REVIEWED
By Anne Nord at 3:25 pm, May 12, 2020

5/11/2020

Worklist: 4229

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2020-1292	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-1326	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-1474	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-1534	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-1556	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
M2020-1565	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1093	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1094	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1094	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1211	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1232	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1246	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1283	6	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1300	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1311	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1312	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1347	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1352	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1353	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1378	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1379	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

Worklist: 4229

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
P2020-1380	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1381	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1397	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1398	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1399	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1400	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1402	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1403	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1405	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
P2020-1406	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

CS

Idaho State Police
Forensic Services
Toxicology Discipline

Request for Departure from an Analytical Method

Date of Request
01/13/2020

Forensic Scientist
Celena Shrum

Analytical Methods
Toxicology AM #25, Toxicology AM #26/27, and AM #28

Deviation

The expiration dates listed for the current batch of PinPoint ToxBox extraction plates are as follows:
*MDS (batch IDP-107-190725)- Expiration is 1/25/2020
*THC (batch IDP-108-190716)- Expiration is 1/16/2020
*MDQ P1 (batch IDP-111-190729)- Expiration is 1/29/2020
*MDQ P2 (batch IDP-112-190730)- Expiration is 1/30/2020

I am issuing a deviation to allow for the use of the remaining plates of these batches. The controls will be used to evaluate if the plate is working as intended. In addition, at least one external control must be included for each run.

Celena Shrum

Date: 01/13/2020
Celena Shrum
Toxicology Discipline Lead

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

Extraction Date: 05/08/2020
Plate lot#: 190725

Analyst: Celena Shrum
Plate Expiration: 1/25/2020- Deviation in place

Mobile phase A: 10mM Amm Form
0.5M Ammonium Hydroxide
Blank Blood Lot: 445283-4
LCMS-QQQ ID: 069901

Mobile phase B: 0.1% Formic Acid in MeOH
Ethyl Acetate LC Methanol
Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

Pre-Analytic:

☒ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
☒ 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☒ 2. Using a calibrated pipette, pipette **250µL blood and urine** (if applicable) into wells of analytical (standards) plate. **Pipette ID: #42**
☒ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 4. Pipette **250µL 0.5M ammonium hydroxide** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **300µL of blood+base** 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 **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. If run contains urine, add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying. *SPE Dry ID: 067103*
☒ 16. Reconstitute in **100µL 100% 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

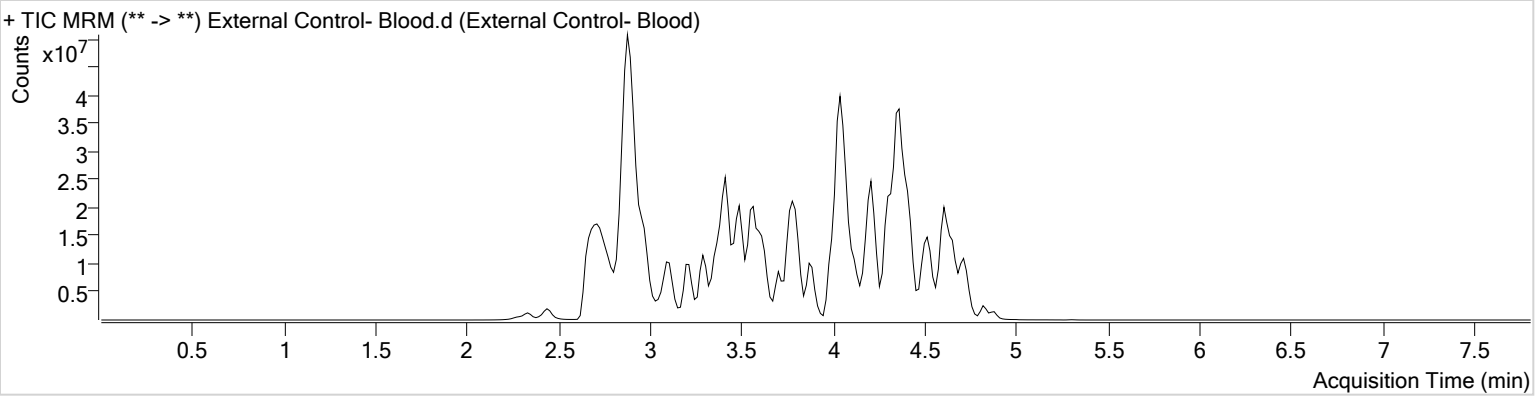
COMMENTS:

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 5/11/2020 1:24:40 PM

Instrument	Falco	**Data File**	External Control- Blood.d
Type	Sample	**Sample**	External Control- Blood
Acq. Method	am 25 all.m	**Operator**	Celena Shrum
Sample Position	P1-E4	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/8/2020 8:30:57 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.610	22568385	3883.52	∞	6078505	114.3747
Amphetamine	2.873	32007285	∞	8974.11	10325459	101.8269
O-desmethyl-tramadol	2.913	59501285	∞	∞	42087387	55.0484

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: 031820)

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	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		

Blood External Control Solution (Lot: WS031820)

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

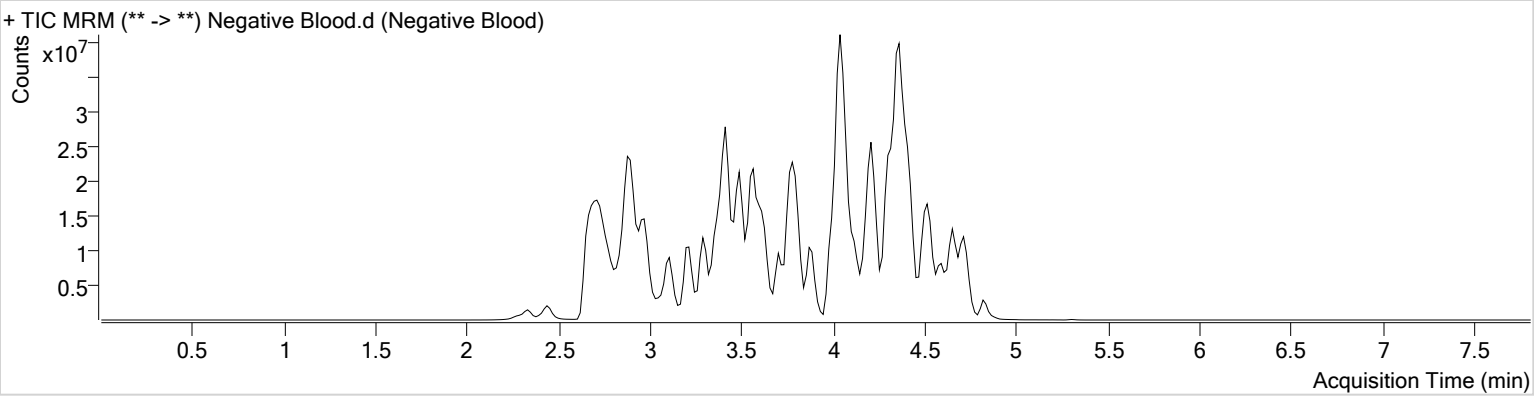
Component	*Source*	*Source Lot Number*
Negative Blood	Hemostat	445283-3
Methanol External Control Solution		031820
Prepared:	03/18/20	
Prepared by:	Sarah Pickle	
Expires:	03/18/21	

AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 25.batch.bin
Calibration Last Update	5/11/2020 1:24:40 PM

Instrument	Falco	**Data File**	Negative Blood.d
Type	Sample	**Sample**	Negative Blood
Acq. Method	am 25 all.m	**Operator**	Celena Shrum
Sample Position	P1-D4	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/8/2020 8:22:38 PM		
Sample Info.			

Sample Chromatogram

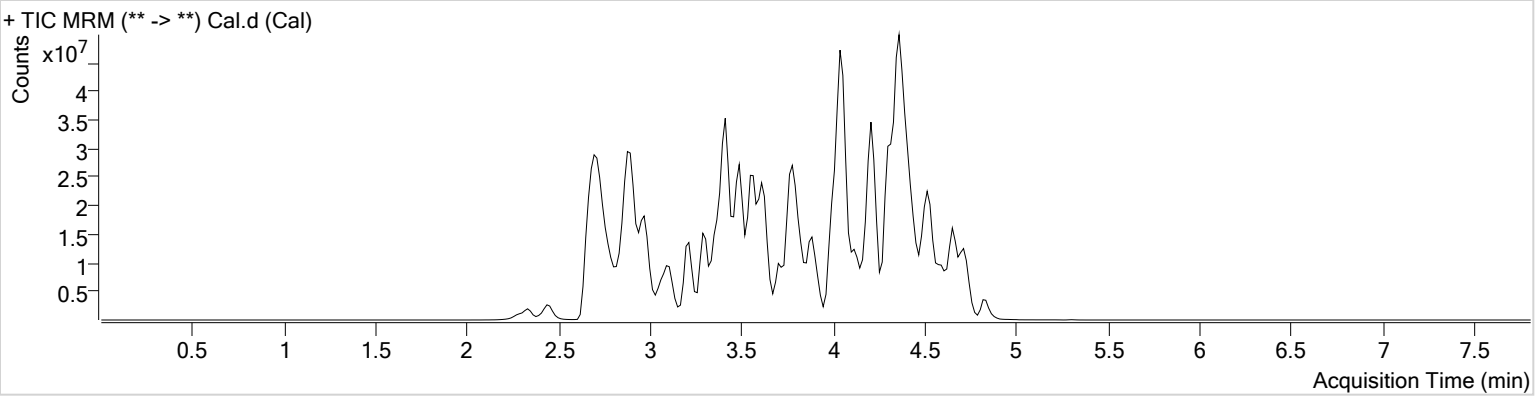


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 25.batch.bin
Calibration Last Update 5/12/2020 2:43:49 PM

Instrument	Falco	**Data File**	Cal.d
Type	Cal	**Sample**	Cal
Acq. Method	am 25 all.m	**Operator**	Celena Shrum
Sample Position	P1-B1	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/8/2020 8:14:10 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	2.890	60110	48666.99	128.88	1440500	10.0000
7-aminoclonazepam	3.582	1302454	276.57	1450.36	5741496	10.0000
7-aminoflunitrazepam	3.782	2610027	3660.50	338.57	18129445	10.0000
Acetyl Fentanyl	3.809	650255	223.99	694830.61	35732483	10.0000
Acetyl Norfentanyl	2.884	406192	112951.29	149.45	20402640	10.0000
a-hydroxyalprazolam	4.515	292259	193.17	107.15	1698475	10.0000
alpha-hydroxymidazolam	4.591	1784726	7963.91	90289.97	11798785	10.0000
alpha-PVP	3.512	6364109	∞	∞	27205073	10.0000
Alprazolam	4.610	2321772	∞	∞	7152304	10.0000
Amitriptyline	4.415	5492271	60.06	99.33	12872140	10.0000
Amphetamine	2.873	2615874	923.63	1572.96	8592905	10.0000
Benzoylecgonine	3.367	1551345	278.24	22.58	7671274	10.0000
Buprenorphine	4.434	1132480	1159.88	4379.14	3296299	10.0000
Bupropion	3.726	5703814	2074.41	948.37	18376658	10.0000
Carbamazepine	4.235	12097940	2623.73	3065.48	43256067	10.0000
Carisoprodol	4.217	1741156	124704.70	336.51	8837430	10.0000
Chlordiazepoxide	4.719	834850	∞	∞	21578211	10.0000
Chlorpheniramine	3.922	36295	1916.82	363741.12	52314426	10.0000
Citalopram	4.039	4043269	656.73	170.41	18688180	10.0000
Clonazepam	4.440	2002036	25303.17	709.57	3340548	10.0000
Cocaine	3.550	7416968	1520.16	179.87	32492368	10.0000
Codeine	2.788	580098	3778.77	∞	2568120	10.0000
Cyclobenzaprine	4.324	4057481	345897.77	109.24	14878609	10.0000
Desipramine	4.355	4919085	∞	∞	27560808	10.0000
Dextromethorphan	4.062	2978655	5164.48	7134.21	13967482	10.0000
Dextrorphan	3.355	3868907	766.36	1379178.31	24167125	10.0000
Diazepam	4.844	1437074	∞	501.74	7955522	10.0000
Dihydrocodeine	2.741	1198800	1226.92	1432.78	5925129	10.0000
Diphenhydramine	4.001	13567838	990.49	376.70	52314426	10.0000
Doxepin	4.122	3486235	3120.72	9.89	21504372	10.0000
Doxylamine	3.630	14882992	∞	14195593.61	46237615	10.0000
EDDP	4.061	2108218	374.90	250.57	15171088	10.0000
Estazolam	4.535	6688548	422.73	4730.02	19685003	10.0000
Etizolam	4.636	351711	234.46	680.02	19685003	10.0000

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Fentanyl	4.038	421947	542.05	265230.01	25277361	10.0000
Flunitrazepam	4.563	3259954	829.54	182573.47	709768	10.0000
Fluoxetine	4.319	4189344	70877.98	909.78	19540338	10.0000
Flurazepam	4.129	4357774	2832349.10	1187.75	709768	10.0000
Hydrocodone	2.986	2131812	184.05	∞	13441961	10.0000
Hydromorphone	2.458	1725383	24.48	∞	6766499	10.0000
Imipramine	4.368	6823495	∞	∞	24540621	10.0000
Ketamine	3.450	5413935	∞	288.35	23568349	10.0000
Lamotrigine	3.555	383851	1297.57	42.62	15956828	10.0000
Levamisole	2.946	4867901	14481.83	2314.59	32492368	10.0000
Lorazepam	4.439	765151	478.63	∞	3340548	10.0000
Maprotiline	4.415	4878732	∞	∞	12872140	10.0000
MDA	2.993	3321321	∞	180.70	14861696	10.0000
MDEA	3.222	6858003	627.65	1999.18	30819738	10.0000
MDMA	3.069	7747214	∞	1403.73	5121099	10.0000
Meperidine	3.571	3186208	∞	115396.52	15956828	10.0000
Meprobamate	3.652	887491	484.08	133.08	4042123	10.0000
Methadone	4.380	8500048	∞	543.37	31597299	10.0000
Methamphetamine	2.979	2679455	92.79	∞	15133580	10.0000
Methocarbamol	3.572	550977	796.46	13.10	15956828	10.0000
Methylphenidate	3.496	11876254	430.90	69.97	42068329	10.0000
Metoprolol	3.416	806598	564.37	4279.58	15956828	10.0000
Midazolam	4.745	1008790	598.58	119.97	12246354	10.0000
Mirtazapine	3.846	5575947	1243.71	∞	15956828	10.0000
Mitragynine	4.159	428349	35293.43	1038986.82	21504372	10.0000
Morphine	2.292	286788	2697.06	16.85	180748	10.0000
Norbuprenorphine	3.806	112456	146922.03	7239.30	556684	10.0000
Nordiazepam	4.693	2173184	∞	118.96	7613752	10.0000
Norfentanyl	3.312	9461540	15900.95	16554.77	35203202	10.0000
Norhydrocodone	2.912	41915	∞	∞	1582532	10.0000
Normeperidine	3.574	1931629	385.71	23.68	7386336	10.0000
Noroxycodone	2.864	1476726	115.05	113.70	5151840	10.0000
Nortriptyline	4.402	2295143	426950.03	351.13	5496612	10.0000
O-desmethyl-tramadol	2.898	11639931	5366.01	681.02	45323204	10.0000
Olanzapine	3.748	175818	50203.45	20.39	1233665	10.0000
Oxazepam	4.505	3716836	3996.72	322.77	23925570	10.0000
Oxycodone	2.907	3432567	283.83	382.72	15312005	10.0000
Oxymorphone	2.333	1599484	209.09	∞	6009359	10.0000
Paroxetine	4.315	511158	250.08	91.91	15584165	10.0000
Phenazepam	4.651	1926616	937.23	402.57	8847675	10.0000
Phencyclidine	3.894	6624903	534705.02	235.94	28618351	10.0000
Phentermine	3.132	1593061	274.47	10.90	20275802	10.0000
Phenytoin	4.126	173469	1064.48	86.88	1233665	10.0000
Promethazine	4.305	13028467	14698.19	∞	38852472	10.0000
Pseudoephedrine	2.704	53629074	16249.08	6016.74	146179179	10.0000
Quetiapine	4.390	3247928	20964.45	372.74	4486321	10.0000
Sertraline	4.534	3047746	1961444.96	∞	15584165	10.0000
Sufentanil	4.359	365534	192.97	127115.09	22721042	10.0000
Tapentadol	3.421	5625181	2348.37	738.11	27401865	10.0000
Temazepam	4.658	5255094	∞	401.59	23472903	10.0000
Tramadol	3.401	14113085	1357.82	222.48	45066743	10.0000
Trazodone	4.451	9389353	∞	1294.97	30544963	10.0000
Venlafaxine	3.767	9899716	∞	∞	42054049	10.0000
Zaleplon	4.350	2078804	139919.30	295.36	5167171	10.0000
Zolpidem	4.211	13072212	540.50	581.29	43234378	10.0000
Zopiclone	4.036	27866	1837.25	16.75	140209	10.0000

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

Extraction Date: 05/08/2020
Analyst: Celena Shrum
Plate lot#: IDP-108-2-200303
Plate Expiration: 09/30/2020

Mobile phase A: 0.1% Formic Acid in LCMS Water
Mobile phase B: 0.1% Formic acid in Acetonitrile
Blank Blood Lot: 445283-4
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 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** of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **800µL of blood+acid or urine+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, Curve weighting of Linear 1/x with r^2 values ≥0.98 for each analyte
☒ 3. RT +/- 3% or 0.100 min, whichever is greater, +/- 20% Accuracy for greater than (+/- 30% for 10ng/ml or less).
☒ 4. Case sample response for THC and OH-THC 3ng/mL (quantitative), Carboxy-THC: 10ng/mL (qualitative only) will be reported. Samples with a THC or OH-THC response over 50 ng/mL will be reported out as greater than 50 ng/mL.
☒ 5. Did all QCs pass for each analyte? (if not, describe in comments section)
☒ 6 Enter QCs into control charting.
☒ 7 Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

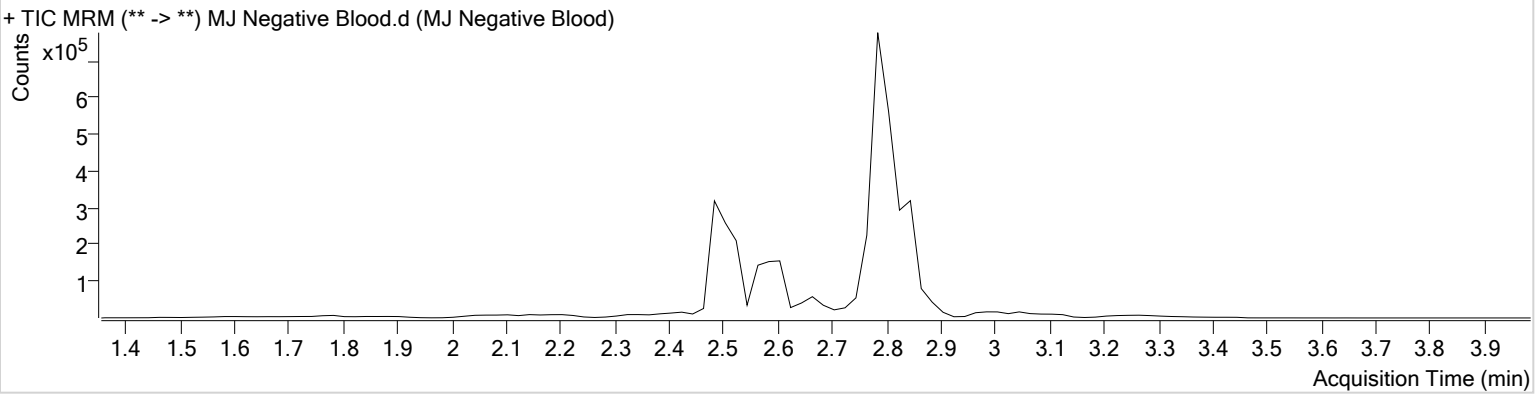
COMMENTS: THC curve range: 1-100, Carboxy-THC curve range: 5-250, THC-OH curve range: 1-100.

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Calibration Last Update	5/12/2020 2:55:50 PM

Instrument	Falco	**Data File**	MJ Negative Blood.d
Type	Sample	**Sample**	MJ Negative Blood
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-A2	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/8/2020 4:11:42 PM		
Sample Info.			

Sample Chromatogram

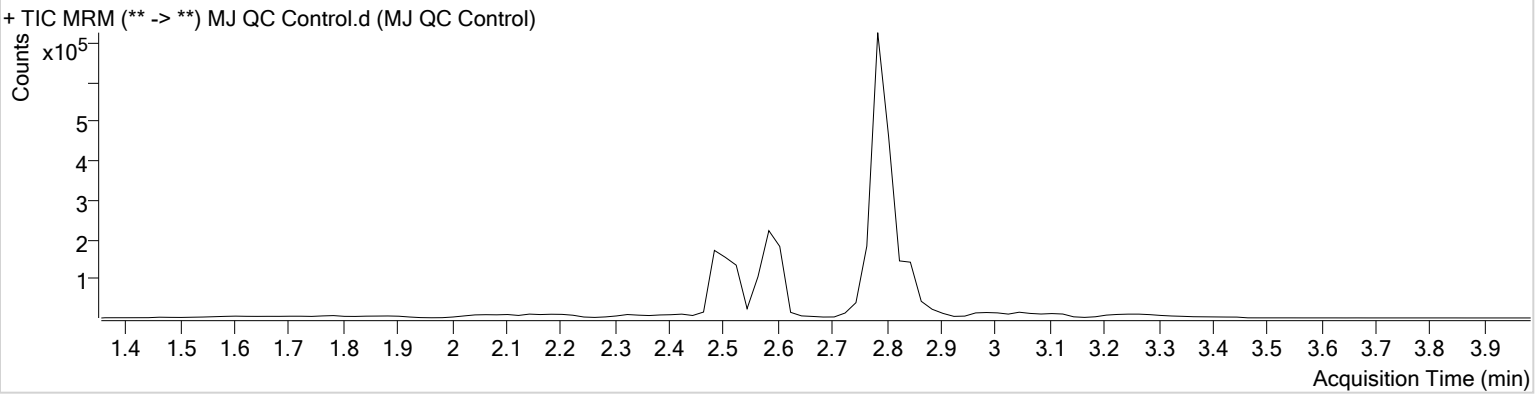


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 5/12/2020 2:55:50 PM

Instrument	Falco	**Data File**	MJ QC Control.d
Type	Sample	**Sample**	MJ QC Control
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-H1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/8/2020 3:58:40 PM		
Sample Info.			

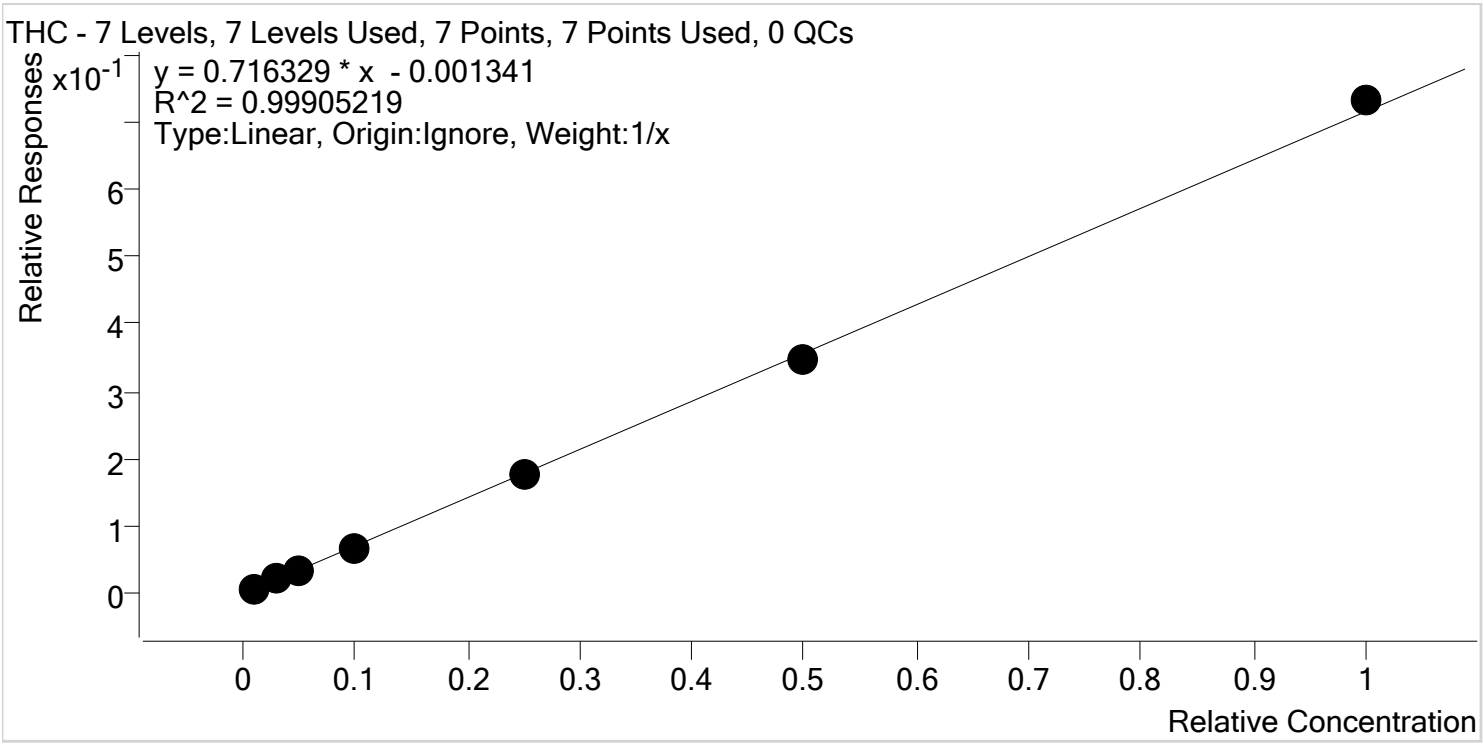
Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.839	7288	260864	4.0873	ng/ml
THC-COOH	2.585	108549	261472	15.9406	ng/ml
THC-OH	2.532	36710	521636	4.4280	ng/ml

AM #26 Cannabinoids Screen Calibration Curve Report

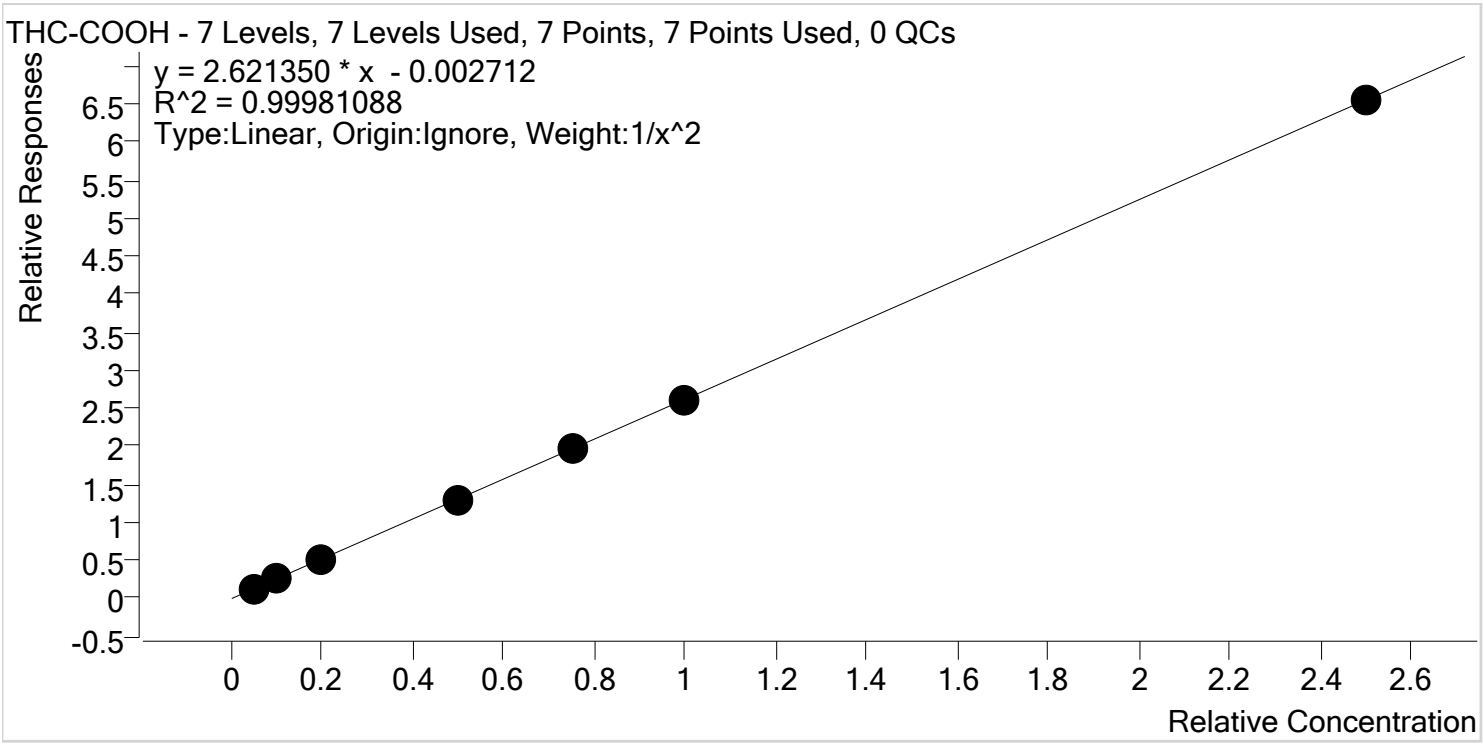
Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Last Cal. Update	5/12/2020 2:55 PM
Analyst Name	ISP\Datastor
Analyte	THC
Internal Standard	THC-d3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	1.0	1.1	114.3
MJ Cal 2	2	✔	3.0	3.0	98.9
MJ Cal 3	3	✔	5.0	4.7	94.4
MJ Cal 4	4	✔	10.0	9.4	93.7
MJ Cal 5	5	✔	25.0	24.7	98.7
MJ Cal 6	6	✔	50.0	48.9	97.7
MJ Cal 7	7	✔	100.0	102.3	102.3

AM #26 Cannabinoids Screen Calibration Curve Report

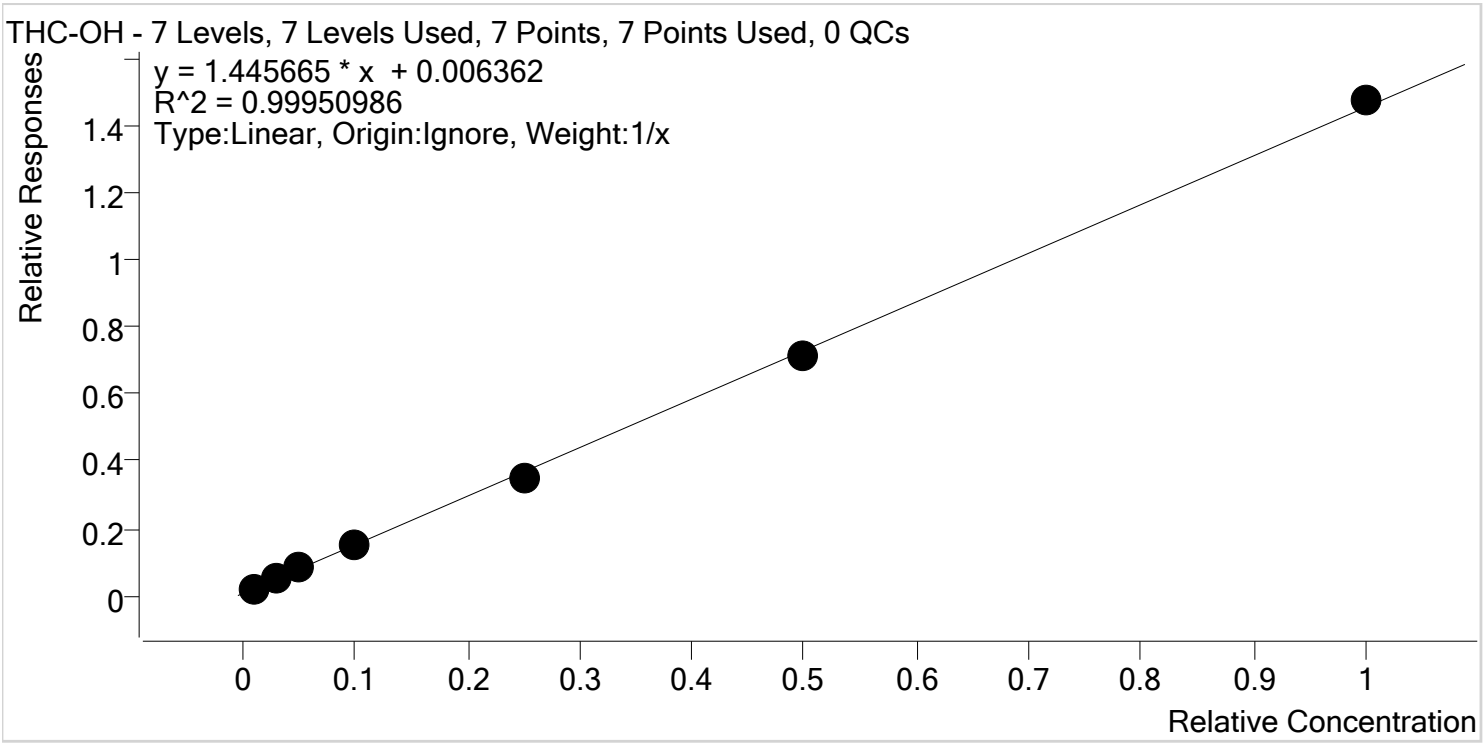
Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Last Cal. Update	5/12/2020 2:55 PM
Analyst Name	ISP\Datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-d9



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	5.0	5.0	100.3
MJ Cal 2	2	✔	10.0	9.9	98.6
MJ Cal 3	3	✔	20.0	20.4	102.0
MJ Cal 4	4	✔	50.0	49.4	98.8
MJ Cal 5	5	✔	75.0	75.5	100.7
MJ Cal 6	6	✔	100.0	99.8	99.8
MJ Cal 7	7	✔	250.0	249.6	99.8

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Last Cal. Update	5/12/2020 2:55 PM
Analyst Name	ISP\Datastor
Analyte	THC-OH
Internal Standard	THC-OH-d3



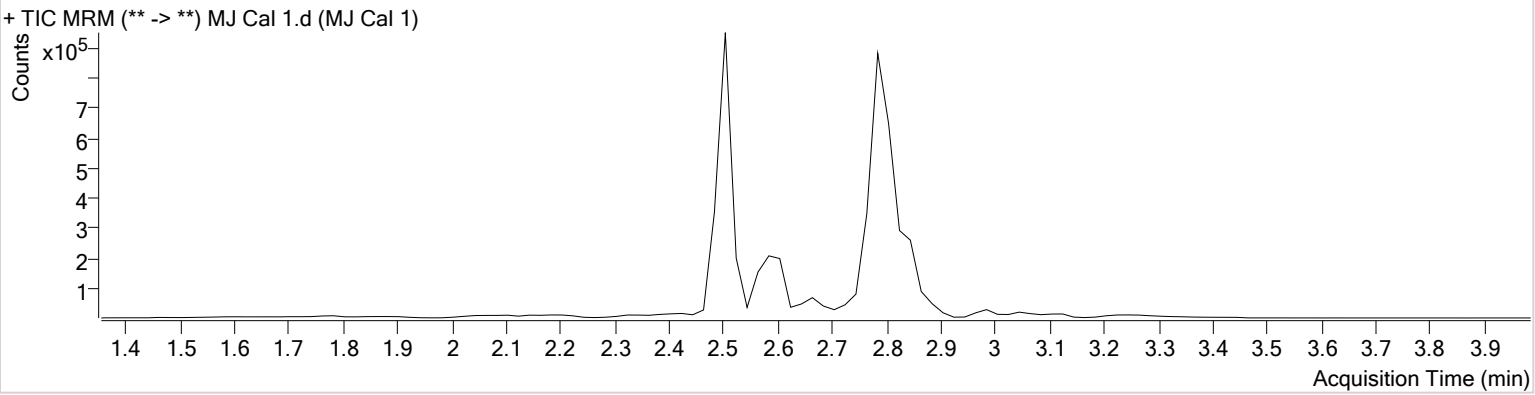
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	1.0	1.0	97.3
MJ Cal 2	2	✔	3.0	3.0	101.6
MJ Cal 3	3	✔	5.0	5.1	102.7
MJ Cal 4	4	✔	10.0	10.3	102.6
MJ Cal 5	5	✔	25.0	24.0	96.0
MJ Cal 6	6	✔	50.0	49.2	98.5
MJ Cal 7	7	✔	100.0	101.3	101.3

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 5/12/2020 2:55:50 PM

Instrument	Falco	**Data File**	MJ Cal 1.d
Type	Cal	**Sample**	MJ Cal 1
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-A1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/8/2020 3:12:54 PM		
Sample Info.			

Sample Chromatogram



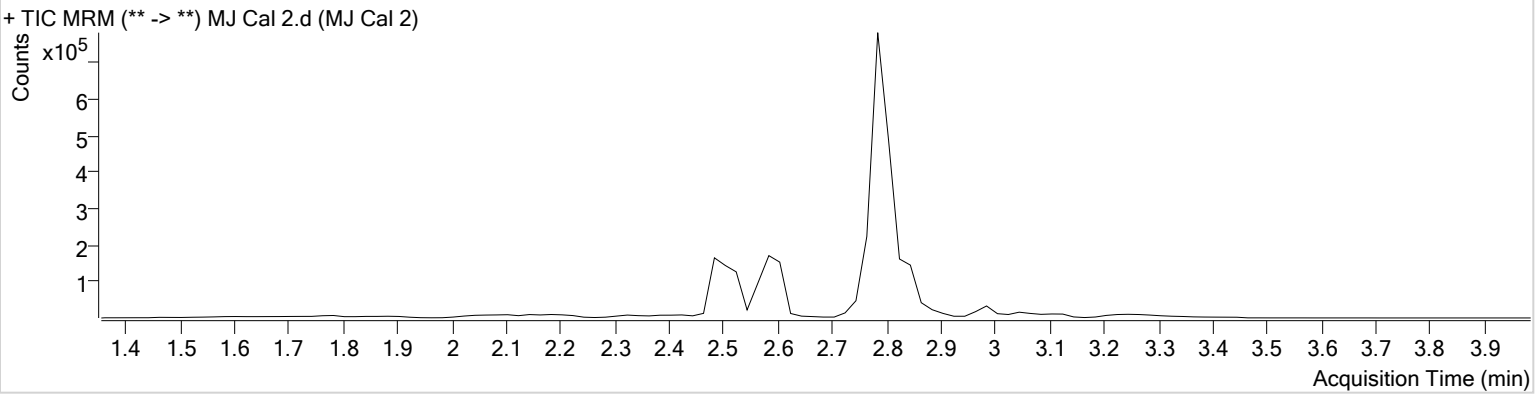
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	2.839	3594	524870	1.1430	ng/ml	**Low**
THC-COOH	2.585	45653	354668	5.0140	ng/ml	
THC-OH	2.512	35939	1759728	0.9727	ng/ml	**Low**

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 5/12/2020 2:55:50 PM

Instrument	Falco	**Data File**	MJ Cal 2.d
Type	Cal	**Sample**	MJ Cal 2
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-B1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/8/2020 3:19:34 PM		
Sample Info.			

Sample Chromatogram



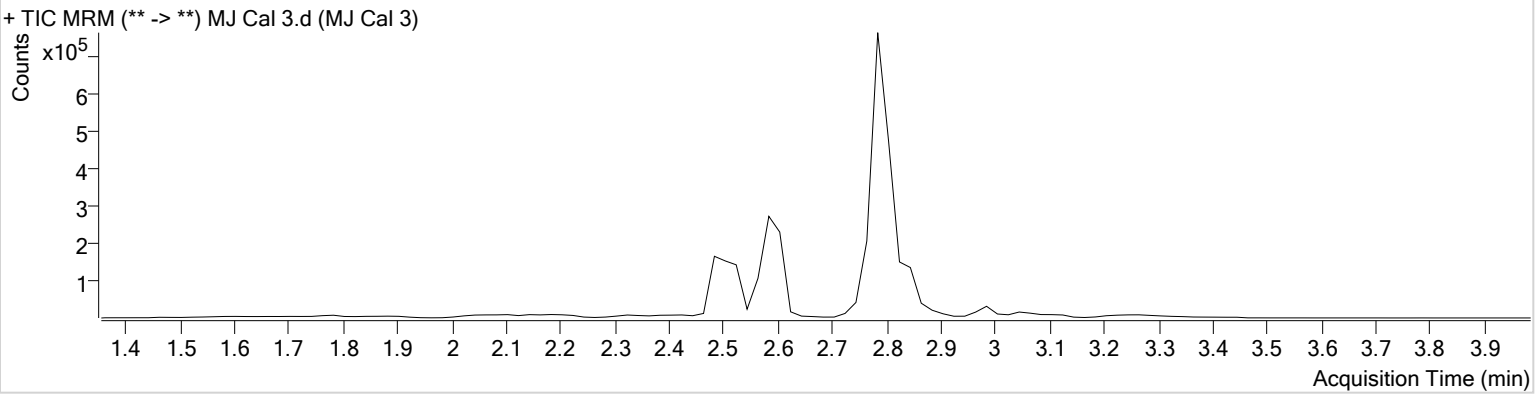
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	2.839	5685	285473	2.9670	ng/ml	**Low**
THC-COOH	2.585	66345	259312	9.8638	ng/ml	
THC-OH	2.532	25750	510534	3.0488	ng/ml	

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 5/12/2020 2:55:50 PM

Instrument	Falco	**Data File**	MJ Cal 3.d
Type	Cal	**Sample**	MJ Cal 3
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-C1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/8/2020 3:26:06 PM		
Sample Info.			

Sample Chromatogram



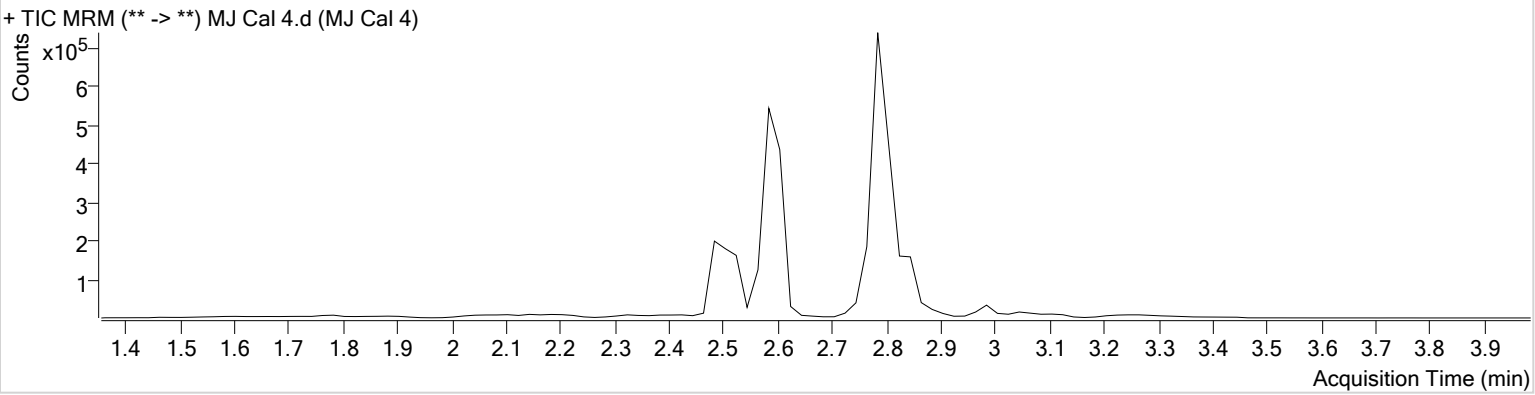
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.839	8474	260943	4.7204	ng/ml
THC-COOH	2.585	146489	275468	20.3901	ng/ml
THC-OH	2.532	42177	523303	5.1351	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 5/12/2020 2:55:50 PM

Instrument	Falco	**Data File**	MJ Cal 4.d
Type	Cal	**Sample**	MJ Cal 4
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-D1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/8/2020 3:32:37 PM		
Sample Info.			

Sample Chromatogram



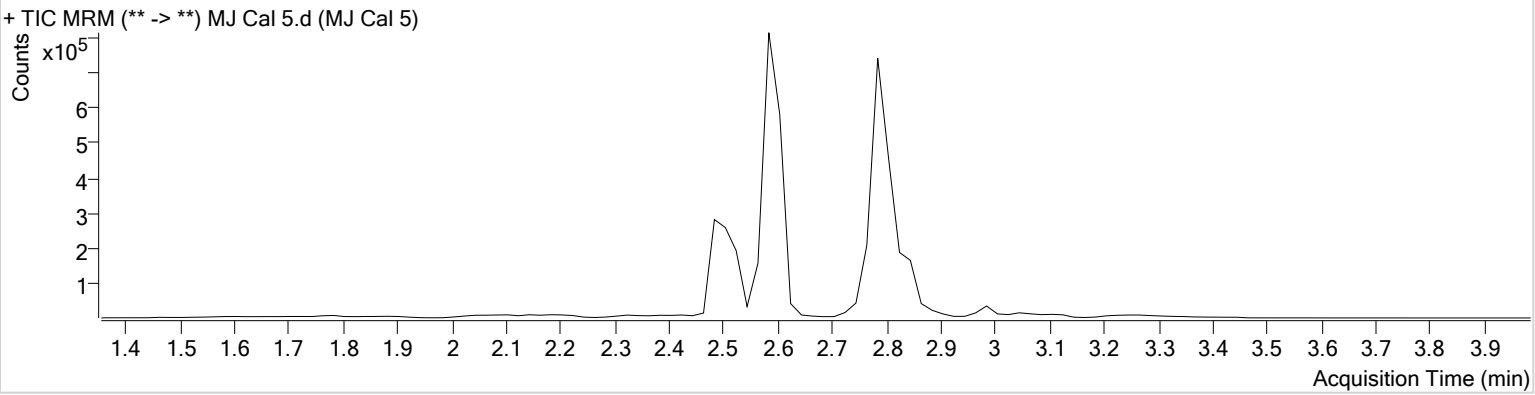
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.859	19046	289571	9.3692	ng/ml
THC-COOH	2.585	376553	291293	49.4175	ng/ml
THC-OH	2.532	88511	572378	10.2565	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 5/12/2020 2:55:50 PM

Instrument	Falco	**Data File**	MJ Cal 5.d
Type	Cal	**Sample**	MJ Cal 5
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-E1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/8/2020 3:39:10 PM		
Sample Info.			

Sample Chromatogram



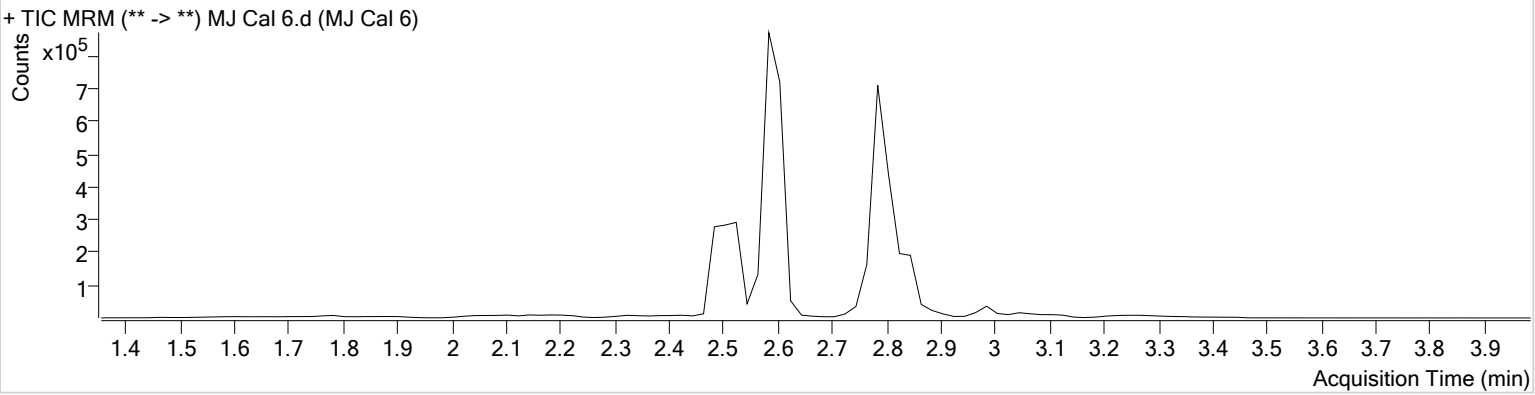
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	50838	289812	24.6757 ng/ml
THC-COOH	2.585	586245	296593	75.5073 ng/ml
THC-OH	2.491	214008	605596	24.0043 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 5/12/2020 2:55:50 PM

Instrument	Falco	**Data File**	MJ Cal 6.d
Type	Cal	**Sample**	MJ Cal 6
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-F1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/8/2020 3:45:40 PM		
Sample Info.			

Sample Chromatogram



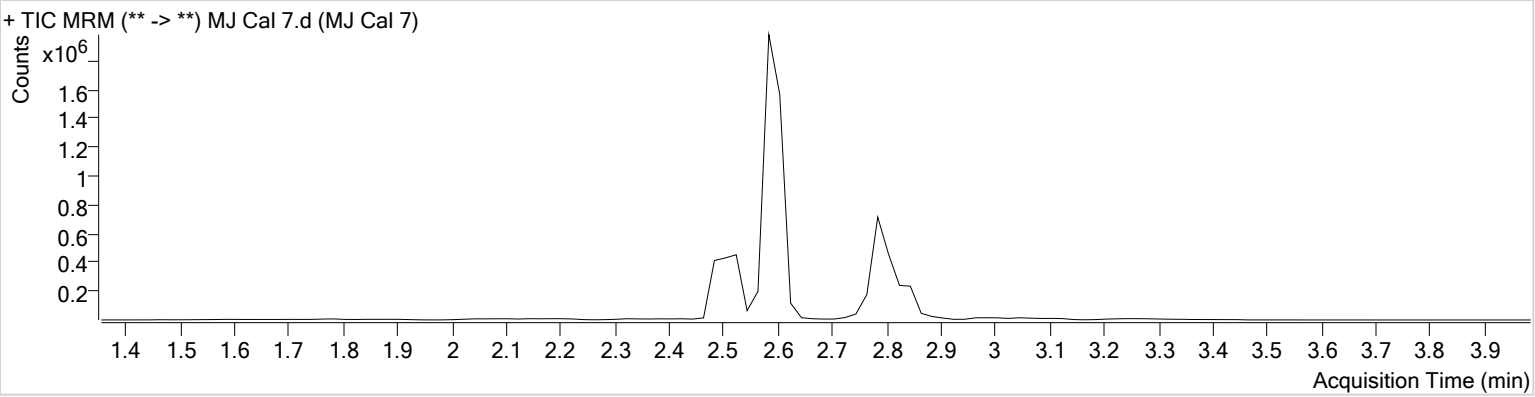
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.859	97980	280959	48.8707 ng/ml
THC-COOH	2.585	683845	261733	99.7756 ng/ml
THC-OH	2.532	398588	554981	49.2396 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 050820 CS\QuantResults\AM 26.batch.bin
Calibration Last Update 5/12/2020 2:55:50 PM

Instrument	Falco	**Data File**	MJ Cal 7.d
Type	Cal	**Sample**	MJ Cal 7
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-G1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/8/2020 3:52:10 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.859	194550	266093	102.2539	ng/ml
THC-COOH	2.585	1645664	251610	249.6138	ng/ml
THC-OH	2.532	823832	559881	101.3430	ng/ml