

REVIEWED
By Tamara Salazar at 12:56 pm, Jun 10, 2022

Worklist: 5973

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
M2022-1179	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2022-1307	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2022-1322	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2022-1889	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2022-0879	4	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2022-0893	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2022-0900	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2022-0997	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2022-1440	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2022-1466	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: 05/24/2022

Plate lot#: 211015

Mobile phase A: 10mM Amm Form

Instant Buffer I

Blank Blood Lot: Lampire 20L20723

LCMS-QQ ID: 069901

Analyst: Celena Shrum

Plate Retest Date: 04/15/2022

Mobile phase B: 0.1% Formic Acid in MeOH

Ethyl Acetate LC Methanol

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

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. Using a calibrated pipette, pipette **250µL blood** into wells of analytical (standards) plate. **Pipette ID: 42**
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. (SKIPPED PER DEVIATION)
- 4. Pipette **250µL 0.5 M ammonium hydroxide** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **200-450µL of blood+base and** mixture to corresponding wells of SLE+ plate.
Amount transferred: 300µl
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).
(Load at 85-100 PSI- Selector to the right). Manifold ID: 067104
- 8. Wait 5 minutes.
- 9. Add **900uL ethyl acetate**.
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 12. Add **900uL ethyl acetate**.
- 13. Wait 5 minutes.
- 14. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 15. Remove plate containing eluate.
- 16. Add 50µl of 1% HCl in MeOH to all wells in the run and place ACT cover on top of plate prior to drying.
- 17. Place on SPE Dry and evaporate to dryness at approx. 35°C.
- 18. Reconstitute in **100µL 20% LC MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Open quantitation software and create a new quantitation batch.
- 2. Make necessary changes to integration limits
- 3. Evaluate samples, S/N of primary transition >5 and S/N of secondary transition >3 or evaluation of peak symmetry and resolution. Within +/- 2% or 0.1 min RT of administrative control. Calculated concentration of 5 or greater or 2-5 for discretionary range.
- 4. Did all QCs pass for each analyte? If no, describe issue in comments (below).
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: Per the method, an external control was included in the run since it was after the plate re-test date.

10-OH-Carbamazepine was listed incorrectly on printouts as 10-OH-Carbazepine. 6/10/22

**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
Title: Laboratory Manager



Date: 2/10/2022

Quality Review

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



CS

	1	2	3	4	5	6	7	8	9	10	11	12
A											P2022-1466-1	M2022-1307-2
B											P2022-1440-1	M2022-1179-2
C											P2022-0997-2	Urine External
D											P2022-0900-1	Neg Urine
E											P2022-0893-1	Blood External
F											P2022-0879-4	Neg Blood
G											M2022-1889-3	CAL
H											M2022-1322-2	

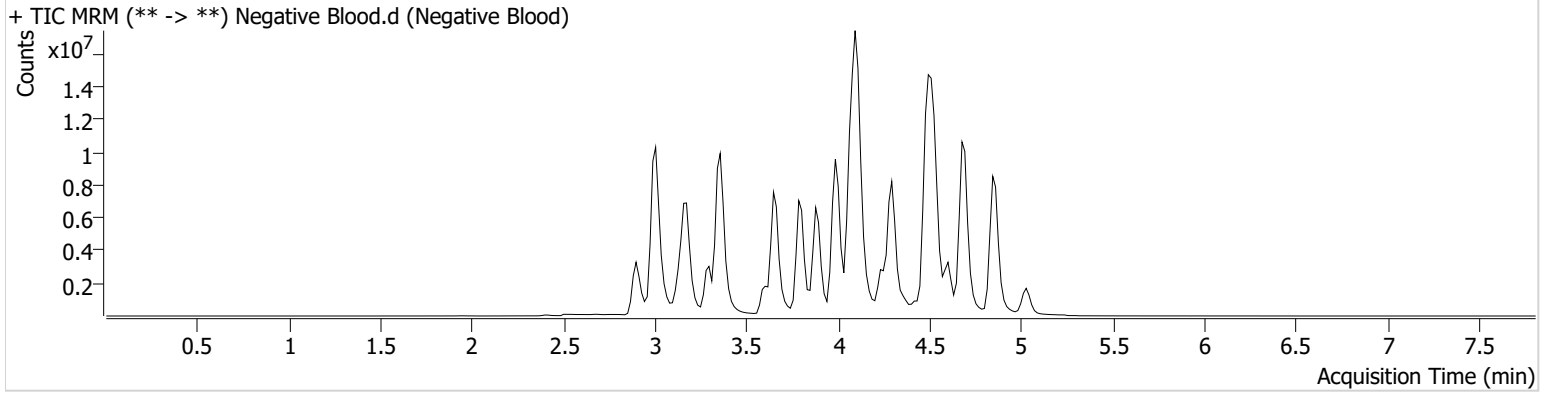
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 5/25/2022 10:37:49 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-F12	Comment	
Injection Volume	5		
Acq. Date-Time	5/24/2022 5:40:38 PM		
Sample Info.			

Sample Chromatogram



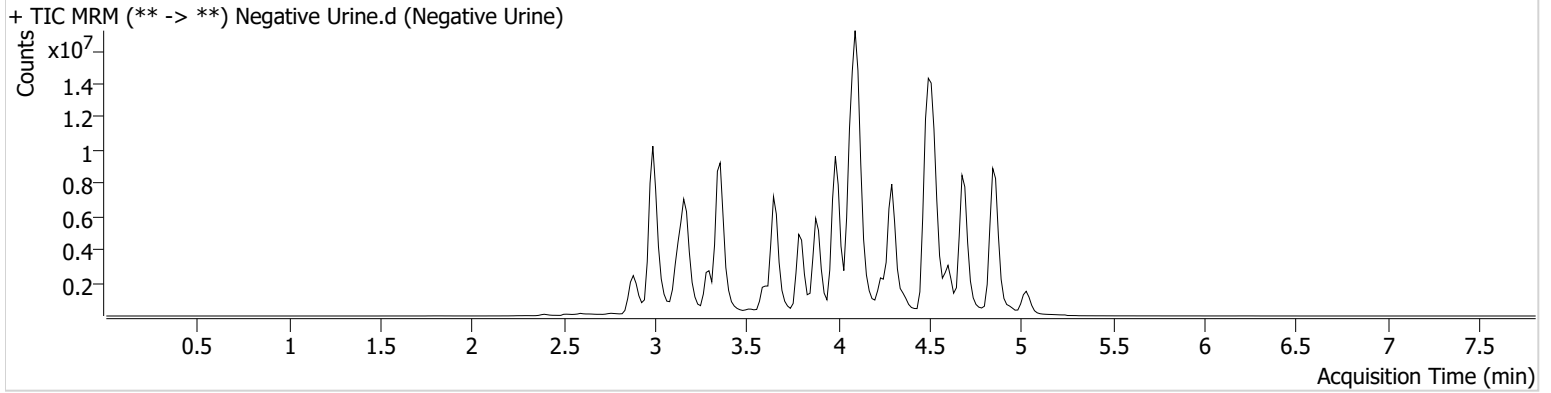
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 5/25/2022 10:37:49 AM

Instrument	Falco (069901)	Data File	Negative Urine.d
Type	Sample	Sample	Negative Urine
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-D12	Comment	
Injection Volume	5		
Acq. Date-Time	5/24/2022 5:57:27 PM		
Sample Info.			

Sample Chromatogram



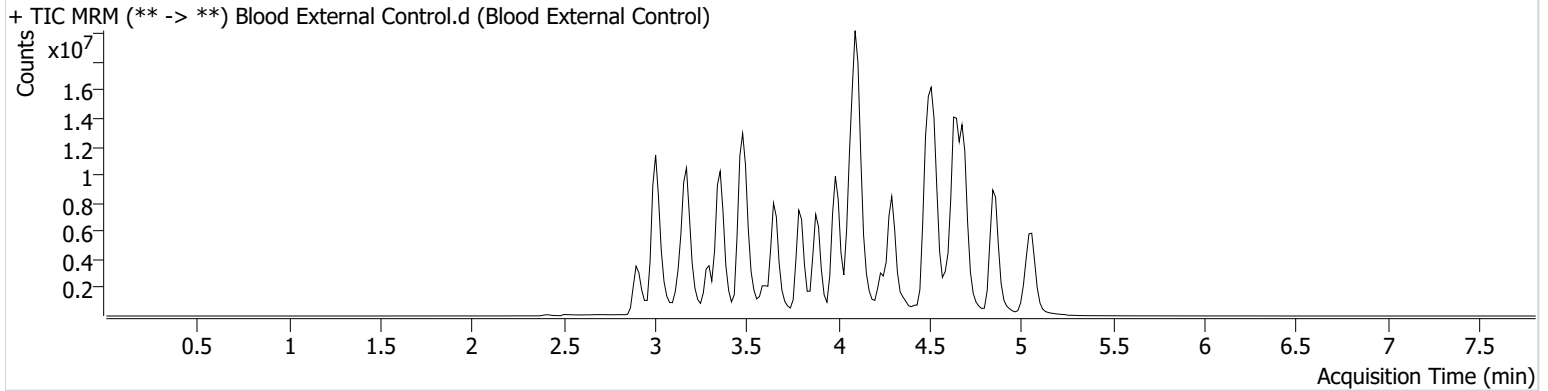
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 5/25/2022 10:37:49 AM

Instrument	Falco (069901)	Data File	Blood External Control.d
Type	Sample	Sample	Blood External Control
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-E12	Comment	
Injection Volume	5		
Acq. Date-Time	5/24/2022 5:49:01 PM		

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.636	21008392	738.82	1029.85	23819507	82.8992
Buprenorphine	5.055	14528329	7593270.75	1085463.86	5853773	97.8074
Hydrocodone	3.174	9392461	8977108.71	15759.60	8550501	74.5431
Tramadol	3.484	45114093	∞	1337.58	46896463	47.8699



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 μ L of 1mg/mL stock was added to each drug to 9600 μ L of LC MeOH.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
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 μ L of methanol external control solution was added to 9800 μ L of blood.
Approximately 200 ng/mL of each compound.*

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Blood	Lampire	22B52016-2
Methanol External Control Solution		042222
Prepared:	04/22/2022	
Expires:	04/22/2023	
Prepared by:	Celena Shrum	

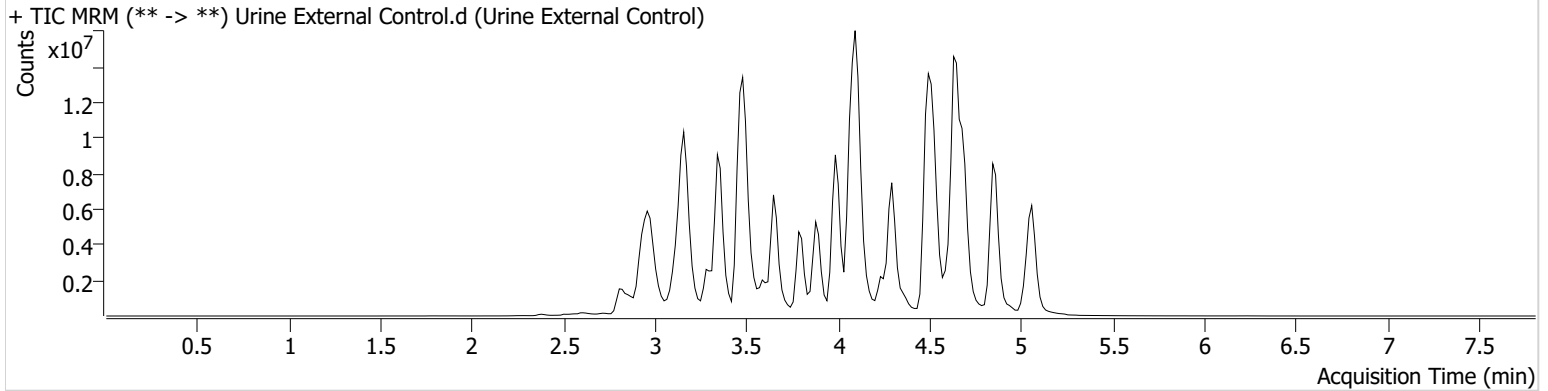
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 5/25/2022 10:37:49 AM

Instrument	Falco (069901)	Data File	Urine External Control.d
Type	Sample	Sample	Urine External Control
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-C12	Comment	
Injection Volume	5		
Acq. Date-Time	5/24/2022 6:05:52 PM		

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.636	22294224	2153.60	963.69	16393073	127.8269
Buprenorphine	5.055	16107758	72455.20	1052021.70	3790105	167.4849
Hydrocodone	3.159	13246643	15861.80	505.88	6933752	129.6454
Tramadol	3.484	52512032	∞	280.44	42902719	60.9066



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: 042222)

100 μ L of 1mg/mL stock was added to each drug to 9600 μ L of LC MeOH.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	215245	N/A
Tramadol	Cerilliant	FE10051901	N/A- Qualitative
Hydrocodone	Cerilliant	FE04241902	N/A- Qualitative
Alprazolam	Cerilliant	FE06102008	N/A- Qualitative
Buprenorphine	Cerilliant	FE03191903	N/A- Qualitative
Prepared:	04/22/2022		
Prepared By:	Celena Shrum		

Urine External Control Solution (Lot: WS042222)

200 μ L of methanol external control solution was added to 9800 μ L of blood.
Approximately 200 ng/mL of each compound.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Urine	Pocatello Lab	POC021022
Methanol External Control Solution		042222
Prepared:	04/22/2022	
Prepared by:	Celena Shrum	

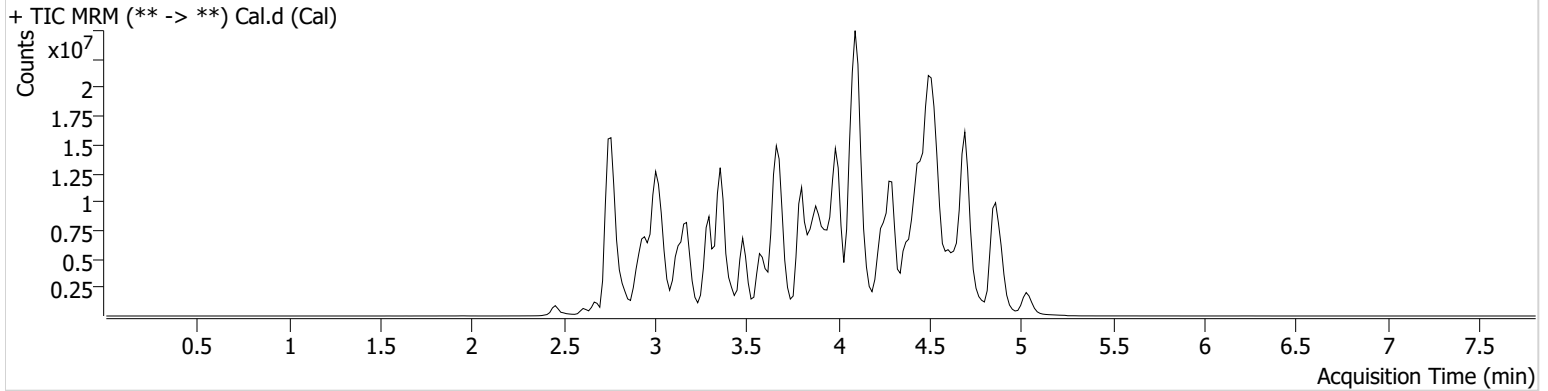
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 5/25/2022 10:37:49 AM

Instrument	Falco (069901)	Data File	Cal.d
Type	Cal	Sample	Cal
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-G12	Comment	
Injection Volume	5		
Acq. Date-Time	5/24/2022 5:32:03 PM		

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbazepine	3.793	4136648	95.09	936.81	21010351	10.0000
6-MAM	3.049	35997	770.94	22937.42	1026059	10.0000
7-aminoclonazepam	3.605	1053002	300.46	46319.09	4419501	10.0000
7-aminoflunitrazepam	3.805	2081210	564.61	17235.15	4419501	10.0000
9-Hydroxyrisperidone	3.997	8099640	5288160.27	152049.33	30846455	10.0000
Acetyl Fentanyl	4.079	367141	402.11	91786.61	31962483	10.0000
Acetyl Norfentanyl	2.934	364259	340.27	120.72	31962483	10.0000
a-hydroxyalprazolam	4.541	222526	122.53	227.94	4419501	10.0000
alpha-hydroxymidazolam	4.616	2138084	499.36	580978.96	4419501	10.0000
Alpha-PHP	3.948	3553465	9785.11	1418.57	31962483	10.0000
alpha-PVP	3.672	4404102	706.32	3403.61	10604704	10.0000
Alprazolam	4.636	2027658	887.15	471.87	19058344	10.0000
Amitriptyline	4.501	2037542	506.66	2439.96	7006437	10.0000
Amphetamine	2.938	3896982	1104.72	1421.36	10604704	10.0000
Benzoyllecgonine	3.405	222699	1049.37	93.99	385890	10.0000
Brompheniramine	4.080	102155	57.33	531621.00	44960355	10.0000
Buprenorphine	5.055	1392705	199134.57	104846.34	5488467	10.0000
Bupropion	3.918	5295732	1427.20	557.48	19861769	10.0000
Carbamazepine	4.258	7815538	1107.44	1449.37	534249	10.0000
Carisoprodol	4.256	1093048	450.69	53.68	6415470	10.0000
Chlordiazepoxide	4.760	533106	141.99	930.78	19058344	10.0000
Chlorpheniramine	3.991	6871348	5173.28	8.73	44960355	10.0000
Chlorpromazine	4.711	2523072	1448617.27	1215.66	11069392	10.0000
Citalopram	4.110	3166571	955.93	347.44	44960355	10.0000
Clomipramine	4.712	3772422	64456.81	366451.29	44960355	10.0000
Clonazepam	4.465	1112887	613.56	237.16	19058344	10.0000
Clonazepam	4.400	1318589	787472.70	189449.40	19058344	10.0000
Clozapine	4.524	4437716	1089.68	1826196.18	16730801	10.0000
Cocaehtylene	3.864	4669726	2459399.55	1523219.62	23059803	10.0000
Cocaine	3.666	4019468	2671023.72	1465.84	23059803	10.0000
Codeine	2.991	306215	236048.12	4918.40	7719455	10.0000
Cyclobenzaprine	4.409	2836748	437.94	213.09	7006437	10.0000
Desipramine	4.410	6665026	610.83	415.51	7006437	10.0000
Dextromethorphan	4.116	1933319	277.83	5048.39	11132918	10.0000

Cal

AM #25 Multi-Drug Screen Results



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrophan	3.423	2223693	359.42	11041.73	11132918	10.0000
Diazepam	4.868	1086397	473.83	898.28	19058344	10.0000
Dihydrocodeine	2.838	862500	28411.66	2238.23	7719455	10.0000
Diphenhydramine	4.086	9717795	1684.26	1115.23	44960355	10.0000
Doxepin	4.223	2499702	320.99	123.12	28954537	10.0000
Doxylamine	3.683	10293878	15815.46	9230302.09	11132918	10.0000
Duloxetine	4.360	92327	9590.06	17973.49	1460153	10.0000
EDDP	4.115	1075645	181.50	175.68	2670338	10.0000
Estazolam	4.561	5494951	1887.31	863.11	19058344	10.0000
Etizolam	4.662	305632	277251.03	2132.26	19058344	10.0000
Fentanyl	4.293	351082	135.20	89885.85	25573451	10.0000
Flualprazolam	4.509	476963	178823.46	2243509.16	19058344	10.0000
Flunitrazepam	4.589	2028234	977.70	346.80	19058344	10.0000
Fluoxetine	4.374	3601902	28411.33	66.07	6178336	10.0000
Flurazepam	4.368	2904891	518.29	121073.69	19058344	10.0000
Hydrocodone	3.174	1137541	427.74	452.70	7719455	10.0000
Hydromorphone	2.612	843906	34210.32	6873.33	150670	10.0000
Hydroxyzine	4.645	2824702	76670.32	1276.72	44960355	10.0000
Imipramine	4.454	7028333	20799.61	581.10	7006437	10.0000
Ketamine	3.825	3841181	2322626.95	190.37	9435576	10.0000
Lamotrigine	3.669	243103	2225.87	1745.92	44960355	10.0000
Levamisole	3.119	2266115	1012069.83	624.53	23059803	10.0000
Levetiracetam	2.677	1159977	239.07	963.49	44960355	10.0000
Lorazepam	4.464	487233	252.26	209.91	19058344	10.0000
Maprotiline	4.501	873491	51.69	109.29	7006437	10.0000
MDA	3.044	1827150	514.47	10.47	25717159	10.0000
MDEA	3.273	3706306	362.50	598.57	25717159	10.0000
MDMA	3.135	4517355	713.41	239.42	25717159	10.0000
Meperidine	3.685	2295676	404.35	862342.17	11132918	10.0000
Meprobamate	3.704	611657	205.55	154833.36	6415470	10.0000
Methadone	4.435	5918436	622.74	4285.87	2670338	10.0000
Methamphetamine	3.045	4919577	209.37	5695.88	25717159	10.0000
Methocarbamol	3.609	498317	168.70	343.62	2670338	10.0000
Methylphenidate	3.579	10679216	433.84	1009.65	19105670	10.0000
Metoprolol	3.484	690686	1673.18	86679.92	11132918	10.0000
Midazolam	4.801	666176	321.91	210057.09	19058344	10.0000
Mirtazapine	4.287	3564056	1383022.10	3297673.48	11132918	10.0000
Mitragynine	4.352	500010	229410.76	6929.64	11132918	10.0000
Morphine	2.460	182810	1028.02	231.02	150670	10.0000
Norbuprenorphine	3.875	82266	45619.83	70392.40	5488467	10.0000
Nordiazepam	4.732	1338134	460035.62	204.65	19058344	10.0000
Norfentanyl	3.379	6752603	655886.11	1267.85	31962483	10.0000
Norhydrocodone	2.977	82018	71.44	1044.36	150670	10.0000
Norketamine	3.934	716543	207.89	4961.04	9435576	10.0000
Normeperidine	3.641	1897081	193.93	442.61	44960355	10.0000
Noroxycodone	2.929	1032971	∞	150.69	9435576	10.0000
Nortriptyline	4.456	1797394	532.49	309.37	7006437	10.0000
O-desmethyl-tramadol	2.963	7932266	45205.27	978.08	44960355	10.0000
O-desmethylvenlafaxine	3.299	1630737	1289.93	254600.18	8720559	10.0000
Olanzapine	3.972	689098	1576329.13	162636.95	534249	10.0000
Oxazepam	4.546	2082005	977.86	405.14	8853390	10.0000
Oxycodone	3.035	1907764	504.33	815.56	9435576	10.0000
Oxymorphone	2.456	1789412	281.52	1096735.98	150670	10.0000
Paroxetine	4.371	473333	721.35	152476.31	6178336	10.0000
Phenazepam	4.661	1619551	1328.86	848.34	19058344	10.0000
Phencyclidine	3.963	6212653	243039.65	1982.64	11132918	10.0000
Phentermine	3.199	1407089	163.37	26.35	19105670	10.0000
Phenytoin	4.164	908915	549.76	1755.78	534249	10.0000
Primidone	3.503	1333940	1128.88	252.26	534249	10.0000
Promethazine	4.438	7947281	49224.41	1542.29	44960355	10.0000

Cal

AM #25 Multi-Drug Screen Results



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Pseudoephedrine	2.769	51107638	14984.30	2039.73	25717159	10.0000
Quetiapine	4.706	4661498	4303432.68	12627.40	35914649	10.0000
Risperidone	4.213	6540270	7772.61	4709.01	30846455	10.0000
Sertraline	4.605	1105073	2685.97	1680.68	6178336	10.0000
Sufentanil	4.721	313578	113664.91	3305.09	31962483	10.0000
Tapentadol	3.488	4492195	305.80	426.77	9435576	10.0000
Temazepam	4.699	3517233	469.18	111.09	19058344	10.0000
Topiramate	3.877	36752	39281.83	8801.74	170250	10.0000
Tramadol	3.484	9035238	48.31	6164.77	44960355	10.0000
Trazodone	4.889	6728765	4162479.18	4305288.76	28954537	10.0000
Venlafaxine	3.852	6877213	887.82	348.39	6178336	10.0000
Zaleplon	4.375	2176325	1020.61	287.59	35914649	10.0000
Zolpidem	4.497	7576933	5634452.37	3533.15	35914649	10.0000
Zopiclone	4.429	362692	200163.39	327680.63	1746647	10.0000

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

Extraction Date: 05/24/2022

Plate lot#: 220309

Mobile phase A: 10mM Amm Form

Blank Blood Lot: Lampire 20L20723

LCMS-QQQ ID: 069901

Analyst: Celena Shrum

Plate Retest Date: 09/09/2022

Mobile phase B: 0.1% Formic Acid in MeOH

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

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. Using a calibrated pipette, add **1000µl blood (calibrated pipette)** into the appropriate wells of analytical (standards) plate. **Pipette ID: #42**
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 4. Pipette **500µL 0.1% formic acid in water blood sample** of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **800µL of blood+acid** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). **(Load at 85-100 PSI- Selector to the right)** Manifold ID: 067104
- 8. Wait 5 minutes.
- 9. Add **2.25mL MTBE. (Add in 3 increments of 750uL)**
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. **(10-15 PSI- Selector to the left).**
- 12. Add **2.25mL Hexane. (Add in 3 increments of 750uL)**
- 13. Wait 5 minutes.
- 14. Apply positive pressure for approx. 15 seconds. **(10-15 PSI- Selector to the left).**
- 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. **SPE Dry ID: 067103**
- 16. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Create batch and process data.
- 2. Make any necessary integration changes, R² 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: Only THC-COOH evaluated. A blood sample from a previous batch was also included in this run (M2022-1304-1).

	1	2	3	4	5	6
a	cal 1ng	QC 2	P2022-0893-1			
b	cal 3 ng	NEG Blood	P2022-0900-1			
c	cal 5 ng	Neg Urine	P2022-0997-2			
d	cal 10ng	M2022-1179-2	P2022-1440-1			
e	cal 25 ng	M2022-1307-2	P2022-1466-1			
f	cal 50 ng	M2022-1322-2	M2022-1304-1			
g	cal 100 ng	M2022-1889-3				
h	QC 1	P2022-0879-4				

CS

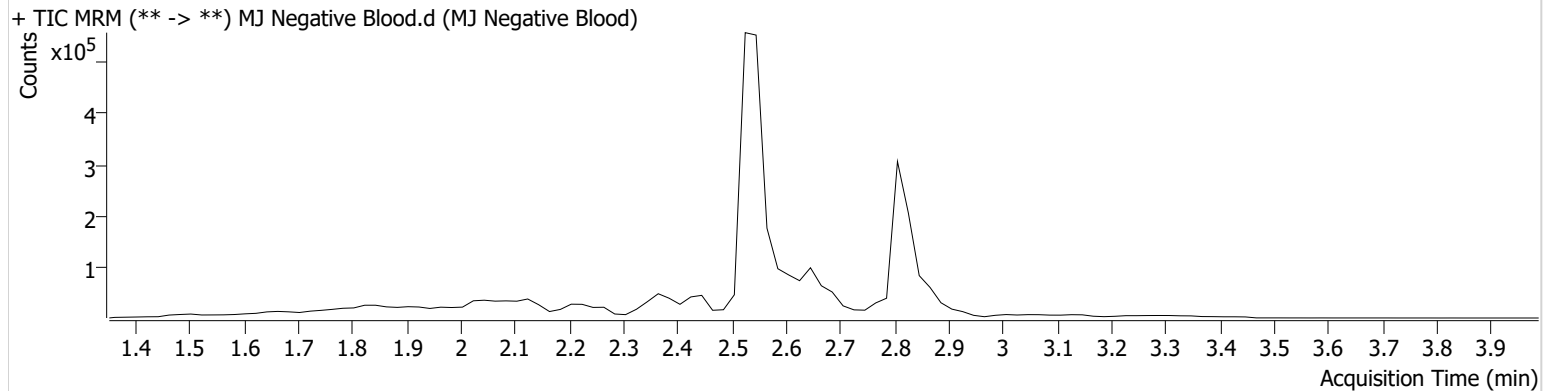


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ Negative Blood.d
Type	Sample	Sample	MJ Negative Blood
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-B2	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 3:03:30 PM		
Sample Info.			

Sample Chromatogram



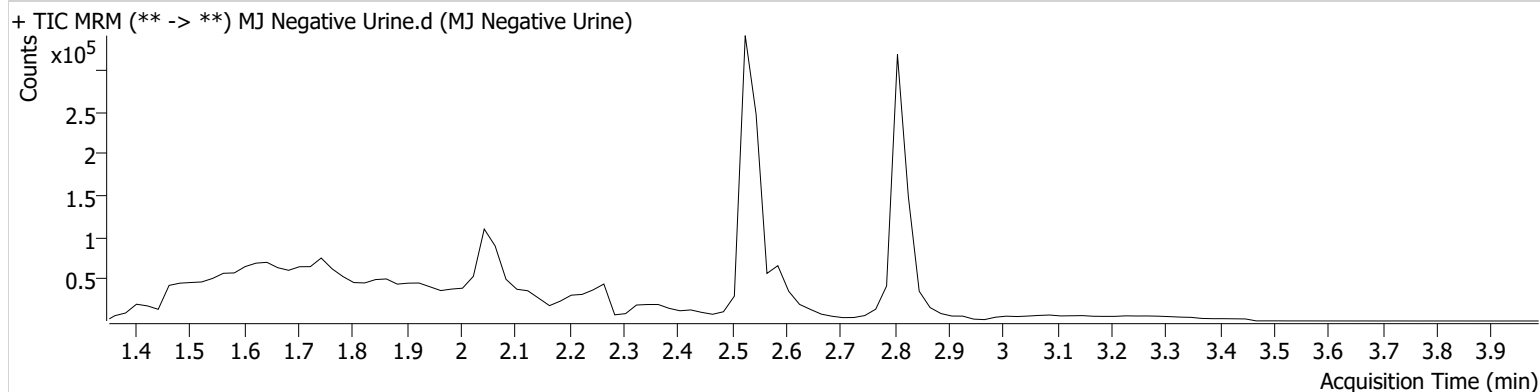
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ Negative Urine.d
Type	Sample	Sample	MJ Negative Urine
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-C2	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 3:10:05 PM		
Sample Info.			

Sample Chromatogram



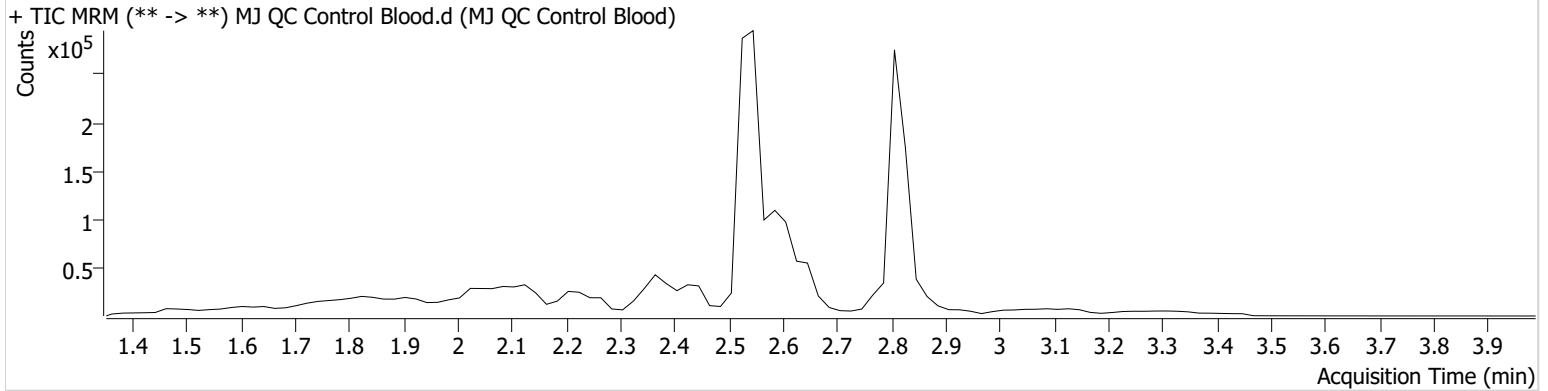
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ QC Control Blood.d
Type	QC	Sample	MJ QC Control Blood
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-H1	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 2:50:18 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.589	44498	91147	21.4877 ng/ml

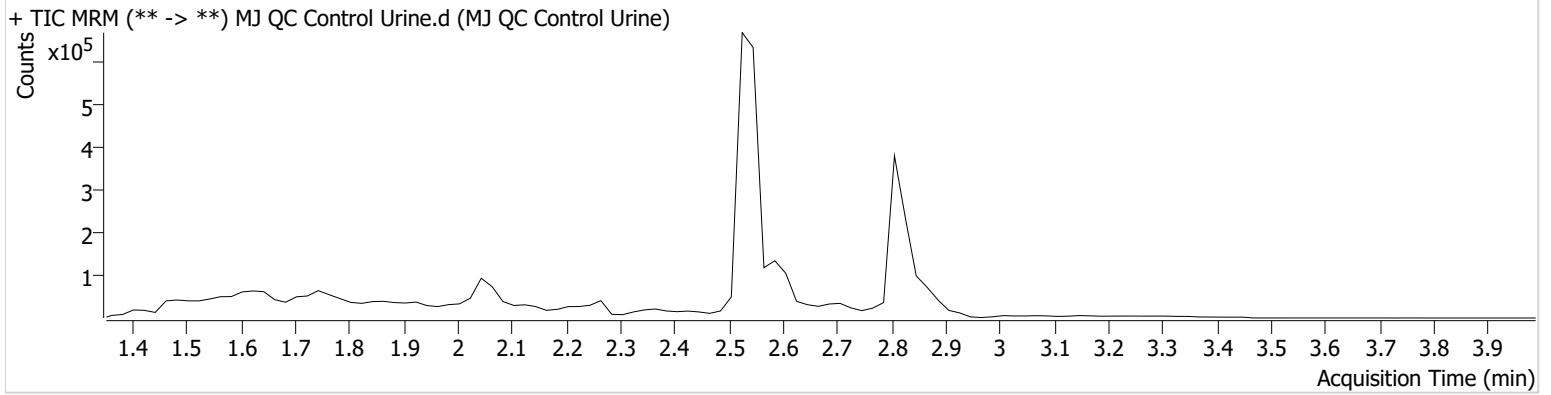
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ QC Control Urine.d
Type	QC	Sample	MJ QC Control Urine
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-A2	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 4:35:26 PM		

Sample Chromatogram

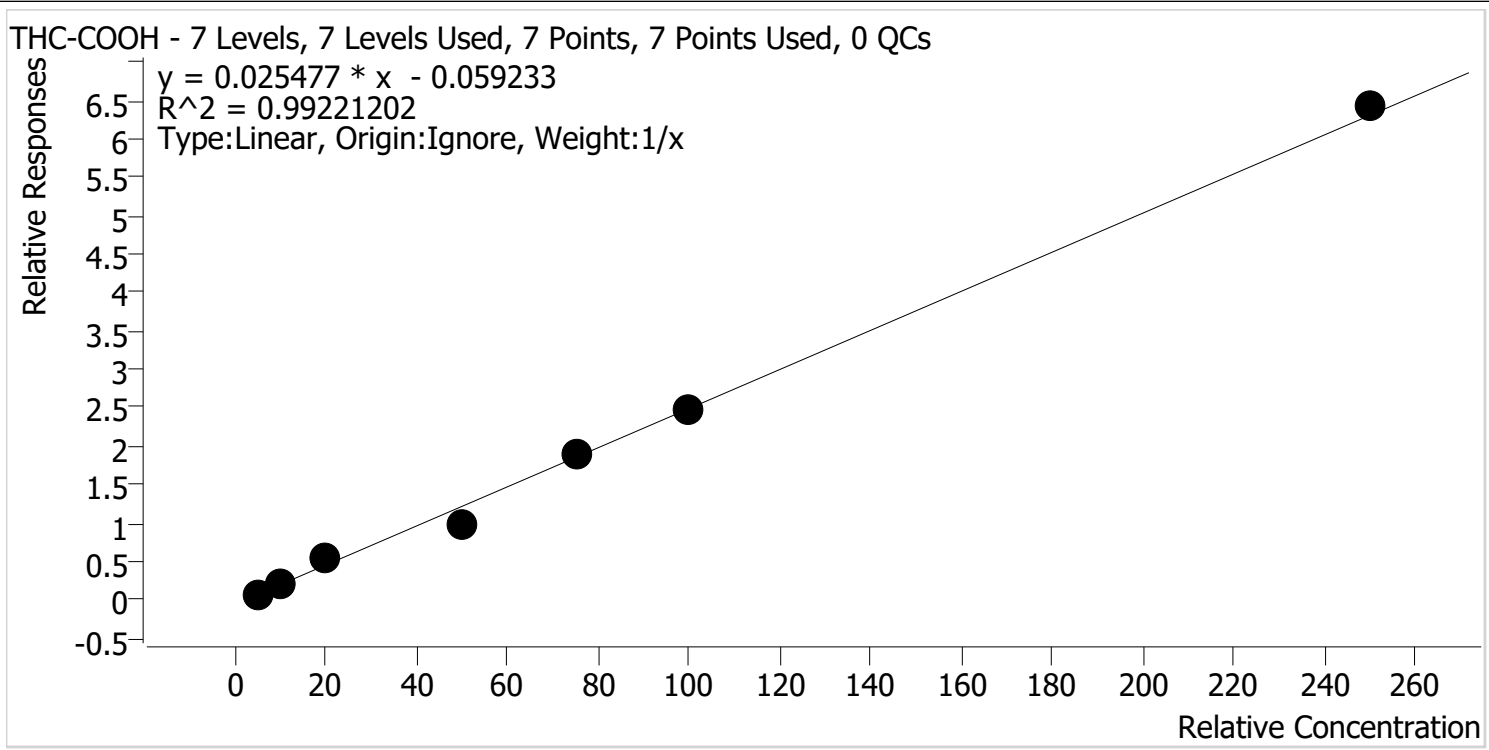


Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.589	48105	119964	18.0646 ng/ml



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Last Cal. Update 5/25/2022 7:23 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	4.9	98.6
MJ Cal 2	2	✓	10.0	9.7	96.6
MJ Cal 3	3	✓	20.0	24.2	120.9
MJ Cal 4	4	✓	50.0	39.9	79.8
MJ Cal 5	5	✓	75.0	76.4	101.9
MJ Cal 6	6	✓	100.0	100.3	100.3
MJ Cal 7	7	✓	250.0	254.6	101.8

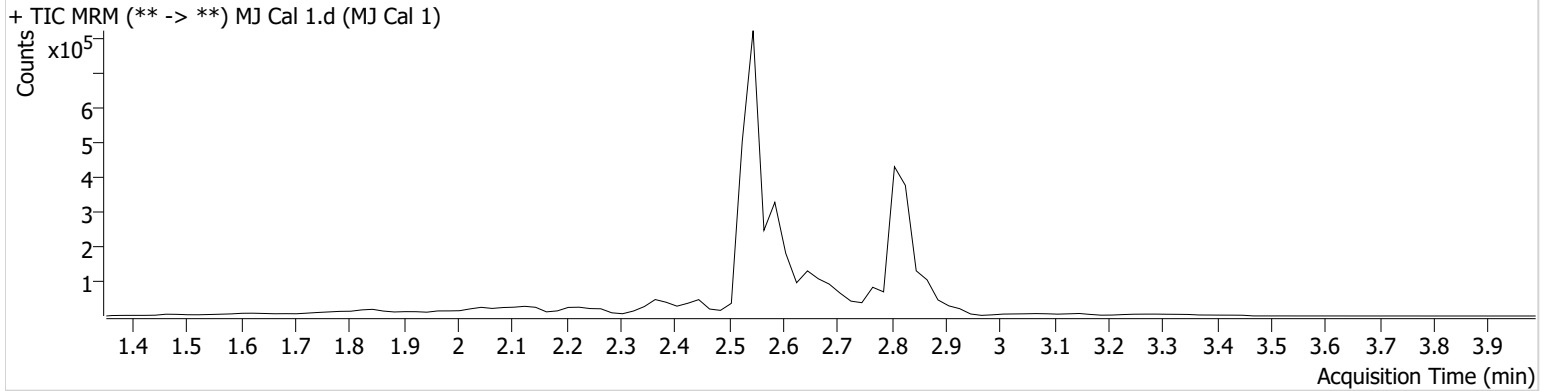
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ Cal 1.d
Type	Cal	Sample	MJ Cal 1
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-A1	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 2:04:10 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.609	26843	404572	4.9293 ng/ml Low

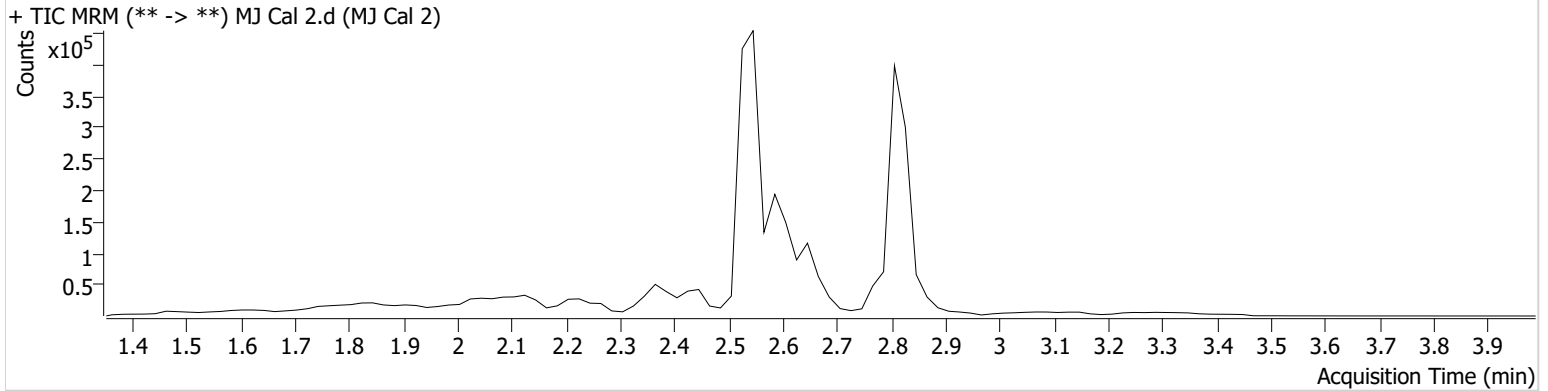
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ Cal 2.d
Type	Cal	Sample	MJ Cal 2
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-B1	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 2:10:56 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.589	47496	254076	9.6625 ng/ml

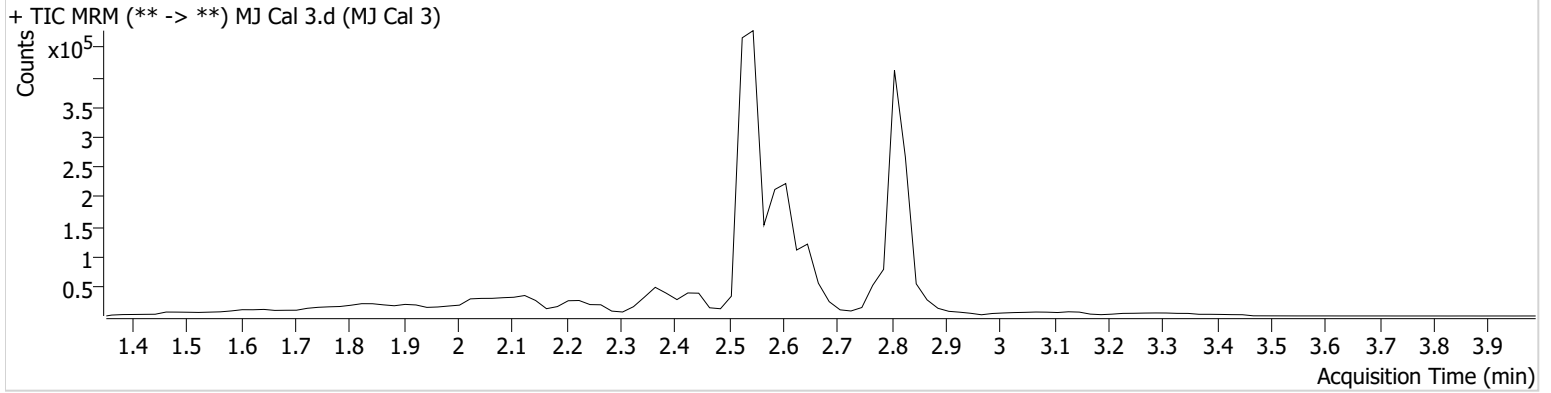
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ Cal 3.d
Type	Cal	Sample	MJ Cal 3
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-C1	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 2:17:30 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.589	111779	200719	24.1837 ng/ml

CS

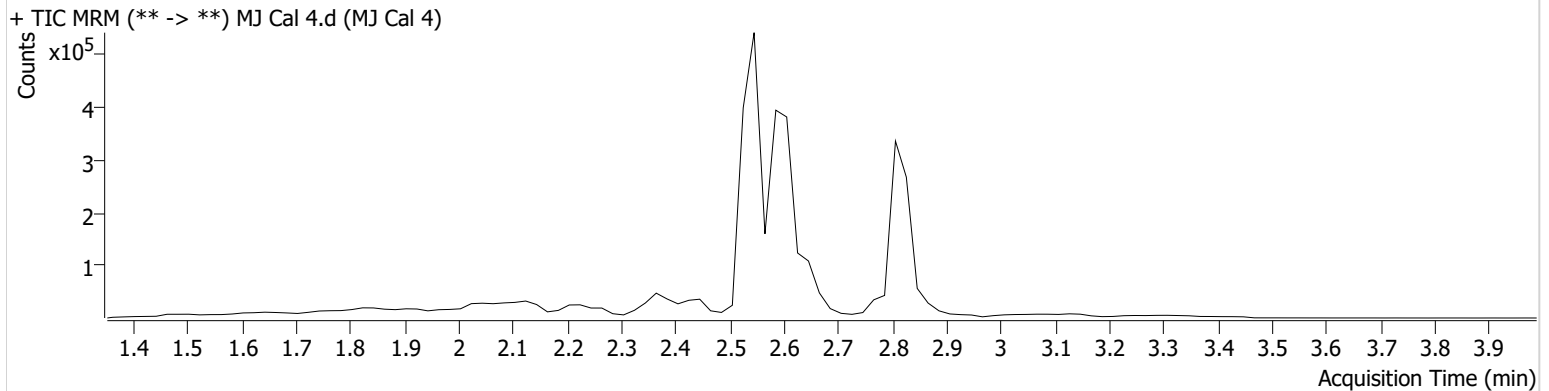


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ Cal 4.d
Type	Cal	Sample	MJ Cal 4
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-D1	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 2:24:04 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.589	256722	268082	39.9130 ng/ml

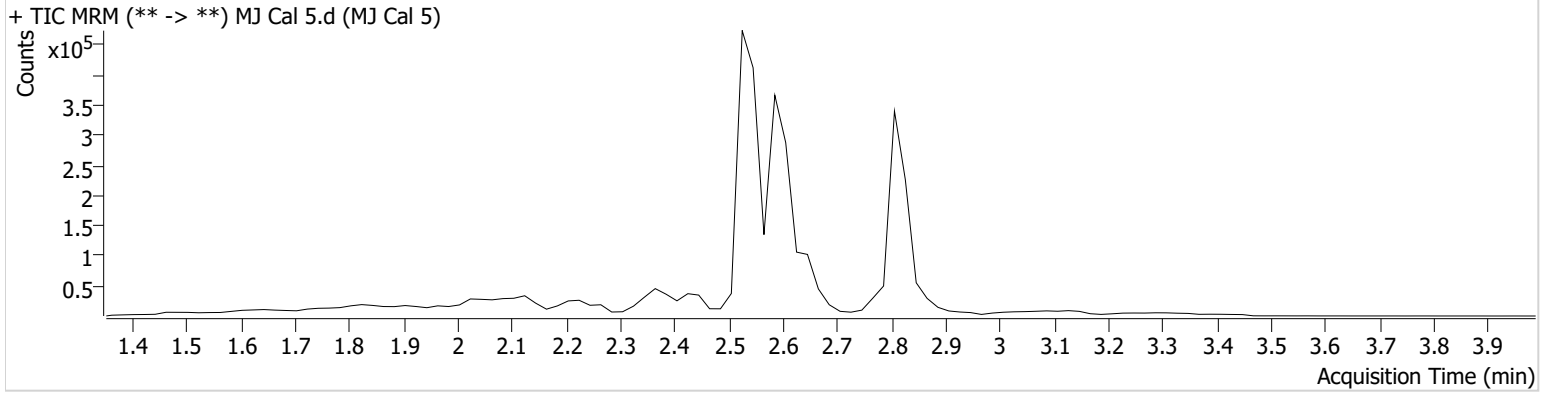
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ Cal 5.d
Type	Cal	Sample	MJ Cal 5
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-E1	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 2:30:37 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.589	265107	140392	76.4444 ng/ml

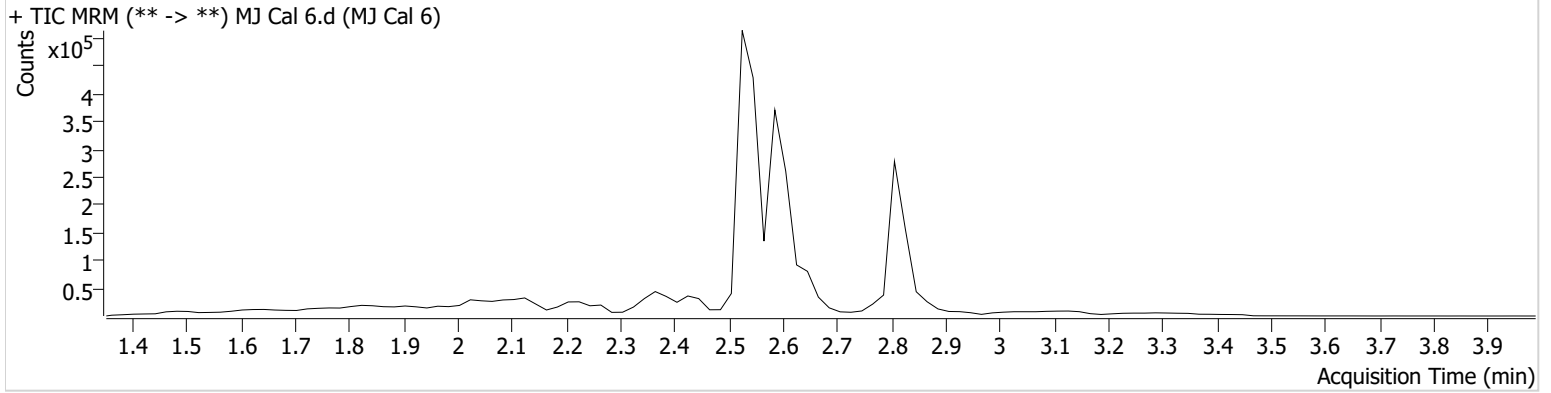
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ Cal 6.d
Type	Cal	Sample	MJ Cal 6
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-F1	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 2:37:11 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.589	255923	102543	100.2870 ng/ml

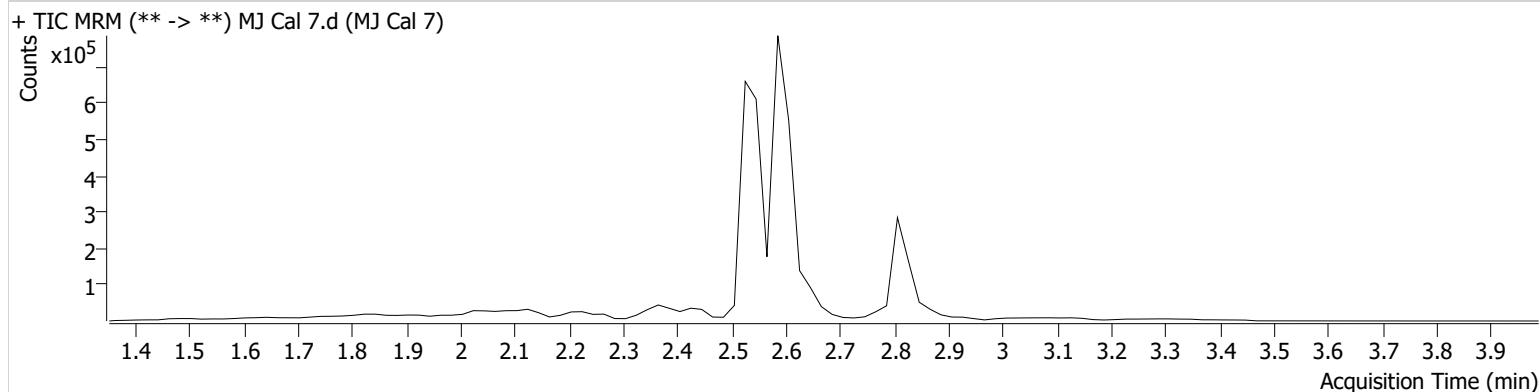
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2022\AM 25-26\052422 AM 25 26 CS\QuantResults\AM 26 c-THC only.batch.bin
Calibration Last Update 5/25/2022 7:23:25 AM

Instrument	Falco (069901)	Data File	MJ Cal 7.d
Type	Cal	Sample	MJ Cal 7
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-G1	Comment	
Injection Volume	10		
Acq. Date-Time	5/24/2022 2:43:44 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.589	611579	95163	254.5801 ng/ml

**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.

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

