









Worklist: 3455

<u>LAB_CASE</u>	<u>ITEM</u>	<u>TASK_ID</u>	<u>DESCRIPTION</u>	
C2019-0562	1	153986	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
M2019-1973	4	153987	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
M2019-2262	3	153991	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1267	1	153992	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1284	1	153993	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1320	1	153994	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1322	1	153995	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	
P2019-1397	1	153996	AM 13 Urine LCMS-QQQ Benzodiazepines and ;	

AM 13: Benzo and Z-Drugs LCMS Urine Extraction

Extraction Date: 06/07/2019
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: 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: D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume
- 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.

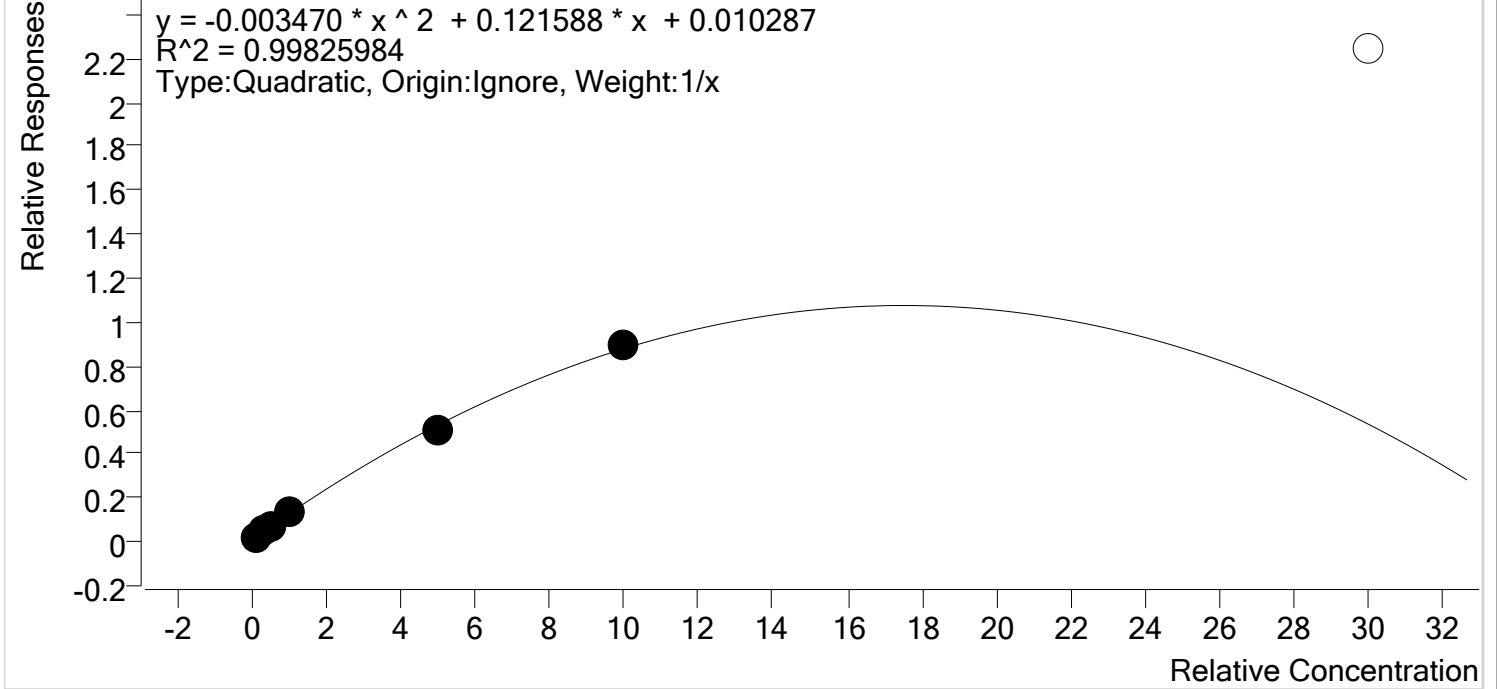
Comments: The samples were originally run with a method that injected 5ul of sample. The method was changed to Reduce the volume injected to 2.5ul. The data used is that from the 2.5ul method.

Compound Calibration Report



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte 7-Aminoclonazepam **Internal Standard** 7-Aminoflunitrazepam-D7 ISTD

7-Aminoclonazepam - 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	8.1	81.4
Cal 2- 25ng	2	✓	25.0	27.3	109.2
Cal 3 -50ng	3	✓	50.0	54.0	107.9
Cal 4-100ng	4	✓	100.0	104.3	104.3
Cal 5-500ng	5	✓	500.0	478.7	95.7
Cal 6-1000ng	6	✓	1000.0	1016.6	101.7
Cal 7-3000ng	7	✗	3000.0	ND	



Compound Calibration Report

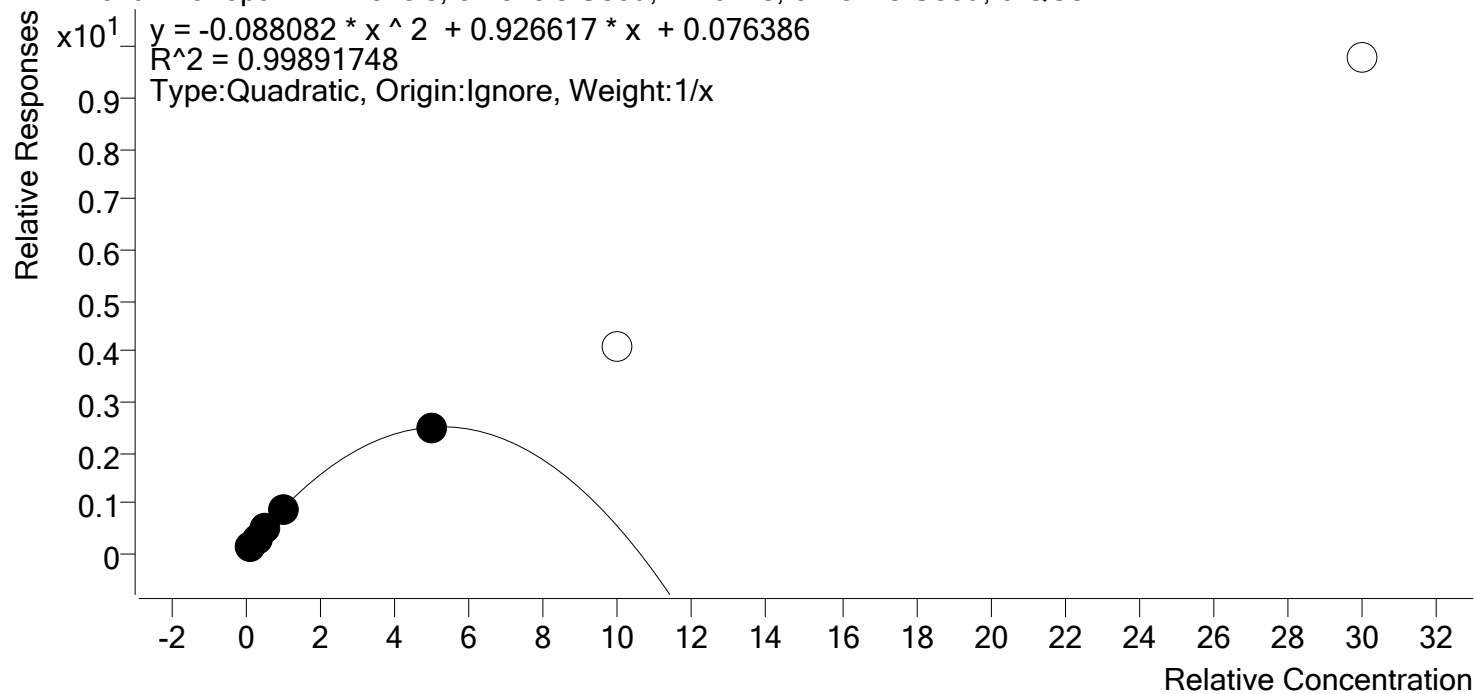
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Last Cal. Update 6/12/2019 1:27 PM

Analyst Name ISP\datastor

Analyte 7-Aminoflunitrazepam **Internal Standard** 7-Aminoflunitrazepam-D7 ISTD

7-Aminoflunitrazepam - 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	9.4	94.2
Cal 2- 25ng	2	✓	25.0	26.3	105.4
Cal 3 -50ng	3	✓	50.0	51.6	103.3
Cal 4-100ng	4	✓	100.0	96.9	96.9
Cal 5-500ng	5	✓	500.0	507.0	101.4
Cal 6-1000ng	6	✗	1000.0	ND	
Cal 7-3000ng	7	✗	3000.0	ND	



Compound Calibration Report

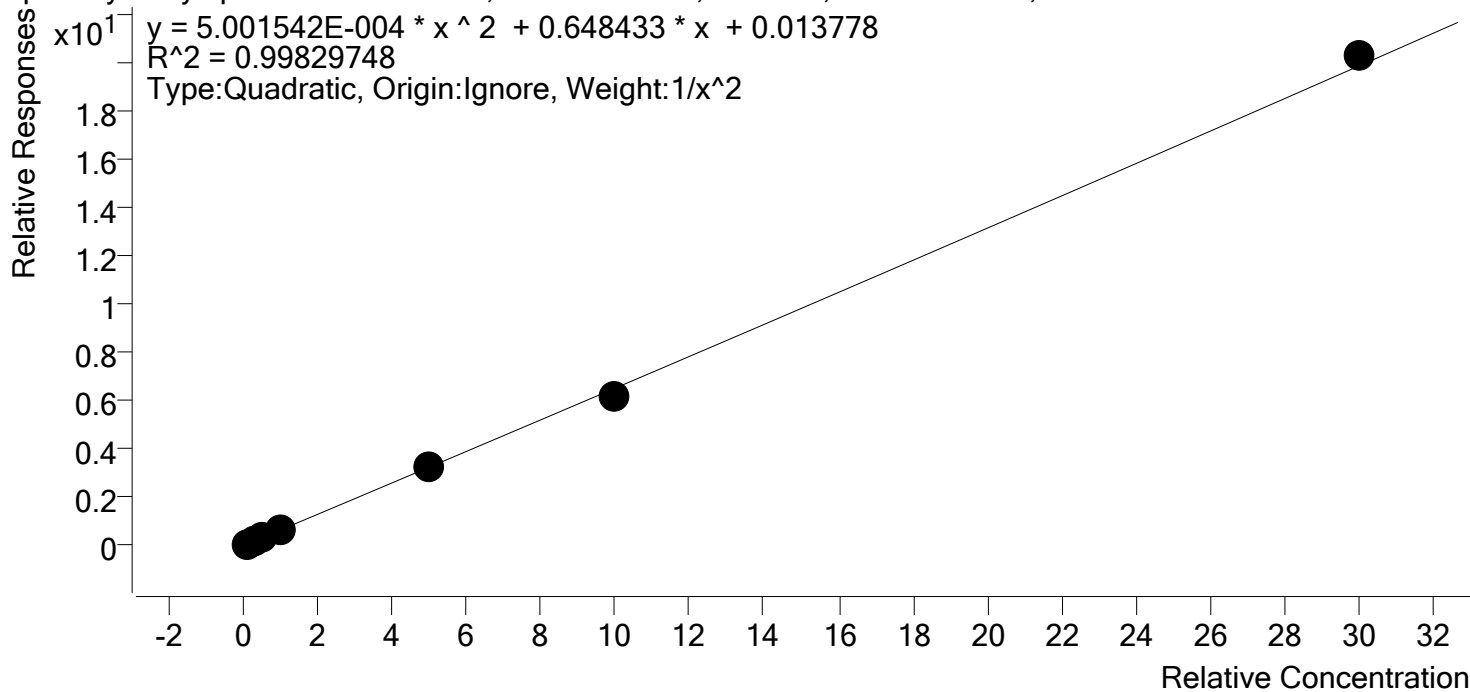
Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin

Last Cal. Update 6/12/2019 1:27 PM

Analyst Name ISP\datastor

Analyte alpha-Hydroxyalprazolam **Internal Standard** alphahydroxyalprazolam -D5 ISTD

alpha-Hydroxyalprazolam - 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	10.0	99.7
Cal 2- 25ng	2	✓	25.0	24.5	98.1
Cal 3 -50ng	3	✓	50.0	51.8	103.6
Cal 4-100ng	4	✓	100.0	104.1	104.1
Cal 5-500ng	5	✓	500.0	492.4	98.5
Cal 6-1000ng	6	✓	1000.0	939.6	94.0
Cal 7-3000ng	7	✓	3000.0	3060.7	102.0



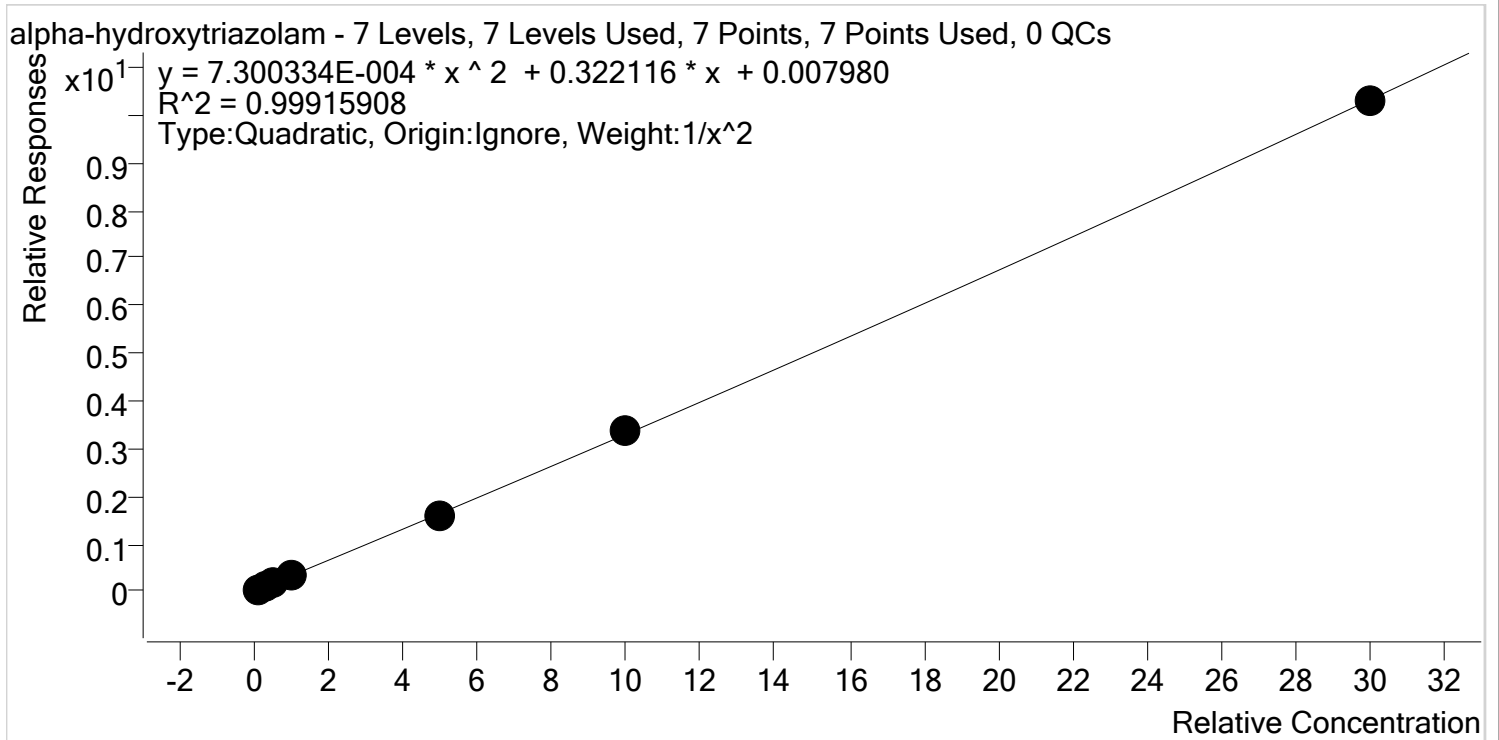
Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin

Last Cal. Update 6/12/2019 1:27 PM

Analyst Name ISP\datastor

Analyte alpha-hydroxytriazolam **Internal Standard** Nordiazepam-D5 ISTD

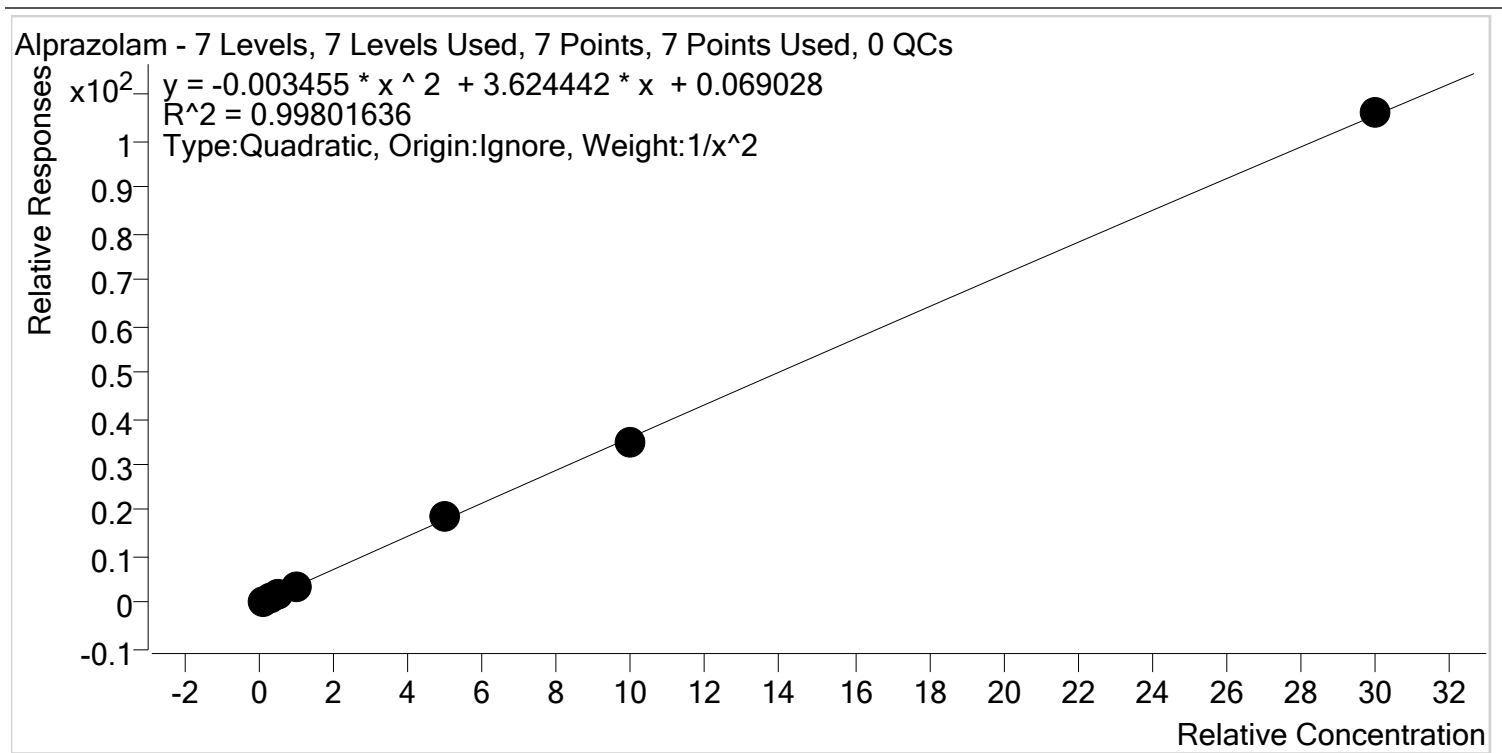


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.1	101.2
Cal 2- 25ng	2	✓	25.0	24.3	97.4
Cal 3 -50ng	3	✓	50.0	48.5	97.0
Cal 4-100ng	4	✓	100.0	104.4	104.4
Cal 5-500ng	5	✓	500.0	495.6	99.1
Cal 6-1000ng	6	✓	1000.0	1011.6	101.2
Cal 7-3000ng	7	✓	3000.0	2991.2	99.7

Compound Calibration Report



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Alprazolam **Internal Standard** alphahydroxyalprazolam -D5 ISTD

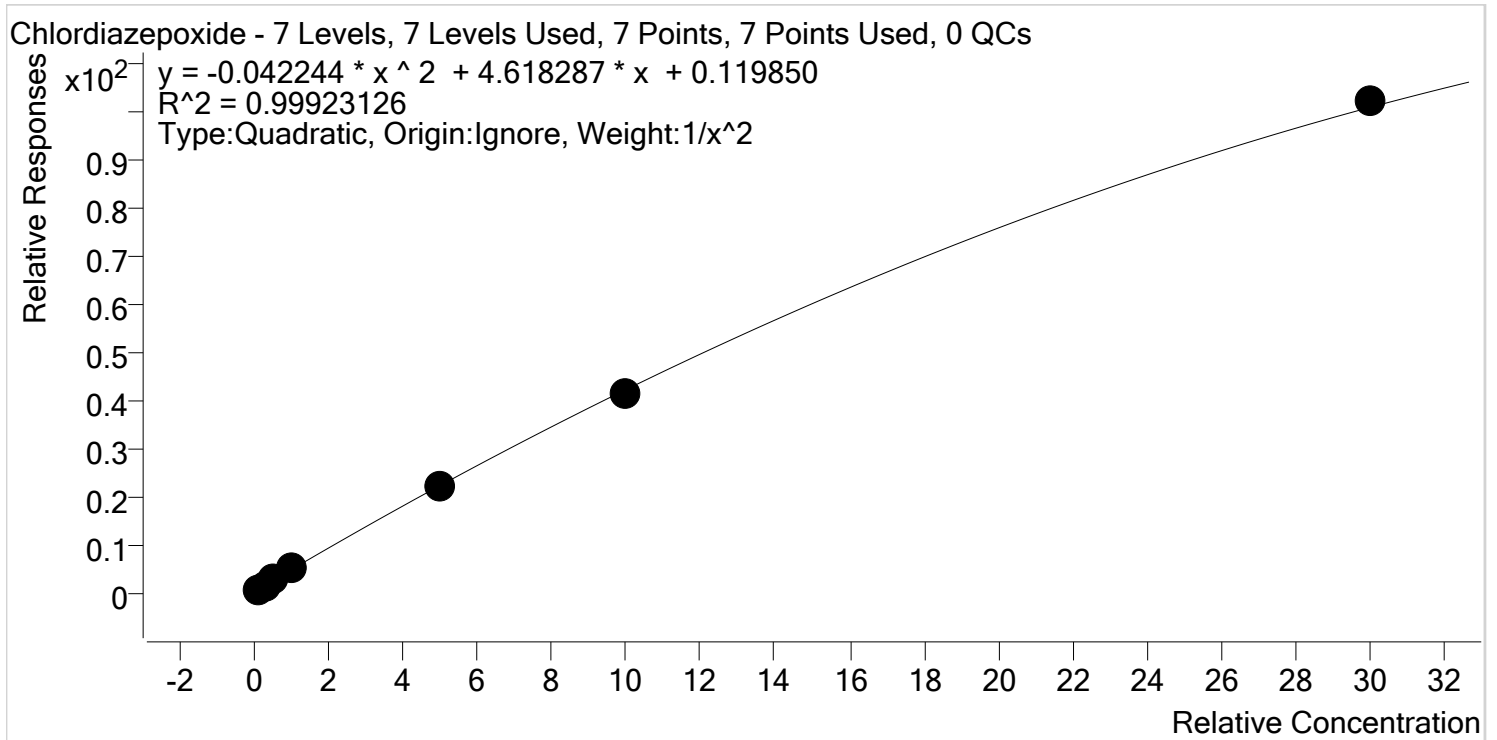


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.2	102.1
Cal 2- 25ng	2	✓	25.0	23.6	94.4
Cal 3 -50ng	3	✓	50.0	49.5	99.0
Cal 4-100ng	4	✓	100.0	103.3	103.3
Cal 5-500ng	5	✓	500.0	524.6	104.9
Cal 6-1000ng	6	✓	1000.0	958.8	95.9
Cal 7-3000ng	7	✓	3000.0	3015.4	100.5



Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Chlordiazepoxide **Internal Standard** Nordiazepam-D5 ISTD

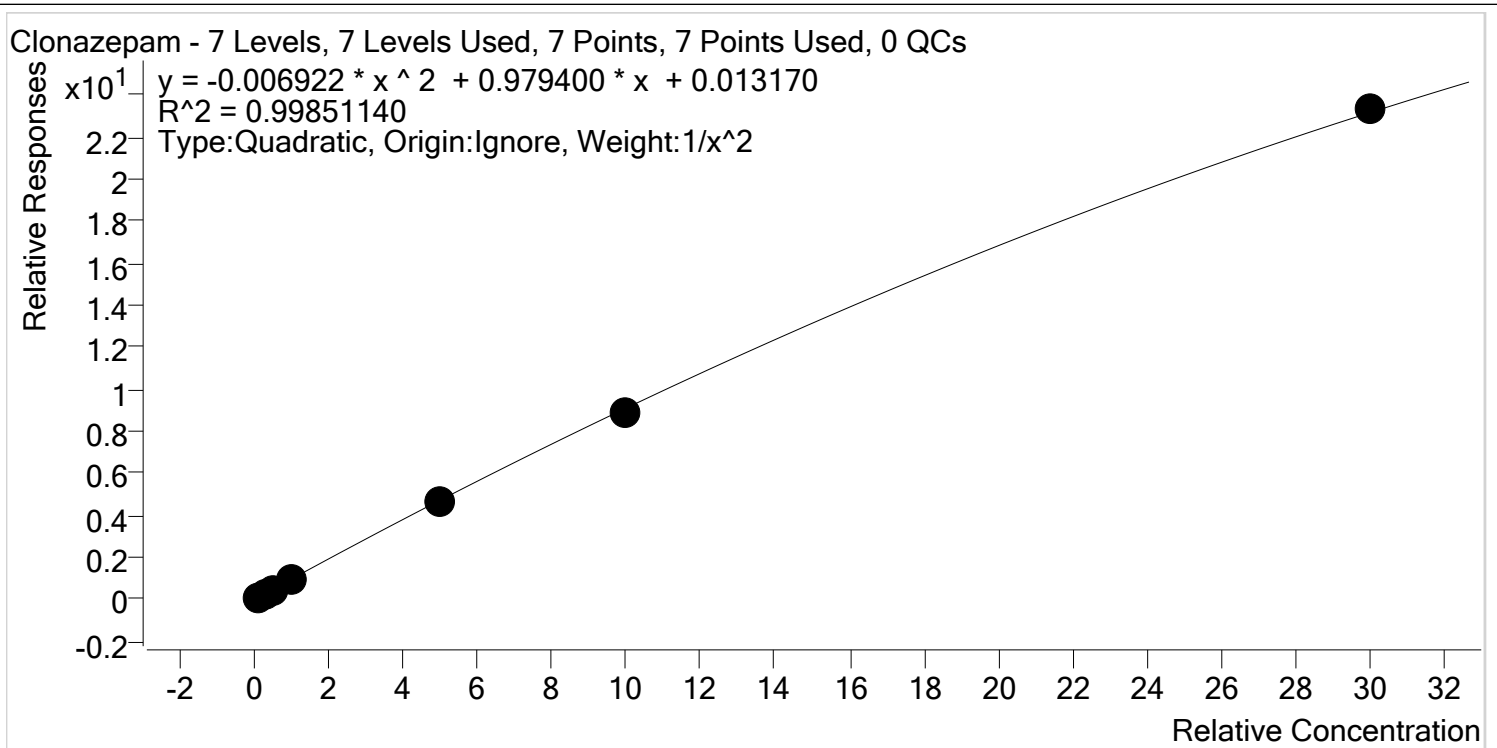


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.0	100.1
Cal 2- 25ng	2	✓	25.0	24.8	99.0
Cal 3 -50ng	3	✓	50.0	49.9	99.8
Cal 4-100ng	4	✓	100.0	104.4	104.4
Cal 5-500ng	5	✓	500.0	489.4	97.9
Cal 6-1000ng	6	✓	1000.0	973.7	97.4
Cal 7-3000ng	7	✓	3000.0	3061.0	102.0



Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Clonazepam **Internal Standard** Clonazepam-D4 ISTD

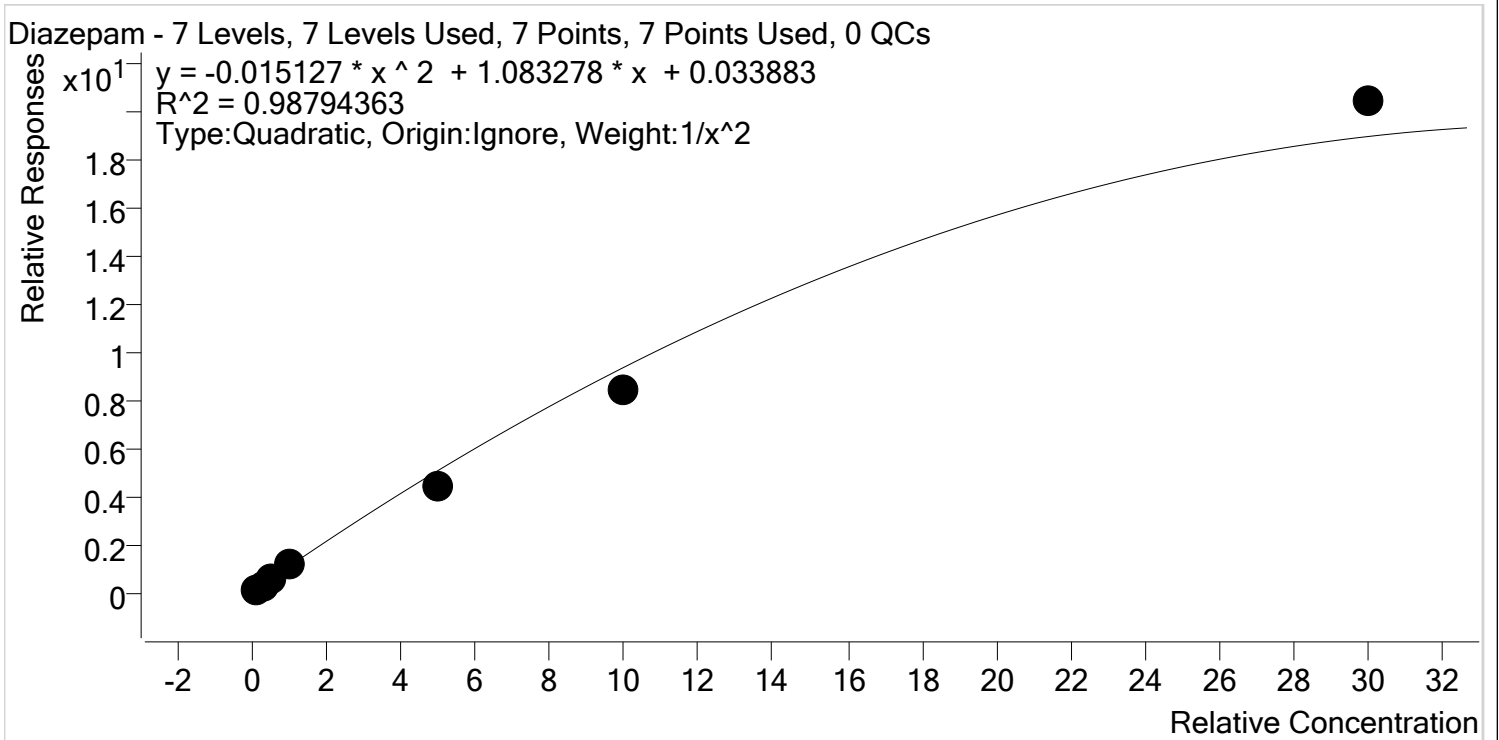


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.1	101.5
Cal 2- 25ng	2	✓	25.0	23.7	94.6
Cal 3 -50ng	3	✓	50.0	50.6	101.2
Cal 4-100ng	4	✓	100.0	104.8	104.8
Cal 5-500ng	5	✓	500.0	493.7	98.7
Cal 6-1000ng	6	✓	1000.0	983.5	98.4
Cal 7-3000ng	7	✓	3000.0	3027.6	100.9

Compound Calibration Report



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Diazepam **Internal Standard** Diazepam-D5 ISTD

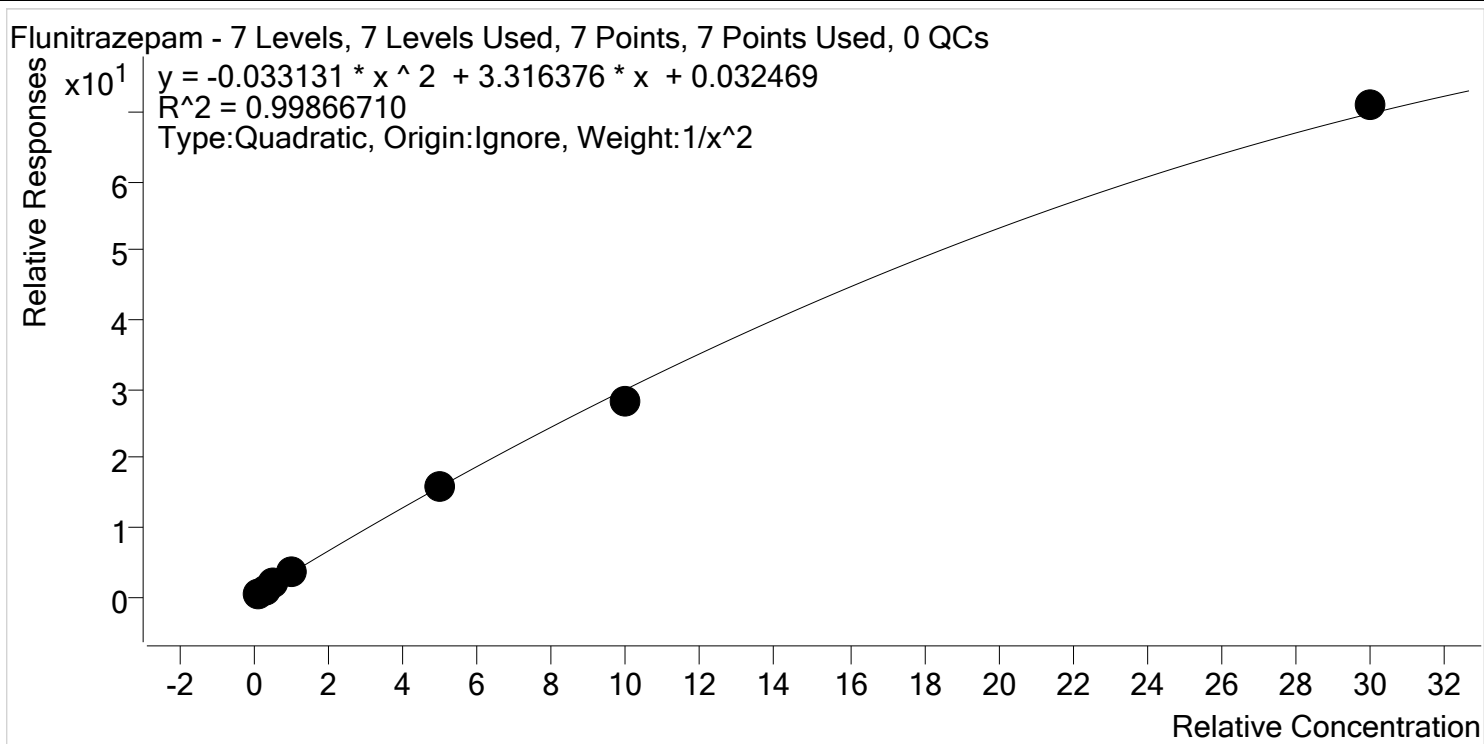


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.6	96.1
Cal 2- 25ng	2	✓	25.0	26.4	105.6
Cal 3 -50ng	3	✓	50.0	52.3	104.6
Cal 4-100ng	4	✓	100.0	110.6	110.6
Cal 5-500ng	5	✓	500.0	428.9	85.8
Cal 6-1000ng	6	✓	1000.0	882.8	88.3
Cal 7-3000ng	7	✓	3000.0	ND	



Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Flunitrazepam **Internal Standard** Clonazepam-D4 ISTD

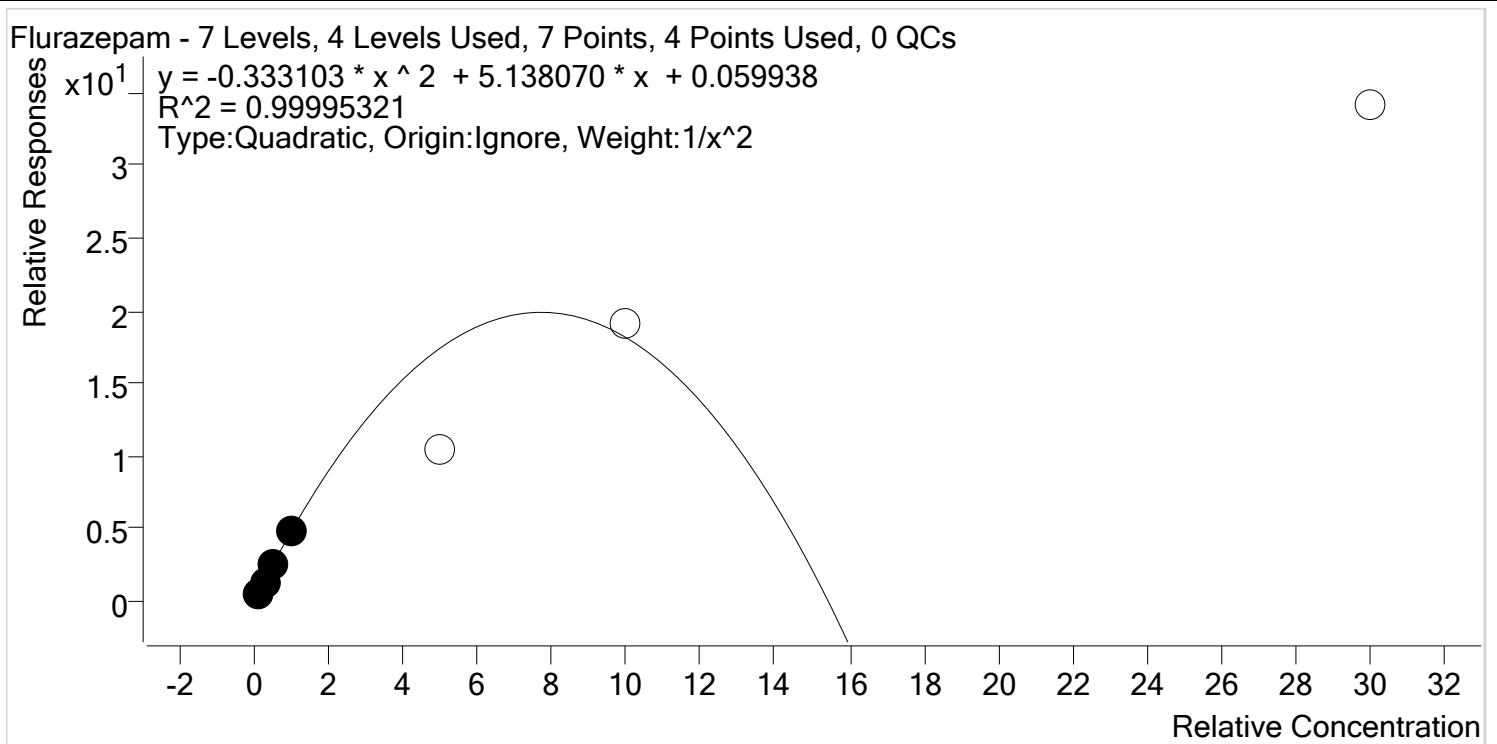


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.1	100.7
Cal 2- 25ng	2	✓	25.0	24.1	96.5
Cal 3 -50ng	3	✓	50.0	50.9	101.8
Cal 4-100ng	4	✓	100.0	103.0	103.0
Cal 5-500ng	5	✓	500.0	507.9	101.6
Cal 6-1000ng	6	✓	1000.0	942.2	94.2
Cal 7-3000ng	7	✓	3000.0	3093.0	103.1



Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Flurazepam **Internal Standard** Diazepam-D5 ISTD



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.0	100.1
Cal 2- 25ng	2	✓	25.0	24.9	99.5
Cal 3 -50ng	3	✓	50.0	50.3	100.6
Cal 4-100ng	4	✓	100.0	99.8	99.8
Cal 5-500ng	5	x	500.0	240.1	48.0
Cal 6-1000ng	6	x	1000.0	631.8	63.2
Cal 7-3000ng	7	x	3000.0	ND	



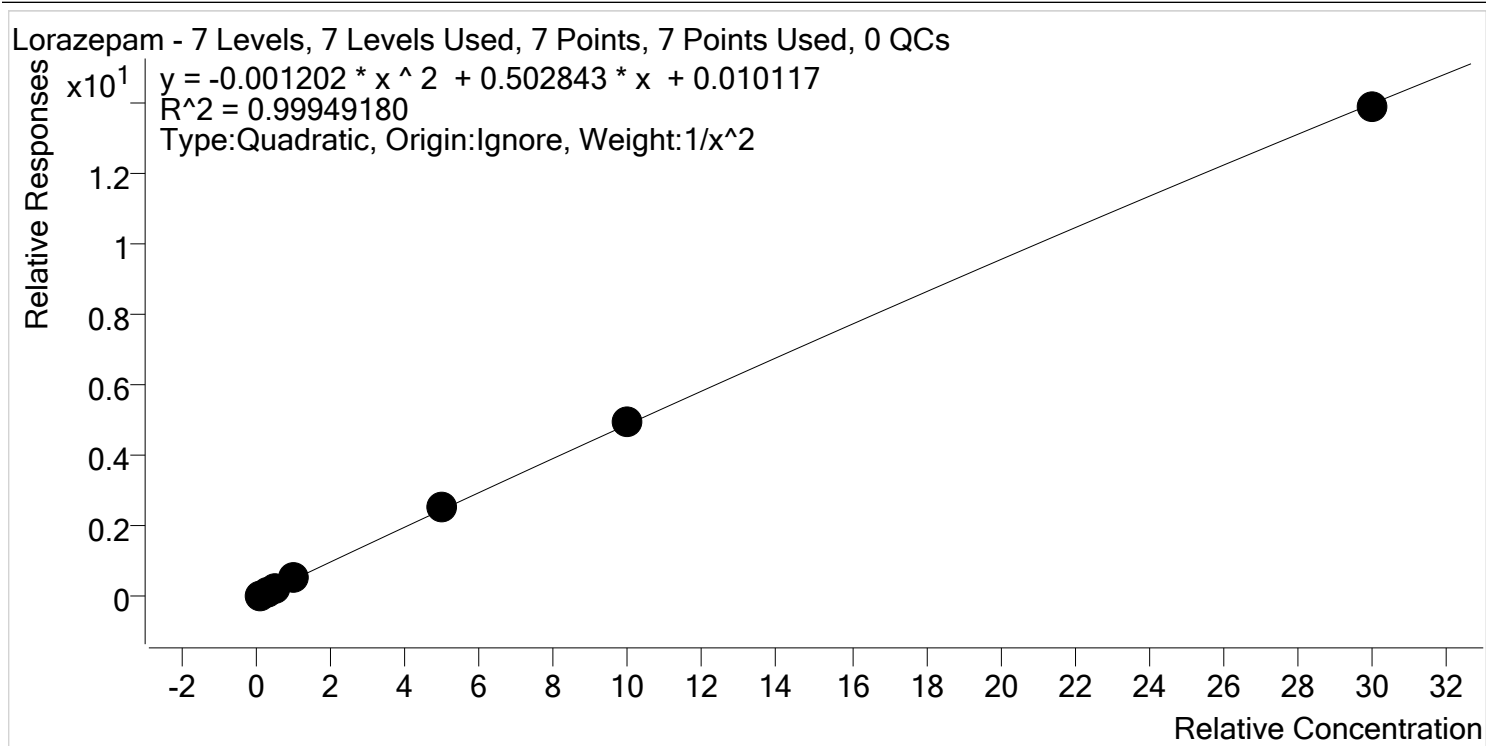
Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin

Last Cal. Update 6/12/2019 1:27 PM

Analyst Name ISP\datastor

Analyte Lorazepam **Internal Standard** Nordiazepam-D5 ISTD



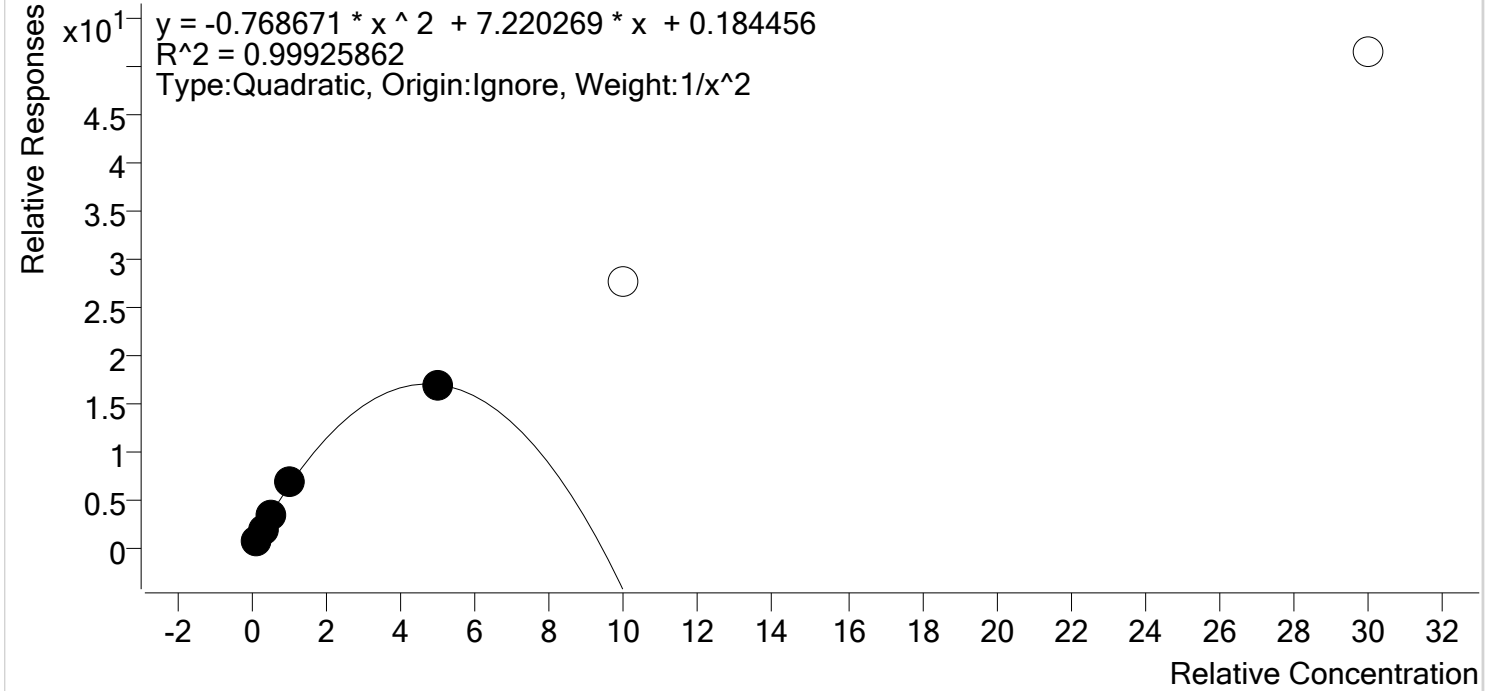
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.1	101.3
Cal 2- 25ng	2	✓	25.0	24.4	97.7
Cal 3 -50ng	3	✓	50.0	48.6	97.3
Cal 4-100ng	4	✓	100.0	101.3	101.3
Cal 5-500ng	5	✓	500.0	511.1	102.2
Cal 6-1000ng	6	✓	1000.0	1009.8	101.0
Cal 7-3000ng	7	✓	3000.0	2977.1	99.2



Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Midazolam **Internal Standard** Clonazepam-D4 ISTD

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

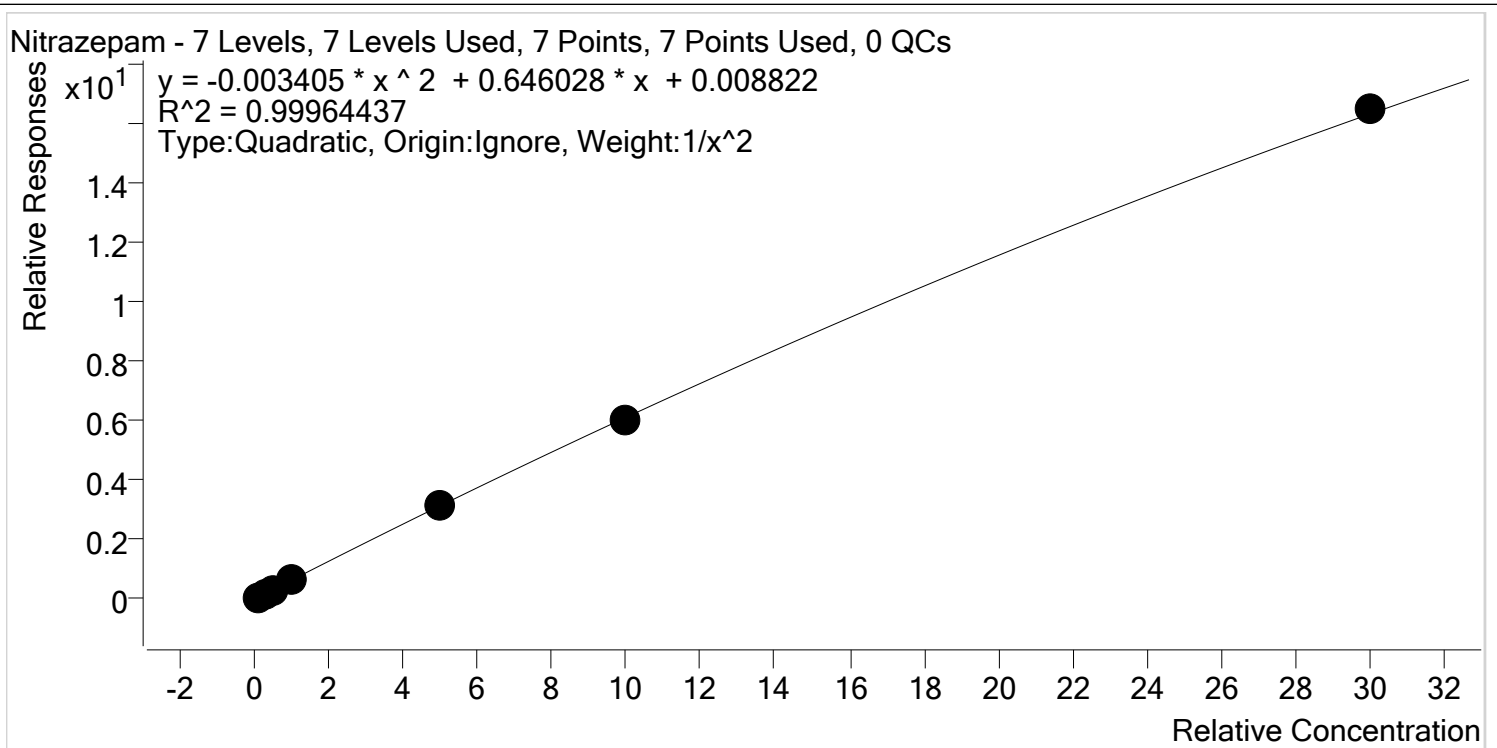


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.1	100.6
Cal 2- 25ng	2	✓	25.0	24.6	98.5
Cal 3 -50ng	3	✓	50.0	49.2	98.3
Cal 4-100ng	4	✓	100.0	103.3	103.3
Cal 5-500ng	5	✓	500.0	420.8	84.2
Cal 6-1000ng	6	✗	1000.0	ND	
Cal 7-3000ng	7	✗	3000.0	ND	



Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Nitrazepam **Internal Standard** Clonazepam-D4 ISTD



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.0	99.7
Cal 2- 25ng	2	✓	25.0	25.1	100.3
Cal 3 -50ng	3	✓	50.0	49.8	99.5
Cal 4-100ng	4	✓	100.0	102.8	102.8
Cal 5-500ng	5	✓	500.0	495.1	99.0
Cal 6-1000ng	6	✓	1000.0	975.2	97.5
Cal 7-3000ng	7	✓	3000.0	3035.6	101.2



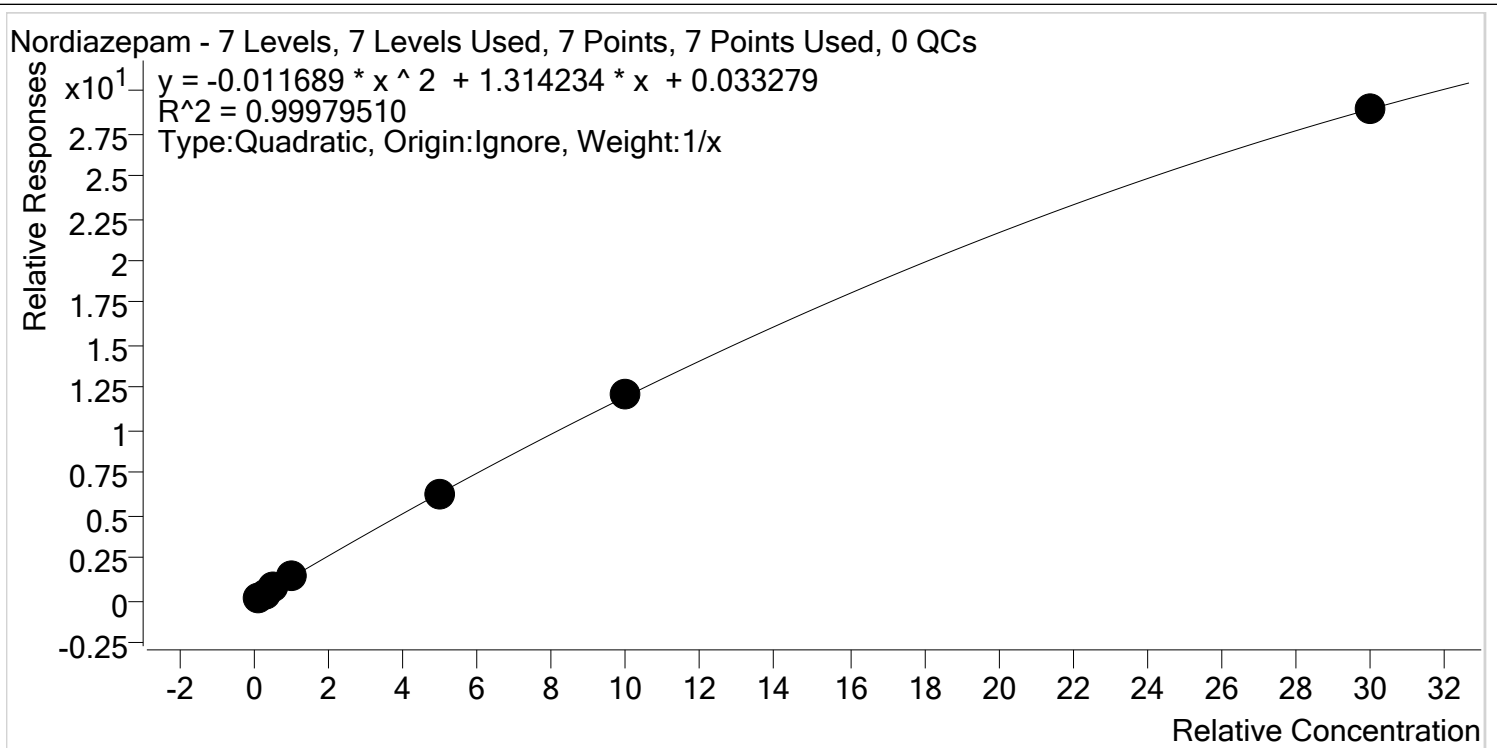
Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin

Last Cal. Update 6/12/2019 1:27 PM

Analyst Name ISP\datastor

Analyte Nordiazepam **Internal Standard** Nordiazepam-D5 ISTD

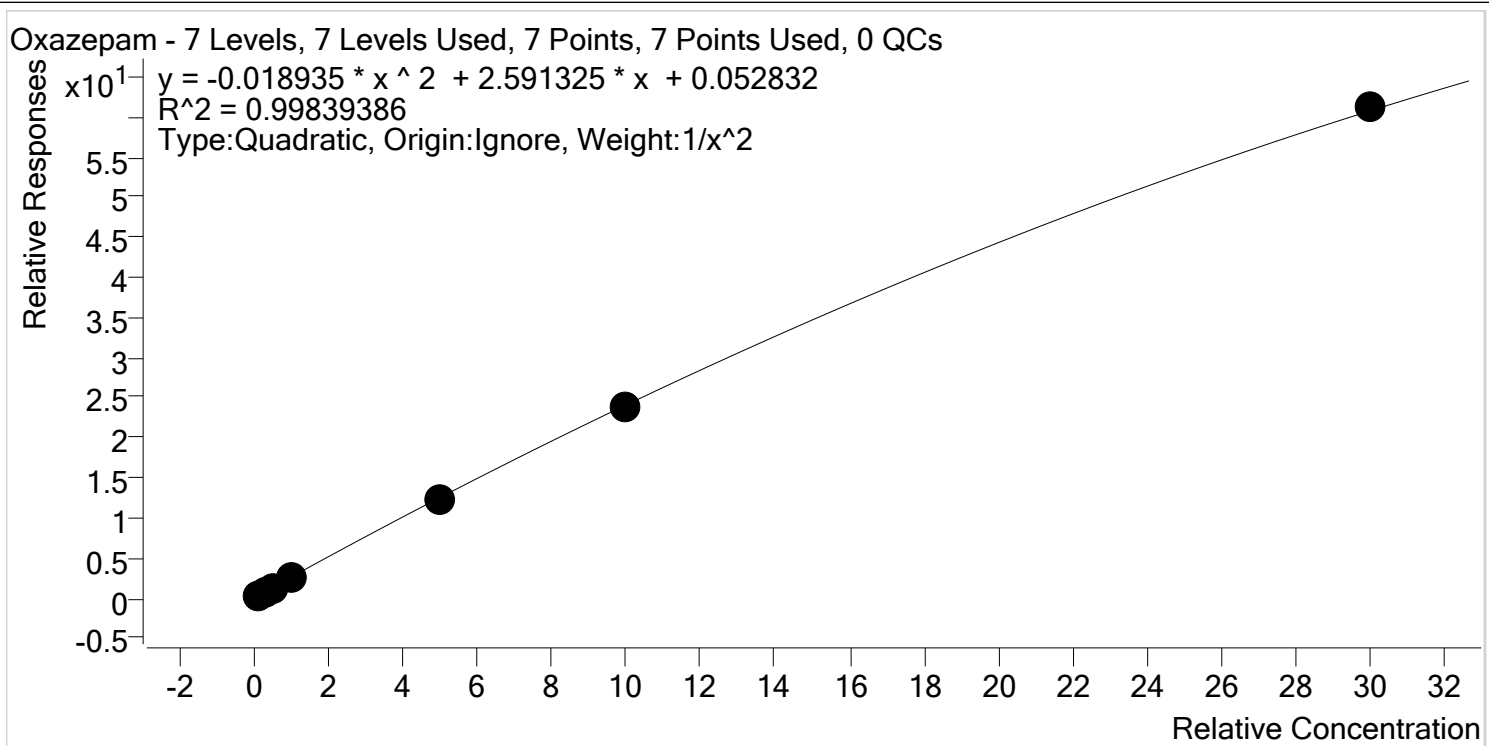


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	9.6	96.1
Cal 2- 25ng	2	✓	25.0	24.9	99.6
Cal 3 -50ng	3	✓	50.0	50.2	100.5
Cal 4-100ng	4	✓	100.0	105.5	105.5
Cal 5-500ng	5	✓	500.0	488.1	97.6
Cal 6-1000ng	6	✓	1000.0	1007.4	100.7
Cal 7-3000ng	7	✓	3000.0	2999.1	100.0

Compound Calibration Report



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Oxazepam **Internal Standard** Oxazepam-D5 ISTD



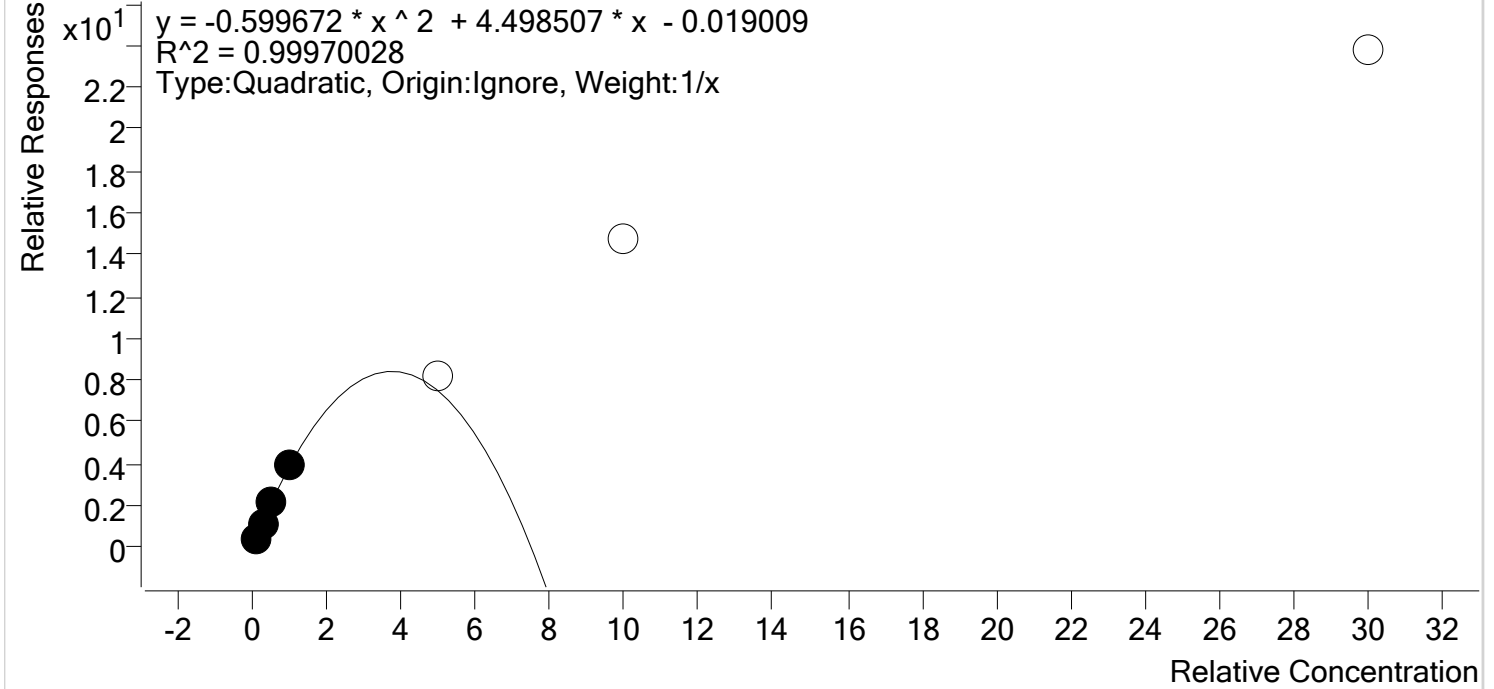
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.2	101.6
Cal 2- 25ng	2	✓	25.0	23.6	94.5
Cal 3 -50ng	3	✓	50.0	50.3	100.5
Cal 4-100ng	4	✓	100.0	105.2	105.2
Cal 5-500ng	5	✓	500.0	497.2	99.4
Cal 6-1000ng	6	✓	1000.0	978.3	97.8
Cal 7-3000ng	7	✓	3000.0	3030.4	101.0

Compound Calibration Report



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte quetiapine **Internal Standard** Temazepam-D5 ISTD

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

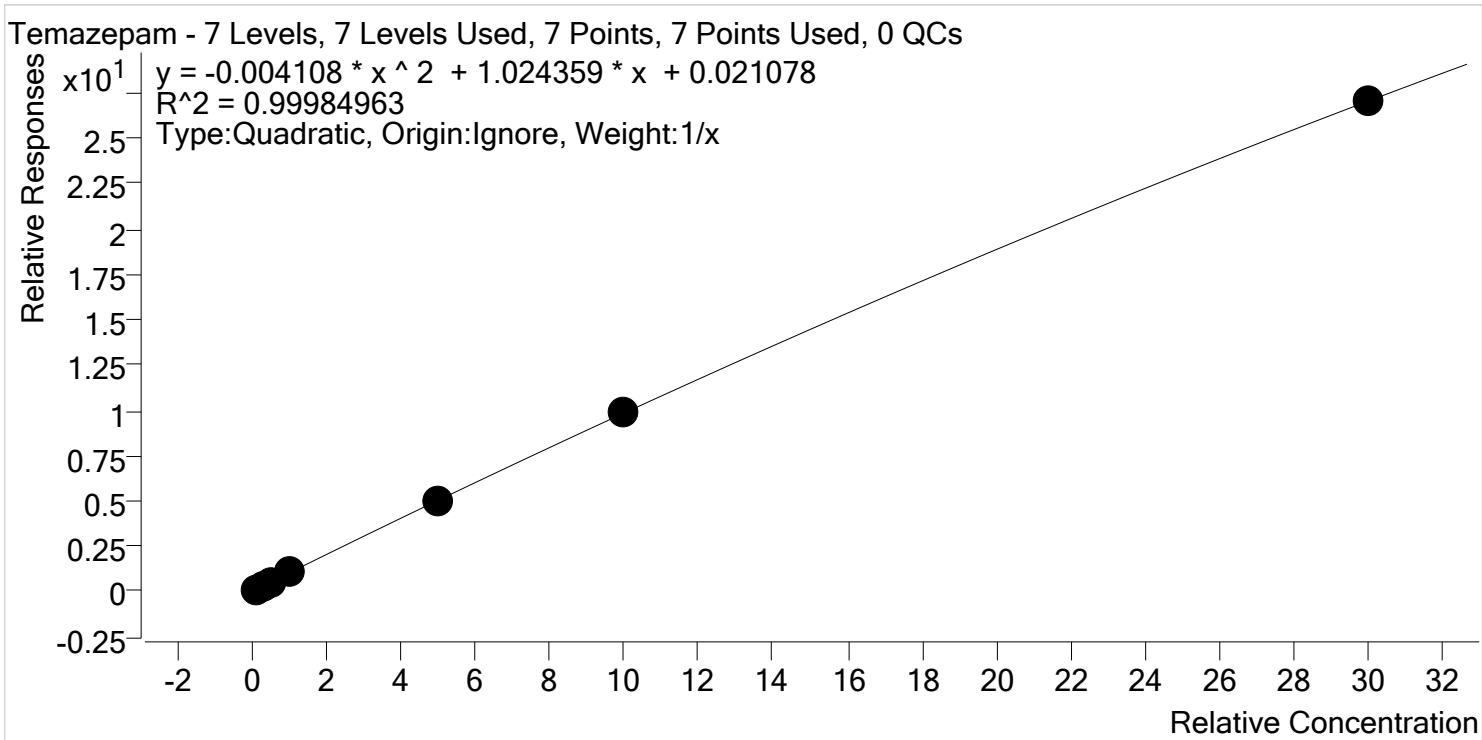


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.1	101.2
Cal 2- 25ng	2	✓	25.0	24.4	97.7
Cal 3 -50ng	3	✓	50.0	50.7	101.4
Cal 4-100ng	4	✓	100.0	99.8	99.8
Cal 5-500ng	5	x	500.0	324.6	64.9
Cal 6-1000ng	6	x	1000.0	ND	
Cal 7-3000ng	7	x	3000.0	ND	



Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte Temazepam **Internal Standard** Temazepam-D5 ISTD

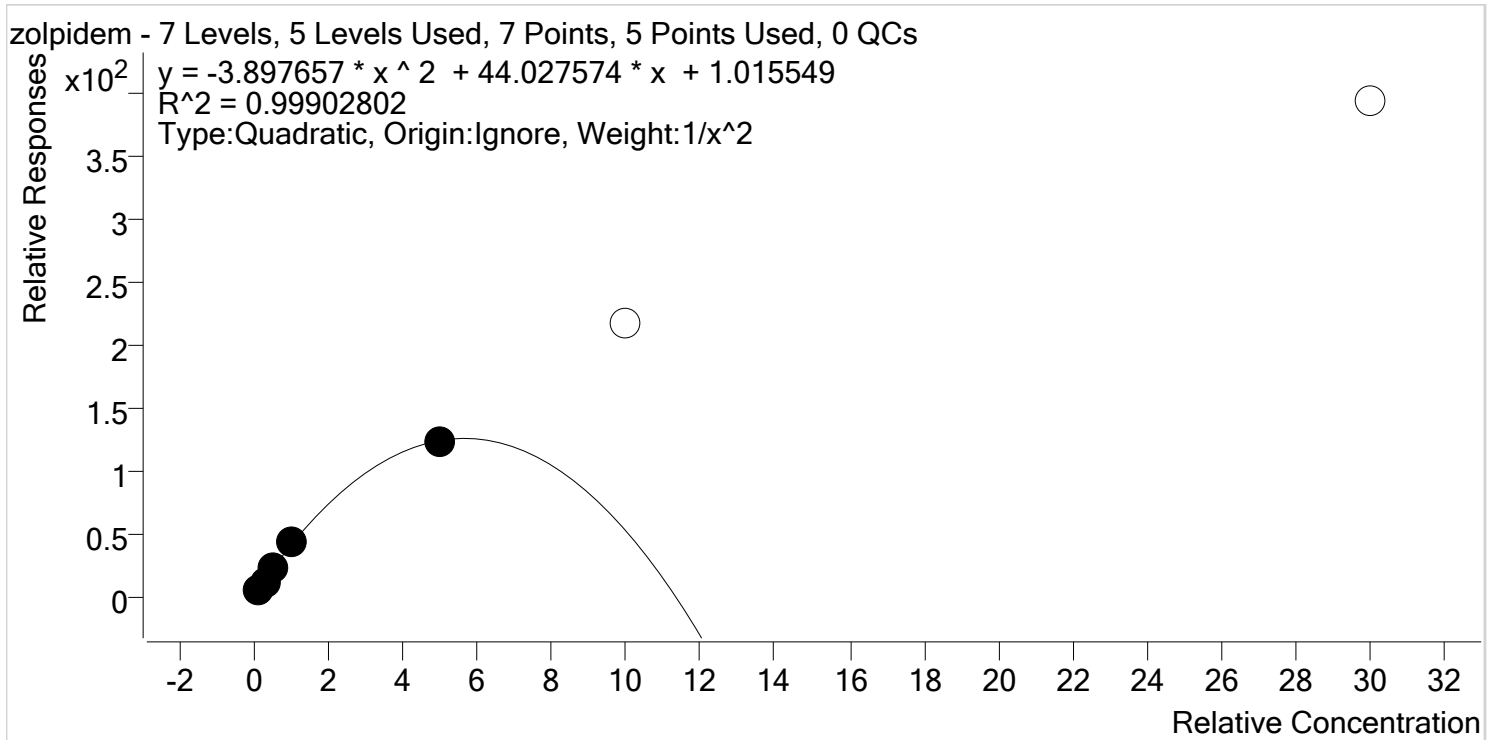


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.0	99.6
Cal 2- 25ng	2	✓	25.0	24.1	96.3
Cal 3 -50ng	3	✓	50.0	50.4	100.8
Cal 4-100ng	4	✓	100.0	104.7	104.7
Cal 5-500ng	5	✓	500.0	488.7	97.7
Cal 6-1000ng	6	✓	1000.0	1008.2	100.8
Cal 7-3000ng	7	✓	3000.0	2998.9	100.0



Compound Calibration Report

Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte zolpidem **Internal Standard** Nordiazepam-D5 ISTD



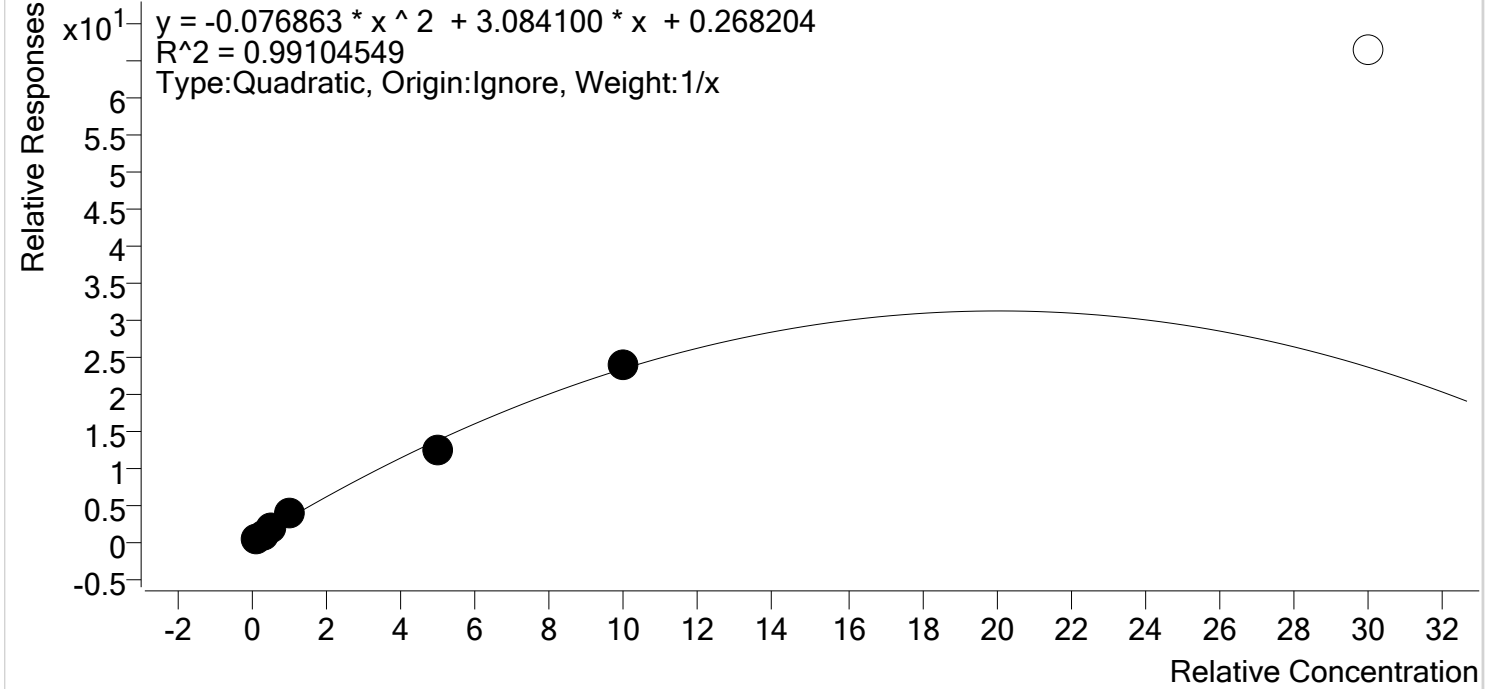
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1-10ng	1	✓	10.0	10.1	100.6
Cal 2- 25ng	2	✓	25.0	24.7	98.9
Cal 3 -50ng	3	✓	50.0	48.8	97.5
Cal 4-100ng	4	✓	100.0	103.8	103.8
Cal 5-500ng	5	✓	500.0	486.1	97.2
Cal 6-1000ng	6	✗	1000.0	ND	
Cal 7-3000ng	7	✗	3000.0	ND	

Compound Calibration Report



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Last Cal. Update 6/12/2019 1:27 PM
Analyst Name ISP\datastor
Analyte zopiclone **Internal Standard** Nordiazepam-D5 ISTD

zopiclone - 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	7.4	73.8
Cal 2- 25ng	2	✓	25.0	25.1	100.5
Cal 3 -50ng	3	✓	50.0	57.1	114.2
Cal 4-100ng	4	✓	100.0	119.1	119.1
Cal 5-500ng	5	✓	500.0	446.7	89.3
Cal 6-1000ng	6	✓	1000.0	1037.0	103.7
Cal 7-3000ng	7	✗	3000.0	ND	

AM #13 Benzodiazepines and Z-Drugs



Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
6/12/2019 1:27:33 PM

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

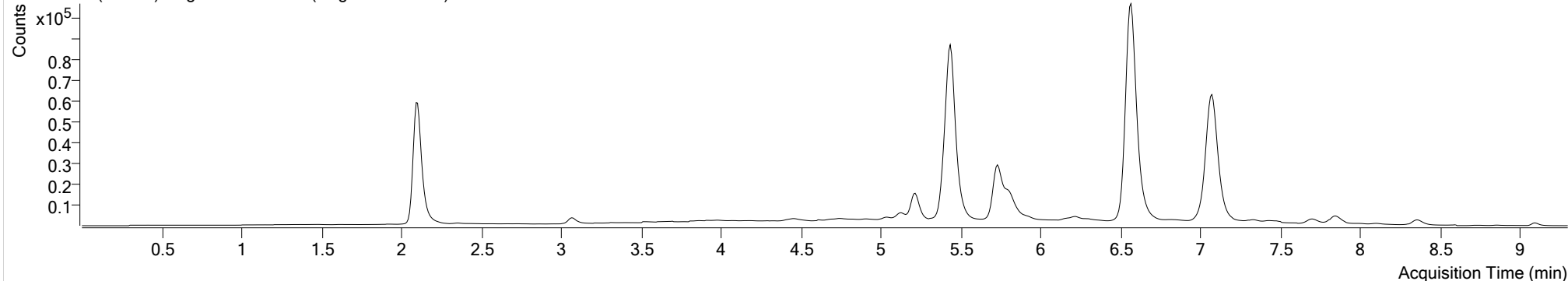
Falco
Sample
Benzos_Z_Drugs 053019 FINAL.m
P5-B1
2.5
6/11/2019 3:42:09 PM

Data File
Sample
Comment

Negative Control.d
Negative Control
Worklist 3455

Sample Chromatogram

+ TIC MRM (** -> **) Negative Control.d (Negative Control)



AM #13 Benzodiazepines and Z-Drugs



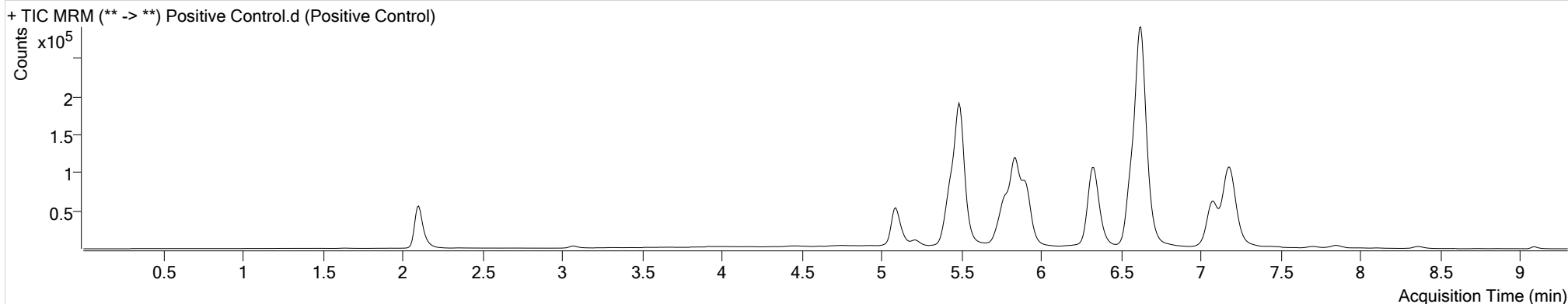
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
6/12/2019 1:27:33 PM

Instrument Falco
Type Sample
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-B2
Injection Volume 2.5
Acq. Date-Time 6/11/2019 3:54:37 PM
Sample Info.

Data File Positive Control.d
Sample Positive Control
Comment Worklist 3455

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Alprazolam	5.908	241169	∞	32.7	∞	17517	379.3326 ng/ml
Clonazepam	5.772	137256	6369.81	44.5	1143.93	51590	275.6749 ng/ml
Diazepam	7.184	431428	4452.10	40.5	3042.81	169974	239.1661 ng/ml
Flunitrazepam	6.320	333400	4742.43	43.7	826.15	51590	197.7968 ng/ml
Lorazepam	5.839	88796	2049.94	98.8	4188.58	76550	229.9340 ng/ml
Nitrazepam	5.092	132764	973.77	52.1	4272.34	51590	405.6594 ng/ml
Oxazepam	5.488	511476	11158.41	41.7	4226.44	65447	306.4106 ng/ml
Temazepam	6.626	965438	∞	33.4	∞	327184	289.3584 ng/ml

AM #13 Benzodiazepines and Z-Drugs

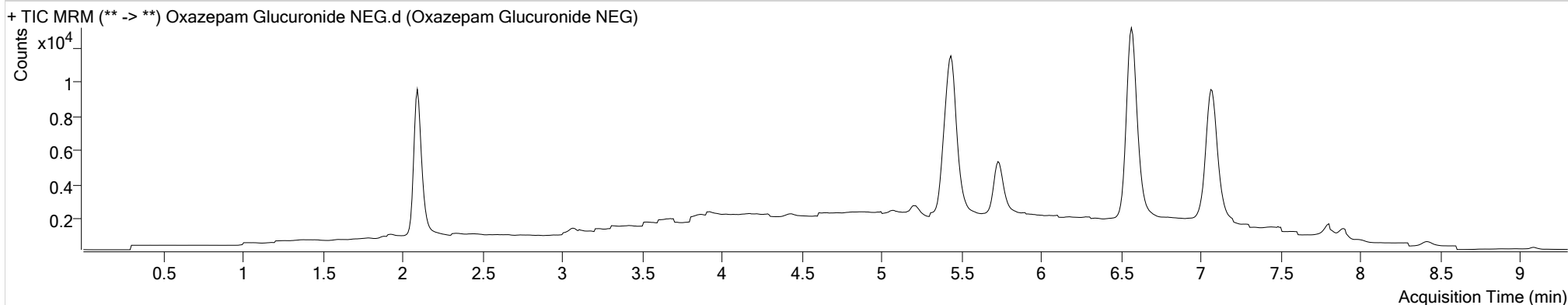


Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Calibration Last Update 6/12/2019 1:27:33 PM

Instrument Falco
Type Sample
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A8
Injection Volume 5
Acq. Date-Time 6/11/2019 2:21:18 PM
Sample Info.

Data File Oxazepam Glucuronide NEG.d
Sample Oxazepam Glucuronide NEG
Comment Worklist 3455

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Oxazepam	5.488	934	26.25	45.2	7.06	8817	2.0490 ng/ml

AM #13 Benzodiazepines and Z-Drugs



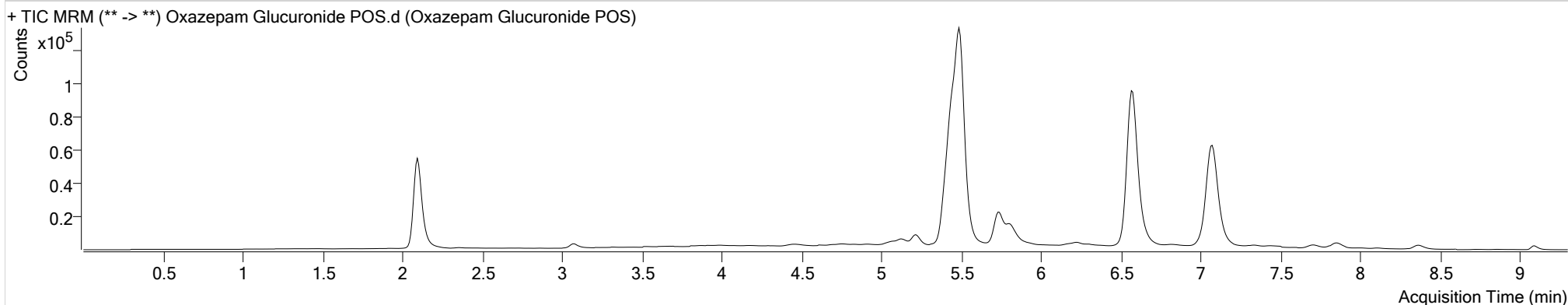
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
6/12/2019 1:27:33 PM

Instrument Falco
Type Sample
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A9
Injection Volume 2.5
Acq. Date-Time 6/11/2019 2:33:47 PM
Sample Info.

Data File Oxazepam Glucuronide POS.d
Sample Oxazepam Glucuronide POS
Comment Worklist 3455

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Oxazepam	5.497	330007	∞	42.4	857.94	69188	184.5142 ng/ml

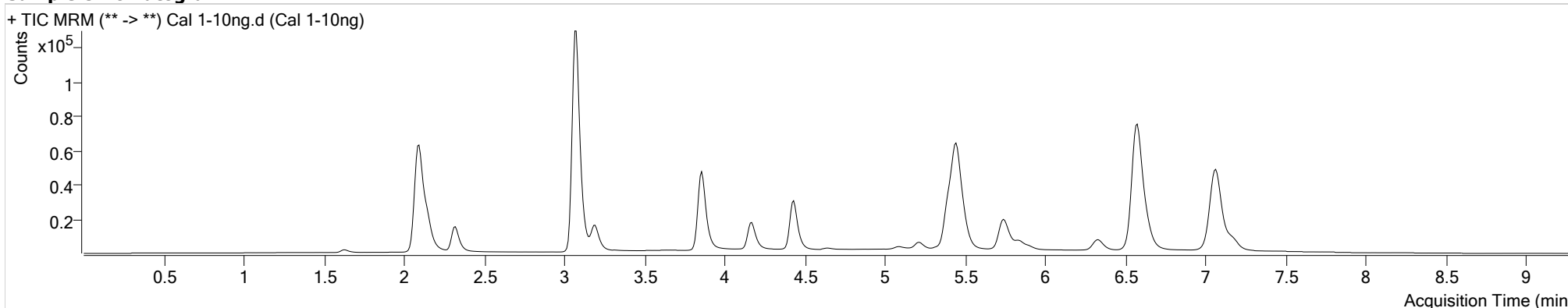
AM #13 Benzodiazepines and Z-Drugs



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Calibration Last Update 6/12/2019 1:27:33 PM

Instrument Falco **Data File** Cal 1-10ng.d
Type Cal **Sample** Cal 1-10ng
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A1 **Comment** Worklist 3455
Injection Volume 2.5
Acq. Date-Time 6/11/2019 12:41:34 PM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.628	4212	229.75	33.4	76.06	208905	8.1414 ng/ml
7-Aminoflunitrazepam	2.148	34037	591.51	35.2	381.81	208905	9.4244 ng/ml
alpha-Hydroxyalprazolam	5.256	948	19.11	97.9	20.93	12091	9.9708 ng/ml
alpha-hydroxytriazolam	5.314	2528	100.80	60.8	82.37	62289	10.1222 ng/ml
Alprazolam	5.900	5307	44.31	30.8	36.80	12091	10.2074 ng/ml
Chlordiazepoxide	3.193	36226	1421.61	30.3	872.50	62289	10.0068 ng/ml
Clonazepam	5.781	5465	251.03	45.1	73.96	48591	10.1465 ng/ml
Diazepam	7.167	19491	1224.07	43.1	795.81	141352	9.6141 ng/ml
Flunitrazepam	6.329	17796	418.93	47.3	267.86	48591	10.0743 ng/ml
Flurazepam	4.427	80709	1755.74	26.4	460.20	141352	10.0112 ng/ml
Lorazepam	5.839	3802	58.73	95.5	103.84	62289	10.1283 ng/ml
Midazolam	4.167	43884	746.45	29.5	183.29	48591	10.0614 ng/ml
Nitrazepam	5.092	3557	165.86	53.6	83.19	48591	9.9718 ng/ml
Nordiazepam	5.490	9931	786.06	56.4	486.98	62289	9.6074 ng/ml
Oxazepam	5.488	20043	1583.89	38.4	203.68	63453	10.1582 ng/ml
quetiapine	3.854	114014	7989.27	45.7	3292.32	265206	10.1157 ng/ml
Temazepam	6.626	32632	935.94	33.3	558.73	265206	9.9582 ng/ml
zolpidem	3.066	336641	27411.69	36.5	7577.31	62289	10.0581 ng/ml

Cal 1-10ng

AM #13 Benzodiazepines and Z-Drugs



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.317	30866	1719.95	61.6	635.65	62289	7.3846 ng/ml

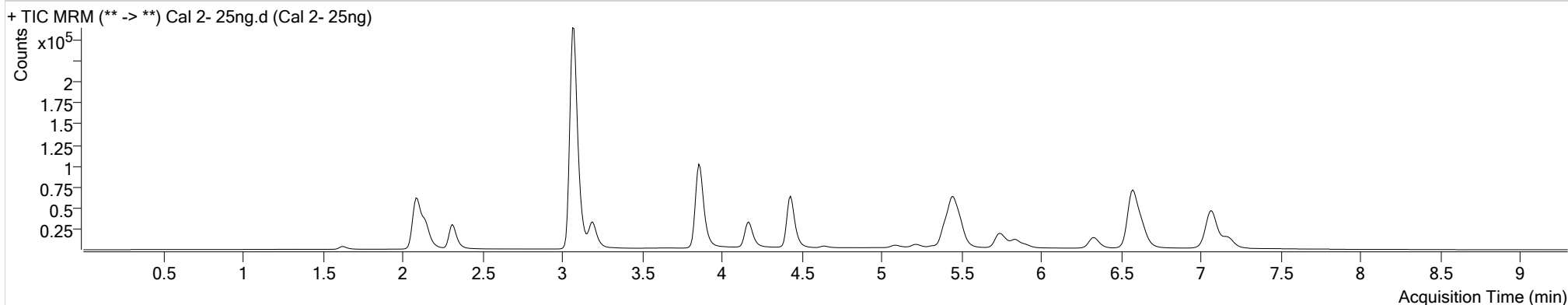
AM #13 Benzodiazepines and Z-Drugs



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Calibration Last Update 6/12/2019 1:27:33 PM

Instrument Falco **Data File** Cal 2- 25ng.d
Type Cal **Sample** Cal 2- 25ng
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A2 **Comment** Worklist 3455
Injection Volume 2.5
Acq. Date-Time 6/11/2019 12:54:01 PM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.628	8706	520.80	35.8	104.11	201368	27.3109 ng/ml
7-Aminoflunitrazepam	2.148	63306	1524.81	36.2	1066.96	201368	26.3439 ng/ml
alpha-Hydroxyalprazolam	5.256	1954	20.40	88.2	19.33	11305	24.5234 ng/ml
alpha-hydroxytriazolam	5.314	5134	264.56	55.3	103.24	59405	24.3380 ng/ml
Alprazolam	5.908	10444	53.95	32.4	32.51	11305	23.5901 ng/ml
Chlordiazepoxide	3.193	74872	3830.37	30.9	631.56	59405	24.7520 ng/ml
Clonazepam	5.781	11152	376.38	45.6	179.64	45616	23.6575 ng/ml
Diazepam	7.175	42410	1440.35	40.4	572.37	132981	26.4098 ng/ml
Flunitrazepam	6.329	37901	637.95	44.5	690.28	45616	24.1328 ng/ml
Flurazepam	4.427	175114	1968.68	26.7	985.27	132981	24.8632 ng/ml
Lorazepam	5.839	7893	250.54	102.8	351.12	59405	24.4254 ng/ml
Midazolam	4.167	87426	∞	29.1	661.70	45616	24.6357 ng/ml
Nitrazepam	5.092	7786	335.82	51.9	187.65	45616	25.0875 ng/ml
Nordiazepam	5.498	21377	1128.05	56.8	834.23	59405	24.9044 ng/ml
Oxazepam	5.497	40235	1872.46	40.9	318.83	60568	23.6369 ng/ml
quetiapine	3.854	255714	15097.26	45.9	8344.86	244976	24.4216 ng/ml
Temazepam	6.634	65548	1161.69	34.0	576.19	244976	24.0863 ng/ml
zolpidem	3.066	692850	34513.15	36.8	19876.11	59405	24.7253 ng/ml

Cal 2- 25ng

AM #13 Benzodiazepines and Z-Drugs



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.308	61661	1848.72	62.2	1576.33	59405	25.1169 ng/ml

AM #13 Benzodiazepines and Z-Drugs



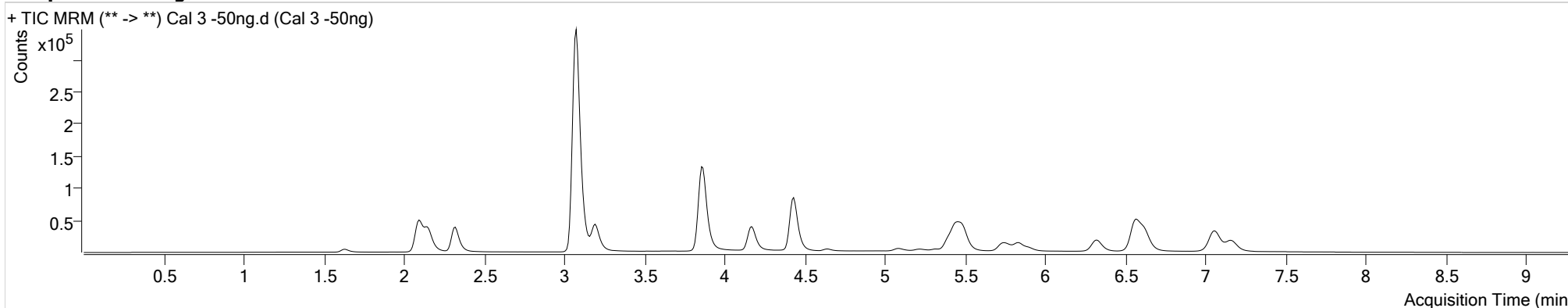
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
6/12/2019 1:27:33 PM

Instrument Falco
Type Cal
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A3
Injection Volume 2.5
Acq. Date-Time 6/11/2019 1:06:29 PM
Sample Info.

Data File Cal 3 -50ng.d
Sample Cal 3 -50ng
Comment Worklist 3455

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.628	11820	1086.48	36.6	284.35	157815	53.9715 ng/ml
7-Aminoflunitrazepam	2.157	83874	1679.41	35.1	1100.02	157815	51.6485 ng/ml
alpha-Hydroxyalprazolam	5.248	2678	27.97	88.9	18.01	7651	51.8245 ng/ml
alpha-hydroxytriazolam	5.314	6896	301.90	59.1	230.33	41951	48.5011 ng/ml
Alprazolam	5.900	14246	436.53	33.5	66.54	7651	49.4881 ng/ml
Chlordiazepoxide	3.193	101218	2323.72	30.3	1513.10	41951	49.8765 ng/ml
Clonazepam	5.772	15528	794.11	44.1	301.10	30630	50.6001 ng/ml
Diazepam	7.167	56645	2598.33	41.7	847.52	95017	52.2871 ng/ml
Flunitrazepam	6.320	52445	1346.47	43.2	348.13	30630	50.9094 ng/ml
Flurazepam	4.427	243337	1182.98	26.2	610.50	95017	50.3185 ng/ml
Lorazepam	5.831	10674	612.32	100.4	650.01	41951	48.6428 ng/ml
Midazolam	4.167	108666	∞	30.0	524.62	30630	49.1530 ng/ml
Nitrazepam	5.084	10091	306.51	55.9	194.15	30630	49.7612 ng/ml
Nordiazepam	5.490	28972	2096.15	58.3	1106.96	41951	50.2420 ng/ml
Oxazepam	5.488	55053	2123.03	40.0	388.45	40760	50.2681 ng/ml
quetiapine	3.854	352614	21138.79	44.6	10431.29	167300	50.7021 ng/ml
Temazepam	6.617	89741	4502.03	33.5	512.66	167300	50.4096 ng/ml
zolpidem	3.075	904295	34431.41	37.1	22554.82	41951	48.7584 ng/ml

AM #13 Benzodiazepines and Z-Drugs



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.317	84098	13851.11	61.6	2932.64	41951	57.1170 ng/ml

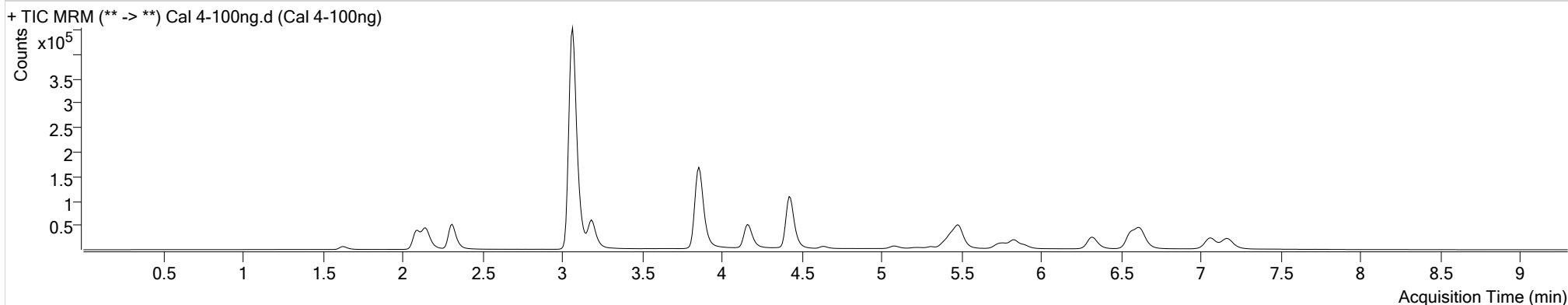
AM #13 Benzodiazepines and Z-Drugs



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Calibration Last Update 6/12/2019 1:27:33 PM

Instrument Falco **Data File** Cal 4-100ng.d
Type Cal **Sample** Cal 4-100ng
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A4 **Comment** Worklist 3455
Injection Volume 2.5
Acq. Date-Time 6/11/2019 1:18:57 PM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.628	16250	874.26	35.5	414.55	121881	104.2992 ng/ml
7-Aminoflunitrazepam	2.148	108687	3057.43	34.2	1437.46	121881	96.9228 ng/ml
alpha-Hydroxyalprazolam	5.248	3548	22.19	94.4	32.15	5147	104.0876 ng/ml
alpha-hydroxytriazolam	5.305	9913	455.47	53.0	222.29	28717	104.4379 ng/ml
Alprazolam	5.900	19604	701.53	33.3	310.51	5147	103.2812 ng/ml
Chlordiazepoxide	3.184	140601	12890.22	30.6	1084.78	28717	104.4161 ng/ml
Clonazepam	5.772	21624	1056.41	44.1	304.05	20949	104.8245 ng/ml
Diazepam	7.167	78813	2857.36	41.0	1078.73	64965	110.5693 ng/ml
Flunitrazepam	6.320	71495	3184.21	43.3	533.82	20949	102.9893 ng/ml
Flurazepam	4.418	315457	1463.97	26.9	860.09	64965	99.7973 ng/ml
Lorazepam	5.831	14880	366.33	101.2	620.39	28717	101.2787 ng/ml
Midazolam	4.159	142963	∞	29.8	1286.80	20949	103.3283 ng/ml
Nitrazepam	5.084	14020	721.65	54.6	265.72	20949	102.7816 ng/ml
Nordiazepam	5.490	40397	2533.83	56.5	1248.51	28717	105.4929 ng/ml
Oxazepam	5.488	77223	1109.93	40.3	536.95	27995	105.2192 ng/ml
quetiapine	3.854	445843	24566.13	46.7	14311.28	115154	99.7545 ng/ml
Temazepam	6.626	125442	6087.67	32.9	1099.64	115154	104.7259 ng/ml
zolpidem	3.066	1220752	123145.42	36.3	24996.26	28717	103.7793 ng/ml

AM #13 Benzodiazepines and Z-Drugs



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.308	110044	1896.31	62.9	1954.37	28717	119.0867 ng/ml

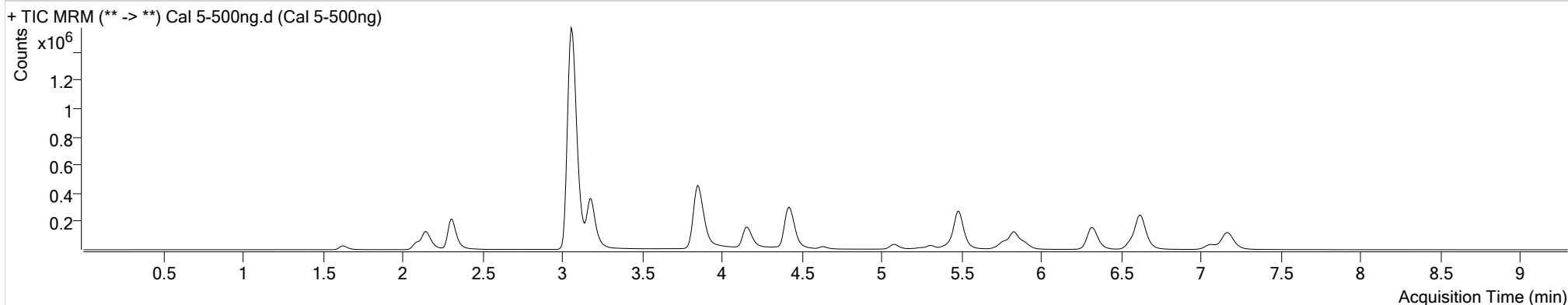
AM #13 Benzodiazepines and Z-Drugs



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Calibration Last Update 6/12/2019 1:27:33 PM

Instrument Falco **Data File** Cal 5-500ng.d
Type Cal **Sample** Cal 5-500ng
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A5 **Comment** Worklist 3455
Injection Volume 2.5
Acq. Date-Time 6/11/2019 1:31:25 PM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.628	75768	6017.25	35.4	1578.05	147761	478.6501 ng/ml
7-Aminoflunitrazepam	2.148	370909	7882.43	36.1	3372.77	147761	506.9805 ng/ml
alpha-Hydroxyalprazolam	5.248	23468	366.59	90.3	645.13	7291	492.3897 ng/ml
alpha-hydroxytriazolam	5.305	65341	∞	56.2	1315.33	40277	495.5878 ng/ml
Alprazolam	5.900	138434	∞	32.1	447.67	7291	524.5772 ng/ml
Chlordiazepoxide	3.184	874489	47929.54	30.6	26219.18	40277	489.4414 ng/ml
Clonazepam	5.764	137415	7507.82	43.9	6603.53	29363	493.7158 ng/ml
Diazepam	7.167	445334	8527.57	40.9	3552.79	101165	428.9281 ng/ml
Flunitrazepam	6.320	470448	∞	44.4	2440.12	29363	507.9072 ng/ml
Flurazepam	4.418	1059663	∞	26.7	∞	101165	240.0559 ng/ml
Lorazepam	5.831	102664	2804.41	100.4	1669.24	40277	511.1408 ng/ml
Midazolam	4.159	497876	∞	30.2	∞	29363	420.7634 ng/ml
Nitrazepam	5.084	91719	2620.68	52.7	2219.91	29363	495.0689 ng/ml
Nordiazepam	5.490	248498	13201.88	55.4	6812.83	40277	488.1089 ng/ml
Oxazepam	5.488	519048	25830.99	41.8	∞	41632	497.1513 ng/ml
quetiapine	3.845	1417813	69870.64	46.3	38005.95	171553	324.5793 ng/ml
Temazepam	6.626	845657	22023.69	33.7	11756.11	171553	488.7411 ng/ml
zolpidem	3.058	4951595	180780.95	36.4	108984.95	40277	486.1483 ng/ml

Cal 5-500ng

AM #13 Benzodiazepines and Z-Drugs



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
zopiclone	2.308	503933	61686.62	62.0	20674.26	40277	446.7179 ng/ml

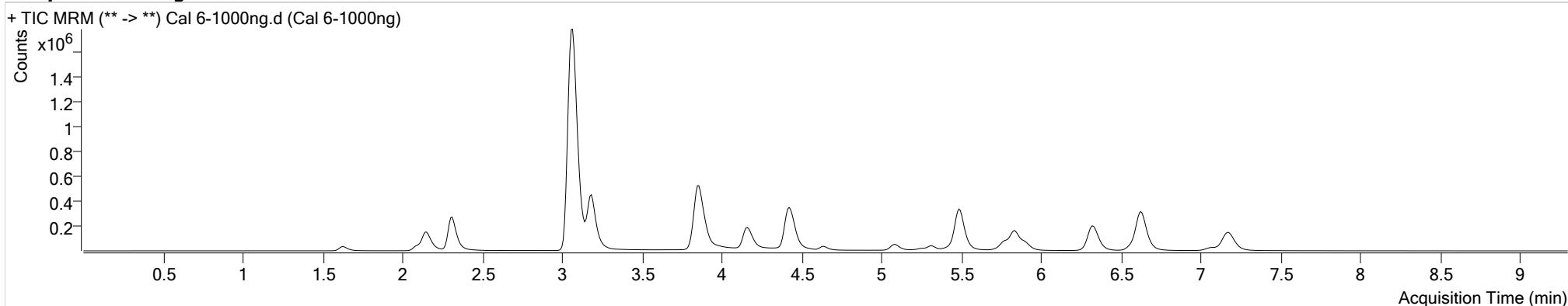
AM #13 Benzodiazepines and Z-Drugs



Batch results D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
Calibration Last Update 6/12/2019 1:27:33 PM

Instrument Falco **Data File** Cal 6-1000ng.d
Type Cal **Sample** Cal 6-1000ng
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A6 **Comment** Worklist 3455
Injection Volume 2.5
Acq. Date-Time 6/11/2019 1:43:53 PM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-Aminoclonazepam	1.628	96785	6644.89	35.5	2395.85	109020	1016.6254 ng/ml
alpha-Hydroxyalprazolam	5.248	33589	136.45	87.4	381.98	5461	939.5805 ng/ml
alpha-hydroxytriazolam	5.314	88434	∞	55.5	1795.83	26468	1011.5774 ng/ml
Alprazolam	5.900	188431	∞	32.3	∞	5461	958.8436 ng/ml
Chlordiazepoxide	3.184	1087418	63650.80	30.6	1655.26	26468	973.7183 ng/ml
Clonazepam	5.772	192605	12037.12	42.1	5070.27	21457	983.5150 ng/ml
Diazepam	7.175	547484	∞	43.7	5572.15	65035	882.8201 ng/ml
Flunitrazepam	6.320	608092	∞	43.6	4209.53	21457	942.2499 ng/ml
Flurazepam	4.418	1250339	∞	26.7	∞	65035	631.7957 ng/ml
Lorazepam	5.831	131417	4206.87	100.8	1056.42	26468	1009.7646 ng/ml
Nitrazepam	5.084	128427	8968.43	53.3	3325.29	21457	975.2250 ng/ml
Nordiazepam	5.498	319923	21781.83	57.0	7425.69	26468	1007.4409 ng/ml
Oxazepam	5.488	654008	24923.14	40.7	1077.98	27723	978.2603 ng/ml
Temazepam	6.626	1109720	75931.78	33.5	8597.96	111742	1008.1965 ng/ml
zopiclone	2.308	634845	44934.68	60.8	8483.04	26468	1037.0234 ng/ml

AM #13 Benzodiazepines and Z-Drugs



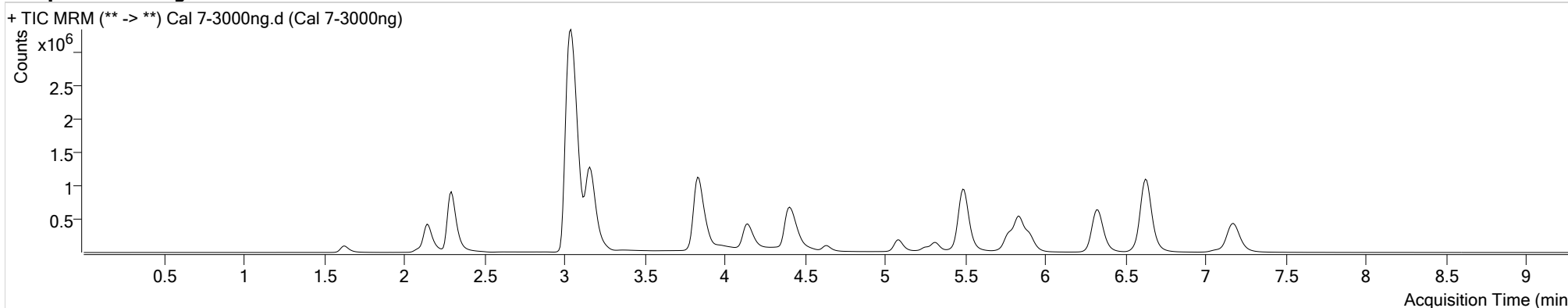
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 13\AM 13 worklist 3455\2.5ul injection\QuantResults\am 13 worklist 3455 2.5ul injection volume.batch.bin
6/12/2019 1:27:33 PM

Instrument Falco
Type Cal
Acq. Method Benzos_Z_Drugs 053019 FINAL.m
Sample Position P5-A7
Injection Volume 2.5
Acq. Date-Time 6/11/2019 1:56:21 PM
Sample Info.

Data File Cal 7-3000ng.d
Sample Cal 7-3000ng
Comment Worklist 3455

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
alpha-Hydroxyalprazolam	5.248	145112	550.71	87.7	94.73	7138	3060.7386 ng/ml
alpha-hydroxytriazolam	5.314	345295	3389.79	57.4	6807.84	33536	2991.1874 ng/ml
Alprazolam	5.900	758197	∞	32.6	∞	7138	3015.3706 ng/ml
Chlordiazepoxide	3.159	3417443	122635.27	30.2	65139.65	33536	3060.9714 ng/ml
Clonazepam	5.772	674807	14927.02	43.9	10804.30	28936	3027.6277 ng/ml
Flunitrazepam	6.320	2051932	∞	43.4	∞	28936	3093.0069 ng/ml
Lorazepam	5.831	466636	18468.86	98.4	22956.31	33536	2977.0853 ng/ml
Nitrazepam	5.084	476927	14224.80	52.9	7153.13	28936	3035.6290 ng/ml
Nordiazepam	5.498	970347	35560.63	56.2	19404.52	33536	2999.1179 ng/ml
Oxazepam	5.488	2085029	84390.44	40.6	32187.05	34073	3030.4485 ng/ml
Temazepam	6.626	4136457	98086.86	33.6	20440.25	152943	2998.8605 ng/ml