

**Daily Air Monitoring Report**

JACOBS

New Bedford Harbor Superfund Site

New Bedford, MA

**Date:** 2/26/2024      **Day:** Monday      **Shift:** 0600h-1630h

**Weather Conditions:** Clear-Cloudy  
Temperature Low 36°F      Precipitation 0.00 in.  
Temperature High 50°F      Average Dewpoint 35.46°F  
Wind Direction SW,SSW,WSW      Average Humidity 70.86 %  
Wind Speed 8-21 mph      Barometric Pressure 29.92 in.

Weather Source: Weather Underground (<https://www.wunderground.com/history/daily/us/ma/new-bedford/KEWB/date/2024-2-26>)

**Summary of Day's Work Activities**

Excavation of Cell 1, Portland cement mixing in DDA, Load out of TSCA material from DDA, delivery of Portland cement

**PPE Utilized:** Level C modified / Level D

**Inspections/Permits:** Daily equipment inspections

**Particulate Air Monitoring**

Location	Max (mg/m <sup>3</sup> )	TWA (mg/m <sup>3</sup> )
Area C North	0.083	0.017
Area C South	0.223	0.005
Area C East	2.37	0.026
Area C West	0.022	0.011

Action Levels: 2.5 mg/m<sup>3</sup> for an 8-hr time weighted average (TWA). If 2.5 mg/m<sup>3</sup> or greater is sustained for longer than 5 minutes, activities will be assessed by the SSHOs and corrective actions will be implanted if necessary.

Instruments: (4) DataRAM™ pDR-1000AN Monitors – ThermoFisher Scientific

**VOC Monitoring**

Location	Max (ppm)	Avg (ppm)
Cell 1 (downwind)	0.0	0.0
Cell 1 (operator cab)	0.5	0.3

Action Levels: Refer to Accident Prevention Plan, Addendum 7, Cell 1 Removal (Jacobs, 2023)

Instruments: (2) RAE Systems MultiRAE Portable Multi Gas Monitor

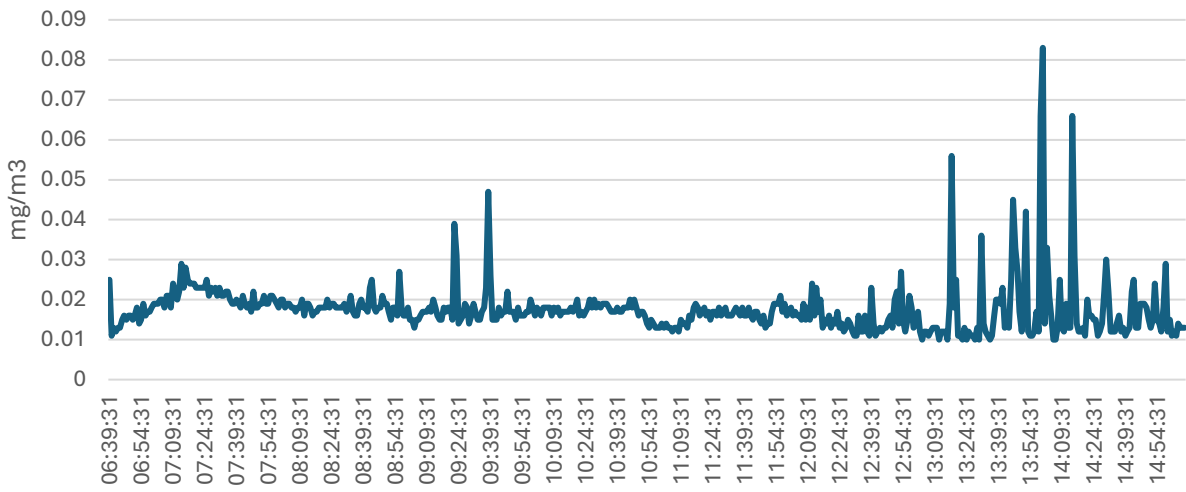
**Action Level or Notable Events**

-Portland cement was confirmed to have caused the elevated readings at Area C East. A concentration of 2.37 mg/m<sup>3</sup> (60s average) was sustained for 1 minute which then tapered to 0.086, 0.092, 0.415, 0.027, and 0.109 mg/m<sup>3</sup> over the next 5 minutes.

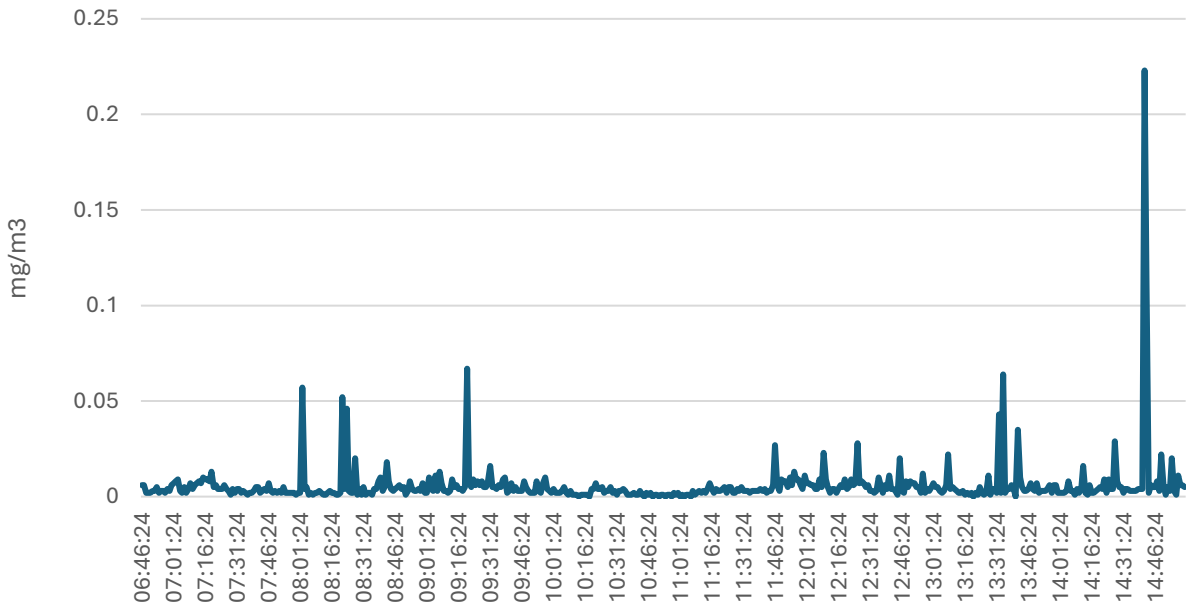
**Corrective Actions**

-None

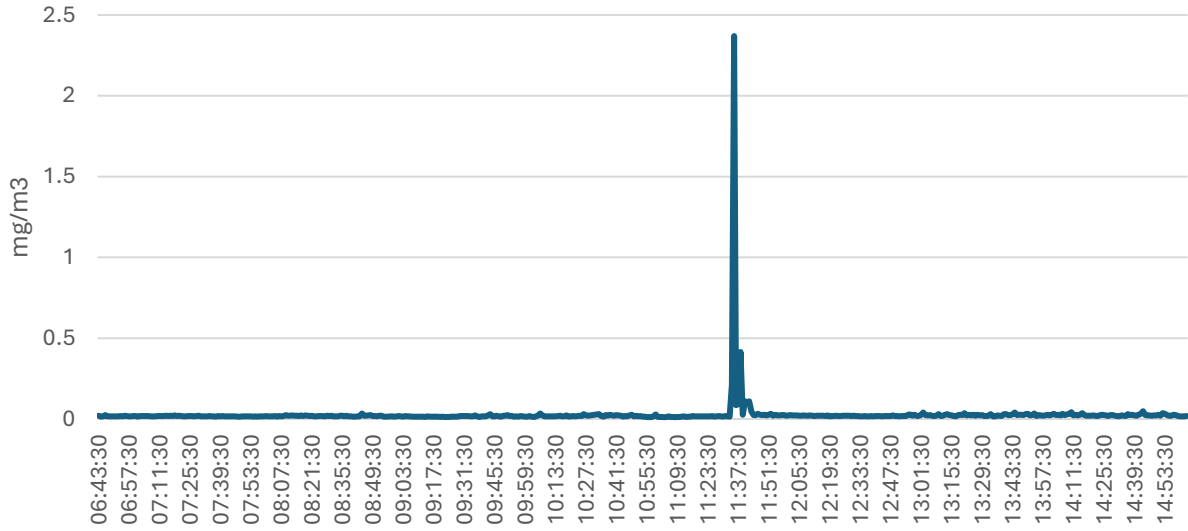
Area C North  
Total Airborne Particulate Monitoring  
26 Feb 2024



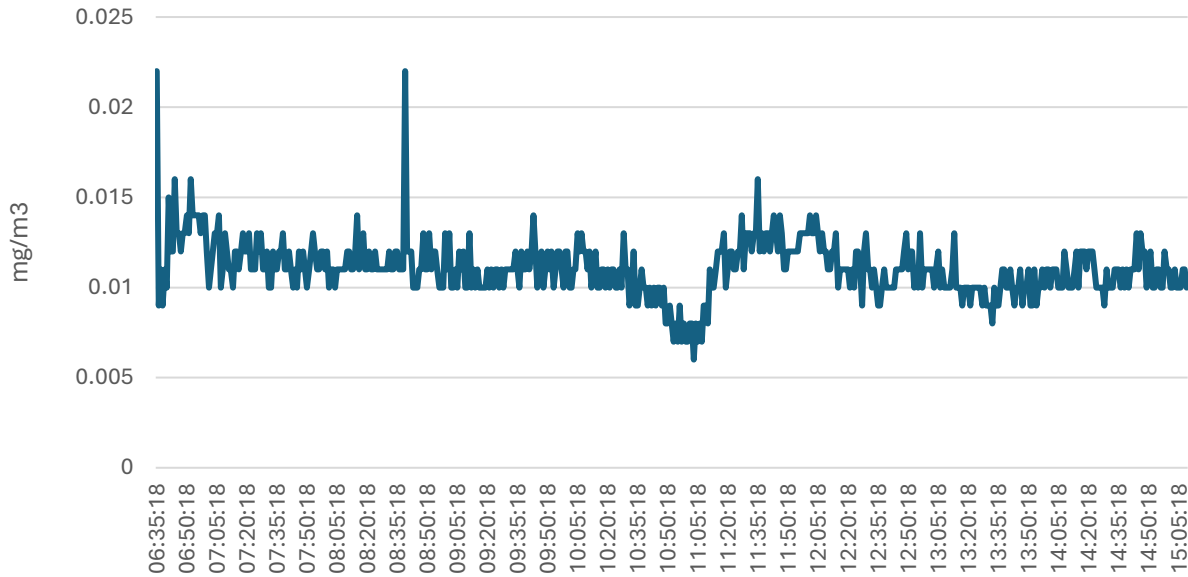
Area C South  
Total Airborne Particulate Monitoring  
26 Feb 2024



Area C East  
Total Airborne Particulate Monitoring  
26 Feb 2024



Area C West  
Total Airborne Particulate Monitoring  
26 Feb 2024



## PID (DOWNWIND) SUMMARY

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### Summary

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 Unit Name           MultiRAE(PGM-6228)  
 Unit SN             M01EA18453  
 Unit Firmware Ver   V1.54  
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Running Mode        Hygiene Mode  
 Datalog Mode       Manual  
 Diagnostic Mode     No  
 Stop Reason

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 Site ID             SITE0000  
 User ID             NEWBEDFD  
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Begin                2/26/2024 08:27:55  
 End                  2/26/2024 08:27:55  
 Sample Period(s)   10  
 Number of Records   1092  
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Sensor	LEL(%LEL)	OXY(%)	H2S(ppm)	CO(ppm)	VOC(ppm)
Sensor SN	SCA3110244D1	SCA3420224D1	SCA3AR0131D1	SCA3060180D1	SCA3A40108CC
Measure Type	Min; Avg; Max; Real	Min; Avg; Max; Real	Min; Avg; Max; Real	Min; Avg; Max; Real	Min; Avg; Max; Real
Span	50	18.0	10.0	50	100.000
Span 2	N/A	N/A	N/A	N/A	1000.000
Low Alarm	10	19.5	10.0	35	0.500
High Alarm	10	23.5	5.0	35	4.000
Over Alarm	100	30.0	100.0	500	5000.000
STEL Alarm	N/A	N/A	15.0	30	5.000
TWA Alarm	N/A	N/A	10.0	35	1.000
Measurement Gas(CF)	Methane(1.00)	N/A	N/A	N/A	Isobutylene(1.00)
Calibration Time	2/7/2024 06:57	2/7/2024 06:57	2/7/2024 06:57	2/7/2024 06:57	2/7/2024 06:59
Peak	0	20.9	0.0	0	0.0
Min	0	20.9	0.0	0	0.0
Average	0	20.9	0.0	0	0.0

PID (OPERATOR CAB) SUMMARY

Datalog

Current Event:24/02/26 07:36

Summary

Unit Name MultiRAE(PGM-6228)  
 Unit SN M01EA16156  
 Unit Firmware Ver V1.50

Running Mode Hygiene Mode  
 Datalog Mode Auto  
 Diagnostic Mode No  
 Stop Reason Battery Low

Site ID SITE0000  
 User ID USER0000

Begin 2/26/2024 07:36:01  
 End 2/26/2024 17:47:39  
 Sample Period(s) 60  
 Number of Records 611

Sensor	LEL(%LEL) VOC(ppm)	OXY(%)	H2S(ppm)	CO(ppm)
Sensor SN	SC03110243AB SC03A40287V4	SCA3420557D3	SC03130296V5	SC03130296V5
Measure Type	Min; Avg; Max; Real Min; Avg; Max; Real	Min; Avg; Max; Real	Min; Avg; Max; Real	Min; Avg; Max; Real
Span	50 100.000	18.0	10.0	50
Span 2	N/A 1000.000	N/A	N/A	N/A
Low Alarm	10 50.000	19.5	10.0	35
High Alarm	20 100.000	23.5	20.0	200
Over Alarm	100 5000.000	30.0	200.0	500
STEL Alarm	N/A 25.000	N/A	15.0	100
TWA Alarm	N/A 10.000	N/A	10.0	35
Measurement Gas(CF)	Methane(1.00) Isobutylene(1.00)	N/A	N/A	N/A
Calibration Time	2/21/2024 16:01 2/21/2024 16:02	2/21/2024 16:01	2/21/2024 16:01	2/21/2024 16:01
Peak	0 0.5	21.3	0.0	0
Min	0 0.0	20.9	0.0	0
Average	0 0.3	21.0	0.0	0

**Daily Air Monitoring Report**

JACOBS

New Bedford Harbor Superfund Site

New Bedford, MA

**Date:** 2/27/2024      **Day:** Tuesday      **Shift:** 0600h-1630h

**Weather Conditions:** Fog, Partly Cloudy, Fair  
Temperature Low 38°F      Precipitation 0.00 in.  
Temperature High 60°F      Average Dewpoint 43.05°F  
Wind Direction SSE, S, SSW      Average Humidity 67.05 %  
Wind Speed 3-15 mph      Barometric Pressure 30.03 in.

Weather Source: Weather Underground (<https://www.wunderground.com/history/daily/us/ma/new-bedford/KEWB/date/2024-2-27>)

**Summary of Day's Work Activities**

Excavation of Cell 1, Portland cement mixing in DDA, Load out of TSCA material from DDA

**PPE Utilized:** Level C modified / Level D

**Inspections/Permits:** Daily equipment inspections

**Particulate Air Monitoring**

Location	Max (mg/m <sup>3</sup> )	TWA (mg/m <sup>3</sup> )
Area C North	0.588	0.085
Area C South	0.970	0.121
Area C East	0.035	0.017
Area C West	0.757	0.108

Action Levels: 2.5 mg/m<sup>3</sup> for an 8-hr time weighted average (TWA). If 2.5 mg/m<sup>3</sup> or greater is sustained for longer than 5 minutes, activities will be assessed by the SSHOs and corrective actions will be implanted if necessary.

Instruments: (4) DataRAM™ pDR-1000AN Monitors – ThermoFisher Scientific

**VOC Monitoring**

Location	Max (ppm)	Avg (ppm)
Cell 1 (downwind)	0.3	0.0
Cell 1 (operator cab)	0.6	0.4

Action Levels: Refer to Accident Prevention Plan, Addendum 7, Cell 1 Removal (Jacobs, 2023)

Instruments: (2) RAE Systems MultiRAE Portable Multi Gas Monitor

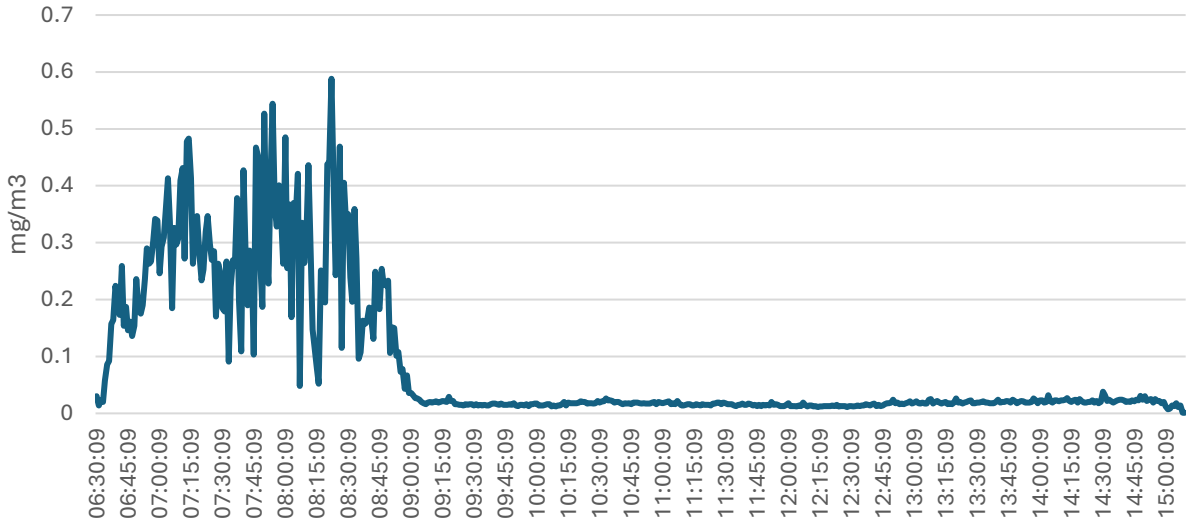
**Action Level or Notable Events**

-Area C East monitor screen froze and required restart. Data from 0630-1112 not retrievable.

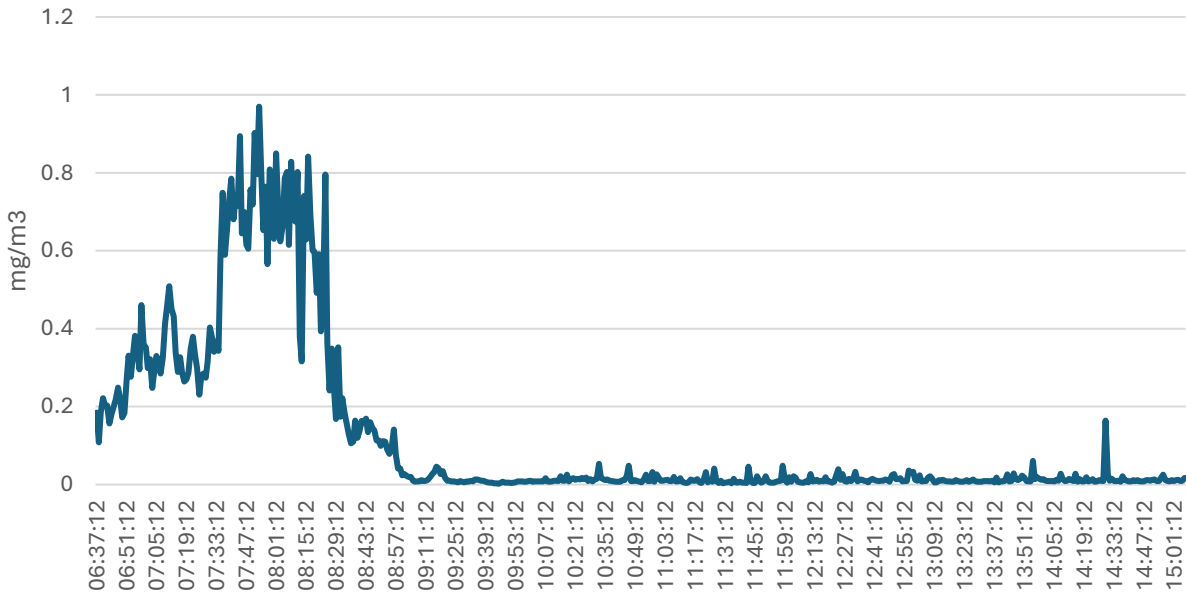
**Corrective Actions**

-None

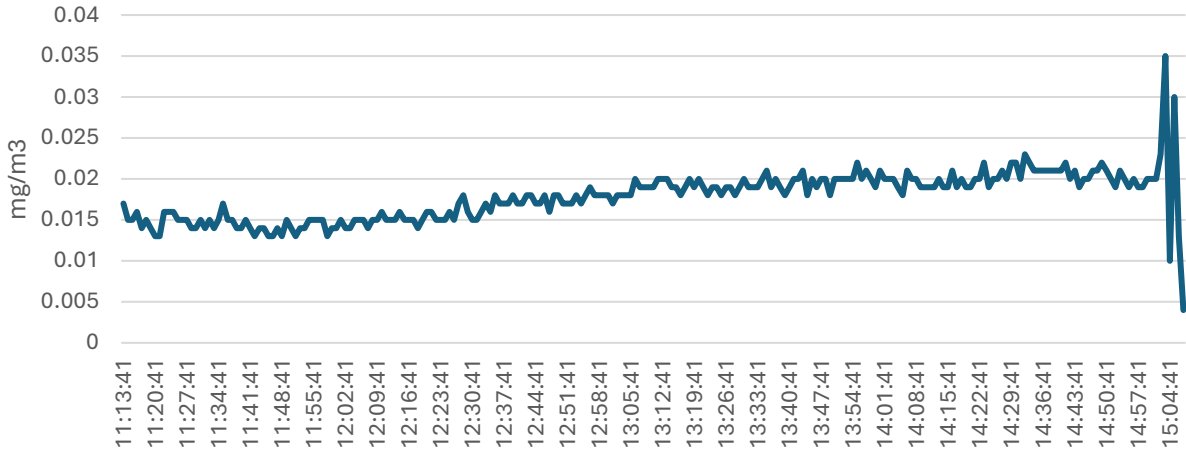
Area C North  
Total Airborne Particulate Monitoring  
27 Feb 2024



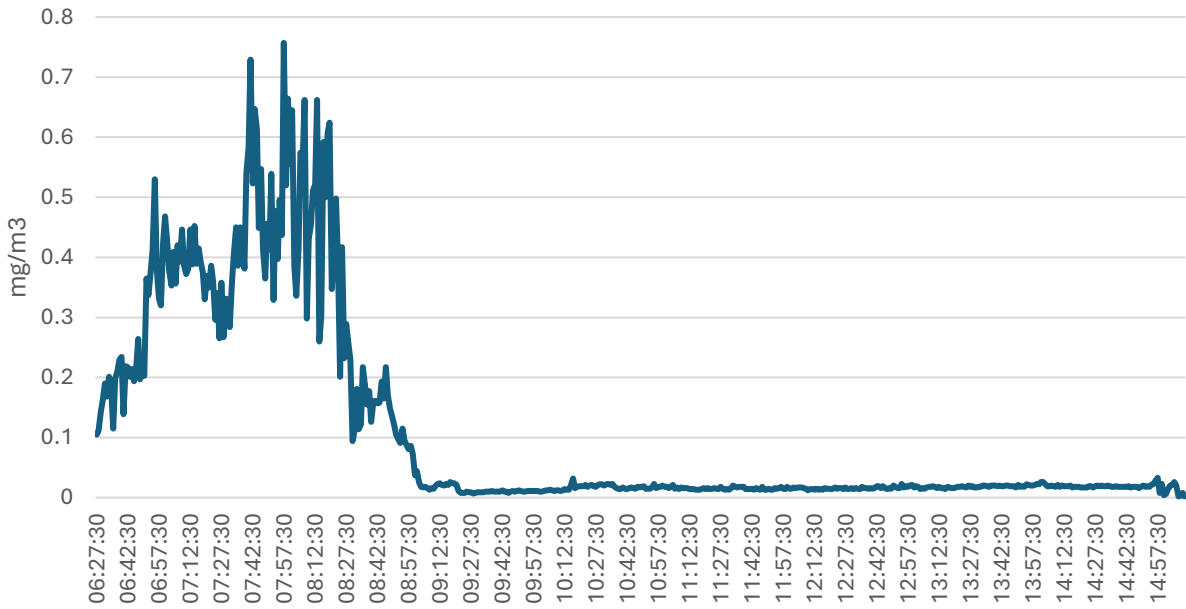
Area C South  
Total Airborne Particulate Monitoring  
27 Feb 2024



Area C East  
Total Airborne Particulate Monitoring  
27 Feb 2024



Area C West  
Total Airborne Particulate Monitoring  
27 Feb 2024





PID (DOWNWIND) SUMMARY
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Summary

-----  
Unit Name MultiRAE(PGM-6228)  
Unit SN M01EA18453  
Unit Firmware Ver V1.54  
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Running Mode Hygiene Mode  
Datalog Mode Auto  
Diagnostic Mode No  
Stop Reason Power Down  
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Site ID SITE0000  
User ID NEWBEDFD  
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Begin 2/27/2024 06:36:23  
End 2/27/2024 16:14:58  
Sample Period(s) 10  
Number of Records 3471  
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Sensor	LEL(%LEL) VOC(ppm)	OXY(%)	H2S(ppm)	CO(ppm)
Sensor SN	SCA3110244D1 SCA3060180D1	SCA3420224D1 SCA3A40108CC	SCA3AR0131D1	
Measure Type	Min; Avg; Max; Real	Min; Avg; Max; Real	Min; Avg; Max; Real	Min; Avg;
Max; Real	Min; Avg; Max; Real			
Span	50 100.000	18.0	10.0	50
Span 2	N/A 1000.000	N/A	N/A	N/A
Low Alarm	10 0.500	19.5	10.0	35
High Alarm	10 3.000	23.5	5.0	35
Over Alarm	100 5000.000	30.0	100.0	500
STEL Alarm	N/A 5.000	N/A	15.0	30
TWA Alarm	N/A 1.000	N/A	10.0	35
Measurement Gas(CF)	Methane(1.00) Isobutylene(1.00)	N/A	N/A	N/A
Calibration Time	2/27/2024 06:33 2/27/2024 06:35	2/27/2024 06:33	2/27/2024 06:33	2/27/2024
Peak	0 0.3	20.9	2.9	0
Min	0 0.0	20.9	0.0	0
Average	0 0.0	20.9	0.0	0

PID (OPERATOR CAB) SUMMARY

Datalog

Current Event:24/02/27 07:38

Summary

Unit Name MultIRAE(PGM-6228)  
 Unit SN M01EA16156  
 Unit Firmware Ver V1.50

Running Mode Hygiene Mode  
 Datalog Mode Auto  
 Diagnostic Mode No  
 Stop Reason Power Down

Site ID SITE0000  
 User ID USER0000

Begin 2/27/2024 07:38:48  
 End 2/27/2024 17:43:44  
 Sample Period(s) 60  
 Number of Records 604

Sensor	LEL(%LEL) VOC(ppm)	OXY(%)	H2S(ppm)	CO(ppm)
Sensor SN	SC03110243AB SC03A40287V4	SCA3420557D3	SC03130296V5	SC03130296V5
Measure Type	Min; Avg; Max; Real Min; Avg; Max; Real	Min; Avg; Max; Real	Min; Avg; Max; Real	Min; Avg; Max; Real
Span	50 100.000	18.0	10.0	50
Span 2	N/A 1000.000	N/A	N/A	N/A
Low Alarm	10 50.000	19.5	10.0	35
High Alarm	20 100.000	23.5	20.0	200
Over Alarm	100 5000.000	30.0	200.0	500
STEL Alarm	N/A 25.000	N/A	15.0	100
TWA Alarm	N/A 10.000	N/A	10.0	35
Measurement Gas(CF)	Methane(1.00) Isobutylene(1.00)	N/A	N/A	N/A
Calibration Time	2/21/2024 16:01 2/21/2024 16:02	2/21/2024 16:01	2/21/2024 16:01	2/21/2024 16:01
Peak	0 0.6	20.9	0.0	0
Min	0 0.0	20.9	0.0	0
Average	0 0.4	20.9	0.0	0