METHOD VALIDATION DRAEGER ALCOTEST 9510
ROBUSTNESS/ RUGGEDNESS TEST C - HIGH TEMPERATURE CONDITIONS PAGE 1

DRAEGER ALCOTEST 9510 SERIAL NUMBER: ARAF-0030

AMBIENT AIR THERMOMETER NUMBER: 90940026

0.04

AMBIENT TEMPERATURE START: 77
AMBIENT TEMPERATURE FINISH: 78.8

	I/R	E/C
Simulator #:	DR1361	DR1361
Sim Therm#:	DR1361	DR1361
Batch#:	12038	12038
Reference Value:	0.0407	0.0407
	0.047	0.049
	0.046	0.048
	0.047	0.049
	0.046	0.048
	0.046	0.048
Mean:	0.0464	0.0484
SD:	0.0005	0.0005
Bias %:	14.00	18.92
CV %:	1.08	1.03

0.08

AMBIENT TEMPEATURE START: 80.6
AMBIENT TEMPERATURE FINISH: 81.9

	I/R	E/C
Simulator #:	DR1361	DR1361
Sim Therm#:	DR1361	DR1361
Batch#:	T00003	T00003
Reference Value:	0.0820	0.0820
	0.073	0.076
	0.077	0.080
	0.080	0.083
	0.082	0.084
	0.082	0.085
Mean:	0.0788	0.0816
SD:	0.0038	0.0036
Bias %:	-3.90	-0.49
CV %:	4.82	4.41

0.15

AMBIENT TEMPERATURE START: 82.6
AMBIENT TEMPERATURE FINISH: 81.9

	I/R	E/C
Simulator #:	DR1361	DR1361
Sim Therm#:	DR1361	DR1361
Batch#:	T00004	T00004
Reference Value:	0.1537	0.1537
	0.136	0.139
	0.147	0.149
	0.150	0.154
	0.154	0.157
	0.157	0.160
Mean:	0.1488	0.1518
SD:	0.0081	0.0082
Bias %:	-3.19	-1.24
CV %:	5.44	5.40

DRY GAS Standard

AMBIENT TEMPEATURE START: 81.5
AMBIENT TEMPERATURE FINISH: 81.1

	I/R	E/C
Simulator #:	n/a	n/a
Sim Therm#:	n/a	n/a
Batch#:	765817	765817
Reference Value:	0.0800	0.0800
	0.081	0.083
	0.081	0.082
	0.081	0.083
	0.081	0.082
	0.081	0.082
Mean:	0.0810	0.0824
SD:	0.0000	0.0005
Bias %:	1.25	3.00
CV %:	0.00	0.61

Rev'd K. DENTON 4/25/13

ATTACH OR PASTE PRINTOUTS BELOW

INSTRUMENT NUMBER: ARAF-0030

TEMPERATURE TEST TYPE: (CIRCLE ONE) NORMAL HIGH LOW

WASHINGTON
ALCOTEST 9510

SERIAL NO ARAF-0030
TEST NO. 00069
DATE: 04/24/2013
****
SUPERVISOR TEST
****

	g/210L	TIME
DIAGNOSTIC	OK	15:06
AIR BLANK	0.000	15:06
EXT STD IR	0.047	15:06
EXT STD EC	0.049	15:06
AIR BLANK	0.000	15:08
EXT STD IR	0.046	15:08
EXT STD EC	0.048	15:08
AIR BLANK	0.000	15:10
EXT STD IR	0.047	15:10
EXT STD EC	0.049	15:10
AIR BLANK	0.000	15:12
EXT STD IR	0.046	15:12
EXT STD EC	0.048	15:12
AIR BLANK	0.000	15:14
EXT STD IR	0.046	15:14
EXT STD EC	0.048	15:14
AIR BLANK	0.000	15:15
DIAGNOSTIC	OK	15:15

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WASHINGTON
ALCOTEST 9510

SERIAL NO.: ARAF-0030
TEST NO.: 00070
DATE: 04/24/2013
****
SUPERVISOR TEST
****

	g/210L	TIME
DIAGNOSTIC	OK	15:26
AIR BLANK	0.000	15:26
EXT STD IR	0.073	15:27
EXT STD EC	0.076	15:27
AIR BLANK	0.000	15:28
EXT STD IR	0.077	15:29
EXT STD EC	0.080	15:29
AIR BLANK	0.000	15:30
EXT STD IR	0.080	15:31
EXT STD EC	0.083	15:31
AIR BLANK	0.000	15:32
EXT STD IR	0.082	15:33
EXT STD EC	0.084	15:33
AIR BLANK	0.000	15:34
EXT STD IR	0.082	15:35
EXT STD EC	0.085	15:35
AIR BLANK	0.000	15:35
DIAGNOSTIC	OK	15:36

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WASHINGTON
ALCOTEST 9510

SERIAL NO.: ARAF-0030
TEST NO.: 00071
DATE: 04/24/2013
****
SUPERVISOR TEST
****

	g/210L	TIME
DIAGNOSTIC	OK	15:45
AIR BLANK	0.000	15:45
EXT STD IR	0.136	15:46
EXT STD EC	0.139	15:46
AIR BLANK	0.000	15:47
EXT STD IR	0.147	15:48
EXT STD EC	0.149	15:48
AIR BLANK	0.000	15:49
EXT STD IR	0.150	15:50
EXT STD EC	0.154	15:50
AIR BLANK	0.000	15:52
EXT STD IR	0.154	15:52
EXT STD EC	0.157	15:52
AIR BLANK	0.000	15:54
EXT STD IR	0.157	15:54
EXT STD EC	0.160	15:54
AIR BLANK	0.000	15:55
DIAGNOSTIC	OK	15:56

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High temp

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WASHINGTON
ALCOTEST 9510

SERIAL NO.: ARAF-0030
TEST NO.: 00072
DATE: 04/24/2013
****
SUPERVISOR TEST
****

	g/210L	TIME
DIAGNOSTIC	OK	16:08
AIR BLANK	0.000	16:08
EXT STD IR	0.081	16:09
EXT STD EC	0.083	16:09
AIR BLANK	0.000	16:10
EXT STD IR	0.081	16:11
EXT STD EC	0.082	16:11
AIR BLANK	0.000	16:12
EXT STD IR	0.081	16:13
EXT STD EC	0.083	16:13
AIR BLANK	0.000	16:14
EXT STD IR	0.081	16:15
EXT STD EC	0.082	16:15
AIR BLANK	0.000	16:16
EXT STD IR	0.081	16:17
EXT STD EC	0.082	16:17
AIR BLANK	0.000	16:18
DIAGNOSTIC	OK	16:18

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METHOD VALIDATION DRAEGER ALCOTEST 9510
ROBUSTNESS/ RUGGEDNESS TEST C - HIGH TEMPERATURE CONDITIONS PAGE 1

DRAEGER ALCOTEST 9510 SERIAL NUMBER: ARAH-0100

AMBIENT AIR THERMOMETER NUMBER: 90940026

	0.04		0.08	
AMBIENT TEMPERATURE START:	76.5		AMBIENT TEMPEATURE START:	79.9
AMBIENT TEMPERATURE FINISH:	78.1		AMBIENT TEMPERATURE FINISH:	81.1
	I/R	E/C	I/R	E/C
Simulator #:	DR4807	DR4807	DR4807	DR4807
Sim Therm#:	DR4807	DR4807	DR4807	DR4807
Batch#:	T00006	T00006	T00003	T00003
Reference Value:	0.0408	0.0408	0.0820	0.0820
	0.043	0.045	0.071	0.075
	0.042	0.045	0.076	0.080
	0.042	0.045	0.078	0.081
	0.042	0.044	0.079	0.083
	0.042	0.044	0.080	0.084
Mean:	0.0422	0.0446	0.0768	0.0806
SD:	0.0004	0.0005	0.0036	0.0035
Bias %:	3.43	9.31	-6.34	-1.71
CV %:	0.95	1.12	4.69	4.34

	0.15		DRY GAS Standard	
AMBIENT TEMPERATURE START:	82.6		AMBIENT TEMPEATURE START:	81.9
AMBIENT TEMPERATURE FINISH:	82		AMBIENT TEMPERATURE FINISH:	81.5
	I/R	E/C	I/R	E/C
Simulator #:	DR4807	DR4807	n/a	n/a
Sim Therm#:	DR4807	DR4807	n/a	n/a
Batch#:	T00004	T00004	765817	765817
Reference Value:	0.1537	0.1537	0.0800	0.0800
	0.144	0.149	0.077	0.082
	0.149	0.155	0.077	0.081
	0.150	0.156	0.077	0.082
	0.151	0.158	0.077	0.082
	0.152	0.158	0.077	0.081
Mean:	0.1492	0.1552	0.0770	0.0816
SD:	0.0031	0.0037	0.0000	0.0005
Bias %:	-2.93	0.98	-3.75	2.00
CV %:	2.08	2.38	0.00	0.61

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ATTACH OR PASTE PRINTOUTS BELOW

INSTRUMENT NUMBER: ARAH-0100

TEMPERATURE TEST TYPE: (CIRCLE ONE) NORMAL HIGH LOW

High Heat

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WASHINGTON
ALCOTEST 9510

SERIAL NO.:      ARAH-0100
TEST NO.:            00064
DATE:           04/24/2013
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SUPERVISOR TEST
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                g/210L   TIME
DIAGNOSTIC OK            14:54
AIR BLANK       0.000    14:54
EXT STD IR      0.043    14:54
EXT STD EC      0.045    14:54
AIR BLANK       0.000    14:56
EXT STD IR      0.042    14:56
EXT STD EC      0.045    14:56
AIR BLANK       0.000    14:57
EXT STD IR      0.042    14:58
EXT STD EC      0.045    14:58
AIR BLANK       0.000    14:59
EXT STD IR      0.042    15:00
EXT STD EC      0.044    15:00
AIR BLANK       0.000    15:01
EXT STD IR      0.042    15:01
EXT STD EC      0.044    15:01
AIR BLANK       0.000    15:02
DIAGNOSTIC OK            15:03
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WASHINGTON
ALCOTEST 9510

SERIAL NO.:      ARAH-0100
TEST NO.:            00067
DATE:           04/24/2013
************************
SUPERVISOR TEST
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                g/210L   TIME
DIAGNOSTIC OK            15:48
AIR BLANK       0.000    15:48
EXT STD IR      0.077    15:49
EXT STD EC      0.082    15:49
AIR BLANK       0.000    15:50
EXT STD IR      0.077    15:50
EXT STD EC      0.081    15:50
AIR BLANK       0.000    15:52
EXT STD IR      0.077    15:52
EXT STD EC      0.082    15:52
AIR BLANK       0.000    15:54
EXT STD IR      0.077    15:54
EXT STD EC      0.082    15:54
AIR BLANK       0.000    15:56
EXT STD IR      0.077    15:56
EXT STD EC      0.081    15:56
AIR BLANK       0.000    15:57
DIAGNOSTIC OK            15:58
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WASHINGTON
ALCOTEST 9510

SERIAL NO.:      ARAH-0100
TEST NO.:            00066
DATE:           04/24/2013
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SUPERVISOR TEST
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                g/210L   TIME
DIAGNOSTIC OK            15:35
AIR BLANK       0.000    15:35
EXT STD IR      0.144    15:35
EXT STD EC      0.149    15:35
AIR BLANK       0.000    15:37
EXT STD IR      0.149    15:37
EXT STD EC      0.155    15:37
AIR BLANK       0.000    15:39
EXT STD IR      0.150    15:39
EXT STD EC      0.156    15:39
AIR BLANK       0.000    15:41
EXT STD IR      0.151    15:42
EXT STD EC      0.158    15:42
AIR BLANK       0.000    15:43
EXT STD IR      0.152    15:44
EXT STD EC      0.158    15:44
AIR BLANK       0.000    15:44
DIAGNOSTIC OK            15:45
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WASHINGTON
ALCOTEST 9510

SERIAL NO.:      ARAH-0100
TEST NO.:            00065
DATE:           04/24/2013
************************
SUPERVISOR TEST
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                g/210L   TIME
DIAGNOSTIC OK            15:15
AIR BLANK       0.000    15:15
EXT STD IR      0.071    15:15
EXT STD EC      0.075    15:15
AIR BLANK       0.000    15:17
EXT STD IR      0.076    15:17
EXT STD EC      0.080    15:17
AIR BLANK       0.000    15:18
EXT STD IR      0.078    15:19
EXT STD EC      0.081    15:19
AIR BLANK       0.000    15:20
EXT STD IR      0.079    15:21
EXT STD EC      0.083    15:21
AIR BLANK       0.000    15:22
EXT STD IR      0.080    15:23
EXT STD EC      0.084    15:23
AIR BLANK       0.000    15:23
DIAGNOSTIC OK            15:24
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