APPENDIX F

CALIBRATION/CERTIFICATION REPORTS

CALIFORNIA AIR RESOURCES BOARD

FLOW CALIBRATION REPORT

TO: *SPECIAL PURPOSE MONITORING*
STEVE RIDER

LOG NUMBER : *2006 085*

FROM: ROBERT RUSSELL\BRIAN SPREADBOROUGH
Program Evaluation & Standards

CALIBRATION DATE: *04/19/2006*
REPORT DATE : *04/19/2006*

IDENTIFICATION

Instrument : *AALBORG 100 cc/min*
Position number : *1*
Property No. : 20005346
Serial No. : *G18847*
Previous Log No.: *2005 119*
Bar Code No. : *20005346*
Elevation : *25.00'*
Inst. Prop. Of : *TESTING AND EVALUATIONS BRANCH / MLD*

Site Name : *MLD Standards Lab*
Site Number : *34-299*
Location : *1309 T-Street*
Sacramento, CA 95814

CALIBRATION STANDARDS	ID NUMBER
molbox	20021493

CALIBRATION RESULTS

Component	FLOW
Instrument Range	0-100 SCCM
Initial Zero Setting	
Initial Span Setting	
Final Zero Setting	
Final Span Setting	
Slope	0.985
Intercept	-2.650
Correlation Coefficient	0.99998
Change From Previous Calibration (%)	0.4253
Date Of Last Calibration	06/22/2005

Calibration Equation:

Calibration Expires: *04/19/2007*

Std. FLOW = 1.016 * (Net Display) + 2.691

Comments:

CALIBRATED BY: _____

CHECKED BY: _____

CALIFORNIA AIR RESOURCES BOARD

FLOW CALIBRATION REPORT

TO: *TESTING AND EVALUATIONS*
STEVE RIDER

LOG NUMBER : *2005 184*

FROM: ROBERT RUSSELL\BRIAN SPREADBOROUGH
Program Evaluation & Standards

CALIBRATION DATE: *08/19/2005*
REPORT DATE : *08/19/2005*

IDENTIFICATION

Instrument : *AALBORG 100 cc/min*
Position number : *1*
Property No. : 20005345
Serial No. : *G18861*
Previous Log No. : *2004 189*
Bar Code No. : *20005345*
Elevation : *25.00'*
Inst. Prop. Of : *TESTING AND EVALUATIONS BRANCH / MLD*

Site Name : *MLD Standards Lab*
Site Number : *34-299*
Location : *1309 T-Street*
Sacramento, CA 95814

CALIBRATION STANDARDS	ID NUMBER
molbox	20021493

CALIBRATION RESULTS

Component	FLOW
Instrument Range	0-100 SCCM
Initial Zero Setting	
Initial Span Setting	
Final Zero Setting	
Final Span Setting	
Slope	0.975
Intercept	-0.245
Correlation Coefficient	0.99999
Change From Previous Calibration (%)	-1.750
Date Of Last Calibration	08/27/2004

Calibration Equation:

Calibration Expires: *08/19/2006*

Std. FLOW = 1.025 * (Net Display) + 0.251

Comments:

CALIBRATED BY:

CHECKED BY:

ARB Calibration Report - Resultant Wind Speed

Calibration Summary:

ID Information:

				Calibration Info.:	
Station Name:	Auto-Met	Manufacturer:	Met One	AS-IS:	X
Site #:	Sacramento	Model #:	010B		
Station Address:	Warehouse on 5th St.	Serial #:	019-8	Calibration Date:	06/05/06
Agency:	ARB	Translator #:	466A	Report Date:	06/06/06
[redacted]		Serial #:	A5541	Previous Cal:	05/16/05

Calibration Results:

	Component:	Wind Speed
	Instrument Range (miles per hour):	0 to 100
	AS-LEFT Starting Torque (gm-cm):	0.53
	AS-LEFT Absolute Avg Speed Difference (miles):	0.02
[redacted]	Slope:	1.000
Wind Speed Best Fit Line	Intercept:	-0.012
[redacted]	Correlation:	1.00000
	AS-LEFT Meets Both PSD Requirements:	YES

Meteorology:

Temperature (°C):	23.0
Elevation (Feet.):	50
Pressure (mmHg):	759.3

Sensor Height:

Feet Above Ground:	13.0
Roof height in feet.:	N.A.
Calculated data to meet EPA height:	19.8
To meet EPA height:	#VALUE!

Calibration Standards:

Standard:	I.D. #:	Cert. Date:	Cert. Factor:
R.M. Young 18310 Torque Disc (0 to 15 gm-cm):	N.A.	N.A.	N.A.
R.M. Young 18811 Selectable Drive (20-990 rpm):	CA02130	12/08/04	Same

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Calibration Data:

Translator:

Zero Scale:		Full Scale:	
DMM Voltage:	Knots:	DMM Voltage:	Knots:
N.A.	N.A.	N.A.	N.A.

Starting Torque:

In gm-cms:	0.4	Starting speed in meters/sec:	0.53
K Factor:	1.4	Meets PSD torque standard:	YES

Speed Accuracy (@ 0 <0.54 & Difference DAS - True <±5% of True)

RPM:	True (y): Miles per Hour	DAS (x): Miles	Difference DAS - True	PSD Difference Data	Meets PSD Difference Standard:
0	0.60	0.60	0.00	1	YES
50	3.58	3.60	0.02	0.5%	
110	7.16	7.15	-0.01	0.1%	Absolute Avg. Diff.:
220	13.72	13.78	0.06	0.4%	0.02
450	27.44	27.45	0.01	0.0%	
920	55.47	55.49	0.02	0.0%	

Wind Speed Regression Data

Regression Results:

x Coefficient (Slope):	0.9998
y Constant (Intercept):	-0.0124
Number of Observations:	6
	0.999999

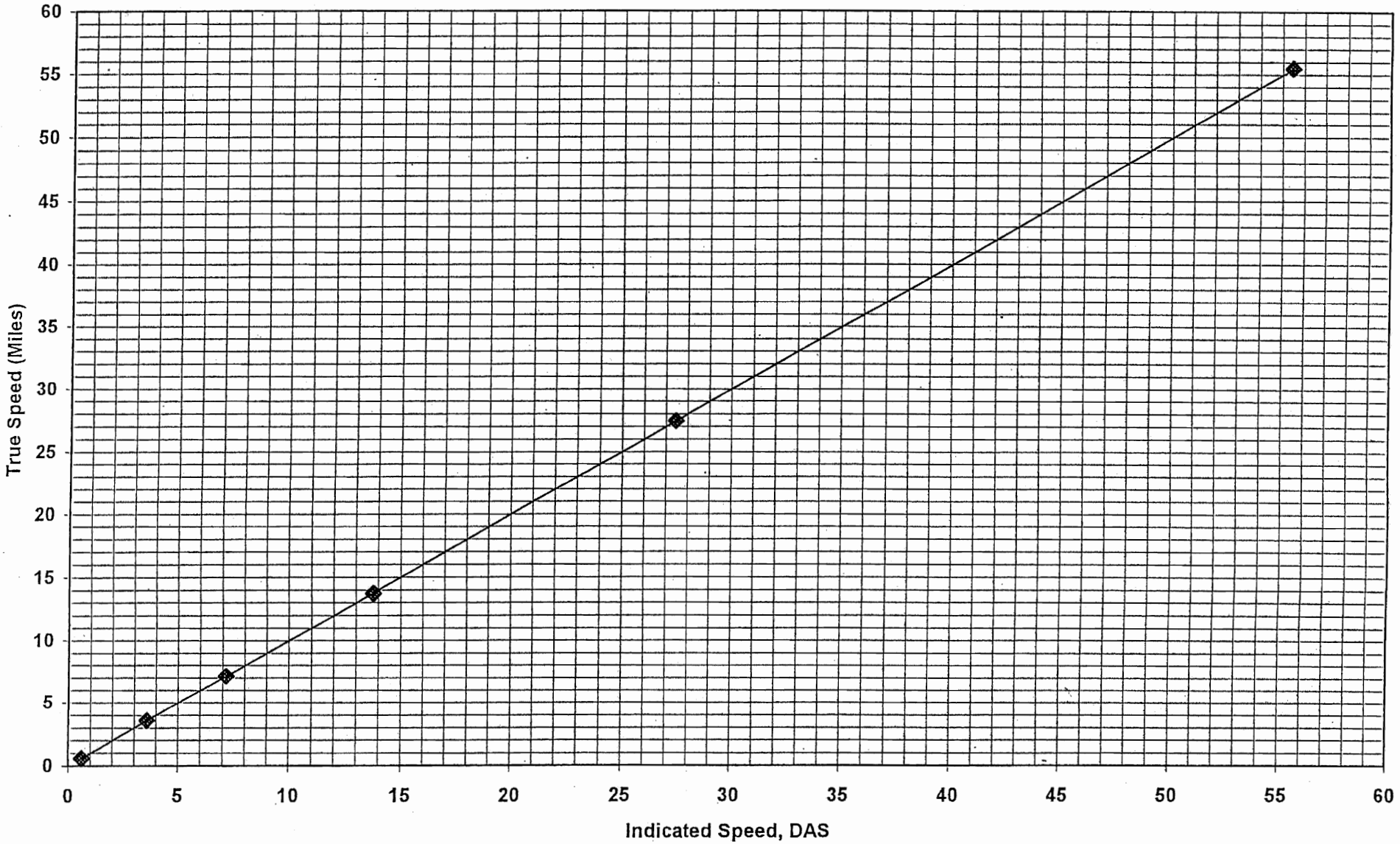
Corrected RWS:

(DAS * x) + y
0.59
3.59
7.14
13.76
27.43
55.47

Comments:	Pre Acrolein Application Study.		
Calibrated by:	Andy Cowell	[redacted]	Checked by:

CALIBRATION GRAPH (AS-IS)

AutoMet Resultant Wind Speed
Sensor Number: 019-8 Cal. Date: 6/5/06



Created by: Andy Cowell

ARB Calibration Report - Resultant Wind Direction

Calibration Summary:

ID Information:

				Calibration Info.:	
Station Name:	Auto-Met	Manufacturer:	Met One	AS-FOUND:	X
Site #:	Sacramento	Model #:	020C	AS-LEFT:	
Station Address:	5th Street Warehouse	Serial #:	A1177	Calibration Date:	06/05/06
Agency:	ARB	Translator #:	466A	Report Date:	06/06/06
		Serial #:	A5541	Previous Cal:	05/16/05

Calibration Results:

Component:		Wind Direction
Instrument Range (degrees):		0 to 360
AS-LEFT Azimuth in relation to True North (deg):		1.1
AS-LEFT Starting Torque (gm-cms):		4.0
AS-LEFT Absolute Average Difference (degrees):		0.9
Wind Direction Best Fit Line	Slope:	1.006
	Intercept:	-0.384
	Correlation:	1.00000
AS-LEFT Meets Both PSD Requirements:		YES

Meteorology:

Temperature (°C):	25.0
Elevation (Feet.):	50
Pressure (mmHg):	759.3

Sensor Height:

Feet Above Ground:	13.0
Roof height in feet.:	N.A.
Calculated data to meet EPA height:	19.8
To meet EPA height:	#VALUE!

Calibration Standards:

Standard:	I.D. #:	Cert. Date:	Cert. Factor:
Brunton 5008 Pocket Transit	N.A.	Factory	WYSIWYG
R.M. Young 18310 Torque Disk	N.A.	Factory	N.A.
Met One 040 Degree Fixture	N.A.	Factory	WYSIWYG

Calibration Data:

Direction Accuracy:

True Degrees (y):	DAS Degrees (x):	Difference DAS - True	Calculated Data to Meet PSD Direction	Translator:	DMM Voltage:	Degrees:
				Zero Scale:	N.A.	N.A.
10	10.6	0.6		Half Scale:	N.A.	N.A.
90	89.7	-0.3	1		gram-centimeters:	4
180	178.9	-1.1	1	Starting Torque:	K Factor:	38
270	269.0	-1.0	1		Speed in m/sec.:	0.32
350	348.4	-1.6	1		Meets torque std.:	YES
	Absolute Avg. Diff.:	0.9			PSD Correction:	1.1

Wind Direction Regression Data

Regression Results:

x Coefficient (Slope):	1.006
y Constant (Intercept):	-0.384
Number of Observations:	5
Correlation:	0.999998

Corrected RWD:

(DAS * x) + y
10.3
89.8
179.6
270.2
350.1

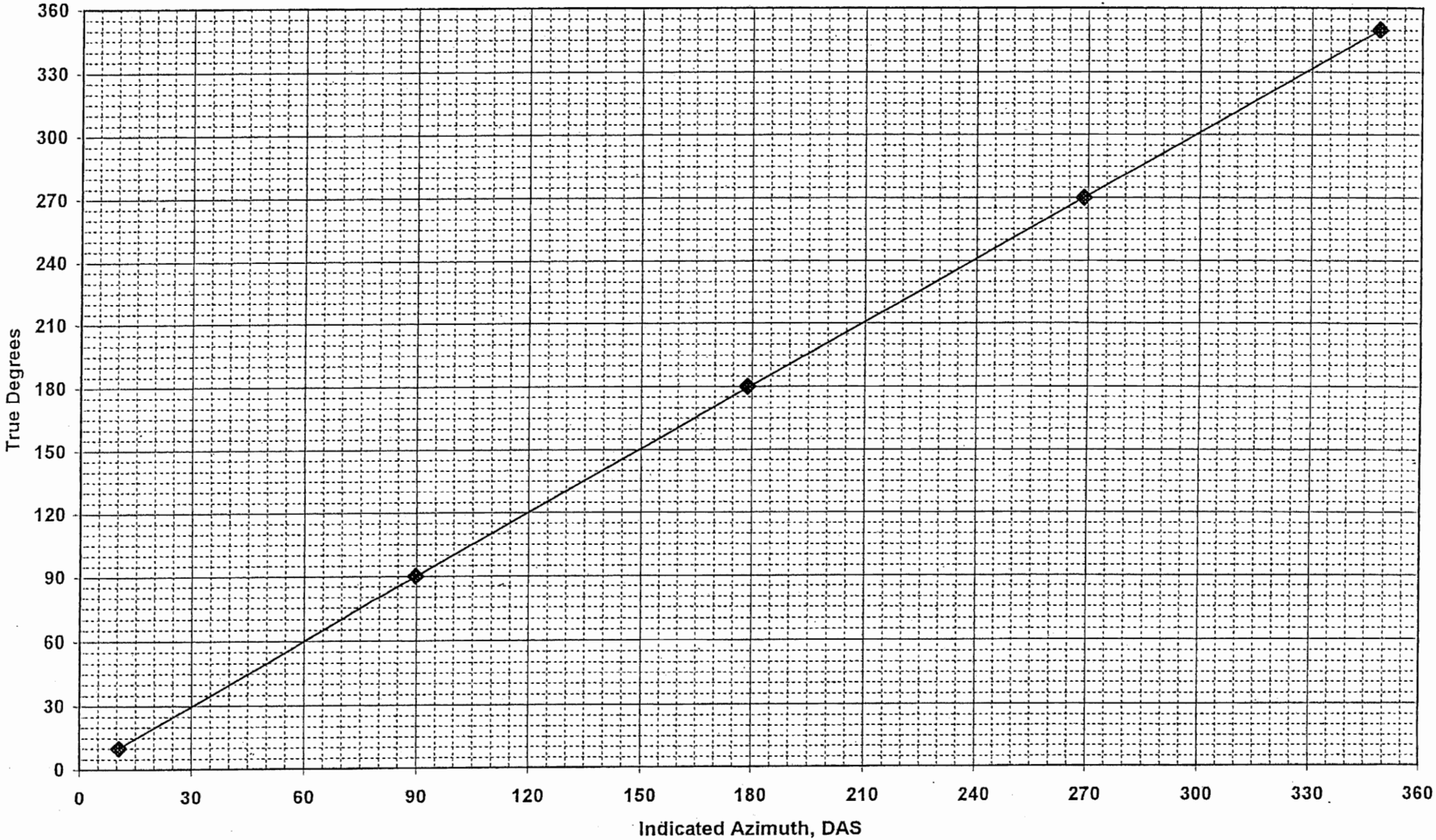
AS-LEFT Condition (0 to 360° only):

			Calculated Data to Meet PSD Direction
Declination of Site (Degrees East):	15.0		
Calculated True North Heading:	345.0		
Crossarm Orientation Uncorrected Transit Reading:	345.0		
Crossarm Degrees in Relation to True North:	0.0	Meets Direction Standard	1
DAS Output with Vane Parallel to Crossarm:	1.1		1
DAS Output Degrees off from True North:	-358.9		1
Azimuth computed from above measurements:	1.1	YES	1

Comments:	Pre Acrolein Application Study		
Calibrated by:	Andy Cowell		Checked by:

CALIBRATION GRAPH (AS-IS)

Automet A5541 Resultant Wind Direction
Sensor Number: A1711 Cal. Date: 6/5/06



Created by: Andy Cowell

ARB Calibration Report - Outside Temperature

Calibration Summary:

ID Information:

				Calibration Info.:	
Station Name:	Auto-Met	Manufacturer:	Met One	AS-IS:	X
Site #:	Sacramento	Model #:	060A-2		
Station Address:	5th Street Warehouse	Serial #:	X1748	Calibration Date:	06/05/06
Agency:	ARB	Translator #:	466A	Report Date:	06/06/06
[redacted]		Serial #:	A5541	Previous Cal:	05/16/05

Calibration Results:

Component:		Outside Temp.
Instrument Range (degrees centigrade):		-50 to +50 C
AS-LEFT Average Ice Bath Difference (°C):		0.23
AS-LEFT Average Ambient Bath Difference (°C):		-0.09
AS-LEFT Average Hot Bath Difference (°C):		-0.06
[redacted]	Slope:	1.006
Outside Temperature Best Fit Line	Intercept:	-0.180
[redacted]	Correlation:	0.99999
AS-LEFT Meets PSD °C Difference Requirement:		YES

Meteorology:

Temperature (°C):	23.0
Elevation (Feet.):	50
Pressure (mmHg):	759.3

Sensor Height:

Feet Above Ground:	10.0
Feet Above Roof:	N.A.

Calibration Standards:

Standard:	I.D. #:	Cert. Date:	Slope:	Intercept:
DigiSense RTD Logger w/ 10" probe	20020999	01/26/06	1.0013	-0.0147
			N.A.	N.A.

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Calibration Data:

If Average Difference of any bath is >0.50°C, correct.

Reference Bath	DAS Degree C (x)	Digital Degree C	True Degree C (y)	Difference DAS - True
ICE	0.40	0.24	0.23	0.17
	0.40	0.18	0.17	0.23
	0.50	0.22	0.21	0.29
Average	0.43	[redacted]	0.20	0.23
AMBIENT	24.70	24.81	24.83	-0.13
	24.70	24.81	24.83	-0.13
	24.80	24.81	24.83	-0.03
Average	24.73	[redacted]	24.83	-0.09
HOT	46.00	46.05	46.10	-0.10
	48.10	48.08	48.13	-0.03
	49.70	49.72	49.77	-0.07
Average	47.93	[redacted]	48.00	-0.06

Transalator:

Zero Scale:	
N.A.	N.A.
DMM Volts	Degrees C
N.A.	N.A.
Full Scale:	
[redacted]	
Regression & Graph Data:	
x	y
0.43	0.20
24.73	24.83
47.93	48.00
PSD Data:	0.23
	-0.09
	-0.06

Outside Temperature Regression Data

Regression Results:

x Coefficient (Slope):	1.0063
y Constant (Intercept):	-0.1799
Number of Observations:	3
Correlation:	0.999991

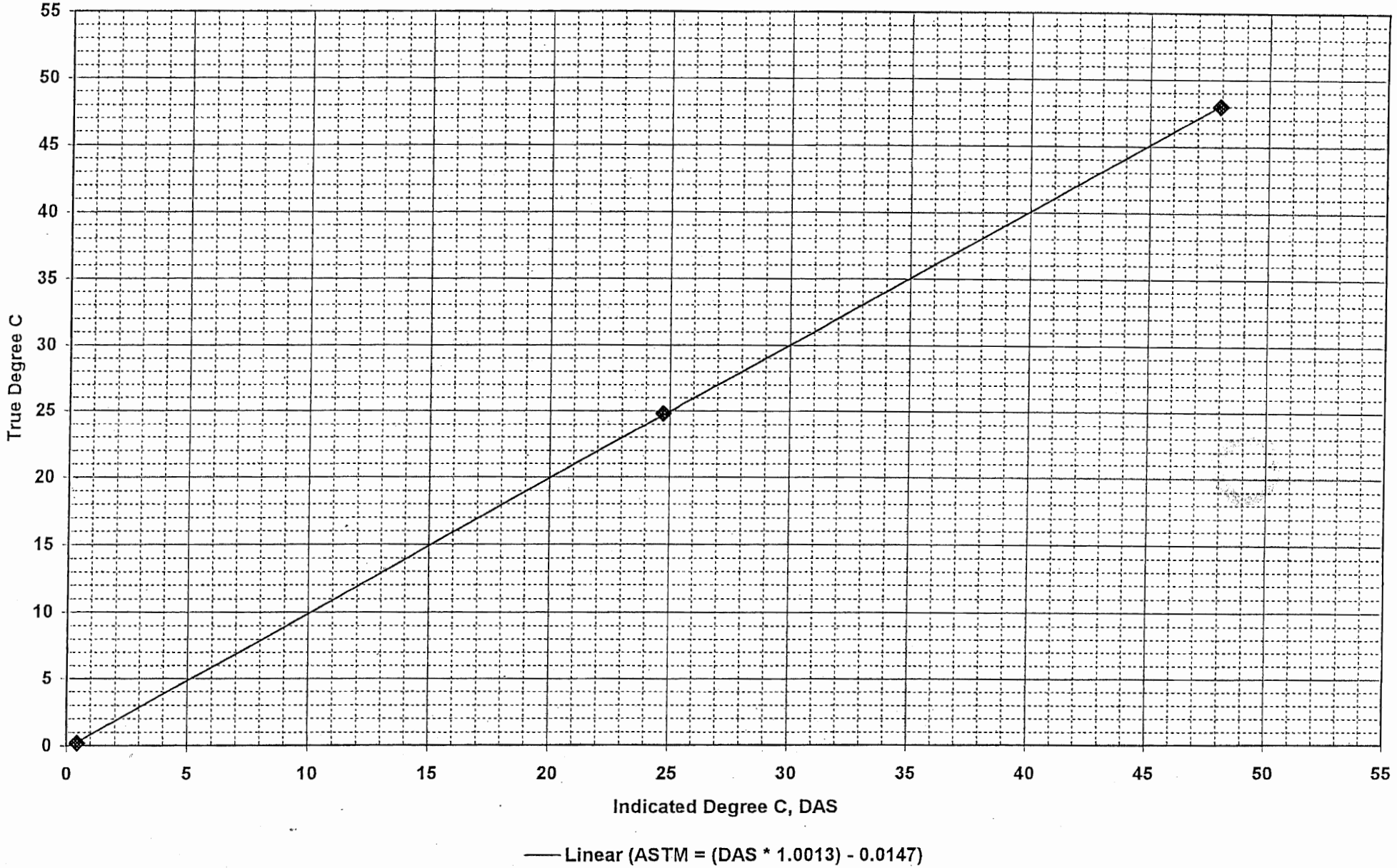
Corrected OTEMP:

(DAS * x) + y
0.26
24.71
48.06

Comments:	Pre Acrolein Application Study		
Calibrated by:	Andy Cowell	[redacted]	Checked by:

CALIBRATION GRAPH (AS-IS)

AutoMet Outside Temperature
Sensor Number: X1748 Cal. Date: 6/5/06



Prepared by: Andy Cowell

ARB Calibration Report - Relative Humidity

Calibration Summary:

ID Information:

				Calibration Info.:	
Station Name:	Auto-Met	Manufacturer:	Vaisala	AS-IS:	X
Site #:	Sacramento	Model #:	HMP45D	AS-LEFT:	
Station Address:	5th Street Warehouse	Serial #:	W1720032	Calibration Date:	06/05/06
Agency:	ARB	Translator #:	466A	Report Date:	06/06/06
[redacted]		Serial #:	A5541	Previous Cal:	05/13/05

Calibration Results:

Component:		Relative Humidity
Instrument Range (Percent Relative Humidity):		0 to 100
[redacted]	Slope:	0.988
Relative Humidity Best Fit Line	Intercept:	-0.551
[redacted]	Correlation:	0.99965
Absolute Average Percent Difference (%RH):		1.2
AS-LEFT Meets PSD Requirements:		YES

Meteorology:

Temperature (°C):	23.0
Elevation (Ft.):	50
Pressure (mmHg):	759.3

Sensor Height:

Feet Above Ground:	10.0
Feet Above Roof:	N.A.

Calibration Standards:

Standard:	I.D. #:	Cert. Date:	Cert. Factor:
Rotronic ER25 Calibration Device:	None	Factory	N.A.
Rotronic EA10 Salt Standard:	100401	07/26/04	(10 x 1)+0
Rotronic EA35 Salt Standard:	350204	10/01/02	(35 x 1)+0
Rotronic EA50 Salt Standard:	500303	08/04/03	(50 x 1)+0
Rotronic EA80 Salt Standard:	800403	07/27/04	(80 x 1)+0

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Calibration Data:

Translator:

Zero Scale:		Full Scale:	
DMM Voltage:	%RH:	DMM Voltage:	%RH:
N.A.	N.A.	N.A.	N.A.

% Relative Humidity Accuracy (If Any Difference > 5.0%RH, adjust so Avg. Diff. Is <2.0%RH Difference)

TRUE %RH (y)	DAS %RH (x)	DAS Voltage	Difference DAS - True	Meets PSD Criteria
0	0.6	N.A.	N.A.	YES
10.0	11.4	N.A.	1.4	1
35.0	34.9	N.A.	-0.1	1
50.0	51.2	N.A.	1.2	1
80.0	81.9	N.A.	1.9	1
[redacted]	[redacted]	ABS Avg. Diff.:	1.2	

Relative Humidity Regression Data

Regression Results:

X Coefficient (Slope):	0.9878
Y Constant (Intercept):	-0.5514
Number of Observations:	4
Correlation:	0.999652

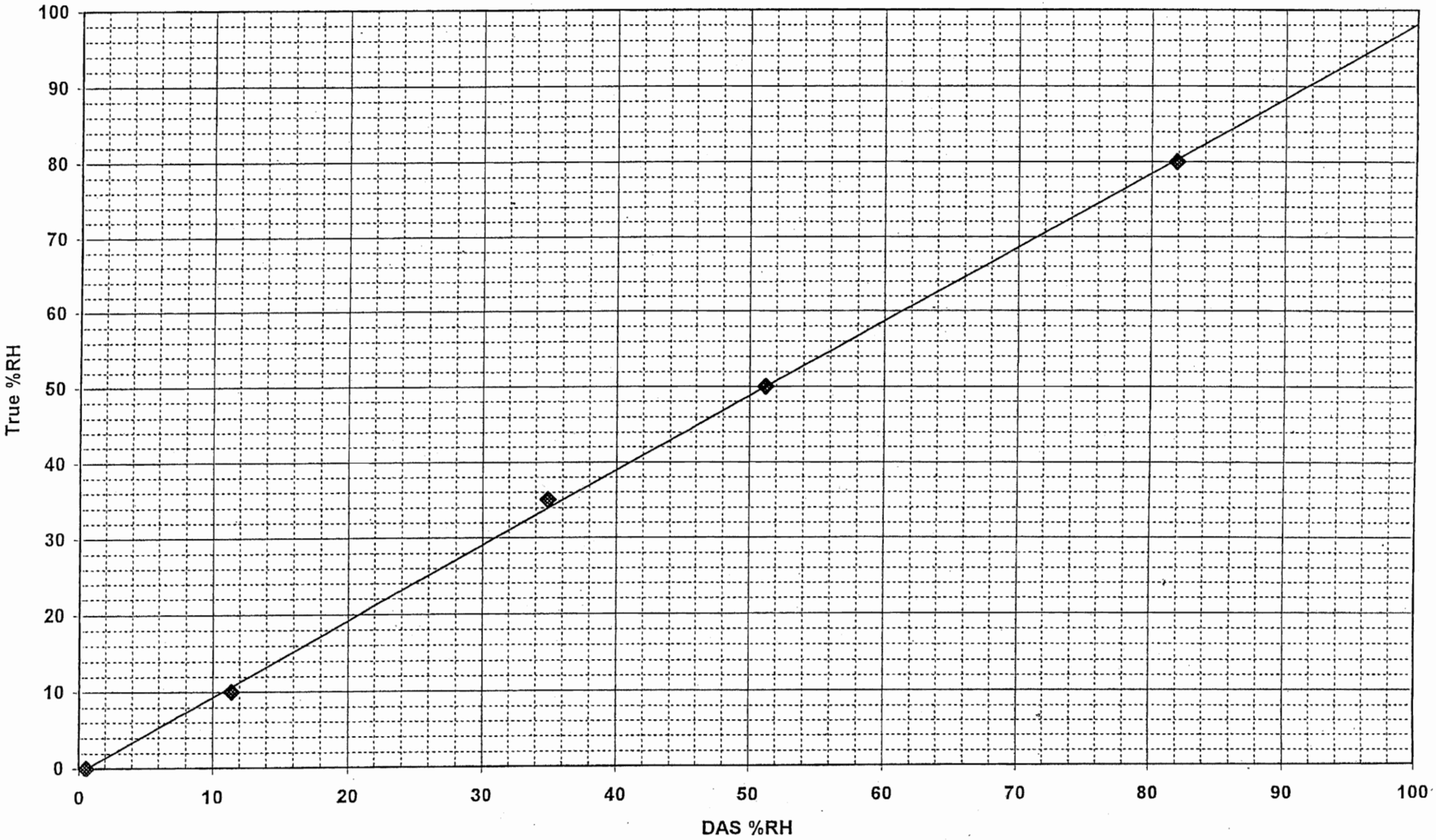
Corrected %RH:

(DAS * x) + y
0.0
10.7
33.9
50.0
80.3
100.0

	Pre Acrolein Application Study			
Calibrated by:	Andy Cowell	[redacted]	Checked by:	

CALIBRATION GRAPH (AS-IS)

AutoMet % Relative Humidity
Sensor Number: W1720032 Cal. Date: 6/5/06



Prepared by: Andy Cowell

ARB Calibration Report - Resultant Wind Speed

Calibration Summary:

ID Information:

Station Name:	ACROLEIN KERN COUNTY	Manufacturer:	Met One	AS-IS:	
Site #:	KERN ISLAND CANAL	Model #:	010C	FINAL:	X
Station Address:		Serial #:	A1162	Calibration Date:	09/26/06
Agency:	CARB	Translator #:	BX-924	Report Date:	
		Serial #:	Y2923	Previous Cal. Date:	6/5/06/

Calibration Info.:

Calibration Results:

Component:		Wind Speed
Instrument Range (knots per hour):		0 to 86.84
AS-is Starting Torque (gm-cm):		0.46
AS-is Absolute Avg Speed Difference (Knots):		0.02
Wind Speed Best Fit Line	Slope:	1.000
	Intercept:	-0.012
	Correlation:	1.00000
AS-is Meets Both PSD Requirements:		NO

Meteorology:

Temperature (°C):	25.0
Elevation (Feet.):	50
Pressure (mmHg):	759.3

Sensor Height:

Feet Above Ground:	13.0
Roof height in feet.:	0.0
Calculated data to meet EPA height:	19.8
	-13.0
To meet EPA height:	19.8

Calibration Standards:

Standard:	I.D. #:	Cert. Date:	Cert. Factor:
R.M. Young 18310 Torque Disc (0 to 15 gm-cm):	N.A.	N.A.	N.A.
R.M. Young 18810 Selectable Drive (10-1,000 rpm):	10329	12/08/04	RPM=(Meter*10)+0

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Calibration Data:

Translator:

Zero Scale:		Full Scale:	
DMM Voltage:	Knots:	DMM Voltage:	Knots:
N.A.	N.A.	N.A.	N.A.

Starting Torque:

In gm-cms:	0.3	Starting speed in meters/sec:	0.46
K Factor:	1.4	Meets PSD torque standard:	YES

Speed Accuracy (@ 0 <0.54 & Difference DAS - True ≤5% of True)

RPM:	True (y): Knots per Hour	DAS (x): MPH	Difference DAS - True	PSD Difference Data	Meets PSD Difference Standard:
0	0.60	0.60	0.00	0	NO
50	3.58	3.60	0.02	0.5%	
110	7.16	7.15	-0.01	0.1%	Absolute Avg. Diff.:
220	13.72	13.75	0.03	0.2%	0.02
450	27.44	27.45	0.01	0.0%	
920	55.47	55.45	-0.02	0.0%	

Wind Speed Regression Data

Regression Results:

x Coefficient (Slope):	1.0004
y Constant (Intercept):	-0.0123
Number of Observations:	6
Correlation:	1.000000

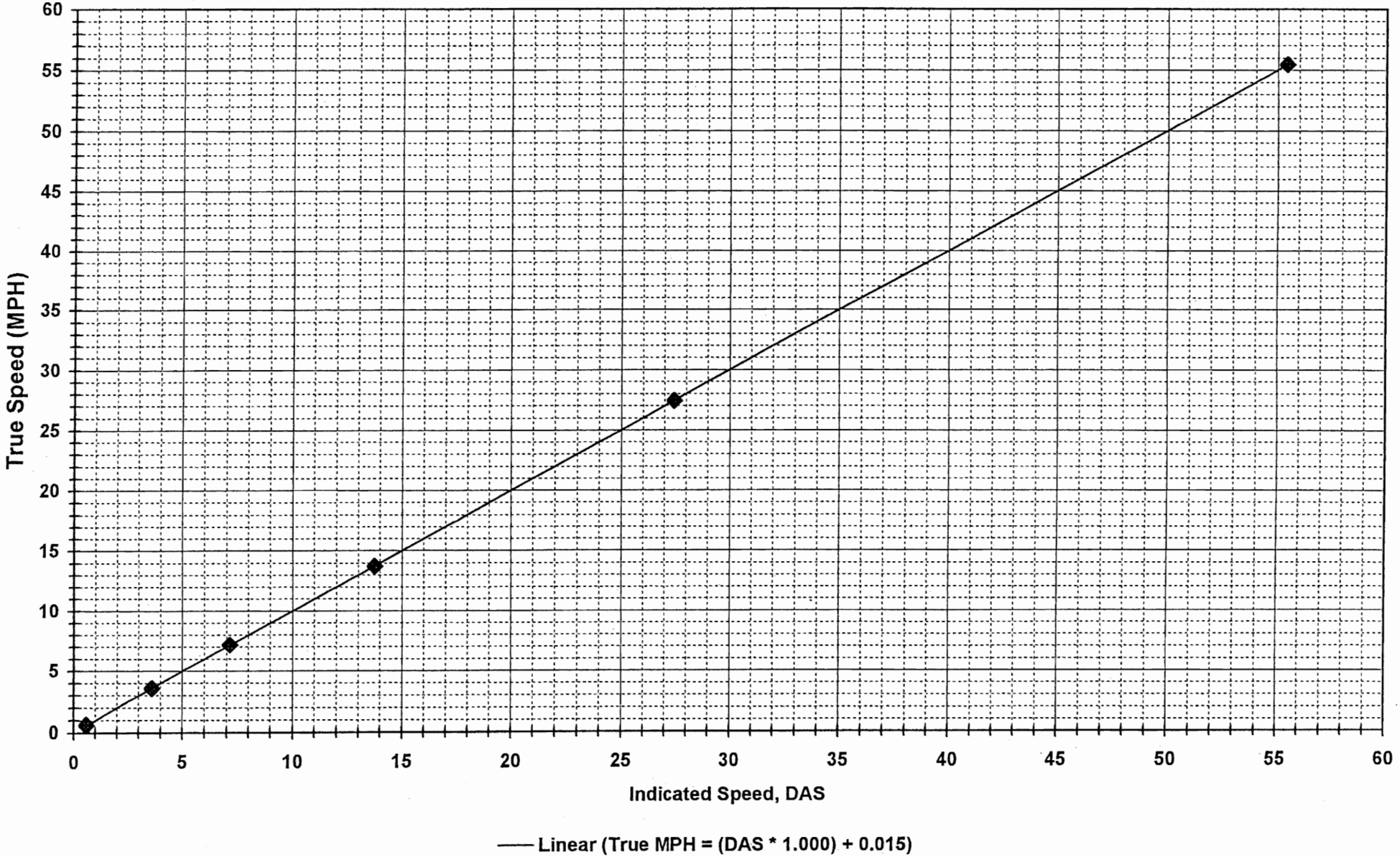
Corrected RWS:

(DAS * x) + y
0.59
3.59
7.14
13.74
27.45
55.46

Comments:			
Calibrated by:	Steve Aston	Checked by:	

CALIBRATION G. APH (AS-FOUND)

Acrolein Application Resultant Wind Speed
Station Number: Kern Island Canal Sensor Number: 019-8 Cal. Date: 09/26/06



ARB Calibration Report - Resultant Wind Direction

Calibration Summary:

ID Information:

				Calibration Info.:	
Station Name:	ACROLEIN KERN COUNTY	Manufacturer:	Met One	AS-IS:	
Site #:	KERN ISLAND CANAL	Model #:	020C-1	FINAL	X
Station Address:		Serial #:	W1487	Calibration Date:	09/26/06
Agency:	ARB	Translator #:	BX-924	Report Date:	
		Serial #:	Y2923	Previous Cal. Date:	06/05/06

Calibration Results:

Component:		Wind Direction
Instrument Range (degrees):		0 to 360
AS-FOUND Azimuth in relation to True North (deg):		2.1
AS-FOUND Starting Torque (gm-cms):		2.8
AS-FOUND Absolute Average Difference (degrees):		1.2
Wind Direction Best Fit Line	Slope:	1.009
	Intercept:	-2.129
	Correlation:	0.99998
AS-FOUND Meets Both PSD Requirements:		YES

For FINAL, see next page.

Meteorology:

Temperature (°C):	25.0
Elevation (Feet.):	50
Pressure (mmHg):	759.3

Sensor Height:

Feet Above Ground:	13.0
Roof height in feet.:	0.0
Calculated data to meet EPA height:	19.8
	-13.0
To meet EPA height:	19.8

Calibration Standards:

Standard:	I.D. #:	Cert. Date:	Cert. Factor:
Brunton 5008 Pocket Transit	5081192140	Factory	WYSIWYG
R.M. Young 18310 Torque Disk	N.A.	Factory	N.A.
Met One 040 Degree Fixture	N.A.	Factory	WYSIWYG

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Calibration Data:

AS-FOUND Condition (0 to 360° only):

Declination of Site (Degrees East):	15.0	Translator:	DMM Voltage:	Degrees:
Calculated True North Heading:	345.0	Zero Scale:	N.A.	N.A.
Crossarm Orientation Uncorrected Transit Reading:	346.0	Half Scale:	N.A.	N.A.
Crossarm Degrees in Relation to True North:	1.0		gram-centimeters:	2.8
DAS Output with Vane Parallel to Crossarm:	1.1	Starting	K Factor:	38
DAS Output Degrees off from True North:	-358.9	Torque:	Speed in m/sec.:	0.27
Azimuth computed from above measurements:	2.1		Meets torque std.:	YES

Direction Accuracy:

True Degrees (y):	DAS Degrees (x):	Difference DAS - True	Calculated Data to Meet PSD Direction
10	12.8	2.8	
90	90.9	0.9	1
180	179.2	-0.8	1
270	270.5	0.5	1
350	349.1	-0.9	1

PSD Correction:
2.1
Absolute Avg. Diff.:
1.2
Meets PSD Difference Standard:
YES

Wind Direction Regression Data

Regression Results:

x Coefficient (Slope):	1.0090
y Constant (Intercept):	-2.1289
Number of Observations:	5
Correlation:	0.999979

Corrected RWD:

(DAS * x) + y
10.8
89.6
178.7
270.8
350.1

ARB Calibration Report - Resultant Wind Direction

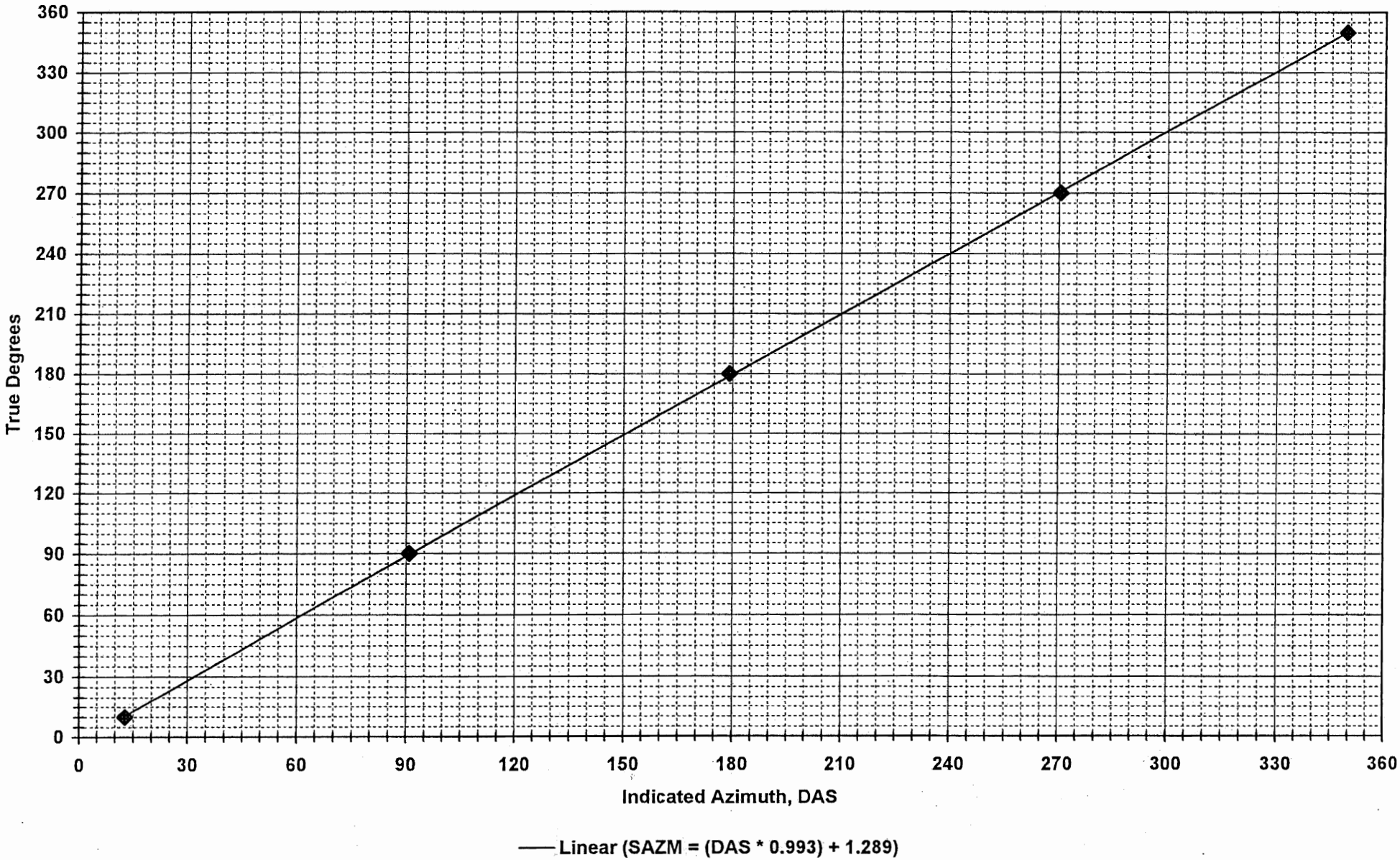
FINAL Condition (0 to 360° only):

Declination of Site (Degrees East):	15.0	FINAL PSD Correction	Calculated Data to Meet PSD Direction
Calculated True North Heading:	345.0		
Crossarm Orientation Uncorrected Transit Reading:	346.0	1.2	
Crossarm Degrees in Relation to True North:	1.0	FINAL Meets Direction Standard	1
DAS Output with Vane Parallel to Crossarm:	0.2		1
DAS Output Degrees off from True North:	-359.8		1
Azimuth computed from above measurements:	1.2	YES	1

Comments:				
Calibrated by:	Steve Aston		Checked by:	

CALIBRATION GRAPH (AS-FOUND)

Acrolein Application Resultant Wind Direction
Station Number: Kern Island Canal Sensor Number: A1177 Cal. Date: 09/26/06



Created by: Steve Rider

ARB Calibration Report - % Relative Humidity

Calibration Summary:

ID Information:

Station Name:	ACROLEIN KERN COUNTY	Manufacturer:	Vaisala	AS-IS	
Site #:	KERN ISLAND CANAL	Model #:	083V-1	FINAL	X
Station Address:		Serial #:	V2510031	Calibration Date:	09/26/06
Agency:	CARB	Translator #:	BX-964	Report Date:	
		Serial #:		Previous Cal. Date:	06/05/06

Calibration Info.:

Calibration Results:

Component:		Relative Humidity
Instrument Range (Percent Relative Humidity):		0 to 100
Relative Humidity Best Fit Line	Slope:	1.008
	Intercept:	-1.213
	Correlation:	0.99954
Absolute Average Percent Difference (%RH):		1.0
AS-FOUND Meets PSD Requirements:		YES

Meteorology:

Temperature (°C):	24.0
Elevation (Ft.):	50
Pressure (mmHg):	759.3

Sensor Height:

Feet Above Ground:	10.0
Feet Above Roof:	N.A.

Calibration Standards:

Standard:	I.D. #:	Cert. Date:	Cert. Factor:
Rotronic ER25 Calibration Device:	None	Factory	N.A.
Rotronic EA10 Salt Standard:	100401	07/26/04	(10 x 1)+0
Rotronic EA35 Salt Standard:	350403	09/15/04	(35 x 1)+0
Rotronic EA50 Salt Standard:	500303	08/04/03	(50 x 1)+0
Rotronic EA80 Salt Standard:	800403	07/29/04	(80 x 1)+0

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Calibration Data:

Translator:

Zero Scale:		Full Scale:	
DMM Voltage:	%RH:	DMM Voltage:	%RH:
N.A.	N.A.	N.A.	N.A.

% Relative Humidity Accuracy (If Any Difference > 5.0%RH, adjust so Avg. Diff. Is <2.0%RH Difference)

TRUE %RH (y)	DAS %RH (x)	DAS Voltage	Difference DAS - True	Meets PSD Criteria
0	1.2	N.A.	N.A.	YES
10.1	11.8	0.1192	1.7	1
35.1	34.8	0.3395	-0.3	1
50.1	51.7	0.4936	1.6	1
80.0	80.6	0.7799	0.6	1
100.0	100.5	ABS Avg. Diff.:	1.0	

Relative Humidity Regression Data

Regression Results:

x Coefficient (Slope):	1.0076
y Constant (Intercept):	-1.2134
Number of Observations:	4
Correlation:	0.999538

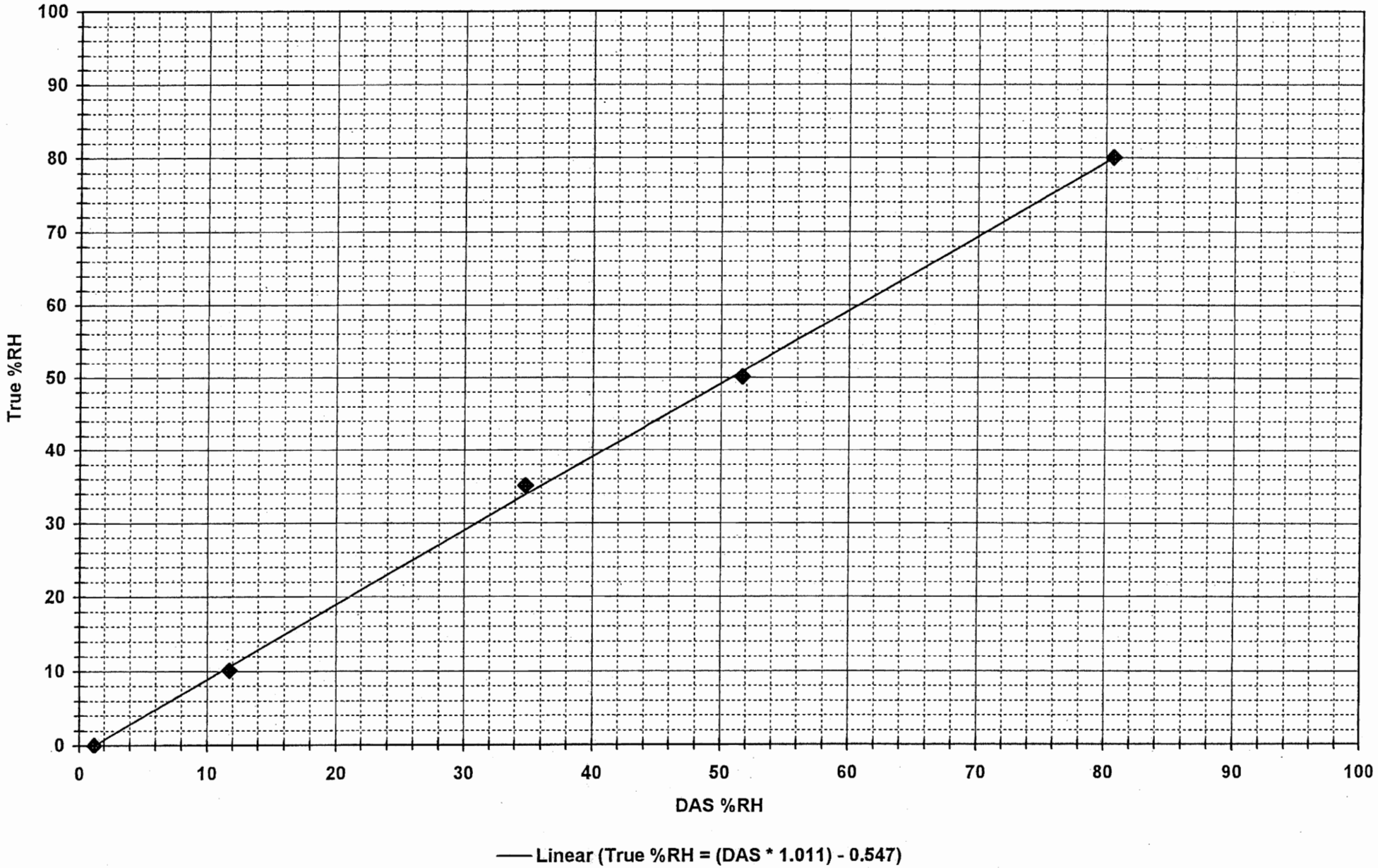
Corrected %RH:

(DAS * x) + y
0.0
10.6
33.9
50.8
80.0
100.0

Comments:			
Calibrated by:	Steve Aston		Checked by:

CALIBRATION GRAPH (AS-FOUND)

Acrolein Application % Relative Humidity
Station Number: Kern Island Canal Sensor Number: W1720032 Cal. Date: 09/26/06



Created by: Steve Rider

ARB Calibration Report - Outside Temperature

Calibration Summary:

ID Information:

				Calibration Info.:	
Station Name:	ACROLEIN KERN COUNTY	Manufacturer:	Met One	AS-IS	
Site #:	KERN ISLAND CANAL	Model #:	060A-2	FINAL	X
Station Address:		Serial #:	X5814	Calibration Date:	09/26/06
Agency:	ARB	Translator #:	BX-964	Report Date:	
		Serial #:		Previous Cal. Date:	06/05/06

Calibration Results:

Component:	Outside Temp.
Instrument Range (degrees centigrade):	-50 to +50
AS-LEFT Average Ice Bath Difference (°C):	-0.09
AS-LEFT Average Ambient Bath Difference (°C):	-0.14
AS-LEFT Average Hot Bath Difference (°C):	0.18
Outside Temperature Best Fit Line — Slope:	0.994
Outside Temperature Best Fit Line — Intercept:	0.152
Outside Temperature Best Fit Line — Correlation:	0.99998
AS-LEFT Meets PSD °C Difference Requirement:	YES

Meteorology:

Temperature (°C):	23.0
Elevation (Feet.):	50
Pressure (mmHg):	759.3

Sensor Height:

Feet Above Ground:	10.0
Feet Above Roof:	N.A.

Calibration Standards:

Standard:	I.D. #:	Cert. Date:	Slope:	Intercept:
Digi-Sense RTD Logger w/10" probe	20020998	01/26/06	0.9980	0.1010
			N.A.	N.A.

Calibration Data:

If Average Difference of any bath is >0.5°C, correct.

Reference Bath	DAS Degree C (x)	Digital Degree C	True Degree C (y)	Difference DAS - True
ICE	0.20	0.20	0.30	-0.10
	0.20	0.19	0.29	-0.09
	0.20	0.19	0.29	-0.09
Average	0.20		0.29	-0.09
AMBIENT	23.80	23.95	24.00	-0.20
	23.90	23.99	24.04	-0.14
	24.00	24.01	24.06	-0.06
Average	23.90		24.04	-0.14
HOT	41.50	41.40	41.42	0.08
	41.60	41.30	41.32	0.28
	41.40	41.20	41.22	0.18
Average	41.50		41.32	0.18

Transalator:

Zero Scale:	
N.A.	N.A.
DMM Volts	Degrees C
N.A.	N.A.
Full Scale:	
Regression & Graph Data:	
x	y
0.20	0.29
23.90	24.04
41.50	41.32
PSD Data:	-0.09
	-0.14
	0.18

Outside Temperature Regression Data

Regression Results:

x Coefficient (Slope):	0.9938
y Constant (Intercept):	0.1517
Number of Observations:	3
Correlation:	0.999984

Corrected OTEMP:

(DAS * x) + y
0.35
23.90
41.39

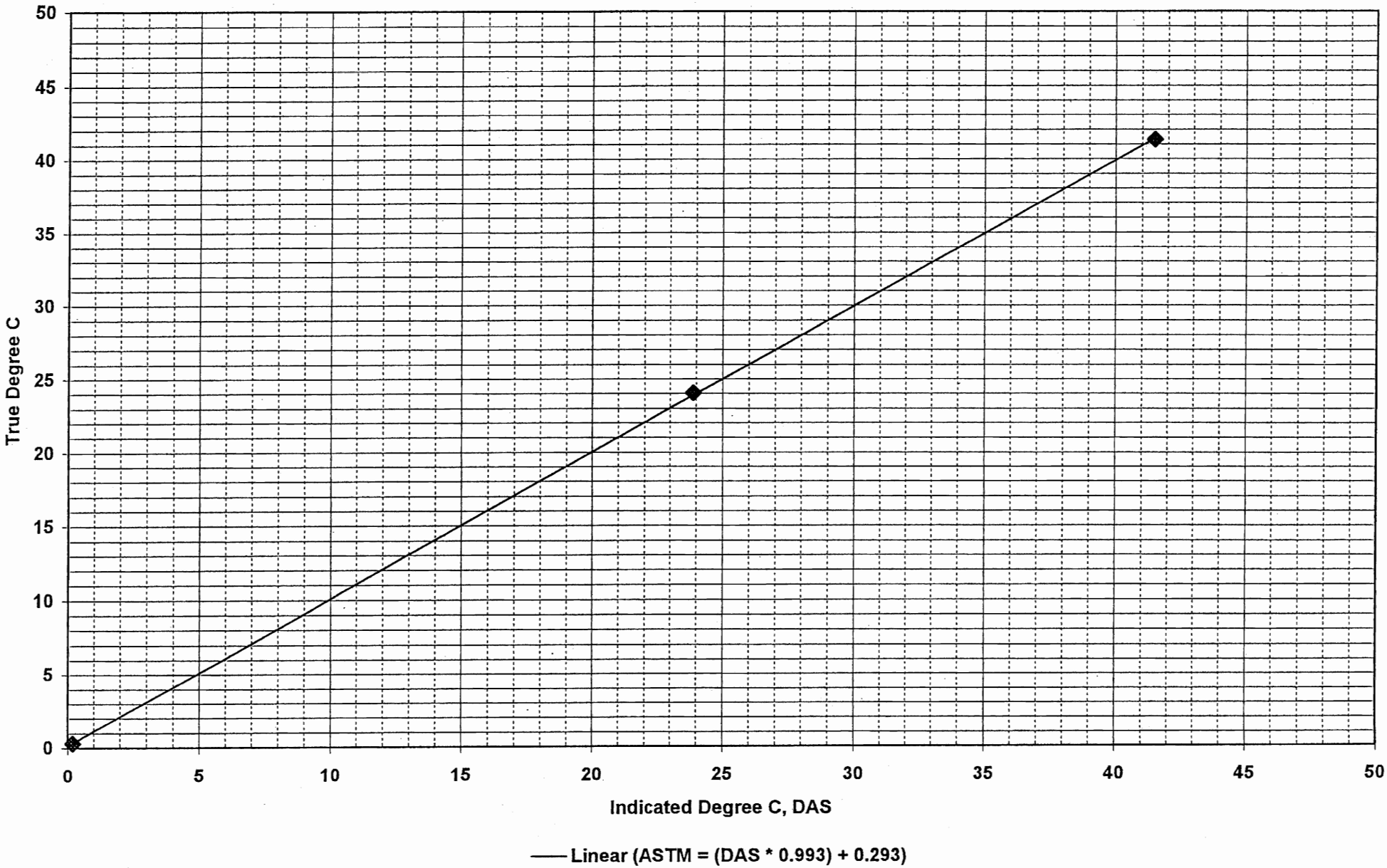
Comments:			
Calibrated by:	Steve Aston	Checked by:	

Rev. 07/00 (SUR)

CALIBRATION GRAPH (AS-LEFT)

Acrolein Application Outside Temperature

Station Number: Kern Island Canal Sensor Number: X1748 Cal. Date: 09/26/06



Created by: Andy Cowell