REVIEWED
By Tamara Salazar at 9:59 am, Aug 13, 2020

8/5/2020

Worklist: 4413

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2020-2386	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
M2020-2407	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-1955	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-1960	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2012	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2022	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2112	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2115	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2141	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2152	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2153	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2154	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2168	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2235	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2278	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
P2020-2335	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ

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

Rachel Cutler
Lab Manager 5/22/20

(I had approved of this deviation verbally but Celena signed it instead of me by mistake. Was noticed during audit.

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

Extraction Date: 8/05/2020
Plate lot#: 190725
Mobile phase A: 10mM Amm Form
Instant Buffer I
Blank Blood Lot: 445283-4
LCMS-QQQ ID: 069901

Analyst: Celena Shrum
Plate Expiration: 1/25/2020- deviation in place
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. 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: 300µl
☒ 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).*** *Manifold ID: 067104*
☒ 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. *SPE Dry ID: 067103*
☒ 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

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: 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	

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.

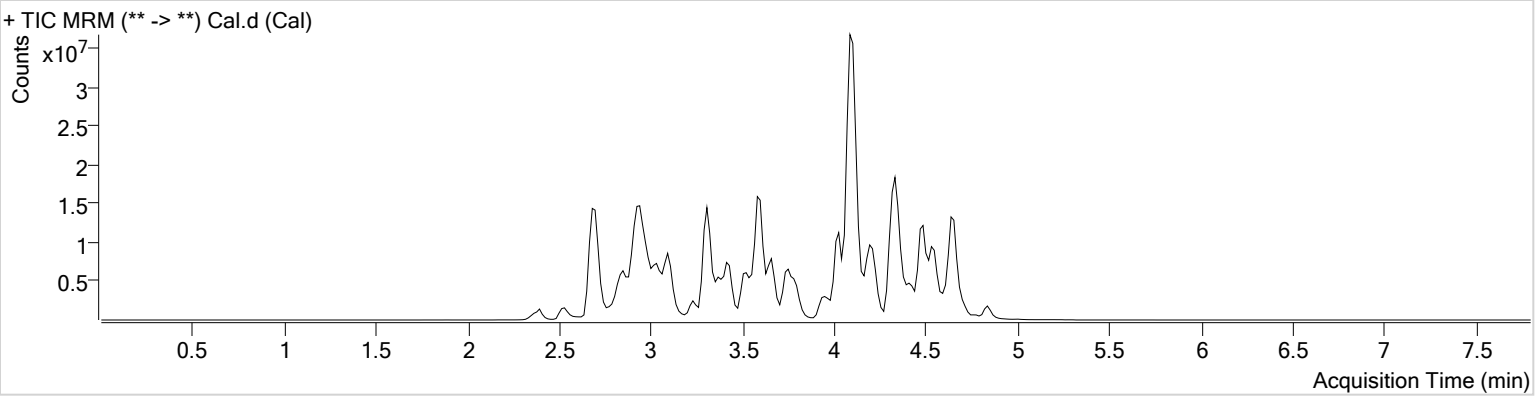
Component	*Source*	*Source Lot Number*
Negative Urine	Pocatello Lab	POC031319
Methanol External Control Solution		031820
Prepared:	05/22/20	
Prepared by:	Celena Shrum	
Expires:	03/18/21	

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\MDS.batch.bin
Calibration Last Update 8/11/2020 11:40:59 AM

Instrument	Falco	**Data File**	Cal.d
Type	Cal	**Sample**	Cal
Acq. Method	AM 25 061720.m	**Operator**	Celena Shrum
Sample Position	P5-B1	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/5/2020 7:09:05 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	2.937	78675	4387.73	60184.27	1905232	10.0000
7-aminoclonazepam	3.599	981320	267.76	463.97	3981639	10.0000
7-aminoflunitrazepam	3.813	1963742	236.16	105.98	3981639	10.0000
Acetyl Fentanyl	3.886	114425	59.53	73051.97	33448334	10.0000
Acetyl Norfentanyl	2.901	444485	136.40	333.30	33448334	10.0000
a-hydroxyalprazolam	4.500	369512	77.95	∞	3981639	10.0000
alpha-hydroxymidazolam	4.591	1503656	1062.76	161672.38	3981639	10.0000
alpha-PVP	3.559	4963756	∞	412.59	9666848	10.0000
Alprazolam	4.626	2464903	56.50	208.46	25494672	10.0000
Amitriptyline	4.430	221959	12.09	151.41	1106836	10.0000
Amphetamine	2.859	3077682	103.91	1575.90	9666848	10.0000
Benzoylecgonine	3.385	1831899	68662.63	113.80	8585336	10.0000
Buprenorphine	4.572	283877	430.64	27138.79	1137098	10.0000
Bupropion	3.758	3884527	285030.32	382.66	13701383	10.0000
Carbamazepine	4.219	13479266	∞	4190.36	852922	10.0000
Carisoprodol	4.202	1829693	107493.63	∞	9415918	10.0000
Chlordiazepoxide	4.719	1271039	101.06	∞	25494672	10.0000
Chlorpheniramine	3.939	10079	19.60	3789.42	28305367	10.0000
Citalopram	4.055	1588094	658.37	1097.07	28305367	10.0000
Clonazepam	4.425	2444379	35.89	202.67	25494672	10.0000
Cocaine	3.597	6666752	34086133.66	205.30	30730164	10.0000
Codeine	2.851	515140	95979.34	1412.38	13720746	10.0000
Cyclobenzaprine	4.354	395220	25617.20	40.88	1106836	10.0000
Desipramine	4.370	692818	115.30	106.95	1106836	10.0000
Dextromethorphan	4.093	476879	132.06	473.60	2564555	10.0000
Dextrorphan	3.387	2530175	13682.91	449.18	2564555	10.0000
Diazepam	4.843	2568644	564.40	24010.18	25494672	10.0000
Dihydrocodeine	2.788	1443676	1475.41	1071.32	13720746	10.0000
Diphenhydramine	4.032	3964693	3638.73	2395.36	28305367	10.0000
Doxepin	4.153	412179	169.15	13.03	7458639	10.0000
Doxylamine	3.662	11034147	∞	751.24	2564555	10.0000
EDDP	4.092	3702047	558.13	1997.44	26902088	10.0000
Estazolam	4.535	8737632	∞	1108.53	25494672	10.0000
Etizolam	4.651	425703	600.30	1762.23	25494672	10.0000

AM #25 Multi-Drug Screen Results

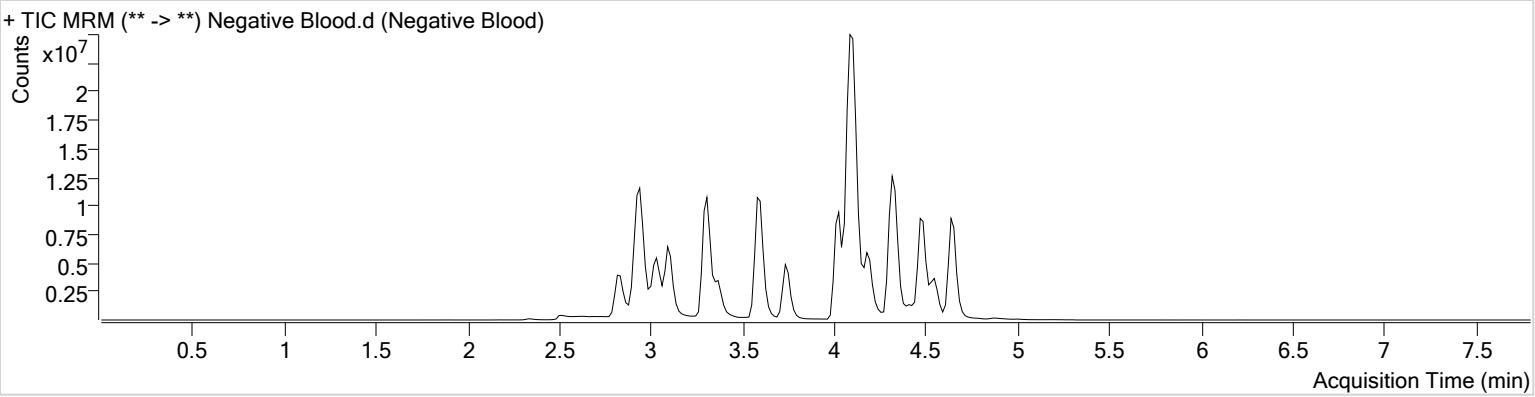
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Fentanyl	4.115	37076	33.69	∞	2508187	10.0000
Flunitrazepam	4.548	4196571	1065.74	509.78	25494672	10.0000
Fluoxetine	4.303	420625	83.35	7.49	923247	10.0000
Flurazepam	4.206	1235772	393.10	121.53	25494672	10.0000
Hydrocodone	3.048	1972124	77.38	160.80	13720746	10.0000
Hydromorphone	2.533	1819031	∞	∞	270759	10.0000
Imipramine	4.399	840230	623.44	∞	1106836	10.0000
Ketamine	3.527	4553391	∞	153.37	16280599	10.0000
Lamotrigine	3.587	308129	36.57	98.29	28305367	10.0000
Levamisole	2.993	4430485	4880.61	608.44	30730164	10.0000
Lorazepam	4.424	923583	∞	∞	25494672	10.0000
Maprotiline	4.430	221959	12.09	81.50	1106836	10.0000
MDA	2.994	2067047	1036.27	71.88	23774653	10.0000
MDEA	3.238	3943690	1434.06	1103.88	23774653	10.0000
MDMA	3.085	4852606	76210.64	170.39	23774653	10.0000
Meperidine	3.602	2027964	204.03	∞	2564555	10.0000
Meprobamate	3.637	851011	3793.99	177.07	9415918	10.0000
Methadone	4.395	1894614	10202.83	615.69	26902088	10.0000
Methamphetamine	2.980	4829940	1278.81	257.82	23774653	10.0000
Methocarbamol	3.557	913318	309.61	∞	26902088	10.0000
Methylphenidate	3.512	8250854	3676.05	∞	16778282	10.0000
Metoprolol	3.448	685008	1299.55	284.36	2564555	10.0000
Midazolam	4.775	557367	225.82	∞	25494672	10.0000
Mirtazapine	3.985	1728699	541.85	4827.85	2564555	10.0000
Mitragynine	4.221	80776	∞	∞	2564555	10.0000
Morphine	2.367	384091	2661.18	28.67	270759	10.0000
Norbuprenorphine	3.837	29249	144.63	20563.06	1137098	10.0000
Nordiazepam	4.677	1972301	∞	9946.32	25494672	10.0000
Norfentanyl	3.328	8020152	1438.63	68.87	33448334	10.0000
Norhydrocodone	2.943	41332	61.36	23296.69	270759	10.0000
Normeperidine	3.589	1260181	795.52	9.48	28305367	10.0000
Noroxycodone	2.880	1674391	41.61	∞	16280599	10.0000
Nortriptyline	4.417	228691	169.93	72.46	1106836	10.0000
O-desmethyl-tramadol	2.914	10829727	44245.84	296.57	28305367	10.0000
Olanzapine	3.842	142283	49190.69	47.34	852922	10.0000
Oxazepam	4.490	4250861	520.17	359.66	26264752	10.0000
Oxycodone	2.939	3714609	∞	∞	16280599	10.0000
Oxymorphone	2.393	2504572	∞	416.18	270759	10.0000
Paroxetine	4.346	48401	8144.63	∞	923247	10.0000
Phenazepam	4.636	1753685	904.47	∞	25494672	10.0000
Phencyclidine	3.941	3247374	514.46	952.56	2564555	10.0000
Phentermine	3.117	1314110	∞	∞	16778282	10.0000
Phenytoin	4.110	193288	61.98	59.50	852922	10.0000
Promethazine	4.337	1053173	426.27	175.21	28305367	10.0000
Pseudoephedrine	2.690	44802011	∞	∞	23774653	10.0000
Quetiapine	4.466	1400150	326707.00	4618.55	43603565	10.0000
Sertraline	4.550	179879	8.91	242.00	923247	10.0000
Sufentanil	4.451	31714	20434.89	46.89	33448334	10.0000
Tapentadol	3.422	4708256	2590.64	3347.01	16280599	10.0000
Temazepam	4.658	5198344	891.54	292.33	25494672	10.0000
Tramadol	3.433	11598097	973.50	147.06	28305367	10.0000
Trazodone	4.590	1465430	7912.19	3505.26	7458639	10.0000
Venlafaxine	3.784	6769383	792.36	129.39	923247	10.0000
Zaleplon	4.366	5449698	678397.19	195.00	43603565	10.0000
Zolpidem	4.335	10957234	934677.30	204.80	43603565	10.0000
Zopiclone	4.175	875467	6709.00	215.04	4673338	10.0000

AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\MDS.batch.bin
Calibration Last Update	8/11/2020 11:40:59 AM

Instrument	Falco	**Data File**	Negative Blood.d
Type	Sample	**Sample**	Negative Blood
Acq. Method	AM 25 061720.m	**Operator**	Celena Shrum
Sample Position	P5-G4	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/5/2020 7:17:36 PM		
Sample Info.			

Sample Chromatogram

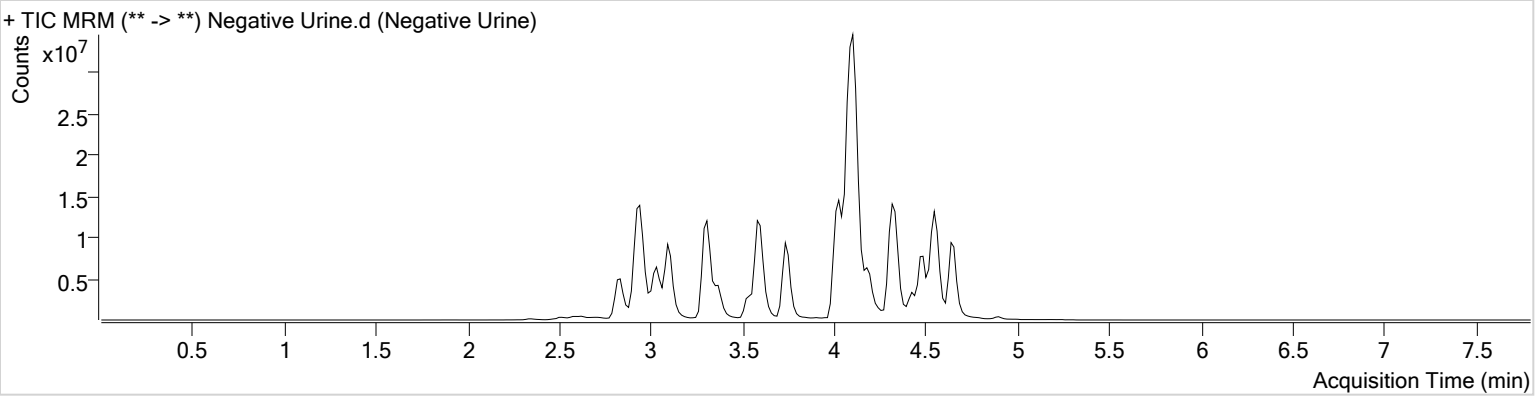


AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\MDS.batch.bin
Calibration Last Update	8/11/2020 11:40:59 AM

Instrument	Falco	**Data File**	Negative Urine.d
Type	Sample	**Sample**	Negative Urine
Acq. Method	AM 25 061720.m	**Operator**	Celena Shrum
Sample Position	P5-A5	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/5/2020 7:34:16 PM		
Sample Info.			

Sample Chromatogram



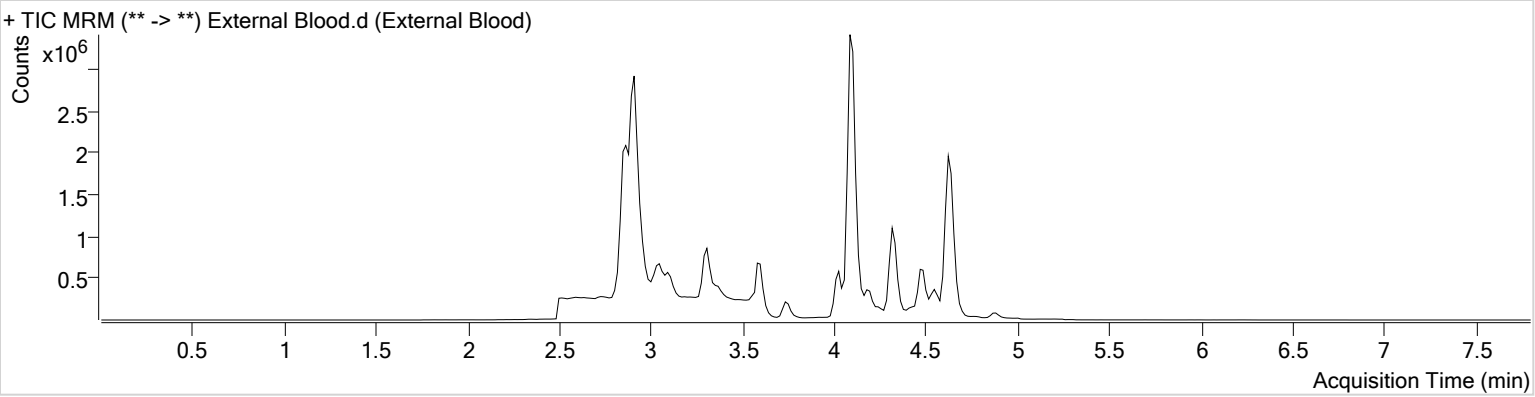
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Phentermine	3.102	232611	29.10	18.77	25174491	1.1797 <5

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\MDS.batch.bin
Calibration Last Update 8/11/2020 11:40:59 AM

Instrument	Falco	**Data File**	External Blood.d
Type	Sample	**Sample**	External Blood
Acq. Method	AM 25 061720.m	**Operator**	Celena Shrum
Sample Position	P5-H4	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/5/2020 7:25:57 PM		
Sample Info.			

Sample Chromatogram



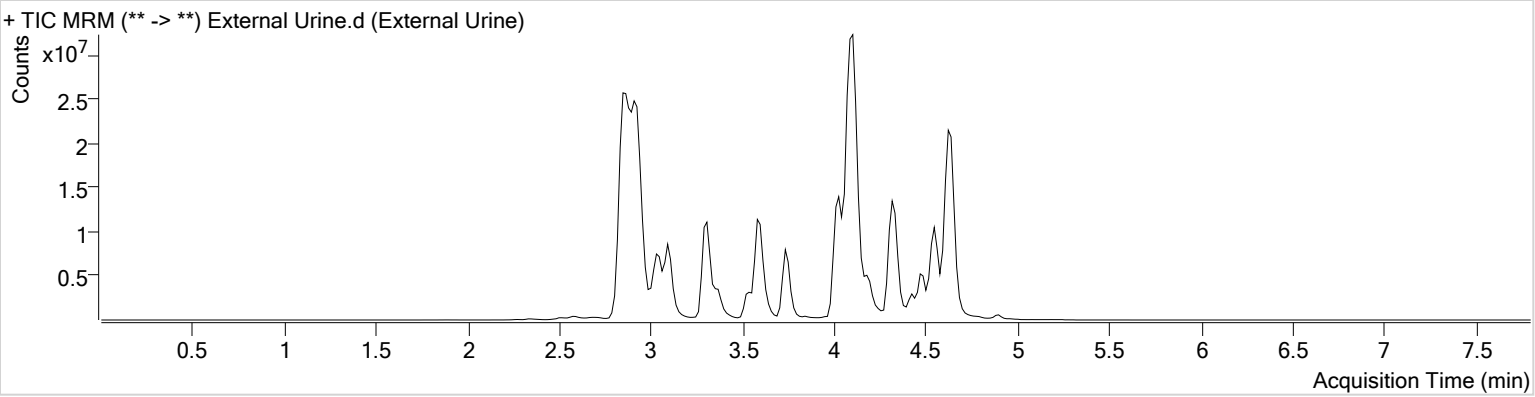
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.626	2144347	550.84	3089.54	2070087	107.1411
Amphetamine	2.874	1687465	317.79	∞	533318	99.3824
O-desmethyl-tramadol	2.914	5742748	∞	453.51	1612180	93.1017

AM #25 Multi-Drug Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\MDS.batch.bin
Calibration Last Update	8/11/2020 11:40:59 AM

Instrument	Falco	**Data File**	External Urine.d
Type	Sample	**Sample**	External Urine
Acq. Method	AM 25 061720.m	**Operator**	Celena Shrum
Sample Position	P5-B5	**Comment**	
Injection Volume	5		
Acq. Date-Time	8/5/2020 7:42:37 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.626	28141815	∞	18433.08	22544655	129.1095
Amphetamine	2.859	34542877	6772.78	∞	10423199	104.0923
O-desmethyl-tramadol	2.914	54232057	∞	723.10	50555102	28.0377
Phentermine	3.102	363602	∞	36.29	21227230	2.1870<5 *

*Ratio is also way off.

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

Extraction Date: 08/05/2020
Plate lot#: IDP-108-2-200303
Mobile phase A: 0.1% Formic Acid in LCMS Water
Blank Blood Lot: 445283-4
LCMS-QQQ ID: 069901

Analyst: Celena Shrum
Plate Expiration: 09/30/2020
Mobile phase B: 0.1% Formic acid in Acetonitrile
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. 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: 800µl
☒ 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

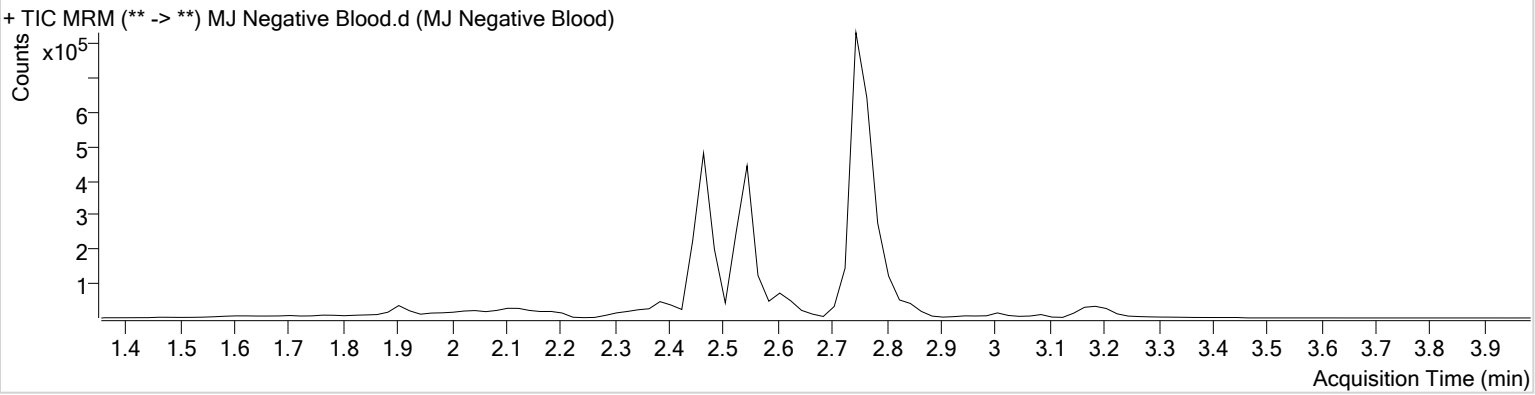
COMMENTS: THC curve range: 3-100, Carboxy-THC curve range: 5-250, THC-OH curve range: 3-100.

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update	8/12/2020 9:14:57 AM

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	8/5/2020 4:25:08 PM		
Sample Info.			

Sample Chromatogram

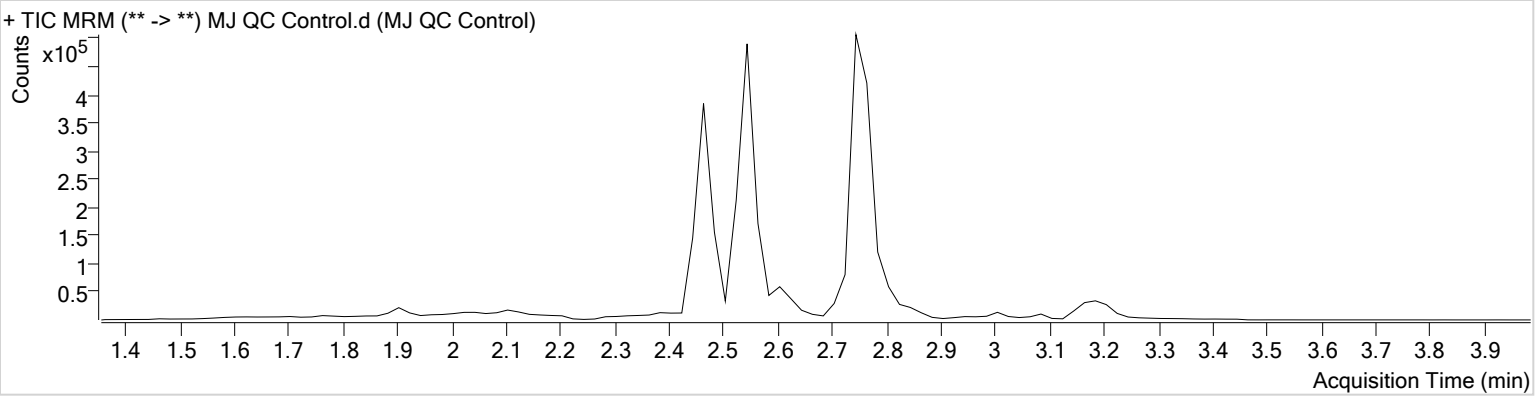


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update 8/12/2020 9:14:57 AM

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	8/5/2020 4:12:06 PM		
Sample Info.			

Sample Chromatogram



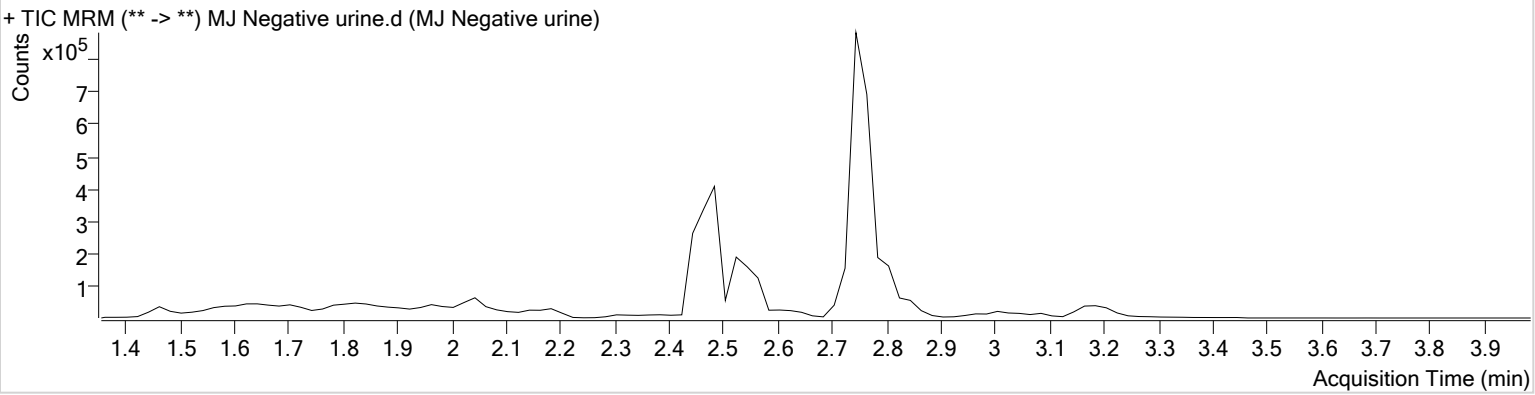
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.799	3806	111286	4.6100	ng/ml
THC-COOH	2.545	117021	565624	14.9418	ng/ml
THC-OH	2.471	6596	775065	4.2104	ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update	8/12/2020 9:14:57 AM

Instrument	Falco	**Data File**	MJ Negative urine.d
Type	Sample	**Sample**	MJ Negative urine
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-B2	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/5/2020 4:38:12 PM		
Sample Info.			

Sample Chromatogram

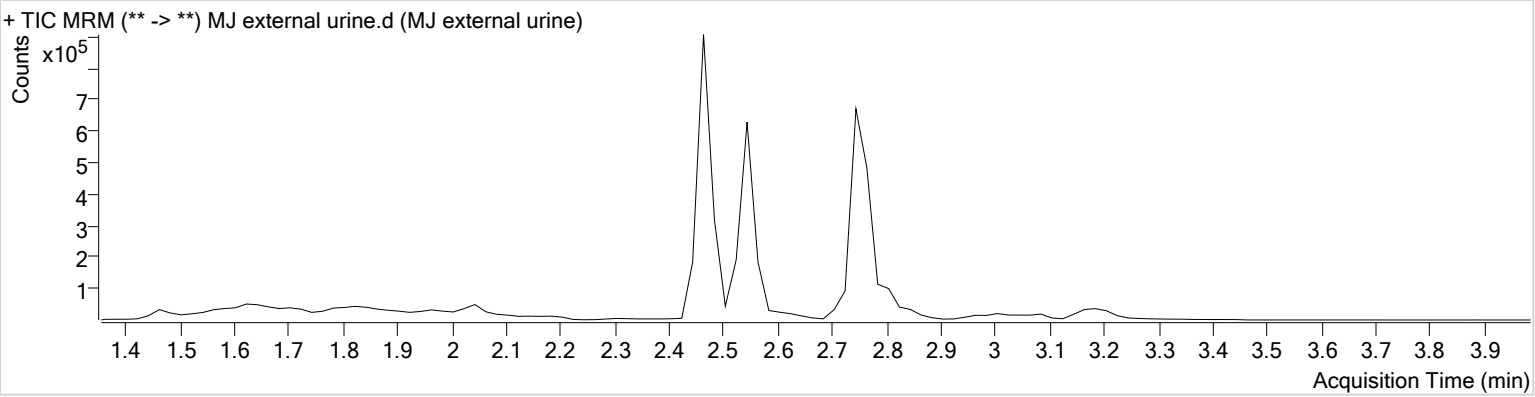


AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update	8/12/2020 9:14:57 AM

Instrument	Falco	**Data File**	MJ external urine.d
Type	Sample	**Sample**	MJ external urine
Acq. Method	am 26 test.m	**Operator**	Celena Shrum
Sample Position	P3-C2	**Comment**	
Injection Volume	10		
Acq. Date-Time	8/5/2020 4:44:44 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.819	9467	139812	8.9476	ng/ml
THC-COOH	2.545	142834	796679	12.9520	ng/ml
THC-OH	2.491	16333	1500757	5.3386	ng/ml

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: WS011620)

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	193941	
THC	Cerilliant	FE09101501	11/30/2020
C-THC	Cerilliant	FE07171501	09/30/2020
THC-OH	Cerilliant	FE07221601	07/31/2021
Prepared:	01/16/2020		
Prepared By:	Tamara Salazar		
Expires:	09/30/2020		

Urine External Control Solution (Lot: 042220)

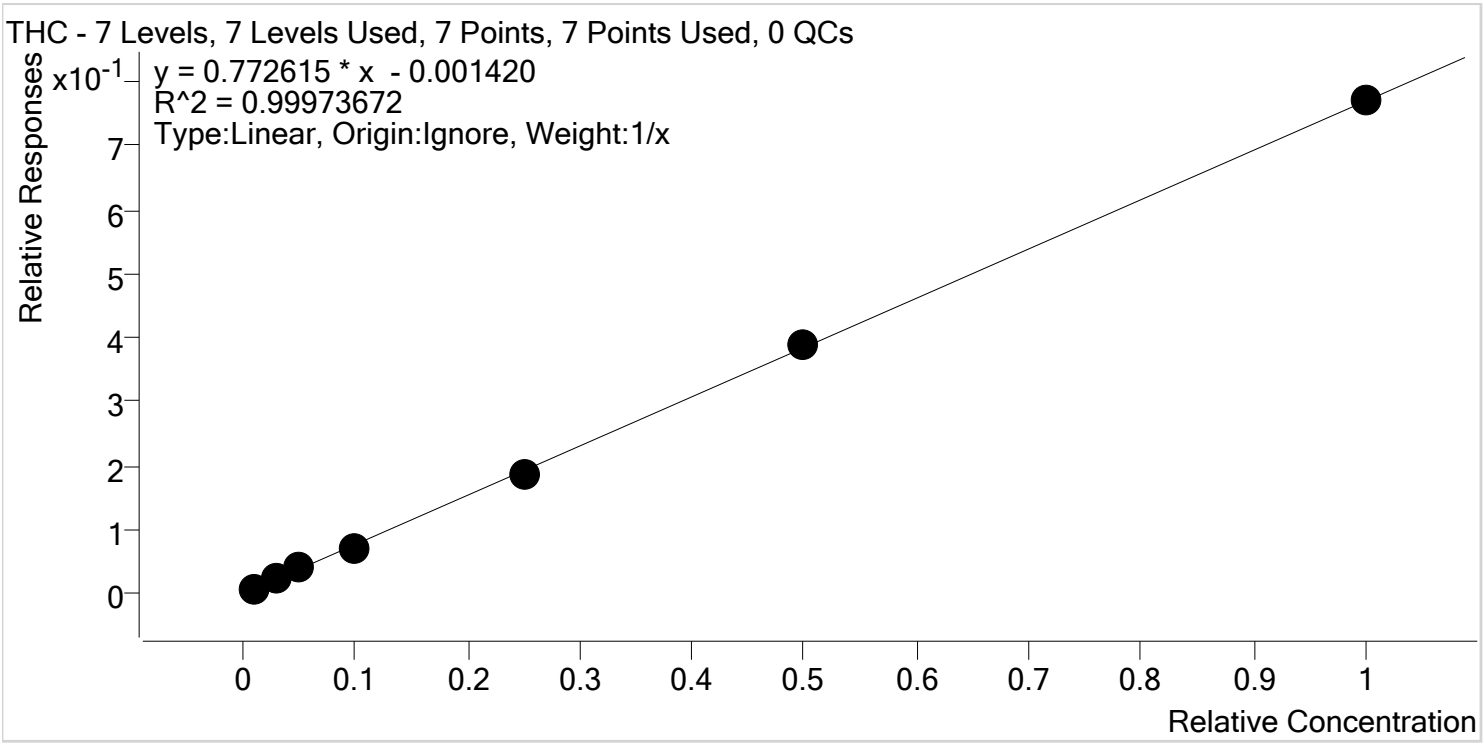
200 ul of methanol external control solution was added to 9800 ul of urine.

Approximately 20ng/mL each

Component	***Source***	***Source Lot Number***
Negative Urine	Pocatello Lab	POC031319
Methanol External Control Solution	-	WS011620
Prepared:	07/07/2020	
Prepared by:	Sophie Jackson	
Expires:	09/30/2020	

AM #26 Cannabinoids Screen Calibration Curve Report

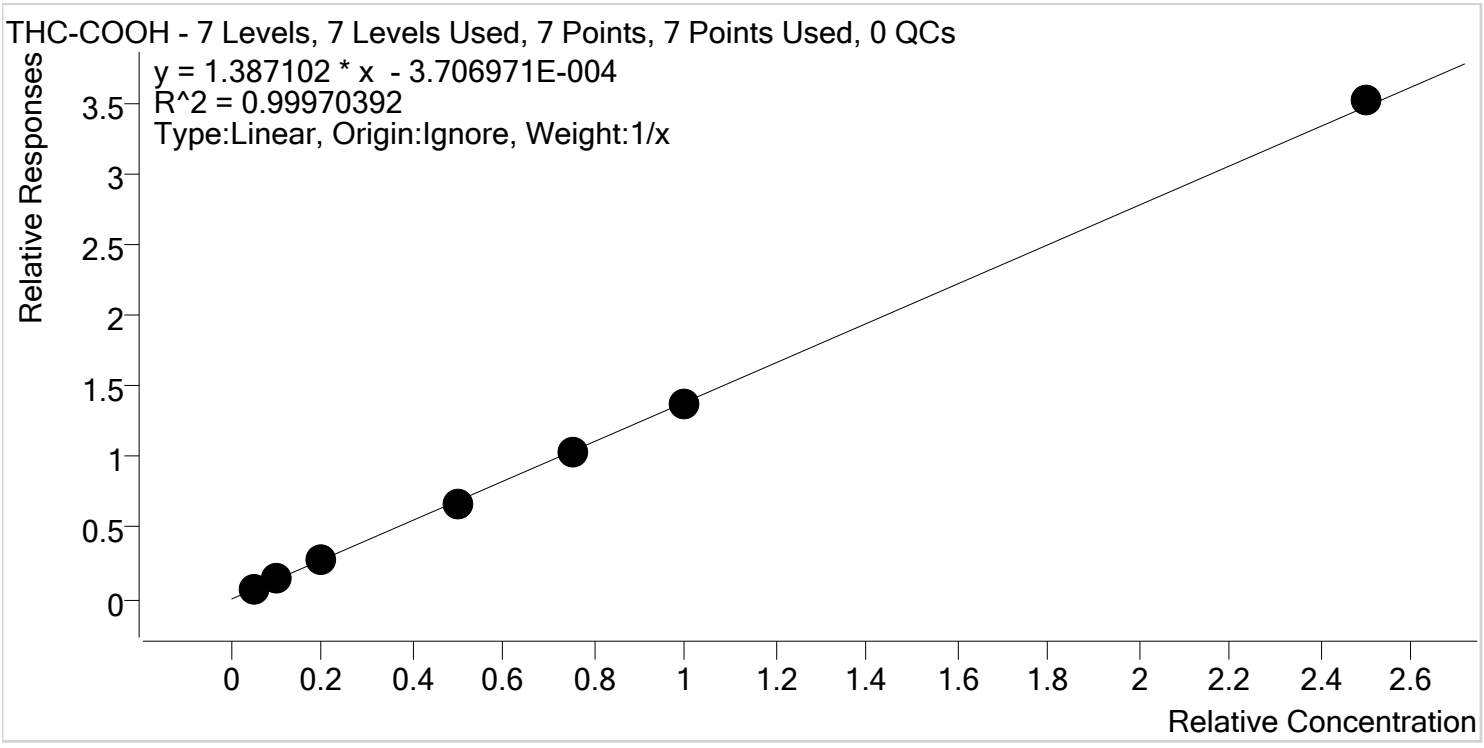
Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Last Cal. Update	8/12/2020 9:14 AM
Analyst Name	ISP\datastor
Analyte	THC
Internal Standard	THC-d3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	1.0	1.1	105.4
MJ Cal 2	2	✔	3.0	2.9	96.7
MJ Cal 3	3	✔	5.0	5.1	102.4
MJ Cal 4	4	✔	10.0	9.6	95.7
MJ Cal 5	5	✔	25.0	24.6	98.4
MJ Cal 6	6	✔	50.0	50.7	101.4
MJ Cal 7	7	✔	100.0	100.1	100.1

AM #26 Cannabinoids Screen Calibration Curve Report

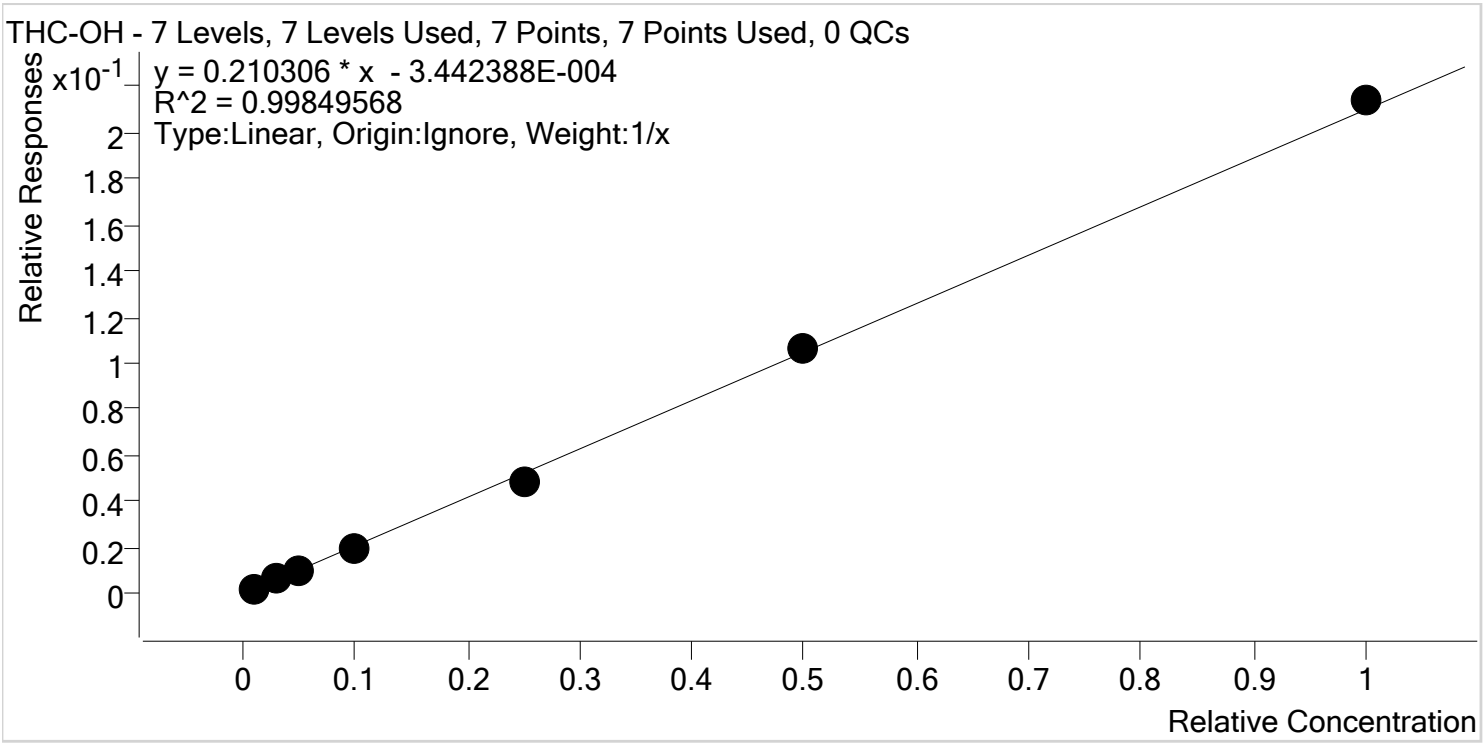
Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Last Cal. Update 8/12/2020 9:14 AM
Analyst Name ISP\datastor
Analyte THC-COOH **Internal Standard** THC-COOH-d9



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	5.0	5.3	105.8
MJ Cal 2	2	✔	10.0	9.8	98.5
MJ Cal 3	3	✔	20.0	19.7	98.7
MJ Cal 4	4	✔	50.0	48.8	97.6
MJ Cal 5	5	✔	75.0	74.8	99.8
MJ Cal 6	6	✔	100.0	98.4	98.4
MJ Cal 7	7	✔	250.0	253.1	101.2

AM #26 Cannabinoids Screen Calibration Curve Report

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Last Cal. Update	8/12/2020 9:14 AM
Analyst Name	ISP\datastor
Analyte	THC-OH
Internal Standard	THC-OH-d3



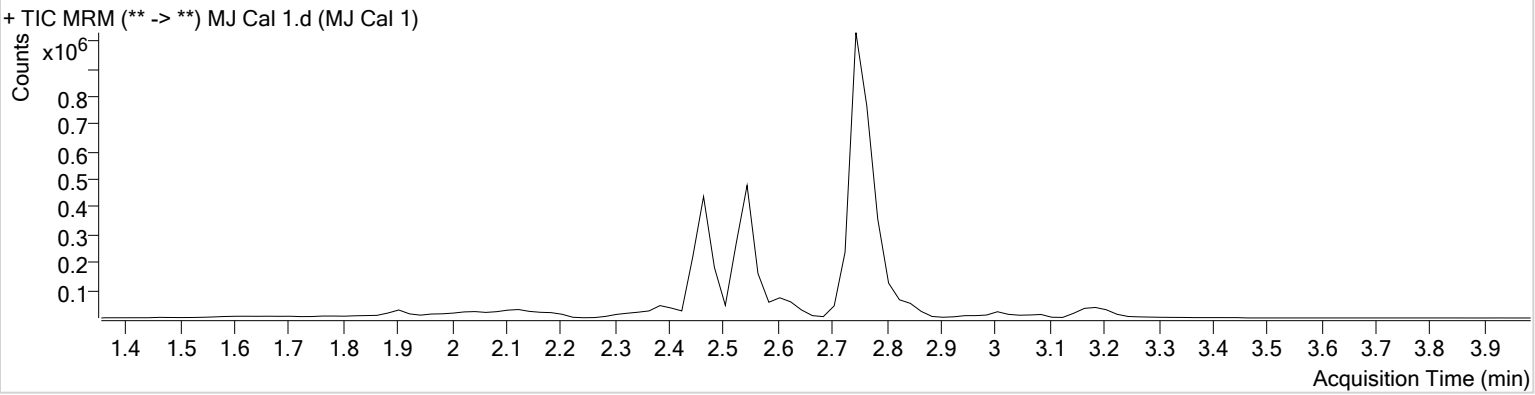
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✔	1.0	1.2	116.0
MJ Cal 2	2	✔	3.0	3.0	98.8
MJ Cal 3	3	✔	5.0	4.8	96.1
MJ Cal 4	4	✔	10.0	9.3	92.8
MJ Cal 5	5	✔	25.0	23.3	93.0
MJ Cal 6	6	✔	50.0	50.7	101.4
MJ Cal 7	7	✔	100.0	101.8	101.8

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update 8/12/2020 9:14:57 AM

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	8/5/2020 3:26:17 PM		
Sample Info.			

Sample Chromatogram



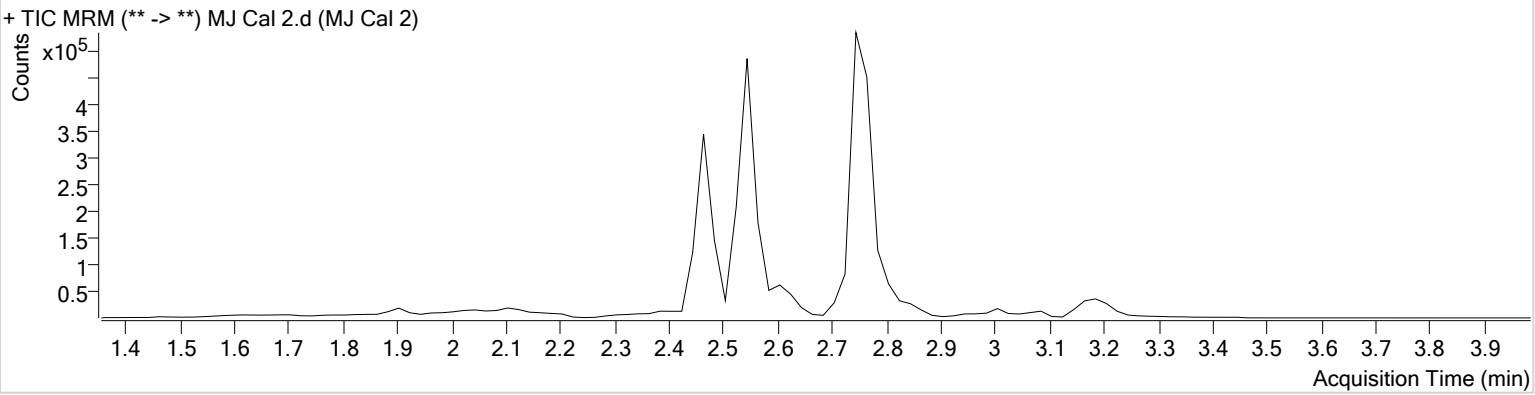
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	2.799	2070	307922	1.0539	ng/ml	**Low**
THC-COOH	2.545	48078	658814	5.2878	ng/ml	
THC-OH	2.471	2066	986168	1.1599	ng/ml	**Low**

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update 8/12/2020 9:14:57 AM

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	8/5/2020 3:32:59 PM		
Sample Info.			

Sample Chromatogram



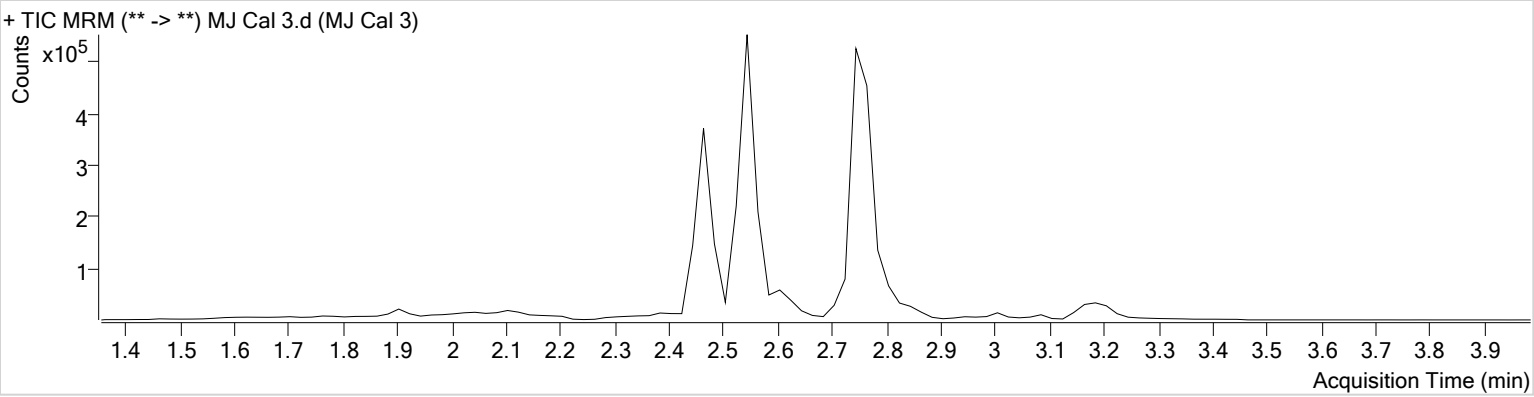
Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	2.799	2520	120083	2.9000	ng/ml	**Low**
THC-COOH	2.545	83905	616042	9.8457	ng/ml	
THC-OH	2.471	4192	711702	2.9642	ng/ml	**Low**

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update 8/12/2020 9:14:57 AM

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	8/5/2020 3:39:32 PM		
Sample Info.			

Sample Chromatogram



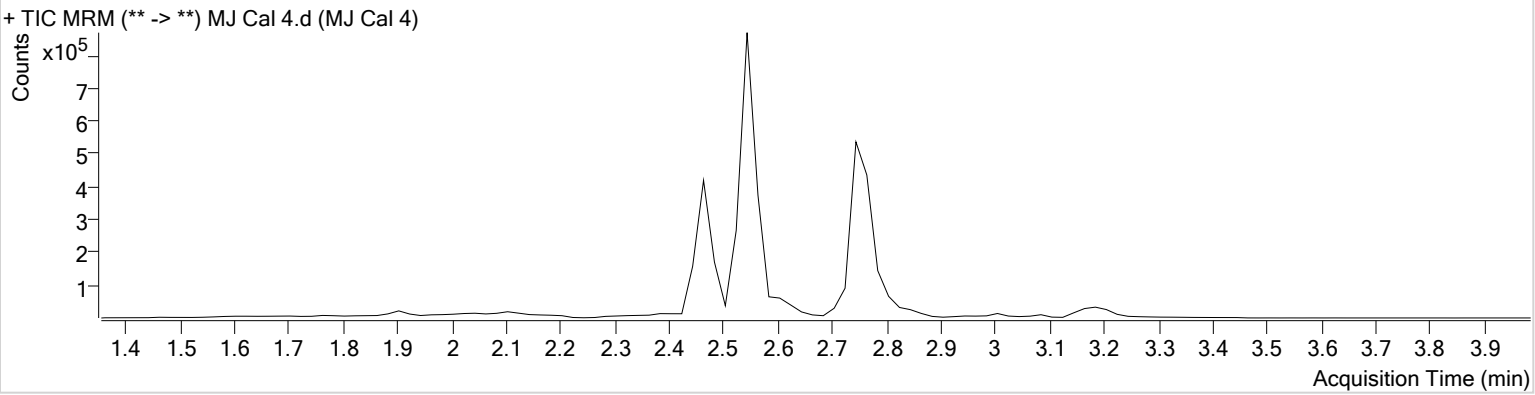
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.799	4778	125307	5.1191	ng/ml
THC-COOH	2.545	158065	577765	19.7498	ng/ml
THC-OH	2.471	7181	735668	4.8054	ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update 8/12/2020 9:14:57 AM

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	8/5/2020 3:46:04 PM		
Sample Info.			

Sample Chromatogram



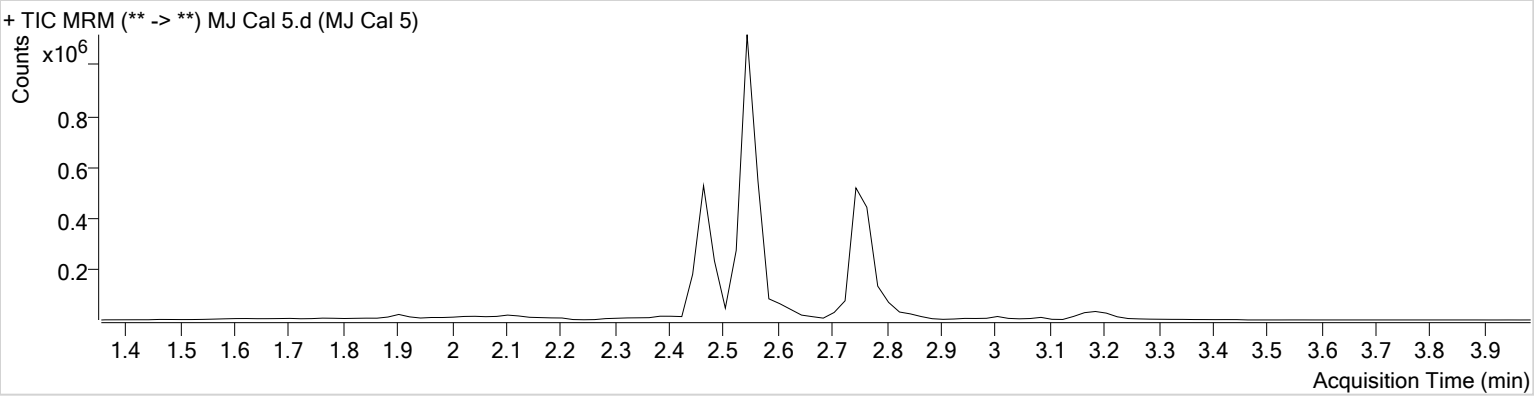
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.799	9595	132346	9.5674	ng/ml
THC-COOH	2.545	403066	595526	48.8208	ng/ml
THC-OH	2.471	14911	777493	9.2831	ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update	8/12/2020 9:14:57 AM

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	8/5/2020 3:52:36 PM		
Sample Info.			

Sample Chromatogram



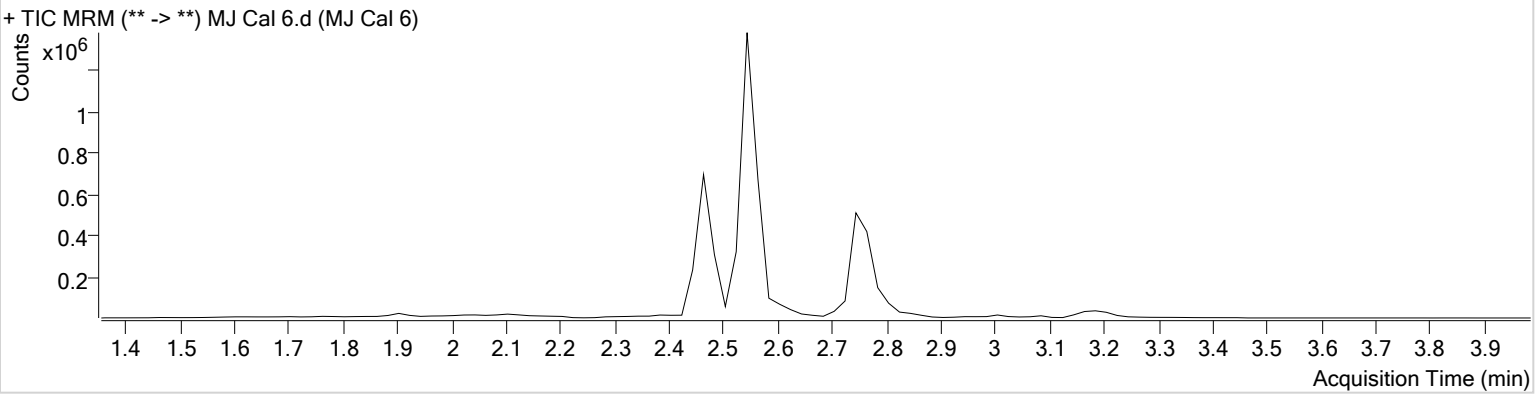
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.799	21495	113896	24.6106 ng/ml
THC-COOH	2.545	608500	586355	74.8422 ng/ml
THC-OH	2.471	38453	791581	23.2624 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update 8/12/2020 9:14:57 AM

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	8/5/2020 3:59:06 PM		
Sample Info.			

Sample Chromatogram



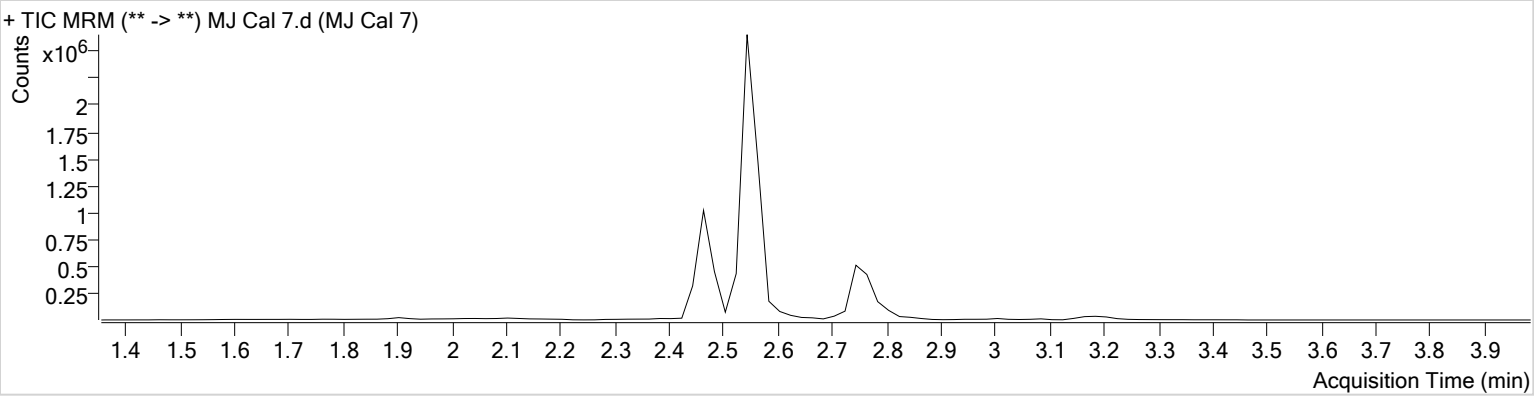
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.799	44614	114322	50.6938 ng/ml
THC-COOH	2.545	814698	597201	98.3752 ng/ml
THC-OH	2.471	84810	798151	50.6890 ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2020\AM 25-26\AM 25-26 080520 CS\QuantResults\THC.batch.bin
Calibration Last Update	8/12/2020 9:14:57 AM

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	8/5/2020 4:05:36 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.799	84208	109131	100.0551	ng/ml
THC-COOH	2.545	1874199	533947	253.0784	ng/ml
THC-OH	2.471	165314	773134	101.8360	ng/ml