









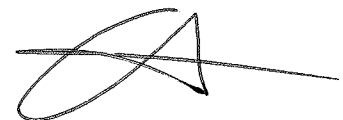
central data reviewed by B. Wylie on 1-5-17



1/5/2017

**Worklist: 1459**

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2016-2304	1	73585	AM 13 Blood LCMS-QQQ Benz	
M2016-3640	1	73586	AM 13 Blood LCMS-QQQ Benz	
M2016-3995	1	73587	AM 13 Blood LCMS-QQQ Benz	
M2016-4477	1	73580	AM 13 Blood LCMS-QQQ Benz	
M2016-4741	1	73581	AM 13 Blood LCMS-QQQ Benz	
P2016-1858	1	73582	AM 13 Blood LCMS-QQQ Benz	
P2016-1877	1	73583	AM 13 Blood LCMS-QQQ Benz	
P2016-2624	1	73584	AM 13 Blood LCMS-QQQ Benz	



# ISP FORENSICS - Cd'A

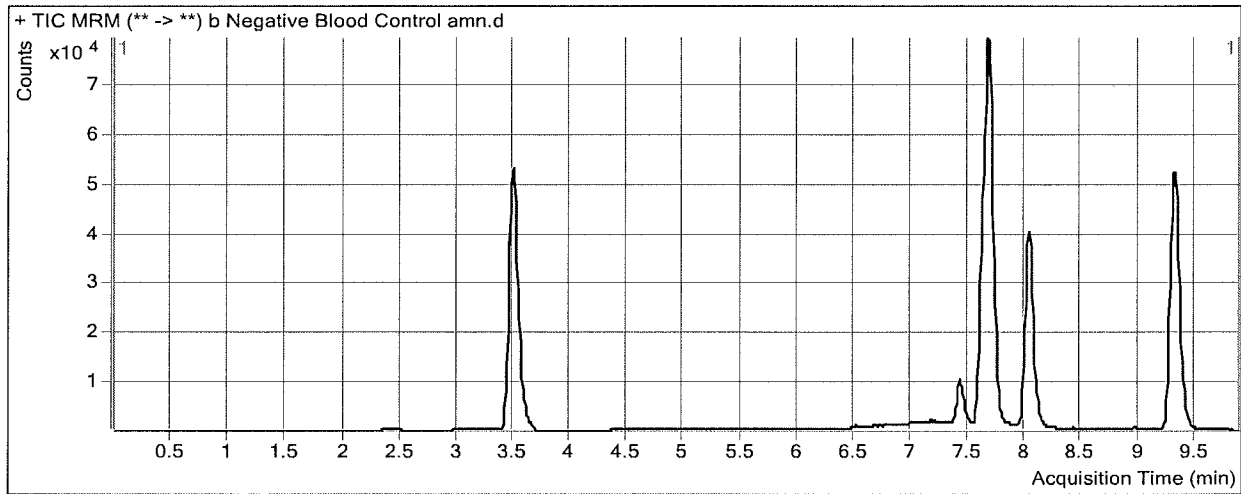
## Benzodiazepine Analysis Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin  
**Analysis Time** 1/5/2017 10:36 AM **Analyst Name** ISP Tox  
**Report Time** 1/5/2017 10:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/5/2017 10:36 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2017-01-04 14:11 **Data File** b Negative Blood Control amn.d  
**Sample Type** Sample **Sample Name** Negative Blood Control  
**Dilution** 1 **Acq Method** Benzos\_Z\_Drugs\_ACN\_FA\_ISP 2016.m  
**Position** P2-A8 **Sample Info** Negative blood lot B0130  
**Inj Vol** -1 **Comment** AM 13 Benzo and Z by LCQQQ

### Sample Chromatogram



# ISP FORENSICS - Cd'A

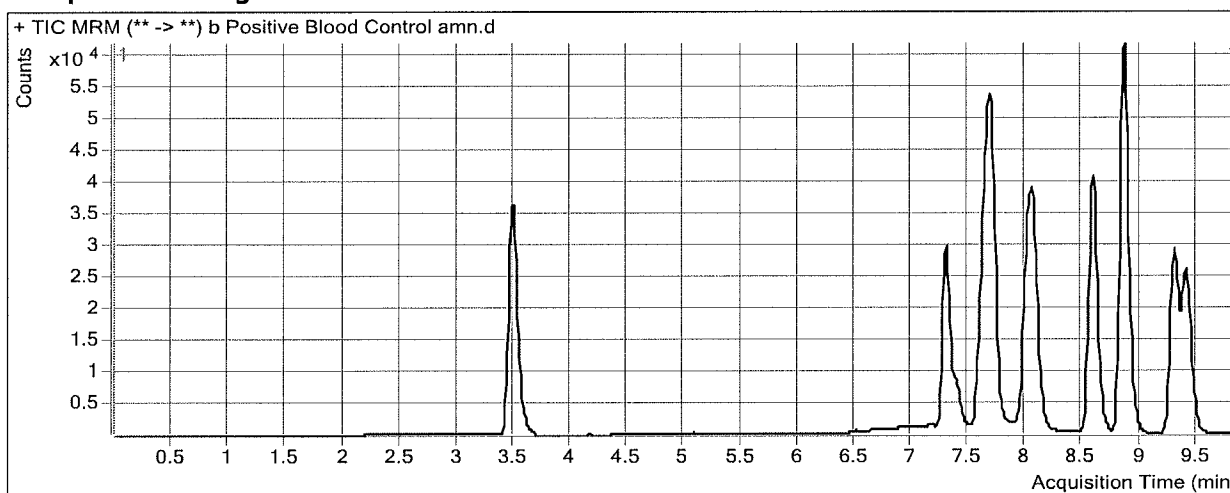
## Benzodiazepine Analysis Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin  
**Analysis Time** 1/5/2017 10:36 AM **Analyst Name** ISP Tox  
**Report Time** 1/5/2017 10:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/5/2017 10:36 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2017-01-04 14:26 **Data File** b Positive Blood Control amn.d  
**Sample Type** Sample **Sample Name** Positive Blood Control  
**Dilution** 1 **Acq Method** Benzos\_Z\_Drugs\_ACN\_FA\_ISP 2016.m  
**Position** P2-A9 **Sample Info** 100ng/mL Lot 101717 in neg blood B0130  
**Inj Vol** -1 **Comment** AM 13 Benzo and Z by LCQQQ

### Sample Chromatogram



### Results

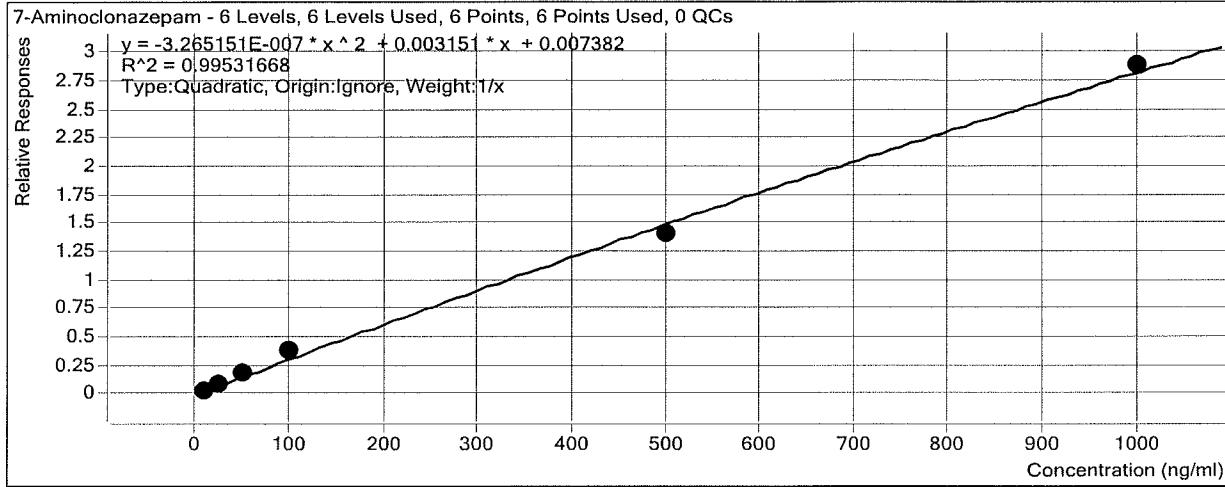
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nitrazepam	Clonazepam-D4 ISTD	7.301	93133	81260	1.1461	103.1303
Oxazepam	Oxazepam D5 ISTD	7.695	100682	110006	0.9152	90.7269
Clonazepam	Clonazepam-D4 ISTD	8.036	73637	81260	0.9062	100.9372
Lorazepam	Oxazepam D5 ISTD	8.059	23031	110006	0.2094	93.8757
Alprazolam	alphahydroxyalprazolam-D5 ISTD	8.080	31522	16342	1.9289	81.8602
Flunitrazepam	Clonazepam-D4 ISTD	8.571	159062	81260	1.9574	202.1291
Temazepam	Oxazepam D5 ISTD	8.849	258637	110006	2.3511	140.6025
Diazepam	Diazepam-D5 ISTD	9.402	97582	82946	1.1765	112.1982

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM      **Analyst Name** ISP TOX

**Target Compound** 7-Aminoclonazepam  
**Internal Standard** 7-Aminoflunitrazepam-D7 ISTD



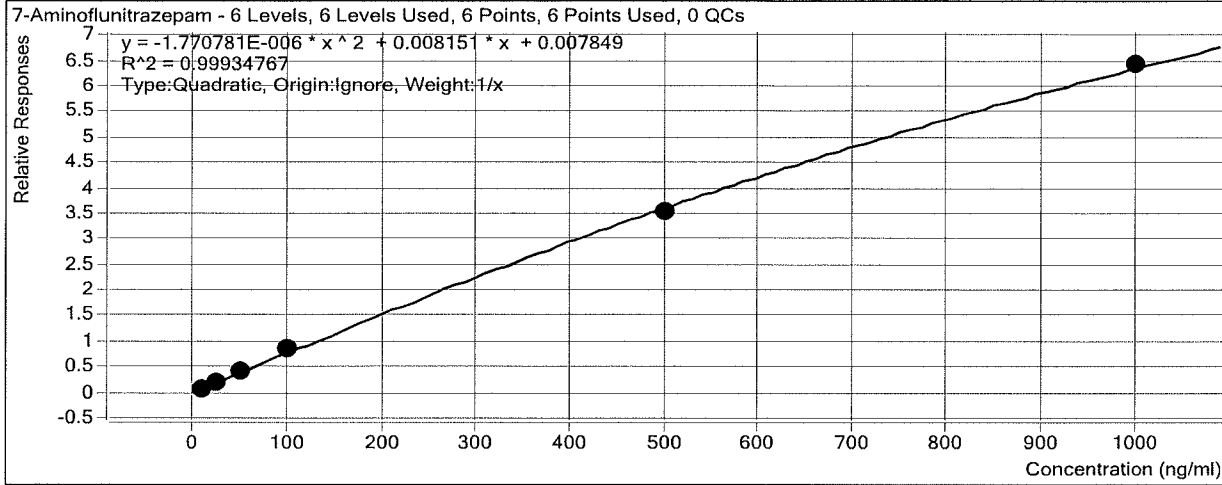
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	8.7	86.8
25 ng/mL	4	<input checked="" type="checkbox"/>	25	23.3	93.3
50 ng/mL	5	<input checked="" type="checkbox"/>	50	53.9	107.8
100 ng/mL	6	<input checked="" type="checkbox"/>	100	117.6	117.6
500 ng/mL	7	<input checked="" type="checkbox"/>	500	464.0	92.8
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	1018.1	101.8

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM **Analyst Name** ISP TOX

**Target Compound** 7-Aminoflunitrazepam  
**Internal Standard** 7-Aminoflunitrazepam-D7 ISTD



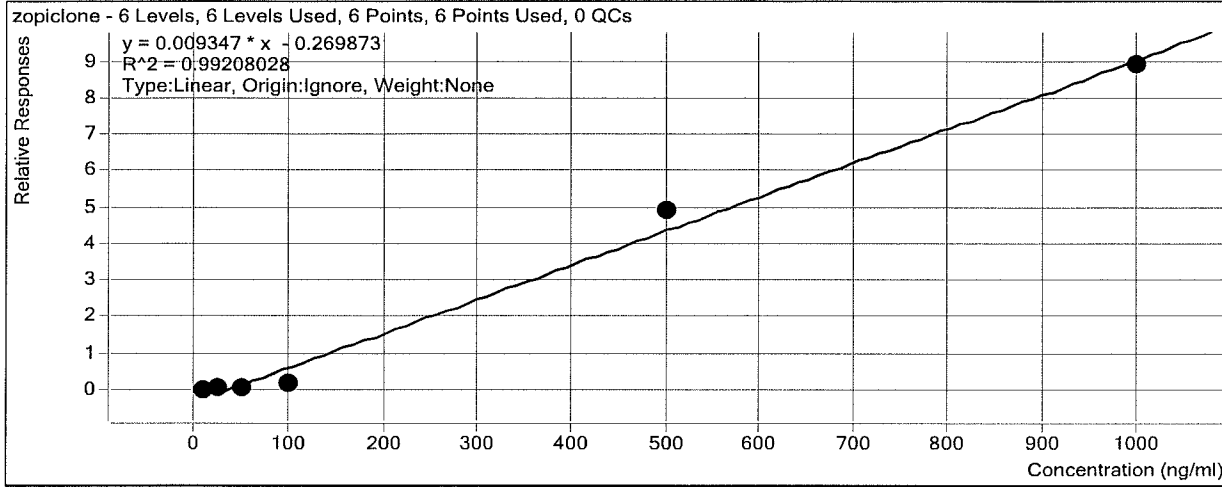
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	9.6	96.0
25 ng/mL	4	<input checked="" type="checkbox"/>	25	24.6	98.5
50 ng/mL	5	<input checked="" type="checkbox"/>	50	50.5	101.0
100 ng/mL	6	<input checked="" type="checkbox"/>	100	106.5	106.5
500 ng/mL	7	<input checked="" type="checkbox"/>	500	486.6	97.3
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	1008.2	100.8

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM **Analyst Name** ISP TOX

**Target Compound** zopiclone  
**Internal Standard** Oxazepam D5 ISTD



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	31.8	318.1 -
25 ng/mL	4	<input checked="" type="checkbox"/>	25	35.0	140.1 -
50 ng/mL	5	<input checked="" type="checkbox"/>	50	36.9	73.9 -
100 ng/mL	6	<input checked="" type="checkbox"/>	100	50.3	50.3 -
500 ng/mL	7	<input checked="" type="checkbox"/>	500	551.6	110.3
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	979.4	97.9

This compound  
Not evaluated in this run

*[Signature]*

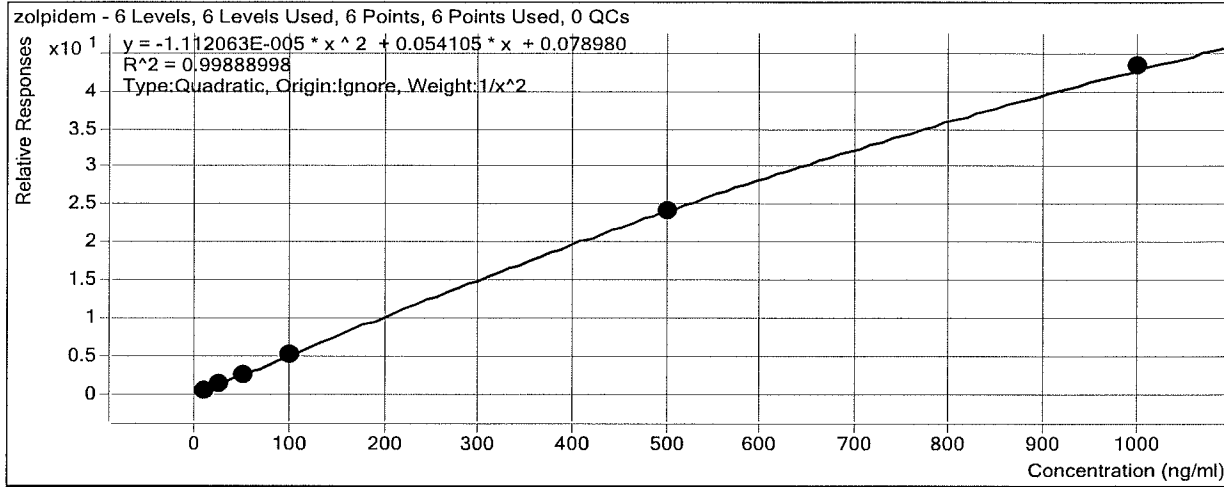
*[Signature]*

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM      **Analyst Name** ISP TOX

**Target Compound** *zolpidem*  
**Internal Standard** *Oxazepam D5 ISTD*



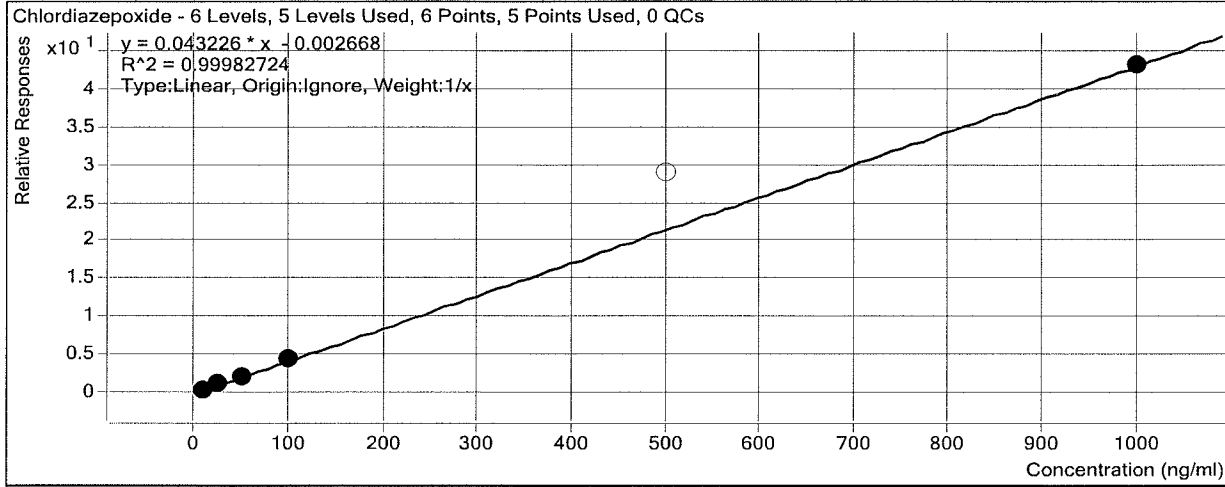
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	9.9	98.6
25 ng/mL	4	<input checked="" type="checkbox"/>	25	26.2	105.0
50 ng/mL	5	<input checked="" type="checkbox"/>	50	48.9	97.9
100 ng/mL	6	<input checked="" type="checkbox"/>	100	98.9	98.9
500 ng/mL	7	<input checked="" type="checkbox"/>	500	494.8	99.0
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	1008.9	100.9

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM      **Analyst Name** ISP TOX

**Target Compound** *Chlordiazepoxide*  
**Internal Standard** *Nordiazepam-D5 ISTD*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	9.9	99.3
25 ng/mL	4	<input checked="" type="checkbox"/>	25	24.3	97.1
50 ng/mL	5	<input checked="" type="checkbox"/>	50	50.0	100.0
100 ng/mL	6	<input checked="" type="checkbox"/>	100	103.9	103.9
500 ng/mL	7	<input type="checkbox"/>	500	674.4	134.9
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	996.9	99.7

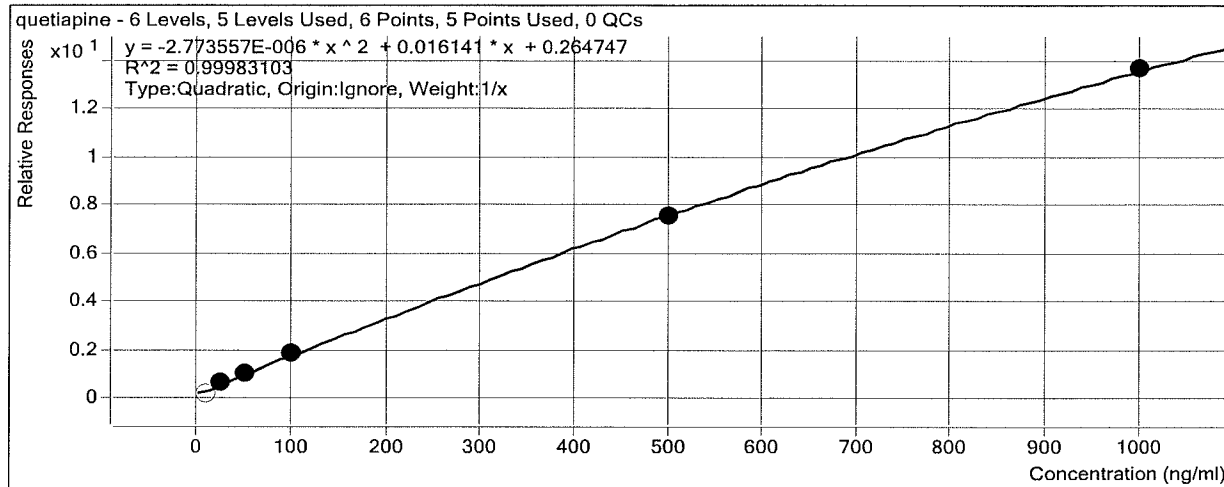


# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM **Analyst Name** ISP TOX

**Target Compound** *quetiapine*  
**Internal Standard** *Oxazepam D5 ISTD*



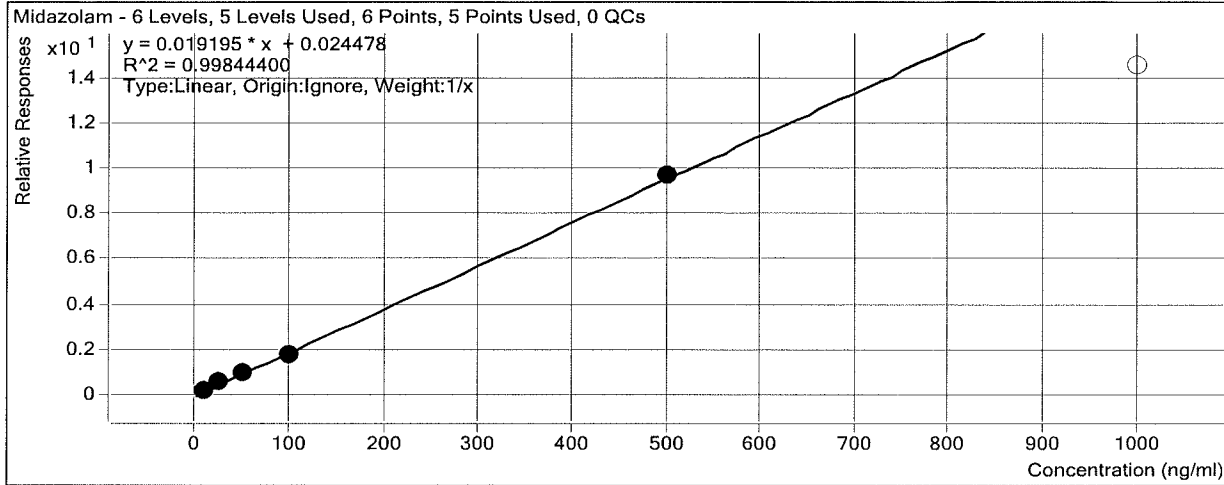
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input type="checkbox"/>	10	0.0	0.0
25 ng/mL	4	<input checked="" type="checkbox"/>	25	25.0	99.8
50 ng/mL	5	<input checked="" type="checkbox"/>	50	48.7	97.4
100 ng/mL	6	<input checked="" type="checkbox"/>	100	103.4	103.4
500 ng/mL	7	<input checked="" type="checkbox"/>	500	496.0	99.2
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	1002.1	100.2

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM      **Analyst Name** ISP TOX

**Target Compound** Midazolam  
**Internal Standard** Clonazepam-D4 ISTD



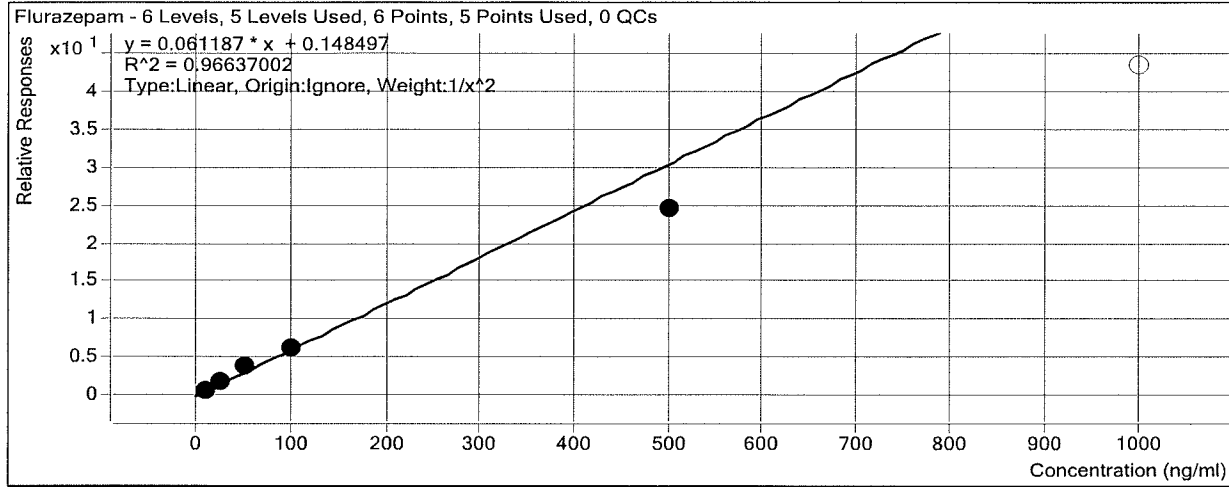
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.4	103.5
25 ng/mL	4	<input checked="" type="checkbox"/>	25	26.5	105.8
50 ng/mL	5	<input checked="" type="checkbox"/>	50	48.4	96.8
100 ng/mL	6	<input checked="" type="checkbox"/>	100	92.4	92.4
500 ng/mL	7	<input checked="" type="checkbox"/>	500	507.4	101.5
1000 ng/mL	8	<input type="checkbox"/>	1000	757.2	75.7

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM **Analyst Name** ISP TOX

**Target Compound** *Flurazepam*  
**Internal Standard** *Diazepam-D5 ISTD*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ngmL	2	<input checked="" type="checkbox"/>	10	9.3	92.7
25 ngmL	4	<input checked="" type="checkbox"/>	25	27.6	110.4
50 ngmL	5	<input checked="" type="checkbox"/>	50	59.0	118.1
100 ngmL	6	<input checked="" type="checkbox"/>	100	98.7	98.7
500 ngmL	7	<input checked="" type="checkbox"/>	500	400.1	80.0
1000 ngmL	8	<input type="checkbox"/>	1000	708.9	70.9

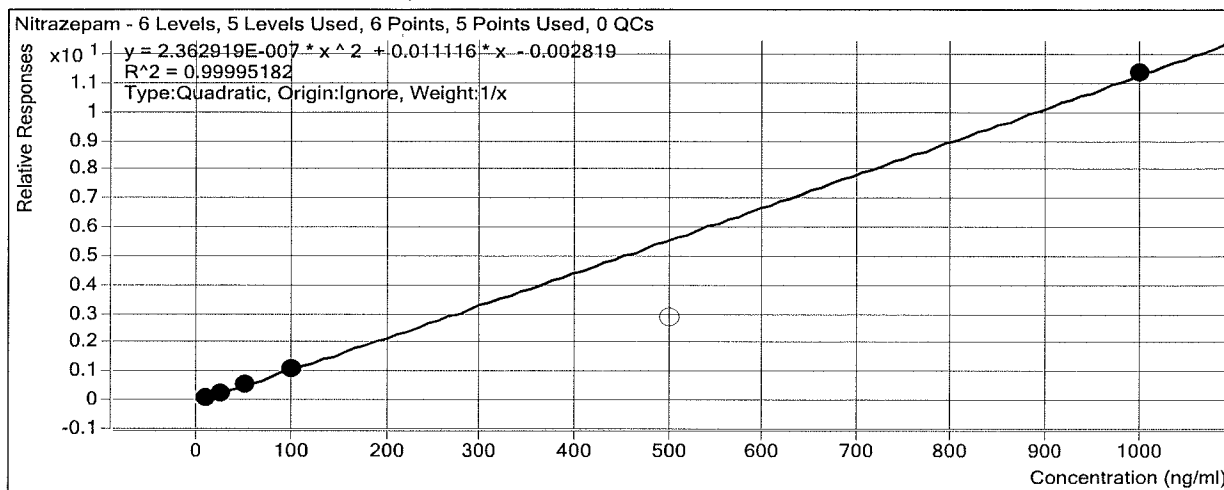
5/23/17 This compound was not evaluated in this run

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM **Analyst Name** ISP TOX

**Target Compound** Nitrazepam  
**Internal Standard** Clonazepam-D4 ISTD



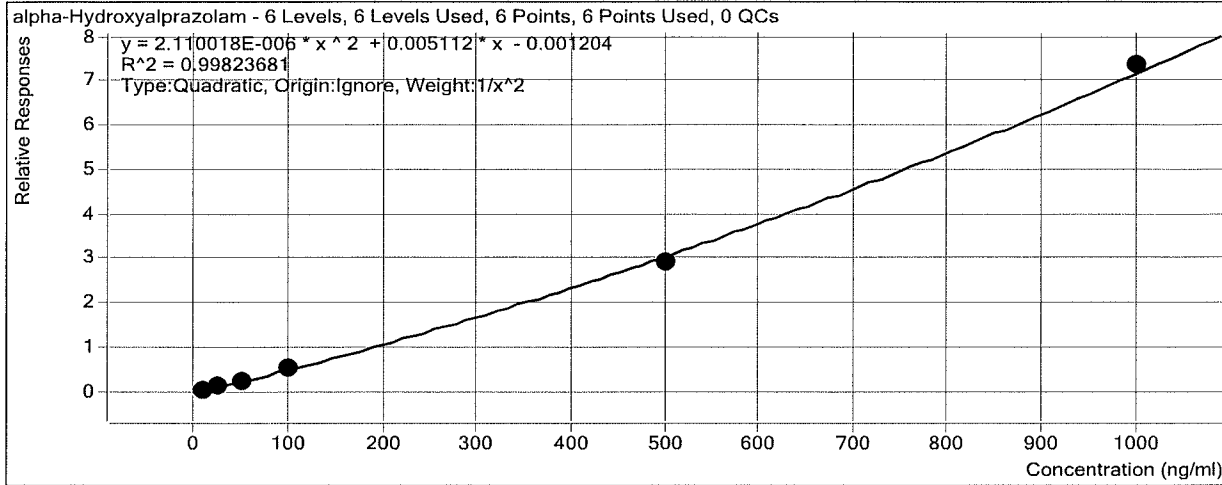
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ngmL	2	<input checked="" type="checkbox"/>	10	10.3	103.2
25 ngmL	4	<input checked="" type="checkbox"/>	25	24.1	96.3
50 ngmL	5	<input checked="" type="checkbox"/>	50	49.9	99.8
100 ngmL	6	<input checked="" type="checkbox"/>	100	100.8	100.8
500 ngmL	7	<input type="checkbox"/>	500	256.3	51.3
1000 ngmL	8	<input checked="" type="checkbox"/>	1000	999.9	100.0

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM      **Analyst Name** ISP TOX

**Target Compound** *alpha-Hydroxyalprazolam*  
**Internal Standard** *alphahydroxyalprazolam-D5 ISTD*



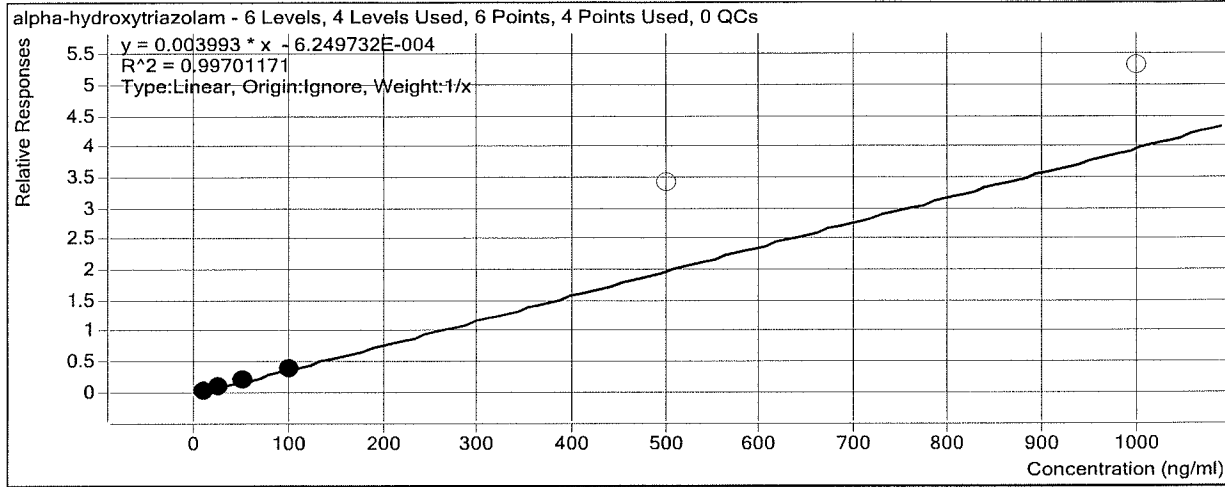
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	9.8	98.2
25 ng/mL	4	<input checked="" type="checkbox"/>	25	26.4	105.5
50 ng/mL	5	<input checked="" type="checkbox"/>	50	48.5	97.1
100 ng/mL	6	<input checked="" type="checkbox"/>	100	102.1	102.1
500 ng/mL	7	<input checked="" type="checkbox"/>	500	479.5	95.9
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	1014.6	101.5

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM **Analyst Name** ISP TOX

**Target Compound** *alpha-hydroxytriazolam*  
**Internal Standard** *Nordiazepam-D5 ISTD*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.7	107.3
25 ng/mL	4	<input checked="" type="checkbox"/>	25	22.8	91.1
50 ng/mL	5	<input checked="" type="checkbox"/>	50	50.1	100.1
100 ng/mL	6	<input checked="" type="checkbox"/>	100	101.4	101.4
500 ng/mL	7	<input type="checkbox"/>	500	854.4	170.9
1000 ng/mL	8	<input type="checkbox"/>	1000	1329.6	133.0

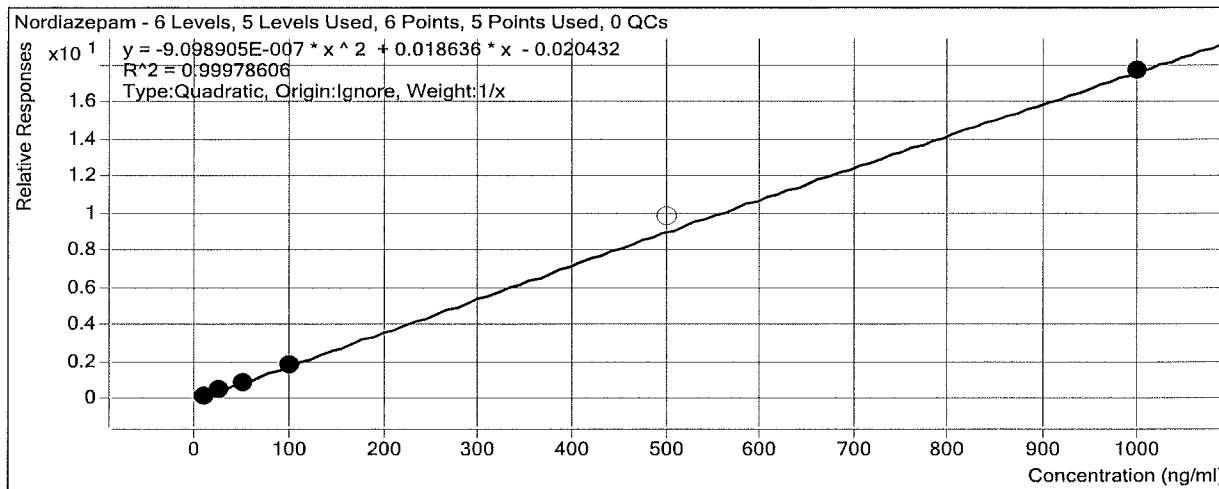
# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM

**Analyst Name** ISP TOX

**Target Compound** Nordiazepam  
**Internal Standard** Nordiazepam-D5 ISTD



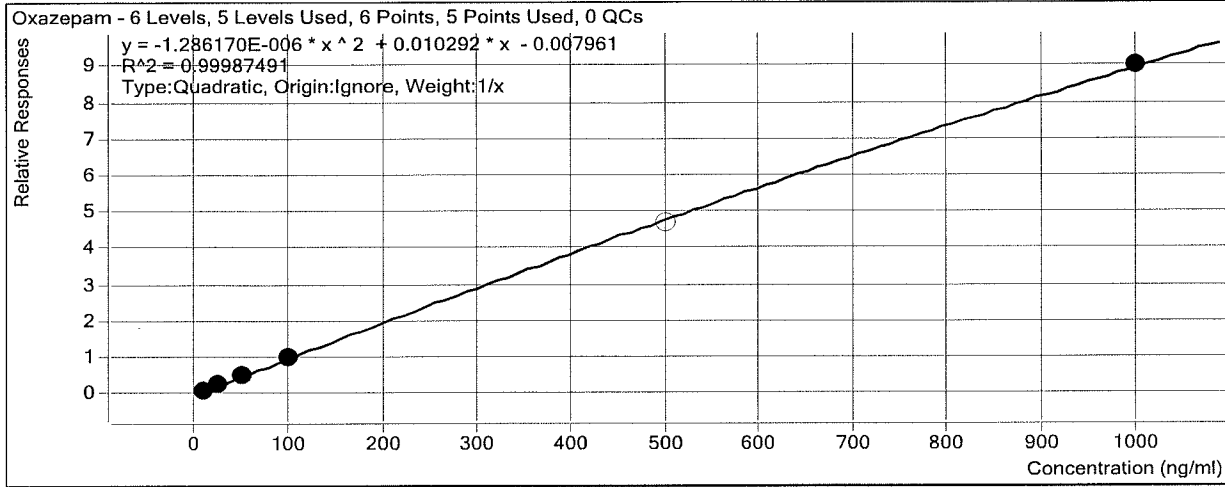
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.5	104.5
25 ng/mL	4	<input checked="" type="checkbox"/>	25	24.3	97.4
50 ng/mL	5	<input checked="" type="checkbox"/>	50	47.8	95.5
100 ng/mL	6	<input checked="" type="checkbox"/>	100	102.6	102.6
500 ng/mL	7	<input type="checkbox"/>	500	542.1	108.4
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	999.9	100.0

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM      **Analyst Name** ISP TOX

**Target Compound** Oxazepam  
**Internal Standard** Oxazepam D5 ISTD



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.4	104.2
25 ng/mL	4	<input checked="" type="checkbox"/>	25	24.1	96.3
50 ng/mL	5	<input checked="" type="checkbox"/>	50	48.9	97.8
100 ng/mL	6	<input checked="" type="checkbox"/>	100	101.7	101.7
500 ng/mL	7	<input type="checkbox"/>	500	490.7	98.1
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	999.9	100.0

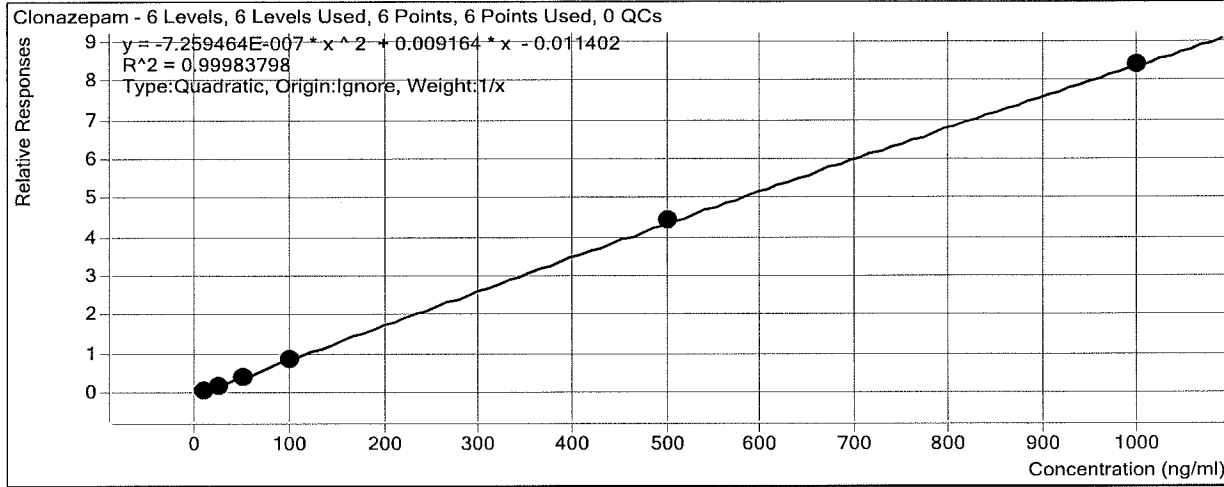


# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM      **Analyst Name** ISP TOX

**Target Compound** *Clonazepam*  
**Internal Standard** *Clonazepam-D4 ISTD*



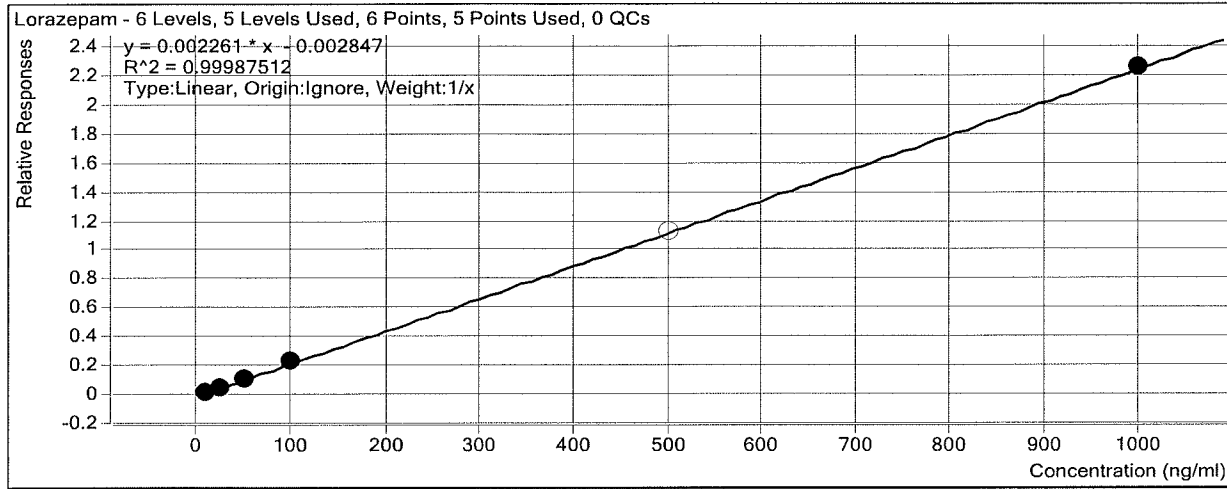
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.7	107.4
25 ng/mL	4	<input checked="" type="checkbox"/>	25	23.9	95.5
50 ng/mL	5	<input checked="" type="checkbox"/>	50	48.7	97.5
100 ng/mL	6	<input checked="" type="checkbox"/>	100	98.8	98.8
500 ng/mL	7	<input checked="" type="checkbox"/>	500	505.7	101.1
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	997.1	99.7

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM      **Analyst Name** ISP TOX

**Target Compound** Lorazepam  
**Internal Standard** Oxazepam D5 ISTD



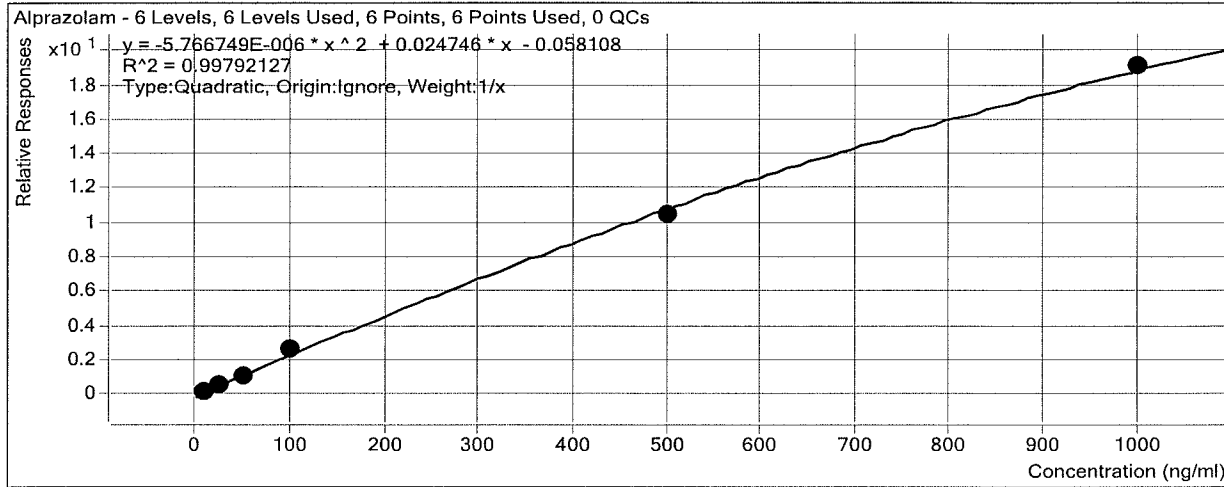
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.5	104.8
25 ng/mL	4	<input checked="" type="checkbox"/>	25	24.0	96.0
50 ng/mL	5	<input checked="" type="checkbox"/>	50	48.7	97.3
100 ng/mL	6	<input checked="" type="checkbox"/>	100	101.8	101.8
500 ng/mL	7	<input type="checkbox"/>	500	503.0	100.6
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	1000.1	100.0

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM      **Analyst Name** ISP TOX

**Target Compound** Alprazolam  
*Internal Standard* alphahydroxyalprazolam-D5 ISTD



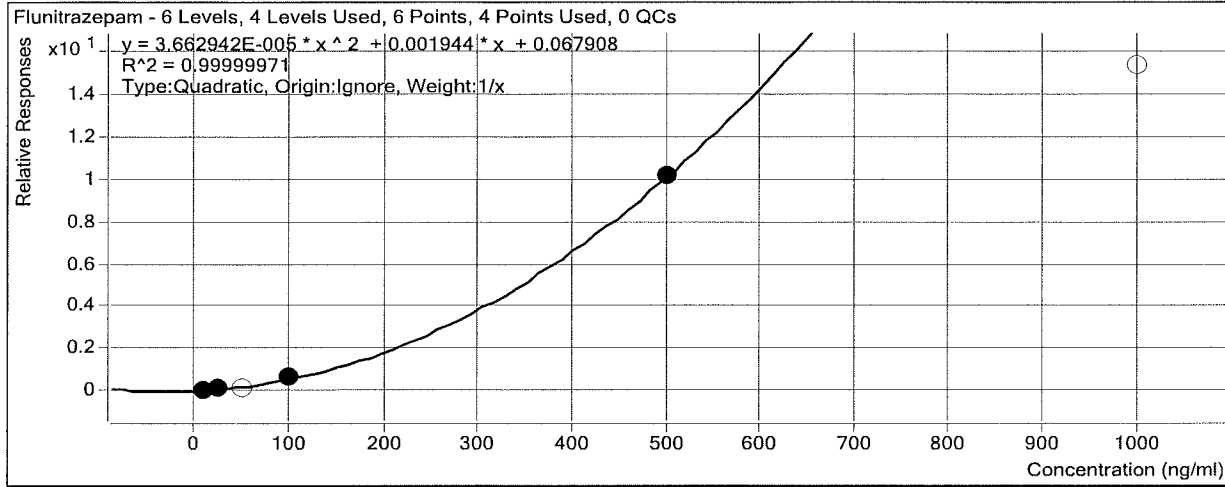
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.3	103.3
25 ng/mL	4	<input checked="" type="checkbox"/>	25	22.9	91.4
50 ng/mL	5	<input checked="" type="checkbox"/>	50	47.8	95.6
100 ng/mL	6	<input checked="" type="checkbox"/>	100	112.3	112.3
500 ng/mL	7	<input checked="" type="checkbox"/>	500	482.6	96.5
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	1010.7	101.1

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM **Analyst Name** ISP TOX

**Target Compound** Flunitrazepam  
**Internal Standard** Clonazepam-D4 ISTD



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.1	101.2
25 ng/mL	4	<input checked="" type="checkbox"/>	25	24.7	98.9
50 ng/mL	5	<input type="checkbox"/>	50	35.6	71.2
100 ng/mL	6	<input checked="" type="checkbox"/>	100	100.1	100.1
500 ng/mL	7	<input checked="" type="checkbox"/>	500	500.0	100.0
1000 ng/mL	8	<input type="checkbox"/>	1000	618.6	61.9

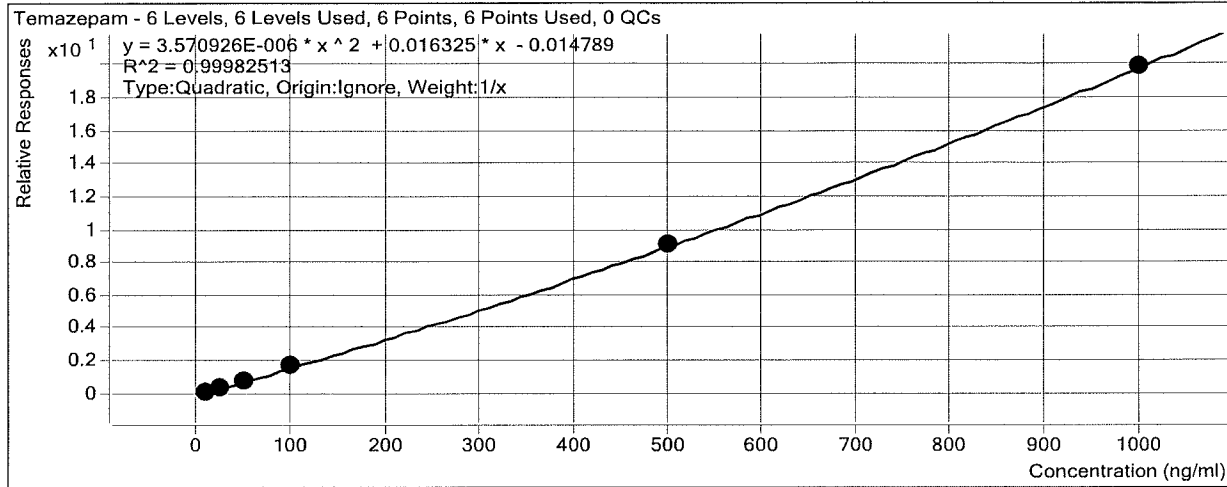
Did not evaluate this compound in this run ~~at~~

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM **Analyst Name** ISP TOX

**Target Compound** *Temazepam*  
**Internal Standard** *Oxazepam D5 ISTD*



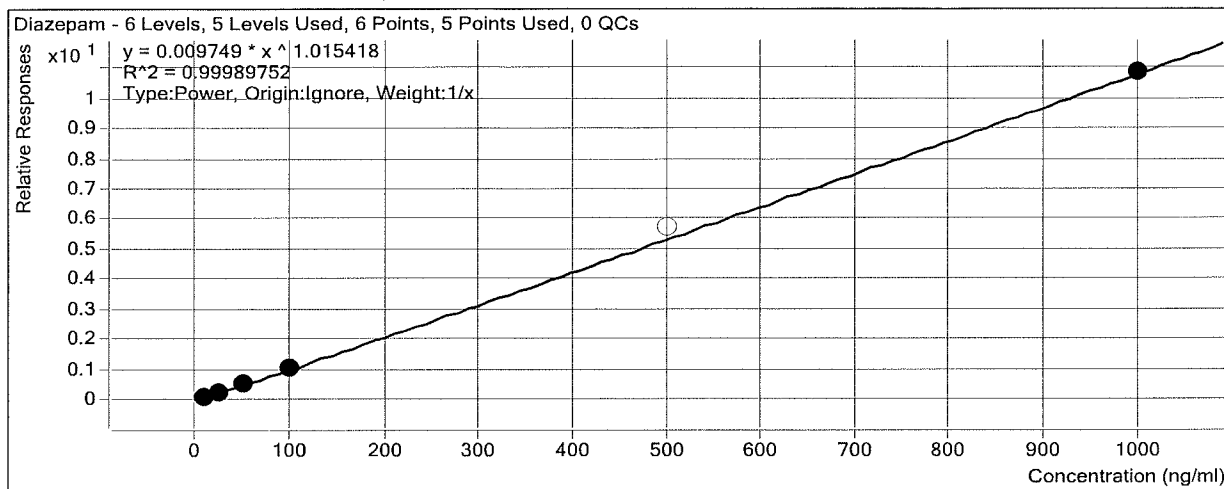
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.7	106.6
25 ng/mL	4	<input checked="" type="checkbox"/>	25	24.5	98.2
50 ng/mL	5	<input checked="" type="checkbox"/>	50	46.5	93.0
100 ng/mL	6	<input checked="" type="checkbox"/>	100	101.8	101.8
500 ng/mL	7	<input checked="" type="checkbox"/>	500	502.4	100.5
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	999.0	99.9

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin

**Last Calib Update** 1/5/2017 10:02 AM **Analyst Name** ISP TOX

**Target Compound** *Diazepam*  
**Internal Standard** *Diazepam-D5 ISTD*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
10 ng/mL	2	<input checked="" type="checkbox"/>	10	10.3	103.4
25 ng/mL	4	<input checked="" type="checkbox"/>	25	23.8	95.3
50 ng/mL	5	<input checked="" type="checkbox"/>	50	49.4	98.7
100 ng/mL	6	<input checked="" type="checkbox"/>	100	102.0	102.0
500 ng/mL	7	<input type="checkbox"/>	500	531.2	106.2
1000 ng/mL	8	<input checked="" type="checkbox"/>	1000	999.5	99.9

# ISP FORENSICS - Cd'A

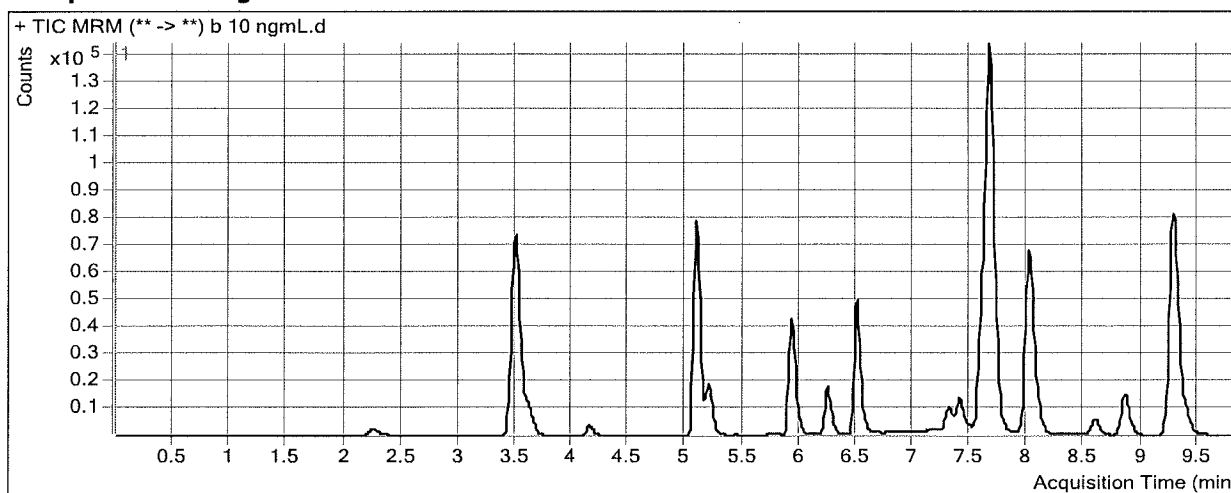
## Benzodiazepine Analysis Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin  
**Analysis Time** 1/5/2017 10:36 AM **Analyst Name** ISP Tox  
**Report Time** 1/5/2017 10:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/5/2017 10:36 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2017-01-04 12:28 **Data File** b 10 ngmL.d  
**Sample Type** Calibration **Sample Name** 10 ngmL  
**Dilution** 1 **Acq Method** Benzos\_Z\_Drugs\_ACN\_FA\_ISP 2016.m  
**Position** P2-A2 **Sample Info** ppd -12/22/16- Unextracted  
**Inj Vol** -1 **Comment** AM 13 Benzo and Z by LCQQQ

### Sample Chromatogram



### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
7-Aminoclonazepam	7-Aminoflunitrazepam-D7 ISTD	2.250	11866	341759	0.0347	8.6835
7-Aminoflunitrazepam	7-Aminoflunitrazepam-D7 ISTD	3.620	29362	341759	0.0859	9.5971
zopiclone	Oxazepam D5 ISTD	4.149	10476	381662	0.0274	31.8087
zolpidem	Oxazepam D5 ISTD	5.078	233274	381662	0.6112	9.8569
Chlordiazepoxide	Nordiazepam-D5 ISTD	5.198	54232	127181	0.4264	9.9265
quetiapine	Oxazepam D5 ISTD	5.922	97337	381662	0.2550	0.0000
Midazolam	Clonazepam-D4 ISTD	6.243	54284	243226	0.2232	10.3521
Flurazepam	Diazepam-D5 ISTD	6.496	169665	236980	0.7159	9.2740
Nitrazepam	Clonazepam-D4 ISTD	7.309	27226	243226	0.1119	10.3209
alpha-Hydroxyalprazolam	alphahydroxyalprazolam-D5 ISTD	7.439	1919	38984	0.0492	9.8240
alpha-hydroxytriazolam	Nordiazepam-D5 ISTD	7.497	5371	127181	0.0422	10.7344
Nordiazepam	Nordiazepam-D5 ISTD	7.689	22160	127181	0.1742	10.4516
Oxazepam	Oxazepam D5 ISTD	7.704	37822	381662	0.0991	10.4154
Clonazepam	Clonazepam-D4 ISTD	8.036	21134	243226	0.0869	10.7352
Lorazepam	Oxazepam D5 ISTD	8.059	7957	381662	0.0208	10.4830
Alprazolam	alphahydroxyalprazolam-D5 ISTD	8.071	7673	38984	0.1968	10.3268
Flunitrazepam	Clonazepam-D4 ISTD	8.571	22217	243226	0.0913	10.1224
Temazepam	Oxazepam D5 ISTD	8.840	60922	381662	0.1596	10.6590
Diazepam	Diazepam-D5 ISTD	9.385	24769	236980	0.1045	10.3412

# ISP FORENSICS - Cd'A

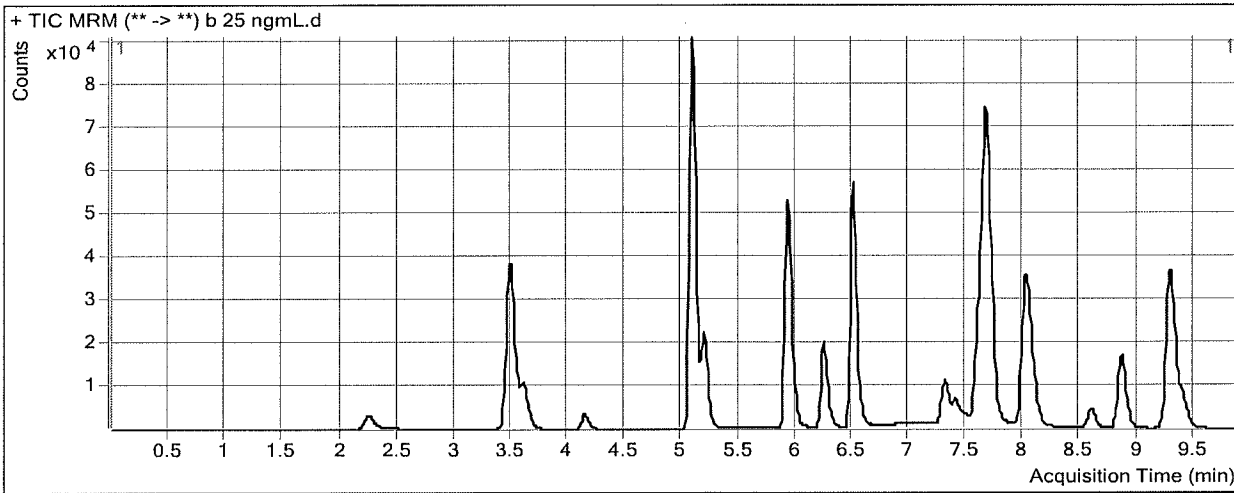
## Benzodiazepine Analysis Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin  
**Analysis Time** 1/5/2017 10:36 AM **Analyst Name** ISP Tox  
**Report Time** 1/5/2017 10:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/5/2017 10:36 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2017-01-04 12:43 **Data File** b 25 ngmL.d  
**Sample Type** Calibration **Sample Name** 25 ngmL  
**Dilution** 1 **Acq Method** Benzos\_Z\_Drugs\_ACN\_FA\_ISP 2016.m  
**Position** P2-A3 **Sample Info** ppd 12/22/16 Unextracted 1-4-17  
**Inj Vol** -1 **Comment** AM 13 Benzo and Z by LCQQQ

### Sample Chromatogram



### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
7-Aminoclonazepam	7-Aminoflunitrazepam-D7 ISTD	2.250	14248	176590	0.0807	23.3191
7-Aminoflunitrazepam	7-Aminoflunitrazepam-D7 ISTD	3.612	36627	176590	0.2074	24.6137
zopiclone	Oxazepam D5 ISTD	4.140	10340	180104	0.0574	35.0141
zolpidem	Oxazepam D5 ISTD	5.087	268523	180104	1.4909	26.2381
Chlordiazepoxide	Nordiazepam-D5 ISTD	5.198	63915	61036	1.0472	24.2874
quetiapine	Oxazepam D5 ISTD	5.931	119937	180104	0.6659	24.9620
Midazolam	Clonazepam-D4 ISTD	6.243	62936	118241	0.5323	26.4549
Flurazepam	Diazepam-D5 ISTD	6.496	194239	105704	1.8376	27.6051
Nitrazepam	Clonazepam-D4 ISTD	7.309	31312	118241	0.2648	24.0633
alpha-Hydroxyalprazolam	alphahydroxyalprazolam-D5 ISTD	7.439	2051	15184	0.1351	26.3733
alpha-hydroxytriazolam	Nordiazepam-D5 ISTD	7.488	5512	61036	0.0903	22.7748
Nordiazepam	Nordiazepam-D5 ISTD	7.697	26415	61036	0.4328	24.3483
Oxazepam	Oxazepam D5 ISTD	7.704	43069	180104	0.2391	24.0804
Clonazepam	Clonazepam-D4 ISTD	8.044	24481	118241	0.2070	23.8823
Lorazepam	Oxazepam D5 ISTD	8.068	9263	180104	0.0514	24.0105
Alprazolam	alphahydroxyalprazolam-D5 ISTD	8.071	7661	15184	0.5045	22.8579
Flunitrazepam	Clonazepam-D4 ISTD	8.580	16364	118241	0.1384	24.7302
Temazepam	Oxazepam D5 ISTD	8.849	69877	180104	0.3880	24.5406
Diazepam	Diazepam-D5 ISTD	9.394	25789	105704	0.2440	23.8304



# ISP FORENSICS - Cd'A

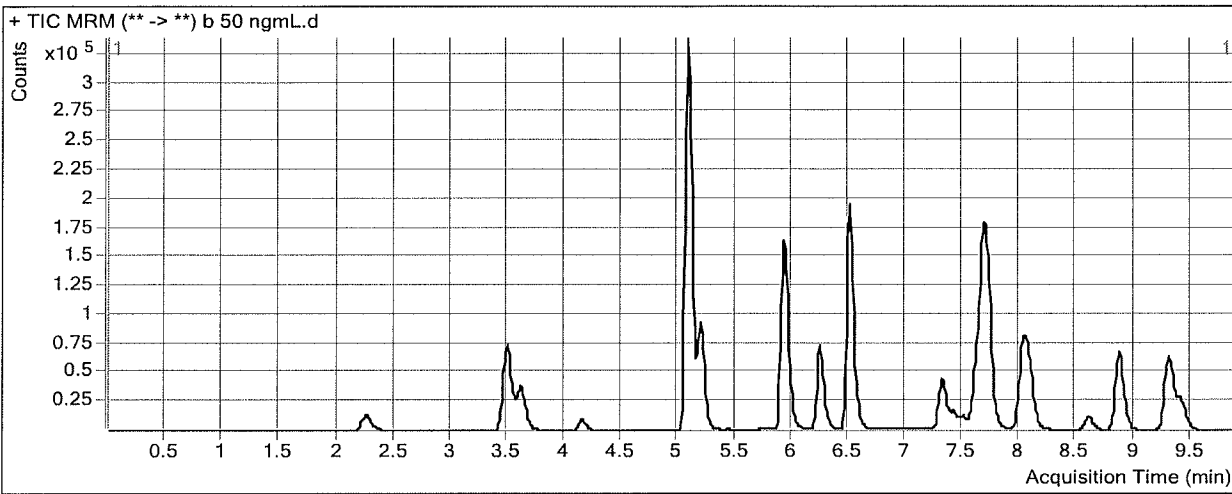
## Benzodiazepine Analysis Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin  
**Analysis Time** 1/5/2017 10:36 AM **Analyst Name** ISP Tox  
**Report Time** 1/5/2017 10:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/5/2017 10:36 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2017-01-04 12:58 **Data File** b 50 ngmL.d  
**Sample Type** Calibration **Sample Name** 50 ngmL  
**Dilution** 1 **Acq Method** Benzos\_Z\_Drugs\_ACN\_FA\_ISP 2016.m  
**Position** P2-A4 **Sample Info** ppd 12/22/16- Unextracted 1-4-17  
**Inj Vol** -1 **Comment** AM 13 Benzo and Z by LCQQQ

### Sample Chromatogram



### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
7-Aminoclonazepam	7-Aminoflunitrazepam-D7 ISTD	2.258	60317	342236	0.1762	53.8879
7-Aminoflunitrazepam	7-Aminoflunitrazepam-D7 ISTD	3.620	142028	342236	0.4150	50.5026
zopiclone	Oxazepam D5 ISTD	4.140	28547	379094	0.0753	36.9283
zolpidem	Oxazepam D5 ISTD	5.078	1023713	379094	2.7004	48.9434
Chlordiazepoxide	Nordiazepam-D5 ISTD	5.198	277742	128623	2.1593	50.0167
quetiapine	Oxazepam D5 ISTD	5.931	395787	379094	1.0440	48.6870
Midazolam	Clonazepam-D4 ISTD	6.243	233049	244391	0.9536	48.4051
Flurazepam	Diazepam-D5 ISTD	6.505	694584	184668	3.7613	59.0445
Nitrazepam	Clonazepam-D4 ISTD	7.317	134953	244391	0.5522	49.8763
alpha-Hydroxyalprazolam	alphahydroxyalprazolam-D5 ISTD	7.447	8790	34899	0.2519	48.5339
alpha-hydroxytriazolam	Nordiazepam-D5 ISTD	7.497	25631	128623	0.1993	50.0658
Nordiazepam	Nordiazepam-D5 ISTD	7.706	111583	128623	0.8675	47.7595
Oxazepam	Oxazepam D5 ISTD	7.712	186670	379094	0.4924	48.9148
Clonazepam	Clonazepam-D4 ISTD	8.053	105942	244391	0.4335	48.7370
Lorazepam	Oxazepam D5 ISTD	8.076	40628	379094	0.1072	48.6694
Alprazolam	alphahydroxyalprazolam-D5 ISTD	8.080	38781	34899	1.1112	47.7863
Flunitrazepam	Clonazepam-D4 ISTD	8.588	44847	244391	0.1835	35.5908
Temazepam	Oxazepam D5 ISTD	8.857	285242	379094	0.7524	46.5236
Diazepam	Diazepam-D5 ISTD	9.402	94375	184668	0.5110	49.3598

# ISP FORENSICS - Cd'A

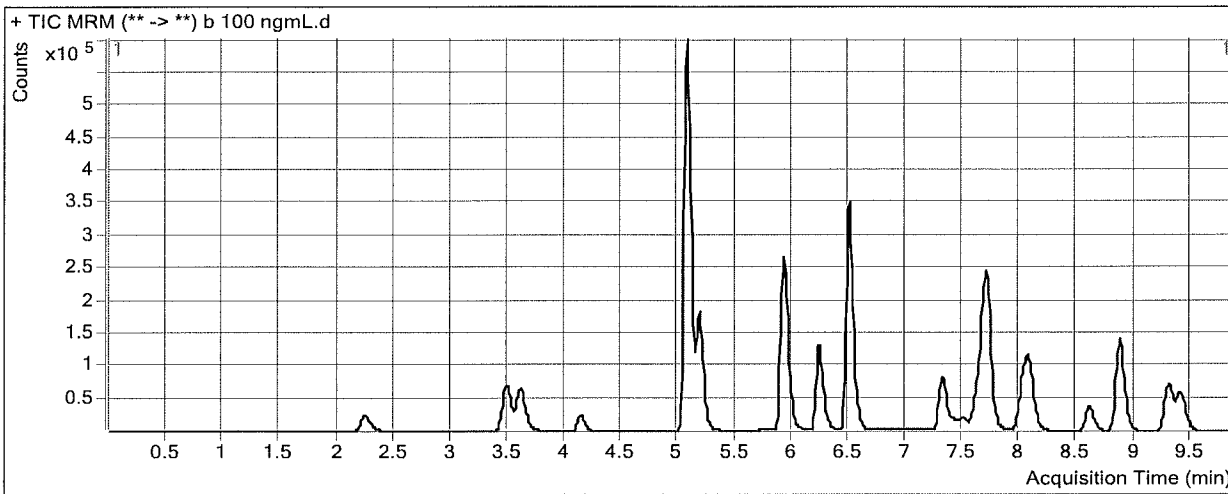
## Benzodiazepine Analysis Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin  
**Analysis Time** 1/5/2017 10:36 AM **Analyst Name** ISP Tox  
**Report Time** 1/5/2017 10:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/5/2017 10:36 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2017-01-04 13:12 **Data File** b 100 ngmL.d  
**Sample Type** Calibration **Sample Name** 100 ngmL  
**Dilution** 1 **Acq Method** Benzos\_Z\_Drugs\_ACN\_FA\_ISP 2016.m  
**Position** P2-A5 **Sample Info** ppd 12/22/16 Unextracted 1-4-17  
**Inj Vol** -1 **Comment** AM 13 Benzo and Z by LCQQQ

### Sample Chromatogram



### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
7-Aminoclonazepam	7-Aminoflunitrazepam-D7 ISTD	2.250	115997	310683	0.3734	117.5728
7-Aminoflunitrazepam	7-Aminoflunitrazepam-D7 ISTD	3.612	265900	310683	0.8559	106.4963
zopiclone	Oxazepam D5 ISTD	4.132	70129	350270	0.2002	50.2918
zolpidem	Oxazepam D5 ISTD	5.070	1863105	350270	5.3191	98.8592
Chlordiazepoxide	Nordiazepam-D5 ISTD	5.190	548408	122226	4.4868	103.8611
quetiapine	Oxazepam D5 ISTD	5.922	666819	350270	1.9037	103.3774
Midazolam	Clonazepam-D4 ISTD	6.243	422969	235324	1.7974	92.3653
Flurazepam	Diazepam-D5 ISTD	6.496	1285580	207695	6.1898	98.7342
Nitrazepam	Clonazepam-D4 ISTD	7.309	263559	235324	1.1200	100.7901
alpha-Hydroxyalprazolam	alphanhydroxyalprazolam-D5 ISTD	7.447	16779	30912	0.5428	102.1145
alpha-hydroxytriazolam	Nordiazepam-D5 ISTD	7.497	49421	122226	0.4043	101.4250
Nordiazepam	Nordiazepam-D5 ISTD	7.706	230001	122226	1.8818	102.5873
Oxazepam	Oxazepam D5 ISTD	7.712	359221	350270	1.0256	101.7087
Clonazepam	Clonazepam-D4 ISTD	8.053	208701	235324	0.8869	98.7955
Lorazepam	Oxazepam D5 ISTD	8.076	79595	350270	0.2272	101.7844
Alprazolam	alphanhydroxyalprazolam-D5 ISTD	8.080	81830	30912	2.6472	112.2609
Flunitrazepam	Clonazepam-D4 ISTD	8.588	148121	235324	0.6294	100.0867
Temazepam	Oxazepam D5 ISTD	8.857	590006	350270	1.6844	101.8202
Diazepam	Diazepam-D5 ISTD	9.402	221749	207695	1.0677	101.9738



# ISP FORENSICS - Cd'A

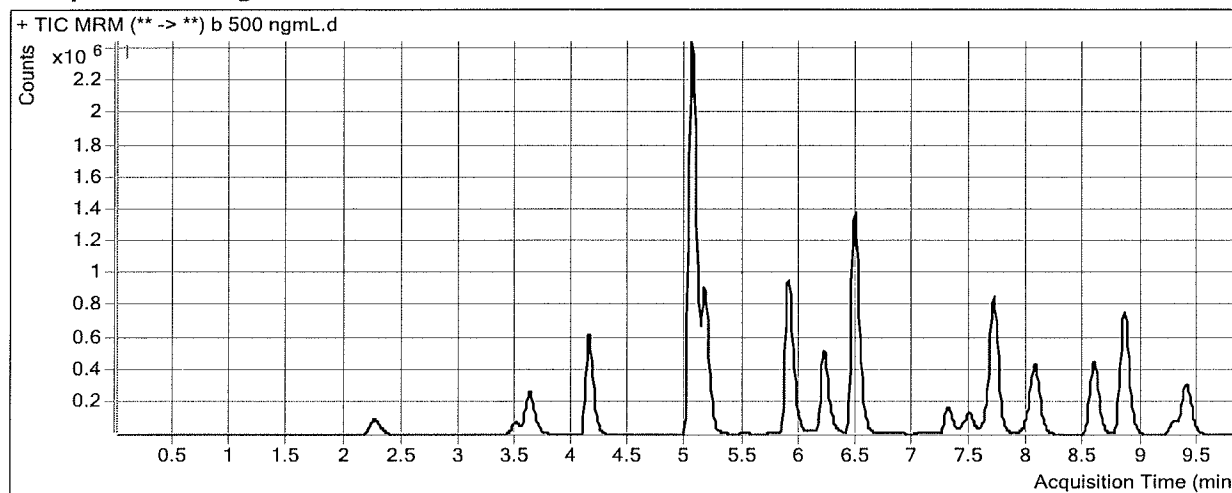
## Benzodiazepine Analysis Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin  
**Analysis Time** 1/5/2017 10:36 AM **Analyst Name** ISP Tox  
**Report Time** 1/5/2017 10:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/5/2017 10:36 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2017-01-05 09:11 **Data File** b 500 ngmL.d  
**Sample Type** Calibration **Sample Name** 500 ngmL  
**Dilution** 1 **Acq Method** Benzos\_Z\_Drugs\_ACN\_FA\_ISP 2016.m  
**Position** P2-A6 **Sample Info** ppd 12/22/16 Unextracted 1-4-17 A  
**Inj Vol** -1 **Comment** AM 13 Benzo and Z by LCQQQ

### Sample Chromatogram



### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
7-Aminoclonazepam	7-Aminoflunitrazepam-D7 ISTD	2.267	479228	342462	1.3994	464.0459
7-Aminoflunitrazepam	7-Aminoflunitrazepam-D7 ISTD	3.620	1217364	342462	3.5547	486.5553
zopiclone	Oxazepam D5 ISTD	4.140	1760666	360345	4.8861	551.6023
zolpidem	Oxazepam D5 ISTD	5.045	8693876	360345	24.1265	494.7798
Chlordiazepoxide	Nordiazepam-D5 ISTD	5.163	2870992	98499	29.1475	674.3678
quetiapine	Oxazepam D5 ISTD	5.897	2734282	360345	7.5880	495.9690
Midazolam	Clonazepam-D4 ISTD	6.209	1830475	187467	9.7642	507.4227
Flurazepam	Diazepam-D5 ISTD	6.471	5696860	231313	24.6283	400.0814
Nitrazepam	Clonazepam-D4 ISTD	7.301	536528	187467	2.8620	256.3179
alpha-Hydroxyalprazolam	alphahydroxyalprazolam-D5 ISTD	7.431	115381	39309	2.9353	479.5221
alpha-hydroxytriazolam	Nordiazepam-D5 ISTD	7.480	335965	98499	3.4109	854.4175
Nordiazepam	Nordiazepam-D5 ISTD	7.689	966729	98499	9.8146	542.1069
Oxazepam	Oxazepam D5 ISTD	7.695	1705580	360345	4.7332	490.7440
Clonazepam	Clonazepam-D4 ISTD	8.029	831797	187467	4.4370	505.6856
Lorazepam	Oxazepam D5 ISTD	8.051	408734	360345	1.1343	503.0407
Alprazolam	alphahydroxyalprazolam-D5 ISTD	8.063	414388	39309	10.5419	482.6442
Flunitrazepam	Clonazepam-D4 ISTD	8.563	1911653	187467	10.1973	499.9970
Temazepam	Oxazepam D5 ISTD	8.832	3274822	360345	9.0880	502.3937
Diazepam	Diazepam-D5 ISTD	9.385	1319772	231313	5.7056	531.2482

# ISP FORENSICS - Cd'A

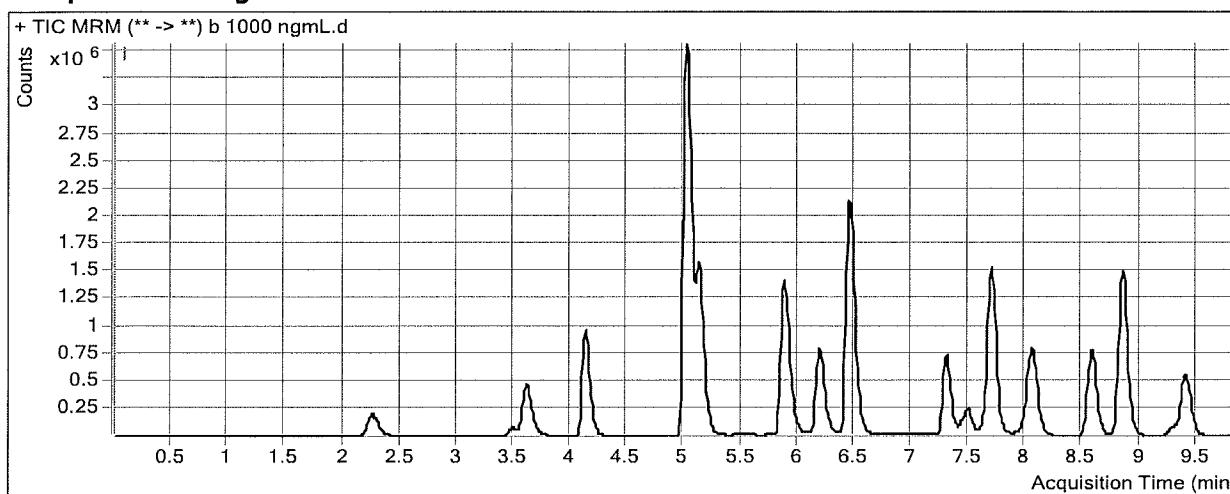
## Benzodiazepine Analysis Report

**Batch Data Path** D:\2016 Data\1-4-17 Blood Benzo\QuantResults\1417 blood benzo.batch.bin  
**Analysis Time** 1/5/2017 10:36 AM **Analyst Name** ISP Tox  
**Report Time** 1/5/2017 10:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/5/2017 10:36 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2017-01-04 13:42 **Data File** b 1000 ngmL.d  
**Sample Type** Calibration **Sample Name** 1000 ngmL  
**Dilution** 1 **Acq Method** Benzos\_Z\_Drugs\_ACN\_FA\_ISP 2016.m  
**Position** P2-A7 **Sample Info** ppd 12/22/16 Unextracted A 1-4-17  
**Inj Vol** -1 **Comment** AM 13 Benzo and Z by LCQQQ

### Sample Chromatogram



### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
7-Aminoclonazepam	7-Aminoflunitrazepam-D7 ISTD	2.258	977337	339685	2.8772	1018.1142
7-Aminoflunitrazepam	ISTD	3.620	2182938	339685	6.4264	1008.2488
zopiclone	Oxazepam D5 ISTD	4.124	2903889	326855	8.8843	979.3548
zolpidem	Oxazepam D5 ISTD	5.020	14167348	326855	43.3445	1008.8564
Chlordiazepoxide	Nordiazepam-D5 ISTD	5.130	5054941	117312	43.0895	996.9083
quetiapine	Oxazepam D5 ISTD	5.881	4463204	326855	13.6550	1002.1496
Midazolam	Clonazepam-D4 ISTD	6.192	3125162	214665	14.5583	757.1851
Flurazepam	Diazepam-D5 ISTD	6.446	9643416	221560	43.5250	708.9163
Nitrazepam	Clonazepam-D4 ISTD	7.301	2436247	214665	11.3491	999.9492
alpha-Hydroxyalprazolam	alphahydroxyalprazolam-D5 ISTD	7.431	275978	37509	7.3576	1014.6144
alpha-hydroxytriazolam	Nordiazepam-D5 ISTD	7.480	622727	117312	5.3083	1329.6347
Nordiazepam	Nordiazepam-D5 ISTD	7.697	2076750	117312	17.7027	999.8527
Oxazepam	Oxazepam D5 ISTD	7.695	2940783	326855	8.9972	999.8743
Clonazepam	Clonazepam-D4 ISTD	8.020	1804141	214665	8.4045	997.1316
Lorazepam	Oxazepam D5 ISTD	8.051	737970	326855	2.2578	1000.0528
Alprazolam	alphahydroxyalprazolam-D5 ISTD	8.071	714984	37509	19.0615	1010.6940
Flunitrazepam	Clonazepam-D4 ISTD	8.563	3281388	214665	15.2861	618.5714
Temazepam	Oxazepam D5 ISTD	8.840	6490372	326855	19.8571	998.9794
Diazepam	Diazepam-D5 ISTD	9.394	2401618	221560	10.8396	999.4922