

Worklist: 6656

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
M2023-4555	2	BCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2023-4659	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2023-4769	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2023-5170	4	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-3501	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-3503	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-3516	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-3629	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-3680	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-3830	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-4026	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2024-0015	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	

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

Extraction Date: 01/16/2024

Plate lot#: 230712

Mobile phase A: 10mM Amm Form

Instant Buffer I

Blank Blood Lot: Lampire 23E52981

LCMS-QQQ ID: 069901

Analyst: Celena Shrum

Plate Retest Date: 01/12/2024- external control used

Mobile phase B: 0.1% Formic Acid in MeOH

Ethyl Acetate LC Methanol

Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

Blank Urine Lot: POC021022

Pre-Analytic:

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

Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Urine Hydrolysis (if applicable): 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 or 250µL hydrolyzed urine** into the appropriate wells of the 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: 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: Due to possible levetiracetam carryover/contamination, case samples P2023-3503-1 and P2023-3516-3 were re-injected. P2023-3503-1 and P2023-3629-1 were re-extracted (along with the negative controls as new mobile phases had been made) on 1/19/24. The calibrator from the original run was re-injected after the re-extracted samples due to retention time shifting. These re-extracts will be evaluated for levetiracetam only.

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	1	2	3	4	5	6	7	8	9	10	11	12
A											M2023-5170-4	P2024-0015-1
B											P2023-3501-1	NEG Urine
C											P2023-3503-1	Blood External Ctrl
D											P2023-3516-3	NEG Blood
E											P2023-3629-1	Urine Internal Ctrl
F										M2023-4555-2	P2023-3680-1	
G										M2023-4659-2	P2023-3830-1	
H										M2023-4769-2	P2023-4026-1	CAL

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	1	2	3	4	5	6	7	8	9	10	11	12
A												
B												
C												
D								Negative Urine			P2023-3629-1	
E		P2023-3503-1						Negative Blood				
F												
G												
H												

SLE plate map for re-extraction run

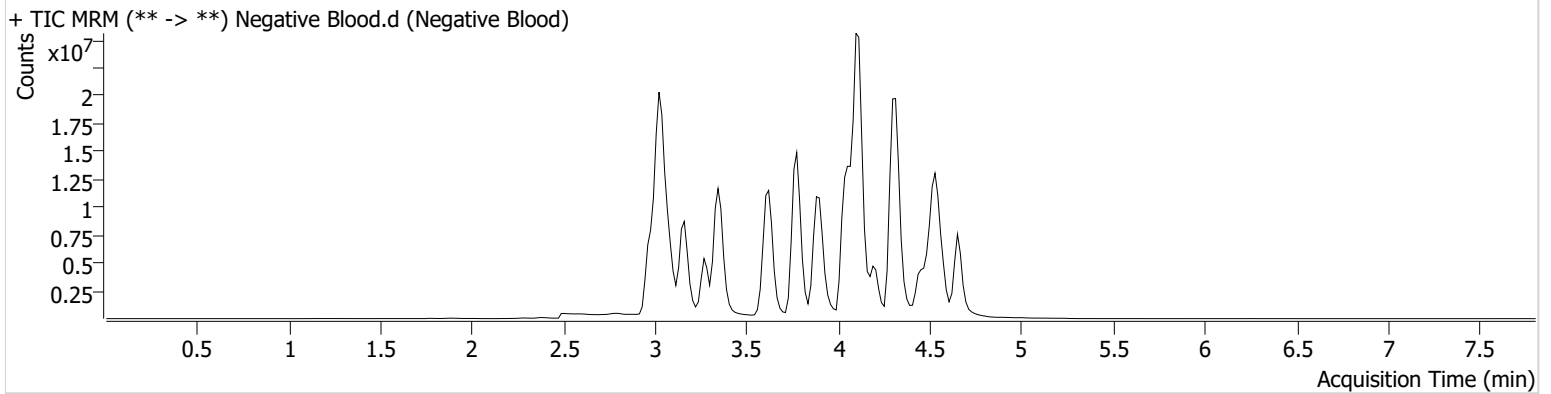
AM #25 Multi-Drug Screen. Results



Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 1/23/2024 7:13:21 AM

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-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	1/16/2024 4:38:11 PM		
Sample Info.			

Sample Chromatogram



AM #25 Multi-Drug Screen. Results



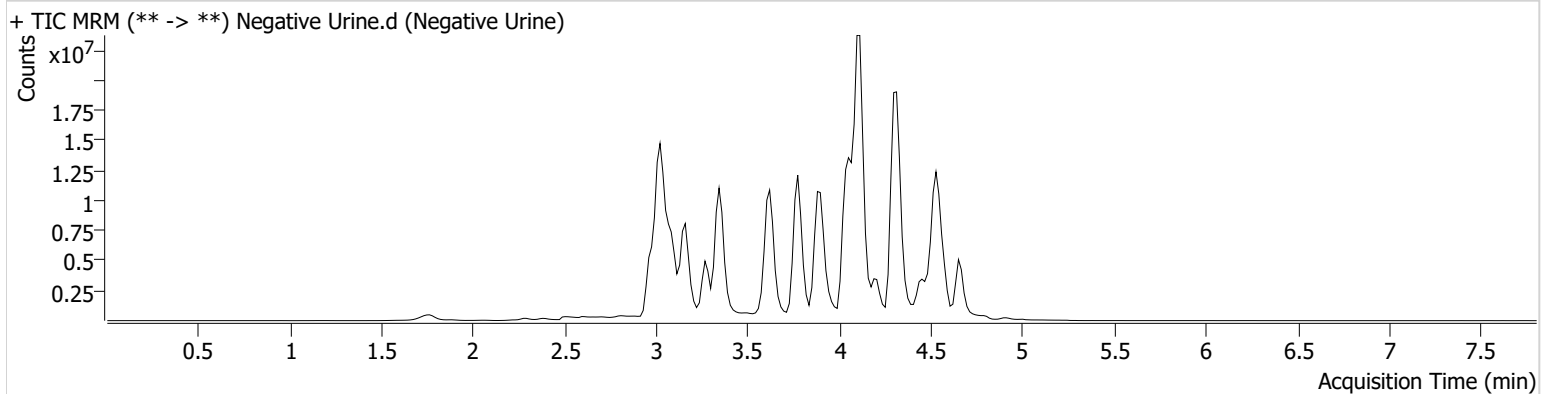
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 1/23/2024 7:13:21 AM

Instrument Falco (069901)
Type Sample
Acq. Method AM 25 MDS.m
Sample Position P2-B12
Injection Volume 5
Acq. Date-Time 1/16/2024 4:55:03 PM
Sample Info.

Data File Negative Urine.d
Sample Negative Urine
Operator Celena Shrum
Comment

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

Sample Chromatogram



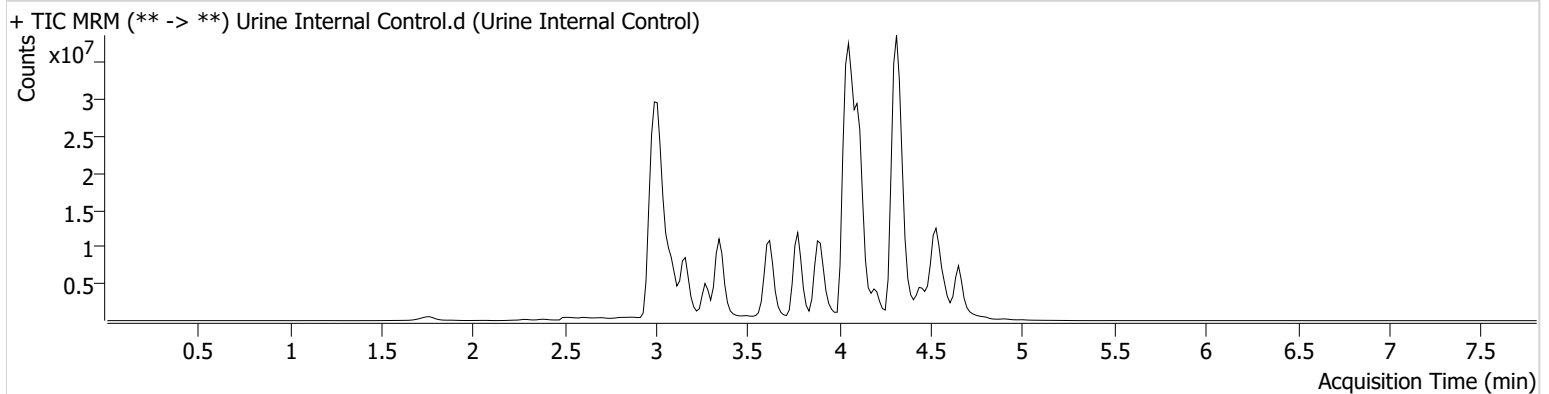
AM #25 Multi-Drug Screen. Results



Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 1/23/2024 7:13:21 AM

Instrument	Falco (069901)	Data File	Urine Internal Control.d
Type	Sample	Sample	Urine Internal Control
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-E12	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	1/16/2024 4:29:45 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Alprazolam	4.639	6081416	178.65	95.6	169.02	10203017	58.9427 ng/ml
Amphetamine	2.986	30675733	12352.71	143.1 Low	1662.26	13706643	103.5475 ng/ml
Codeine	3.023	3852049	4906854.37	100.2 Low	3320.98	11421368	96.5130 ng/ml
Diphenhydramine	4.057	66051071	579.03	61.2 High	10396.39	52814996	39.2558 ng/ml
Zolpidem	4.332	61496297	21752.93	55.7 High	7835.46	42931611	50.9622 ng/ml



AM #25 Multi-Drug Screen. Results

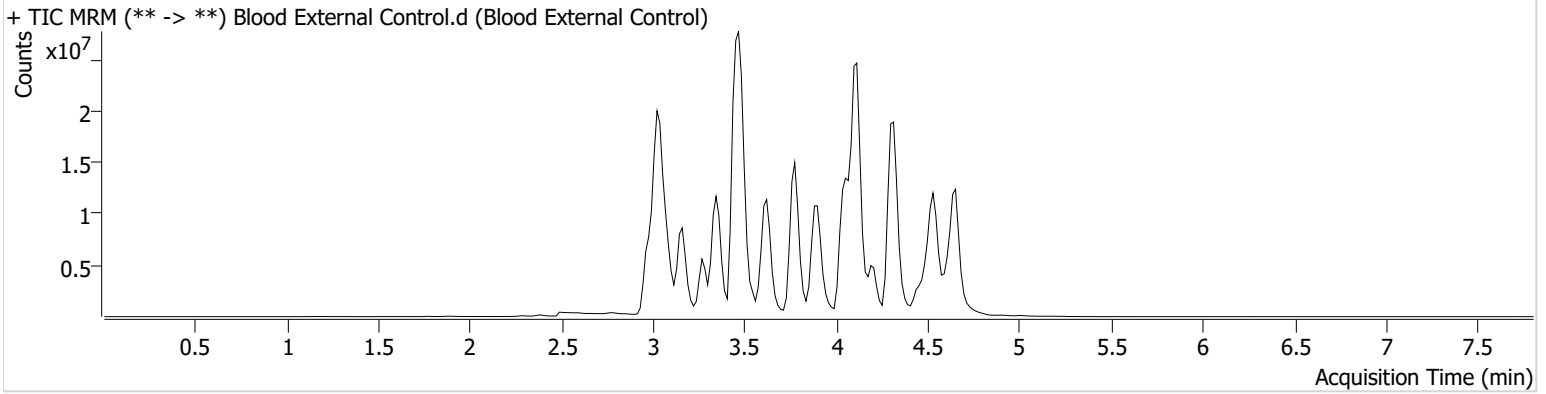
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 1/23/2024 7:13:21 AM

Instrument Falco (069901)
Type Sample
Acq. Method AM 25 MDS.m
Sample Position P2-C12
Injection Volume 5
Acq. Date-Time 1/16/2024 4:46:37 PM
Sample Info.

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

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Alprazolam	4.639	15315652	220.86	91.8	236.41	17691984	85.6078 ng/ml
Tramadol	3.471	116101221	∞	3.8 High	459.91	55189833	45.2648 ng/ml



Idaho State Police Forensic Services

**AM #25 Blood Multi-Drug Screen by LCMS-QQQ
And
AM #28 Blood Multi-Drug Confirmatory Analysis by
LCMS-QQQ---Panel 1**

Methanol External Control Solution (Lot: 072123)

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

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

Blood External Control Solution (Lot: WS072123)

*100 μ L of methanol external control solution was added to 9900 μ L of blood.
Approximately 100 ng/mL of each compound.*

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



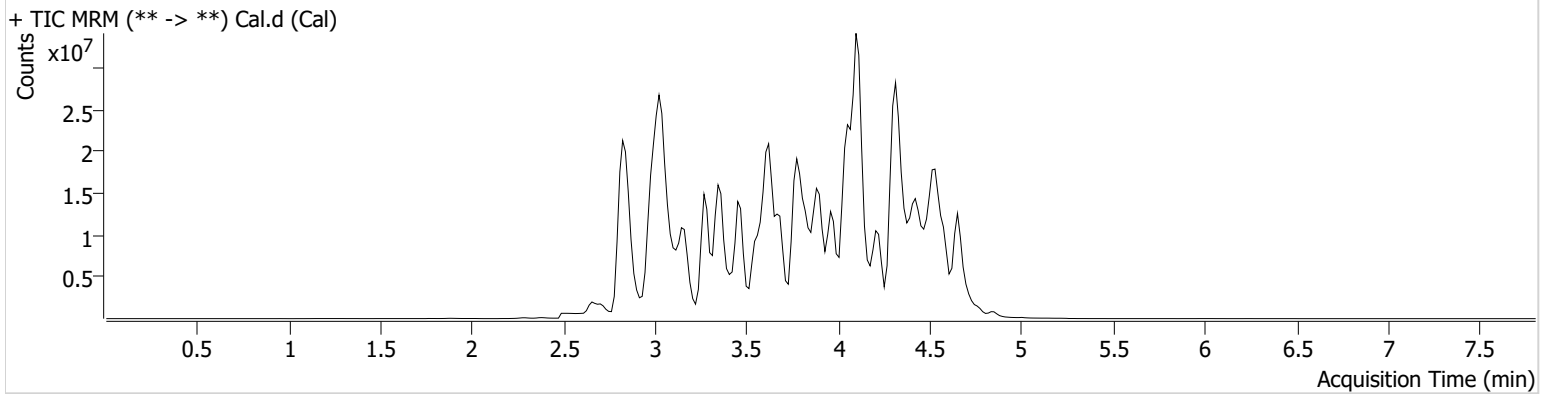
AM #25 Multi-Drug Screen. Results

Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 1/23/2024 7:13:21 AM

Instrument Falco (069901) **Data File** Cal.d
Type Cal **Sample** Cal
Acq. Method AM 25 MDS.m **Operator** Celena Shrum
Sample Position P2-H12 **Comment**
Injection Volume 5
Acq. Date-Time 1/16/2024 4:21:10 PM
Sample Info.

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
10-OH-Carbamazepine	3.765	2660556	40.46	122.3	745.38	20793754	10.0000 ng/ml
6-MAM	3.020	67077	29.03	75.1	17338.85	2214486	10.0000 ng/ml
7-aminoclonazepam	3.607	1321727	∞	77.4	205.67	6537872	10.0000 ng/ml
7-aminoflunitrazepam	3.807	2223205	356.54	22.6	284.38	6537872	10.0000 ng/ml
9-Hydroxyrisperidone	3.892	10303620	696.82	2.8	139990.68	42675480	10.0000 ng/ml
Acetyl Fentanyl	3.897	572259	245.97	74.0	184817.59	40241550	10.0000 ng/ml
Acetyl Norfentanyl	2.982	566169	146.83	36.0	112.26	40241550	10.0000 ng/ml
a-hydroxyalprazolam	4.513	307813	4994.43	60.6	24809.20	6537872	10.0000 ng/ml
alpha-hydroxymidazolam	4.589	2313229	145.66	57.8	252.02	6537872	10.0000 ng/ml
Alpha-PHP	3.858	6103181	2261.75	35.9	1721.93	40241550	10.0000 ng/ml
alpha-PVP	3.582	8417176	884.11	49.3	495.35	19723554	10.0000 ng/ml
Alprazolam	4.639	1554681	330.78	90.6	182.09	15374302	10.0000 ng/ml
Amitriptyline	4.458	2794959	112.98	67.6	212.89	8958590	10.0000 ng/ml
Amphetamine	3.001	4262940	2009.88	218.5	1021.64	19723554	10.0000 ng/ml
Benzoylecgonine	3.392	109572	408.25	27.3	44.45	443501	10.0000 ng/ml
Bromazolam	4.696	1151640	396431.84	137.2	67584.71	15374302	10.0000 ng/ml
Brompheniramine	4.067	173515	38517.84	921.4	3239.37	55233915	10.0000 ng/ml
Buprenorphine	4.555	106122	86.42	14.2	9829.07	4720677	10.0000 ng/ml
Bupropion	3.796	7261872	674.54	65.3	880.91	28982386	10.0000 ng/ml
Carbamazepine	4.229	12699338	∞	90.2	1154.22	122526	10.0000 ng/ml
Carisoprodol	4.212	1415402	573.82	66.0	66.79	9185140	10.0000 ng/ml
Chlordiazepoxide	4.718	1097794	425.00	154.7	183.14	15374302	10.0000 ng/ml
Chlorpheniramine	3.963	11276652	9878.05	0.2	23.40	18178859	10.0000 ng/ml
Chlorpromazine	4.637	1744742	1259228.13	109.4	1778.14	7165590	10.0000 ng/ml
Citalopram	4.082	4463425	431.17	33.5	1274341.76	55233915	10.0000 ng/ml
Clomipramine	4.653	2364758	7941.37	85.0	3506.39	55233915	10.0000 ng/ml
Clonazepam	4.422	820030	610.25	32.3	116230.48	122526	10.0000 ng/ml
Clonazolam	4.373	1602628	69199.58	33.9	248016.52	15374302	10.0000 ng/ml
Clozapine	4.313	5595164	1106.88	73.3	∞	26053458	10.0000 ng/ml
Cocaethylene	3.820	6846728	1446622.62	47.4	1953371.24	38243226	10.0000 ng/ml

AM #25 Multi-Drug Screen. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaine	3.621	7588459	3694369.88	19.8	624.95	38243226	10.0000 ng/ml
Codeine	3.023	498965	1052.68	136.3	77422.42	14278491	10.0000 ng/ml
Cyclobenzaprine	4.366	4275263	551.47	8.6	133.58	8958590	10.0000 ng/ml
Desipramine	4.397	6899060	1595.20	45.1	862.51	8958590	10.0000 ng/ml
Dextromethorphan	4.103	3160866	328.70	78.8	406.67	18178859	10.0000 ng/ml
Dextrorphan	3.410	4419714	3651.13	52.0	634.50	18178859	10.0000 ng/ml
Diazepam	4.857	1220704	543.36	92.6	673.76	15374302	10.0000 ng/ml
Dihydrocodeine	3.022	1591042	9246.81	58.7	1795.55	14278491	10.0000 ng/ml
Diphenhydramine	4.057	17596426	1606.51	28.4	1438.06	55233915	10.0000 ng/ml
DMT	3.030	522486	2251.23	130.9	535.64	18178859	10.0000 ng/ml
Doxepin	4.164	3382521	483.28	44.4	27.52	35757298	10.0000 ng/ml
Doxylamine	3.685	16266677	21014.27	88.2	10189.10	18178859	10.0000 ng/ml
Duloxetine	4.348	116211	9346.61	751.9	846.59	1129462	10.0000 ng/ml
EDDP	4.118	1046306	198.66	46.4	2616.86	5113330	10.0000 ng/ml
Etazolam	4.533	5120990	35986.61	51.5	431.26	15374302	10.0000 ng/ml
Etizolam	4.650	234579	64557.66	369.4	340317.49	15374302	10.0000 ng/ml
Fentanyl	4.112	374207	91.27	71.5	716.75	26449631	10.0000 ng/ml
Flualprazolam	4.497	1014955	604694.70	129.3	56920.67	15374302	10.0000 ng/ml
Flunitrazepam	4.546	1850910	300.95	36.7	169.54	15374302	10.0000 ng/ml
Fluorofentanyl	4.141	699288	76539.14	77.1	97.60	26449631	10.0000 ng/ml
Fluoxetine	4.331	2848402	1027.74	7.6	572.60	4066732	10.0000 ng/ml
Flurazepam	4.202	4807549	2353753.14	21.1	348607.52	15374302	10.0000 ng/ml
Hydrocodone	3.099	2586002	74205.57	43.8	398.12	14278491	10.0000 ng/ml
Hydromorphone	2.979	1183961	5297.22	91.7	2798.97	378668	10.0000 ng/ml
Hydroxyzine	4.495	4326286	564.02	85.0	2502.05	26053458	10.0000 ng/ml
Imipramine	4.411	8476768	33592.76	67.8	618.98	8958590	10.0000 ng/ml
Ketamine	3.581	4991129	1636.48	36.2	147.76	15676104	10.0000 ng/ml
Lamotrigine	3.610	397644	1656.48	88.9	2071.59	55233915	10.0000 ng/ml
Levamisole	3.059	4219587	11791976.86	85.1	297.41	38243226	10.0000 ng/ml
Levetiracetam	2.664	2751058	244.47	56.3	179.79	55233915	10.0000 ng/ml
Lorazepam	4.422	305299	273.29	257.8	67.73	15374302	10.0000 ng/ml
Maprotiline	4.458	2083323	119.02	77.5	95.71	8958590	10.0000 ng/ml
MDA	3.045	2689505	298.82	41.9	∞	38998139	10.0000 ng/ml
MDEA	3.275	7287270	675.46	51.2	754.42	38998139	10.0000 ng/ml
MDMA	3.121	8687687	514.47	49.6	467.22	38998139	10.0000 ng/ml
Meperidine	3.641	4199264	515.36	57.8	4602.48	18178859	10.0000 ng/ml
Meprobamate	3.659	754008	225.90	21.1	40.41	9185140	10.0000 ng/ml
Methadone	4.423	9949353	628.46	45.8	530.61	5113330	10.0000 ng/ml
Methamphetamine	3.047	9088124	2431.90	39.8	238.81	38998139	10.0000 ng/ml
Methocarbamol	3.580	471259	111.56	84.6	195.85	5113330	10.0000 ng/ml
Methylphenidate	3.550	17728393	5682.30	23.2	454.60	26835356	10.0000 ng/ml
Metoprolol	3.470	1344767	477.29	100.2	231.79	18178859	10.0000 ng/ml
Midazolam	4.759	1147078	527.39	89.1	264.20	15374302	10.0000 ng/ml
Mirtazapine	3.979	4983221	19016.18	215.8	8817.24	18178859	10.0000 ng/ml
Mitragynine	4.217	788378	481832.19	229.9	911798.69	18178859	10.0000 ng/ml
Morphine	2.826	292158	432.83	98.9	1658.40	378668	10.0000 ng/ml
Norbuprenorphine	3.847	94785	389.73	106.9	41877.35	4720677	10.0000 ng/ml
Nordiazepam	4.689	1315180	657.43	58.3	356.11	15374302	10.0000 ng/ml
Norfentanyl	3.365	10414555	229.09	37.8	167.06	40241550	10.0000 ng/ml
Norhydrocodone	3.009	244866	236.06	59.3	175.15	378668	10.0000 ng/ml
Norketamine	3.659	1054584	271.70	466.1	2512.28	15676104	10.0000 ng/ml
Normeperidine	3.627	4216058	1085.81	75.2	969.50	55233915	10.0000 ng/ml
Noroxycodone	2.976	1778498	∞	29.1	86.58	15676104	10.0000 ng/ml
Nortriptyline	4.428	1853814	391.71	71.3	295.27	8958590	10.0000 ng/ml
O-desmethyl-tramadol	2.995	11159490	302.71	6.2	107.51	55233915	10.0000 ng/ml
O-desmethylvenlafaxine	3.270	2647687	905.96	657.2	10817.04	15455851	10.0000 ng/ml
Olanzapine	3.852	1930119	1156913.51	52.8	3940.44	122526	10.0000 ng/ml
Oxazepam	4.502	1308323	417.11	75.1	64.53	9644564	10.0000 ng/ml
Oxycodone	3.036	3410249	474.99	28.5	893.94	15676104	10.0000 ng/ml

AM #25 Multi-Drug Screen. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Oxymorphone	2.702	3287128	∞	25.4	325.39	378668	10.0000 ng/ml
Paroxetine	4.359	539281	272.99	84.2	425.27	4066732	10.0000 ng/ml
Phenazepam	4.650	994605	357.96	67.9	186.50	15374302	10.0000 ng/ml
Phencyclidine	3.965	8593645	377.75	68.0	221.37	18178859	10.0000 ng/ml
Phentermine	3.185	2053614	304.90	6.7	54.00	26835356	10.0000 ng/ml
Phenytoin	4.120	293208	115.06	76.4	31.12	122526	10.0000 ng/ml
Primidone	3.475	575512	312053.41	90.4	65.64	122526	10.0000 ng/ml
Promethazine	4.349	10408214	837.16	31.5	338.12	55233915	10.0000 ng/ml
Pseudoephedrine	2.832	69982440	706.34	37.6	33103.55	38998139	10.0000 ng/ml
Quetiapine	4.464	6861585	3678305.76	56.5	987509.30	47073607	10.0000 ng/ml
Risperidone	4.093	9100317	11980.32	11.2	1279.98	42675480	10.0000 ng/ml
Sertraline	4.578	773937	304.50	106.0	283.25	4066732	10.0000 ng/ml
Sufentanil	4.433	334754	374.35	77.1	262.67	40241550	10.0000 ng/ml
Tapentadol	3.459	8049996	1291.28	33.7	378.18	15676104	10.0000 ng/ml
Temazepam	4.671	3543728	422.63	27.0	49.59	15374302	10.0000 ng/ml
Topiramate	3.834	33608	19107.65	52.4	37141.70	163518	10.0000 ng/ml
Tramadol	3.455	25669809	332.73	1.7	213.85	55233915	10.0000 ng/ml
Trazodone	4.572	8828916	7472.28	67.9	3835.28	35757298	10.0000 ng/ml
Venlafaxine	3.824	10181883	1074.68	26.9	1660.87	15455851	10.0000 ng/ml
Xylazine	3.429	2963352	4642.12	46.8	120.55	15676104	10.0000 ng/ml
Zaleplon	4.348	1872064	1357175.54	72.9	215.04	47073607	10.0000 ng/ml
Zolpidem	4.316	13231253	2812470.67	28.6	21398.67	47073607	10.0000 ng/ml
Zopiclone	4.171	383380	136014.57	60.1	1293.09	1783162	10.0000 ng/ml

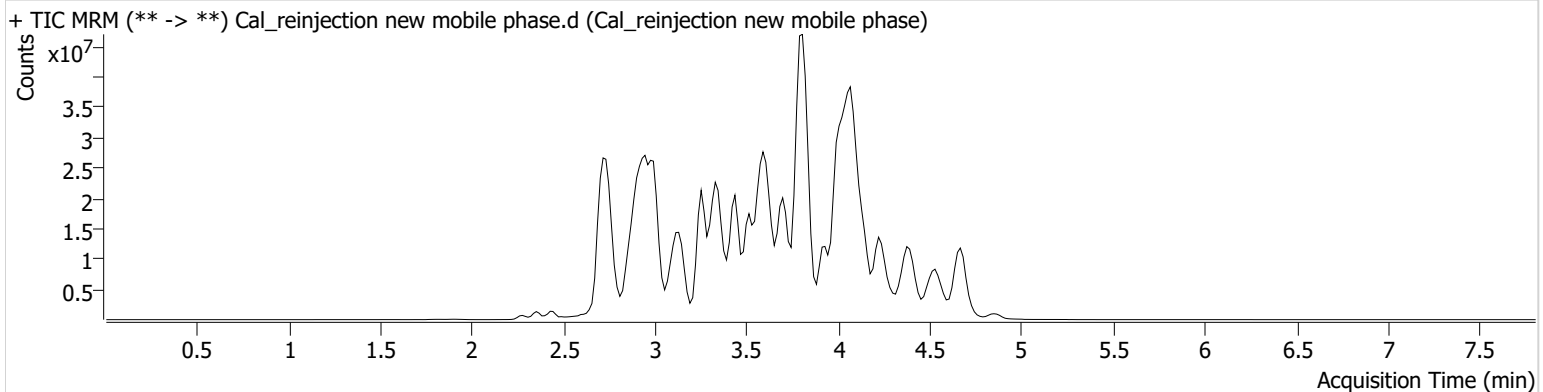
AM #25 Multi-Drug Screen. Results



Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\Re-extraction data\QuantResults\AM 25 re-extracts.batch.bin
Calibration Last Update 1/19/2024 1:55:51 PM

Instrument	Falco (069901)	Data File	Cal_reinjection new mobile phase.d
Type	Cal	Sample	Cal_reinjection new mobile phase
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-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	1/19/2024 1:11:31 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Levetiracetam	2.679	4032654	545.08	57.9	233.45	67362712	10.0000 ng/ml

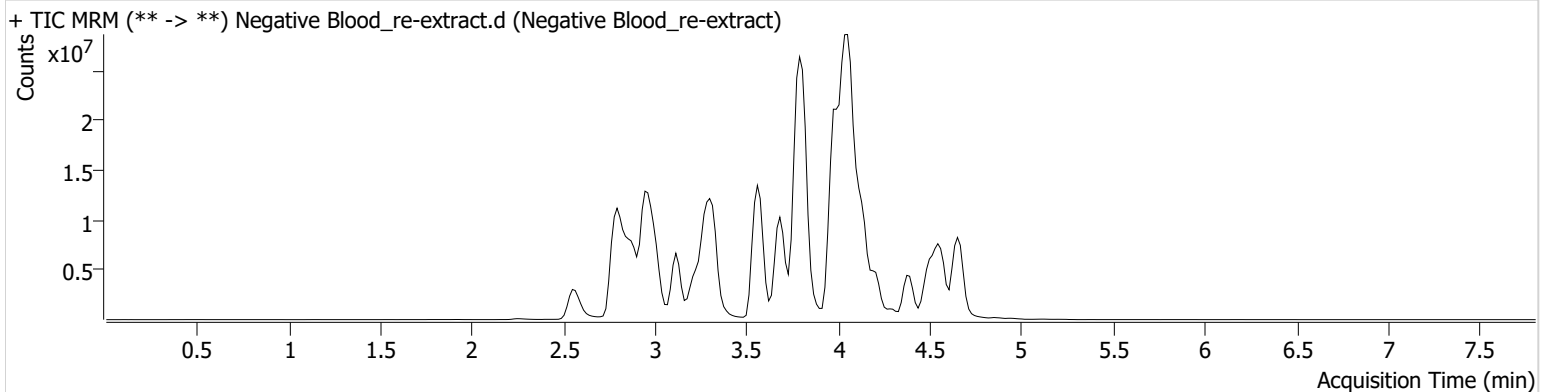
AM #25 Multi-Drug Screen. Results



Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\Re-extraction data\QuantResults\AM 25 re-extracts.batch.bin
Calibration Last Update 1/19/2024 1:55:51 PM

Instrument	Falco (069901)	Data File	Negative Blood_re-extract.d
Type	Sample	Sample	Negative Blood_re-extract
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-E8	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	1/19/2024 12:09:45 PM		
Sample Info.			

Sample Chromatogram



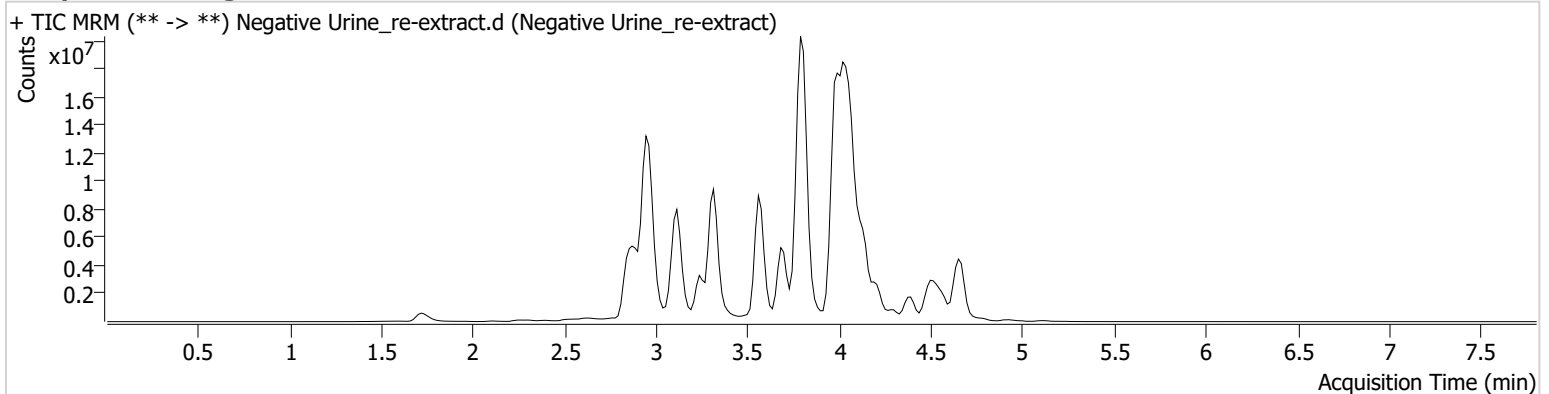
AM #25 Multi-Drug Screen. Results



Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\Re-extraction data\QuantResults\AM 25 re-extracts.batch.bin
Calibration Last Update 1/19/2024 1:55:51 PM

Instrument	Falco (069901)	Data File	Negative Urine_re-extract.d
Type	Sample	Sample	Negative Urine_re-extract
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-D8	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	1/19/2024 12:18:21 PM		
Sample Info.			

Sample Chromatogram





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

Extraction Date: 01/16/2024

Plate lot#: 231212

Mobile phase A: 10mM Amm Form

Blank Blood Lot: Lampire 23E52981

LCMS-QQQ ID: 069901

Analyst: Celena Shrum

Plate Retest Date: 06/12/2024

Mobile phase B: 0.1% Formic Acid in MeOH

Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

Blank Urine Lot: POC021022

Pre-Analytic:

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

Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Urine hydrolysis (if applicable): add 1.5mL urine to blank plate, add 250µl 1N KOH. Shake and incubate at 40 degrees for 15 minutes.
- 3. Using a calibrated pipette, add **1000µl blood or 1000µl hydrolyzed urine** into the appropriate wells of analytical (standards) plate. **Pipette ID: #42**
- 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 5. Pipette **500µL 0.1% formic acid in water to blood samples and 500µl of saturated phosphate buffer to urine samples** to the appropriate wells of the analytical plate.
- 6. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 7. Transfer **800µL of blood+acid mixture or urine+acid** to corresponding wells of SLE+ plate.
- 8. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). **(Load at 85-100 PSI- Selector to the right)** Manifold ID: 067104
- 9. Wait 5 minutes.
- 10. Add **2.25mL MTBE. (Add in 3 increments of 750uL)**
- 11. Wait 5 minutes.
- 12. Apply positive pressure for approx. 15 seconds. **(10-15 PSI- Selector to the left).**
- 13. Add **2.25mL Hexane. (Add in 3 increments of 750uL)**
- 14. Wait 5 minutes.
- 15. Apply positive pressure for approx. 15 seconds. **(10-15 PSI- Selector to the left).**
- 16. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. **SPE Dry ID: 067103**
- 16. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Create batch and process data.
- 2. Make any necessary integration changes, R^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:

3

	1	2	3	4	5	6
a					P2023-3629-1	QC 1
b				M2023-4555-2	P2023-3680-1	cal 100 ng
c				M2023-4659-2	P2023-3830-1	cal 50 ng
d				M2023-4769-2	P2023-4026-1	cal 25 ng
e				M2023-5170-4	P2024-0015-1	cal 10ng
f				P2023-3501-1	NEG Urine	cal 5 ng
g				P2023-3503-1	NEG Blood	cal 3 ng
h				P2023-3516-3	QC 2	cal 1ng

AM #26 Cannabinoids Screen Results



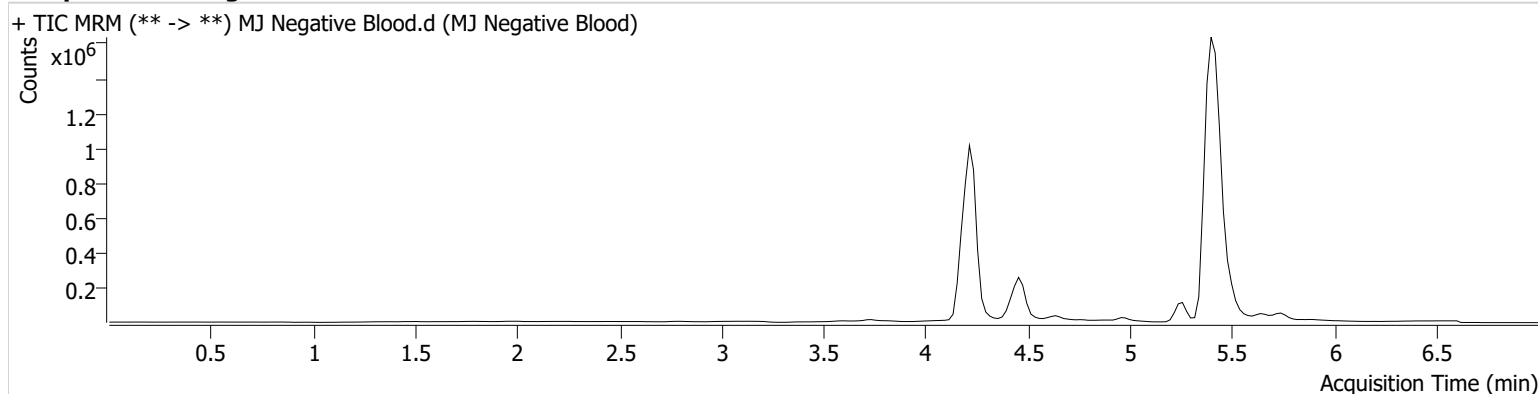
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type Sample
Acq. Method AM 26 THC.m
Sample Position P1-G5
Injection Volume 10
Acq. Date-Time 1/16/2024 2:00:42 PM
Sample Info.

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

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

Sample Chromatogram



AM #26 Cannabinoids Screen Results



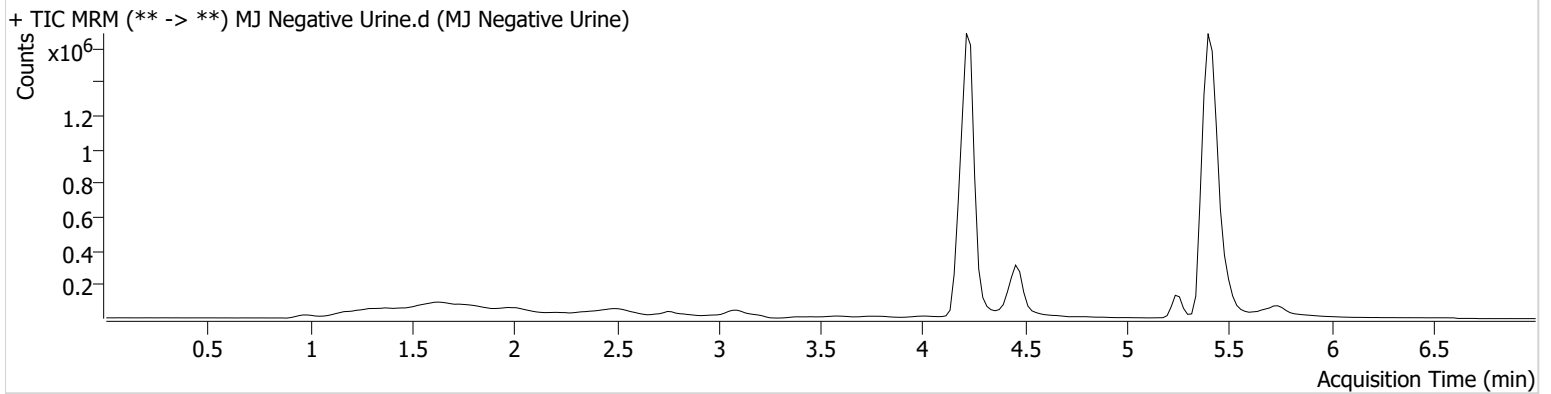
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type Sample
Acq. Method AM 26 THC.m
Sample Position P1-F5
Injection Volume 10
Acq. Date-Time 1/16/2024 2:08:17 PM
Sample Info.

Data File MJ Negative Urine.d
Sample MJ Negative Urine
Operator Celena Shrum
Comment

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

Sample Chromatogram





AM #26 Cannabinoids Screen Results

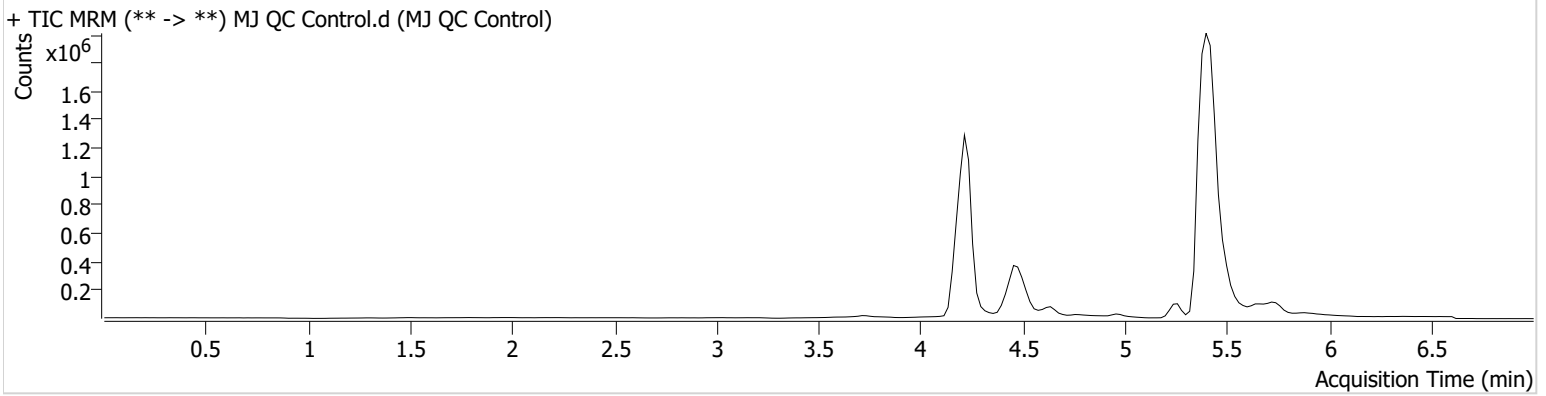
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type QC
Acq. Method AM 26 THC.m
Sample Position P1-A6
Injection Volume 10
Acq. Date-Time 1/16/2024 1:45:30 PM
Sample Info.

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

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.349	1616	7.14 Low	1578.5 High	∞	71600	5.4393 ng/ml
THC-COOH	4.496	311111	∞	160.1	∞	1398140	13.8851 ng/ml
THC-OH	4.242	57621	∞	832.3	∞	5611934	4.9812 ng/ml



AM #26 Cannabinoids Screen Results

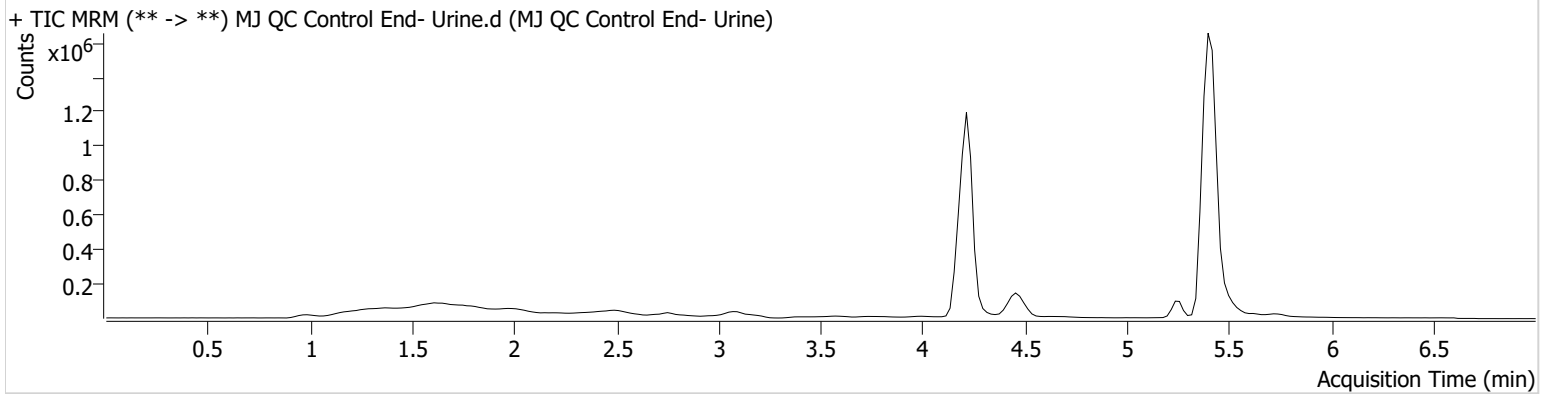
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type QC
Acq. Method AM 26 THC.m
Sample Position P1-H5
Injection Volume 10
Acq. Date-Time 1/16/2024 3:46:43 PM
Sample Info.

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

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

Sample Chromatogram

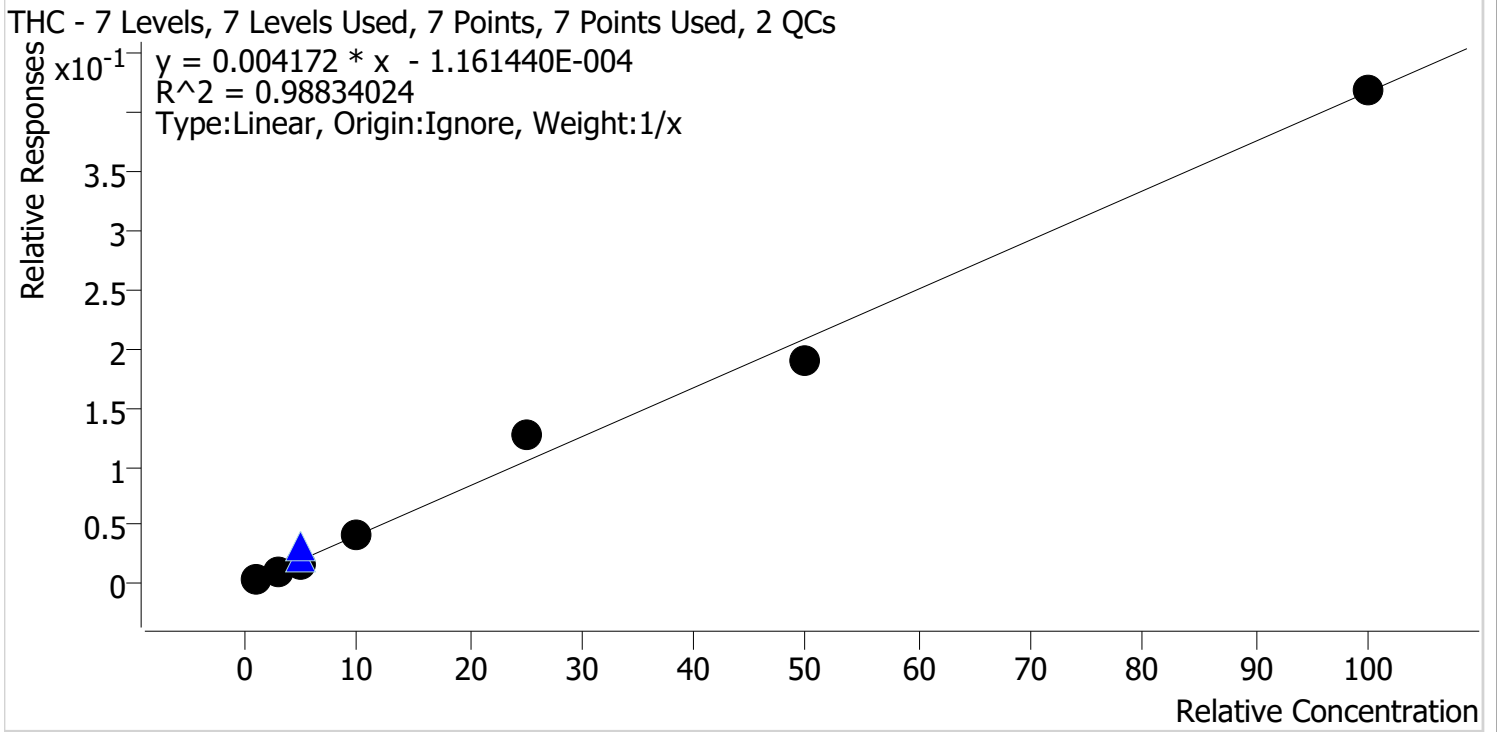


Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.369	4652	13.93	411.2 High	∞	139214	8.0366 ng/ml
THC-COOH	4.496	94053	112.63	156.4	∞	502100	11.7941 ng/ml
THC-OH	4.222	49225	∞	778.7	∞	5080008	4.7118 ng/ml



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Last Cal. Update 1/17/2024 7:41 AM
Analyst Name ISP\datastor
Analyte THC **Internal Standard** THC-D3

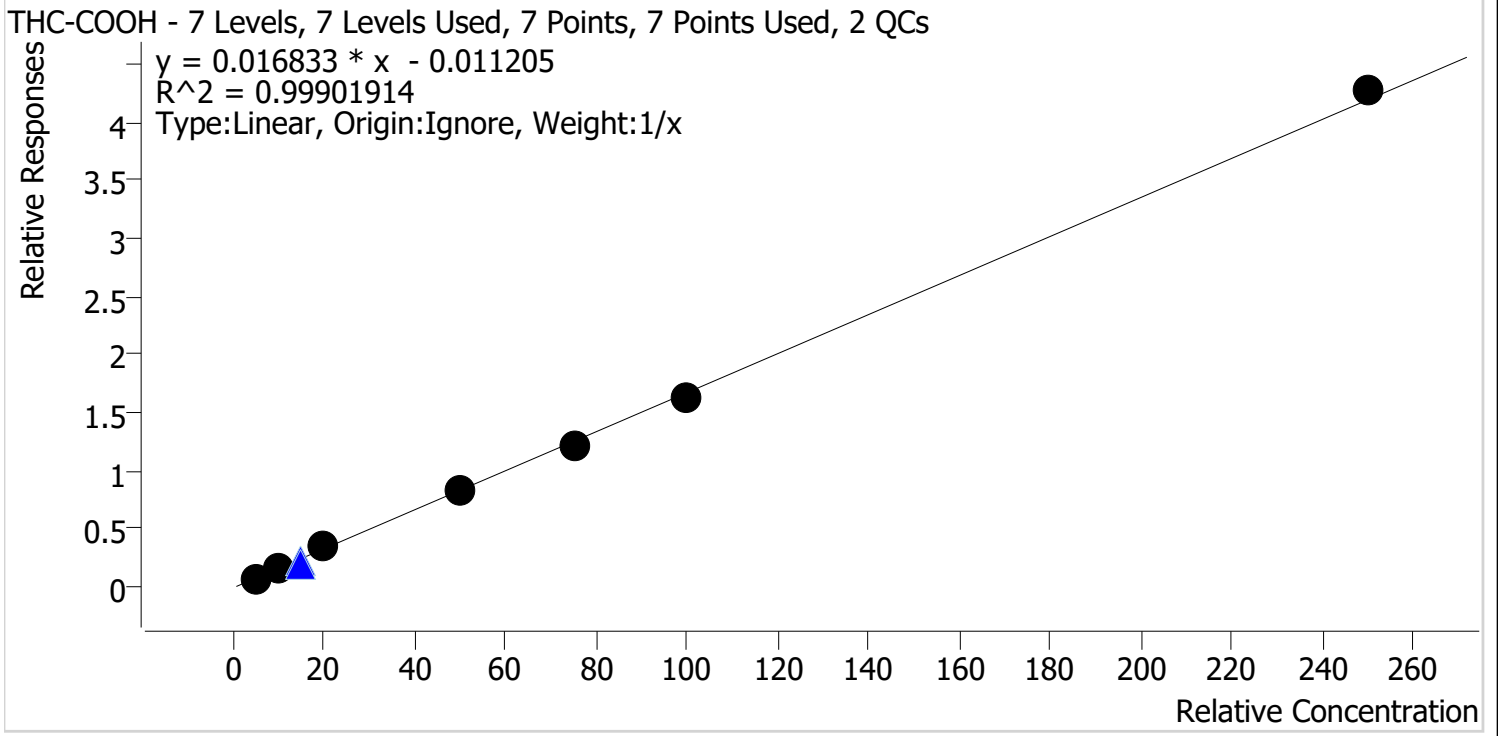


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	1.0	1.2	118.2
MJ Cal 2	2	✓	3.0	2.5	83.9
MJ Cal 3	3	✓	5.0	4.2	84.1
MJ Cal 4	4	✓	10.0	10.1	101.0
MJ Cal 5	5	✓	25.0	30.6	122.3
MJ Cal 6	6	✓	50.0	45.2	90.3
MJ Cal 7	7	✓	100.0	100.3	100.3



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Last Cal. Update 1/17/2024 7:41 AM
Analyst Name ISP\datastor
Analyte THC-COOH **Internal Standard** THC-COOH-D9

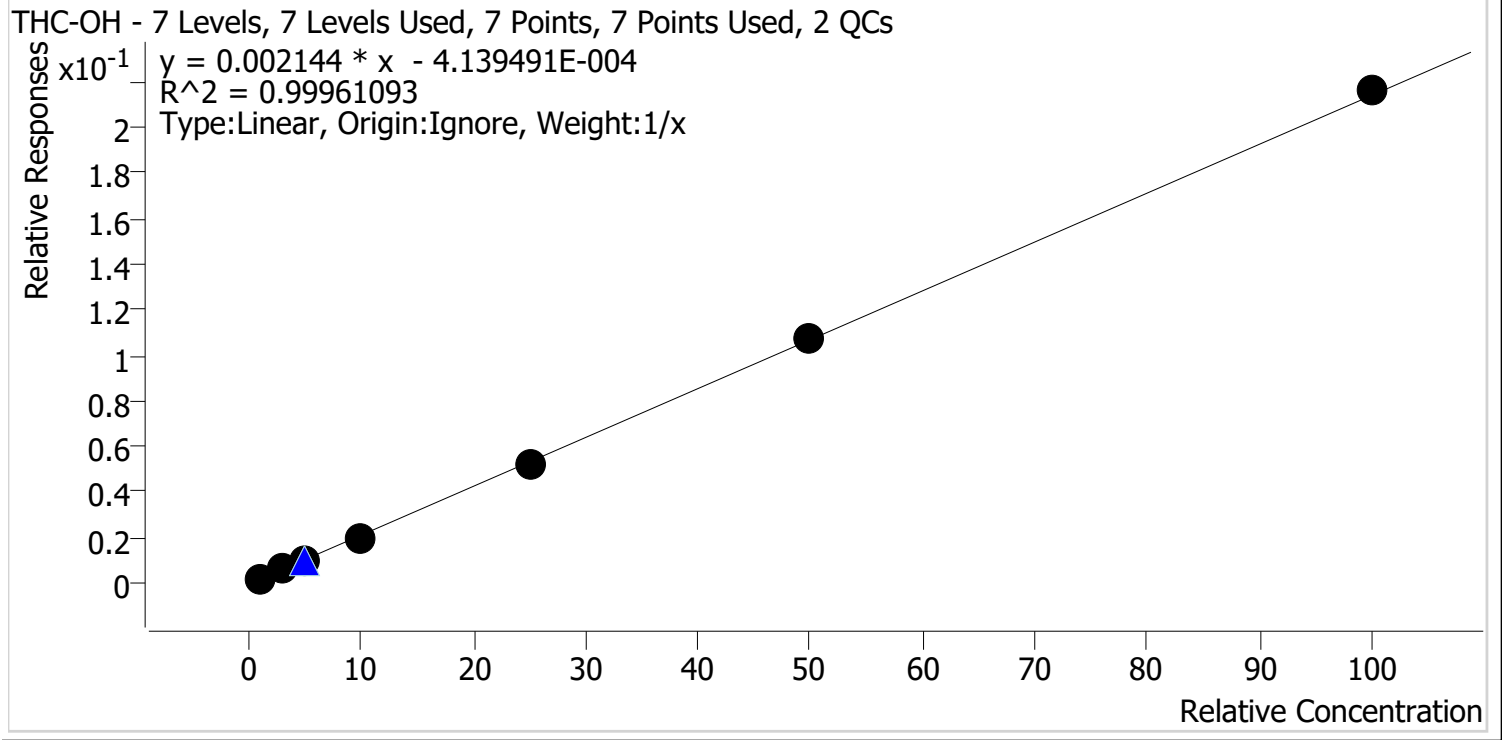


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	5.0	4.7	93.1
MJ Cal 2	2	✓	10.0	10.9	109.4
MJ Cal 3	3	✓	20.0	20.6	103.0
MJ Cal 4	4	✓	50.0	49.1	98.2
MJ Cal 5	5	✓	75.0	73.4	97.9
MJ Cal 6	6	✓	100.0	96.6	96.6
MJ Cal 7	7	✓	250.0	254.7	101.9



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Last Cal. Update 1/17/2024 7:41 AM
Analyst Name ISP\datastor
Analyte THC-OH **Internal Standard** THC-OH-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	1.0	1.1	109.4
MJ Cal 2	2	✓	3.0	3.0	100.2
MJ Cal 3	3	✓	5.0	4.8	96.6
MJ Cal 4	4	✓	10.0	9.5	94.6
MJ Cal 5	5	✓	25.0	24.5	97.9
MJ Cal 6	6	✓	50.0	50.2	100.4
MJ Cal 7	7	✓	100.0	100.9	100.9



AM #26 Cannabinoids Screen Results

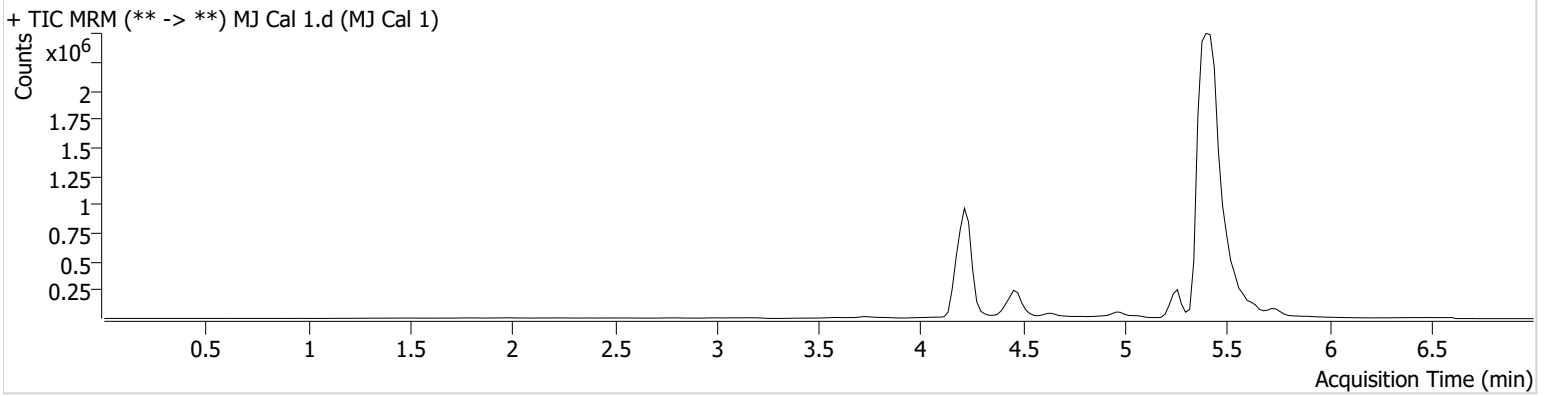
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type Cal
Acq. Method AM 26 THC.m
Sample Position P1-H6
Injection Volume 10
Acq. Date-Time 1/16/2024 12:52:20 PM
Sample Info.

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

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.369	887	5.00 Low	3393.6 High	55.85	184125	1.1822 ng/ml
THC-COOH	4.496	63747	∞	203.4	50.80	949905	4.6525 ng/ml
THC-OH	4.242	9037	∞	942.4	∞	4679319	1.0937 ng/ml



AM #26 Cannabinoids Screen Results

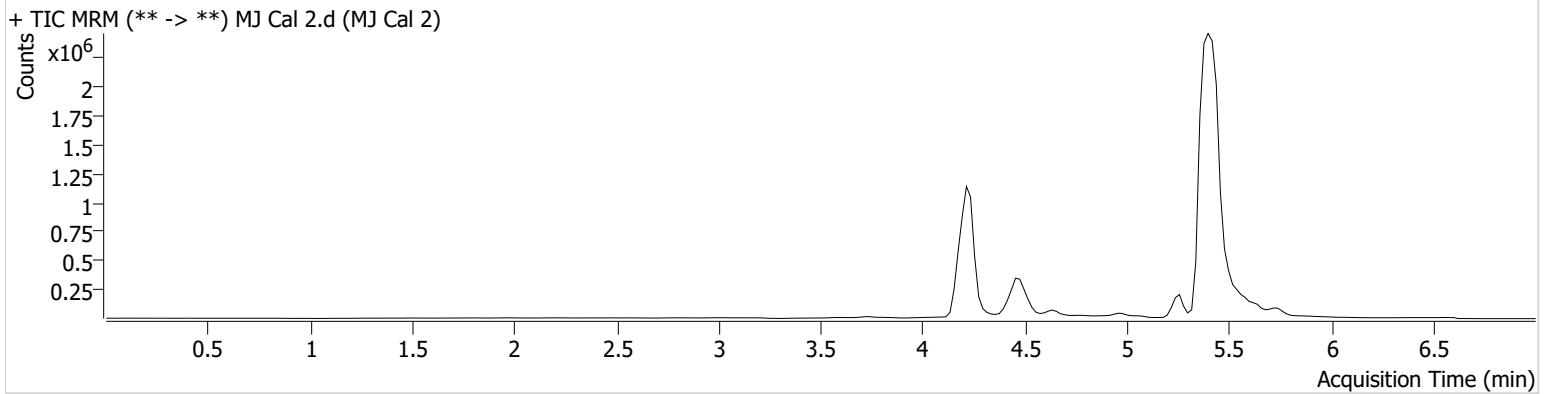
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type Cal
Acq. Method AM 26 THC.m
Sample Position P1-G6
Injection Volume 10
Acq. Date-Time 1/16/2024 1:00:04 PM
Sample Info.

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

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.349	1914	∞	1634.5 High	∞	184420	2.5159 ng/ml
THC-COOH	4.496	218507	∞	162.3	∞	1264008	10.9355 ng/ml
THC-OH	4.242	31670	∞	843.0	∞	5249750	3.0064 ng/ml



AM #26 Cannabinoids Screen Results

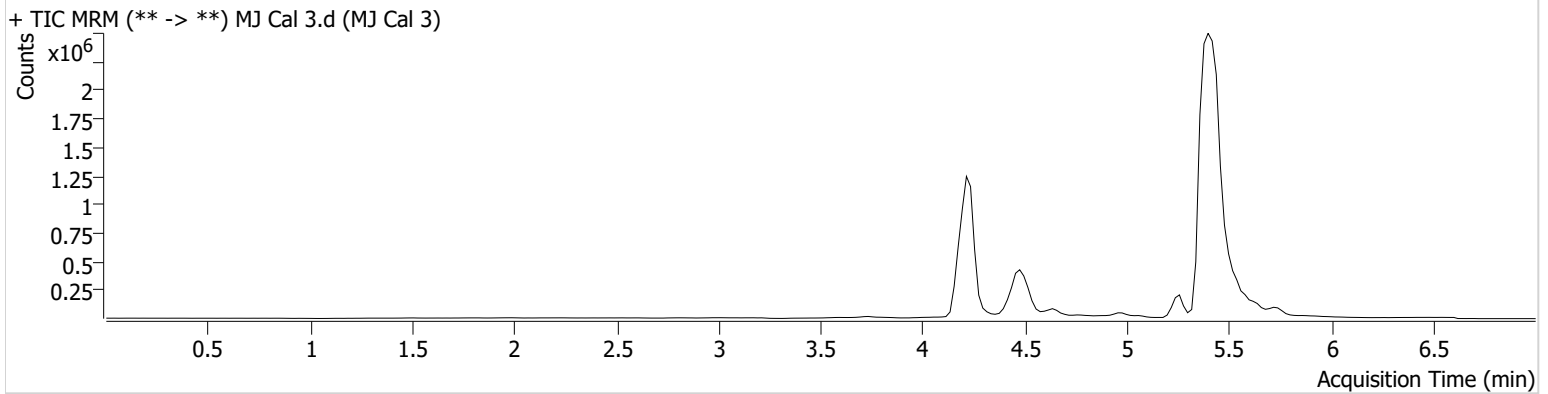
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type Cal
Acq. Method AM 26 THC.m
Sample Position P1-F6
Injection Volume 10
Acq. Date-Time 1/16/2024 1:07:39 PM
Sample Info.

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

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.349	2500	37.70	1323.0 High	∞	143539	4.2027 ng/ml
THC-COOH	4.496	427362	∞	157.4	∞	1273389	20.6038 ng/ml
THC-OH	4.242	55310	∞	835.8	∞	5563630	4.8291 ng/ml



AM #26 Cannabinoids Screen Results

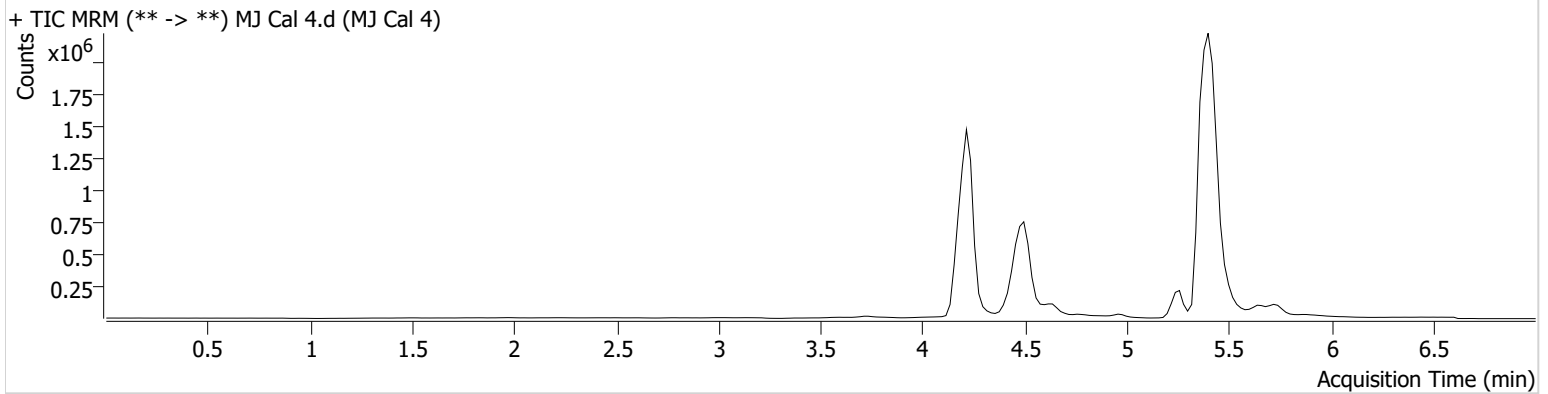
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type Cal
Acq. Method AM 26 THC.m
Sample Position P1-E6
Injection Volume 10
Acq. Date-Time 1/16/2024 1:15:13 PM
Sample Info.

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

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.349	5024	∞	508.9 High	∞	119534	10.1020 ng/ml
THC-COOH	4.496	1163566	∞	160.9	∞	1427463	49.0913 ng/ml
THC-OH	4.222	124798	∞	776.3	∞	6279186	9.4615 ng/ml

AM #26 Cannabinoids Screen Results



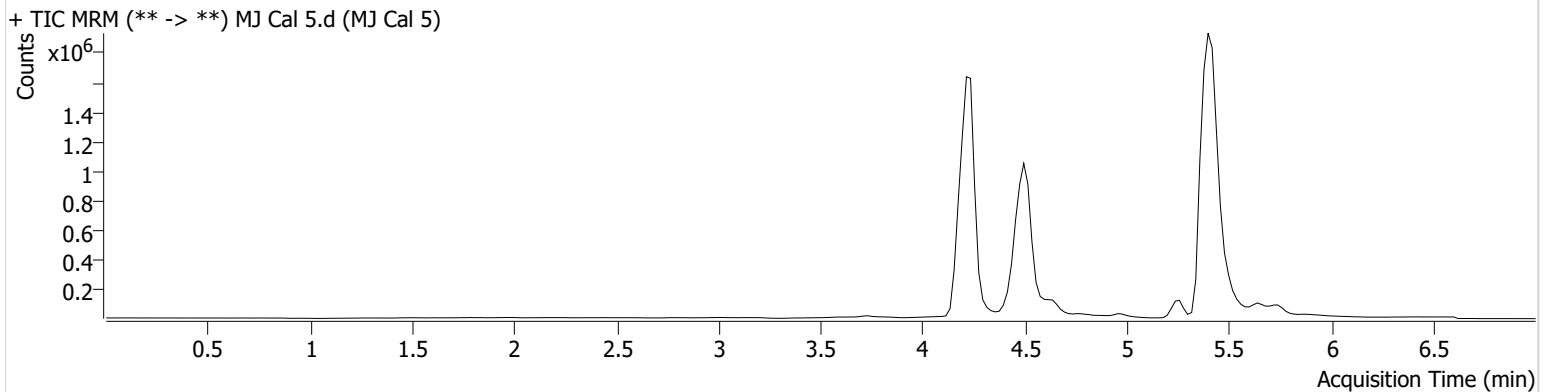
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type Cal
Acq. Method AM 26 THC.m
Sample Position P1-D6
Injection Volume 10
Acq. Date-Time 1/16/2024 1:22:47 PM
Sample Info.

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

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.369	8503	182.79	290.5 High	∞	66737	30.5654 ng/ml
THC-COOH	4.496	1726325	∞	160.6	∞	1409712	73.4171 ng/ml
THC-OH	4.242	297419	∞	773.7	∞	5712257	24.4739 ng/ml

AM #26 Cannabinoids Screen Results



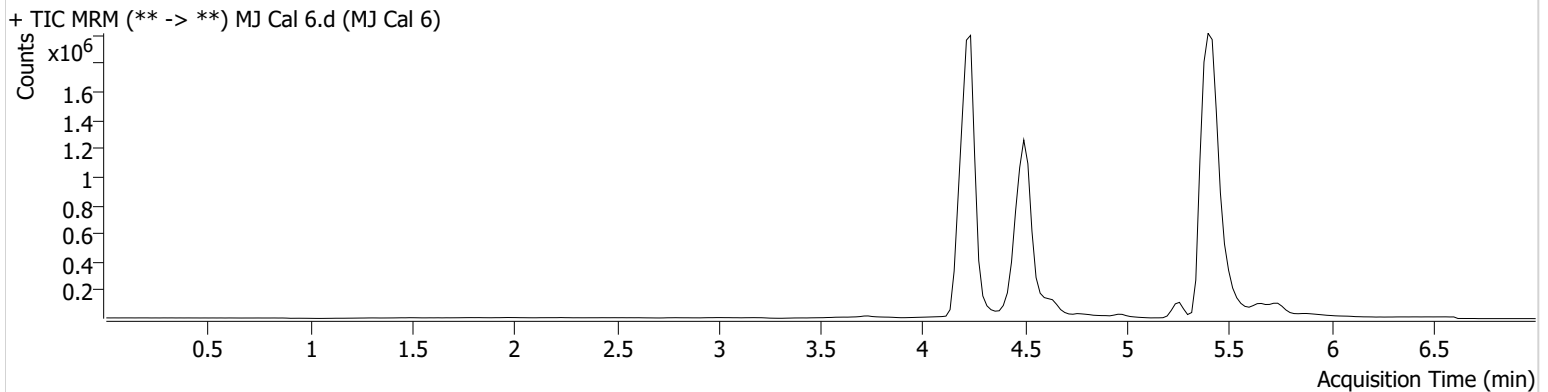
Batch results D:\MassHunter\Data\2024\AM 25 26\011624 AM 25 26 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type Cal
Acq. Method AM 26 THC.m
Sample Position P1-C6
Injection Volume 10
Acq. Date-Time 1/16/2024 1:30:21 PM
Sample Info.

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

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.349	13958	∞	206.4 High	∞	74142	45.1517 ng/ml
THC-COOH	4.496	2154030	∞	160.6	∞	1333366	96.6393 ng/ml
THC-OH	4.242	559502	∞	753.2	∞	5218336	50.1935 ng/ml

AM #26 Cannabinoids Screen Results



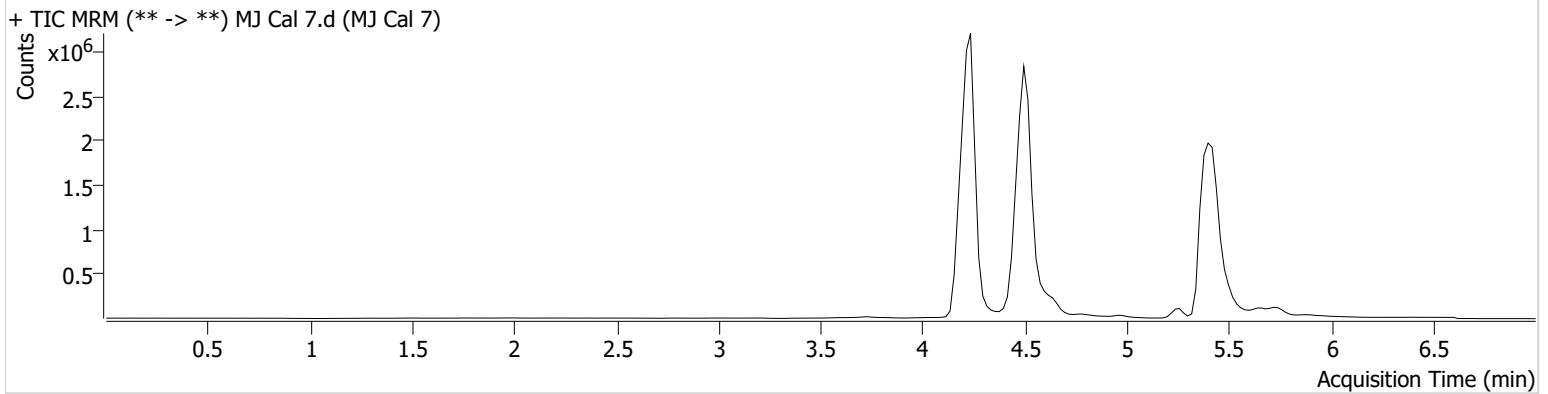
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Calibration Last Update 1/17/2024 7:41:15 AM

Instrument Falco (069901)
Type Cal
Acq. Method AM 26 THC.m
Sample Position P1-B6
Injection Volume 10
Acq. Date-Time 1/16/2024 1:37:56 PM
Sample Info.

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

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

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.349	29089	274.21	115.7	∞	69548	100.2801 ng/ml
THC-COOH	4.496	5233131	∞	160.9	∞	1224013	254.6605 ng/ml
THC-OH	4.242	1195780	∞	762.4	∞	5534974	100.9419 ng/ml