5 MJ	5	✔	75.0	75.9	101.2
Cal 6 MJ	6	✔	100.0	98.2	98.2
Cal 7 MJ	7	✔	250.0	253.6	101.4

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Last Cal. Update	8/31/2022 12:44 PM
Analyst Name	ISP\datastor
Analyte	THC-OH
Internal Standard	THC-OH-D3



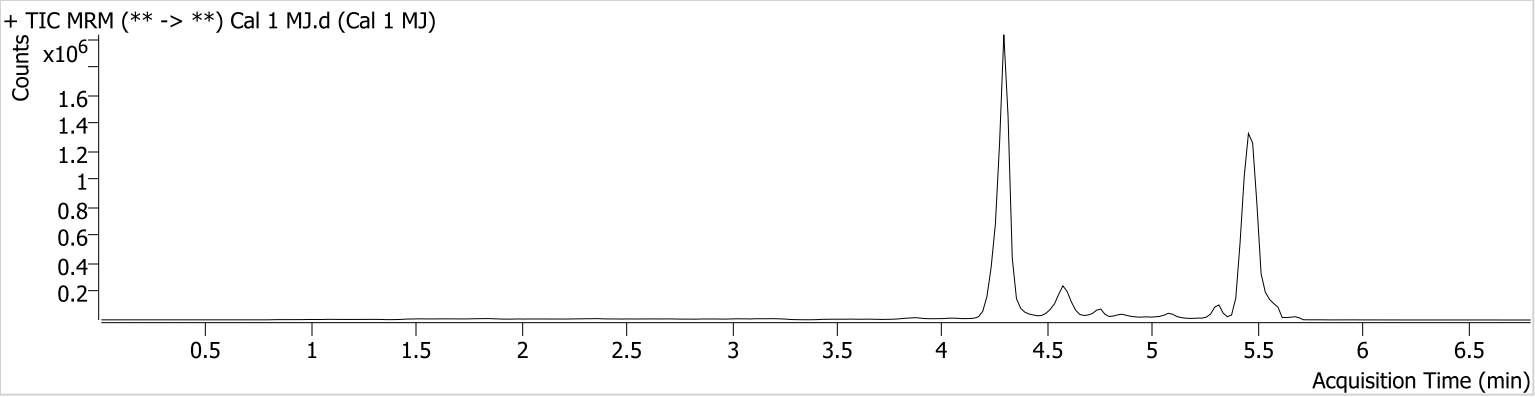
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	1.1	110.9
Cal 2 MJ	2	✔	3.0	2.9	96.7
Cal 3 MJ	3	✔	5.0	5.0	99.8
Cal 4 MJ	4	✔	10.0	9.4	93.8
Cal 5 MJ	5	✔	25.0	24.4	97.4
Cal 6 MJ	6	✔	50.0	50.1	100.2
Cal 7 MJ	7	✔	100.0	101.2	101.2

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/31/2022 12:44:45 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	8/19/2022 3:03:47 PM		
Sample Info.			

Sample Chromatogram



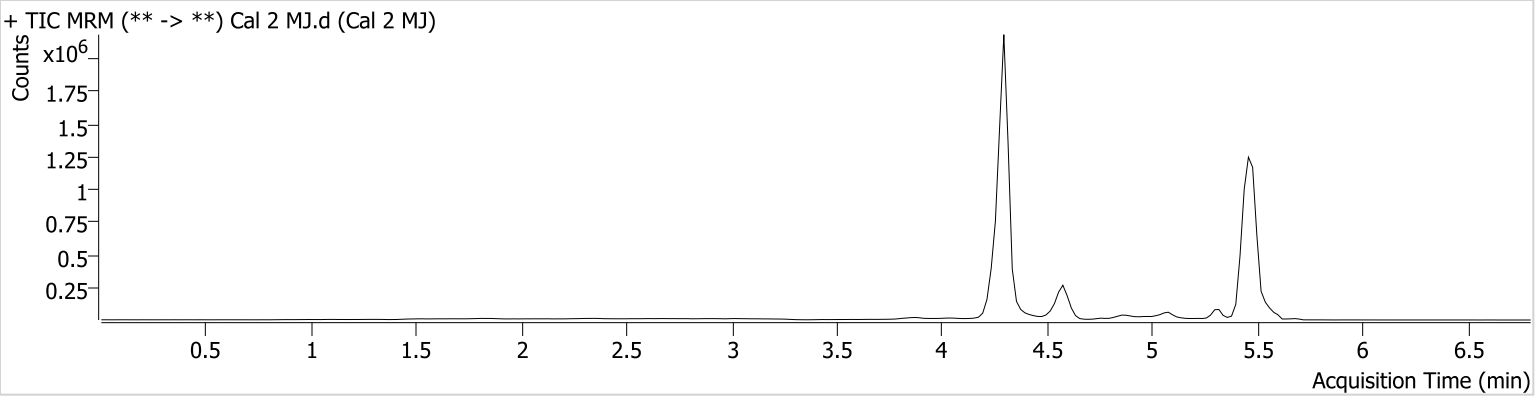
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	5.509	5016	788050	0.8657	ng/ml	**Low**
THC-COOH	4.616	66993	1044134	5.7331	ng/ml	
THC-OH	4.302	11971	7929864	1.1092	ng/ml	**Low**

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update	8/31/2022 12:44:45 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	8/19/2022 3:11:31 PM		
Sample Info.			

Sample Chromatogram



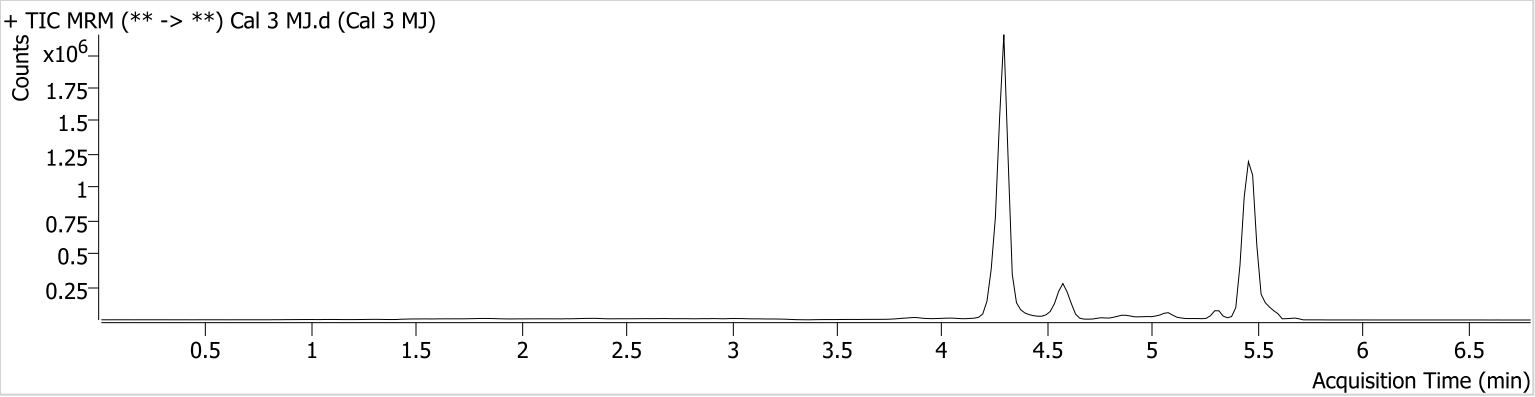
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	5.489	12046	601193	3.0507	ng/ml	
THC-COOH	4.596	91647	928021	9.5476	ng/ml	
THC-OH	4.302	37282	7994684	2.9012	ng/ml	**Low**

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/31/2022 12:44:45 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	8/19/2022 3:19:05 PM		
Sample Info.			

Sample Chromatogram



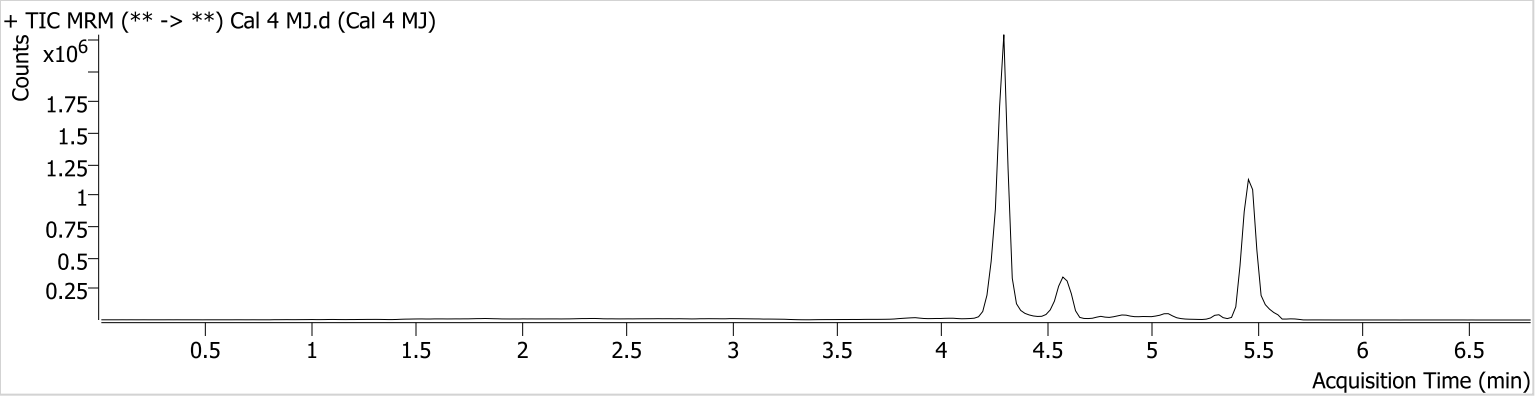
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	19160	554220	5.3734	ng/ml
THC-COOH	4.596	153617	861785	18.3134	ng/ml
THC-OH	4.302	60159	7217842	4.9875	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/31/2022 12:44:45 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	8/19/2022 3:26:40 PM		
Sample Info.			

Sample Chromatogram



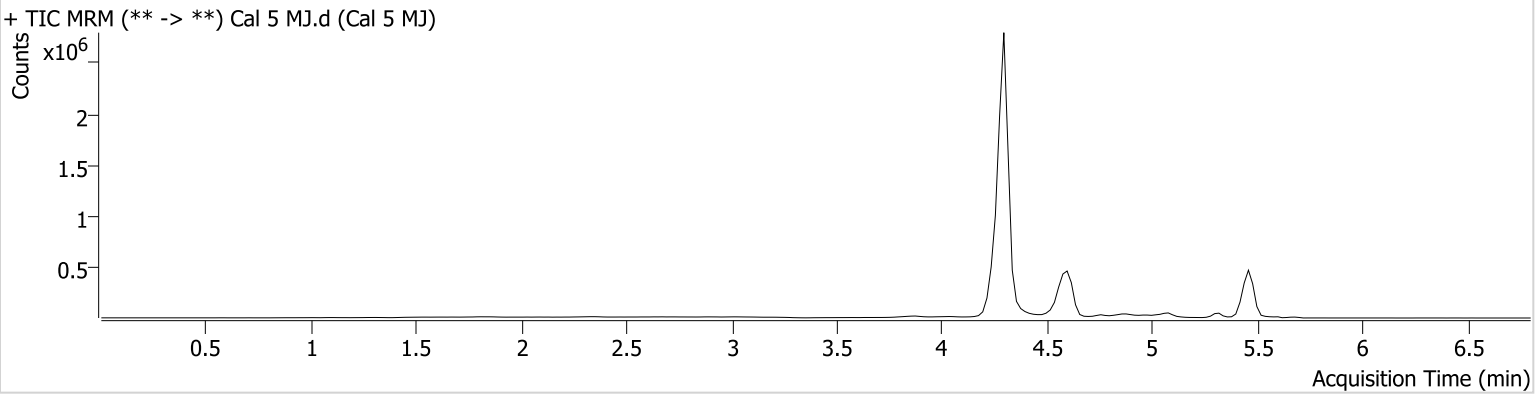
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	41071	574678	11.2699	ng/ml
THC-COOH	4.596	353845	778560	48.7722	ng/ml
THC-OH	4.302	123116	7659817	9.3848	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/31/2022 12:44:45 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	8/19/2022 3:34:14 PM		
Sample Info.			

Sample Chromatogram



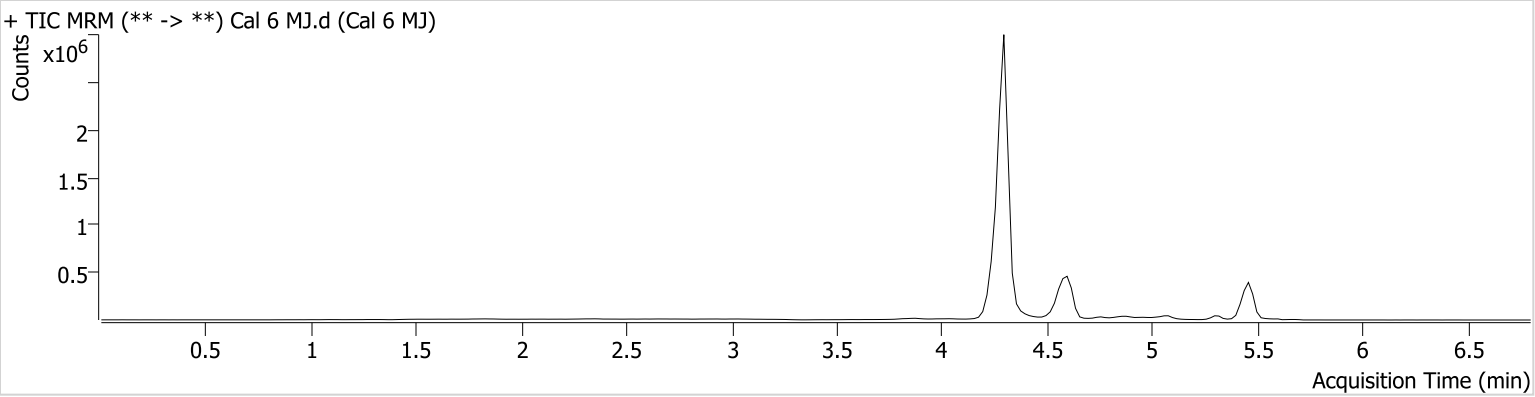
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.469	31145	216116	22.8800	ng/ml
THC-COOH	4.596	554313	791677	75.8630	ng/ml
THC-OH	4.302	324717	7653248	24.3613	ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update	8/31/2022 12:44:45 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	8/19/2022 3:41:49 PM		
Sample Info.			

Sample Chromatogram



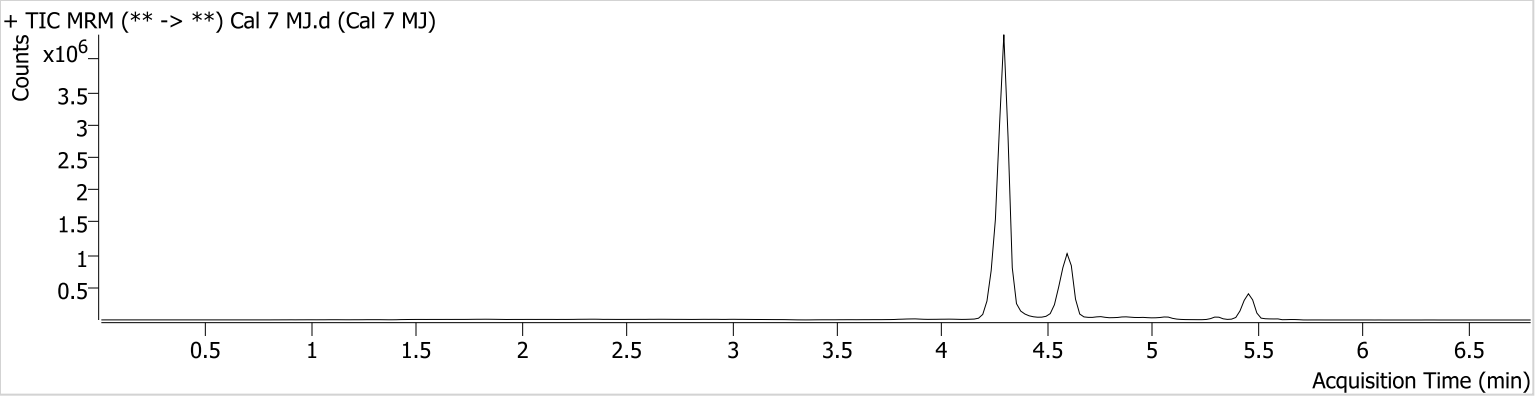
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.469	57279	184387	49.4939	ng/ml
THC-COOH	4.596	613297	679675	98.1545	ng/ml
THC-OH	4.302	582640	6644775	50.0775	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\081922 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 8/31/2022 12:44:45 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	8/19/2022 3:49:23 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.469	116268	183578	101.0663	ng/ml
THC-COOH	4.596	1485254	642346	253.6163	ng/ml
THC-OH	4.302	1165798	6563765	101.1785	ng/ml