DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAF-0029

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**
	0.009	0.009	0.012	0.012	0.010	0.010	0.011	0.013	0.009	0.008
	0.009	0.009	0.011	0.011	0.010	0.010	0.011	0.012	0.009	0.008
	0.010	0.009	0.011	0.011	0.010	0.010	0.011	0.011	0.009	0.009
	0.010	0.009	0.011	0.011	0.010	0.010	0.011	0.011	0.009	0.009
	0.009	0.009	0.011	0.011	0.010	0.010	0.012	0.011	0.009	0.009
	0.009	0.009	0.011	0.010	0.010	0.010	0.012	0.011	0.009	0.009
	0.009	0.009	0.011	0.010	0.010	0.010	0.011	0.011	0.009	0.009
	0.009	0.009	0.011	0.010	0.010	0.010	0.011	0.011	0.009	0.009
	0.009	0.009	0.011	0.010	0.010	0.010	0.011	0.011	0.009	0.009
	0.009	0.009	0.011	0.010	0.010	0.010	0.011	0.011	0.009	0.009
Mean:	0.0092	0.0090	0.0111	0.0106	0.0100	0.0100	0.0112	0.0113	0.0090	0.0088
SD:	0.0004	0.0000	0.0003	0.0007	0.0000	0.0000	0.0004	0.0007	0.0000	0.0004
Bias %:	2.22	0.00	23.33	17.78	11.11	11.11	24.44	25.56	0.00	-2.22
CV %:	4.35	0.00	2.70	6.60	0.00	0.00	3.57	6.19	0.00	4.55
Calculated Mean-Ref. Value Difference:	0.0002	0	0.0021	0.0016	0.0010	0.001	0.0022	0.0023	0.0000	-0.0002

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAF-0029

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	0.013	0.014	0.014	0.014	0.014	0.014	0.013
	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.013
	0.014	0.014	0.014	0.013	0.014	0.014	0.014	0.014	0.014	0.013
	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.014	0.014	0.013
	0.014	0.014	0.014	0.013	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	0.014	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	0.014	0.014
Mean:	0.0140	0.0140	0.0140	0.0137	0.0140	0.0140	0.0147	0.0140	0.0140	0.0136
SD:	0.0000	0.0000	0.0000	0.0005	0.0000	0.0000	0.0005	0.0000	0.0000	0.0005
Bias %:	-4.76	-4.76	-4.76	-6.80	-4.76	-4.76	0.00	-4.76	-4.76	-7.48
CV %:	0.00	0.00	0.00	3.65	0.00	0.00	3.40	0.00	0.00	3.68
Calculated Mean-Ref. Value Difference:	-0.0007	-0.0007	-0.0007	-0.001	-0.0007	-0.0007	0.0000	-0.0007	-0.0007	-0.0011

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAF-0029

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	0.019	0.020	0.019	0.019	0.019	0.019	0.018	0.019	0.018
	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.019
	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.019
	0.020	0.019	0.020	0.020	0.020	0.019	0.020	0.019	0.020	0.019
	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.019
	0.020	0.019	0.020	0.019	0.020	0.019	0.021	0.019	0.020	0.019
	0.020	0.019	0.020	0.019	0.020	0.019	0.021	0.019	0.020	0.019
	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.020	0.020	0.019
	0.020	0.019	0.020	0.019	0.020	0.019	0.021	0.020	0.020	0.019
	0.020	0.019	0.020	0.019	0.020	0.019	0.021	0.020	0.020	0.019
Mean:	0.0200	0.0190	0.0200	0.0191	0.0199	0.0190	0.0203	0.0192	0.0199	0.0189
SD:	0.0000	0.0000	0.0000	0.0003	0.0003	0.0000	0.0007	0.0006	0.0003	0.0003
Bias %:	-1.96	-6.86	-1.96	-6.37	-2.45	-6.86	-0.49	-5.88	-2.45	-7.35
CV %:	0.00	0.00	0.00	1.57	1.51	0.00	3.45	3.13	1.51	1.59
Calculated Mean-Ref. Value Difference:	-0.0004	-0.0014	-0.0004	-0.0013	-0.0005	-0.0014	-0.0001	-0.0012	-0.0005	-0.0015

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAF-0029

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	0.039	0.040	0.038	0.040	0.039	0.038	0.036	0.039	0.037
	0.040	0.039	0.040	0.038	0.040	0.039	0.039	0.037	0.039	0.038
	0.040	0.039	0.040	0.039	0.040	0.039	0.040	0.038	0.040	0.038
	0.040	0.039	0.040	0.039	0.040	0.039	0.040	0.038	0.040	0.038
	0.040	0.039	0.040	0.039	0.040	0.039	0.040	0.038	0.040	0.038
	0.040	0.039	0.040	0.039	0.040	0.039	0.040	0.038	0.040	0.039
	0.040	0.039	0.040	0.039	0.040	0.039	0.040	0.038	0.040	0.039
	0.040	0.039	0.040	0.039	0.040	0.039	0.040	0.038	0.040	0.039
	0.040	0.039	0.040	0.039	0.040	0.039	0.040	0.038	0.040	0.039
	0.040	0.039	0.040	0.039	0.040	0.039	0.041	0.038	0.041	0.039
Mean:	0.0400	0.0390	0.0400	0.0388	0.0400	0.0390	0.0398	0.0377	0.0399	0.0384
SD:	0.0000	0.0000	0.0000	0.0004	0.0000	0.0000	0.0008	0.0007	0.0006	0.0007
Bias %:	-1.96	-4.41	-1.96	-4.90	-1.96	-4.41	-2.45	-7.60	-2.21	-5.88
CV %:	0.00	0.00	0.00	1.03	0.00	0.00	2.01	1.86	1.50	1.82
Calculated Mean-Ref. Value Difference:	-0.0008	-0.0018	-0.0008	-0.002	-0.0008	-0.0018	-0.0010	-0.0031	-0.0009	-0.0024

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAF-0029

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	0.079	0.081	0.078	0.080	0.078	0.079	0.075	0.080	0.077
	0.080	0.079	0.081	0.078	0.081	0.078	0.080	0.076	0.081	0.078
	0.080	0.079	0.081	0.078	0.081	0.078	0.080	0.077	0.081	0.078
	0.080	0.079	0.081	0.078	0.081	0.078	0.081	0.077	0.081	0.078
	0.080	0.079	0.081	0.078	0.081	0.078	0.081	0.077	0.081	0.078
	0.080	0.079	0.081	0.078	0.081	0.078	0.081	0.078	0.080	0.078
	0.080	0.079	0.081	0.078	0.081	0.078	0.081	0.078	0.080	0.077
	0.080	0.079	0.081	0.078	0.081	0.078	0.081	0.078	0.080	0.077
	0.081	0.079	0.081	0.078	0.081	0.078	0.082	0.078	0.080	0.077
	0.081	0.079	0.081	0.078	0.081	0.078	0.082	0.078	0.080	0.077
Mean:	0.0802	0.0790	0.0810	0.0780	0.0809	0.0780	0.0808	0.0772	0.0804	0.0775
SD:	0.0004	0.0000	0.0000	0.0000	0.0003	0.0000	0.0009	0.0010	0.0005	0.0005
Bias %:	-0.25	-1.74	0.75	-2.99	0.62	-2.99	0.50	-3.98	0.00	-3.61
CV %:	0.50	0.00	0.00	0.00	0.37	0.00	1.11	1.30	0.62	0.65
Calculated Mean-Ref. Value Difference:	-0.0002	-0.0014	0.0006	-0.0024	0.0005	-0.0024	0.0004	-0.0032	0.0000	-0.0029

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAF-0029

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**
	0.149	0.147	0.155	0.150	0.155	0.150	0.153	0.147	0.155	0.148
	0.152	0.149	0.155	0.150	0.155	0.150	0.154	0.147	0.155	0.149
	0.153	0.150	0.155	0.150	0.156	0.151	0.154	0.147	0.155	0.150
	0.155	0.152	0.155	0.150	0.156	0.150	0.154	0.147	0.155	0.150
	0.155	0.152	0.155	0.149	0.155	0.150	0.155	0.148	0.155	0.150
	0.155	0.153	0.154	0.150	0.156	0.151	0.155	0.149	0.154	0.149
	0.155	0.153	0.155	0.150	0.156	0.151	0.156	0.150	0.155	0.150
	0.154	0.152	0.155	0.150	0.156	0.151	0.156	0.150	0.155	0.150
	0.154	0.152	0.156	0.151	0.156	0.151	0.156	0.150	0.155	0.150
	0.154	0.152	0.154	0.150	0.155	0.151	0.156	0.150	0.155	0.150
Mean:	0.1536	0.1512	0.1549	0.1500	0.1556	0.1506	0.1549	0.1485	0.1549	0.1496
SD:	0.0019	0.0019	0.0006	0.0005	0.0005	0.0005	0.0011	0.0014	0.0003	0.0007
Bias %:	0.92	-0.66	1.77	-1.45	2.23	-1.05	1.77	-2.43	1.77	-1.71
CV %:	1.24	1.26	0.39	0.33	0.32	0.33	0.71	0.94	0.19	0.47
Calculated Mean-Ref. Value Difference:	0.0014	-0.001	0.0027	-0.0022	0.0034	-0.0016	0.0027	-0.0037	0.0027	-0.0026

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAF-0029

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**
	0.204	0.203	0.200	0.194	0.207	0.202	0.194	0.186	0.202	0.196
	0.206	0.203	0.203	0.198	0.208	0.202	0.196	0.189	0.204	0.198
	0.206	0.204	0.204	0.199	0.208	0.203	0.199	0.190	0.204	0.198
	0.206	0.203	0.204	0.199	0.208	0.204	0.200	0.191	0.204	0.198
	0.206	0.203	0.205	0.200	0.208	0.203	0.202	0.193	0.204	0.198
	0.205	0.202	0.206	0.201	0.208	0.202	0.203	0.195	0.205	0.198
	0.205	0.203	0.206	0.201	0.207	0.203	0.203	0.196	0.205	0.198
	0.206	0.204	0.206	0.201	0.206	0.201	0.204	0.196	0.205	0.198
	0.206	0.205	0.206	0.201	0.205	0.200	0.205	0.196	0.205	0.198
	0.207	0.205	0.205	0.200	0.206	0.202	0.205	0.197	0.206	0.198
Mean:	0.2057	0.2035	0.2045	0.1994	0.2071	0.2022	0.2011	0.1929	0.2044	0.1978
SD:	0.0008	0.0010	0.0019	0.0022	0.0011	0.0011	0.0038	0.0037	0.0011	0.0006
Bias %:	1.63	0.54	1.04	-1.48	2.32	-0.10	-0.64	-4.69	0.99	-2.27
CV %:	0.39	0.49	0.93	1.10	0.53	0.54	1.89	1.92	0.54	0.30
Calculated Mean-Ref. Value Difference:	0.0033	0.0011	0.0021	-0.003	0.0047	-0.0002	-0.0013	-0.0095	0.0020	-0.0046

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAF-0029

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	0.296	0.305	0.298	0.309	0.302	0.308	0.297	0.302	0.292
	0.304	0.301	0.308	0.301	0.310	0.302	0.309	0.298	0.305	0.294
	0.305	0.302	0.308	0.301	0.311	0.303	0.310	0.297	0.306	0.295
	0.307	0.304	0.308	0.301	0.310	0.303	0.311	0.297	0.307	0.295
	0.307	0.304	0.309	0.301	0.310	0.302	0.311	0.297	0.307	0.295
	0.308	0.304	0.309	0.300	0.310	0.301	0.311	0.296	0.308	0.295
	0.309	0.304	0.309	0.300	0.311	0.301	0.310	0.296	0.308	0.295
	0.309	0.304	0.309	0.300	0.310	0.300	0.310	0.295	0.308	0.296
	0.309	0.304	0.309	0.301	0.310	0.299	0.311	0.295	0.308	0.293
	0.308	0.302	0.309	0.300	0.311	0.300	0.311	0.295	0.307	0.293
Mean:	0.3065	0.3025	0.3083	0.3003	0.3102	0.3013	0.3102	0.2963	0.3066	0.2943
SD:	0.0031	0.0025	0.0013	0.0009	0.0006	0.0013	0.0010	0.0011	0.0019	0.0013
Bias %:	0.69	-0.62	1.28	-1.35	1.91	-1.02	1.91	-2.66	0.72	-3.32
CV %:	1.01	0.83	0.42	0.30	0.19	0.43	0.32	0.37	0.62	0.44
Calculated Mean-Ref. Value Difference:	0.0021	-0.0019	0.0039	-0.0041	0.0058	-0.0031	0.0058	-0.0081	0.0022	-0.0101

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.

DRAEGER ALCOTEST 9510 VALIDATION TESTING

INSTRUMENT SERIAL NUMBER: ARAF-0029

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**
	0.414	0.411	0.408	0.401	0.410	0.399	0.406	0.385	0.415	0.399
	0.416	0.411	0.409	0.400	0.412	0.400	0.409	0.388	0.415	0.399
	0.414	0.409	0.409	0.399	0.412	0.399	0.410	0.388	0.414	0.396
	0.415	0.409	0.410	0.400	0.412	0.399	0.410	0.387	0.414	0.395
	0.415	0.409	0.410	0.398	0.412	0.398	0.409	0.386	0.413	0.395
	0.416	0.408	0.410	0.398	0.412	0.397	0.408	0.385	0.415	0.395
	0.415	0.406	0.411	0.398	0.410	0.394	0.406	0.383	0.415	0.393
	0.413	0.404	0.409	0.396	0.412	0.395	0.407	0.384	0.416	0.395
	0.410	0.400	0.409	0.395	0.412	0.395	0.407	0.383	0.416	0.395
	0.410	0.400	0.409	0.395	0.412	0.396	0.407	0.383	0.416	0.394
Mean:	0.4138	0.4067	0.4094	0.3980	0.4116	0.3972	0.4079	0.3852	0.4149	0.3956
SD:	0.0022	0.0041	0.0008	0.0021	0.0008	0.0021	0.0015	0.0020	0.0010	0.0020
Bias %:	2.78	1.02	1.69	-1.14	2.24	-1.34	1.32	-4.32	3.06	-1.74
CV %:	0.53	1.01	0.20	0.53	0.19	0.53	0.37	0.52	0.24	0.51
Calculated Mean-Ref. Value Difference:	0.0112	0.0041	0.0068	-0.0046	0.0090	-0.0054	0.0053	-0.0174	0.0123	-0.007

TESTING COMPLETED OVER 5 DAYS SEPARATE DAYS.