





















REVIEWED

By Britany Wylie at 9:07 am, May 02, 2019



4/30/2019

Worklist: 3355

<u>LAB_CASE</u>	<u>ITEM</u>	<u>TASK_ID</u>	<u>DESCRIPTION</u>	
C2019-0636	1	147681	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0642	1	147768	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0643	1	147770	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0669	1	148206	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0675	1	148277	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0680	1	148450	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0681	1	148452	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0685	2	148497	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0693	1	149897	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0694	1	148529	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0695	1	148531	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0696	2	148536	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0712	1	148870	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0720	1	148975	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0721	1	148977	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0722	1	148979	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0723	1	148981	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0738	1	149287	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0740	1	149315	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	
C2019-0768	1	149802	AM 25/AM 26 Blood MultiDrug/THC Screen by Li	



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

Extraction Date: 4/29/19

Analyst: Anne Nord

Plate lot#: 0543908

Plate Expiration: November 28 2019

**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:** 19A207P3

**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.
- 3. Create worklist: Data Path Name: D:\masshunter\Data\2019\am 25-26\043019

### Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Pipette **250µL blood (calibrated pipette) Pipette ID: 1926134** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 66759*
- 4. Pipette **250µL 00.5M ammonium hydroxide** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **300µL of blood+base** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).  
*(Load at 85-100 PSI- Selector to the right) Manifold ID: 66792*
- 8. Wait 5 minutes.
- 9. Add **900uL ethyl acetate**.
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*.
- 12. Add **900uL ethyl acetate**.
- 13. Wait 5 minutes.
- 14. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*.
- 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.  
*SPE Dry ID: 66819*
- 16. Reconstitute in **100µL 100% LC MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

### Post-Analytic

- 1. Open quantitation software and create a new quantitation batch.  
Batch Name:mds
- 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. Calc conc 5 or greater, discretionary range 2-5
- 4. Did all QCs pass for each analyte? Y / N yes
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: 6-Monoacetylmorphine not evaluated, zolpiclone not evaluated.



Toxicology AM method 28 panel 1 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)
doxepine	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 28 control 50 ul working solution lot (31420) in 9950 ul blood lot (19A207P3)

ppd 3/14/19 Exp 3/14/2020 by AMN Concentration 50 ng/ml each (5 ng/ml buprenorphine)

used for AM 25 control 4/29/19

# AM #25 Multi-Drug Screen Results

**Batch results**

D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\mds.batch.bin

**Calibration Last Update**

4/30/2019 3:31:33 PM

**Instrument**

69679

**Type**

Cal

**Acq. Method**

am 25.m

**Sample Position**

P2-B1

**Injection Volume**

5

**Acq. Date-Time**

4/29/2019 3:50:18 PM

**Sample Info.**

**Data File**

am 25 calibrator.d

**Sample**

am 25 calibrator

**Operator**

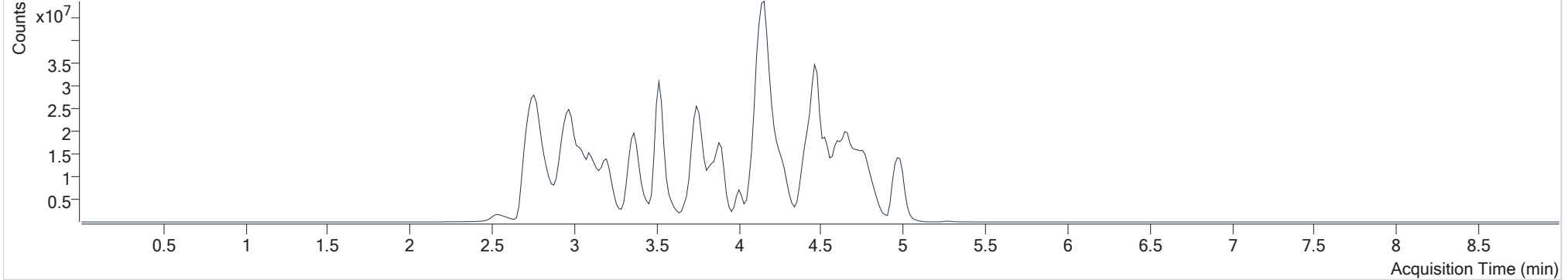
Anne Nord

**Comment**



**Sample Chromatogram**

+ TIC MRM (\*\* -> \*\*) am 25 calibrator.d (am 25 calibrator)



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
7-aminoclonazepam	3.531	468075	∞	∞	2080739	10.00
7-aminoflunitrazepam	3.729	2139024	108	1508	11348084	10.00
Acetyl Fentanyl	4.416	643859	1203	151636	39544420	10.00
Acetyl Norfentanyl	2.943	278379	1364	185	15072756	10.00
a-hydroxyalprazolam	4.447	95654	175	15	462834	10.00
alpha-hydroxymidazolam	4.523	1057181	256	783	8223906	10.00
alpha-PVP	3.860	6395008	4065	1904	26284625	10.00
Alprazolam	4.542	1366093	∞	186331	4924165	10.00
Amitriptyline	4.747	3042843	33	252	8783735	10.00
Amphetamine	2.978	3312194	76	69	8604301	10.00
Benzoylcegonine	3.333	197982	763	321	780772	10.00
Buprenorphine	5.280	108896	828	80241	481390	10.00
Bupropion	4.151	2962452	∞	∞	16741797	10.00
Carbamazepine	4.167	5600208	13660	∞	26180303	10.00
Carisoprodol	4.149	755538	101273	54	3491744	10.00
Chlordiazepoxide	4.667	491928	103	148	9686508	10.00
Chlorpheniramine	4.101	21110	10	∞	54635854	10.00
Citalopram	4.231	4465919	2292	2204	21002124	10.00

am 25 calibrator

# AM #25 Multi-Drug Screen Results



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Clonazepam	4.402	174887	212	70	329401	10.00
Cocaine	3.803	1117457	727	102	1638775	10.00
Codeine	3.225	639435	2666	804	3220839	10.00
Cyclobenzaprine	4.624	4389481	1660	45	16559617	10.00
Desipramine	4.548	4637278	1001	∞	24189372	10.00
Dextromethorphan	4.270	4043020	26178	∞	20165904	10.00
Dextrorphan	3.534	3763507	1390	883	20624740	10.00
Diazepam	4.791	545381	∞	2098	2560969	10.00
Dihydrocodeine	2.967	1598194	∞	∞	9232001	10.00
Diphenhydramine	4.195	15257437	9371	∞	54635854	10.00
Doxepin	4.438	2678109	1327	67	16210828	10.00
Doxylamine	3.746	17725560	∞	15221	50659023	10.00
EDDP	4.130	5671970	3745	1404	32487029	10.00
Estazolam	4.451	1897284	1557	129	5534653	10.00
Etizolam	4.553	166076	2580	268637	5534653	10.00
Fentanyl	4.631	497563	174	19147	24372797	10.00
Flunitrazepam	4.510	81129	380	46	11129	10.00
Fluoxetine	4.434	3689951	5418	947	16266470	10.00
Flurazepam	4.628	4234783	322925	744733	11129	10.00
Hydrocodone	3.469	1837415	∞	∞	10029186	10.00
Hydromorphone	2.819	1464374	∞	∞	3199767	10.00
Imipramine	4.670	8178018	5561	∞	29521003	10.00
Ketamine	4.105	2510793	∞	∞	17139864	10.00
Lamotrigine	3.626	445835	468	11703	20150562	10.00
Levamisole	3.372	4906092	∞	∞	1638775	10.00
Lorazepam	4.371	104323	13	21	4924165	10.00
Maprotiline	4.562	521424	93	277	8783735	10.00
MDA	3.113	3100133	1326	1813	13827394	10.00
MDEA	3.356	7788306	2399	2488	34463437	10.00
MDMA	3.219	8705826	11173	∞	4866099	10.00
Meperidine	3.842	4175198	5687	14713	20150562	10.00
Meprobamate	3.617	417009	157	260	1853729	10.00
Methadone	4.480	9862078	2998	1110	39181969	10.00
Methamphetamine	3.084	15831777	∞	∞	28652783	10.00
Methocarbamol	3.536	141100	62	102	20150562	10.00
Methylphenidate	3.385	585806	66	19	741780	10.00
Metoprolol	3.518	841080	1142	768	20150562	10.00
Midazolam	4.708	833791	∞	1062	11948438	10.00
Mirtazapine	4.579	3320196	3397	∞	20150562	10.00
Mitragynine	4.643	724258	82665	5578	16210828	10.00
Morphine	2.592	708061	1087	2523	530896	10.00
Norbuprenorphine	4.045	63358	20685	41	320038	10.00
Nordiazepam	4.640	154051	54159	26	475238	10.00
Norfentanyl	3.385	5531465	3062	904	24075971	10.00

am 25 calibrator



# AM #25 Multi-Drug Screen Results

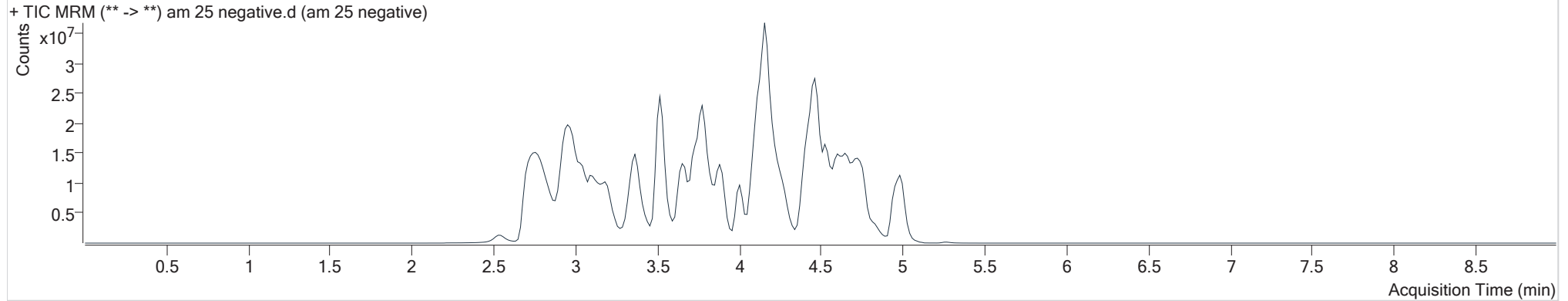
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Norhydrocodone	3.090	70867	∞	69	2296691	10.00
Normeperidine	3.691	2357492	2799	1938	9322549	10.00
Noroxycodone	3.013	1623635	∞	∞	5483806	10.00
Nortriptyline	4.595	1826960	2262	551	4604297	10.00
O-desmethyl-tramadol	2.987	11887796	∞	171	50901284	10.00
Olanzapine	4.295	1854024	552	484	84716	10.00
Oxazepam	4.452	94154	∞	12	554539	10.00
Oxycodone	3.177	3714993	330	∞	17526388	10.00
Oxymorphone	2.543	1461846	38	102	5489814	10.00
Paroxetine	4.616	289850	∞	20	5347996	10.00
Phenazepam	4.584	313388	825	327	1217294	10.00
Phencyclidine	4.026	3167986	5017	365	16337848	10.00
Phentermine	3.221	2223571	∞	∞	18702657	10.00
Phenytoin	4.073	8440	∞	∞	84716	10.00
Promethazine	4.776	9512177	∞	∞	45355417	10.00
Pseudoephedrine	2.764	64697108	2599	∞	150934070	10.00
Quetiapine	4.797	5621186	47223	∞	7535644	10.00
Sertraline	4.819	1168627	∞	823	5347996	10.00
Sufentanil	4.995	539032	61812	∞	28978240	10.00
Tapentadol	3.525	6071181	∞	1983	29345885	10.00
Temazepam	4.605	718779	79	18	3584477	10.00
Tramadol	3.533	11435965	∞	710	46702312	10.00
Trazodone	4.966	6592017	1308	2219	28614996	10.00
Venlafaxine	3.899	10962880	14414	1098	43291492	10.00
Zaleplon	4.281	1426192	∞	5024169	4080065	10.00
Zolpidem	4.481	11987055	5463	410	43300571	10.00

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\mds.batch.bin  
**Calibration Last Update** 4/30/2019 3:31:33 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 negative.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 negative
<b>Acq. Method</b>	am 25.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-A3	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	4/29/2019 4:00:28 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	3.069	9186395	∞	∞	22877100	7.27 <10

# AM #25 Multi-Drug Screen Results

**Batch results**

D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\mds.batch.bin

**Calibration Last Update**

4/30/2019 3:31:33 PM

**Instrument**

69679

**Type**

Sample

**Acq. Method**

am 25.m

**Sample Position**

P2-B3

**Injection Volume**

5

**Acq. Date-Time**

4/29/2019 4:10:39 PM

**Sample Info.****Data File**

am 25 external control.d

**Sample**

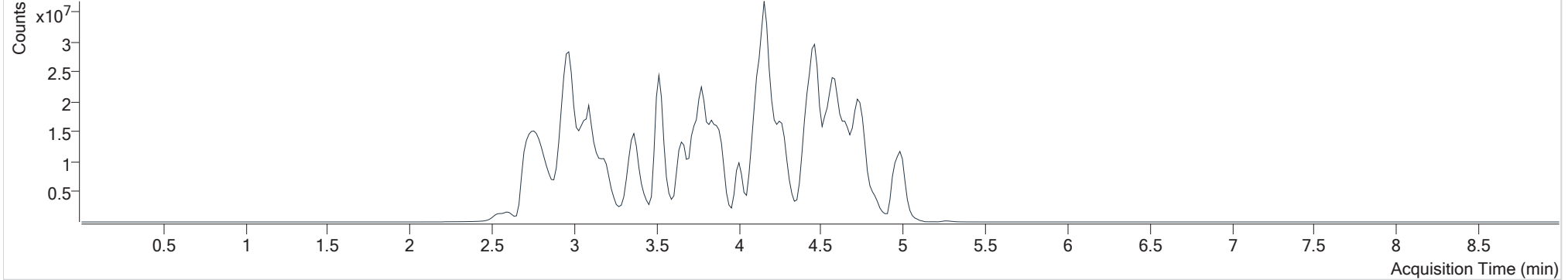
am 25 external control

**Operator**

Anne Nord

**Comment****Sample Chromatogram**

+ TIC MRM (\*\* -&gt; \*\*) am 25 external control.d (am 25 external control)



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Amitriptyline	4.732	17093617	1013	∞	9700738	50.87
Amphetamine	2.978	13676421	372	327	8061076	44.07
Buprenorphine	5.280	60187	637	∞	639906	4.16
Desipramine	4.579	1180564	∞	∞	33542846	1.84 <5
Dextromethorphan	4.270	18681314	∞	19095696	19391490	48.05
Doxepin	4.438	12634719	∞	∞	16744193	45.67
Meperidine	3.842	17989047	41332	16381	18179203	47.76
Methamphetamine	3.084	44723132	∞	∞	20746960	39.01
Mirtazapine	4.579	14568532	1291431	41788	18179203	48.64
Morphine	2.607	1910576	25602	8449	411299	34.83
Paroxetine	4.600	2229568	∞	∞	5899702	69.73



**Idaho State Police  
Forensic Services  
Toxicology Discipline**

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**Request for Departure from an Analytical Method**

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Date of Request  
5/1/2019

Forensic Scientist  
Anne Nord

Analytical Method

4.1.2 Using a **calibrated** single channel pipette, add 250 $\mu$ L of blank blood into the appropriate wells of the analytical (standards) plate (wells containing internal positive and negative controls). Pipette the appropriate sample/case blood into the appropriate wells containing only internal standards.

4.1.3 Place plate on shaking incubator at approximately 900 rpm for approximately 15 minutes.

4.1.4 Using a pipette (single or multi-channel), pipette 250 $\mu$ L of 0.5M ammonium hydroxide buffer into all wells in use on the analytical (standards) plate.

4.1.5 Place plate on shaking incubator at approximately 900 rpm for approximately 15 minutes.

Request

The 0.5 M ammonium hydroxide was accidentally added to the calibrator well in a previous run. I am requesting to evaluate the run using this calibrator. Additional ammonium hydroxide was not added. The impact the ammonium hydroxide has being added early on the calibrator will be normalized by the internal standard. The quality requirements for signal to noise will disqualify any compounds that are too weak from being evaluated.

**Discipline Leader Review**

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Departure approved  
Comments: This is a minor deviation.

Departure Not Approved  
Comments:

*Celena Shrum*

Celena Shrum  
Toxicology Program Discipline Leader

Date: 05/01/2019



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

Extraction Date: 4/29/19

Analyst: Anne Nord

Plate lot#: 0539904

Plate Expiration: 09/10/2019

**Mobile phase A:** 10mM Ammonium Formate  
0.1% Formic Acid in Water

**Mobile phase B:** 0.1% Formic acid in MeOH  
Hexane

**Blank Blood Lot:** 19A207P3

**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.
- 3. Create worklist:

### Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Pipette **1000 µL blood (calibrated pipette) Pipette ID: k52558g** in wells of analytical (standards) plate.
  - Blank blood for locations containing standards/QCs and internal standards
  - Sample blood for locations containing only internal standards
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 66759*
- 4. Pipette **500 µL 0.1% formic acid** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **800 µL of blood+base** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 4 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 750uL).
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 12. Add **2.25 mL 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: 66819*
- 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.  
Data path: D:\2019 data\am 25-26\042919 Batch Name: cann screen
- 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 +/- .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: *dropped calibrator level 2 from THC curve.*

# AM #26 Cannabinoids Screen Results

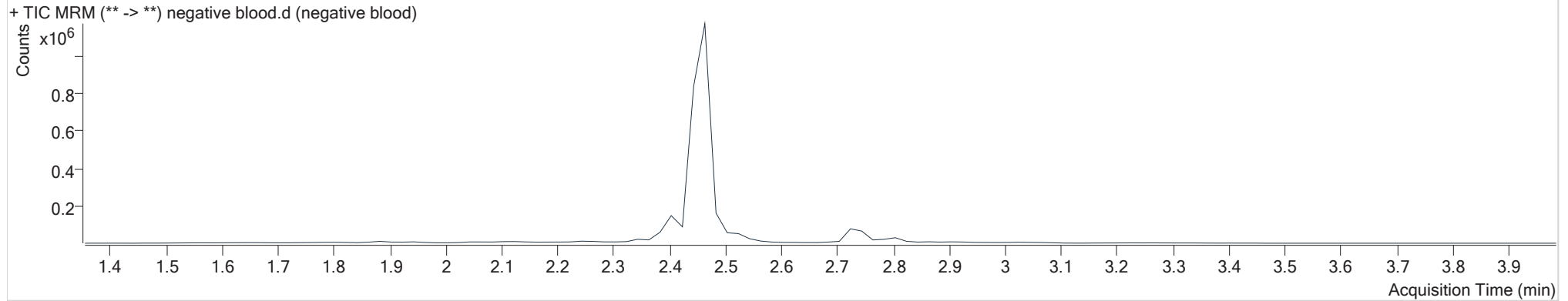


**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Calibration Last Update** 5/1/2019 2:46:30 PM

**Instrument** 69679  
**Type** Sample  
**Acq. Method** am 26 cann screen.m  
**Sample Position** P1-A2  
**Injection Volume** 10  
**Acq. Date-Time** 4/29/2019 11:53:27 AM  
**Sample Info.**

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

## Sample Chromatogram



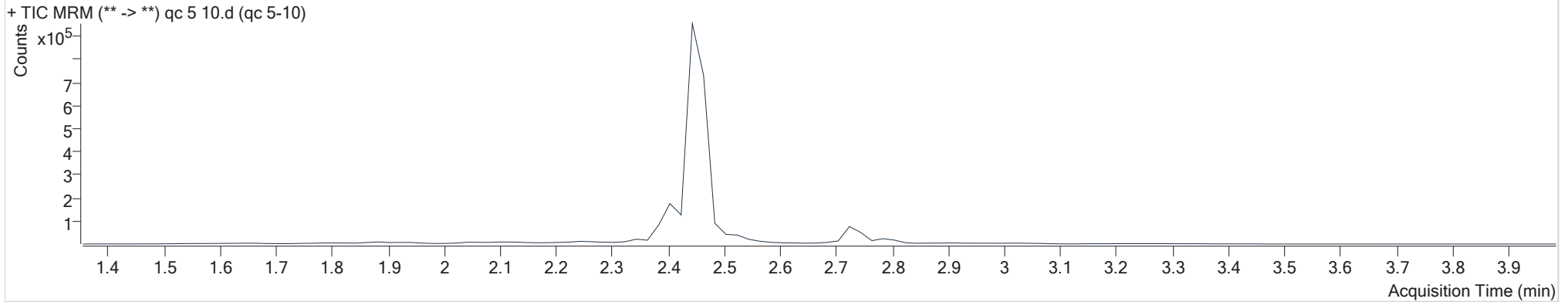
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Calibration Last Update** 5/1/2019 2:46:30 PM

**Instrument** 69679  
**Type** QC  
**Acq. Method** am 26 cann screen.m  
**Sample Position** P1-H1  
**Injection Volume** 10  
**Acq. Date-Time** 4/29/2019 1:26:22 PM  
**Sample Info.**

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

## Sample Chromatogram



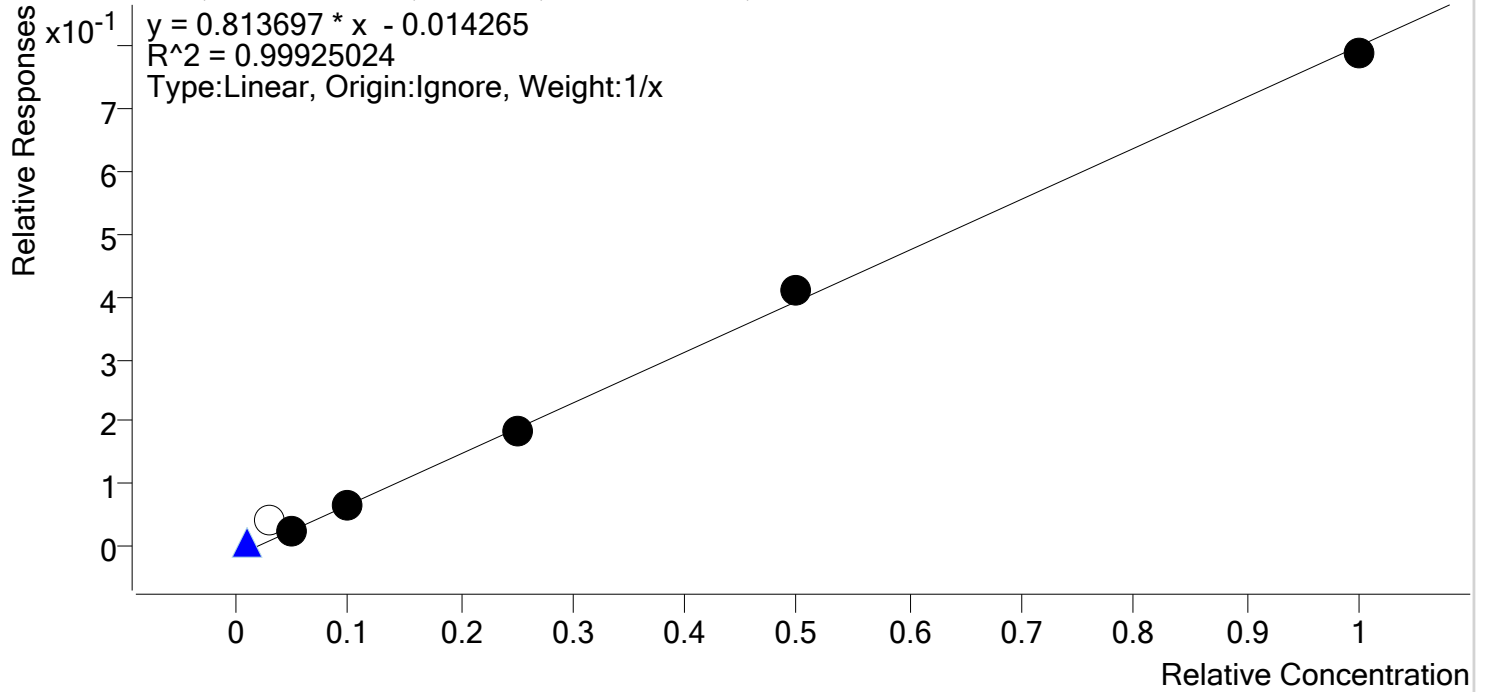
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	941	28369	5.83 ng/ml
THC-COOH	2.405	82109	330655	11.46 ng/ml
THC-OH	2.451	17601	2063528	4.60 ng/ml

# Compound Calibration Report



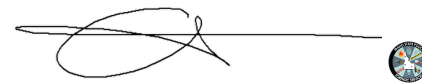
**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Last Cal. Update** 5/1/2019 2:46 PM  
**Analyst Name** ISP\datastor  
**Analyte** THC **Internal Standard** THC-d3

THC - 6 Levels, 5 Levels Used, 6 Points, 5 Points Used, 1 QCs



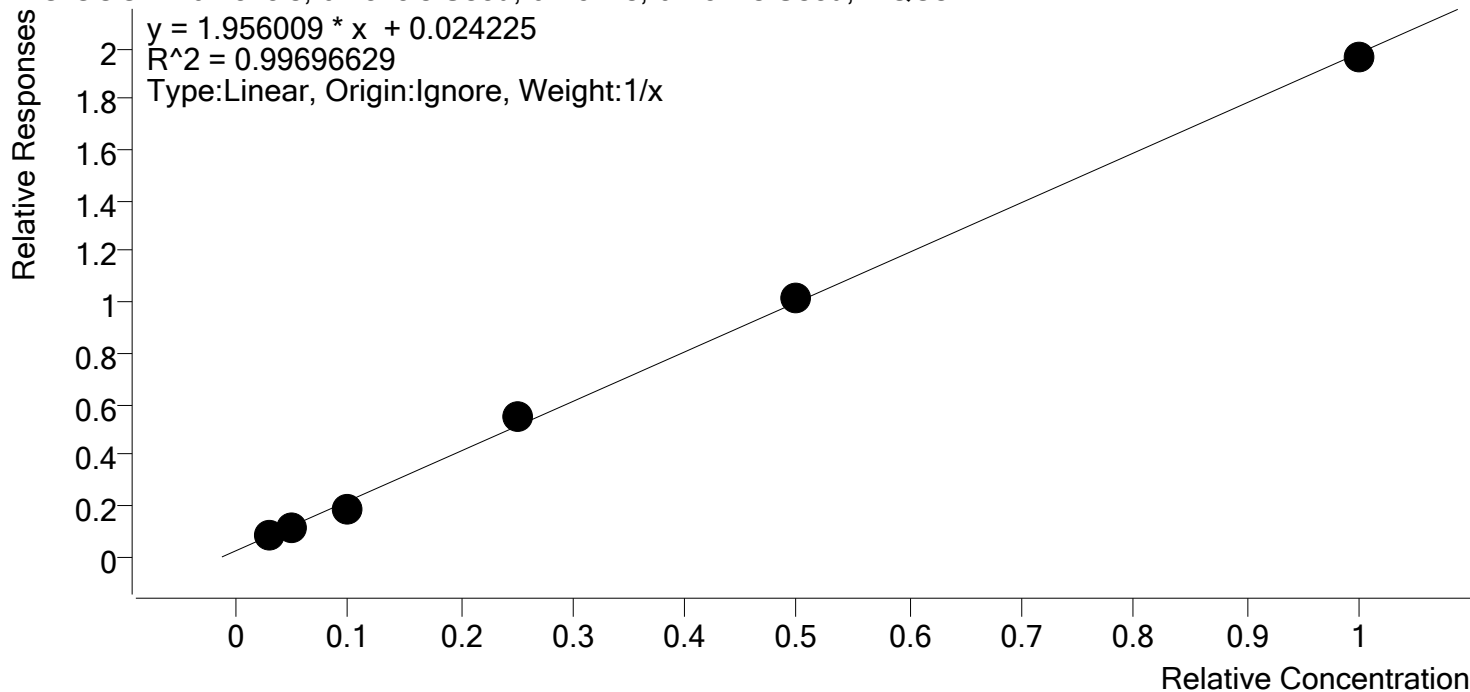
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 2	2	x	3.0	7.0	231.8
cal 3	3	✓	5.0	4.9	97.7
cal 4	4	✓	10.0	10.1	101.4
cal 5	5	✓	25.0	24.7	98.9
cal-6	6	✓	50.0	51.8	103.5
cal-7	7	✓	100.0	98.5	98.5

# Compound Calibration Report



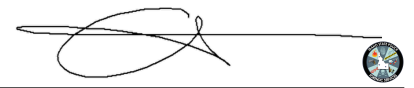
**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Last Cal. Update** 5/1/2019 2:46 PM  
**Analyst Name** ISP\datastor  
**Analyte** THC-COOH **Internal Standard** THC-COOH-d9

THC-COOH - 6 Levels, 6 Levels Used, 6 Points, 6 Points Used, 1 QCs



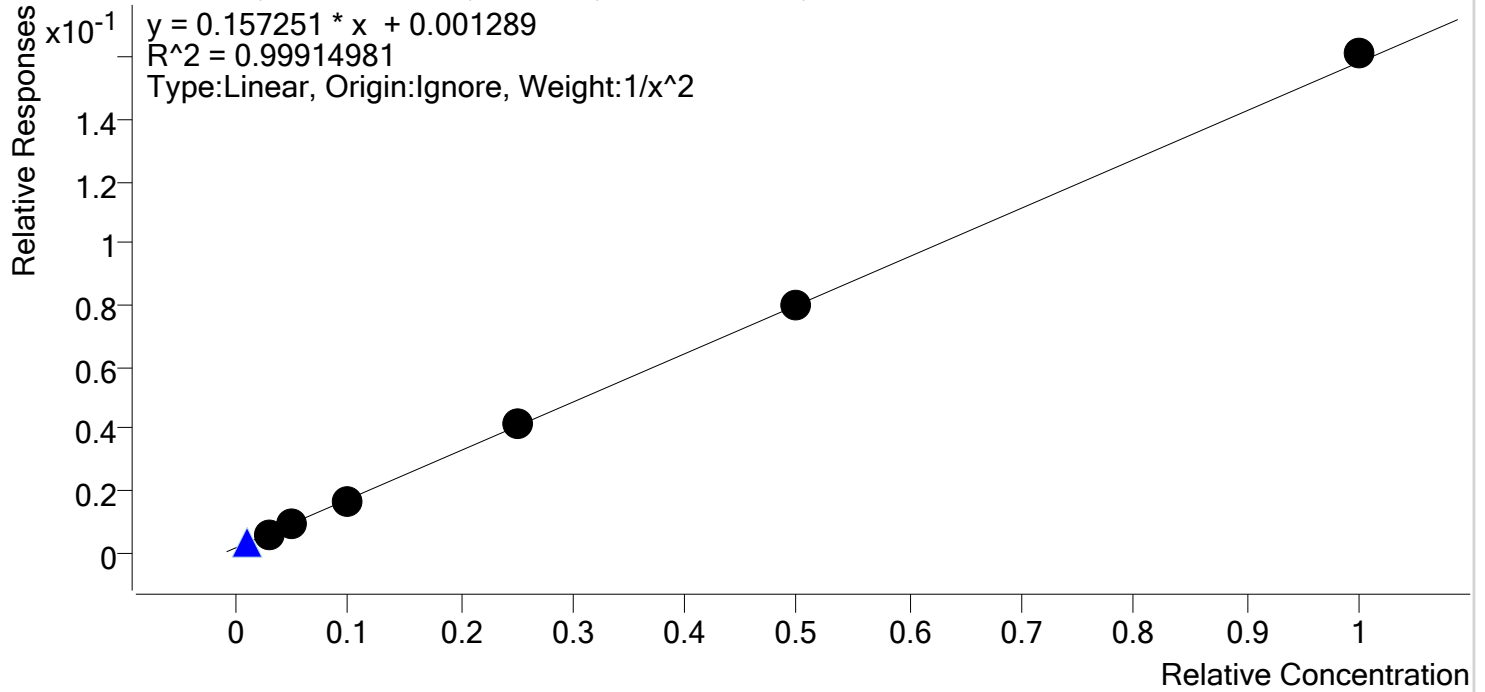
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 2	2	✓	3.0	3.4	112.5
cal 3	3	✓	5.0	4.8	95.2
cal 4	4	✓	10.0	8.5	84.9
cal 5	5	✓	25.0	26.8	107.3
cal-6	6	✓	50.0	50.5	100.9
cal-7	7	✓	100.0	99.1	99.1

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Last Cal. Update** 5/1/2019 2:46 PM  
**Analyst Name** ISP\datastor  
**Analyte** THC-OH **Internal Standard** THC-OH-d3

THC-OH - 6 Levels, 6 Levels Used, 6 Points, 6 Points Used, 1 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 2	2	✓	3.0	3.0	101.1
cal 3	3	✓	5.0	5.0	99.9
cal 4	4	✓	10.0	9.6	95.8
cal 5	5	✓	25.0	25.4	101.7
cal-6	6	✓	50.0	49.9	99.7
cal-7	7	✓	100.0	101.8	101.8

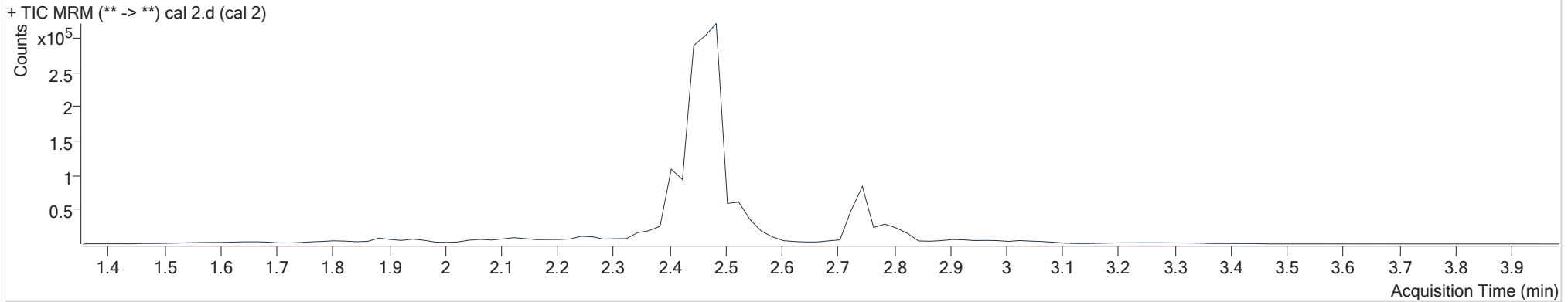
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Calibration Last Update** 5/1/2019 2:46:30 PM

**Instrument** 69679  
**Type** Cal  
**Acq. Method** am 26 cann screen.m  
**Sample Position** P1-B1  
**Injection Volume** 10  
**Acq. Date-Time** 4/29/2019 11:00:02 AM  
**Sample Info.**

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

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	1912	45172	6.95 ng/ml
THC-COOH	2.425	25057	277586	3.38 ng/ml <b>Low</b>
THC-OH	2.451	6996	1155107	3.03 ng/ml



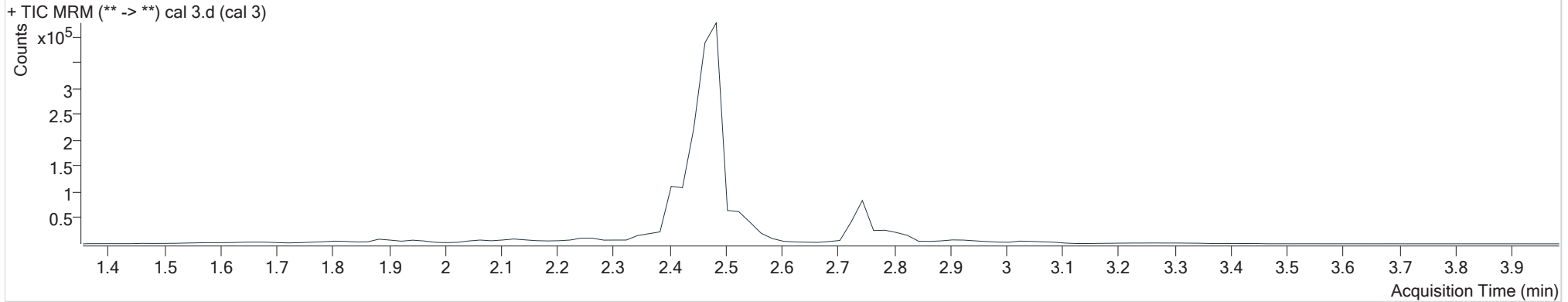
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Calibration Last Update** 5/1/2019 2:46:30 PM

**Instrument** 69679  
**Type** Cal  
**Acq. Method** am 26 cann screen.m  
**Sample Position** P1-C1  
**Injection Volume** 10  
**Acq. Date-Time** 4/29/2019 11:06:42 AM  
**Sample Info.**

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

## Sample Chromatogram



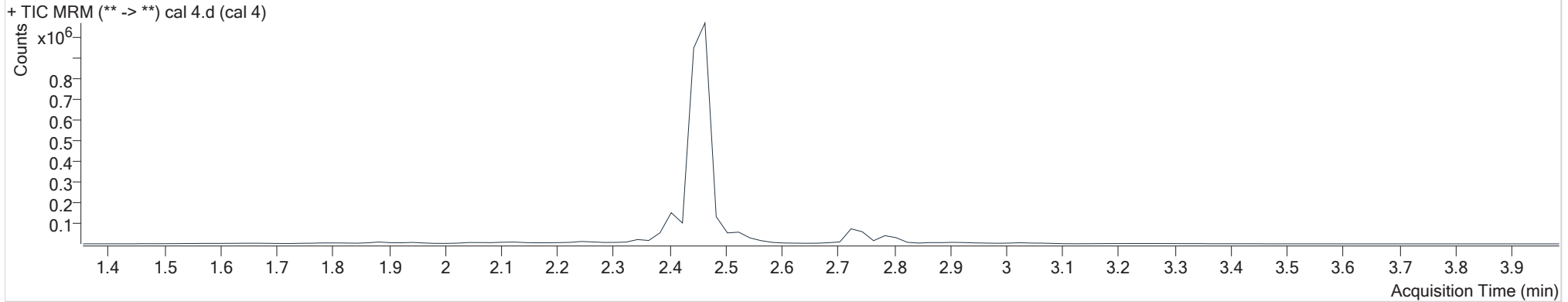
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	1019	39993	4.89 ng/ml
THC-COOH	2.425	31034	264438	4.76 ng/ml <b>Low</b>
THC-OH	2.491	10870	1188439	5.00 ng/ml

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Calibration Last Update** 5/1/2019 2:46:30 PM

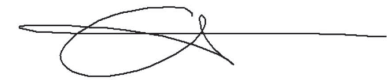
<b>Instrument</b>	69679	<b>Data File</b>	cal 4.d
<b>Type</b>	Cal	<b>Sample</b>	cal 4
<b>Acq. Method</b>	am 26 cann screen.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P1-D1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	4/29/2019 11:13:21 AM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.799	5016	73491	10.14 ng/ml
THC-COOH	2.405	53940	283388	8.49 ng/ml <b>Low</b>
THC-OH	2.451	38287	2341873	9.58 ng/ml

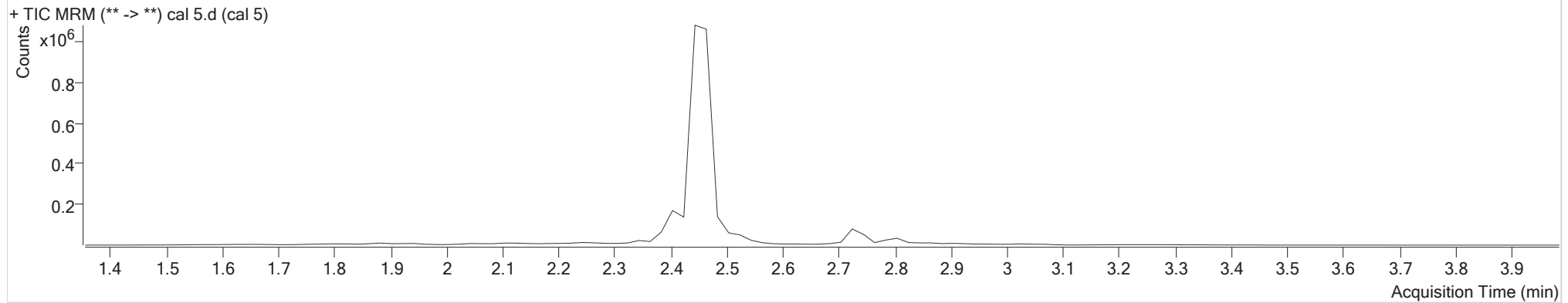
# AM #26 Cannabinoids Screen Results



**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Calibration Last Update** 5/1/2019 2:46:30 PM

<b>Instrument</b>	69679	<b>Data File</b>	cal 5.d
<b>Type</b>	Cal	<b>Sample</b>	cal 5
<b>Acq. Method</b>	am 26 cann screen.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P1-E1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	4/29/2019 11:20:03 AM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	12875	68916	24.71 ng/ml
THC-COOH	2.405	141458	257714	26.82 ng/ml
THC-OH	2.451	85339	2067141	25.43 ng/ml

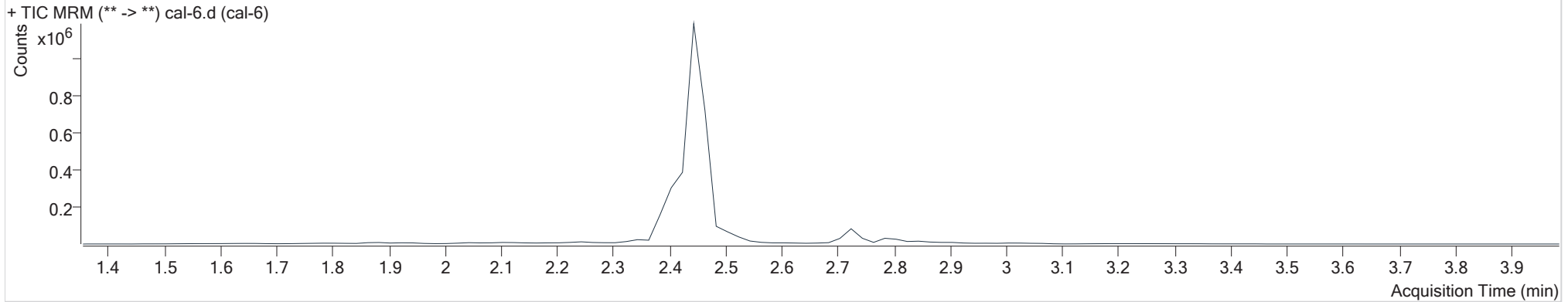
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Calibration Last Update** 5/1/2019 2:46:30 PM

**Instrument** 69679  
**Type** Cal  
**Acq. Method** am 26 cann screen.m  
**Sample Position** P1-F1  
**Injection Volume** 10  
**Acq. Date-Time** 4/29/2019 11:26:44 AM  
**Sample Info.**

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

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.799	24784	60915	51.75 ng/ml
THC-COOH	2.405	287909	284698	50.46 ng/ml
THC-OH	2.471	89150	1118639	49.86 ng/ml

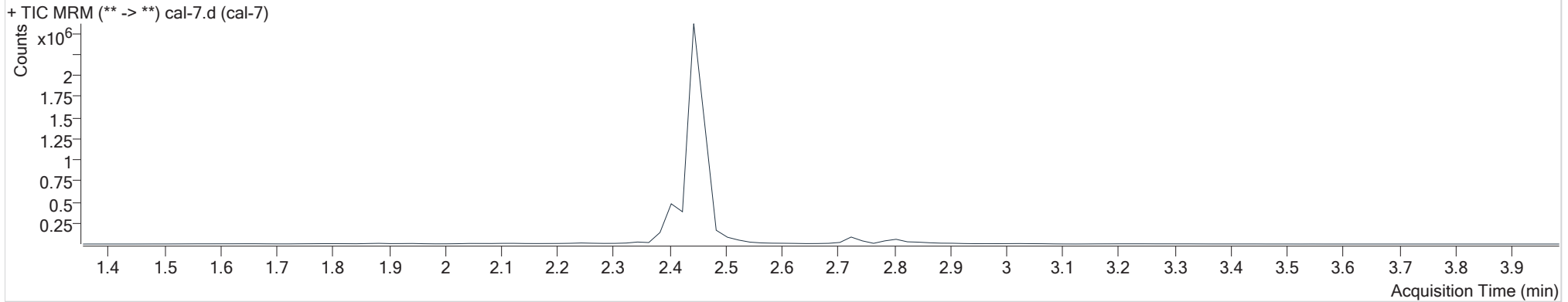
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2019\am 25-26\042919\QuantResults\cann screen.batch.bin  
**Calibration Last Update** 5/1/2019 2:46:30 PM

**Instrument** 69679  
**Type** Cal  
**Acq. Method** am 26 cann screen.m  
**Sample Position** P1-G1  
**Injection Volume** 10  
**Acq. Date-Time** 4/29/2019 11:33:26 AM  
**Sample Info.**

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

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	65204	82824	98.50 ng/ml
THC-COOH	2.405	551109	280848	99.08 ng/ml
THC-OH	2.451	334654	2074307	101.78 ng/ml