REVIEWED
By Amber Gerheart at 11:34 am, Aug 04, 2022

REVIEWED
By Amber Gerheart at 12:20 pm, Aug 08, 2022

TS 7/25/2022

Worklist: 6038

	LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
	M2022-2004	4	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	M2022-2128	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	M2022-2290	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	M2022-2291	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	M2022-2311	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	M2022-2399	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	M2022-3003	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1643	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
*	P2022-1665	4	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
*	P2022-1665	5	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1671	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1683	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1711	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1761	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1765	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1794	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1796	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1802	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1877	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
	P2022-1892	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
**	P2022-2199	7	BCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ

*Due to inconsitent results between the original screen analysis and confirmation analysis,case samples P2022-1665-4 and P2022-1665-5 were re-extract and re-ran for AM 25 on 08/02/2022.

**P2022-2199 was logged as a blood collection kit that contained a urine sample.

TS

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

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Idaho State Police
Forensic Services

Request for Departure from an Analytical Method or Quality Standard

Deviation Number (assigned by QM): **TOX-22-02**

Date of Request:
03/02/2022

Requestor/Discipline:
Celena Shrum/Toxicology

Analytical Method/Quality Standard, Revision #:
Toxicology AM #25, AM #26, and AM #27, 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):

Toxicology AM #25 3.3.1.1 Internal standards are prepared by the ToxBox plate manufacturer and contained on the 96 well plate. If the run contains urine samples, a positive external urine
control must also be run.

Toxicology AM #26 3.3.2 A negative control will be run with each extraction. If the run contains urine samples, a negative urine control and external positive urine control must also be included.

Toxicology AM #27 3.3.2 A negative control will be run with each extraction. If the run contains urine samples, a negative urine control and positive external urine control will also be included in the run.

The deviation is to include the option of using an internal urine control in lieu of an external urine control.

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Technical Justification for Analytical Method Deviations:

Internal controls serve the same purpose as external controls but also helps to avoid the possible issues that can occur with using external controls (incorrect spiking, incorrect preparation, evaporation of compounds, etc.). If these errors occur, runs need to be repeated and this wastes time, sample, and supplies.

Technical Review

☒ Departure approved
Comments:

☐ Departure Not Approved
Comments:

Approver: Rachel Cutler Date: 3/2/22
Title: Lab Manager

Quality Review

Quality Approver: Jason Crowe
Title: Quality Manager
Date: 3/2/2022

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	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	M2022-2291-2	P2022-1683-3	P2022-1892-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample
B	IS + Cal. 1	IS + Sample	IS + Sample	IS + Sample	Neg Blood	M2022-2311-2	P2022-1711-1	P2022-2199-7	IS + Sample	IS + Sample	IS + Sample	IS + Sample
C	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Blood External	M2022-2399-2	P2022-1761-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
D	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Neg Urine	M2022-3003-3	P2022-1765-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
E	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Urine External	P2022-1643-1	P2022-1794-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
F	IS + Sample	IS + Sample	IS + Sample	IS + Sample	M2022-2004-4	P2022-1665-4	P2022-1796-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
G	IS + Sample	IS + Sample	IS + Sample	IS + Sample	M2022-2128-2	P2022-1665-5	P2022-1802-2	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 1
H	IS + Sample	IS + Sample	IS + Sample	IS + Sample	M2022-2290-3	P2022-1671-1	P2022-1877-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 1

All wells to contain 60 µl of residual DMSO

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

Extraction Date: 07/25/2022
Plate lot#: 211015
Mobile phase A: 10mM Amm Form
Blank Blood Lot: Lampire 22B52015-1
LCMS-QQQ ID: 069901

Analyst: Tamara Salazar
Plate Retest Date: 04/15/2022—ok with external control
Mobile phase B: 0.1% Formic Acid in MeOH
Blank Urine Lot: POC21022
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 or 250µL hydrolyzed urine in 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: *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).***
☒ 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. Add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying. This step is required for urine samples, but optional for blood samples.
☒ 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: Case sample M2022-2291-2 was reinjected due to low internal standard response in some compounds. The re-injection did not show any improvement in ITSD response. M2022-2291-2 was not evaluated for 10 OH-Carbamazepine, 7-aminoclonazepam, 7-aminoflunitrazepam, alpha-hydroxyalprazolam, and alpha-hydroxymidazolam.

*Deviation TOX-22-01 refers to a step between steps 3 and 4 that stated " Place on shaking incubator at ambient temp., 900rpm for 15 minutes." This step was skipped per the deviation and the text was removed from the checklist in error.

08/08/22 TS

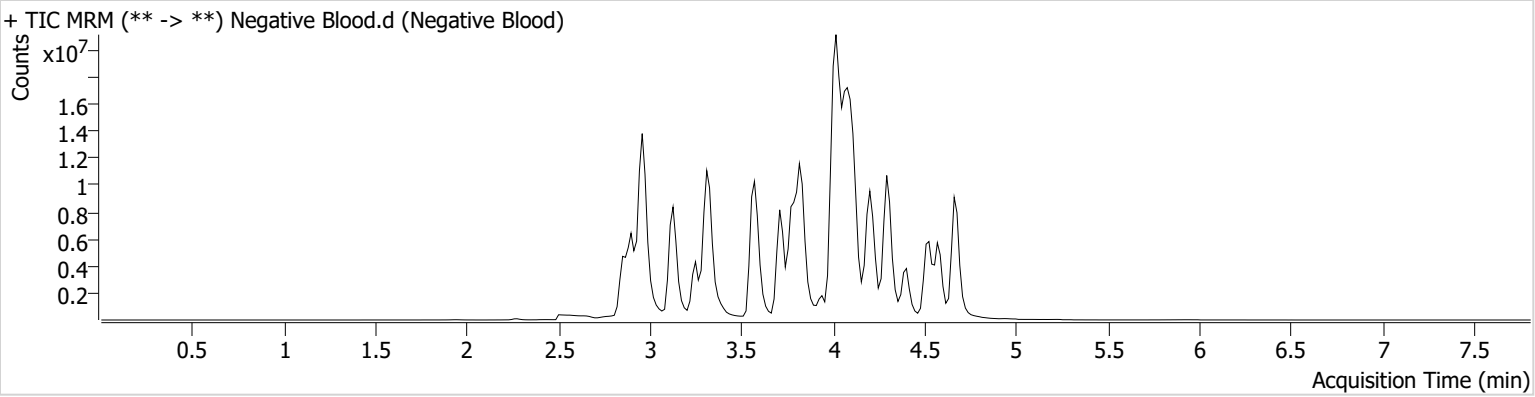
TS

AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 25.batch.bin
Calibration Last Update	8/2/2022 3:19:58 PM

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-B5	**Comment**	
Injection Volume	5		
Acq. Date-Time	7/25/2022 6:02:10 PM		
Sample Info.			

Sample Chromatogram



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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	

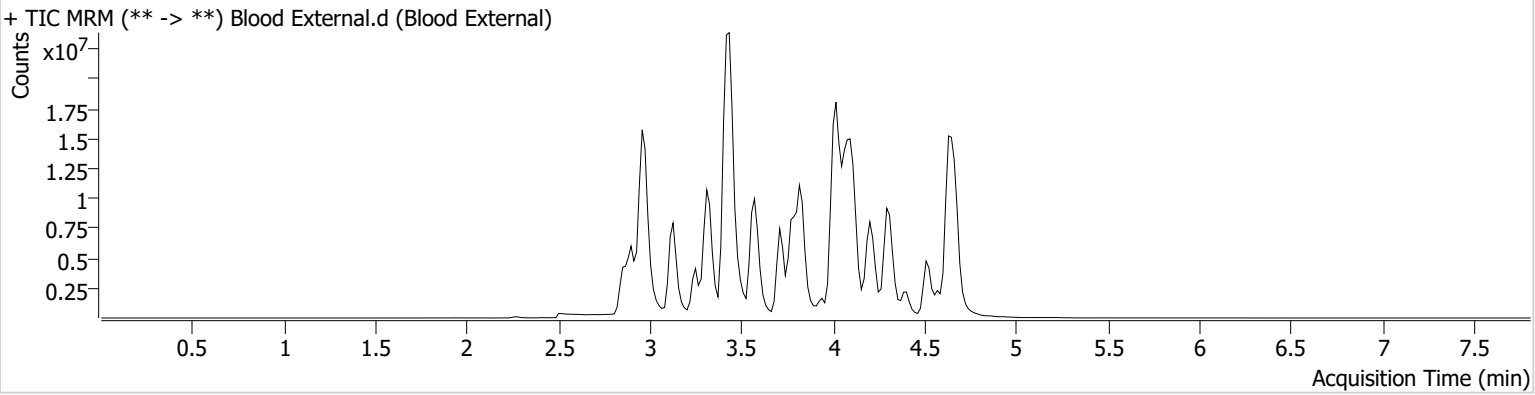
TS

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 25.batch.bin
Calibration Last Update 8/2/2022 3:19:58 PM

Instrument	Falco (069901)	**Data File**	Blood External.d
Type	Sample	**Sample**	Blood External
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P2-C5	**Comment**	
Injection Volume	5		
Acq. Date-Time	7/25/2022 6:10:34 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.636	22312525	1578.82	573.58	25174226	72.7017
Buprenorphine	4.305	6201138	3323624.35	8357.76	3252485	79.5596
Hydrocodone	2.976	9390930	4635.83	1388.98	9346342	67.9360
Tramadol	3.438	94075471	∞	571.93	45966319	43.3423

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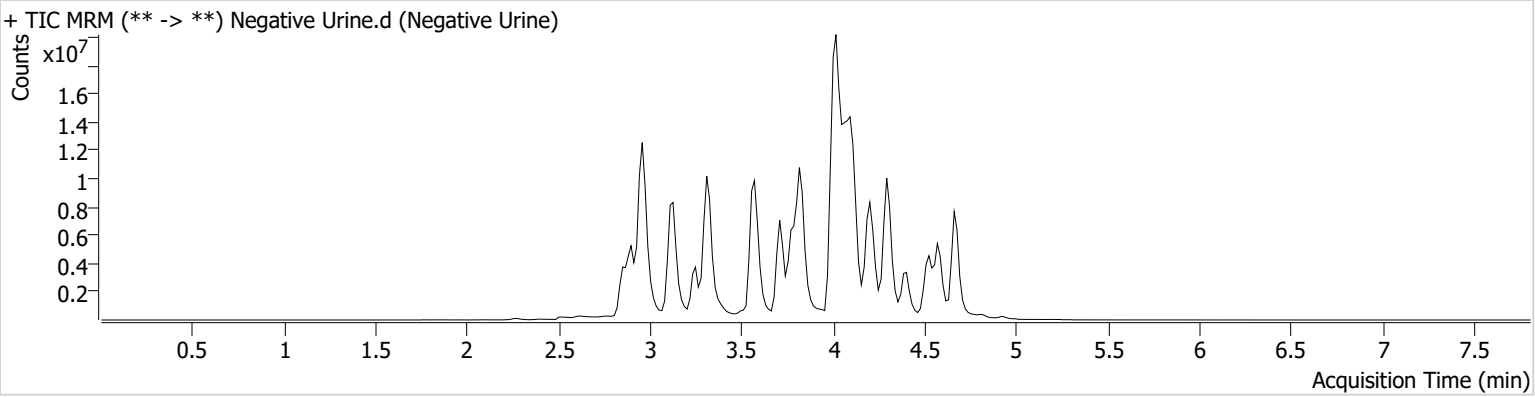
AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 25.batch.bin
Calibration Last Update 8/2/2022 3:19:58 PM

Instrument	Falco (069901)	**Data File**	Negative Urine.d
Type	Sample	**Sample**	Negative Urine
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P2-D5	**Comment**	
Injection Volume	5		
Acq. Date-Time	7/25/2022 6:19:01 PM		
Sample Info.			

Sample Chromatogram



TS

Idaho State Police Forensic Services

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

Methanol External Control Solution (Lot: 120320)

100 µL of 1mg/mL stock was added to each drug to 9700 µL of LC MeOH.

Component	***Source***	***Source Lot Number***	***Expiration Date***
Methanol (LCMS)	Fisher	197468	
O-desmethyl Tramadol	Cerilliant	FN01241702	04/30/2022
Amphetamine	Cerilliant	FE04061701	06/30/2022
Alprazolam	Cerilliant	FE07061604	07/31/2021
Prepared:	12/03/2020		
Prepared By:	Celena Shrum		

Urine External Control Solution (Lot: WS032122)

100 µL of methanol external control solution was added to 9900 µL of urine.
Approximately 100 ng/mL of each compound.

Component	***Source***	***Source Lot Number***
Negative Urine	Pocatello Lab	POC021022
Methanol External Control Solution		120320
Prepared:	03/21/22	
Prepared by:	Tamara Salazar	

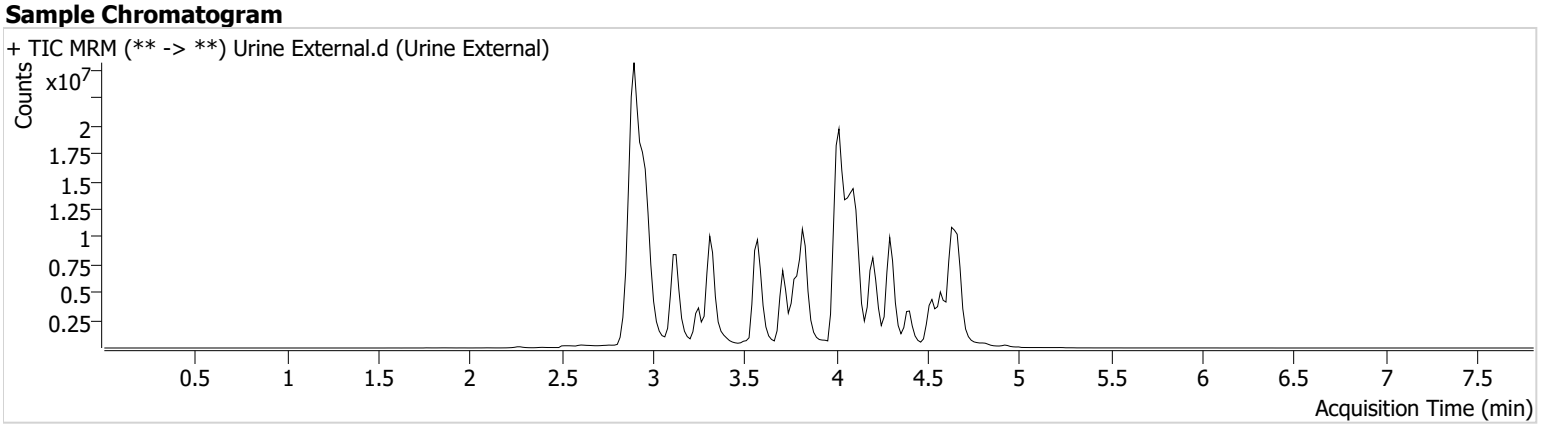
TS

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 25.batch.bin
Calibration Last Update 8/2/2022 3:19:58 PM

Instrument	Falco (069901)	**Data File**	Urine External.d
Type	Sample	**Sample**	Urine External
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P2-E5	**Comment**	
Injection Volume	5		
Acq. Date-Time	7/25/2022 6:27:26 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.636	14424365	498.76	587.31	20504978	57.7018
Amphetamine	2.892	19527854	1911.27	15370.58	9208972	66.0362
O-desmethyl-tramadol	2.917	38397860	527.55	516.52	46636845	38.5321

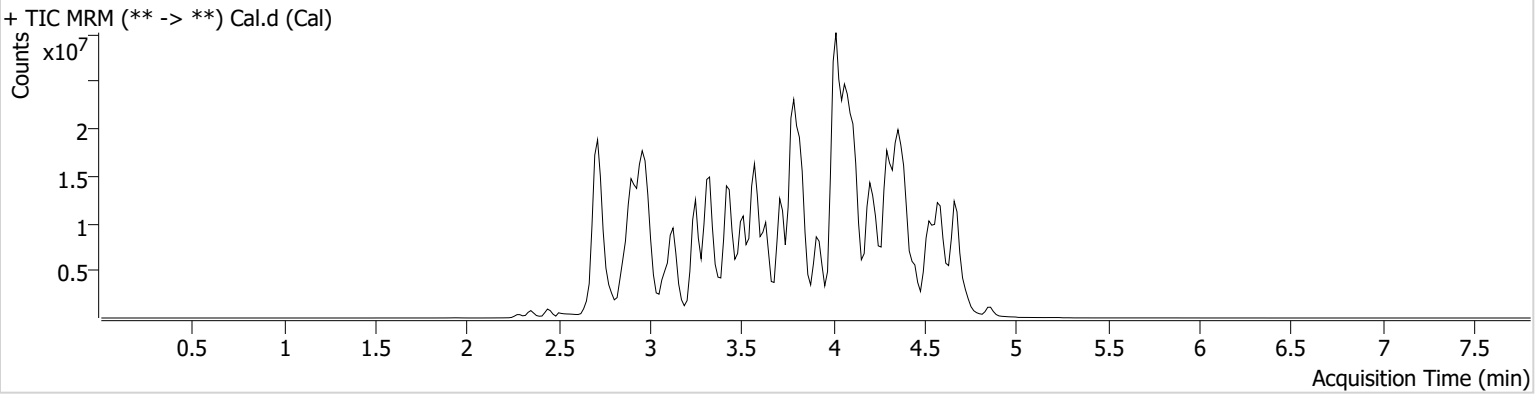
TS

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 25.batch.bin
Calibration Last Update 8/2/2022 3:19:58 PM

Instrument	Falco (069901)	**Data File**	Cal.d
Type	Cal	**Sample**	Cal
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P2-A1	**Comment**	
Injection Volume	5		
Acq. Date-Time	7/25/2022 5:53:35 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.778	3410425	47.21	657.25	22087873	10.0000
6-MAM	2.895	56989	267.45	14934.83	1696437	10.0000
7-aminoclonazepam	3.605	1047656	1211.31	425965.95	4131342	10.0000
7-aminoflunitrazepam	3.805	1884682	417.55	129.69	4131342	10.0000
9-Hydroxyrisperidone	3.828	9602169	72634.57	462.09	33775117	10.0000
Acetyl Fentanyl	3.802	467270	182.92	175188.40	37768048	10.0000
Acetyl Norfentanyl	2.904	517256	1061.73	361.41	37768048	10.0000
a-hydroxyalprazolam	4.525	292929	105.69	99058.57	4131342	10.0000
alpha-hydroxymidazolam	4.600	2937576	961.67	651.24	4131342	10.0000
Alpha-PHP	3.794	4551111	10604.42	1468.26	37768048	10.0000
alpha-PVP	3.518	7187816	1764.98	871.60	14210123	10.0000
Alprazolam	4.636	3007771	396.76	260.04	24671553	10.0000
Amitriptyline	4.409	2811412	349.86	156.64	10183579	10.0000
Amphetamine	2.892	4563088	1018.80	2885.94	14210123	10.0000
Benzoylecgonine	3.405	283316	515.45	191.64	537183	10.0000
Brompheniramine	4.018	131619	152.56	9736.73	49530343	10.0000
Buprenorphine	4.305	977974	1333.19	24919.83	4080975	10.0000
Bupropion	3.732	6589968	1498.81	3496.39	24412021	10.0000
Carbamazepine	4.242	11864496	∞	∞	501815	10.0000
Carisoprodol	4.240	1508313	1528.86	178.79	8946351	10.0000
Chlordiazepoxide	4.729	621308	196.14	313.99	24671553	10.0000
Chlorpheniramine	3.930	9741104	62264.53	71.13	49530343	10.0000
Chlorpromazine	4.572	3044956	1244.62	9359.88	13868061	10.0000
Citalopram	4.048	4009716	594.35	707571.88	49530343	10.0000
Clomipramine	4.589	4623459	4044.16	4475.23	49530343	10.0000
Clonazepam	4.450	1776431	8563.63	150644.29	24671553	10.0000
Clonazolam	4.385	1563801	867151.32	450841.01	24671553	10.0000
Clozapine	4.201	5901199	1750.66	1049.29	23068513	10.0000
Cocaethylene	3.771	6024430	3121256.25	∞	31117822	10.0000
Cocaine	3.573	6160485	584.36	29667.55	31117822	10.0000
Codeine	2.793	485028	527638.33	226.59	10460720	10.0000
Cyclobenzaprine	4.332	3765774	1092.63	487.48	10183579	10.0000
Desipramine	4.363	8001011	764.70	628.91	10183579	10.0000
Dextromethorphan	4.053	2464129	137172.80	414.72	14658579	10.0000

TS

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrorphan	3.377	3254386	658.31	938.09	14658579	10.0000
Diazepam	4.868	1570893	363.73	2047.36	24671553	10.0000
Dihydrocodeine	2.746	1152056	1650.82	1711.61	10460720	10.0000
Diphenhydramine	4.008	12105641	73785.36	2511.41	49530343	10.0000
Doxepin	4.130	2867630	414.39	138.39	28113121	10.0000
Doxylamine	3.637	12717576	31481.31	442.09	14658579	10.0000
Duloxetine	4.314	99033	8246.10	1970.08	1383997	10.0000
EDDP	4.084	1509858	1991.28	339.20	3746232	10.0000
Estazolam	4.545	6491384	3036.97	885.33	24671553	10.0000
Etizolam	4.646	354294	132765.11	304274.85	24671553	10.0000
Fentanyl	4.016	342262	107.31	6147.09	26143507	10.0000
Flualprazolam	4.509	998159	982003.98	3215.82	24671553	10.0000
Flunitrazepam	4.573	2335595	500.72	851.43	24671553	10.0000
Fluoxetine	4.313	3530131	2513.59	96.71	6892905	10.0000
Flurazepam	4.122	3466802	1382046.62	1056.69	24671553	10.0000
Hydrocodone	2.976	1547137	1528.63	1031.41	10460720	10.0000
Hydromorphone	2.444	1432563	906.37	378.50	253994	10.0000
Hydroxyzine	4.445	3709208	963.54	503.69	49530343	10.0000
Imipramine	4.361	9236640	1725.36	1358.45	10183579	10.0000
Ketamine	3.425	4919345	1790.43	174.70	15597324	10.0000
Lamotrigine	3.546	325244	251.40	9707.99	49530343	10.0000
Levamisole	2.935	3295693	18416.55	272.52	31117822	10.0000
Levetiracetam	2.677	1447564	200.15	2261.34	49530343	10.0000
Lorazepam	4.449	622892	332.92	240.61	24671553	10.0000
Maprotiline	4.409	1949401	1888.37	112.55	10183579	10.0000
MDA	3.013	3247865	263.52	6.62	34020064	10.0000
MDEA	3.242	5455046	871.15	459.90	34020064	10.0000
MDMA	3.089	7218596	1704.51	1308.59	34020064	10.0000
Meperidine	3.578	2933883	236.97	13550.25	14658579	10.0000
Meprobamate	3.688	871454	13607.57	125.79	8946351	10.0000
Methadone	4.389	8134985	15582.36	272.58	3746232	10.0000
Methamphetamine	2.999	8229734	497.27	1056.11	34020064	10.0000
Methocarbamol	3.594	541401	128.55	285.76	3746232	10.0000
Methylphenidate	3.502	16357182	797.10	371.44	25716159	10.0000
Metoprolol	3.438	941067	874.10	547.32	14658579	10.0000
Midazolam	4.725	859660	338605.90	1416.82	24671553	10.0000
Mirtazapine	3.792	4188967	1645.72	5393.53	14658579	10.0000
Mitragynine	4.152	773544	303101.52	1231145.40	14658579	10.0000
Morphine	2.293	256872	676.58	960.34	253994	10.0000
Norbuprenorphine	3.813	95535	110.36	122436.77	4080975	10.0000
Nordiazepam	4.717	1900552	427.85	478.10	24671553	10.0000
Norfentanyl	3.333	9413818	715.56	1086.93	37768048	10.0000
Norhydrocodone	2.931	120649	157.30	58147.77	253994	10.0000
Norketamine	3.457	910926	239.93	3446.74	15597324	10.0000
Normeperidine	3.595	2706497	637.21	458.63	49530343	10.0000
Noroxycodone	2.883	1310365	281.43	342.94	15597324	10.0000
Nortriptyline	4.394	2097581	1391.61	385.93	10183579	10.0000
O-desmethyl-tramadol	2.917	10583441	48287.22	415.05	49530343	10.0000
O-desmethylvenlafaxine	3.253	2330330	979.76	47913.14	12251942	10.0000
Olanzapine	3.711	2673657	312.36	1337.34	501815	10.0000
Oxazepam	4.530	2546581	618.37	189.50	12005233	10.0000
Oxycodone	2.912	3209853	898.66	739.35	15597324	10.0000
Oxymorphone	2.350	1554268	268.84	308.29	253994	10.0000
Paroxetine	4.325	441989	685.39	11418.51	6892905	10.0000
Phenazepam	4.661	2298204	729.93	511.26	24671553	10.0000
Phencyclidine	3.917	7965607	1476.25	44.17	14658579	10.0000
Phentermine	3.152	1841696	249.16	42.37	25716159	10.0000
Phenytoin	4.149	936051	13144.40	197.34	501815	10.0000
Primidone	3.488	1539012	1355257.68	289.77	501815	10.0000
Promethazine	4.299	10913757	1254.63	710.85	49530343	10.0000

Cal

TS

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Pseudoephedrine	2.723	54263777	15218.77	1631.72	34020064	10.0000
Quetiapine	4.337	4853095	1901.12	1205265.01	38454179	10.0000
Risperidone	4.013	7383710	4131008.20	242.55	33775117	10.0000
Sertraline	4.528	1253055	323191.96	491.38	6892905	10.0000
Sufentanil	4.307	331592	54621.85	595.43	37768048	10.0000
Tapentadol	3.442	6596182	579.92	∞	15597324	10.0000
Temazepam	4.683	4871849	657.20	96.50	24671553	10.0000
Topiramate	3.862	48768	36924.51	19929.52	251294	10.0000
Tramadol	3.423	23388179	1848.60	74.37	49530343	10.0000
Trazodone	4.338	7768877	2490.38	1947906.19	28113121	10.0000
Venlafaxine	3.790	8274979	1183.89	1035.50	6892905	10.0000
Zaleplon	4.360	2921280	1386.80	324.22	38454179	10.0000
Zolpidem	4.112	9336613	135595.99	1646.29	38454179	10.0000
Zopiclone	3.952	879617	21453.19	308387.46	4369342	10.0000

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

Extraction Date: 07/25/2022
Plate lot#: 220309
Mobile phase A: 10mM Amm Form in LCMS Water
Blank Blood Lot: Lampire 22B52015-1
LCMS-QQQ ID: 069901

Analyst: Tamara Salazar
Plate Retest Date: 09/09/2022
Mobile phase B: 0.1% Formic acid in MeOH
Blank Urine Lot: POC21022
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: 42
☒ 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 5. 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.
☒ 6. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 7. Transfer **700-800µL of blood+acid or urine+acid** mixture to corresponding wells of SLE+ plate. Amount transferred*: 800 µL*
☒ 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)***
☒ 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.
☒ 17. 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:

TS

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_1	M2022-2399-2	P2022-1761-1		IS + QC_1
B	IS + Cal. 2	Neg Blood	M2022-3003-3	P2022-1765-1		IS + Cal. 7
C	IS + Cal. 3	Neg Urine	P2022-1643-1	P2022-1794-1		IS + Cal. 6
D	IS + Cal. 4	M2022-2004-4	P2022-1665-4	P2022-1796-1		IS + Cal. 5
E	IS + Cal. 5	M2022-2128-2	P2022-1665-5	P2022-1802-2		IS + Cal. 4
F	IS + Cal. 6	P2022-1671-1	M2022-2290-3	P2022-1877-1		IS + Cal. 3
G	IS + Cal. 7	M2022-2291-2	P2022-1683-3	P2022-1892-1		IS + Cal. 2
H	IS + QC_1	M2022-2311-2	P2022-1711-1	P2022-2199-7	IS + QC_1	IS + Cal. 1

All wells to contain 100 µl of residual DMSO

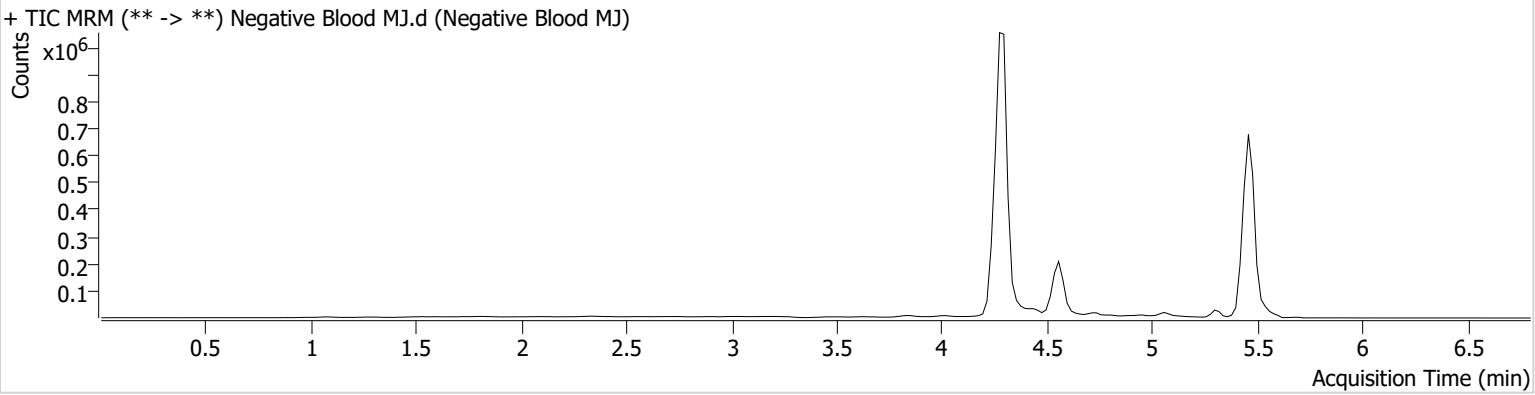
TS

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update	7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Negative Blood MJ.d
Type	Sample	**Sample**	Negative Blood MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-B2	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 1:38:08 PM		
Sample Info.			

Sample Chromatogram



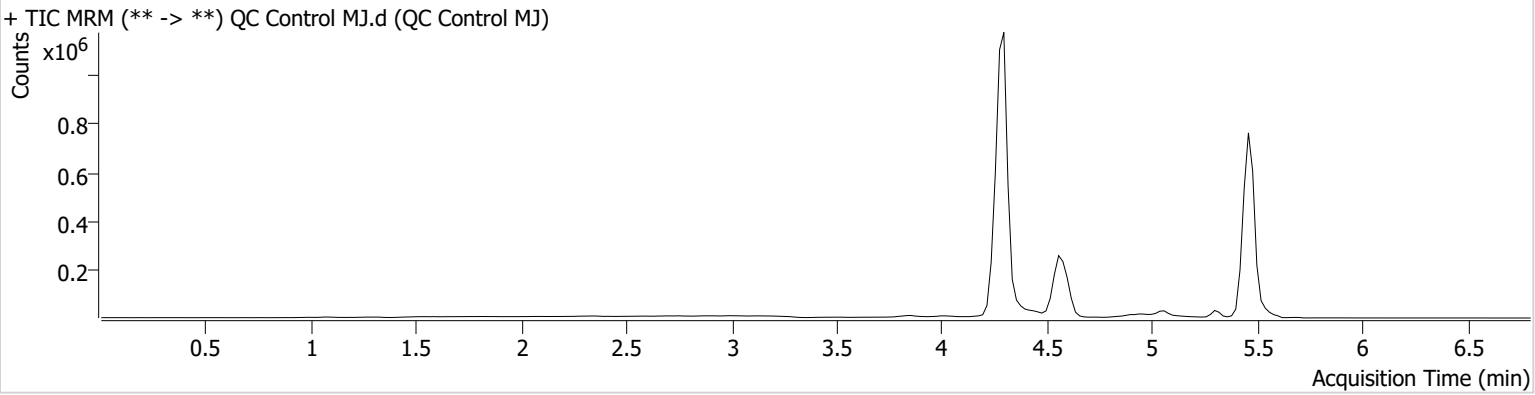
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update 7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	QC Control MJ.d
Type	QC	**Sample**	QC Control MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-H1	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 1:22:58 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	12247	360873	4.7595	ng/ml
THC-COOH	4.596	147133	810484	14.2251	ng/ml
THC-OH	4.302	32909	4284555	4.5718	ng/ml

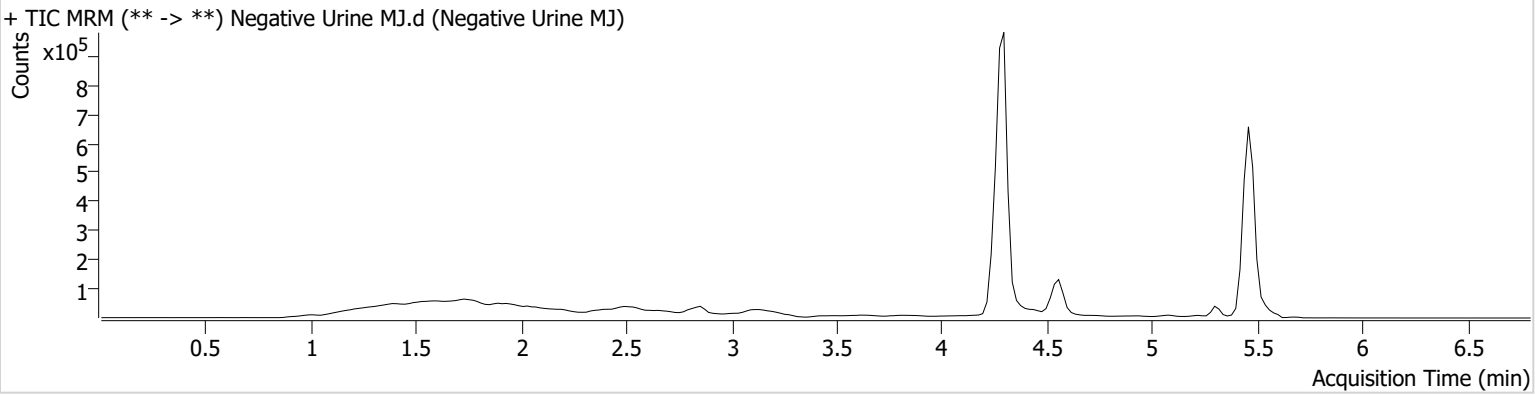
TS

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update	7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Negative Urine MJ.d
Type	Sample	**Sample**	Negative Urine MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-C2	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 2:08:30 PM		
Sample Info.			

Sample Chromatogram



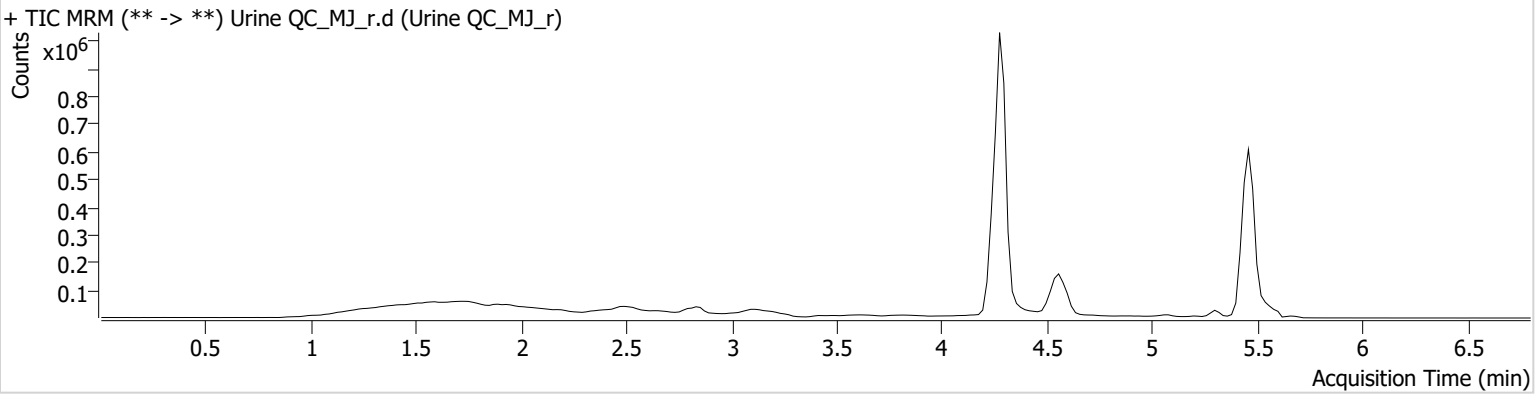
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update 7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Urine QC_MJ_r.d
Type	Sample	**Sample**	Urine QC_MJ_r
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-A2	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 5:02:33 PM		
Sample Info.			

Sample Chromatogram

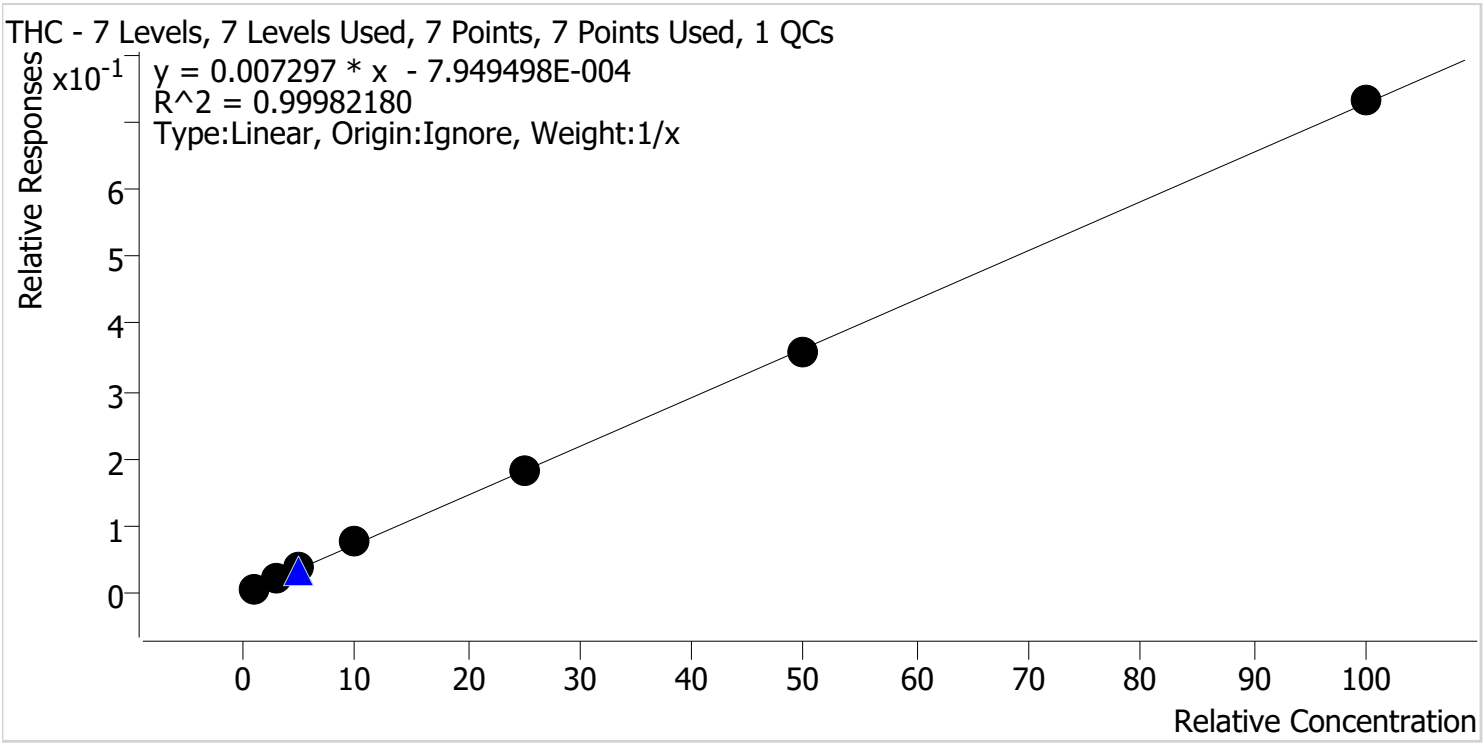


Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.449	5132	150745	4.7738	ng/ml
THC-COOH	4.576	102062	519110	15.3856	ng/ml
THC-OH	4.302	28307	3796302	4.4482	ng/ml

TS

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Last Cal. Update	7/26/2022 8:03 AM
Analyst Name	ISP\datastor
Analyte	THC
Internal Standard	THC-D3

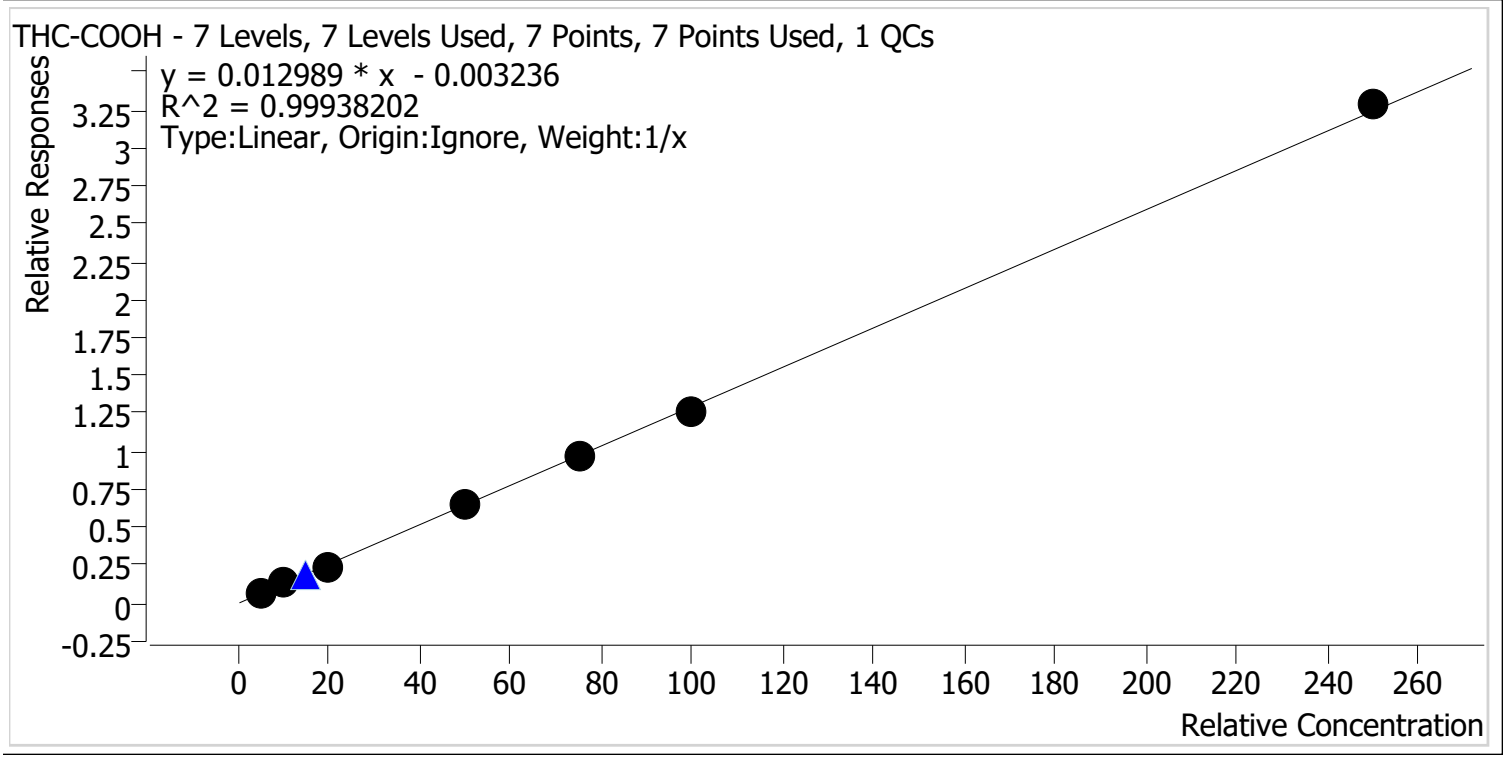


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	1.0	98.0
Cal 2 MJ	2	✔	3.0	2.9	98.2
Cal 3 MJ	3	✔	5.0	5.1	102.0
Cal 4 MJ	4	✔	10.0	10.3	103.3
Cal 5 MJ	5	✔	25.0	24.9	99.4
Cal 6 MJ	6	✔	50.0	49.2	98.5
Cal 7 MJ	7	✔	100.0	100.5	100.5

TS

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Last Cal. Update	7/26/2022 8:03 AM
Analyst Name	ISP\datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-D9

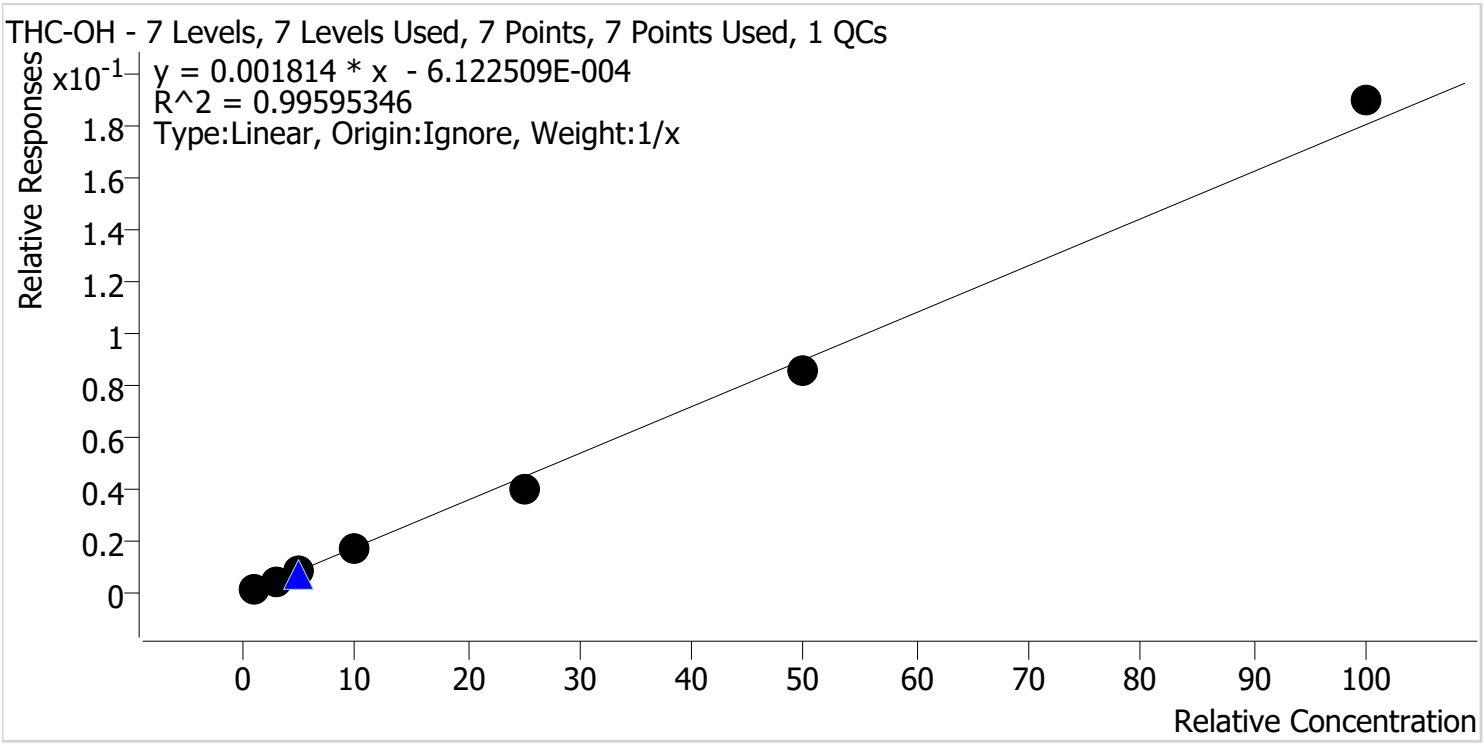


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	5.0	5.4	108.1
Cal 2 MJ	2	✔	10.0	9.9	98.7
Cal 3 MJ	3	✔	20.0	18.8	93.9
Cal 4 MJ	4	✔	50.0	50.2	100.5
Cal 5 MJ	5	✔	75.0	75.2	100.3
Cal 6 MJ	6	✔	100.0	97.1	97.1
Cal 7 MJ	7	✔	250.0	253.4	101.3

TS

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Last Cal. Update	7/26/2022 8:03 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	1.2	119.4
Cal 2 MJ	2	✔	3.0	2.9	97.4
Cal 3 MJ	3	✔	5.0	4.9	97.4
Cal 4 MJ	4	✔	10.0	9.5	95.1
Cal 5 MJ	5	✔	25.0	22.4	89.7
Cal 6 MJ	6	✔	50.0	48.0	96.0
Cal 7 MJ	7	✔	100.0	105.1	105.1

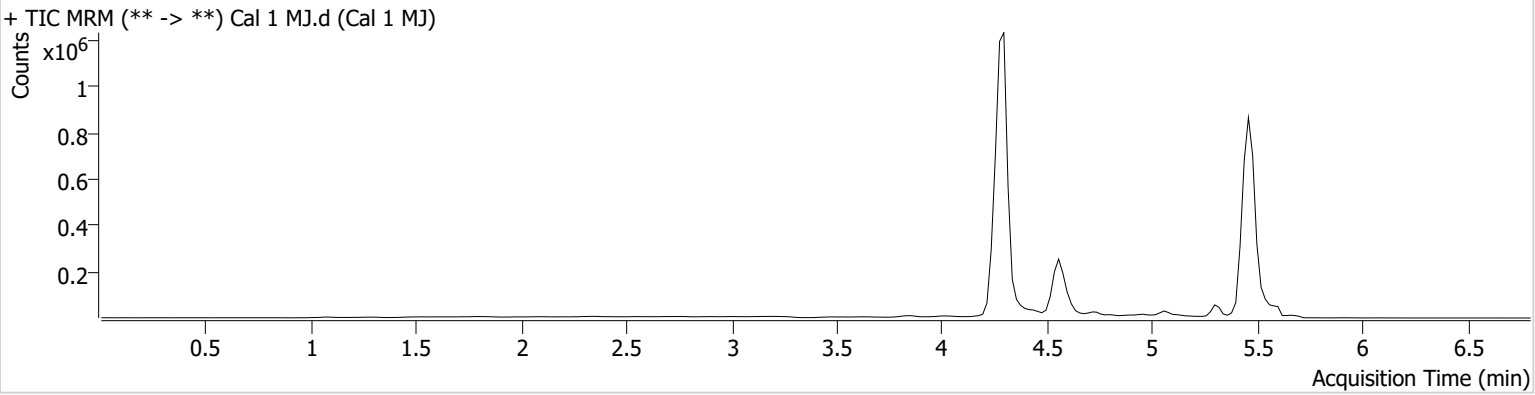
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update 7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Cal 1 MJ.d
Type	Cal	**Sample**	Cal 1 MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-A1	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 12:29:51 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	5.489	2790	438862	0.9801	ng/ml	**Low**
THC-COOH	4.596	60732	906850	5.4050	ng/ml	
THC-OH	4.302	7638	4917436	1.1938	ng/ml	**Low**

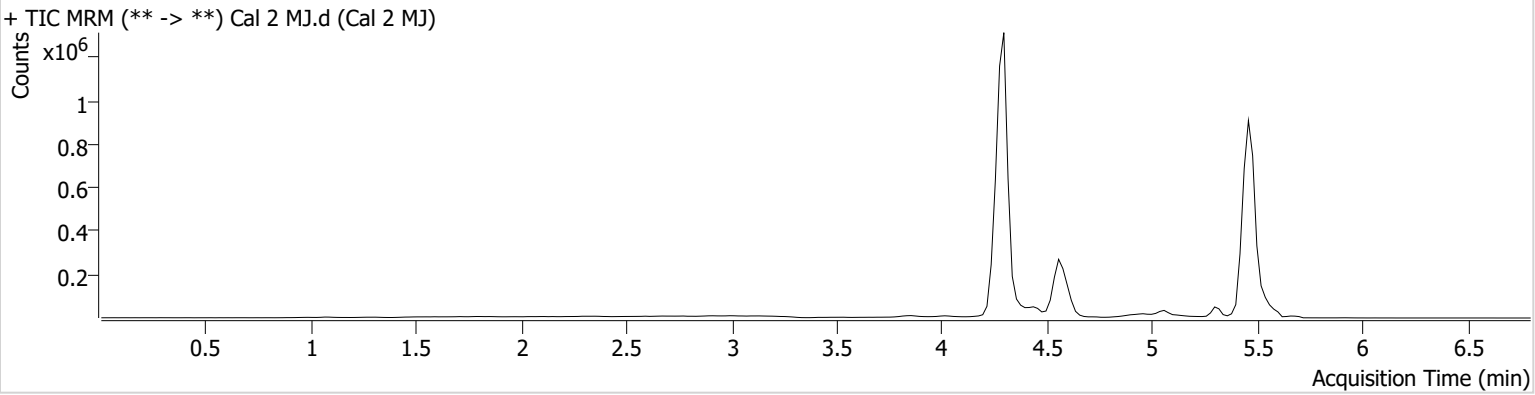
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update 7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Cal 2 MJ.d
Type	Cal	**Sample**	Cal 2 MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-B1	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 12:37:35 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	5.489	9416	454718	2.9467	ng/ml	**Low**
THC-COOH	4.596	114490	916045	9.8712	ng/ml	
THC-OH	4.302	22131	4723122	2.9207	ng/ml	**Low**

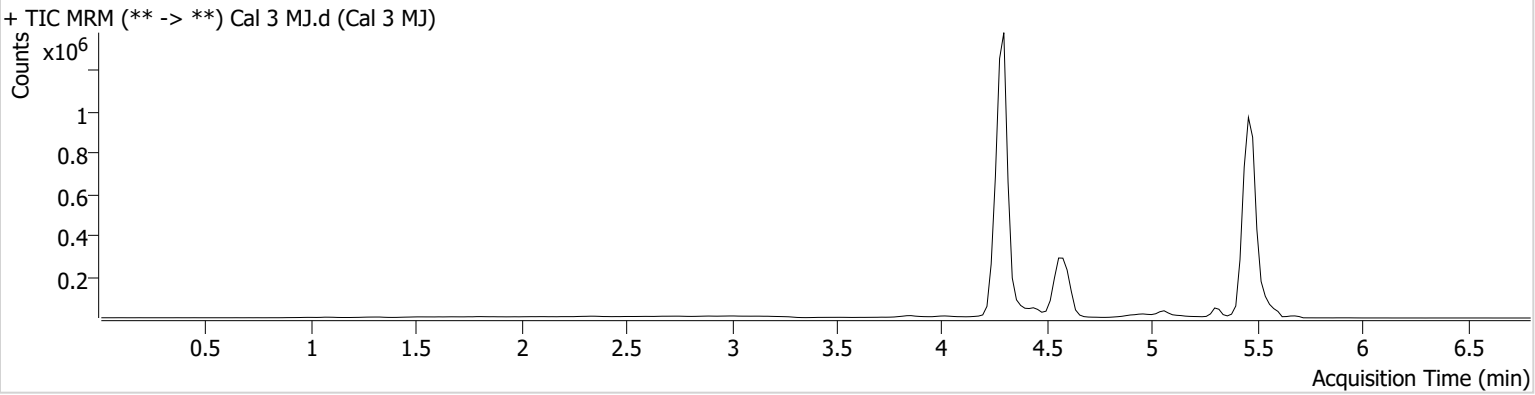
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update 7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Cal 3 MJ.d
Type	Cal	**Sample**	Cal 3 MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-C1	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 12:45:09 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	19550	536668	5.1010	ng/ml
THC-COOH	4.596	221162	918339	18.7898	ng/ml
THC-OH	4.302	39984	4865500	4.8679	ng/ml

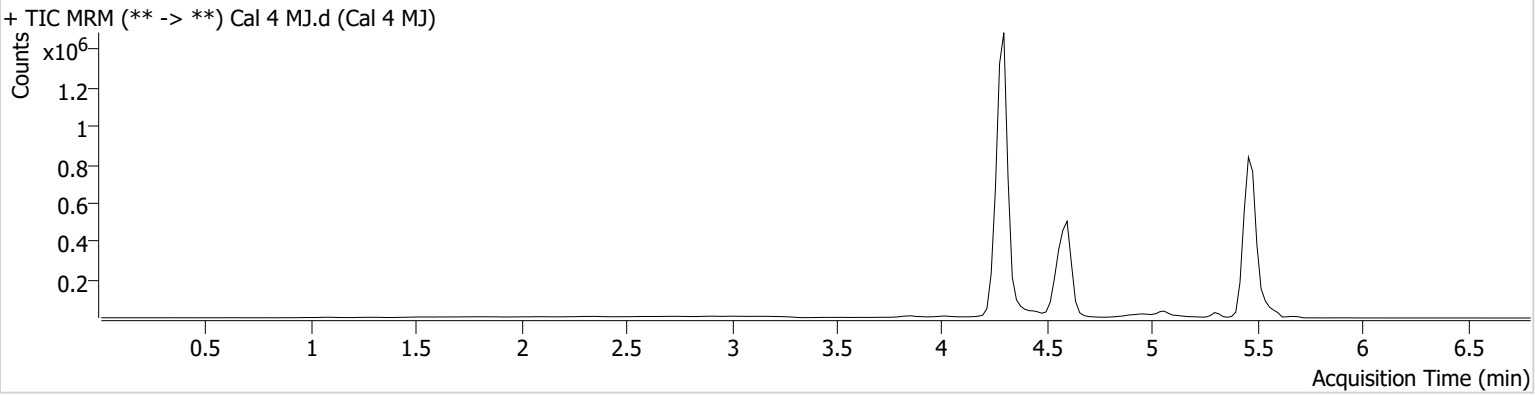
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update 7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Cal 4 MJ.d
Type	Cal	**Sample**	Cal 4 MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-D1	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 12:52:43 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	32241	432280	10.3294	ng/ml
THC-COOH	4.596	568388	875329	50.2402	ng/ml
THC-OH	4.302	80579	4841313	9.5132	ng/ml

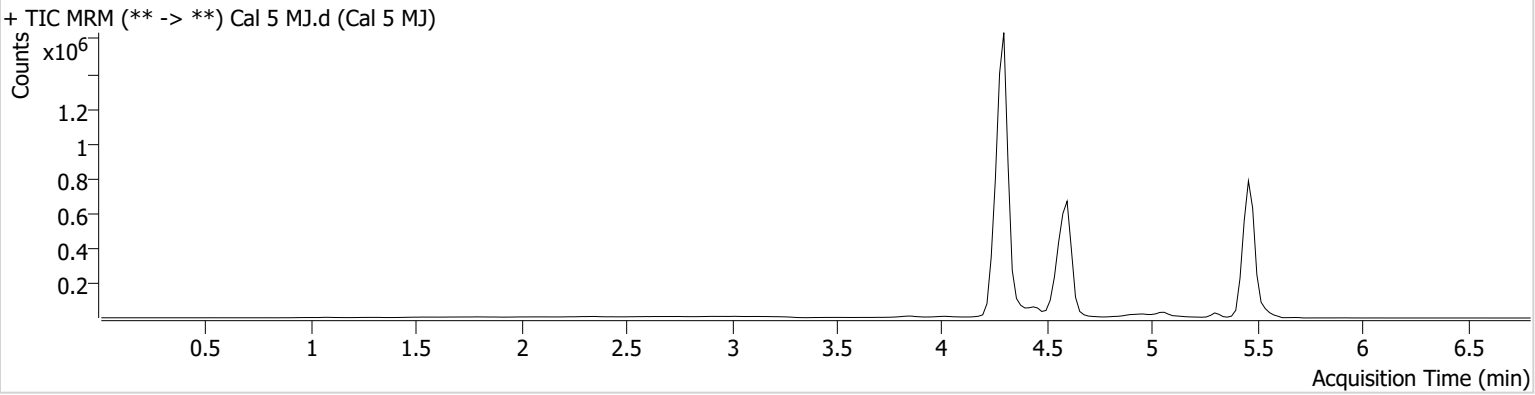
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update 7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Cal 5 MJ.d
Type	Cal	**Sample**	Cal 5 MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-E1	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 1:00:17 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	68184	377570	24.8558	ng/ml
THC-COOH	4.596	837938	860241	75.2403	ng/ml
THC-OH	4.302	194803	4861606	22.4274	ng/ml

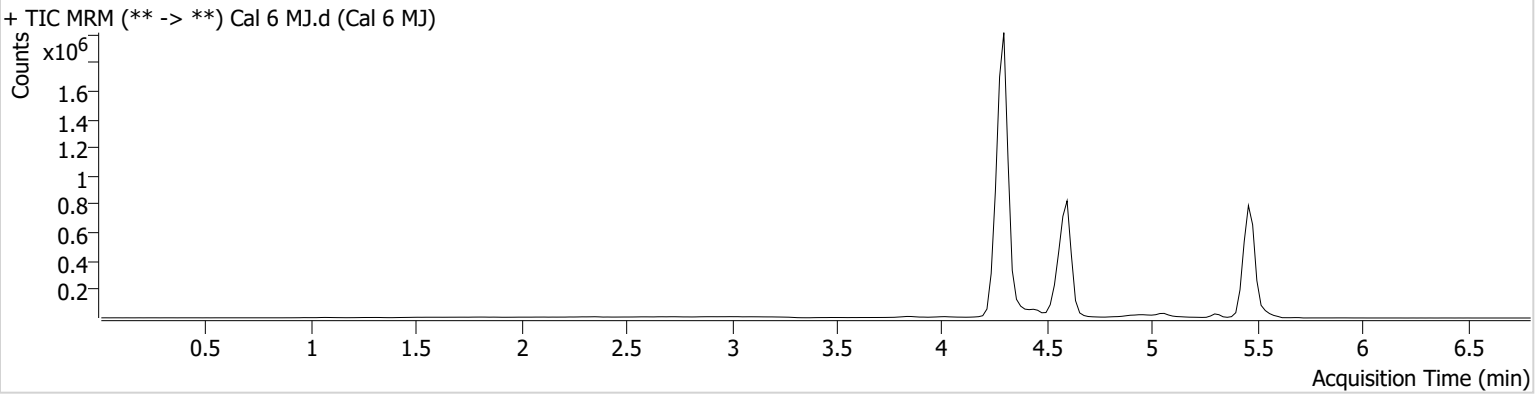
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update 7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Cal 6 MJ.d
Type	Cal	**Sample**	Cal 6 MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-F1	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 1:07:51 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	127816	356475	49.2440	ng/ml
THC-COOH	4.596	1016595	808137	97.0951	ng/ml
THC-OH	4.302	372011	4303851	47.9890	ng/ml

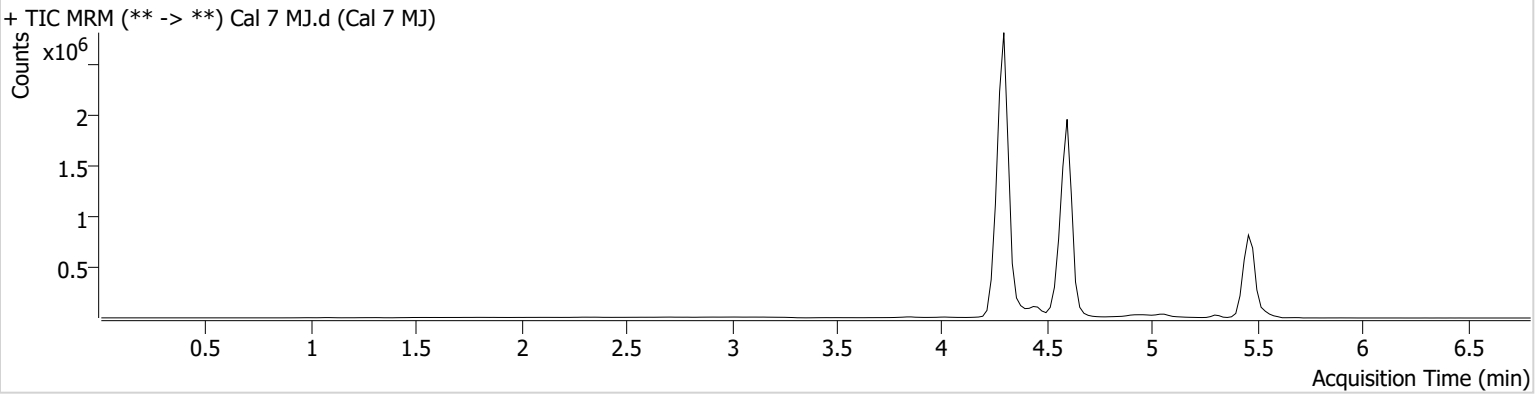
TS

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\072522 AM 25 26 TS_Urines\QuantResults\AM 26.batch.bin
Calibration Last Update 7/26/2022 8:03:16 AM

Instrument	Falco (069901)	**Data File**	Cal 7 MJ.d
Type	Cal	**Sample**	Cal 7 MJ
Acq. Method	AM 26 THC.m	**Operator**	Tamara Salazar
Sample Position	P1-G1	**Comment**	
Injection Volume	10		
Acq. Date-Time	7/25/2022 1:15:24 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.489	259862	354565	100.5430	ng/ml
THC-COOH	4.596	2580590	784928	253.3583	ng/ml
THC-OH	4.302	778153	4095302	105.0881	ng/ml

TS

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

Extraction Date: 08/02/2022 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
Blank Blood Lot: Lampire 22B52015-1 Blank Urine Lot: POC021022
LCMS-QQQ ID: 069901 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 or 250µL hydrolyzed urine in 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: *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).***
☒ 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. Add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying. This step is required for urine samples, but optional for blood samples.
☒ 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: Case samples P2022-1665-4 and P2022-1665-5 were re-extracted and re-run for AM 25 screening analysis due to inconsistent results between the original AM 25 screening analysis and the confirmation analysis.

TS

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Urine Ext	IS + Sample	IS + Sample	IS + Sample	IS + Sample
B	IS + Cal. 1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Urine Neg	IS + Sample	IS + Sample	IS + Sample	IS + Sample
C	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-1665-4	IS + Sample	IS + Sample	IS + Sample	IS + Sample
D	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2022-1665-5	IS + Sample	IS + Sample	IS + Sample	IS + Sample
E	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
F	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
G	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Neg Blood	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 1
H	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Blood Ext	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 1

All wells to contain 60 µl of residual DMSO

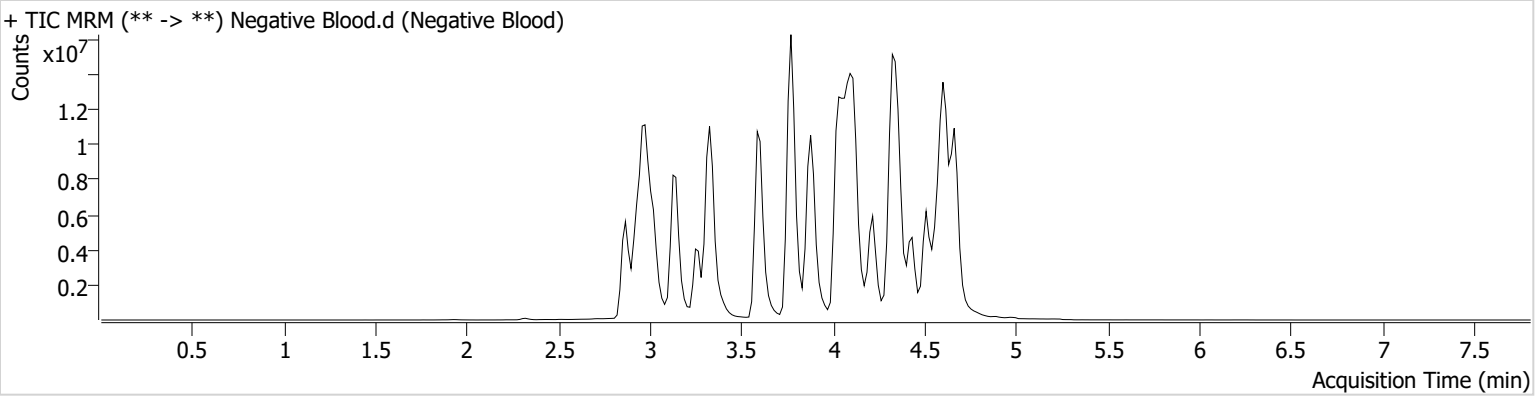
TS

AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\080222 AM 25 TS Urines\QuantResults\AM 25_re-extract.batch.bin
Calibration Last Update	8/2/2022 3:36:47 PM

Instrument	Falco (069901)	**Data File**	Negative Blood.d
Type	Sample	**Sample**	Negative Blood
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P6-G7	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/2/2022 2:11:19 PM		
Sample Info.			

Sample Chromatogram



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 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	

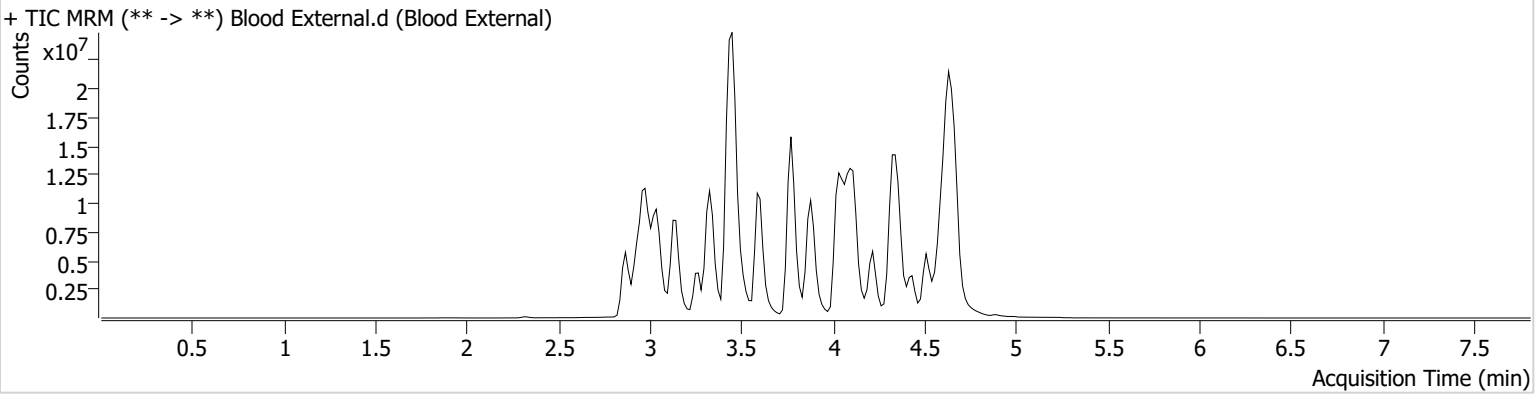
TS

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080222 AM 25 TS Urines\QuantResults\AM 25_re-extract.batch.bin
Calibration Last Update 8/2/2022 3:36:47 PM

Instrument	Falco (069901)	**Data File**	Blood External.d
Type	Sample	**Sample**	Blood External
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P6-H7	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/2/2022 2:19:43 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.636	20416651	585.39	637.91	25922612	81.0383
Buprenorphine	4.643	8708768	4321762.05	904.60	4317537	78.5674
Hydrocodone	3.037	12852986	1358.75	5804.84	12224451	64.4206
Tramadol	3.453	100804992	∞	385.86	48955527	39.6725

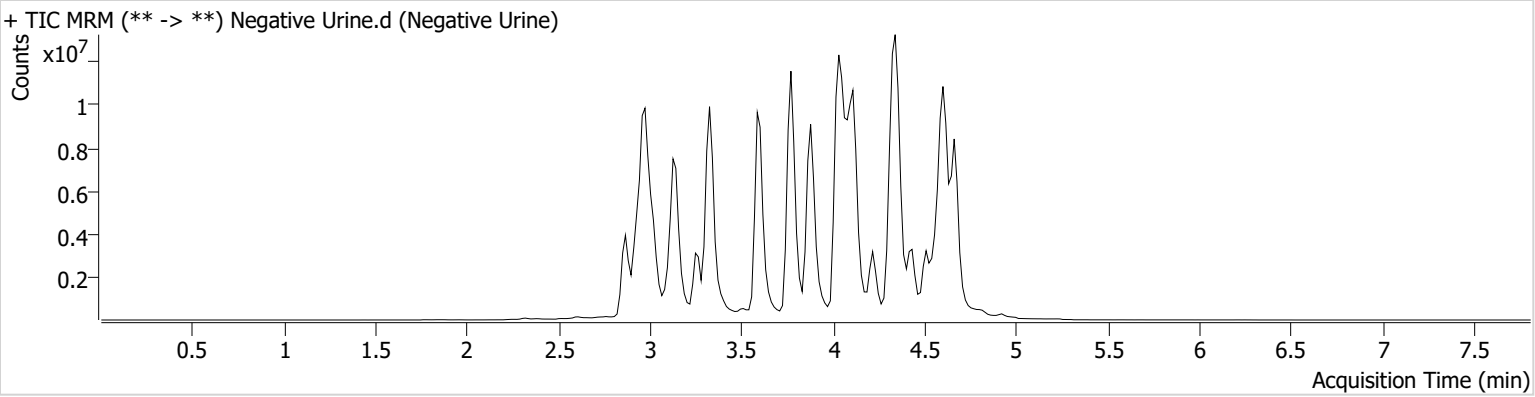
TS

AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\080222 AM 25 TS Urines\QuantResults\AM 25_re-extract.batch.bin
Calibration Last Update	8/2/2022 3:36:47 PM

Instrument	Falco (069901)	**Data File**	Negative Urine.d
Type	Sample	**Sample**	Negative Urine
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P6-B8	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/2/2022 2:28:07 PM		
Sample Info.			

Sample Chromatogram



TS

Idaho State Police
Forensic Services

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

Methanol External Control Solution (Lot: 120320)

100 µL of 1mg/mL stock was added to each drug to 9700 µL of LC MeOH.

Component	***Source***	***Source Lot Number***	***Expiration Date***
Methanol (LCMS)	Fisher	197468	
O-desmethyl Tramadol	Cerilliant	FN01241702	04/30/2022
Amphetamine	Cerilliant	FE04061701	06/30/2022
Alprazolam	Cerilliant	FE07061604	07/31/2021
Prepared:	12/03/2020		
Prepared By:	Celena Shrum		

Urine External Control Solution (Lot: WS032122)

100 µL of methanol external control solution was added to 9900 µL of urine.
Approximately 100 ng/mL of each compound.

Component	***Source***	***Source Lot Number***
Negative Urine	Pocatello Lab	POC021022
Methanol External Control Solution		120320
Prepared:	03/21/22	
Prepared by:	Tamara Salazar	

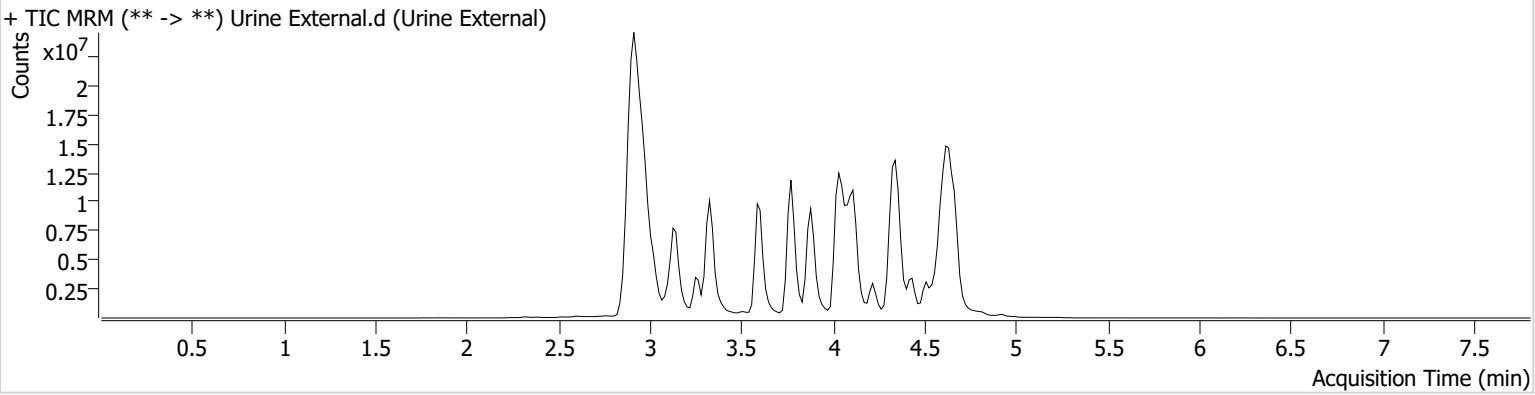
TS

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080222 AM 25 TS Urines\QuantResults\AM 25_re-extract.batch.bin
Calibration Last Update 8/2/2022 3:36:47 PM

Instrument	Falco (069901)	**Data File**	Urine External.d
Type	Sample	**Sample**	Urine External
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P6-A8	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/2/2022 2:36:34 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.636	12507914	667.56	726.43	20228263	63.6225
Amphetamine	2.908	21071608	2960.57	373.83	10986580	61.6285
O-desmethyl-tramadol	2.933	39748321	∞	320.22	45427579	37.8070

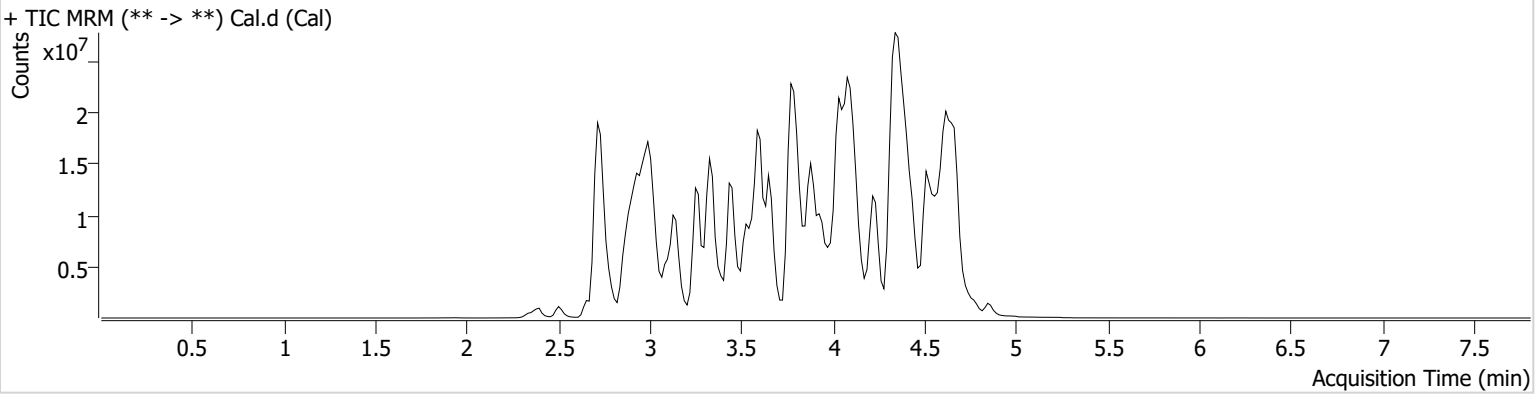
TS

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\080222 AM 25 TS Urines\QuantResults\AM 25_re-extract.batch.bin
Calibration Last Update 8/2/2022 3:36:47 PM

Instrument	Falco (069901)	**Data File**	Cal.d
Type	Cal	**Sample**	Cal
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P6-G12	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/2/2022 2:02:44 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.778	4053161	109.15	1016.76	25773029	10.0000
6-MAM	2.941	67419	590478.34	27482.24	2104098	10.0000
7-aminoclonazepam	3.605	1143317	501.66	276.09	4714279	10.0000
7-aminoflunitrazepam	3.805	2068919	832.47	14095.74	4714279	10.0000
9-Hydroxyrisperidone	3.890	10727118	7202.54	∞	36165050	10.0000
Acetyl Fentanyl	3.894	549454	881.11	253.72	38398542	10.0000
Acetyl Norfentanyl	2.919	509164	105456.59	159.80	38398542	10.0000
a-hydroxyalprazolam	4.525	370870	537.17	245.87	4714279	10.0000
alpha-hydroxymidazolam	4.600	2317423	331.08	241.11	4714279	10.0000
Alpha-PHP	3.840	5075788	1852.91	356.41	38398542	10.0000
alpha-PVP	3.564	7237431	1303.00	453.34	17615283	10.0000
Alprazolam	4.636	2533412	299.08	605.17	26066962	10.0000
Amitriptyline	4.439	3045645	258.02	179.88	11519148	10.0000
Amphetamine	2.908	5482050	750.15	4342.56	17615283	10.0000
Benzoylecgonine	3.405	278677	639.79	143.81	548123	10.0000
Brompheniramine	4.033	153818	144.06	1158.79	50040466	10.0000
Buprenorphine	4.643	1285208	369255.80	87790.41	5006049	10.0000
Bupropion	3.794	6898423	2861.35	624.49	26101744	10.0000
Carbamazepine	4.242	12549719	593.07	1237.29	882014	10.0000
Carisoprodol	4.225	1639056	213074.35	1557.79	9616317	10.0000
Chlordiazepoxide	4.745	778579	372.41	1066.55	26066962	10.0000
Chlorpheniramine	3.945	10672829	313.06	14019.29	50040466	10.0000
Chlorpromazine	4.618	3298215	466.11	600.88	15311347	10.0000
Citalopram	4.063	4664279	488.38	673718.10	50040466	10.0000
Clomipramine	4.634	4429132	6695.00	1712322.30	50040466	10.0000
Clonazepam	4.450	1697288	55992.12	4469.53	26066962	10.0000
Clonazolam	4.385	1703137	1007528.38	377486.33	26066962	10.0000
Clozapine	4.325	5556429	2083.36	725589.48	22286733	10.0000
Cocaethylene	3.802	6103259	2996122.97	10103.50	31349077	10.0000
Cocaine	3.604	6130843	59507.91	1591.31	31349077	10.0000
Codeine	2.854	480419	1313.74	422.27	12684885	10.0000
Cyclobenzaprine	4.363	3596334	605.80	86.07	11519148	10.0000
Desipramine	4.379	8351405	889.55	1001.04	11519148	10.0000
Dextromethorphan	4.085	2723644	278.93	11318.88	16827642	10.0000

TS

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrorphan	3.392	3567546	856.03	743.00	16827642	10.0000
Diazepam	4.853	1714589	684.32	884.17	26066962	10.0000
Dihydrocodeine	2.776	1370950	2490.68	430.00	12684885	10.0000
Diphenhydramine	4.039	14470226	1839.51	821.95	50040466	10.0000
Doxepin	4.161	3632019	445.16	88.22	30967083	10.0000
Doxylamine	3.652	14643735	460.98	424.97	16827642	10.0000
Duloxetine	4.330	99513	12009.67	3829.27	1550748	10.0000
EDDP	4.099	807356	4042.43	379.42	2054973	10.0000
Estazolam	4.545	7367373	864.89	1828.74	26066962	10.0000
Etizolam	4.646	377535	314920.43	508319.12	26066962	10.0000
Fentanyl	4.124	436880	143.62	173080.03	29093844	10.0000
Flualprazolam	4.494	1063594	803341.41	69921.61	26066962	10.0000
Flunitrazepam	4.573	2278065	2554.85	229.35	26066962	10.0000
Fluoxetine	4.328	3612264	639.22	63.40	7828419	10.0000
Flurazepam	4.214	3813049	1093.61	4527.52	26066962	10.0000
Hydrocodone	3.037	2070315	1081.76	958.26	12684885	10.0000
Hydromorphone	2.505	1692520	14543.25	1687.53	272823	10.0000
Hydroxyzine	4.507	4388615	878.78	12781.97	50040466	10.0000
Imipramine	4.392	10052163	1041.49	2707.98	11519148	10.0000
Ketamine	3.564	5212265	1011.74	138.47	15910629	10.0000
Lamotrigine	3.608	342483	184.52	1261.00	50040466	10.0000
Levamisole	2.996	3625139	5345.86	640.84	31349077	10.0000
Levetiracetam	2.662	1584979	993.59	842.76	50040466	10.0000
Lorazepam	4.449	655518	435.25	85.64	26066962	10.0000
Maprotiline	4.439	2247545	194.28	751.80	11519148	10.0000
MDA	3.013	3273462	552.66	363.91	35361151	10.0000
MDEA	3.242	5856261	2079.27	208.45	35361151	10.0000
MDMA	3.104	7920974	31885.71	19135.61	35361151	10.0000
Meperidine	3.608	2896846	1186.60	9535.25	16827642	10.0000
Meprobamate	3.673	1180487	703.34	85.94	9616317	10.0000
Methadone	4.404	8786159	564.10	692.86	2054973	10.0000
Methamphetamine	3.014	9032371	2559.58	3268.52	35361151	10.0000
Methocarbamol	3.594	626902	502.61	270.37	2054973	10.0000
Methylphenidate	3.533	18389651	812.95	502.55	27434921	10.0000
Metoprolol	3.453	1056161	342.55	359628.78	16827642	10.0000
Midazolam	4.771	972023	1268.06	127577.43	26066962	10.0000
Mirtazapine	3.992	5233301	26844.73	2498.04	16827642	10.0000
Mitragynine	4.214	836646	467472.74	766574.70	16827642	10.0000
Morphine	2.339	329441	463.70	451.17	272823	10.0000
Norbuprenorphine	3.844	137405	11644.64	79831.25	5006049	10.0000
Nordiazepam	4.701	2082517	247455.48	838.38	26066962	10.0000
Norfentanyl	3.348	9895755	41758.72	854.82	38398542	10.0000
Norhydrocodone	2.947	135085	109.95	119.91	272823	10.0000
Norketamine	3.672	1098743	427.39	17375.78	15910629	10.0000
Normeperidine	3.610	2696709	474.93	319.94	50040466	10.0000
Noroxycodone	2.899	1850329	∞	208.45	15910629	10.0000
Nortriptyline	4.410	2379818	185599.60	279.68	11519148	10.0000
O-desmethyl-tramadol	2.933	11581059	43877.08	481.65	50040466	10.0000
O-desmethylvenlafaxine	3.268	2333390	395.28	15117.63	12316589	10.0000
Olanzapine	3.834	1507351	7715.43	9573.29	882014	10.0000
Oxazepam	4.530	2875534	596.18	375.06	14025909	10.0000
Oxycodone	2.943	3187142	1219.16	2438.42	15910629	10.0000
Oxymorphone	2.395	2094778	506.33	1952.33	272823	10.0000
Paroxetine	4.340	529372	399.41	85969.31	7828419	10.0000
Phenazepam	4.646	2317214	453.53	402418.32	26066962	10.0000
Phencyclidine	3.932	8908435	16648.65	399.75	16827642	10.0000
Phentermine	3.168	2138027	122.36	30.35	27434921	10.0000
Phenytoin	4.133	1551064	678.64	461.98	882014	10.0000
Primidone	3.488	2432340	1995427.77	281.46	882014	10.0000
Promethazine	4.346	10918539	1154.77	568.92	50040466	10.0000

Cal

TS

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Pseudoephedrine	2.723	57154887	6827.95	806.21	35361151	10.0000
Quetiapine	4.506	5739660	2191734.25	1866273.69	42730446	10.0000
Risperidone	4.090	7758500	2141136.05	2829.29	36165050	10.0000
Sertraline	4.559	1383103	1993.90	773.81	7828419	10.0000
Sufentanil	4.475	331442	135026.51	426.45	38398542	10.0000
Tapentadol	3.457	7425878	859.05	585.18	15910629	10.0000
Temazepam	4.683	5276126	1577.42	206.52	26066962	10.0000
Topiramate	3.847	64212	38888.60	26388.94	340646	10.0000
Tramadol	3.438	25972400	∞	116.12	50040466	10.0000
Trazodone	4.645	8088844	2208070.52	1628374.63	30967083	10.0000
Venlafaxine	3.806	10170972	1241.18	341.40	7828419	10.0000
Zaleplon	4.360	2891783	907.12	1438.18	42730446	10.0000
Zolpidem	4.359	10153575	5692997.12	1297.69	42730446	10.0000
Zopiclone	4.214	1268795	692299.07	253102.06	6807742	10.0000