

**REVIEWED**








By Tamara Salazar at 8:21 am, May 27, 2020

**Worklist: 4246**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
M2020-1304	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-1314	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-1448	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-1449	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-1457	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-1520	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-1562	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-1577	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-1701	4	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-1701	5	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1308	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1349	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1411	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1417	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1437	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1438	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1445	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1446	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1447	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1453	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1468	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

**Worklist: 4246**

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<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
P2020-1484	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1485	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1486	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1493	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1499	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1501	6	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1514	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

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

Extraction Date: 05/21/20  
 Plate lot#: IDP-107-190725

Analyst: Sarah Pickle  
 Plate Expiration: 01/25/2020

**Mobile phase A:** 10mM Amm Form  
 0.5M Ammonium Hydroxide  
**Blank Blood Lot:** Hemostat 445283-4  
**LCMS-QQQ ID:** 069901

**Mobile phase B:** 0.1% Formic Acid in MeOH  
 Ethyl Acetate LC Methanol  
**Column:** Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

### Pre-Analytic:

- 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.

### Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Pipette **250 µL blood (calibrated pipette)** in wells of analytical (standards) plate. **Pipette ID: #16**
- 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+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: 067104*
- 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. Place on SPE Dry and evaporate to dryness at approx. 35°C.  
*SPE Dry ID: 067103*
- 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.  
 Batch Name: AM 25 SP Worklist path: D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS
- 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:

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  
01/13/2020

Forensic Scientist  
Celena Shrum

Analytical Methods  
Toxicology AM #25, Toxicology AM #26/27, and AM #28

Deviation

The expiration dates listed for the current batch of PinPoint ToxBox extraction plates are as follows:

- \*MDS (batch IDP-107-190725)- Expiration is 1/25/2020
- \*THC (batch IDP-108-190716)- Expiration is 1/16/2020
- \*MDQ P1 (batch IDP-111-190729)- Expiration is 1/29/2020
- \*MDQ P2 (batch IDP-112-190730)- Expiration is 1/30/2020

I am issuing a deviation to allow for the use of the remaining plates of these batches. The controls will be used to evaluate if the plate is working as intended. In addition, at least one external control must be included for each run.

*Celena Shrum*  
Date: 01/13/2020  
Celena Shrum  
Toxicology Discipline Lead

*Rachel Cutler*  
*Lab Manager* 5/22/20

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



# Idaho State Police Forensic Services

## AM #25 Blood Multi-Drug Screen by LCMS-QQQ And AM #28 Blood Multi-Drug Confirmatory Analysis by LCMS-QQQ---Panel 1

### Methanol External Control Solution (Lot: 031820)

*100 µL of 1mg/mL stock was added to each drug to 9700 µL of LC MeOH.*

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	193068	
O-desmethyl Tramadol	Cerilliant	FN01241702	04/30/2022
Amphetamine	Cerilliant	FE04061701	06/30/2022
Alprazolam	Cerilliant	FE07061604	07/31/2021
Prepared:	03/18/20		
Prepared By:	Sarah Pickle		
Expires:	03/18/21		

### Blood External Control Solution (Lot: WS031820)

*100 µL of methanol external control solution was added to 9900 µL of blood.  
Approximately 100 ng/mL of each compound.*

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Blood	Hemostat	445283-3
Methanol External Control Solution		031820
Prepared:	03/18/20	
Prepared by:	Sarah Pickle	
Expires:	03/18/21	

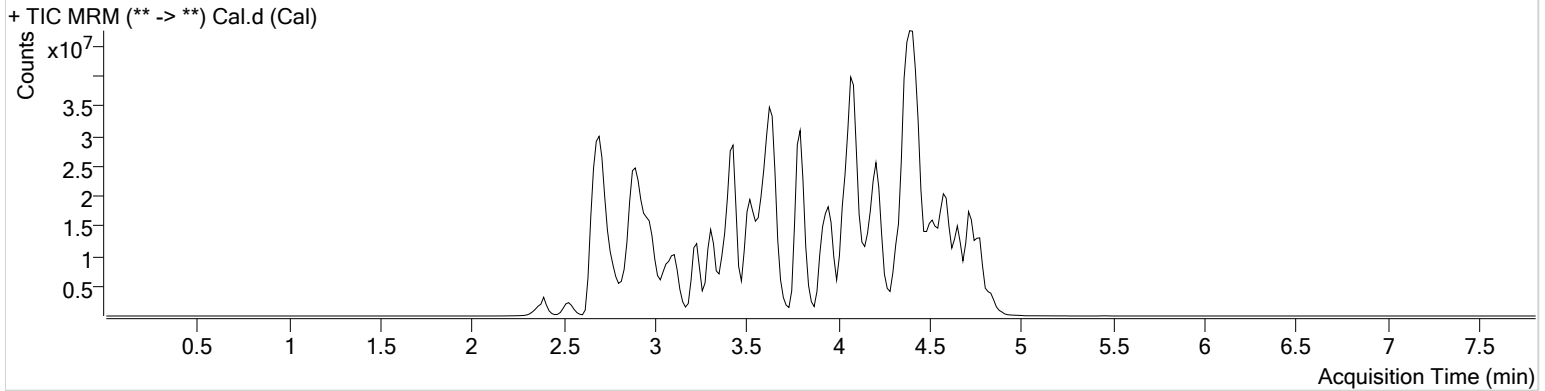
# AM #25 Multi-Drug Screen Results



**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 25 SP.batch.bin  
**Calibration Last Update** 5/22/2020 12:55:34 PM

<b>Instrument</b>	Falco	<b>Data File</b>	Cal.d
<b>Type</b>	Cal	<b>Sample</b>	Cal
<b>Acq. Method</b>	am 25 all.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P1-H12	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	5/21/2020 4:04:49 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	2.966	68787	4651.10	10645.94	1605760	10.0000
7-aminoclonazepam	3.582	1290983	813.46	683.23	5591943	10.0000
7-aminoflunitrazepam	3.797	2733265	2543.31	578.73	19429009	10.0000
Acetyl Fentanyl	3.963	573169	264.73	1102.93	33978559	10.0000
Acetyl Norfentanyl	2.884	381000	232.19	∞	19578876	10.0000
α-hydroxyalprazolam	4.515	267986	213.00	18866.30	1431771	10.0000
α-hydroxymidazolam	4.591	1422556	∞	833354.50	9097306	10.0000
α-PVP	3.589	4890231	685.94	1260.19	25205655	10.0000
Alprazolam	4.626	1944875	138.96	∞	5940187	10.0000
Amitriptyline	4.461	5427372	31.42	73.69	12759633	10.0000
Amphetamine	2.873	3956268	∞	3039.00	10022986	10.0000
Benzoyllecgonine	3.367	1228998	3098.53	228.10	5950613	10.0000
Buprenorphine	4.832	1004632	163.06	435.35	4911832	10.0000
Bupropion	3.818	7383713	∞	∞	21007169	10.0000
Carbamazepine	4.235	9337005	∞	∞	39760581	10.0000
Carisprodol	4.217	1553564	84040.93	422.43	8264074	10.0000
Chlordiazepoxide	4.719	696453	210.75	∞	17426043	10.0000
Chlorpheniramine	3.953	33481	2864.07	∞	50007539	10.0000
Citalopram	4.070	4180735	1232.05	22485.40	19182830	10.0000
Clonazepam	4.440	1222277	47.97	3941.83	2001524	10.0000
Cocaine	3.596	6156174	5200138.54	496.50	28632316	10.0000
Codeine	2.895	432121	∞	∞	2063401	10.0000
Cyclobenzaprine	4.370	3711186	465497.57	∞	13603801	10.0000
Desipramine	4.386	5203149	∞	1126.06	28225542	10.0000
Dextromethorphan	4.108	2802534	346.68	5850.02	13565173	10.0000
Dextrorphan	3.386	3227816	479752.47	349.70	20914895	10.0000
Diazepam	4.844	1272884	801.49	∞	6371897	10.0000
Dihydrocodeine	2.787	1249014	227.06	234.26	7043886	10.0000
Diphenhydramine	4.047	13026994	950.59	999.23	50007539	10.0000
Doxepin	4.168	3068786	125222.91	4.44 <b>Low</b>	20004218	10.0000
Doxylamine	3.645	13886520	9191.63	8038.93	44072560	10.0000
EDDP	4.091	2124573	482.85	188.08	15426652	10.0000
Estazolam	4.535	5971149	2008.00	3036.75	18366405	10.0000
Etizolam	4.651	363969	683.04	1019.49	18366405	10.0000

Cal

# AM #25 Multi-Drug Screen Results

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Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Fentanyl	4.192	415182	∞	245.04	26523447	10.0000
Flunitrazepam	4.563	2200215	1058.57	2770.01	537370	10.0000
Fluoxetine	4.334	5150032	4369632.55	163.11	21774781	10.0000
Flurazepam	4.267	3876234	1839025.54	537.41	537370	10.0000
Hydrocodone	3.091	1554481	∞	404.67	11591267	10.0000
Hydromorphone	2.548	1455301	26.27	13.61	5406415	10.0000
Imipramine	4.414	6614865	821080.13	174.73	24160882	10.0000
Ketamine	3.650	4675227	177713.06	∞	20377646	10.0000
Lamotrigine	3.617	277416	∞	90.06	13954680	10.0000
Levamisole	3.023	4405608	∞	∞	28632316	10.0000
Lorazepam	4.439	474545	350.91	224.25	2001524	10.0000
Maprotiline	4.461	5469019	174.92	575.53	12759633	10.0000
MDA	2.993	3312425	509.01	2647.05	15005935	10.0000
MDEA	3.237	6297692	∞	1196.85	28630394	10.0000
MDMA	3.084	5732617	800041.14	129.95	4039665	10.0000
Meperidine	3.618	2936916	299.98	2443.99	13954680	10.0000
Meprobamate	3.652	664584	81133.27	63.96	2632047	10.0000
Methadone	4.395	8362016	316495.28	475.33	31722381	10.0000
Methamphetamine	2.994	4523708	∞	∞	22788918	10.0000
Methocarbamol	3.556	525562	120.50	34.76	13954680	10.0000
Methylphenidate	3.527	12807430	∞	∞	42827175	10.0000
Metoprolol	3.446	788419	475.79	1363.27	13954680	10.0000
Midazolam	4.776	918558	1746.44	∞	10781358	10.0000
Mirtazapine	4.140	4691534	∞	749.00	13954680	10.0000
Mitragynine	4.281	461793	96876.99	1691741.02	20004218	10.0000
Morphine	2.383	224878	∞	357.71	147078	10.0000
Norbuprenorphine	3.852	116693	85.46	71050.27	601838	10.0000
Nordiazepam	4.693	1836002	∞	25.72	6468399	10.0000
Norfentanyl	3.327	8509590	14462404.40	236.81	32876560	10.0000
Norhydrocodone	2.927	38004	64.01	∞	1376756	10.0000
Normeperidine	3.604	1618629	272.09	6.73	5779362	10.0000
Noroxycodone	2.879	1535704	156.29	182.71	5080171	10.0000
Nortriptyline	4.417	2099641	1476878.32	286.36	5035818	10.0000
O-desmethyl-tramadol	2.913	10331912	3850.15	3608.15	43278301	10.0000
Olanzapine	3.886	647119	632619.73	72.42	764261	10.0000
Oxazepam	4.505	3130079	762.99	906.83	20417410	10.0000
Oxycodone	2.952	3284149	200.61	328.34	14820213	10.0000
Oxymorphone	2.393	2188710	637.19	∞	6867175	10.0000
Paroxetine	4.346	508185	∞	2002.90	12904779	10.0000
Phenazepam	4.651	1671003	1074605.46	293.99	7614412	10.0000
Phencyclidine	3.940	7091223	∞	351.18	30312257	10.0000
Phentermine	3.132	1816500	272.81	11.96	20478906	10.0000
Phenytoin	4.126	161971	20529.70	∞	764261	10.0000
Promethazine	4.383	10665408	∞	∞	36656848	10.0000
Pseudoephedrine	2.704	51154100	20891.85	12095.66	118581513	10.0000
Quetiapine	4.589	3959813	11460.14	∞	6441713	10.0000
Sertraline	4.565	2485325	∞	535.91	12904779	10.0000
Sufentanil	4.589	417958	305.18	293.90	26471297	10.0000
Tapentadol	3.436	5303431	1471.83	608.76	26280959	10.0000
Temazepam	4.658	4408949	∞	273.96	20289099	10.0000
Tramadol	3.432	13098919	106035.91	257.56	43830848	10.0000
Trazodone	4.773	8727694	4271.58	4222.82	34017010	10.0000
Venlafaxine	3.797	9119800	∞	∞	39810077	10.0000
Zaleplon	4.350	2414347	∞	677.93	6088410	10.0000
Zolpidem	4.442	10965671	305.53	415.09	39508937	10.0000
Zopiclone	4.328	185475	58514.87	134.01	1146181	10.0000

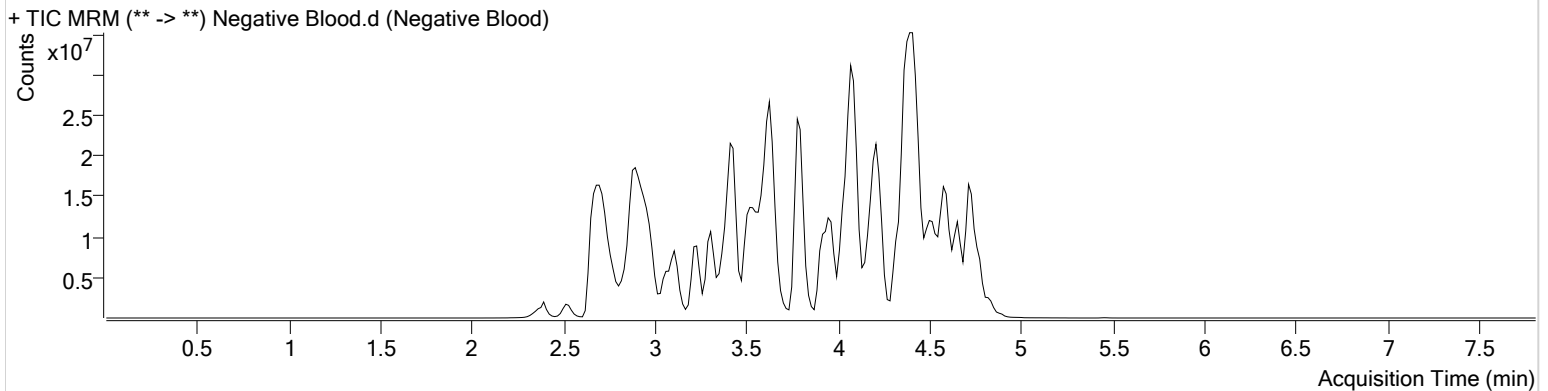
# AM #25 Multi-Drug Screen Results



**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 25 SP.batch.bin  
**Calibration Last Update** 5/22/2020 12:55:34 PM

<b>Instrument</b>	Falco	<b>Data File</b>	Negative Blood.d
<b>Type</b>	Sample	<b>Sample</b>	Negative Blood
<b>Acq. Method</b>	am 25 all.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P1-F12	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	5/21/2020 4:13:19 PM		
<b>Sample Info.</b>			

## Sample Chromatogram





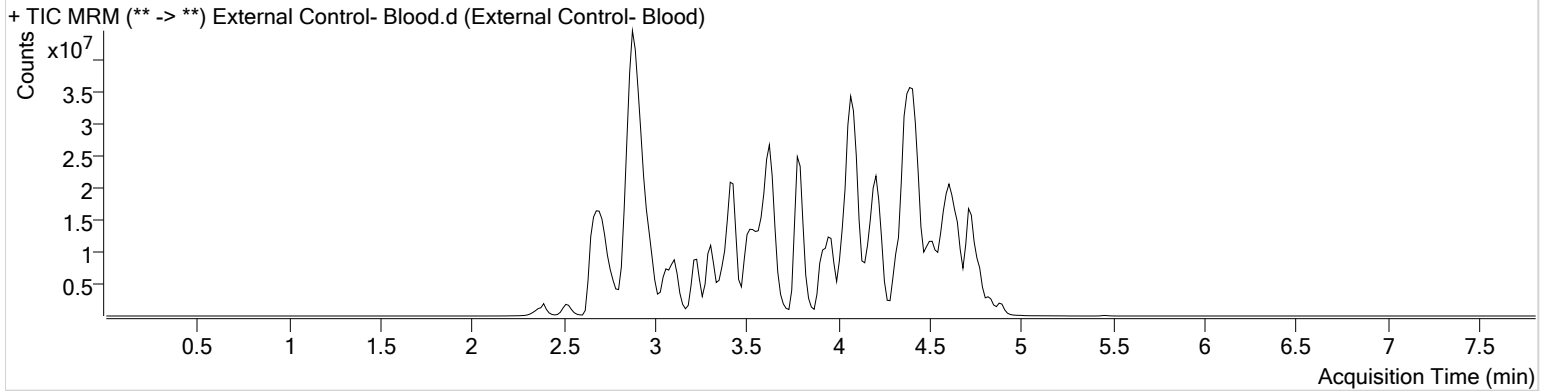
# AM #25 Multi-Drug Screen Results



**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 25 SP.batch.bin  
**Calibration Last Update** 5/22/2020 12:55:34 PM

<b>Instrument</b>	Falco	<b>Data File</b>	External Control- Blood.d
<b>Type</b>	Sample	<b>Sample</b>	External Control- Blood
<b>Acq. Method</b>	am 25 all.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P1-E12	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	5/21/2020 4:21:38 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.626	18282035	∞	∞	5044634	110.6887
Amphetamine	2.873	35001700	∞	∞	9591713	92.4495
O-desmethyl-tramadol	2.913	53530526	∞	584.12	40065968	55.9649

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

Extraction Date: 05/21/20

Analyst: Sarah Pickle

Plate lot#: IDP-108-2-200303

Plate Expiration: 09/03/20

**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:** Hemostat 445283-4

**Column:** Phenomenex Phenyl Hexyl (4.6x50mm: 2.6 um)

**LCMS-QQ ID:** 069901

## 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. Pipette **1000 µL blood (calibrated pipette)** in wells of analytical (standards) plate. **Pipette ID: 3382167**
- 3. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
- 4. Pipette **500 µL 0.1% formic acid** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
- 6. Transfer **800 µL 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: 067104
- 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: 067103*
- 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.  
Worklist path: D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS Batch Name: AM 26 SP
- 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:

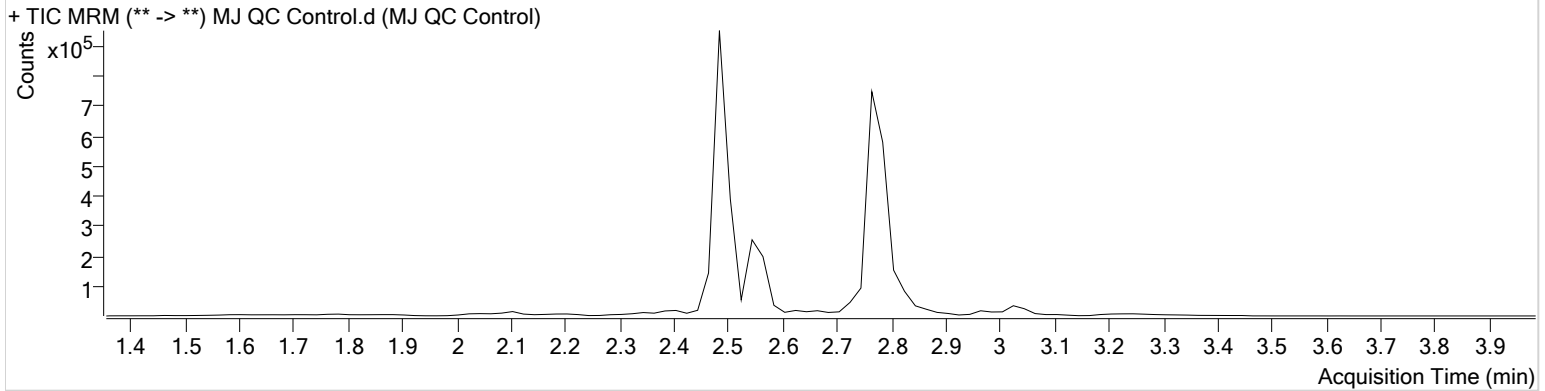
# AM #26 Cannabinoids Screen Results



**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Calibration Last Update** 5/26/2020 1:55:01 PM

<b>Instrument</b>	Falco	<b>Data File</b>	MJ QC Control.d
<b>Type</b>	Sample	<b>Sample</b>	MJ QC Control
<b>Acq. Method</b>	am 26 test.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P3-H1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	5/21/2020 12:01:07 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	3379	116866	4.5459 ng/ml
THC-COOH	2.565	71759	403485	19.4806 ng/ml
THC-OH	2.491	160783	1614213	4.3776 ng/ml

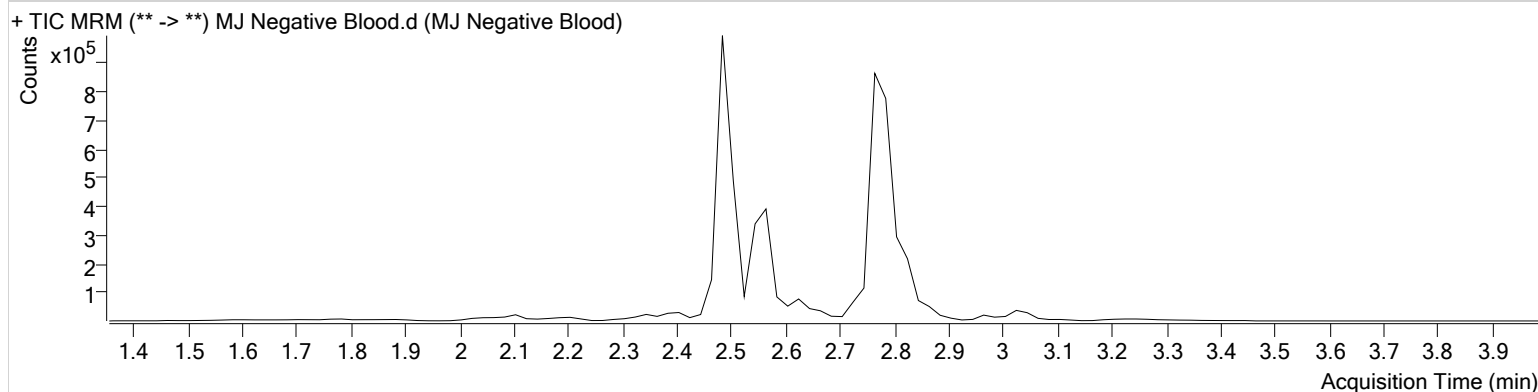
# AM #26 Cannabinoids Screen Results



**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Calibration Last Update** 5/26/2020 1:55:01 PM

<b>Instrument</b>	Falco	<b>Data File</b>	MJ Negative Blood.d
<b>Type</b>	Sample	<b>Sample</b>	MJ Negative Blood
<b>Acq. Method</b>	am 26 test.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P3-A2	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	5/21/2020 12:14:11 PM		
<b>Sample Info.</b>			

## Sample Chromatogram

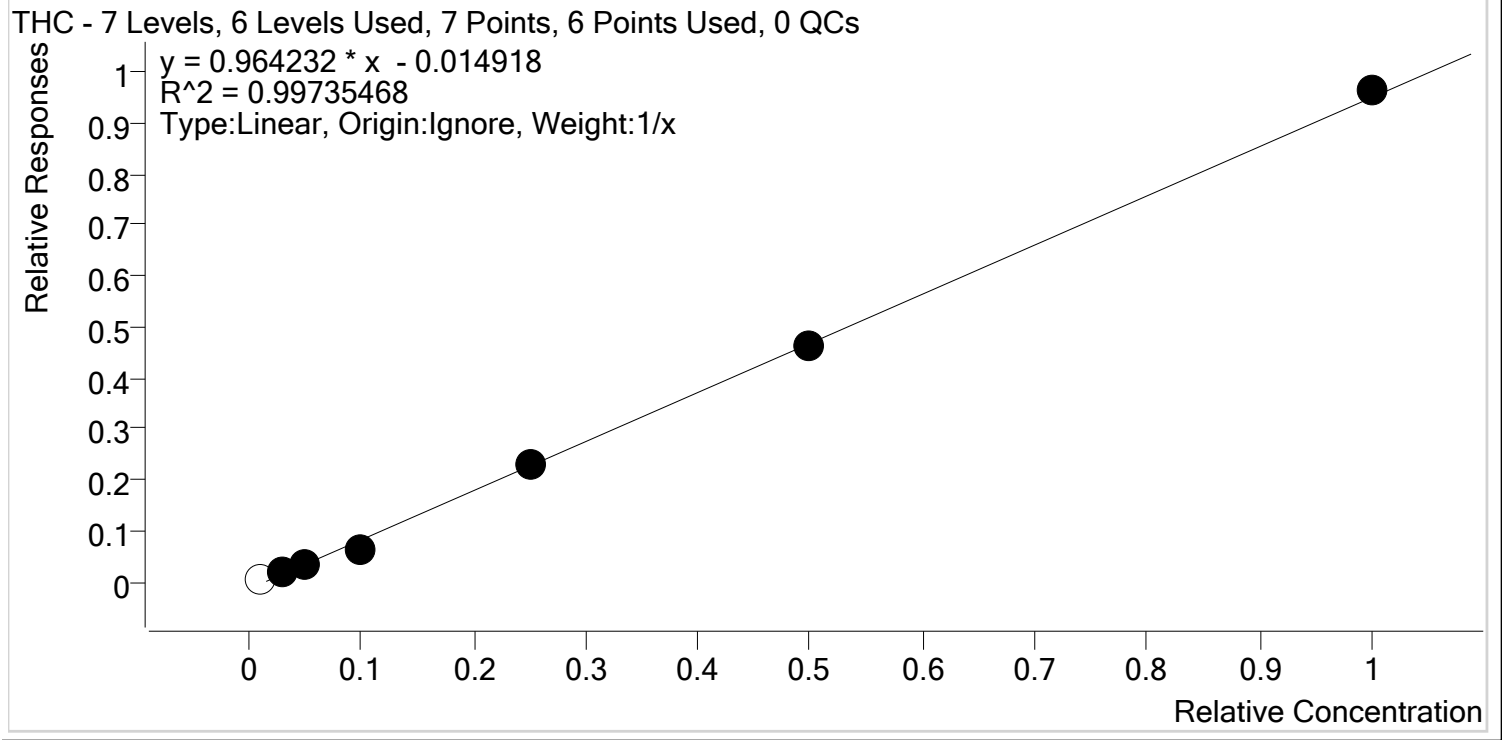


Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC-OH	2.552	88128	1889277	1.3936 ng/ml	<b>Low</b>



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Last Cal. Update** 5/26/2020 1:55 PM  
**Analyst Name** ISP\Datastor  
**Analyte** THC **Internal Standard** THC-d3

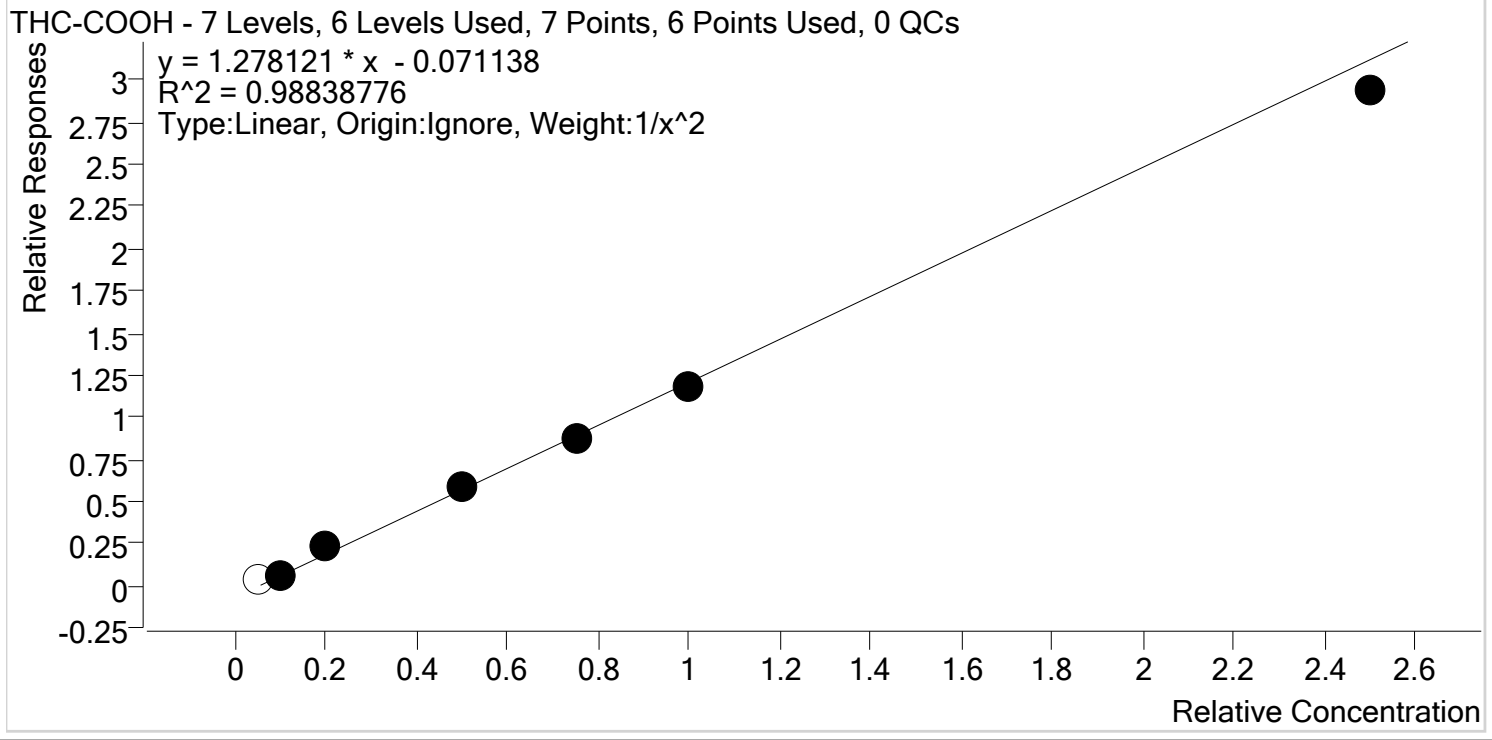


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	x	1.0	2.1	210.2
MJ Cal 2	2	✓	3.0	3.4	113.7
MJ Cal 3	3	✓	5.0	5.1	101.3
MJ Cal 4	4	✓	10.0	8.3	83.1
MJ Cal 5	5	✓	25.0	25.4	101.7
MJ Cal 6	6	✓	50.0	49.4	98.8
MJ Cal 7	7	✓	100.0	101.4	101.4



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Last Cal. Update** 5/26/2020 1:55 PM  
**Analyst Name** ISP\Datastor  
**Analyte** THC-COOH **Internal Standard** THC-COOH-d9

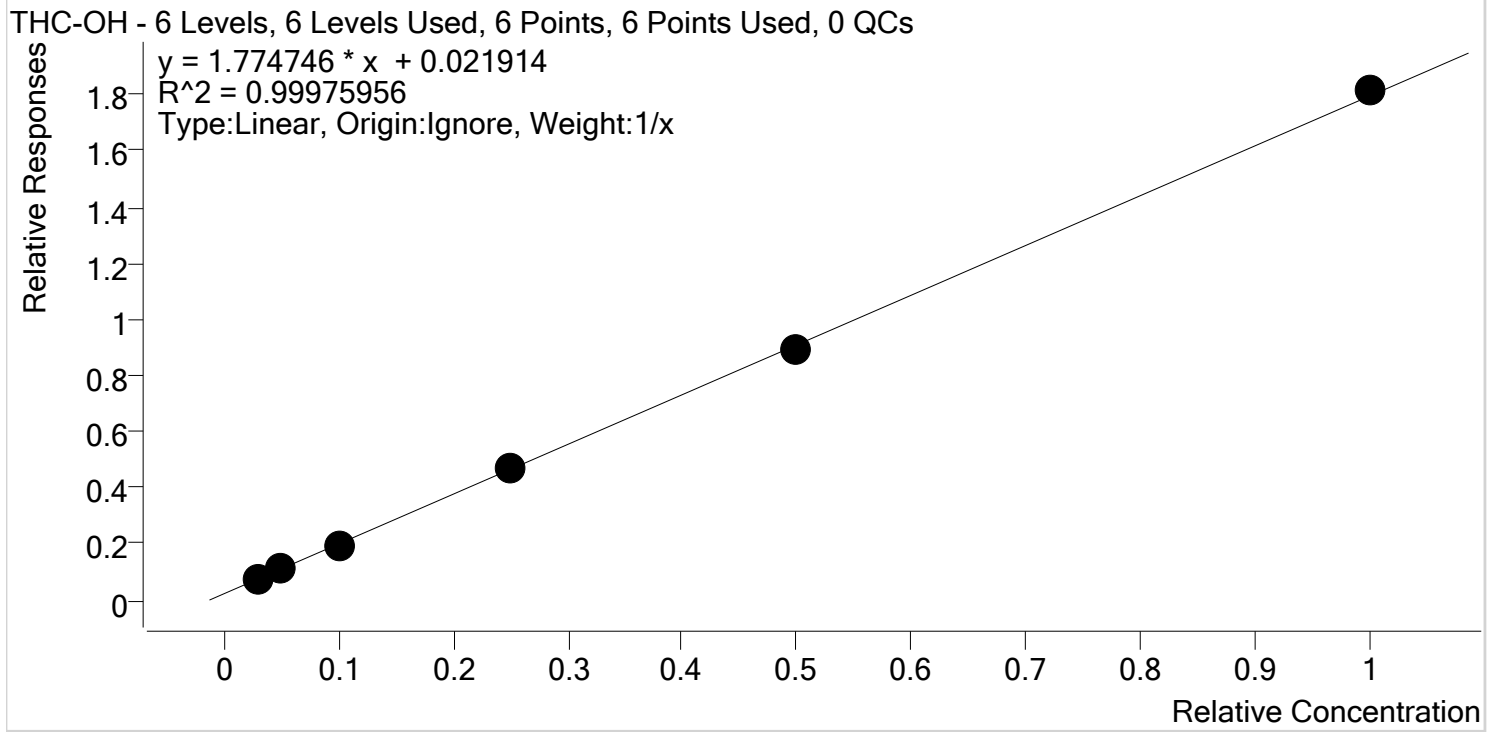


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	x	5.0	8.6	172.4
MJ Cal 2	2	✓	10.0	9.2	92.4
MJ Cal 3	3	✓	20.0	23.2	116.0
MJ Cal 4	4	✓	50.0	50.6	101.2
MJ Cal 5	5	✓	75.0	74.3	99.0
MJ Cal 6	6	✓	100.0	97.1	97.1
MJ Cal 7	7	✓	250.0	235.6	94.2



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Last Cal. Update** 5/26/2020 1:55 PM  
**Analyst Name** ISP\Datastor  
**Analyte** THC-OH **Internal Standard** THC-OH-d3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 2	2	✓	3.0	3.1	101.8
MJ Cal 3	3	✓	5.0	5.1	101.6
MJ Cal 4	4	✓	10.0	9.8	97.6
MJ Cal 5	5	✓	25.0	24.9	99.6
MJ Cal 6	6	✓	50.0	49.1	98.3
MJ Cal 7	7	✓	100.0	101.0	101.0

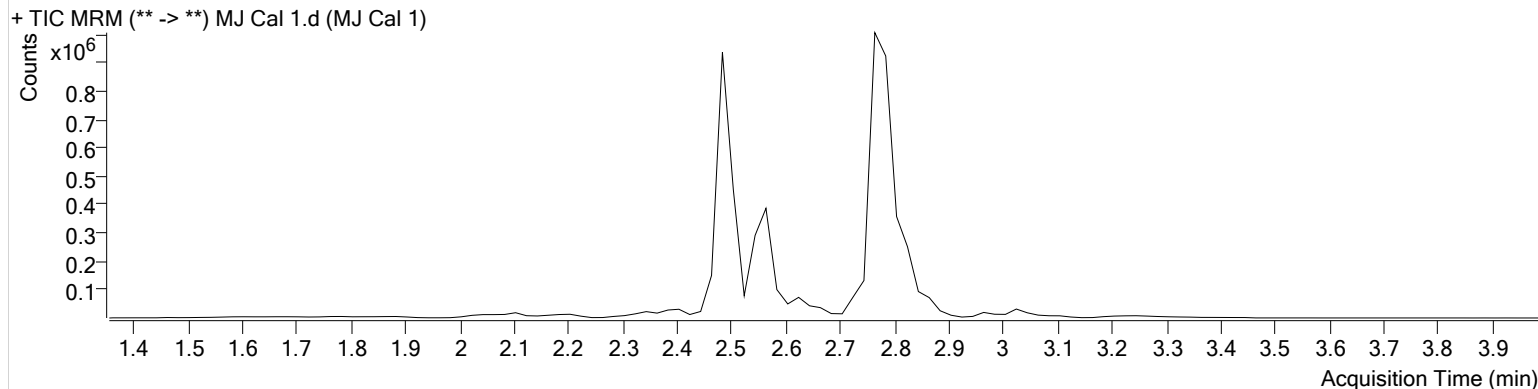


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Calibration Last Update** 5/26/2020 1:55:01 PM

<b>Instrument</b>	Falco	<b>Data File</b>	MJ Cal 1.d
<b>Type</b>	Cal	<b>Sample</b>	MJ Cal 1
<b>Acq. Method</b>	am 26 test.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P3-A1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	5/21/2020 11:15:23 AM		

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.839	2337	436695	2.1023 ng/ml	<b>Low</b>
THC-COOH	2.585	25481	653005	8.6188 ng/ml	



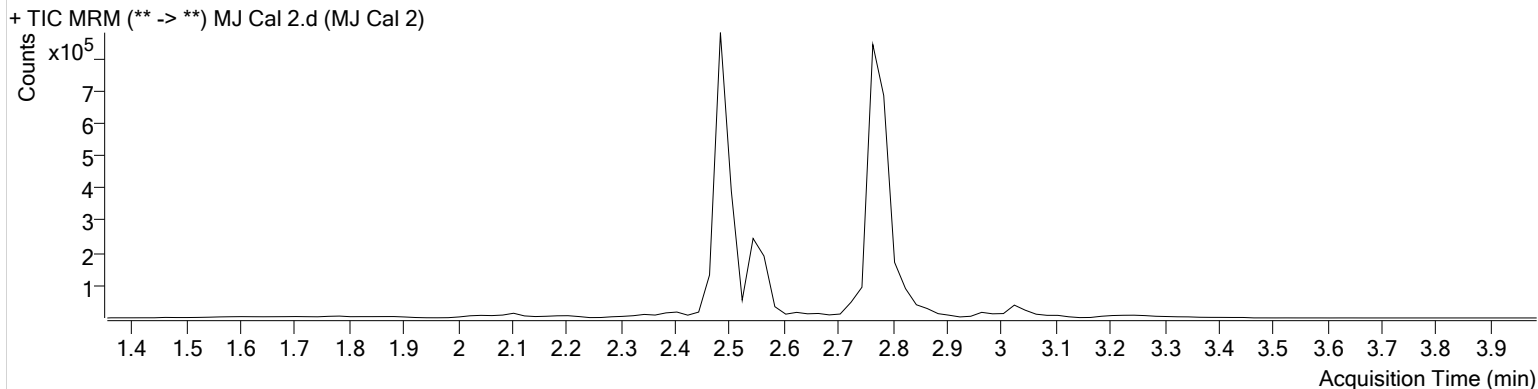


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Calibration Last Update** 5/26/2020 1:55:01 PM

<b>Instrument</b>	Falco	<b>Data File</b>	MJ Cal 2.d
<b>Type</b>	Cal	<b>Sample</b>	MJ Cal 2
<b>Acq. Method</b>	am 26 test.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P3-B1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	5/21/2020 11:22:02 AM		

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	2214	123178	3.4109 ng/ml
THC-COOH	2.545	21085	448992	9.2400 ng/ml
THC-OH	2.491	119085	1564737	3.0535 ng/ml

# AM #26 Cannabinoids Screen Results

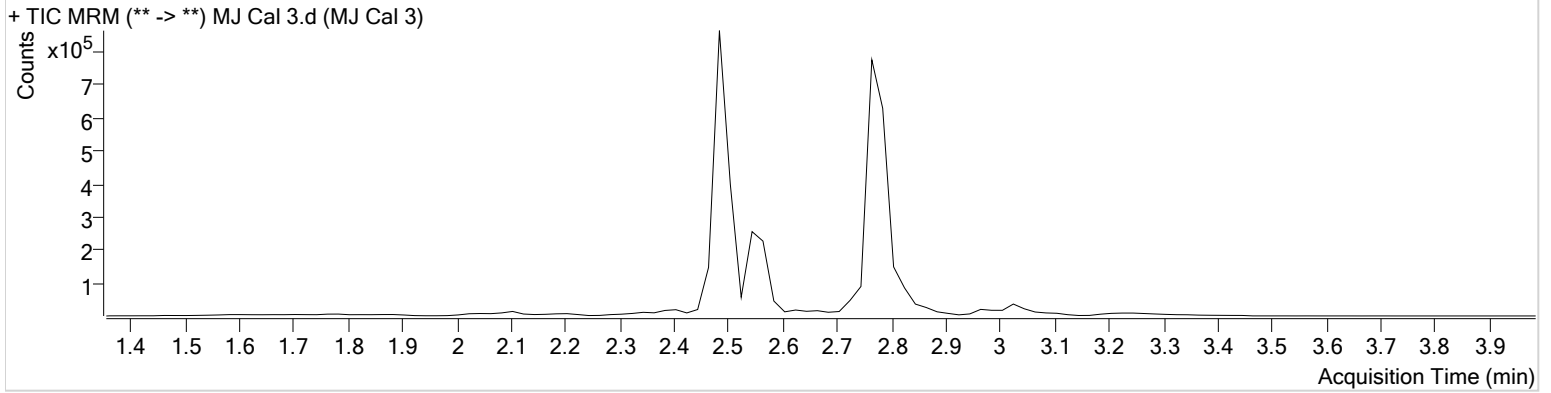


**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Calibration Last Update** 5/26/2020 1:55:01 PM

<b>Instrument</b>	Falco	<b>Data File</b>	MJ Cal 3.d
<b>Type</b>	Cal	<b>Sample</b>	MJ Cal 3
<b>Acq. Method</b>	am 26 test.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P3-C1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	5/21/2020 11:28:34 AM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	3814	112496	5.0635 ng/ml
THC-COOH	2.565	93820	416161	23.2044 ng/ml
THC-OH	2.491	169721	1513841	5.0824 ng/ml

S

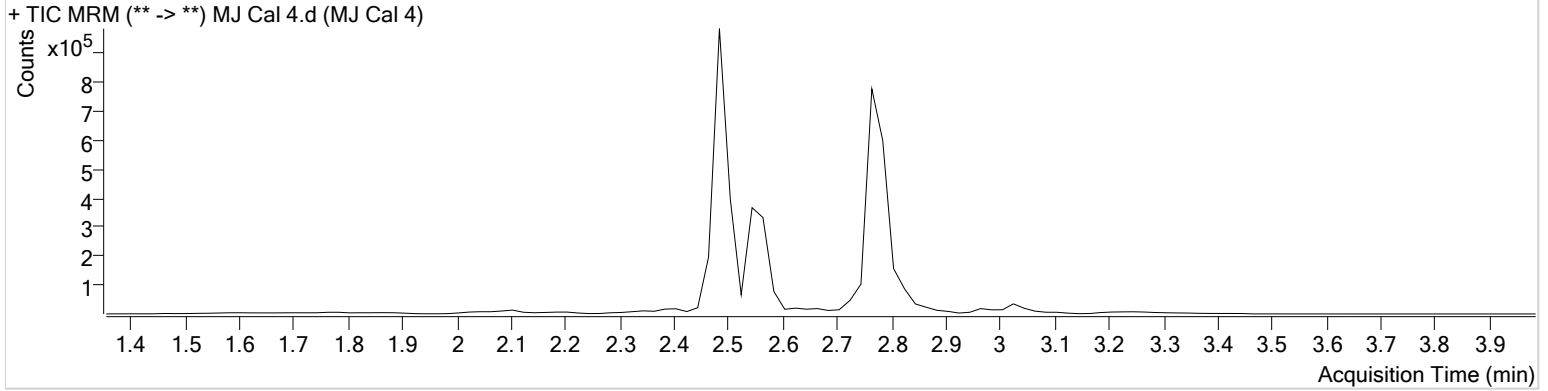


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Calibration Last Update** 5/26/2020 1:55:01 PM

<b>Instrument</b>	Falco	<b>Data File</b>	MJ Cal 4.d
<b>Type</b>	Cal	<b>Sample</b>	MJ Cal 4
<b>Acq. Method</b>	am 26 test.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P3-D1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	5/21/2020 11:35:06 AM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	7680	117767	8.3108 ng/ml
THC-COOH	2.565	249526	433550	50.5961 ng/ml
THC-OH	2.491	308714	1582366	9.7582 ng/ml

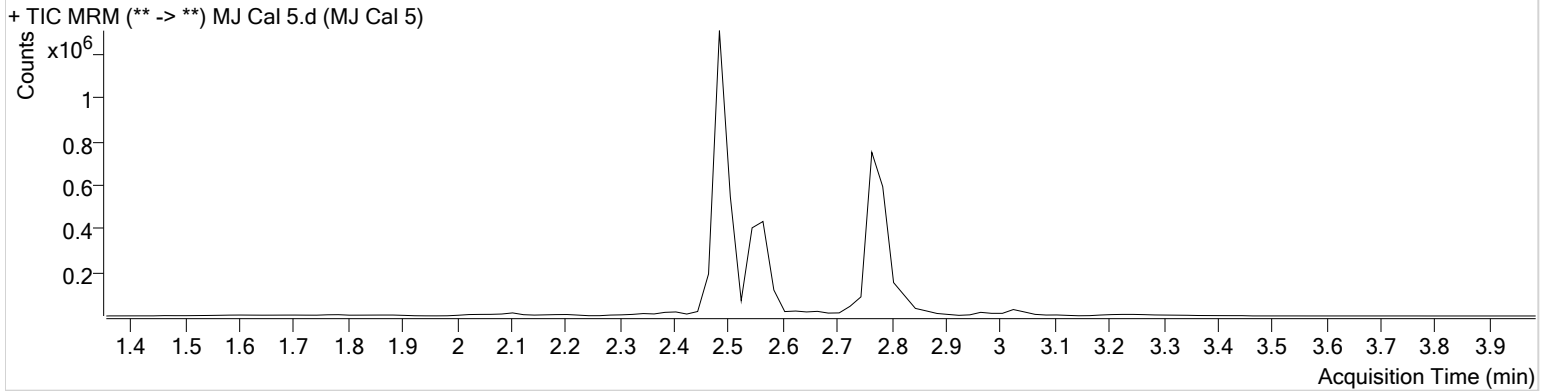
# AM #26 Cannabinoids Screen Results



**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Calibration Last Update** 5/26/2020 1:55:01 PM

<b>Instrument</b>	Falco	<b>Data File</b>	MJ Cal 5.d
<b>Type</b>	Cal	<b>Sample</b>	MJ Cal 5
<b>Acq. Method</b>	am 26 test.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P3-E1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	5/21/2020 11:41:36 AM		

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	25988	112821	25.4360 ng/ml
THC-COOH	2.565	373656	425637	74.2507 ng/ml
THC-OH	2.491	757919	1633296	24.9122 ng/ml

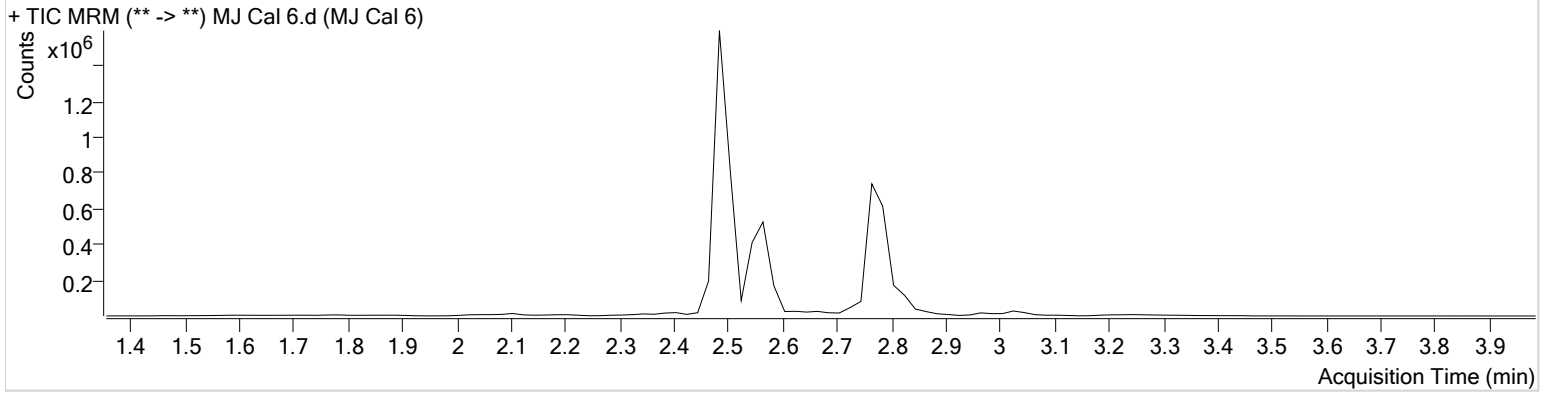
# AM #26 Cannabinoids Screen Results



**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Calibration Last Update** 5/26/2020 1:55:01 PM

<b>Instrument</b>	Falco	<b>Data File</b>	MJ Cal 6.d
<b>Type</b>	Cal	<b>Sample</b>	MJ Cal 6
<b>Acq. Method</b>	am 26 test.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P3-F1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	5/21/2020 11:48:06 AM		

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	54901	118980	49.4020 ng/ml
THC-COOH	2.565	483304	412941	97.1373 ng/ml
THC-OH	2.491	1415501	1583147	49.1446 ng/ml

# AM #26 Cannabinoids Screen Results

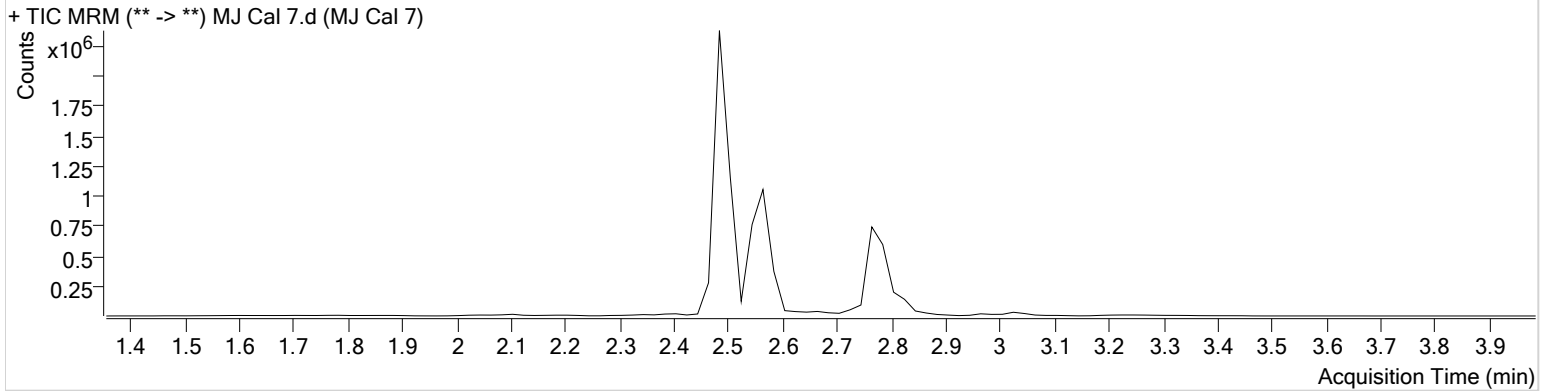


**Batch results** D:\MassHunter\Data\2020\AM 25-26\052120 AM 25 26 SP CS\QuantResults\AM 26 SP.batch.bin  
**Calibration Last Update** 5/26/2020 1:55:01 PM

<b>Instrument</b>	Falco	<b>Data File</b>	MJ Cal 7.d
<b>Type</b>	Cal	<b>Sample</b>	MJ Cal 7
<b>Acq. Method</b>	am 26 test.m	<b>Operator</b>	Sarah Pickle
<b>Sample Position</b>	P3-G1	<b>Comment</b>	
<b>Injection Volume</b>	10		
<b>Acq. Date-Time</b>	5/21/2020 11:54:37 AM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.839	110920	115231	101.3768 ng/ml
THC-COOH	2.565	1197368	407219	235.6186 ng/ml
THC-OH	2.491	2794213	1539275	101.0491 ng/ml