DRAEGER ALCOTEST 9510 VALIDATION TESTING

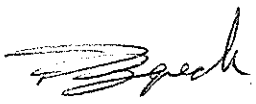
INSTRUMENT SERIAL NUMBER: ARAH-0089

SOLUTION BATCH NUMBER: D00001

SOLUTION TARGET CONCENTRATION: 0.009

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C
Reference Value:	**0.0090**	**0.0090**	**0.0090**	**0.0090**	**0.0090**	**0.0090**	**0.0090**	**0.0090**	**0.0090**	**0.0090**
	0.010	0.010	0.010	0.011	0.010	0.010	0.010	0.012	0.009	0.009
	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.009
	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.009
	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.009
	0.009	0.010	0.009	0.011	0.010	0.010	0.010	0.011	0.009	0.009
	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.010
	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.009
	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.010
	0.009	0.010	0.010	0.011	0.010	0.010	0.011	0.011	0.009	0.010
	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.010
Mean:	0.0091	0.0100	0.0099	0.0110	0.0100	0.0100	0.0101	0.0111	0.0090	0.0094
SD:	0.0003	0.0000	0.0003	0.0000	0.0000	0.0000	0.0003	0.0003	0.0000	0.0005
Bias %:	1.11	11.11	10.00	22.22	11.11	11.11	12.22	23.33	0.00	4.44
CV %:	3.30	0.00	3.03	0.00	0.00	0.00	2.97	2.70	0.00	5.32
Calculated Mean-Ref. Value Difference:	0.0001	0.001	0.0009	0.002	0.0010	0.001	0.0011	0.0021	0.0000	0.0004

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.



DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAH-0089

SOLUTION BATCH NUMBER: D00002

SOLUTION TARGET CONCENTRATION: 0.0147

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C
Reference Value:	**0.0147**	**0.0147**	**0.0147**	**0.0147**	**0.0147**	**0.0147**	**0.0147**	**0.0147**	**0.0147**	**0.0147**
	0.014	0.014	0.014	0.014	0.014	0.014	0.012	0.012	0.014	0.014
	0.014	0.015	0.014	0.014	0.014	0.014	0.013	0.013	0.014	0.014
	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
	0.014	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014
	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015
	0.014	0.015	0.015	0.014	0.015	0.014	0.014	0.014	0.015	0.015
	0.014	0.015	0.015	0.014	0.014	0.014	0.015	0.014	0.015	0.015
	0.014	0.015	0.015	0.014	0.014	0.014	0.015	0.014	0.014	0.015
	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015
Mean:	0.0140	0.0148	0.0143	0.0141	0.0141	0.0140	0.0139	0.0137	0.0144	0.0145
SD:	0.0000	0.0004	0.0005	0.0003	0.0003	0.0000	0.0009	0.0007	0.0005	0.0005
Bias %:	-4.76	0.68	-2.72	-4.08	-4.08	-4.76	-5.44	-6.80	-2.04	-1.36
CV %:	0.00	2.70	3.50	2.13	2.13	0.00	6.47	5.11	3.47	3.45
Calculated Mean-Ref. Value Difference:	-0.0007	0.0001	-0.0004	-0.0006	-0.0006	-0.0007	-0.0008	-0.001	-0.0003	-0.0002

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAH-0089

SOLUTION BATCH NUMBER: D00003

SOLUTION TARGET CONCENTRATION: 0.0204

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C
Reference Value:	**0.0204**	**0.0204**	**0.0204**	**0.0204**	**0.0204**	**0.0204**	**0.0204**	**0.0204**	**0.0204**	**0.0204**
	0.020	0.020	0.020	0.020	0.020	0.020	0.017	0.017	0.019	0.019
	0.020	0.020	0.020	0.020	0.020	0.020	0.018	0.018	0.019	0.019
	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.020
	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.020
	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.019	0.020
	0.019	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.019	0.020
	0.019	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
	0.019	0.020	0.020	0.020	0.021	0.020	0.020	0.020	0.019	0.020
	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
	0.019	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.020
Mean:	0.0196	0.0200	0.0200	0.0200	0.0201	0.0200	0.0193	0.0191	0.0192	0.0198
SD:	0.0005	0.0000	0.0000	0.0000	0.0003	0.0000	0.0011	0.0010	0.0004	0.0004
Bias %:	-3.92	-1.96	-1.96	-1.96	-1.47	-1.96	-5.39	-6.37	-5.88	-2.94
CV %:	2.55	0.00	0.00	0.00	1.49	0.00	5.70	5.24	2.08	2.02
Calculated Mean-Ref. Value Difference:	-0.0008	-0.0004	-0.0004	-0.0004	-0.0003	-0.0004	-0.0011	-0.0013	-0.0012	-0.0006

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAH-0089

SOLUTION BATCH NUMBER: D00004

SOLUTION TARGET CONCENTRATION: 0.0408

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C
Reference Value:	**0.0408**	**0.0408**	**0.0408**	**0.0408**	**0.0408**	**0.0408**	**0.0408**	**0.0408**	**0.0408**	**0.0408**
	0.040	0.040	0.040	0.039	0.040	0.039	0.039	0.038	0.038	0.038
	0.040	0.040	0.040	0.039	0.040	0.039	0.039	0.038	0.039	0.038
	0.040	0.040	0.040	0.040	0.040	0.039	0.040	0.039	0.039	0.038
	0.040	0.040	0.040	0.040	0.040	0.039	0.040	0.039	0.039	0.039
	0.040	0.040	0.040	0.040	0.040	0.039	0.040	0.039	0.039	0.039
	0.040	0.040	0.040	0.040	0.040	0.039	0.040	0.039	0.039	0.039
	0.040	0.040	0.040	0.040	0.040	0.039	0.040	0.040	0.039	0.039
	0.040	0.040	0.040	0.040	0.040	0.039	0.040	0.040	0.040	0.039
	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.039
	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.039
Mean:	0.0400	0.0400	0.0400	0.0398	0.0400	0.0392	0.0398	0.0392	0.0392	0.0387
SD:	0.0000	0.0000	0.0000	0.0004	0.0000	0.0004	0.0004	0.0008	0.0006	0.0005
Bias %:	-1.96	-1.96	-1.96	-2.45	-1.96	-3.92	-2.45	-3.92	-3.92	-5.15
CV %:	0.00	0.00	0.00	1.01	0.00	1.02	1.01	2.04	1.53	1.29
Calculated Mean-Ref. Value Difference:	-0.0008	-0.0008	-0.0008	-0.001	-0.0008	-0.0016	-0.0010	-0.0016	-0.0016	-0.0021

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAH-0089

SOLUTION BATCH NUMBER: D00005

SOLUTION TARGET CONCENTRATION: 0.0804

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C
Reference Value:	**0.0804**	**0.0804**	**0.0804**	**0.0804**	**0.0804**	**0.0804**	**0.0804**	**0.0804**	**0.0804**	**0.0804**
	0.080	0.080	0.081	0.079	0.079	0.077	0.078	0.076	0.080	0.079
	0.080	0.080	0.081	0.080	0.079	0.077	0.078	0.076	0.081	0.079
	0.080	0.080	0.081	0.079	0.079	0.078	0.079	0.076	0.081	0.079
	0.080	0.080	0.081	0.079	0.080	0.078	0.079	0.077	0.081	0.079
	0.080	0.079	0.081	0.079	0.080	0.078	0.080	0.077	0.081	0.079
	0.080	0.080	0.081	0.079	0.080	0.078	0.080	0.078	0.080	0.079
	0.080	0.080	0.081	0.079	0.081	0.079	0.080	0.078	0.080	0.079
	0.080	0.080	0.081	0.079	0.081	0.079	0.080	0.078	0.081	0.079
	0.080	0.080	0.081	0.079	0.081	0.079	0.080	0.078	0.081	0.079
	0.080	0.080	0.081	0.079	0.081	0.079	0.081	0.078	0.081	0.079
Mean:	0.0800	0.0799	0.0810	0.0791	0.0801	0.0782	0.0795	0.0772	0.0807	0.0790
SD:	0.0000	0.0003	0.0000	0.0003	0.0009	0.0008	0.0010	0.0009	0.0005	0.0000
Bias %:	-0.50	-0.62	0.75	-1.62	-0.37	-2.74	-1.12	-3.98	0.37	-1.74
CV %:	0.00	0.38	0.00	0.38	1.12	1.02	1.26	1.17	0.62	0.00
Calculated Mean-Ref. Value Difference:	-0.0004	-0.0005	0.0006	-0.0013	-0.0003	-0.0022	-0.0009	-0.0032	0.0003	-0.0014

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAH-0089

SOLUTION BATCH NUMBER: D00006

SOLUTION TARGET CONCENTRATION: 0.1522

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C
Reference Value:	**0.1522**	**0.1522**	**0.1522**	**0.1522**	**0.1522**	**0.1522**	**0.1522**	**0.1522**	**0.1522**	**0.1522**
	0.151	0.150	0.152	0.148	0.158	0.154	0.151	0.147	0.149	0.145
	0.152	0.151	0.153	0.148	0.158	0.154	0.152	0.148	0.150	0.146
	0.151	0.150	0.153	0.149	0.157	0.153	0.152	0.148	0.150	0.147
	0.153	0.152	0.153	0.149	0.157	0.153	0.153	0.148	0.151	0.147
	0.153	0.152	0.153	0.149	0.157	0.153	0.153	0.148	0.151	0.148
	0.154	0.153	0.153	0.150	0.157	0.153	0.153	0.149	0.152	0.148
	0.153	0.153	0.153	0.150	0.157	0.153	0.154	0.150	0.152	0.149
	0.153	0.153	0.154	0.150	0.157	0.154	0.154	0.150	0.152	0.149
	0.153	0.152	0.154	0.150	0.156	0.153	0.155	0.151	0.152	0.149
	0.153	0.153	0.154	0.150	0.156	0.153	0.155	0.151	0.153	0.150
Mean:	0.1526	0.1519	0.1532	0.1493	0.1570	0.1533	0.1532	0.1490	0.1512	0.1478
SD:	0.0010	0.0012	0.0006	0.0008	0.0007	0.0005	0.0013	0.0014	0.0012	0.0015
Bias %:	0.26	-0.20	0.66	-1.91	3.15	0.72	0.66	-2.10	-0.66	-2.89
CV %:	0.66	0.79	0.39	0.54	0.45	0.33	0.85	0.94	0.79	1.01
Calculated Mean-Ref. Value Difference:	0.0004	-0.0003	0.0010	-0.0029	0.0048	0.0011	0.0010	-0.0032	-0.0010	-0.0044

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAH-0089

SOLUTION BATCH NUMBER: D00007

SOLUTION TARGET CONCENTRATION: 0.2024

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C
Reference Value:	**0.2024**	**0.2024**	**0.2024**	**0.2024**	**0.2024**	**0.2024**	**0.2024**	**0.2024**	**0.2024**	**0.2024**
	0.202	0.204	0.192	0.187	0.205	0.201	0.202	0.197	0.199	0.196
	0.204	0.204	0.199	0.194	0.204	0.202	0.203	0.197	0.200	0.197
	0.204	0.205	0.202	0.197	0.205	0.202	0.203	0.198	0.200	0.196
	0.204	0.204	0.203	0.199	0.205	0.202	0.203	0.198	0.200	0.196
	0.203	0.203	0.204	0.200	0.205	0.201	0.203	0.199	0.201	0.196
	0.203	0.203	0.204	0.201	0.205	0.202	0.203	0.199	0.201	0.196
	0.203	0.203	0.204	0.202	0.205	0.202	0.204	0.199	0.200	0.196
	0.203	0.204	0.205	0.202	0.203	0.200	0.204	0.199	0.201	0.195
	0.204	0.205	0.205	0.202	0.202	0.199	0.204	0.200	0.201	0.195
	0.205	0.205	0.204	0.201	0.202	0.199	0.205	0.200	0.201	0.195
Mean:	0.2035	0.2040	0.2022	0.1985	0.2041	0.2010	0.2034	0.1986	0.2004	0.1958
SD:	0.0008	0.0008	0.0040	0.0048	0.0013	0.0012	0.0008	0.0011	0.0007	0.0006
Bias %:	0.54	0.79	-0.10	-1.93	0.84	-0.69	0.49	-1.88	-0.99	-3.26
CV %:	0.39	0.39	1.98	2.42	0.64	0.60	0.39	0.55	0.35	0.31
Calculated Mean-Ref. Value Difference:	0.0011	0.0016	-0.0002	-0.0039	0.0017	-0.0014	0.0010	-0.0038	-0.0020	-0.0066

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAH-0089

SOLUTION BATCH NUMBER: D00008

SOLUTION TARGET CONCENTRATION: 0.3044

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C
Reference Value:	**0.3044**	**0.3044**	**0.3044**	**0.3044**	**0.3044**	**0.3044**	**0.3044**	**0.3044**	**0.3044**	**0.3044**
	0.299	0.299	0.301	0.296	0.302	0.297	0.303	0.296	0.297	0.288
	0.303	0.302	0.303	0.298	0.305	0.299	0.303	0.296	0.299	0.290
	0.304	0.304	0.304	0.299	0.305	0.299	0.304	0.296	0.300	0.290
	0.304	0.304	0.304	0.298	0.306	0.300	0.304	0.295	0.300	0.290
	0.305	0.304	0.305	0.298	0.306	0.299	0.305	0.295	0.300	0.290
	0.306	0.305	0.305	0.297	0.306	0.299	0.306	0.295	0.301	0.290
	0.307	0.305	0.305	0.297	0.306	0.299	0.307	0.296	0.302	0.290
	0.307	0.304	0.306	0.298	0.306	0.298	0.307	0.295	0.303	0.291
	0.307	0.304	0.305	0.297	0.305	0.297	0.307	0.295	0.303	0.291
	0.306	0.302	0.306	0.297	0.306	0.297	0.308	0.295	0.303	0.290
Mean:	0.3048	0.3033	0.3044	0.2975	0.3053	0.2984	0.3054	0.2954	0.3008	0.2900
SD:	0.0025	0.0018	0.0015	0.0008	0.0013	0.0011	0.0018	0.0005	0.0020	0.0008
Bias %:	0.13	-0.36	0.00	-2.27	0.30	-1.97	0.33	-2.96	-1.18	-4.73
CV %:	0.82	0.59	0.49	0.27	0.43	0.37	0.59	0.17	0.66	0.28
Calculated Mean-Ref. Value Difference:	0.0004	-0.0011	0.0000	-0.0069	0.0009	-0.006	0.0010	-0.009	-0.0036	-0.0144

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAH-0089

SOLUTION BATCH NUMBER: D00009

SOLUTION TARGET CONCENTRATION: 0.4026

	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C	I/R	E/C
Reference Value:	**0.4026**	**0.4026**	**0.4026**	**0.4026**	**0.4026**	**0.4026**	**0.4026**	**0.4026**	**0.4026**	**0.4026**
	0.408	0.408	0.401	0.395	0.396	0.387	0.398	0.385	0.404	0.391
	0.407	0.405	0.404	0.396	0.398	0.387	0.398	0.385	0.406	0.391
	0.407	0.405	0.405	0.396	0.399	0.388	0.399	0.385	0.405	0.390
	0.407	0.404	0.405	0.395	0.400	0.388	0.400	0.386	0.405	0.389
	0.408	0.405	0.405	0.395	0.401	0.387	0.401	0.386	0.406	0.390
	0.408	0.404	0.406	0.395	0.400	0.387	0.401	0.384	0.406	0.388
	0.409	0.402	0.404	0.393	0.401	0.386	0.401	0.384	0.407	0.388
	0.407	0.400	0.404	0.391	0.402	0.386	0.402	0.384	0.407	0.388
	0.405	0.399	0.405	0.391	0.403	0.387	0.403	0.385	0.407	0.388
	0.406	0.397	0.405	0.391	0.404	0.387	0.404	0.386	0.407	0.387
Mean:	0.4072	0.4029	0.4044	0.3938	0.4004	0.3870	0.4007	0.3850	0.4060	0.3890
SD:	0.0011	0.0033	0.0013	0.0021	0.0024	0.0007	0.0020	0.0008	0.0011	0.0014
Bias %:	1.14	0.07	0.45	-2.19	-0.55	-3.87	-0.47	-4.37	0.84	-3.38
CV %:	0.27	0.82	0.32	0.53	0.60	0.18	0.50	0.21	0.27	0.36
Calculated Mean-Ref. Value Difference:	0.0046	0.0003	0.0018	-0.0088	-0.0022	-0.0156	-0.0019	-0.0176	0.0034	-0.0136

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.