

REVIEWED







By Tamara Salazar at 8:02 am, Aug 05, 2021

8/4/2021

Worklist: 5153

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
M2021-2279	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-2780	4	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-2956	4	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-2956	5	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-2956	6	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-3044	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-3049	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-3143	10	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-3143	11	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-3143	12	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-3143	7	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-3143	8	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
M2021-3143	9	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-1952	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2034	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2102	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2186	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2188	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2273	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2274	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2310	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	

Worklist: 5153

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
P2021-2328	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2348	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2366	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2377	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2437	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2021-2438	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: 07/23/2021

Plate lot#: 201206

Mobile phase A: 10mM Amm Form

Instant Buffer I

Blank Blood Lot: Lampire 20L20724

LCMS-QQ ID: 069901

Analyst: Celena Shrum

Plate Retest Date: 06/06/2021

Mobile phase B: 0.1% Formic Acid in MeOH

Ethyl Acetate LC Methanol

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

Blank Urine Lot: POC031319

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.
- 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. Place on SPE Dry and evaporate to dryness at approx. 35°C.
- 16. Reconstitute in **100µL 20% LC MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

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

COMMENTS:



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: 120320)

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

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
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		
Expires:	07/31/2021		

Blood External Control Solution (Lot: WS060421)

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	20L20723
Methanol External Control Solution		120320
Prepared:	06/04/2021	
Prepared by:	Celena Shrum	
Expires:	07/31/2021	



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 μ L of 1mg/mL stock was added to each drug to 9700 μ L of LC MeOH.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
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		
Expires:	07/31/2021		

Urine External Control Solution (Lot: WS061521)

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 Urine	Pocatello Lab	POC031319
Methanol External Control Solution		120320
Prepared:	06/15/2021	
Prepared by:	Amber Gerheart	
Expires:	07/31/2021	

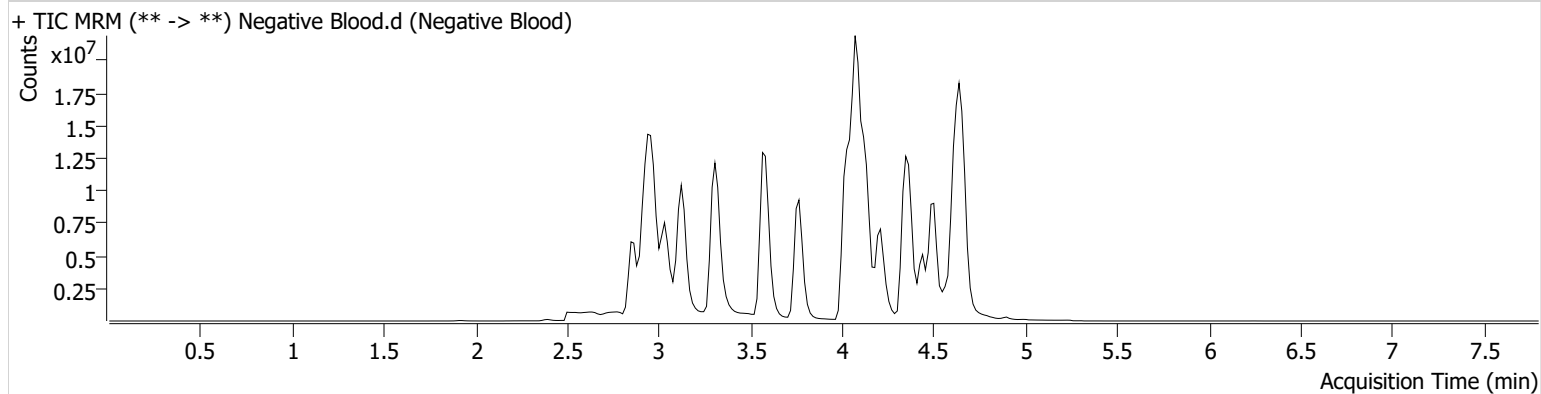
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 7/29/2021 11:56:50 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-D1	Comment	
Injection Volume	5		
Acq. Date-Time	7/23/2021 6:38:21 PM		
Sample Info.			

Sample Chromatogram



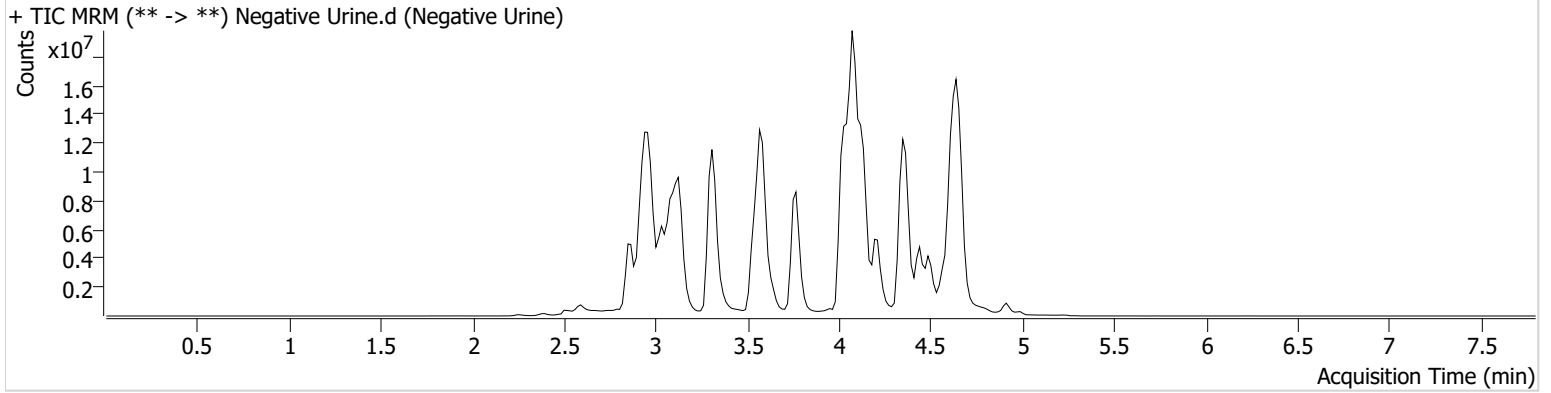
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 7/29/2021 11:56:50 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-F1	Comment	
Injection Volume	5		
Acq. Date-Time	7/23/2021 6:55:10 PM		
Sample Info.			

Sample Chromatogram



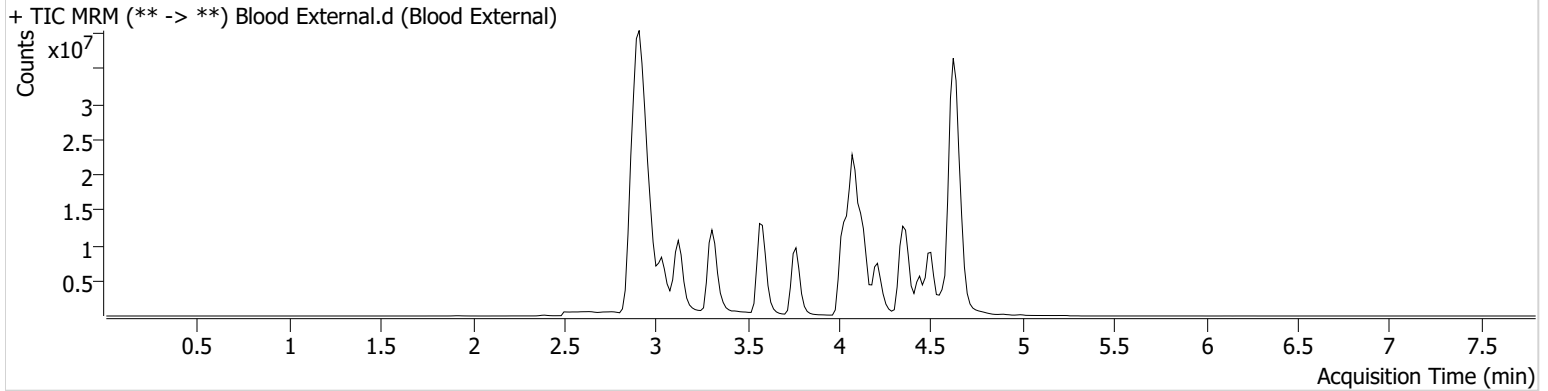
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 7/29/2021 11:56:50 AM

Instrument	Falco (069901)	Data File	Blood External.d
Type	Sample	Sample	Blood External
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-E1	Comment	
Injection Volume	5		
Acq. Date-Time	7/23/2021 6:46:45 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.626	37425074	914.58	1058.69	36169666	91.0384
Amphetamine	2.890	43463648	2644.05	8434.96	16595066	61.7796
O-desmethyl-tramadol	2.915	56104980	49146.31	6051.64	55187501	41.3315

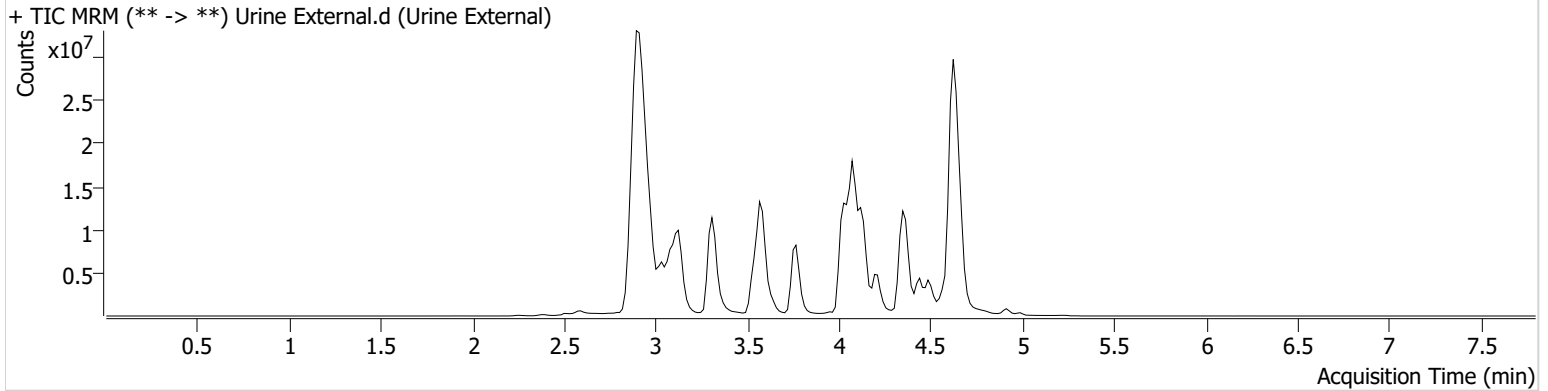
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 7/29/2021 11:56:50 AM

Instrument	Falco (069901)	Data File	Urine External.d
Type	Sample	Sample	Urine External
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-G1	Comment	
Injection Volume	5		
Acq. Date-Time	7/23/2021 7:03:33 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.626	25555438	458.53	446.55	30447772	73.8472
Amphetamine	2.890	31799864	1914.78	727.92	12621911	59.4289
O-desmethyl-tramadol	2.915	46696324	27015.71	1698.75	51169465	37.1015

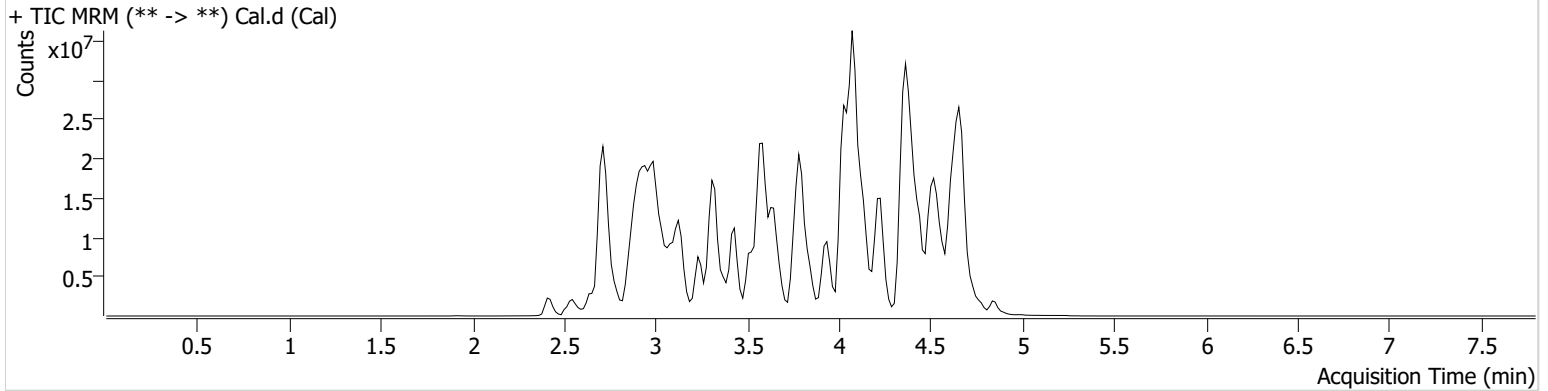
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 7/29/2021 11:56:50 AM

Instrument	Falco (069901)	Data File	Cal.d
Type	Cal	Sample	Cal
Acq. Method	AM 25 MDS.m	Operator	Celena Shrum
Sample Position	P2-A1	Comment	
Injection Volume	5		
Acq. Date-Time	7/23/2021 6:29:48 PM		

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	2.953	104878	108163.68	11637.68	3016549	10.0000
7-aminoclonazepam	3.569	1376611	457.90	198.99	5855895	10.0000
7-aminoflunitrazepam	3.783	2130663	335.35	664.60	5855895	10.0000
Acetyl Fentanyl	3.902	832985	478.14	393422.11	40768032	10.0000
Acetyl Norfentanyl	2.901	689823	1063.56	229.47	40768032	10.0000
a-hydroxyalprazolam	4.515	685498	182.60	∞	5855895	10.0000
alpha-hydroxymidazolam	4.591	3948109	772.76	472.64	5855895	10.0000
Alpha-PHP	3.834	6709243	3226.87	9961.15	40768032	10.0000
alpha-PVP	3.559	7954250	399.45	655.44	17919436	10.0000
Alprazolam	4.626	3709624	322.74	495.97	32638945	10.0000
Amitriptyline	4.446	2775464	165.15	390.08	11695224	10.0000
Amphetamine	2.890	7596728	1187.79	960.74	17919436	10.0000
Benzoylcegonine	3.385	533792	1146541.23	79.08	887758	10.0000
Brompheniramine	4.041	225374	102.42	339.29	52486945	10.0000
Buprenorphine	4.679	1806409	4228.76	55869.14	7466305	10.0000
Bupropion	3.789	9196034	1400.68	260.75	30530792	10.0000
Carbamazepine	4.234	15454532	∞	746.53	1036492	10.0000
Carisoprodol	4.217	2401096	1710.73	47.89	14748244	10.0000
Chlordiazepoxide	4.735	2587154	138.97	56632.93	32638945	10.0000
Chlorpheniramine	3.954	14045705	59928.85	14.59	52486945	10.0000
Citalopram	4.071	5783051	463.26	774728.52	52486945	10.0000
Clomipramine	4.640	3289474	7449.64	1423.09	52486945	10.0000
Clonazepam	4.440	2941522	755.69	126485.24	32638945	10.0000
Clonazolam	4.375	2897723	14039.99	1222592.09	32638945	10.0000
Cocaethylene	3.796	8685536	5266570.30	3529989.12	36000674	10.0000
Cocaine	3.582	7621321	1946.88	306.91	36000674	10.0000
Codeine	2.866	621462	1099.46	4688.65	19092281	10.0000
Cyclobenzaprine	4.370	3634871	241.17	54.84	11695224	10.0000
Desipramine	4.386	7441662	929.84	562.97	11695224	10.0000
Dextromethorphan	4.093	3726628	268.62	15021.04	19967833	10.0000
Dextrorphan	3.372	4686437	1291.07	24317.37	19967833	10.0000
Diazepam	4.843	2544166	879.94	422.00	32638945	10.0000
Dihydrocodeine	2.774	1731360	2554.46	947.20	19092281	10.0000
Diphenhydramine	4.032	15803187	1567.74	992.07	52486945	10.0000

Cal

AM #25 Multi-Drug Screen Results



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Doxepin	4.153	3370384	1344.10	91.00	35692332	10.0000
Doxylamine	3.647	16794322	623.05	233.50	19967833	10.0000
EDDP	4.076	2671735	638.31	356.63	6383698	10.0000
Estazolam	4.535	12165606	3900.41	762.11	32638945	10.0000
Etizolam	4.636	560997	427309.55	2027.05	32638945	10.0000
Fentanyl	4.131	522469	186.48	980.92	30810407	10.0000
Flualprazolam	4.484	1742164	1532487.19	2097.84	32638945	10.0000
Flunitrazepam	4.564	5924868	∞	3017.60	32638945	10.0000
Fluoxetine	4.335	2845410	227.43	283.01	5285476	10.0000
Flurazepam	4.206	7336252	615.84	742232.55	32638945	10.0000
Hydrocodone	3.064	2662648	813.12	1010.56	19092281	10.0000
Hydromorphone	2.549	2455119	10927.44	46732.31	281505	10.0000
Imipramine	4.399	9814721	2921.75	637.24	11695224	10.0000
Ketamine	3.574	5567196	905.12	60.84	26053311	10.0000
Lamotrigine	3.602	447674	1236.00	60832.77	52486945	10.0000
Levamisole	3.009	4666871	181481.81	414.48	36000674	10.0000
Levetiracetam	2.659	2418446	605.47	1811.52	52486945	10.0000
Lorazepam	4.424	1121631	519.37	211.90	32638945	10.0000
Maprotiline	4.446	1925313	175.58	417.76	11695224	10.0000
MDA	3.010	5164204	447.80	3.36	38442900	10.0000
MDEA	3.238	7908120	372.40	2032.57	38442900	10.0000
MDMA	3.085	10312614	1184.34	495.86	38442900	10.0000
Meperidine	3.619	3940545	1325.64	706.27	19967833	10.0000
Meprobamate	3.652	1364560	801.81	109.00	14748244	10.0000
Methadone	4.395	11391733	∞	477.06	6383698	10.0000
Methamphetamine	2.996	11627612	475.37	1380.92	38442900	10.0000
Methocarbamol	3.573	729756	225.64	91.94	6383698	10.0000
Methylphenidate	3.513	18103361	62.94	278.32	30810062	10.0000
Metoprolol	3.433	1165468	226.74	813.51	19967833	10.0000
Midazolam	4.775	1363016	1586.97	1172.59	32638945	10.0000
Mirtazapine	4.016	5726828	48378.68	1441.78	19967833	10.0000
Mitragynine	4.221	831419	414580.82	1734.79	19967833	10.0000
Morphine	2.412	457564	495.28	2323.41	281505	10.0000
Norbuprenorphine	3.838	174280	105342.11	44564.24	7466305	10.0000
Nordiazepam	4.692	2621267	698.59	529.50	32638945	10.0000
Norfentanyl	3.329	12723221	9728.85	683.12	40768032	10.0000
Norhydrocodone	2.944	47058	32.81	20.62	281505	10.0000
Norketamine	3.682	1349319	352.81	2723.16	26053311	10.0000
Normeperidine	3.605	3655228	482.42	416.12	52486945	10.0000
Noroxycodone	2.896	2067152	218.99	295.10	26053311	10.0000
Nortriptyline	4.417	1964140	214349.83	196.35	11695224	10.0000
O-desmethyl-tramadol	2.915	12910150	139936.56	338.53	52486945	10.0000
Olanzapine	3.842	4094912	2281811.11	631.13	1036492	10.0000
Oxazepam	4.505	5126569	577.69	441.27	22703285	10.0000
Oxycodone	2.939	5319817	969.38	1667.24	26053311	10.0000
Oxymorphone	2.408	2202547	2034.31	326.05	281505	10.0000
Paroxetine	4.346	490864	433.60	226570.07	5285476	10.0000
Phenazepam	4.636	3612753	1073.89	1156.42	32638945	10.0000
Phencyclidine	3.926	10317971	994.55	348.69	19967833	10.0000
Phentermine	3.149	3024444	325.39	136.05	30810062	10.0000
Phenytoin	4.126	1960975	685.09	273.60	1036492	10.0000
Promethazine	4.352	11270790	1405.44	2512.72	52486945	10.0000
Pseudoephedrine	2.720	58425166	802.85	14042.31	38442900	10.0000
Quetiapine	4.513	8483907	6944394.03	3766291.45	46100961	10.0000
Sertraline	4.565	920094	239.16	258.26	5285476	10.0000
Sufentanil	4.497	464520	207084.47	208.75	40768032	10.0000
Tapentadol	3.438	9464642	996.31	695.88	26053311	10.0000
Temazepam	4.673	8215453	939.51	245.82	32638945	10.0000
Tramadol	3.433	15493422	705.25	88.15	52486945	10.0000
Trazodone	4.666	9961814	3398673.74	5138851.37	35692332	10.0000

Cal

AM #25 Multi-Drug Screen Results



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Venlafaxine	3.800	12184417	1683.57	464.18	5285476	10.0000
Zaleplon	4.351	4940349	40034.15	276641.69	46100961	10.0000
Zolpidem	4.366	16444040	8056942.68	908.51	46100961	10.0000
Zopiclone	4.236	659697	241976.47	417876.44	3330870	10.0000

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

Extraction Date: 07/23/2021

Analyst: Celena Shrum

Plate lot#: IDP-108-2-201206

Plate Retest Date: 06/06/2021

Mobile phase A: 0.1% Formic Acid in LCMS Water

Mobile phase B: 0.1% Formic acid in Acetonitrile

Blank Blood Lot: Lampire 20L20724

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

LCMS-QQQ ID: 069901

Blank Urine Lot: POC031319

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 was evaluated.

	1	2	3	4	5	6
a	cal 1ng	Negative Blood	M2021-2956-6	M2021-3143-12	P2021-2310-1	
b	cal 3 ng	Blood External	M2021-3044-2	P2021-1952-1	P2021-2328-1	
c	cal 5 ng	Negative Urine	M2021-3049-2	P2021-2034-1	P2021-2348-1	
d	cal 10ng	Urine External	M2021-3143-7	P2021-2102-1	P2021-2366-1	
e	cal 25 ng	M2021-2279-1	M2021-3143-8	P2021-2186-1	P2021-2377-1	
f	cal 50 ng	M2021-2780-4	M2021-3143-9	P2021-2188-1	P2021-2437-1	
g	cal 100 ng	M2021-2956-4	M2021-3143-10	P2021-2273-1	P2021-2438-1	
h	QC 1	M2021-2956-5	M2021-3143-11	P2021-2274-1		



Idaho State Police
Forensic Services

CS

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

Methanol External Control Solution (Lot: WS03052021)

10 µL of 1mg/mL THC, 100 µL of 100 µg/mL THC-OH, C-THC in 9790 µL MeOH

Approximate concentration 1ug/mL.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	200921	
THC	Cerilliant	FE01041701	03/31/2022
C-THC	Cerilliant	FE08011801	08/31/2023
THC-OH	Cerilliant	FE07221601	07/31/2021
Prepared:	03/05/2021		
Expires:	07/31/2021		
Prepared By:	Tamara Salazar/Amber Gerheart		

Blood External Control Solution (Lot: 060421)

100 ul of methanol external control solution was added to 9900 ul of blood.

Approximately 10ng/mL each

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Blood	Lampire	20L20723
Methanol External Control Solution	-	WS03052021
Prepared:	06/04/2021	
Expires:	07/31/2021	
Prepared by:	Celena Shrum	



Idaho State Police
Forensic Services

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

Methanol External Control Solution (Lot: WS03052021)

10 µL of 1mg/mL THC, 100 µL of 100 µg/mL THC-OH, C-THC in 9790 µL MeOH

Approximate concentration 1ug/mL.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	200921	
THC	Cerilliant	FE01041701	03/31/2022
C-THC	Cerilliant	FE08011801	08/31/2023
THC-OH	Cerilliant	FE07221601	07/31/2021
Prepared:	03/05/2021		
Expires:	07/31/2021		
Prepared By:	Tamara Salazar/Amber Gerheart		

Urine External Control Solution (Lot: 061521)

200 ul of methanol external control solution was added to 9800 ul of blood.

Approximately 20ng/mL each

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Urine	Pocatello Lab	POC031319
Methanol External Control Solution	-	WS03052021
Prepared:	06/15/2021	
Prepared by:	Amber Gerheart	

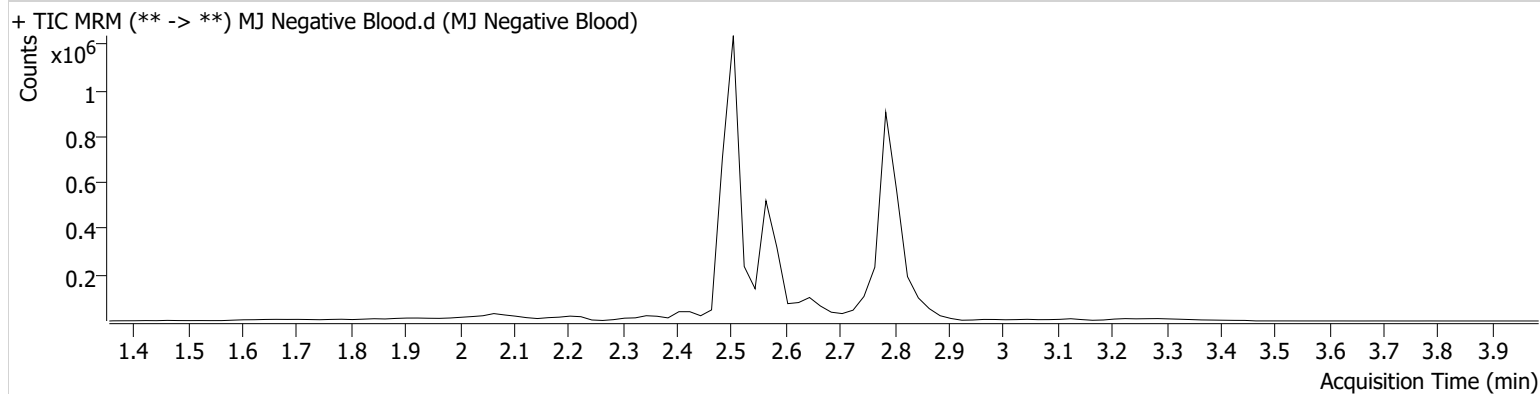
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 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-A2	Comment	
Injection Volume	10		
Acq. Date-Time	7/23/2021 2:04:55 PM		
Sample Info.			

Sample Chromatogram



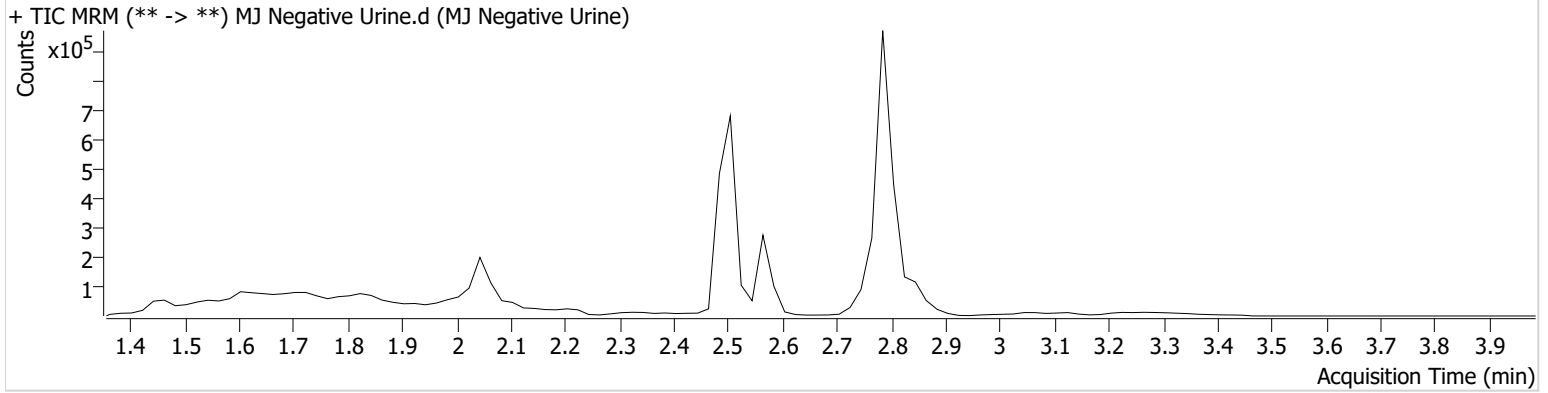
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 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	7/23/2021 2:17:58 PM		
Sample Info.			

Sample Chromatogram



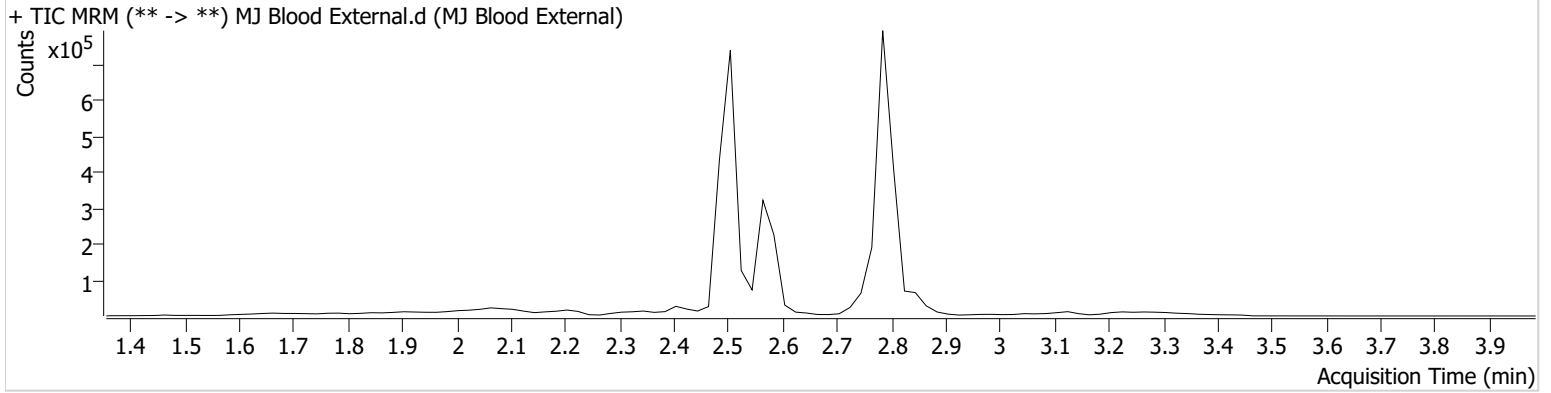
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 AM

Instrument	Falco (069901)	Data File	MJ Blood External.d
Type	Sample	Sample	MJ Blood External
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-B2	Comment	
Injection Volume	10		
Acq. Date-Time	7/23/2021 2:11:26 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	49615	490360	9.0259 ng/ml

AM #26 Cannabinoids Screen Results

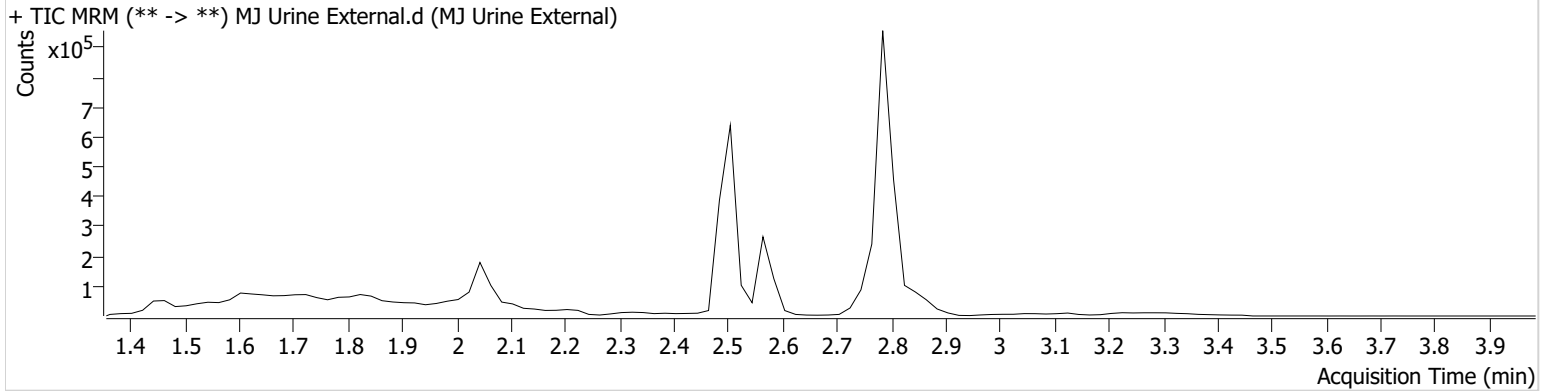


Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 AM

Instrument	Falco (069901)	Data File	MJ Urine External.d
Type	Sample	Sample	MJ Urine External
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-D2	Comment	
Injection Volume	10		
Acq. Date-Time	7/23/2021 2:24:29 PM		

Sample Info.

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	23650	415827	5.3132 ng/ml

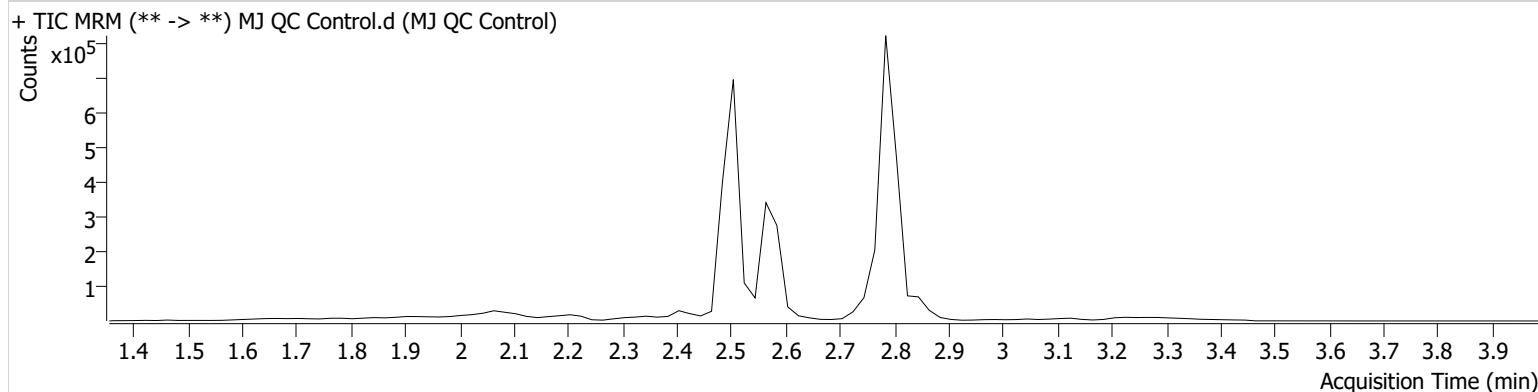
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 AM

Instrument	Falco (069901)	Data File	MJ QC Control.d
Type	Sample	Sample	MJ QC Control
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-H1	Comment	
Injection Volume	10		
Acq. Date-Time	7/23/2021 1:51:51 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	88724	473308	16.2554 ng/ml

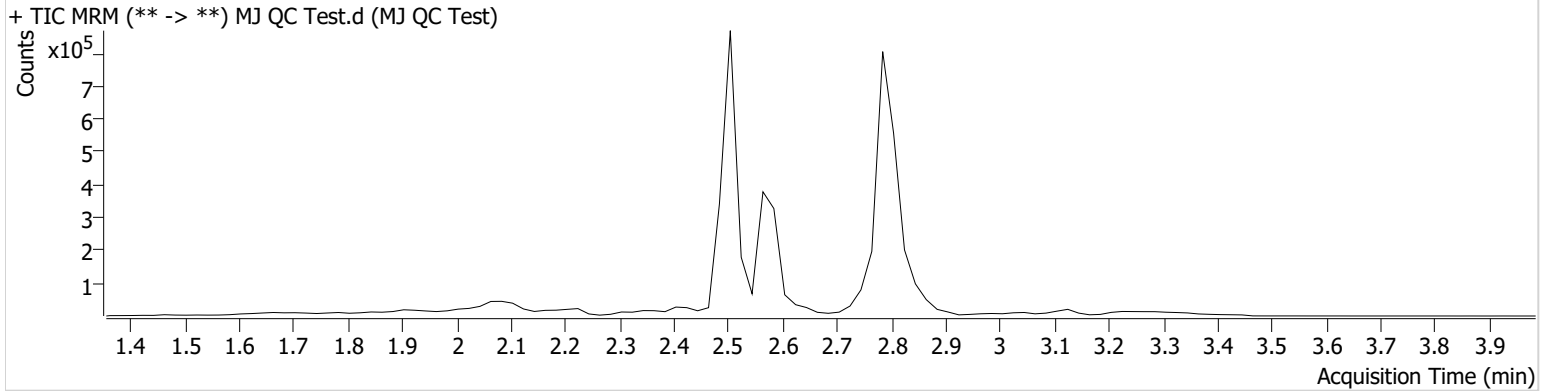
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 AM

Instrument	Falco (069901)	Data File	MJ QC Test.d
Type	Sample	Sample	MJ QC Test
Acq. Method	AM 26 THCS.m	Operator	Celena Shrum
Sample Position	P1-H1	Comment	
Injection Volume	10		
Acq. Date-Time	7/23/2021 5:27:11 PM		
Sample Info.			

Sample Chromatogram

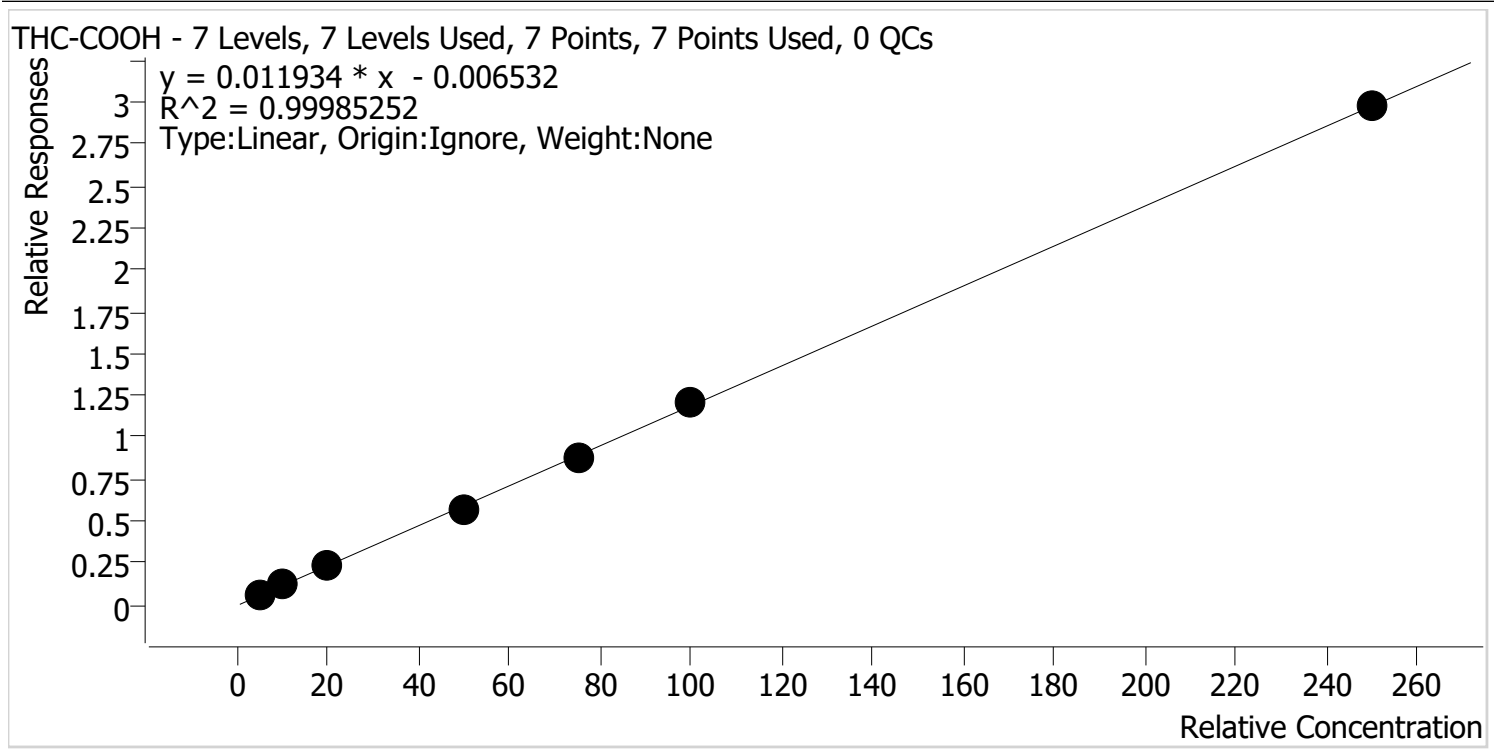


Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	92013	561879	14.2698 ng/ml



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Last Cal. Update 8/4/2021 6:38 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	5.6	111.1
MJ Cal 2	2	✓	10.0	10.4	104.3
MJ Cal 3	3	✓	20.0	19.9	99.6
MJ Cal 4	4	✓	50.0	48.5	97.1
MJ Cal 5	5	✓	75.0	74.0	98.6
MJ Cal 6	6	✓	100.0	101.7	101.7
MJ Cal 7	7	✓	250.0	249.9	100.0

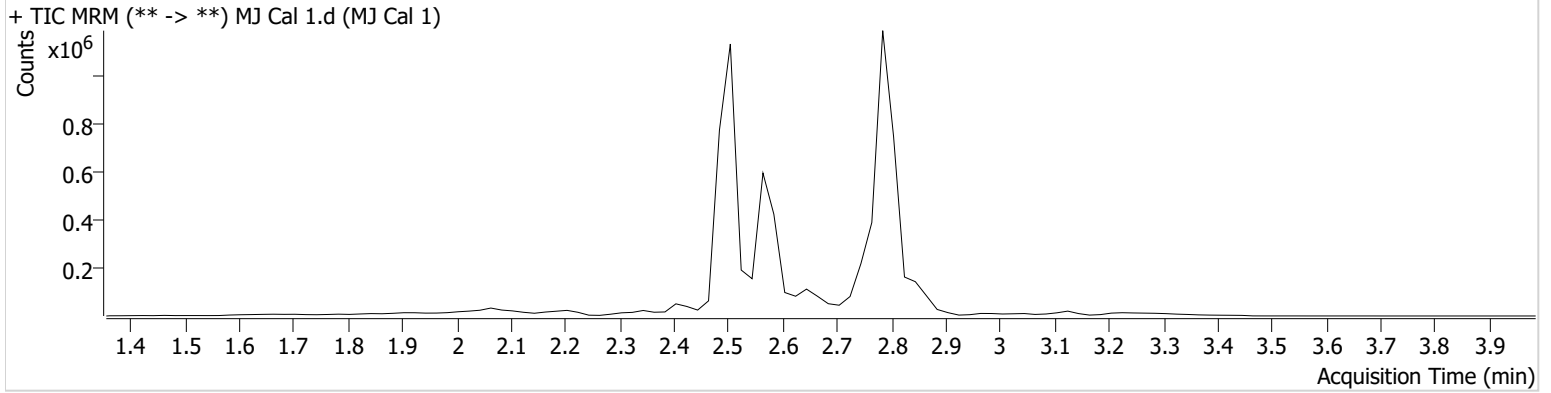
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 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	7/23/2021 1:06:02 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	50806	849783	5.5573 ng/ml

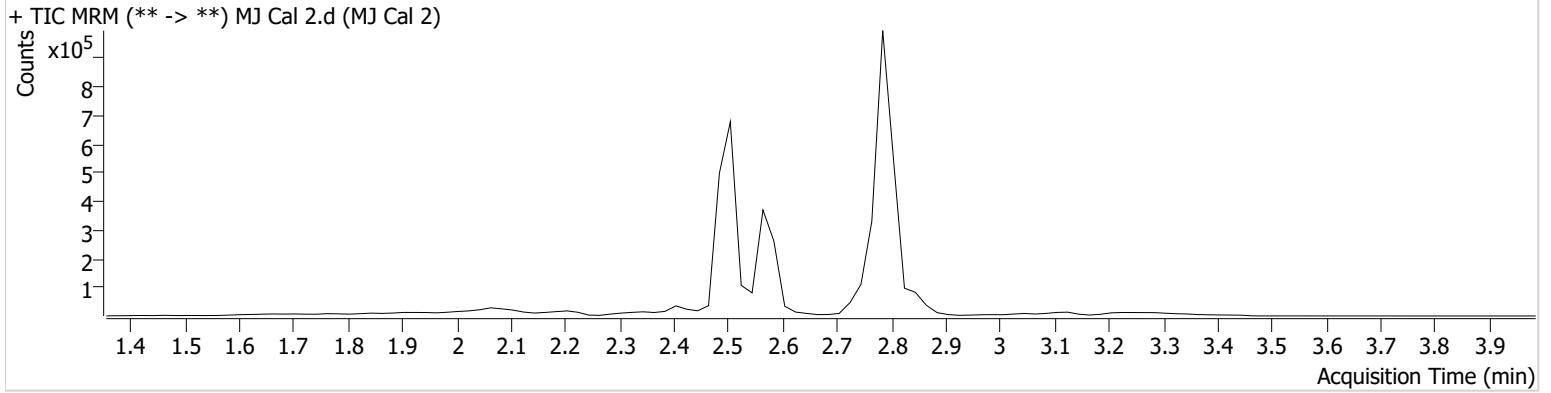
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 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	7/23/2021 1:12:44 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	64658	548305	10.4289 ng/ml

AM #26 Cannabinoids Screen Results

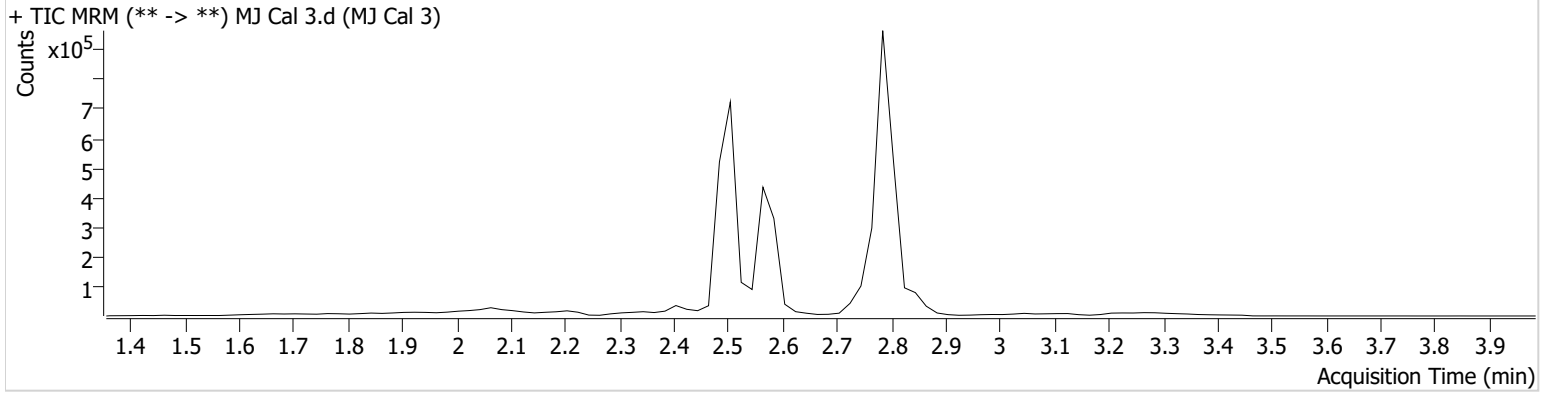


Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 AM

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	7/23/2021 1:19:15 PM		

Sample Info.

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	127820	552774	19.9240 ng/ml

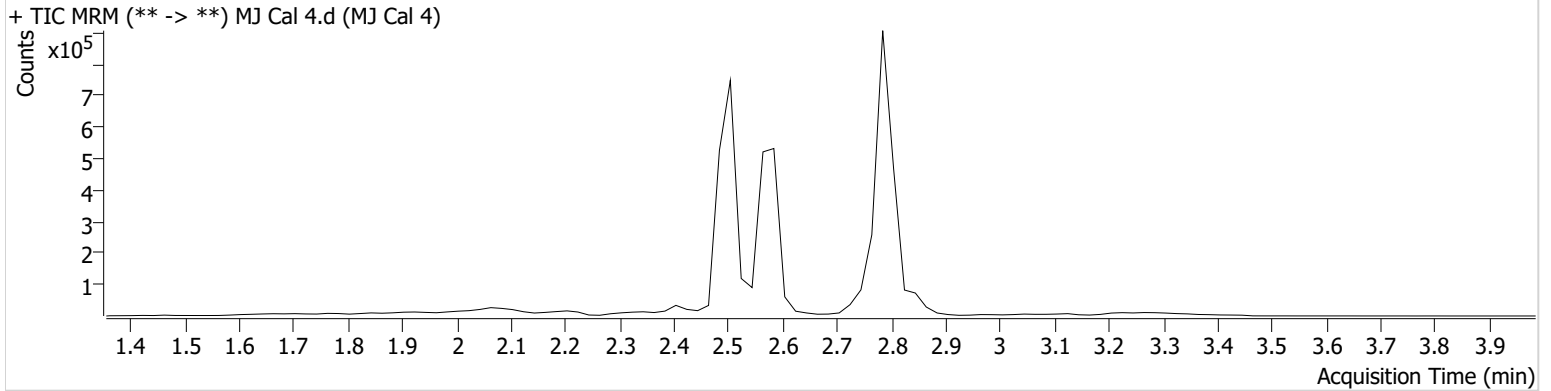
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 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	7/23/2021 1:25:46 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	290893	507823	48.5481 ng/ml

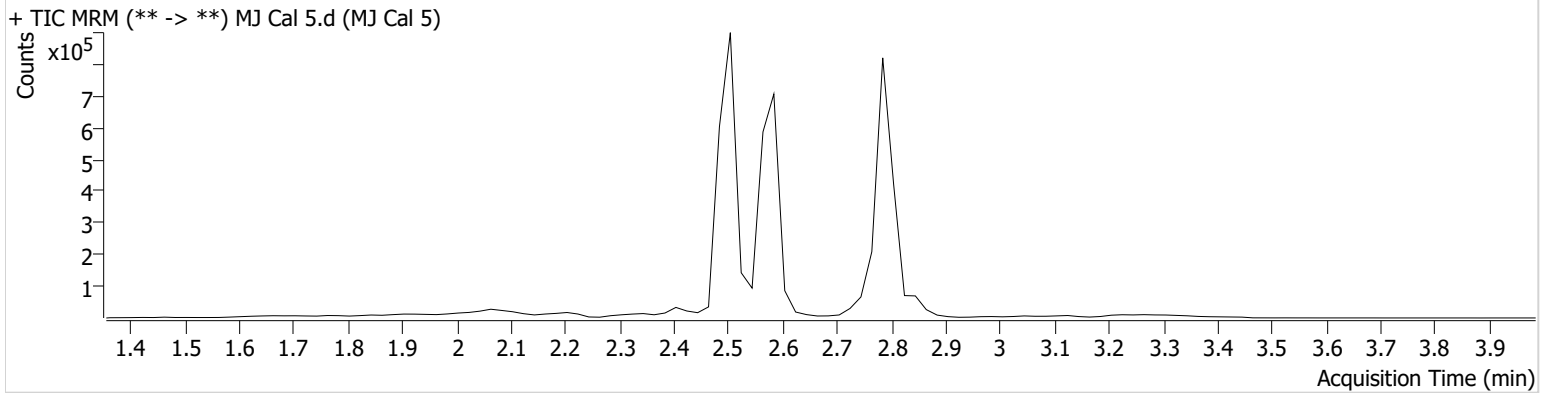
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 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	7/23/2021 1:32:18 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	419391	478718	73.9592 ng/ml

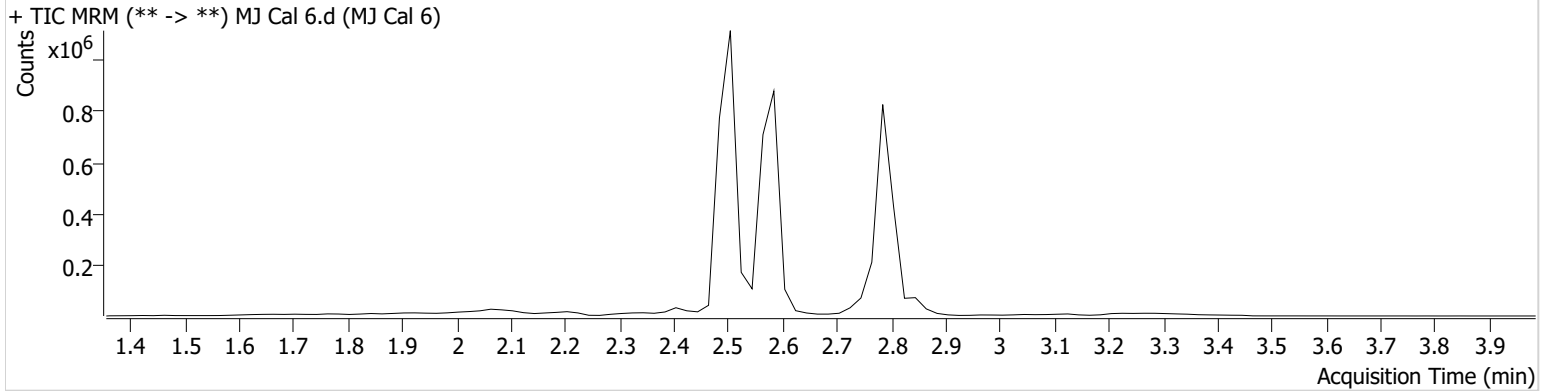
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 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	7/23/2021 1:38:49 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	570993	473160	101.6703 ng/ml

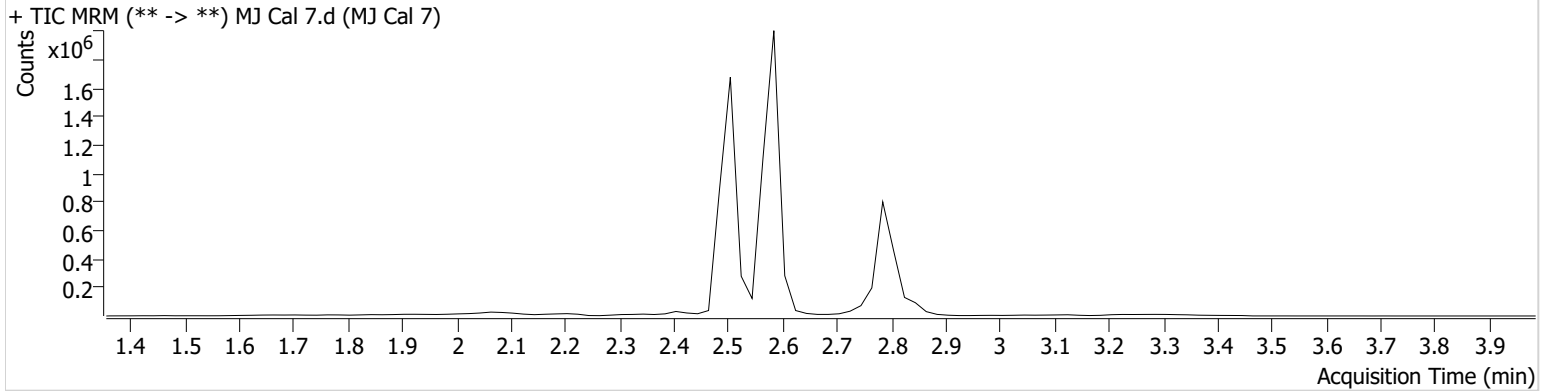
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2021\AM 25-26\072321 AM 25 26 CS\QuantResults\AM 26 THC-COOH Only.batch.bin
Calibration Last Update 8/4/2021 6:38:19 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	7/23/2021 1:45:20 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC-COOH	2.587	1343586	451500	249.9123 ng/ml