REVIEWED
By Celena Shrum at 3:07 pm, May 19, 2021

SC TS 5/19/2021

Worklist: 4963

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2021-1608	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2021-1769	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2021-1882	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1098	1	URINE	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1098	2	URINE	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1098	3	URINE	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1257	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1262	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1263	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1328	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1410	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1440	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1447	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2021-1518	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ

SC TS

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

Extraction Date: 05/10/2021 Analyst: Tamara Salazar
Plate lot#: IDP-120-201206 Plate Expiration: 06/06/2021
Mobile phase A: 10mM Amm Form **Mobile phase B:** 0.1% Formic Acid in MeOH
Instant Buffer I Ethyl Acetate LC Methanol
Blank Blood Lot: Lampire 20L20723 **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. Urine Hydrolysis: In blank well, add 250µL urine, 40µL BG Turbo, and 100µL Instant Buffer I. Place on plate shaker for 5 minutes.
☒ 3. Using a calibrated pipette, pipette **250µL blood and urine** (if applicable) into wells of analytical (standards) plate. **Pipette ID: 42**
☒ 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 5. Pipette **250µL 0.5 M ammonium hydroxide** in wells of analytical plate.
☒ 6. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 7. Transfer **200-450µL of blood+base and urine+base (if applicable)** mixture to corresponding wells of SLE+ plate. Amount transferred: *300uL*
☒ 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 **900uL ethyl acetate.**
☒ 11. Wait 5 minutes.
☒ 12. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 13. Add **900uL ethyl acetate.**
☒ 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. If run contains urine, add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying.
☒ 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

however there was 05/19/21 TS

COMMENTS: Extraction performed on 05/11/2021, ~~however~~ a high background in the blanks proceeding the sample injections. The background was cleared and the plate was injected on 05/12/2021.

Sarah Collins added sample P2021-0961-1 to the AM 25 multi-drug screen urine hydrolysis plate. The remainder of the analysis was performed by Tamara Salazar. Sarah Collins approved of all techniques and methods utilized during the extraction. SC

SC TS

	1	2	3	4	5	6	7	8	9	10
A	IS + Cal. 1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2021-1098-1	P2021-1440-1	IS + Sample	IS + Sample	IS + Sample
B	IS + Cal. 1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	P2021-1098-2	P2021-1447-1	IS + Sample	IS + Sample	IS + Sample
C	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Neg Blood	P2021-1098-3	P2021-1518-1	IS + Sample	IS + Sample	IS + Sample
D	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Urine Control	P2021-1257-1	P2021-0961-1 Sarah Collins addition	IS + Sample	IS + Sample	IS + Sample
E	IS + Sample	IS + Sample	IS + Sample	IS + Sample	Neg Urine	P2021-1262-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample
F	IS + Sample	IS + Sample	IS + Sample	IS + Sample	M2021-1608-1	P2021-1263-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample
G	IS + Sample	IS + Sample	IS + Sample	IS + Sample	M2021-1769-3	P2021-1328-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample
H	IS + Sample	IS + Sample	IS + Sample	IS + Sample	M2021-1882-2	P2021-1410-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample

All wells to contain 60 µl of residual DMSO

11	12
IS + Sample	IS + Sample
IS + Sample	IS + Sample
IS + Sample	IS + Sample
IS + Sample	IS + Sample
IS + Sample	IS + Sample
IS + Sample	IS + Sample
IS + Sample	IS + Cal. 1
IS + Sample	IS + Cal. 1

SC TS

Idaho State Police Forensic Services

AM #25 Blood and 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: 031820)

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

Component	*Source*	*Source Lot Number*	*Expiration Date*
Methanol (LCMS)	Fisher	193068	
O-desmethyl Tramadol	Cerilliant	FN01241702	04/30/2022
Amphetamine	Cerilliant	FE04061701	06/30/2022
Alprazolam	Cerilliant	FE07061604	07/31/2021
Prepared: 03/18/20			
Prepared By: Sarah Pickle			
Expires: 03/18/21			

Urine External Control Solution (Lot: WS052220)

200 ul of methanol external control solution was added to 9800 ul of urine. Approximately 100ng/mL of each compound.

Component	*Source*	*Source Lot Number*
Negative Urine	Pocatello Lab	POC031319
Methanol External Control Solution		031820
Prepared:	05/22/20	
Prepared by:	Celena Shrum	
Expires:	03/18/21	

TS

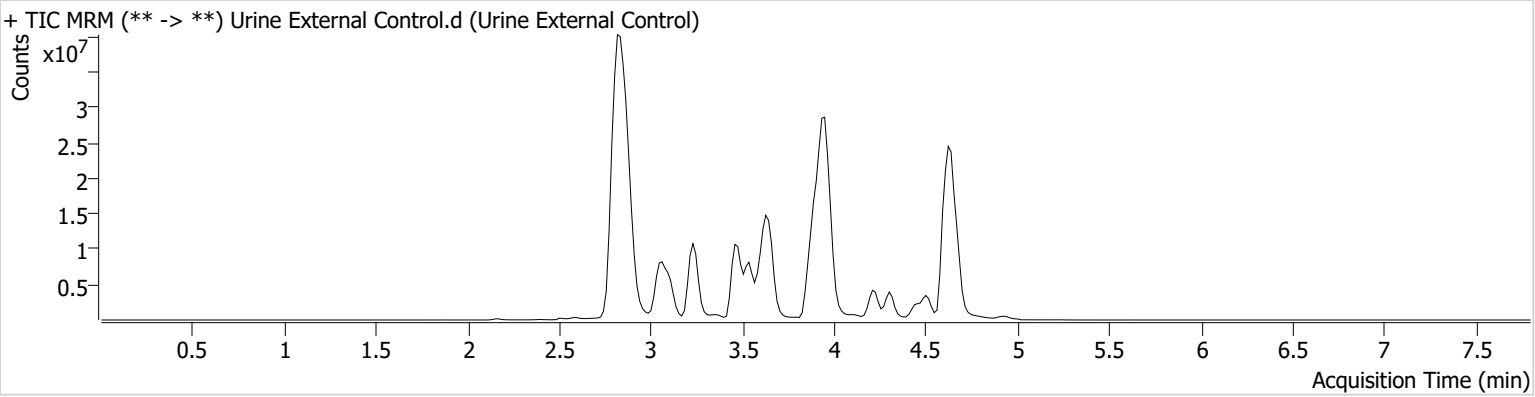
Per AM 21 section 4.2.2, reference material used for urine controls used in analytical methods 25-30 may be expired since urine results are reported qualitatively only.

AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 25 TS.batch.bin
Calibration Last Update	5/12/2021 2:01:34 PM

Instrument	Falco (069901)	**Data File**	Urine External Control.d
Type	Sample	**Sample**	Urine External Control
Acq. Method	AM 25 MDS.m	**Operator**	Tamara Salazar
Sample Position	P2-D5	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/12/2021 8:53:53 AM		
Sample Info.			

Sample Chromatogram



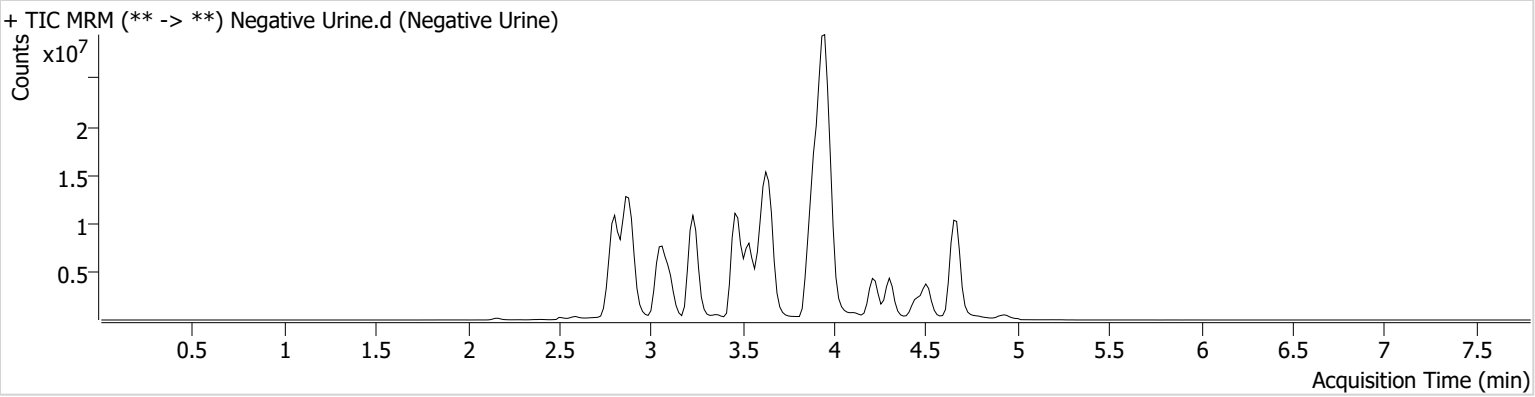
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.626	44659158	5062.53	4609.47	38875636	79.4790
Amphetamine	2.829	43801531	1631.31	6816.44	13325223	83.2931
O-desmethyl-tramadol	2.853	59425279	934.83	767.77	57476545	42.8038

AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 25 TS.batch.bin
Calibration Last Update	5/12/2021 2:01:34 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-E5	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/12/2021 9:02:17 AM		
Sample Info.			

Sample Chromatogram

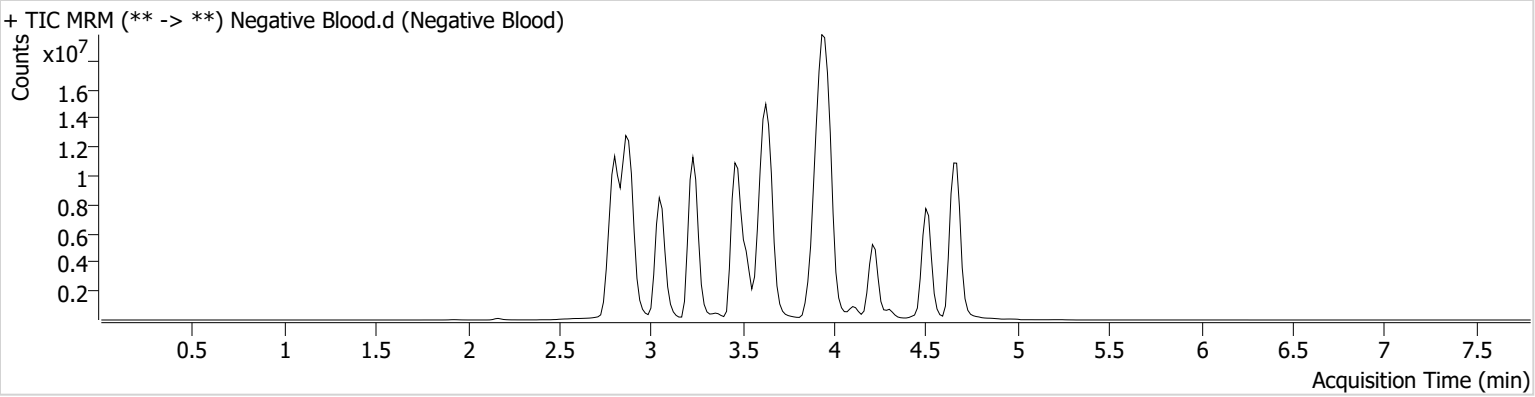


AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 25 TS.batch.bin
Calibration Last Update	5/12/2021 2:01:34 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-C5	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/12/2021 8:45:30 AM		
Sample Info.			

Sample Chromatogram

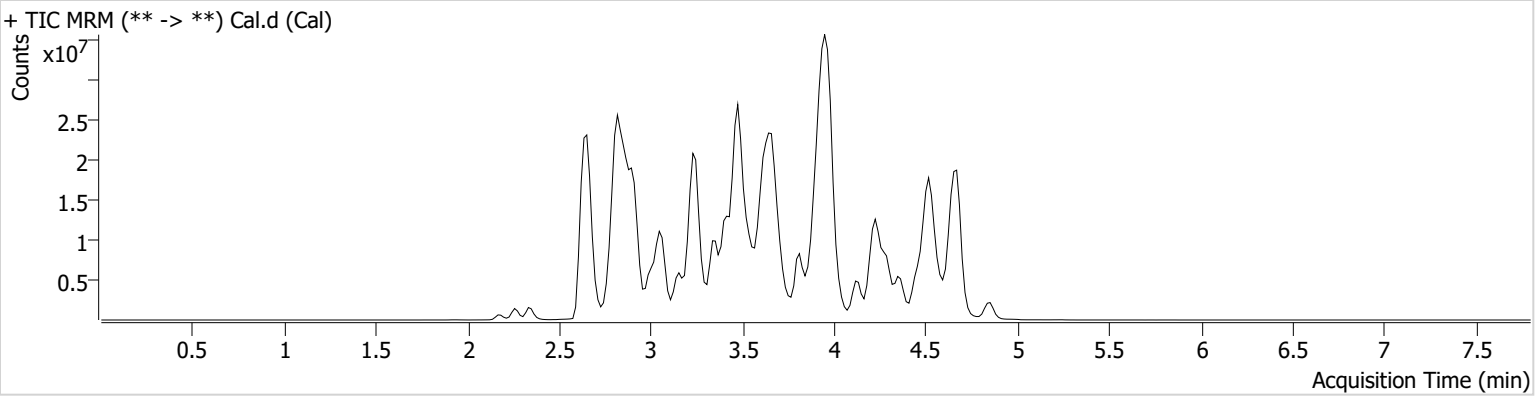


AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 25 TS.batch.bin
Calibration Last Update	5/12/2021 2:01:34 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	5/12/2021 8:36:55 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	2.786	99092	780.53	105323.60	3332214	10.0000
7-aminoclonazepam	3.538	2750154	394.00	541.97	11092679	10.0000
7-aminoflunitrazepam	3.753	4001491	518.23	354.94	11092679	10.0000
Acetyl Fentanyl	3.657	464893	321.39	313282.64	44338048	10.0000
Acetyl Norfentanyl	2.825	647137	1006.14	543.12	44338048	10.0000
a-hydroxyalprazolam	4.515	771931	951.78	392.89	11092679	10.0000
alpha-hydroxymidazolam	4.468	4141447	673.11	1393.11	11092679	10.0000
Alpha-PHP	3.680	6488542	76266.88	15084.94	44338048	10.0000
alpha-PVP	3.422	9315687	3238.72	536.38	17745374	10.0000
Alprazolam	4.610	6465483	771.26	842.21	44732221	10.0000
Amitriptyline	4.308	604173	49.61	427.31	2733506	10.0000
Amphetamine	2.829	7003107	816.01	957.11	17745374	10.0000
Benzoylecgonine	3.369	439308	323.90	183.54	817763	10.0000
Brompheniramine	3.918	137600	157.67	291.28	53927543	10.0000
Buprenorphine	3.945	985183	11631.20	122073.98	4333747	10.0000
Bupropion	3.620	7935739	1800.14	424.27	28644757	10.0000
Carbamazepine	4.234	19218546	∞	1114.69	1954382	10.0000
Carisoprodol	4.233	2972371	2066.68	308.16	18266809	10.0000
Chlordiazepoxide	4.551	2461256	1072.37	4673.46	44732221	10.0000
Chlorpheniramine	3.830	9697565	5634.35	29.43	53927543	10.0000
Citalopram	3.964	4161680	480.55	1647568.69	53927543	10.0000
Clomipramine	4.501	558551	1321.32	296.40	53927543	10.0000
Clonazepam	4.455	4939967	683.97	1481242.40	44732221	10.0000
Clonazolam	4.375	4383974	25376.16	1064388.95	44732221	10.0000
Cocaethylene	3.673	9041219	7898845.85	1721.62	43643617	10.0000
Cocaine	3.460	10272040	8509019.96	338.17	43643617	10.0000
Codeine	2.683	665195	2176.96	1606.69	18076687	10.0000
Cyclobenzaprine	4.231	1216736	344.53	27.84	2733506	10.0000
Desipramine	4.278	1790072	706.04	229.35	2733506	10.0000
Dextromethorphan	3.954	2714174	853.25	594.99	14249740	10.0000
Dextrorphan	3.280	4709241	1821.60	847.80	14249740	10.0000
Diazepam	4.859	3861041	∞	2361.37	44732221	10.0000
Dihydrocodeine	2.652	1601265	747.17	511.75	18076687	10.0000
Diphenhydramine	3.925	13334157	2651.33	1301.19	53927543	10.0000

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Doxepin	4.029	1448451	2107.40	84.04	20848193	10.0000
Doxylamine	3.478	17400634	1090.30	380.48	14249740	10.0000
EDDP	3.983	2674576	796.85	297.74	5793420	10.0000
Estazolam	4.535	13747612	1412.39	856.45	44732221	10.0000
Etizolam	4.636	805098	394306.40	2509.54	44732221	10.0000
Fentanyl	3.870	284521	94.08	134626.03	19333081	10.0000
Flualprazolam	4.484	2339766	1747938.03	2181.12	44732221	10.0000
Flunitrazepam	4.564	7460499	3442.72	6334.72	44732221	10.0000
Fluoxetine	4.242	559180	1055.90	12.41	793352	10.0000
Flurazepam	3.992	5872259	969.42	748.66	44732221	10.0000
Hydrocodone	2.866	2542895	1711.34	1644.32	18076687	10.0000
Hydromorphone	2.336	2526101	1690.96	2913.55	332312	10.0000
Imipramine	4.276	3255843	4192.20	462.73	2733506	10.0000
Ketamine	3.251	7027646	4109.80	261.81	26608564	10.0000
Lamotrigine	3.403	630507	1483.49	65562.29	53927543	10.0000
Levamisole	2.826	5276245	9815.33	6701.18	43643617	10.0000
Levetiracetam	2.659	1793746	291.94	528.26	53927543	10.0000
Lorazepam	4.439	1630441	7834.66	∞	44732221	10.0000
Maprotiline	4.308	415228	142.54	73.80	2733506	10.0000
MDA	2.933	6359879	645.08	177.20	40870441	10.0000
MDEA	3.146	8654436	2166.97	9929.95	40870441	10.0000
MDMA	3.009	11316511	1860.62	1184.18	40870441	10.0000
Meperidine	3.481	4434592	692.97	572.47	14249740	10.0000
Meprobamate	3.668	1667081	6520.97	575.47	18266809	10.0000
Methadone	4.288	8323566	989.18	717.58	5793420	10.0000
Methamphetamine	2.920	14011194	615.41	447.98	40870441	10.0000
Methocarbamol	3.573	1251620	740.48	60.90	5793420	10.0000
Methylphenidate	3.421	19967312	2279.58	2403.59	33959840	10.0000
Metoprolol	3.356	1264716	713.54	684411.34	14249740	10.0000
Midazolam	4.285	838085	∞	5264.24	44732221	10.0000
Mirtazapine	3.555	4314981	2758.69	4735.06	14249740	10.0000
Mitragynine	4.006	490619	230685.74	666834.00	14249740	10.0000
Morphine	2.171	436459	∞	1288.57	332312	10.0000
Norbuprenorphine	3.715	116735	106.96	48528.51	4333747	10.0000
Nordiazepam	4.707	3386044	1004.97	1000.14	44732221	10.0000
Norfentanyl	3.252	13033560	17860.22	3245.81	44338048	10.0000
Norhydrocodone	2.852	63721	48759.56	11.37	332312	10.0000
Norketamine	3.222	1316192	351.31	3130.57	26608564	10.0000
Normeperidine	3.513	5339819	901.24	691.71	53927543	10.0000
Noroxycodone	2.820	1813168	298.12	118.64	26608564	10.0000
Nortriptyline	4.309	342037	2032.37	47.99	2733506	10.0000
O-desmethyl-tramadol	2.853	13025925	2089.04	654.83	53927543	10.0000
Olanzapine	3.046	1069527	424244.68	537.66	1954382	10.0000
Oxazepam	4.521	6624963	683.77	465.03	29671242	10.0000
Oxycodone	2.818	5598597	631.79	5089.86	26608564	10.0000
Oxymorphone	2.256	2840248	507.72	410.15	332312	10.0000
Paroxetine	4.239	85280	29.09	1759.45	793352	10.0000
Phenazepam	4.651	6262992	5681491.53	4437488.19	44732221	10.0000
Phencyclidine	3.819	9533202	3523.53	566.67	14249740	10.0000
Phentermine	3.072	3098373	317.00	30.80	33959840	10.0000
Phenytoin	4.141	3480855	1787.28	1373.78	1954382	10.0000
Promethazine	4.198	3616875	1382.85	252.87	53927543	10.0000
Pseudoephedrine	2.662	63022028	7303.34	3396.71	40870441	10.0000
Quetiapine	4.114	4722616	1175.28	2363.17	42873932	10.0000
Sertraline	4.442	140316	364.40	61.57	793352	10.0000
Sufentanil	4.129	170451	84316.27	86.77	44338048	10.0000
Tapentadol	3.360	10255630	3824.23	669.57	26608564	10.0000
Temazepam	4.673	10847406	4463.46	367.89	44732221	10.0000
Tramadol	3.341	16493183	2103.18	120.26	53927543	10.0000
Trazodone	3.946	4326860	1102.68	2168.33	20848193	10.0000

Cal

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Venlafaxine	3.707	12050810	2335.09	652.04	793352	10.0000
Zaleplon	4.351	6805047	1354.82	1322.99	42873932	10.0000
Zolpidem	3.659	13708086	3431.61	4177.83	42873932	10.0000
Zopiclone	3.609	1224361	371144.18	415380.12	6961557	10.0000

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

Extraction Date: 05/10/2021 Analyst: Tamara Salazar

Plate lot#: ICP-108-2-201206 10mM Ammonium Formate 01/27/23 Plate Expiration: 06/06/2021 0.1% Formic Acid in Methanol 01/27/23

Mobile phase A: ~~0.1% Formic Acid in LCMS Water~~ **Mobile phase B:** ~~0.1% Formic acid in Acetonitrile~~

Blank Blood Lot: Lampire 20L20723 **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. Urine hydrolysis: add 1.5mL urine to blank plate, add 250µl 1N KOH. Shake and incubate at 40 degrees for 15 minutes.
Using a calibrated pipette, add **1000µl blood and urine (if applicable) (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, 500 µL saturated phosphate buffer in urine** in wells of analytical plate.

☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.

☒ 6. Transfer **700-800µL of blood+acid or urine+acid** mixture to corresponding wells of SLE+ plate.
Amount transferred: 800uL

☒ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).
(Load at 85-100 PSI- Selector to the right)

☒ 8. Wait 5 minutes.

☒ 9. Add **2.25mL MTBE. (*Add in 3 increments of 750uL)***

☒ 10. Wait 5 minutes.

☒ 11. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***

☒ 12. Add **2.25mL Hexane. (*Add in 3 increments of 750uL)***

☒ 13. Wait 5 minutes.

☒ 14. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***

☒ 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.

☒ 16. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

☒ 1. Create batch and process data.

☒ 2. Make any necessary integration changes, R^2 values ≥0.98 for each analyte

☒ 3. RT +/- 2% or 0.100 min, whichever is greater

☒ 4. Confirmation testing on case samples with a response for THC and OH-THC of 3ng/mL or greater and/or Carboxy-THC at 10ng/mL or greater (analyst discretion between 5-10ng/mL) may be pursued.

☒ 5. Did all QCs pass for each analyte? (if not, describe in comments section)

☒ 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

~~SC~~ TS

	1	2	3	4	5	6
A	IS + Cal. 1	IS + Sample	IS + Sample	P2021-1447-1	P2021-1098-2	IS + QC_1
B	IS + Cal. 2	IS + Sample	IS + Sample	P2021-1440-1	P2021-1098-1	IS + Cal. 7
C	IS + Cal. 3	IS + Sample	IS + Sample	P2021-1410-1	M2021-1882-2	IS + Cal. 6
D	IS + Cal. 4	IS + Sample	IS + Sample	P2021-1328-1	M2021-1769-3	IS + Cal. 5
E	IS + Cal. 5	IS + Sample	IS + Sample	P2021-1263-1	M2021-1608-1	IS + Cal. 4
F	IS + Cal. 6	IS + Sample	IS + Sample	P2021-1262-1	Neg Urine	IS + Cal. 3
G	IS + Cal. 7	IS + Sample	IS + Sample	P2021-1257-1	Urine Control	IS + Cal. 2
H	IS + QC_1	IS + Sample	P2021-1518-1	P2021-1098-3	Neg Blood	IS + Cal. 1

All wells to contain 100 µl of residual DMSO

SC

TS

Idaho State Police Forensic Services

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

Methanol External Control Solution (Lot: 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.

Component	***Source***	***Source Lot Number***	***Expiration Date***
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		
Prepared By:	Tamara Salazar/Amber Gerheart		

Urine External Control Solution (Lot: 04232021)

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

Approximately 20ng/mL each

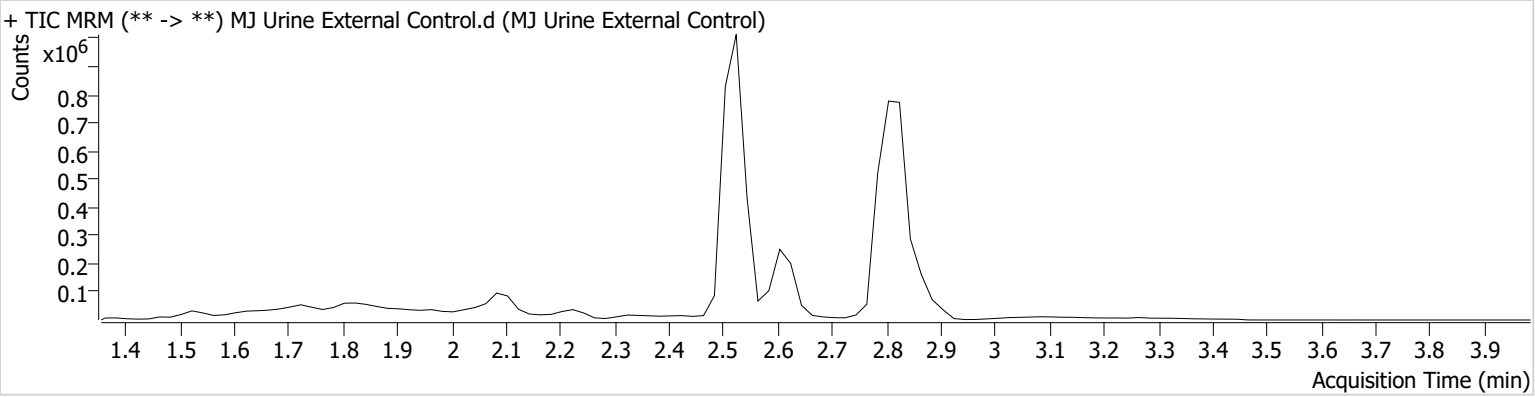
Component	***Source***	***Source Lot Number***
Negative Blood	Lampire	20L20724
Methanol External Control Solution	-	WS03052021
Prepared:	04/23/2021	
Prepared by:	Sarah Collins	

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update	5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Urine External Control.d
Type	Sample	**Sample**	MJ Urine External Control
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-G5	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 12:42:50 PM		
Sample Info.			

Sample Chromatogram



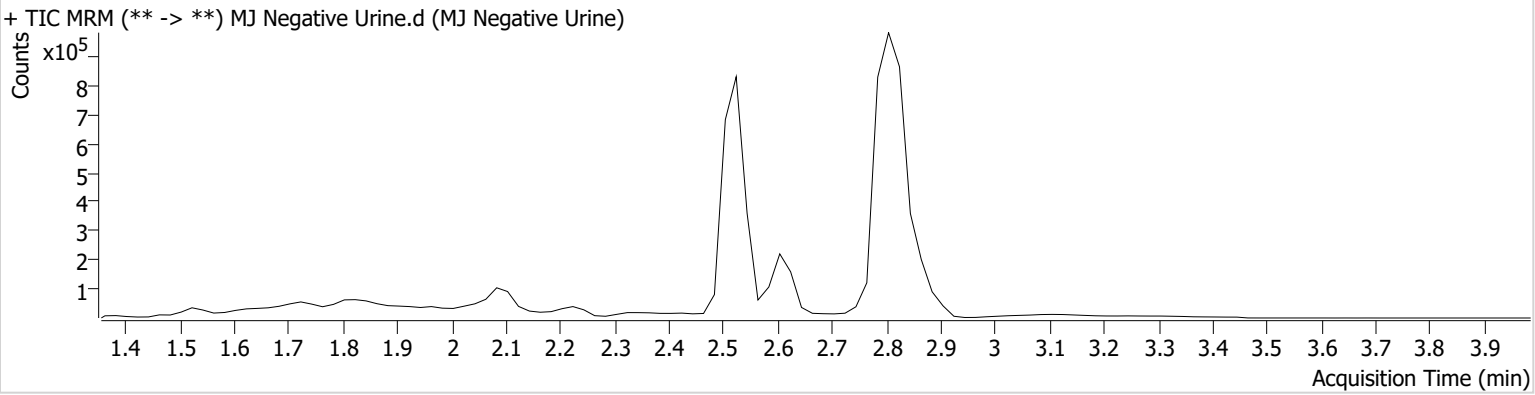
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.879	15219	174733	10.6017 ng/ml
THC-COOH	2.627	64692	481459	10.8048 ng/ml
THC-OH	2.534	39740	2513522	10.3840 ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update	5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Negative Urine.d
Type	Sample	**Sample**	MJ Negative Urine
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-F5	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 12:49:24 PM		
Sample Info.			

Sample Chromatogram

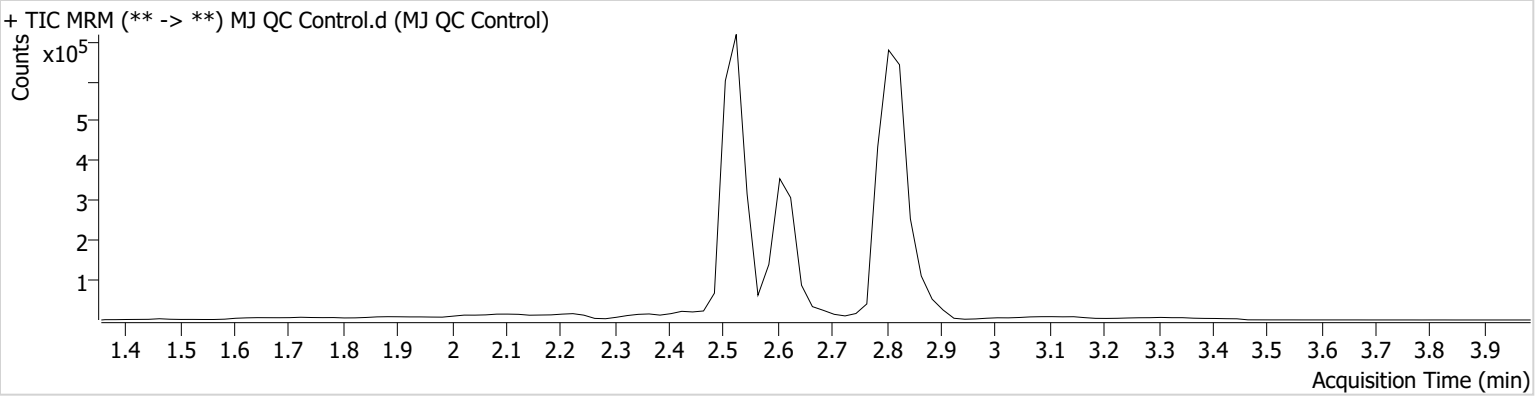


AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update	5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ QC Control.d
Type	Sample	**Sample**	MJ QC Control
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-A6	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 12:23:12 PM		
Sample Info.			

Sample Chromatogram



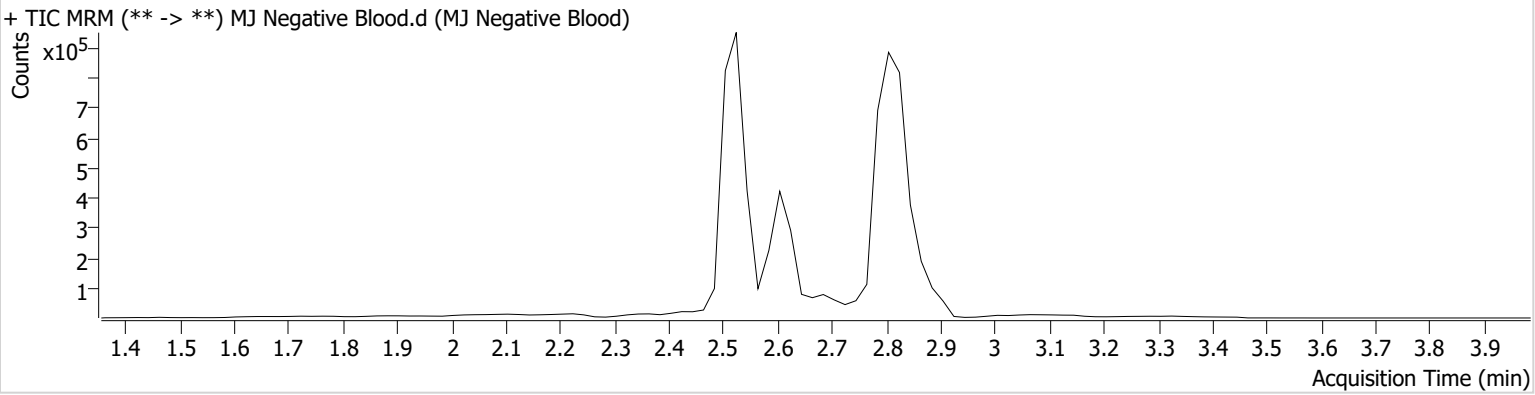
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.859	4893	128153	4.6054	ng/ml
THC-COOH	2.627	116203	621693	14.7264	ng/ml
THC-OH	2.534	13346	1919324	4.4322	ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update	5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Negative Blood.d
Type	Sample	**Sample**	MJ Negative Blood
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-H5	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 12:36:18 PM		
Sample Info.			

Sample Chromatogram

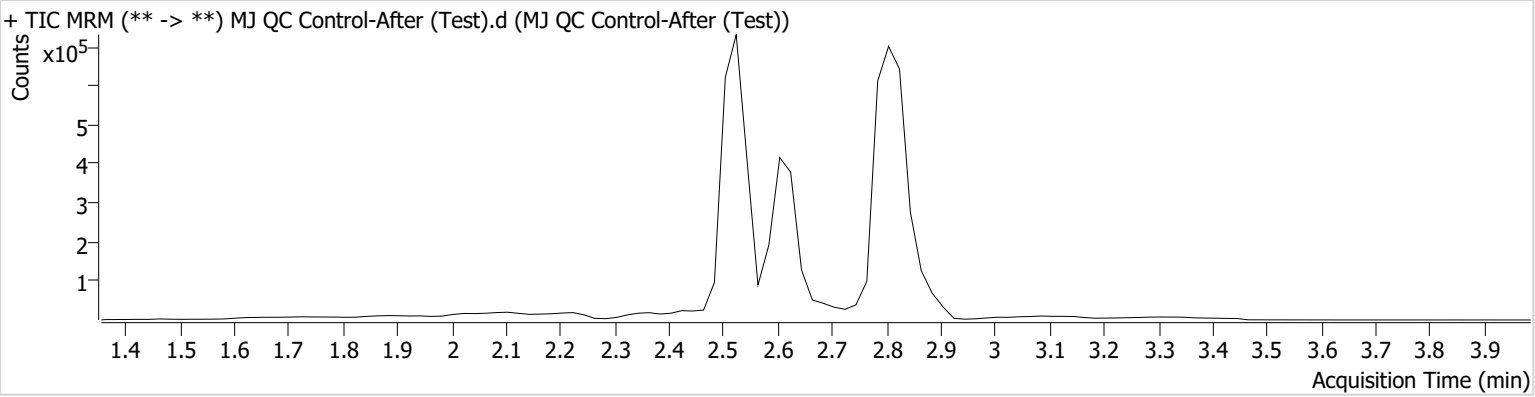


AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update	5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ QC Control-After (Test).d
Type	Sample	**Sample**	MJ QC Control-After (Test)
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-A6	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 3:14:42 PM		
Sample Info.			

Sample Chromatogram

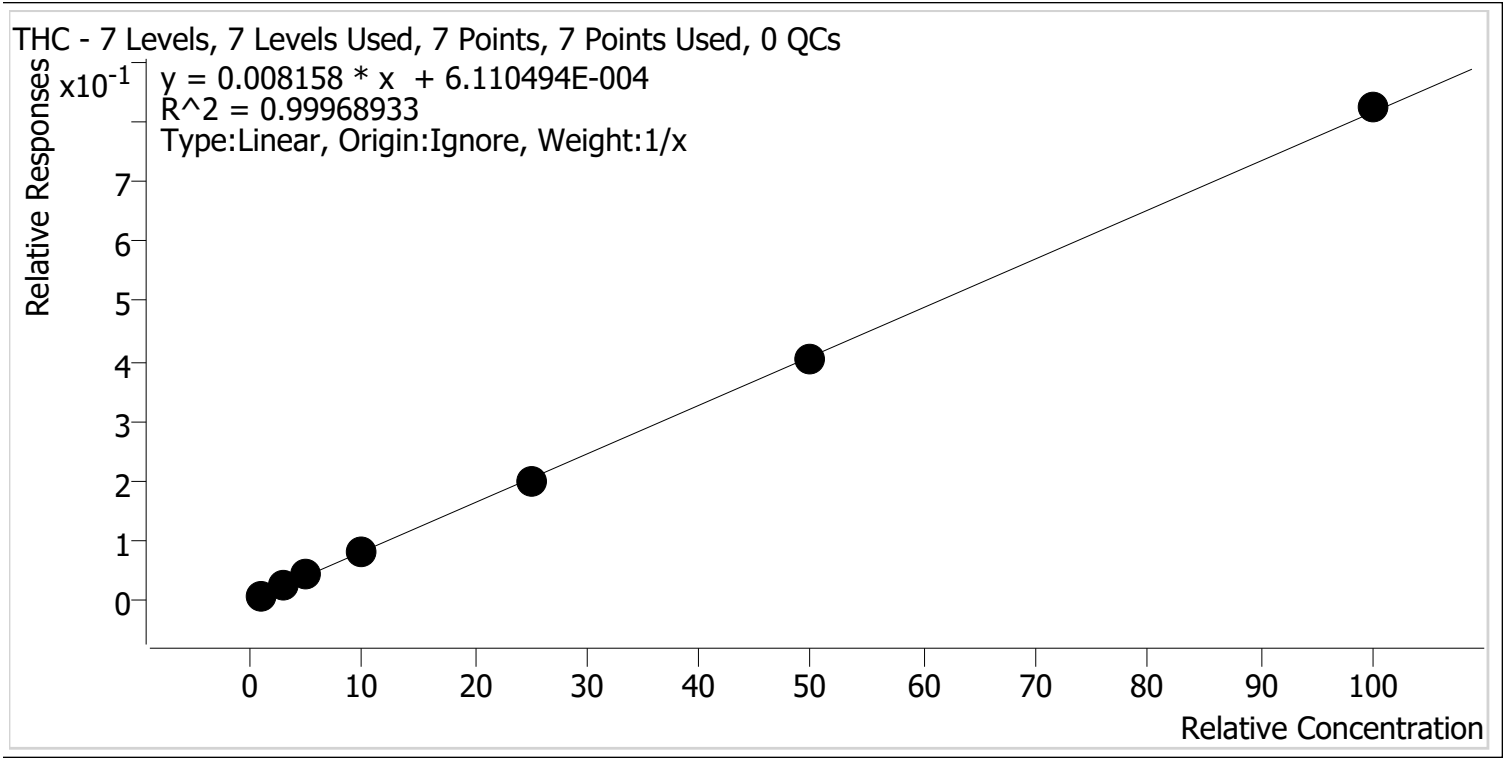


Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.859	4285	112889	4.5780	ng/ml
THC-COOH	2.627	145371	784630	14.6040	ng/ml
THC-OH	2.534	15332	2101544	4.6620	ng/ml

SC TS

AM #26 Cannabinoids Screen Calibration Curve Report

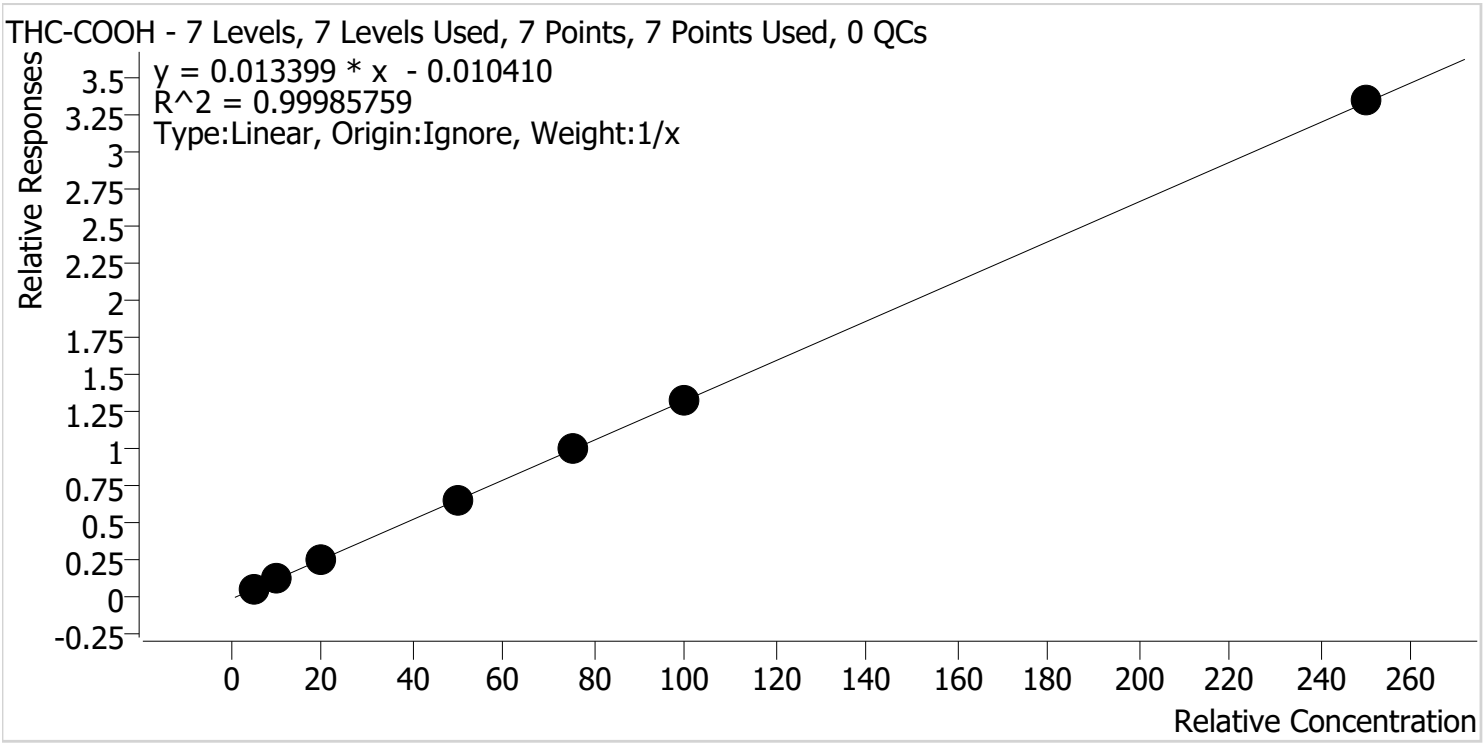
Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Last Cal. Update	5/11/2021 3:25 PM
Analyst Name	ISP\datastor
Analyte	THC
Internal Standard	THC-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	1.0	1.0	99.7
MJ Cal 2	2	✔	3.0	2.9	98.3
MJ Cal 3	3	✔	5.0	5.2	103.5
MJ Cal 4	4	✔	10.0	10.2	101.8
MJ Cal 5	5	✔	25.0	24.1	96.6
MJ Cal 6	6	✔	50.0	49.6	99.3
MJ Cal 7	7	✔	100.0	100.9	100.9

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Last Cal. Update	5/11/2021 3:25 PM
Analyst Name	ISP\datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-D9

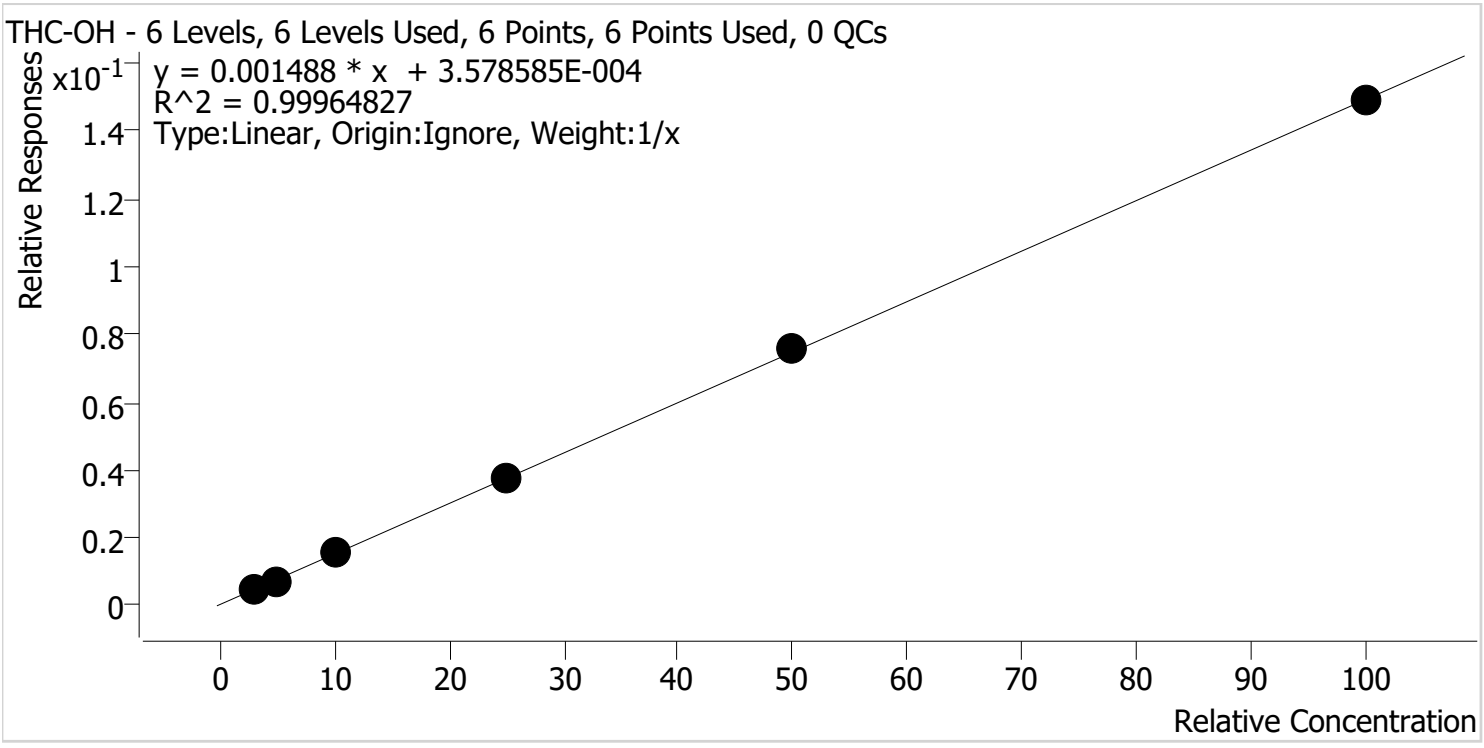


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	5.0	5.2	103.1
MJ Cal 2	2	✔	10.0	9.5	95.4
MJ Cal 3	3	✔	20.0	20.6	102.9
MJ Cal 4	4	✔	50.0	49.6	99.1
MJ Cal 5	5	✔	75.0	74.9	99.9
MJ Cal 6	6	✔	100.0	99.3	99.3
MJ Cal 7	7	✔	250.0	251.0	100.4

SC TS

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Last Cal. Update	5/11/2021 3:25 PM
Analyst Name	ISP\datastor
Analyte	THC-OH
Internal Standard	THC-OH-D3



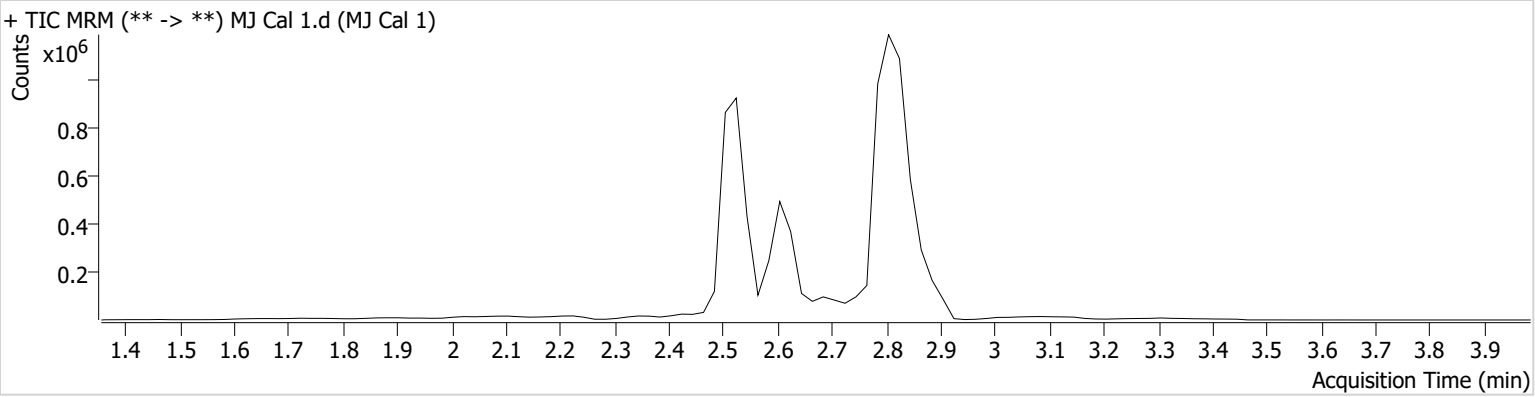
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 2	2	✔	3.0	3.2	105.2
MJ Cal 3	3	✔	5.0	4.6	92.2
MJ Cal 4	4	✔	10.0	10.3	102.7
MJ Cal 5	5	✔	25.0	24.9	99.5
MJ Cal 6	6	✔	50.0	50.4	100.7
MJ Cal 7	7	✔	100.0	99.7	99.7

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Cal 1.d
Type	Cal	**Sample**	MJ Cal 1
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-H6	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 11:37:13 AM		
Sample Info.			

Sample Chromatogram



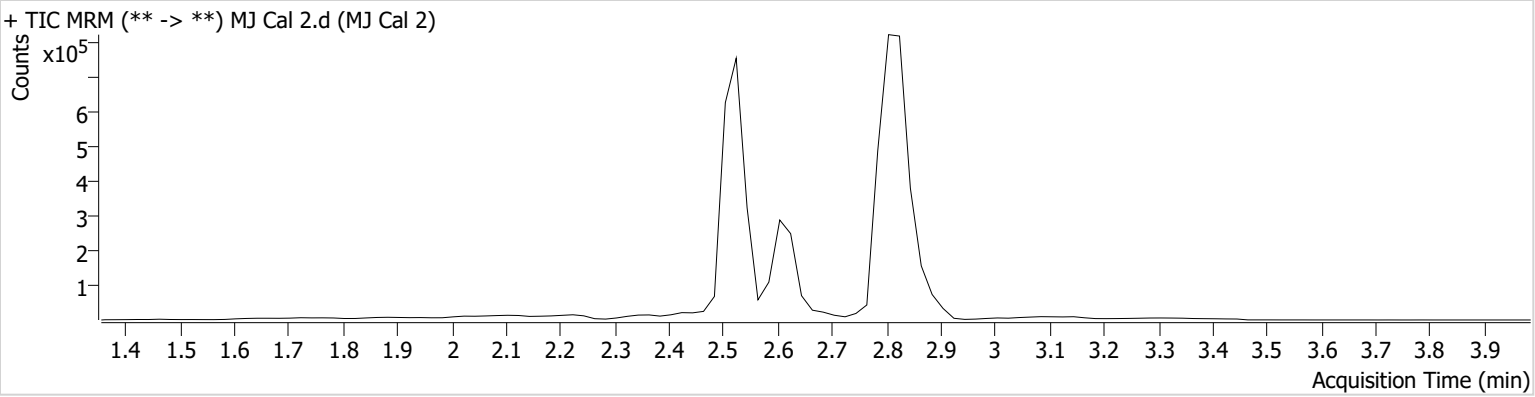
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	2.859	2186	250091	0.9966	ng/ml	Low
THC-COOH	2.627	56973	971600	5.1531	ng/ml	

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update	5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Cal 2.d
Type	Cal	**Sample**	MJ Cal 2
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-G6	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 11:43:55 AM		
Sample Info.			

Sample Chromatogram



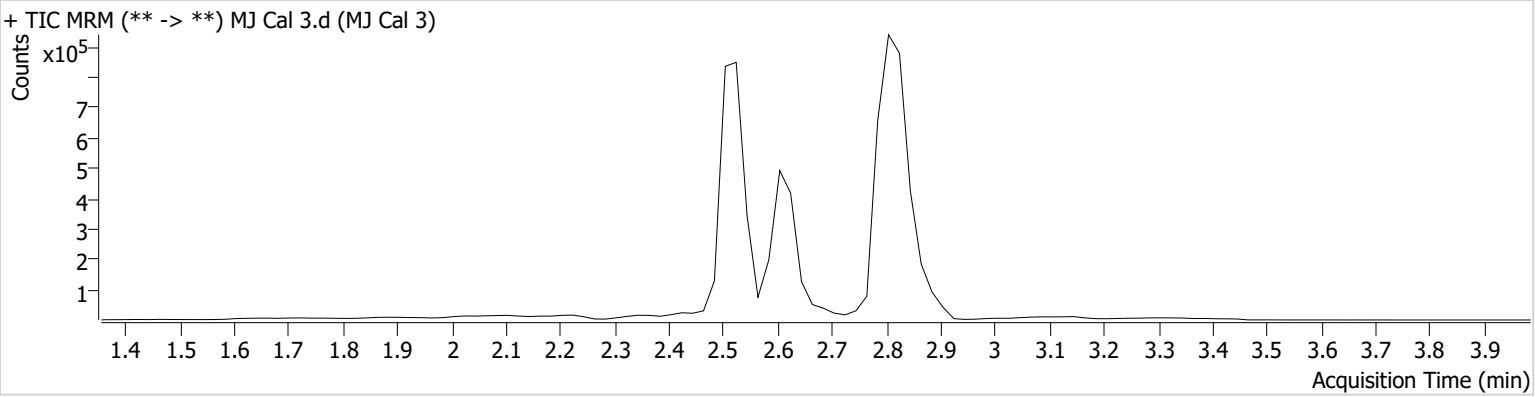
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	2.859	4333	175711	2.9479	ng/ml	**Low**
THC-COOH	2.627	65635	559136	9.5375	ng/ml	
THC-OH	2.534	10234	2024250	3.1569	ng/ml	

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Cal 3.d
Type	Cal	**Sample**	MJ Cal 3
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-F6	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 11:50:26 AM		
Sample Info.			

Sample Chromatogram



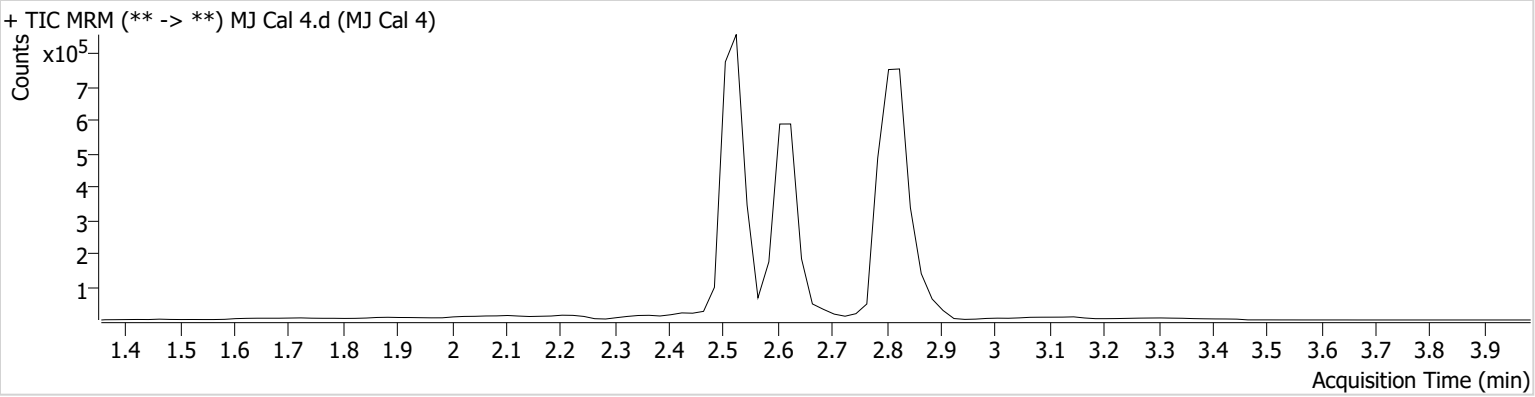
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.859	7886	184071	5.1770	ng/ml
THC-COOH	2.627	204731	771923	20.5707	ng/ml
THC-OH	2.534	17084	2367238	4.6092	ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update	5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Cal 4.d
Type	Cal	**Sample**	MJ Cal 4
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-E6	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 11:56:58 AM		
Sample Info.			

Sample Chromatogram



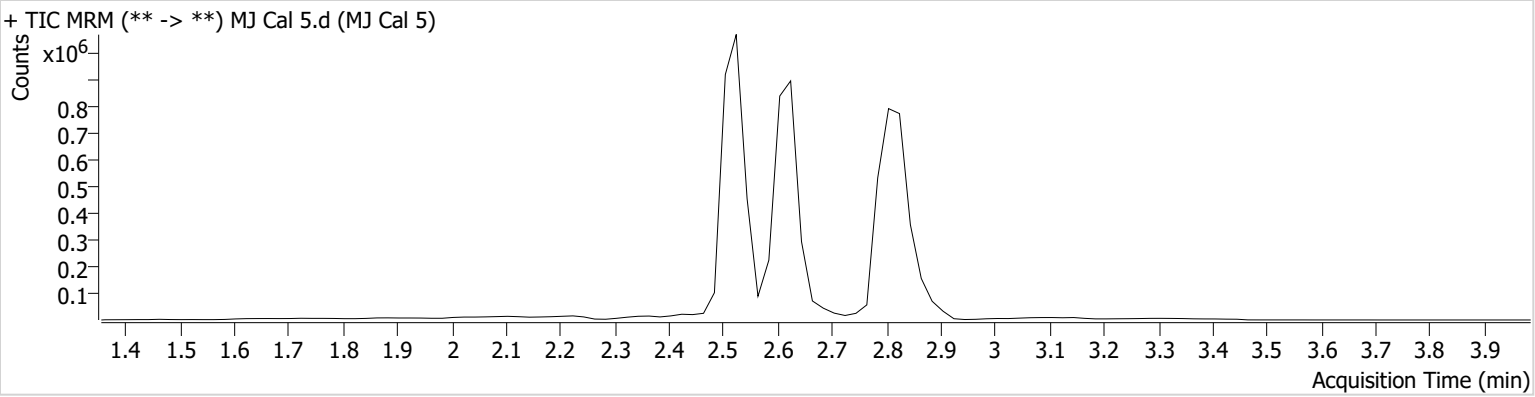
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.859	13068	156222	10.1789 ng/ml
THC-COOH	2.627	413774	632941	49.5656 ng/ml
THC-OH	2.534	33723	2156800	10.2665 ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update	5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Cal 5.d
Type	Cal	**Sample**	MJ Cal 5
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-D6	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 12:03:31 PM		
Sample Info.			

Sample Chromatogram



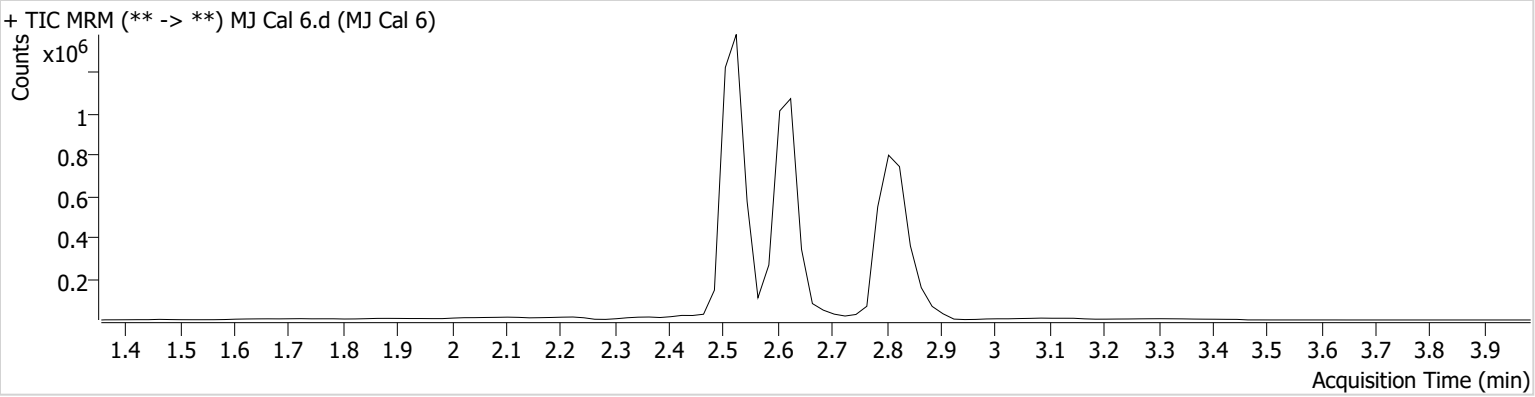
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.859	33136	167757	24.1379 ng/ml
THC-COOH	2.627	710367	714879	74.9369 ng/ml
THC-OH	2.534	85576	2290682	24.8637 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Cal 6.d
Type	Cal	**Sample**	MJ Cal 6
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-C6	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 12:10:05 PM		
Sample Info.			

Sample Chromatogram



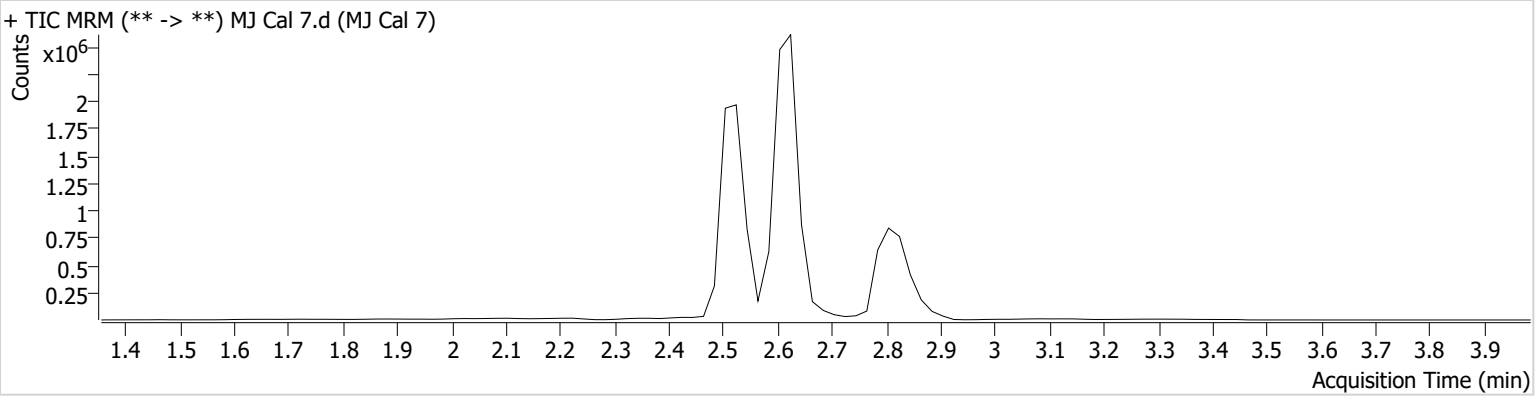
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.859	66619	164276	49.6355 ng/ml
THC-COOH	2.627	913051	691788	99.2782 ng/ml
THC-OH	2.534	180970	2403168	50.3631 ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2021\AM 25-26\051121 AM 25 26 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update	5/11/2021 3:25:02 PM

Instrument	Falco (069901)	**Data File**	MJ Cal 7.d
Type	Cal	**Sample**	MJ Cal 7
Acq. Method	AM 26 THCS.m	**Operator**	Tamara Salazar
Sample Position	P1-B6	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/11/2021 12:16:38 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.859	128315	155731	100.9263	ng/ml
THC-COOH	2.627	2692668	803245	250.9580	ng/ml
THC-OH	2.514	390584	2625159	99.7406	ng/ml