

Worklist: 6310

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
M2023-0917	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-0918	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-0920	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-0953	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-0980	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-1067	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-1069	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2023-1151	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0716	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0722	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0724	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0725	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0735	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0765	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0766	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0767	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0768	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0778	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0787	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0788	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0789	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

Worklist: 6310

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
P2023-0796	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0811	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0853	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2023-0867	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-0867	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-0867	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
P2023-1007	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	

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

Extraction Date: 4/4/2023

Plate lot#: 230119

Mobile phase A: 10mM Amm Form

Blank Blood Lot: Lampire 23A52593

LCMS-QQQ ID: 069901

Analyst: Amber Gerheart

Plate Retest Date: 7/19/2023

Mobile phase B: 0.1% Formic Acid in MeOH

Blank Urine Lot: POC021022

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. **Urine Hydrolysis:** In blank well, add 250µL urine, 40µL BG Turbo, and 100µL Instant Buffer I. Place on plate shaker for 5 minutes.
- 3. Using a calibrated pipette, pipette **250µL blood and urine** (if applicable) into wells of analytical (standards) plate.
Pipette ID: 42
- 4. Pipette **250µL 0.5 M ammonium hydroxide** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **200-450µL of blood+base and urine+base (if applicable)** mixture to corresponding wells of SLE+ plate.
Amount transferred: 300µL
- 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).
- 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.
- 16. Reconstitute in **100µL 20% 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 of 5 or greater or 2-5 for discretionary range.
- 4. Did all QCs pass for each analyte? If no, describe issue in comments (below).
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

Fluoxetine and temazepam not evaluated due to S/N

AM

	1	2	3	4	5	6	7	8	9	10	11	12
A	Urine QC											
B	Urine Negative											
C	P2023-0867-1											
D	P2023-0867-2											
E	P2023-0867-3											
F	P2023-1007-1											
G												
H												

Hydrolysis Plate for AM 25

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + QC_1	M2023-0980-1	P2023-0735-3	P2023-0789-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
B	IS + QC_1 Urine	M2023-1067-3	P2023-0765-1	P2023-0796-2	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
C	Blood Negative	M2023-1069-2	P2023-0766-1	P2023-0811-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
D	Urine Negative	M2023-1151-1	P2023-0767-1	P2023-0853-2	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
E	M2023-0917-1	P2023-0716-1	P2023-0768-1	P2023-0867-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
F	M2023-0918-1	P2023-0722-1	P2023-0778-3	P2023-0867-2	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample
G	M2023-0920-1	P2023-0724-1	P2023-0787-1	P2023-0867-3	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_1
H	M2023-0953-1	P2023-0725-1	P2023-0788-1	P2023-1007-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_1

All wells to contain 60 µl of residual DMSO

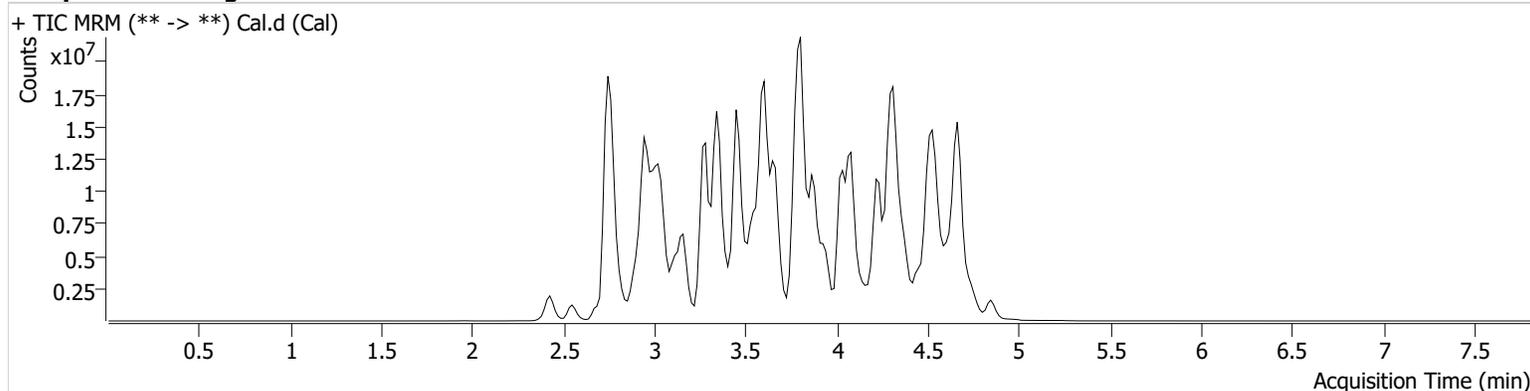


AM #25 Multi-Drug Screen Results

Batch results G:\TOX\Pocatello\Falco\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 25 eval.batch.bin
Calibration Last Update 4/10/2023 8:08:37 AM

Instrument	Falco (069901)	Data File	Cal.d
Type	Cal	Sample	Cal
Acq. Method	AM 25 MDS.m	Operator	Amber Gerheart
Sample Position	P2-A1	Comment	
Injection Volume	5		
Acq. Date-Time	4/4/2023 2:05:35 PM		

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.793	4816940	320.01	765.68	30041214	10.0000
6-MAM	2.956	102919	109.76	174743.97	2246368	10.0000
7-aminoclonazepam	3.605	1215130	126.86	398.07	4642192	10.0000
7-aminoflunitrazepam	3.805	2223270	8260.48	190.05	4642192	10.0000
9-Hydroxyrisperidone	3.874	6296899	5116367.61	105.33	26296590	10.0000
Acetyl Fentanyl	3.879	136060	24.04	56304.46	6104621	10.0000
Acetyl Norfentanyl	2.934	624101	1933.89	745.20	38669466	10.0000
a-hydroxyalprazolam	4.525	617275	659.98	561.13	22184053	10.0000
alpha-hydroxymidazolam	4.600	3957066	2299.42	322.90	32574019	10.0000
Alpha-PHP	3.840	3402719	7791.28	1277.72	6617462	10.0000
alpha-PVP	3.580	6763574	904.29	1195.68	6617462	10.0000
Alprazolam	4.620	4702260	487.29	300.01	32574019	10.0000
Amitriptyline	4.424	144712	6.24	32.08	461996	10.0000
Amphetamine	2.938	1567722	379.80	805.19	6617462	10.0000
Benzoyllecgonine	3.405	438316	240464.97	136.40	556012	10.0000
Brompheniramine	4.033	35141	46.85	225.78	3174699	10.0000
Buprenorphine	4.566	309955	120715.06	19434.78	1130030	10.0000
Bupropion	3.794	2877827	711.43	1385.47	13279643	10.0000
Carbamazepine	4.242	17413235	∞	1177.63	13651687	10.0000
Carisoprodol	4.225	3088844	3162.35	525.51	14481066	10.0000
Chlordiazepoxide	4.729	3030338	594.60	4268.01	32574019	10.0000
Chlorpheniramine	3.945	3096116	478.06	2808.38	3174699	10.0000
Chlorpromazine	4.603	113293	122157.48	238.36	511099	10.0000
Citalopram	4.063	1402999	223.25	1198.10	28762431	10.0000
Clomipramine	4.604	171161	576.47	945.85	251350	10.0000
Clonazepam	4.450	3420435	320.39	8265.05	893882	10.0000
Clonazepam	4.369	3531346	1947385.76	606261.25	22184053	10.0000
Clozapine	4.278	965343	1135.28	207.02	3535310	10.0000
Cocaehtylene	3.802	6650335	3129110.29	1299651.60	34669616	10.0000
Cocaine	3.604	7690219	15076.89	805.39	34669616	10.0000
Codeine	2.884	603801	2840.20	593.01	13651687	10.0000
Cyclobenzaprine	4.332	330912	797.51	18.68	461996	10.0000
Desipramine	4.363	415445	230.49	88.08	461996	10.0000
Dextromethorphan	4.070	683767	9322.18	144.80	3174699	10.0000

Cal



AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrorphan	3.408	4349721	12394.97	450.26	6617462	10.0000
Diazepam	4.853	2527464	266.15	540.90	32574019	10.0000
Dihydrocodeine	2.792	2002727	11455.12	144.75	13651687	10.0000
Diphenhydramine	4.039	4636304	6513.19	1046.64	28762431	10.0000
DMT	3.013	728202	1639.60	599.31	6617462	10.0000
Doxepin	4.146	389736	84.83	15.34	3535310	10.0000
Doxylamine	3.668	14581147	1279.55	120059.75	6617462	10.0000
Duloxetine	4.314	5061	2359.06	1455.02	49827	10.0000
EDDP	4.084	1274919	342.22	414.05	2345575	10.0000
Estazolam	4.545	13766011	2217.12	1399723.58	22184053	10.0000
Etizolam	4.646	338365	150477.93	513448.54	32574019	10.0000
Fentanyl	4.093	50259	18.17	14256.14	2992238	10.0000
Flualprazolam	4.494	1925057	602.85	67352.67	32574019	10.0000
Flunitrazepam	4.558	4237684	9230.45	74758.82	22184053	10.0000
Fluorofentanyl	4.123	59938	44.54	21.02	2992238	10.0000
Fluoxetine	4.313	162342	66852.62	2.61 Low	251350	10.0000
Flurazepam	4.183	1851018	793129.98	517.11	1130030	10.0000
Hydrocodone	3.052	3134263	1289.47	1798.10	13651687	10.0000
Hydromorphone	2.551	2240332	2716586.16	334.34	346055	10.0000
Hydroxyzine	4.476	582419	815.66	281.00	3535310	10.0000
Imipramine	4.377	720928	467.93	179.98	461996	10.0000
Ketamine	3.564	4692281	2052.51	238.69	19194554	10.0000
Lamotrigine	3.623	331290	285.13	2221.89	6617462	10.0000
Levamisole	3.012	4372698	34345.95	2629.56	34669616	10.0000
Levetiracetam	2.692	1267859	624.82	505.16	4642192	10.0000
Lorazepam	4.434	993968	489.15	59.36	22184053	10.0000
Maprotiline	4.409	123502	7.39	62.11	461996	10.0000
MDA	3.044	3591714	936.26	226.31	16997053	10.0000
MDEA	3.257	5386752	3205.82	18960.78	16997053	10.0000
MDMA	3.120	6810247	746.66	785.79	16997053	10.0000
Meperidine	3.624	2095104	956.81	237.22	346055	10.0000
Meprobamate	3.688	2166887	461.34	9487.84	14481066	10.0000
Methadone	4.389	2082395	8192.56	265.41	6104621	10.0000
Methamphetamine	3.030	4759286	765.87	686.54	16997053	10.0000
Methocarbamol	3.609	530255	2181.10	107341.54	14481066	10.0000
Methylphenidate	3.533	12369879	821.79	449.56	15846530	10.0000
Metoprolol	3.468	1312368	360.57	282.17	6617462	10.0000
Midazolam	4.755	1002006	351.06	20111.31	4642192	10.0000
Mirtazapine	3.946	1964993	1216.42	1600.34	1130030	10.0000
Mitragynine	4.198	120324	68841.94	267055.51	2992238	10.0000
Morphine	2.414	382594	7238.67	714.54	346055	10.0000
Norbuprenorphine	3.844	41661	14689.84	59895.99	1130030	10.0000
Nordiazepam	4.701	2624882	3230.84	509.32	32574019	10.0000
Norfentanyl	3.364	10934574	∞	1895.60	38669466	10.0000
Norhydrocodone	2.962	185778	101.03	897.09	13651687	10.0000
Norketamine	3.657	1105629	270.60	4337.25	19194554	10.0000
Normeperidine	3.626	2634641	506.66	218.42	346055	10.0000
Noroxycodone	2.914	3024570	∞	163.08	13651687	10.0000
Nortriptyline	4.395	109377	761.61	40.63	251350	10.0000
O-desmethyl-tramadol	2.948	12731681	893.81	210.97	15621421	10.0000
O-desmethylvenlafaxine	3.284	3243179	827.96	9633.67	15621421	10.0000
Olanzapine	3.834	134253	98.46	690.02	251350	10.0000
Oxazepam	4.515	4165960	380.48	474.70	22184053	10.0000
Oxycodone	2.973	4974976	1082.18	2062.26	19194554	10.0000
Oxymorphone	2.426	4246841	∞	765.65	346055	10.0000
Paroxetine	4.325	24668	604.84	11491.61	251350	10.0000
Phenazepam	4.646	3412690	324.71	550.86	32574019	10.0000
Phencyclidine	3.932	4966272	290.65	1118.85	15621421	10.0000
Phentermine	3.183	1572290	92.97	86.21	15846530	10.0000
Phenytol	4.133	1505161	140021.91	3608.51	893882	10.0000

Cal

AA



AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Primidone	3.503	3105783	337925.87	453.84	893882	10.0000
Promethazine	4.330	576766	242.47	104.82	461996	10.0000
Pseudoephedrine	2.754	57498734	20631.07	2311.17	16997053	10.0000
Quetiapine	4.460	2020738	8906.08	715293.13	3174699	10.0000
Risperidone	4.059	2551071	12484.96	206.57	3174699	10.0000
Sertraline	4.544	50803	21174.16	60.27	251350	10.0000
Sufentanil	4.414	27246	10589.71	47.09	2992238	10.0000
Tapentadol	3.473	9044545	3313.00	806.47	19194554	10.0000
Temazepam	4.668	8203280	427.52	326.18	32574019	10.0000
Topiramate	3.862	159467	207.38	38766.43	630411	10.0000
Tramadol	3.453	34203376	18173.24	128.16	2246368	10.0000
Trazodone	4.584	1863488	895474.98	451413.63	6104621	10.0000
Venlafaxine	3.806	12452659	2091.63	514.62	15621421	10.0000
Zaleplon	4.360	5853062	1037.68	257.56	22184053	10.0000
Zolpidem	4.313	15661109	8703.59	22779.66	47404007	10.0000
Zopiclone	4.168	776833	635690.90	207800.54	3134707	10.0000

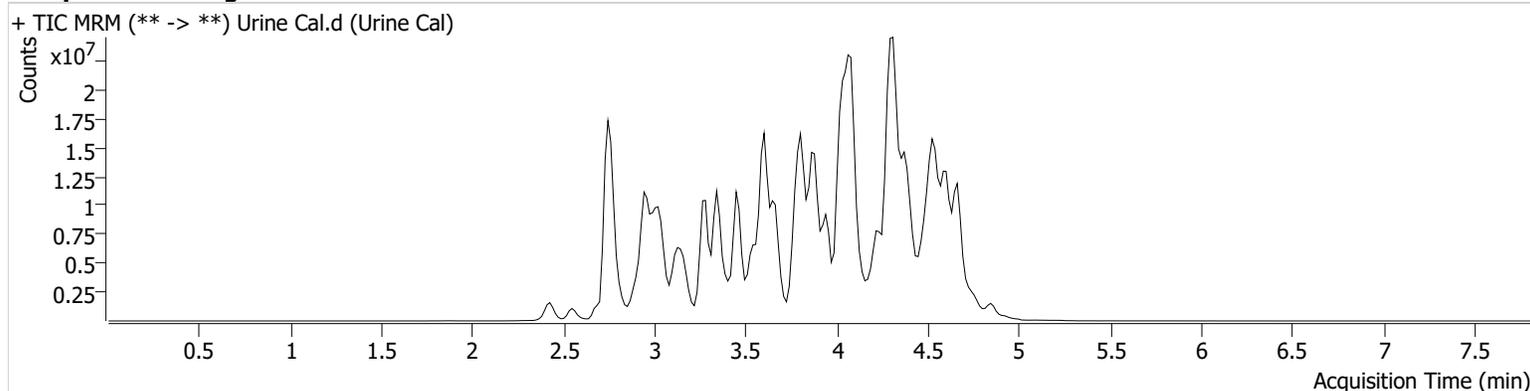


AM #25 Multi-Drug Screen Results

Batch results G:\TOX\Pocatello\Falco\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 25 eval.batch.bin
Calibration Last Update 4/10/2023 8:08:37 AM

Instrument	Falco (069901)	Data File	Urine Cal.d
Type	Sample	Sample	Urine Cal
Acq. Method	AM 25 MDS.m	Operator	Amber Gerheart
Sample Position	P2-B1	Comment	
Injection Volume	5		
Acq. Date-Time	4/4/2023 2:14:12 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.793	2433645	77.54	422.96	14097084	10.7665
6-MAM	2.956	72832	84.83	115.23	1528658	10.3991
7-aminoclonazepam	3.605	1469610	1092.12	325.93	5641206	9.9525
7-aminoflunitrazepam	3.820	2777126	438.02	306.08	5641206	10.2791
9-Hydroxyrisperidone	3.874	10142569	2605.98	87729.83	37174821	11.3939
Acetyl Fentanyl	3.879	608745	70.63	494.55	29043275	9.4041
Acetyl Norfentanyl	2.934	389616	141.68	153.17	25308985	9.5384
a-hydroxyalprazolam	4.525	302118	167.16	99.37	7369633	14.7330
alpha-hydroxymidazolam	4.601	2868228	214.82	194.73	22517493	10.4856
Alpha-PHP	3.840	2904060	1027.05	2351.83	5200302	10.8603
alpha-PVP	3.580	4533408	864.57	124.50	5200302	8.5293
Alprazolam	4.620	3129925	1665.00	639.44	22517493	9.6289
Amitriptyline	4.424	2097365	248.02	129.59	5790772	11.5630
Amphetamine	2.938	1456614	207.59	150.30	5200302	11.8233
Benzoylcegonine	3.421	348260	3094.61	93.52	448865	9.8420
Brompheniramine	4.033	148441	76.93	344.03	10461966	12.8181
Buprenorphine	4.566	969160	81571.91	53516.42	3118266	11.3311
Bupropion	3.794	3074546	1267.96	241.05	13804797	10.2771
Carbamazepine	4.242	10441264	602.92	1925.15	9131958	8.9639
Carisoprodol	4.225	1751006	966.45	85.81	7685723	10.6809
Chlordiazepoxide	4.729	2362132	337.30	6433.22	22517493	11.2762
Chlorpheniramine	3.945	9501812	261.12	96.02	10461966	9.3128
Chlorpromazine	4.603	2174550	229.66	416.16	10276814	9.5458
Citalopram	4.063	3047337	1593.36	424.47	48508711	12.8786
Clomipramine	4.604	3211967	2069.45	1389.24	4724691	9.9833
Clonazepam	4.450	562733	307.06	73.37	162895	9.0281
Clonazolam	4.369	1406004	1374.82	320757.45	7369633	11.9851
Clozapine	4.278	5585214	1441.86	666.26	21691448	9.4297
Cocaehtylene	3.802	5317424	12955.65	570.04	26922530	10.2965
Cocaine	3.604	5425003	6380.21	590.30	26922530	9.0844
Codeine	2.884	410921	1283.98	3833.04	9131958	10.1739
Cyclobenzaprine	4.332	3475631	400.37	77.36	5790772	8.3796
Desipramine	4.363	6259884	772.93	263.30	5790772	12.0214
Dextromethorphan	4.070	2174941	256.48	207.83	10461966	9.6522

Urine Cal



AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrorphan	3.408	3852791	∞	433.77	5200302	11.2714
Diazepam	4.853	1990401	562.60	1186.67	22517493	11.3922
Dihydrocodeine	2.792	1511195	1120.35	523.64	9131958	11.2803
Diphenhydramine	4.039	11830002	1291.57	550.24	48508711	15.1293
DMT	3.013	612521	1284.83	2680.99	5200302	10.7037
Doxepin	4.146	2513277	957.16	218.71	21691448	10.5101
Doxylamine	3.668	12220055	1678.33	1368.26	5200302	10.6646
Duloxetine	4.314	100190	7320.09	40795.78	1193144	8.2675
EDDP	4.084	1032959	159.30	150.09	1842355	10.3152
Estazolam	4.545	5707131	707.83	247.13	7369633	12.4797
Etizolam	4.646	258248	102209.70	238371.69	22517493	11.0409
Fentanyl	4.093	415112	94.91	446.94	22172661	11.1464
Flualprazolam	4.494	1300496	1056.65	605.63	22517493	9.7727
Flunitrazepam	4.573	1088305	395.40	174.56	7369633	7.7307
Fluorofentanyl	4.123	627011	∞	603.90	22172661	14.1173
Fluoxetine	4.313	3142303	983.64	125.81	4724691	10.2973
Flurazepam	4.183	4502775	532.68	22204.40	3118266	8.8155
Hydrocodone	3.052	2024895	238.66	277.41	9131958	9.6581
Hydromorphone	2.551	1729097	23392.10	3657.27	300337	8.8929
Hydroxyzine	4.476	4741954	731.90	1258.84	21691448	13.2697
Imipramine	4.377	7045298	1089.48	493.27	5790772	7.7967
Ketamine	3.564	3338229	1539.99	29.62	14691767	9.2947
Lamotrigine	3.623	311783	145.76	734.21	5200302	11.9759
Levamisole	3.027	3763796	930.33	∞	26922530	11.0843
Levetiracetam	2.692	1373287	202.05	789.20	5641206	8.9134
Lorazepam	4.434	339507	151.07	12.82	7369633	10.2818
Maprotiline	4.409	1690596	96.50	157.92	5790772	10.9211
MDA	3.044	2747323	214.19	77.99	13309062	9.7686
MDEA	3.257	5076244	1021.08	853.84	13309062	12.0349
MDMA	3.120	5869599	1050.36	242.30	13309062	11.0071
Meperidine	3.624	2396404	91.32	459.19	300337	13.1792
Meprobamate	3.688	834983	246.73	110.26	7685723	7.2603
Methadone	4.389	8895864	314.71	294.10	29043275	8.9792
Methamphetamine	3.030	4099932	563.71	82.64	13309062	11.0017
Methocarbamol	3.609	278311	68.21	144.80	7685723	9.8892
Methylphenidate	3.533	10248213	665.04	506.47	10262376	12.7929
Metoprolol	3.468	1012574	1337.67	892.92	5200302	9.8182
Midazolam	4.755	1282384	371.39	329.99	5641206	10.5317
Mirtazapine	3.961	4223752	1131.22	846.26	3118266	7.7896
Mitragynine	4.198	856220	1481.01	17879.05	22172661	9.6031
Morphine	2.414	404327	860.88	756.73	300337	12.1767
Norbuprenorphine	3.844	91278	93.27	215.50	3118266	7.9399
Nordiazepam	4.701	1724867	874.39	514.76	22517493	9.5060
Norfentanyl	3.364	6118990	193.57	990.26	25308985	8.5501
Norhydrocodone	2.962	107667	71.34	54.04	9131958	8.6638
Norketamine	3.657	761937	109.01	2009.94	14691767	9.0035
Normeperidine	3.626	2784144	196.94	108.07	300337	12.1760
Noroxycodone	2.914	1715588	685.93	123.25	9131958	8.4795
Nortriptyline	4.395	2163288	491.07	266.29	4724691	10.5219
O-desmethyl-tramadol	2.948	10423379	12609.90	154.71	10943097	11.6870
O-desmethylvenlafaxine	3.284	2360597	107.00	∞	10943097	10.3904
Olanzapine	3.834	2164104	403063.97	2360.52	4724691	8.5755
Oxazepam	4.515	1498310	754.48	6.74	7369633	10.8263
Oxycodone	2.973	3843129	940.22	306.73	14691767	10.0925
Oxymorphone	2.426	3340120	949.41	555.56	300337	9.0622
Paroxetine	4.325	382442	92.20	72.89	4724691	8.2479
Phenazepam	4.646	1719405	278.38	150.56	22517493	7.2884
Phencyclidine	3.932	3198924	395.81	329.12	10943097	9.1950
Phentermine	3.183	1215965	73.16	28.96	10262376	11.9419
Phenytol	4.133	291452	949.90	201.23	162895	10.6257

Urine Cal

AA



AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Primidone	3.503	483990	1729.30	11.90	162895	8.5514
Promethazine	4.330	8371043	487.72	439.97	5790772	11.5793
Pseudoephedrine	2.754	52479828	4919.73	398.57	13309062	11.6563
Quetiapine	4.460	5821658	1410.96	558.95	10461966	8.7423
Risperidone	4.059	9047218	2979.62	527.54	10461966	10.7617
Sertraline	4.544	1086292	647.44	377.53	4724691	11.3753
Sufentanil	4.429	447028	726.77	139.51	22172661	22.1413
Tapentadol	3.473	6374691	1042.48	326.00	14691767	9.2082
Temazepam	4.668	5463242	251.28	0.86 Low	22517493	9.6342
Topiramate	3.862	44799	30211.27	16197.85	209940	8.4358
Tramadol	3.453	21973876	∞	∞	1528658	9.4408
Trazodone	4.584	8088080	1272.04	734.56	29043275	9.1229
Venlafaxine	3.821	10944893	2563.96	107.74	10943097	12.5467
Zaleplon	4.360	2372560	705.13	588.71	7369633	12.2019
Zolpidem	4.313	12623698	758.02	1404.07	41448228	9.2188
Zopiclone	4.183	18481	5523.32	60.10	73284	10.1760

AA

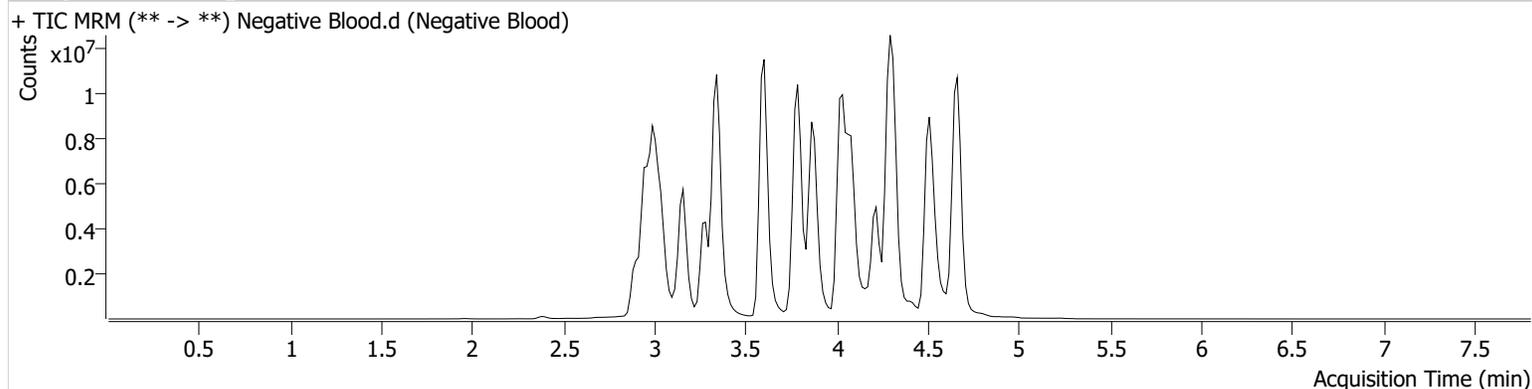


AM #25 Multi-Drug Screen Results

Batch results G:\TOX\Pocatello\Falco\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 25 eval.batch.bin
Calibration Last Update 4/10/2023 8:08:37 AM

Instrument	Falco (069901)	Data File	Negative Blood.d
Type	Sample	Sample	Negative Blood
Acq. Method	AM 25 MDS.m	Operator	Amber Gerheart
Sample Position	P2-C1	Comment	
Injection Volume	5		
Acq. Date-Time	4/4/2023 2:22:39 PM		
Sample Info.			

Sample Chromatogram



AA

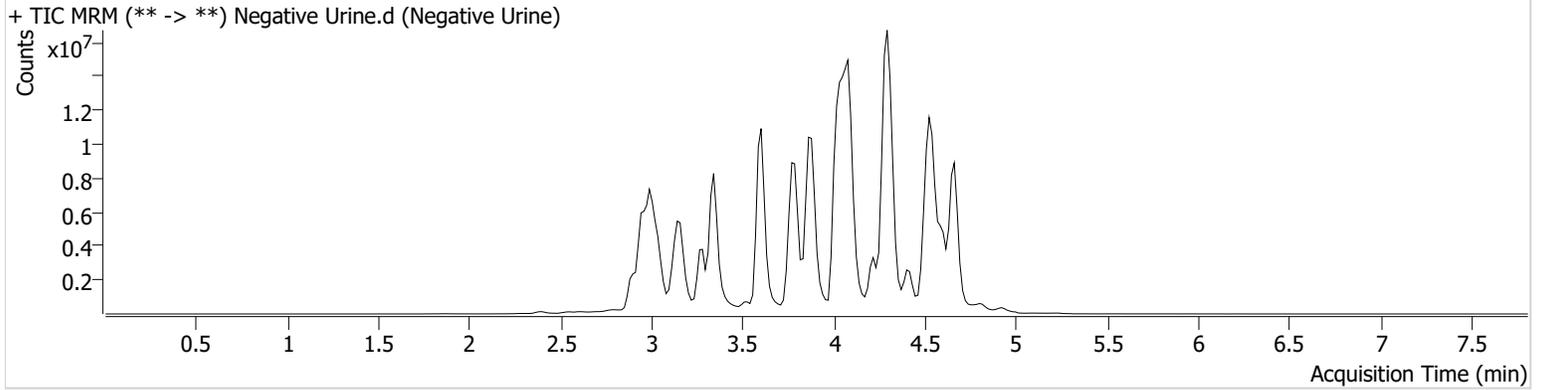


AM #25 Multi-Drug Screen Results

Batch results G:\TOX\Pocatello\Falco\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 25 eval.batch.bin
Calibration Last Update 4/10/2023 8:08:37 AM

Instrument	Falco (069901)	Data File	Negative Urine.d
Type	Sample	Sample	Negative Urine
Acq. Method	AM 25 MDS.m	Operator	Amber Gerheart
Sample Position	P2-D1	Comment	
Injection Volume	5		
Acq. Date-Time	4/4/2023 2:31:05 PM		
Sample Info.			

Sample Chromatogram



AM# 26: Screening of THC and Metabolites in Blood and Urine by LC-MS/MS

Extraction Date: 4/4/2023

Plate lot#: 220802

Mobile phase A: 10mM Amm Form

Blank Blood Lot: Lampire 23A52593

LCMS-QQ ID: 069901

Analyst: Amber Gerheart

Plate Retest Date: 7/23/2023

Mobile phase B: 0.1% Formic Acid in MeOH

Blank Urine Lot: POC021022

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. Urine hydrolysis: add 1.5mL urine to blank plate, add 250µl 1N KOH. Shake and incubate at 40 degrees for 15 minutes.
- 3. Using a calibrated pipette, add **1000µl blood and urine (if applicable) (calibrated pipette)** into the appropriate wells of analytical (standards) plate. **Pipette ID:** 42
- 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 5. Pipette **500µL 0.1% formic acid in water blood sample, 500 µL saturated phosphate buffer in urine** in wells of analytical plate.
- 6. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 7. Transfer **700-800µL of blood+acid or urine+acid** mixture to corresponding wells of SLE+ plate. Amount transferred: 800µL
- 8. 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*)
- 9. Wait 5 minutes.
- 10. Add **2.25mL MTBE. (Add in 3 increments of 750uL)**
- 11. Wait 5 minutes.
- 12. Apply positive pressure for approx. 15 seconds. (*10-15 PSI- Selector to the left*).
- 13. Add **2.25mL Hexane. (Add in 3 increments of 750uL)**
- 14. Wait 5 minutes.
- 15. Apply positive pressure for approx. 15 seconds. (*10-15 PSI- Selector to the left*).
- 16. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
- 17. 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.
- 2. Make any necessary integration changes, R² values ≥0.98 for each analyte
- 3. RT +/- 2% or 0.100 min, whichever is greater
- 4. Confirmation testing on case samples with a response for THC and OH-THC of 3ng/mL or greater and/or Carboxy-THC at 10ng/mL or greater (analyst discretion between 5-10ng/mL) may be pursued.
- 5. Did all QCs pass for each analyte? (if not, describe in comments section)
- 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

THC not evaluated due to peak shape.

Instrument stopped twice due to high pressure. Instrument fixed and run continued with no further issues.

AM

	1	2	3	4	5	6
A	Urine QC					
B	Urine Negative					
C	P2023-0867-1					
D	P2023-0867-2					
E	P2023-0867-3					
F	P2023-1007-1					
G						
H						

Hydrolysis Plate for AM 26

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_URINE	M2023-1067-3	P2023-0765-1	P2023-0796-2	IS + QC_1
B	IS + Cal. 2	Blood Negative	M2023-1069-2	P2023-0766-1	P2023-0811-1	IS + Cal. 7
C	IS + Cal. 3	Urine Negative	M2023-1151-1	P2023-0767-1	P2023-0853-2	IS + Cal. 6
D	IS + Cal. 4	M2023-0917-1	P2023-0716-1	P2023-0768-1	P2023-0867-1	IS + Cal. 5
E	IS + Cal. 5	M2023-0918-1	P2023-0722-1	P2023-0778-3	P2023-0867-2	IS + Cal. 4
F	IS + Cal. 6	M2023-0920-1	P2023-0724-1	P2023-0787-1	P2023-0867-3	IS + Cal. 3
G	IS + Cal. 7	M2023-0953-1	P2023-0725-1	P2023-0788-1	P2023-1007-1	IS + Cal. 2
H	IS + QC_1	M2023-0980-1	P2023-0735-3	P2023-0789-1	IS + QC_1	IS + Cal. 1

All wells to contain 100 µl of residual DMSO

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_URINE	M2023-1067-3	P2023-0765-1	P2023-0796-2	P2023-0722-1
B	IS + Cal. 2	Blood Negative	M2023-1069-2	P2023-0766-1	P2023-0811-1	
C	IS + Cal. 3	Urine Negative	M2023-1151-1	P2023-0767-1	P2023-0853-2	
D	IS + Cal. 4	M2023-0917-1	P2023-0716-1	P2023-0768-1	P2023-0867-1	
E	IS + Cal. 5	M2023-0918-1		P2023-0778-3	P2023-0867-2	
F	IS + Cal. 6	M2023-0920-1	P2023-0724-1	P2023-0787-1	P2023-0867-3	
G	IS + Cal. 7	M2023-0953-1	P2023-0725-1	P2023-0788-1	P2023-1007-1	
H	IS + QC_1	M2023-0980-1	P2023-0735-3	P2023-0789-1		

SLE and Injection Plate

AS

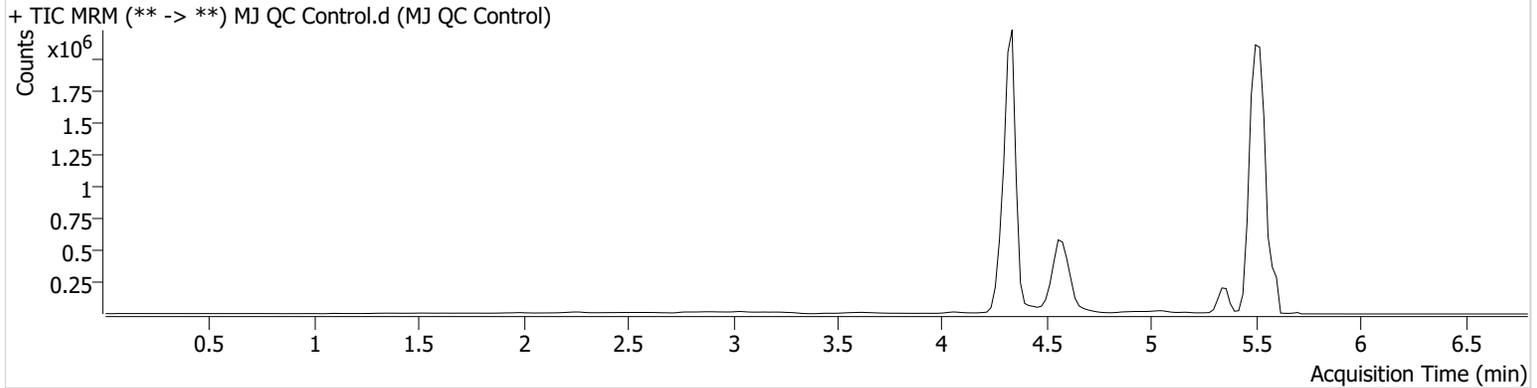


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ QC Control.d
Type	QC	Sample	MJ QC Control
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-H1	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 8:16:16 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.550	4318	105526	5.0567 ng/ml
THC-COOH	4.596	429721	2112359	13.9002 ng/ml
THC-OH	4.342	75416	8328800	4.7401 ng/ml

AS

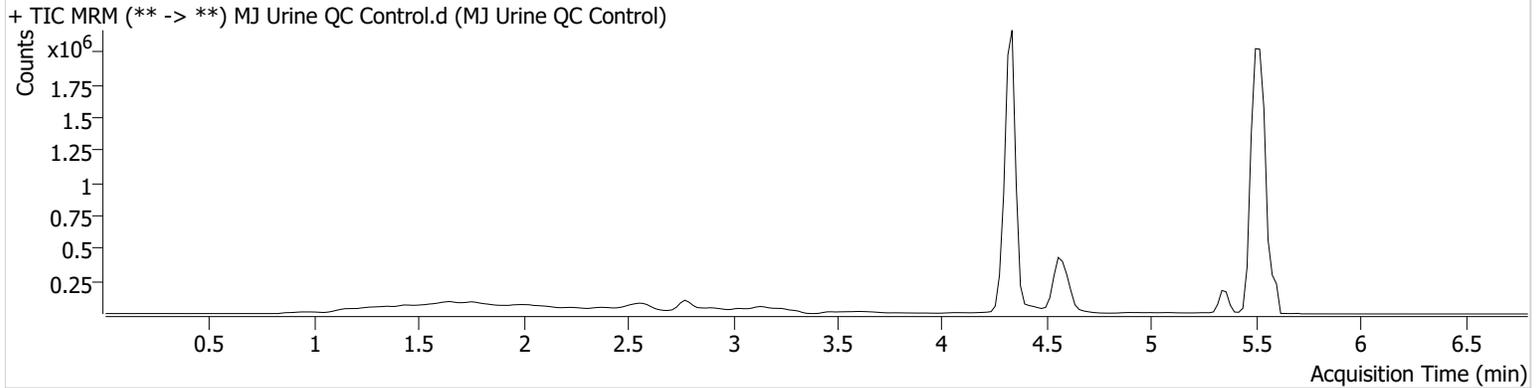


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Urine QC Control.d
Type	QC	Sample	MJ Urine QC Control
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-A2	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 8:23:50 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.550	1812	46772	4.7949 ng/ml
THC-COOH	4.596	269062	1381854	13.2515 ng/ml
THC-OH	4.342	66745	7298384	4.7855 ng/ml

AA

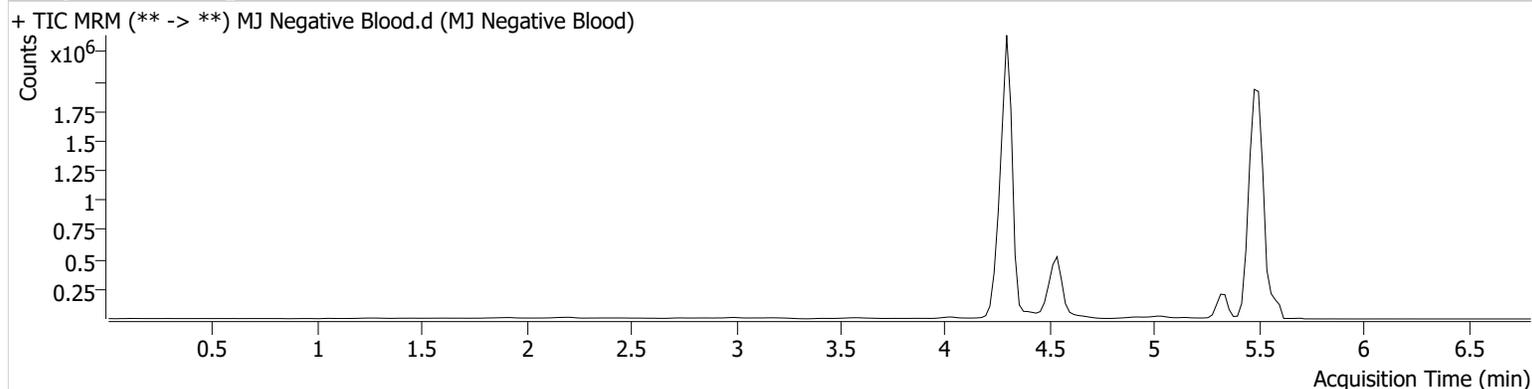


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Negative Blood.d
Type	Sample	Sample	MJ Negative Blood
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-B2	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 8:31:27 PM		
Sample Info.			

Sample Chromatogram



AG

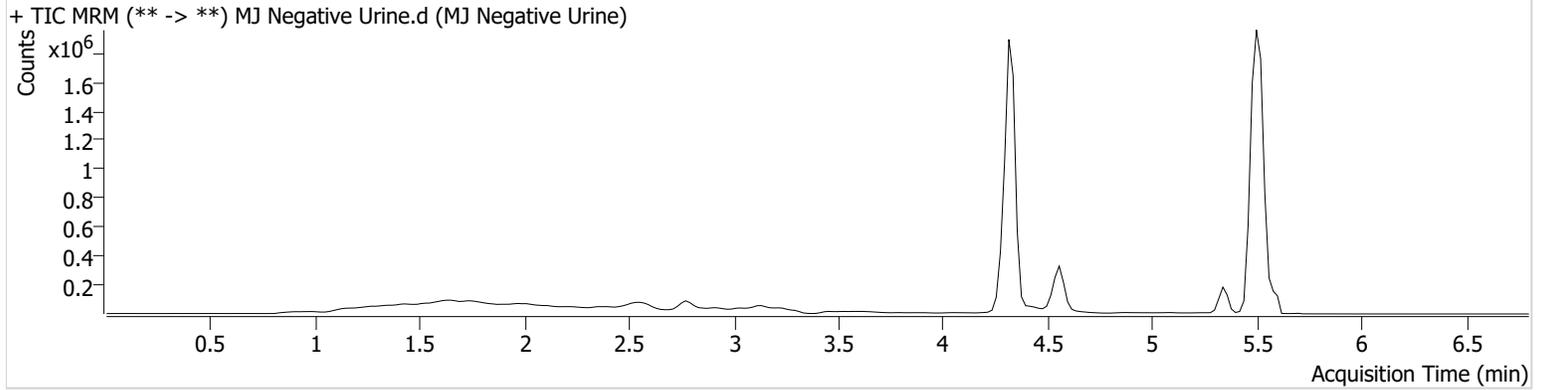


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Negative Urine.d
Type	Sample	Sample	MJ Negative Urine
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-C2	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 8:39:02 PM		
Sample Info.			

Sample Chromatogram

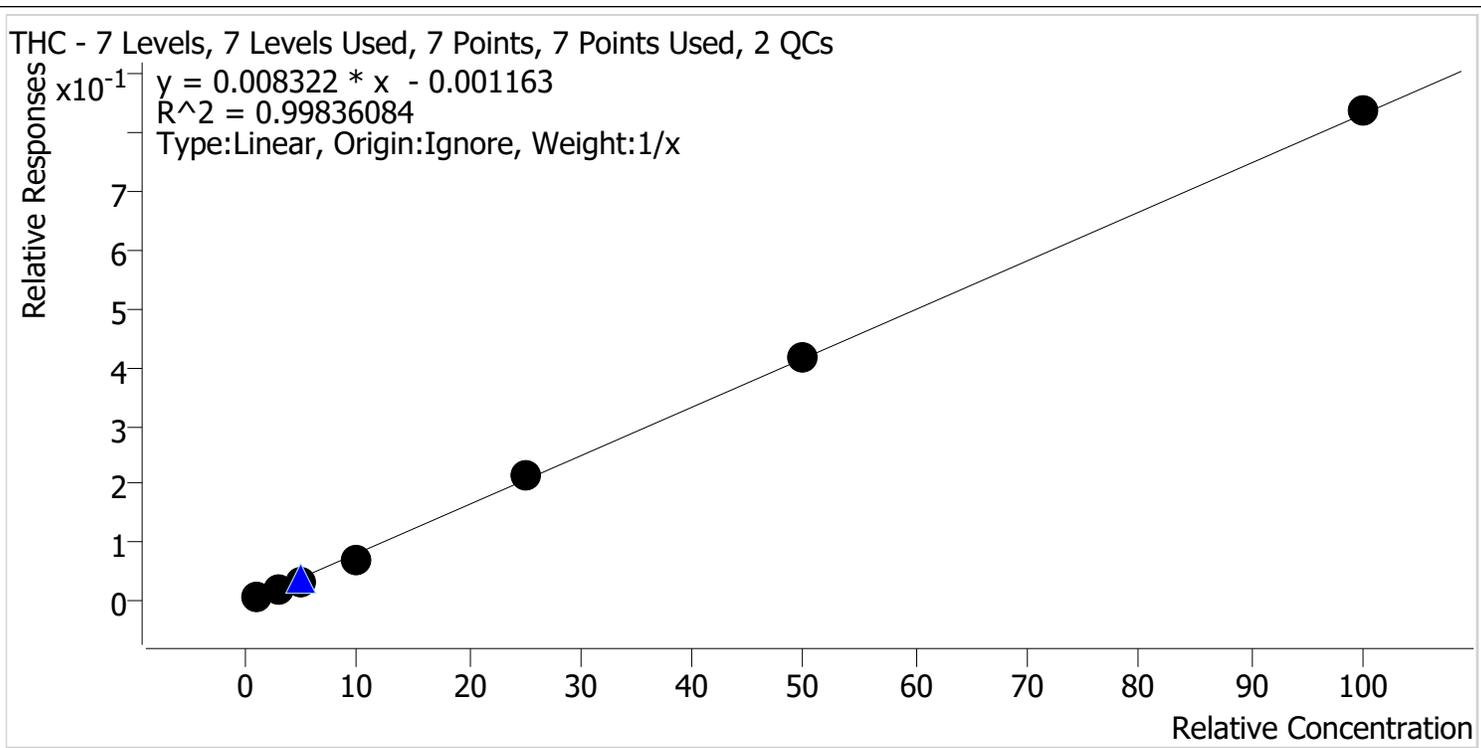


AA



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Last Cal. Update 4/6/2023 11:45 AM
Analyst Name ISP\datastor
Analyte THC **Internal Standard** THC-D3



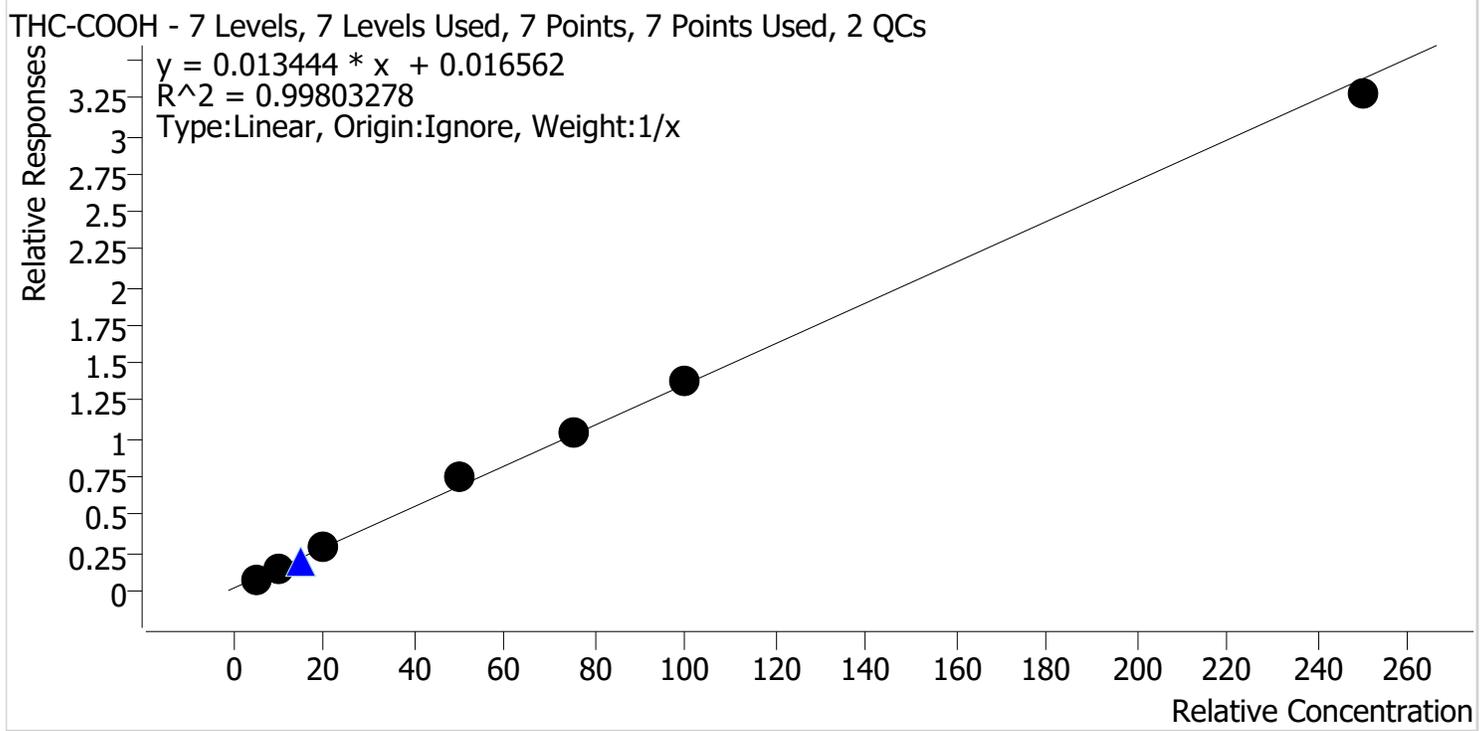
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	1.0	1.2	121.4
MJ Cal 2	2	✓	3.0	2.9	97.6
MJ Cal 3	3	✓	5.0	4.5	89.2
MJ Cal 4	4	✓	10.0	8.8	88.0
MJ Cal 5	5	✓	25.0	25.6	102.6
MJ Cal 6	6	✓	50.0	50.3	100.6
MJ Cal 7	7	✓	100.0	100.7	100.7

AA



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Last Cal. Update 4/6/2023 11:45 AM
Analyst Name ISP\datastor
Analyte THC-COOH **Internal Standard** THC-COOH-D9



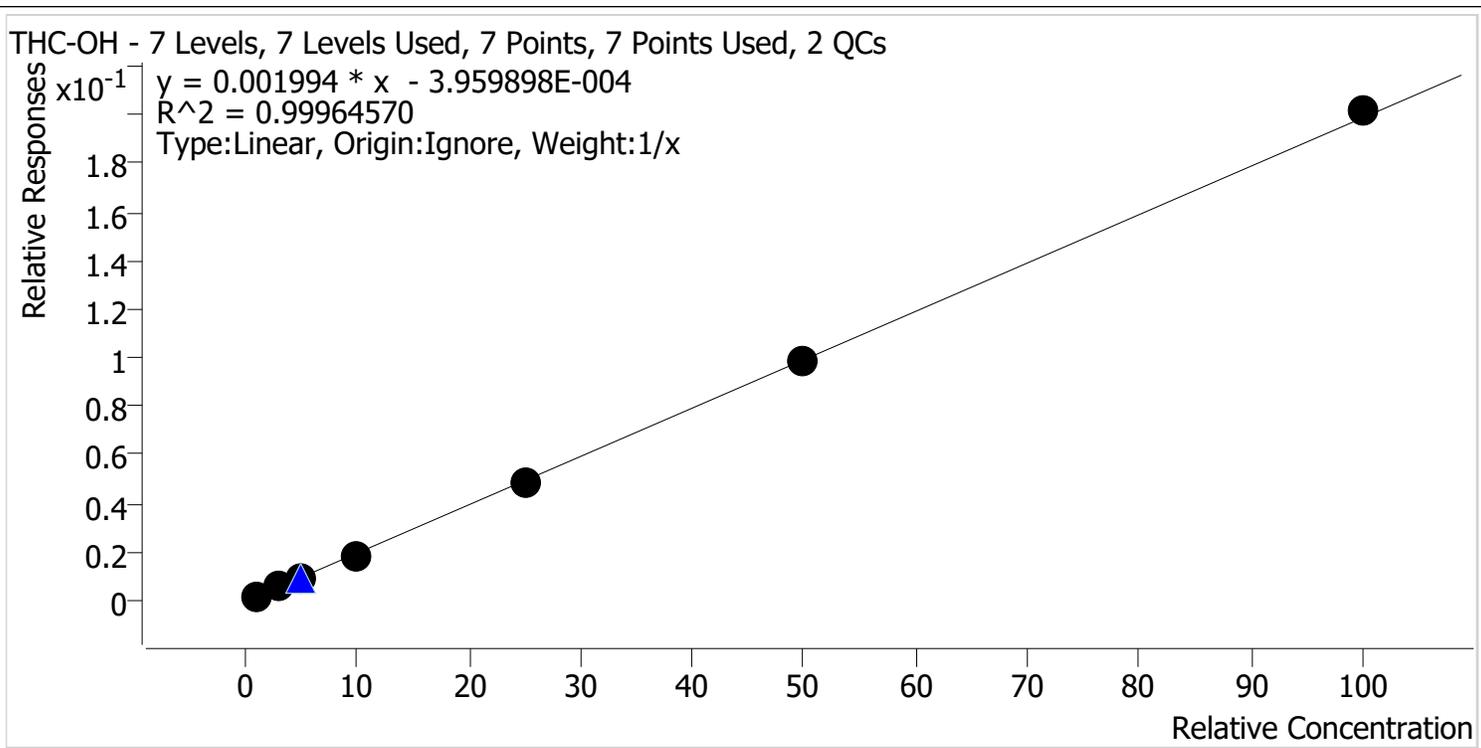
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	5.0	4.3	85.5
MJ Cal 2	2	✓	10.0	10.1	100.7
MJ Cal 3	3	✓	20.0	21.1	105.5
MJ Cal 4	4	✓	50.0	53.9	107.8
MJ Cal 5	5	✓	75.0	75.8	101.1
MJ Cal 6	6	✓	100.0	102.3	102.3
MJ Cal 7	7	✓	250.0	242.5	97.0

AA



AM #26 Cannabinoids Screen Calibration Curve Report

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Last Cal. Update 4/6/2023 11:45 AM
Analyst Name ISP\datastor
Analyte THC-OH **Internal Standard** THC-OH-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
MJ Cal 1	1	✓	1.0	1.1	109.3
MJ Cal 2	2	✓	3.0	2.9	97.5
MJ Cal 3	3	✓	5.0	4.9	98.2
MJ Cal 4	4	✓	10.0	9.7	96.8
MJ Cal 5	5	✓	25.0	24.4	97.6
MJ Cal 6	6	✓	50.0	49.6	99.2
MJ Cal 7	7	✓	100.0	101.4	101.4

AG

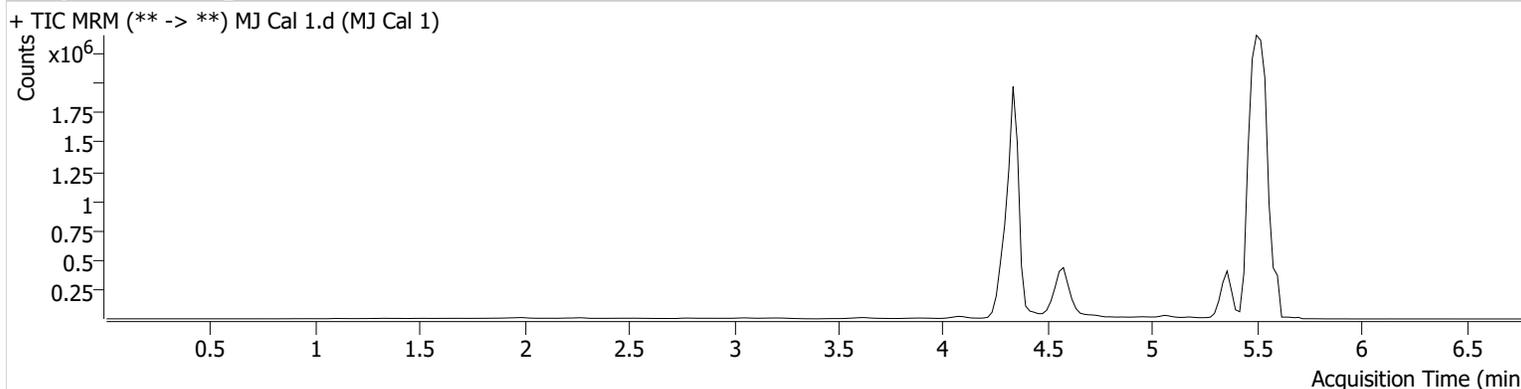


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Cal 1.d
Type	Cal	Sample	MJ Cal 1
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-A1	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 7:23:00 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.550	2095	234416	1.2136 ng/ml	Low
THC-COOH	4.616	134654	1818726	4.2753 ng/ml	Low
THC-OH	4.362	14141	7931401	1.0929 ng/ml	Low

AG

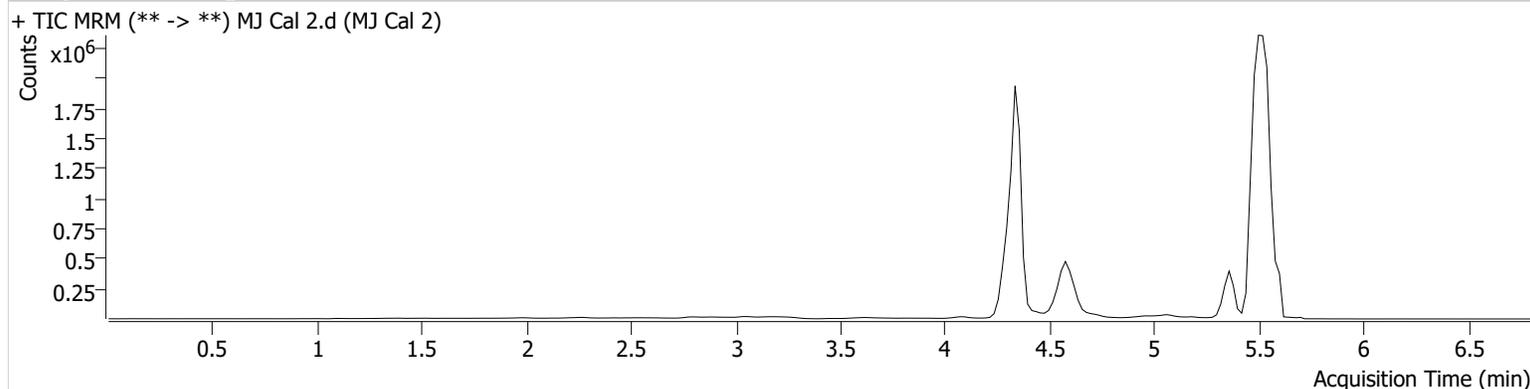


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Cal 2.d
Type	Cal	Sample	MJ Cal 2
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-B1	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 7:30:46 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	5.570	6307	271884	2.9271 ng/ml	Low
THC-COOH	4.616	280247	1843886	10.0735 ng/ml	
THC-OH	4.362	41275	7592367	2.9252 ng/ml	Low

AA

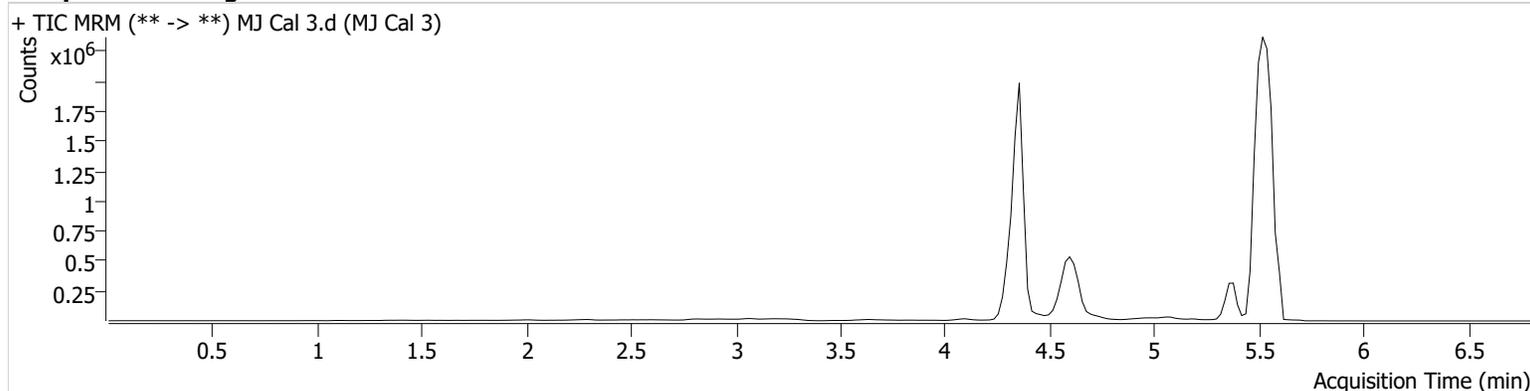


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Cal 3.d
Type	Cal	Sample	MJ Cal 3
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-C1	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 7:38:22 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.570	7723	214720	4.4617 ng/ml
THC-COOH	4.616	520917	1735162	21.0992 ng/ml
THC-OH	4.362	67269	7161581	4.9098 ng/ml

AG

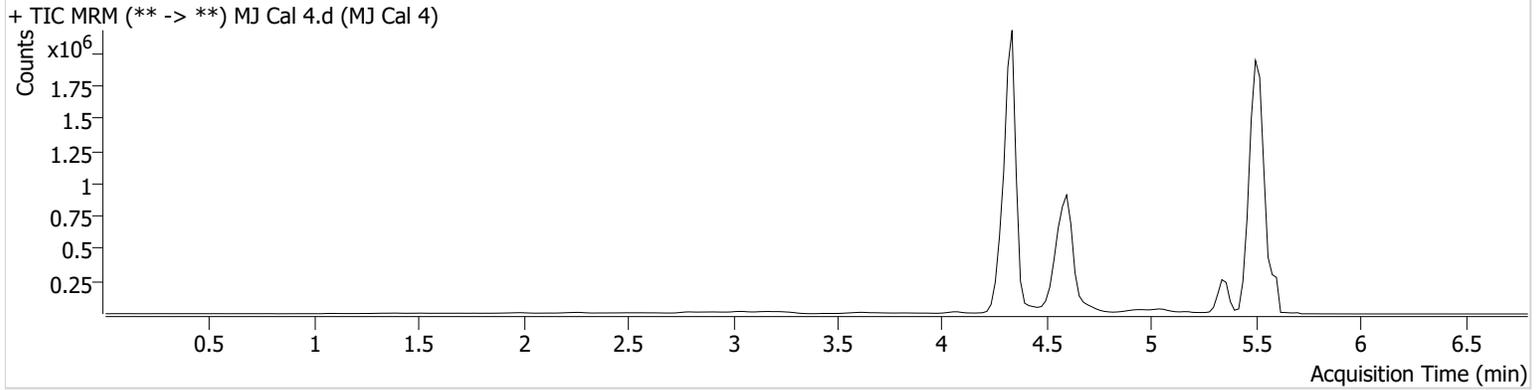


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Cal 4.d
Type	Cal	Sample	MJ Cal 4
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-D1	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 7:45:58 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.550	11767	163215	8.8023 ng/ml
THC-COOH	4.596	1278970	1725236	53.9116 ng/ml
THC-OH	4.342	142741	7551476	9.6792 ng/ml

AG

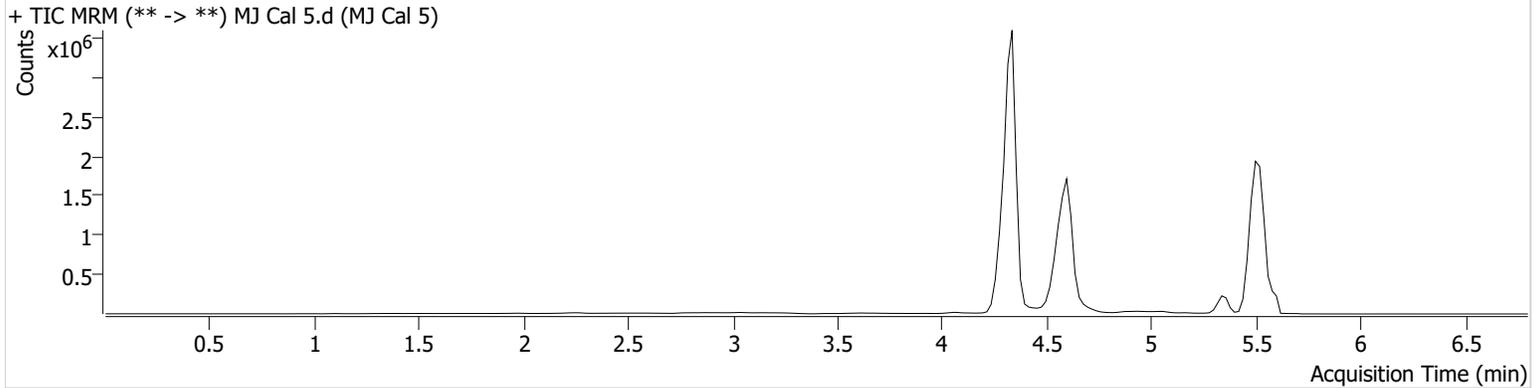


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Cal 5.d
Type	Cal	Sample	MJ Cal 5
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-E1	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 7:53:34 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.550	30475	143596	25.6407 ng/ml
THC-COOH	4.596	2509772	2422035	75.8471 ng/ml
THC-OH	4.342	512675	10622476	24.4054 ng/ml

AG

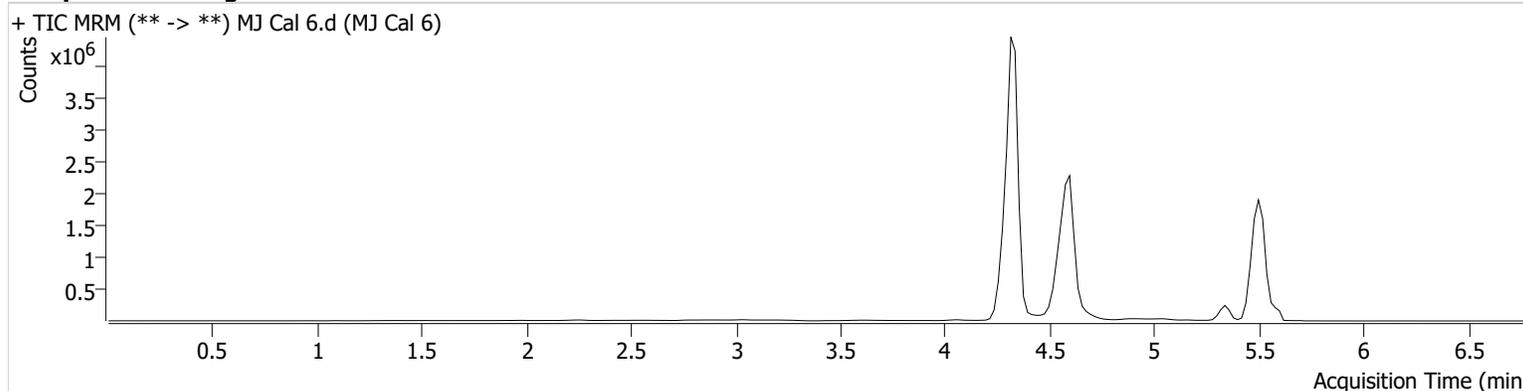


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Cal 6.d
Type	Cal	Sample	MJ Cal 6
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-F1	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 8:01:08 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.530	73500	176079	50.2965 ng/ml
THC-COOH	4.596	3575321	2568223	102.3216 ng/ml
THC-OH	4.342	1015388	10306839	49.6100 ng/ml

AG

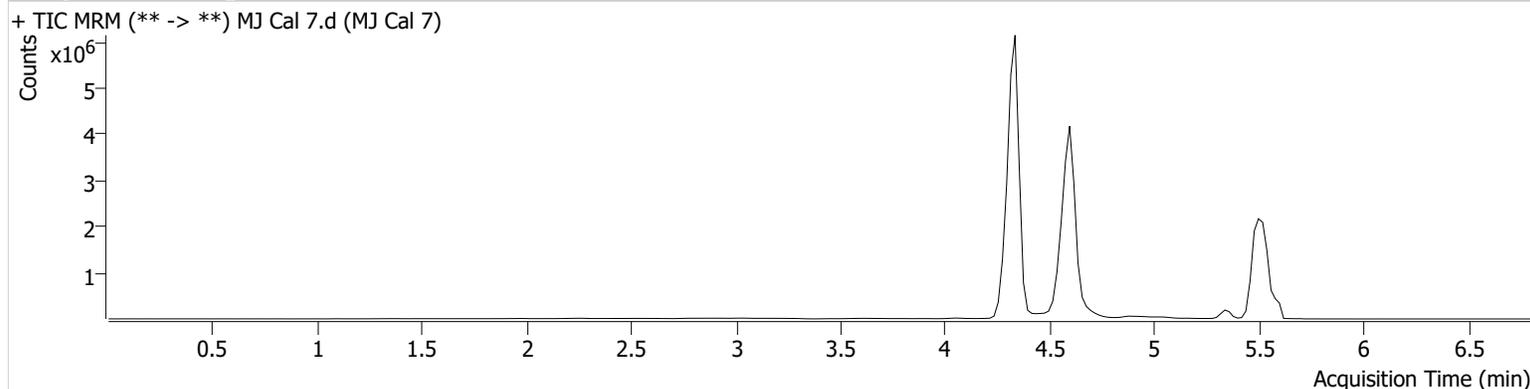


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\AM 25 26\040423 AM 25 26 AG\QuantResults\AM 26.batch.bin
Calibration Last Update 4/6/2023 11:45:22 AM

Instrument	Falco (069901)	Data File	MJ Cal 7.d
Type	Cal	Sample	MJ Cal 7
Acq. Method	AM 26 THC.m	Operator	Amber Gerheart
Sample Position	P1-G1	Comment	
Injection Volume	10		
Acq. Date-Time	4/4/2023 8:08:42 PM		

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	5.550	78100	93359	100.6581 ng/ml
THC-COOH	4.596	6615628	2019258	242.4717 ng/ml
THC-OH	4.342	1798607	8915938	101.3775 ng/ml