


















Worklist: 3484

<u>LAB_CASE</u>	<u>ITEM</u>	<u>TASK_ID</u>	<u>DESCRIPTION</u>	
C2019-0955	2	154951	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
C2019-0997	2	154952	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
M2019-2174	2	154953	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
M2019-2306	5	154954	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
M2019-2450	3	154955	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
M2019-2452	3	154956	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
M2019-2486	1	154957	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
M2019-2708	3	154958	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
M2019-2712	3	154959	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1582	1	154960	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1606	1	154961	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1634	1	154962	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1636	1	154963	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1715	1	154964	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1716	1	154965	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1755	1	154966	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1834	1	154967	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	

When putting cases into review, I noticed that the wrong report template was used for the cases (it had the AM 28 heading), so I had to regenerate the reports. In order to do so, I had to re-analyze and save. Nothing was changed in the batch but the calibration date for the central file and the case samples will be different.

AM 13: Benzo and Z-Drugs LCMS Urine Extraction

Extraction Date: 06/18/2019
Negative Blood/Urine Lot: POC031319
Positive Control Working Solution Lot: WS013119
Calibrator Working Solution Lot #'s: WS021319
Oxazepam Glucuronide Lot: Alltech 715-5035
LC Column: Agilent Poroshell 120 EC-C18 (2.1x75mm; 2.7 Micron)

Analyst: Celena Shrum
LCMS-QQQ ID: Abby Falco
b-glucuronidase Lot: Kura 4150

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. Prep Non-Extracted Calibrators:

Level	ng/mL	Working Solution (ng/μL)	Volume to add (μL)
Blank	-	-	-
1	10	1	10
2	25	1	25
3	50	1	50
4	100	1	100
5	500	10	50
6	1000	10	100
7	3000 (Urine)	10	300

Analytic:

- 1. Remove working solutions, external control, negative urine and case samples from cold storage.
- 2. **Blood:** Add 1mL samples, and controls to Extraction tube. **Urine:** To each labeled round bottomed tube add 1mL sample, using negative blood or urine sample for both negative and positive control. Positive control: spike negative blood or urine with 300uL positive control working solution. Urine Required additional glucuronide positive and negative controls.
- 3. To all samples: add 100uL Internal Standard Working Solution.
- 4. For Urine Only: Glucuronide Cleaving:
 - 4.1. Add 20uL of 2M Acetate buffer to all urine samples, Vortex.
 - 4.2. To all but negative glucuronide control: add 76uL Kura b-glucuronidase. Cap and gently rock.
 - 4.3. Place in oven at ~60C for approx. 30 minutes.
- 5. Add 4mL water to all extraction tubes. Urine Samples: Transfer into the extraction tubes.
- 6. Place on tube rocker at ambient temp for ~ 10 minutes.
- 7. Centrifuge for ~ 10 min at ~2500rpm.
Optional: To break up emulsions: re-centrifuge at ~3000rpm for ~5 minutes
- 8. Transfer solvent to tapered bottom tube and evaporate to dryness under nitrogen @ 37C.
- 9. Reconstitute with 100uL of 9:1 mobile phase A:B
- 10. Transfer to labeled ALS vial with insert.
- 11. Run using appropriate LCMS Instrument Acquisition.

Post-Analytic

- 1. Complete Data Analysis on all samples and corresponding sample blanks
LCMS Data Path: C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3484 Urine 042419 CS\QuantResults\am 13 worklist 3484
- 2. Did positive and negative control samples provide intended response? Y / N
- 3. RT within +/-5% of Calibrators; Ion Ratios within +/- 20% of the calibrator average for the run.
- 4. Central File Packet to include: LIMS Worklist, Method Checklist, Working solution prep sheet, and Control sample LCMS data printouts.

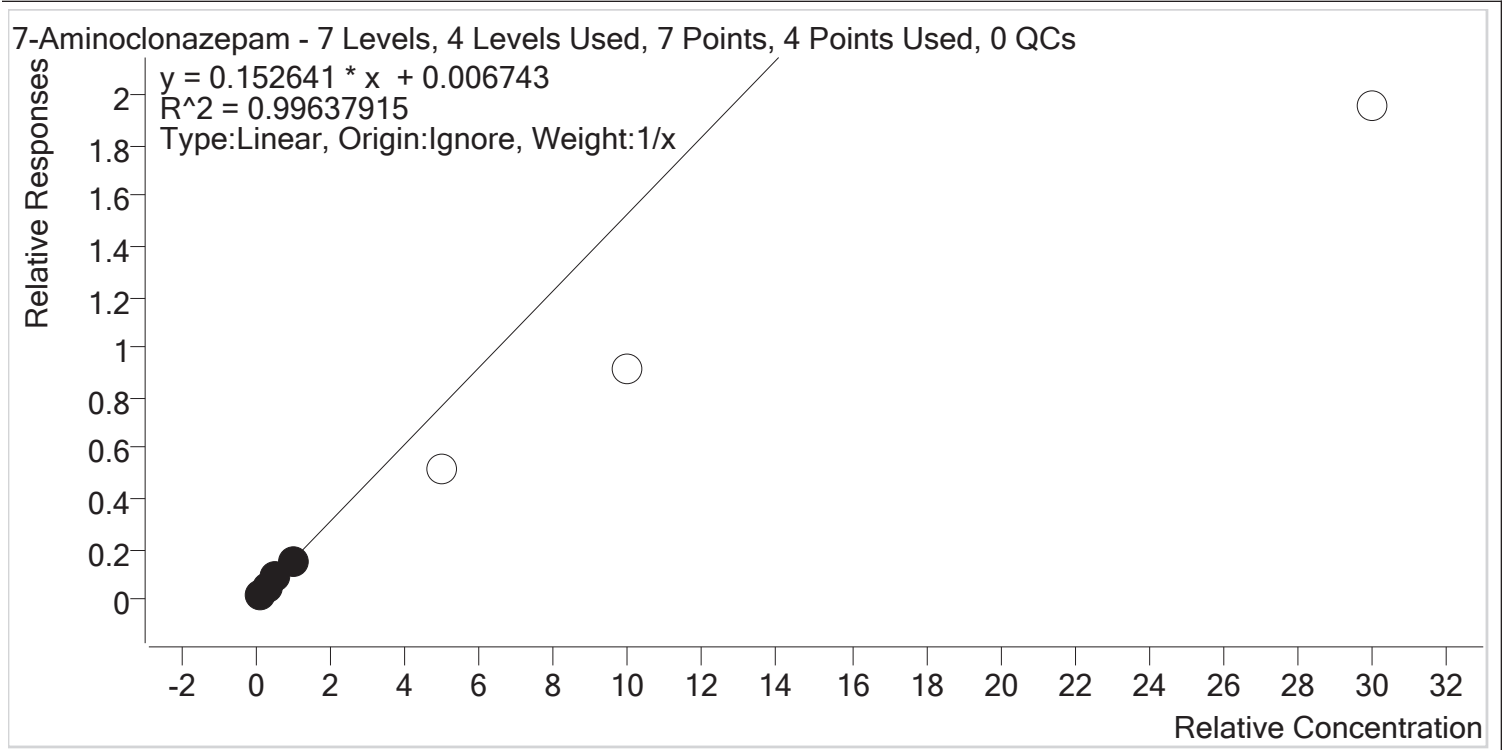
Comments:

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte 7-Aminoclonazepam **Internal Standard** 7-Aminoflunitrazepam-D7 ISTD



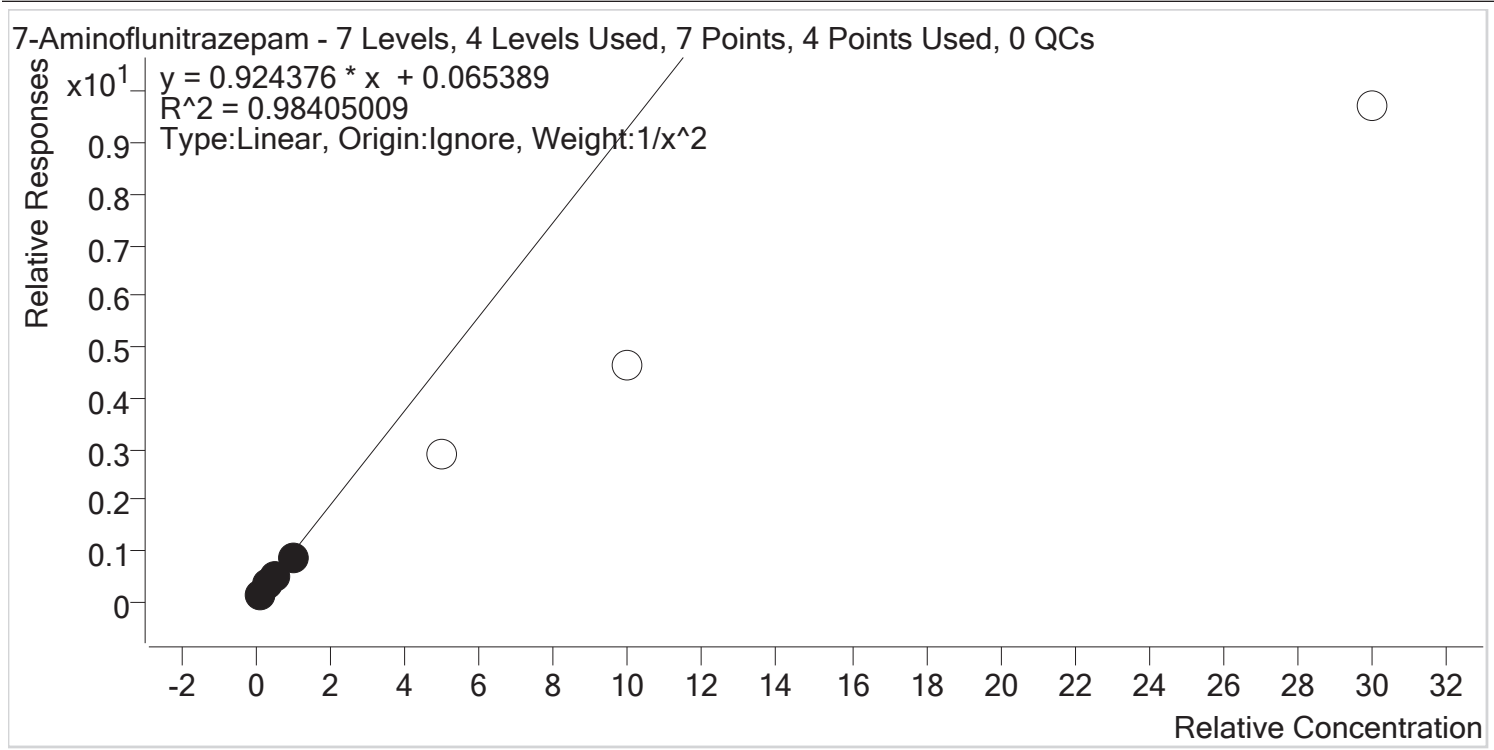
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.2	91.9
Cal 2- 25ng	2	✓	25.0	26.9	107.7
Cal 3 -50ng	3	✓	50.0	51.5	103.1
Cal 4-100ng	4	✓	100.0	97.4	97.4
Cal 5-500ng	5	×	500.0	336.3	67.3
Cal 6-1000ng	6	×	1000.0	599.8	60.0
Cal 7-3000ng	7	×	3000.0	1277.6	42.6

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte 7-Aminoflunitrazepam **Internal Standard** 7-Aminoflunitrazepam-D7 ISTD



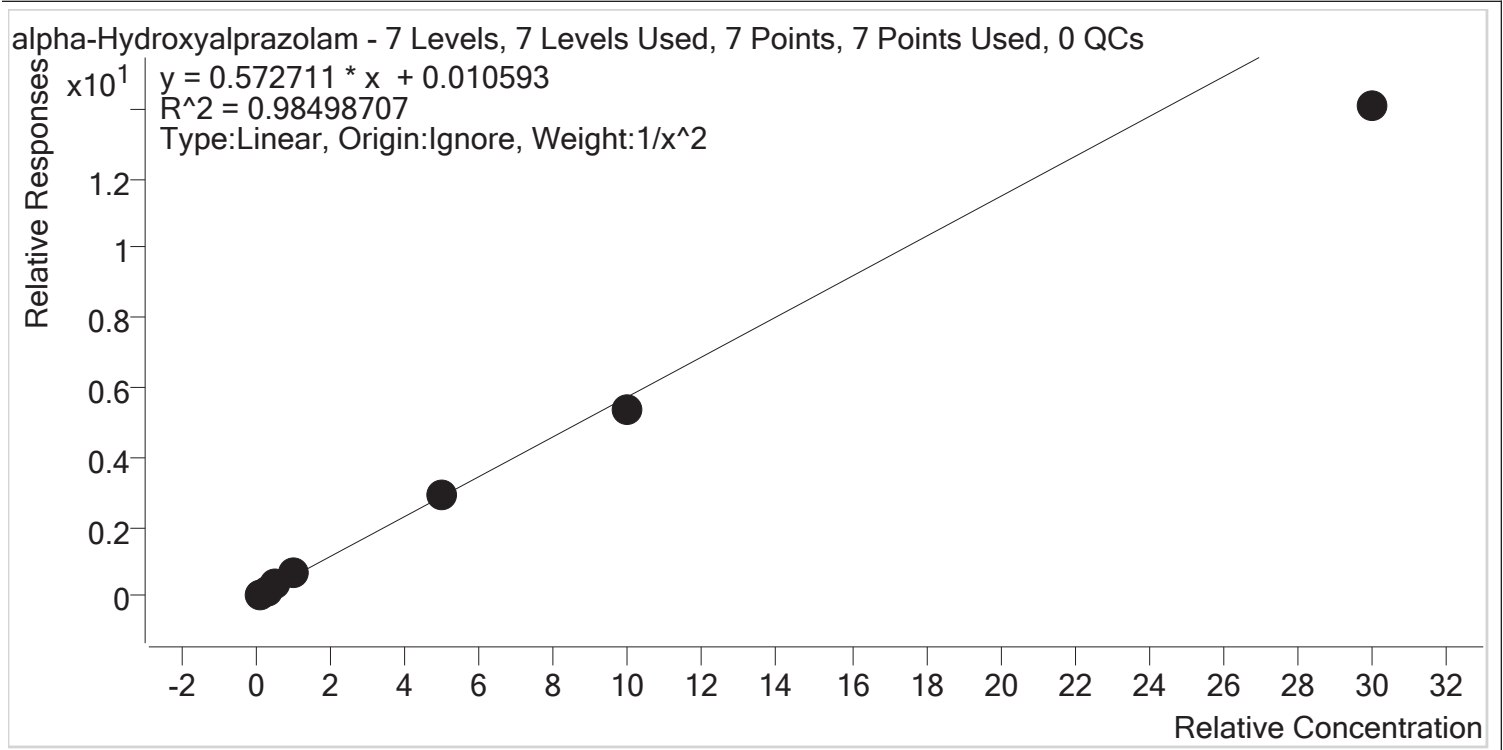
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.6	95.7
Cal 2- 25ng	2	✓	25.0	28.1	112.5
Cal 3 -50ng	3	✓	50.0	50.5	101.0
Cal 4-100ng	4	✓	100.0	90.8	90.8
Cal 5-500ng	5	×	500.0	305.7	61.1
Cal 6-1000ng	6	×	1000.0	496.7	49.7
Cal 7-3000ng	7	×	3000.0	1044.5	34.8

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte alpha-Hydroxyalprazolam **Internal Standard** alphahydroxyalprazolam -D5 ISTD



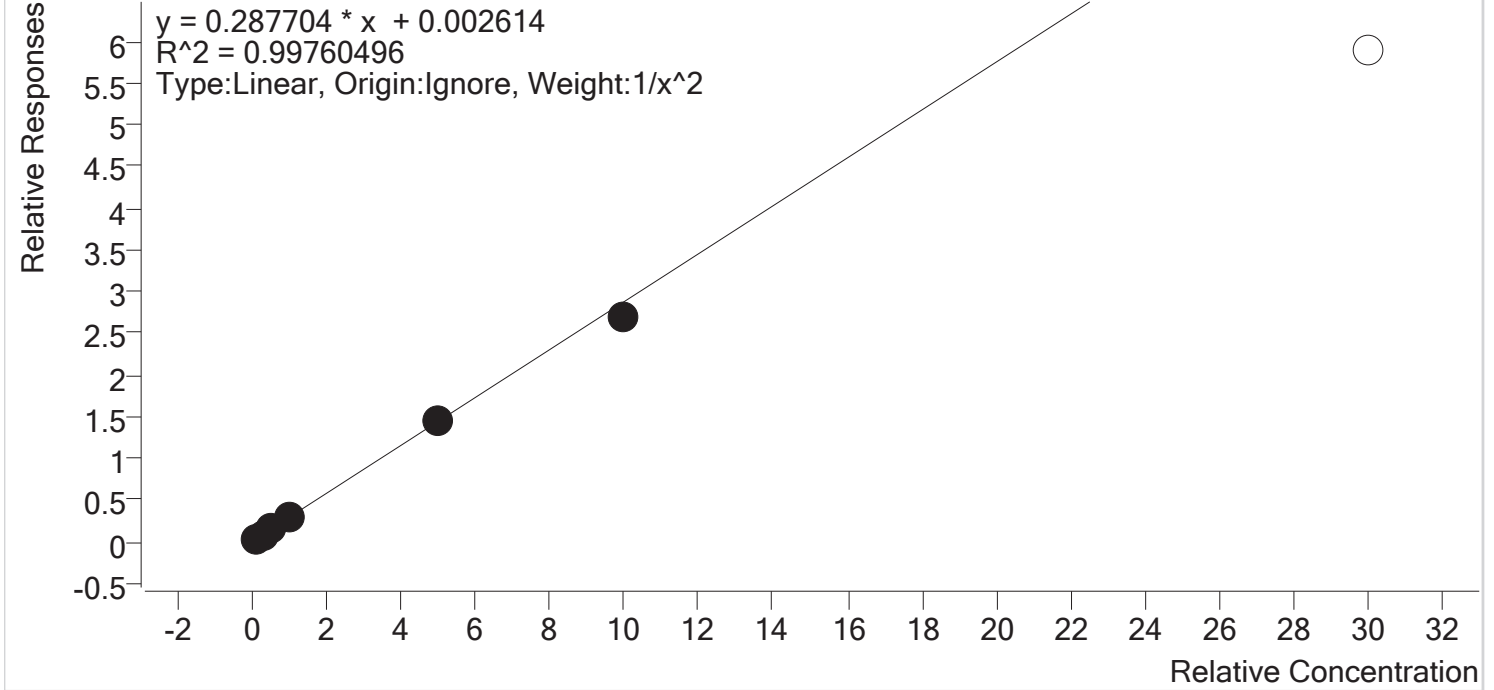
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.4	93.7
Cal 2- 25ng	2	✓	25.0	27.2	108.9
Cal 3 -50ng	3	✓	50.0	54.1	108.2
Cal 4-100ng	4	✓	100.0	111.5	111.5
Cal 5-500ng	5	✓	500.0	508.2	101.6
Cal 6-1000ng	6	✓	1000.0	942.4	94.2
Cal 7-3000ng	7	✓	3000.0	2452.2	81.7



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte alpha-hydroxytriazolam **Internal Standard** Nordiazepam-D5 ISTD

alpha-hydroxytriazolam - 7 Levels, 6 Levels Used, 7 Points, 6 Points Used, 0 QCs



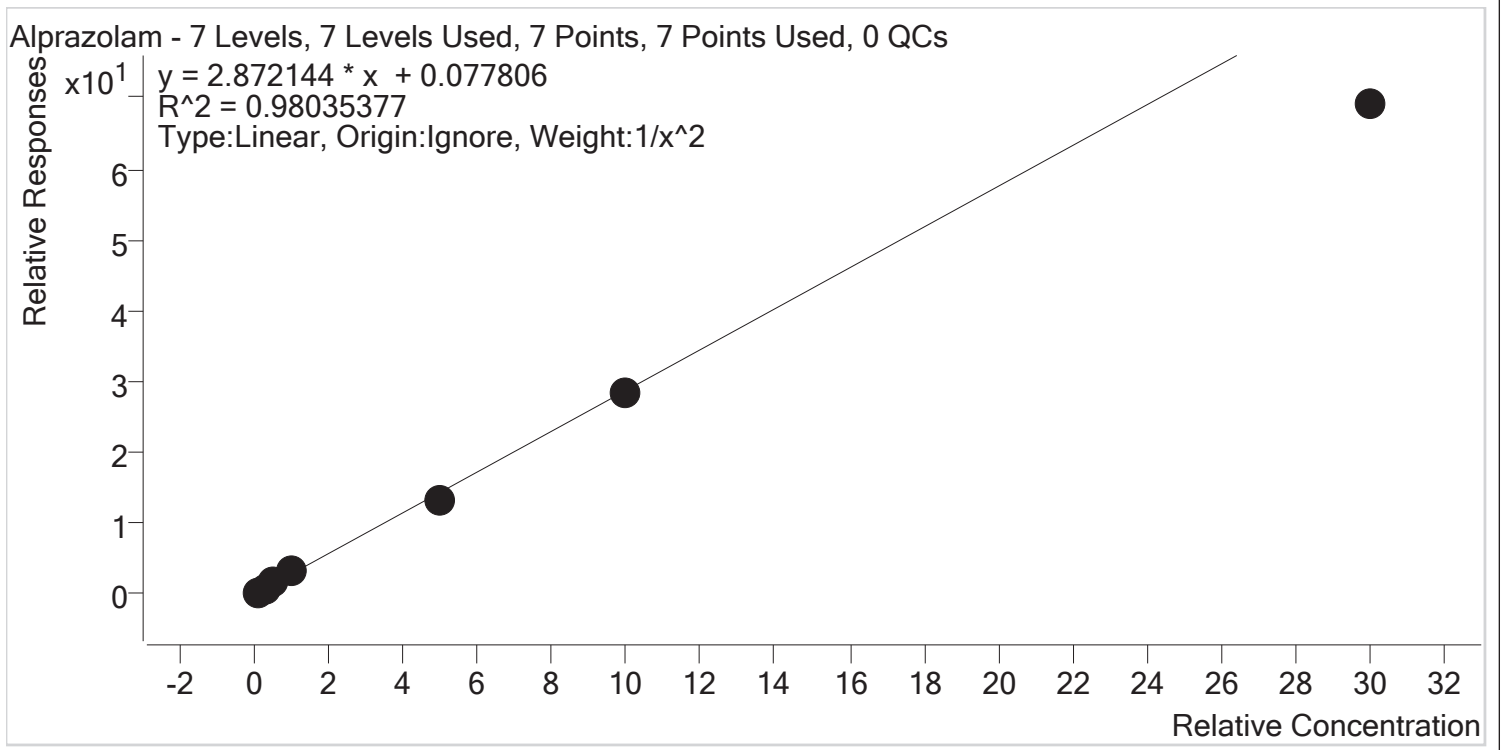
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.8	98.5
Cal 2- 25ng	2	✓	25.0	25.4	101.7
Cal 3 -50ng	3	✓	50.0	50.9	101.9
Cal 4-100ng	4	✓	100.0	105.3	105.3
Cal 5-500ng	5	✓	500.0	497.8	99.6
Cal 6-1000ng	6	✓	1000.0	930.8	93.1
Cal 7-3000ng	7	×	3000.0	2048.0	68.3



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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Alprazolam **Internal Standard** alphahydroxyalprazolam -D5 ISTD



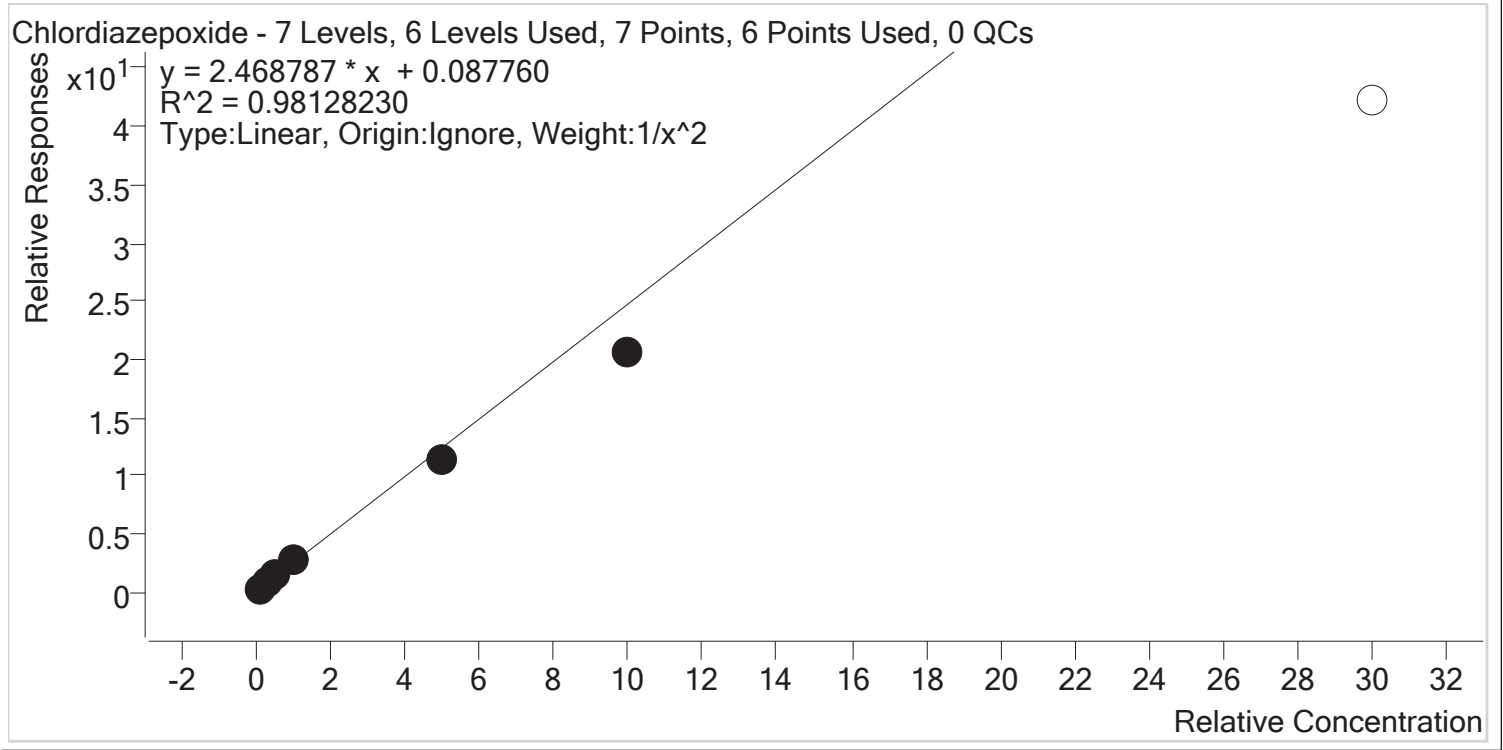
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.2	92.5
Cal 2- 25ng	2	✓	25.0	27.7	110.7
Cal 3 -50ng	3	✓	50.0	55.3	110.5
Cal 4-100ng	4	✓	100.0	113.5	113.5
Cal 5-500ng	5	✓	500.0	466.9	93.4
Cal 6-1000ng	6	✓	1000.0	993.4	99.3
Cal 7-3000ng	7	✓	3000.0	2402.3	80.1

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Chlordiazepoxide **Internal Standard** Nordiazepam-D5 ISTD

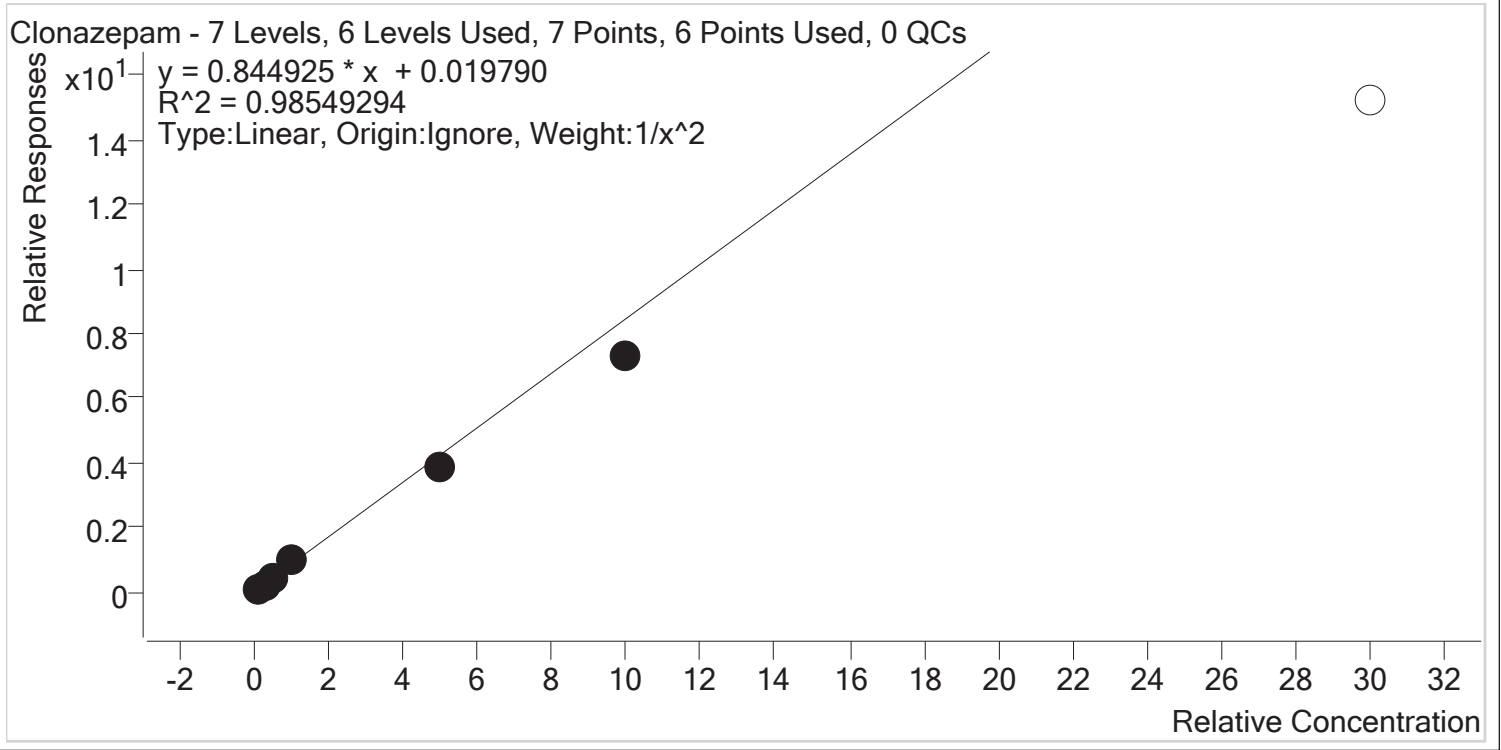


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.3	93.4
Cal 2- 25ng	2	✓	25.0	27.4	109.7
Cal 3 -50ng	3	✓	50.0	54.7	109.3
Cal 4-100ng	4	✓	100.0	111.2	111.2
Cal 5-500ng	5	✓	500.0	464.1	92.8
Cal 6-1000ng	6	✓	1000.0	835.1	83.5
Cal 7-3000ng	7	×	3000.0	1706.4	56.9



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Clonazepam **Internal Standard** Clonazepam-D4 ISTD



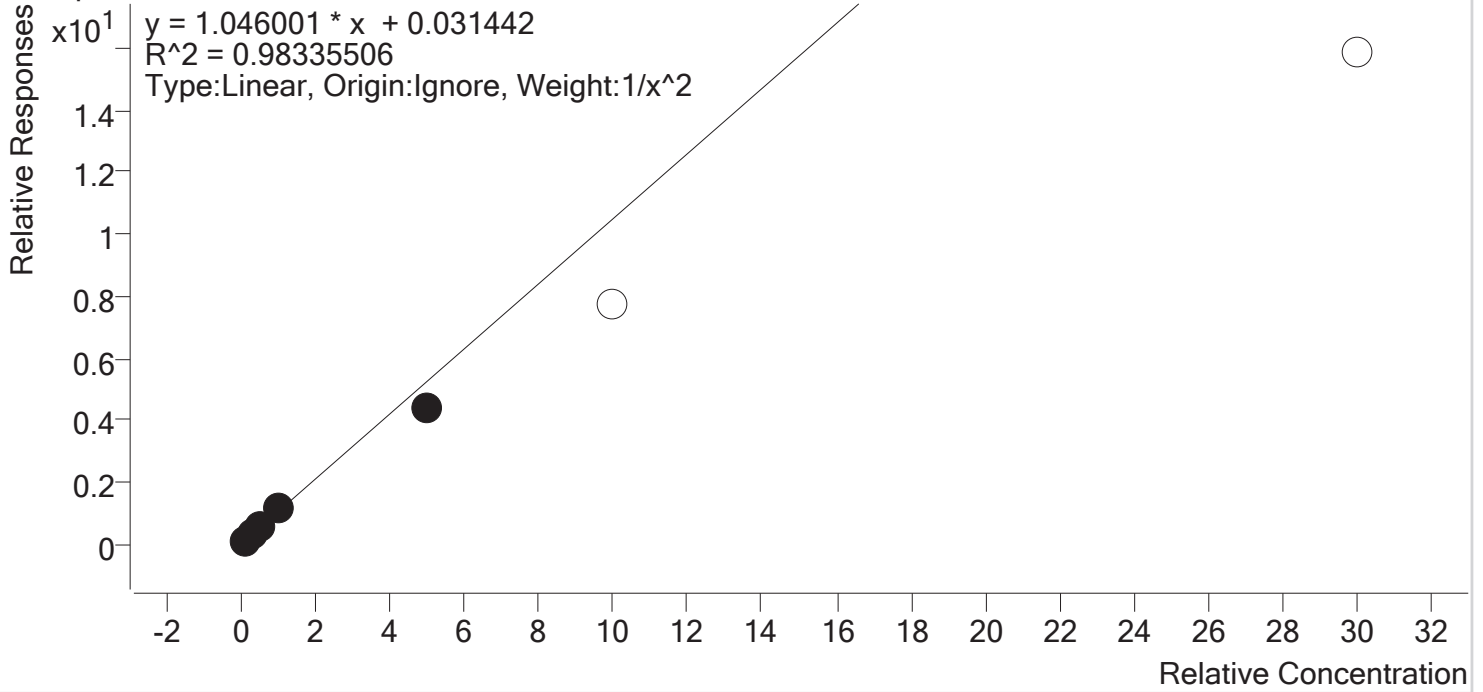
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.4	94.5
Cal 2- 25ng	2	✓	25.0	27.0	107.9
Cal 3 -50ng	3	✓	50.0	53.9	107.7
Cal 4-100ng	4	✓	100.0	111.1	111.1
Cal 5-500ng	5	✓	500.0	461.7	92.3
Cal 6-1000ng	6	✓	1000.0	864.4	86.4
Cal 7-3000ng	7	×	3000.0	1798.4	59.9



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Diazepam **Internal Standard** Diazepam-D5 ISTD

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

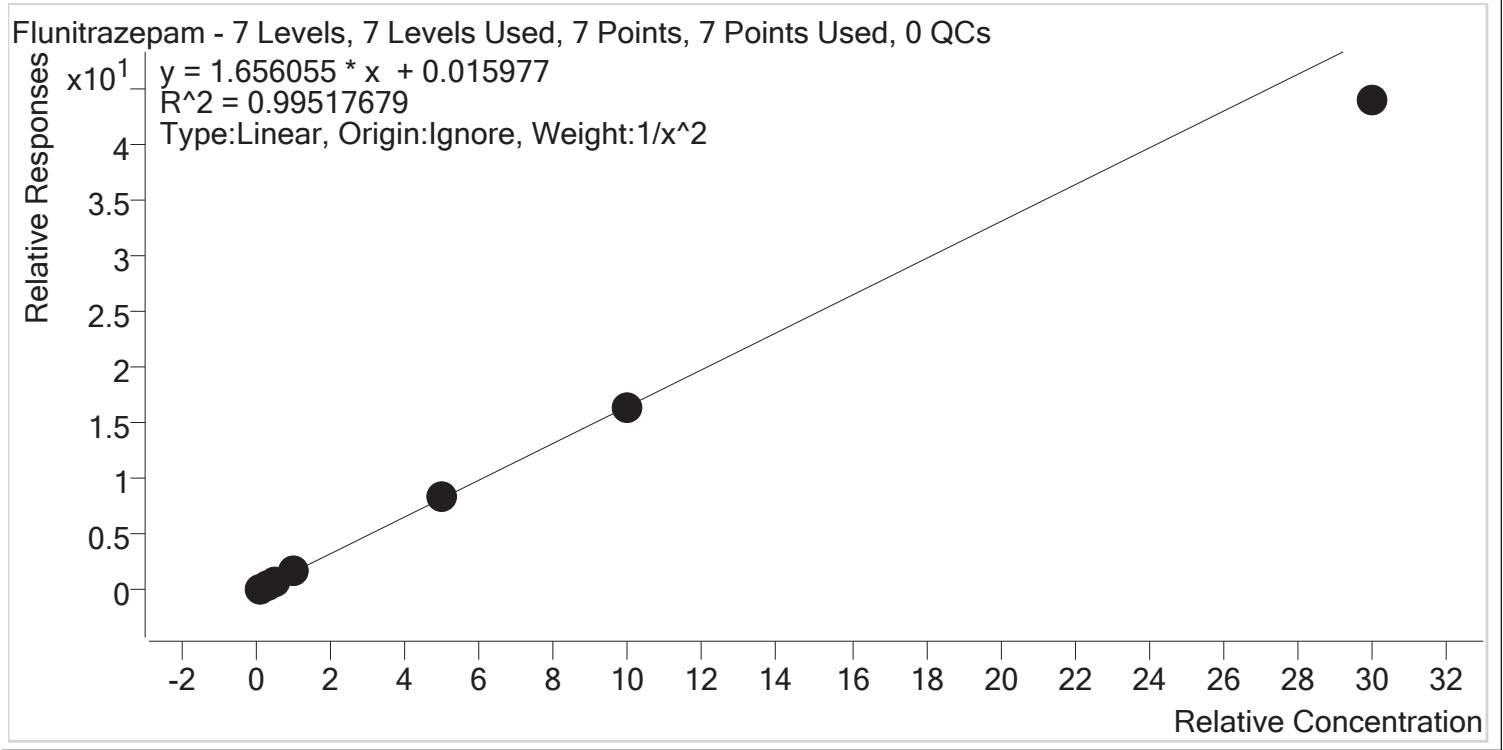


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.5	95.3
Cal 2- 25ng	2	✓	25.0	26.9	107.6
Cal 3 -50ng	3	✓	50.0	53.1	106.1
Cal 4-100ng	4	✓	100.0	107.2	107.2
Cal 5-500ng	5	✓	500.0	418.8	83.8
Cal 6-1000ng	6	×	1000.0	741.8	74.2
Cal 7-3000ng	7	×	3000.0	1510.2	50.3



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Flunitrazepam **Internal Standard** Clonazepam-D4 ISTD



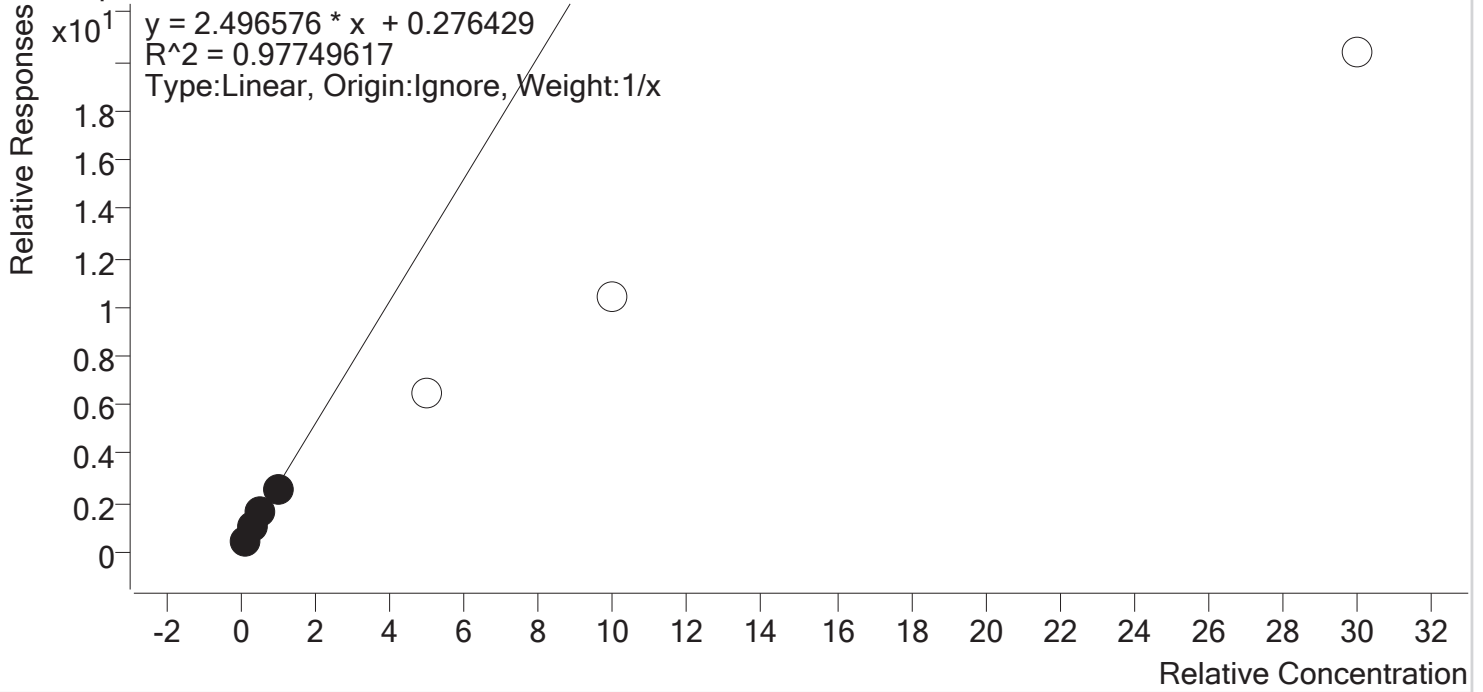
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.7	97.4
Cal 2- 25ng	2	✓	25.0	25.8	103.3
Cal 3 -50ng	3	✓	50.0	51.4	102.8
Cal 4-100ng	4	✓	100.0	107.9	107.9
Cal 5-500ng	5	✓	500.0	503.4	100.7
Cal 6-1000ng	6	✓	1000.0	993.7	99.4
Cal 7-3000ng	7	✓	3000.0	2657.6	88.6



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Flurazepam **Internal Standard** Diazepam-D5 ISTD

Flurazepam - 7 Levels, 4 Levels Used, 7 Points, 4 Points Used, 0 QCs

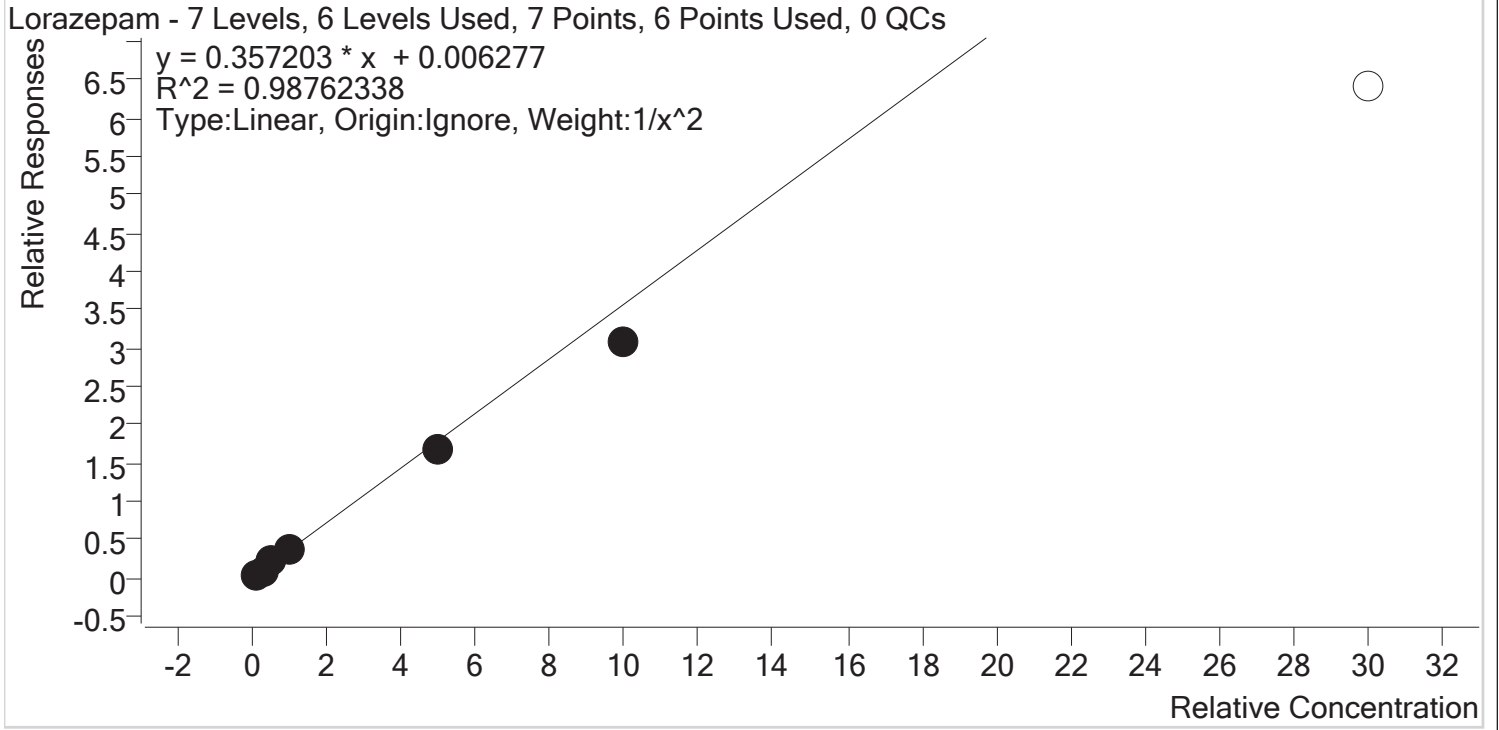


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	8.0	80.0
Cal 2- 25ng	2	✓	25.0	29.5	118.2
Cal 3 -50ng	3	✓	50.0	54.4	108.8
Cal 4-100ng	4	✓	100.0	93.1	93.1
Cal 5-500ng	5	×	500.0	251.5	50.3
Cal 6-1000ng	6	×	1000.0	406.8	40.7
Cal 7-3000ng	7	×	3000.0	804.4	26.8



AM #28 Multi-Drug Quant. Calibration Curve Report

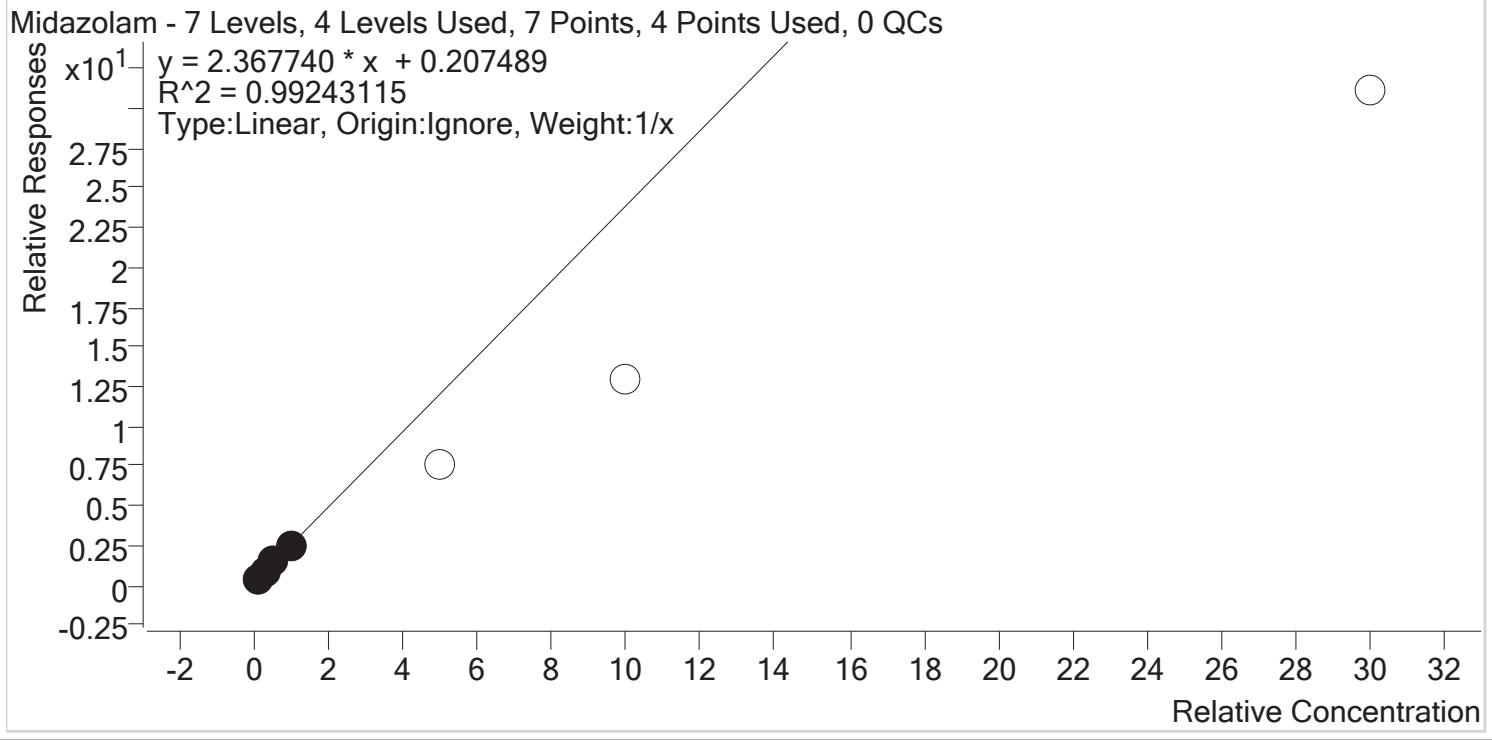
Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Lorazepam **Internal Standard** Nordiazepam-D5 ISTD



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.5	95.2
Cal 2- 25ng	2	✓	25.0	26.3	105.4
Cal 3 -50ng	3	✓	50.0	55.0	110.1
Cal 4-100ng	4	✓	100.0	108.6	108.6
Cal 5-500ng	5	✓	500.0	470.7	94.1
Cal 6-1000ng	6	✓	1000.0	865.7	86.6
Cal 7-3000ng	7	×	3000.0	1795.1	59.8

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Midazolam **Internal Standard** Clonazepam-D4 ISTD



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	8.9	89.0
Cal 2- 25ng	2	✓	25.0	27.3	109.2
Cal 3 -50ng	3	✓	50.0	53.0	106.0
Cal 4-100ng	4	✓	100.0	95.8	95.8
Cal 5-500ng	5	×	500.0	312.2	62.4
Cal 6-1000ng	6	×	1000.0	538.5	53.9
Cal 7-3000ng	7	×	3000.0	1304.8	43.5

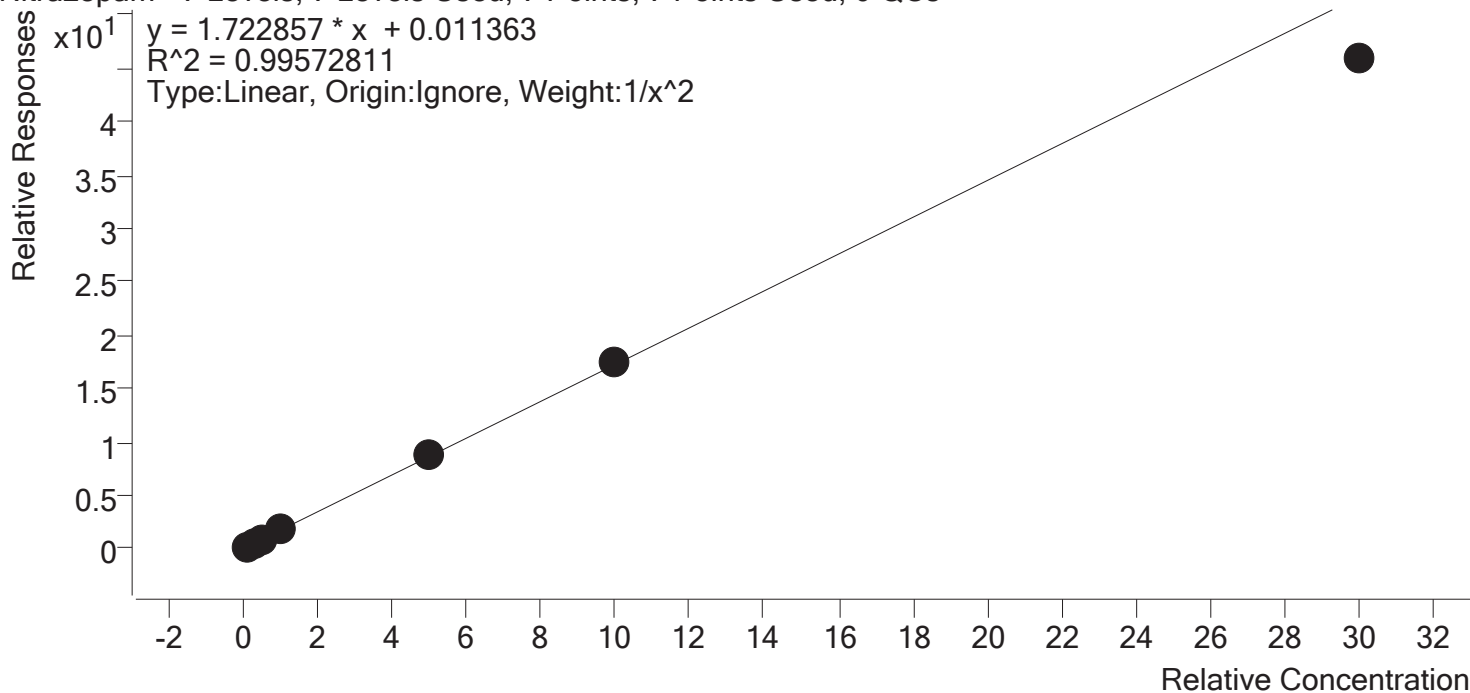
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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Nitrazepam **Internal Standard** Clonazepam-D4 ISTD

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



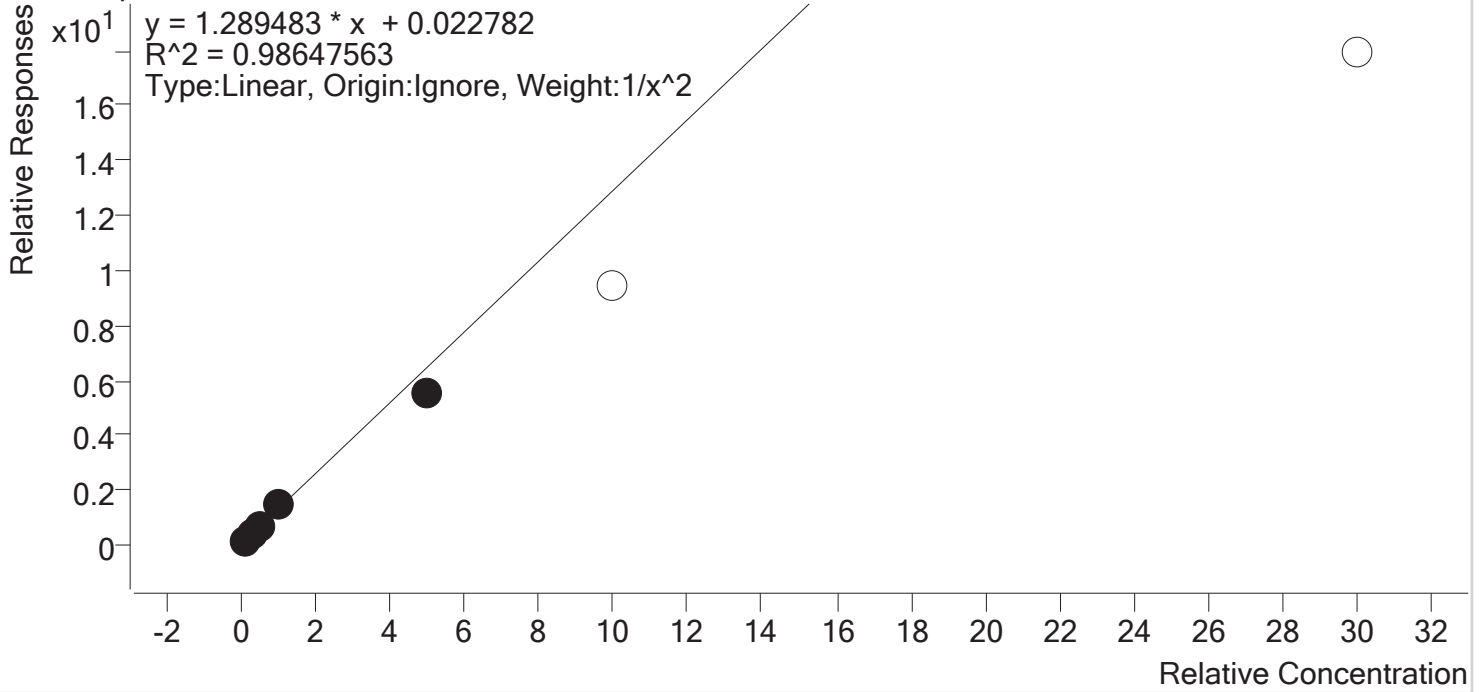
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.8	98.2
Cal 2- 25ng	2	✓	25.0	25.6	102.3
Cal 3 -50ng	3	✓	50.0	50.4	100.8
Cal 4-100ng	4	✓	100.0	107.3	107.3
Cal 5-500ng	5	✓	500.0	502.5	100.5
Cal 6-1000ng	6	✓	1000.0	1021.1	102.1
Cal 7-3000ng	7	✓	3000.0	2662.9	88.8



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Nordiazepam **Internal Standard** Nordiazepam-D5 ISTD

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



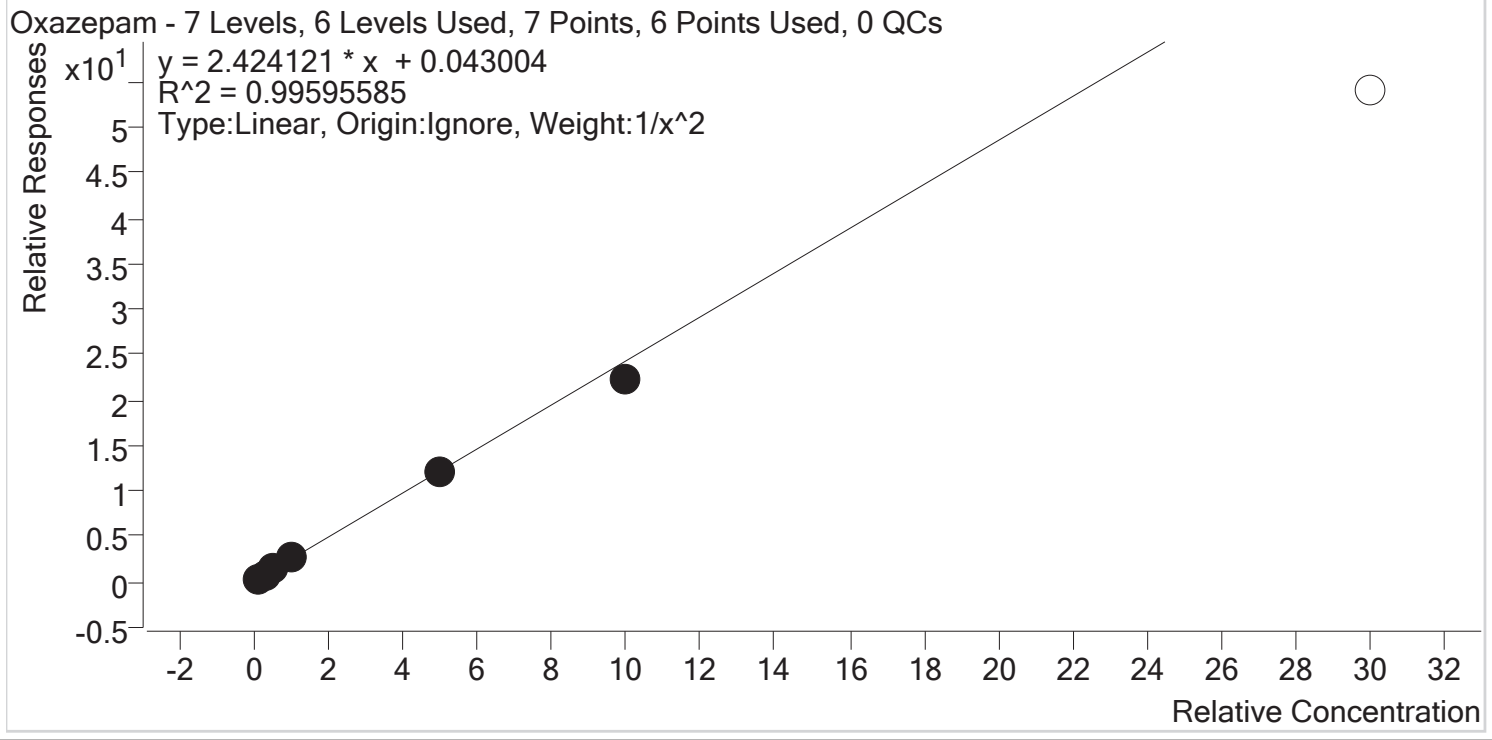
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.7	96.7
Cal 2- 25ng	2	✓	25.0	26.2	104.9
Cal 3 -50ng	3	✓	50.0	51.9	103.8
Cal 4-100ng	4	✓	100.0	109.3	109.3
Cal 5-500ng	5	✓	500.0	426.8	85.4
Cal 6-1000ng	6	×	1000.0	727.5	72.8
Cal 7-3000ng	7	×	3000.0	1389.0	46.3

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Oxazepam **Internal Standard** Oxazepam-D5 ISTD



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.8	97.5
Cal 2- 25ng	2	✓	25.0	25.8	103.2
Cal 3 -50ng	3	✓	50.0	51.6	103.2
Cal 4-100ng	4	✓	100.0	106.6	106.6
Cal 5-500ng	5	✓	500.0	488.5	97.7
Cal 6-1000ng	6	✓	1000.0	917.6	91.8
Cal 7-3000ng	7	×	3000.0	2226.8	74.2

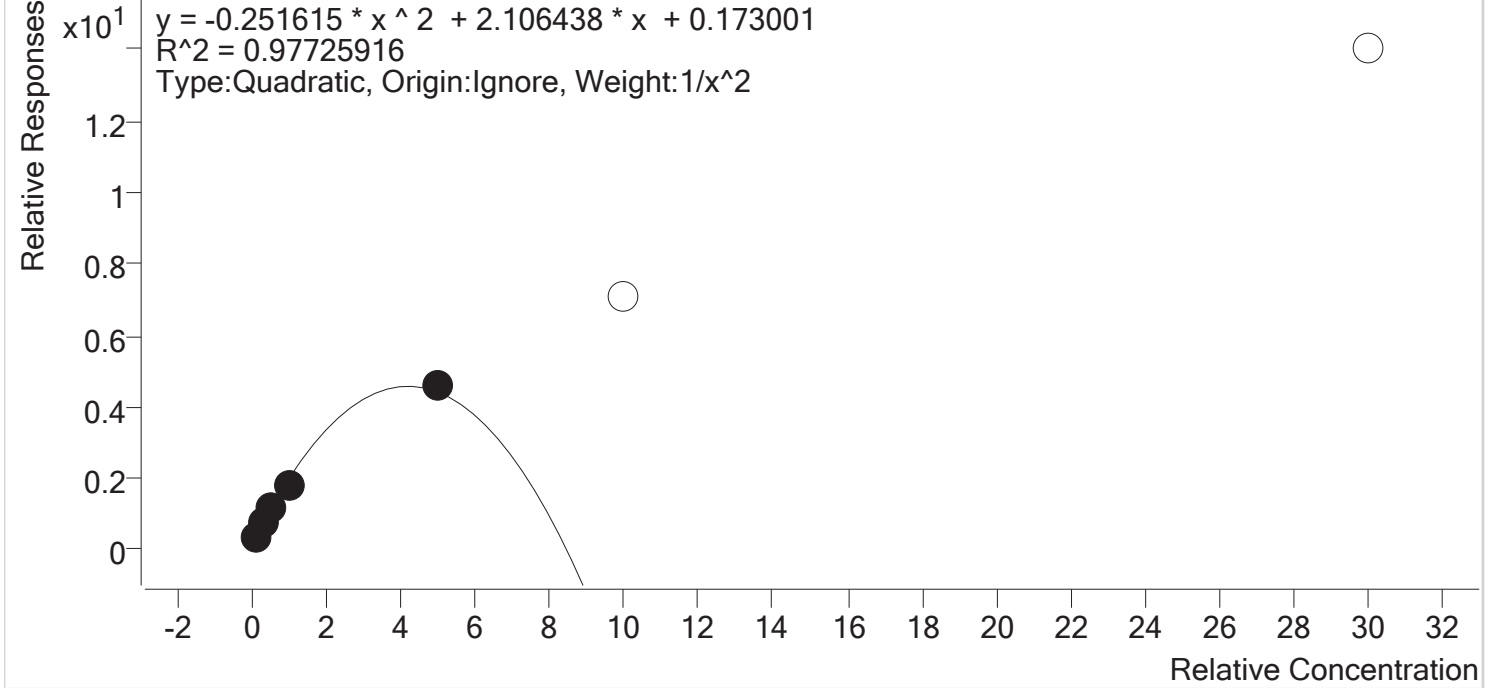


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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte quetiapine **Internal Standard** Temazepam-D5 ISTD

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

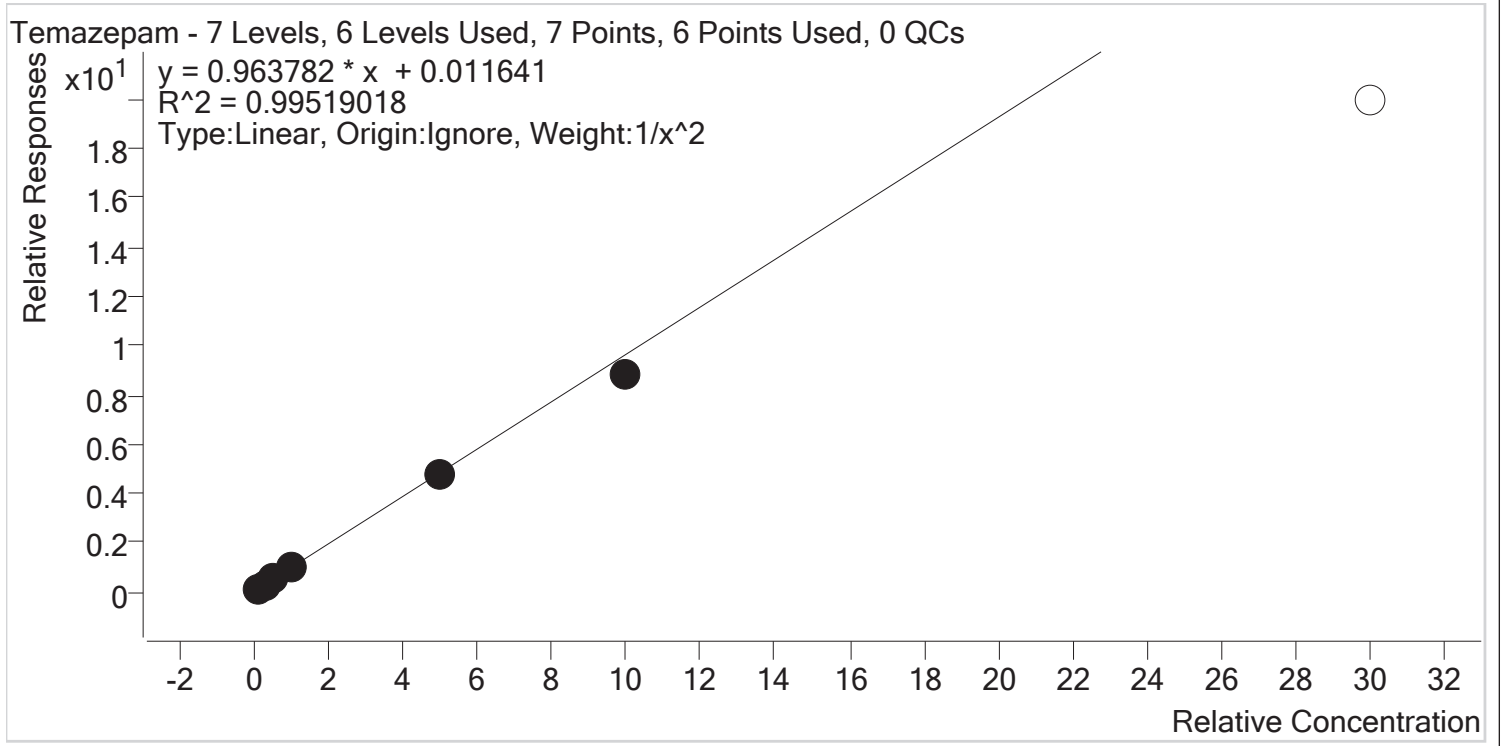


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.5	95.4
Cal 2- 25ng	2	✓	25.0	28.8	115.2
Cal 3 -50ng	3	✓	50.0	49.7	99.5
Cal 4-100ng	4	✓	100.0	86.2	86.2
Cal 5-500ng	5	✓	500.0	415.0	83.0
Cal 6-1000ng	6	×	1000.0	ND	
Cal 7-3000ng	7	×	3000.0	ND	



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte Temazepam **Internal Standard** Temazepam-D5 ISTD



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.7	97.3
Cal 2- 25ng	2	✓	25.0	25.9	103.8
Cal 3 -50ng	3	✓	50.0	51.5	103.0
Cal 4-100ng	4	✓	100.0	107.3	107.3
Cal 5-500ng	5	✓	500.0	488.5	97.7
Cal 6-1000ng	6	✓	1000.0	909.6	91.0
Cal 7-3000ng	7	×	3000.0	2070.7	69.0

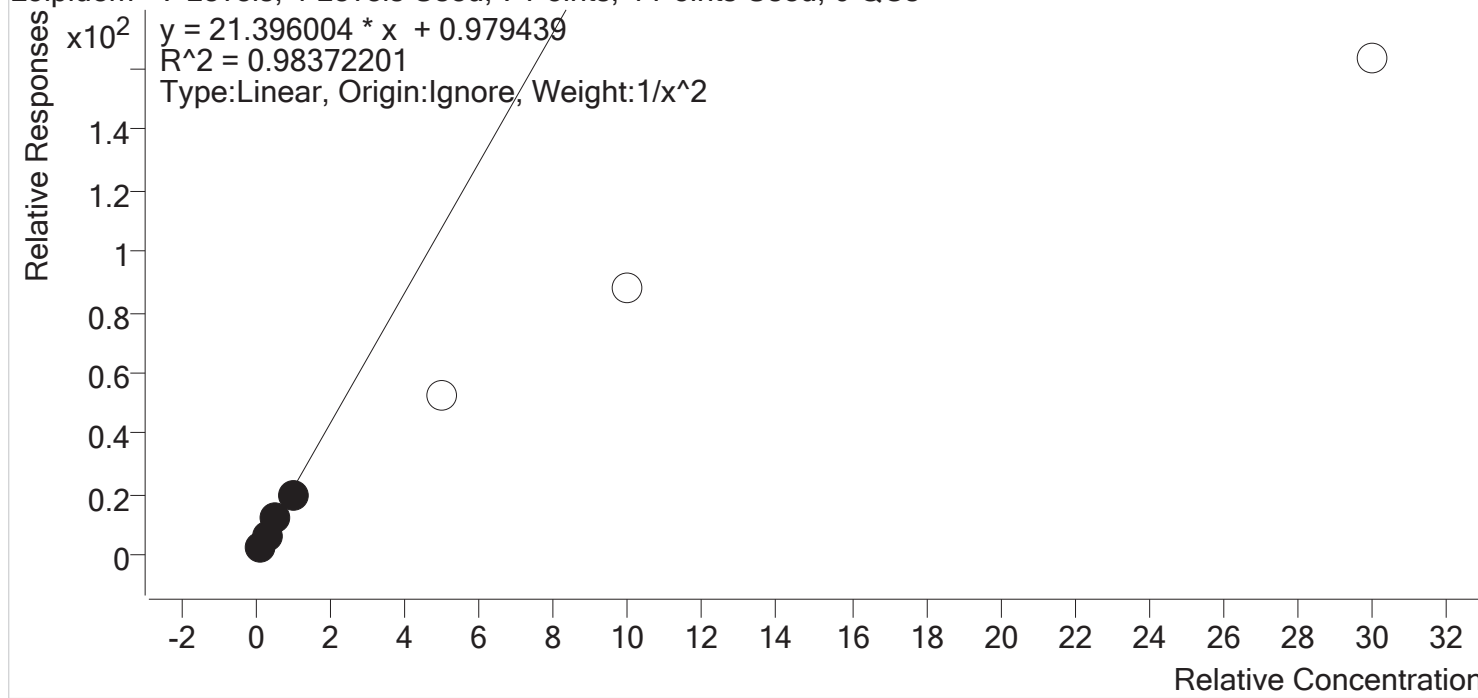
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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte zolpidem **Internal Standard** Nordiazepam-D5 ISTD

zolpidem - 7 Levels, 4 Levels Used, 7 Points, 4 Points Used, 0 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.6	95.8
Cal 2- 25ng	2	✓	25.0	27.9	111.5
Cal 3 -50ng	3	✓	50.0	51.5	103.1
Cal 4-100ng	4	✓	100.0	89.6	89.6
Cal 5-500ng	5	×	500.0	244.4	48.9
Cal 6-1000ng	6	×	1000.0	405.1	40.5
Cal 7-3000ng	7	×	3000.0	758.0	25.3

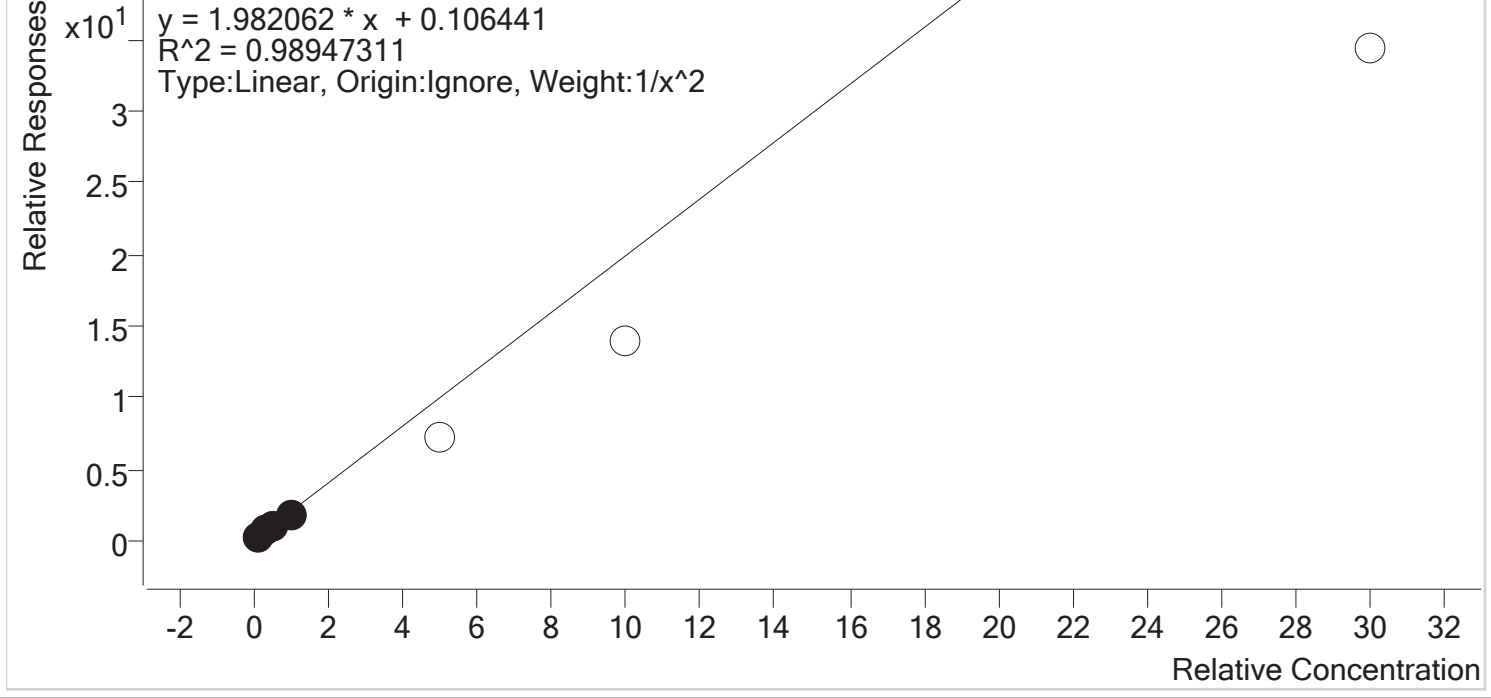


cg

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
Last Cal. Update 6/19/2019 11:49 AM
Analyst Name ISP\datastor
Analyte zopiclone **Internal Standard** Nordiazepam-D5 ISTD

zopiclone - 7 Levels, 4 Levels Used, 7 Points, 4 Points Used, 0 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.7	96.7
Cal 2- 25ng	2	✓	25.0	27.2	109.0
Cal 3 -50ng	3	✓	50.0	51.4	102.8
Cal 4-100ng	4	✓	100.0	91.5	91.5
Cal 5-500ng	5	×	500.0	355.2	71.0
Cal 6-1000ng	6	×	1000.0	699.2	69.9
Cal 7-3000ng	7	×	3000.0	1727.0	57.6

AM #28 Multi-Drug Quant. Results



Batch results

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin

Calibration Last Update

6/19/2019 11:49:31 AM

Instrument

Falco

Type

Sample

Acq. Method

Benzos_Z_Drugs 053019 FINAL.m

Sample Position

P5-B1

Injection Volume

2.5

Acq. Date-Time

6/18/2019 4:38:23 PM

Sample Info.

Data File

Negative Control.d

Sample

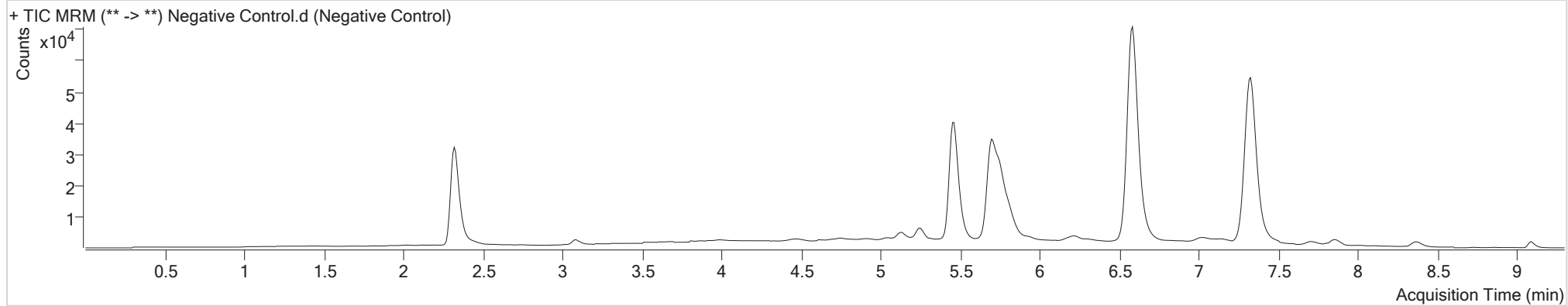
Negative Control

Operator

Comment

Worklist 3484

Sample Chromatogram



AM #28 Multi-Drug Quant. Results



Batch results

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin

Calibration Last Update

6/19/2019 11:49:31 AM

Instrument

Falco

Data File

Positive Control.d

Type

Sample

Sample

Positive Control

Acq. Method

Benzos_Z_Drugs 053019 FINAL.m

Operator

Worklist 3484

Sample Position

P5-B2

Comment

Injection Volume

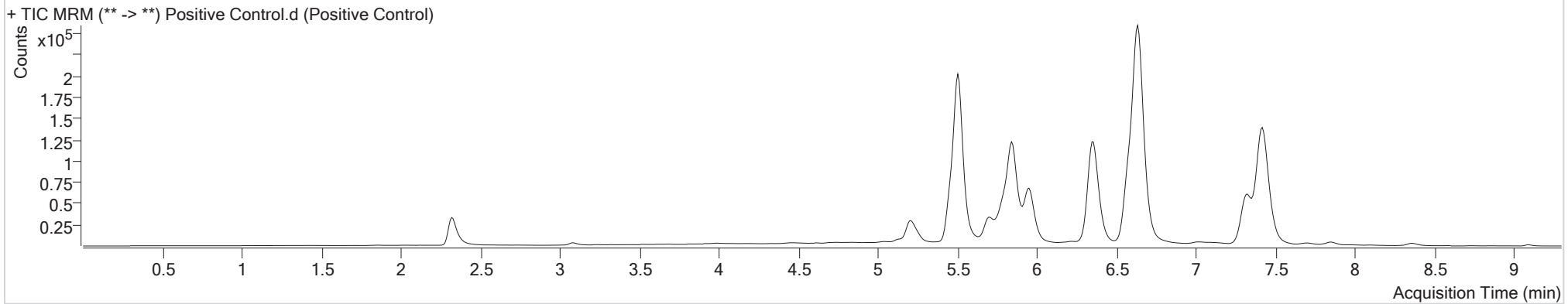
2.5

Acq. Date-Time

6/18/2019 4:50:52 PM

Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Alprazolam	5.950	221681	∞	32.3	382.36	14867	516.4407 ng/ml
Clonazepam	5.789	94133	1320.23	44.1	1171.68	34830	317.5262 ng/ml
Diazepam	7.419	521415	9180.01	42.0	2224.04	163123	302.5810 ng/ml
Flunitrazepam	6.346	377453	3908.79	43.5	5521.12	34830	653.4226 ng/ml
Lorazepam	5.848	94070	2086.94	101.5	6891.86	58516	448.2927 ng/ml
Nitrazepam	5.210	66469	3388.32	52.4	1347.45	34830	110.1086 ng/ml
Oxazepam	5.505	532499	21657.45	41.2	6502.47	65593	333.1209 ng/ml
Temazepam	6.634	844976	22426.32	33.8	5746.87	297104	293.8838 ng/ml

AM #28 Multi-Drug Quant. Results

**Batch results**

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin

Calibration Last Update

6/19/2019 11:49:31 AM

Instrument

Falco

Type

Sample

Acq. Method

Benzos_Z_Drugs 053019 FINAL.m

Sample Position

P5-A8

Injection Volume

2.5

Acq. Date-Time

6/18/2019 4:00:58 PM

Sample Info.**Data File**

Oxazepam Glucuronide NEG.d

Sample

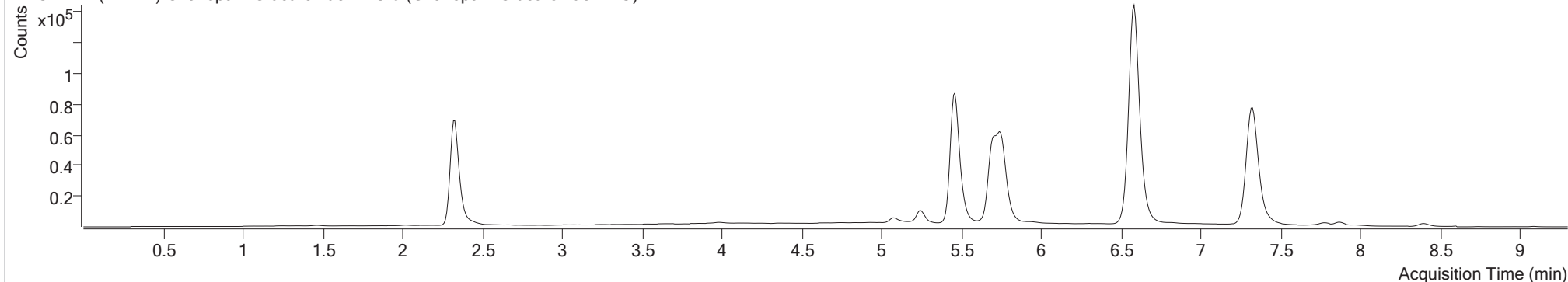
Oxazepam Glucuronide NEG

Operator

Worklist 3484

Comment**Sample Chromatogram**

+ TIC MRM (** -> **) Oxazepam Glucuronide NEG.d (Oxazepam Glucuronide NEG)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Oxazepam	5.505	7953	17.98	42.7	44.82	104196	1.3745 ng/ml

AM #28 Multi-Drug Quant. Results



Batch results

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin

Calibration Last Update

6/19/2019 11:49:31 AM

Instrument

Falco

Data File

Oxazepam Glucuronide POS.d

Type

Sample

Sample

Oxazepam Glucuronide POS

Acq. Method

Benzos_Z_Drugs 053019 FINAL.m

Operator

Worklist 3484

Sample Position

P5-A9

Comment

Injection Volume

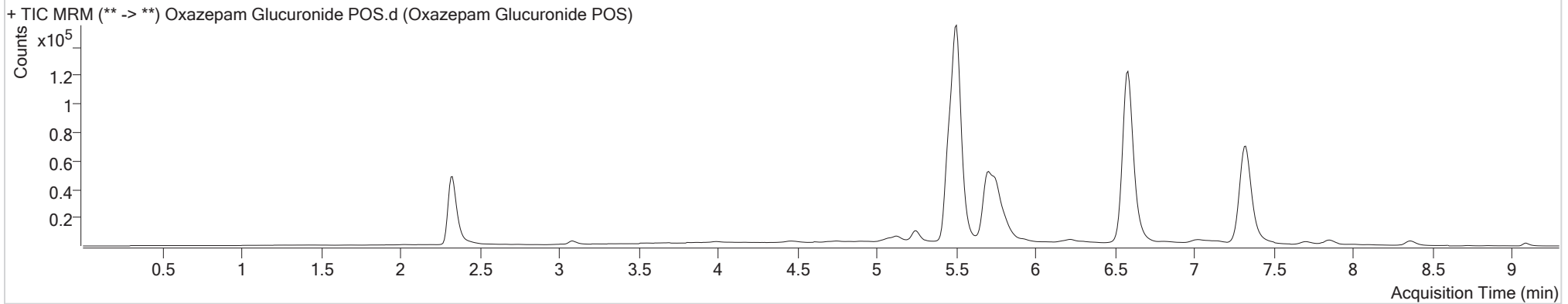
2.5

Acq. Date-Time

6/18/2019 4:13:26 PM

Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Oxazepam	5.505	382186	9408.98	42.1	∞	80411	194.2923 ng/ml

AM #28 Multi-Drug Quant. Results



Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
6/19/2019 11:49:31 AM

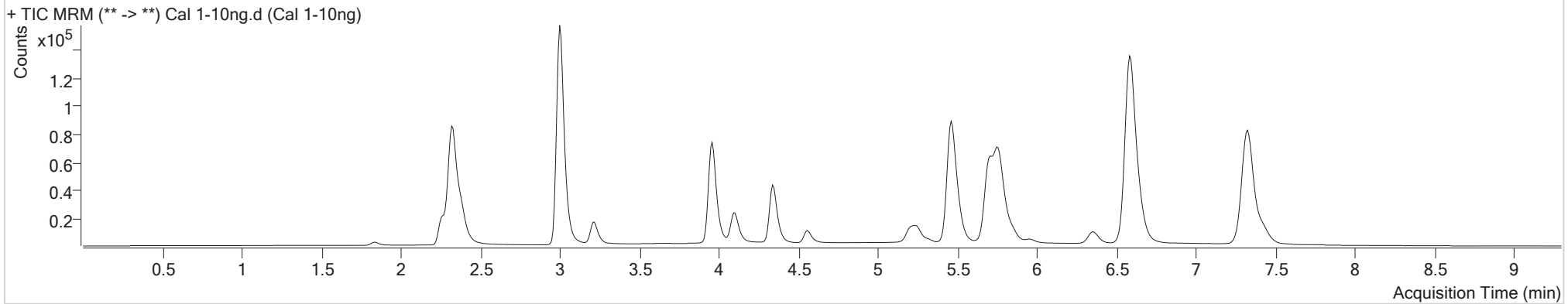
Instrument Type
Acq. Method
Sample Position
Injection Volume
Acq. Date-Time
Sample Info.

Falco
Cal
Benzos_Z_Drugs 053019 FINAL.m
P5-A1
2.5
6/18/2019 2:21:14 PM

Data File
Sample
Operator
Comment

Cal 1-10ng.d
Cal 1-10ng
Worklist 3484

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.837	5947	529.08	36.0	137.91	286343	9.1898 ng/ml
7-Aminoflunitrazepam	2.383	44059	3323.81	35.2	688.90	286343	9.5718 ng/ml
alpha-Hydroxyalprazolam	5.290	1471	19.03	94.0	19.56	22882	9.3714 ng/ml
alpha-hydroxytriazolam	5.322	4113	224.31	53.3	96.33	132891	9.8493 ng/ml
Alprazolam	5.959	7857	190.41	31.3	26.19	22882	9.2463 ng/ml
Chlordiazepoxide	3.218	42315	1436.10	30.8	608.61	132891	9.3429 ng/ml
Clonazepam	5.798	14123	518.73	45.5	304.04	141793	9.4464 ng/ml
Diazepam	7.427	32124	1417.25	41.4	377.99	244909	9.5339 ng/ml
Flunitrazepam	6.354	25126	720.39	43.8	409.91	141793	9.7353 ng/ml
Flurazepam	4.334	116604	1518.63	26.2	799.36	244909	7.9983 ng/ml
Lorazepam	5.848	5355	193.14	105.3	215.32	132891	9.5230 ng/ml
Midazolam	4.100	59288	608.78	29.6	582.94	141793	8.8964 ng/ml
Nitrazepam	5.210	25601	790.02	53.1	471.66	141793	9.8201 ng/ml
Nordiazepam	5.785	19591	1018.66	54.0	294.65	132891	9.6658 ng/ml
Oxazepam	5.505	28958	1462.42	40.4	316.96	103617	9.7549 ng/ml
quetiapine	3.955	180176	18404.29	45.6	8844.61	484896	9.5357 ng/ml
Temazepam	6.642	51118	858.07	33.6	361.01	484896	9.7303 ng/ml
zolpidem	2.999	402643	59926.13	36.7	18142.10	132891	9.5833 ng/ml

Cal 1-10ng

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.258	39614	1278.84	60.9	2007.08	132891	9.6695 ng/ml

AM #28 Multi-Drug Quant. Results



Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
6/19/2019 11:49:31 AM

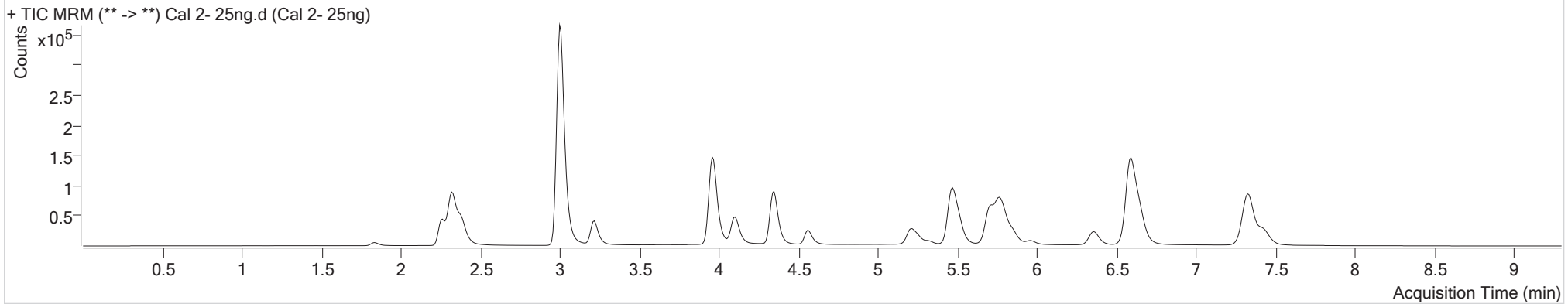
Instrument Type
Acq. Method
Sample Position
Injection Volume
Acq. Date-Time
Sample Info.

Falco
Cal
Benzos_Z_Drugs 053019 FINAL.m
P5-A2
2.5
6/18/2019 2:33:43 PM

Data File
Sample
Operator
Comment

Cal 2- 25ng.d
Cal 2- 25ng
Worklist 3484

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.837	13752	789.99	35.7	378.90	287533	26.9170 ng/ml
7-Aminoflunitrazepam	2.383	93557	6165.65	34.6	628.75	287533	28.1261 ng/ml
alpha-Hydroxyalprazolam	5.290	3841	39.28	86.5	40.30	23057	27.2353 ng/ml
alpha-hydroxytriazolam	5.322	10539	456.23	56.7	202.68	139101	25.4249 ng/ml
Alprazolam	5.959	20125	291.55	32.5	361.48	23057	27.6802 ng/ml
Chlordiazepoxide	3.218	106425	1238.43	30.2	1320.62	139101	27.4360 ng/ml
Clonazepam	5.798	36300	1047.37	45.0	604.89	146522	26.9794 ng/ml
Diazepam	7.427	80013	3254.85	40.8	445.37	255760	26.9025 ng/ml
Flunitrazepam	6.354	65016	481.44	43.7	892.00	146522	25.8296 ng/ml
Flurazepam	4.342	259321	2131.24	27.0	526.20	255760	29.5401 ng/ml
Lorazepam	5.848	13961	606.42	102.5	670.35	139101	26.3400 ng/ml
Midazolam	4.100	125143	∞	30.7	690.54	146522	27.3087 ng/ml
Nitrazepam	5.210	66200	1675.76	53.0	1316.49	146522	25.5650 ng/ml
Nordiazepam	5.793	50186	1565.88	54.5	426.87	139101	26.2126 ng/ml
Oxazepam	5.513	74595	1802.21	40.9	589.01	111589	25.8022 ng/ml
quetiapine	3.955	384737	91595.46	45.5	3706.90	507202	28.7880 ng/ml
Temazepam	6.651	132714	6081.09	33.3	903.11	507202	25.9414 ng/ml
zolpidem	2.999	965625	86755.93	36.5	55008.70	139101	27.8672 ng/ml

Cal 2- 25ng

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.258	89918	3899.61	61.2	2358.34	139101	27.2435 ng/ml

AM #28 Multi-Drug Quant. Results



Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
6/19/2019 11:49:31 AM

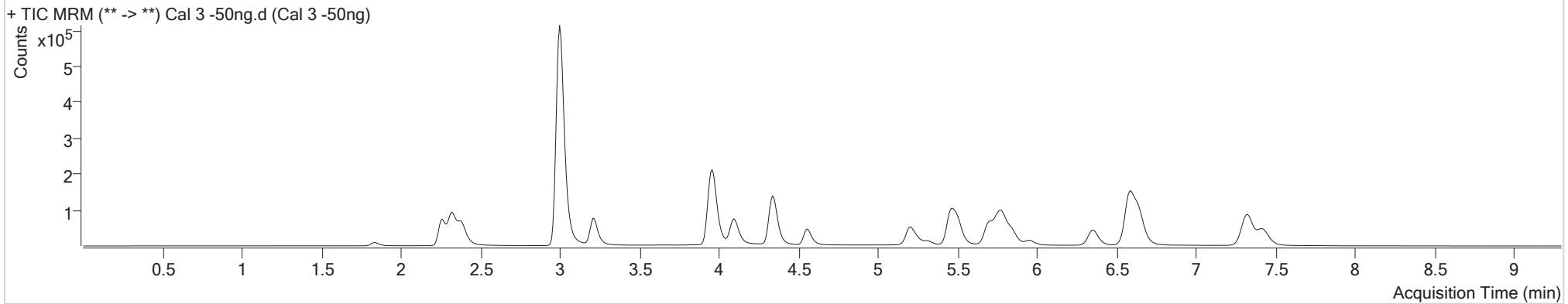
Instrument
Type
Acq. Method
Sample Position
Injection Volume
Acq. Date-Time
Sample Info.

Falco
Cal
Benzos_Z_Drugs 053019 FINAL.m
P5-A3
2.5
6/18/2019 2:46:11 PM

Data File
Sample
Operator
Comment

Cal 3 -50ng.d
Cal 3 -50ng
Worklist 3484

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.837	24385	2740.65	35.7	354.86	285485	51.5413 ng/ml
7-Aminoflunitrazepam	2.391	151964	5682.97	34.9	4409.28	285485	50.5114 ng/ml
alpha-Hydroxyalprazolam	5.290	7928	381.82	87.6	361.42	24736	54.1131 ng/ml
alpha-hydroxytriazolam	5.314	20796	503.40	56.6	243.36	139408	50.9404 ng/ml
Alprazolam	5.950	41188	114.72	31.4	338.96	24736	55.2648 ng/ml
Chlordiazepoxide	3.210	200370	9185.50	31.1	1317.80	139408	54.6637 ng/ml
Clonazepam	5.798	70095	1127.64	43.4	2801.42	147593	53.8669 ng/ml
Diazepam	7.427	152174	12985.13	40.7	1013.88	259474	53.0621 ng/ml
Flunitrazepam	6.354	128015	3565.94	42.9	990.64	147593	51.4099 ng/ml
Flurazepam	4.334	424096	∞	26.7	∞	259474	54.3952 ng/ml
Lorazepam	5.848	28281	989.75	98.5	2089.22	139408	55.0361 ng/ml
Midazolam	4.091	215860	∞	30.4	1403.28	147593	53.0063 ng/ml
Nitrazepam	5.202	129882	8218.79	53.6	12210.02	147593	50.4187 ng/ml
Nordiazepam	5.785	96489	3872.38	55.7	1116.16	139408	51.9086 ng/ml
Oxazepam	5.505	145729	8684.68	41.4	1806.76	112656	51.5888 ng/ml
quetiapine	3.955	596704	28111.40	46.3	19337.04	515084	49.7382 ng/ml
Temazepam	6.642	261652	10932.63	33.3	4930.31	515084	51.4989 ng/ml
zolpidem	2.999	1674152	92528.86	36.7	122274.05	139408	51.5495 ng/ml

Cal 3 -50ng

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.258	156892	4460.56	61.3	9939.89	139408	51.4096 ng/ml

AM #28 Multi-Drug Quant. Results



Batch results

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin

Calibration Last Update

6/19/2019 11:49:31 AM

Instrument

Falco

Data File

Cal 4-100ng.d

Type

Cal

Sample

Cal 4-100ng

Acq. Method

Benzos_Z_Drugs 053019 FINAL.m

Operator

Worklist 3484

Sample Position

P5-A4

Injection Volume

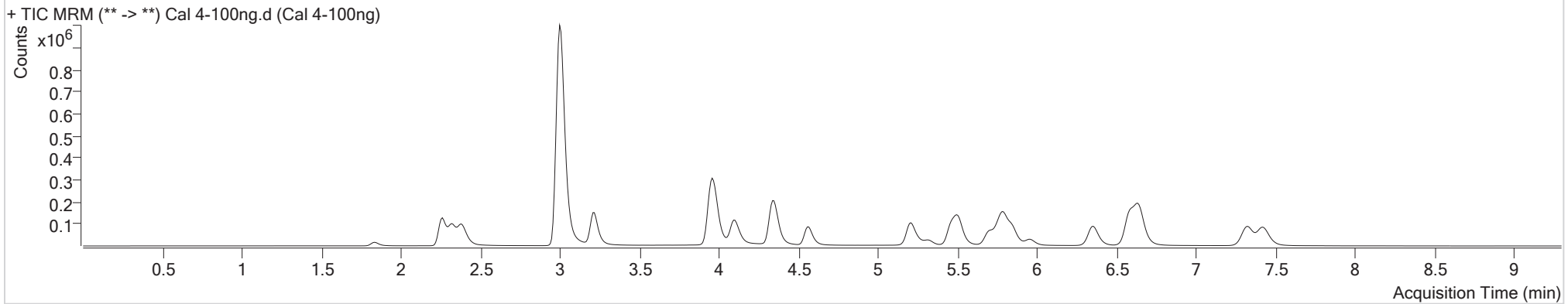
2.5

Acq. Date-Time

6/18/2019 2:58:40 PM

Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.837	43659	1143.83	35.7	428.58	281051	97.3520 ng/ml
7-Aminoflunitrazepam	2.391	254156	6407.81	34.8	3334.74	281051	90.7547 ng/ml
alpha-Hydroxyalprazolam	5.290	16402	538.34	87.5	95.43	25267	111.4953 ng/ml
alpha-hydroxytriazolam	5.322	43704	1104.18	54.5	3584.43	143042	105.2881 ng/ml
Alprazolam	5.959	84319	∞	32.3	271.28	25267	113.4811 ng/ml
Chlordiazepoxide	3.218	405098	20855.98	30.3	11548.20	143042	111.1582 ng/ml
Clonazepam	5.798	138951	6799.29	44.2	3716.25	144951	111.1123 ng/ml
Diazepam	7.427	299245	8664.53	40.8	6042.45	259650	107.1751 ng/ml
Flunitrazepam	6.354	261245	1352.68	44.1	4009.09	144951	107.8662 ng/ml
Flurazepam	4.334	675064	∞	26.6	∞	259650	93.0664 ng/ml
Lorazepam	5.848	56400	2695.27	102.8	3424.21	143042	108.6248 ng/ml
Midazolam	4.100	358828	∞	29.3	∞	144951	95.7886 ng/ml
Nitrazepam	5.210	269696	17981.85	53.5	9730.77	144951	107.3356 ng/ml
Nordiazepam	5.793	204891	6598.49	54.4	1002.41	143042	109.3155 ng/ml
Oxazepam	5.505	300435	12497.78	41.9	4420.80	114352	106.6072 ng/ml
quetiapine	3.955	931255	53261.21	45.1	39494.31	517048	86.5188 ng/ml
Temazepam	6.642	540624	22844.70	34.5	10840.03	517048	107.2810 ng/ml
zolpidem	2.999	2882319	158236.19	37.0	81694.40	143042	89.5995 ng/ml

Cal 4-100ng

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.258	274677	52453.37	62.4	33229.76	143042	91.5115 ng/ml

AM #28 Multi-Drug Quant. Results



Batch results

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin

Calibration Last Update

6/19/2019 11:49:31 AM

Instrument

Falco

Data File

Cal 5-500ng.d

Type

Cal

Sample

Cal 5-500ng

Acq. Method

Benzos_Z_Drugs 053019 FINAL.m

Operator

Worklist 3484

Sample Position

P5-A5

Comment

Injection Volume

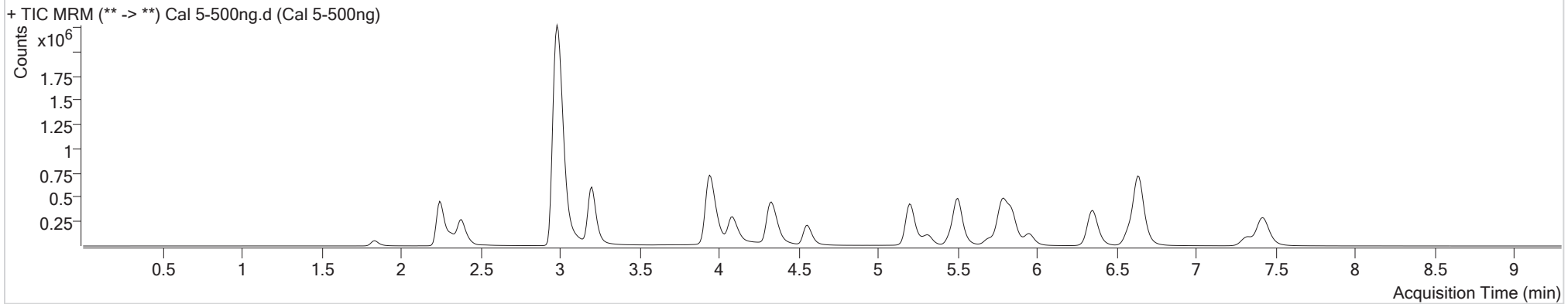
2.5

Acq. Date-Time

6/18/2019 3:11:07 PM

Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.837	143797	13174.13	36.0	542.65	276532	336.2539 ng/ml
7-Aminoflunitrazepam	2.383	799580	∞	35.0	7255.75	276532	305.7275 ng/ml
alpha-Hydroxyalprazolam	5.281	80657	∞	89.4	∞	27610	508.2294 ng/ml
alpha-hydroxytriazolam	5.314	210391	16645.84	54.4	2655.33	146642	497.7720 ng/ml
Alprazolam	5.950	372425	∞	32.9	5307.09	27610	466.9298 ng/ml
Chlordiazepoxide	3.201	1693180	83579.93	30.2	61199.93	146642	464.1397 ng/ml
Clonazepam	5.789	524223	44653.63	44.8	17184.92	133717	461.6509 ng/ml
Diazepam	7.419	1145636	∞	40.2	9437.49	259682	418.7606 ng/ml
Flunitrazepam	6.346	1116977	3954.86	43.4	∞	133717	503.4442 ng/ml
Flurazepam	4.326	1702358	∞	26.6	∞	259682	251.5089 ng/ml
Lorazepam	5.839	247495	10468.36	101.6	25727.90	146642	470.7348 ng/ml
Midazolam	4.083	1016103	∞	29.4	∞	133717	312.1718 ng/ml
Nitrazepam	5.202	1159085	74652.03	53.4	30147.02	133717	502.4698 ng/ml
Nordiazepam	5.785	810377	36595.45	54.1	∞	146642	426.7960 ng/ml
Oxazepam	5.505	1362779	58669.63	41.2	34438.70	114669	488.4830 ng/ml
quetiapine	3.938	2406131	151652.74	46.7	41988.66	525210	415.0084 ng/ml
Temazepam	6.642	2478640	69307.67	34.1	19738.93	525210	488.4600 ng/ml
zolpidem	2.982	7810380	412259.21	36.9	262040.09	146642	244.3552 ng/ml

Cal 5-500ng

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.241	1047998	155765.50	61.3	6608.24	146642	355.1968 ng/ml

AM #28 Multi-Drug Quant. Results



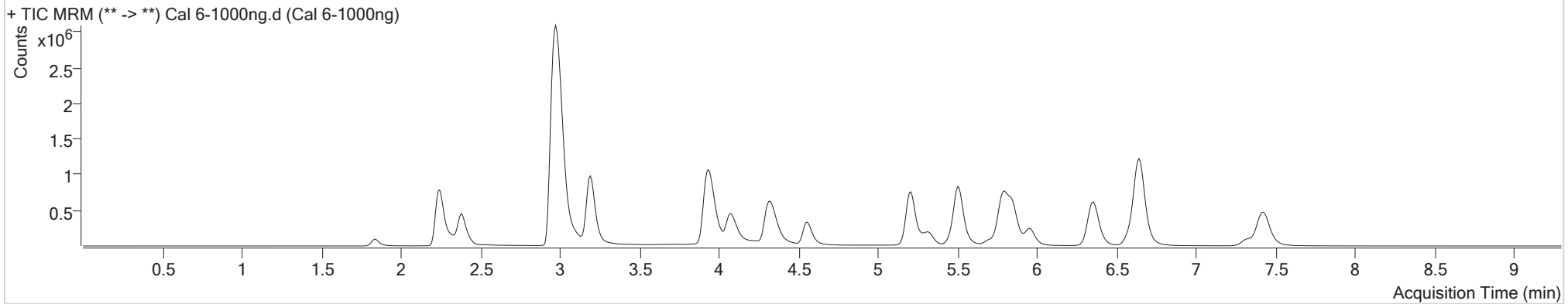
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
6/19/2019 11:49:31 AM

Instrument Type Falco
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A6
Injection Volume 2.5
Acq. Date-Time 6/18/2019 3:23:35 PM
Sample Info.

Data File Cal 6-1000ng.d
Sample Cal 6-1000ng
Operator
Comment Worklist 3484

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.837	250439	22552.56	36.7	12107.53	271528	599.8350 ng/ml
7-Aminoflunitrazepam	2.383	1264556	7364.55	37.4	7080.51	271528	496.7461 ng/ml
alpha-Hydroxyalprazolam	5.281	157403	∞	89.0	∞	29107	942.3783 ng/ml
alpha-hydroxytriazolam	5.322	373447	12268.63	55.4	4802.58	139310	930.8397 ng/ml
Alprazolam	5.959	832763	∞	33.0	∞	29107	993.4163 ng/ml
Chlordiazepoxide	3.193	2884475	125694.42	30.1	150604.23	139310	835.1321 ng/ml
Clonazepam	5.798	871307	39955.11	44.2	34478.52	118974	864.4208 ng/ml
Diazepam	7.427	1954345	∞	40.6	20307.90	250856	741.8038 ng/ml
Flunitrazepam	6.354	1959698	∞	43.8	∞	118974	993.6654 ng/ml
Flurazepam	4.317	2617329	∞	26.8	∞	250856	406.8445 ng/ml
Lorazepam	5.848	431642	14427.04	102.0	25701.67	139310	865.6544 ng/ml
Midazolam	4.075	1541663	1119.60	30.2	∞	118974	538.5082 ng/ml
Nitrazepam	5.210	2094342	84218.50	52.3	80403.12	118974	1021.0925 ng/ml
Nordiazepam	5.785	1310094	∞	55.1	∞	139310	727.5290 ng/ml
Oxazepam	5.505	2467675	94718.20	41.3	40449.51	110722	917.6124 ng/ml
Temazepam	6.642	4507892	160558.69	33.9	50390.08	513527	909.6087 ng/ml
zolpidem	2.974	12210603	415822.89	36.8	320053.74	139310	405.0799 ng/ml
zopiclone	2.241	1945425	143853.33	61.2	94036.73	139310	699.1831 ng/ml

AM #28 Multi-Drug Quant. Results



Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3484\QuantResults\am 13 worklist 3484.batch.bin
6/19/2019 11:49:31 AM

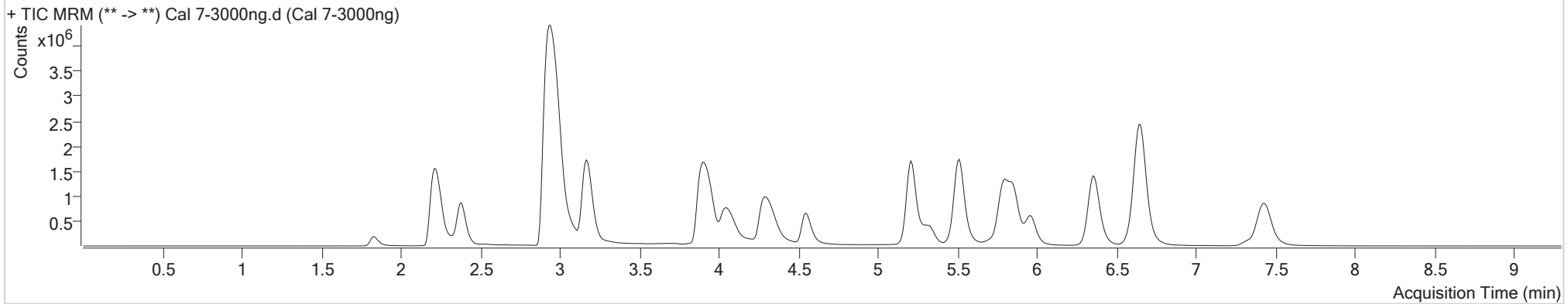
Instrument Type
Acq. Method
Sample Position
Injection Volume
Acq. Date-Time
Sample Info.

Falco
Cal
Benzos_Z_Drugs 053019 FINAL.m
P5-A7
2.5
6/18/2019 3:36:03 PM

Data File
Sample
Operator
Comment

Cal 7-3000ng.d
Cal 7-3000ng
Worklist 3484

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.829	515055	28287.54	36.7	11368.74	263196	1277.6301 ng/ml
7-Aminoflunitrazepam	2.383	2558476	∞	35.1	26404.92	263196	1044.5335 ng/ml
alpha-Hydroxyalprazolam	5.281	394935	∞	87.4	∞	28100	2452.1800 ng/ml
alpha-hydroxytriazolam	5.322	815256	22841.60	55.0	9589.18	138301	2047.9990 ng/ml
Alprazolam	5.959	1941068	∞	32.3	∞	28100	2402.3427 ng/ml
Chlordiazepoxide	3.167	5838397	180165.11	30.4	248151.01	138301	1706.4021 ng/ml
Clonazepam	5.798	1593151	79500.87	44.7	19572.01	104712	1798.3571 ng/ml
Diazepam	7.427	3875105	18381.76	40.5	13096.48	244823	1510.2068 ng/ml
Flunitrazepam	6.354	4610242	∞	43.3	∞	104712	2657.6253 ng/ml
Flurazepam	4.284	4984487	∞	26.7	∞	244823	804.4282 ng/ml
Lorazepam	5.856	887660	27687.99	102.2	35085.79	138301	1795.0719 ng/ml
Midazolam	4.049	3256674	∞	30.2	3405.92	104712	1304.7747 ng/ml
Nitrazepam	5.210	4805121	170032.60	52.8	84311.73	104712	2662.8696 ng/ml
Nordiazepam	5.793	2480278	∞	54.0	∞	138301	1389.0180 ng/ml
Oxazepam	5.513	5609281	280456.22	42.1	179626.14	103832	2226.7766 ng/ml
Temazepam	6.651	9986366	187993.60	34.1	75462.05	500108	2070.6724 ng/ml
zolpidem	2.932	22566273	303641.12	36.4	211733.22	138301	758.0319 ng/ml
zopiclone	2.208	4748828	204381.66	61.4	125331.97	138301	1727.0139 ng/ml