REVIEWED
By Anne Nord at 11:50 am, May 08, 2020

5/7/2020 BW

Worklist: 4215

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
C2020-0720	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0730	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0743	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0753	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0756	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0757	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0771	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0772	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0787	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0793	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0793	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0799	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0800	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0801	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0815	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0820	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

BW

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

Extraction Date: 5/5/20 Analyst: Britany Wylie
Plate lot#: 190725 Plate Expiration: 1/25/2020

Mobile phase A: 10mM Amm Form 0.5M Ammonium Hydroxide **Mobile phase B:** 0.1% Formic Acid in MeOH Ethyl Acetate LC Methanol
Blank Blood Lot: 20A52255 **Blank Urine lot:** 41520 **Column**: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)
LCMS-QQQ ID: 69679

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 pipette: 250 ul urine in blank well, add 40 ul BG Turbo, add 100 ul 500 mm sodium phosphate buffer mix for at least five minutes ambient temperature.
Pipette **250 µL blood (calibrated pipette)** or 250 ul urine in wells of analytical (standards) plate. **Pipette ID: 1926134**
☒ 3. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
☒ 4. Pipette **250 µL of 0.5 M ammonium hydroxide** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
☒ 6. Transfer **300 µL of blood or urine+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: 66792*
☒ 8. Wait 5 minutes.
☒ 9. Add **900 µL ethyl acetate.**
☒ 10. Wait 5 minutes.
☒ 11. Apply positive pressure for approx. 10-15 seconds. ***(12-15 PSI- Selector to the left).***
☒ 12. Add **900 µL ethyl acetate.**
☒ 13. Wait 5 minutes.
☒ 14. Apply positive pressure for approx. 10-15 seconds. ***(12-15 PSI- Selector to the left).***
☒ 15. Remove plate containing eluate. **Urine samples add 50 ul 1% HCl in MeOH** Place on SPE Dry and evaporate to dryness at approx. 35°C.
SPE Dry ID: 66819
☒ 16. Reconstitute in **100 µL 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 5 or greater or 2-5 for discretionary range.
☒ 4. Did all QCs pass for each analyte? (If no is it described in comments?)
☒ 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: *Olanzapine not evaluated*

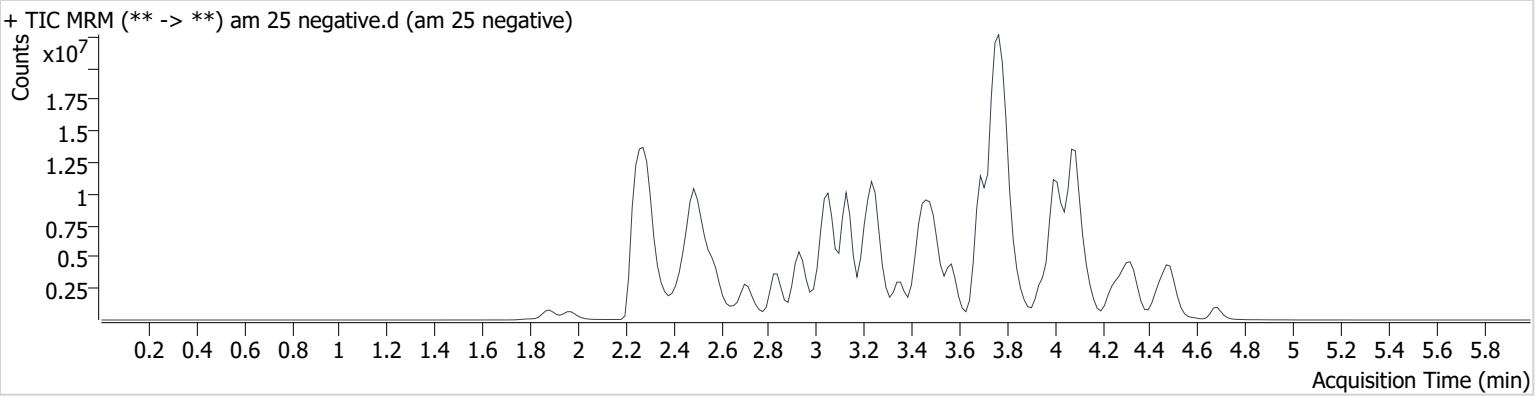
BW

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am25-26 5-5-2020\QuantResults\mds.batch.bin
Calibration Last Update 5/5/2020 7:21:29 PM

Instrument	69679	**Data File**	am 25 negative.d
Type	Sample	**Sample**	am 25 negative
Acq. Method	am25 short rt short.m	**Operator**	Britany Wylie
Sample Position	P2-C1	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	5/5/2020 3:20:09 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.	
Methamphetamine	2.574	1918575	∞	111.4	7350002	6.290	<10

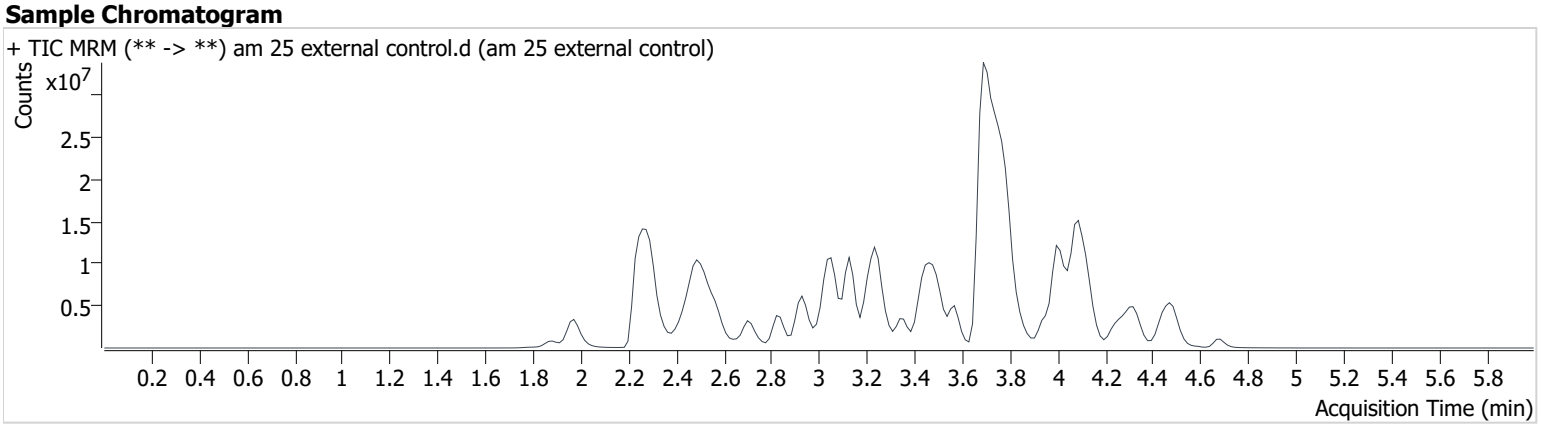
BW

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am25-26 5-5-2020\QuantResults\mds.batch.bin
Calibration Last Update 5/5/2020 7:21:29 PM

Instrument	69679	**Data File**	am 25 external control.d
Type	Sample	**Sample**	am 25 external control
Acq. Method	am25 short rt short.m	**Operator**	Britany Wylie
Sample Position	P2-D1	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	5/5/2020 3:26:51 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Chlordiazepoxide	4.460	2195369	1253.6	670.8	5107644	128.908
Diphenhydramine	3.720	63848682	1445.2	3439.5	26715068	152.389
Hydromorphone	1.978	6214903	4147.7	1847.4	2767677	86.970
Methamphetamine	2.559	3567931	88.1	272.9	11988332	7.171 <10
Nortriptyline	4.128	9095564	2714.7	805.2	2902097	81.870

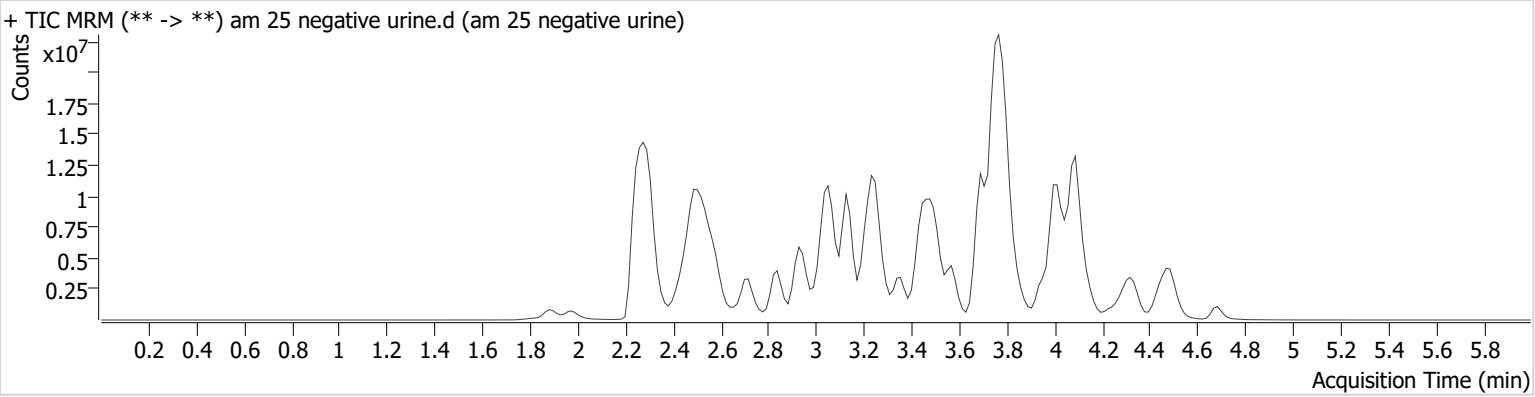
BW

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am25-26 5-5-2020\QuantResults\mds.batch.bin
Calibration Last Update 5/5/2020 7:21:29 PM

Instrument	69679	**Data File**	am 25 negative urine.d
Type	Sample	**Sample**	am 25 negative urine
Acq. Method	am25 short rt short.m	**Operator**	Britany Wylie
Sample Position	P2-G2	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	5/5/2020 4:53:49 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	2.574	4440726	∞	178.6	14592375	7.333 <32

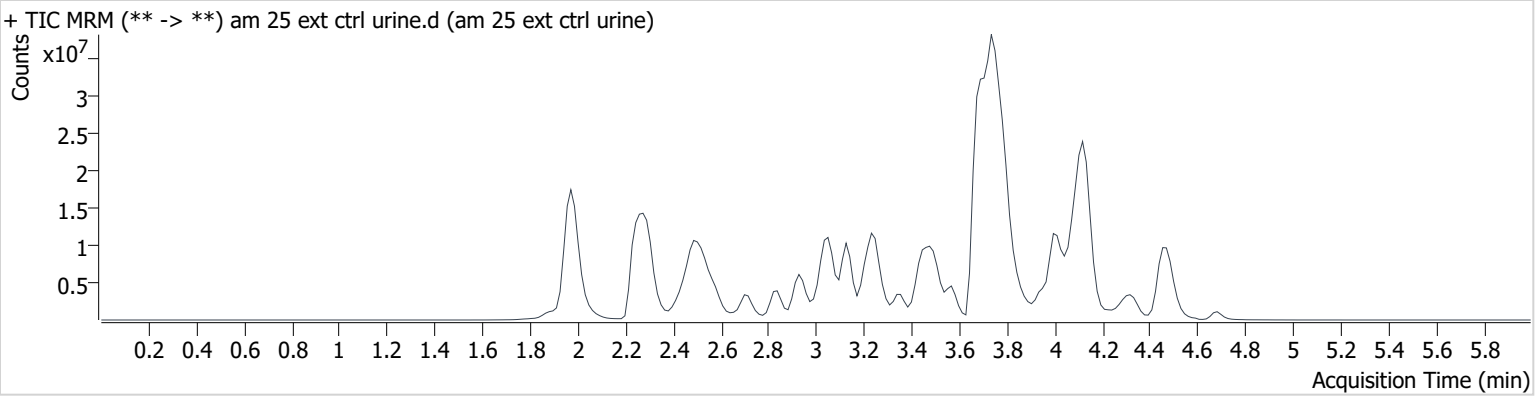
BW

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am25-26 5-5-2020\QuantResults\mds.batch.bin
Calibration Last Update 5/5/2020 7:21:29 PM

Instrument	69679	**Data File**	am 25 ext ctrl urine.d
Type	Sample	**Sample**	am 25 ext ctrl urine
Acq. Method	am25 short rt short.m	**Operator**	Britany Wylie
Sample Position	P2-H2	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	5/5/2020 5:00:31 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Chlordiazepoxide	4.459	13143124	1960.4	15366.3	4624076	852.447
Diphenhydramine	3.713	117250994	49471.7	55525.4	10797501	692.392
Hydromorphone	1.978	41984281	29108.0	133724.9	2182133	745.174
Methamphetamine	2.574	2375232	86.9	∞	14498834	3.947<32
Nortriptyline	4.128	41827912	225238.4	1841.3	1950003	560.323

BW

Toxicology AM method 25/28 urine external control prep

working solution 10000 ng/ml in meoh Hydromorphone, Diphenhydramine, Nortriptyline, Chlordiazepoxide

Stock solution 1mg/ml 50 ul each in 4800ul meOH

ppd 4/17/20: Exp: 6/1/20 lot 41720 by baw

Drug	lot	expiration
Hydromorphone	FE04101502	6/1/2020
Diphenhydramine	FN09161502	9/1/2020
nortriptyline	FN06191503	8/1/2020
chlordiazepoxide	FE07241502	8/1/2020

AM 25/28 control 500 ul working solution (41720) in 4500 ul negative urine (500ng/mL Expected concentration)

ppd 4/17/20, exp 6/1/20 lot u32420 negative urine 41520 by BAW

AM 25/28 Blood Control: 50ul working solution (4172020) in 4950 ul neg blood (100ng/mL Expected concentration)

ppd 4/17/20, exp 6/1/20 lot b3920 neg blood lot 20A52255 by BAW

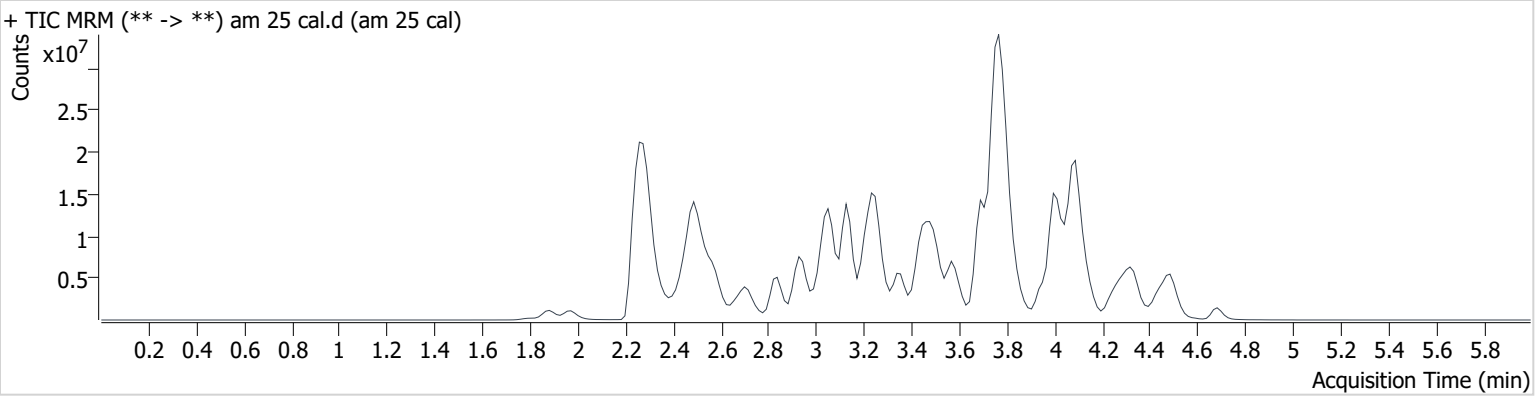
BW

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am25-26 5-5-2020\QuantResults\mds.batch.bin
Calibration Last Update 5/5/2020 7:21:29 PM

Instrument	69679	**Data File**	am 25 cal.d
Type	Cal	**Sample**	am 25 cal
Acq. Method	am25 short rt short.m	**Operator**	Britany Wylie
Sample Position	P2-A1	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	5/5/2020 3:13:26 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	2.455	26629	5809.7	43.3	861229	10.000
7-aminoclonazepam	3.297	748554	1272.0	802.4	3377397	10.000
7-aminoflunitrazepam	3.540	1140374	1610.9	1400.1	7110338	10.000
Acetyl Fentanyl	3.429	227324	98.8	∞	15114381	10.000
Acetyl Norfentanyl	2.479	142978	367.9	223.1	9101479	10.000
a-hydroxyalprazolam	4.318	107120	198.2	4595.9	655596	10.000
alpha-hydroxymidazolam	4.347	636718	473.7	885.6	3855941	10.000
alpha-PVP	3.135	2379099	426.9	510.0	11056466	10.000
Alprazolam	4.428	881433	1102.0	521.3	3363557	10.000
Amitriptyline	4.126	1117929	176.5	1035.3	4459099	10.000
Amphetamine	2.468	1365426	242.8	645.3	4775446	10.000
Benzoylecgonine	3.066	476825	1453.6	253.4	2145924	10.000
Buprenorphine	3.794	151768	324.3	15527.7	565621	10.000
Bupropion	3.363	2405252	805.5	1871.7	9017584	10.000
Carbamazepine	4.022	3131876	∞	1296.5	17282898	10.000
Carisoprodol	4.005	700376	515.3	141.7	3285319	10.000
Chlordiazepoxide	4.459	168593	71.1	3200.0	5056310	10.000
Chlorpheniramine	3.605	11196	17.4	15180.5	32631122	10.000
Citalopram	3.767	889400	371.3	269.0	4145842	10.000
Clonazepam	4.259	767325	435.0	917.2	1222575	10.000
Cocaine	3.202	3082399	11416.4	666.6	17638012	10.000
Codeine	2.337	182886	287.0	265.4	954620	10.000
Cyclobenzaprine	4.049	1959037	489.8	90.3	8270689	10.000
Desipramine	4.081	2475422	1961.5	643.7	13332973	10.000
Dextromethorphan	3.743	799905	1439.1	708.3	4079990	10.000
Dextrorphan	3.009	1395738	5986.2	226434.5	7934168	10.000
Diazepam	4.692	702138	1729.1	1063.1	3420376	10.000
Dihydrocodeine	2.306	429458	1997.3	257.2	2338730	10.000
Diphenhydramine	3.698	5117684	1493.7	985.1	32631122	10.000
Doxepin	3.832	1169848	2075.9	236.1	6305637	10.000
Doxylamine	3.268	5329914	1953.5	3242.4	26260769	10.000
EDDP	3.771	4054603	1613.0	238.0	26510714	10.000
Estazolam	4.339	2065641	907.9	1866.5	5625023	10.000
Etizolam	4.454	91440	37235.4	121573.7	5625023	10.000

BW

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Fentanyl	3.674	174779	78.2	62154.5	11309644	10.000
Flunitrazepam	4.397	1223077	832.3	350560.9	232920	10.000
Fluoxetine	4.060	1599425	450.0	67.1	7317118	10.000
Flurazepam	3.795	1334259	943.4	131567.4	232920	10.000
Hydrocodone	2.549	793257	1407.2	1299.1	4836710	10.000
Hydromorphone	1.978	760031	1153.1	4090.3	2943632	10.000
Imipramine	4.079	2950553	2454.6	1288.6	12453932	10.000
Ketamine	2.965	1772952	3429.9	151.1	8952827	10.000
Lamotrigine	3.146	153496	200.7	732.3	6521996	10.000
Levamisole	2.495	1660970	405.5	339.3	17638012	10.000
Lorazepam	4.243	221719	151.6	∞	3363557	10.000
Maprotiline	4.126	844409	156.5	408.6	4459099	10.000
MDA	2.603	1676951	435.3	197.1	7907995	10.000
MDEA	2.845	2692042	1646.6	1094.3	12873563	10.000
MDMA	2.678	2823179	1096.8	2923.8	1873705	10.000
Meperidine	3.223	1359624	751.1	351.9	6521996	10.000
Meprobamate	3.381	491738	11784.3	264.8	2196447	10.000
Methadone	4.090	3619091	3923.9	646.2	18788022	10.000
Methamphetamine	2.574	3468512	∞	58.3	8357569	10.000
Methocarbamol	3.286	200920	44.0	533.4	6521996	10.000
Methylphenidate	3.149	4757955	7664.1	442.4	24552335	10.000
Metoprolol	3.068	323637	2740.8	272.4	6521996	10.000
Midazolam	4.272	335641	2419.2	127938.1	4876710	10.000
Mirtazapine	3.344	1341870	17479.8	4033.1	6521996	10.000
Mitragynine	3.825	158915	410.7	1400.0	6305637	10.000
Morphine	1.800	143130	4723.0	∞	109197	10.000
Norbuprenorphine	3.504	31950	20452.2	10574.5	172145	10.000
Nordiazepam	4.525	643265	768.6	2739.7	2211159	10.000
Norfentanyl	2.936	2926607	729.7	1829.1	14048396	10.000
Norhydrocodone	2.521	15660	37.4	26.5	775994	10.000
Normeperidine	3.241	1256135	405.0	603.9	5283812	10.000
Noroxycodone	2.473	541968	90.0	147.1	2971524	10.000
Nortriptyline	4.128	1121969	1227420.7	493.9	2930815	10.000
O-desmethyl-tramadol	2.507	3680923	2740.9	185.8	22270025	10.000
~~Olanzapine~~ bw 5-7-20	~~2.760~~	~~11452~~	~~50.2~~	~~1.2~~ **~~Low~~**	~~171208~~	~~10.000~~ NE
Oxazepam	4.324	973945	485.1	117.1	6069126	10.000
Oxycodone	2.486	1413594	729.3	1100.7	7026758	10.000
Oxymorphone	1.883	797794	2023.0	8341.4	3474729	10.000
Paroxetine	4.072	226023	∞	167.8	4954192	10.000
Phenazepam	4.484	1062277	1609.7	1726.8	4540157	10.000
Phencyclidine	3.592	2912545	1065.0	966.9	14891259	10.000
Phentermine	2.742	837002	39.7	11.4	8593545	10.000
Phenytoin	3.913	27526	50.7	24.9	171208	10.000
Promethazine	4.000	4496006	2620.8	516.1	18763235	10.000
Pseudoephedrine	2.269	27987751	897.4	8478.6	92479055	10.000
Quetiapine	3.948	1112994	2221.6	1156.7	1724558	10.000
Sertraline	4.291	1025923	1093.0	504.3	4954192	10.000
Sufentanil	3.948	144591	77197.5	158.2	8537549	10.000
Tapentadol	3.075	2329996	791.7	3760.6	13026050	10.000
Temazepam	4.505	1619152	929.5	348.0	7802895	10.000
Tramadol	3.054	4991108	1373.6	42.2	27268679	10.000
Trazodone	3.811	1818544	281.5	403.4	7562715	10.000
Venlafaxine	3.450	3475301	54525.5	902.2	19828683	10.000
Zaleplon	4.153	1005245	281.4	201.8	2789462	10.000
Zolpidem	3.508	4103053	1290.4	727.5	21521402	10.000
Zopiclone	3.413	285113	2847.1	2019.2	1512820	10.000

* NE - Not evaluated

BW

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

BW

AM# 26: THC and Metabolites Screen in Blood by LC-MS/MS

Extraction Date: ~~5/6/2020~~ 5/5/2020 BW Analyst: Britany Wylie

Plate lot#: 200303 Plate Expiration: 09/03/2020

Mobile phase A: 10mM Ammonium Formate 0.1% Formic Acid in Water **Mobile phase B:** 0.1% Formic acid in MeOH MTBE Hexane

Blank Blood Lot: 20A52255 **Urine Blank:** 41520 **Column**: Phenomenex Phenyl Hexyl (4.6x50mm: 2.6 um)

LCMS-QQQ ID: 69679

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 1.5 ml urine to blank plate, add 250 ul 1N KOH mix and incubate at 40 degrees for 15 minutes.
Pipette **1000 µL blood (calibrated pipette)** in wells of analytical (standards) plate. **Pipette ID: K52558g**
Pipette 1000 ul urine to analytical (standards) plate.

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

☒ 4. Pipette **500 µL 0.1% formic acid in blood** wells **500 ul saturated phosphate buffer in urine** wells of analytical plate.

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

☒ 6. Transfer 8**00 µL 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: 66792

☒ 8. Wait 5 minutes.

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

☒ 10. Wait 5 minutes.

☒ 11. Apply positive pressure for approx. 10-15 seconds. ***(12-15 PSI- Selector to the left).***

☒ 12. Add **2.25 mL hexane** (add in 3 increments of 750 µL).

☒ 13. Wait 5 minutes.

☒ 14. Apply positive pressure for approx. 10-15 seconds. ***(12-15 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: 66819

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

Post-Analytic

☒ 1. Create batch and process data.

☒ 2. Calculated sample concentration of 3 ng/mL or greater for THC and THC-OH, a calculated sample concentration of 10 ng/mL or greater for Carboxy-THC.

☒ 3. Retention time within +/- 2% or +/-0.100 min whichever is greater of the average retention time of the calibrators.

☒ 4. Did all QCs pass for each analyte? Yes

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

COMMENTS: Initial injection showed RT and response was very low, samples injected were not evaluated. Method was updated and optimized and the batch was reinjected and evaluated on 5/6/20. One sample was reinjected on 5/7/20 as the initial injection was the wrong plate location. BW

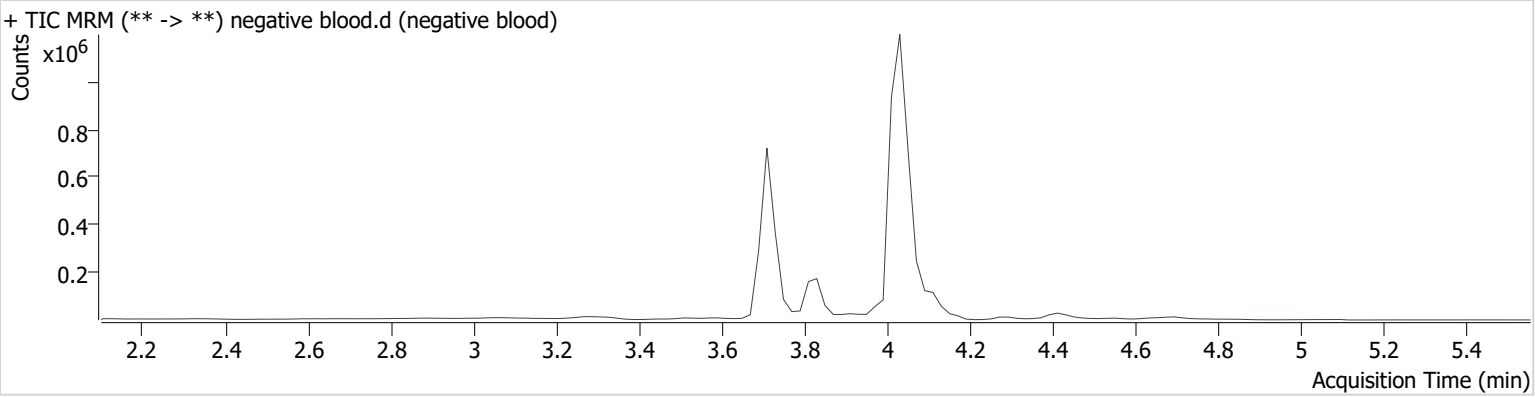
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	negative blood.d
Type	Sample	**Sample**	negative blood
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-A2	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/6/2020 12:03:16 AM		
Sample Info.			

Sample Chromatogram



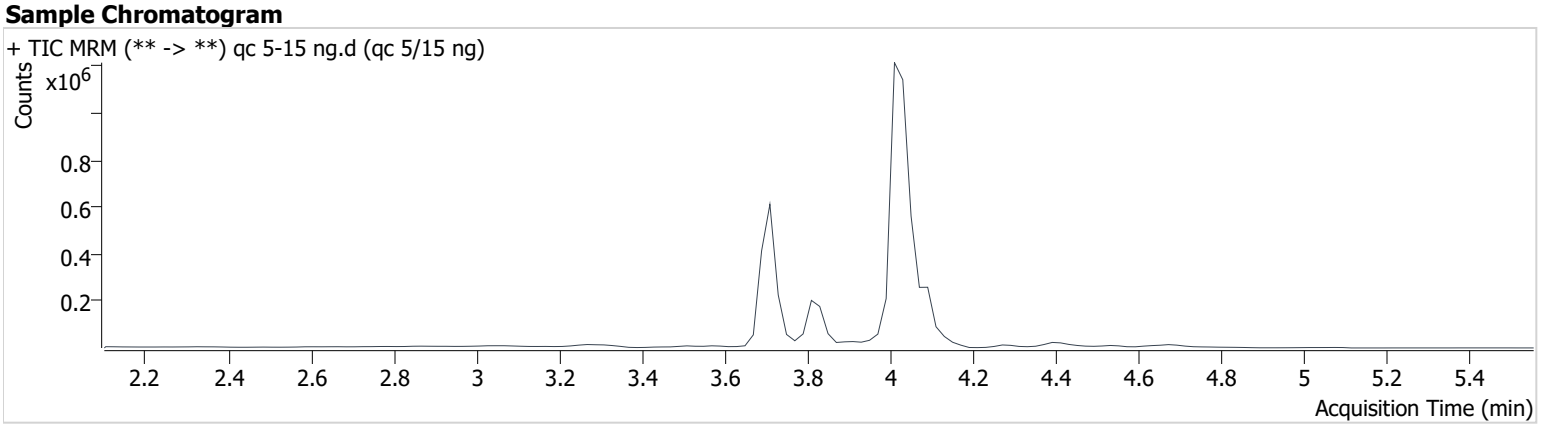
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	qc 5-15 ng.d
Type	QC	**Sample**	qc 5/15 ng
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-H1	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/5/2020 11:56:38 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.104	13336	412834	4.533	ng/ml
THC-COOH	3.830	139157	396474	13.257	ng/ml
THC-OH	3.716	135206	1487839	4.525	ng/ml

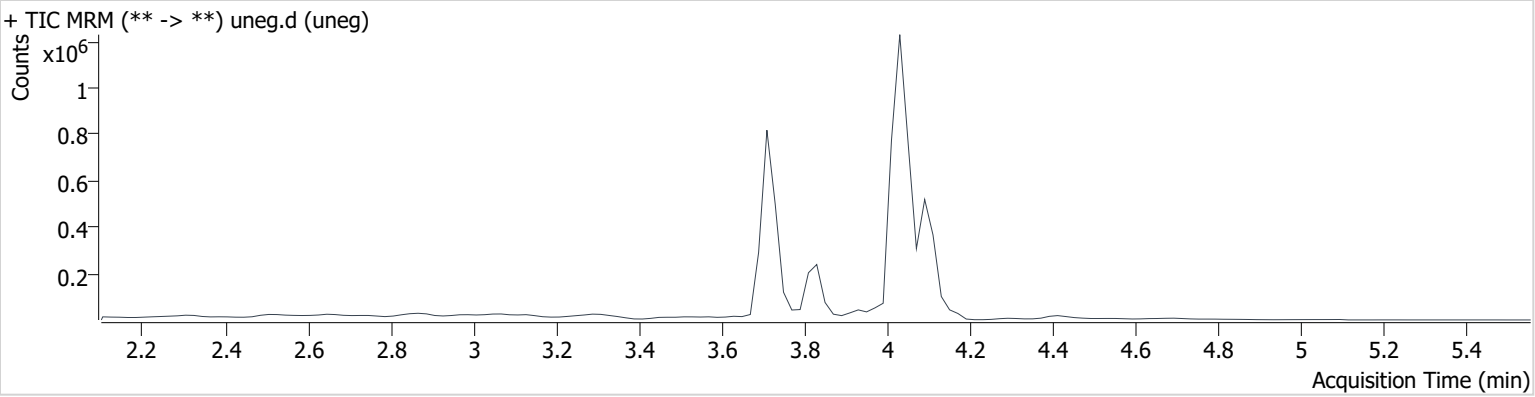
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	uneg.d
Type	Sample	**Sample**	uneg
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-D3	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/6/2020 1:22:44 AM		
Sample Info.			

Sample Chromatogram



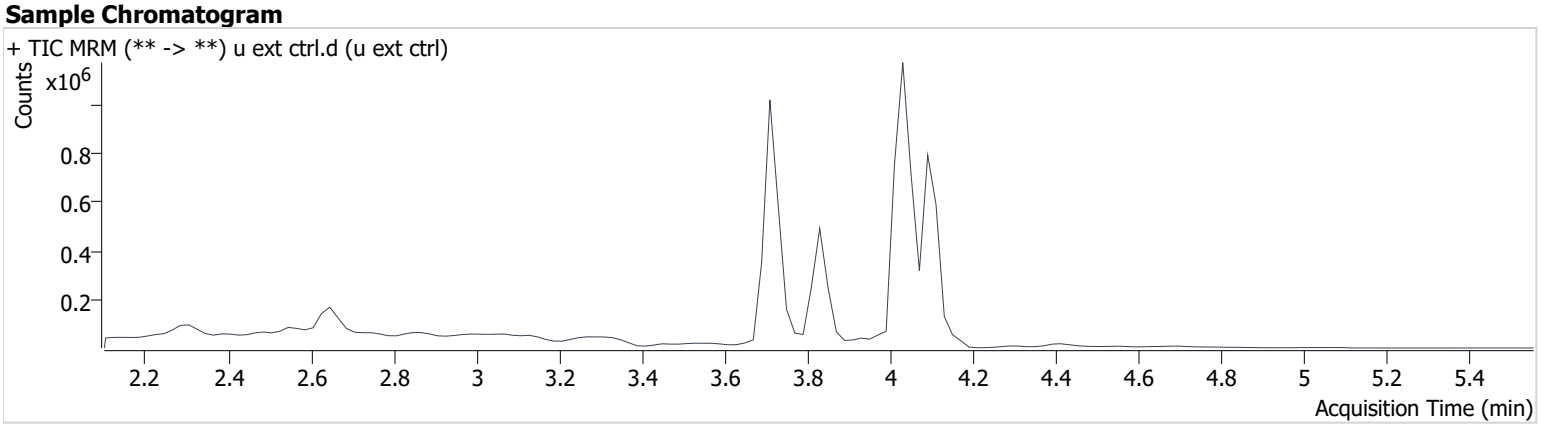
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	u ext ctrl.d
Type	Sample	**Sample**	u ext ctrl
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-E3	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/6/2020 1:29:19 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.104	214127	1408187	20.670	ng/ml
THC-COOH	3.830	380472	514540	34.151	ng/ml
THC-OH	3.716	514613	1985421	14.122	ng/ml

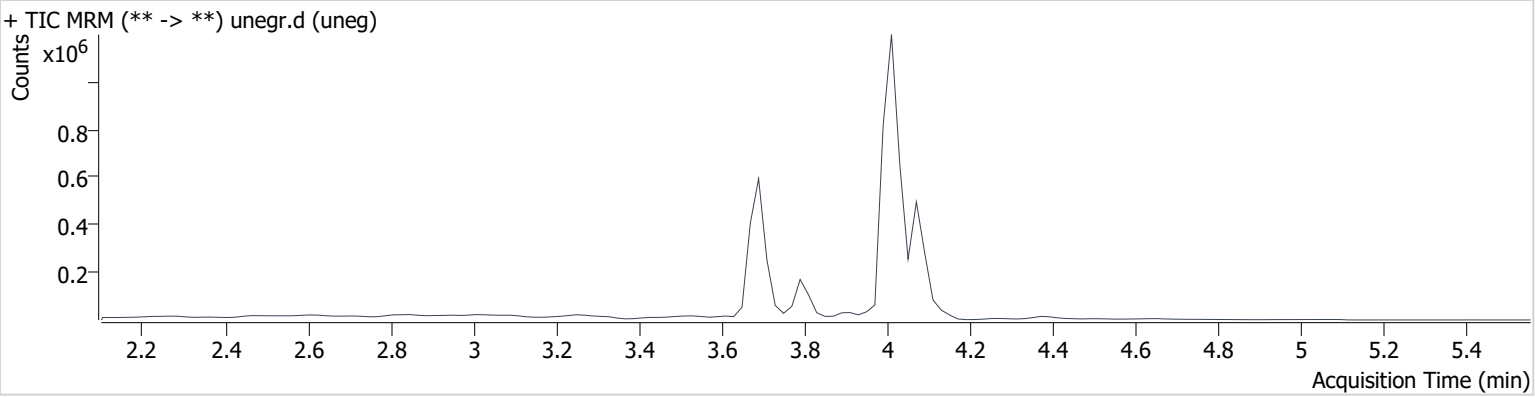
BW

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update	5/7/2020 10:50:56 AM

Instrument	69679	**Data File**	unegr.d
Type	Sample	**Sample**	uneg
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-D3	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/7/2020 10:16:15 AM		
Sample Info.			

Sample Chromatogram



urine controls were re-injected: one case sample was not injected during initial run, controls evaluated for RT- no variation noted.

BW 5-7-20

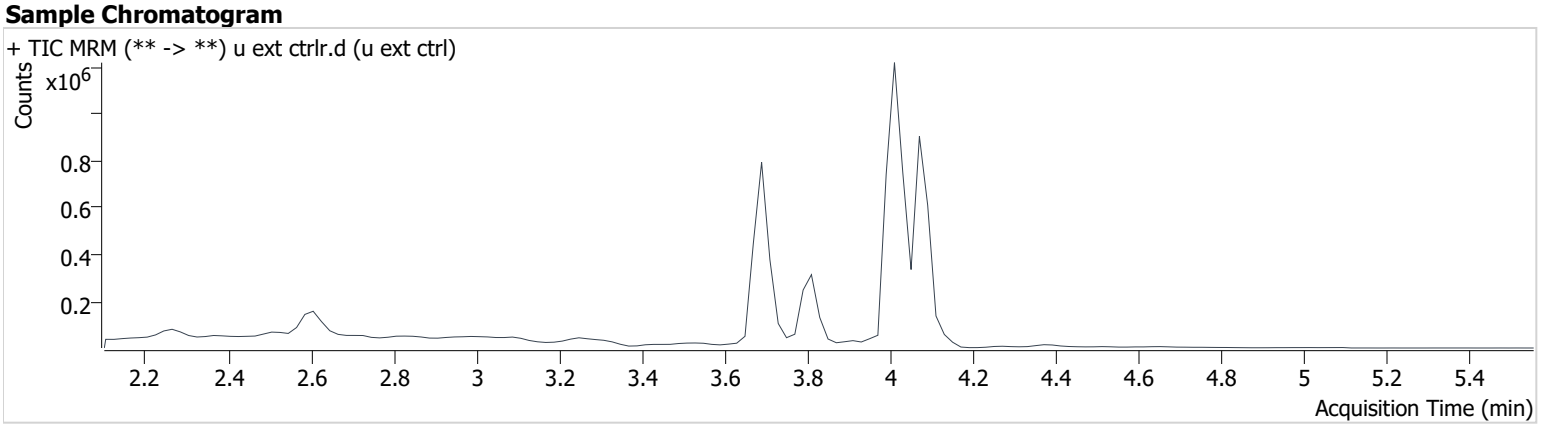
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/7/2020 10:50:56 AM

Instrument	69679	**Data File**	u ext ctrlr.d
Type	Sample	**Sample**	u ext ctrl
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-E3	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/7/2020 10:22:53 AM		
Sample Info.			

Sample Chromatogram

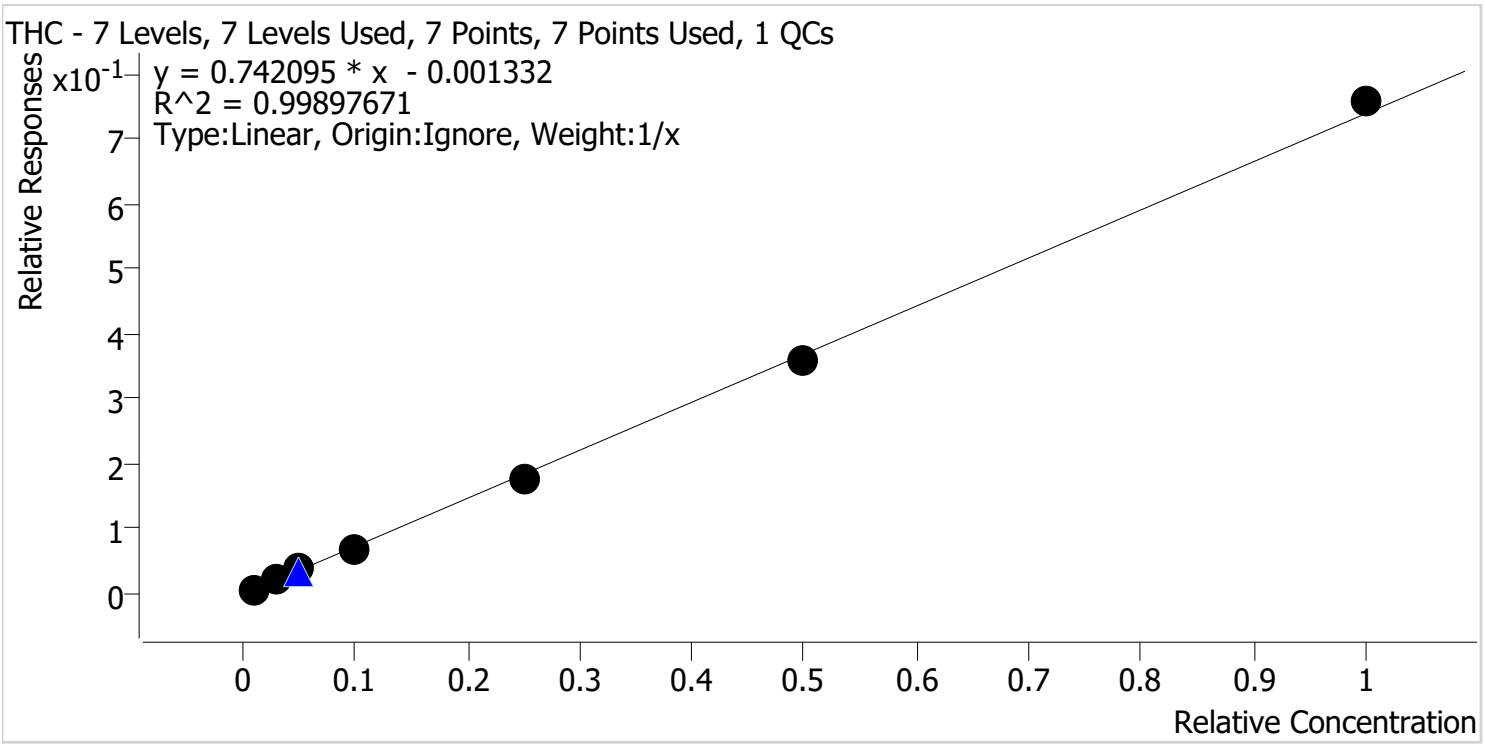


Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.084	245173	1606976	20.739	ng/ml
THC-COOH	3.810	300686	377584	37.211	ng/ml
THC-OH	3.696	427169	1566811	14.888	ng/ml

urine controls were re-injected: one case sample was not injected during initial run, controls evaluated for RT- no variation noted. BW

Compound Calibration Report

Batch results	D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Last Cal. Update	5/6/2020 8:45 AM
Analyst Name	ISP\datastor
Analyte	THC
Internal Standard	THC-d3

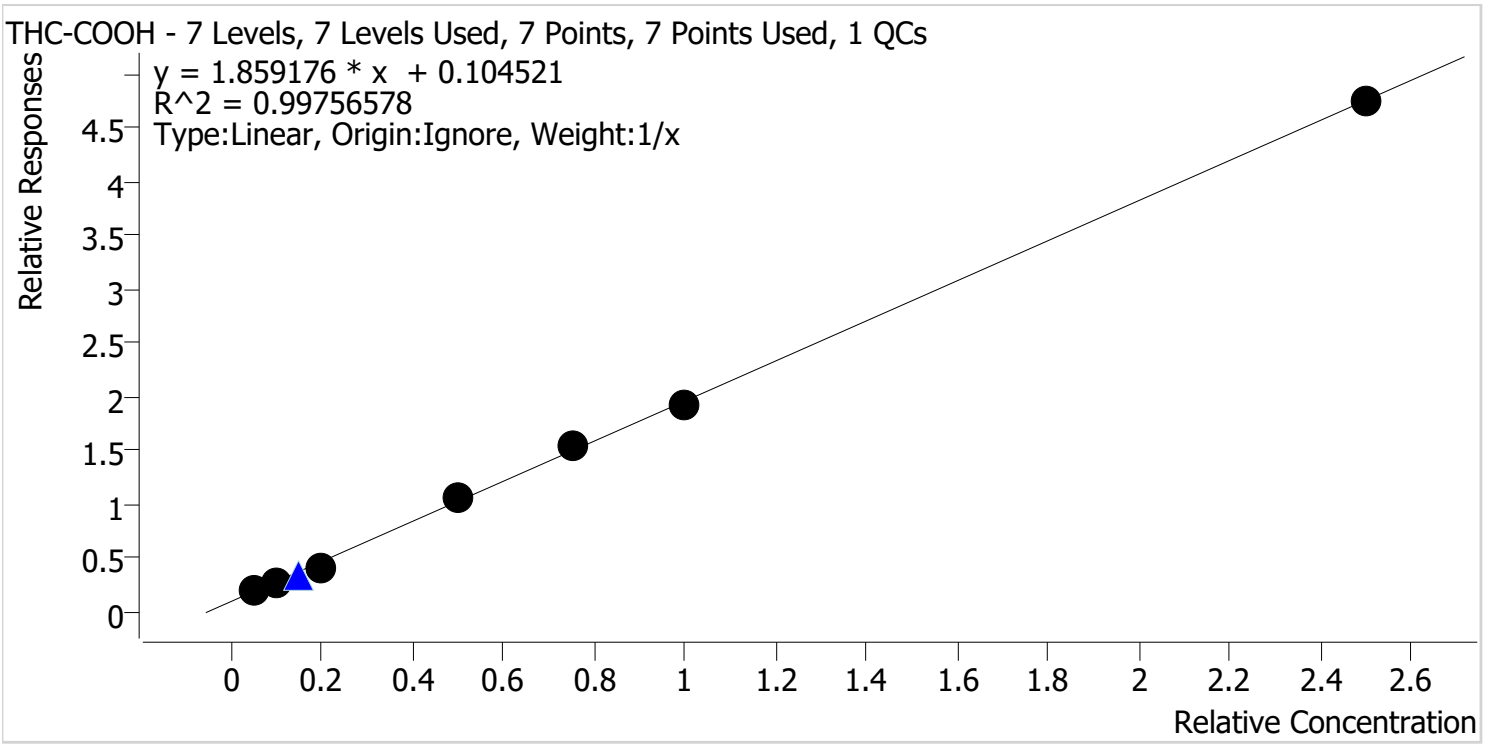


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✔	1.0	1.0	100.4
cal 2	2	✔	3.0	3.1	104.4
cal 3	3	✔	5.0	5.2	103.8
cal 4	4	✔	10.0	9.6	95.7
cal 5	5	✔	25.0	24.0	96.0
cal-6	6	✔	50.0	48.6	97.3
cal-7	7	✔	100.0	102.5	102.5

Compound Calibration Report

Batch results	D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Last Cal. Update	5/6/2020 8:45 AM
Analyst Name	ISP\datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-d9

BW



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✔	5.0	5.8	116.5
cal 2	2	✔	10.0	9.3	92.6
cal 3	3	✔	20.0	16.8	83.9
cal 4	4	✔	50.0	52.6	105.2
cal 5	5	✔	75.0	77.5	103.3
cal-6	6	✔	100.0	98.8	98.8
cal-7	7	✔	250.0	249.3	99.7

Compound Calibration Report

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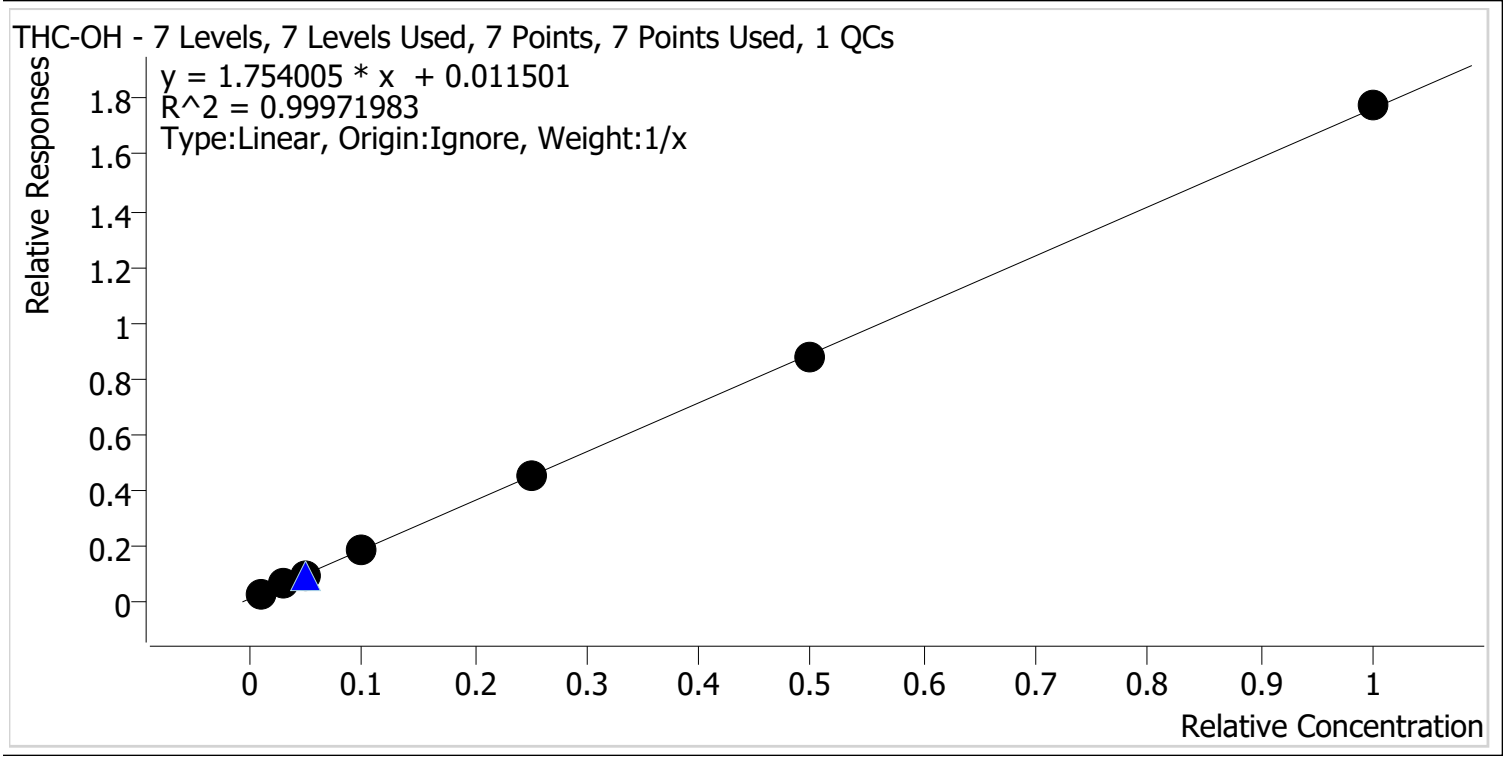
Batch results	D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Last Cal. Update	5/6/2020 8:45 AM
Analyst Name	ISP\datastor
Analyte	THC-OH
Internal Standard	THC-OH-d3

BW



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✔	1.0	1.0	102.3
cal 2	2	✔	3.0	3.2	105.9
cal 3	3	✔	5.0	4.6	92.6
cal 4	4	✔	10.0	9.9	99.1
cal 5	5	✔	25.0	25.0	100.2
cal-6	6	✔	50.0	49.6	99.2
cal-7	7	✔	100.0	100.6	100.6

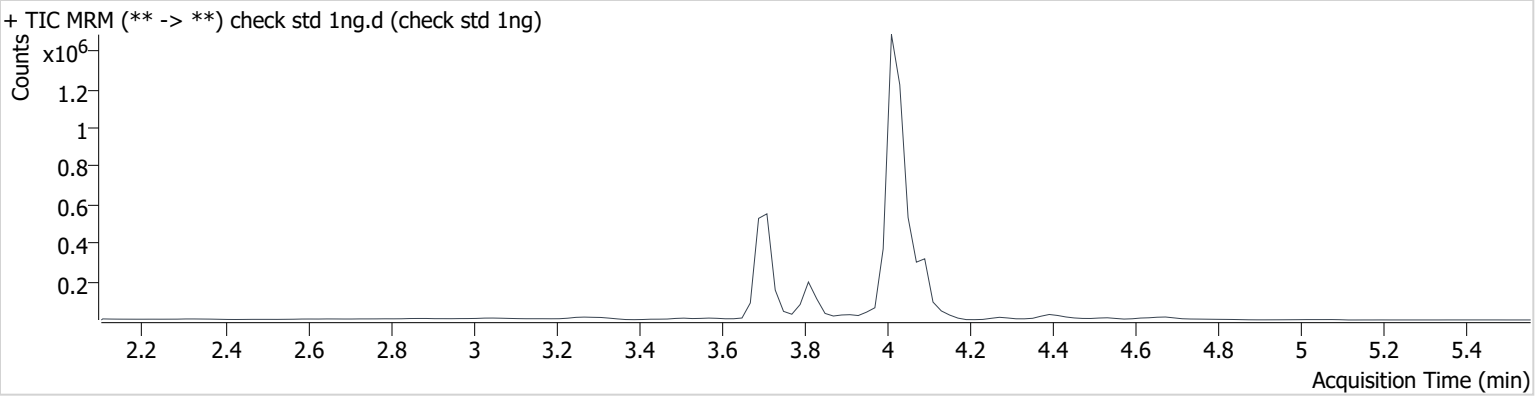
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	check std 1ng.d
Type	Cal	**Sample**	check std 1ng
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-A1	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/5/2020 11:03:46 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	4.104	3294	538338	1.004	ng/ml	**Low**
THC-COOH	3.830	84718	398009	5.827	ng/ml	**Low**
THC-OH	3.716	46640	1584024	1.023	ng/ml	**Low**

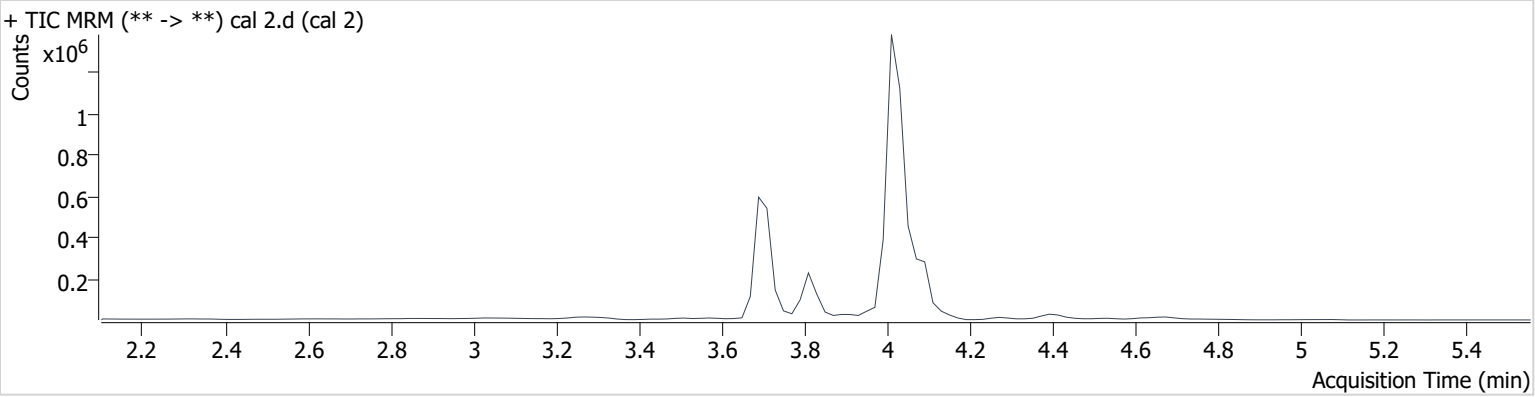
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	cal 2.d
Type	Cal	**Sample**	cal 2
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-B1	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/5/2020 11:10:24 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	4.104	11306	516165	3.131	ng/ml	
THC-COOH	3.830	114861	415080	9.262	ng/ml	**Low**
THC-OH	3.716	107378	1596671	3.178	ng/ml	

BW

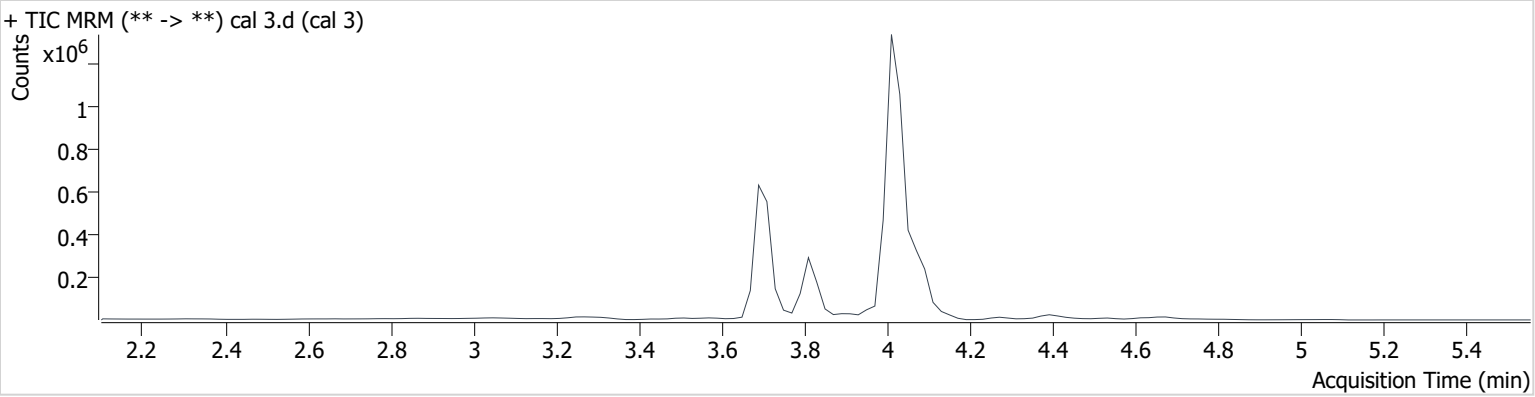
AM #26 Cannabinoids Screen Results

BW

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	cal 3.d
Type	Cal	**Sample**	cal 3
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-C1	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/5/2020 11:17:03 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.084	18156	488528	5.188	ng/ml
THC-COOH	3.830	192664	462742	16.773	ng/ml
THC-OH	3.716	153014	1650281	4.631	ng/ml

BW

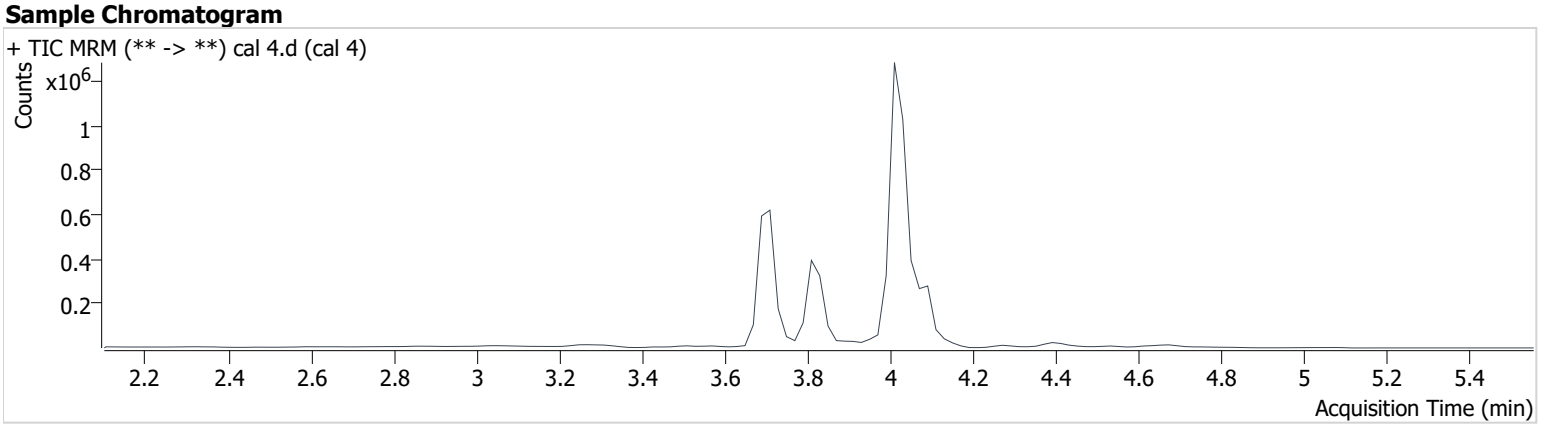
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	cal 4.d
Type	Cal	**Sample**	cal 4
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-D1	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/5/2020 11:23:40 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.104	33124	475144	9.574	ng/ml
THC-COOH	3.830	480701	444185	52.587	ng/ml
THC-OH	3.716	285791	1541407	9.915	ng/ml

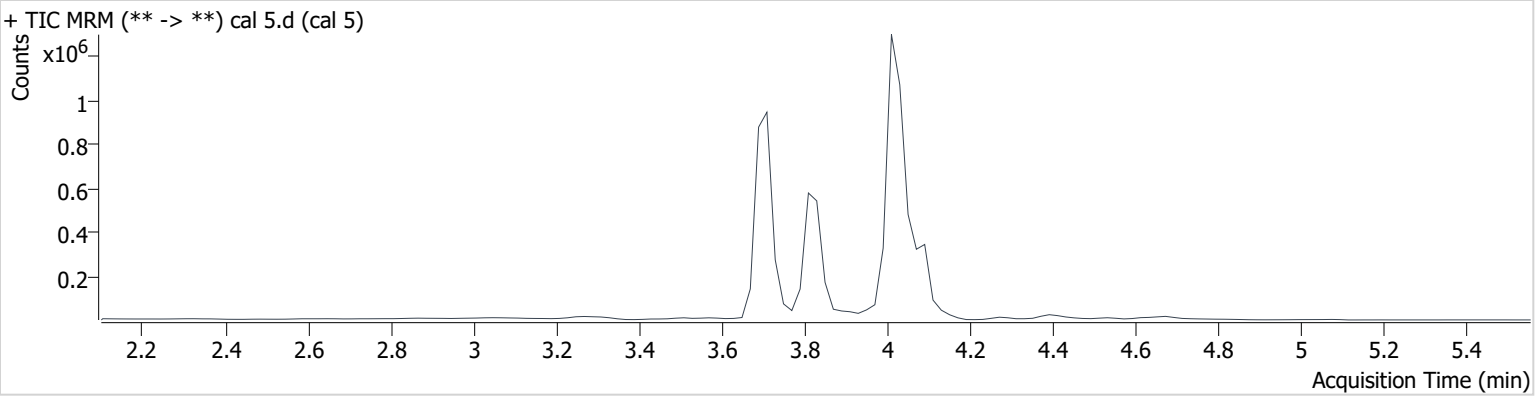
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	cal 5.d
Type	Cal	**Sample**	cal 5
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-E1	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/5/2020 11:30:16 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.104	91995	520502	23.996	ng/ml
THC-COOH	3.830	819911	530764	77.467	ng/ml
THC-OH	3.716	841009	1865365	25.049	ng/ml

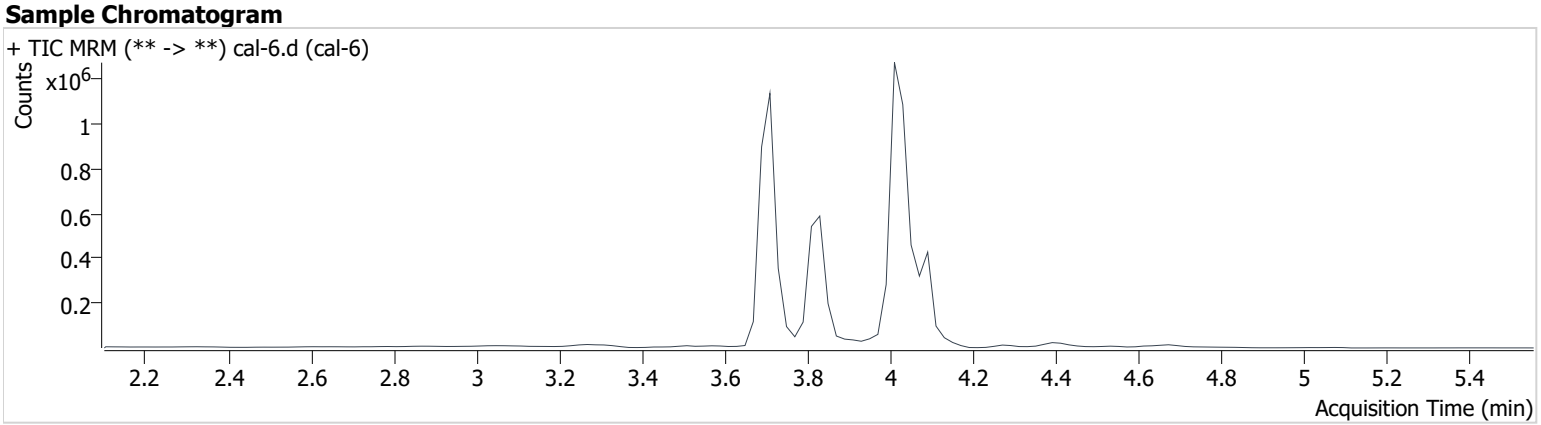
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	cal-6.d
Type	Cal	**Sample**	cal-6
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-F1	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/5/2020 11:36:52 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.104	189197	526112	48.639	ng/ml
THC-COOH	3.830	872962	449672	98.797	ng/ml
THC-OH	3.716	1395492	1583313	49.594	ng/ml

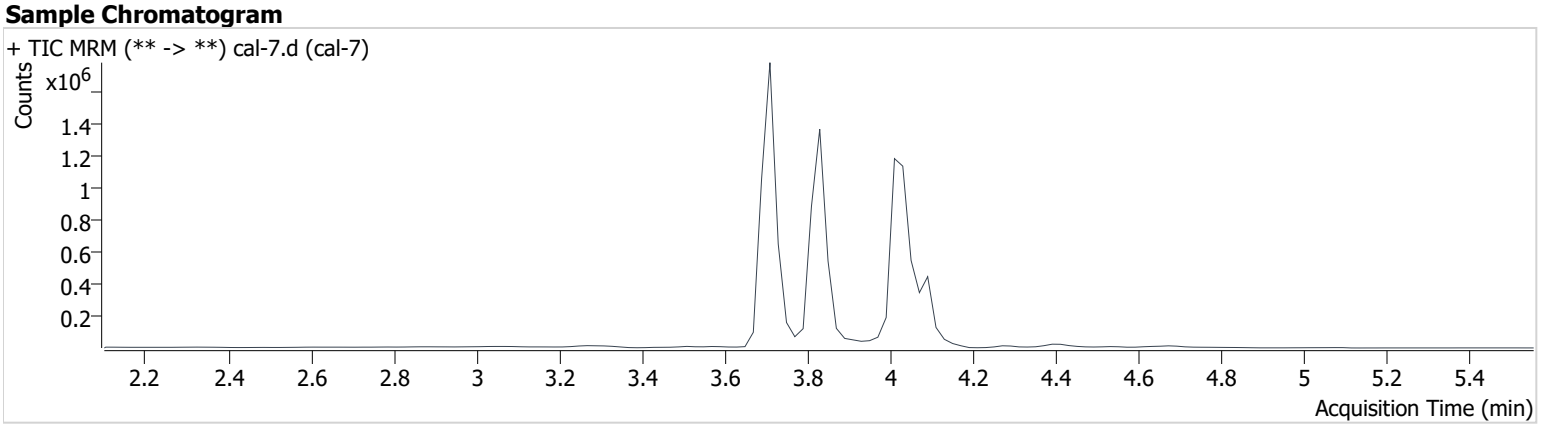
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 26 reinject 5-5-20\QuantResults\thcr.batch.bin
Calibration Last Update 5/6/2020 8:45:58 AM

Instrument	69679	**Data File**	cal-7.d
Type	Cal	**Sample**	cal-7
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Britany Wylie
Sample Position	P3-G1	**Comment**	
Injection Volume	5		
Acq. Date-Time	5/5/2020 11:43:30 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.104	313984	413637	102.468 ng/ml
THC-COOH	3.830	2056837	434005	249.287 ng/ml
THC-OH	3.716	2733941	1539189	100.611 ng/ml