

**PARTISOL PARTICULATE MATTER (PM) SAMPLER
Calibration Data**

SITE NAME: KCBX ST-NE
AQS Site Code: N/A
DATE: 10-Apr-14
TIME: 12:25

CLIENT: Koch
SAMPLER ID: ST-NE-Metals
Model Number: 2025i
Serial Number: 20547

TEMPERATURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Sensor Temperature (T _s) (°C)	Calibration Sensor Temperature (T _c) (°C)	Temperature Difference ¹ (Sampler - Calibration) (°C)
	17.1	18.6	-1.5
	17.1	18.6	-1.5
	17.1	18.6	-1.5

1. Acceptance Criteria: ± 2.0 °C

PRESSURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Sensor Pressure (P _s) (mm Hg)	Calibration Sensor Pressure (P _c) (mm Hg)	Pressure Difference ² (Sampler - Calibration) (mm Hg)
	737.0	739.0	-2.0
	737.0	739.0	-2.0
	737.0	739.0	-2.0

2. Acceptance Criteria: ± 10.0 mm Hg

COMPARTMENT TEMPERATURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Compartment Temperature (T _s) (°C)	Calibration Sensor Temperature (T _c) (°C)	Temperature Difference ³ (Sampler - Calibration) (°C)
	17.3	17.2	0.1
	17.3	17.2	0.1
	17.3	17.2	0.1

3. Acceptance Criteria: ± 2.0 °C

LEAK CHECK, TIME, AND FLOWRATE Calibration Data					
External Leak Check ⁴ <input type="text" value="5.0"/> mmHg		Clock/Timer Verification ⁵ :			
4. Acceptance Criteria < 25 mm Hg		Partisol :	<input type="text" value="12:29:00"/>		
		Reference Time:	<input type="text" value="12:29:00"/>		
5. Acceptance Criteria: within 60 sec. of Reference Time					
SINGLE POINT CHECK					
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Indicated Flow Rate (LPM)	Calibration Flow Rate (Q _c) (LPM)	Percent Difference ⁶ (Sampler vs. Calibration)	Percent Difference ⁷ (Calibration vs. Design)	
	THREE POINT CHECK				
	Sampler Indicated Flow Rate (LPM)	Calibration Flow Rate (Q _a) (LPM)	Percent Difference ⁶ (Sampler vs. Calibration)	Percent Difference ⁷ (Calibration vs. Design)	
16.66	17.19	-3.1%	0.0%		
18.38	18.86	-2.5%	0.0%		
15.09	15.47	-2.5%	0.0%		

A three point flow check is required quarterly and a single point operating flow rate check is required monthly
 The 2025i Partisol operates using actual flow rates, and converts to standard conditions in the onboard data file

6. Acceptance Criteria: ± 4.0%
 7. Acceptance Criteria: ± 5.0%

Calibration Tech: G. Mazik

Note: Initial leak check reading was 26. Cleaned all seals and reading dropped 5.



Rev. 3/3/2014

**PARTISOL PARTICULATE MATTER (PM) SAMPLER
Calibration Data**

SITE NAME: KCBX ST-NE
AQS Site Code: N/A
DATE: 10-Apr-14
TIME: 12:00

CLIENT: Koch
SAMPLER ID: ST-NE-Carbon
Model Number: 2025i
Serial Number: 20544

TEMPERATURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Sensor Temperature (T _s) (°C)	Calibration Sensor Temperature (T _c) (°C)	Temperature Difference ¹ (Sampler - Calibration) (°C)
	18.3	17.2	1.1
	18.3	17.2	1.1
	18.3	17.2	1.1

1. Acceptance Criteria: ± 2.0 °C

PRESSURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Sensor Pressure (P _s) (mm Hg)	Calibration Sensor Pressure (P _c) (mm Hg)	Pressure Difference ² (Sampler - Calibration) (mm Hg)
	738.0	738.0	0.0
	738.0	738.0	0.0
	738.0	738.0	0.0

2. Acceptance Criteria: ± 10.0 mm Hg

COMPARTMENT TEMPERATURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Compartment Temperature (T _s) (°C)	Calibration Sensor Temperature (T _c) (°C)	Temperature Difference ³ (Sampler - Calibration) (°C)
	17.3	17.7	-0.4
	17.3	17.7	-0.4
	17.3	17.7	-0.4

3. Acceptance Criteria: ± 2.0 °C

LEAK CHECK, TIME, AND FLOWRATE Calibration Data					
External Leak Check ⁴		22.0	mmHg		
Clock/Timer Verification ⁵ :		Partisol :	12:08:00		
Reference Time:		12:08:00			
5. Acceptance Criteria: within 60 sec. of Reference Time					
SINGLE POINT CHECK					
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Indicated Flow Rate (LPM)	Calibration Flow Rate (Q _c) (LPM)	Percent Difference ⁶ (Sampler vs. Calibration)	Percent Difference ⁷ (Calibration vs. Design)	
	THREE POINT CHECK				
	Sampler Indicated Flow Rate (LPM)	Calibration Flow Rate (Q _a) (LPM)	Percent Difference ⁶ (Sampler vs. Calibration)	Percent Difference ⁷ (Calibration vs. Design)	
16.67	16.41	1.6%	0.0%		
18.40	18.20	1.1%	0.0%		
15.09	14.96	0.9%	0.0%		

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6. Acceptance Criteria: ± 4.0%
 7. Acceptance Criteria: ± 5.0%

Calibration Tech: G. Mazik

**PARTISOL PARTICULATE MATTER (PM) SAMPLER
Calibration Data**

SITE NAME: KCBX NT-NE
AQS Site Code: N/A
DATE: 10-Apr-14
TIME: 13:20

CLIENT: Koch
SAMPLER ID: NT-NE-Metals
Model Number: 2025i
Serial Number: 20546

TEMPERATURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Sensor Temperature (T _s) (°C)	Calibration Sensor Temperature (T _c) (°C)	Temperature Difference ¹ (Sampler - Calibration) (°C)
	17.2	17.2	0.0
	17.2	17.2	0.0
	17.2	17.1	0.1

1. Acceptance Criteria: ± 2.0 °C

PRESSURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Sensor Pressure (P _s) (mm Hg)	Calibration Sensor Pressure (P _c) (mm Hg)	Pressure Difference ² (Sampler - Calibration) (mm Hg)
	739.0	740.0	-1.0
	739.0	740.0	-1.0
	739.0	740.0	-1.0

2. Acceptance Criteria: ± 10.0 mm Hg

COMPARTMENT TEMPERATURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Compartment Temperature (T _s) (°C)	Calibration Sensor Temperature (T _c) (°C)	Temperature Difference ³ (Sampler - Calibration) (°C)
	18.0	18.2	-0.2
	18.0	18.2	-0.2
	18.0	18.1	-0.1

3. Acceptance Criteria: ± 2.0 °C

LEAK CHECK, TIME, AND FLOWRATE Calibration Data					
External Leak Check ⁴		6.0	mmHg		
		Clock/Timer Verification ⁵ :			
		Partisol :	13:23:00		
		Reference Time:	13:23:00		
5. Acceptance Criteria: within 60 sec. of Reference Time					
SINGLE POINT CHECK					
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Indicated Flow Rate (LPM)	Calibration Flow Rate (Q _c) (LPM)	Percent Difference ⁶ (Sampler vs. Calibration)	Percent Difference ⁷ (Calibration vs. Design)	
	THREE POINT CHECK				
	Sampler Indicated Flow Rate (LPM)	Calibration Flow Rate (Q _a) (LPM)	Percent Difference ⁶ (Sampler vs. Calibration)	Percent Difference ⁷ (Calibration vs. Design)	
16.66	16.98	-1.9%	0.0%		
18.39	18.44	-0.3%	0.0%		
15.09	14.99	0.7%	0.0%		

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6. Acceptance Criteria: ± 4.0%
 7. Acceptance Criteria: ± 5.0%

Calibration Tech: G. Mazik

**PARTISOL PARTICULATE MATTER (PM) SAMPLER
Calibration Data**

SITE NAME: KCBX NT-NE
AQS Site Code: N/A
DATE: 10-Apr-14
TIME: 13:45

CLIENT: Koch
SAMPLER ID: NT-NE-Carbon
Model Number: 2025i
Serial Number: 20545

TEMPERATURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Sensor Temperature (T _s) (°C)	Calibration Sensor Temperature (T _c) (°C)	Temperature Difference ¹ (Sampler - Calibration) (°C)
	16.9	17.2	-0.3
	16.9	17.2	-0.3
	16.9	17.2	-0.3

1. Acceptance Criteria: ± 2.0 °C

PRESSURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Sensor Pressure (P _s) (mm Hg)	Calibration Sensor Pressure (P _c) (mm Hg)	Pressure Difference ² (Sampler - Calibration) (mm Hg)
	739.0	740.0	-1.0
	739.0	740.0	-1.0
	739.0	740.0	-1.0

2. Acceptance Criteria: ± 10.0 mm Hg

COMPARTMENT TEMPERATURE Calibration Data			
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Compartment Temperature (T _s) (°C)	Calibration Sensor Temperature (T _c) (°C)	Temperature Difference ³ (Sampler - Calibration) (°C)
	17.7	17.8	-0.1
	17.7	17.7	0.0
	17.7	17.8	-0.1

3. Acceptance Criteria: ± 2.0 °C

LEAK CHECK, TIME, AND FLOWRATE Calibration Data				
External Leak Check ⁴	10.0	mmHg		
	Clock/Timer Verification ⁵ : 11:37			
	Partisol :		13:47:00	
	Reference Time:		13:47:00	
	4. Acceptance Criteria < 25 mm Hg			
	5. Acceptance Criteria: within 60 sec. of Reference Time			
SINGLE POINT CHECK				
Calibration Device: BGI Model Number: deltaCal Serial Number: 579 Certification Expiration: 09/10/13	Sampler Indicated Flow Rate (LPM)	Calibration Flow Rate (Q _c) (LPM)	Percent Difference ⁶ (Sampler vs. Calibration)	Percent Difference ⁷ (Calibration vs. Design)
	THREE POINT CHECK			
	Sampler Indicated Flow Rate (LPM)	Calibration Flow Rate (Q _a) (LPM)	Percent Difference ⁶ (Sampler vs. Calibration)	Percent Difference ⁷ (Calibration vs. Design)
16.66	16.49	1.0%	0.0%	
18.40	18.29	0.6%	0.0%	
15.09	14.95	0.9%	0.0%	

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6. Acceptance Criteria: ± 4.0%

7. Acceptance Criteria: ± 5.0%

Calibration Tech: G. Mazik