REVIEWED
By Anne Nord at 1:35 pm, Apr 21, 2020

4/20/2020

BW

Worklist: 4166

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
C2020-0606	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0607	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0608	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0612	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0622	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0631	1	UCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0637	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0639	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0661	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0665	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0668	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0669	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0673	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2020-0676	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0676	2	URINE	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0676	3	URINE	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2020-0677	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ

Worklist: 4173

BW

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
C2020-0697	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: 4/15/20 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:** 32420 **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:

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~~ BW 4/20/20
*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

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

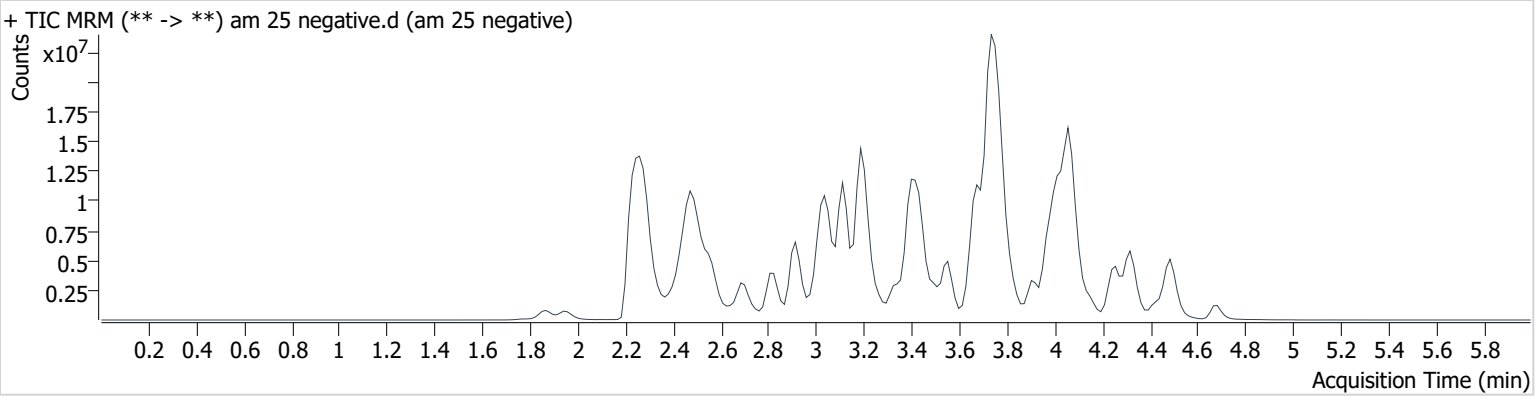
BW

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\mds.batch.bin
Calibration Last Update 4/21/2020 11:18:47 AM

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	4/15/2020 3:06:41 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	2.559	1959388	∞	∞	7568420	6.008

BW

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\mds.batch.bin
Calibration Last Update 4/21/2020 11:18:47 AM

Instrument	69679	**Data File**	am 25 blood ext control.d
Type	Sample	**Sample**	am 25 blood ext control
Acq. Method	am25 short rt short.m	**Operator**	Britany Wylie
Sample Position	P2-D1	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	4/15/2020 3:13:23 PM		
Sample Info.			

Sample Chromatogram

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Chlordiazepoxide	4.338	2493755	498.4	851.1	5592673	126.703
Diphenhydramine	3.702	62566263	1057.5	52032976.8	25975404	148.520
Hydromorphone	1.963	6482365	6647.2	85273.5	2621721	97.791
Nortriptyline	4.112	11470119	6219196.8	5972.0	2759059	109.076

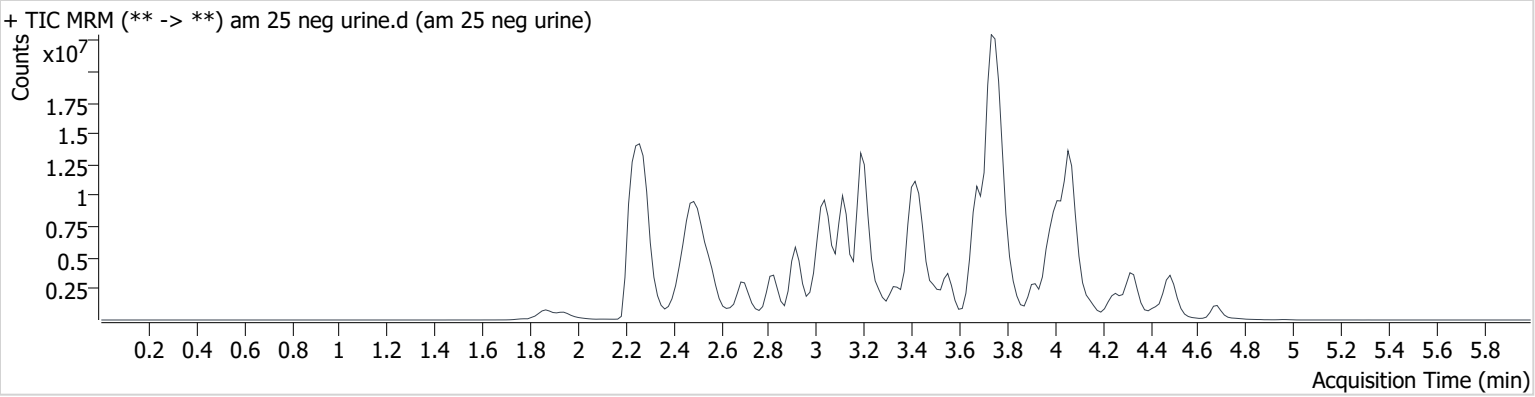
BW

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\mds.batch.bin
Calibration Last Update 4/21/2020 11:18:47 AM

Instrument	69679	**Data File**	am 25 neg urine.d
Type	Sample	**Sample**	am 25 neg urine
Acq. Method	am25 short rt short.m	**Operator**	Britany Wylie
Sample Position	P2-H2	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	4/15/2020 4:53:46 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Phentermine	2.787	326031	14.7	28.3	9169037	3.793 <5
Pseudoephedrine	2.451 **High**	429505	26.3		79290998	0.176 <5

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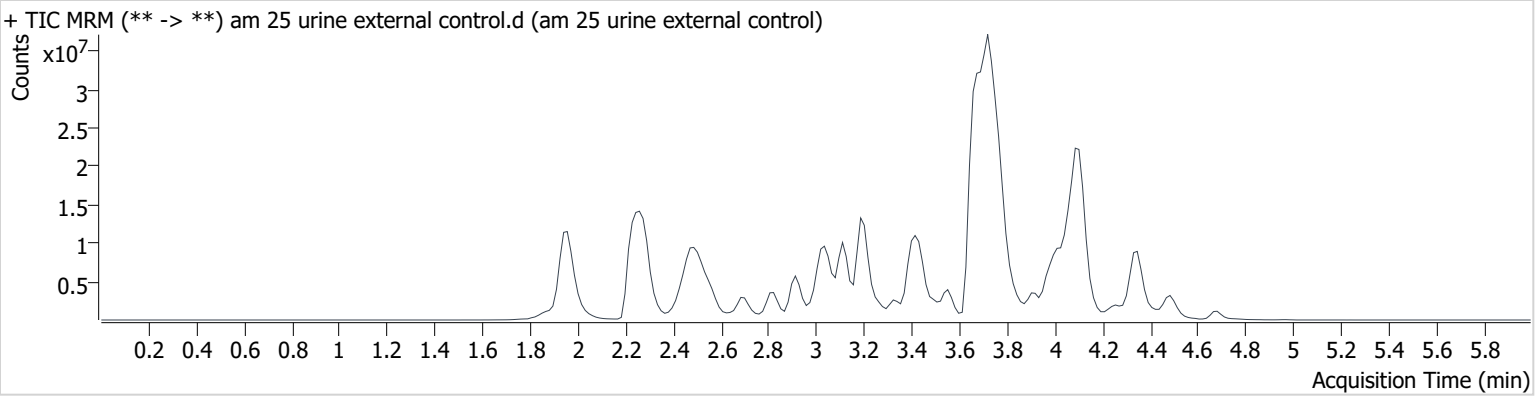
AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\mds.batch.bin
Calibration Last Update 4/21/2020 11:18:47 AM

Instrument	69679	**Data File**	am 25 urine external control.d
Type	Sample	**Sample**	am 25 urine external control
Acq. Method	am25 short rt short.m	**Operator**	Britany Wylie
Sample Position	P2-A3	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	4/15/2020 5:07:05 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Chlordiazepoxide	4.353	9189538	248.5	429.4	4026486	648.514
Diphenhydramine	3.698	105366774	∞	1001.1	11289142	575.506
Hydromorphone	1.963	28426115	6315.9	8839.0	1645389	683.284
Nortriptyline	4.112	38365615	2453.9	1929.6	1615516	623.094
Phentermine	2.787	352026	16.4	23.8	8661654	4.335
Pseudoephedrine	2.223 **Low**	257138	9.1		79330744	0.105

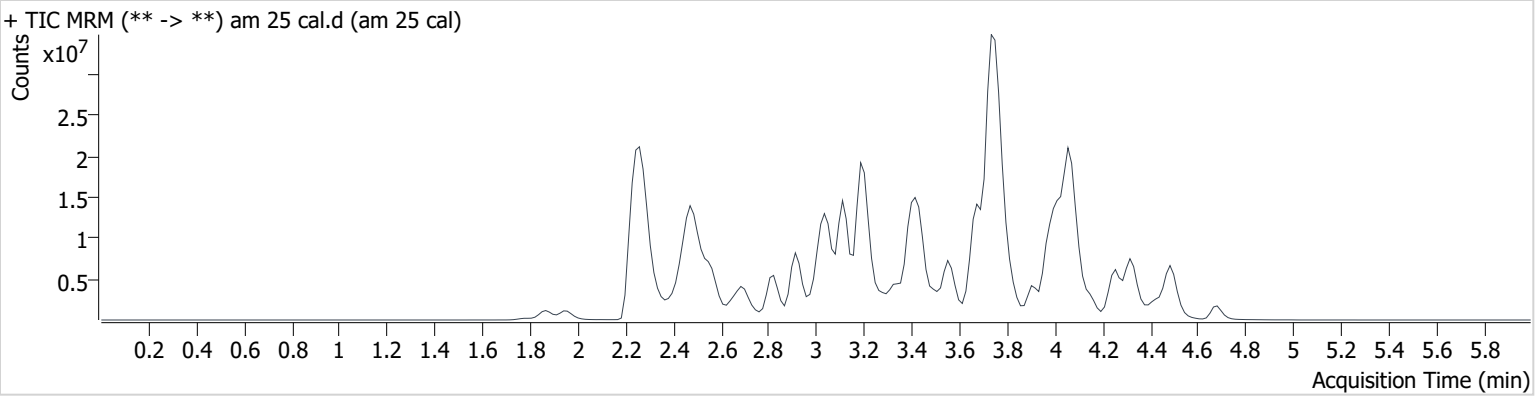
BW

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\mds.batch.bin
Calibration Last Update 4/21/2020 11:18:47 AM

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	4/15/2020 3:20:05 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	2.440	29360	62937.5	830.3	936683	10.000
7-aminoclonazepam	3.282	825135	308.3	521.7	3758960	10.000
7-aminoflunitrazepam	3.525	1209588	944.4	653.2	7801550	10.000
Acetyl Fentanyl	3.414	224681	56.0	123759.1	15115006	10.000
Acetyl Norfentanyl	2.464	134613	168.5	64.9	8353381	10.000
a-hydroxyalprazolam	4.318	127077	93.0	1654.0	693986	10.000
alpha-hydroxymidazolam	4.271	660012	226.7	601.0	4052518	10.000
alpha-PVP	3.119	2378542	2039.8	536.6	10920032	10.000
Alprazolam	4.427	1103492	1020.0	409.3	4008775	10.000
Amitriptyline	4.111	1151276	188.9	247.6	4586648	10.000
Amphetamine	2.453	1315990	517.7	886.6	4721957	10.000
Benzoylecgonine	3.066	467973	609.9	191.0	2174868	10.000
Buprenorphine	3.717	164133	271.9	10490.2	831494	10.000
Bupropion	3.348	2176696	3305.3	1385.1	8166055	10.000
Carbamazepine	4.022	2993250	2069.3	1192.4	16503761	10.000
Carisoprodol	4.005	791466	1875.0	92.5	3929251	10.000
Chlordiazepoxide	4.338	220384	103.5	226.2	6262272	10.000
Chlorpheniramine	3.589	12488	20.9	6699.0	32521261	10.000
Citalopram	3.751	940965	482.4	377.8	4275485	10.000
Clonazepam	4.259	879227	356.7	310.8	1496892	10.000
Cocaine	3.187	3191850	4219.4	539.0	17877846	10.000
Codeine	2.322	190049	3263.4	1957.0	930767	10.000
Cyclobenzaprine	4.018	2018245	714.5	262.2	8520992	10.000
Desipramine	4.066	2347315	1834.1	1954.9	12515300	10.000
Dextromethorphan	3.712	767156	525.4	287.3	3851067	10.000
Dextrorphan	2.993	1275838	993.6	1750.5	7271725	10.000
Diazepam	4.692	842073	722.7	1894.4	4136190	10.000
Dihydrocodeine	2.291	422788	914.5	605.3	2289861	10.000
Diphenhydramine	3.683	5274248	1207.6	1256.2	32521261	10.000
Doxepin	3.816	1251674	636.3	86.2	6704432	10.000
Doxylamine	3.205	5407437	1651.6	9022.3	25897211	10.000
EDDP	3.756	4010545	9040.6	427.8	26011357	10.000
Estazolam	4.339	2328977	813.7	7797.6	6012215	10.000
Etizolam	4.454	112272	42141.0	6004.3	6012215	10.000

BW

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Fentanyl	3.658	205595	18.6	714.1	12847654	10.000
Flunitrazepam	4.396	1548865	658.3	301822.2	299076	10.000
Fluoxetine	4.029	1547415	610.9	∞	6860564	10.000
Flurazepam	3.779	1269479	471498.0	73946.3	299076	10.000
Hydrocodone	2.519	803120	523.6	830.6	4873717	10.000
Hydromorphone	1.963	749236	907.7	464.5	2963270	10.000
Imipramine	4.063	3022614	874.1	316.2	12606806	10.000
Ketamine	2.935	1848361	1108.2	126.9	9194603	10.000
Lamotrigine	3.115	155294	301.0	966.2	6251353	10.000
Levamisole	2.465	1644016	855.0	528.9	17877846	10.000
Lorazepam	4.243	283820	596.8	883.8	4008775	10.000
Maprotiline	4.095	868360	247.4	388.4	4586648	10.000
MDA	2.587	1890097	903.7	360.6	9117433	10.000
MDEA	2.830	2782497	4965.8	1012.7	13148311	10.000
MDMA	2.663	2982824	9661.0	723.0	1900419	10.000
Meperidine	3.208	1376804	215.0	577.1	6251353	10.000
Meprobamate	3.381	553859	227.4	135.3	2604311	10.000
Methadone	4.074	3729217	1074.8	1198.4	19496742	10.000
Methamphetamine	2.559	3274655	97.1	80.3	7599592	10.000
Methocarbamol	3.302	227569	498.0	655.4	6251353	10.000
Methylphenidate	3.134	5223827	2074.9	787.9	26388218	10.000
Metoprolol	3.053	322644	508.2	3375.7	6251353	10.000
Midazolam	4.057	266404	1934.6	1764.0	4043698	10.000
Mirtazapine	3.299	1323445	6575.6	9416.7	6251353	10.000
Mitragynine	3.809	136522	115.3	45.6	6704432	10.000
Morphine	1.785	134191	1949.0	130.3	89500	10.000
Norbuprenorphine	3.473	39422	35428.5	16404.1	200063	10.000
Nordiazepam	4.524	771074	1184.5	427.8	2614634	10.000
Norfentanyl	2.936	2672001	27416.4	345.8	12767108	10.000
Norhydrocodone	2.521	17594	114.1	44.1	828009	10.000
Normeperidine	3.226	1175616	347.0	282.1	4940216	10.000
Noroxycodone	2.473	559024	89.7	164.3	3228893	10.000
Nortriptyline	4.112	1110044	930.4	255.6	2912477	10.000
O-desmethyl-tramadol	2.492	3657411	29930.2	66.3	21880212	10.000
Olanzapine	2.805	567460	1690.6	690.5	211049	10.000
Oxazepam	4.324	1136365	334.8	61.6	7181173	10.000
Oxycodone	2.470	1413183	4324.4	615.7	7252853	10.000
Oxymorphone	1.867	824584	3474.2	56.3	3551088	10.000
Paroxetine	4.041	195280	136.5	103.8	5472358	10.000
Phenazepam	4.469	1370587	803.6	3544.6	5857412	10.000
Phencyclidine	3.577	3010920	920.2	471.5	15331912	10.000
Phentermine	2.726	840173	69.9	18.4	8962173	10.000
Phenytoin	3.913	35275	213.3	82.1	211049	10.000
Promethazine	3.969	4741065	6182.2	891.4	19200114	10.000
Pseudoephedrine	2.269	26925955	543.5	230.1	87267976	10.000
Quetiapine	3.902	1128646	998.9	852.7	1724297	10.000
Sertraline	4.261	1143587	36156.8	771.2	5472358	10.000
Sufentanil	3.917	153563	360.5	309.1	8875372	10.000
Tapentadol	3.059	2444287	1057.5	1123.0	13516546	10.000
Temazepam	4.505	2111387	522.8	125.2	10276919	10.000
Tramadol	3.039	5175406	1513.7	55.0	27534382	10.000
Trazodone	3.719	1360933	561.6	291.6	5641070	10.000
Venlafaxine	3.435	3746673	4066.0	477.4	21394045	10.000
Zaleplon	4.153	1391662	4030.1	444.0	4051632	10.000
Zolpidem	3.415	4116506	1616.9	1041.6	22298814	10.000
Zopiclone	3.367	434223	907.3	316.9	2361599	10.000

BW

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

Extraction Date: 4/15/2020 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:** 32420 **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:

BW

Toxicology AM method 27/26 external prep information

working solution 1 ug/ml in meoh C-THC, THC-OH, THC

Stock solution 1mg/ml 7.5 ul each THC, 100 ug/ml 150 ul C-THC, 75 ulTHC-OH in 9767.5 ul meOH

Ppd 2/13/20 Exp: 8/13/20 lot 21320 by AMN

Drug	lot	expiration
C-THC	FE07171501	9/1/2020
THC-OH	FE07721601	7/1/2021
THC	FE001041701	3/1/2022

AM 27/26 blood control 100 ul working solution lot (91319) in 9900 ul blood lot (20A52255)

ppd 02/13/20 Exp 08/13/20 lot b81320 Concentration 7.5 ng/ml THC, THC-OH and 15 ng/ml C-THC by AMN

AM 27/26 urine control 400 ul working solution lot (21320) in 9600 ul urine lot (32420)

ppd 4/17/20 Exp 9120 lot u101720 Concentration 30 ng/ml THC, THC-OH and 60 ng/ml C-THC by BAW

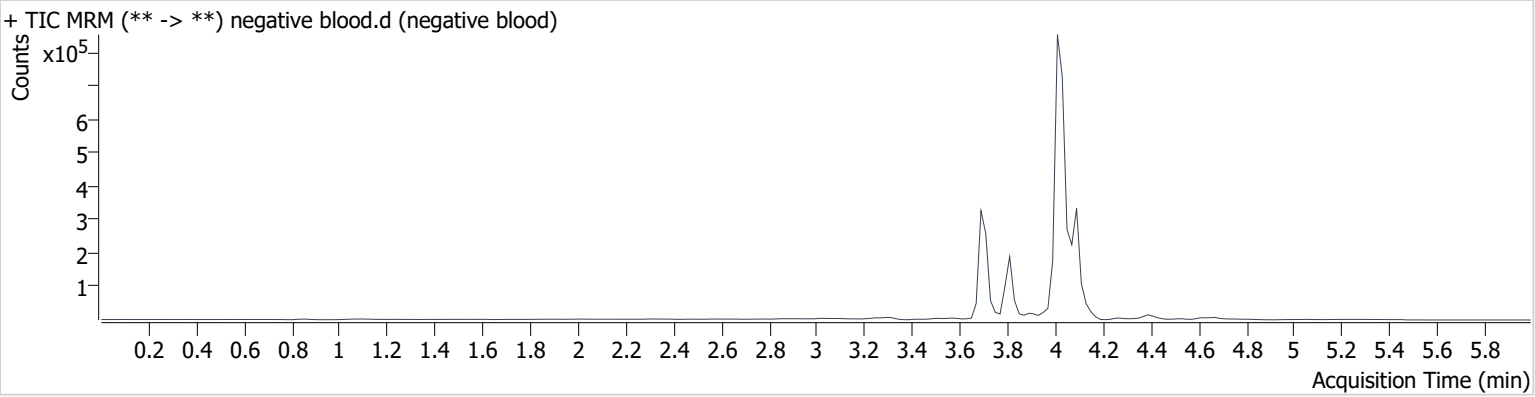
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	negative blood.d
Type	Sample	**Sample**	negative blood
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-A2	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 8:06:21 PM		
Sample Info.			

Sample Chromatogram



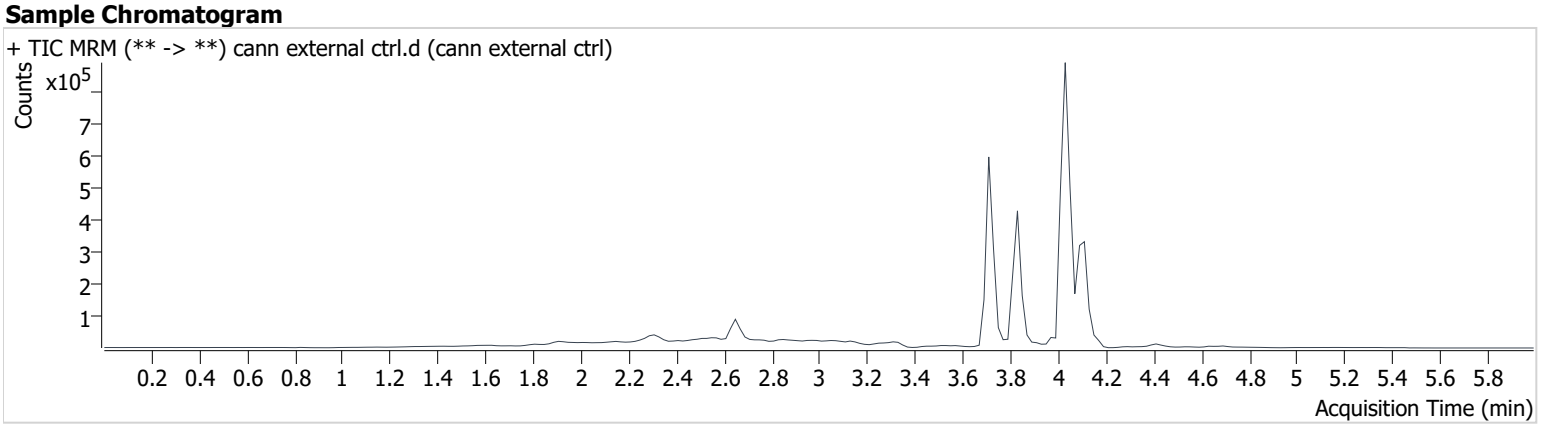
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	cann external ctrl.d
Type	Sample	**Sample**	cann external ctrl - Urine BW 4/21/20
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-F3	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 9:25:34 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.120	47382	655839	3.950	ng/ml
THC-COOH	3.829	307675	503176	32.024	ng/ml
THC-OH	3.714	216225	966219	11.873	ng/ml

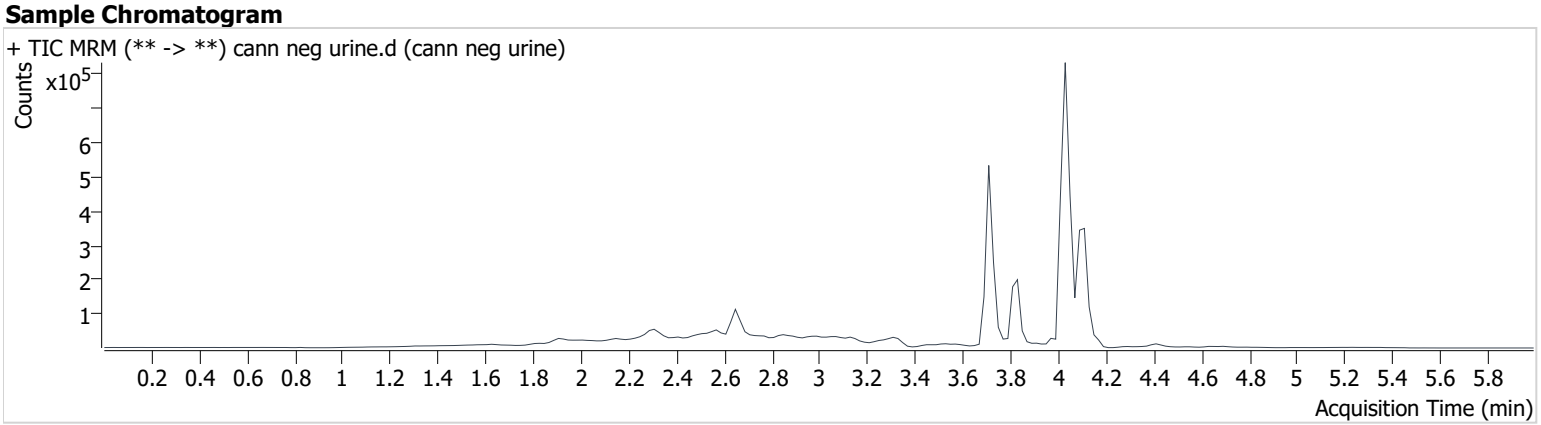
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	cann neg urine.d
Type	Sample	**Sample**	cann neg urine
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-E3	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 9:18:58 PM		
Sample Info.			

Sample Chromatogram

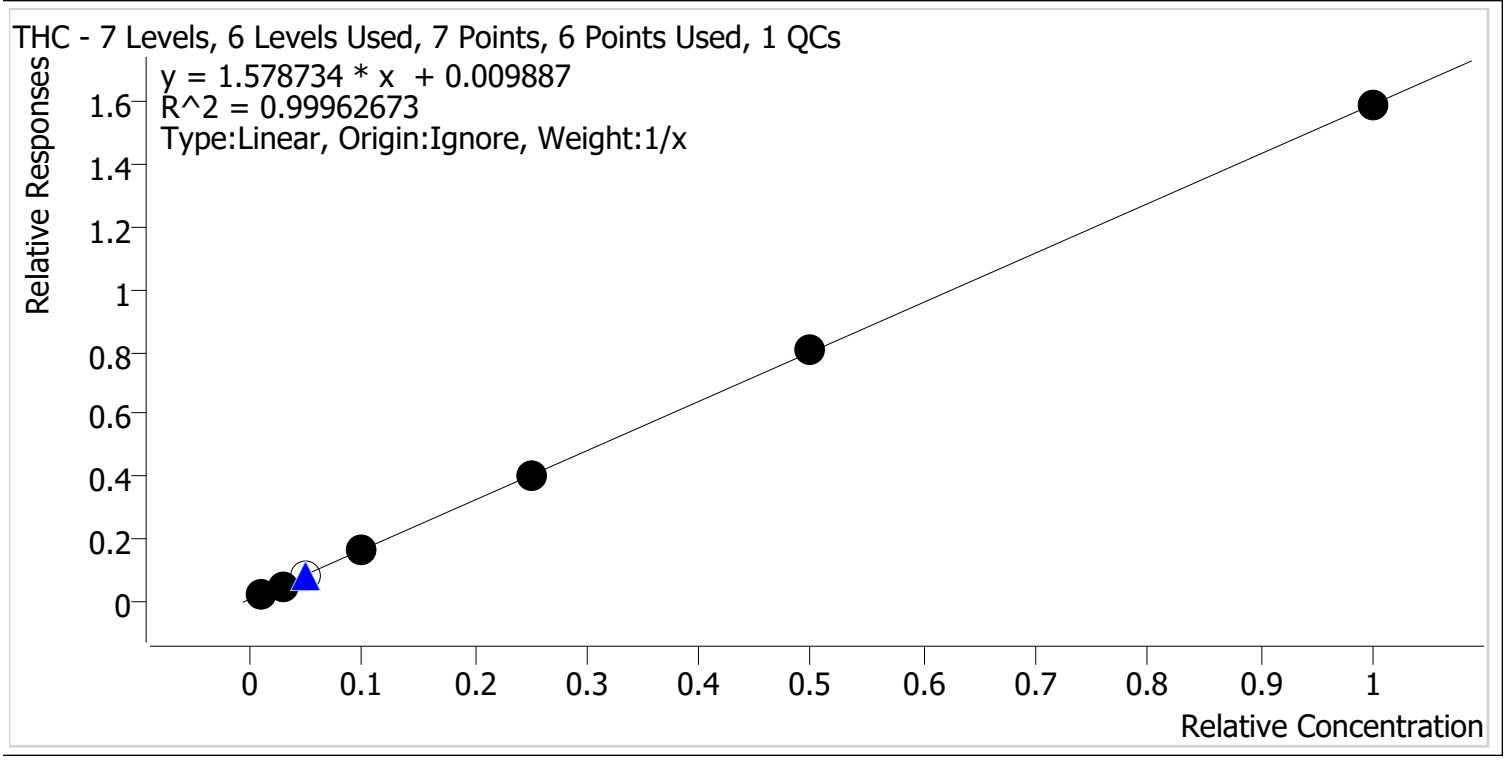


Compound Calibration Report

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Last Cal. Update 4/15/2020 10:12 PM
Analyst Name ISP\datastor

BW

Analyte THC **Internal Standard** THC-d3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✔	1.0	1.1	111.6
cal 2	2	✔	3.0	2.7	89.9
cal 3	3	✗	5.0	4.7	93.0
cal 4	4	✔	10.0	9.7	97.3
cal 5	5	✔	25.0	25.0	100.0
cal-6	6	✔	50.0	50.7	101.4
cal-7	7	✔	100.0	99.7	99.7

Compound Calibration Report

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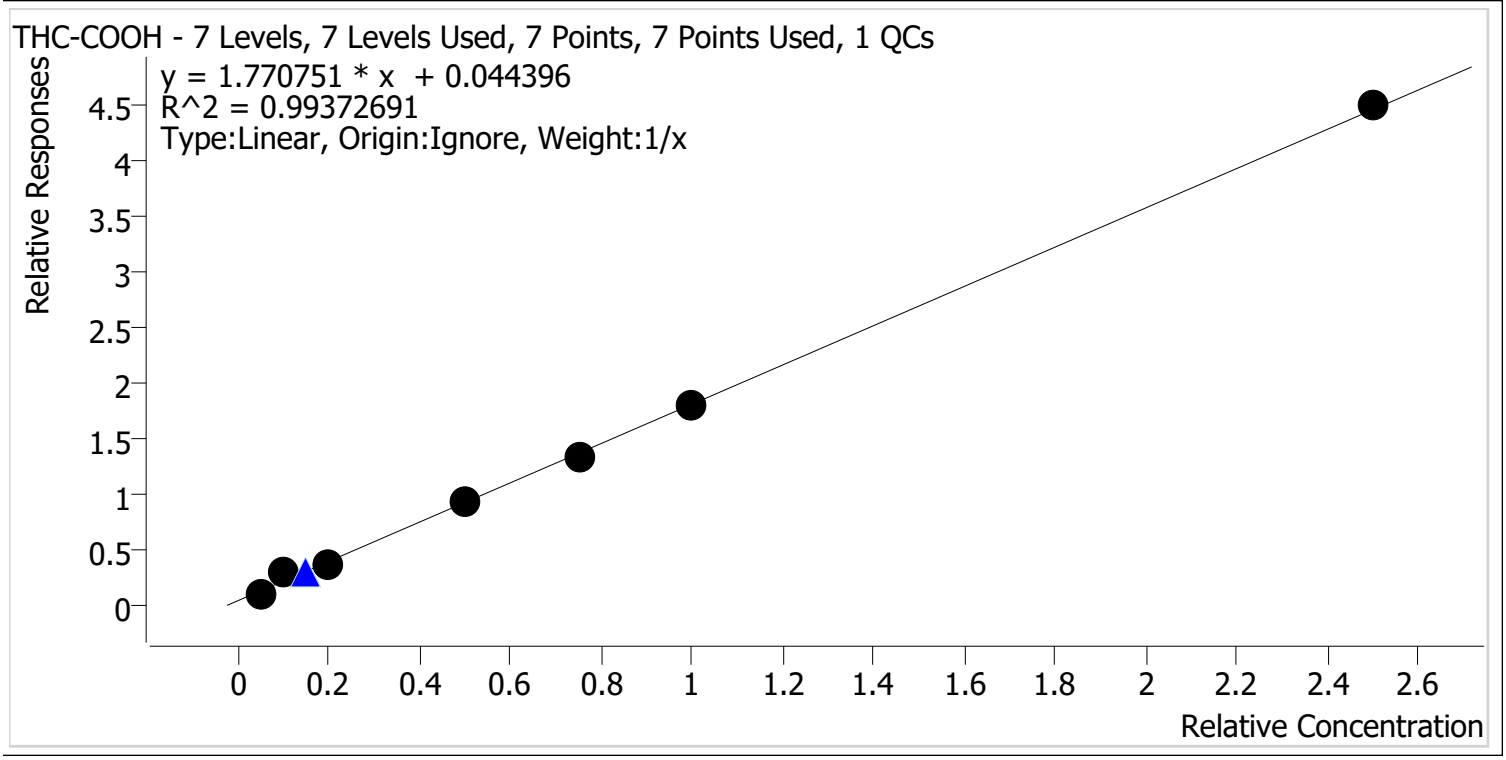
Batch results	D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Last Cal. Update	4/15/2020 10:12 PM
Analyst Name	ISP\datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-d9

BW

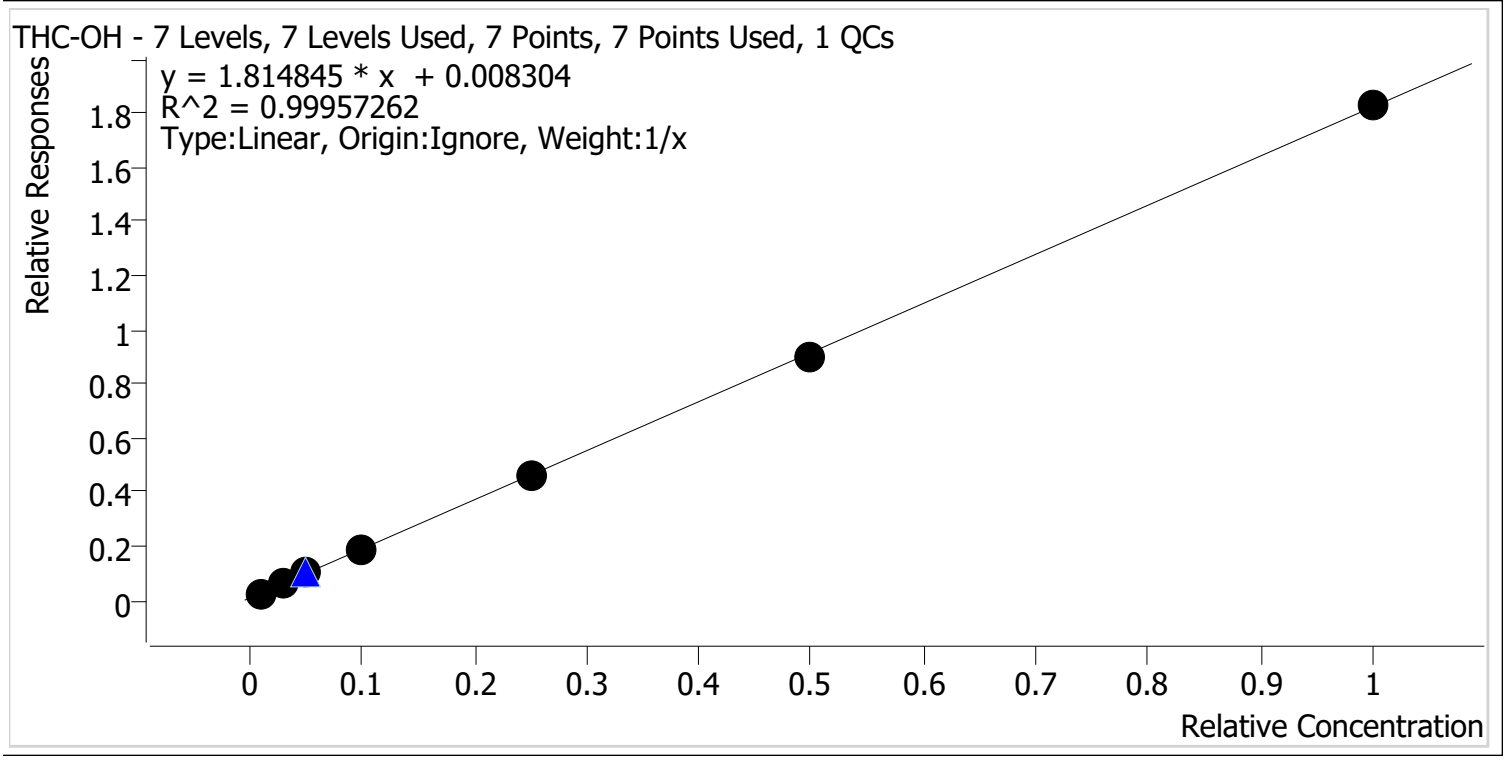


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✔	5.0	3.5	69.1
cal 2	2	✔	10.0	14.2	142.0
cal 3	3	✔	20.0	18.4	91.9
cal 4	4	✔	50.0	49.8	99.5
cal 5	5	✔	75.0	73.4	97.8
cal-6	6	✔	100.0	98.8	98.8
cal-7	7	✔	250.0	252.0	100.8

Compound Calibration Report

Batch results	D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Last Cal. Update	4/15/2020 10:12 PM
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	0.9	86.9
cal 2	2	✔	3.0	3.2	106.5
cal 3	3	✔	5.0	5.3	106.8
cal 4	4	✔	10.0	10.1	100.6
cal 5	5	✔	25.0	25.2	100.7
cal-6	6	✔	50.0	49.1	98.2
cal-7	7	✔	100.0	100.2	100.2

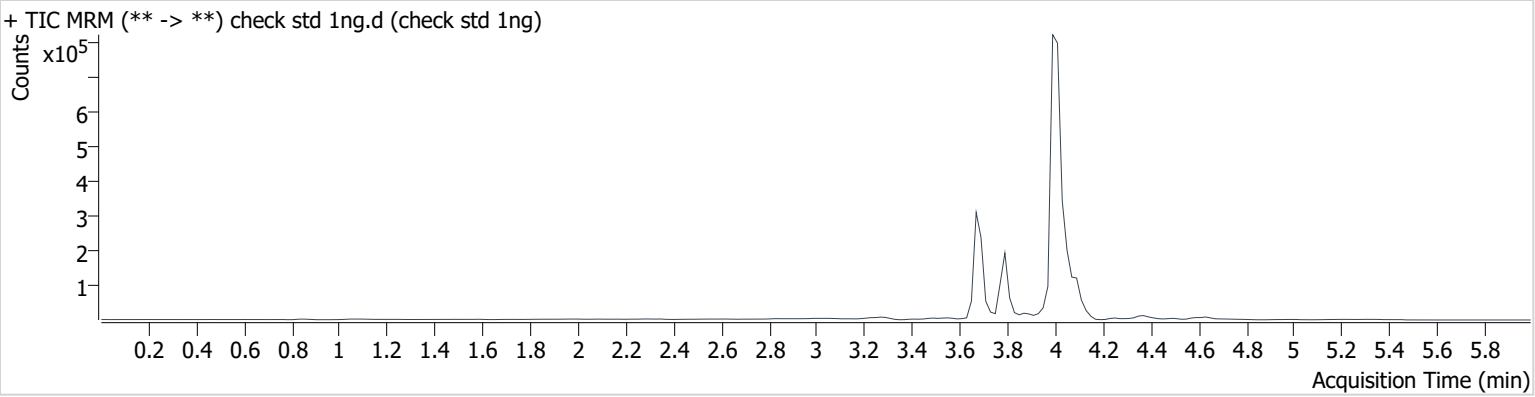
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	check std 1ng.d
Type	Cal	**Sample**	check std 1ng
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-A1	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 7:06:57 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	4.080	7171	260760	1.116	ng/ml	**Low**
THC-COOH	3.789	40661	385162	3.455	ng/ml	**Low**
THC-OH	3.674	19072	792021	0.869	ng/ml	**Low**

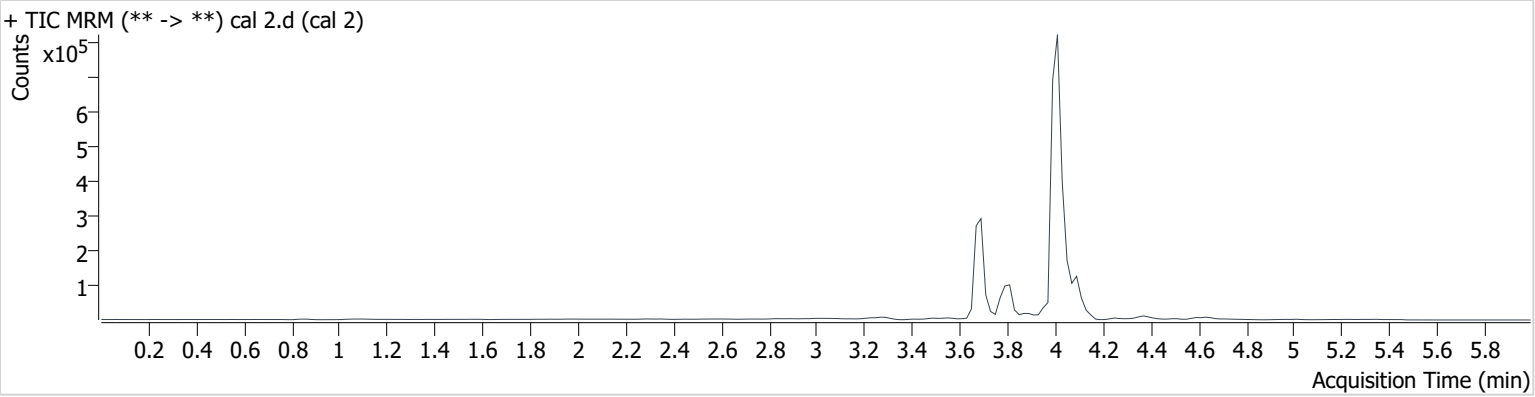
AM #26 Cannabinoids Screen Results

BW

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	cal 2.d
Type	Cal	**Sample**	cal 2
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-B1	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 7:13:35 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.		
THC	4.060	10962	208848	2.698	ng/ml	**Low**
THC-COOH	3.809	67250	227284	14.202	ng/ml	
THC-OH	3.694	51488	777039	3.194	ng/ml	

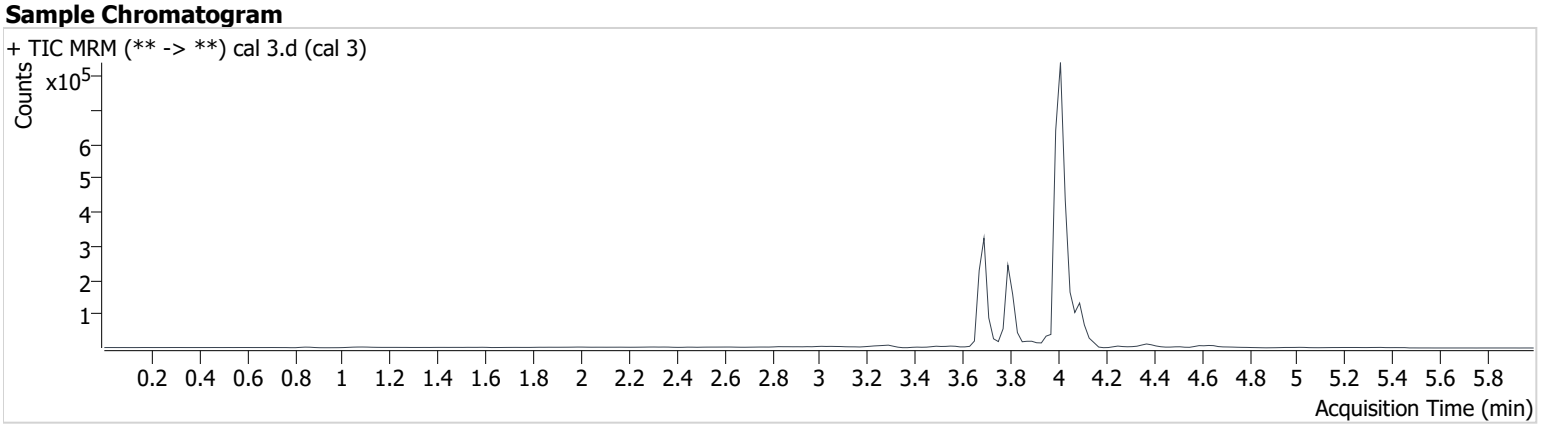
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	cal 3.d
Type	Cal	**Sample**	cal 3
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-C1	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 7:20:10 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.100	16327	195950	4.652	ng/ml
THC-COOH	3.809	140835	380818	18.378	ng/ml
THC-OH	3.694	78944	750245	5.340	ng/ml

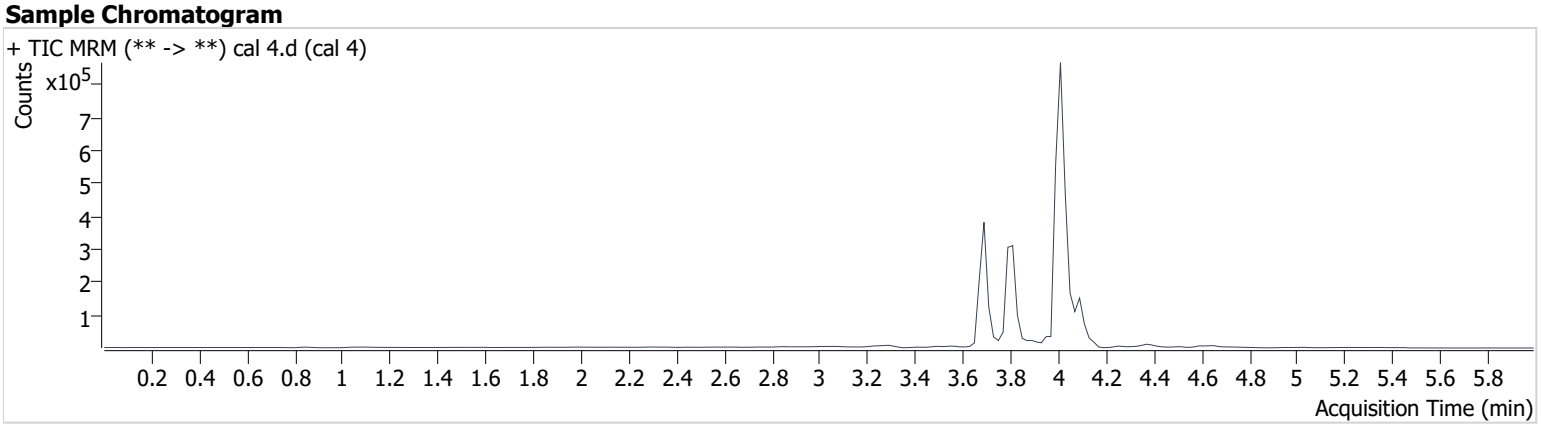
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	cal 4.d
Type	Cal	**Sample**	cal 4
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-D1	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 7:26:47 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.100	33515	204957	9.732	ng/ml
THC-COOH	3.809	362729	391883	49.765	ng/ml
THC-OH	3.694	146971	770023	10.059	ng/ml

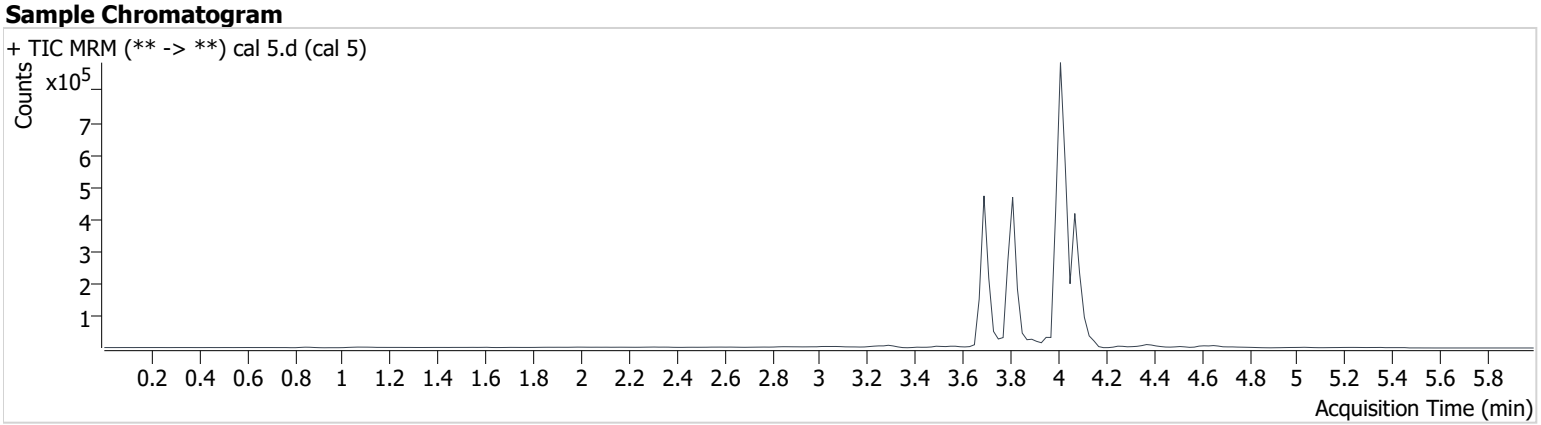
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	cal 5.d
Type	Cal	**Sample**	cal 5
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-E1	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 7:33:23 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.080	195666	483524	25.006 ng/ml
THC-COOH	3.809	529490	394021	73.382 ng/ml
THC-OH	3.694	341318	733389	25.186 ng/ml

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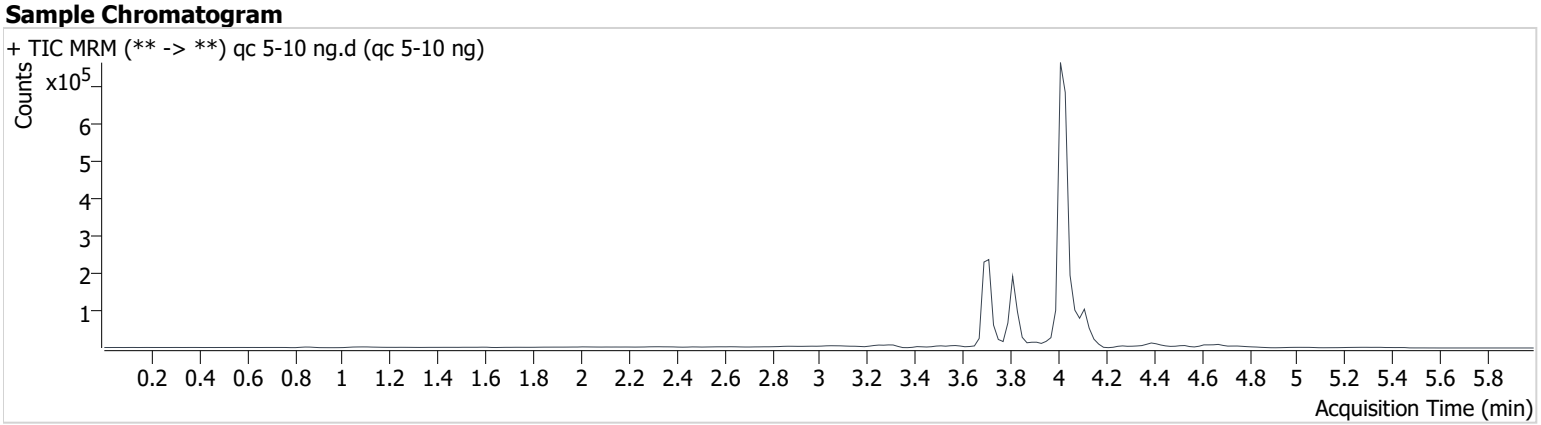
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	qc 5-10 ng.d
Type	QC	**Sample**	qc 5-10 ng
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-H1	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 7:59:42 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.080	12482	144921	4.829	ng/ml
THC-COOH	3.829	89893	304368	14.172	ng/ml
THC-OH	3.714	65151	603679	5.489	ng/ml

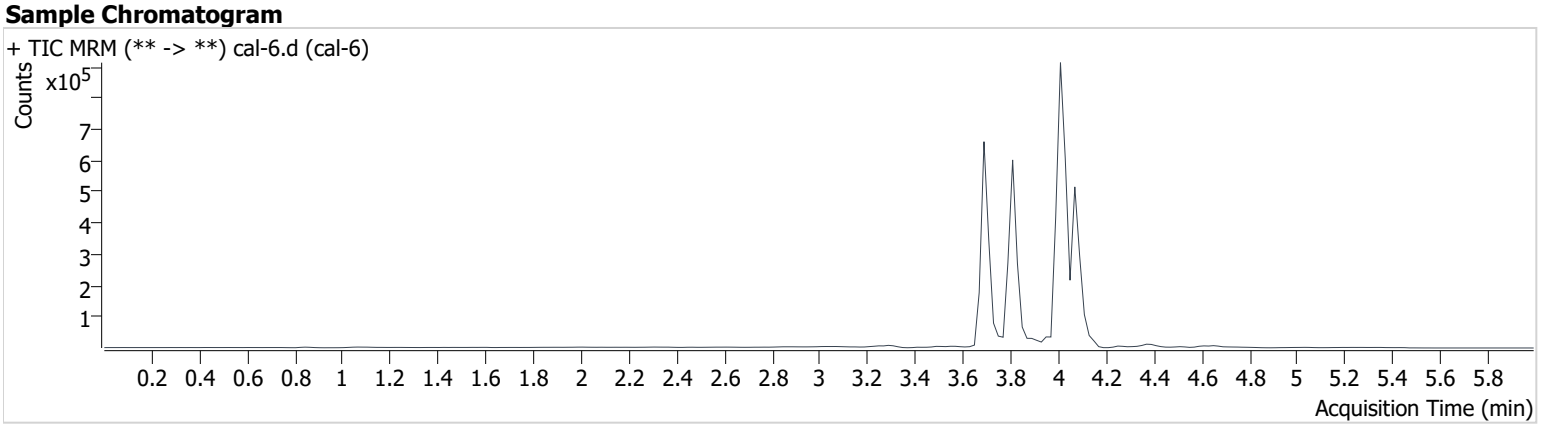
BW

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	cal-6.d
Type	Cal	**Sample**	cal-6
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-F1	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 7:39:58 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.080	387605	478262	50.709	ng/ml
THC-COOH	3.809	718097	400197	98.826	ng/ml
THC-OH	3.694	707359	786223	49.116	ng/ml

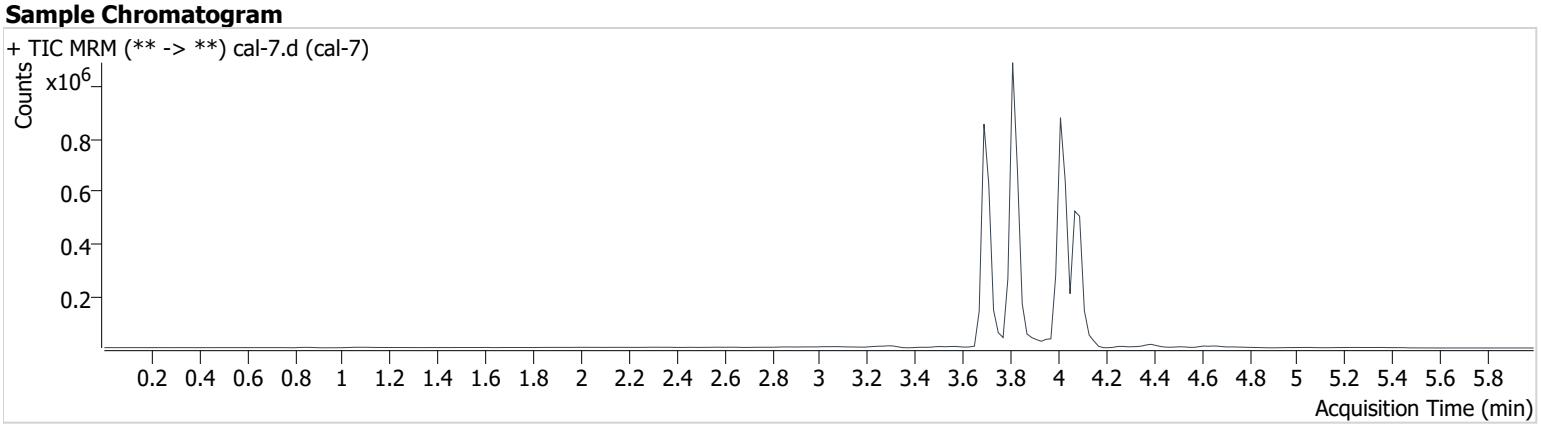
AM #26 Cannabinoids Screen Results

BW

Batch results D:\MassHunter\Data\2020 Data\am 25-26 4-15-20\QuantResults\thcs.batch.bin
Calibration Last Update 4/15/2020 10:12:32 PM

Instrument	69679	**Data File**	cal-7.d
Type	Cal	**Sample**	cal-7
Acq. Method	am 26 cann screen.m	**Operator**	Britany Wylie
Sample Position	P3-G1	**Comment**	
Injection Volume	5		
Acq. Date-Time	4/15/2020 7:46:35 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.100	648444	409239	99.740	ng/ml
THC-COOH	3.809	1535247	340670	251.992	ng/ml
THC-OH	3.694	1341517	734111	100.234	ng/ml