REVIEWED
By Celena Shrum at 11:05 am, Jun 17, 2022

Re-reviewed on 6/21/22 at 2:01pm

TS

CS

6/6/2022

Worklist: 5959

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2022-1560	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-1607	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-1634	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-1742	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-1785	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-1823	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-1848	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-1910	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2022-1987	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1111	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1195	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1205	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1248	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1268	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1294	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1322	1	BCK	Tox Proficiency
P2022-1322	2	BCK	Tox Proficiency
P2022-1322	3	BCK	Tox Proficiency
P2022-1368	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1380	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1381	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

Worklist: 5959

TS

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
P2022-1383	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1384	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1385	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1393	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1425	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1426	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1441	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2022-1452	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

Idaho State Police
Forensic Services

Request for Departure from an Analytical Method or Quality Standard

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

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

Requestor/Discipline: Celena Shrum/Toxicology

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

Temporary or Permanent Deviation: Permanent

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

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

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

Technical Review

☒ Departure approved
Comments:

☐ Departure Not Approved
Comments:

Approver: Rachel Cutler Date: 2/10/2022
Title: Laboratory Manager

Quality Review

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

TS

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	M2022-1785-1*	P2022-1248-1	P2022-1381-1	P2022-1452-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
B	IS + Cal. 1	M2022-1823-1	P2022-1268-1	P2022-1383-1	M2022-1785-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
C	Neg Blood	M2022-1848-2	P2022-1294-1	P2022-1384-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
D	External Blood Ctrl	M2022-1910-1	P2022-1322-1	P2022-1385-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
E	M2022-1560-3	M2022-1987-3	P2022-1322-2	P2022-1393-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
F	M2022-1607-1	P2022-1111-1	P2022-1322-3	P2022-1425-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
G	M2022-1634-1	P2022-1195-1	P2022-1368-1	P2022-1426-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 1
H	M2022-1742-1	P2022-1205-3	P2022-1380-1	P2022-1441-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 1

All wells to contain 60 µl of residual DMSO

*Moved during the SLE portion of the extraction due to blood clot

06/21/22 TS

TS

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

Extraction Date: 06/09/2022 Analyst: Tamara Salazar
Plate lot#: 211015 Plate Retest Date: 04/15/2022 – ok with external control
Mobile phase A: 10mM Amm Form Mobile phase B: 0.1% Formic Acid in MeOH
Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)
Blank Blood Lot: 20L20723
LCMS-QQQ ID: 069901

Pre-Analytic:

☒ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
☒ 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☐ ~~2. Urine Hydrolysis: In blank well, add 250µL urine, 40µL BG Turbo, and 100µL Instant Buffer I. Place on plate shaker for 5 minutes.~~ (Not applicable)
☒ 3. Using a calibrated pipette, pipette **250µL blood and urine** (if applicable) into wells of analytical (standards) plate. **Pipette ID: 42**
☒ 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 urine+base (if applicable)** mixture to corresponding wells of SLE+ plate. Amount transferred: *250uL*
☒ 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).***
☒ 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. Place on SPE Dry and evaporate to dryness at approx. 35°C.
☒ 16. If run contains urine or at the analyst's discretion, add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying (optional).
☒ 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:

TS

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~~ of 04/03/203 TS 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	

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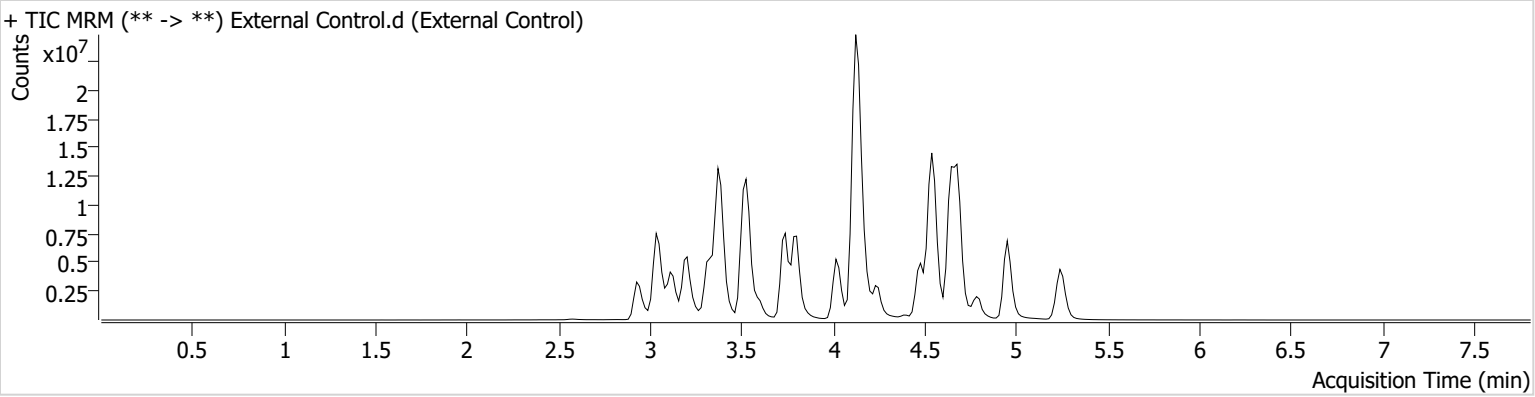
AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 25.batch.bin
Calibration Last Update 6/16/2022 9:59:45 AM

Instrument	Falco (069901)	**Data File**	External Control.d
Type	Sample	**Sample**	External Control
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P2-D1	**Comment**	
Injection Volume	5		
Acq. Date-Time	6/9/2022 5:47:04 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.651	15920938	980.92	1842.63	18794721	66.3717
Buprenorphine	5.236	9563383	3008948.99	725450.67	4174768	109.3698
Hydrocodone	3.374	9510644	6749.90	545.42	8753606	73.1327
Tramadol	3.530	44412893	∞	176.99	42373283	49.8312

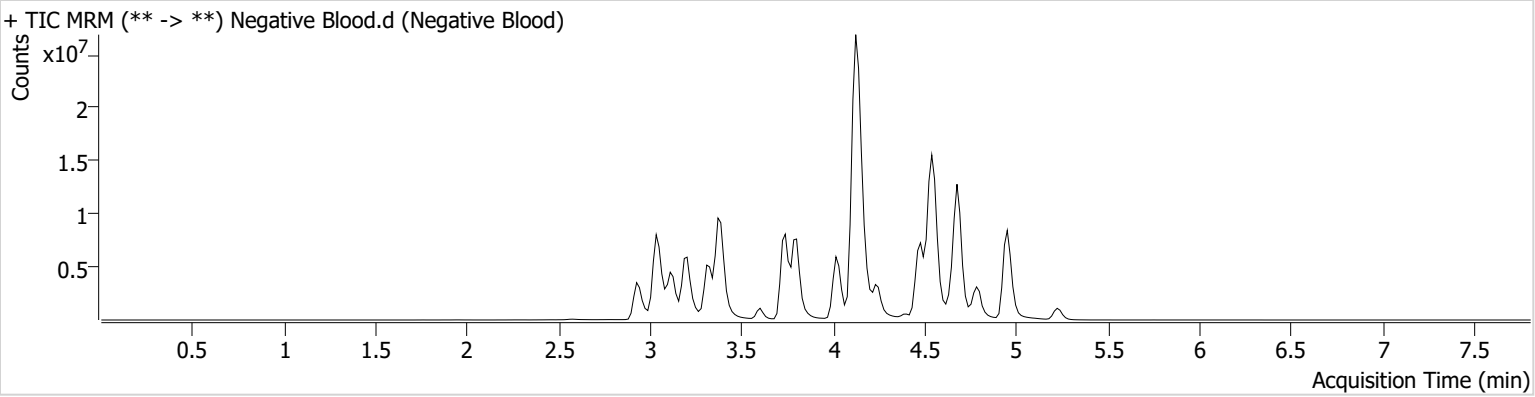
TS

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 25.batch.bin
Calibration Last Update 6/16/2022 9:59:45 AM

Instrument	Falco (069901)	**Data File**	Negative Blood.d
Type	Sample	**Sample**	Negative Blood
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P2-C1	**Comment**	
Injection Volume	5		
Acq. Date-Time	6/9/2022 5:38:40 PM		
Sample Info.			

Sample Chromatogram



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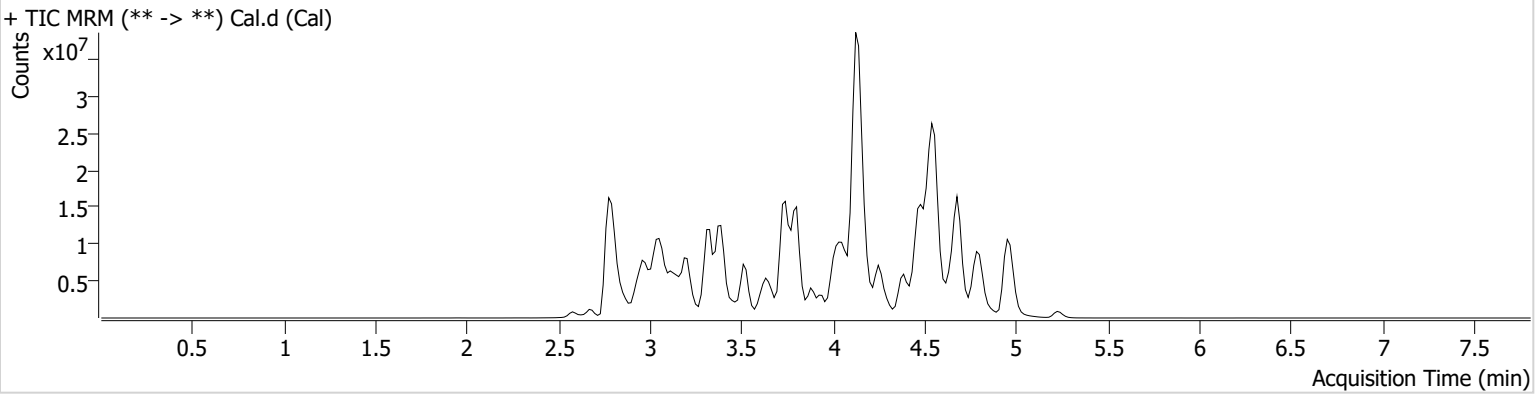
AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 25.batch.bin
Calibration Last Update 6/16/2022 9:59:45 AM

Instrument	Falco (069901)	**Data File**	Cal.d
Type	Cal	**Sample**	Cal
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P2-B1	**Comment**	
Injection Volume	5		
Acq. Date-Time	6/9/2022 5:30:05 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.808	3412881	129.91	872.31	22273932	10.0000
6-MAM	3.217	51103	16432.14	14649.53	1590401	10.0000
7-aminoclonazepam	3.605	825672	7759.09	1238.94	3435981	10.0000
7-aminoflunitrazepam	3.820	1364303	239.49	106.17	3435981	10.0000
9-Hydroxyrisperidone	4.136	6650892	359.47	87062.61	30565158	10.0000
Acetyl Fentanyl	4.264	487664	302.41	144609.94	31442639	10.0000
Acetyl Norfentanyl	2.965	418054	2923.95	114.57	31442639	10.0000
a-hydroxyalprazolam	4.541	171277	387.29	241.64	3435981	10.0000
alpha-hydroxymidazolam	4.616	2155060	265.97	7753.42	3435981	10.0000
Alpha-PHP	4.072	3773558	19167.70	8905.25	31442639	10.0000
alpha-PVP	3.795	5419679	8362.18	412.72	13698292	10.0000
Alprazolam	4.651	2038347	359.59	338.09	15970862	10.0000
Amitriptyline	4.578	1744907	601.74	752.23	8881941	10.0000
Amphetamine	2.969	4372503	730.98	503.37	13698292	10.0000
Benzoylecgonine	3.421	208546	502.48	29.41	360857	10.0000
Brompheniramine	4.141	94724	58802.51	174.23	46724812	10.0000
Buprenorphine	5.236	507826	2750.44	37938.14	2424559	10.0000
Bupropion	4.072	5301536	2005.20	239.21	20895117	10.0000
Carbamazepine	4.273	8788264	7477.03	1962.59	353364	10.0000
Carisoprodol	4.256	1165431	2676.31	98.32	6859067	10.0000
Chlordiazepoxide	4.760	482199	139.54	454.26	15970862	10.0000
Chlorpheniramine	4.053	6799195	5122.47	16.13	46724812	10.0000
Chlorpromazine	4.803	2297870	736292.17	14233.03	9965773	10.0000
Citalopram	4.156	3202878	1695.71	119.42	46724812	10.0000
Clomipramine	4.788	3262108	12718.61	13201.45	46724812	10.0000
Clonazepam	4.465	690631	244.40	159.88	15970862	10.0000
Clonazolam	4.400	1232402	903593.82	156199.21	15970862	10.0000
Clozapine	4.678	4987914	∞	1671.67	19842058	10.0000
Cocaethylene	3.941	5205022	4753243.84	12450.89	28011318	10.0000
Cocaine	3.758	8862022	17831302.83	1298.19	28011318	10.0000
Codeine	3.189	371598	2260.86	2345.65	9463737	10.0000
Cyclobenzaprine	4.486	2827783	919.93	118.21	8881941	10.0000
Desipramine	4.440	5933787	540.26	408.60	8881941	10.0000
Dextromethorphan	4.178	2158648	213.96	127.23	11652463	10.0000

TS

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrorphan	3.469	2512255	2990755.45	689.95	11652463	10.0000
Diazepam	4.868	726323	207.56	528.86	15970862	10.0000
Dihydrocodeine	2.959	1040415	5430.90	61.35	9463737	10.0000
Diphenhydramine	4.148	9040503	1328.42	2843.70	46724812	10.0000
Doxepin	4.300	2592451	322.35	274.80	29174451	10.0000
Doxylamine	3.729	10389118	6865.65	17330.84	11652463	10.0000
Duloxetine	4.406	83324	21056.88	9987.22	1243414	10.0000
EDDP	4.146	1557773	321.39	1177.67	3606591	10.0000
Estazolam	4.561	3590576	466.11	8636.76	15970862	10.0000
Etizolam	4.662	250345	279590.98	381625.51	15970862	10.0000
Fentanyl	4.478	361494	545.23	1361.75	26593223	10.0000
Flualprazolam	4.509	618008	461.80	2996.92	15970862	10.0000
Flunitrazepam	4.589	1370326	379.49	932.64	15970862	10.0000
Fluoxetine	4.390	3198191	2172.17	253.08	4179228	10.0000
Flurazepam	4.521	2919442	1782685.12	230354.03	15970862	10.0000
Hydrocodone	3.358	1405964	828.88	247.12	9463737	10.0000
Hydromorphone	2.809	872265	219.93	212.81	229684	10.0000
Hydroxyzine	4.767	3317274	571.64	1049.08	46724812	10.0000
Imipramine	4.515	6155042	972.89	756.22	8881941	10.0000
Ketamine	4.056	3998623	5728.32	169.60	13111559	10.0000
Lamotrigine	3.685	315395	673.38	71915.46	46724812	10.0000
Levamisole	3.304	2603521	846.81	280.57	28011318	10.0000
Levetiracetam	2.677	1200004	477.40	571.56	46724812	10.0000
Lorazepam	4.464	297901	72.49	125.21	15970862	10.0000
Maprotiline	4.578	1065578	154.38	24041.25	8881941	10.0000
MDA	3.074	2458564	215.58	221.42	30871333	10.0000
MDEA	3.304	4022979	254.53	1769.66	30871333	10.0000
MDMA	3.166	5049356	1379.30	2051.60	30871333	10.0000
Meperidine	3.778	2701223	100.29	522.33	11652463	10.0000
Meprobamate	3.704	754268	1192.91	189.51	6859067	10.0000
Methadone	4.466	6641470	2252.30	890.16	3606591	10.0000
Methamphetamine	3.076	6027568	2575.27	963.21	30871333	10.0000
Methocarbamol	3.609	668944	265.52	28.08	3606591	10.0000
Methylphenidate	3.641	10673255	431.00	689.48	20231258	10.0000
Metoprolol	3.499	738054	313.86	416.70	11652463	10.0000
Midazolam	4.801	663985	470470.11	105773.50	15970862	10.0000
Mirtazapine	4.518	3659912	1414716.19	3000951.99	11652463	10.0000
Mitragynine	4.505	616633	273093.59	817.64	11652463	10.0000
Morphine	2.642	200303	∞	147.68	229684	10.0000
Norbuprenorphine	3.921	87801	71229.35	68360.93	2424559	10.0000
Nordiazepam	4.732	1007742	770.78	1844.41	15970862	10.0000
Norfentanyl	3.410	6344079	6314.76	853.30	31442639	10.0000
Norhydrocodone	3.007	153220	14.53	5.85	229684	10.0000
Norketamine	4.088	660023	291.15	1089969.48	13111559	10.0000
Normeperidine	3.672	3146979	662.65	472.72	46724812	10.0000
Noroxycodone	2.960	1591359	∞	603.05	13111559	10.0000
Nortriptyline	4.487	1446672	143652.52	2950.30	8881941	10.0000
O-desmethyl-tramadol	3.009	7650642	1286.02	335.33	46724812	10.0000
O-desmethylvenlafaxine	3.330	1768210	1493.32	19632.95	9136559	10.0000
Olanzapine	4.127	714810	369212.19	341.20	353364	10.0000
Oxazepam	4.546	1226854	262.50	299.59	5474866	10.0000
Oxycodone	3.157	2727663	612.09	462.38	13111559	10.0000
Oxymorphone	2.579	2189552	109.42	56.89	229684	10.0000
Paroxetine	4.417	361958	223.94	95431.34	4179228	10.0000
Phenazepam	4.676	1206832	973709.66	230891.66	15970862	10.0000
Phencyclidine	3.994	6697268	482.14	374.74	11652463	10.0000
Phentermine	3.229	1452977	878.80	185.76	20231258	10.0000
Phenytoin	4.164	548853	249.32	152.64	353364	10.0000
Primidone	3.503	1685828	1299054.74	416.24	353364	10.0000
Promethazine	4.561	7403703	7148.81	1009.61	46724812	10.0000

Cal

TS

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Pseudoephedrine	2.784	58681194	572.47	1210.34	30871333	10.0000
Quetiapine	4.813	4873968	8927999.63	1390551.30	38164314	10.0000
Risperidone	4.367	9199383	1927563.84	135590.46	30565158	10.0000
Sertraline	4.651	763658	76261.75	2049.26	4179228	10.0000
Sufentanil	4.904	281284	306860.82	127.44	31442639	10.0000
Tapentadol	3.519	5137283	851.10	855.77	13111559	10.0000
Temazepam	4.698	2856466	876.66	99.00	15970862	10.0000
Topiramate	3.877	50507	29026.79	∞	249509	10.0000
Tramadol	3.530	9827952	∞	48.35	46724812	10.0000
Trazodone	4.966	7131929	1619.98	1758.99	29174451	10.0000
Venlafaxine	3.883	7703085	701.14	183.51	4179228	10.0000
Zaleplon	4.375	2024773	773.19	803795.32	38164314	10.0000
Zolpidem	4.559	8582047	8588.08	1909438.52	38164314	10.0000
Zopiclone	4.521	402328	194111.58	248443.34	2030105	10.0000

TS

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_1	M2022-1848-2	P2022-1294-1	P2022-1384-1	IS + QC_1
B	IS + Cal. 2	Neg Blood	M2022-1910-1	P2022-1322-1	P2022-1385-1	IS + Cal. 7
C	IS + Cal. 3	M2022-1560-3	M2022-1987-3	P2022-1322-2	P2022-1393-1	IS + Cal. 6
D	IS + Cal. 4	M2022-1607-1	P2022-1111-1	P2022-1322-3	P2022-1425-1	IS + Cal. 5
E	IS + Cal. 5	M2022-1634-1	P2022-1195-1	P2022-1368-1	P2022-1426-1	IS + Cal. 4
F	IS + Cal. 6	M2022-1742-1	P2022-1205-3	P2022-1380-1	P2022-1441-1	IS + Cal. 3
G	IS + Cal. 7	M2022-1785-1	P2022-1248-1	P2022-1381-1	P2022-1452-1	IS + Cal. 2
H	IS + QC_1	M2022-1823-1	P2022-1268-1	P2022-1383-1	IS + QC_1	IS + Cal. 1

All wells to contain 100 µl of residual DMSO

TS

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

Extraction Date: 06/09/2022
Analyst: Tamara Salazar
Plate lot#: 220309
Plate Retest Date: 09/09/2022
Mobile phase A: 10mM Amm Form in LCMS Water
Mobile phase B: 0.1% Formic acid in MeOH
Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)
Blank Blood Lot: 20L20723
LCMS-QQQ ID: 069901

Pre-Analytic:

☒ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
☒ 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☒ 2. ~~Urine hydrolysis: add 1.5mL urine to blank plate, add 250µl 1N KOH. Shake and incubate at 40 degrees for 15 minutes.~~
Using a calibrated pipette, add **1000µl blood and urine (if applicable) (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, 500 µL saturated phosphate buffer in urine** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **700-800µL of blood+acid or urine+acid** mixture to corresponding wells of SLE+ plate.
Amount transferred: 750 uL
☒ 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)
☒ 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.
☒ 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: Run stopped due to high pressure on calibrator 5 and case sample P2022-1268. The instrument pressure was corrected, and the run continued without further issue.

Calibrator 4 dropped for THC-COOH and THC-OH due to accuracy.

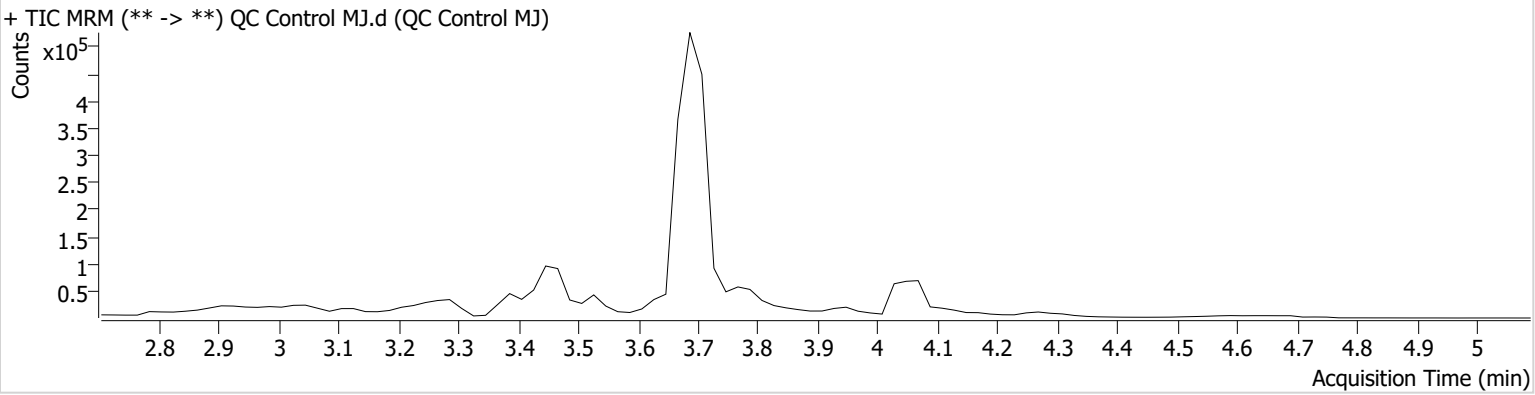
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 6/16/2022 10:01:34 AM

Instrument	Falco (069901)	**Data File**	QC Control MJ.d
Type	QC	**Sample**	QC Control MJ
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-H1	**Comment**	
Injection Volume	10		
Acq. Date-Time	6/9/2022 12:25:07 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.122	818	25308	4.1516	ng/ml
THC-COOH	3.710	71426	278348	17.2691	ng/ml
THC-OH	3.696	18866	889118	10.3455	ng/ml

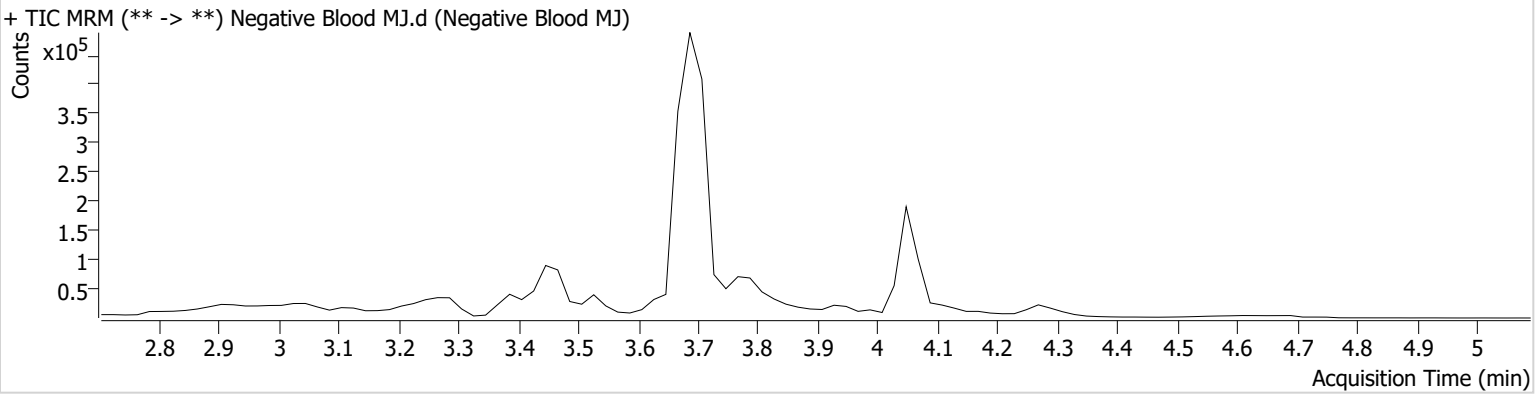
TS

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update	6/16/2022 10:01:34 AM

Instrument	Falco (069901)	**Data File**	Negative Blood MJ.d
Type	Sample	**Sample**	Negative Blood MJ
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-B2	**Comment**	
Injection Volume	10		
Acq. Date-Time	6/9/2022 12:38:16 PM		
Sample Info.			

Sample Chromatogram

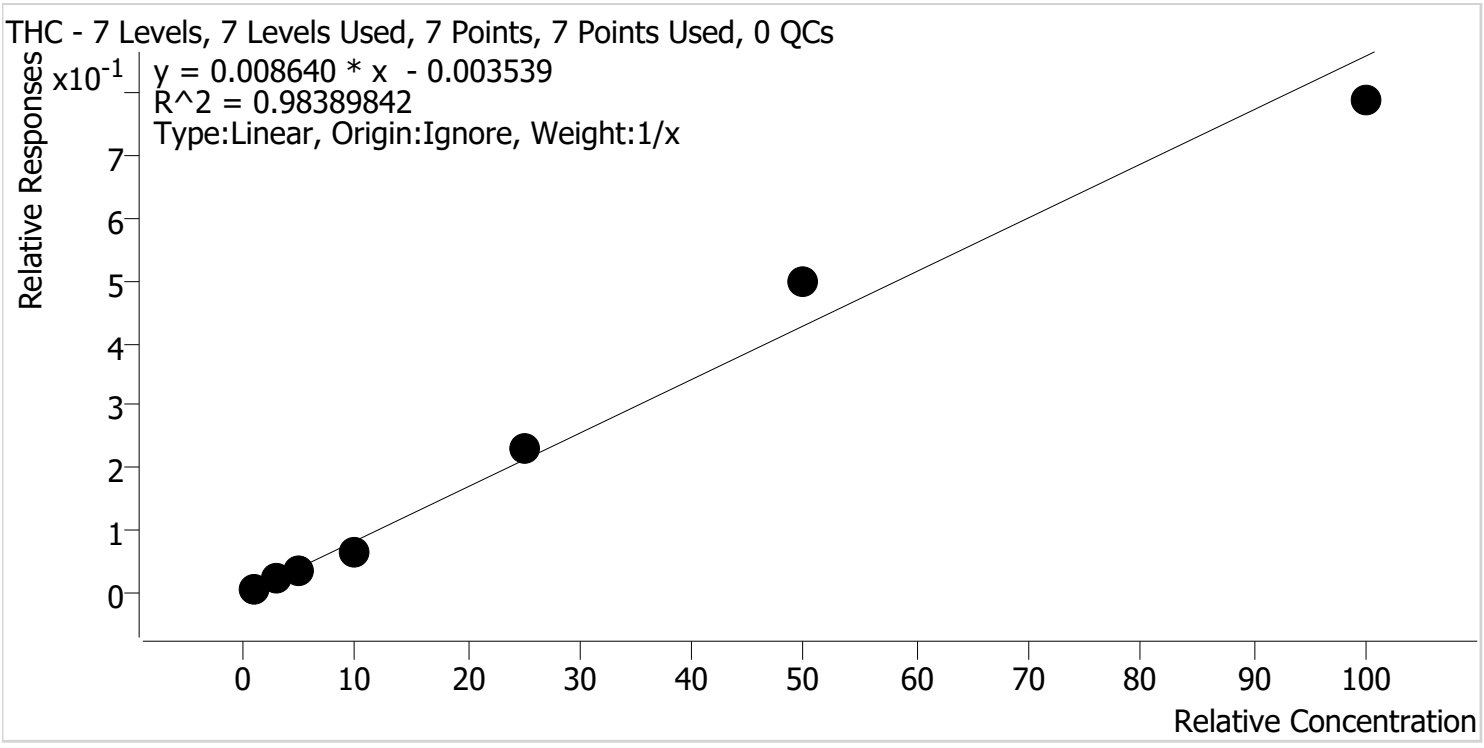


Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC-OH	3.676	6104	993950	1.5337	ng/ml	**Low**

TS

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Last Cal. Update	6/16/2022 10:01 AM
Analyst Name	ISP\datastor
Analyte	THC
Internal Standard	THC-D3

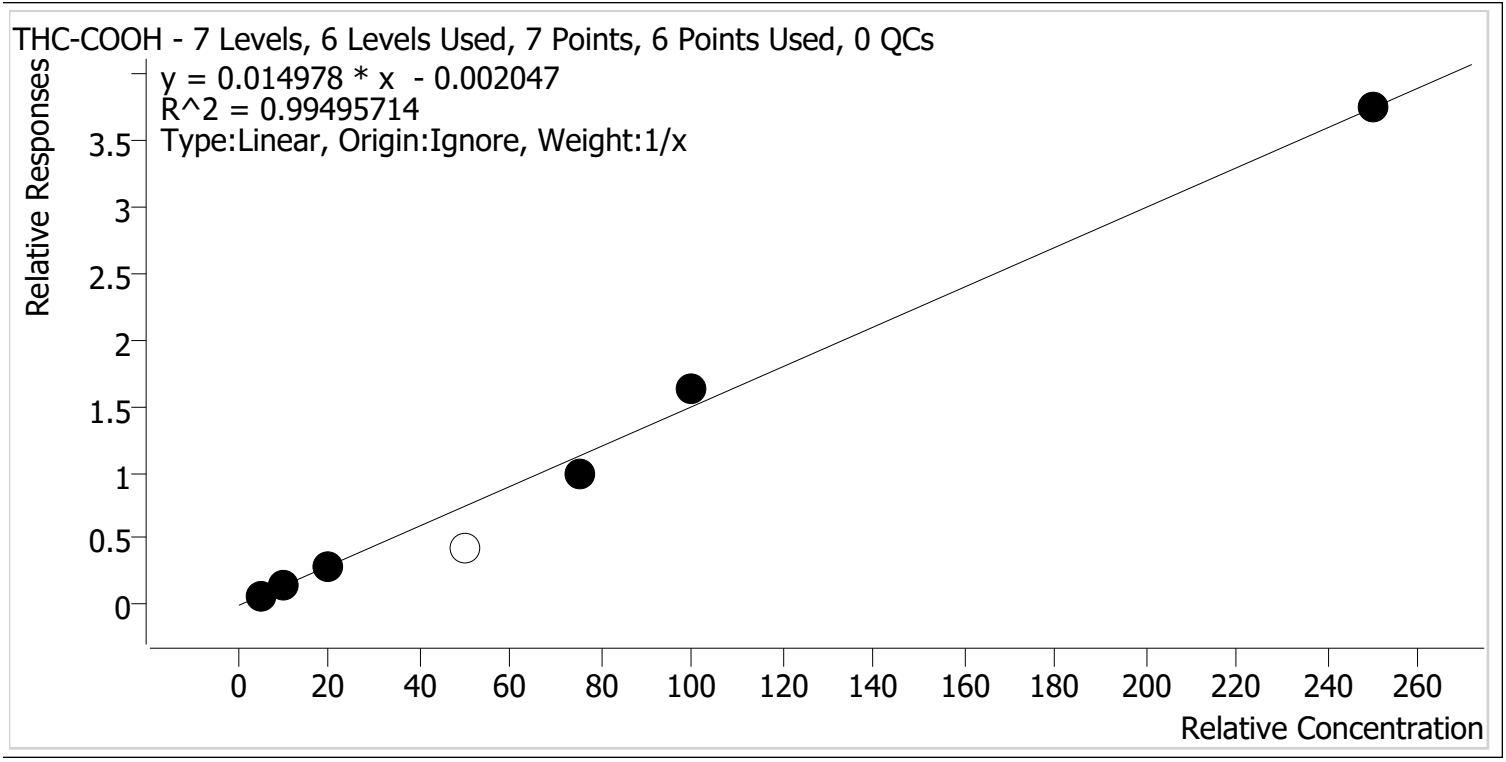


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	1.1	113.9
Cal 2 MJ	2	✔	3.0	2.9	97.1
Cal 3 MJ	3	✔	5.0	4.5	90.4
Cal 4 MJ	4	✔	10.0	8.1	81.3
Cal 5 MJ	5	✔	25.0	27.2	108.8
Cal 6 MJ	6	✔	50.0	58.4	116.8
Cal 7 MJ	7	✔	100.0	91.7	91.7

TS

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Last Cal. Update 6/16/2022 10:01 AM
Analyst Name ISP\datastor
Analyte THC-COOH **Internal Standard** THC-COOH-D9



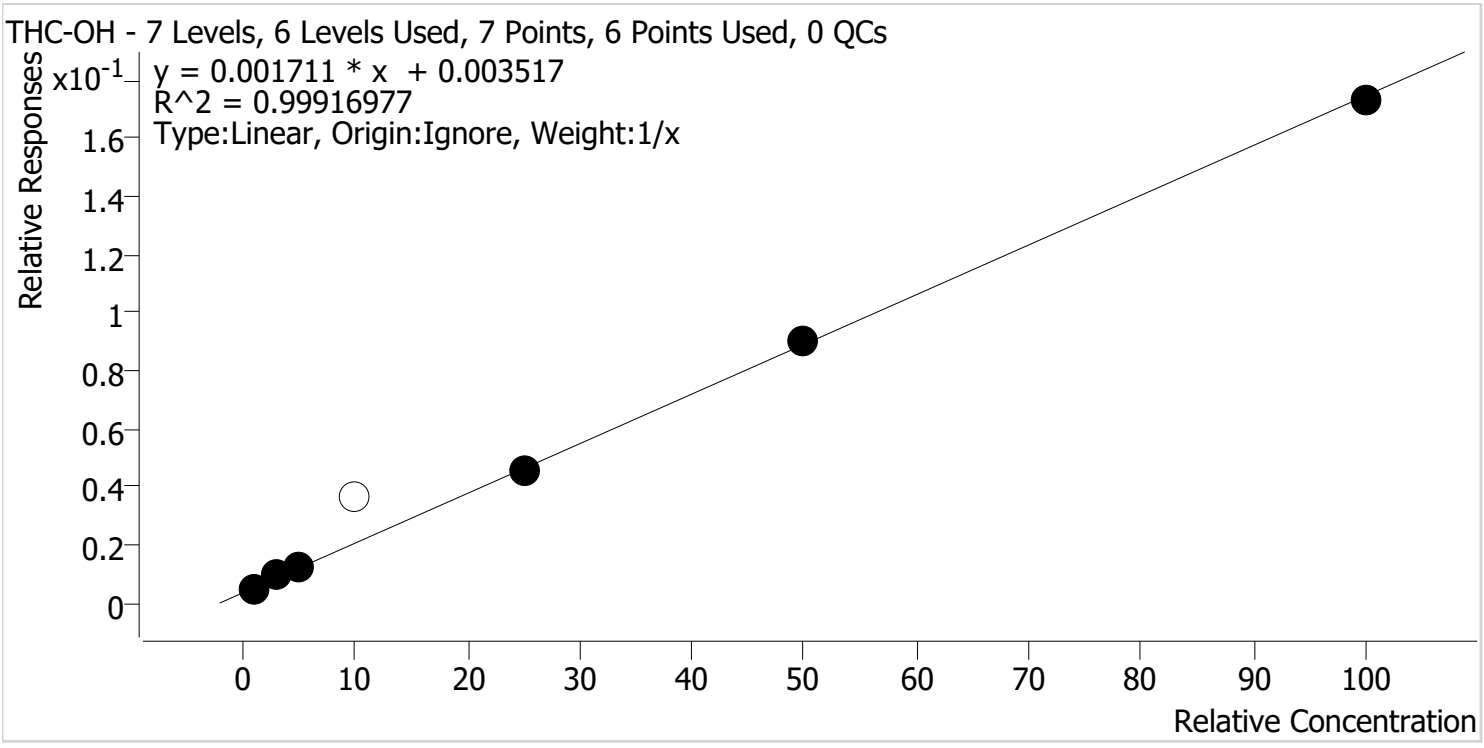
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	5.0	5.0	99.2
Cal 2 MJ	2	✔	10.0	10.4	104.2
Cal 3 MJ	3	✔	20.0	20.0	100.1
Cal 4 MJ	4	✗	50.0	28.9	57.7
Cal 5 MJ	5	✔	75.0	65.9	87.9
Cal 6 MJ	6	✔	100.0	108.6	108.6
Cal 7 MJ	7	✔	250.0	250.1	100.0

Calibrator 4 dropped due to accuracy.

TS

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Last Cal. Update	6/16/2022 10:01 AM
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	0.8	83.7
Cal 2 MJ	2	✔	3.0	3.5	116.3
Cal 3 MJ	3	✔	5.0	5.0	100.1
Cal 4 MJ	4	✗	10.0	19.1	191.4
Cal 5 MJ	5	✔	25.0	24.8	99.1
Cal 6 MJ	6	✔	50.0	50.9	101.8
Cal 7 MJ	7	✔	100.0	99.0	99.0

Calibrator 4 dropped due to accuracy.

Generated at 10:02 AM on 6/16/2022

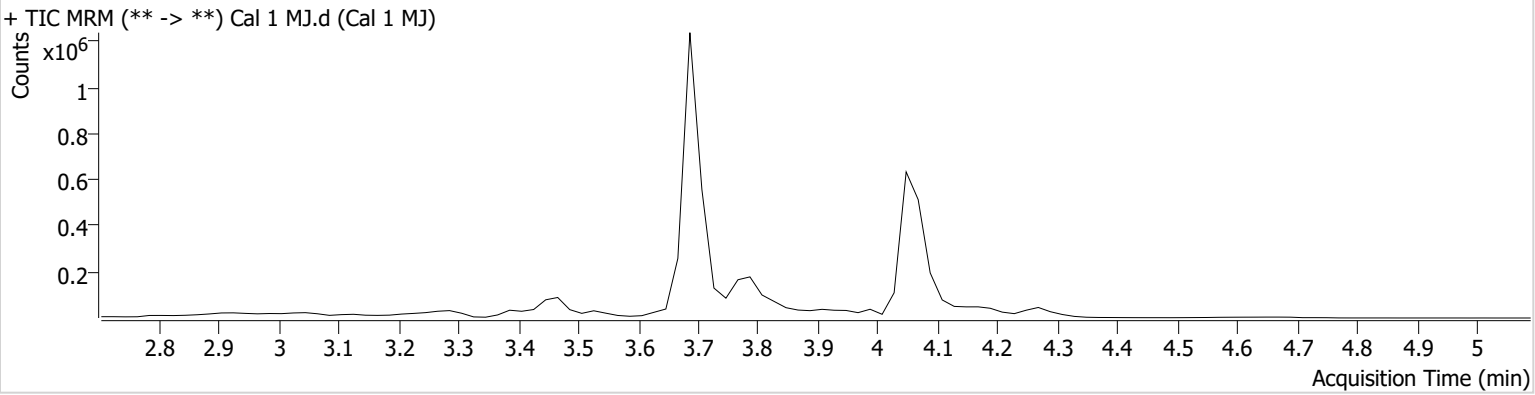
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 6/16/2022 10:01:34 AM

Instrument	Falco (069901)	**Data File**	Cal 1 MJ.d
Type	Cal	**Sample**	Cal 1 MJ
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-A1	**Comment**	
Injection Volume	10		
Acq. Date-Time	6/9/2022 10:51:02 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	4.102	1046	166029	1.1385	ng/ml	**Low**
THC-COOH	3.710	21423	296549	4.9598	ng/ml	**Low**
THC-OH	3.696	10063	2033225	0.8372	ng/ml	**Low**

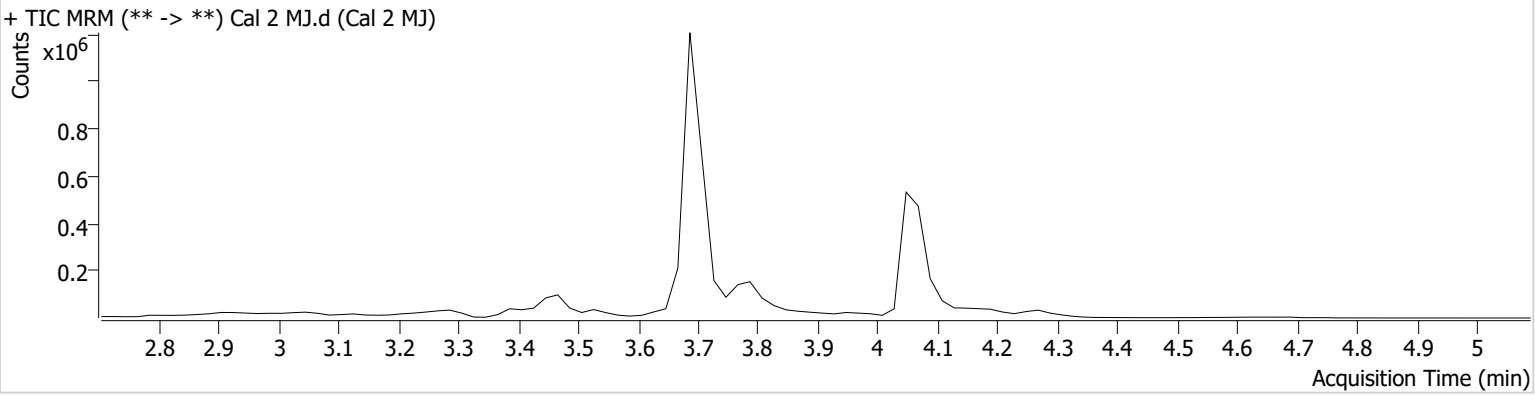
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 6/16/2022 10:01:34 AM

Instrument	Falco (069901)	**Data File**	Cal 2 MJ.d
Type	Cal	**Sample**	Cal 2 MJ
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-B1	**Comment**	
Injection Volume	10		
Acq. Date-Time	6/9/2022 10:57:49 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	4.122	2573	118940	2.9135	ng/ml	**Low**
THC-COOH	3.710	47714	309884	10.4168	ng/ml	
THC-OH	3.696	18277	1926723	3.4884	ng/ml	

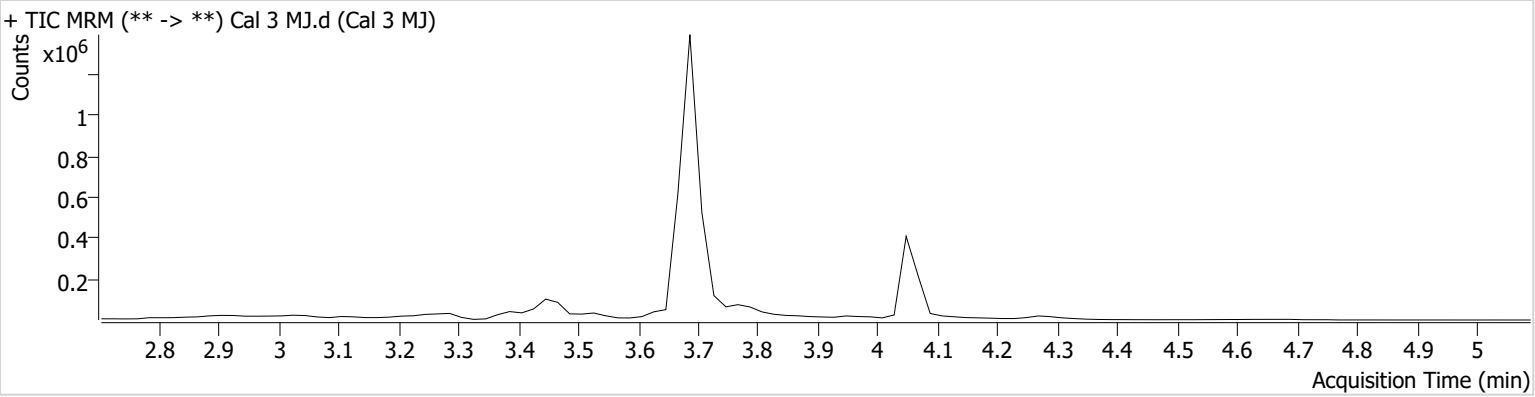
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 6/16/2022 10:01:34 AM

Instrument	Falco (069901)	**Data File**	Cal 3 MJ.d
Type	Cal	**Sample**	Cal 3 MJ
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-C1	**Comment**	
Injection Volume	10		
Acq. Date-Time	6/9/2022 11:04:24 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.122	965	27188	4.5188	ng/ml
THC-COOH	3.710	102158	342937	20.0255	ng/ml
THC-OH	3.696	25721	2129220	5.0045	ng/ml

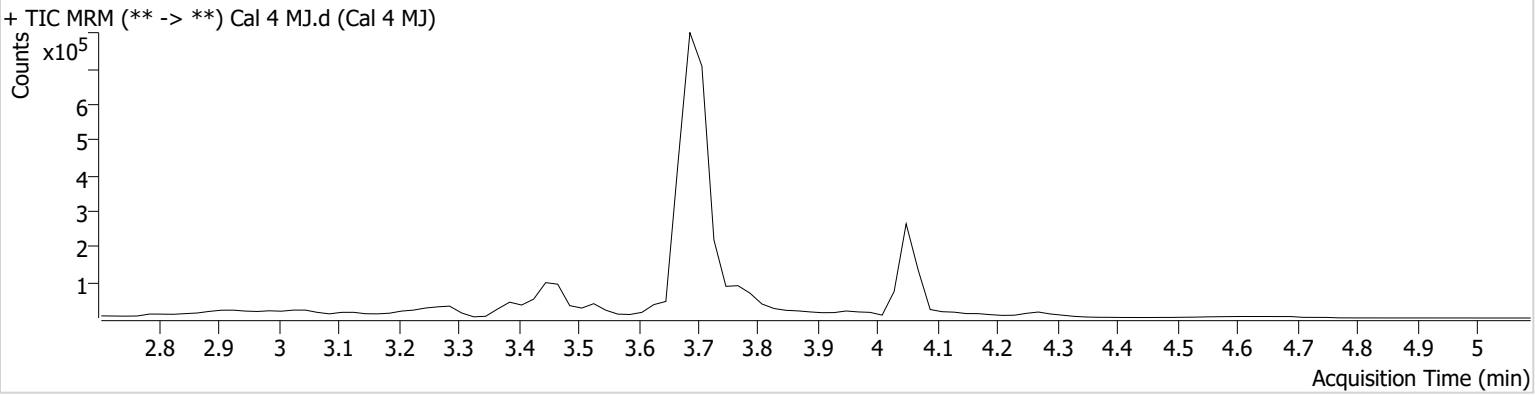
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 6/16/2022 10:01:34 AM

Instrument	Falco (069901)	**Data File**	Cal 4 MJ.d
Type	Cal	**Sample**	Cal 4 MJ
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-D1	**Comment**	
Injection Volume	10		
Acq. Date-Time	6/9/2022 11:11:00 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.122	1756	26310	8.1344	ng/ml
THC-COOH	3.690	158997	369591	28.8588	ng/ml
THC-OH	3.696	42148	1162267	19.1382	ng/ml

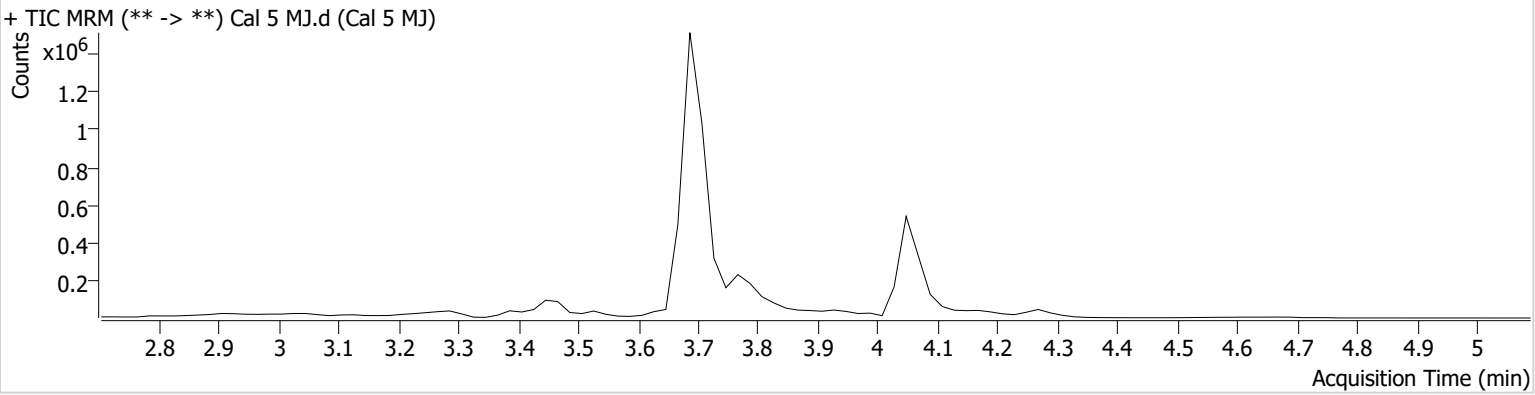
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 6/16/2022 10:01:34 AM

Instrument	Falco (069901)	**Data File**	Cal 5 MJ.d
Type	Cal	**Sample**	Cal 5 MJ
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-E1	**Comment**	
Injection Volume	10		
Acq. Date-Time	6/9/2022 12:05:17 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.102	22476	97060	27.2124	ng/ml
THC-COOH	3.710	361987	367344	65.9283	ng/ml
THC-OH	3.696	80019	1742542	24.7822	ng/ml

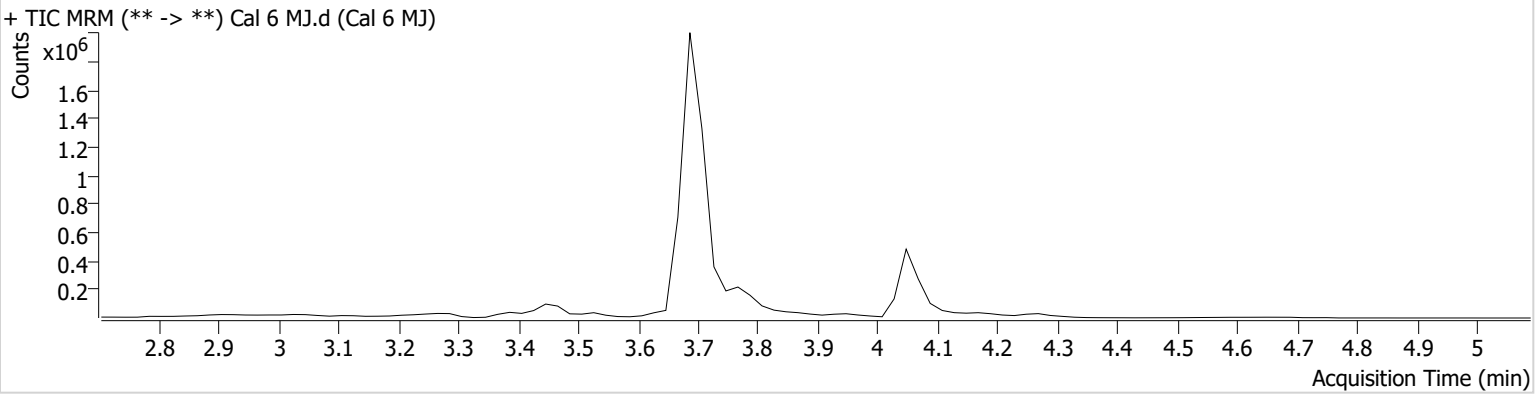
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 6/16/2022 10:01:34 AM

Instrument	Falco (069901)	**Data File**	Cal 6 MJ.d
Type	Cal	**Sample**	Cal 6 MJ
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-F1	**Comment**	
Injection Volume	10		
Acq. Date-Time	6/9/2022 12:12:01 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.102	37848	75571	58.3784	ng/ml
THC-COOH	3.710	573881	353383	108.5607	ng/ml
THC-OH	3.696	164348	1813885	50.8975	ng/ml

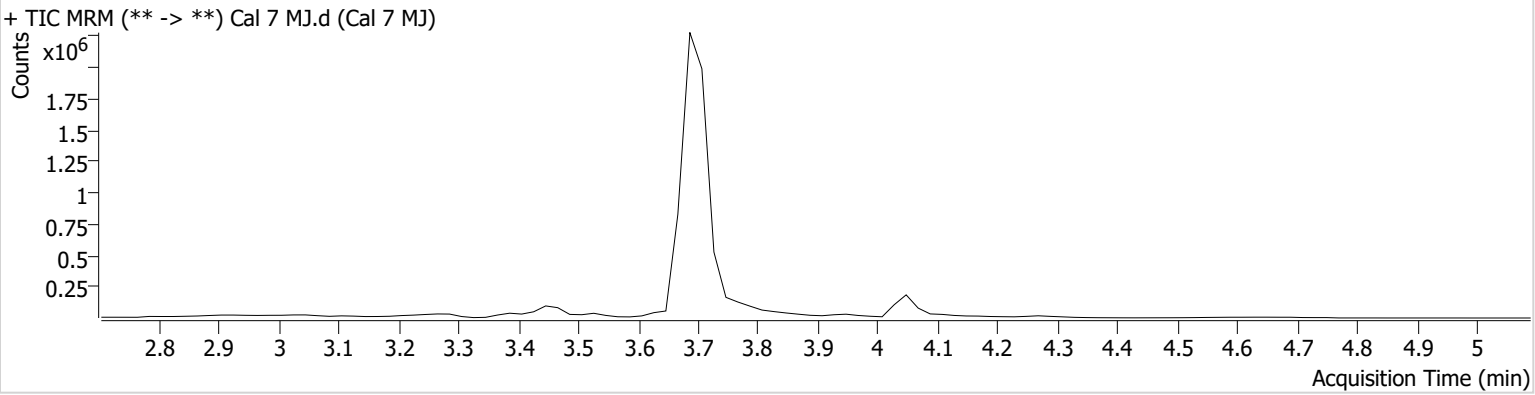
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\060922 AM 25 26 TS\QuantResults\AM 26.batch.bin
Calibration Last Update 6/16/2022 10:01:34 AM

Instrument	Falco (069901)	**Data File**	Cal 7 MJ.d
Type	Cal	**Sample**	Cal 7 MJ
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-G1	**Comment**	
Injection Volume	10		
Acq. Date-Time	6/9/2022 12:18:34 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.122	21444	27187	91.7039	ng/ml
THC-COOH	3.710	1180530	315308	250.1090	ng/ml
THC-OH	3.696	256117	1481342	98.9903	ng/ml