

























Worklist: 3655

<u>LAB_CASE</u>	<u>ITEM</u>	<u>TASK_ID</u>	<u>DESCRIPTION</u>	
C2019-1572	1	160328	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1589	1	160709	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1590	1	160712	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1592	1	160716	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1628	1	160997	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1642	1	161458	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1648	1	161563	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1655	1	161615	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1658	2	162591	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1662	1	162592	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1667	1	161876	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1668	5	161814	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1691	1	161997	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1703	1	162593	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1705	1	162119	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1712	1	162209	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1714	1	162212	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1721	1	162283	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1721	2	162286	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1722	1	162289	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-1737	1	162595	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
M2019-3587	3	162594	AM 25/AM 26 Blood MultiDrug/THC Screen by L	

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

Extraction Date: 9/5/19

Analyst: Anne Nord

Plate lot#: 0543908

Plate Expiration: November 28 2019

Mobile phase A: 10mM Amm Form

Mobile phase B: 0.1% Formic Acid in MeOH

0.5M Ammonium Hydroxide

Ethyl Acetate

LC Methanol

Blank Blood Lot: 445283-2 **Blank Urine lot:** 8919 **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.

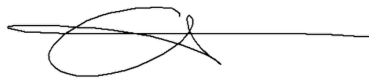
Analytic:

- 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 μ L 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. *Shaker ID: 66759*
- 4. Pipette **250 μ L 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 μ L 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 μ L 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 μ L 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. Place on SPE Dry and evaporate to dryness at approx. 35°C.
SPE Dry ID: 66819
- 16. Reconstitute in **100 μ L 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? Y / N _____
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: Zopiclone not evaluated in urine samples poor internal standard response.



Toxicology AM method 25 external prep information

working solution 10000 ng/ml in meoh Hydromorphone, Hydrocodone, Nortriptyline, Sertraline

Stock solution 1mg/ml 100 ul each in 9600ul meOH

ppd 5/20/19: Exp: 5/20/20 lot 52020

by baw

Drug	lot	expiration
Hydromorphone	FE04101502	6/1/2020
Hydrocodone	FE09091505	9/1/2020
nortriptyline	FN06191503	8/1/2020
sertraline	FN01081501	3/1/2020

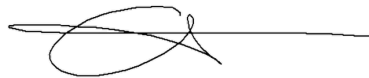
AM 25 control 100 ul working solution (52020) in 9900 ul neg blood

ppd 5/20/19, exp 3/1/20 lot 52019

neg blood lot 19A207P3

by BAW

Concentration 100ng/ml hydrocodone, nortriptyline, sertraline, hydromorphone



Toxicology AM method 25 and 28 external prep information

working solution 10000 ng/ml in meoh amphetamine, dextromethorphan, methamphetamine, morphine, paroxetine, amitriptyline meperidine, doxepine, mirtazapine, 1000 ng/ml buprenorphine

Stock solution 1mg/ml (.1mg/ml buprenorphine) 100 ul each in 9000 ul meOH

Ppd 3/14/19 Exp: 3/14/20 lot 31420 by AMN

Drug	lot	expiration
amphetamine	FE06011503	6/1/2020
dextromethorphan	FN07231501	7/1/2020
methamphetamine	FE08101708	10/1/2022
morphine	FE08141515	11/1/2020
buprenorphine	FE09211501	9/1/2020
paroxetine	FN05111505	6/1/2020
mirtazapine	FN04201503	4/1/2020
meperidine	FE01191502	2/1/2020 (this compound will not be evaluated in this control after 2/1/2020)
doxepin	FN01281502	2/1/2020 (this compound will not be evaluated in this control after 2/1/2020)
amitriptyline	FN07081401	9/1/2019 (this compound will not be evaluated in this control after 9/1/2019)

AM 25-28 urine control 100 ul working solution lot (31420) in 5000 ul urine lot (31319)

ppd 9/5/19 Exp 3/14/2020

by AMN

Concentration 196 ng/ml each (19.6 ng/ml buprenorphine)

Lot 9519

AM #25 Multi-Drug Screen Results

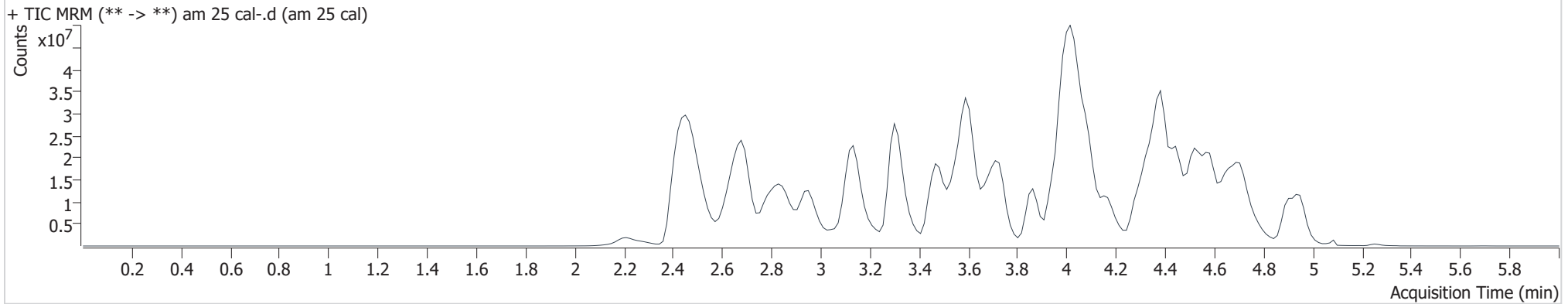
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\mds.batch.bin
9/6/2019 4:35:18 PM

Instrument 69679
Type Cal
Acq. Method am 25 short.m
Sample Position P2-A1
Injection Volume 5
Acq. Date-Time 9/5/2019 4:10:07 PM
Sample Info.

Data File am 25 cal-.d
Sample am 25 cal
Operator Anne Nord
Comment

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	3.039	93616	413.53	32.706	2296125	10.000
7-aminoclonazepam	3.319	360238	215.53	1.6064E+05	1690488	10.000
7-aminoflunitrazepam	3.547	2610911	2163	3121.3	14642931	10.000
Acetyl Fentanyl	4.307	682511	368.18	2.6177E+05	40956540	10.000
Acetyl Norfentanyl	2.640	473320	4384.7	248.39	25723696	10.000
a-hydroxyalprazolam	4.337	72632	1037.1	260.45	384106	10.000
alpha-hydroxymidazolam	4.443	1326640	386.71	4469.1	10201127	10.000
alpha-PVP	3.690	6957092	1717.2	1182.6	27137431	10.000
Alprazolam	4.447	1420754	942.89	643.06	4832792	10.000
Amitriptyline	4.683	2648206	244.44	1135.9	12276173	10.000
Amphetamine	2.704	4810514	590.81	901.11	11273056	10.000
Benzoyllecgonine	3.074	1316044	917.67	1040.3	6318743	10.000
Buprenorphine	5.266	195684	2562.4	44080	1044001	10.000
Bupropion	4.026	3245407	780.46	1360.9	19639848	10.000
Carbamazepine	4.042	6235662	630.62	2945.8	29265969	10.000
Carisoprodol	4.037	840171	774.74	127.96	3790349	10.000
Chlordiazepoxide	4.603	363638	74.004	321.36	8943516	10.000
Chlorpheniramine	4.006	20741	301.68	3.0265E+14	58050049	10.000

am 25 cal



AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Citalopram	4.106	4941708	815.3	637.47	22850806	10.000
Clonazepam	4.292	263610	1011	92614	399882	10.000
Cocaine	3.619	8780180	2318.8	1135.5	37959024	10.000
Codeine	2.981	713657	434.6	644.83	3568390	10.000
Cyclobenzaprine	4.545	5760883	3120.7	79.46	21350436	10.000
Desipramine	4.469	7807322	2.2073E+06	452.8	39431775	10.000
Dextromethorphan	4.191	4127617	397.51	543.23	20033540	10.000
Dextrorphan	3.352	3779127	1124.6	740.22	20151199	10.000
Diazepam	4.727	650602	3261.2	2039.5	3061629	10.000
Dihydrocodeine	2.693	1849181	276.24	203.6	10020754	10.000
Diphenhydramine	4.084	16051972	1600.9	998.75	58050049	10.000
Doxepin	4.358	3139115	253.36	56.82	18652723	10.000
Doxylamine	3.578	18019255	699.69	929.06	59823229	10.000
EDDP	4.005	7931234	15652	322.82	41941499	10.000
Estazolam	4.357	2117766	9585.6	666.28	5888597	10.000
Etizolam	4.473	197840	88961	8.83E+05	5888597	10.000
Fentanyl	4.536	527357	127.16	4857.4	25553868	10.000
Flunitrazepam	4.415	1221206	782.82	457.76	207830	10.000
Fluoxetine	4.339	5537327	1430.7	637.25	23770266	10.000
Flurazepam	4.549	4846474	2743.2	687.35	207830	10.000
Hydrocodone	3.255	1734059	862.65	332.46	10457083	10.000
Hydromorphone	2.531	1689450	533.56	576.6	3827884	10.000
Imipramine	4.605	10485075	1357.2	∞	36374168	10.000
Ketamine	3.966	2495455	1373.7	116.32	18918157	10.000
Lamotrigine	3.428	426180	326.43	200.06	21223378	10.000
Levamisole	3.142	5495068	227.85	552.56	37959024	10.000
Lorazepam	4.260	72055	∞	∞	4832792	10.000
Maprotiline	4.483	703232	75.231	661.9	12276173	10.000
MDA	2.854	3574610	1695	797.96	16465597	10.000
MDEA	3.126	8311150	1413.7	1309.3	37144372	10.000
MDMA	2.975	9250570	992.44	933.97	5221806	10.000
Meperidine	3.687	4414595	552.66	551.53	21223378	10.000
Meprobamate	3.417	371259	946.95	589.74	1737405	10.000
Methadone	4.400	10943374	1436.7	760.12	40905697	10.000
Methamphetamine	2.841	9069558	90.748	380.26	37947600	10.000
Methocarbamol	3.307	142217	242.16	180.05	21223378	10.000
Methylphenidate	3.475	14325894	4542.1	14013	49657703	10.000
Metoprolol	3.305	801150	195.73	139.94	21223378	10.000
Midazolam	4.644	895264	23078	3103.6	12943264	10.000
Mirtazapine	4.531	4046459	50706	4080.7	21223378	10.000
Mitragynine	4.564	796075	7.437E+05	13483	18652723	10.000
Morphine	2.292	677430	3503.9	326.26	452104	10.000
Norbuprenorphine	3.921	57788	12839	18051	296460	10.000
Nordiazepam	4.561	192997	88129	6708.4	602659	10.000



AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Norfentanyl	3.155	8171626	1460.2	1234	33712326	10.000
Norhydrocodone	2.833	75771	34.914	39.602	2387830	10.000
Normeperidine	3.506	3680256	1633.7	483.38	13715616	10.000
Noroxycodone	2.724	1737993	∞	53.423	5726130	10.000
Nortriptyline	4.515	2833457	5.6165E+05	1785.5	7187771	10.000
O-desmethyl-tramadol	2.699	13508697	2100.7	4217.4	53353917	10.000
Olanzapine	4.185	1140922	175.59	27.766	96884	10.000
Oxazepam	4.357	83027	34.062	31.045	475599	10.000
Oxycodone	2.918	4058267	1177.4	999.03	18961448	10.000
Oxymorphone	2.223	2266783	290.87	427.56	7906575	10.000
Paroxetine	4.505	511817	186.24	159.88	8797644	10.000
Phenazepam	4.489	305274	364.71	1913.1	1159874	10.000
Phencyclidine	3.872	7727910	916.93	1716.5	35471162	10.000
Phentermine	2.977	1489771	639.13	34.676	23701345	10.000
Phenytoin	3.932	12965	2884.3	15.694	96884	10.000
Promethazine	4.712	11981452	1205.8	641.46	50889796	10.000
Pseudoephedrine	2.467	69920013	18855	29355	146720558	10.000
Quetiapine	4.733	5875533	2242.3	1581.9	8340521	10.000
Sertraline	4.770	1877330	262.62	401.94	8797644	10.000
Sufentanil	4.963	594053	1085.8	770.97	30058841	10.000
Tapentadol	3.309	5863051	713.68	637	28125221	10.000
Temazepam	4.525	665773	169.02	37.397	3412357	10.000
Tramadol	3.320	11554381	2181.3	363.36	47982973	10.000
Trazodone	4.918	6375628	1.3011E+06	1.2918E+06	25887752	10.000
Venlafaxine	3.731	11537612	1.0257E+05	534	44999171	10.000
Zaleplon	4.171	1510444	236.03	14928	4383910	10.000
Zolpidem	4.386	11865172	2252.5	1211.7	43413858	10.000
Zopiclone	4.395	45448	30.372	65.715	218192	10.000



AM #25 Multi-Drug Screen Results

Batch results

D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\mds.batch.bin

Calibration Last Update

9/6/2019 4:35:18 PM

Instrument

69679

Type

Sample

Acq. Method

am 25 short.m

Sample Position

P2-C1

Injection Volume

5

Acq. Date-Time

9/5/2019 4:17:19 PM

Sample Info.**Data File**

am 25 negative blood-.d

Sample

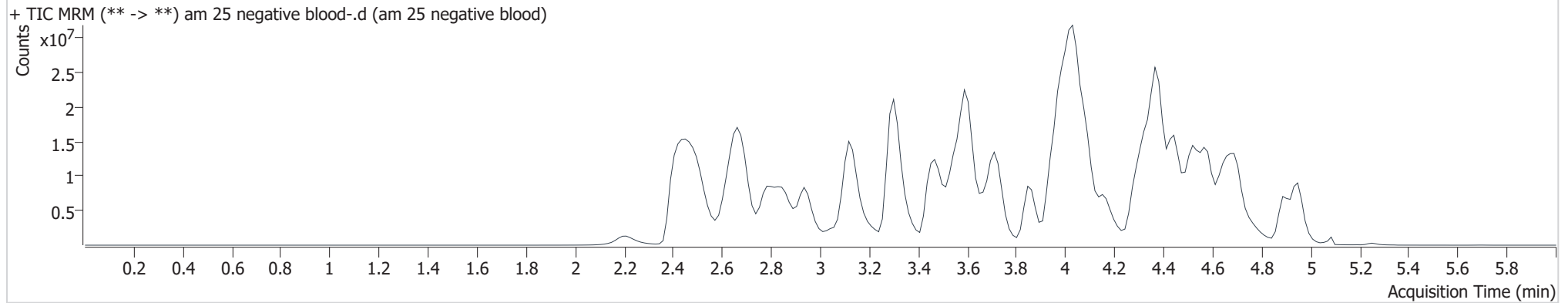
am 25 negative blood

Operator

Anne Nord

Comment

negative blood

Sample Chromatogram

AM #25 Multi-Drug Screen Results

Batch results

D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\mds.batch.bin

Calibration Last Update

9/6/2019 4:35:18 PM

Instrument

69679

Type

Sample

Acq. Method

am 25 short.m

Sample Position

P2-D1

Injection Volume

5

Acq. Date-Time

9/5/2019 4:24:29 PM

Sample Info.

Data File

am 25 external control blood-.d

Sample

am 25 external control blood

Operator

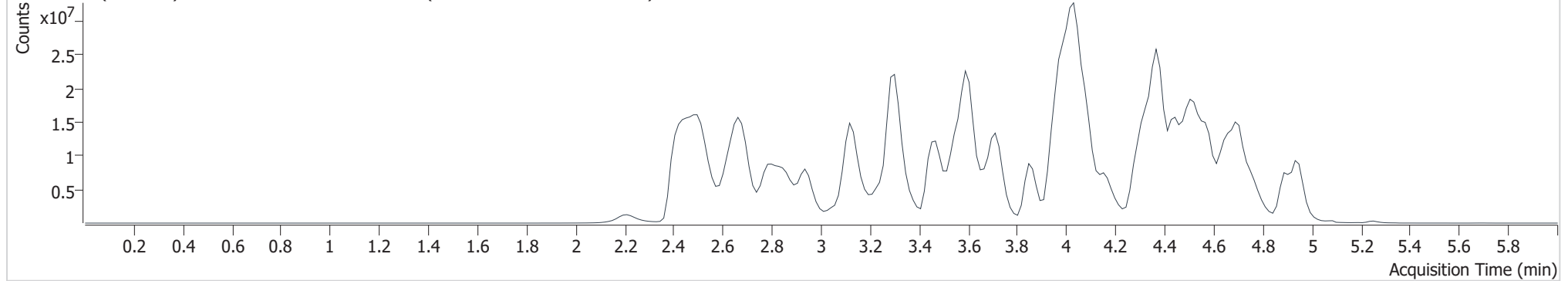
Anne Nord

Comment

blood external control

Sample Chromatogram

+ TIC MRM (** -> **) am 25 external control blood-.d (am 25 external control blood)



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Hydrocodone	3.255	14608583	7040.8	994.09	9424236	93.478
Hydromorphone	2.516	12467533	1281.6	1079.8	3186716	88.644
Nortriptyline	4.500	21202571	1252.5	4321	5989084	89.806
Sertraline	4.740	13571616	728.95	2740.1	7414802	85.774

AM #25 Multi-Drug Screen Results

Batch results

D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\mds.batch.bin

Calibration Last Update

9/6/2019 4:35:18 PM

Instrument

69679

Type

Sample

Acq. Method

am 25 short.m

Sample Position

P2-F3

Injection Volume

5

Acq. Date-Time

9/5/2019 8:31:03 PM

Sample Info.**Data File**

am 25 negative urine.d

Sample

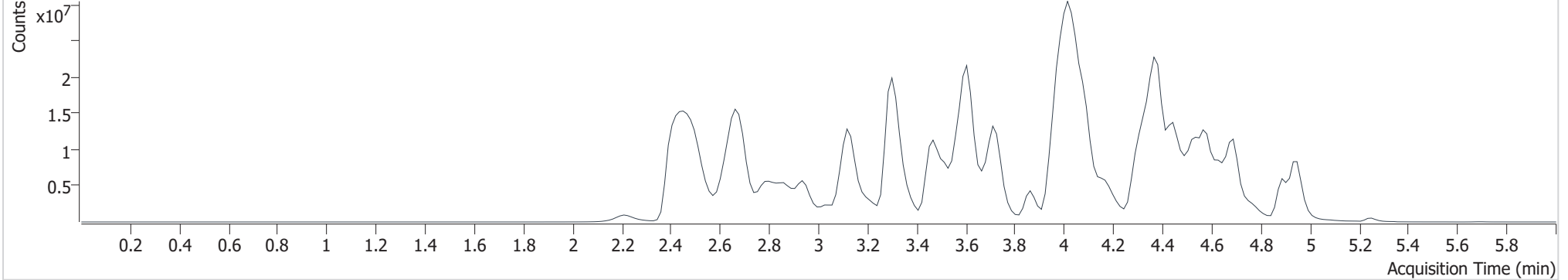
am 25 negative urine

Operator

Anne Nord

Comment**Sample Chromatogram**

+ TIC MRM (** -> **) am 25 negative urine.d (am 25 negative urine)



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Oxazepam	4.311	9849	9.7035	7.4302	457990	1.232 <3

AM #25 Multi-Drug Screen Results

Batch results

Calibration Last Update

D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\mds.batch.bin
9/6/2019 4:35:18 PM

Instrument

Type

Acq. Method

Sample Position

Injection Volume

Acq. Date-Time

Sample Info.

69679
Sample
am 25 short.m
P2-G3
5
9/5/2019 8:38:13 PM

Data File

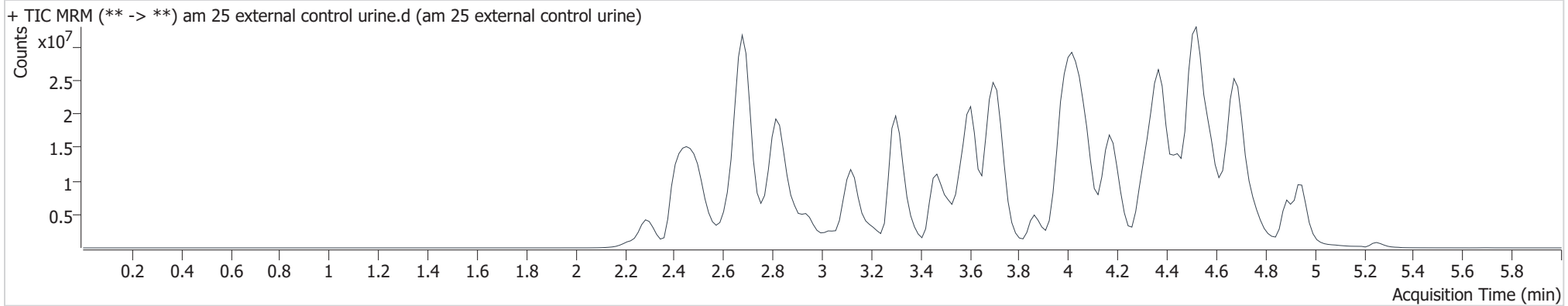
Sample

Operator

Comment

am 25 external control urine.d
am 25 external control urine
Anne Nord

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Amitriptyline	4.683	22930126	1115.9	607.5	7889723	134.727
Amphetamine	2.689	30825812	3528.2	3725.9	5258578	137.371
Buprenorphine	5.266	526540	456.1	2697.9	2090216	13.440
Desipramine	4.515	3263287	933.01	330.38	32029112	5.146
Dextromethorphan	4.175	35837538	882.63	712.45	11315282	153.720
Doxepin	4.358	25426700	743.06	3274.8	10654223	141.809
Meperidine	3.702	38929137	1420.1	778.09	12769052	146.568
Methamphetamine	2.825	46997241	8007	3034	13678561	143.757
Mirtazapine	4.515	39454019	1137.1	1635.4	12769052	162.059
Morphine	2.292	6044462	598.61	2518.2	317439	127.078
Oxazepam	4.311	10175	33.555	1.6539 Low	402542	1.448 <3
Paroxetine	4.490	4912115	347.61	225.73	6456251	130.780

A Mirtazapine, known interferant



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

Extraction Date: 9/5/19

Analyst: Anne Nord

Plate lot#: 190716

Plate Expiration: 01/16/2020

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: 445283-2 **Urine Blank:** 8919 **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. *Shaker ID: 66759*
- 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 **800 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? Y / N
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

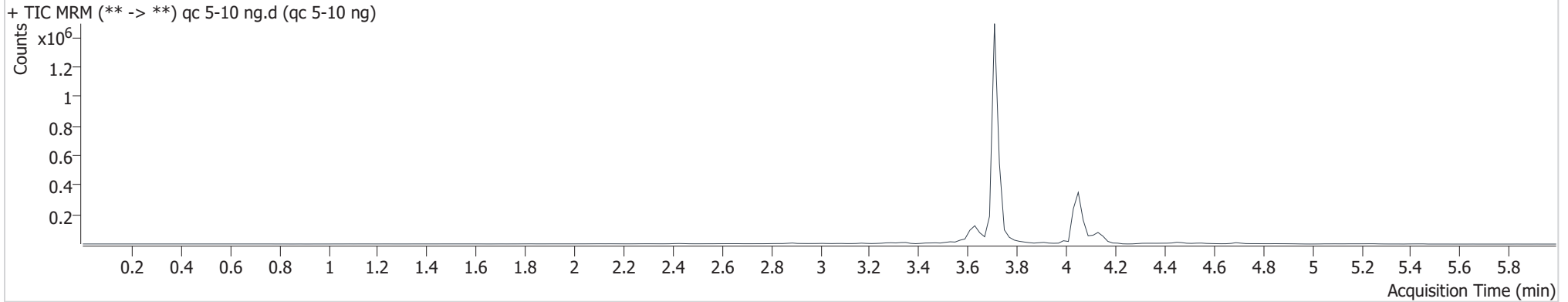
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Calibration Last Update 9/6/2019 9:19:55 AM

Instrument 69679
Type QC
Acq. Method am 26 cann screen.m
Sample Position P3-H1
Injection Volume 5
Acq. Date-Time 9/5/2019 2:21:18 PM
Sample Info.

Data File qc 5-10 ng.d
Sample qc 5-10 ng
Operator Anne Nord
Comment

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.120	5209	61158	5.946 ng/ml
THC-COOH	3.630	36802	199575	13.438 ng/ml
THC-OH	3.716	18651	2650022	4.527 ng/ml

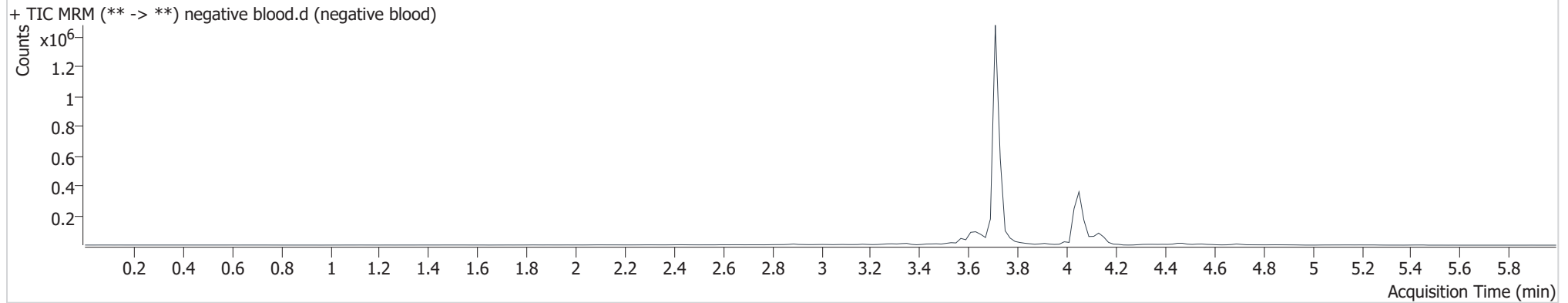
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Calibration Last Update 9/6/2019 9:19:55 AM

Instrument 69679
Type Sample
Acq. Method am 26 cann screen.m
Sample Position P3-A2
Injection Volume 5
Acq. Date-Time 9/5/2019 2:27:54 PM
Sample Info.

Data File negative blood.d
Sample negative blood
Operator Anne Nord
Comment

Sample Chromatogram



AM #26 Cannabinoids Screen Results

Batch results

D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin

Calibration Last Update

9/6/2019 9:19:55 AM

Instrument

69679

Type

Sample

Acq. Method

am 26 cann screen.m

Sample Position

P3-B5

Injection Volume

5

Acq. Date-Time

9/5/2019 5:53:40 PM

Sample Info.**Data File**

negative urine.d

Sample

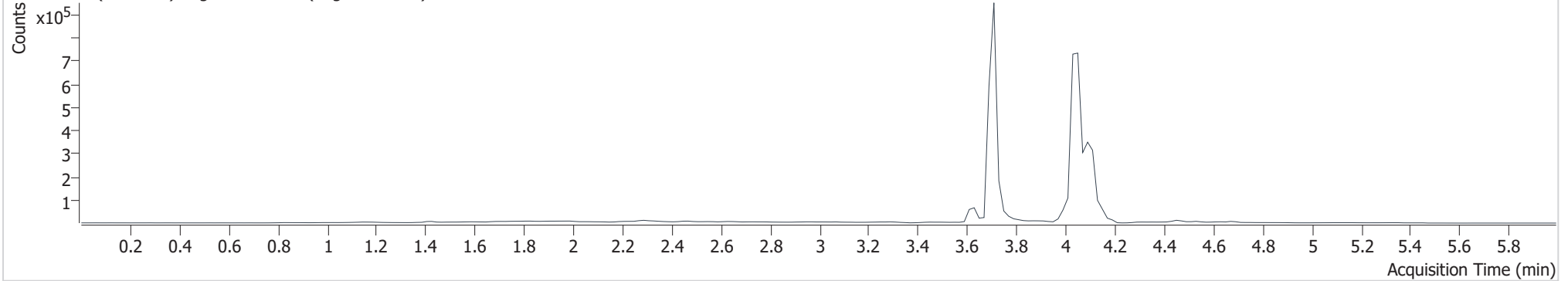
negative urine

Operator

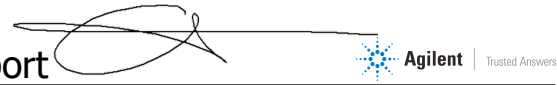
Anne Nord

Comment**Sample Chromatogram**

+ TIC MRM (** -> **) negative urine.d (negative urine)

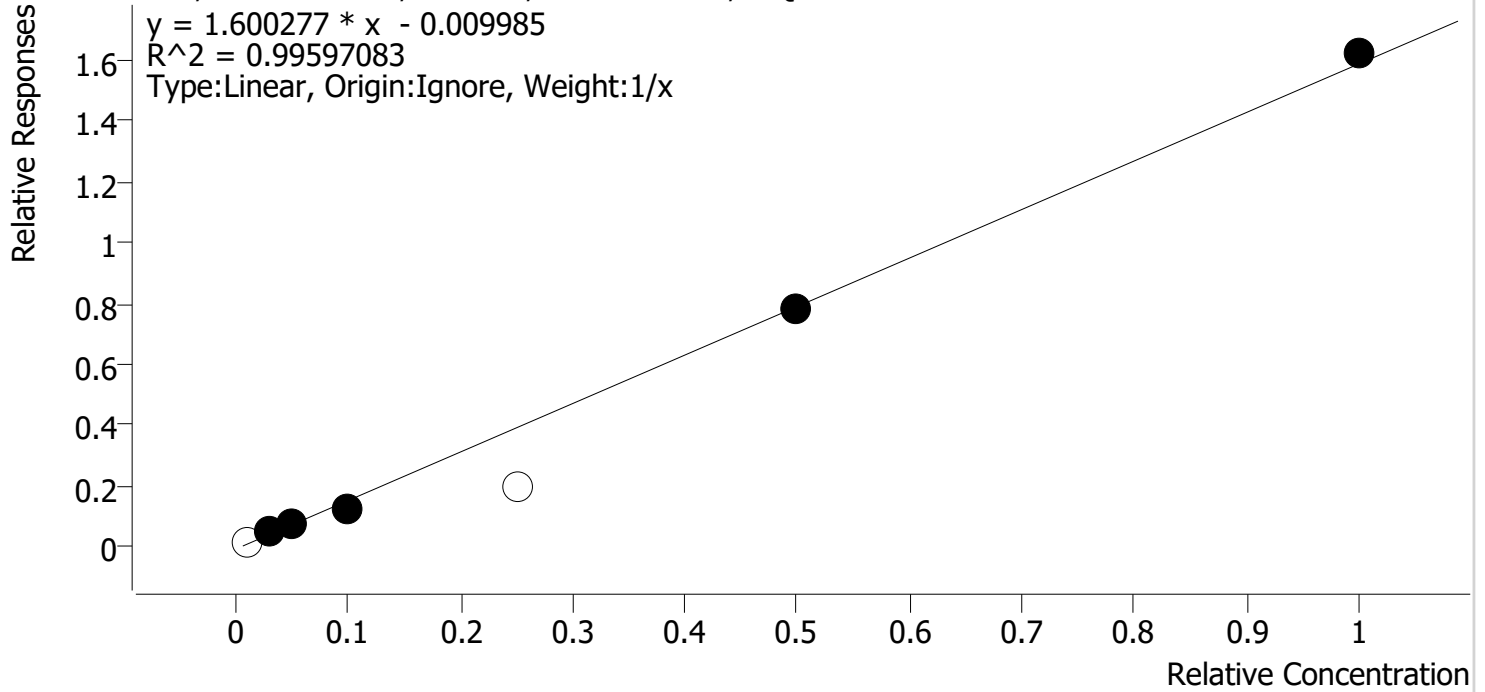


Compound Calibration Report



Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Last Cal. Update 9/6/2019 9:19 AM
Analyst Name ISP\datastor
Analyte THC **Internal Standard** THC-d3

THC - 7 Levels, 5 Levels Used, 7 Points, 5 Points Used, 0 QCs



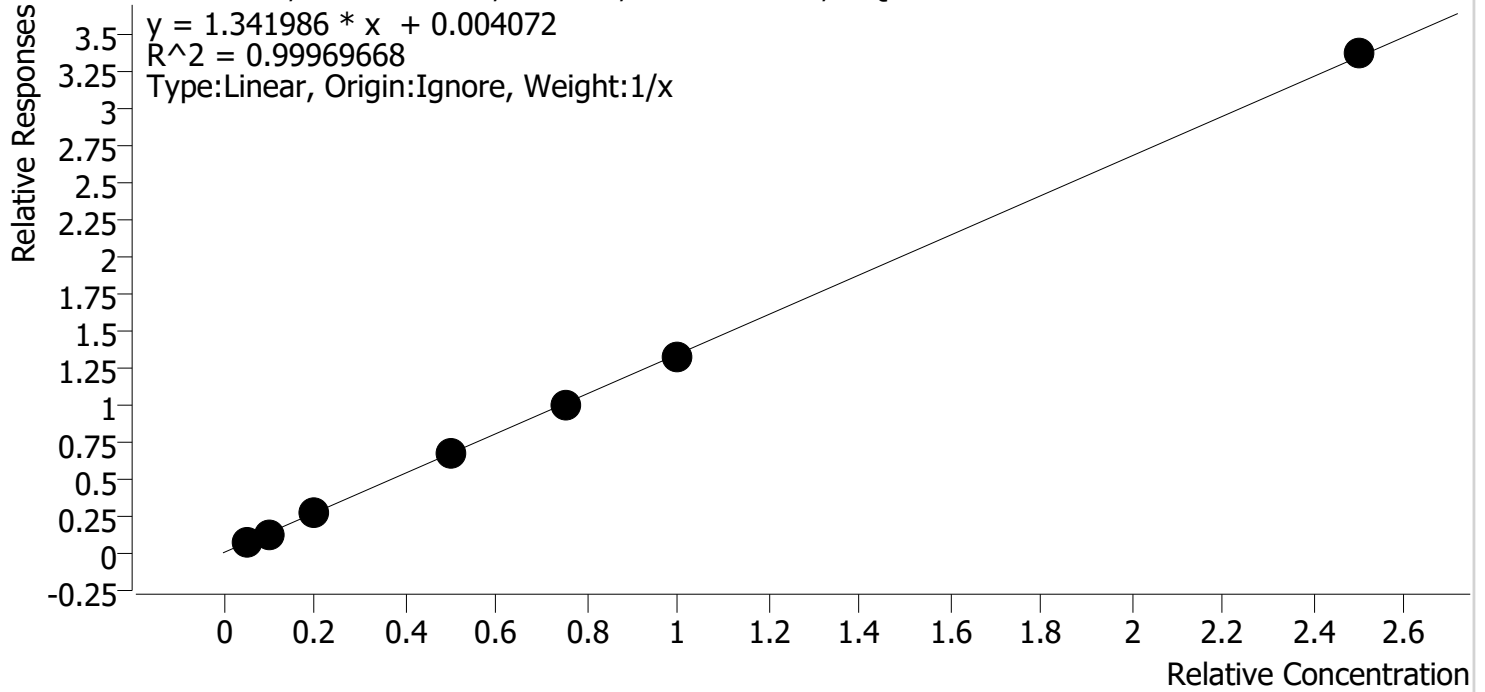
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	x	1.0	1.5	151.5
cal 2	2	✓	3.0	3.4	112.5
cal 3	3	✓	5.0	5.4	107.0
cal 4	4	✓	10.0	8.0	80.1
cal 5	5	x	25.0	13.2	52.6
cal-6	6	✓	50.0	49.2	98.3
cal-7	7	✓	100.0	102.1	102.1

Compound Calibration Report



Batch results	D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin		
Last Cal. Update	9/6/2019 9:19 AM		
Analyst Name	ISP\datastor		
Analyte	THC-COOH	Internal Standard	THC-COOH-d9

THC-COOH - 7 Levels, 7 Levels Used, 7 Points, 7 Points Used, 0 QCs

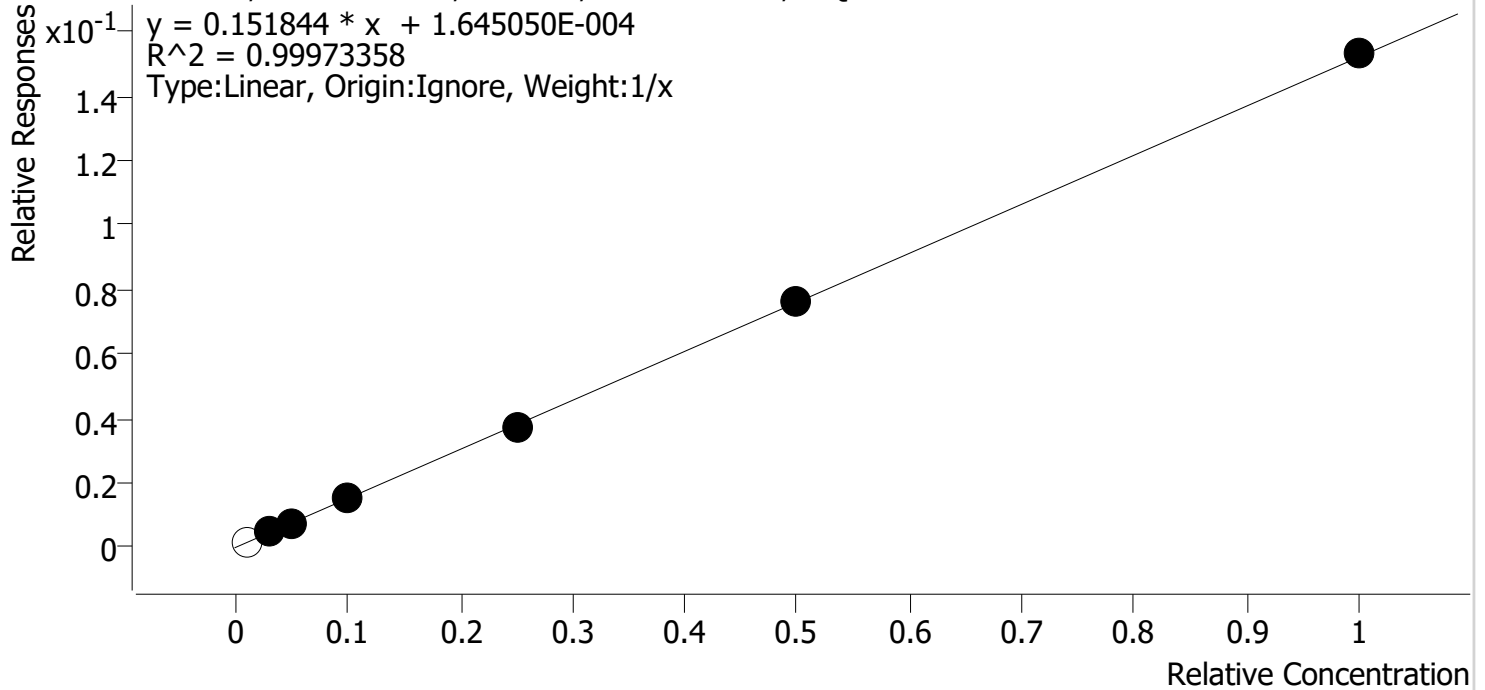


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✓	5.0	5.3	106.7
cal 2	2	✓	10.0	9.3	93.4
cal 3	3	✓	20.0	19.9	99.7
cal 4	4	✓	50.0	50.6	101.3
cal 5	5	✓	75.0	75.0	100.1
cal-6	6	✓	100.0	98.2	98.2
cal-7	7	✓	250.0	251.5	100.6

Compound Calibration Report

Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Last Cal. Update 9/6/2019 9:19 AM
Analyst Name ISP\datastor
Analyte THC-OH **Internal Standard** THC-OH-d3

THC-OH - 7 Levels, 6 Levels Used, 7 Points, 6 Points Used, 0 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	x	1.0	1.1	114.6
cal 2	2	✓	3.0	3.1	101.7
cal 3	3	✓	5.0	5.1	101.9
cal 4	4	✓	10.0	9.9	98.9
cal 5	5	✓	25.0	24.2	96.6
cal-6	6	✓	50.0	50.1	100.3
cal-7	7	✓	100.0	100.7	100.7

AM #26 Cannabinoids Screen Results

Batch results

D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin

Calibration Last Update

9/6/2019 9:19:55 AM

Instrument

69679

Type

Cal

Acq. Method

am 26 cann screen.m

Sample Position

P3-A1

Injection Volume

5

Acq. Date-Time

9/5/2019 1:28:34 PM

Sample Info.

Data File

check std 1ng.d

Sample

check std 1ng

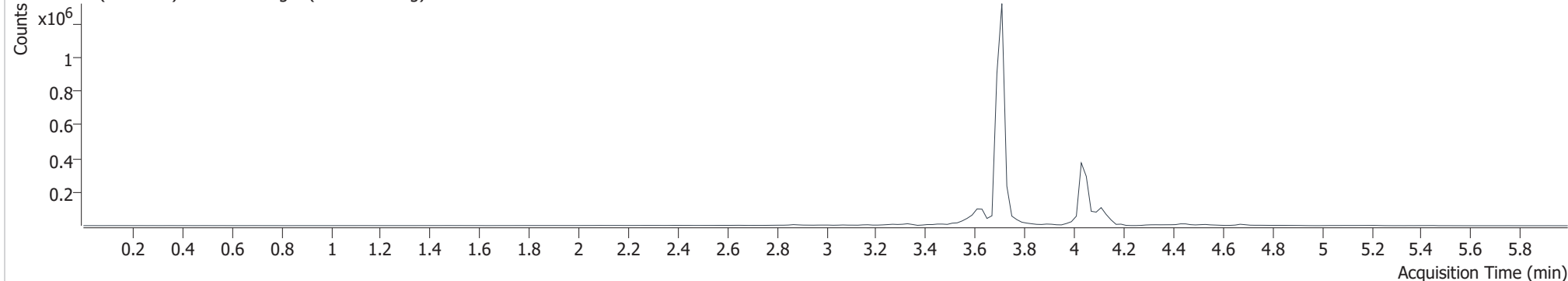
Operator

Anne Nord

Comment

Sample Chromatogram

+ TIC MRM (** -> **) check std 1ng.d (check std 1ng)



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.120	1627	114049	1.515 ng/ml Low
THC-COOH	3.610	15119	199793	5.335 ng/ml Low
THC-OH	3.716	5734	3010913	1.146 ng/ml Low

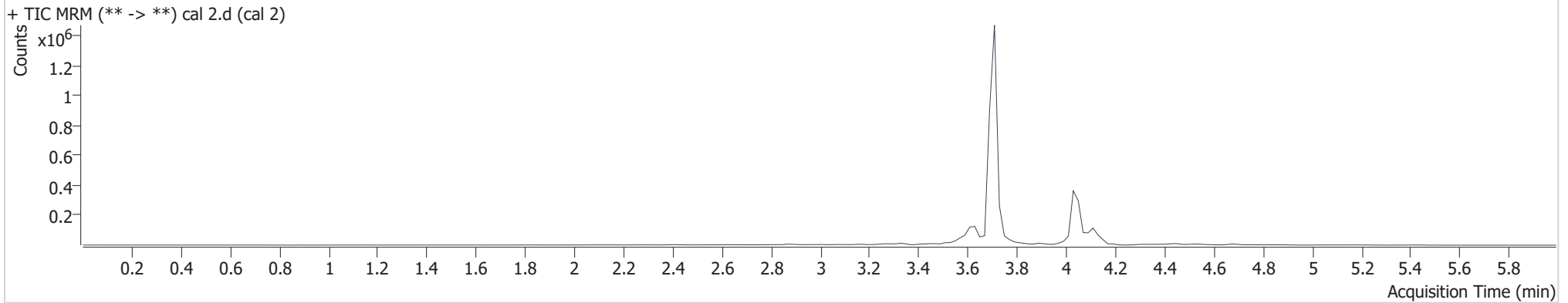
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Calibration Last Update 9/6/2019 9:19:55 AM

Instrument 69679
Type Cal
Acq. Method am 26 cann screen.m
Sample Position P3-B1
Injection Volume 5
Acq. Date-Time 9/5/2019 1:35:12 PM
Sample Info.

Data File cal 2.d
Sample cal 2
Operator Anne Nord
Comment

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.120	5176	117611	3.374 ng/ml
THC-COOH	3.630	28757	222143	9.343 ng/ml Low
THC-OH	3.716	15016	3129851	3.051 ng/ml

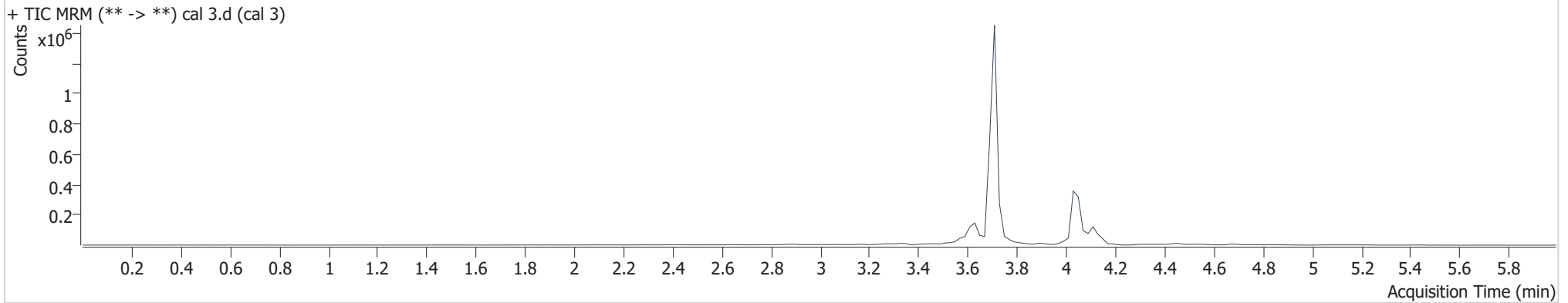
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Calibration Last Update 9/6/2019 9:19:55 AM

Instrument 69679
Type Cal
Acq. Method am 26 cann screen.m
Sample Position P3-C1
Injection Volume 5
Acq. Date-Time 9/5/2019 1:41:48 PM
Sample Info.

Data File cal 3.d
Sample cal 3
Operator Anne Nord
Comment

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.120	8876	117325	5.352 ng/ml
THC-COOH	3.630	54115	199109	19.949 ng/ml
THC-OH	3.716	21980	2782560	5.094 ng/ml

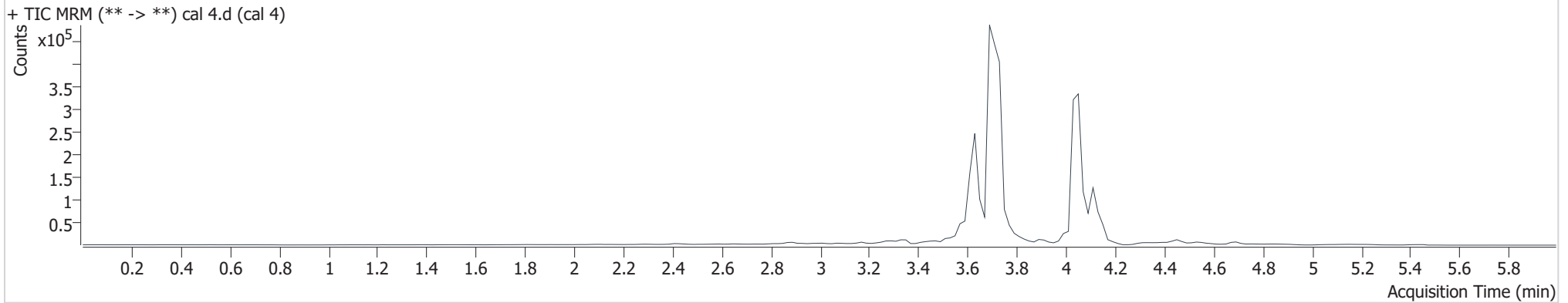
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Calibration Last Update 9/6/2019 9:19:55 AM

Instrument 69679
Type Cal
Acq. Method am 26 cann screen.m
Sample Position P3-D1
Injection Volume 5
Acq. Date-Time 9/5/2019 1:48:24 PM
Sample Info.

Data File cal 4.d
Sample cal 4
Operator Anne Nord
Comment

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.120	14315	121186	8.006 ng/ml
THC-COOH	3.630	140208	205072	50.644 ng/ml
THC-OH	3.696	22963	1513130	9.886 ng/ml

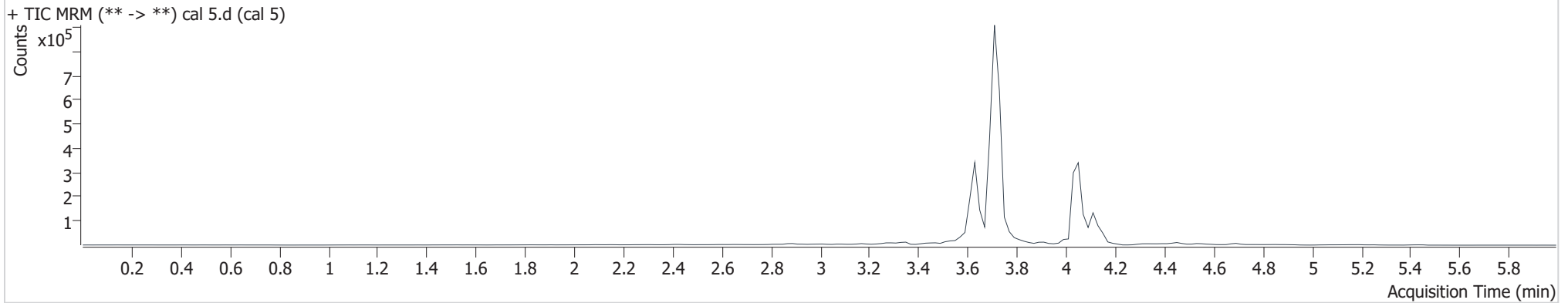
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Calibration Last Update 9/6/2019 9:19:55 AM

Instrument 69679
Type Cal
Acq. Method am 26 cann screen.m
Sample Position P3-E1
Injection Volume 5
Acq. Date-Time 9/5/2019 1:55:00 PM
Sample Info.

Data File cal 5.d
Sample cal 5
Operator Anne Nord
Comment

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.100	24794	123619	13.157 ng/ml
THC-COOH	3.630	220989	218539	75.048 ng/ml
THC-OH	3.736	56810	1542185	24.152 ng/ml

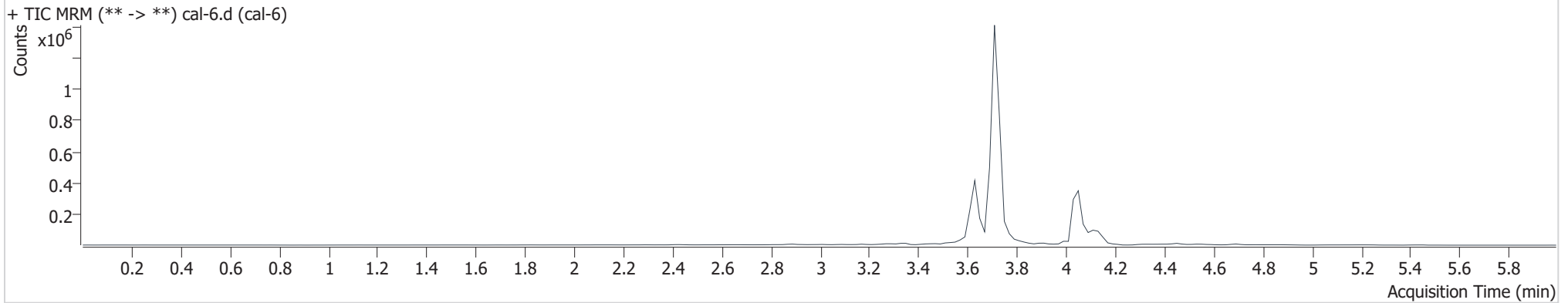
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Calibration Last Update 9/6/2019 9:19:55 AM

Instrument 69679
Type Cal
Acq. Method am 26 cann screen.m
Sample Position P3-F1
Injection Volume 5
Acq. Date-Time 9/5/2019 2:01:36 PM
Sample Info.

Data File cal-6.d
Sample cal-6
Operator Anne Nord
Comment

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.100	50090	64480	49.168 ng/ml
THC-COOH	3.630	289936	219426	98.158 ng/ml
THC-OH	3.736	114299	1498339	50.130 ng/ml

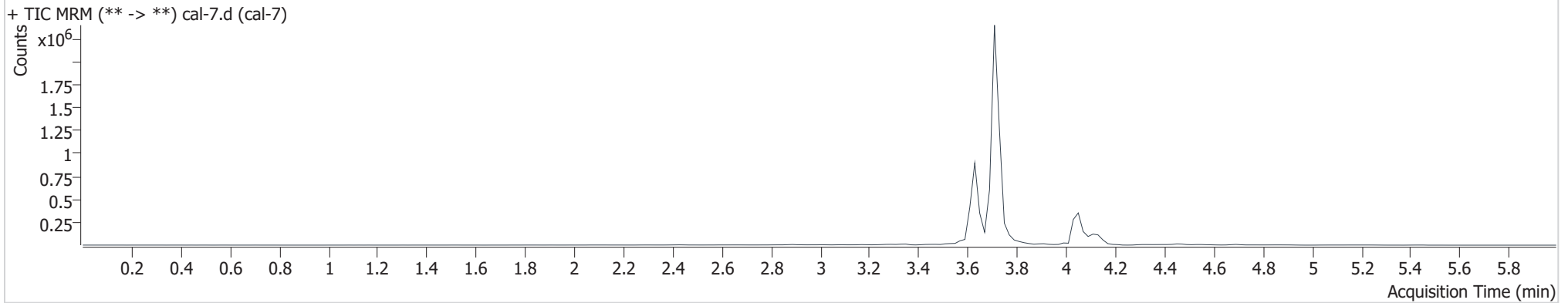
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2019\am 25-26\090519\QuantResults\cann screen.batch.bin
Calibration Last Update 9/6/2019 9:19:55 AM

Instrument 69679
Type Cal
Acq. Method am 26 cann screen.m
Sample Position P3-G1
Injection Volume 5
Acq. Date-Time 9/5/2019 2:08:12 PM
Sample Info.

Data File cal-7.d
Sample cal-7
Operator Anne Nord
Comment

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.140	104004	64046	102.101 ng/ml
THC-COOH	3.630	728856	215672	251.523 ng/ml
THC-OH	3.736	227527	1486599	100.687 ng/ml