REVIEWED
By Tamara Salazar at 8:54 am, Feb 17, 2022

2/14/2022

Worklist: 5594

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2022-0019	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2022-0019	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2022-0067	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2022-0181	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2022-0200	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2022-0200	4	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2022-0203	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2022-0460	4	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2022-0465	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0096	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0184	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0191	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0202	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0307	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0322	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0322	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0322	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0328	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0349	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2022-0350	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: 02/10/2022
Plate lot#: 211015
Mobile phase A: 10mM Amm Form
Instant Buffer I
Blank Blood Lot: Lampire 20L20725
LCMS-QQQ 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: 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: M2021-5427-3 and P2022-0071-1 from worklist 5550 were also included in this run.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Cal				M2022-0019-1	M2022-0465-3	P2022-0322-3					
B					M2022-0019-2	P2022-0096-1	P2022-0328-2					
C					M2022-0067-3	P2022-0184-2	P2022-0349-1					
D					M2022-0181-1	P2022-0191-1	P2022-0350-1					
E					M2022-0200-3	P2022-0202-2	M2021-5427-3					
F				NEG Blood	M2022-0200-4	P2022-0307-1	P2022-0071-1					
G				NEG Urine	M2022-0203-3	P2022-0322-1						
H				Urine External Ctrl.	M2022-0460-4	P2022-0322-2						

Idaho State Police
Forensic Services

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

Methanol External Control Solution (Lot: 120320)

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

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

Urine External Control Solution (Lot: WS110521)

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

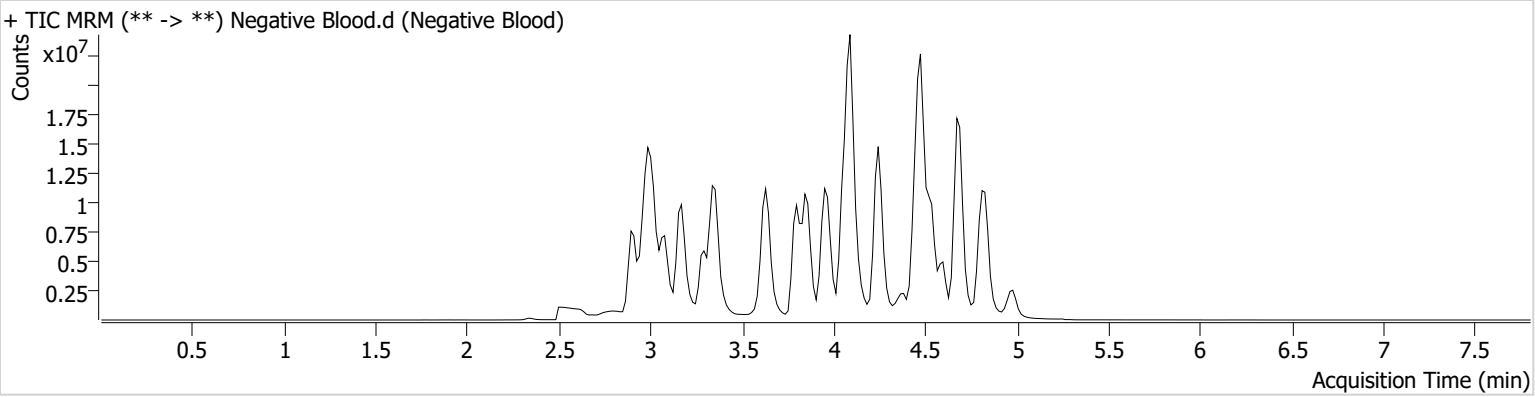
Component	*Source*	*Source Lot Number*
Negative Urine	Pocatello Lab	POC031319
Methanol External Control Solution		120320
Prepared:	11/05/2021	
Prepared by:	Celena Shrum	

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 25 MDS.batch.bin
Calibration Last Update 2/16/2022 8:03:23 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	P6-F4	**Comment**	
Injection Volume	5		
Acq. Date-Time	2/10/2022 7:40:38 PM		
Sample Info.			

Sample Chromatogram

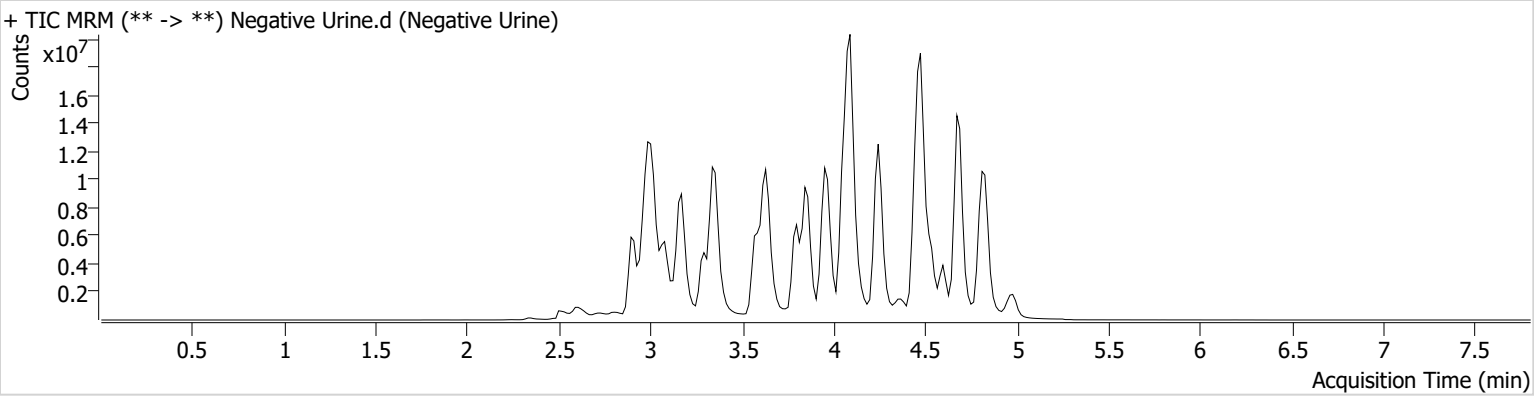


AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 25 MDS.batch.bin
Calibration Last Update	2/16/2022 8:03:23 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	P6-G4	**Comment**	
Injection Volume	5		
Acq. Date-Time	2/10/2022 7:49:03 PM		
Sample Info.			

Sample Chromatogram

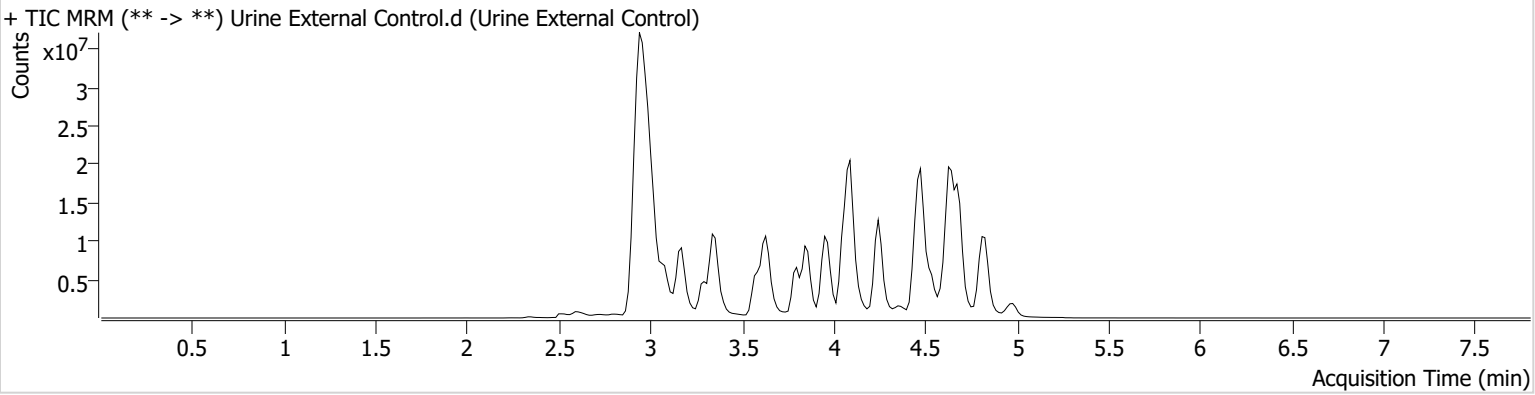


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 25 MDS.batch.bin
Calibration Last Update 2/16/2022 8:03:23 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	P6-H4	**Comment**	
Injection Volume	5		
Acq. Date-Time	2/10/2022 7:57:29 PM		
Sample Info.			

Sample Chromatogram



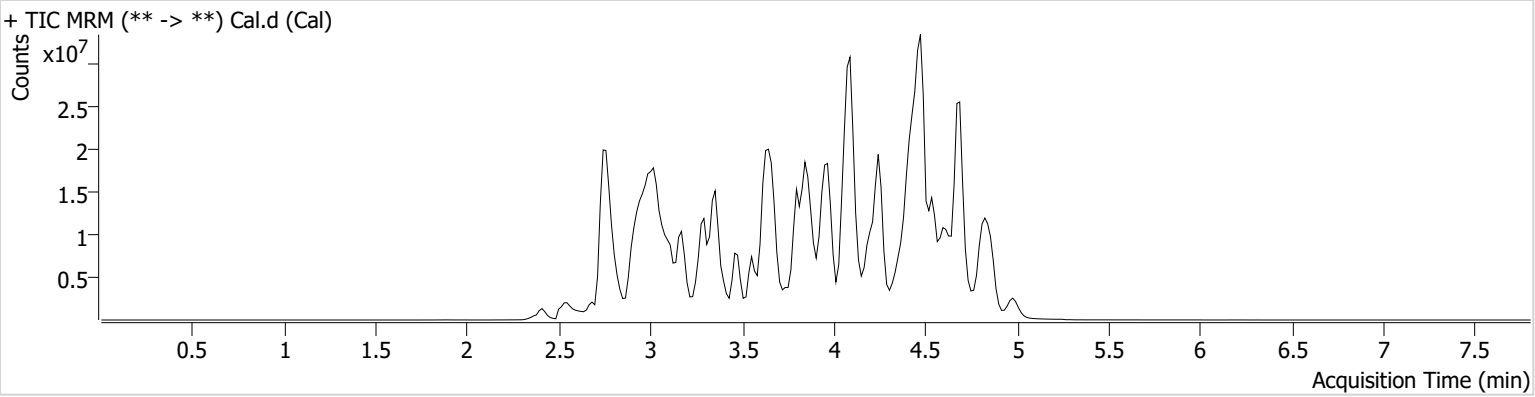
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.631	32133096	358.95	171.51	29082973	95.9073
Amphetamine	2.936	40550914	48338.49	576.60	15417481	93.0078
O-desmethyl-tramadol	2.961	58156297	47910.01	866.62	54918276	53.5720

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 25 MDS.batch.bin
Calibration Last Update 2/16/2022 8:03:23 AM

Instrument	Falco (069901)	**Data File**	Cal.d
Type	Cal	**Sample**	Cal
Acq. Method	AM 25 MDS.m	**Operator**	Celena Shrum
Sample Position	P6-A1	**Comment**	
Injection Volume	5		
Acq. Date-Time	2/10/2022 7:32:04 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	3.000	73869	26028.53	1412.30	2185430	10.0000
7-aminoclonazepam	3.602	1116619	1067.03	283.28	4406472	10.0000
7-aminoflunitrazepam	3.802	1324424	252.52	517.45	4406472	10.0000
Acetyl Fentanyl	4.029	569640	608.25	160247.01	36216561	10.0000
Acetyl Norfentanyl	2.932	561734	448.08	542.63	36216561	10.0000
a-hydroxyalprazolam	4.536	429328	70.60	102.97	4406472	10.0000
alpha-hydroxymidazolam	4.611	3487098	498.98	9655.19	4406472	10.0000
Alpha-PHP	3.914	4746665	17927.67	2411.66	36216561	10.0000
alpha-PVP	3.638	6368834	609.78	528.10	20174710	10.0000
Alprazolam	4.631	3295466	360.36	684.88	28605837	10.0000
Amitriptyline	4.482	3190861	350.52	419.74	10977049	10.0000
Amphetamine	2.936	5705257	1042.76	1725.36	20174710	10.0000
Benzoylecgonine	3.402	322231	242.28	12.58	624547	10.0000
Brompheniramine	4.076	175202	218.52	459.37	54193808	10.0000
Buprenorphine	5.005	1885923	6046.96	136178.88	7161597	10.0000
Bupropion	3.884	7240051	733.94	668.84	28025389	10.0000
Carbamazepine	4.270	12395764	∞	990.12	612938	10.0000
Carisoprodol	4.252	1732702	3929.85	52.04	9339258	10.0000
Chlordiazepoxide	4.771	1686062	358.62	1937.57	28605837	10.0000
Chlorpheniramine	3.988	10926322	17958.37	9.08	54193808	10.0000
Citalopram	4.106	4529162	762.54	589.79	54193808	10.0000
Clomipramine	4.692	6026349	12199.29	2703.76	54193808	10.0000
Clonazepam	4.476	1677760	216.86	151.66	28605837	10.0000
Clonazolam	4.396	1837174	1655.01	406074.59	28605837	10.0000
Cocaethylene	3.845	7114165	4243754.94	6052.63	36245925	10.0000
Cocaine	3.631	7281425	4120.42	397.78	36245925	10.0000
Codeine	2.912	519524	383.09	5333.29	14429220	10.0000
Cyclobenzaprine	4.405	5112278	786.22	81.30	10977049	10.0000
Desipramine	4.406	9578458	3835.32	14999.55	10977049	10.0000
Dextromethorphan	4.112	3142604	7763.12	8043.07	17931609	10.0000
Dextrorphan	3.405	3262428	41731.47	2428.40	17931609	10.0000
Diazepam	4.864	2058553	1913.51	870.77	28605837	10.0000
Dihydrocodeine	2.789	1502477	1053.06	587.29	14429220	10.0000
Diphenhydramine	4.083	14909617	2632.20	524.16	54193808	10.0000

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Doxepin	4.204	3398914	573.10	79.12	39718653	10.0000
Doxylamine	3.665	15675031	5108.41	10987.81	17931609	10.0000
EDDP	4.096	1050137	793.33	23274.13	2702856	10.0000
Estazolam	4.557	8186586	724.01	1217.72	28605837	10.0000
Etizolam	4.642	319272	288765.77	908.69	28605837	10.0000
Fentanyl	4.259	458411	148.72	132312.80	30579144	10.0000
Flualprazolam	4.505	977488	2130.81	679999.63	28605837	10.0000
Flunitrazepam	4.585	3185647	941.39	307.04	28605837	10.0000
Fluoxetine	4.370	5654004	984.23	390.67	12406712	10.0000
Flurazepam	4.318	4776294	268.58	123416.89	28605837	10.0000
Hydrocodone	3.110	2230757	4916.83	615.72	14429220	10.0000
Hydromorphone	2.549	1683779	2573.57	3222.44	445363	10.0000
Imipramine	4.435	9147062	2895.21	359.69	10977049	10.0000
Ketamine	3.761	5573029	7838.77	180.65	18543960	10.0000
Lamotrigine	3.667	447124	397.07	5349.33	54193808	10.0000
Levamisole	3.071	4606699	27634.79	432.44	36245925	10.0000
Levetiracetam	2.690	1714535	402.86	1128.03	54193808	10.0000
Lorazepam	4.460	517849	171.52	166.57	28605837	10.0000
Maprotiline	4.482	1536930	200.93	2242.79	10977049	10.0000
MDA	3.041	4112423	768.20	5.48	38295717	10.0000
MDEA	3.270	6914209	969.53	344.36	38295717	10.0000
MDMA	3.117	8843634	2290.41	322.78	38295717	10.0000
Meperidine	3.667	3900769	2731.29	4405.52	17931609	10.0000
Meprobamate	3.701	977616	662.14	77.08	9339258	10.0000
Methadone	4.416	9583641	304.69	232.70	2702856	10.0000
Methamphetamine	3.042	11785513	4656.68	713.99	38295717	10.0000
Methocarbamol	3.606	617946	319.21	521.03	2702856	10.0000
Methylphenidate	3.561	15610967	378.07	242.09	27454022	10.0000
Metoprolol	3.465	923818	171.77	606.90	17931609	10.0000
Midazolam	4.781	1057135	357.12	1910.86	28605837	10.0000
Mirtazapine	4.206	4795335	7682.81	84518.10	17931609	10.0000
Mitragynine	4.317	822343	859232.81	1113952.65	17931609	10.0000
Morphine	2.382	394707	∞	1778.70	445363	10.0000
Norbuprenorphine	3.871	98713	55855.72	56771.86	7161597	10.0000
Nordiazepam	4.728	2349932	1697.62	∞	28605837	10.0000
Norfentanyl	3.361	9008973	439.24	152.30	36216561	10.0000
Norhydrocodone	2.959	113910	51.89	23.85	445363	10.0000
Norketamine	3.885	1102600	237.81	1461.25	18543960	10.0000
Normeperidine	3.638	3881257	1166.71	617.79	54193808	10.0000
Noroxycodone	2.911	1417560	275.24	159.30	18543960	10.0000
Nortriptyline	4.437	3048319	1053.41	479.46	10977049	10.0000
O-desmethyl-tramadol	2.961	10712519	14295.83	170.36	54193808	10.0000
Olanzapine	3.938	2642932	1726045.09	9480.81	612938	10.0000
Oxazepam	4.541	3750068	1142.89	434.46	17086220	10.0000
Oxycodone	2.986	3699373	418.28	803.54	18543960	10.0000
Oxymorphone	2.408	1653011	9172.93	297.93	445363	10.0000
Paroxetine	4.366	748750	56842.42	360435.10	12406712	10.0000
Phenazepam	4.672	3070639	554.31	267920.44	28605837	10.0000
Phencyclidine	3.945	8038195	569.19	847.11	17931609	10.0000
Phentermine	3.196	2121264	3284.36	104.61	27454022	10.0000
Phenytoin	4.161	873132	15628.98	335.64	612938	10.0000
Promethazine	4.419	11099964	11566703.08	294.76	54193808	10.0000
Pseudoephedrine	2.767	65555476	11937.00	1633.16	38295717	10.0000
Quetiapine	4.671	6516777	3096489.03	764.51	44828887	10.0000
Sertraline	4.601	2239239	935962.27	1177.55	12406712	10.0000
Sufentanil	4.670	474268	249289.30	324.15	36216561	10.0000
Tapentadol	3.485	6760039	1063.37	548.14	18543960	10.0000
Temazepam	4.694	5736922	372.16	675.97	28605837	10.0000
Tramadol	3.466	12605262	1194.49	110.98	54193808	10.0000
Trazodone	4.854	9728374	2134.91	1006.58	39718653	10.0000

Cal

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Venlafaxine	3.833	8857883	333119.31	216.97	12406712	10.0000
Zaleplon	4.371	3101711	974.36	269.49	44828887	10.0000
Zolpidem	4.478	12309813	2403.08	2086.83	44828887	10.0000
Zopiclone	4.394	797523	7263.49	2807.96	3850899	10.0000

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

Extraction Date: 02/10/2022
Plate lot#: 211018
Mobile phase A: 0.1% Formic Acid in LCMS Water
Blank Blood Lot: Lampire 20L20725
LCMS-QQQ ID: 069901

Analyst: Celena Shrum
Plate Retest Date: 04/18/2022
Mobile phase B: 0.1% Formic acid in Acetonitrile
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, 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, 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: P2022-0015-2 from worklist 5550 was also included in this run.

	1	2	3	4	5	6
a	cal 1ng	QC 2	M2022-0200-3	P2022-0202-2		
b	cal 3 ng	NEG Blood	M2022-0200-4	P2022-0307-1		
c	cal 5 ng	NEG Urine	M2022-0203-3	P2022-0322-1		
d	cal 10ng	P2022-0015-2	M2022-0460-4	P2022-0322-2		
e	cal 25 ng	M2022-0019-1	M2022-0465-3	P2022-0322-3		
f	cal 50 ng	M2022-0019-2	P2022-0096-1	P2022-0328-2		
g	cal 100 ng	M2022-0067-3	P2022-0184-2	P2022-0349-1		
h	QC 1	M2022-0181-1	P2022-0191-1	P2022-0350-1		

IDAHO STATE POLICE

MEMORANDUM

DATE: 3/3/2022

TO: Toxicology Discipline/ Jason Crowe

FROM: Celena Shrum- Toxicology Discipline lead

SUBJECT: Use of internal control in lieu of external control

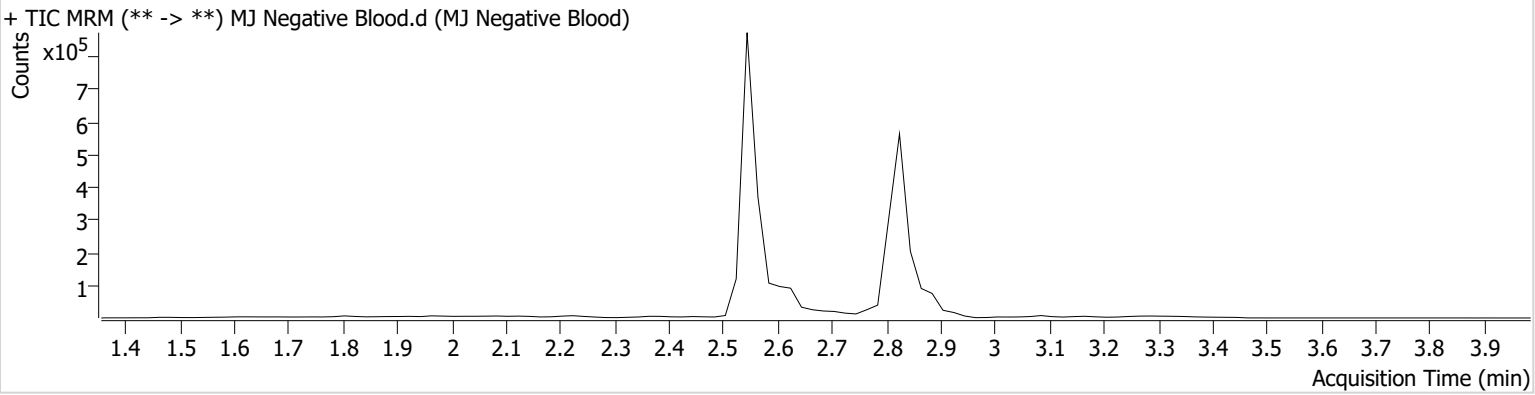
Toxicology Analytical Methods #25, 26, and 27 specify that if a run contains urine samples, a negative control and **external** urine control must also be included in the run. The purpose of this control is to demonstrate that the extraction worked as intended and to ensure that the results and concentrations obtained are accurate. It was decided in October 2021 that extra QC's would be included on the analytical plates so that they could be used as an internal control for runs with urine cases instead of continuing with including an external control. An internal control serves the same purpose as an external control but is prepared and placed on the analytical plate rather than being prepared in-house and placed on the plate at the time of testing. Utilizing internal controls versus external increases the efficacy of the controls used by ensuring consistent spiking and preparation, eliminating evaporation of compounds, etc. There is no quality issue with any of the cases, since an additional urine control was used that served the same purpose as the external control, but it was a violation of the wording specified in the method.

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update	2/16/2022 8:04:24 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	P5-B2	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 3:57:30 PM		
Sample Info.			

Sample Chromatogram

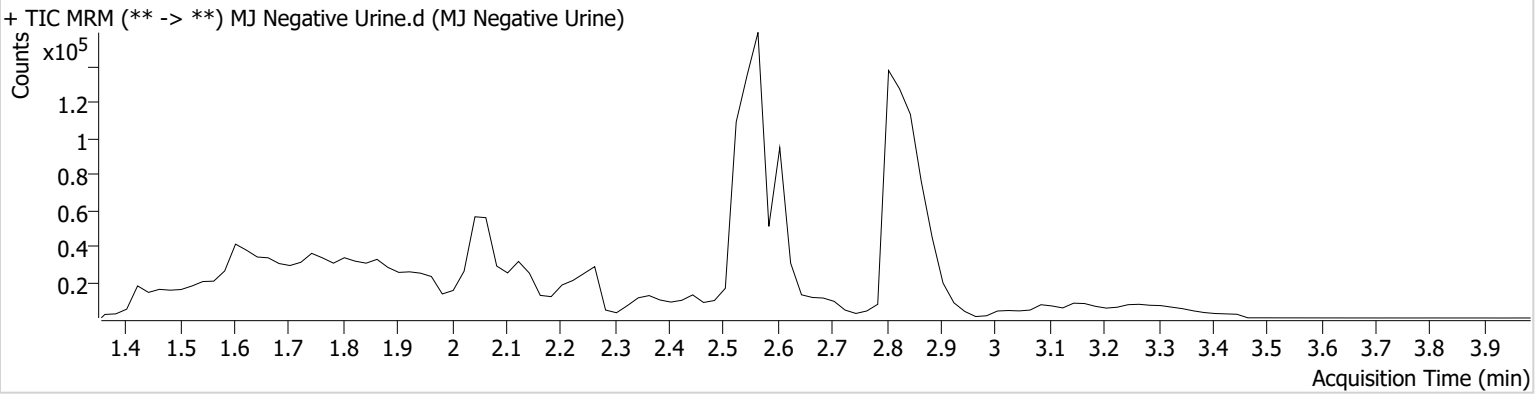


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update 2/16/2022 8:04:24 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	P5-C2	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 4:04:04 PM		
Sample Info.			

Sample Chromatogram

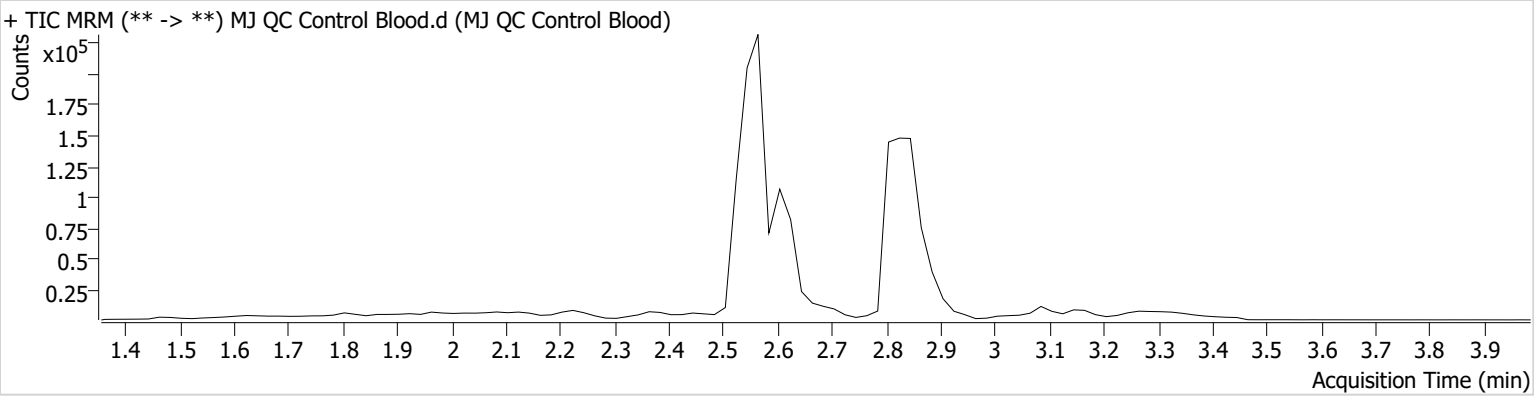


AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update	2/16/2022 8:04:24 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	P5-H1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 3:44:19 PM		
Sample Info.			

Sample Chromatogram



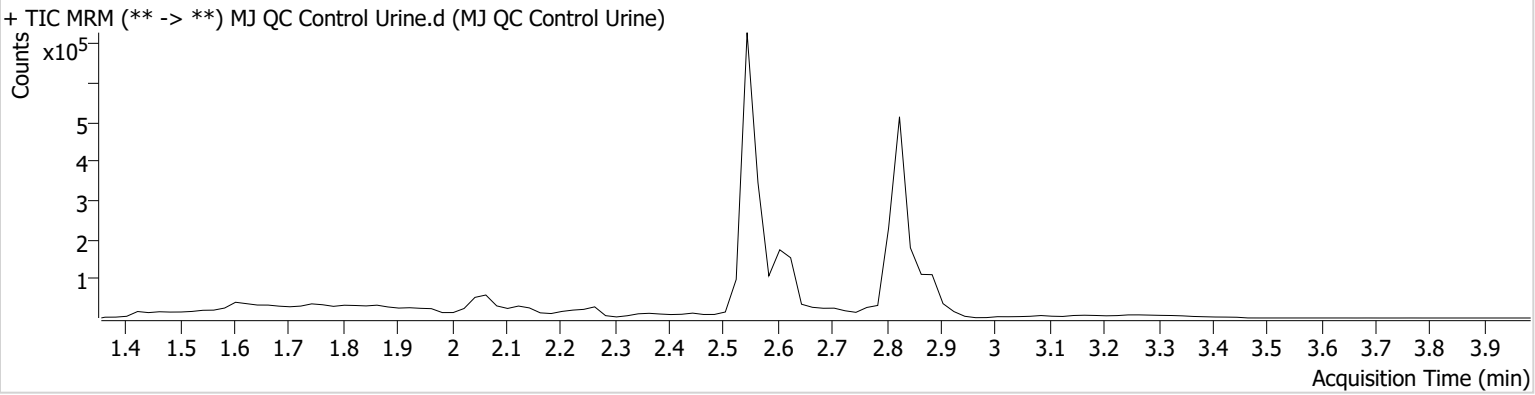
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.879	2590	70649	4.8245	ng/ml
THC-COOH	2.607	55309	124371	19.1056	ng/ml
THC-OH	2.574	4758	599064	8.2841	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update 2/16/2022 8:04:24 AM

Instrument	Falco (069901)	**Data File**	MJ QC Control Urine.d
Type	Sample	**Sample**	MJ QC Control Urine
Acq. Method	AM 26 THCS.m	**Operator**	Celena Shrum
Sample Position	P5-A2	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 6:35:28 PM		
Sample Info.			

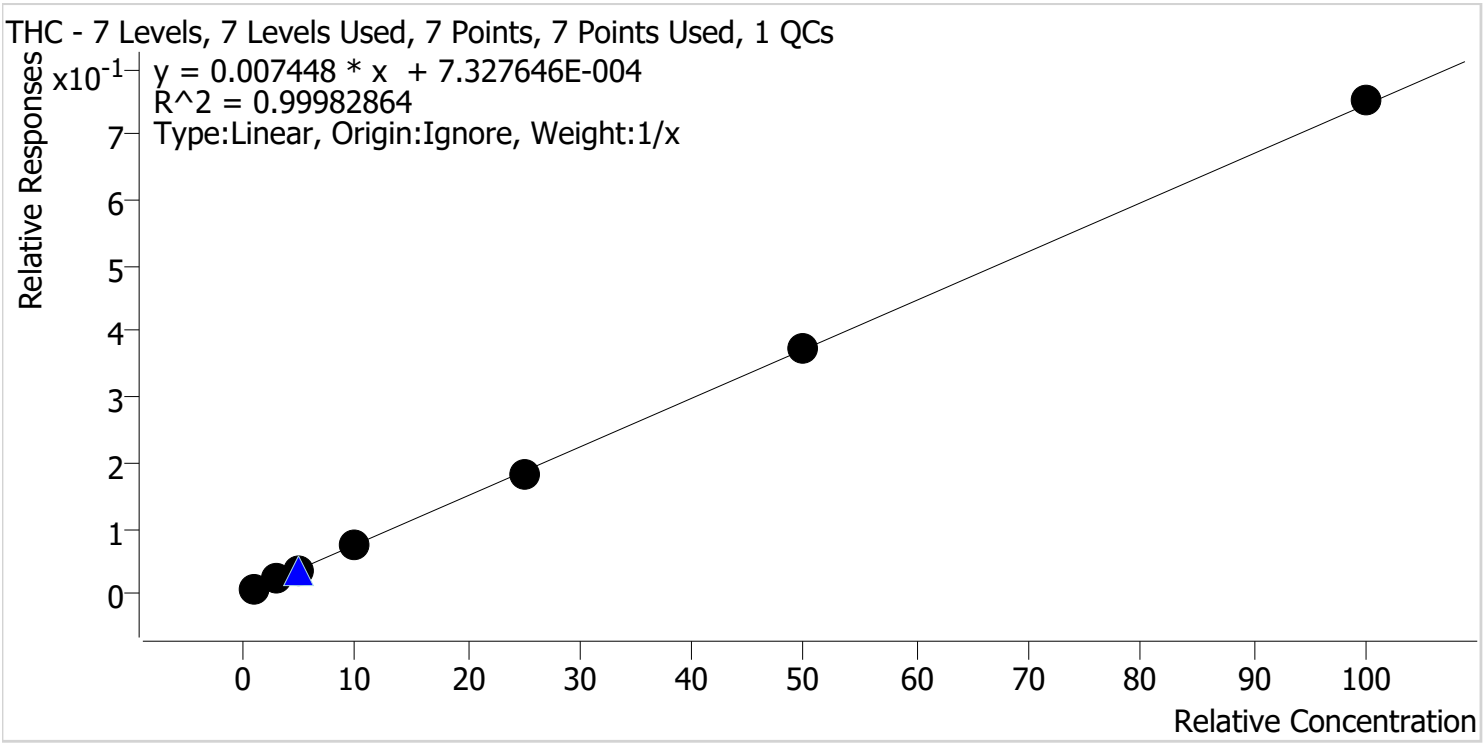
Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.899	6266	160817	5.1329	ng/ml
THC-COOH	2.607	84637	195822	18.5760	ng/ml
THC-OH	2.554	12337	1360969	9.6126	ng/ml

AM #26 Cannabinoids Screen Calibration Curve Report

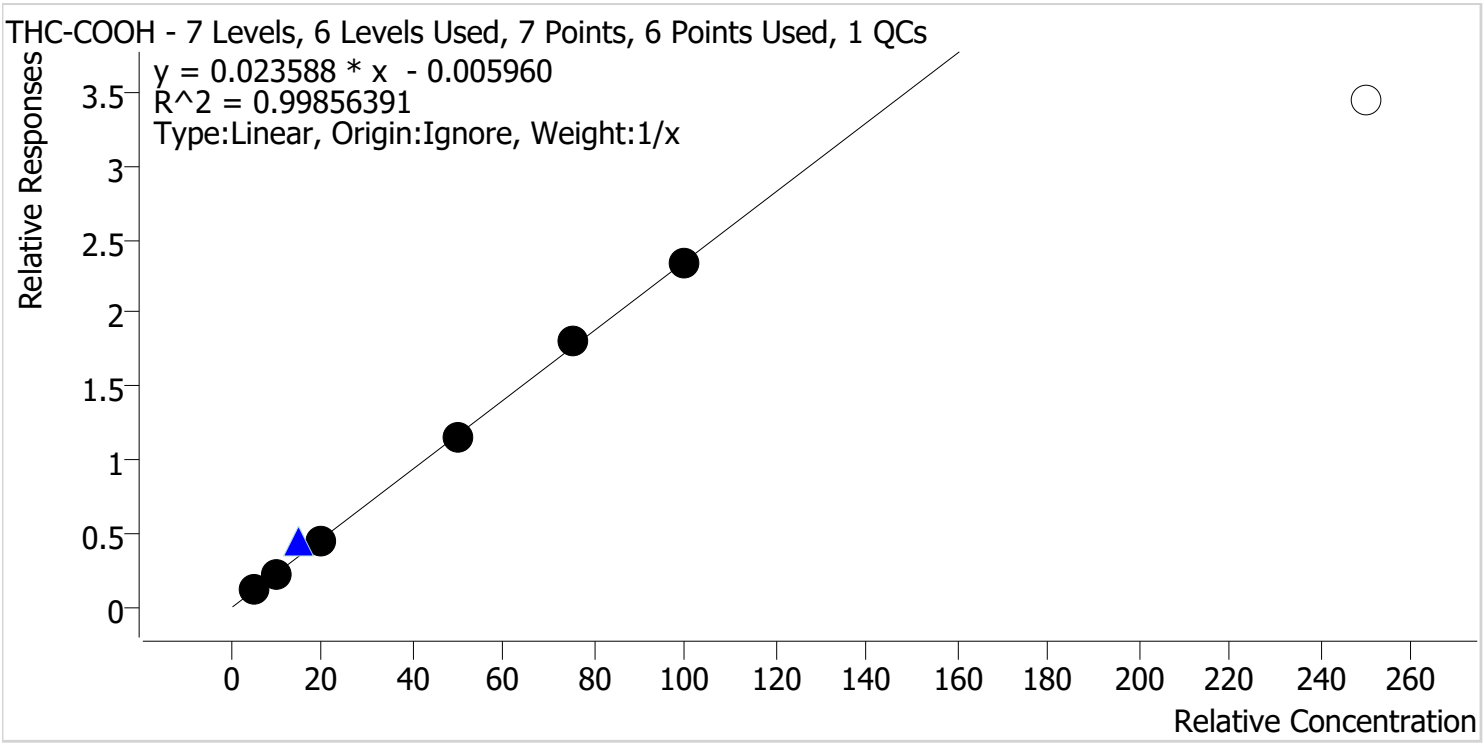
Batch results	D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Last Cal. Update	2/16/2022 8:04 AM
Analyst Name	ISP\Datastor
Analyte	THC
Internal Standard	THC-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	1.0	1.0	103.0
MJ Cal 2	2	✔	3.0	3.0	100.8
MJ Cal 3	3	✔	5.0	5.0	100.9
MJ Cal 4	4	✔	10.0	9.6	96.3
MJ Cal 5	5	✔	25.0	24.6	98.4
MJ Cal 6	6	✔	50.0	49.8	99.7
MJ Cal 7	7	✔	100.0	100.8	100.8

AM #26 Cannabinoids Screen Calibration Curve Report

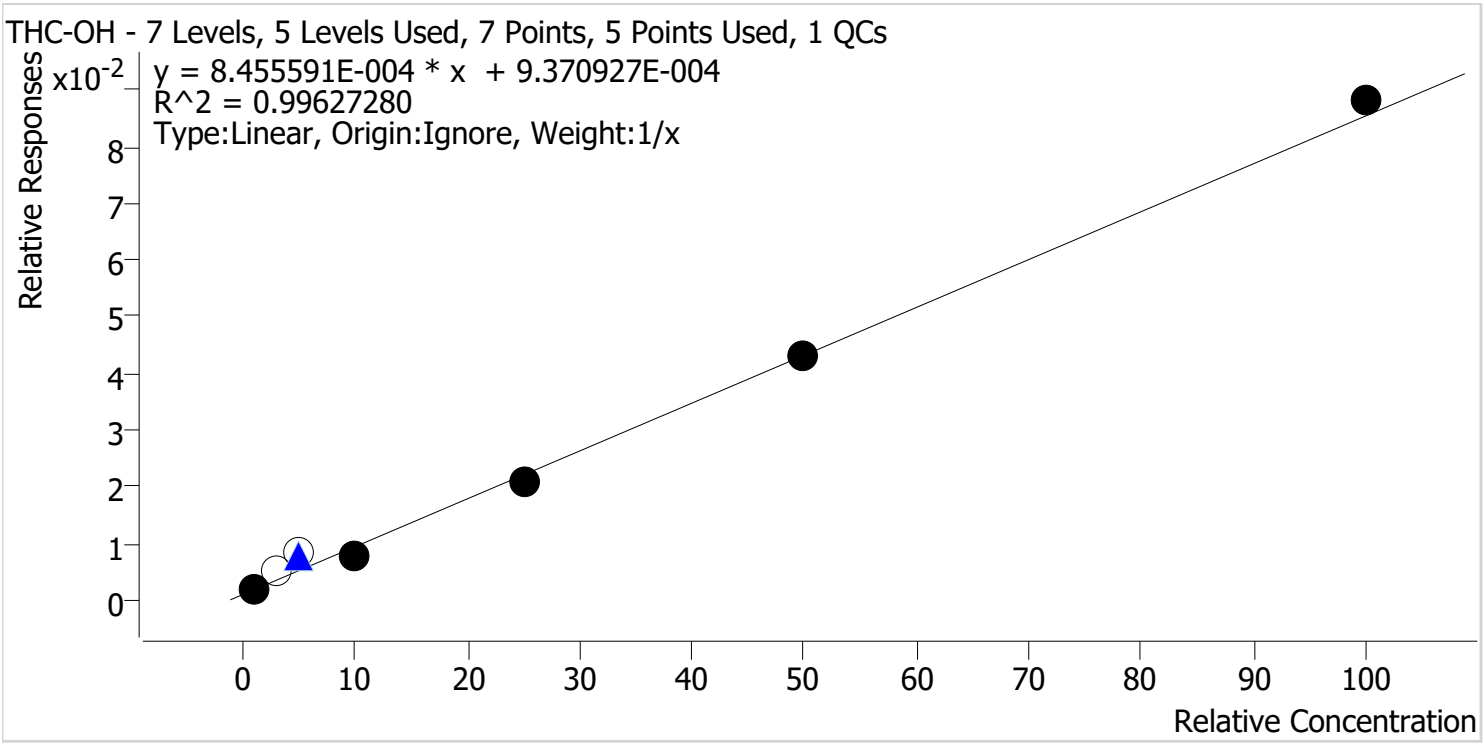
Batch results	D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Last Cal. Update	2/16/2022 8:04 AM
Analyst Name	ISP\Datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-D9



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	5.0	5.5	110.2
MJ Cal 2	2	✔	10.0	9.5	94.6
MJ Cal 3	3	✔	20.0	18.7	93.7
MJ Cal 4	4	✔	50.0	49.4	98.8
MJ Cal 5	5	✔	75.0	77.3	103.1
MJ Cal 6	6	✔	100.0	99.5	99.5
MJ Cal 7	7	✗	250.0	146.3	58.5

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Last Cal. Update	2/16/2022 8:04 AM
Analyst Name	ISP\Datastor
Analyte	THC-OH
Internal Standard	THC-OH-D3



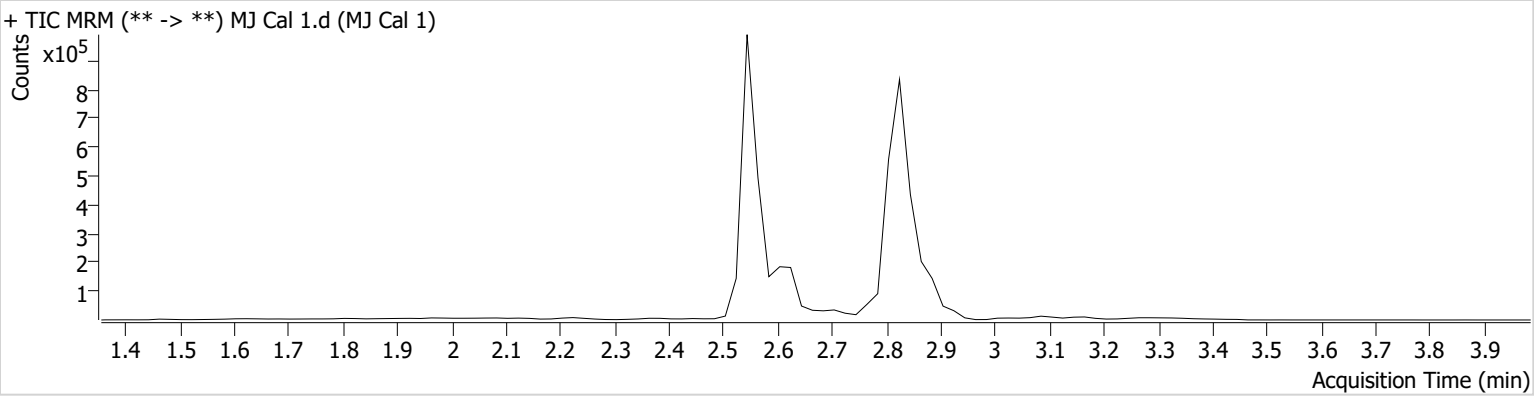
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	1.0	1.2	122.2
MJ Cal 2	2	✗	3.0	4.6	154.9
MJ Cal 3	3	✗	5.0	8.5	169.6
MJ Cal 4	4	✔	10.0	8.0	80.2
MJ Cal 5	5	✔	25.0	23.6	94.5
MJ Cal 6	6	✔	50.0	50.0	99.9
MJ Cal 7	7	✔	100.0	103.2	103.2

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update 2/16/2022 8:04:24 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	P5-A1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 2:58:12 PM		
Sample Info.			

Sample Chromatogram



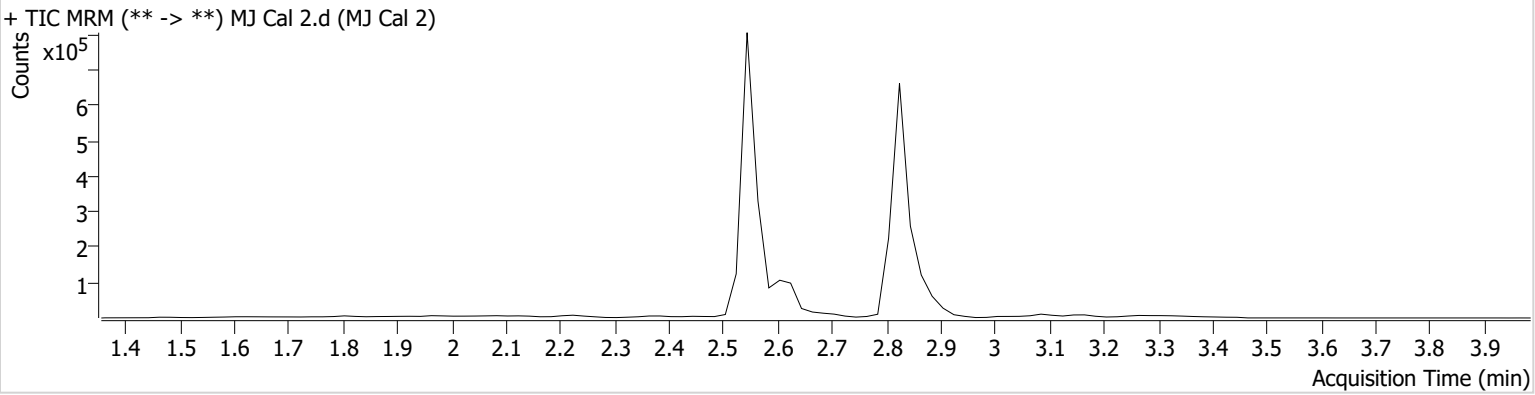
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	2.899	1664	197999	1.0303	ng/ml	**Low**
THC-COOH	2.607	44602	359624	5.5105	ng/ml	
THC-OH	2.554	3769	1913163	1.2217	ng/ml	**Low**

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update 2/16/2022 8:04:24 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	P5-B1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 3:04:57 PM		
Sample Info.			

Sample Chromatogram



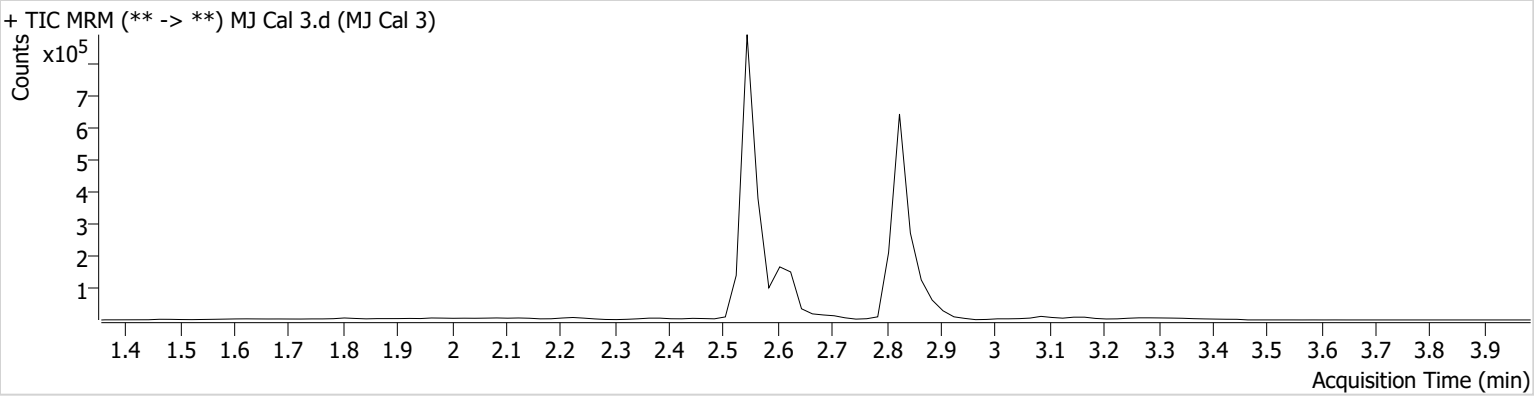
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.879	2474	106373	3.0237	ng/ml
THC-COOH	2.607	41824	192511	9.4630	ng/ml
THC-OH	2.554	7248	1489529	4.6465	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update 2/16/2022 8:04:24 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	P5-C1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 3:11:31 PM		
Sample Info.			

Sample Chromatogram



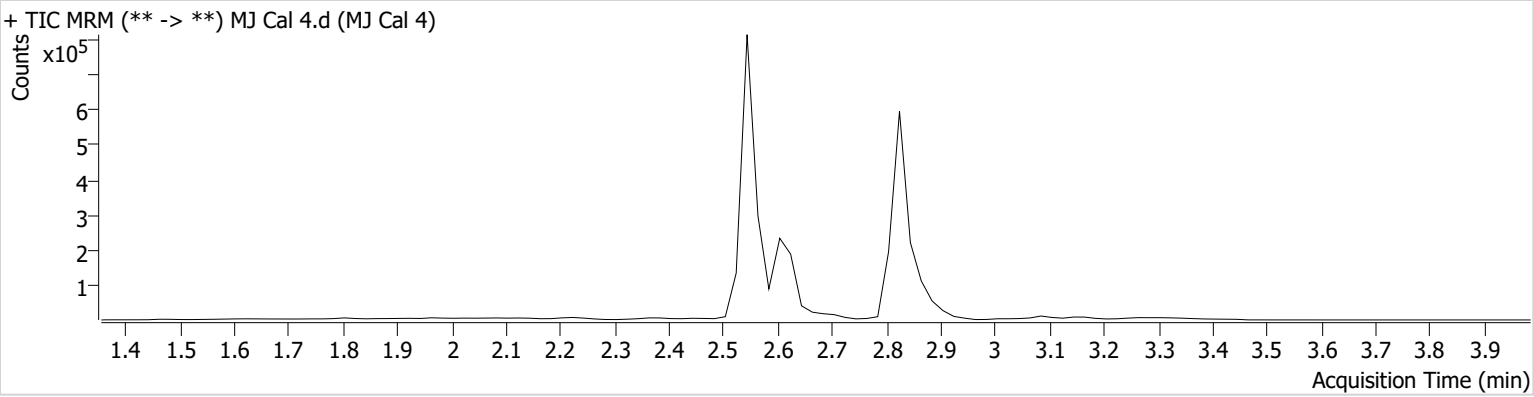
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.879	4152	108364	5.0454	ng/ml
THC-COOH	2.607	92889	213060	18.7354	ng/ml
THC-OH	2.554	13161	1623627	8.4782	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update 2/16/2022 8:04:24 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	P5-D1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 3:18:05 PM		
Sample Info.			

Sample Chromatogram



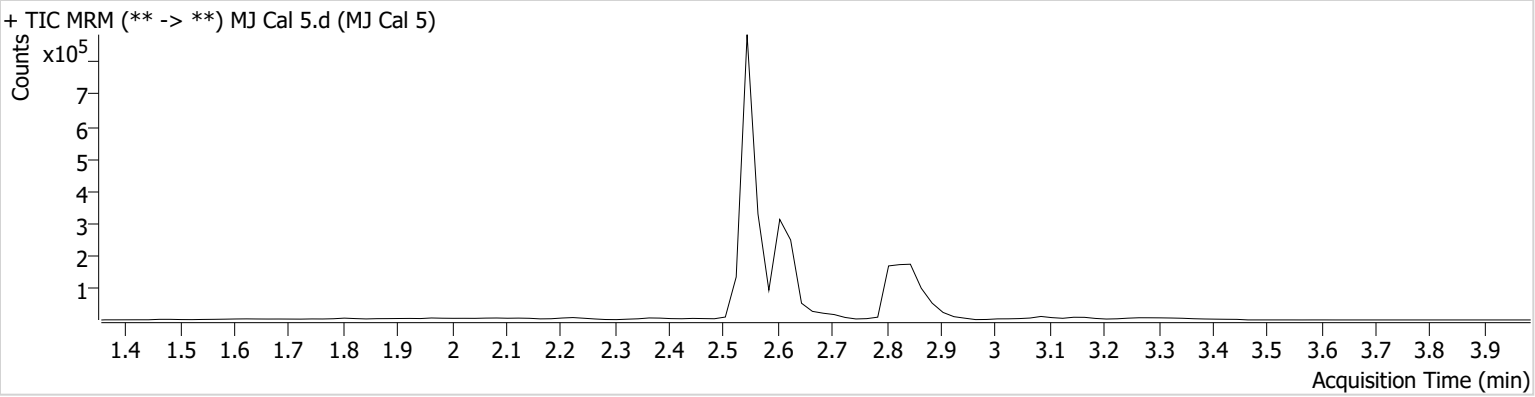
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.879	7008	96678	9.6347	ng/ml
THC-COOH	2.607	172898	149095	49.4151	ng/ml
THC-OH	2.574	10432	1350854	8.0249	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update 2/16/2022 8:04:24 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	P5-E1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 3:24:38 PM		
Sample Info.			

Sample Chromatogram



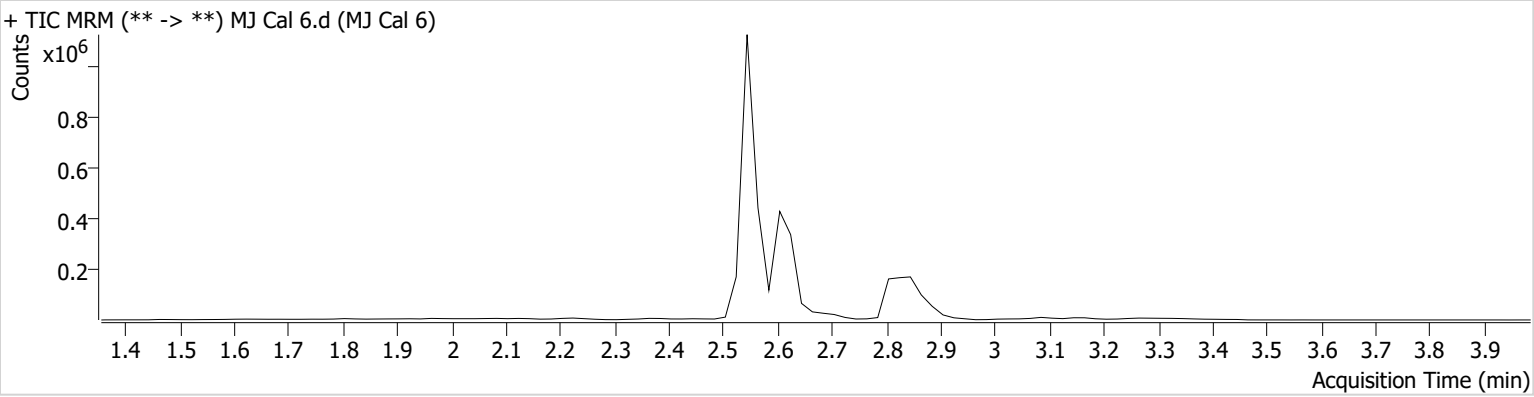
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.879	15460	84021	24.6069 ng/ml
THC-COOH	2.607	246141	135380	77.3312 ng/ml
THC-OH	2.574	25689	1228813	23.6161 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update 2/16/2022 8:04:24 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	P5-F1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 3:31:12 PM		
Sample Info.			

Sample Chromatogram



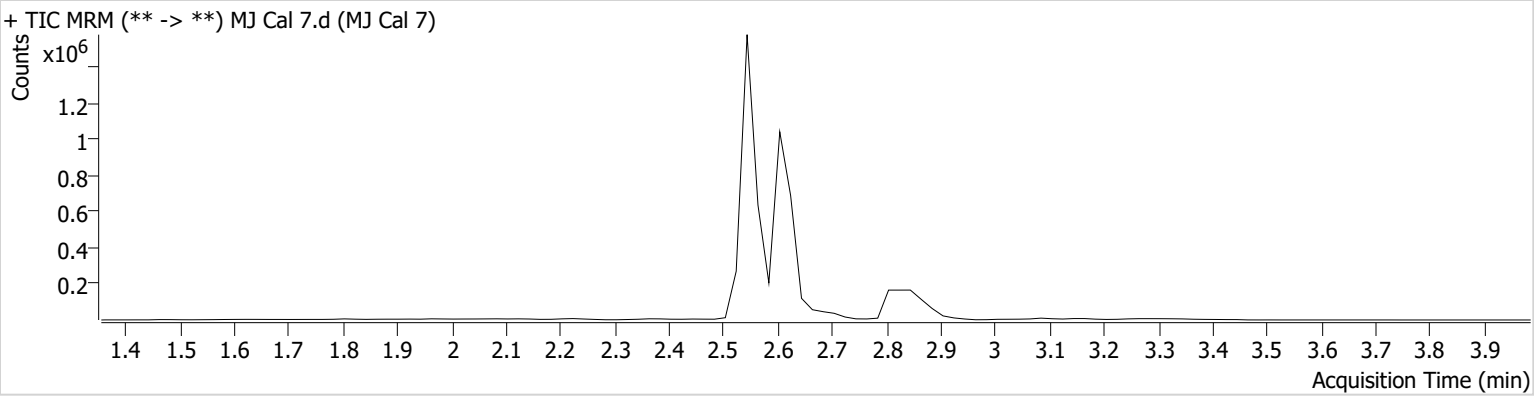
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.879	28631	76981	49.8373 ng/ml
THC-COOH	2.607	351026	149876	99.5448 ng/ml
THC-OH	2.574	54791	1268488	49.9747 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\AM 25-26\02-10-22 AM 25 26 CS\QuantResults\AM 26 THC.batch.bin
Calibration Last Update 2/16/2022 8:04:24 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	P5-G1	**Comment**	
Injection Volume	10		
Acq. Date-Time	2/10/2022 3:37:45 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.879	55512	73854	100.8216	ng/ml
THC-COOH	2.607	830918	241190	146.3041	ng/ml
THC-OH	2.574	111855	1268673	103.1625	ng/ml