

TS

Worklist: 3979

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
M2020-0081	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-0174	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-0218	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-0326	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-0351	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2019-3446	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2019-3698	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2019-3894	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2019-3925	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0053	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0079	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0085	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0115	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0282	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0283	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0284	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0303	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0304	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0305	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0333	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0334	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

Worklist: 3979

15

<u>LAB_CASE</u>	<u>ITEM</u>	<u>ITEM_TYPE</u>	<u>DESCRIPTION</u>	
P2020-0335	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0342	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0343	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0373	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-0384	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

TS

**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 ToxBBox 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

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

TS

Extraction Date: 02/10/2020
Plate Item #: IDP-107 Plate Lot#: 190725

Analyst: Tamara Salazar
Plate Expiration: 01/25/2020

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: Hemostat 445283-3
LCMS-QQQ ID: 069901

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 **250µL blood (calibrated pipette) Pipette ID: 42** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 067105*
- 4. Pipette **250µL 0.5M 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: 067104
- 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: 067103
- 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: *AM 25 TS*
Worklist path: *D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wklist 3979 TS*
- 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

15

**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: 031319)

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

**Made for the AM 28 urine validation*

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	184782	
O-desmethyl Tramadol	Cerilliant	FN01241702	04/30/2022
Amphetamine	Cerilliant	FE04061701	06/30/2022
Alprazolam	Cerilliant	FE07061604	07/31/2021
Prepared:	03/13/19		
Prepared By:	Tamara Salazar		
Expires:	03/13/2020		

Blood External Control Solution (Lot: WS010820)

100 ul of methanol external control solution was added to 9900 ul of blood.

Approximately 50ng/mL of each compound.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Blood	Hemostat	445283-3
Methanol External Control Solution		031319
Prepared:	01/08/2020	
Prepared by:	Tamara Salazar	
Expires:	03/13/2020	

AM #25 Multi-Drug Screen Results

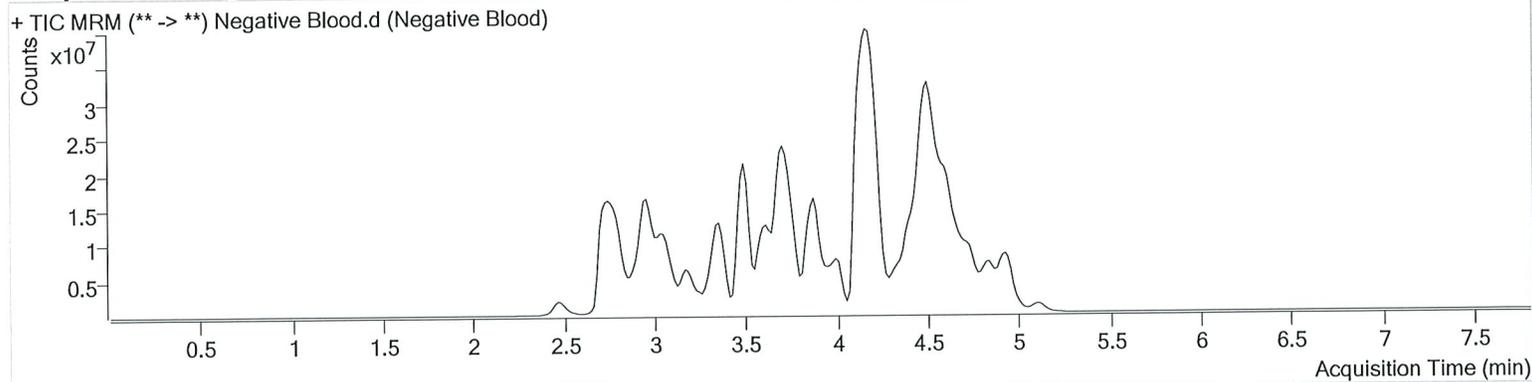
TS



Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wk1st 3979 TS\QuantResults\AM 25 TS.batch.bin
Calibration Last Update 2/11/2020 2:57:17 PM

Instrument	Falco	Data File	Negative Blood.d
Type	Sample	Sample	Negative Blood
Acq. Method	am 25 all.m	Operator	Tamara Salazar
Sample Position	P1-F12	Comment	
Injection Volume	5		
Acq. Date-Time	2/10/2020 4:38:33 PM		
Sample Info.			

Sample Chromatogram



AM #25 Multi-Drug Screen Results

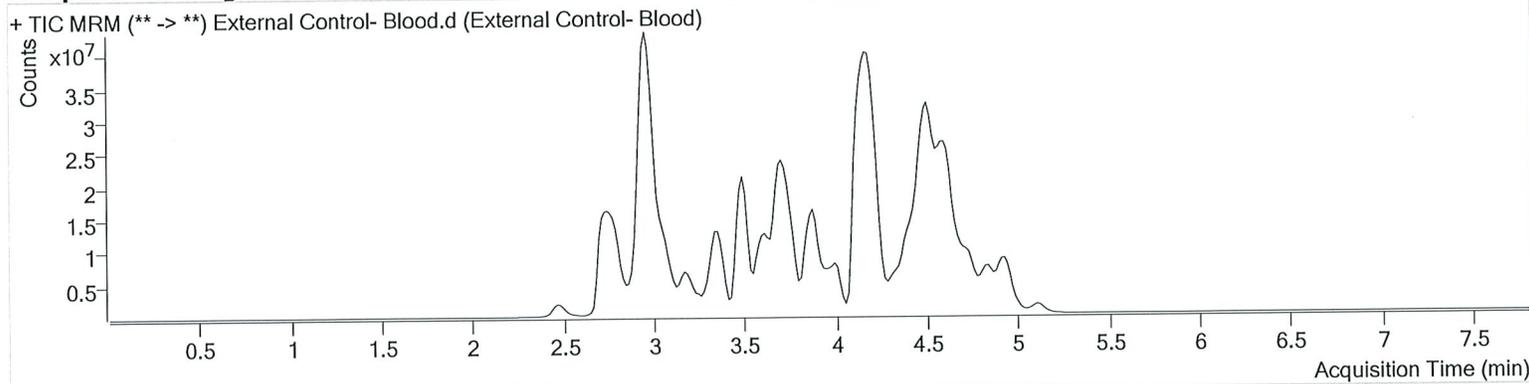
TS



Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wk1st 3979 TS\QuantResults\AM 25 TS.batch.bin
Calibration Last Update 2/11/2020 2:57:17 PM

Instrument	Falco	Data File	External Control- Blood.d
Type	Sample	Sample	External Control- Blood
Acq. Method	am 25 all.m	Operator	Tamara Salazar
Sample Position	P1-E12	Comment	
Injection Volume	5		
Acq. Date-Time	2/10/2020 4:46:53 PM		

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.601	17047616	514.66	5072.50	4249139	104.4218
Amphetamine	2.949	31370945	9447.24	14922.03	7887704	93.4380
O-desmethyl-tramadol	2.974	63027762	1216984.66	794.60	44633256	69.6604

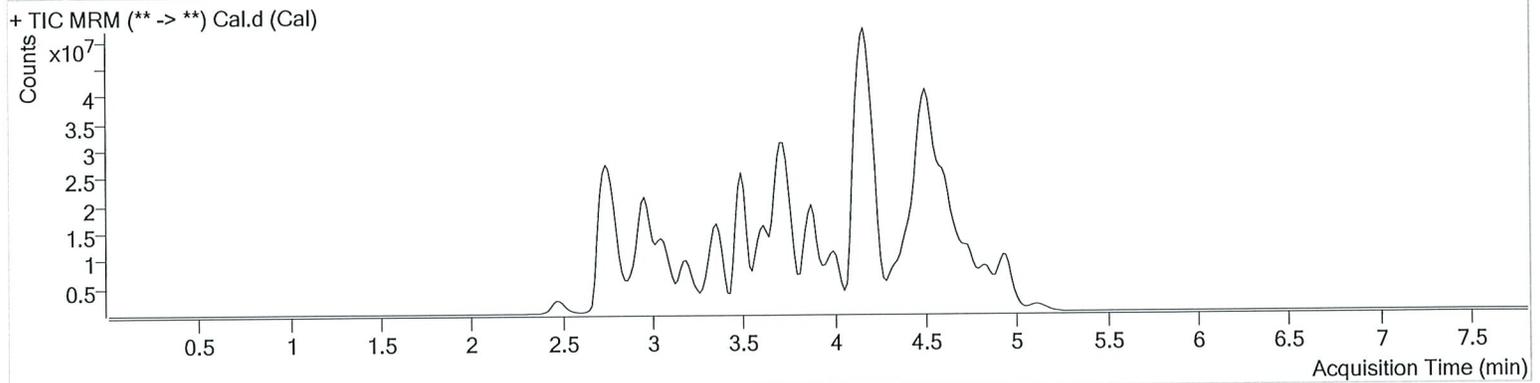
AM #25 Multi-Drug Screen Results



Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wk1st 3979 TS\QuantResults\AM 25 TS.batch.bin
Calibration Last Update 2/11/2020 2:57:17 PM

Instrument	Falco	Data File	Cal.d
Type	Cal	Sample	Cal
Acq. Method	am 25 all.m	Operator	Tamara Salazar
Sample Position	P1-H12	Comment	
Injection Volume	5		
Acq. Date-Time	2/10/2020 4:30:04 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	3.149	56649	40.90	28.65	1561002	10.0000
7-aminoclonazepam	3.567	1292472	4408.65	195.30	5352756	10.0000
7-aminoflunitrazepam	3.780	2827117	∞	454.90	19140376	10.0000
Acetyl Fentanyl	4.208	391070	42.18	1231.66	29532576	10.0000
Acetyl Norfentanyl	2.945	354785	5884.78	85.49	15903703	10.0000
a-hydroxyalprazolam	4.499	164675	66.22	3486.27	911132	10.0000
alpha-hydroxymidazolam	4.590	1271756	∞	∞	8340685	10.0000
alpha-PVP	3.727	5477305	218.64	282.72	25291747	10.0000
Alprazolam	4.609	1580791	1092.25	∞	4114367	10.0000
Amitriptyline	4.645	4929010	446.36	∞	11917105	10.0000
Amphetamine	2.949	3558487	∞	4481.77	8360109	10.0000
Benzoyllecgonine	3.367	1139939	196.52	737.29	5325608	10.0000
Buprenorphine	5.148	1190103	1764.27	5063.87	5050239	10.0000
Bupropion	3.971	6462414	∞	∞	21276952	10.0000
Carbamazepine	4.218	7717061	∞	∞	45572169	10.0000
Carisoprodol	4.201	979283	757.71	137.72	4935420	10.0000
Chlordiazepoxide	4.717	609573	114.58	∞	16981200	10.0000
Chlorpheniramine	4.076	22672	15.24	∞	55647233	10.0000
Citalopram	4.207	3576647	76.60	1291.46	15656987	10.0000
Clonazepam	4.424	1039408	∞	109535.46	1954640	10.0000
Cocaine	3.702	6555865	∞	5630.57	31994416	10.0000
Codeine	3.076	462876	∞	1361.44	2279994	10.0000
Cyclobenzaprine	4.538	3784695	∞	∞	13039121	10.0000
Desipramine	4.523	5729074	15132.55	1083.32	34421650	10.0000
Dextromethorphan	4.246	2981675	151944.24	4659.90	13701421	10.0000
Dextrophan	3.493	2521692	1281.77	34858.63	16611687	10.0000
Diazepam	4.826	1456146	∞	210.78	7133801	10.0000
Dihydrocodeine	2.909	1179783	∞	3893.08	6537864	10.0000
Diphenhydramine	4.139	7658865	∞	∞	55647233	10.0000
Doxepin	4.352	2936381	∞	∞	20030384	10.0000
Doxylamine	3.736	12244979	40915.94	∞	48847538	10.0000
EDDP	4.167	5005403	∞	4214.65	35795736	10.0000
Estazolam	4.519	3573045	∞	606.81	11136948	10.0000
Etizolam	4.635	282980	169.89	622.05	11136948	10.0000

Cal

AM #25 Multi-Drug Screen Results



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Fentanyl	4.421	363775	∞	86267.00	24826577	10.0000
Flunitrazepam	4.547	1124292	3032.25	1810.33	272301	10.0000
Fluoxetine	4.425	4626689	543.30	50.78	20602200	10.0000
Flurazepam	4.465	3154269	1829112.05	154769.31	272301	10.0000
Hydrocodone	3.305	1500396	76.09	58.63	10500070	10.0000
Hydromorphone	2.699	570942	130.74	∞	3543495	10.0000
Imipramine	4.584	6915013	1629.55	∞	26099976	10.0000
Ketamine	3.894	4895652	877.30	190.91	23681557	10.0000
Lamotrigine	3.647	371016	122.34	6160.83	16293548	10.0000
Levamisole	3.191	4307624	6574.80	∞	31994416	10.0000
Lorazepam	4.423	555631	218.13	315.24	1954640	10.0000
Maprotiline	4.645	4929010	446.36	128.53	11917105	10.0000
MDA	3.100	2481846	353.08	185.16	11520345	10.0000
MDEA	3.344	5381248	1584.72	1440.41	26049360	10.0000
MDMA	3.191	6053769	4076.24	1323.11	4122431	10.0000
Meperidine	3.755	3383631	2479.40	824.44	16293548	10.0000
Meprobamate	3.636	488627	672.34	69.06	2053075	10.0000
Methadone	4.491	7073767	∞	264.94	34320021	10.0000
Methamphetamine	3.070	3543790	∞	1035.66	21756290	10.0000
Methocarbamol	3.541	485596	∞	∞	16293548	10.0000
Methylphenidate	3.619	10730651	∞	∞	47294931	10.0000
Metoprolol	3.507	708040	219.90	271.18	16293548	10.0000
Midazolam	4.758	828629	∞	∞	9587665	10.0000
Mirtazapine	4.462	4018541	∞	1554.83	16293548	10.0000
Mitragynine	4.479	391293	11378.71	146894.95	20030384	10.0000
Morphine	2.517	209011	219.58	60.30	123796	10.0000
Norbuprenorphine	4.004	91268	397.15	37.54	436343	10.0000
Nordiazepam	4.676	1379739	∞	126.43	4542243	10.0000
Norfentanyl	3.389	7492072	479672.34	665.70	32292752	10.0000
Norhydrocodone	3.048	34827	∞	11.67	1242256	10.0000
Normeperidine	3.681	2712829	1866.92	4448.98	9767388	10.0000
Noroxycodone	2.985	1389215	∞	∞	4610735	10.0000
Nortriptyline	4.554	2070763	126824.33	329.94	5072400	10.0000
O-desmethyl-tramadol	2.974	9625218	668.48	225.11	47481344	10.0000
Olanzapine	4.224	568343	∞	∞	499207	10.0000
Oxazepam	4.489	1756337	179.88	179.31	12410800	10.0000
Oxycodone	3.074	3079033	∞	514.67	13317896	10.0000
Oxymorphone	2.484	2279915	369.18	∞	8606417	10.0000
Paroxetine	4.544	338780	∞	8.46	13890279	10.0000
Phenazepam	4.634	1292833	3493.68	39223.20	6008062	10.0000
Phencyclidine	4.016	6569768	4591.21	830.63	30191599	10.0000
Phentermine	3.208	1185336	93.74	9.76	19786325	10.0000
Phenytoin	4.109	80622	10114.71	∞	499207	10.0000
Promethazine	4.616	11560045	8378.75	∞	46948812	10.0000
Pseudoephedrine	2.749	51896890	12635.06	∞	122616225	10.0000
Quetiapine	4.756	5098098	313787.79	138275.13	7398519	10.0000
Sertraline	4.731	2809053	∞	∞	13890279	10.0000
Sufentanil	4.847	431967	∞	∞	29656780	10.0000
Tapentadol	3.497	4625466	4552.35	1584.25	24327688	10.0000
Temazepam	4.656	3116113	∞	118.55	15541140	10.0000
Tramadol	3.508	10947030	∞	164.13	48451192	10.0000
Trazodone	4.956	8985349	4853.66	∞	41237523	10.0000
Venlafaxine	3.874	8527332	9183.71	301.36	47096137	10.0000
Zaleplon	4.349	3272021	249997.75	442.67	7445650	10.0000
Zolpidem	4.517	10206074	∞	280.54	51800357	10.0000
Zopiclone	4.480	284666	852.45	104.33	1700716	10.0000

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

TS

Extraction Date: 02/10/2020

Analyst: Tamara Salazar

Plate lot# IDP-108, 190716

Plate Expiration: 01/16/20

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

MTBE

Mobile phase B: 0.1% Formic acid in MeOH
Hexane

Blank Blood Lot: 445283-3

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

LCMS-QQQ 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.
- 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: 42** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 067105*
- 4. Pipette **500 µL 0.1% formic acid** for blood 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: 067104
- 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: 067103
- 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.
Worklist path: *D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wklst 3979 TS*
Batch Name: *AM 26 TS*
- 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: *Curves limited: THC-OH 3-100*



Idaho State Police Forensic Services

JS

AM #26 Blood THC and Metabolites Screen by LCMS-QQQ and AM #27 Quantitative Analysis of THC and Metabolites in Blood by LCMS-QQQ

Methanol External Control Solution (Lot: WS011620)
10 ul of 1mg/mL THC, 100 ul of 100 ug/mL THC-OH, C-THC in 9790 ul MeOH
Approximate concentration 1ug/mL.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	193941	
THC	Cerilliant	FE09101501	11/30/2020
C-THC	Cerilliant	FE07171501	09/30/2020
THC-OH	Cerilliant	FE07221601	07/31/2021
Prepared:	01/16/2020		
Prepared By:	Tamara Salazar		
Expires:	09/30/2020		

Blood External Control Solution (Lot: 011620)
100 ul of methanol external control solution was added to 9900 ul of blood.
Approximately 10ng/mL of each compound.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Blood	Hemostat	445283-3
Methanol External Control Solution	-	WS011620
Prepared:	01/16/2020	
Prepared by:	Tamara Salazar	
Expires:	09/30/2020	

AM #26 Cannabinoids Screen Results

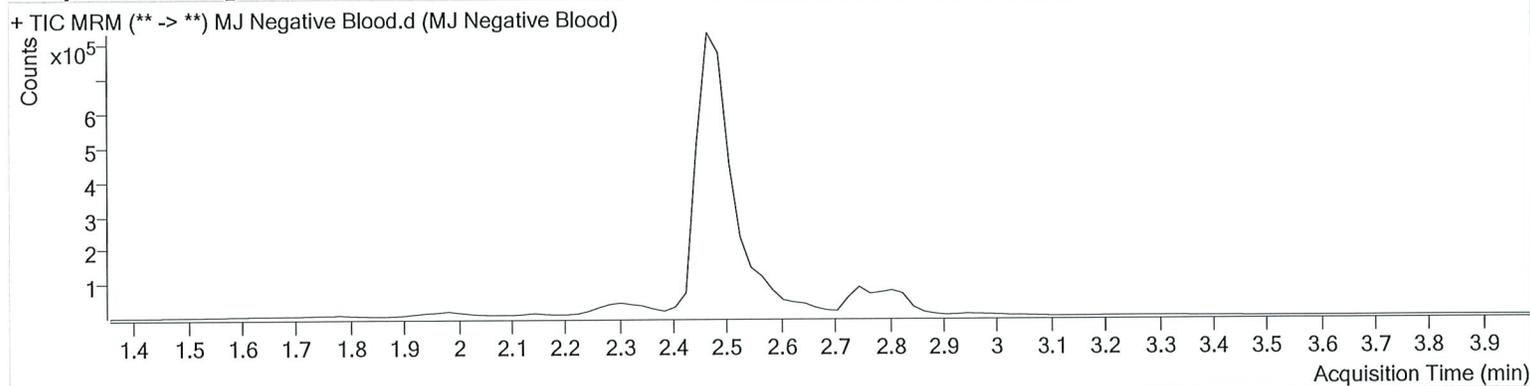
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Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wk1st 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument	Falco	Data File	MJ Negative Blood.d
Type	Sample	Sample	MJ Negative Blood
Acq. Method	am 26 test.m	Operator	Tamara Salazar
Sample Position	P3-A2	Comment	
Injection Volume	10		
Acq. Date-Time	2/10/2020 12:53:26 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC-OH	2.451	118129	2611156	2.1288 ng/ml	Low

AM #26 Cannabinoids Screen Results

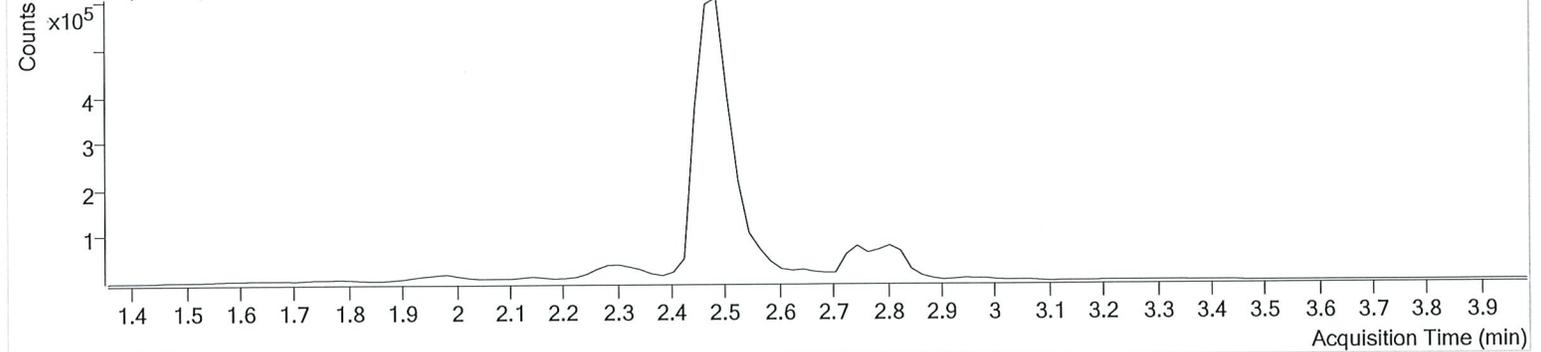


Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wk1st 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument	Falco	Data File	MJ QC Control.d
Type	Sample	Sample	MJ QC Control
Acq. Method	am 26 test.m	Operator	Tamara Salazar
Sample Position	P3-H1	Comment	
Injection Volume	10		
Acq. Date-Time	2/10/2020 12:40:24 PM		
Sample Info.			

Sample Chromatogram

+ TIC MRM (** -> **) MJ QC Control.d (MJ QC Control)



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	7203	153196	5.6250 ng/ml
THC-COOH	2.505	123756	416308	18.9498 ng/ml
THC-OH	2.471	142895	1664296	5.3741 ng/ml

AM #26 Cannabinoids Screen Results

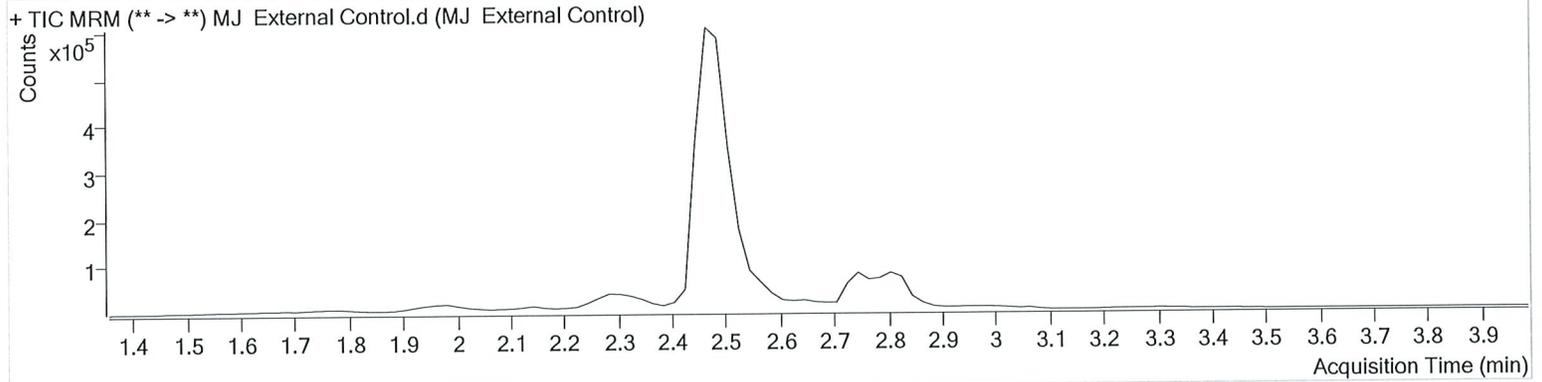


Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wk1st 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument Falco
Type Sample
Acq. Method am 26 test.m
Sample Position P3-B2
Injection Volume 10
Acq. Date-Time 2/10/2020 12:59:58 PM
Sample Info.

Data File MJ External Control.d
Sample MJ External Control
Operator Tamara Salazar
Comment

Sample Chromatogram



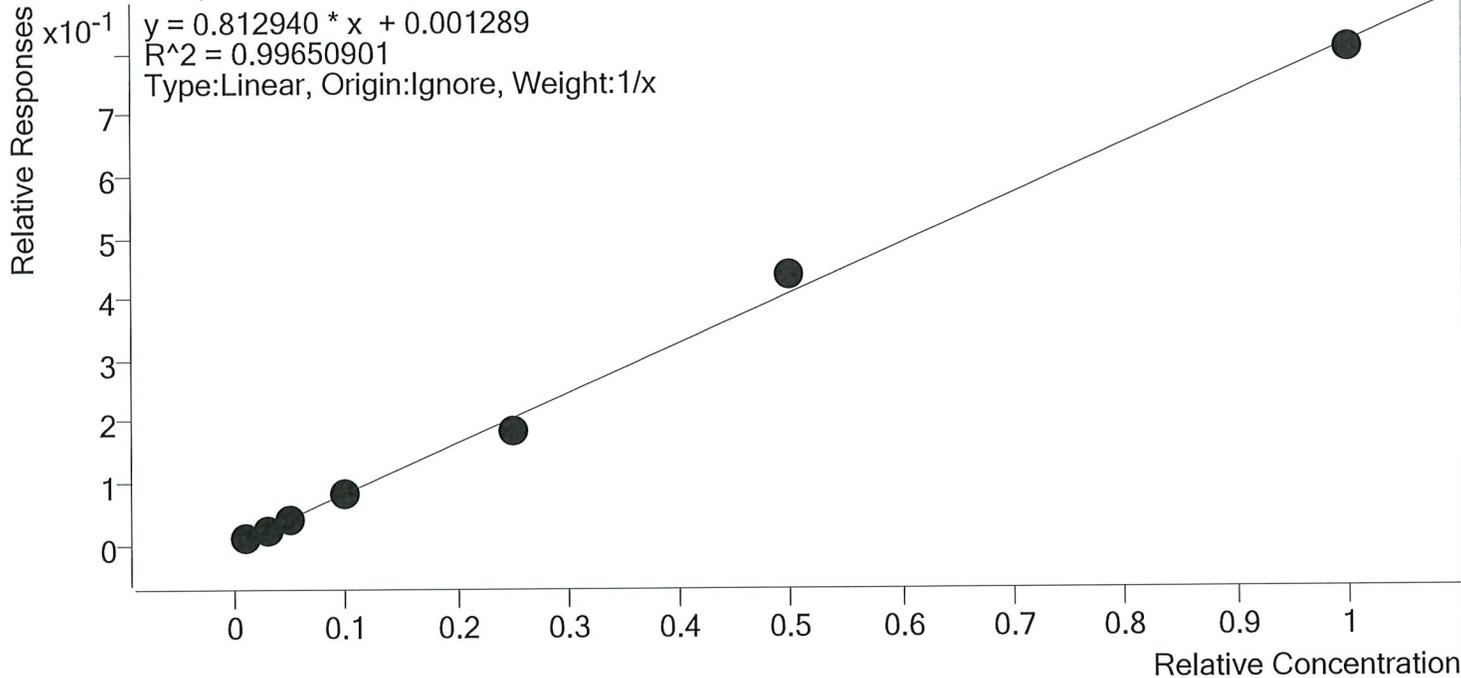
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	12362	184504	8.0832 ng/ml
THC-COOH	2.505	63855	409628	10.2129 ng/ml
THC-OH	2.471	248716	1657002	10.5066 ng/ml



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wklst 3979 TS\QuantResults\AM 26
 TS.batch.bin
Last Cal. Update 2/11/2020 3:04 PM
Analyst Name ISP\datastor
Analyte THC **Internal Standard** THC-d3

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

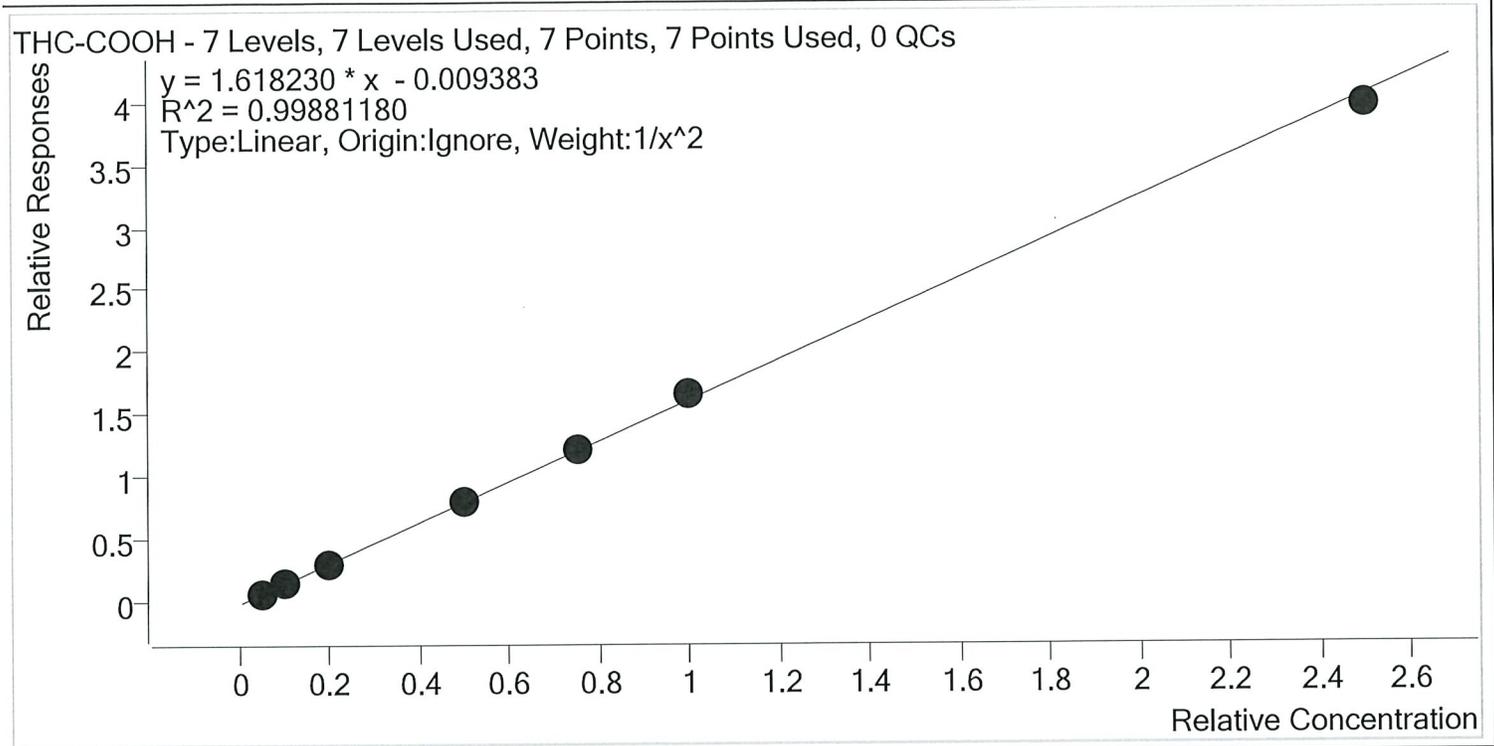


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	1.0	1.1	111.1
MJ Cal 2	2	✓	3.0	2.8	94.5
MJ Cal 3	3	✓	5.0	4.9	97.5
MJ Cal 4	4	✓	10.0	10.0	100.4
MJ Cal 5	5	✓	25.0	22.5	90.1
MJ Cal 6	6	✓	50.0	53.8	107.7
MJ Cal 7	7	✓	100.0	98.8	98.8



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wklst 3979 TS\QuantResults\AM 26
 TS.batch.bin
Last Cal. Update 2/11/2020 3:04 PM
Analyst Name ISP\datastor
Analyte THC-COOH **Internal Standard** THC-COOH-d9

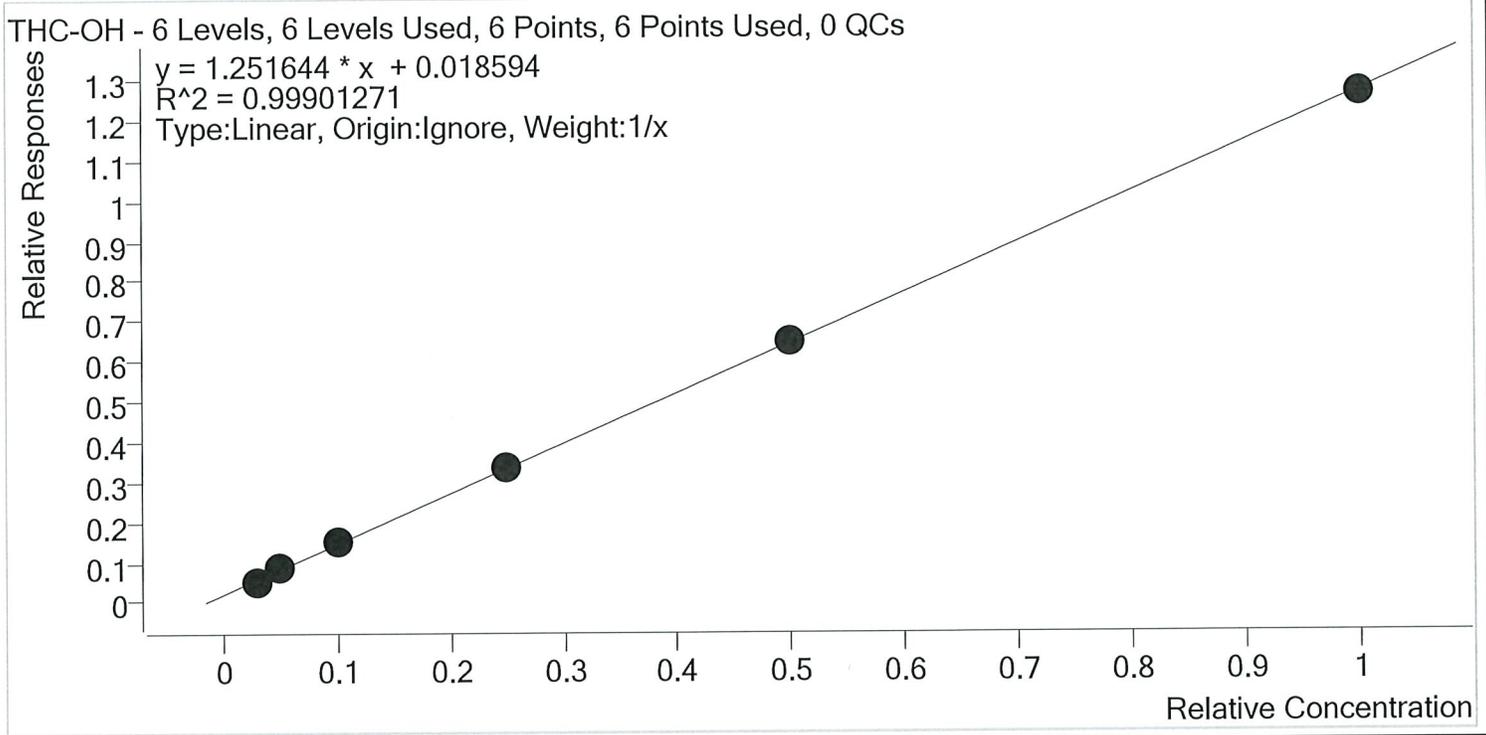


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	5.0	5.1	102.3
MJ Cal 2	2	✓	10.0	9.6	96.0
MJ Cal 3	3	✓	20.0	19.5	97.4
MJ Cal 4	4	✓	50.0	50.6	101.1
MJ Cal 5	5	✓	75.0	76.7	102.3
MJ Cal 6	6	✓	100.0	103.0	103.0
MJ Cal 7	7	✓	250.0	244.9	98.0



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wklst 3979 TS\QuantResults\AM 26
 TS.batch.bin
Last Cal. Update 2/11/2020 3:04 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	2.6	86.2
MJ Cal 3	3	✓	5.0	5.4	107.6
MJ Cal 4	4	✓	10.0	10.7	107.1
MJ Cal 5	5	✓	25.0	24.9	99.8
MJ Cal 6	6	✓	50.0	49.9	99.8
MJ Cal 7	7	✓	100.0	99.5	99.5

AM #26 Cannabinoids Screen Results

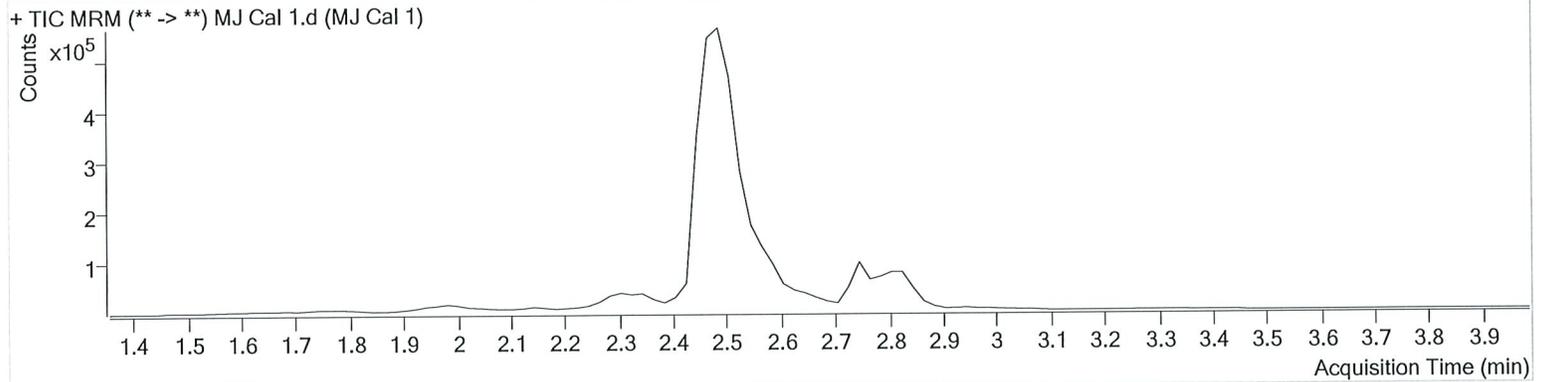
TS



Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wk1st 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument	Falco	Data File	MJ Cal 1.d
Type	Cal	Sample	MJ Cal 1
Acq. Method	am 26 test.m	Operator	Tamara Salazar
Sample Position	P3-A1	Comment	
Injection Volume	10		
Acq. Date-Time	2/10/2020 11:54:32 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.819	1934	187390	1.1108 ng/ml	Low
THC-COOH	2.505	32959	449093	5.1150 ng/ml	

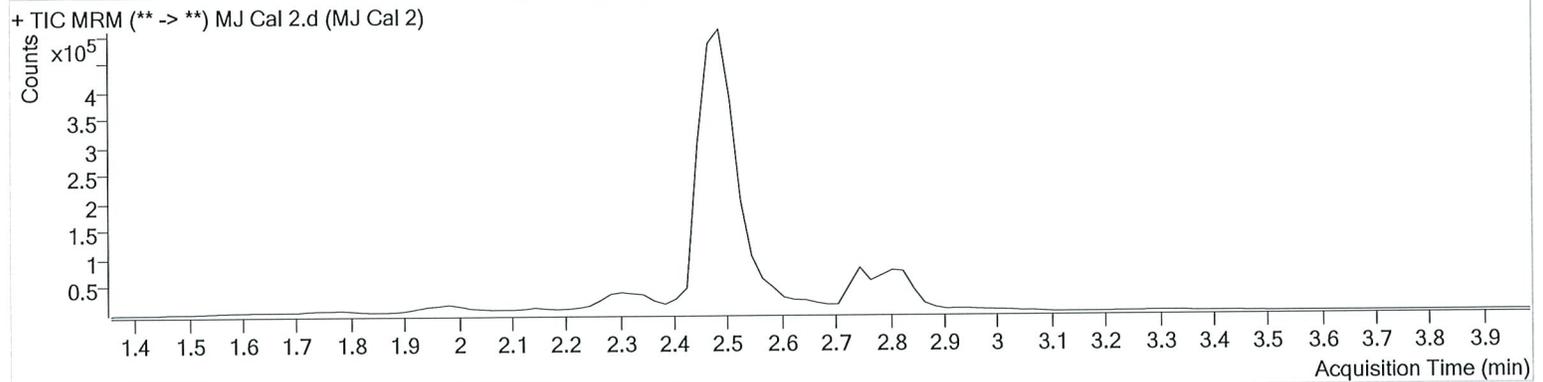
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wklst 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument	Falco	Data File	MJ Cal 2.d
Type	Cal	Sample	MJ Cal 2
Acq. Method	am 26 test.m	Operator	Tamara Salazar
Sample Position	P3-B1	Comment	
Injection Volume	10		
Acq. Date-Time	2/10/2020 12:01:12 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	2.839	4184	171866	2.8363 ng/ml	Low
THC-COOH	2.505	56072	384298	9.5962 ng/ml	
THC-OH	2.471	83592	1640445	2.5856 ng/ml	Low

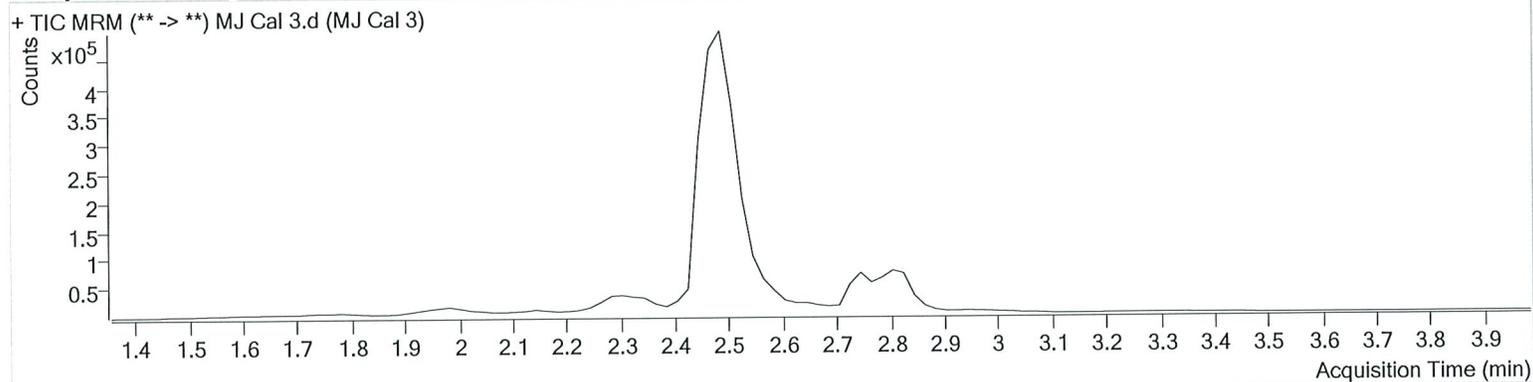
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wklst 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument	Falco	Data File	MJ Cal 3.d
Type	Cal	Sample	MJ Cal 3
Acq. Method	am 26 test.m	Operator	Tamara Salazar
Sample Position	P3-C1	Comment	
Injection Volume	10		
Acq. Date-Time	2/10/2020 12:07:44 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	7348	179661	4.8727 ng/ml
THC-COOH	2.505	109875	359287	19.4779 ng/ml
THC-OH	2.471	126454	1471059	5.3823 ng/ml

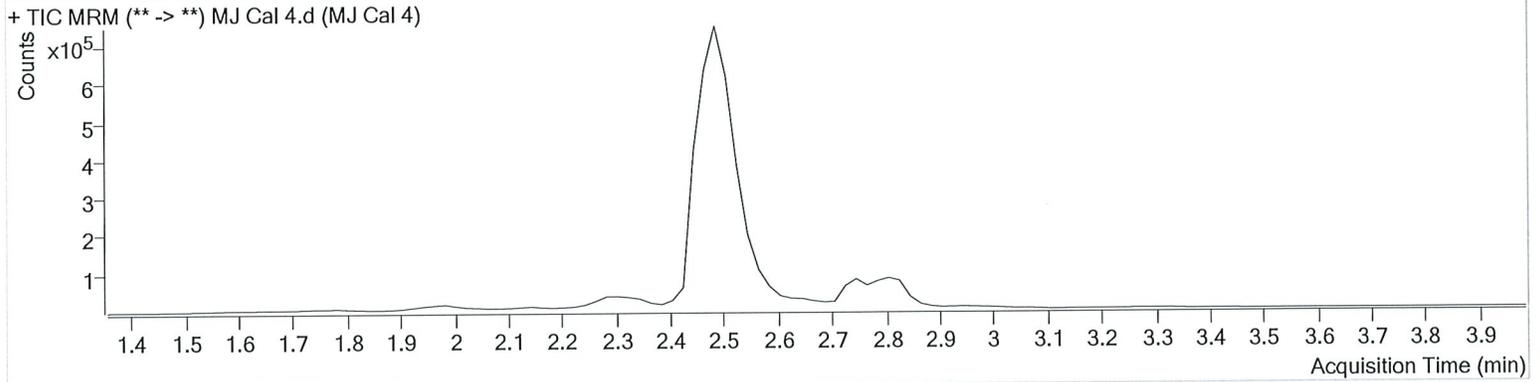
AM #26 Cannabinoids Screen Results



Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wklst 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument	Falco	Data File	MJ Cal 4.d
Type	Cal	Sample	MJ Cal 4
Acq. Method	am 26 test.m	Operator	Tamara Salazar
Sample Position	P3-D1	Comment	
Injection Volume	10		
Acq. Date-Time	2/10/2020 12:14:17 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	14157	170805	10.0371 ng/ml
THC-COOH	2.505	364421	450647	50.5518 ng/ml
THC-OH	2.471	286762	1878507	10.7107 ng/ml

AM #26 Cannabinoids Screen Results

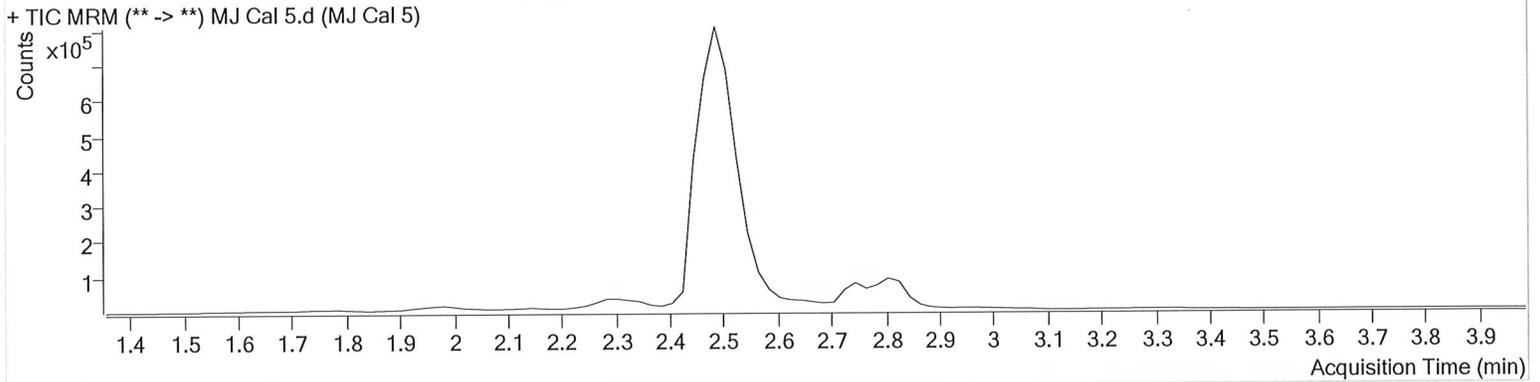
TS



Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wk1st 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument	Falco	Data File	MJ Cal 5.d
Type	Cal	Sample	MJ Cal 5
Acq. Method	am 26 test.m	Operator	Tamara Salazar
Sample Position	P3-E1	Comment	
Injection Volume	10		
Acq. Date-Time	2/10/2020 12:20:50 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	34845	188971	22.5239 ng/ml
THC-COOH	2.505	481143	390556	76.7089 ng/ml
THC-OH	2.471	548536	1658446	24.9399 ng/ml

TS

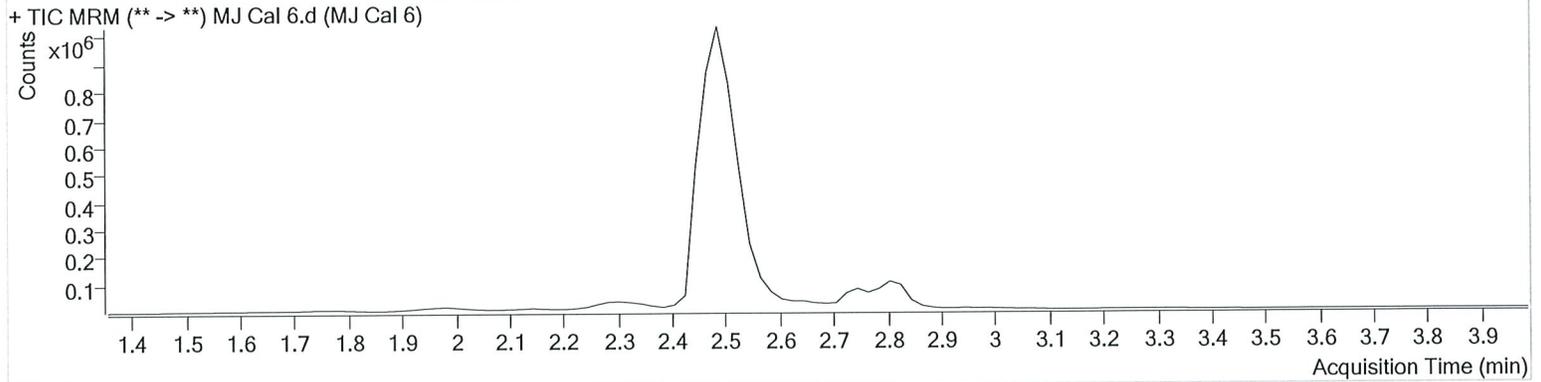


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wklst 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument	Falco	Data File	MJ Cal 6.d
Type	Cal	Sample	MJ Cal 6
Acq. Method	am 26 test.m	Operator	Tamara Salazar
Sample Position	P3-F1	Comment	
Injection Volume	10		
Acq. Date-Time	2/10/2020 12:27:22 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	70510	160638	53.8355 ng/ml
THC-COOH	2.505	636117	383801	103.0013 ng/ml
THC-OH	2.471	1055849	1641003	49.9201 ng/ml

AM #26 Cannabinoids Screen Results

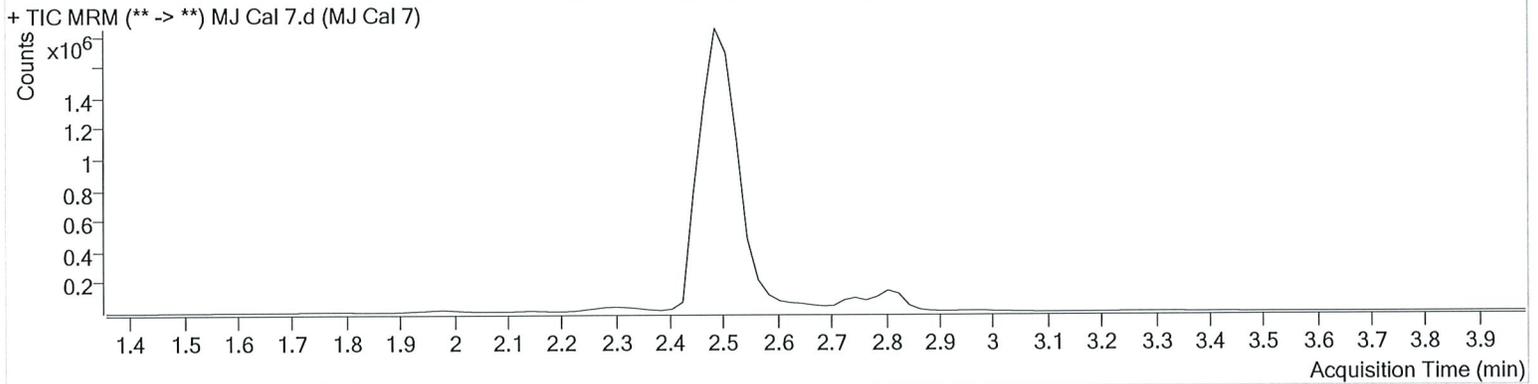
KS



Batch results D:\MassHunter\Data\2020\AM 25-26\021020 AM 25 26 wk1st 3979 TS\QuantResults\AM 26 TS.batch.bin
Calibration Last Update 2/11/2020 3:04:04 PM

Instrument	Falco	Data File	MJ Cal 7.d
Type	Cal	Sample	MJ Cal 7
Acq. Method	am 26 test.m	Operator	Tamara Salazar
Sample Position	P3-G1	Comment	
Injection Volume	10		
Acq. Date-Time	2/10/2020 12:33:54 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	2.819	145462	180847	98.7836 ng/ml
THC-COOH	2.505	1573039	397848	244.9125 ng/ml
THC-OH	2.471	2209701	1748877	99.4614 ng/ml