8/28/2023

Worklist: 6482

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2023-3053	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2023-3397	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2023-3475	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2023-3537	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2023-3541	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2023-3608	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2449	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2465	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2480	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2485	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2497	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2498	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2499	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2512	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2522	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2542	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2543	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2544	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2554	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2559	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2561	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

Worklist: 6482

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
P2023-2565	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2566	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2569	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2575	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2584	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2611	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2023-2615	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

SC

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

Extraction Date: 08/28/23
Plate lot#: 230712
Mobile phase A: 10mM Amm Form
Blank Blood Lot: 23A52594
LCMS-QQQ ID: 069901

Analyst: Sarah Collins
Plate Retest Date: 01/12/2024
Mobile phase B: 0.1% Formic Acid in MeOH
Blank Urine Lot: N/A
Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

Pre-Analytic:

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

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☐ 2. Urine Hydrolysis: In blank well, add 250µL urine, 40µL BG Turbo, and 100µL Instant Buffer I. Place on plate shaker for 5 minutes.
☒ 3. Using a calibrated pipette, pipette **250µL blood and urine** (if applicable) into wells of analytical (standards) plate. **Pipette ID: #42**
☒ 4. 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: *300uL*
☒ 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. 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).
☒ 16. 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: *The pressure maxed out and stopped the run 8/28/23. The clog was removed and the run was continued 8/29/23.*

There was contamination in case samples P2023-2542-1, P2023-2543-1, and P2023-2575-1. These samples will be re-extracted at a later date.

The last checktune was ran 8/21/23 which is outside the 7 day window per AM #24 section 4.2.1.5.1. A successful checktune was ran 8/30/23. See deviation approval to use the data ran on 8/29/23.

SC

Idaho State Police
Forensic Services

Request for Departure from an Analytical Method or Quality Standard

Deviation Number (assigned by QM): ISP DEV TOX-23-01

Date of Request: **8/31/2023**

Requestor/Discipline: Celena Shrum and Sarah Collins/Toxicology

Analytical Method/Quality Standard, Revision #: AM #24, Revision 17

Temporary or Permanent Deviation: Permanent

Scope of Deviation (record specific information, e.g. affected programs, evidence types, expected end date; etc): Deviation is specific for this particular instance and as such does not have an end date.

Deviation Request (Describe detailed instructions of the changes being made; include reference to specific section number(s) in the method manual):

AM #24 states: 4.2.1.5.1 NOTE: A successful checktune must have been run within one week prior to running case samples for LC/MS/MS. A successful transmission tune must have been run within one week prior to running cases and a successful mass calibration must be run prior to the start of the run. A system tune should be performed when the transmission and/or calibration check dictates the need.

We are requesting to use the data for the AM #25 and #26 runs that were injected starting on 8/28/23 and ran through 8/29/23 even though a checktune was not run within the 7 days prior to the injection of the samples. Checktunes were run on 8/21/23 and 8/30/23 and both passed.

Technical Justification for Analytical Method Deviations:
An autotune optimizes the instrument and then the checktune is used to determine if anything has changed since the autotune that would indicate that it is running less than optimally. The calibrators, controls, and ISTD's demonstrated that the instrument was working properly at the time that the samples were run. The checktunes prior to and after the runs were passing, which would also indicate that the instrument was running optimally. Additionally, it has been determined that this requirement is going to be removed in the next method revision and replaced with a suggested guideline about when autotunes and checktunes should be performed.

Technical Review

☒ Departure approved

Comments:

☐ Departure Not Approved
Comments:

Approver: Rachel Cutler Date: 8/31/23
Title: Pocatello Laboratory Manager

Quality Review

Quality Approver: Tina Mattox Date: 9/1/2023
Title: Lab Improvement Manager

8C

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1								p2023-2611-1	p2023-2554-2	p2023-2497-1	m2023-3475-2
B	IS + Cal. 1								p2023-2584-1	p2023-2544-1	p2023-2485-1	m2023-3397-2
C	IS + Control								p2023-2575-1	p2023-2543-1	p2023-2480-1	m2023-3053-1
D	IS + Control								p2023-2569-1	p2023-2542-1	p2023-2465-2	negative control
E									p2023-2566-1	p2023-2522-1	p2023-2449-1	IS + Control
F									p2023-2565-1	p2023-2512-1	m2023-3608-2	IS + Control
G									p2023-2561-1	p2023-2499-1	m2023-3541-2	IS + Cal. 1
H								p2023-2615-1	p2023-2559-1	p2023-2498-1	m2023-3537-1	IS + Cal. 1

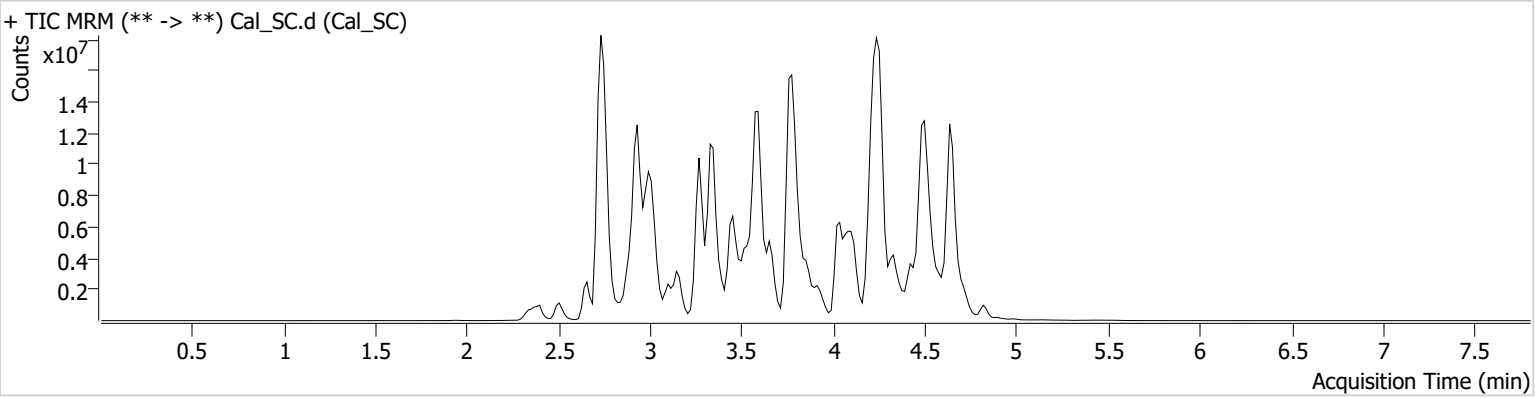
SC

AM #25 Multi-Drug Screen. Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 25 SC.batch.bin
Calibration Last Update 8/30/2023 1:31:20 PM

Instrument	Falco (069901)	**Data File**	Cal_SC.d
Type	Cal	**Sample**	Cal_SC
Acq. Method	AM 25 MDS_new compounds 081023.m	**Operator**	Sarah Collins
Sample Position	P6-H12	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	8/29/2023 9:46:16 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
10-OH-Carbamazepine	3.765	4140419	262.05	114.6		1087.19	28445866	10.0000 ng/ml
6-MAM	2.928	63412	23659.58	72.0		23873.06	1760973	10.0000 ng/ml
7-aminoclonazepam	3.577	1645604	1423.17	88.5		852.90	9164498	10.0000 ng/ml
7-aminoflunitrazepam	3.777	3651270	465.49	20.0		7322.14	9164498	10.0000 ng/ml
9-Hydroxyrisperidone	3.862	1549259	441.64	2.6		18445.09	6681562	10.0000 ng/ml
Acetyl Fentanyl	3.851	38080	32.75	99.7		18018.88	26723011	10.0000 ng/ml
Acetyl Norfentanyl	2.921	449631	614.49	39.9		219.34	26723011	10.0000 ng/ml
a-hydroxyalprazolam	4.498	460291	1134.85	47.6		53.23	9164498	10.0000 ng/ml
alpha-hydroxymidazolam	4.574	2158814	1344.66	56.1		1014.82	9164498	10.0000 ng/ml
Alpha-PHP	3.827	2004926	18953.26	32.7		775.90	26723011	10.0000 ng/ml
alpha-PVP	3.566	4350158	17964.61	46.6		215.69	7121439	10.0000 ng/ml
Alprazolam	4.593	2183373	405.52	90.3		319.73	24023797	10.0000 ng/ml
Amitriptyline	4.427	239597	16.36	53.1		47.89	557296	10.0000 ng/ml
Amphetamine	2.925	1552649	266.82	228.8		252.70	7121439	10.0000 ng/ml
Benzoylecgonine	3.392	245188	137542.66	21.0		38124.10	828355	10.0000 ng/ml
Bromazolam	4.665	1121650	515.19	132.4		720243.03	24023797	10.0000 ng/ml
Brompheniramine	4.036	16693	6233.79	726.2		91.16	14877514	10.0000 ng/ml
Buprenorphine	4.493	12087	83.68	13.2		1015.89	425266	10.0000 ng/ml
Bupropion	3.781	1676673	461.67	66.8		535.06	6992391	10.0000 ng/ml
Carbamazepine	4.229	14618815	2161.68	90.7		638.31	850341	10.0000 ng/ml
Carisoprodol	4.212	1637925	204418.80	61.6		135.23	11136402	10.0000 ng/ml
Chlordiazepoxide	4.718	1944420	35.18	69.0		524.41	24023797	10.0000 ng/ml
Chlorpheniramine	3.948	1209725	1452.34	0.2	Low	14.23	1546343	10.0000 ng/ml
Chlorpromazine	4.607	167642	69895.26	289.4	High	137305.58	744487	10.0000 ng/ml
Citalopram	4.066	609083	1044.54	33.6		111279.83	14877514	10.0000 ng/ml
Clomipramine	4.623	206910	3217.18	84.9		840.11	14877514	10.0000 ng/ml
Clonazepam	4.422	2500264	568.91	27.9		366285.50	850341	10.0000 ng/ml
Clonazolam	4.357	1843077	766003.18	28.2		157471.66	24023797	10.0000 ng/ml
Clozapine	4.266	593568	216660.65	71.0		230.20	2420014	10.0000 ng/ml
Cocaethylene	3.805	3956116	5442.67	39.9		1403.91	21898457	10.0000 ng/ml

SC

AM #25 Multi-Drug Screen. Results

Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
Cocaine	3.590	3831092	65604.38	19.1		345.01	21898457	10.0000 ng/ml
Codeine	2.840	488817	5637.03	89.5		692.10	11019672	10.0000 ng/ml
Cyclobenzaprine	4.335	263248	64.68	7.2		11.57	557296	10.0000 ng/ml
Desipramine	4.366	468513	335.22	41.1		105.49	557296	10.0000 ng/ml
Dextromethorphan	4.072	285456	214.40	90.2		248.35	1546343	10.0000 ng/ml
Dextrorphan	3.394	1528394	920.06	51.9		552.69	1546343	10.0000 ng/ml
Diazepam	4.826	1315574	1383.16	88.8		704.93	24023797	10.0000 ng/ml
Dihydrocodeine	2.763	1551164	1070.45	52.3		1714.47	11019672	10.0000 ng/ml
Diphenhydramine	4.042	1961009	417.62	27.8		271.49	14877514	10.0000 ng/ml
DMT	2.999	146015	513.34	243.1	High	1649.21	1546343	10.0000 ng/ml
Doxepin	4.148	238465	141.37	37.8		17.25	5338161	10.0000 ng/ml
Doxylamine	3.654	5969299	20688.95	97.2		388.37	1546343	10.0000 ng/ml
Duloxetine	4.317	7973	6018.48	1136.1	High	797.78	124417	10.0000 ng/ml
EDDP	4.087	136417	64.81	58.1		67.90	871509	10.0000 ng/ml
Estazolam	4.517	8179012	1430.93	48.6		1024.80	24023797	10.0000 ng/ml
Etizolam	4.619	205706	177499.59	370.9		7076.48	24023797	10.0000 ng/ml
Fentanyl	4.081	19416	7.35	80.4		7564.34	1925558	10.0000 ng/ml
Flualprazolam	4.467	920934	927847.15	167.2		1049180.46	24023797	10.0000 ng/ml
Flunitrazepam	4.546	3781069	1318.78	35.6		681.87	24023797	10.0000 ng/ml
Fluorofentanyl	4.110	34666	9554.00	148.6		23.92	1925558	10.0000 ng/ml
Fluoxetine	4.316	250219	229415.31	7.8		7.29	648293	10.0000 ng/ml
Flurazepam	4.171	556402	346.14	25.9		62700.65	24023797	10.0000 ng/ml
Hydrocodone	3.023	1697545	4321.47	36.1		1717.17	11019672	10.0000 ng/ml
Hydromorphone	2.506	1841481	11961.02	74.2		2590.70	704788	10.0000 ng/ml
Hydroxyzine	4.479	241653	119.40	86.5		543.85	2420014	10.0000 ng/ml
Imipramine	4.380	482917	358.40	63.4		905.83	557296	10.0000 ng/ml
Ketamine	3.519	3847088	1302.00	38.5		148.63	16407659	10.0000 ng/ml
Lamotrigine	3.594	281270	439.19	76.5		244.62	14877514	10.0000 ng/ml
Levamisole	2.982	3588728	27035.48	80.9		418.63	21898457	10.0000 ng/ml
Levetiracetam	2.664	2379342	642.46	194.2		1402.78	14877514	10.0000 ng/ml
Lorazepam	4.422	713485	909.59	254.5		∞	24023797	10.0000 ng/ml
Maprotiline	4.427	136172	9.82	66.6		799.16	557296	10.0000 ng/ml
MDA	3.030	1149122	191.57	40.5		94.94	11761733	10.0000 ng/ml
MDEA	3.259	2199458	707.46	48.4		264.38	11761733	10.0000 ng/ml
MDMA	3.106	2798333	449.33	48.4		456.96	11761733	10.0000 ng/ml
Meperidine	3.610	949434	237.02	54.3		884.01	1546343	10.0000 ng/ml
Meprobamate	3.675	1172829	371.85	19.2		140.71	11136402	10.0000 ng/ml
Methadone	4.392	806206	619.60	41.2		142.16	871509	10.0000 ng/ml
Methamphetamine	3.016	1752561	2330.81	42.2		110.77	11761733	10.0000 ng/ml
Methocarbamol	3.580	499765	213.72	83.4		187.80	871509	10.0000 ng/ml
Methylphenidate	3.535	5637549	676.44	20.2		62.38	7332997	10.0000 ng/ml
Metoprolol	3.455	479295	253.61	109.0		299866.61	1546343	10.0000 ng/ml
Midazolam	4.729	477256	1804.56	87.0		986.20	24023797	10.0000 ng/ml
Mirtazapine	3.918	849795	421954.18	218.2		9372.26	1546343	10.0000 ng/ml
Mitragynine	4.170	55311	27483.02	219.8		79398.92	1546343	10.0000 ng/ml
Morphine	2.339	458988	424.48	79.3		2118.42	704788	10.0000 ng/ml
Norbuprenorphine	3.831	7549	3158.31	162.6	High	3583.99	425266	10.0000 ng/ml
Nordiazepam	4.689	1657849	330.56	70.2		359.99	24023797	10.0000 ng/ml
Norfentanyl	3.350	5768216	7846.03	37.1		1009.04	26723011	10.0000 ng/ml
Norhydrocodone	2.948	168308	117.31	45.4		52.81	704788	10.0000 ng/ml
Norketamine	3.597	503775	104.61	489.5		692.47	16407659	10.0000 ng/ml
Normeperidine	3.627	622637	422.24	61.7		139.07	14877514	10.0000 ng/ml
Noroxycodone	2.900	1747090	320.94	27.7		193.71	16407659	10.0000 ng/ml
Nortriptyline	4.413	169994	160008.04	62.6		35.64	557296	10.0000 ng/ml
O-desmethyl-tramadol	2.934	9525174	36062.59	5.2		190.86	14877514	10.0000 ng/ml
O-desmethylvenlafaxine	3.270	2064328	1421.99	602.1		2621.55	12895010	10.0000 ng/ml
Olanzapine	3.806	196847	158788.35	50.1		66019.17	850341	10.0000 ng/ml
Oxazepam	4.502	2944710	356.56	74.8		205.92	21106418	10.0000 ng/ml
Oxycodone	2.944	3989709	830.03	26.0		415.95	16407659	10.0000 ng/ml

SC

AM #25 Multi-Drug Screen. Results

Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
Oxymorphone	2.396	2262521	∞	29.0		11335.49	704788	10.0000 ng/ml
Paroxetine	4.328	36870	59.54	87.5	High	7759.42	648293	10.0000 ng/ml
Phenazepam	4.634	1711543	877235.91	67.4		997658.25	24023797	10.0000 ng/ml
Phencyclidine	3.919	1828849	9864.80	56.9		223.21	1546343	10.0000 ng/ml
Phentermine	3.170	494633	90.52	8.0		9.64	7332997	10.0000 ng/ml
Phenytoin	4.120	1843812	392.53	80.5		645.79	850341	10.0000 ng/ml
Primidone	3.490	2139386	1689384.72	84.7		374.89	850341	10.0000 ng/ml
Promethazine	4.318	633583	941.04	29.3		149.37	14877514	10.0000 ng/ml
Pseudoephedrine	2.740	50368908	923.40	33.4	Low	53912.29	11761733	10.0000 ng/ml
Quetiapine	4.433	1265395	308.65	50.3		179.61	42189132	10.0000 ng/ml
Risperidone	4.047	1071932	658338.38	9.6		45.45	6681562	10.0000 ng/ml
Sertraline	4.547	122134	68645.59	86.3		280.26	648293	10.0000 ng/ml
Sufentanil	4.387	15546	10555.53	132.2	High	7675.74	26723011	10.0000 ng/ml
Tapentadol	3.459	3308215	7855.48	39.0		1396.86	16407659	10.0000 ng/ml
Temazepam	4.656	5103409	1097.93	29.2		217.63	24023797	10.0000 ng/ml
Topiramate	3.849	87934	392.07	29.0	Low	22326.46	298519	10.0000 ng/ml
Tramadol	3.440	13452769	1239.23	1.6		32.21	14877514	10.0000 ng/ml
Trazodone	4.510	1425769	1381529.26	59.6		412731.99	5338161	10.0000 ng/ml
Venlafaxine	3.808	3662390	990.02	29.6		67.40	12895010	10.0000 ng/ml
Xylazine	3.397	952208	368.27	45.1		55.41	16407659	10.0000 ng/ml
Zaleplon	4.332	4419854	2667.92	71.0		42417.13	42189132	10.0000 ng/ml
Zolpidem	4.254	10941583	2538.78	30.5		721.62	42189132	10.0000 ng/ml
Zopiclone	4.109	1334283	302879.71	56.9		263857.66	6646078	10.0000 ng/ml

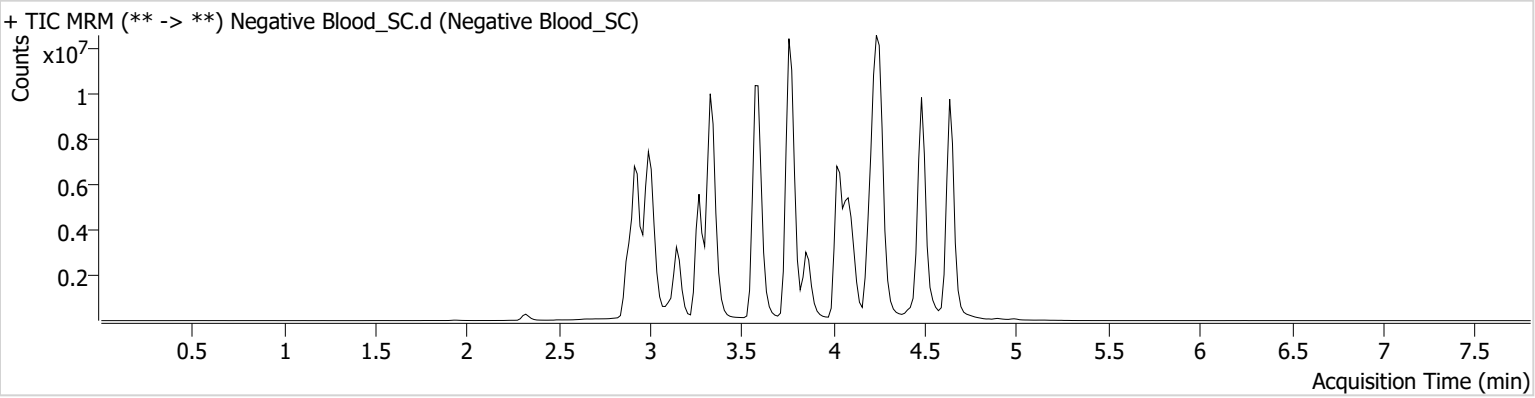
SC

AM #25 Multi-Drug Screen. Results

Batch results	D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 25 SC.batch.bin
Calibration Last Update	8/30/2023 1:31:20 PM

Instrument	Falco (069901)	**Data File**	Negative Blood_SC.d
Type	Sample	**Sample**	Negative Blood_SC
Acq. Method	AM 25 MDS_new compounds 081023.m	**Operator**	Sarah Collins
Sample Position	P6-D12	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	8/29/2023 9:54:52 PM		
Sample Info.			

Sample Chromatogram



SC

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

Extraction Date: 08/31/23
Plate lot#: 230712
Mobile phase A: 10mM Amm Form
Blank Blood Lot: 23A52594
LCMS-QQQ ID: 069901

Analyst: Sarah Collins
Plate Retest Date: 01/12/2024
Mobile phase B: 0.1% Formic Acid in MeOH
Blank Urine Lot: N/A
Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

Pre-Analytic:

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

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☐ 2. Urine Hydrolysis: In blank well, add 250µL urine, 40µL BG Turbo, and 100µL Instant Buffer I. Place on plate shaker for 5 minutes.
☒ 3. Using a calibrated pipette, pipette **250µL blood and urine** (if applicable) into wells of analytical (standards) plate. **Pipette ID: #42**
☒ 4. 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: *300uL*
☒ 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. 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).
☒ 16. 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: *Re-extract for case samples P2023-2542-1, P2023-2543-1, and P2023-2575-1. These samples were originally injected with an older method. They were reinjected 8/31/23 using the updated method. The reinjected data was used for analysis.*

Analytical plate map

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1											
B	IS + Cal. 1											
C	IS + Control											
D	IS + Control							p2023-2542-1				
E								p2023-2543-1				IS + Control
F								p2023-2575-1				IS + Control
G								negative control				IS + Cal. 1
H												IS + Cal. 1

SLE plate map

SC

	1	2	3	4	5	6	7	8	9	10	11	12
A							p2023-2542-1					
B							p2023-2543-1					
C							p2023-2575-1					
D							negative control					
E							IS + Cal. 1					
F												
G												
H												

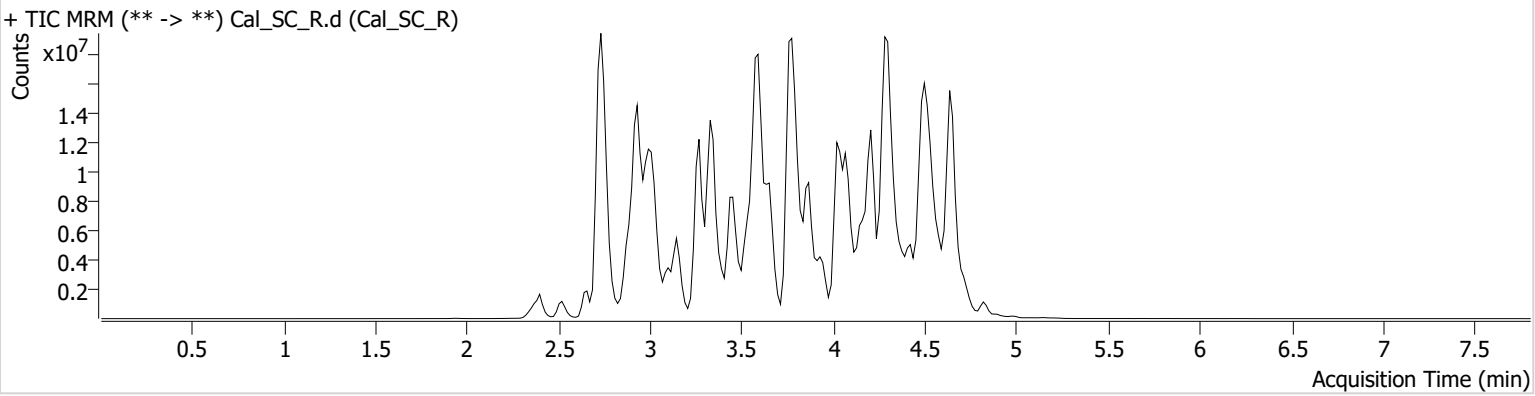
SC

AM #25 Multi-Drug Screen. Results

Batch results D:\MassHunter\Data\2023\AM 25 26\083123 AM 25 SC reextracts\QuantResults\AM 25.batch.bin
Calibration Last Update 8/31/2023 6:50:36 PM

Instrument	Falco (069901)	**Data File**	Cal_SC_R.d
Type	Cal	**Sample**	Cal_SC_R
Acq. Method	AM 25 MDS_new compounds 081023.m	**Operator**	Sarah Collins
Sample Position	P6-E7	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	8/31/2023 2:32:53 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
10-OH-Carbamazepine	3.765	4531563	1262.77	116.8		267771.23	29518961	10.0000 ng/ml
6-MAM	2.943	80675	33845.16	78.7		73825.89	2618246	10.0000 ng/ml
7-aminoclonazepam	3.577	1904081	799144.80	85.5		712751.61	10184651	10.0000 ng/ml
7-aminoflunitrazepam	3.777	3630280	297.69	20.8		146.40	10184651	10.0000 ng/ml
9-Hydroxyrisperidone	3.862	4357456	611.84	2.6		44481.79	21818308	10.0000 ng/ml
Acetyl Fentanyl	3.866	122146	54.13	73.8	Low	57058.99	31827161	10.0000 ng/ml
Acetyl Norfentanyl	2.921	477623	253.22	43.6		513.30	31827161	10.0000 ng/ml
a-hydroxyalprazolam	4.498	564658	1705.74	52.3		1372.02	10184651	10.0000 ng/ml
alpha-hydroxymidazolam	4.574	2501208	218.35	58.3		42065.05	10184651	10.0000 ng/ml
Alpha-PHP	3.827	3066393	291019.85	37.5		3099.94	31827161	10.0000 ng/ml
alpha-PVP	3.566	5785689	2067.95	49.4		729.96	11218881	10.0000 ng/ml
Alprazolam	4.608	2216603	189.64	89.5		263.31	27597535	10.0000 ng/ml
Amitriptyline	4.427	686975	91.12	66.9		80.74	1976940	10.0000 ng/ml
Amphetamine	2.925	2389574	517.61	216.4		539.61	11218881	10.0000 ng/ml
Benzoylecgonine	3.392	142820	153228.75	28.6	High	24200.57	556630	10.0000 ng/ml
Bromazolam	4.665	1432798	6691.77	136.0		3690.84	27597535	10.0000 ng/ml
Brompheniramine	4.036	34183	30770.67	1094.6	High	335.41	28269049	10.0000 ng/ml
Buprenorphine	4.570	24440	7202.71	10.6	Low	1417.77	1267385	10.0000 ng/ml
Bupropion	3.781	2905732	874.16	63.3		628.47	12704949	10.0000 ng/ml
Carbamazepine	4.229	17291807	∞	89.9		2239.69	1103347	10.0000 ng/ml
Carisoprodol	4.212	2248993	776990.33	60.1		180.26	14662218	10.0000 ng/ml
Chlordiazepoxide	4.718	2510963	396.50	70.2		440.57	27597535	10.0000 ng/ml
Chlorpheniramine	3.948	2748691	1447.96	0.3	Low	3472.54	4030319	10.0000 ng/ml
Chlorpromazine	4.607	587471	322477.35	151.7	High	486.17	2584865	10.0000 ng/ml
Citalopram	4.066	1288285	525.57	37.4		242063.30	28269049	10.0000 ng/ml
Clomipramine	4.623	743971	14122.82	77.6		1399.93	28269049	10.0000 ng/ml
Clonazepam	4.422	3242390	3354952.29	31.9		289400.77	1103347	10.0000 ng/ml
Clonazolam	4.357	2809631	2897.68	29.8		347067.32	27597535	10.0000 ng/ml
Clozapine	4.282	1381171	1616.40	72.8		574.42	5945968	10.0000 ng/ml
Cocaethylene	3.790	5590235	5008.27	44.0		898.77	31898878	10.0000 ng/ml

SC

AM #25 Multi-Drug Screen. Results

Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
Cocaine	3.590	6185693	4442769.04	18.1		572.52	31898878	10.0000 ng/ml
Codeine	2.855	566438	5943.61	86.8		1859.34	12891199	10.0000 ng/ml
Cyclobenzaprine	4.335	970516	270.91	7.8		60.33	1976940	10.0000 ng/ml
Desipramine	4.366	1519669	1142.21	41.8		331.86	1976940	10.0000 ng/ml
Dextromethorphan	4.072	776431	903.61	81.0		307.48	4030319	10.0000 ng/ml
Dextrorphan	3.394	2449261	856.44	53.4		12963.48	4030319	10.0000 ng/ml
Diazepam	4.826	1538243	765.02	92.4		531.72	27597535	10.0000 ng/ml
Dihydrocodeine	2.778	1742392	6042.13	49.6		1256.15	12891199	10.0000 ng/ml
Diphenhydramine	4.026	4755749	1972.14	28.3		62076.31	28269049	10.0000 ng/ml
DMT	2.999	352341	1203.83	132.4	Low	468.17	4030319	10.0000 ng/ml
Doxepin	4.148	691255	490.40	40.7		50.00	13070083	10.0000 ng/ml
Doxylamine	3.654	9425738	11017.97	95.5		1182.09	4030319	10.0000 ng/ml
Duloxetine	4.317	29556	2060.57	1017.2		7532.94	381811	10.0000 ng/ml
EDDP	4.071	298644	336.03	49.3		48.53	1556902	10.0000 ng/ml
Estazolam	4.517	9008154	1000.03	50.7		1250.58	27597535	10.0000 ng/ml
Etizolam	4.619	238731	2299.63	349.9		430.46	27597535	10.0000 ng/ml
Fentanyl	4.081	89846	29.81	65.2	Low	55230.12	5828303	10.0000 ng/ml
Flualprazolam	4.467	1299321	727614.04	134.7		1056.17	27597535	10.0000 ng/ml
Flunitrazepam	4.546	4374971	1666.92	37.9		3376074.70	27597535	10.0000 ng/ml
Fluorofentanyl	4.126	146260	53817.70	88.7	Low	314.22	5828303	10.0000 ng/ml
Fluoxetine	4.316	919836	515.85	7.9		40.95	2252686	10.0000 ng/ml
Flurazepam	4.171	1395870	680050.51	21.5		2487.33	27597535	10.0000 ng/ml
Hydrocodone	3.038	2115452	822.15	34.1		257.57	12891199	10.0000 ng/ml
Hydromorphone	2.521	1951159	2907492.86	72.9		3340.10	704041	10.0000 ng/ml
Hydroxyzine	4.479	898990	890.41	82.1		495.42	5945968	10.0000 ng/ml
Imipramine	4.380	1652543	567.74	62.1		164.07	1976940	10.0000 ng/ml
Ketamine	3.550	4198293	2036.74	37.4		213.90	19152300	10.0000 ng/ml
Lamotrigine	3.610	359560	1144.11	81.1		5105.12	28269049	10.0000 ng/ml
Levamisole	2.998	3993958	439.05	82.0		592.18	31898878	10.0000 ng/ml
Levetiracetam	2.664	1985964	652.94	173.0		684.49	28269049	10.0000 ng/ml
Lorazepam	4.422	874446	739.71	271.0		172.42	27597535	10.0000 ng/ml
Maprotiline	4.427	480352	29.56	77.8		77.98	1976940	10.0000 ng/ml
MDA	3.030	2214069	159.86	39.1		622.25	18185469	10.0000 ng/ml
MDEA	3.244	3732997	1022.54	50.6		770.09	18185469	10.0000 ng/ml
MDMA	3.106	4797782	996.20	49.0		398.99	18185469	10.0000 ng/ml
Meperidine	3.610	1721311	437.07	57.3		611.42	4030319	10.0000 ng/ml
Meprobamate	3.675	1735785	796.98	22.3		4290.22	14662218	10.0000 ng/ml
Methadone	4.392	2270508	370.77	43.4		198.48	1556902	10.0000 ng/ml
Methamphetamine	3.016	2990788	146.46	40.7		2987.53	18185469	10.0000 ng/ml
Methocarbamol	3.580	642001	261.35	90.4		264.80	1556902	10.0000 ng/ml
Methylphenidate	3.535	9603314	1218.56	21.0		344.11	13065837	10.0000 ng/ml
Metoprolol	3.455	689525	296.18	103.7		614.24	4030319	10.0000 ng/ml
Midazolam	4.729	737136	496.94	90.9		88468.28	27597535	10.0000 ng/ml
Mirtazapine	3.948	1683392	372106.05	220.1		1326.95	4030319	10.0000 ng/ml
Mitragynine	4.186	167211	88940.38	245.5		229118.60	4030319	10.0000 ng/ml
Morphine	2.370	454575	1213.02	77.4		183.44	704041	10.0000 ng/ml
Norbuprenorphine	3.831	22925	17570.98	130.9		37867.42	1267385	10.0000 ng/ml
Nordiazepam	4.674	2327406	4375.34	63.8		356.58	27597535	10.0000 ng/ml
Norfentanyl	3.350	7652822	4054.87	34.7		1025.23	31827161	10.0000 ng/ml
Norhydrocodone	2.948	199994	303.38	53.4	High	41.01	704041	10.0000 ng/ml
Norketamine	3.643	899455	417.55	489.0		40278.81	19152300	10.0000 ng/ml
Normeperidine	3.612	1460446	1207679.71	62.7		210.85	28269049	10.0000 ng/ml
Noroxycodone	2.900	2390436	∞	25.9		316.07	19152300	10.0000 ng/ml
Nortriptyline	4.413	591467	607.08	63.1		148.68	1976940	10.0000 ng/ml
O-desmethyl-tramadol	2.934	10656973	18464.60	5.4		258.73	28269049	10.0000 ng/ml
O-desmethylvenlafaxine	3.270	2483496	586.73	599.5		13278.52	14806376	10.0000 ng/ml
Olanzapine	3.821	669037	366661.27	57.4		426.79	1103347	10.0000 ng/ml
Oxazepam	4.502	3721098	292.78	75.8		825.72	25576226	10.0000 ng/ml
Oxycodone	2.944	4349915	1249.84	27.1		694.22	19152300	10.0000 ng/ml

SC

AM #25 Multi-Drug Screen. Results

Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
Oxymorphone	2.396	3089062	∞	27.5	Low	10329.45	704041	10.0000 ng/ml
Paroxetine	4.328	159816	95.64	72.3	High	96067.19	2252686	10.0000 ng/ml
Phenazepam	4.634	2576056	1105.33	68.3		597583.98	27597535	10.0000 ng/ml
Phencyclidine	3.919	3376223	731.30	65.4		3901.47	4030319	10.0000 ng/ml
Phentermine	3.170	915215	96.57	6.9		25.81	13065837	10.0000 ng/ml
Phenytoin	4.120	2283313	630.48	76.5		1136.08	1103347	10.0000 ng/ml
Primidone	3.490	2203379	582.30	85.7		481.89	1103347	10.0000 ng/ml
Promethazine	4.318	2069751	722.16	30.7		185.09	28269049	10.0000 ng/ml
Pseudoephedrine	2.740	53150733	18232.83	38.2		103820.22	18185469	10.0000 ng/ml
Quetiapine	4.448	2578051	3409073.07	55.6		277519.41	42709487	10.0000 ng/ml
Risperidone	4.062	2660774	1726911.11	10.9		346.32	21818308	10.0000 ng/ml
Sertraline	4.547	421888	3306.90	108.8		427.00	2252686	10.0000 ng/ml
Sufentanil	4.417	60696	2222.55	96.2		165.24	31827161	10.0000 ng/ml
Tapentadol	3.459	4962414	588.50	34.4		172.36	19152300	10.0000 ng/ml
Temazepam	4.656	6765579	6070.13	28.1		233.58	27597535	10.0000 ng/ml
Topiramate	3.849	120026	169917.90	38.2		17959.60	463453	10.0000 ng/ml
Tramadol	3.440	16591803	∞	1.7		38.30	28269049	10.0000 ng/ml
Trazodone	4.572	2701819	810730.75	68.8		737725.78	13070083	10.0000 ng/ml
Venlafaxine	3.808	5734849	8291.91	29.3		270.20	14806376	10.0000 ng/ml
Xylazine	3.397	1565734	391163.81	45.1		22.47	19152300	10.0000 ng/ml
Zaleplon	4.332	4834004	1449.48	70.6		2293349.10	42709487	10.0000 ng/ml
Zolpidem	4.301	12790703	3034380.25	29.2		2217.66	42709487	10.0000 ng/ml
Zopiclone	4.155	2541574	1618503.89	61.5		612647.94	13901996	10.0000 ng/ml

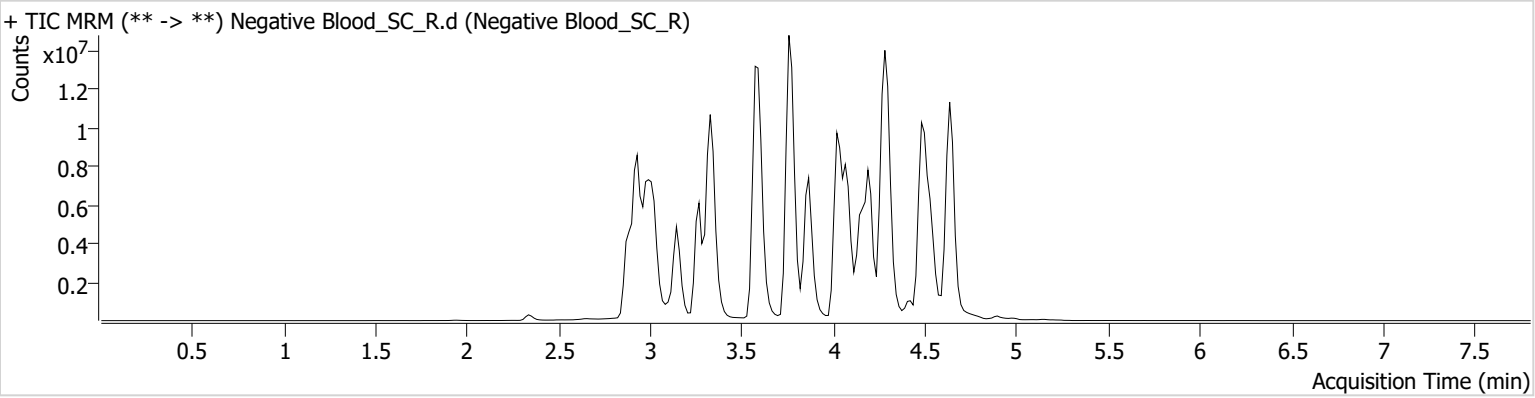
SC

AM #25 Multi-Drug Screen. Results

Batch results	D:\MassHunter\Data\2023\AM 25 26\083123 AM 25 SC reextracts\QuantResults\AM 25.batch.bin
Calibration Last Update	8/31/2023 6:50:36 PM

Instrument	Falco (069901)	**Data File**	Negative Blood_SC_R.d
Type	Sample	**Sample**	Negative Blood_SC_R
Acq. Method	AM 25 MDS_new compounds 081023.m	**Operator**	Sarah Collins
Sample Position	P6-D7	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	8/31/2023 2:41:27 PM		
Sample Info.			

Sample Chromatogram



SC

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

Extraction Date: 08/28/23
Plate lot#: 220802
Mobile phase A: 10mM Amm Form in LCMS Water
Blank Blood Lot: 23A52594
LCMS-QQQ ID: 069901

Analyst: Sarah Collins
Retest Date: 07/23/23 - external control ran
Mobile phase B: 0.1% Formic acid in MeOH
Blank Urine Lot: N/A
Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

Pre-Analytic:

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

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☐ 2. Urine hydrolysis: add 1.5mL urine to blank plate, add 250µl 1N KOH. Shake and incubate at 40 degrees for 15 minutes.
☒ 3. Using a calibrated pipette, pipette 1000µL blood or 1000µL hydrolyzed urine in wells of analytical (standards) plate. Pipette ID: Click here to enter text. 3382167
☒ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 4. Add **500µL of 0.1% formic acid in water to blood samples, and 500µL of saturated phosphate buffer to urine samples** in the wells of the 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: 800uL
☒ 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: *The pressure maxed out and stopped the run 8/28/23. The clog was removed and the run was continued 8/29/23.*

The last checktune was ran 8/21/23 which is outside the 7 day window per AM #24 section 4.2.1.5.1. A successful checktune was ran 8/30/23. See deviation approval to use the data ran on 8/29/23.

THC-COOH curve range 5-75 (calibrators 6 and 7 dropped due to accuracy)

8C

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_2	p2023-2449-1	p2023-2522-1	p2023-2566-1	p2023-2569-1
B	IS + Cal. 2	negative blood	p2023-2465-2	p2023-2542-1	p2023-2569-1*	p2023-2575-1
C	IS + Cal. 3	m2023-3053-1	p2023-2480-1	p2023-2543-1	p2023-2575-1*	
D	IS + Cal. 4	m2023-3397-2	p2023-2485-1	p2023-2544-1	p2023-2584-1	
E	IS + Cal. 5	m2023-3475-2	p2023-2497-1	p2023-2554-2	p2023-2611-1	
F	IS + Cal. 6	m2023-3537-1	p2023-2498-1	p2023-2559-1	p2023-2615-1	
G	IS + Cal. 7	m2023-3541-2	p2023-2499-1	p2023-2561-1	external blood control	
H	IS + QC_1 blood	m2023-3608-2	p2023-2512-1	p2023-2565-1*	p2023-2565-1	

All wells to contain 100 µl of residual DMSO

*Moved during analytical step 7 due to blood clot

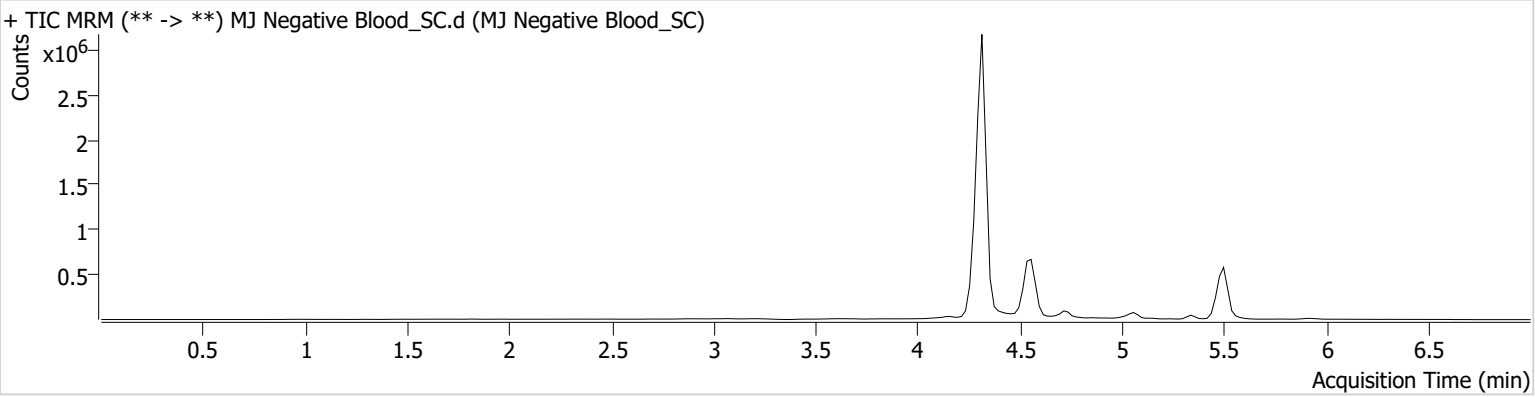
SC

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update	8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ Negative Blood_SC.d
Type	Sample	**Sample**	MJ Negative Blood_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-B2	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 5:32:25 PM		
Sample Info.			

Sample Chromatogram



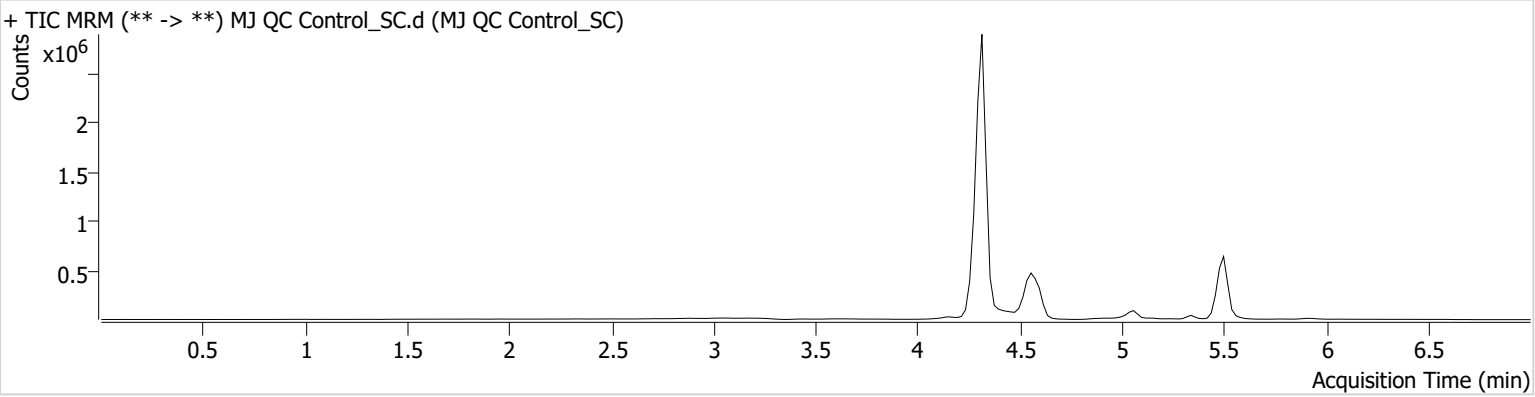
SC

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update 8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ QC Control_SC.d
Type	QC	**Sample**	MJ QC Control_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-H1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 5:17:15 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.469	9055	31.87	118.1 **Low**	∞	254229	4.5332 ng/ml
THC-COOH	4.596	310656	∞	154.8	∞	1654072	12.2718 ng/ml
THC-OH	4.322	79866	∞	800.7	∞	9954488	4.6244 ng/ml

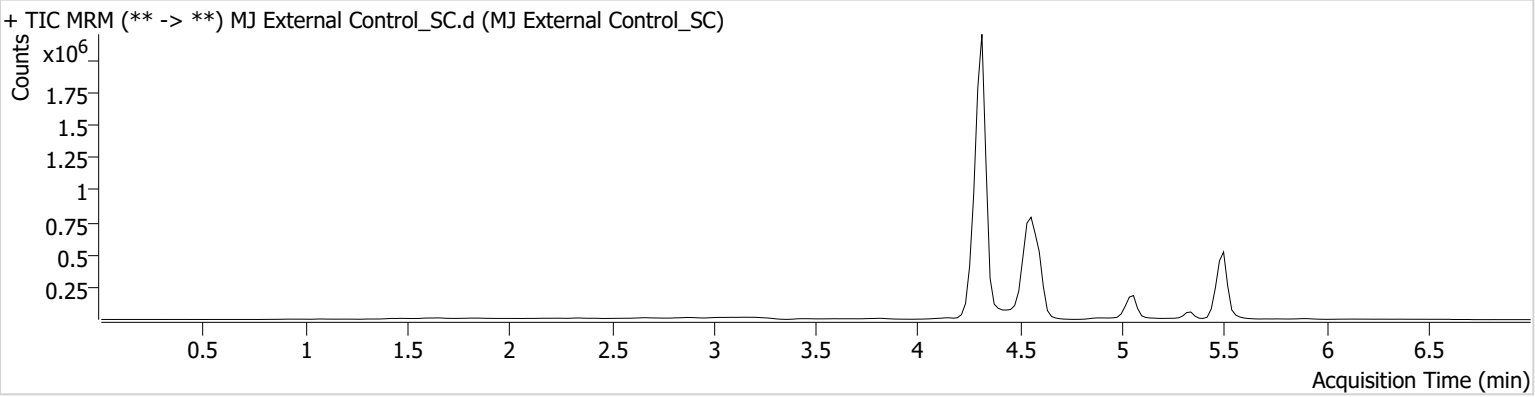
SC

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update 8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ External Control_SC.d
Type	Sample	**Sample**	MJ External Control_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-G5	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 5:39:59 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC-COOH	4.596	535558	∞	154.8	∞	3054192	11.4265 ng/ml

SC

Idaho State Police Forensic Services

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

Methanol External Control Solution (Lot: WS101322)
100 µL of 100 µg/mL C-THC in 9900 µL MeOH
Approximate concentration 1ug/mL.

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

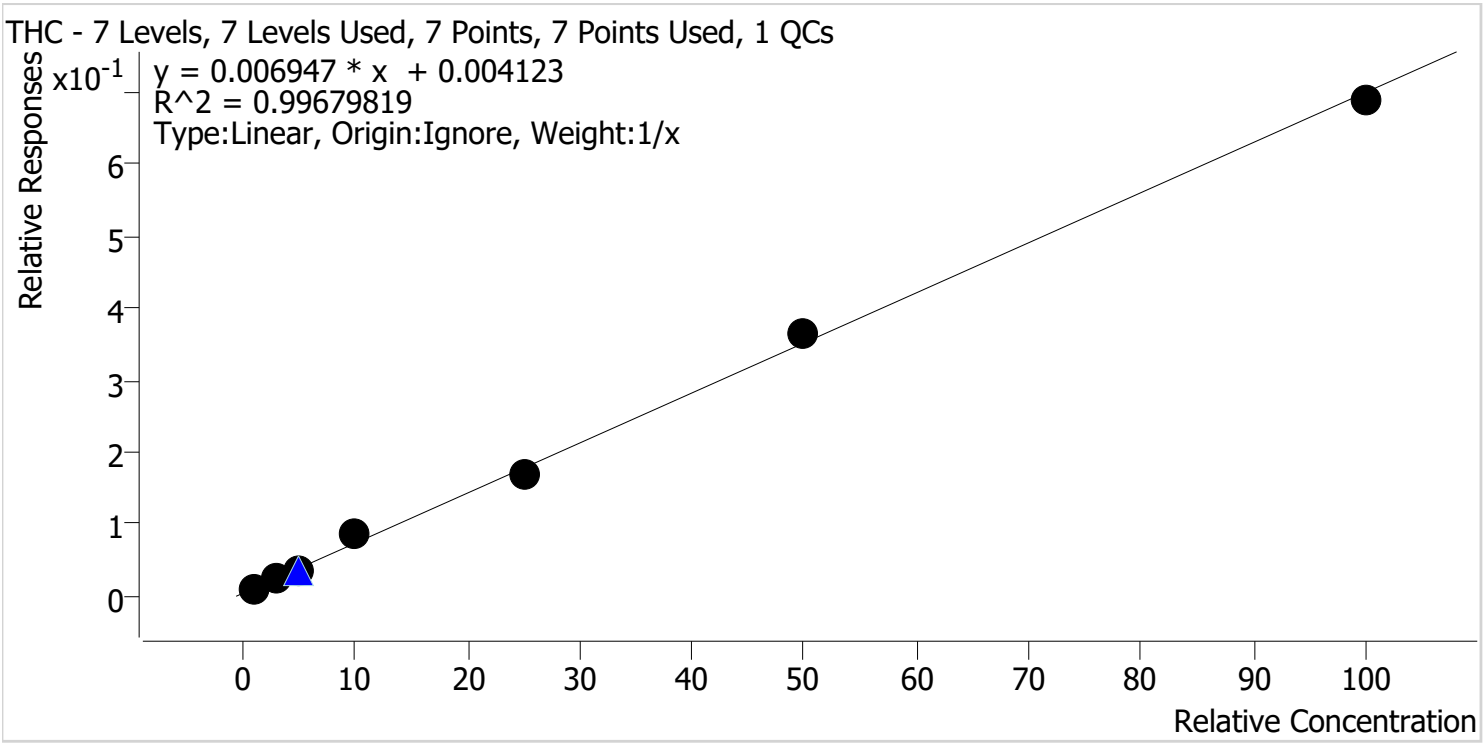
Blood External Control Solution (Lot: 071423)
200 ul of methanol external control solution was added to 9800 ul of blood.
Approximately 20ng/mL

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

SC

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Last Cal. Update	8/30/2023 7:34 AM
Analyst Name	ISP\Datastor
Analyte	THC
Internal Standard	THC-D3

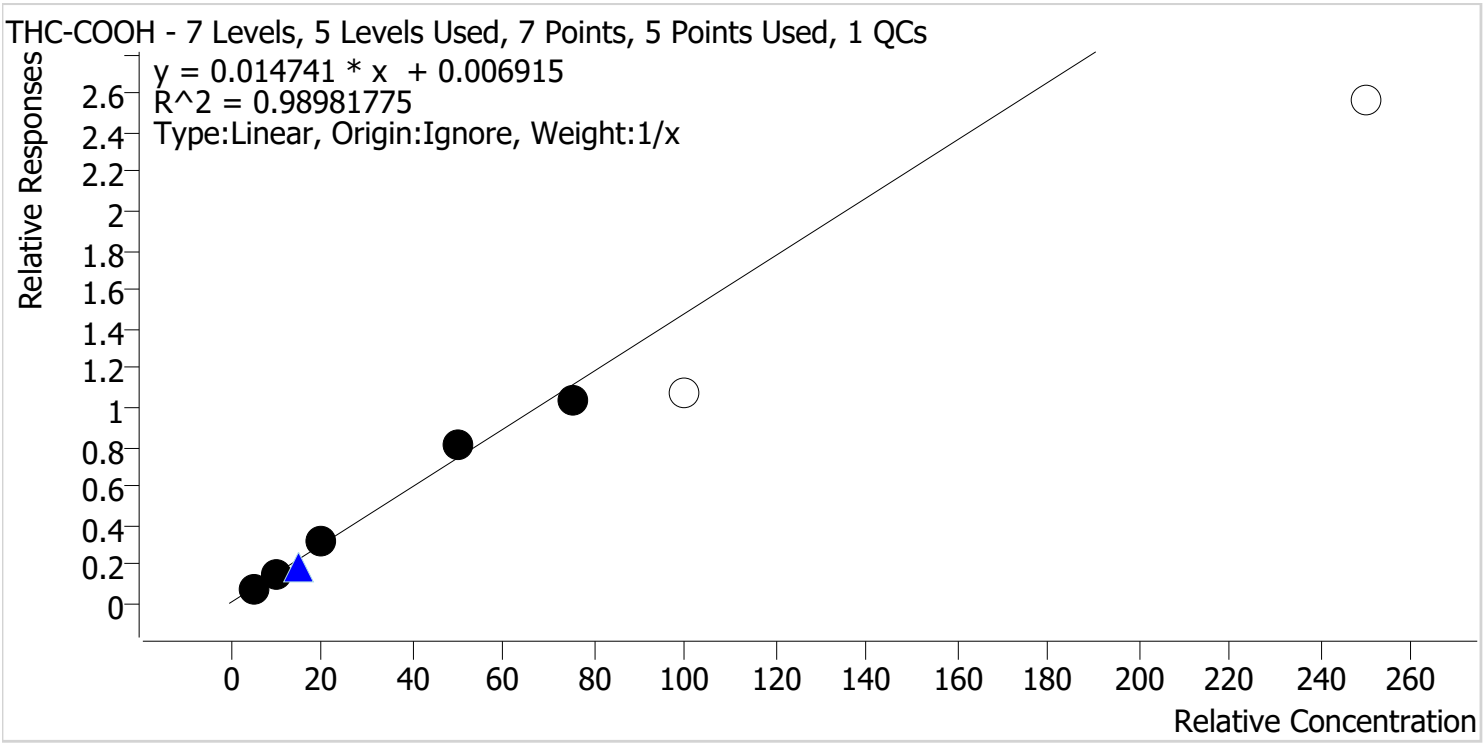


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1_SC	1	✔	1.0	0.9	92.0
MJ Cal 2_SC	2	✔	3.0	3.1	102.4
MJ Cal 3_SC	3	✔	5.0	4.6	91.0
MJ Cal 4_SC	4	✔	10.0	11.8	118.2
MJ Cal 5_SC	5	✔	25.0	23.7	94.7
MJ Cal 6_SC	6	✔	50.0	51.6	103.3
MJ Cal 7_SC	7	✔	100.0	98.3	98.3

SC

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Last Cal. Update	8/30/2023 7:34 AM
Analyst Name	ISP\Datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-D9

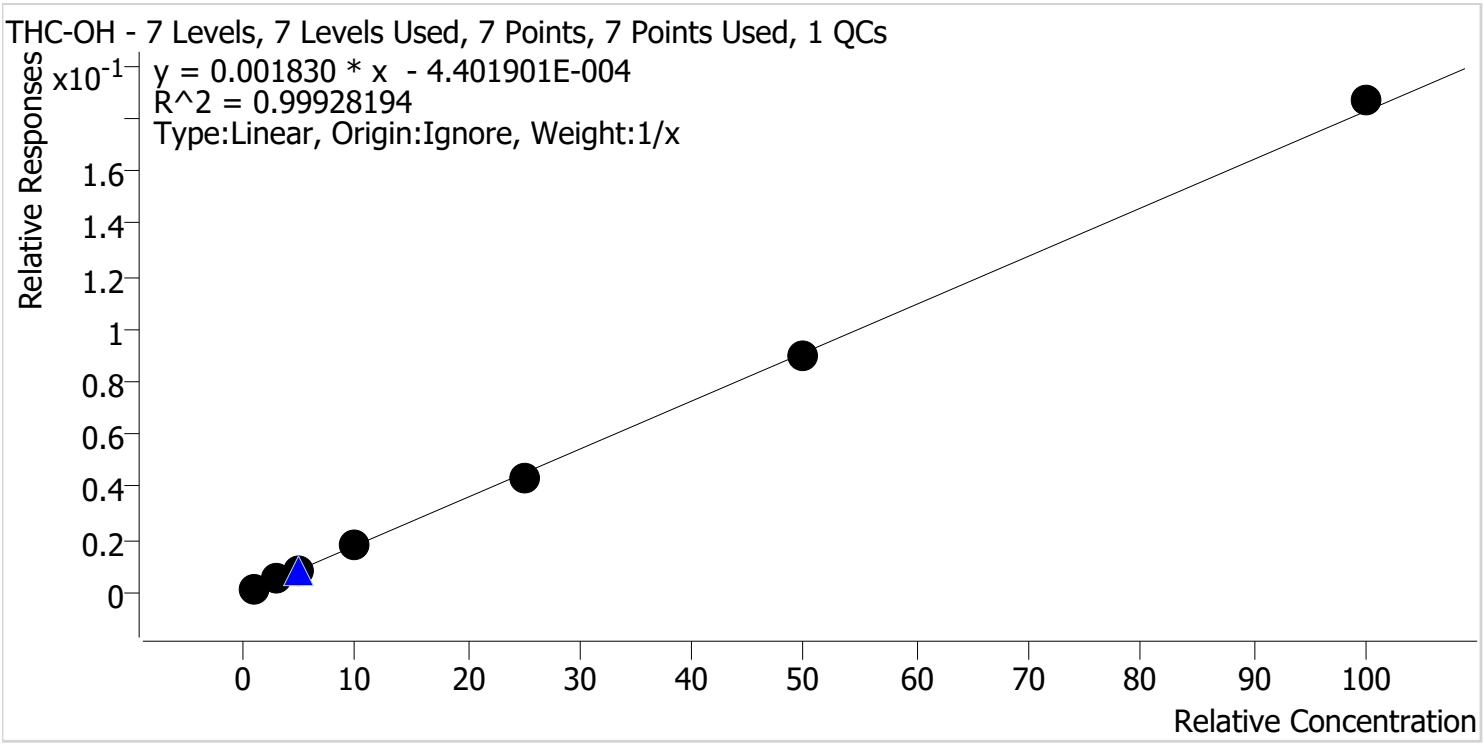


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1_SC	1	✔	5.0	4.6	92.6
MJ Cal 2_SC	2	✔	10.0	9.9	98.6
MJ Cal 3_SC	3	✔	20.0	21.3	106.7
MJ Cal 4_SC	4	✔	50.0	54.7	109.4
MJ Cal 5_SC	5	✔	75.0	69.4	92.6
MJ Cal 6_SC	6	✗	100.0	72.1	72.1
MJ Cal 7_SC	7	✗	250.0	173.6	69.4

SC

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Last Cal. Update	8/30/2023 7:34 AM
Analyst Name	ISP\Datastor
Analyte	THC-OH
Internal Standard	THC-OH-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1_SC	1	✔	1.0	1.1	109.7
MJ Cal 2_SC	2	✔	3.0	3.0	99.2
MJ Cal 3_SC	3	✔	5.0	4.8	96.4
MJ Cal 4_SC	4	✔	10.0	9.8	98.1
MJ Cal 5_SC	5	✔	25.0	24.1	96.4
MJ Cal 6_SC	6	✔	50.0	49.0	98.1
MJ Cal 7_SC	7	✔	100.0	102.2	102.2

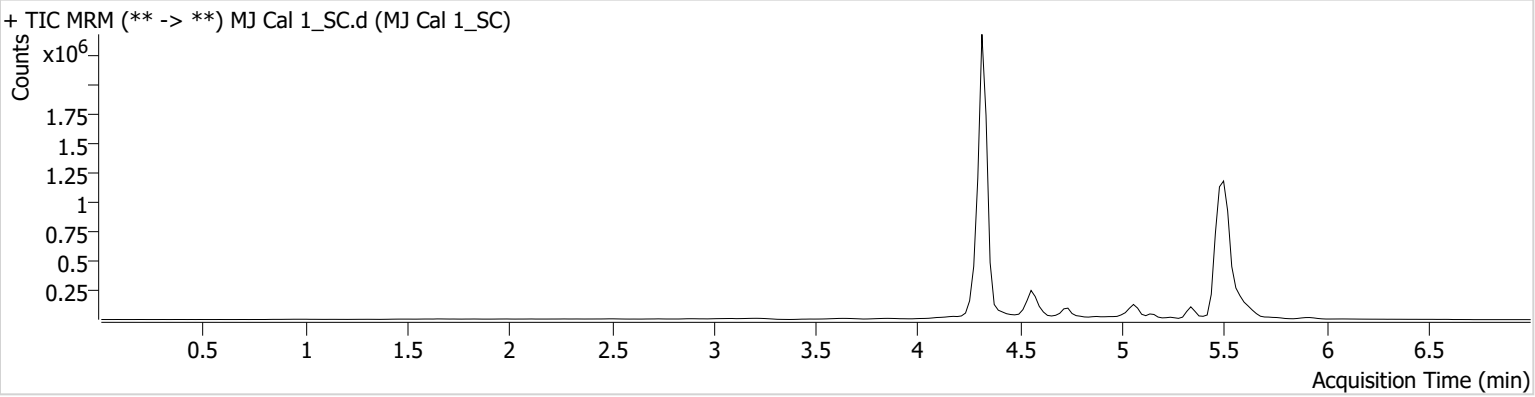
SC

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update 8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ Cal 1_SC.d
Type	Cal	**Sample**	MJ Cal 1_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-A1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 4:24:08 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.530	7076	∞	326.5 **High**	∞	672776	0.9204 ng/ml
THC-COOH	4.596	63261	∞	160.0	∞	841290	4.6320 ng/ml
THC-OH	4.322	12294	∞	1004.5 **High**	∞	7845850	1.0967 ng/ml

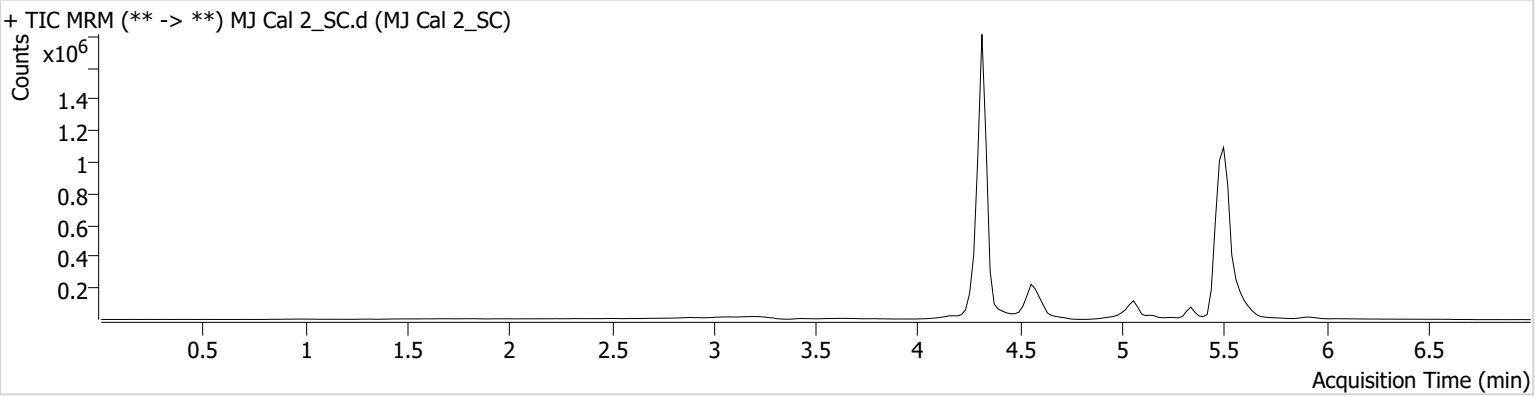
SC

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update 8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ Cal 2_SC.d
Type	Cal	**Sample**	MJ Cal 2_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-B1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 4:31:51 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.530	16866	∞	130.5 **Low**	∞	662272	3.0724 ng/ml
THC-COOH	4.596	116545	127.76	166.2	424.24	765152	9.8638 ng/ml
THC-OH	4.322	28762	∞	823.5	133.14	5743839	2.9766 ng/ml

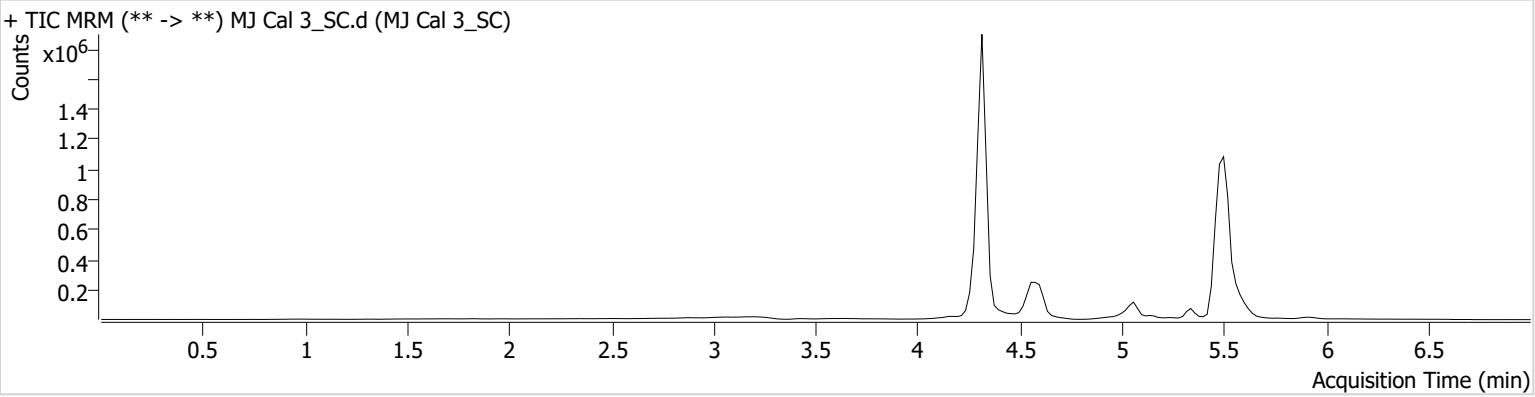
SC

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update 8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ Cal 3_SC.d
Type	Cal	**Sample**	MJ Cal 3_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-C1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 4:39:25 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.530	26197	∞	103.3 **Low**	∞	733093	4.5503 ng/ml
THC-COOH	4.596	243387	∞	157.1	477.52	757171	21.3370 ng/ml
THC-OH	4.322	49595	288.37	794.9	235.74	5917377	4.8200 ng/ml

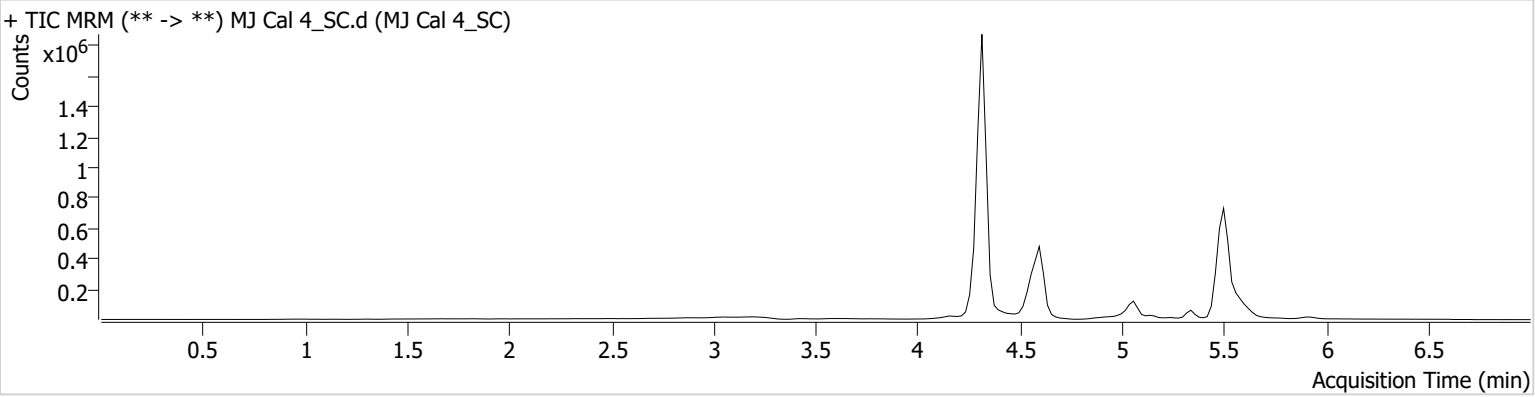
SC

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update 8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ Cal 4_SC.d
Type	Cal	**Sample**	MJ Cal 4_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-D1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 4:47:00 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.489	30876	∞	65.2 **Low**	∞	357986	11.8214 ng/ml
THC-COOH	4.596	577028	∞	153.8	∞	709278	54.7201 ng/ml
THC-OH	4.322	96368	806.81	756.2	∞	5501979	9.8108 ng/ml

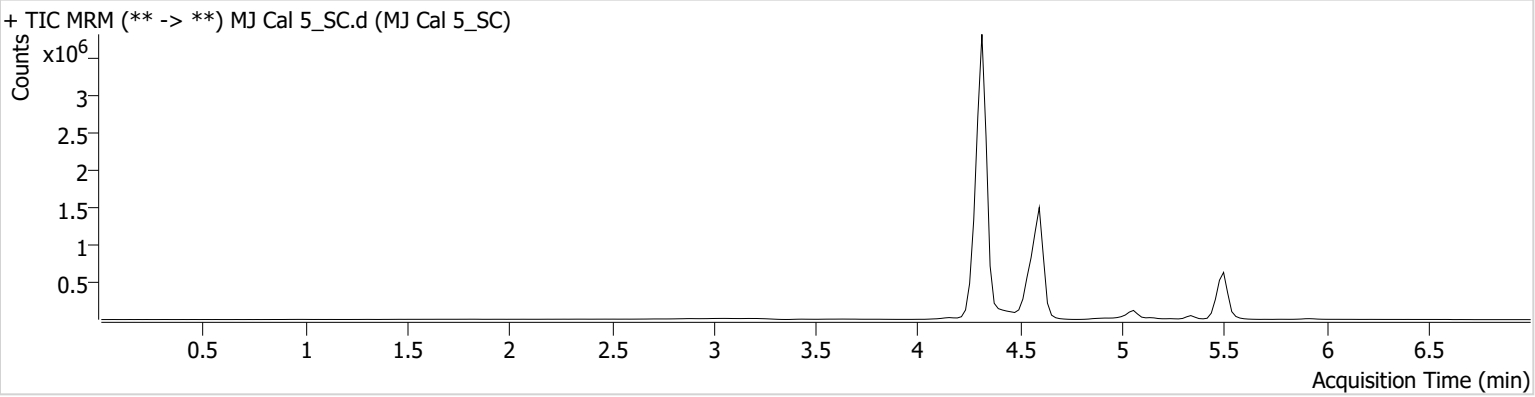
SC

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update 8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ Cal 5_SC.d
Type	Cal	**Sample**	MJ Cal 5_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-E1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 4:54:33 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
THC	5.489	46669	112.10	41.9	Low	203.66	276695	23.6851 ng/ml
THC-COOH	4.596	1876436	∞	153.3		∞	1820665	69.4471 ng/ml
THC-OH	4.322	458580	1305.92	754.2		∞	10505674	24.0912 ng/ml

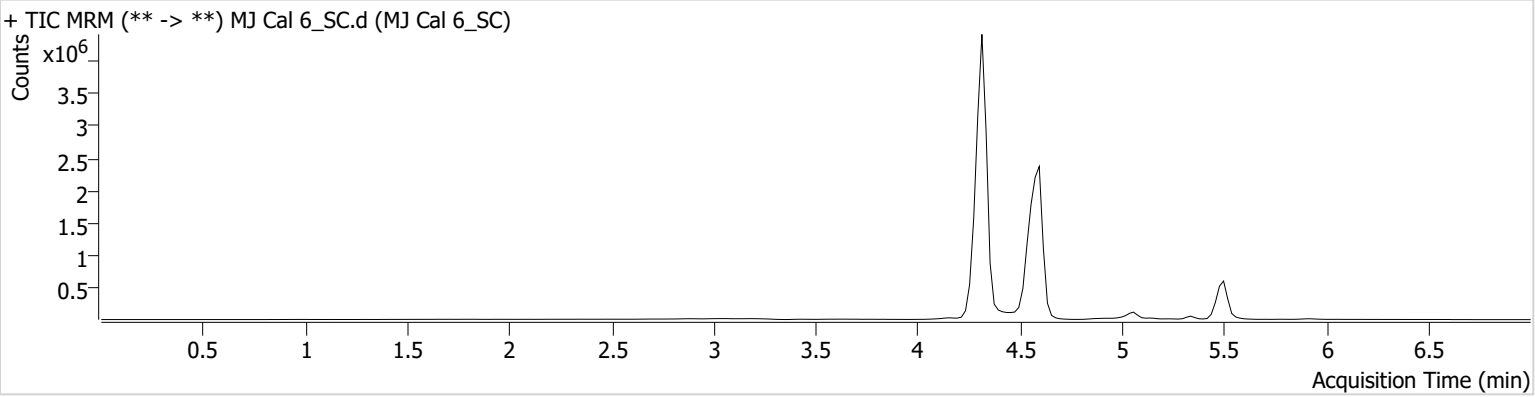
SC

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update 8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ Cal 6_SC.d
Type	Cal	**Sample**	MJ Cal 6_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-F1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 5:02:07 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
THC	5.489	88397	∞	35.6	**Low**	117.75	243651	51.6297 ng/ml
THC-COOH	4.596	3282254	∞	152.2		∞	3069691	72.0666 ng/ml
THC-OH	4.322	853088	4604.81	769.2		∞	9553816	49.0301 ng/ml

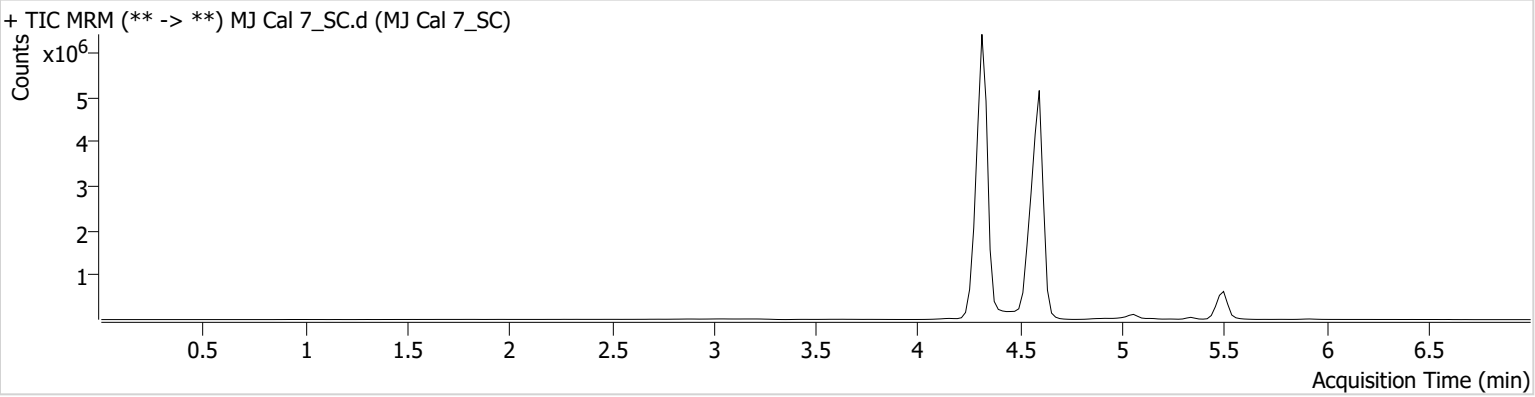
SC

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\082823 AM 25 26 CS\QuantResults\AM 26 SC.batch.bin
Calibration Last Update 8/30/2023 7:34:49 AM

Instrument	Falco (069901)	**Data File**	MJ Cal 7_SC.d
Type	Cal	**Sample**	MJ Cal 7_SC
Acq. Method	AM 26 THC.m	**Operator**	Sarah Collins
Sample Position	P5-G1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	8/29/2023 5:09:41 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.489	178580	277.76	30.2 **Low**	∞	259876	98.3206 ng/ml
THC-COOH	4.596	7367777	∞	153.6	18548.58	2872078	173.5569 ng/ml
THC-OH	4.322	1820358	∞	730.7	∞	9757714	102.1746 ng/ml