

TV Tracking #: 928 (Semi-Annual)

1.  RECEIVED IN  
ENFORCEMENT: 06/26/2024

**Appendix A**  
**SEM Data- continued**



**Altamont Landfill and Resource Recovery Facility**  
10840 Altamont Pass Road,  
Livermore, CA 94551

May 14, 2024

Marcus Netz  
Altamont Landfill and Resource Recovery Facility  
10840 Altamont Road  
Livermore, California 94551

**Re: Second Quarter 2024 Surface Emissions and Component Leak Monitoring Report for the Altamont Landfill and Resource Recovery Facility**

Dear Mr. Netz:

This monitoring report for the “Altamont Landfill and Resource Recovery Facility (ALRRF)” contains the results of the Second Quarter 2024 Integrated and Instantaneous Surface Emissions Monitoring (SEM) and Component Leak Monitoring. Initial surface emissions monitoring was performed by RES Environmental, Inc. (RES). Re-monitoring of surface emissions and site-wide component leak monitoring (except Linde Plant), wherever applicable was conducted by ALRRF personnel. The component leak monitoring for Linde Plant was conducted by third party contractor.

**APPLICABLE REQUIREMENTS**

The monitoring discussed in this report was conducted in accordance with the following requirements:

**Surface Emission Monitoring (SEM)**

- New Source Performance Standard (NSPS), Title 40 of the Code of Federal Regulations (CFR) §60.755 (c) and (d), 40 CFR 60, Appendix A Method 21, promulgated by the United States Environmental Protection Agency (USEPA).
- California Code of Regulations (CCR) Title 17, Subchapter 10, Article 4, Subarticle 6, §95460 to §95476, known as the Assembly Bill 32 (AB32) landfill methane rule (LMR).
- Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 34, Section 303 (Landfill Surface Requirements) and Section 607 (Landfill Surface Inspection procedures).
- United States Environmental Protection Agency’s (USEPA) *Standards of Performance for Municipal Solid Waste Landfills*; 40 Code of Federal Regulations (CFR) Part 63, Subpart AAAA-National Emission Standards for Hazardous Air Pollutants (NESHAP).

## **Component Leak**

- Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 34, Section 301 (Landfill Gas Collection and Emission Control System Requirements) and Section 602 (Collection and Control System Leak Inspection procedures).
- California Code of Regulations (CCR) Title 17, Subchapter 10, Article 4, Subarticle 6, §95464, known as the Assembly Bill 32 (AB32) landfill methane rule (LMR).

## **ALRRF Plan and Alternative Compliance Measures**

An Alternative Compliance Option (ACO) Request was submitted to the California Air Resources Board (CARB) on May 16, 2011. After receipt of comments, this ACO was amended, restated, and submitted to BAAQMD on July 1, 2016. SEM and Component Leak monitoring was conducted per the methods outlined in the July 1, 2016, ACO.

## **PROCEDURES**

### **General**

The surface of the ALRRF Fill Area 1 disposal area has been divided into one-hundred and ninety-three (193), approximately 50,000 square foot monitoring grids. The current surface of the ALRRF Fill Area II disposal area has been divided into forty-five (45), approximately 50,000 square foot monitoring grids. The entire landfill surface is monitored with the exception of active portions of the Landfill, slope areas, and as requested in the approved ACO, areas containing only asbestos-containing waste, inert waste and/or non-decomposable waste which are excluded for safety as allowed by CCR Title 17 §95466.

Field personnel walked the surface of the landfill following the 25-foot walking pattern as depicted the 2011 ALRRF AB-32 SEM Plan, which traverses each monitoring grid. Additionally, in accordance with the provisions of 40 CFR 60.753(d) and 60.755(c)(1-3), the entire perimeter of the landfill surface was monitored. During the event, special attention was given to monitoring unusual cover conditions (stressed vegetation, cracks, seeps, etc.) and any areas with unusual odors.

### **Instantaneous Surface Emissions Monitoring**

The Instantaneous SEM was conducted using a Toxic Vapor Analyzer (TVA) 1000 flame ionization detector (FID), which was calibrated to 500 parts per million by volume (ppm<sub>v</sub>) methane, which meets or exceeds all guidelines set forth in the CCR Title 17 §95471(a) and NSPS. The FID was calibrated prior to use in accordance with the United States Environmental Protection Agency (USEPA) Method 21 requirements. The Instantaneous SEM procedures followed the requirements of 40 CFR 60.755 (c) and (d) and CCR Title 17 §95471(c)(2).

RES personnel walked the surface of the landfill on a grid-by-grid basis with the wand tip held at 2 inches from the landfill surface. While sampling the grid; the technicians also checked any surface impoundments (wells or otherwise) for leaks. Technicians also checked any surface cracks,

seeps, or other areas that show evidence of surface emissions (odors or distressed vegetation). Active and sloped areas excluded for safety were documented on field data sheets and maps.

All instantaneous surface monitoring was performed in accordance with the applicable requirements referenced in this report. Any detections of methane above 200 ppm<sub>v</sub> (areas of concern) or 500 ppm<sub>v</sub> (exceedances) for instantaneous were recorded, flagged, and marked on an SEM Map, which, wherever required, is included in the Appendices of this report. Applicable corrective action and re-monitoring timelines are listed below:

- Corrective actions must be initiated within 5 days of the initial exceedance and re-monitoring shall be conducted within 10 days of the initial exceedance.
  - If the re-monitoring event shows the exceedance is corrected, the location shall be re-monitored within 1 month of the initial exceedance.
  - If the 1-month re-monitoring event shows the location is still corrected, all re-monitoring requirements have been completed.
- If either the first 10-day or 1-month re-monitoring events show a second exceedance, additional corrective actions shall be completed and a second re-monitoring event shall be conducted within 10 days of the second exceedance.
- If the second 10-day re-monitoring event shows the second exceedance is corrected, the location shall be re-monitored within 1 month of the initial exceedance. If the 1-month re-monitoring event shows the area is still corrected, monitoring requirements have been completed.

If any location shows three exceedances, an additional well shall be installed within 120 days of the initial exceedance.

### **Integrated Surface Emissions Monitoring**

The Integrated surface monitoring was conducted using a TVA 1000 calibrated to 25 ppm<sub>v</sub> for the integrated monitoring, which meets or exceeds all guidelines set forth in the CCR Title 17 §95471(a). The field technician traversed the grid walking path over a continuous 25-minute period using the TVA 1000 held within 3 inches above the landfill surface. The Integrated monitoring procedures followed the requirements of CCR Title 17 §95471(c)(3).

Grids with results greater than 25 ppm<sub>v</sub> were recorded, marked on the SEM map, and flagged for remediation. Any grids with integrated concentrations greater than 25 ppm<sub>v</sub> are subject to the following re-monitoring timeline:

- Re-monitoring shall be conducted within 10 days of the initial exceedance.
- If the 10-day re-monitoring event shows the exceedance is corrected, all re-monitoring requirements have been completed.

- If either the first 10-day re-monitoring event shows a second grid exceedance, additional corrective actions shall be completed and a second re-monitoring event shall be conducted within 10 days of the second exceedance.
- If the second 10-day re-monitoring event shows the second exceedance is corrected, all re-monitoring requirements have been completed.
- The second 10-day re-monitoring event shows a third grid exceedance, an additional well shall be installed within 120 days of the third exceedance.

### **Component Leak Monitoring Procedures**

ALRRF/Third Party Contractor personnel monitored the exposed LFG components under positive pressure (pipes, wellheads, valves, blowers, and other mechanical appurtenances) using a TVA 1000 calibrated to 500 ppm<sub>v</sub>. All leaks measured one half inch or less from the component exceeding the compliance limit of 500 ppm<sub>v</sub> per requirements outlined in pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B) and 1,000 ppm<sub>v</sub> per requirements outlined in BAAQMD 8-34-303 were recorded. Applicable corrective action and re-monitoring timelines are listed below:

- Leaks between 500 and 999 ppm<sub>v</sub> must be corrected and re-monitored within 10 days of the initial exceedance.
- Leaks at or above 1000 ppm<sub>v</sub> must be corrected and re-monitored within 7 days of the initial exceedance.

### **SECOND QUARTER 2024 SEM AND COMPONENT LEAK RESULTS**

The following is a summary of the SEM and component leak monitoring results completed for the Second Quarter 2024.

#### **Instantaneous Surface Emissions Monitoring Results**

The Instantaneous surface monitoring was performed on April 2, 3, 4, and 9, 2024, in accordance with the NSPS, BAAQMD 8-34, NESHAP, and CCR Title 17 §95469 and ACO. Results and data from the monitoring are presented in Attachment A.

#### ***Initial Monitoring Event Exceedances of 500 ppm<sub>v</sub>***

There were 7 exceedances of 500 ppm<sub>v</sub> as methane detected on April 9, 2024. Corrective actions to initiate repairs of the exceedances were completed within five days for all locations (April 10, 2024).

#### ***Ten-Day Re-Monitoring Results***

The 10-day re-monitoring event was completed on April 10, 2024. All locations were observed at less than 500 ppm<sub>v</sub>.

### One-Month Re-Monitoring Results

The 1-month re-monitoring event was completed on May 6, 2024. All locations were observed at less than 500 ppm<sub>v</sub>.

### Readings between 200 ppm<sub>v</sub> and 499 ppm<sub>v</sub> (Initial and Re-monitored)

There were no readings between 200 ppm<sub>v</sub> and 499 ppm<sub>v</sub> as methane detected during the initial monitoring event on April 2, 3, 4, and 9, 2024. Pursuant to CCR Title 17 §95471(c), instantaneous surface emissions exceeding 200 ppm<sub>v</sub> but below 500 ppm<sub>v</sub> are required to be recorded.

### **Integrated Surface Emissions Monitoring Results**

The Integrated surface sampling (ISS) was performed on April 8, 9, and 10, 2024, in accordance with the ACO and requirements outlined in CCR Title 17 §95469.

### Initial Monitoring Event Exceedances of 25 ppm<sub>v</sub>

There were no grids with exceedances of 25 ppm<sub>v</sub> as methane detected during the initial monitoring event on April 8, 9, and 10, 2024.

The average methane concentration of each grid was recorded during the monitoring event per applicable requirements. See Attachment B, Integrated SEM 25 ppm<sub>v</sub> Exceedances and Monitoring Log, and SEM Map included in Attachment B, for details.

### **Component Leak Monitoring Results**

Component leak monitoring was conducted per the applicable requirements on April 10, 2024 and May 3, 2024. No leaks greater than 500 ppm<sub>v</sub> were identified. LNG Plant was permanently shut down and is being decommissioned. Please see Attachment C, for details.

### **WEATHER CONDITIONS**

#### **Wind Speed Conductions during the Surface Emission Monitoring Events**

Wind speeds during initial monitoring were monitored using a portable weather station. The station has a strip chart that records the wind speed and direction. After completion of monitoring, the strip chart is reviewed by RES office staff to determine the average and maximum wind speeds during the monitoring and the average wind direction during each grid and ensure that the wind speed requirements are met (no gusts greater than 20 mph, average wind speed cannot exceed 10 mph). The average wind speed recorded during the re-monitoring event was 16 mph. These values are documented in the field data sheets. The chart data is scanned and included in Attachment D.

#### **Precipitation Requirements**

Per the ALRRF's ACO, the initial monitoring event was carefully scheduled so that it could be conducted in compliance with the precipitation requirements (no measurable precipitation within

24 hours). Re-monitoring events are required to adhere to strict timelines. Any conflicts with precipitation requirements are discussed in the results section of this document.

## **EQUIPMENT CALIBRATION**

The portable analyzers were calibrated to meet the instrument specifications requirements of U.S. EPA Method 21. The calibration gas used was methane, diluted to a nominal concentration of 25 ppm<sub>v</sub> in air for integrated sample analyses and 500 ppm<sub>v</sub> in air for instantaneous monitoring to comply with the requirements.

All analyzers were calibrated prior to use with required response time and precision related instrument checks. Calibration records include the following: One time response time test record; One time response factor determination for methane; Calibration Precision test records (test to be performed every 3 months); and Daily Instrument Calibration and Background test records for each gas meter that was used during the quarterly monitoring event. The calibration log records are included in Attachment E.

All monitoring was completed in accordance with the applicable regulatory requirements or approved alternatives. If you have any questions regarding this report, please do not hesitate to contact me at rphadnis@wm.com.

Thank you,  
Waste Management



Rajan Phadnis  
Environmental Protection Specialist

### **Attachment A – Instantaneous Surface Emission Monitoring Event Records**

- Monitoring Logs and Exceedances
- SEM Map

### **Attachment B – Integrated Surface Emission Monitoring Event Records**

- Monitoring Logs and Exceedances
- SEM Map

### **Attachment C – Component Leak Monitoring Event Records**

- Component Leak Exceedances and Monitoring Logs

### **Attachment D – Weather Station Data**

- Strip Chart Data

**Attachment E – Calibration Records**

- Instrument and Gas Calibration Records



**Attachment A**

Instantaneous Surface Emission Monitoring Event Records

**Table A.1**  
**Instantaneous Landfill Surface Emissions Monitoring**  
**Initial Monitoring Event Areas of Concern**

**2024 QUARTER:** 2  
**PERFORMED BY:** RES  
**LANDFILL NAME:** Altamont Landfill and Resource Recovery Facility

Flag Number	Grid Number	Date of Monitoring	Concentration of Emission (ppmv)	Comments
O1	62	4/9/2024	520	Well 739
O2	98	4/9/2024	700	Well 880
O3	152	4/9/2024	1,000	Well 772
O4	138	4/9/2024	700	Well 775
O5	114	4/9/2024	5,000	Well 713
O6	36	4/9/2024	600	Well 824
O7	55	4/9/2024	700	Well 877

**Table A.2**  
**Instantaneous Landfill Surface Emissions Monitoring**  
**Exceedance and Monitoring Logs (NSPS/BAAQMD 8-34)**

2024 QUARTER: 2

INITIAL MONITORING PERFORMED BY: RES

FOLLOW-UP MONITORING PERFORMED BY: ALRRF

LANDFILL NAME: Altamont Landfill and Resource Recovery Facility

Initial Monitoring Event			Corrective action within 5 days		1st 10-day Follow-Up			1st 30-day Follow-Up			Comments
Flag	Monitoring	Field	Repair	Repair Action	Monitoring	No Exced.	Exced.	Monitoring	No Exced.	Exced.	
Number	Date	Reading	Date	Taken	Date	<500 ppm	>500 ppm	Date	<500 ppm	>500 ppm	
O1	4/9/2024	520	4/10/2024	Compacted soil	4/10/2024	14		5/6/2024	11		Well 678
O2	4/9/2024	700	4/10/2024	Added and compacted soil	4/10/2024	116		5/6/2024	122		Well 713
O3	4/9/2024	1,000	4/10/2024	Compacted soil/ tuned	4/10/2024	113		5/6/2024	100		Well 733
O4	4/9/2024	700	4/10/2024	Compacted soil	4/10/2024	28		5/6/2024	10		Well 862
O5	4/9/2024	5,000	4/10/2024	Compacted soil	4/10/2024	27		5/6/2024	55		Well 759
O6	4/9/2024	600	4/10/2024	Compacted soil/ tuned	4/10/2024	10		5/6/2024	7		Well 760
O7	4/9/2024	700	4/10/2024	Compacted soil	4/10/2024	31		5/6/2024	82		Well 812

**Table A.3**  
**Instantaneous Landfill Surface Emissions Monitoring**  
**Exceedance and Monitoring Logs (AB-32)**

2024 QUARTER: 2

INITIAL MONITORING PERFORMED BY: RES

FOLLOW-UP MONITORING PERFORMED BY: ALRRF

LANDFILL NAME: Altamont Landfill and Resource Recovery Facility

Initial Monitoring Event			1st Re-mon 10-day Follow-Up			2nd Re-mon Event - 10 Days			Comments
Flag	Monitoring	Field	Monitoring	No Exced.	Exced.	Monitoring	No Exced.	Exced.	
Number	Date	Reading	Date	<500 ppm	>500 ppm	Date	<500 ppm	>500 ppm	
O1	4/9/2024	520	4/10/2024	14					Well 678
O2	4/9/2024	700	4/10/2024	116					Well 713
O3	4/9/2024	1,000	4/10/2024	113					Well 733
O4	4/9/2024	700	4/10/2024	28					Well 862
O5	4/9/2024	5,000	4/10/2024	27					Well 759
O6	4/9/2024	600	4/10/2024	10					Well 760
O7	4/9/2024	700	4/10/2024	31					Well 812

**Table A.4**  
**Instantaneous Landfill Surface Emissions Monitoring**  
**Areas of Concern Greater than 200 ppmv**

**2024 QUARTER: 2**

**INITIAL MONITORING PERFORMED BY: RES**

**FOLLOW-UP MONITORING PERFORMED BY: NA**

**LANDFILL NAME: Altamont Landfill and Resource Recovery Facility**

Initial Monitoring Event			Re-mon Event		Comments
Exceedance	Monitoring	Field	Monitoring	Reading	
Flag No.	Date	Reading	Date	ppm	
None					





# ALTAMONT LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LESLIE WADE EDDIE DEWING  
MICHAEL ESTAGORA TYLER ANDERSON  
JERRY MAZUR Cal. Gas Exp. Date: 11-10-24

Date: 4-2-24 Instrument Used: TUA 1000 Grid Spacing: 25'

Temperature: 65 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
84	J.M	1030	1045	22.20	2	4	16	
85		1045	1100	33.07	2	3	16	
86		1110	1125	30.09	2	3	16	
87		1125	1140	44.60	3	4	16	
93		1140	1155	36.30	3	4	16	
92		1155	1210	49.20	3	4	16	
91		1210	1225	37.28	3	4	15	
90		1225	1240	40.09	3	4	15	
97		1240	1255	29.18	2	4	15	
98		1255	1310	41.20	3	4	15	
99		1310	1325	44.30	3	4	15	
100		1325	1340	27.28	3	4	15	
107		1340	1355	39.20	3	4	15	
106		1400	1415	55.22	3	4	15	
105		1415	1430	50.09	3	4	14	
104		1430	1445	40.01	4	5	14	
111	√	1445	1500	47.08	4	5	14	
51	EO	1030	1045	47.44	2	4	16	
52		1045	1100	51.79	2	3	16	
53		1100	1115	49.57	3	4	16	
60		1120	1135	48.54	2	3	16	
59		1135	1150	54.64	3	4	16	
58		1150	1205	57.71	3	4	16	
64		1215	1220	62.44	3	4	15	
65		1225	1240	60.18	3	4	15	
66		1245	1300	64.32	3	4	15	
73		1300	1315	67.84	3	4	15	
72		1315	7330	61.79	3	4	15	
71		1330	1345	59.14	3	4	14	
78	√	1410	1415	54.15	3	4	15	

Attach Calibration Sheet  
 Attach site map showing grid ID



# ALTAMONT LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEU HUANG EDDIE DE JONG  
Miguel Estacion tyler anderson  
JERRY MENOR Cal. Gas Exp. Date: 11-10-24

Date: 4-2-24 Instrument Used: FVA 1000 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
79		1415	1430	64.74	3	4	14	
80		1430	1445	58.31	4	5	14	
14		1510	1525	74.88	4	6	14	
29	↓	1530	1545	69.79	4	6	14	
21	ME	1030	1045	17.11	2	4	16	
22		1045	1100	17.22	2	3	16	
23		1100	1115	16.80	3	4	16	
28		1115	1130	14.61	2	3	16	
27		1130	1145	13.28	3	4	16	
26		1145	1200	14.41	3	4	16	
32		1200	1215	10.52	2	4	15	
33		1215	1230	12.21	3	5	15	
34		1230	1245	17.09	3	4	15	
41		1245	1300	17.17	3	4	15	
40		1300	1315	15.72	3	4	15	
39		1315	1330	20.37	3	4	15	
45		1330	1345	25.15	3	4	14	
46		1345	1400	27.41	3	4	15	
47		1400	1415	12.80	3	4	15	
35		1435	1450	22.16	4	5	14	
42	↓	1450	1505	21.61	4	5	14	
1	TA	1030	1045	43.38	2	4	16	
2		1045	1100	48.52	2	3	16	
3		1100	1115	68.23	3	4	16	
6		1115	1130	72.89	2	3	16	
5		1130	1145	58.72	3	4	16	
4		1147	1202	70.12	3	4	16	
8		1202	1217	112	2	4	15	
9		1219	1234	85.32	3	5	15	
10	↓	1235	1250	127	3	4	15	

Attach Calibration Sheet  
 Attach site map showing grid ID



# ALTAMONT LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEISHMAN

Cal. Gas Exp. Date: \_\_\_\_\_

Date: 4-4-24 Instrument Used: \_\_\_\_\_ Grid Spacing: \_\_\_\_\_

Temperature: \_\_\_\_\_ Precip: \_\_\_\_\_ Upwind BG: \_\_\_\_\_ Downwind BG: \_\_\_\_\_

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
135								steep-veg
178								↓
169								
191								
211								active-veg
212								
213								
215								
216								
217								
218								
219								
220								
221								
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237								

Attach Calibration Sheet  
Attach site map showing grid ID



**ALTAMONT LANDFILL  
INSTANTANEOUS LANDFILL SURFACE MONITORING**

Personnel: LEIGH WADK EDDIE DEILING  
MIGUEL ESTACOA TYLER ANDERSON  
JERRY MAROZ Cal. Gas Exp. Date 11-10-24

Date 4-3-24 Instrument Used FUA1100 Grid Spacing 25'

Temperature: 41 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
36	LW	0645	0700	125	4	6	12	
48		0700	0710	97.13	4	5	12	
55		0710	0720	70.27	5	6	13	
61		0720	0730	50.84	5	6	13	
67		0730	0745	45.62	4	5	13	
68		0745	0800	78.21	3	4	14	
75		0800	0815	139	3	4	12	
82		0815	0830	90.13	4	5	13	
87		0830	0845	65.47	4	5	14	
88		0845	0900	40.22	5	6	14	
95		0910	0925	51.58	5	7	13	
102		0925	0940	68.37	4	5	14	
109		0940	0955	40.29	3	4	13	
117		0955	1010	35.77	3	5	12	
125		1010	1025	28.72	3	4	12	
133		1025	1040	50.10	4	5	12	
140		1200	1215	45.80	5	6	14	
147		1215	1230	29.64	5	7	13	
153		1300	1315	70.28	7	9	14	
154		1315	1330	48.23	5	7	14	
161		1330	1340	145	6	7	14	
160	↓	1340	1350	70.35	6	6	14	
7	ME	0630	0645	80.5	5	6	13	
15		0645	0700	101	4	6	12	
16		0700	0715	87.53	5	6	13	
20		0715	0730	81.80	5	6	13	
25		0730	0745	98.70	4	5	13	
24		0745	0800	78.90	3	4	14	
30		0800	0815	103	3	4	12	
31	↓	0815	0830	100	4	5	13	

Attach Calibration Sheet  
 Attach site map showing grid ID

# ALTAMONT LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEIGHANNE KODIE DELORES  
MIGUEL ESTACON TYLER ANDERSON  
JERRY MURPHY Cal Gas Exp Date: 11-10-24

Date: 4-3-24 Instrument Used: FVA1000 Grid Spacing: 25'

Temperature: 50 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
38		0830	0845	88.30	4	5	14	
37		0845	0900	83.23	5	6	14	
43		0900	0915	91.28	5	7	13	
44		0915	0930	94.43	5	7	13	
50		0930	0945	45.22	4	5	13	
49		0945	1000	38.21	3	3	12	
56		1000	1015	42.61	4	5	12	
57		1015	1030	36.13	4	5	12	
63		1030	1045	34.28	4	5	12	
62		1045	1100	44.11	5	6	13	
177		1220	1235	45.61	5	7	13	
183		1240	1300	37.53	6	9	13	
184		1300	1315	34.28	7	9	14	
189	✓	1320	1335	32.13	5	7	14	
112	+A	0630	0645	50.74	5	6	13	
113		0645	0700	42.88	4	6	12	
114		0700	0715	56.29	5	6	13	
115		0715	0730	53.91	5	6	13	
123		0730	0745	33.74	4	5	13	
122		0745	0800	53.32	3	4	14	
121		0800	0815	37.99	3	4	12	
120		0815	0830	29.12	4	5	13	
128		0830	0845	27.78	4	5	14	
129		0845	0900	47.61	5	6	14	
130		0900	0915	69.84	5	7	13	
131		0920	0925	71.58	5	7	13	
132		0935	0950	58.19	3	4	13	
124		0950	1005	43.22	3	4	12	
116		1005	1020	31.53	3	4	12	
108	✓	1020	1035	38.88	4	5	12	

Attach Calibration Sheet  
 Attach site map showing grid ID

# ALTAMONT LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LOUISIANA BRUCE DORLING  
MICHAEL ESTRECH TYLOR ANDERSON  
JERRY MUMFORD Cal Gas Exp Date 11-10-24

Date 4-3-24 Instrument Used: TVA1100 Grid Spacing: 25'

Temperature: 57 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
101		1035	1050	49.62	4	5	12	
94		1050	1105	53.28	5	6	13	
165		1205	1220	40.82	5	7	13	
166		1220	1235	70.90	6	8	13	
167		1235	1250	54.66	6	8	13	
168	↓	1250	1305	32.12	6	9	13	
136	JM	0630	0645	34.09	5	6	13	
137		0645	0700	44.17	4	6	12	
138		0700	0715	37.50	5	6	13	
139		0715	0730	30.57	5	6	13	
146		0730	0745	46.50	4	5	13	
145		0745	0800	55.07	3	4	14	
144		0800	0815	49.80	3	4	12	
143		0815	0830	35.07	4	5	13	
150		0830	0845	10.17	4	5	14	
151		0845	0900	9.03	5	6	14	
152		0900	0915	10.38	5	7	13	
158		0915	0930	8.42	5	7	13	
157		0930	0945	10.05	4	5	13	
156		0945	1010	9.80	3	3	11	
155		1005	1015	9.11	4	5	12	
162		1015	1030	60.47	4	5	12	
163		1030	1045	65.07	4	5	12	
164		1045	1100	70.01	5	6	13	
159		1215	1230	80.07	5	7	13	
171		1230	1245	77.06	5	7	13	
182		1250	1305	64.77	6	9	13	
193	↓	1310	1320	66.09	6	9	14	
69	ED	0630	0645	48.64	5	6	13	
70	↓	0645	0700	54.49	4	6	12	

Attach Calibration Sheet  
 Attach site map showing grid ID

**ALTAMONT LANDFILL  
INSTANTANEOUS LANDFILL SURFACE MONITORING**

Personnel: LEISHNADE EDDIE D. VILLAS  
Michael Estreou Tyler Anderson  
JERRY M. HAZ Cal Gas Exp. Date: 11-10-24

Date: 4-3-24 Instrument Used: FVA1000 Grid Spacing: 25'

Temperature: 62 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
77		0700	0715	56.92	5	6	13	
76		0715	0730	40.34	5	6	13	
83		0730	0745	33.12	4	5	13	
89		0745	0800	22.16	3	4	14	
96		0805	0820	55.81	3	5	13	
103		0820	0835	39.94	4	5	13	
110		0835	0850	47.80	5	6	14	
118		0850	0905	51.57	5	6	14	
119		0910	0925	81.06	5	7	13	
127		0925	0940	79.70	4	5	14	
126		0940	0955	51.69	3	4	13	
134		1000	1015	65.92	4	5	12	
141		1015	1030	53.02	4	5	12	
142		1030	1045	88.70	4	5	12	
149		1045	1100	68.96	5	6	13	
148		1100	1115	75.57	5	6	13	
172		1210	1225	77.14	5	7	13	
173		1225	1240	91.86	5	7	13	
174		1300	1315	69.61	6	9	14	
175		1315	1330	94.52	5	7	14	

Attach Calibration Sheet  
 Attach site map showing grid ID



# ALTAMONT LANDFILL INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: LEIGH WADDE ROBERT J. M.  
MIGUEL ESTACOA HYUN ANSON  
JERRY MUMFORD Cal. Gas Exp. Date: 11-10-24

Date: 4-4-24 Instrument Used: LVA-1000 Grid Spacing: 25'

Temperature: 40 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS	
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT		
179	LW	0630	0645	50.17	5	10	11		
185	↓	0645	0700	107	3	5	10		
190		0700	0715	82.10	4	8	10		
186		0715	0730	74.33	4	7	10		
180		0730	0745	60.12	5	10	10		
176		0745	0800	42.18	7	10	12		
181	ME	0630	0645	65.31	5	10	11		
187	↓	0645	0700	50.36	3	5	10		
170		0700	0715	38.21	4	8	10		
188		0715	0730	75.60	4	7	10		
192		0730	0745	134	5	10	10		
194	JM	0630	0645	20.77	5	10	11		
195	↓	0645	0700	36.45	3	5	10		
196		0700	0715	29.34	4	8	10		
197		0715	0730	36.55	4	7	10		
198		0730	0745	24.80	5	10	10		
199		0745	0800	57.35	7	10	12		
200		ED	0630	0645	85.77	5	10	11	
201	↓	0645	0700	45.38	3	5	10		
202		0700	0715	34.58	4	8	10		
203		0715	0730	28.67	4	7	10		
204		0730	0745	39.80	5	10	10		
205		0745	0800	41.67	7	10	12		
206		TA	0630	0645	19.54	5	10	11	
207		0645	0700	30.27	3	5	10		
208		0700	0715	28.91	4	8	10		
209		0715	0730	41.60	4	7	10		
210		0730	0745	30.11	5	10	10		
214	↓	0745	0800	47.60	7	10	12		

Attach Calibration Sheet  
 Attach site map showing grid ID

Altitude

YEAR: 2024

QUARTER: 2ND

ALTAMONT (S04305)		
TIME DATE	TIME LOCATION ID	TIME CONCENTRATIONS (PPM)
4-9-24	ALHC0825	28.30
4-2-24	ALLC0695	82.18
4-9-24	ALLC0700	48.15
4-2-24	ALLC0703	74.26
↓	ALLC0709	80.77
	ALLC0734	50.38
	ALLC0736	72.06
	ALLC0737	65.12
	4-9-24	ALLC0738
	ALLC0739	520
	ALLC0740	12.18
	ALLC0743	28.32
	ALLC0744	36.18
	ALLC0745	11.66
	ALLC0746	21.24
	ALLC0747	35.10
	ALLC0748	41.22
	ALLC0749	60.51
	ALLC0755	13.07
	ALLC0775	700
	ALLC0776	48.13
	ALLC0777	31.18
	ALLC0778	31.66
	ALLC0779	15.27
	ALLC0780	18.25
	ALLC0781	39.22
	ALLC0783	14.51
	ALLC0784	20.41
	ALLC0785	70.66
	ALLC0786	45.10
	ALLC0787	15.54
	ALLC0788	17.22
	ALLC0789	21.48
	ALLC0790	18.50
	ALLC0791	26.22
	ALLC0792	17.12
	ALLC0793	10.21

YEAR: 2024  
 QUARTER: 2nd

ALTAMONT (S04305)		
TIME DATE	TIME LOCATION ID	TIME CONCENTRATIONS (PPM)
4-9-24 ↓	ALLC0794	40.77
	ALLC0796	50.75
	ALLC0797	30.80
	ALLC0798	50.45
	ALLC0800	34.20
	ALLC0801	40.60
	ALLC0802	30.06
	ALLC0803	12.50
	ALLC0804	15.75
	ALLC0805	26.30
	ALLC0806	14.52
	ALLC0807	28.30
	ALLC0808	20.24
	ALLC0811	30.75
	ALLC0812	26.45
	ALLC0813	47.58
	ALLC0814	29.70
ALLC0815	19.70	
ALLC0816	29.22	
ALLC0817	31.20	
ALLC0819	46.15	
ALLC0820	21.47	
4-2-24 ↓	ALLC0821	55.72
4-9-24 ↓	ALLC0822	26.21
4-2-24 ↓	ALLC0826	14.70
↓	ALLC0827	78.06
↓	ALLC0828	11.5
4-9-24	ALLC0830	31.25
↓	ALLC0831	15.90
	ALLC0832	25.10
	ALLC0833	40.66
	ALLC0834	18.71
	ALLC0835	26.15
	ALLC0836	27.04
	ALLC0837	24.10
	ALLC0838	34.50
	ALLC0839	24.60

YEAR: 2024  
 QUARTER: 2ND

ALTAMONT (S04305)		
TIME DATE	TIME LOCATION ID	TIME CONCENTRATIONS (PPM)
4-9-24	ALLC0840	70.13
4-2-24	ALLC0841	64.17
	ALLC0842	59.11
	ALLC0843	21.26
	ALLC0844	32.17
	ALLC0845	41.20
	ALLC0846	70.24
	ALLC0847	68.27
	ALLC0848	113
	ALLC0849	50.07
	ALT20001	18.16
	ALT20002	24.22
	ALT20003	34.76
	ALT20004	29.14
	ALT20005	40.77
	ALT20006	28.11
	ALT20007	51.35
	ALT20008	16.24
	ALT20009	29.32
	ALT20010	16.55
	ALT20011	39.41
	ALT20012	21.26
	ALT20013	35.11
	ALT20014	50.77
	ALT20015	62.34
	ALT20016	48.30
	ALT20017	32.12
	ALT20018	24.36
	ALT20019	30.57
ALT20020	40.65	
ALT20021	68.47	
ALT20022	32.18	
ALT20023	29.60	
ALT20024	37.81	
ALT20025	45.26	
ALT20026	28.44	
ALT20027	24.18	

624 - Altamont (S04305) Penetration Scan Results, Exceedances, and Corrective Actions

YEAR: 2024  
 QUARTER: 2nd

4-2-24	ALT20028	17.34
↓	ALT20029	40.16
4-9-24	ALTA0003	38.50
4-2-24	ALTA0054	37.60
↓	ALTA0056	90.12
	ALTA0059	31.55
4-9-24	ALTA0087	39.21
4-2-24	ALTA0108	10.16
4-9-24	ALTA0201	6006
↓	ALTA0472	80.24
<b>ALTAMONT (S04305)</b>		
<b>IME DATE</b>	<b>IME LOCATION ID</b>	<b>IME CONCENTRATIONS (PPM)</b>
4-2-24	ALTA0483	34.22
4-9-24	ALTA0488	42.13
4-2-24	ALTA0491	31.15
↓	ALTA0508	75.22
	ALTA0517	124
↓	ALTA0518	108
4-9-24	ALTA0529	111
4-2-24	ALTA0541	39.27
↓	ALTA0545	52.11
↓	ALTA0551	77.30
4-9-24	ALTA0578	105
↓	ALTA0579	90.12
4-2-24	ALTA0589	32.40
4-9-24	ALTA0611	57.15
↓	ALTA0612	40.18
4-2-24	ALTA0624	48.13
↓	ALTA0629	40.18
4-9-24	ALTA0639	51.10
↓	ALTA0650	39.18
	ALTA0651	77.20
	ALTA0652	45.30
	ALTA0654	41.80
	ALTA0664	39.12
	ALTA0668	27.14
	ALTA0669	48.30
	ALTA0678	24.22
4-2-24	ALTA0682	51.77

YEAR: 2024  
 QUARTER: 2nd

4-9-24	ALTA0712	28.60
↓	ALTA0713	5.000
	ALTA0714	38.06
	ALTA0751	38.11
	ALTA0753	40.22
	ALTA0755	13.07
	ALTA0756	18.12
	ALTA0759	31.18
ALTAMONT (S04305)		
TIME DATE	TIME LOCATION ID	TIME CONCENTRATIONS (PPM)
4-9-24	ALTA0760	26.07
↓	ALTA0761	70.32
	ALTA0762	40.55
4-2-24	ALTA0764	35.10
4-9-24	ALTA0765	18.26
↓	ALTA0766	24.50
	ALTA0767	15.05
	ALTA0769	31.15
	ALTA0770	28.14
	ALTA0771	70.32
	ALTA0772	1,000
	ALTA0733	106
	ALTA0850	21.37
	ALTA0851	19.20
	ALTA0852	17.60
	ALTA0853	24.91
	ALTA0854	32.10
	ALTA0855	37.20
	ALTA0856	41.77
	ALTA0857	30.70
	ALTA0858	24.66
	ALTA0859	35.20
	ALTA0860	41.10
	ALTA0861	50.17
	ALTO862A	39.20
ALTA0863	25.21	
ALTA0864	42.15	
ALTA0865	39.85	
ALTA0866	31.22	

YEAR: 2024  
 QUARTER: 2nd

4-9-24	ALTA0867	107
↓	ALTA0868	34.52
	ALTA0869	40.11
	ALTA0870	51.36
	ALTA0872	70.14
	ALTA0873	80.11
	ALTA0875	40.16
	ALTA0876	34.50
ALTAMONT (S04305)		
IME DATE	IME LOCATION ID	IME CONCENTRATIONS (PPM)
4-9-24	ALTA0877	700
4-2-24	ALTA0878	80.75
↑	ALTA0879	50.13
	ALTAFP02	70
	ALTAFP03	64
	ALTAFP04	87
	ALTAFP05	77
	ALTAFP06	118
	ALTAFP07	56
	ALTAFP08	94
	ALTAFP09	121
	ALTAFP10	85
	ALTAFP11	70
	ALTAFP12	75
	ALTAFP13	108
	ALTAFP14	92
	ALTAFP15	180
	ALTAFP16	77
	ALTAFP17	125
	ALTAFP18	92
	ALTAFP19	150
	ALTAFP20	142
ALTAFP21	170	
ALTAFP22	95	
ALTAFP23	70	
ALTAFP24	105	
ALTAFP25	75	
ALTAFP26	65	
ALTAFP27	74	

YEAR: 2024  
 QUARTER: 2nd

4-2-24 ↓	ALTAFP28	67
	ALTAFP29	41
	ALTAFP30	82
	ALTAFP31	106
	ALTAFP32	98
	ALTAFP33	86
	ALTAFP34	113
	ALTAFP35	125
	ALTAFP36	130
	ALTAFP37	88
ALTAFP38	64	
<b>ALTAMONT (S04305)</b>		
<b>IME DATE</b>	<b>IME LOCATION ID</b>	<b>IME CONCENTRATIONS (PPM)</b>
4-2-24 ↓	ALTAFP39	99
	ALTAFP40	107
	ALTAFP41	65
	ALTAFP42	84
	ALTAFP43	75
	ALTAFP44	111
	ALTAFP45	108
	ALTAFP46	114
	ALTAFP47	92
	ALTAFP48	80
	ALTAFP49	75
	ALTAFP50	94
	ALTAFP51	85
	ALTAFP52	110
	ALTAFP53	54
	ALTAFP54	70
	ALTAFP55	92
	ALTAFP56	77
	ALTAFP60	45
	ALTAFP61	87
ALTAFP62	105	
ALTAFP63	66	
ALTAFP64	94	
ALTAFP65	59	
ALTAFP66	78	
ALTAFP67	66	



YEAR: 2024  
 QUARTER: 2nd

4-2-24	ALTAFP68	77
↓	ALTAFP69	108
	ALTAFP70	94
	ALTAFP71	54
	ALTAFP72	78
	ALTAFP73	69
	ALTAFP74	110
	ALTAFP75	55
	ALTAFP76	84
	ALTAFP77	79
	ALTAFP78	116
	ALTAFP79	84
ALTAMONT (S04305)		
IME DATE	IME LOCATION ID	IME CONCENTRATIONS (PPM)
4-2-24	ALTAFP80	115
↓	ALTAFP81	127
	ALTAFP82	84
	ALTAFP83	115
	ALTAFP84	88
	ALTAFP85	97
	ALTAFP86	104
	ALTAFP87	180
	ALTAFP88	125
4-9-24	ALTOTC15	34.22
4-9-24	ALUC0824	600
	DC683	600
4-9-24	VD2	30.28
4-9-24	VZMA	24.06
	SVF1	<del>89.44</del> 600
4-9-24	LS2	36.80
	LS5	600
	INJWELL104	600
4-2-24	ALLCSVEI	78.65
4-9-24	WELL 880	700 PPM
4-9-21	WELL 686	25.12

**LEGEND**





- EXISTING 10' CONTOUR
- EXISTING LFG EXTRACTION WELL
- EXISTING CONDENSATE INJECTION WELL
- EXISTING LOCAL CONTROL WELL
- EXISTING REMOTE WELLHEAD
- SEM GRID BLOCK

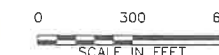
105

 = ASBESTOS AREA NOT MONITORED

*Intake towers*  
 4-2-24  
 4-3-24  
 4-4-24  
 4-9-24

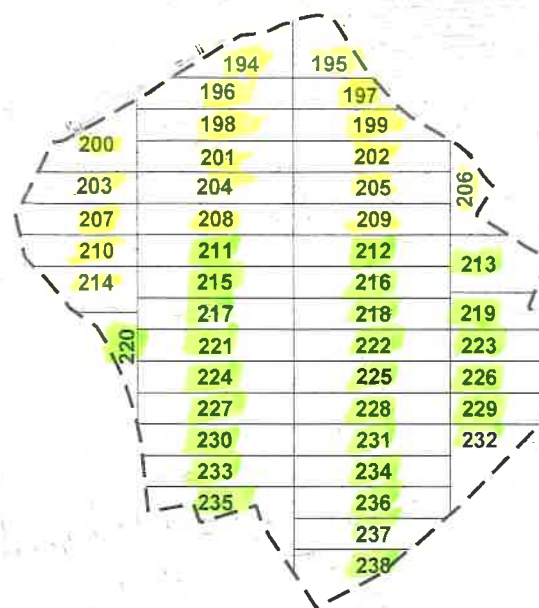
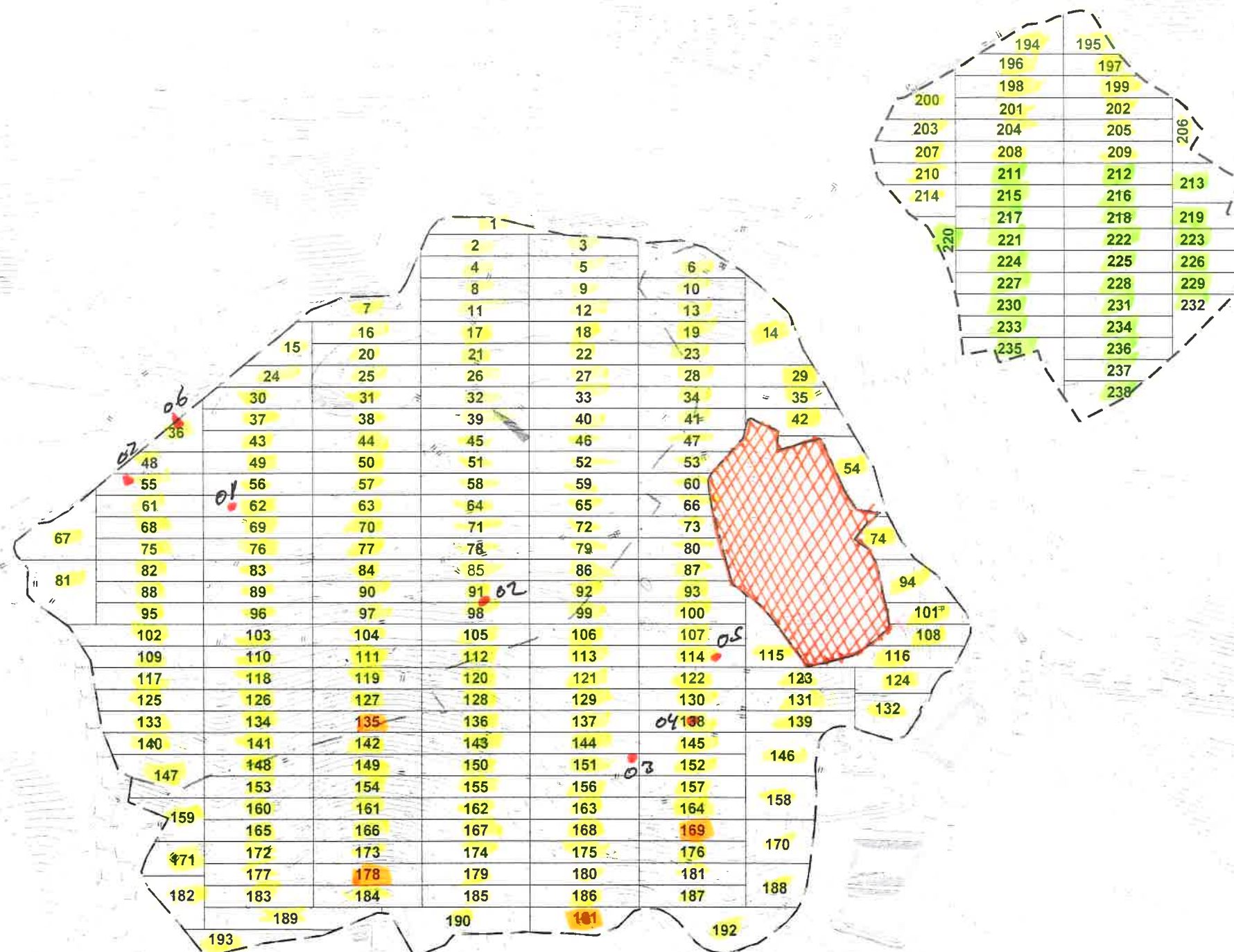


-  GRIDS NOT DRAWN
-  ACTIVE TRACS
-  STOP-VEG
-  SPOTPP



**NOTES:**

1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY MILLER CREEK AERIAL MAPPING INC. DATE OF PHOTOGRAPHY: DECEMBER 13, 2022. DATUM: HORIZONTAL - ZONE 3, NAD27, VERTICAL - NGVD29.
2. SUPPLEMENTAL 2014 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA PROVIDED BY EMAIL FROM F3 & ASSOCIATES. DATE OF SURVEY: FEBRUARY 17, 2015.
3. SUPPLEMENTAL 2015 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: DECEMBER 18, 2015 AND FEBRUARY 25, 2016. ADDITIONAL FIELD MARKUPS PROVIDED BY WM DATED MAY 17, 2016.
4. THE 2016 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: DECEMBER 22, 2016.
5. THE 2017 GCCS IMPROVEMENTS AS-BUILT WELL LOCATIONS PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE SURVEYS RECEIVED: APRIL 17, 2018.
6. THE 2018 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: JUNE 26 AND JULY 30, 2018.
7. ASBESTOS AREA BOUNDARY LOCATION PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: APRIL 7, 2016.
8. THE 2019 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: JANUARY 31 AND FEBRUARY 12, 2020.
9. THE 2020 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: JANUARY 7 AND 30, FEBRUARY 12, APRIL 22 AND 30, AND JUNE 19, 2020.
10. SUPPLEMENTAL 2020 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: JULY 31, 2020.
11. FORCE MAIN PIPING LOCATIONS PER MARKUPS PROVIDED BY WM. DATE OF MARKUPS: APRIL 7, APRIL 9, AND MAY 7, 2020.
12. THE 2021 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: NOVEMBER 23, 2021, DECEMBER 9, 2021, DECEMBER 13, 2021, AND MARCH 8, 2022.
13. THE 2022 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: JUNE 8, 2023.



REV	DATE	DESCRIPTION	OWN BY	DES BY	CHK BY	APP BY

ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY  
 ALAMEDA COUNTY, CALIFORNIA

**2023 GCCS IMPROVEMENTS SEM GRID MAP**

SHEET NO.  
**7**  
 PROJECT NO.  
 230016

**FINAL RECORD DRAWINGS**

File: C:\Users\jwagner\OneDrive\Documents\Temp\Altamont\230016.dwg, Plot: 230016.dwg, Plot Date: 07/07/23, 11:02 AM, Plot Size: 11.00 x 17.00, Plot Scale: 1.00, Plot Orientation: Landscape, Plot Color: Black, Plot Lineweight: 0.20, Plot Linetype: Solid, Plot Font: Arial, Plot Font Size: 10.00, Plot Font Color: Black, Plot Font Style: Normal, Plot Font Weight: Normal, Plot Font Underline: Off, Plot Font Overlap: Off, Plot Font Spacing: Normal, Plot Font Stretch: Normal, Plot Font Color: Black, Plot Font Size: 10.00, Plot Font Color: Black, Plot Font Style: Normal, Plot Font Weight: Normal, Plot Font Underline: Off, Plot Font Overlap: Off, Plot Font Spacing: Normal, Plot Font Stretch: Normal

- LEGEND**
- EXISTING 10' CONTOUR
  - EXISTING LFG EXTRACTION WELL
  - EXISTING CONDENSATE INJECTION WELL
  - EXISTING LOCAL CONTROL WELL
  - EXISTING REMOTE WELLHEAD

**105** SEM GRID BLOCK

 = ASBESTOS AREA NOT MONITORED

*2nd Quarter NSPS  
Perimeter Survey*



*UPWIND* (blue dot)

*DOWNWIND* (red dot)



- NOTES:**
1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY MILLER CREEK AERIAL MAPPING INC. DATE OF PHOTOGRAPHY: DECEMBER 13, 2022. DATUM: HORIZONTAL - ZONE 3, NAD27, VERTICAL - NGVD29.
  2. SUPPLEMENTAL 2014 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA PROVIDED BY EMAIL FROM F3 & ASSOCIATES. DATE OF SURVEY: FEBRUARY 17, 2015.
  3. SUPPLEMENTAL 2015 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEYS PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA DATE OF SURVEYS: DECEMBER 18, 2015 AND FEBRUARY 25, 2016. ADDITIONAL FIELD MARKUPS PROVIDED BY WM DATED MAY 17, 2016.
  4. THE 2016 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: DECEMBER 22, 2016.
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  6. THE 2018 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: JUNE 26 AND JULY 30, 2018.
  7. ASBESTOS AREA BOUNDARY LOCATION PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: FEBRUARY 7, 2016.
  8. THE 2019 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: JANUARY 31 AND FEBRUARY 12, 2020.
  9. THE 2020 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: JANUARY 7 AND 30, FEBRUARY 12, APRIL 22 AND 30, AND JUNE 19, 2020.
  10. SUPPLEMENTAL 2020 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: JULY 31, 2020.
  11. FORCE MAIN PIPING LOCATIONS PER MARKUPS PROVIDED BY WM. DATE OF MARKUPS: APRIL 7, APRIL 9, AND MAY 7, 2020.
  12. THE 2021 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: NOVEMBER 23, 2021, DECEMBER 9, 2021, DECEMBER 13, 2021, AND MARCH 8, 2022.
  13. THE 2022 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEYS: JUNE 8, 2023.

**FINAL RECORD DRAWINGS**



REV	DATE	DESCRIPTION	CHK BY	DES BY	APP BY

DATE OF ISSUE: 07/07/23  
 DRAWN BY: JCK  
 DESIGNED BY: CME  
 CHECKED BY: AMH  
 APPROVED BY: EJS



ALTAMONT LANDFILL AND  
 RESOURCE RECOVERY FACILITY  
 ALAMEDA COUNTY, CALIFORNIA

**2023 GCCS IMPROVEMENTS  
 SEM GRID MAP**

SHEET NO  
**7**

PROJECT NO  
 230018

File: C:\Users\jck\OneDrive\Documents\2023\2023\_07\_07\_143046.dwg, Plot: 07/07/23 14:30:46, Job ID: 2023 - 01-10-00

**Attachment B**

Integrated Surface Emission Monitoring Event Records

**Table B.1  
Integrated Landfill Surface Monitoring  
Exceedances and Monitoring Log**

**2024 QUARTER: 2**

**INITIAL MONITORING PERFORMED BY:** RES

**FOLLOW-UP MONITORING PERFORMED BY:** NA

**LANDFILL NAME: Altamont Landfill and Resource Recovery Facility**

Initial Monitoring Event			1st Re-mon Event - 10 Days			Comments
Exceedance	Monitoring	Field	Monitoring	No Exced.	No Exced.	
Grid ID No.	Date	Reading	Date	<25 ppm	>25 ppm	
No exceedances						

ALTAMONT LANDFILL  
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEIGH WADE      RODOLFO DELA ROSA  
MICHAEL STANARD      TYLOR ANDERSON  
JERRY MORALES      \_\_\_\_\_  
 Cal Gas Exp. Date: 11-10-24

Date: 4-8-24      Instrument Used: VA1000      Grid Spacing: 25'  
 Temperature: 60      Precip: 0      Upwind B.G.: 2.8      Downwind B.G.: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
7	lw	0935	0955	20.17	5	7	4	
15		0955	1015	18.49	5	6	4	
16		1015	1040	12.71	6	8	5	
20		1040	1100	14.58	6	8	5	
25		1100	1120	10.61	5	6	6	
24		1120	1135	18.52	5	6	6	
30		1135	1155	16.40	4	6	5	
31		1155	1210	10.37	4	5	5	
38		1210	1230	9.56	4	5	4	
37		1230	1250	14.25	4	6	4	
43		1250	1310	16.92	5	7	5	
44		1310	1330	11.24	5	6	5	
50		1330	1355	8.62	6	7	4	
49		1400	1425	13.21	4	5	4	
51	v	1425	1450	9.68	5	6	4	
70	ME	0930	0955	8.10	5	7	4	
69		0955	1020	12.47	5	7	5	
76		1020	1045	10.21	5	6	5	
77		1045	1110	8.52	5	7	6	
78		1110	1135	7.38	5	6	6	
79		1135	1200	7.41	5	7	6	
80		1200	1225	8.20	5	6	4	
87		1225	1250	7.60	4	5	4	
86		1250	1315	6.55	4	5	5	
85		1315	1340	6.92	5	7	5	
84		1340	1405	7.06	5	6	6	
83		1405	1430	13.16	4	5	4	
89		1430	1455	11.55	5	6	4	
90		1455	1520	7.52	5	6	4	
91	v	1520	1545	7.06	4	5	4	

Attach Calibration Sheet  
 Attach site map showing grid ID

ALTAMONT LANDFILL  
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEIGH WADK ANDRE DE LIMA  
MICHAEL COSTA LYDIA ANDERSON  
JERRY MENDOZA Cal Gas Exp Date: 11-10-24

Date: 4-8-24 Instrument Used: TVA10W Grid Spacing: 2.5'  
 Temperature: 65 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
52	JM	0930	0955	7.81	5	7	4	
53		0955	1020	16.41	5	7	5	
60		1020	1045	9.77	5	6	5	
59		1045	1110	8.87	5	7	6	
58		1110	1135	7.26	5	6	6	
57		1135	1200	6.55	5	7	6	
56		1200	1225	10.18	5	6	4	
62		1225	1250	11.47	4	5	4	
63		1250	1320	8.12	4	5	5	
64		1320	1345	7.43	5	7	5	
65		1345	1410	7.10	4	5	5	
66		1410	1435	6.40	4	5	4	
73		1435	1520	6.10	5	6	4	
72		1520	1545	6.38	4	5	4	
71		1545	1610	7.04	4	6	4	
1	ED	0930	0955	12.15	5	7	4	
2		0955	1020	10.77	5	7	5	
3		1020	1045	14.60	5	6	5	
6		1045	1110	19.42	5	7	6	
5		1110	1135	14.38	5	6	6	
4		1135	1200	10.26	5	7	6	
8		1200	1225	8.51	5	6	4	
9		1225	1250	12.39	4	5	4	
10		1250	1315	20.22	4	5	5	
13		1320	1345	16.58	5	7	4	
12		1345	1410	10.18	4	5	5	
11		1410	1435	8.56	4	5	4	
17		1435	1500	6.47	5	6	4	
18		1500	1525	10.90	5	6	4	
19		1525	1550	13.71	4	5	4	

Attach Calibration Sheet  
 Attach site map showing grid ID

ALTAMONT LANDFILL  
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEIGH WALKER EDDIE DE 1.29  
MICHAEL ESTACONA ty/BEN CRANSON  
JERRY MANOZ

Cal. Gas Exp. Date: 11-10-24

Date: 4-8-24 Instrument Used: LUA1000 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 15 POINT	
21	LA	0930	0955	7.11	5	7	4	
22		0955	1020	7.45	5	7	5	
23		1020	1045	9.60	5	6	5	
24		1045	1110	13.22	5	7	6	
27		1110	1125	10.71	5	6	6	
26		1125	1200	9.43	5	7	6	
32		1200	1225	7.50	5	6	4	
33		1225	1250	7.12	4	6	4	
34		1250	1315	11.39	5	7	5	
41		1315	1340	9.65	5	7	5	
40		1340	1405	7.80	5	6	6	
39		1405	1430	8.32	4	5	4	
45		1430	1455	7.13	5	6	4	
46		1455	1520	8.04	5	6	4	
47		1520	1545	9.57	4	5	4	

Attach Calibration Sheet  
 Attach site map showing grid ID



ALTAMONT LANDFILL  
INTEGRATED LANDFILL SURFACE MONITORING

Project: Migliorista Area tylman area  
JERRY KENNEDY  
APP. 2/15/09

Cal. Gas Exp. Date: 11-10-24

Date: 4-9-24 Instrument Used: LVA 1000 Grid Spacing: 25'

Temperature: 50 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.8

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX SPEED	DIRECTION 16 POINT	
92	ME	0630	0655	8.70	3	4	2	
93		0655	0720	6.51	3	4	2	
100		0720	0745	7.92	3	4	1	
99		0745	0810	9.41	2	4	2	
98		0810	0835	8.17	3	5	2	
97		0835	0900	7.76	3	4	4	
96		0900	0925	10.30	4	6	6	
103		0925	0955	8.41	4	5	6	
104		0955	1020	6.86	3	5	6	
105		1020	1045	7.44	4	5	6	
106		1045	1110	6.98	4	6	6	
107		1200	1225	6.52	3	5	6	
114		1225	1250	7.18	3	5	5	
113		1250	1315	8.14	3	4	4	
112	V	1315	1340	7.92	2	3	4	
138	JM	0630	0655	11.77	3	4	2	
139		0655	0720	9.50	3	4	2	
146		0720	0745	10.66	3	4	1	
145		0745	0810	12.71	2	4	2	
144		0810	0835	9.30	3	5	2	
143		0835	0900	8.64	3	4	4	
142		0900	0925	12.90	4	6	6	
141		0925	0950	10.46	4	5	6	
148		0950	1015	9.60	3	5	6	
149		1015	1040	11.47	4	5	6	
150		1040	1105	13.86	4	6	5	
151		1105	1130	10.35	5	6	6	
152		1130	1155	17.12	2	3	5	
157		1300	1325	14.57	3	5	6	
158	V	1325	1350	11.64	4	6	4	

Attach Calibration Sheet  
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ALTAMONT LANDFILL  
INTEGRATED LANDFILL SURFACE MONITORING

PERSONNEL: Miguel Estrecha  
Jenny Munn  
EOD: C. Deane

fy/m Anderson

Cal Gas Exp Date: 11-10-24

Date: 4-9-24 Instrument Used: VU1000 Grid Spacing: 25'

Temperature: 68 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 15 POINT	
111	EO	0630	0655	7.49	3	4	2	
110		0655	0720	6.96	3	4	2	
118		0720	0745	6.14	3	4	1	
119		0745	0810	6.24	2	4	2	
120		0810	0835	7.11	3	5	2	
121		0835	0900	8.60	3	4	4	
122		0900	0925	7.44	4	6	6	
130		0925	0950	8.41	4	5	6	
129		0950	1015	7.38	3	5	6	
128		1015	1040	9.12	4	5	6	
127		1040	1105	6.45	4	6	5	
126		1230	1255	9.15	3	5	5	
134		1215	1320	8.33	3	5	6	
136		1320	1345	6.41	2	3	4	
137	✓	1345	1410	8.16	2	3	6	
14	+A	0630	0655	20.77	3	4	2	
29		0655	0720	9.60	3	4	2	
35		0720	0745	11.14	2	4	2	
42		0745	0810	9.41	2	4	2	
54		0810	0835	7.60	3	5	2	
74		0835	0900	8.32	3	4	4	
84		0900	0925	6.55	4	6	6	
101		0925	0950	10.31	4	5	6	
108		0950	1015	9.16	3	5	6	
116		1015	1040	8.41	4	5	6	
115		1040	1105	7.28	4	6	5	
123		1205	1230	11.55	3	5	6	
124		1230	1255	12.62	3	5	5	
132		1255	1320	9.88	3	5	6	
131	✓	1320	1345	10.41	2	3	4	

Attach Calibration Sheet  
Attach site map showing grid ID

## ALTAMONT LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LOISLWROK ENOCORLINE  
MICHAEL ESTACON TYLER ANDERSON  
JERRY ALLEN Cal. Gas Expo. Date: 11-10-24

Date: 4-10-24 Instrument Used: LV A1000 Grid Spacing: 25'

Temperature: 51 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
200	LW	0640	0700	7.88	4	6	1	
201		0700	0720	6.65	4	6	1	
202		0720	0740	7.22	4	6	1	
206		0740	0750	6.94	4	6	1	
205		0750	0815	7.15	3	4	1	
204		0815	0840	6.50	3	4	1	
203		0840	0900	8.55	3	4	2	
207		0900	0920	9.70	3	4	1	
210		0920	0940	10.47	2	3	1	
214		0940	1000	8.77	3	4	16	
208		1000	1020	8.52	2	3	16	
209	✓	1020	1040	7.58	2	4	1	
170	ME	0630	0655	7.50	4	6	1	
176		0655	0720	8.64	4	6	1	
175		0720	0745	10.81	4	6	1	
180		0745	0810	12.21	3	4	1	
181		0810	0835	9.68	3	4	1	
188		0835	0900	14.52	3	4	2	
187		0900	0925	16.49	3	4	1	
186		0925	0950	13.80	3	3	16	
192		0950	1015	19.57	2	3	16	
194		1035	1100	8.60	2	4	16	
195		1100	1125	6.47	5	6	2	
197		1125	1150	9.12	4	6	2	
196		1150	1215	7.32	5	6	16	
198		1215	1240	7.06	4	5	1	
199	✓	1240	1305	8.14	3	5	16	
36	JM	0630	0645	22.12	4	5	2	
48		0645	0700	20.19	4	6	1	
55	✓	0700	0715	17.38	4	6	1	

Attach Calibration Sheet  
 Attach site map showing grid ID

# ALTAMONT LANDFILL INTEGRATED LANDFILL SURFACE MONITORING

Personnel: LEIGHANN EDDIE DELING  
MIGUEL ESTACERA TYLOR MANNION  
JERRY ALLEN Cal. Gas Exp. Date: 11-10-24

Date: 11-10-24 Instrument Used: YU-1020 Grid Spacing: 25'

Temperature: 57 Precip: 0 Upwind BG: 2.8 Downwind BG: 2.2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
61		0715	0730	15.46	4	5	16	
67		0730	0745	12.40	4	6	1	
68		0745	0800	14.58	3	4	2	
75		0800	0815	11.60	3	4	1	
82		0815	0830	9.58	3	4	1	
81		0830	0845	8.20	4	5	2	
88		0845	0920	10.40	3	4	1	
95		0920	0945	8.65	2	3	1	
102		0945	1000	7.60	3	4	16	
109		1000	1010	8.45	3	4	16	
117		1010	1020	11.70	2	3	16	
125	✓	1020	1030	9.66	2	3	1	
193	ED	0630	0645	11.50	4	5	2	
189		0645	0700	13.65	4	6	1	
183		0700	0715	10.40	4	6	1	
184		0715	0740	14.66	4	6	1	
190		0740	0805	12.20	3	4	2	
185		0805	0830	11.52	3	4	1	
179		0830	0840	12.60	3	4	1	
174		0840	0850	14.55	3	4	1	
167		0850	0910	10.81	3	4	2	
162		0910	0910	12.45	3	4	2	
155		0910	0920	9.71	3	4	1	
156		0920	0945	8.60	2	3	1	
163		0945	1010	6.64	3	4	16	
164		1010	1025	9.71	2	3	1	
168	✓	1025	1100	8.50	2	4	16	
133	TA	0630	0645	8.14	4	5	16	
140	↓	0845	0920	9.70	4	6	1	
147	↓	0920	0945	7.22	4	6	1	

Attach Calibration Sheet  
 Attach site map showing grid ID



ALTAMONT LANDFILL  
INTEGRATED LANDFILL SURFACE MONITORING

Personnel LEISHMAN

Cal Gas Exp Date \_\_\_\_\_

Date 4-10-24 Instrument used \_\_\_\_\_ Grid Spacing \_\_\_\_\_

Temperature \_\_\_\_\_ Precip \_\_\_\_\_ Upwind BG: \_\_\_\_\_ Downwind BG \_\_\_\_\_

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 15 POINT	
135								STEPP-V06
178								
169								↓
191								
211								ACTIVE-TR1?
212								
213								
215								
216								
217								
218								
219								
220								
221								
222								
223								
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225								
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229								
230								
231								
232								
233								
234								
235								
236								
237								

Attach Calibration Sheet  
Attach site map showing grid ID



**LEGEND**

- EXISTING 10' CONTOUR
- EXISTING LFG EXTRACTION WELL
- EXISTING CONDENSATE INJECTION WELL
- EXISTING LOCAL CONTROL WELL
- EXISTING REMOTE WELLHEAD
- SEM GRID BLOCK

105



= ASBESTOS AREA NOT MONITORED

- INTEGRATED
- GR.O.S. MONITORING
- Active-Test
- STOP-VAB

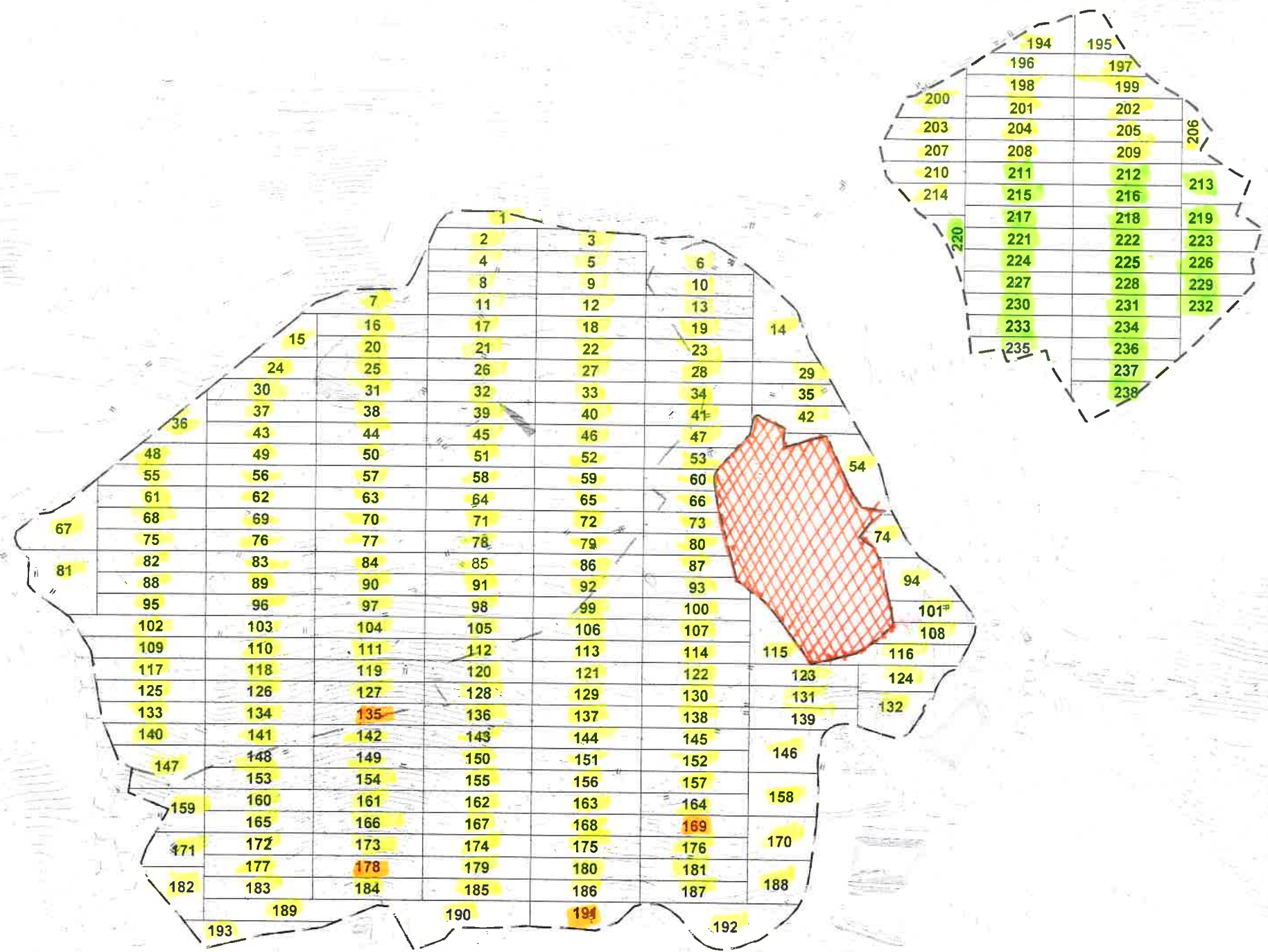
4-8-24  
4-9-24  
4-10-24



0 300 600  
SCALE IN FEET

**NOTES:**

1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY MILLER CREEK AERIAL MAPPING INC. DATE OF PHOTOGRAPHY: DECEMBER 13, 2022. DATUM: HORIZONTAL - ZONE 3, NAD27, VERTICAL - NAVD29.
2. SUPPLEMENTAL 2014 GCCS IMPROVEMENTS AS-BUILT PIPING PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA PROVIDED BY EMAIL FROM F3 & ASSOCIATES. DATE OF SURVEY: FEBRUARY 17, 2015.
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REV	DATE	DESCRIPTION	OWN BY	DES BY	CHK BY	APP BY
07/07/23						



**FINAL RECORD DRAWINGS**

ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY  
ALAMEDA COUNTY, CALIFORNIA

**2023 GCCS IMPROVEMENTS SEM GRID MAP**

SHEET NO. **7**

PROJECT NO. 235018

1" = 100' 0" (Scale)  
 Date: 07/07/23  
 File: C:\Users\j... \Documents\2023\2023\_GCCS\_Improvements\2023\_GCCS\_Improvements.dwg  
 Project: 235018



**Attachment C**

Component Leak Monitoring Event Records

**Table C.1**  
**AB-32 Component Leak Monitoring**  
**Summary of Component Leaks Greater than 500 ppmv**

**2024 QUARTER: 2**

**INITIAL MONITORING PERFORMED BY: ALRRF**

**FOLLOW-UP MONITORING PERFORMED BY: ALRRF**

**LANDFILL NAME: Altamont Landfill and Resource Recovery Facility**

Location	Initial Monitoring			Corrective Action		10-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
A15- Flare Station	4/10/2024	ND						
A16- Flare Station	4/10/2024	ND						
S6 and S7 Turbines	5/3/2024	ND						

Note: LNG Plant was shutdown during the entire quarter and is being decommissioned.

ND= No exceedances detected

**Table C.2**  
**BAAQMD Component Leak Monitoring**  
**Summary of Component Leaks Greater than 1,000 ppmv**

**2024 QUARTER:** 2

**INITIAL MONITORING PERFORMED BY:** ALRRF

**FOLLOW-UP MONITORING PERFORMED BY:** ALRRF

**LANDFILL NAME:** Altamont Landfill and Resource Recovery Facility

Location	Initial Monitoring			Corrective Action		7-Day Remonitoring		
	Date	TOC (ppmv)	Tech	Date	Description	Date	TOC (ppmv)	Tech
A15- Flare Station	4/10/2024	ND						
A16- Flare Station	4/10/2024	ND						
S6 and S7 Turbines	5/3/2024	ND						

Note: LNG Plant was shutdown during the entire quarter and is being decommissioned.

ND= No exceedances detected

**QUARTERLY LFG COMPONENT LEAK MONTORING**

EQUIPMENT:	A15															
INSTRUMENT:	FID															
MAKE:	Photovac															
MODEL:	Micro FID															
S/N:	CZPD312															
DATE OF SAMPLING:	04.10.24															
TECHNICIAN:	Garry Carpenter															
LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Discharge Blower			Flame Arrestor			Header Pipe to Flare & Sensors		Propane Tank and Piping	
	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#1	#2
<b>A-15 Flare Station</b>																
TEST DATE	04.10.24			04.10.24			04.10.24			04.10.24			04.10.24		04.10.24	
LEAK CONCENTRATION FOUND (ppm)	N/D			N/D			N/D			N/D			N/D		N/D	
ACTION TAKEN																
REPAIR DATE																
RE-TEST DATE																
RE-TEST CONCENTRATION (ppm)																
Comments: <b>Bolt connections (expansion chamber) were tightened.</b>																
Note:	<p>In the event that an exceedance is detected, please initiate corrective action and <b>re-monitor the exceedance location within 7 days</b> of the initial exceedance.</p> <p>Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).</p> <p>Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.</p>															

**QUARTERLY LFG COMPONENT LEAK MONITORING**

EQUIPMENT:	A16 Flare
INSTRUMENT:	Photovac
MAKE:	Thermo scientific
MODEL:	Micro FID
S/N:	CZPD312
DATE OF SAMPLING:	04.10.24
TECHNICIAN:	Garry Carpenter

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Flare Valves, Sensors and Piping			Blowers			LNG Valves, Sensors and Piping to LNG Isolation Valve			Header to Landfill			Propane Tanks and Piping		IC Engine Valves and Sensors			IC Engine Compression Skid			IC Engine Manifold Piping and Metal Container					
	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#1	#2	#3	#1	#2	#3	#1	#2	#3			
<b>A-16</b>																																
TEST DATE	04.10.24			04.10.24			04.10.24			04.10.24			04.10.24			04.10.24			04.10.24													
LEAK CONCENTRATION FOUND (ppm)	N/D			N/D			N/D			N/D			N/D			N/D			N/D													
ACTION TAKEN																																
REPAIR DATE																																
RE-TEST DATE																																
RE-TEST CONCENTRATION (ppm)																																

Comments: LNG Plant was out of service starting July 1, 2024.

Note: In the event that an exceedance is detected, please initiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.  
 Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).  
 Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

**QUARTERLY LFG COMPONENT LEAK MONITORING**

EQUIPMENT:	Turbine Gas skids
INSTRUMENT:	FID
MAKE:	Photovac
MODEL:	MicroFiD I/S
S/N:	CZPD312
DATE OF SAMPLING:	5/3/2024
TECHNICIAN:	L.LaCerra

LOCATION OF LEAK(S)	Bolted Connections			Pipes (Flanged, Unions)			Roots Flex Couplings			Howden Compressor	Interstage Vessel			Oil/Gas Separator Vessel			Gas Separator Vessel		Cooling Towers/ Heat Exchanger Piping		
	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#1	#2	#3	#1	#2	#3	#1	#2	#1	#2	#3
<b>Compressor skid # 1</b>																					
TEST DATE	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24
LEAK CONCENTRATION FOUND (ppm)	8.0 PPM			12.0 PPM			3.0 PPM			1.0 PPM	3.0 PPM			3.0 PPM			2.0 PPM		1.0 PPM		
ACTION TAKEN																					
REPAIR DATE																					
RE-TEST DATE																					
RE-TEST CONCENTRATION (ppm)																					
<b>Compressor skid # 2</b>																					
TEST DATE	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24	5/3/24
LEAK CONCENTRATION FOUND (ppm)	2.0 PPM			6.0 PPM			9.0 PPM			2.0 PPM	2.0 PPM			5.0 PPM			3.0 PPM		3.0 PPM		
ACTION TAKEN																					
REPAIR DATE																					
RE-TEST DATE																					
RE-TEST CONCENTRATION (ppm)																					

Comments:

Note: In the event that an exceedance is detected, please initiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.  
 Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).  
 Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

**QUARTERLY LFG COMPONENT LEAK MONITORING**

EQUIPMENT:	Turbine Gas skids
INSTRUMENT:	FID
MAKE:	Photovac
MODEL:	MicroFiD I/S
S/N:	CZPD312
DATE OF SAMPLING:	5/3/2024
TECHNICIAN:	L.LaCerra

LOCATION OF LEAK(S)	Bolted connections			Pipes (flanged, unions)			Inlet piping and valves			Sensors, transducers			Propane tank & piping			Gas manifold and piping				
	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#4	#5
<b>Turbine 1</b>	5/3/24			5/3/24			5/3/24			5/3/24			5/3/24			5/3/24				
TEST DATE	5/3/24			5/3/24			5/3/24			5/3/24			5/3/24			5/3/24				
LEAK CONCENTRATION FOUND (ppm)	3.0 PPM			1.0 PPM			2.0 PPM			1.0 PPM			1.0 PPM			4.0 PPM				
ACTION TAKEN																				
REPAIR DATE																				
RE-TEST DATE																				
RE-TEST CONCENTRATION (ppm)																				
<b>Turbine 2</b>	5/3/24			5/3/24			5/3/24			5/3/24			5/3/24			5/3/24				
TEST DATE	5/3/24			5/3/24			5/3/24			5/3/24			5/3/24			5/3/24				
LEAK CONCENTRATION FOUND (ppm)	3.0 PPM			2.0 PPM			11.0 PPM			2.0 PPM			1.0 PPM			150 PPM				
ACTION TAKEN																Tightened fittings				
REPAIR DATE																5/3/24				
RE-TEST DATE																5/3/24				
RE-TEST CONCENTRATION (ppm)																4.0 PPM				

Comments:

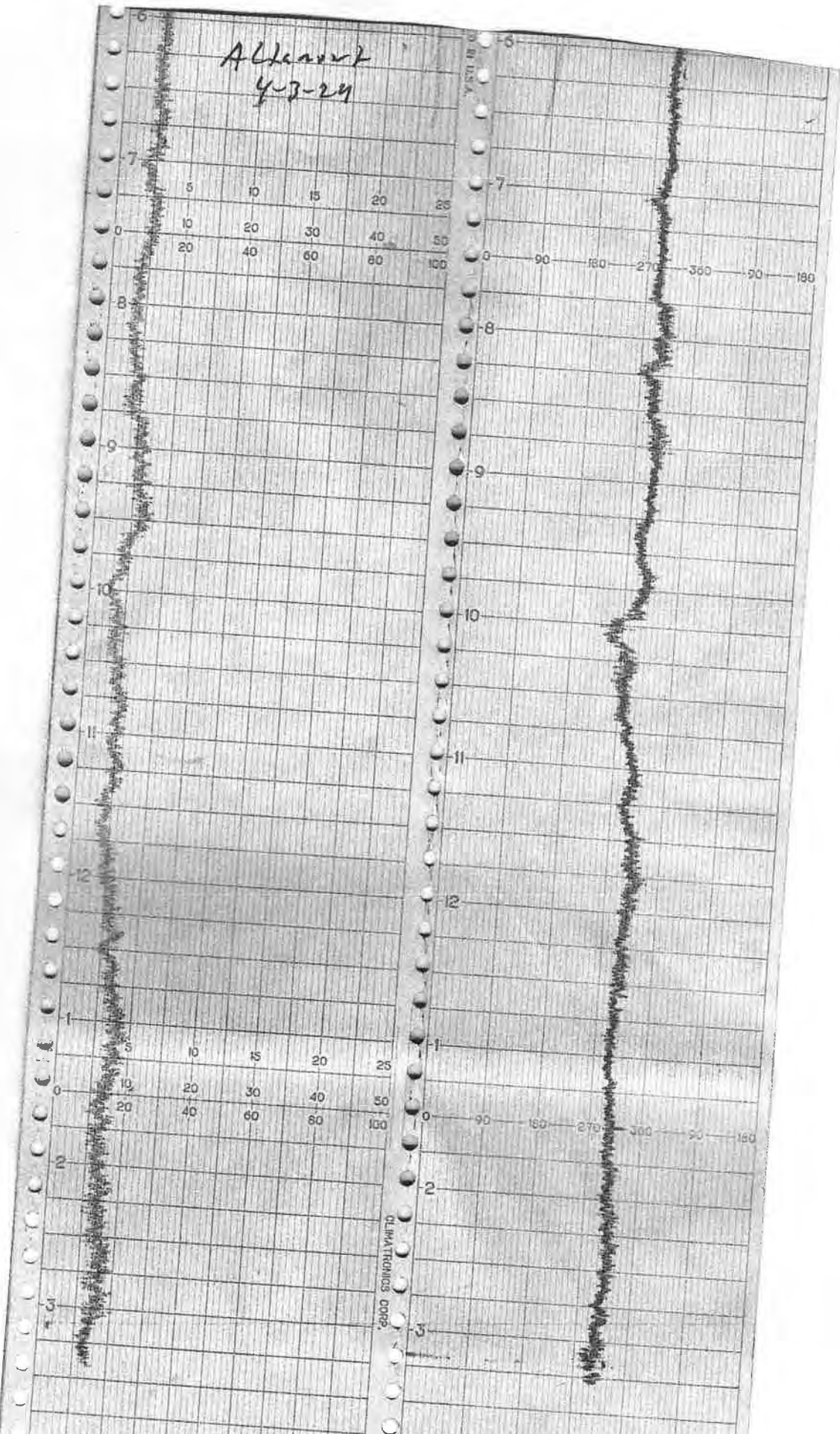
Note: In the event that an exceedance is detected, please initiate corrective action and **re-monitor the exceedance location within 7 days** of the initial exceedance.  
 Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).  
 Leaks over 1,000 ppmv methane are exceedances at any component containing landfill gas pursuant to BAAQMD Regulation 8-34-301.2.

**Attachment D**

Weather Station Data

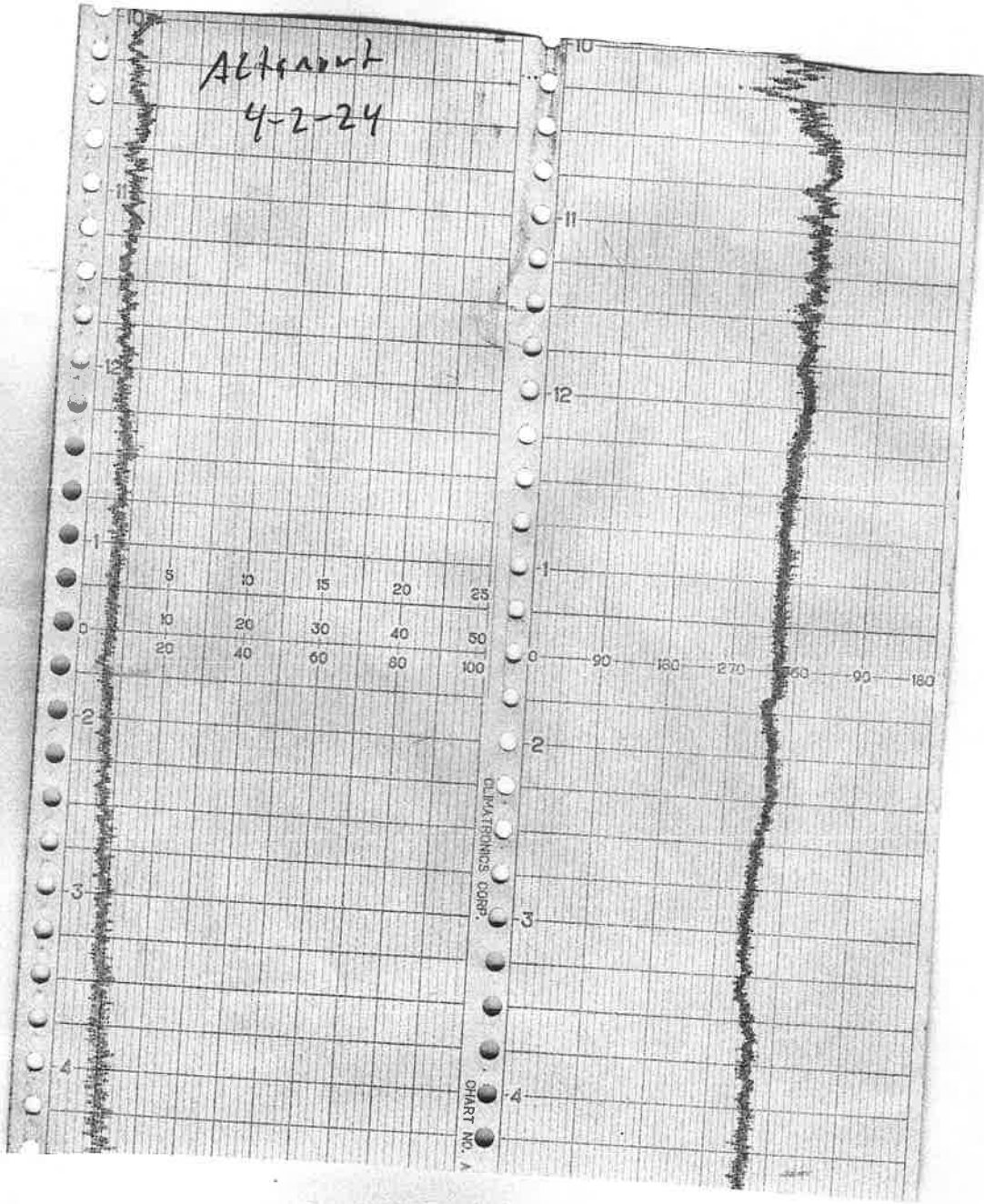


Attachment  
4-3-24

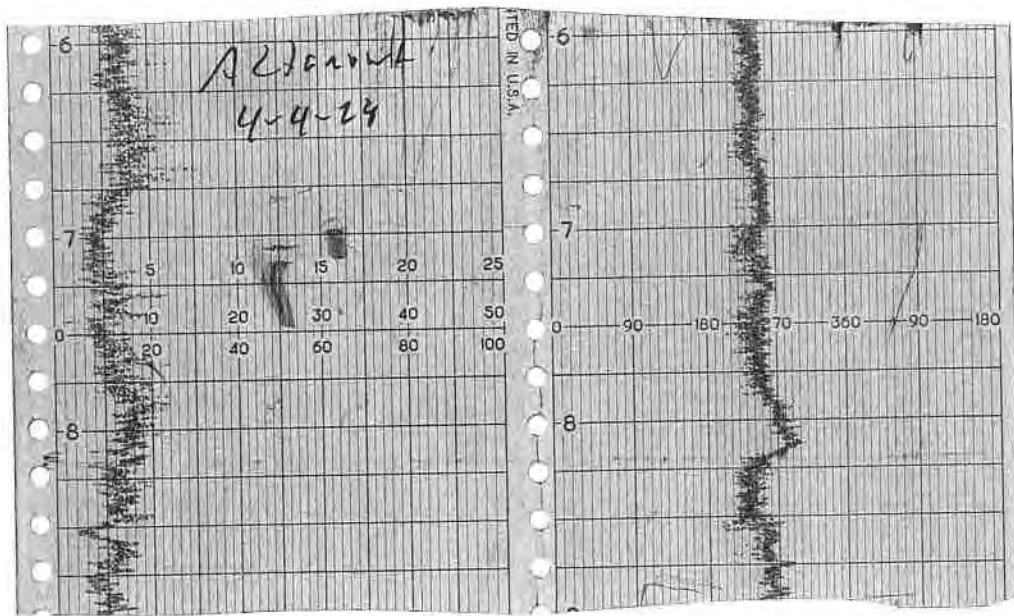


**WIND SPEED & DIRECTION CHART ROLL**

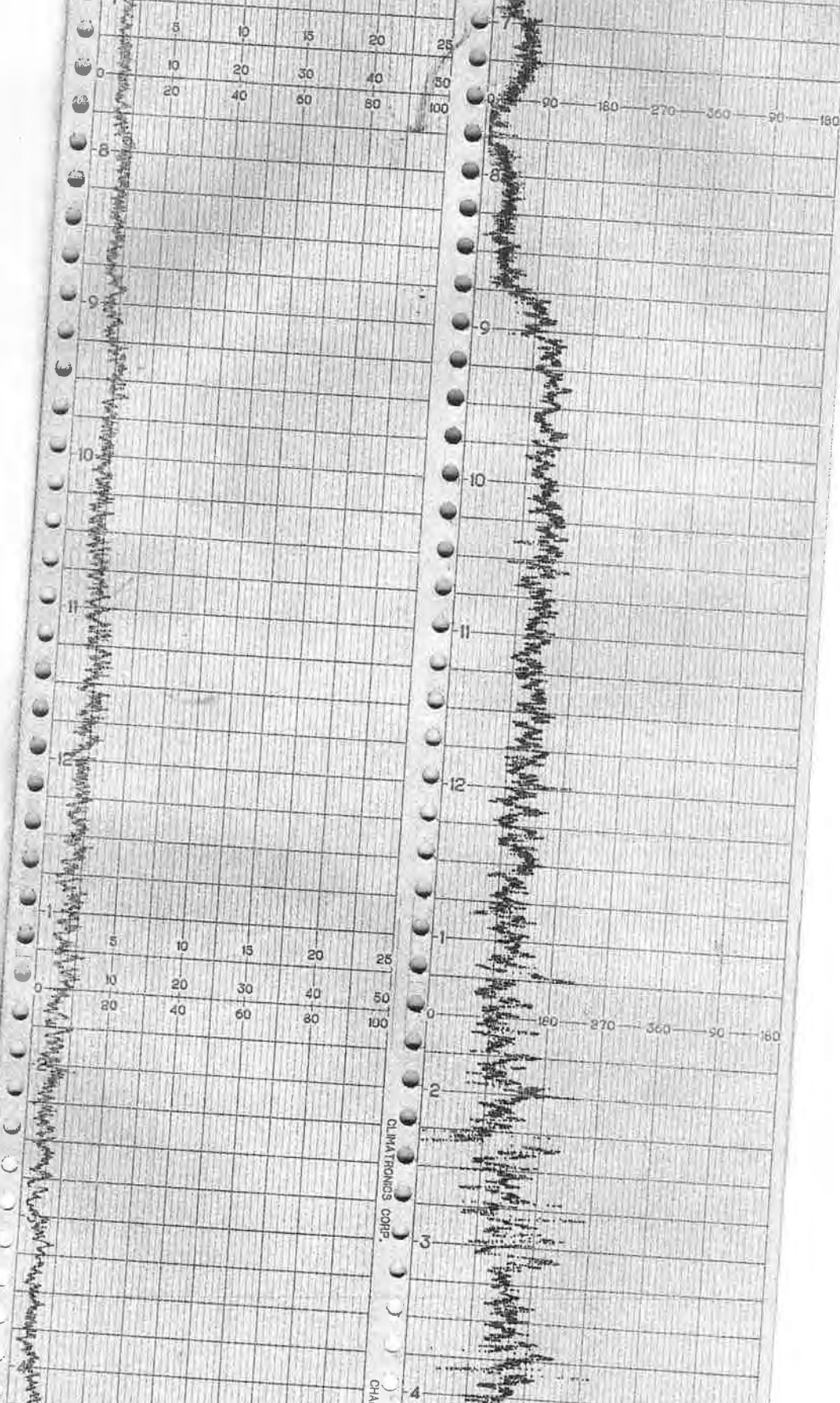
# WIND SPEED & DIRECTION CHART ROLL



# WIND SPEED & DIRECTION CHART ROLL



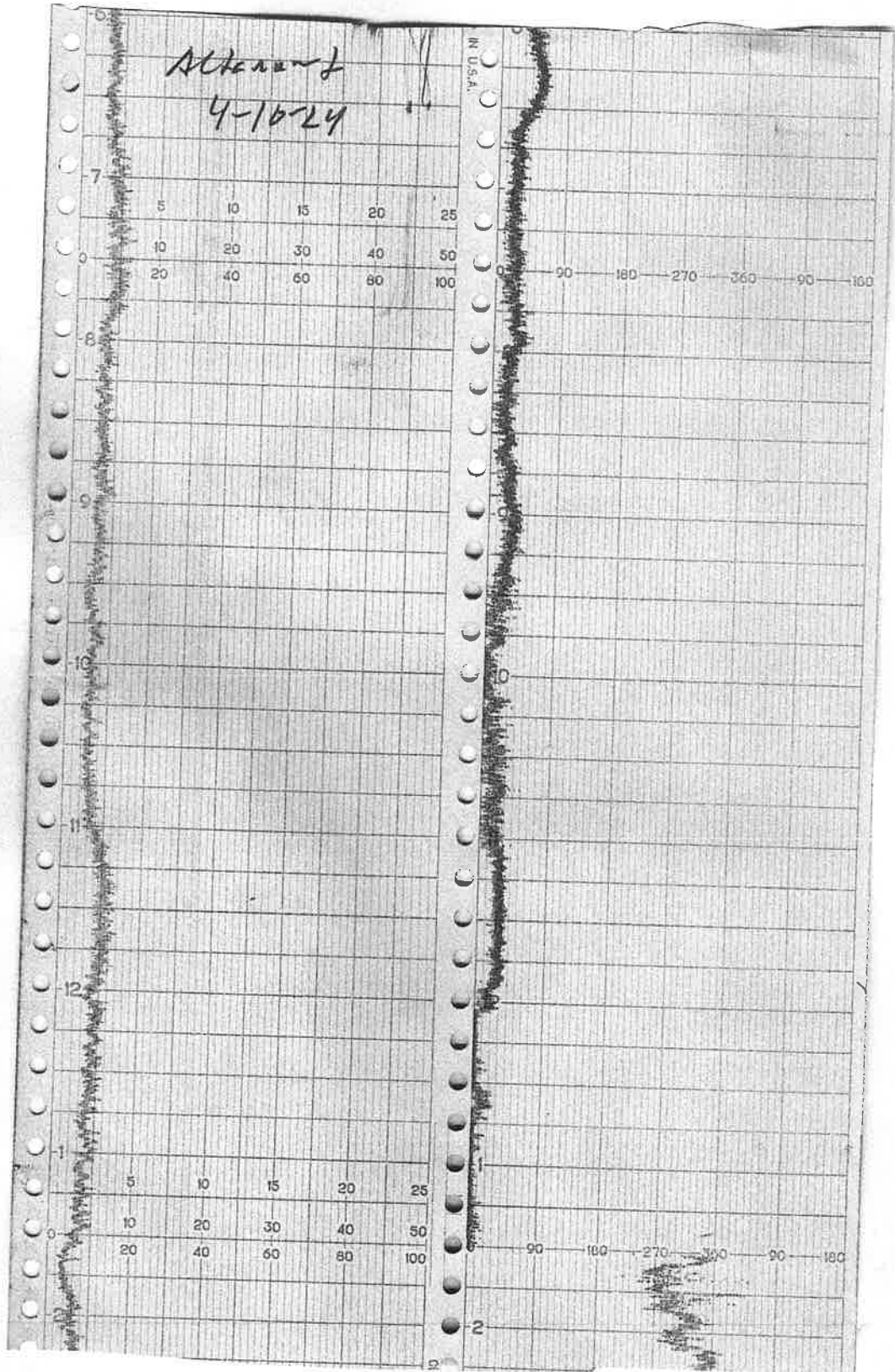
Altamont  
4-9-24



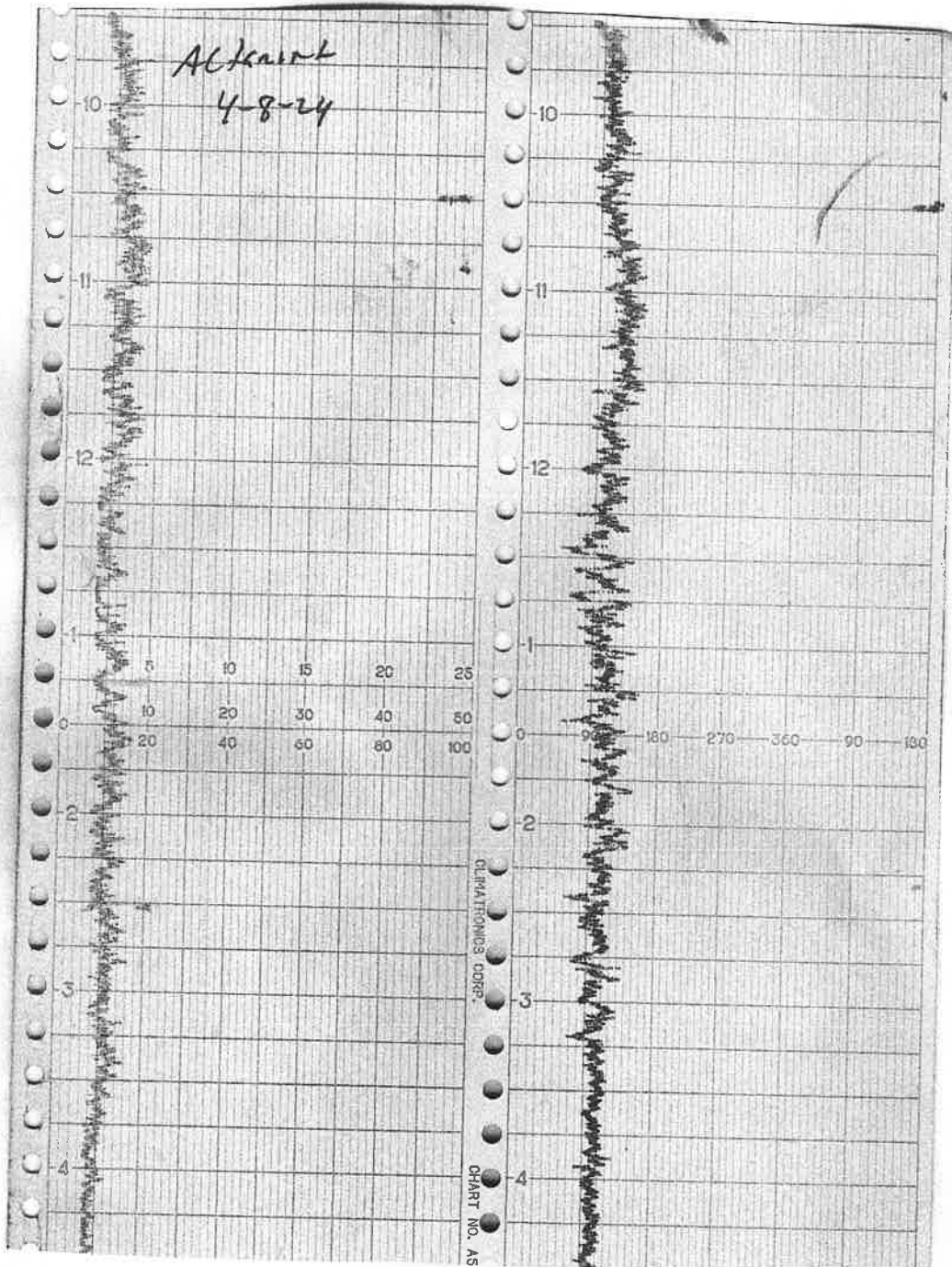
**WIND SPEED & DIRECTION CHART ROLL**

CLIMATE MONITORING  
CORP.  
CHART

# WIND SPEED & DIRECTION CHART ROLL



# WIND SPEED & DIRECTION CHART ROLL



16-POINT WIND DIRECTION INDEX

<u>NO</u>	<u>DIRECTION</u>	<u>DEGREES</u>		
		<u>FROM</u>	<u>CENTER</u>	<u>TO</u>
16	NORTH (N)	348.8	<u>360.0</u>	0.0
1	NORTH-NORTHEAST (NNE)	011.3	<u>022.5</u>	033.8
2	NORTHEAST (NE)	033.8	<u>045.0</u>	056.3
3	EAST-NORTHEAST (ENE)	056.3	<u>067.5</u>	078.8
4	EAST (E)	078.8	<u>090.0</u>	101.3
5	EAST-SOUTHEAST (ESE)	101.3	<u>112.5</u>	123.8
6	SOUTHEAST (SE)	123.8	<u>135.0</u>	146.3
7	SOUTH-SOUTHEAST (SSE)	146.3	<u>157.5</u>	168.8
8	SOUTH (S)	168.8	<u>180.0</u>	191.3
9	SOUTH-SOUTHWEST (SSW)	191.3	<u>202.5</u>	213.8
10	SOUTHWEST (SW)	213.8	<u>225.0</u>	236.3
11	WEST-SOUTHWEST (WSW)	236.3	<u>247.5</u>	258.8
12	WEST (W)	258.8	<u>270.0</u>	281.3
13	WEST-NORTHWEST (WNW)	281.3	<u>292.5</u>	303.8
14	NORTHWEST (NW)	303.8	<u>315.0</u>	326.3
15	NORTH-NORTHWEST (NNW)	326.3	<u>337.5</u>	348.8

**Attachment E**  
Calibration Records



**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME ALTSBORT INSTRUMENT MAKE: Hanna  
 MODEL TrA1000 EQUIPMENT #: 10 SERIAL #: 1036346773  
 MONITORING DATE: 4-2-24 TIME: 0945

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>490</u> ppm	<u>440</u> ppm	<u>6</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.12</u> ppm	<u>490</u> ppm	<u>10</u>
#2	<u>0.09</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.04</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.66</u> #DIV/0! Must be less than 10%

Performed By: CEYSHAWA Date/Time: 4-2-24 0945

**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME Altamont INSTRUMENT MAKE HANNA  
 MODEL: WA1000 EQUIPMENT #: 11 SERIAL #: 1036346774  
 MONITORING DATE 4-2-24 TIME: 0945

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>504</u> ppm	<u>454</u> ppm	<u>5</u>
#2	<u>498</u> ppm	<u>448</u> ppm	<u>5</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.14</u> ppm	<u>504</u> ppm	<u>4</u>
#2	<u>0.08</u> ppm	<u>498</u> ppm	<u>2</u>
#3	<u>0.06</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.40</u> #DIV/0! Must be less than 10%

Performed By: Nicole Estrook Date/Time: 4-2-24 - 0945

**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME Altamont INSTRUMENT MAKE JHuan  
 MODEL lvA1000 EQUIPMENT #: 12 SERIAL #: 1036246341  
 MONITORING DATE 4-2-24 TIME 0945

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>501</u> ppm	<u>451</u> ppm	<u>4</u>
#2	<u>498</u> ppm	<u>448</u> ppm	<u>4</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>4</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.10</u> ppm	<u>501</u> ppm	<u>1</u>
#2	<u>0.07</u> ppm	<u>498</u> ppm	<u>2</u>
#3	<u>0.03</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.20</u> #DIV/0! Must be less than 10%

Performed By: JERRY MURPHY Date/Time: 4-2-24-0945

**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo  
 MODEL: LuA1000 EQUIPMENT # 13 SERIAL #: 1102746775  
 MONITORING DATE 4-2-24 TIME 0945

**Calibration Procedure:**

- 1 Allow instrument to zero itself while introducing air
- 2 Introduce calibration gas into the probe. Stabilized reading = 500 ppm
- 3 Adjust meter settings to read 500 ppm

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>495</u> ppm	<u>445</u> ppm	<u>&gt;</u>
#2	<u>502</u> ppm	<u>452</u> ppm	<u>&gt;</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>&gt;</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>&gt;</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	<u>0.18</u> ppm	<u>495</u> ppm	<u>5</u>
#2	<u>0.11</u> ppm	<u>502</u> ppm	<u>2</u>
#3	<u>0.07</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.46</u> #DIV/0! Must be less than 10%

Performed By: BOB DEWINE Date/Time: 4-2-24 - 0945

**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME Altavert INSTRUMENT MAKE JHanna  
 MODEL: VA1000 EQUIPMENT #: 16 SERIAL # 1102746776  
 MONITORING DATE 4-2-24 TIME 0945

**Calibration Procedure:**

- 1 Allow instrument to zero itself while introducing air
- 2 Introduce calibration gas into the probe. Stabilized reading = 500 ppm
- 3 Adjust meter settings to read 500 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	<u>0.13</u> ppm	<u>500</u> ppm	<u>5</u>
#2	<u>0.02</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.05</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision $\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$			<u>0.46</u> #DIV/0! Must be less than 10%

Performed By: tyler anderson Date/Time: 4-2-24 - 0945

**CALIBRATION PROCEDURE AND BACKGROUND REPORT - INSTANTANEOUS**

LANDFILL NAME Altmont INSTRUMENT MAKE: Hera 10  
 MODEL FA1000 EQUIPMENT # 10 SERIAL #: 1036346773  
 MONITORING DATE: 4-3-24 TIME: 0600

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>490</u> ppm	<u>440</u> ppm	<u>5</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.13</u> ppm	<u>490</u> ppm	<u>10</u>
#2	<u>0.10</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.08</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision $\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$			<u>0.66</u> #DIV/0! Must be less than 10%

Performed By COISHA ME Date/Time: 4-3-24- 0600

**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME Altamont INSTRUMENT MAKE: Thermo  
 MODEL: EA1000 EQUIPMENT # 11 SERIAL #: 1036346774  
 MONITORING DATE: 4-3-24 TIME 0600

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>507</u> ppm	<u>457</u> ppm	<u>6</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	<u>0.09</u> ppm	<u>507</u> ppm	<u>7</u>
#2	<u>0.06</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.05</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision $\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$			<u>0.46</u> #DIV/0! Must be less than 10%

Performed By: Miguel Estreba Date/Time: 4-3-24- 0600



**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME Alford INSTRUMENT MAKE: Hera  
 MODEL: FA1000 EQUIPMENT #: 12 SERIAL #: 1036246741  
 MONITORING DATE: 4-3-24 TIME: 0600

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>208</u> ppm	<u>202</u> ppm	<u>205</u> ppm

Background Value = 205 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>495</u> ppm	<u>445</u> ppm	<u>5</u>
#2	<u>504</u> ppm	<u>454</u> ppm	<u>5</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.18</u> ppm	<u>495</u> ppm	<u>5</u>
#2	<u>0.04</u> ppm	<u>504</u> ppm	<u>9</u>
#3	<u>0.02</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision $\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$			<u>0.60</u> #DIV/0! Must be less than 10%

Performed By: Jenny Munoz Date/Time: 4-3-24 0600



**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME Altamont INSTRUMENT MAKE FHorn  
 MODEL: LA1000 EQUIPMENT # 13 SERIAL # 1162746775  
 MONITORING DATE 4-3-24 TIME 0600

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>500</u> ppm	<u>450</u> ppm	<u>&gt;</u>
#2	<u>495</u> ppm	<u>445</u> ppm	<u>&gt;</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>&gt;</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>&gt;</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.10</u> ppm	<u>500</u> ppm	<u>&gt;</u>
#2	<u>0.08</u> ppm	<u>495</u> ppm	<u>5</u>
#3	<u>0.04</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.80</u> #DIV/0! Must be less than 10%

Performed By EDD.C DELING Date/Time 4-3-24 0600

**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME Altamond INSTRUMENT MAKE: FHWA 100  
 MODEL LV41000 EQUIPMENT #: 16 SERIAL #: 1102746776  
 MONITORING DATE: 4-3-24 TIME 0600

**Calibration Procedure:**

- 1 Allow instrument to zero itself while introducing air
- 2 Introduce calibration gas into the probe. Stabilized reading = 500 ppm
- 3 Adjust meter settings to read 500 ppm

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>490</u> ppm	<u>441</u> ppm	<u>6</u>
#2	<u>501</u> ppm	<u>451</u> ppm	<u>6</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	<u>0.15</u> ppm	<u>490</u> ppm	<u>10</u>
#2	<u>0.09</u> ppm	<u>501</u> ppm	<u>1</u>
#3	<u>0.07</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision $\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3}$		$\frac{X 1}{500} X \frac{100}{1}$	<u>0.73</u> #DIV/0! Must be less than 10%

Performed By: TYLER ANDERSON Date/Time: 4-3-24 0600

**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME ALCANTARA INSTRUMENT MAKE FHONER  
 MODEL WA1000 EQUIPMENT #: 10 SERIAL # 1036346773  
 MONITORING DATE: 4-4-24 TIME: 0615

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>502</u> ppm	<u>452</u> ppm	<u>5</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	<u>0.05</u> ppm	<u>502</u> ppm	<u>2</u>
#2	<u>0.06</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.04</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.13</u> #DIV/0! Must be less than 10%

Performed By: LEIGH WOOD Date/Time 4-4-24 0615

**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS**

LANDFILL NAME Altamont INSTRUMENT MAKE JHann  
 MODEL FAA1000 EQUIPMENT # 11 SERIAL #: 1036346774  
 MONITORING DATE 4-4-24 TIME 0615

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>489</u> ppm	<u>439</u> ppm	<u>5</u>
#2	<u>501</u> ppm	<u>451</u> ppm	<u>5</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	<u>0.15</u> ppm	<u>489</u> ppm	<u>11</u>
#2	<u>0.05</u> ppm	<u>501</u> ppm	<u>1</u>
#3	<u>0.04</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.80</u> #DIV/0! Must be less than 10%

Performed By: Miguel Estrada Date/Time: 4-4-24 - 0615

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME Alton L INSTRUMENT MAKE JHONW  
 MODEL FA 1000 EQUIPMENT # 12 SERIAL # 1036246741  
 MONITORING DATE 4-4-24 TIME 0615

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>495</u> ppm	<u>445</u> ppm	<u>7</u>
#2	<u>502</u> ppm	<u>452</u> ppm	<u>7</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>7</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>7</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.18</u> ppm	<u>495</u> ppm	<u>5</u>
#2	<u>0.14</u> ppm	<u>502</u> ppm	<u>2</u>
#3	<u>0.08</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.46</u> #DIV/0! Must be less than 10%

Performed By JERRY MEROZ Date/Time 4-4-24-0615

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME Altanork INSTRUMENT MAKE: Hera  
 MODEL: LA 1000 EQUIPMENT #: 13 SERIAL #: 1102746725  
 MONITORING DATE 4-4-24 TIME 0615

Calibration Procedure:

- 1 Allow instrument to zero itself while introducing air.
- 2 Introduce calibration gas into the probe. Stabilized reading = 500 ppm
- 3 Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>507</u> ppm	<u>457</u> ppm	<u>4</u>
#2	<u>498</u> ppm	<u>448</u> ppm	<u>4</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>4</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.14</u> ppm	<u>507</u> ppm	<u>7</u>
#2	<u>0.09</u> ppm	<u>498</u> ppm	<u>2</u>
#3	<u>0.05</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.60</u> #DIV/0! Must be less than 10%

Performed By: ENDIE PELING Date/Time 4-4-24-0615

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME Altamira INSTRUMENT MAKE Hann  
 MODEL: PA1100 EQUIPMENT # 16 SERIAL #: 1182746776  
 MONITORING DATE: 4-4-24 TIME 0615

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>504</u> ppm	<u>454</u> ppm	<u>5</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.10</u> ppm	<u>504</u> ppm	<u>4</u>
#2	<u>0.07</u> ppm	<u>500</u> ppm	<u>3</u>
#3	<u>0.04</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision		$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$	<u>0.26</u> #DIV/0! Must be less than 10%

Performed By: tyler cameron Date/Time: 4-4-24 - 0615

**CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED**

LANDFILL NAME: Acton INSTRUMENT MAKE: Hera  
 MODEL FA1000 EQUIPMENT #: 10 SERIAL # 1036346773  
 MONITORING DATE: 4-8-24 TIME: 0920

Calibration Procedure:

- 1 Allow instrument to zero itself while introducing air
- 2 Introduce calibration gas into the probe Stabilized reading = 25 ppm
- 3 Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value:  (Upwind + Downwind) 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>24</u> ppm	<u>21.6</u> ppm	<u>4</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>4</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			#DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.18</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.11</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.07</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By: LSchwartz Date/Time: 4-8-24-0920



**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED**

LANDFILL NAME: Acton INSTRUMENT MAKE: FHERNO  
 MODEL: FVA1000 EQUIPMENT #: 11 SERIAL #: 1036346772  
 MONITORING DATE: 4-8-24 TIME: 0920

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>23</u> ppm	<u>20.7</u> ppm	<u>6</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.15</u> ppm	<u>23</u> ppm	<u>2</u>
#2	<u>0.09</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.04</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>2.6</u> #DIV/0! Must be less than 10%

Performed By: Miguel Estrella Date/Time: 4-8-24-0920

**CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED**

LANDFILL NAME ACT Grant INSTRUMENT MAKE Herao  
 MODEL: IVA1000 EQUIPMENT # 12 SERIAL #: 1036246741  
 MONITORING DATE: 4-8-24 TIME 0920

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value:  (Upwind + Downwind) 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>24</u> ppm	<u>21.6</u> ppm	<u>4</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>4</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>4</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.10</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.08</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.05</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By: JERRY ALLEN Date/Time: 4-8-24-0920

**CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED**

LANDFILL NAME ACT Grant INSTRUMENT MAKE: FHERNO  
 MODEL: FVA1000 EQUIPMENT # 13 SERIAL #: 1102746775  
 MONITORING DATE: 4-8-24 TIME 0920

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>23</u> ppm	<u>20.7</u> ppm	<u>5</u>
#2	<u>24</u> ppm	<u>21.6</u> ppm	<u>5</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	<u>0.16</u> ppm	<u>23</u> ppm	<u>2</u>
#2	<u>0.11</u> ppm	<u>24</u> ppm	<u>1</u>
#3	<u>0.08</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>4.0</u> #DIV/0! Must be less than 10%

Performed By EDDIOE/IN9 Date/Time: 4-8-24-0920

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME Acton INSTRUMENT MAKE Hera  
 MODEL: FVA1000 EQUIPMENT # 16 SERIAL # 1102746776  
 MONITORING DATE 4-8-24 TIME: 0920

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>24</u> ppm	<u>21.6</u> ppm	<u>5</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.17</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.10</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.05</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By: tyler ANDERSON Date/Time 4-8-24-0920

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME ACT Grant INSTRUMENT MAKE HERNO  
 MODEL: HVA1000 EQUIPMENT # 11 SERIAL #: 1036346774  
 MONITORING DATE 4-9-24 TIME 0600

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>24</u> ppm	<u>21.6</u> ppm	<u>✓</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>✓</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>✓</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>✓</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.21</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.14</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.10</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By: Miguel ESTACEDA Date/Time 4-9-24 0600

**CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED**

LANDFILL NAME: ACT Grant INSTRUMENT MAKE: HANNA  
 MODEL: FVA1000 EQUIPMENT #: 12 SERIAL #: 1036246741  
 MONITORING DATE: 4-9-24 TIME: 0600

**Calibration Procedure:**

- 1 Allow instrument to zero itself while introducing air
- 2 Introduce calibration gas into the probe. Stabilized reading = 25 ppm
- 3 Adjust meter settings to read 25 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value:  (Upwind + Downwind) 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>23</u> ppm	<u>20.7</u> ppm	<u>6</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.17</u> ppm	<u>23</u> ppm	<u>2</u>
#2	<u>0.13</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.08</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>2.6</u> #DIV/0! Must be less than 10%

Performed By: JERRY MURPHY Date/Time: 4-9-24 0600

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME: ACT Grant INSTRUMENT MAKE: Hera  
 MODEL: FVA1000 EQUIPMENT # 13 SERIAL #: 1102746775  
 MONITORING DATE: 4-9-24 TIME: 0600

Calibration Procedure:

- 1 Allow instrument to zero itself while introducing air
- 2 Introduce calibration gas into the probe. Stabilized reading = 25 ppm
- 3 Adjust meter settings to read 25 ppm

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>24</u> ppm	<u>21.6</u> ppm	<u>5</u>
#2	<u>24</u> ppm	<u>21.6</u> ppm	<u>5</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.11</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.07</u> ppm	<u>24</u> ppm	<u>1</u>
#3	<u>0.05</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>2.6</u> #DIV/0! Must be less than 10%

Performed By: EPD. & DE 1119 Date/Time: 4-9-24-0600

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME ACT Grant INSTRUMENT MAKE Herao  
 MODEL FVA1000 EQUIPMENT #. 16 SERIAL #: 1102746776  
 MONITORING DATE: 4-9-24 TIME 0600

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>24</u> ppm	<u>21.6</u> ppm	<u>4</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>4</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>4</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>4</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.15</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.09</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.06</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By: Tyler Anderson Date/Time: 4-9-24 0600



**CALIBRATION PROCEDURE AND BACKGROUND REPORT - INSTANTANEOUS**

LANDFILL NAME Altamont INSTRUMENT MAKE Thermo  
 MODEL LVA1000 EQUIPMENT # 10 SERIAL #: 1036346773  
 MONITORING DATE 4-9-24 TIME 0600

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 500 ppm
3. Adjust meter settings to read 500 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>495</u> ppm	<u>445</u> ppm	<u>5</u>
#2	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
#3	<u>500</u> ppm	<u>450</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.10</u> ppm	<u>495</u> ppm	<u>5</u>
#2	<u>0.07</u> ppm	<u>500</u> ppm	<u>0</u>
#3	<u>0.04</u> ppm	<u>500</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{500} \times \frac{100}{1}$		<u>0.33</u> #DIV/0! Must be less than 10%

Performed By: Loughran Date/Time: 4-9-24 0600

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME Acton INSTRUMENT MAKE HERNO  
 MODEL FVA1000 EQUIPMENT #: 10 SERIAL #: 1036JU6773  
 MONITORING DATE 4-10-24 TIME: 0600

Calibration Procedure:

- 1 Allow instrument to zero itself while introducing air
- 2 Introduce calibration gas into the probe. Stabilized reading = 25 ppm
- 3 Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>24</u> ppm	<u>21.6</u> ppm	<u>6</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.11</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.07</u> ppm	<u>25</u> ppm	<u>6</u>
#3	<u>0.04</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By LOUISIANA Date/Time: 4-10-24-0600

**CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED**

LANDFILL NAME Altamont INSTRUMENT MAKE Herao  
 MODEL FVA1000 EQUIPMENT # 11 SERIAL # 1036346774  
 MONITORING DATE: 4-10-24 TIME 0600

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm.

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>23</u> ppm	<u>20.7</u> ppm	<u>&gt;</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>&gt;</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>&gt;</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>&gt;</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.45</u> ppm	<u>23</u> ppm	<u>2</u>
#2	<u>0.09</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.07</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>2.6</u> #DIV/0! Must be less than 10%

Performed By M. J. B. / NGOR Date/Time 4-10-24-0600

**CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED**

LANDFILL NAME Acfgrowt INSTRUMENT MAKE HANNO  
 MODEL HVA1000 EQUIPMENT # 12 SERIAL #: 1036246741  
 MONITORING DATE: 4-10-24 TIME 0600

**Calibration Procedure:**

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25 ppm
3. Adjust meter settings to read 25 ppm

**Background Determination Procedure**

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

**INSTRUMENT RESPONSE TIME RECORD**

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>24</u> ppm	<u>21.6</u> ppm	<u>5</u>
#2	<u>24</u> ppm	<u>21.6</u> ppm	<u>5</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>5</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>5</u> #DIV/0! Must be less than 30 seconds

**CALIBRATION PRECISION RECORD**

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.17</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.11</u> ppm	<u>24</u> ppm	<u>1</u>
#3	<u>0.09</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times 1 \times \frac{100}{25 \times 1}$		<u>2.8</u> #DIV/0! Must be less than 10%

Performed By: JERRY MENOR Date/Time: 4-10-24 0600

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INTEGRATED

LANDFILL NAME ACTGROVE INSTRUMENT MAKE: HERNO  
 MODEL: FVA1000 EQUIPMENT #: 13 SERIAL #: 1102746725  
 MONITORING DATE 4-10-24 TIME: 0610

Calibration Procedure:

- 1 Allow instrument to zero itself while introducing air
- 2 Introduce calibration gas into the probe Stabilized reading = 25 ppm
- 3 Adjust meter settings to read 25 ppm

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: $\frac{(\text{Upwind} + \text{Downwind})}{2}$
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>24</u> ppm	<u>21.6</u> ppm	<u>6</u>
#2	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD - (B)]
#1	<u>0.15</u> ppm	<u>24</u> ppm	<u>1</u>
#2	<u>0.08</u> ppm	<u>25</u> ppm	<u>0</u>
#3	<u>0.04</u> ppm	<u>25</u> ppm	<u>6</u>
Calculate Precision	$\frac{[\text{STD-B1}] + [\text{STD-B2}] + [\text{STD-B3}]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>1.3</u> #DIV/0! Must be less than 10%

Performed By: ETDIE DB/LRS Date/Time: 4-10-24-0600

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME Acgiant INSTRUMENT MAKE HERNO  
 MODEL: FVA1000 EQUIPMENT # 16 SERIAL # 1102746776  
 MONITORING DATE 4-10-24 TIME: 0600

Calibration Procedure:

- 1 Allow instrument to zero itself while introducing air
- 2 Introduce calibration gas into the probe. Stabilized reading = 25 ppm
- 3 Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: <u>(Upwind + Downwind)</u> 2
<u>2.8</u> ppm	<u>2.2</u> ppm	<u>2.5</u> ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	<u>23</u> ppm	<u>20.7</u> ppm	<u>6</u>
#2	<u>24</u> ppm	<u>21.6</u> ppm	<u>6</u>
#3	<u>25</u> ppm	<u>22.5</u> ppm	<u>6</u>
Calculate Response Time $\frac{(1+2+3)}{3}$			<u>6</u> #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	<u>0.16</u> ppm	<u>23</u> ppm	<u>2</u>
#2	<u>0.08</u> ppm	<u>24</u> ppm	<u>1</u>
#3	<u>0.04</u> ppm	<u>25</u> ppm	<u>0</u>
Calculate Precision	$\frac{[STD-B1] + [STD-B2] + [STD-B3]}{3} \times \frac{1}{25} \times \frac{100}{1}$		<u>4.0</u> #DIV/0! Must be less than 10%

Performed By tylora edson Date/Time 4-10-24-0600

## CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Altamont Landfill Date: 4-10-24

Time: 9:20 AM \_\_\_\_\_ PM

Instrument Make: Photo Vac Model: Micro FID S/N: C2-PD 312

### Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.  
Stable Reading = 500 ppm
3. Adjust meter to read 500 ppm.

### Background Determination Procedure

1. Upwind Reading (highest in 30 seconds): 3 ppm (a)
2. Downwind Reading (highest in 30 seconds): 1 ppm (b)

Calculate Background Value:

$$\frac{(a) + (b)}{2} \quad \text{Background} = \underline{2} \text{ ppm}$$

Performed By: Garry Carpenter

## CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

Landfill Name: Altamont Landfill

Date: 5-6-24

Time: 1:15 PM

Instrument Make: Photo Vac Model: MicroFID S/N: CZPD312

### Calibration Procedure

1. Allow instrument to internally zero itself while introducing zero air.
2. Introduce the calibration gas into the probe.  
Stable Reading = 500 ppm
3. Adjust meter to read 500 ppm.

### Background Determination Procedure

1. Upwind Reading (highest in 30 seconds): 3 ppm (a)
2. Downwind Reading (highest in 30 seconds): 1 ppm (b)

Calculate Background Value:

$$\frac{(a) + (b)}{2} \quad \text{Background} = \underline{2} \quad \text{ppm}$$

Performed By: Berry Carpenter



## RESPONSE TIME TEST RECORD

Date: 4-10-24

Expiration Date (3 months): 7-10-24

Time: 9:15 AM \_\_\_\_\_ PM

Instrument Make: PhotoVoice Model: MicroFLD S/N: CZPD312

Measurement #1:

Stabilized Reading Using Calibration Gas: 500 ppm

90% of the Stabilized Reading: 450 ppm

Time to Reach 90% of Stabilized Reading after  
switching from Zero Air to Calibration Gas: 2.5 seconds (a)

Measurement #2:

Stabilized Reading Using Calibration Gas: 501 ppm

90% of the Stabilized Reading: 451 ppm

Time to Reach 90% of Stabilized Reading after  
switching from Zero Air to Calibration Gas: 3.0 seconds (b)

Measurement #3:

Stabilized Reading Using Calibration Gas: 500 ppm

90% of the Stabilized Reading: 450 ppm

Time to Reach 90% of Stabilized Reading after  
switching from Zero Air to Calibration Gas: 3.0 seconds (c)

Calculate Response Time:

$$\frac{(a) + (b) + (c)}{3} = \frac{2.5 + 3.0 + 3.0}{3} = \underline{3.17} \text{ seconds (must be less than 30 seconds)}$$

Performed By: Garry Carpenter

## CALIBRATION PRECISION TEST RECORD

Date: 4-10-24

Expiration Date (3 months): 7-10-24

Time: 9:18 AM \_\_\_\_\_ PM

Instrument Make: Photo Vac Model: Miro F10 S/N: 0200312

Measurement #1:

Meter Reading for Zero Air: 0 ppm (a)

Meter Reading for Calibration Gas: 500 ppm (b)

Measurement #2:

Meter Reading for Zero Air: 0 ppm (c)

Meter Reading for Calibration Gas: 500 ppm (d)

Measurement #3:

Meter Reading for Zero Air: 0 ppm (e)

Meter Reading for Calibration Gas: 500 ppm (f)

Calculate Precision:

$$\frac{\{|(500) - (b)| + |(500) - (d)| + |(500) - (f)|\}}{3} \times \frac{1}{500} \times 100$$

\_\_\_\_\_ % (must be < than 10%)

Performed By: Gary Carpenter



**EQUIPCO** SALES & SERVICE

2100 Meridian Park Boulevard  
Concord, CA 94520  
TO REORDER CALL 1 (888)-234-5678

**AIR, ULTRA ZERO**  
THC < 0.01 PPM

Analytical Accuracy +/- 2%

103L @ 70F & 500 PSIG  
LOT# 12-402022706  
P/N: ZER-AIR-103L  
EXP. DATE: 10/11/2025

**EQUIPCO** SALES & SERVICE

2100 MERIDIAN PARK BLVD  
Concord, CA 94520  
TO REORDER CALL 1 (888) 234-5678

**METHANE 500ppm**  
AIR BALANCE

Analytical Accuracy +/- 2%

103L @ 70F & 1000 PSIG  
Lot# 260447  
P/N MET-500-103L

EXP: JAN/2025



Environmental Inc.

### TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #10

SERIAL NUMBER: 1036346773

TECHNICIAN: [Signature] DATE: 4-6-29

#### GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,006	+/- 2500
< 1	ZERO GAS	0.071	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50	/	+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.



# TVA1000B CALIBRATION VERIFICATION

Environmental Inc.

CUSTOMER: RES Van #11

SERIAL NUMBER: 1036346774

TECHNICIAN: MM DATE: 4-6-29

## GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,001	+/- 2500
< 1	ZERO GAS	0.069	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50	/	+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.



Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit # 12

SERIAL NUMBER: 103624674

TECHNICIAN: MM

DATE: 4-6-24

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	99	+/- 25
500	500	499	+/- 125
10000	10000	10,003	+/- 2500
< 1	ZERO GAS	0.03	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50	/	+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.



# TVA1000B CALIBRATION VERIFICATION

Environmental Inc.

CUSTOMER: RES Unit # 13

SERIAL NUMBER: 1102746775

TECHNICIAN: MM

DATE: 4-6-29

## GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.68	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50	/	+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.



# TVA1000B CALIBRATION VERIFICATION

Environmental Inc.

CUSTOMER: RES Unit #16

SERIAL NUMBER: 1102746776

TECHNICIAN: Mc My DATE: 4-6-24

## GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,111	+/- 2500
< 1	ZERO GAS	0.73	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

All measurement standards are calibrated at scheduled intervals by the National Institute of Standards and Technology (NIST), or against certified standards, which are traceable to the National Institute of Standards and Technology.



**SURFACE EMISSION MONITORING INSTRUMENT  
 CALIBRATION LOG**

Site: \_\_\_\_\_

Purpose: \_\_\_\_\_

Operator:                     JM                    JM                    

Date:           4-6-24                     Time:           0845                    

Model #           7CA-1000                    

Serial #           #10 1036346773                    

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="radio"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u>2.1</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="radio"/> Pass / Fail / NA	<u>500</u>	<u>500</u>	<u>100%</u>
Clean system check (check valve chatter)	<input checked="" type="radio"/> Pass / Fail / NA	RESPONSE TIME		
H <sub>2</sub> supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="radio"/> Pass / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>4-6-24</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<input checked="" type="radio"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	<u>6</u>	
		2.	<u>6</u>	
		3.	<u>5</u>	
		Average	<u>5.6</u>	
		Equal to or less than 30 seconds?	<input checked="" type="radio"/> <b>N</b>	
		Instrument calibrated to	<u>City</u> gas.	

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**SURFACE EMISSION MONITORING INSTRUMENT  
 CALIBRATION LOG**

Site: \_\_\_\_\_

Purpose: \_\_\_\_\_

Operator: Jim M

Date: 4-6-24 Time: 0900

Model # TEA 1000

Serial # #11 1036346274

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="radio"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u>2.7</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="radio"/> Pass / Fail / NA	<u>500</u>	<u>500</u>	<u>100%</u>
Clean system check (check valve chatter)	<input checked="" type="radio"/> Pass / Fail / NA	RESPONSE TIME		
H <sub>2</sub> supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="radio"/> Pass / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>4-6-24</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<input checked="" type="radio"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1. <u>5</u>		
		2. <u>5</u>		
		3. <u>5</u>		
		Average <u>5.0</u>		
		Equal to or less than 30 seconds?	<input checked="" type="radio"/> Y	N
		Instrument calibrated to <u>CH<sub>4</sub></u> gas.		

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**SURFACE EMISSION MONITORING INSTRUMENT  
 CALIBRATION LOG**

Site: \_\_\_\_\_

Purpose: \_\_\_\_\_

Operator:       JLH             JH      

Date:       4-6-24       Time:       0915      

Model #       YVA 1000      

Serial #       #12 103624674      

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="radio"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u>2.3</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="radio"/> Pass / Fail / NA	<u>500</u>	<u>500</u>	<u>100%</u>
Clean system check (check valve chatter)	<input checked="" type="radio"/> Pass / Fail / NA	RESPONSE TIME		
H <sub>2</sub> supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="radio"/> Pass / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>4-6-24</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<input checked="" type="radio"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	<u>6</u>	
		2.	<u>6</u>	
		3.	<u>6</u>	
		Average	<u>6.0</u>	
		Equal to or less than 30 seconds?	<input checked="" type="radio"/> Y	N
		Instrument calibrated to	<u>644</u>	gas.

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**SURFACE EMISSION MONITORING INSTRUMENT  
 CALIBRATION LOG**

Site: \_\_\_\_\_

Purpose: \_\_\_\_\_

Operator: MM

Date: 4-6-24 Time: 1015

Model # TC1 1000

Serial # #16 1102746716

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	<input checked="" type="radio"/> Pass / Fail	CALIBRATION CHECK		
Reading following ignition	<u>2.1</u> ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	<input checked="" type="radio"/> Pass / Fail / NA	<u>500</u>	<u>500</u>	<u>100%</u>
Clean system check (check valve chatter)	<input checked="" type="radio"/> Pass / Fail / NA	RESPONSE TIME		
H <sub>2</sub> supply pressure gauge (acceptable range 9.5 - 12)	<input checked="" type="radio"/> Pass / Fail / NA	Calibration Gas, ppm	<u>500</u>	
Date of last factory calibration	<u>4-6-24</u>	90% of Calibration Gas, ppm	<u>450</u>	
Factory calibration record w/instrument within 3 months	<input checked="" type="radio"/> Pass / Fail	Time required to attain 90% of Cal Gas ppm		
		1. <u>5</u>		
		2. <u>6</u>		
		3. <u>6</u>		
		Average <u>5.6</u>		
		Equal to or less than 30 seconds?	<input checked="" type="radio"/> Y	N
		Instrument calibrated to <u>clay</u> gas.		

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# Intermountain Specialty Gases

520 N. Kings Road  
Nampa, ID 83687 (USA)  
Phone (800) 552-5003, Fax (208) 466-9143  
[www.isgases.com](http://www.isgases.com)



## CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy (+/-)</u>
Oxygen	20.9 %	2%
Nitrogen	Balance UHP	

**Lot #** 20-7421  
Mfg. Date: 5/20/2020  
Expiration Date:  
Transfill Date: see cylinder  
Parent Cylinder ID Number: NY02268

### Method of Preparation:

Gravimetric/Pressure Transfilled

### Method of Analysis:

The parent mix was prepared gravimetrically and is traceable to the NIST by certified weights (ID #CA10814) used to calibrate the scale.

Analysis By: Tony Janquart  
Title: Quality Assurance Manager  
Certificate Date: 5/20/2020

103 L  
103-01-100

751 Kaiser Avenue, Irvine, CA 92614  
(800) 201-8150 Fax (949) 757-0363

103 L

P/N: 01-100

Lot#: 20-7421

Exp Date  
7/10/2024

3.6H<sup>2</sup> @ 70°F and 1,000 PSIG



Concentration (Mole%) Accuracy

- 20.9% Oxygen  
- Bal. Nitrogen

Aquasupply Service INC



# INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

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## CERTIFICATE OF ANALYSIS

---

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy</u>
Methane	25 ppm	± 5%
Air	Balance	

<b>Lot #</b>	<b>17-6074</b>
--------------	----------------

Mfg. Date: 10/16/2017  
Parent Cylinder ID Number: 17161

**Method of Preparation:**  
Gravimetric/Pressure Transfilled

**Method of Analysis:**

The parent mix was prepared gravimetrically and is traceable to the NIST by certified weights (ID #CA10814) used to calibrate the scale.

Analysis By: Tony Janquart  
Quality Assurance Manager  
800-552-5003  
Certificate Date: 10/16/2017



ProSupply Service INC.

Concentration (Mole%) Accuracy  
+/- 5%  
(CH<sub>4</sub>) - 25 ppm  
- Balance

3.6ft<sup>3</sup> @ 70°F and 1,000 PSIG

Exp Date  
7/10/2024

Lot#: 17-6074

P/N:23-0025

**103 L**

Kaiser Avenue, Irvine, CA 92614  
(949) 253-0053 or (800) 201-8150 Fax (949) 757-0363

Methane



CONTAINS GAS UNDER PRESSURE  
Read label before use. Keep label at hand. Use appropriate PPE.  
Do not handle until all safety instructions are read.  
Use a back flow preventer when connecting to equipment.  
Use slowly. Close valve after use. Store in a cool, dry place away from sunlight when ambient temperature is above 50°F.  
Dispose of content and container in accordance with applicable regulations.  
DO NOT REMOVE THIS LABEL  
Federal law forbids transportation of this gas in a container not labeled in accordance with 49 CFR 171.15-171.16 (Federal law prohibits the use of this gas in a container not labeled in accordance with 49 CFR 171.15-171.16).

103-23-0025  
Methane 25 ppm/  
Oxygen 20.9%/ Nitrogen

**103 L**

Lot #  
17-6074



COA



2 of 2



# INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

---

## CERTIFICATE OF ANALYSIS

---

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy</u>
Methane	25 ppm	± 5%
Air	Balance	

<b>Lot #</b>	<b>17-6074</b>
--------------	----------------

Mfg. Date: 10/16/2017

Parent Cylinder ID 17161

Number:

### Method of Preparation:

Gravimetric/Pressure Transfilled

### Method of Analysis:

The parent mix was prepared gravimetrically and is traceable to the NIST by certified weights (ID #CA10814) used to calibrate the scale.

Analysis By: Tony Janquart  
Quality Assurance Manager

800-552-5003

Certificate Date: 10/16/2017

MicroSupply Service INC.



Concentration (Mole%) Accuracy  
(CH<sub>4</sub>) - 25 ppm +/- 5%  
- Balance

Methane



CONTAINS GAS  
Read label before use  
label at time of use  
Do not handle with bare hands  
protective gloves  
Use a back flow preventer  
slowly Close valve in  
sunlight when not in use  
Dispose of compressed gas  
DO NOT REMOVE LABEL  
Federal law prohibits  
5124). Federal law

Contents: 3.6ft<sup>3</sup> @ 70°F and 1,000 PSIG

Exp Date  
4/27/2023

Lot#: 17-6074

P/N:23-0025

103 L

1 Kaiser Avenue, Irvine, CA 92614  
949-4353 or (800) 201-8150 Fax (949) 757-0363

103-23-0025  
Methane 25 ppm/  
Oxygen 20.9% / Nitrogen

103 L

Lot #  
17-6074



DOT SP 11323 NRC 1100/1505M-1102  
TC-SU6495 NRC 76/104

# Intermountain Specialty Gases

520 N. Kings Road  
Nampa, ID 83687 (USA)  
Phone (800) 552-5003, Fax (208) 466-9143  
[www.isgases.com](http://www.isgases.com)



"Your calibration gas manufacturer since 1992"

## CERTIFICATE OF ANALYSIS

<u>Composition</u>	<u>Certification</u>	<u>Analytical Accuracy (+/-)</u>
Methane	500 ppm	2%
Oxygen	20.9 %	2%
Nitrogen	Balance UHP	

**Lot #** 20-7497  
**Mfg. Date:** 7/10/2020  
**Expiration Date:**  
**Transfill Date:** see cylinder  
**Parent Cylinder ID** TWC001763  
**Number:**

**Method of Preparation:**  
Gravimetric/Pressure Transfilled

**Method of Analysis:**  
The parent mix was prepared gravimetrically and is traceable to the NIST by certified weights (ID #CA10814) used to calibrate the scale.

**Analysis By:** Tony Janquart  
**Title:** Quality Assurance Manager  
**Certificate Date:** 7/10/2020



Concentration (Mole%) Accuracy  
+/- 2%  
500 ppm  
Balance

70°F and 1,000 PSIG

Exp Date

7/10/2024

Lot#: 20-7497

P/N:23-0500

**103 L**

Avenue, Irvine, CA 92614  
(800) 201-8150 Fax (949) 757-0363

Methane (0.001)



WAR

CONTAINS GAS UNDER PRESSURE

Read label before use. Keep out of children's reach. Keep label at hand. Use equipment under pressure.

Do not handle until all safety procedures are followed. Use protective gloves, protective clothing.

Use a back flow preventive device and open slowly. Close valve after each use. Store in a cool, dry place, away from sunlight when ambient temperature is above 50°F.

Dispose of content and/or container in accordance with applicable regulations.

DO NOT REMOVE THIS PRODUCT LABEL

Federal law forbids transportation of this product in a motor vehicle (49 CFR 173.34). Federal law prohibits selling this product.

103-23-0500  
Methane 500 ppm/  
Nitrogen 20.0% / Nitrogen

**103 L**

Lot #

20-7497



COA



4 of 4



A DIVISION OF NORCO, INC.

Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

Premier Safety & Service

33596 Sterling Pond Blvd
Sterling Hights MI 48312

Cust Number 07152
Order Number 69671309
PO Number 08361523

Lot Number 2-108-80
Norlab Part# J1971500PA
Cylinder Size 103 Liter
Number of Cyl 1

Date on Manufacture 6/10/2022
Expires 06/2025
Analytical Accuracy +/- 2 %

Customer Part# N/A

Table with 3 columns: Component, Reported Concentration, Requested Concentration. Rows for Methane and Air.

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs.

NIST Traceable Numbers are available upon request.

Approved: [Signature] Date Signed: 6/10/2022
David Reed
Lab Technician



800.962.7837  
www.premiersafety.com

33596 Sterling Pond  
Sterling Heights, MI

Components	Concentration (Mole %)
Methane	500 ppm
Air	Balance

Lot#: 2-108-80  
 Accuracy: +/- 2 %  
 Part: J1971500PA  
 Contents: 103Liters-3.6Cu.Ft.,-1000psig

MFG Date: 5/5/2022  
 Exp. Date: 05/2025

# CALIBRATION GAS





## Calibration Gases & Equipment

### CERTIFICATE OF ANALYSIS

Norco, Inc  
Twin Falls Warehouse  
203 S. Park Ave. West  
Twin Falls, ID 83301

Cust Number WH012  
Order Number 71846398  
PO Number 04A35563

Lot Number 3-088-88  
Norlab Part# J1971500PA  
Cylinder Size 103 Liter  
Number of Cyl 5

Date on Manufacture 4/7/2023  
Expires 04/2027  
Analytical Accuracy +/- 2 %

Customer Part# N/A

Component	Reported Concentration	Requested Concentration
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs.

NIST Traceable Numbers are available upon request.

Approved:

  
\_\_\_\_\_  
Jeff Korn  
Lab Technician

Date Signed:

4/7/2023





800.962.7837  
www.premiersafety.com

33596 Sterling Road  
Sterling Heights, MI

**Components** **Concentration (Mole %)**

Methane  
Air

500 ppm  
Balance

Lot#: 3-088-88  
Accuracy: +/- 2 %  
Part: J1971500PA  
Contents: 103Liters-3.6Cu.Ft., -1000psig

MFG Date: 4/7/2023  
Exp. Date: 04/2027

**CALIBRATION GAS**



A DIVISION OF NORCO, INC.

### Calibration Gases & Equipment

## CERTIFICATE OF ANALYSIS

Premier Safety & Service

33596 Sterling Pond Blvd  
Sterling Hights MI 48312

Cust Number 07152  
Order Number 69679439  
PO Number 04906817

Lot Number 2-154-85  
Norlab Part# J1002  
Cylinder Size 103 Liter  
Number of Cyl 1

Date on Manufacture 6/13/2022  
Expires 06/2025  
Analytical Accuracy Certified

Customer Part# N/A

Component	Reported Concentration	Requested Concentration
Air	Zero Grade	Zero Grade
Oxygen	20.9 %	20.9 %
T.H.C. (as Methane)	< 1.0 ppm	< 1.0 ppm
Nitrogen	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

Minor constituents tested with standards traceable to NIST by mass or comparison to SRM's (Standard Reference Materials).

NIST Traceable Numbers are available upon request.

Approved:

David Reed  
Lab Technician

Date Signed:

6/13/2022



800.962.7837  
www.premiersafety.com

33596 Sterling  
Sterling Heights

**Components**

**Concentration (Mol %)**

Air  
Oxygen  
T.H.C. (as Methane)  
Nitrogen

Zero Grade  
20.9 %  
< 1.0 ppm  
Balance

Lot: 2-154-85

Accuracy: Certified

Part: J1002

Contents: 103Liters-3.6Cu.Ft., -1000psig

MFG Date: 6/13/2022

Exp. Date: 08/2025

**CALIBRATION GAS**





## Calibration Gases & Equipment

### CERTIFICATE OF ANALYSIS

Premier Safety & Service

33596 Sterling Pond Blvd  
Sterling Hights MI 48312

Cust Number 07152  
Order Number 73732858  
PO Number 04B70733

Lot Number 3-340-61  
Norlab Part# J1971500PA  
Cylinder Size 103 Liter  
Number of Cyl 5

Date on Manufacture 12/7/2023  
Expires 12/2027  
Analytical Accuracy +/- 2 %

Customer Part# N/A

Component	Reported Concentration	Requested Concentration
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs.

NIST Traceable Numbers are available upon request.

Approved:

  
\_\_\_\_\_  
Aaron Schwenken  
Lab Manager

Date Signed:

12/7/2023

**PREMIER SAFETY**

800.962.7837  
www.premiersafety.com

33596 Sterling  
Sterling Highway

**Components**

Methane  
Air

**Concentration (Mixture)**

500 ppm  
Balance

Lot#: 3-340-61

Accuracy: +/- 2 %

Part: J1971500PA

Contents: 103Liters-3.6Cu.Ft., -1000psig

MFG Date: 12/7/00

Exp. Date: 12/2007

**CALIBRATION GAS**



**Calibration Gases & Equipment**

**CERTIFICATE OF ANALYSIS**

Premier Safety & Service  
33596 Sterling Pond Blvd  
Sterling Hights MI 48312

Cust Number 07152  
Order Number 73732858  
PO Number 04B70733

Lot Number 3-340-62  
Norlab Part# J197125PA  
Cylinder Size 103 Liter  
Number of Cyl 5

Date on Manufacture 12/7/2023  
Expires 12/2027  
Analytical Accuracy +/- 5 %


Customer Part# N/A

Component	Reported Concentration	Requested Concentration
Methane	25 ppm	25 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs.

NIST Traceable Numbers are available upon request.

Approved:  Date Signed: 12/7/2023  
Aaron Schwenken  
Lab Manager



800.962.7837  
www.premiersafety.com

33596 Sterling Parkway  
Sterling Heights, MI

**Components**

**Concentration (Mole %)**

Methane  
Air

25 ppm  
Balance

Lot#: 3-340-62

Accuracy: +/- 5 %

Part: J197125PA

Contents: 103Liters-3.6Cu.Ft., -1000psig

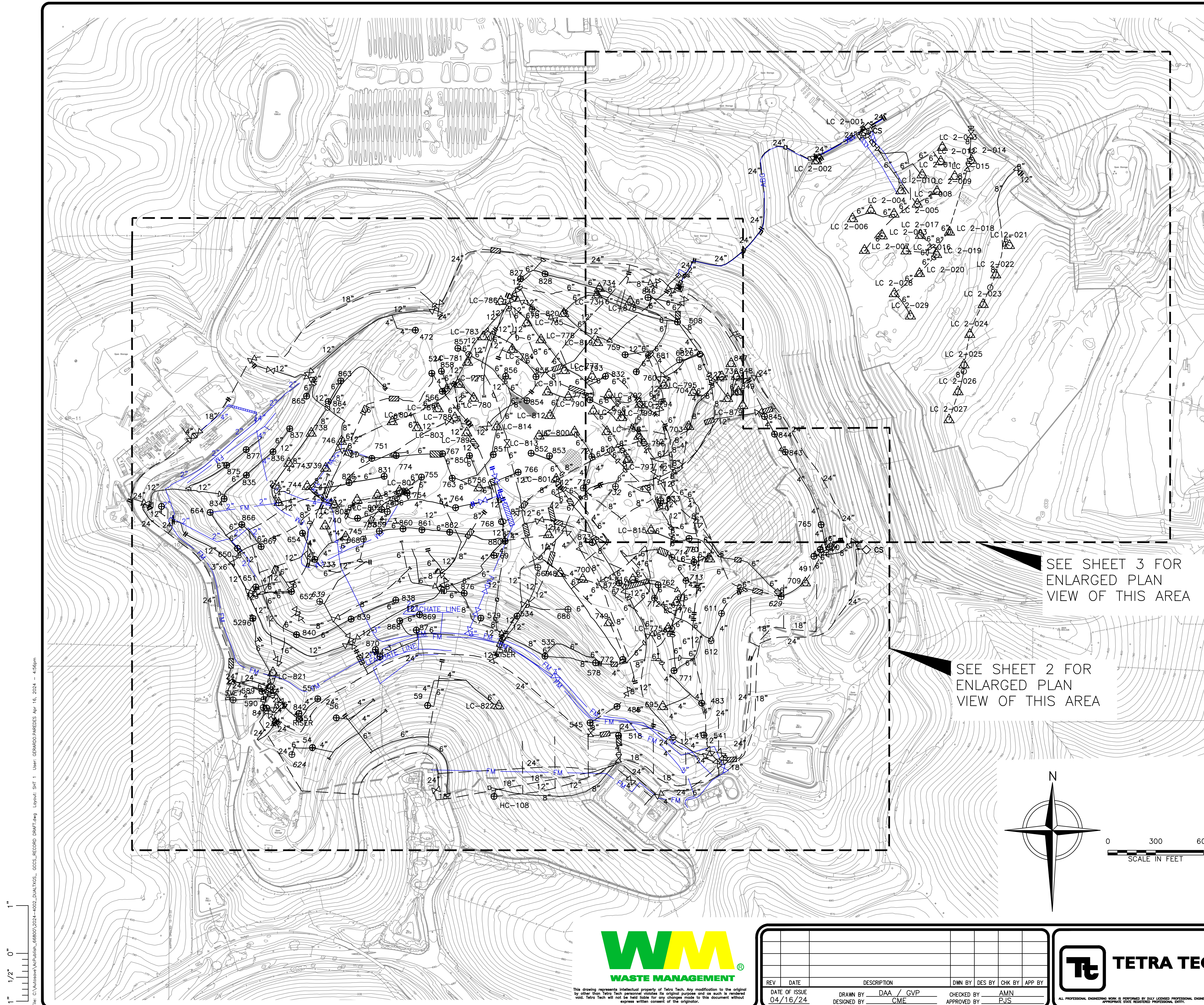
MFG Date: 12/7/2023

Exp. Date: 12/2027

**CALIBRATION GAS**

**Appendix B**  
**GCCS Map**





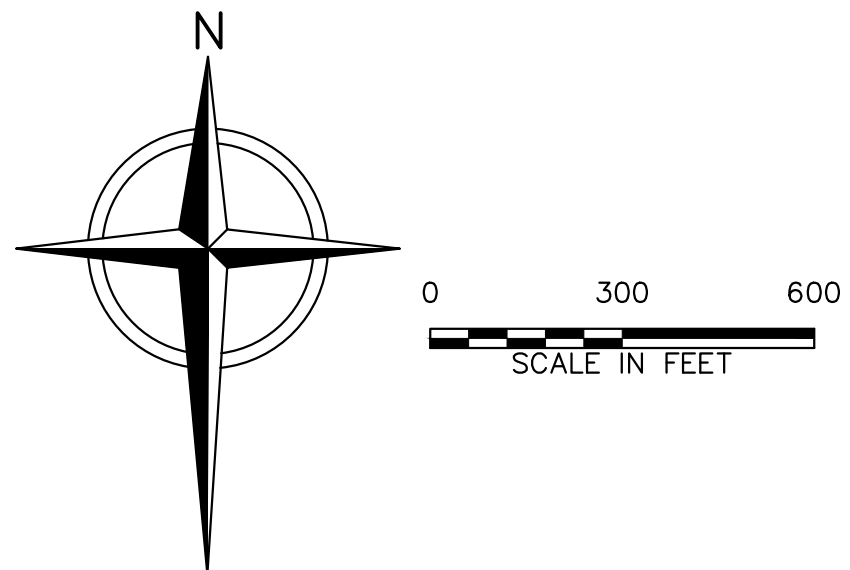
**LEGEND**

	UNIT 1 APPROXIMATE LIMIT OF WASTE
	UNIT 2 APPROXIMATE LINER BOUNDARY
	APPROXIMATE ASBESTOS AREA BOUNDARY
	EXISTING 10' CONTOUR
	EXISTING LANDFILL GAS PIPE -- ABOVEGROUND
	EXISTING LANDFILL GAS PIPE -- BELOWGROUND
	EXISTING LEACHATE COLLECTION PIPE
	EXISTING HORIZONTAL LFG COLLECTOR
	EXISTING FORCE MAIN PIPE
	EXISTING CONDENSATE LINE -- ABOVEGROUND
	EXISTING CONDENSATE LINE -- BELOWGROUND
	523 EXISTING LFG EXTRACTION WELL
	CI-1 EXISTING CONDENSATE INJECTION WELL
	LC 2-021 691 EXISTING LOCAL CONTROL WELL
	EXISTING REMOTE WELLHEAD
	EXISTING CONTROL VALVE
	EXISTING BLIND FLANGE
	EXISTING FLANGE CONNECTION
	EXISTING REDUCER FITTING
	EXISTING CONDENSATE PUMP STATION
	EXISTING ROAD CROSSING
	EXISTING HEADER HIGH POINT
	EXISTING CAP
	GP-10 EXISTING GAS MONITORING PROBE
	12" INSTALLED LANDFILL GAS PIPE -- ABOVEGROUND
	INSTALLED LANDFILL GAS PIPE -- BELOWGROUND
	INSTALLED REDUCER FITTING
	LC 2-021 691 INSTALLED LOCAL CONTROL WELL
	INSTALLED BLIND FLANGE
	INSTALLED CONTROL VALVE
	INSTALLED U-TRAP RISER
	AREA FROM SURVEY INFORMATION IN FILE TITLED "DINOSED - DISPOSAL AREA"
	AREA FROM SURVEY INFORMATION IN FILE TITLED "9-23-14 RTA" EXISTING HEADER HIGH POINT
	APPROXIMATE LOCATION OF OLD FLARE MATERIALS

- NOTES:**
1. TOPOGRAPHIC CONTOURS PREPARED USING PHOTOGRAMMETRIC METHODS BY MILLER CREEK AERIAL MAPPING INC. DATE OF PHOTOGRAPHY: DECEMBER 13, 2022. DATUM: HORIZONTAL - ZONE 3, NAD27, VERTICAL - NAVD29.
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  7. ASBESTOS AREA BOUNDARY LOCATION PER FIELD SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: APRIL 7, 2016.
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  14. THE 2023 GCCS IMPROVEMENTS AS-BUILT PER PRECONSTRUCTION SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: OCTOBER 16, 2023.
  15. THE 2023 GCCS IMPROVEMENTS AS-BUILT PER SURVEY PERFORMED BY F3 & ASSOCIATES, INC. OF BENICIA, CA. DATE OF SURVEY: DECEMBER 22, 2023.

SEE SHEET 3 FOR ENLARGED PLAN VIEW OF THIS AREA

SEE SHEET 2 FOR ENLARGED PLAN VIEW OF THIS AREA



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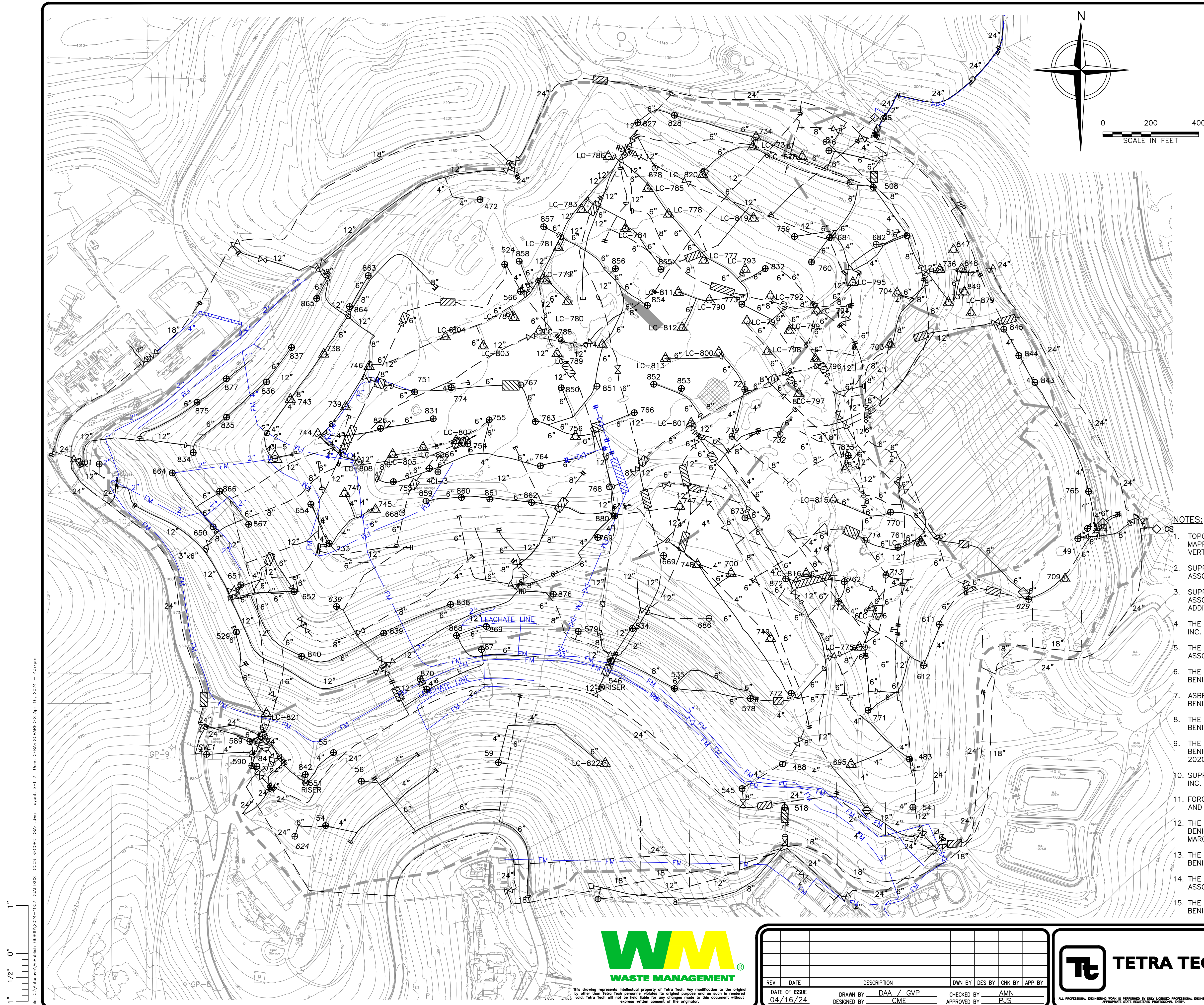
ALAMONT LANDFILL AND RESOURCE RECOVERY FACILITY  
ALAMEDA COUNTY, CALIFORNIA

**2024 GCCS IMPROVEMENTS  
GCCS RECORD LAYOUT**

SHEET NO.  
**1**

PROJECT NO.  
2024-4002

**DRAFT RECORD DRAWINGS**



**LEGEND**

- UNIT 1 APPROXIMATE LIMIT OF WASTE
- UNIT 2 APPROXIMATE LINER BOUNDARY
- APPROXIMATE ASBESTOS AREA BOUNDARY
- EXISTING 10' CONTOUR
- EXISTING LANDFILL GAS PIPE - ABOVEGROUND
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- EXISTING LEACHATE COLLECTION PIPE
- EXISTING HORIZONTAL LFG COLLECTOR
- EXISTING FORCE MAIN PIPE
- EXISTING CONDENSATE LINE - ABOVEGROUND
- EXISTING CONDENSATE LINE - BELOWGROUND
- EXISTING AIR LINE - BELOWGROUND
- EXISTING LFG EXTRACTION WELL
- EXISTING CONDENSATE INJECTION WELL
- EXISTING LOCAL CONTROL WELL
- EXISTING REMOTE WELLHEAD
- EXISTING CONTROL VALVE
- EXISTING BLIND FLANGE
- EXISTING FLANGE CONNECTION
- EXISTING REDUCER FITTING
- EXISTING CONDENSATE PUMP STATION
- EXISTING ROAD CROSSING
- EXISTING HEADER HIGH POINT
- EXISTING CAP
- EXISTING GAS MONITORING PROBE
- INSTALLED LANDFILL GAS PIPE - ABOVEGROUND
- INSTALLED LANDFILL GAS PIPE - BELOWGROUND
- INSTALLED REDUCER FITTING
- INSTALLED LOCAL CONTROL WELL
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- INSTALLED CONTROL VALVE
- INSTALLED U-TRAP RISER
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- AREA FROM SURVEY INFORMATION IN FILE TITLED "9-23-14 RTA"
- APPROXIMATE LOCATION OF OLD FLARE MATERIALS

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**DRAFT RECORD DRAWINGS**



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**TETRA TECH**

ALTAMONT LANDFILL AND  
RESOURCE RECOVERY FACILITY  
ALAMEDA COUNTY, CALIFORNIA

**2024 GCCS IMPROVEMENTS  
FILL AREA 1**

SHEET NO.  
**2**

PROJECT NO.  
2024-4002

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 1" = 100' 1/2" = 50' 0" = 25'

## **Appendix C**

### **Root Cause/Corrective Action Analyses Notifications**

No Root Cause/Corrective Action Analyses during the reporting period

**Appendix D**  
**40 CFR 62, SUBPART OOO SEMI-ANNUAL REPORT**

**JUNE 2024**

**40 CFR 62, SUBPART 000  
SEMI-ANNUAL REPORT**



**Altamont Landfill and Resource Recovery Facility  
Facility Number A-2066  
10840 Altamont Pass Road,  
Livermore, CA 94551**

## EXECUTIVE SUMMARY

---

The Altamont Landfill and Resource Recovery Facility (ALRRF) is a municipal solid waste (MSW) landfill located in Livermore, California, in Alameda County, and is owned/operated by Waste Management of Alameda County, Inc. The facility is subject to the requirements of the United States Environmental Protection Agency's (USEPA) *Standards of Performance for Municipal Solid Waste Landfills*; 40 Code of Federal Regulations (CFR) Part 63, Subpart AAAA.

Waste Management of Alameda County, Inc is submitting following information for 40 CFR 62, Subpart OOO for the Altamont Landfill and Resource Recovery Facility (ALRRF). The requirements from 40 CFR 62.16716(c) incorporated requirements for landfill gas temperatures at wellheads from sections of that were incorporated into the California State Plan 40 CFR 62 Subpart F. This report covers the period from December 1, 2023, to May 31, 2024.

## TABLE OF CONTENTS

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<b>1.0 40 CFR 40 CFR 62.1115(B)(2) SEMI-ANNUAL REPORT.....</b>	<b>2</b>
1.1.1 Wellhead Monitoring §62.16722(a)(2) and (3).....	2
1.1.2 Root Cause/Corrective Action Analysis §62.16724(h)(7) .....	4

## 1.0 40 CFR 40 CFR 62.1115(B)(2) SEMI-ANNUAL REPORT

---

ALRRF is submitting this Report because the existing MSW landfill owns and/or operates an active landfill gas collection and control system. The following summarizes the report requirements from 40 CFR 62, Subpart OOO. This report covers from December 1, 2023, through May 31, 2024.

### 1.1.1 Wellhead Monitoring §62.16722(a)(2) and (3)

*§62.16722(a) requires each owner or operator seeking to comply with §62.16714(b)(2) for an active gas collection system to install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead; and*

*(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis*

*(3) Monitor temperature of the landfill gas on a monthly basis as provided in §62.16720(a)(4). The temperature measuring device must be calibrated annually using the procedure in 40 CFR part 60, appendix A-1, EPA Method 2, section 10.3.*

ALRRF operated in compliance with all wellhead monitoring standards listed in §62.16716(a)(2) and (3) during the reporting period. Each landfill gas collector is equipped with an access port allowing for measuring temperature at each wellhead. On a monthly basis operations and maintenance personnel measure the gauge pressure, temperature, and oxygen concentration at each well head. The gauge pressure taken at the wellhead is used in determining the presence of vacuum at the collector. Measurements are taken with a portable meter which is calibrated per the manufacturer's specifications.

Wells that were found to be operating at temperatures greater than 131°F (or HOV) are summarized in the following tables.



**Wells with Landfill Gas Temperatures Greater than 131°F or HOV**

Name	Initial Reading		5-Day Corrective Action	Final Reading		Duration (days)
	Date	Temp (°F)		Date	Temp (°F)	
ALT20012	5/1/2024	131.1	NSPS/EG CAI;Dec. Flow/Vac.	5/1/2024	129.9	<1
ALT20012	5/15/2024	131.3	No Adj. Made;NSPS/EG CAI	5/28/2024	80.1	<15
ALTA0855*	4/12/2024	164.6	NSPS/EG CAI;Barely Open;Dec. Flow/Vac.	4/16/2024	144.2	<5
ALTA0880**	12/27/2023	135	NSPS/EG CAI;Barely Open	2/19/2024	125	<60
ALTA0834**	12/27/2023	133	NSPS/EG CAI;Inc. Flow/Vac.	1/5/2024	129	<15

\*Well ALTA0855 was on HOV list. Well ALTA0855 was damaged and decommissioned on April 18, 2024

\*\* Wells ALTA0834 and ALTA0880 were added to the HOV list on April 3, 2024.

A list of all current HOVs is presented in the following table.

**Wells with Temperature HOVs**

Device	Date	HOV	Device	Date	HOV
ALLC0745	7/1/2018	145°F	ALTA0733	10/3/2017	145°F
ALTA0579	1/22/2011	145°F	ALLC0740	6/3/2019	145°F
ALTA0589	1/18/2018	145°F	ALTA0755	2/1/2019	145°F
ALTA0611	1/22/2011	145°F	ALTA0721	3/24/2017	145°F
ALTA0612	3/3/2011	145°F	ALTA0723	3/24/2017	145°F
ALTA0639	12/1/2014	145°F	ALTA0732	3/24/2017	145°F
ALTA0652	6/1/2016	145°F	ALTA0654	1/1/2017	145°F
ALLC0836	9/23/2021	145°F	ALLC0835	9/23/2021	145°F
ALLC0798	7/29/2022	145°F	ALLC0837	9/23/2021	145°F
ALTA0850	3/14/2023	145°F	ALTA0859	3/14/2023	145°F
ALTA0867	3/14/2023	145°F	ALTA0760	1/31/2023	145°F
ALTA0858	6/9/2023	145°F	ALT20013	7/6/2023	145°F
ALTA0767	9/25/2023	145°F	ALTA0834	4/3/2024	145°F
ALT20017	9/25/2023	145°F	ALTA0880	4/3/2024	145°F

**Wells with Temperature HOVs**

<b>Device</b>	<b>Date</b>	<b>HOV</b>	<b>Device</b>	<b>Date</b>	<b>HOV</b>
ALT20012	6/10/2024	145°F	-	-	-

**1.1.2 Root Cause/Corrective Action Analysis §62.16724(h)(7)**

§62.16724(h)(7): For any corrective action analysis for which corrective actions are required in §62.16720(a)(3) or (4) and that take more than 60 days to correct the exceedance, the root cause analysis conducted, including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure or elevated temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

During the reporting period all temperature exceedances were within 0 to 60 days.

**40 CFR 62, SUBPART OOO**

**Root Cause/Corrective Action Analyses Notifications**

# Altamont Landfill

## Root Cause / Corrective Action Analysis

Well ID **ALTA0880** Analysis Category **Temperature**  
Initial Exceedance Date **12/27/2023** Exceedance Correction Date **2/19/2024**  
Form Completed By **Rajan Phadnis**

### Root Cause Analysis

Were hoses and filters from the monitor connected properly? **Yes**  
Is the well turned off for fire mitigation? **No**

Initial Assessment of Issue **Temperature change - cause unknown**

Issue Investigated	Result	Date Completed
<b>Evidence of Fire</b>	<b>No indicators of fire, no further action required</b>	<b>12/27/2023</b>

### Gas Analyses (if required)

Parameter	Result	Source	Date
<b>Carbon Monoxide</b>	<b>20 ppm</b>	<b>Stain tube</b>	<b>12/27/2024</b>
<b>Carbon Monoxide</b>	<b>20 ppm</b>	<b>Stain tube</b>	<b>1/5/2024</b>
<b>Carbon Monoxide</b>	<b>20 ppm</b>	<b>Stain tube</b>	<b>2/26/2024</b>
<b>Carbon Monoxide</b>	<b>20 ppm</b>	<b>Stain tube</b>	<b>3/19/2024</b>

Certification **Rajan Phadnis** Approved By **Ben Tarver**

Exceedance corrected within 60 days of initial exceedance? **Yes**  
Exceedance corrected within 120 days of initial exceedance? **Yes**

### Corrective Action Analysis

Scope of Corrective Action **NA**  
Start Date **NA** Completion Date **NA**  
Certification  Approved By

### Summary of Completed Actions

**Submitted HOV letter to BAAQMD requesting well to be added to HOV list to 145°F.**