February 9, 2022

Ventura County Air Pollution Control District
4567 Telephone Road, 2nd Floor
Ventura, California 93003
805-303-4005

Mr. Matt Salazar
Air Enforcement Office
US EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105

RE: Initial 40 CFR 63, Subpart AAAA Semi-Annual Report
Simi Valley Landfill and Recycling Center, Simi Valley, California

Dear Mr. Keith Macias.

Pursuant to Title 40 Code of Federal Regulations 63.1981(h), Waste Management of California, Inc. is submitting the Initial Semi-Annual Report for the Simi Valley Landfill and Recycling Center (SVLRC). This report covers the period from September 27, 2021 (the effective date of the rule) to December 31, 2021.

If you have any questions or comments regarding this document, please call Collin Pavelchik at (510) 714-6098 (cpavelch@wm.com).

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Ventura County Air Pollution Control District as public record.

Sincerely,

Mark Grady
District Manager

cc Mr. Christian Colline, Waste Management
Ms. Jayna Morgan, Waste Management
Mr. Dustin Colyar, Waste Management
Mr. Matthew Darr, Waste Management

EXECUTIVE SUMMARY

The Simi Valley Landfill and Recycling Center (SVLRC) is a municipal solid waste (MSW) landfill located in Ventura, California in Ventura County and is owned/operated by Waste Management of California, 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 and as such is submitting this NESHAP AAAA Report.

Updates to 40 CFR Part 62, Subpart F, *Plan for the Control of Designated Pollutants from Existing Facility* (Section 111(D) Plan) became effective on June 21, 2021. SVLRC is subject to this rule. New provisions under 40 CFR 63, Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, took effect on September 27, 2021. SVLRC is also subject to this rule, and in accordance with 40 CFR 62 Subpart F the facility is complying with the Subpart AAAA requirements in lieu of the incorporated OOO sections of Subpart F requirements as of that effective date.

In accordance with 63.1981, SVLRC is certifying prior submission of respective NESHAP AAAA reports under 40 CFR part 60 subpart WWW; 40 CFR part 60, subpart XXX; federal plan or EPA-approved and effective State Plan that implements either subpart Cc or Cf. This includes initial and amended (as applicable): design capacity report, NMOC emission rate report, collection and control system Design Plan as well as the initial performance test report.

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1.0 40 CFR 63.1981(h) SEMI-ANNUAL REPORT

SVLRC 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 pursuant to §63.1981(h). This report covers from September 27, 2021 through December 31, 2021.

1.1 Exceedance of Applicable Parameters §63.1981(h)(1)

§63.1981(h)(1) Number of times that applicable parameters monitored under §63.1958(b), (c), and (d) were exceeded and when the gas collection and control system was not operating under §63.1958(e), including periods of SSM. For each instance, report the date, time, and duration of each exceedance.

(i) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with the temperature and nitrogen or oxygen operational standards in introductory paragraph §63.1958(c), provide a statement of the wellhead operational standard for temperature and oxygen you are complying with for the period covered by the report. Indicate the number of times each of those parameters monitored under §63.1961(a)(3) were exceeded. For each instance, report the date, time, and duration of each exceedance.

(ii) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with the operational standard for temperature in §63.1958(c)(1), provide a statement of the wellhead operational standard for temperature and oxygen you are complying with for the period covered by the report. Indicate the number of times each of those parameters monitored under §63.1961(a)(4) were exceeded. For each instance, report the date, time, and duration of each exceedance.

(iii) Beginning no later than September 27, 2021, number of times the parameters for the site-specific treatment system in §63.1961(g) were exceeded.

1.1.1 Wells Operating Under Positive Pressure §63.1958(b)

§63.1958(b) Operate the collection system with negative pressure at each wellhead except under the following conditions:

(1) A fire or increased well temperature. The owner or operator must record instances when positive pressure occurs in efforts to avoid a fire. These records must be submitted with the semi-annual reports as provided in §63.1981(h);

(2) Use of a geomembrane or synthetic cover. The owner or operator must develop acceptable pressure limits in the design plan;

(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes must be approved by the Administrator as specified in §63.1981(d)(2);

SVLRC operated in compliance with all wellhead monitoring standards listed in §63.1958(b) during the reporting period. All instances of positive pressure were corrected within applicable Subpart AAAA timelines.

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 positive pressures are summarized in the following table.

Wells Operating Under Positive Pressure

Name	Initial Reading		Corrective Action Date	5-Day Corrective Action	Final Reading		Duration (days)
	Date	Value ("H_20)			Date	Value ("H_20)	
SIH02113	11/3/21	0.03	11/3/21	Inc. Flow/Vac.	11/3/21	-0.02	<1
SIH2001B	11/1/21	0.0	11/1/21	Inc. Flow/Vac	11/1/21	-0.2	<1
SIH2001B	12/1/21	0.0	12/1/21	Inc. Flow/Vac	12/1/21	-0.3	<1
SIM1572S	11/2/21	0.0	11/2/21	Inc. Flow/Vac	11/2/21	-0.4	<1
SIM1778S	10/21/21	2.1	10/21/21	Inc. Flow/Vac	10/21/21	-21.0	<1
SIM1793S	12/13/21	0.46	12/13/21	Inc. Flow/Vac	12/13/21	-4.3	<1
SIM1924S	12/1/21	0.1	12/1/21	Inc. Flow/Vac	12/1/21	-0.6	<1
SIM1931S	10/4/21	0.0	10/4/21	Inc. Flow/Vac	10/4/21	-0.4	<1
SIM1933S	10/4/21	0.0	10/4/21	Inc. Flow/Vac	10/7/21	-0.3	3
SIM1933S	11/1/21	0.0	11/1/21	Inc. Flow/Vac	11/1/21	-0.4	<1

Wells Operating Under Positive Pressure

Name	Initial Reading		Corrective Action Date	5-Day Corrective Action	Final Reading		Duration (days)
	Date	Value ("H_20)			Date	Value ("H_20)	
SIM1933S	11/2/21	0.0	11/2/21	Inc. Flow/Vac	11/2/21	-2.0	<1
SIM2052S	12/1/21	0.1	12/1/21	Inc. Flow/Vac	12/1/21	-0.3	<1
SIM2061D	10/14/21	5.6	10/14/21	Inc. Flow/Vac	10/14/21	-33.3	<1
SIM2101S	9/23/21	0.03	9/23/21	Inc. Flow/Vac	10/8/21	-0.35	15
SIM2104S	10/27/21	0.4	10/27/21	Inc. Flow/Vac	10/27/21	-10.6	<1
SIMW0031	12/1/21	24.6	12/1/21	Inc. Flow/Vac	12/1/21	-1.1	<1
SIMW0808	12/8/21	0.06	12/8/21	Inc. Flow/Vac	12/8/21	-0.22	<1
SIMW1101	12/1/21	3.8	12/1/21	Inc. Flow/Vac	12/1/21	-0.7	<1
SIMW1776	12/1/21	4.9	12/1/21	Inc. Flow/Vac	12/1/21	-2.2	<1
SIMW1811	12/7/21	0.43	12/7/21	Inc. Flow/Vac	12/7/21	-2.43	<1
SIMW1815	10/20/21	3.4	10/20/21	Inc. Flow/Vac	10/20/21	-16.4	<1
SIMW2005	10/20/21	1.2	10/20/21	Inc. Flow/Vac	10/20/21	-9.2	<1
SIMW2009	11/2/21	0.14	11/2/21	Inc. Flow/Vac	11/2/21	-0.31	<1
SIMW2009	12/3/21	0.0	12/3/21	Inc. Flow/Vac	12/3/21	-0.1	<1
SIMW2047	11/1/21	0.49	11/1/21	Inc. Flow/Vac	11/1/21	-1.04	<1
SIMW2065	10/25/21	0.0	10/25/21	Inc. Flow/Vac	10/27/21	-1.0	<1
SIMW2065	11/4/21	0.0	11/4/21	Inc. Flow/Vac	11/10/21	-1.3	6
SIMW2076	10/4/21	0.7	10/4/21	Inc. Flow/Vac	10/7/21	-8.3	3
SIMW2076	11/9/21	0.15	11/9/21	Inc. Flow/Vac	11/9/21	-3.32	<1

1.1.2 Wells with Temperatures >145°F or HOV §63.1958(c)

§63.1958(c) Operate each interior wellhead in the collection system as specified in 40 CFR 60.753(c), until the landfill owner or operator elects to meet the operational standard for temperature in paragraph (c)(1) of this section.

> *(1) Beginning no later than September 27, 2021, operate each interior wellhead in the collection system with a landfill gas temperature less than 62.8 degrees Celsius (145 degrees Fahrenheit).*
>
> *(2) The owner or operator may establish a higher operating temperature value at a particular well. A higher operating value demonstration must be submitted to the Administrator for approval and must include supporting data demonstrating that the elevated parameter neither causes fires nor significantly inhibits anaerobic decomposition by killing methanogens. The demonstration must satisfy both criteria in order to be approved (i.e., neither causing fires nor killing methanogens is acceptable).*

The applicable standard for temperature and oxygen during this reporting period was §63.1958(c)(1), [62.8°C (145°F) or higher operating value (HOV), no oxygen limits]. SVLRC operated in compliance with all wellhead monitoring standards listed in §63.1958(c) during the reporting period. There were no instances of temperatures greater than 145°F (or HOV).

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. Measurements are taken with a portable meter which is calibrated per the manufacturer's specifications.

Wells with Landfill Gas Temperature Greater than 145°F or HOV

Name	Initial Reading		5-Day Corrective Action	Final Reading		Duration (days)
	Date	Temp (°F)		Date	Temp (°F)	
N/A						

A list of all current HOVs (greater than 145°F) is presented in the following table:

Wells with Temperature HOVs

Device	Date	HOV
SIM1778D	6/18/2021	150
SIMW1779	6/18/2021	150

Device	Date	HOV
SIMW1232	6/18/2021	150
SIMW1233	6/18/2021	150

*SVLRC also has seventy-two (72) existing HOVs for temperatures equal or greater than 131°F and equal or less than 145°F.

1.1.3 Surface Emissions Monitoring §63.1958(d)

§63.1958(d)(1) Operate the collection system so that the methane concentration is less than 500 parts per million (ppm) above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator must conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at no more than 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan must be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30-meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

(2) Beginning no later than September 27, 2021, the owner or operator must:

(i) Conduct surface testing using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in §63.1960(d).

(ii) Conduct surface testing at all cover penetrations. Thus, the owner or operator must monitor any cover penetrations that are within an area of the landfill where waste has been placed and a gas collection system is required.

(iii) Determine the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.

Surface emissions monitoring is discussed in Section 1.5.

1.1.4 Treatment System Monitoring §63.1981(h)(1)(iii)

§63.1981(h)(1) (iii) Beginning no later than September 27, 2021, number of times the parameters for the site-specific treatment system in §63.1961(g) were exceeded.

§63.1961(g) Each owner or operator seeking to demonstrate compliance with §63.1959(b)(2)(iii)(C) using a landfill gas treatment system must calibrate, maintain, and operate according to the manufacturer's specifications a device that records flow to the treatment system and bypass of the treatment system (if applicable). Beginning no later than September 27, 2021, each owner or operator must maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required in §63.1983(b)(5)(ii). The owner or operator must:

(1) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes; and

(2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

SVLRC does not operate a treatment system and therefore, is not subject to the requirements of §63.1981(h)(1)(iii).

1.2 Gas Stream Diversion §63.1981(h)(2)

§63.1981(h)(2) Description and duration of all periods when the gas stream was diverted from the control device or treatment system through a bypass line or the indication of bypass flow as specified under §63.1961.

The gas collection system is not designed nor equipped to bypass the control device(s); therefore §63.1981(h)(2) is not applicable.

1.3 Control or Treatment System Downtime Events §63.1981(h)(3)

§63.1981(h)(3) Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating.

Control device and treatment system downtime events were recorded in compliance with §63.1981(h)(1) and (3) during the reporting period. The following tables summarize all the periods when the control devices and/or treatment system were not operating.

Enclosed Flare No. 3 Downtime Events

Shutdown	Startup	Duration (hours)	Reason
10/7/21 11:30	10/7/21 12:30	1.0	Biogas System Signal Malfunction
10/8/21 0:20	10/8/21 4:35	4.25	Biogas System Signal Malfunction
10/8/21 6:20	10/8/21 7:30	1.17	Biogas System Signal Malfunction
10/20/21 7:40	10/20/21 10:45	3.08	Biogas System Troubleshooting
10/22/21 7:10	10/22/21 10:35	3.42	Sump Failure Sump 4
10/26/21 5:50	10/26/21 13:45	7.92	Sump Clean Out
11/11/21 14:05	11/11/21 15:15	1.17	Vibration Test Combustion Air Blower (CAB)
11/17/21 12:10	11/17/21	0.83	Blower Seal Replacement BL-103/BL-104
11/18/21 8:30	11/18/21 18:10	9.67	Blower-105 Install
11/18/21 19:05	11/19/21 12:50	17.75	Blower-105 Install
11/25/21 4:40	11/26/21 13:45	33.08	Power Outage
12/6/21 8:40	12/6/21 14:55	6.25	Replacement Bearings on Blower-104 installed/H2S Breakthrough
12/16/21 11:05	12/17/21 9:40	22.58	CAB Flare 4 Restart
12/23/21 7:55	12/23/21 8:15	0.33	Biogas System Signal Malfunction
12/24/21 5:35	12/24/21 14:50	9.25	High Burner Temperature/Surging Due to Condensate Build Up in H2S Tank

Enclosed Flare No. 4 Downtime Events

Shutdown	Startup	Duration (hours)	Reason
10/1/21 18:55	10/2/21 6:50	11.92	High O2 affected the Gas Line
10/7/21 11:30	10/7/21 12:25	0.92	Biogas System Signal Malfunction
10/8/21 0:20	10/8/21 4:25	4.08	Biogas System Signal Malfunction
10/8/21 6:20	10/8/21 7:25	1.08	Biogas System Signal Malfunction

10/14/21 8:05	10/14/21 9:10	1.08	High O2 affected the Gas Line
10/20/21 7:45	10/20/21 10:45	3.0	Biogas System Troubleshooting
10/22/21 7:10	10/22/21 10:15	3.08	Sump Failure Sump 4
10/26/21 5:50	10/26/21 13:35	7.75	Sump Cleanout
10/27/21 19:15	12/23/21 10:05	1358.83	Combustion Air Blower Failure
12/23/21 10:10	12/23/21 10:15	0.08	Biogas System Signal Malfunction

1.4 Collection System Downtime Events §63.1981(h) (4)

§63.1981(h)(4) All periods when the collection system was not operating.

§63.1958(e) Operate the system as specified in § 60.753(e) of this chapter, except:

(1) Beginning no later than September 27, 2021, operate the system in accordance to §63.1955(c) such that all collected gases are vented to a control system designed and operated in compliance with §63.1959(b)(2)(iii). In the event the collection or control system is not operating:

(i) The gas mover system must be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere must be closed within 1 hour of the collection or control system not operating; and

(ii) Efforts to repair the collection or control system must be initiated and completed in a manner such that downtime is kept to a minimum, and the collection and control system must be returned to operation.

The gas collection system was operated in accordance with §63.1955(c) during the reporting period to in a manner consistent with safety and good air pollution control practices to minimize emissions and downtime. All collected gases were vented to a control system design and operated in compliance with §63.1959(b)(2)(iii). In the event of collection or control system downtime the gas mover system is shut down and all valves in the collection and control system contributing to the venting of gas to the atmosphere are closed within 1 hour of the collection or control system not operating. Efforts to repair the collection or control system are initiated and completed pursuant to the work practice standards of Section 112(h) of the Clean Air Act such that downtime is kept to a minimum, and the collection and control system is returned to operation.

Collection System Downtime Events

Shutdown	Startup	Duration (hours)	Reason
10/7/2021	10/7/2021	0.92	Biogas System Signal Malfunction
10/8/2021	10/8/2021	5.16	Biogas System Signal Malfunction
10/20/2021	10/20/2021	3.0	Biogas System Signal Malfunction
10/22/2021	10/22/2021	3.08	Sump failure sump 4
10/26/2021	10/26/2021	7.75	Sump cleanout
11/11/2021	11/11/2021	1.17	Flare 4 offline due to Combustion Air Blower (CAB) failure; CAB Vibration test
11/17/2021	11/17/2021	0.83	Flare 4 offline due to CAB failure; blower seal replacement
11/18/2021	11/18/2021	9.67	Flare 4 offline due to CAB failure; new blower install
11/18/2021	11/19/2021	17.75	Flare 4 offline due to CAB failure; new blower installed
11/25/2021	11/26/2021	33.08	Flare 4 offline due to CAB failure; power outage
12/6/2021	12/6/2021	6.25	Flare 4 offline due to CAB failure; replace bearings on blower
12/16/2021	12/17/2021	22.58	Flare 4 offline due to CAB failure; CAB restart
12/23/2021	12/23/2021	0.33	Biogas System Signal Malfunction
12/24/2021	12/24/2021	9.25	High Burner Temp/Surging Due to Condensate Build Up In H2S Tank

1.5 Surface Emissions Monitoring §63.1981(h)(5)

§63.1981(h)(5) The location of each exceedance of the 500-ppm methane concentration as provided in §63.1958(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month. Beginning no later than September 27, 2021,

for location, you record the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.

Surface emissions monitoring was completed in compliance with §63.1960(c) during the reporting period. Monitoring included the perimeter of the landfill, the serpentine path with a 30-meter spacing, penetration and openings monitoring and per Method 21 requirements areas where visual observations indicate possible elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover are monitored.

Monitoring for the Fourth Quarter 2021 was completed during the reporting period. There were eleven (11) locations with recorded methane concentrations greater than 500 ppm as methane. All locations were remediated within §63.1960(c)(4) timelines. The location information plus initial and final remediated methane concentrations are presented in the following table. Applicable monitoring data is presented in Appendix A.

Surface Emissions Monitoring - Areas over 500 ppmv

Initial Monitoring Event					10-Day Remonitoring		1-Month Remonitoring	
Flag Number	Date	Location		CH_4 (ppm_v)	Date	CH_4 (ppm_v)	Date	CH_4 (ppm_v)
		Longitude	Latitude					
1	10/11/21	-118.794695	34.29738102	4211	10/21/21	90	11/10/21	7
21	10/11/21	-118.794776	34.29862297	576	10/21/21	8	11/10/21	15
22	10/11/21	-118.79543	34.29844603	2056	10/21/21	12	11/10/21	11
31	10/11/21	-118.793394	34.29783097	1500	10/21/21	58	11/10/21	19
32	10/11/21	-118.79623	34.29903997	3800	10/21/21	15	11/10/21	10
33	10/11/21	-118.796943	34.2986497	3000	10/21/21	24	11/10/21	13
34	10/11/21	-118.792307	34.30078902	2000	10/21/21	102	11/10/21	16
35	10/11/21	-118.793443	34.30015401	2200	10/21/21	74	11/10/21	5
36	10/11/21	-118.793893	34.30047797	2500	10/21/21	56	11/10/21	7
41	10/11/21	-118.796052	34.29686797	1700	10/21/21	28	11/10/21	9
42	10/11/21	-118.796924	34.29560398	700	10/21/21	60	11/10/21	4

1.6 System Expansion §63.1981(h)(6)

§63.1981(h)(6) The date of installation and the location of each well or collection system expansion added pursuant to §63.1960(a)(3) and (4), (b), and (c)(4).

SVLRC complied with the requirements of §63.1960(a)(3) and (4), (b), and (c)(4).

SVLRC continually looks for ways to optimize the collection system and additional wells or collectors are installed on an as needed basis maintain collection efficiency. The following table summarizes the locations of the wells added to the collection system during the reporting period. Locations of the wells are shown on the GCCS Map included in Appendix B.

Wellfield Expansions to Comply with §63.1960(a)(3) (Pressure Exceedances)

Well ID	Startup Date
N/A, no expansions were required to correct pressure exceedances	

Wellfield Expansions to Comply with §63.1960(a)(4) (Temperature Exceedances)

Well ID	Startup Date
N/A, no expansions were required to correct temperature exceedances	

Wellfield Expansions to Comply with §63.1960(b) (Collection System Coverage)

Well ID	Startup Date
N/A, no expansions were required to increase collection system coverage	

Wellfield Expansions to Comply with §63.1960(c)(4) (Surface Emissions)

Well ID	Startup Date
N/A, no expansions were required to correct surface emissions exceedances	

1.7 Root Cause / Corrective Action Analyses §40 CFR 63.1981(h)(7)

§63.1981(h)(7) For any corrective action analysis for which corrective actions are required in §63.1960(a)(3)(i) or (a)(5) 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 high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

SVLRC complied with the requirements of §63.1960(a)(3)(i) and (a)(5). No root cause or corrective action analyses were required during the reporting period. During the reporting period all wells with positive pressures or temperatures greater than 145°F (or applicable HOV) were corrected within 0 to 60 days.

1.8 Enhanced Monitoring §40 CFR 63.1981(h)(8)

§63.1981(h)(8) Each owner or operator required to conduct enhanced monitoring in §63.1961(a)(5) and (6) must include the results of all monitoring activities conducted during the period.

(i) For each monitoring point, report the date, time, and well identifier along with the value and units of measure for oxygen, temperature (wellhead and downwell), methane, and carbon monoxide.

(ii) Include a summary trend analysis for each well subject to the enhanced monitoring requirements to chart the weekly readings over time for oxygen, wellhead temperature, methane, and weekly or monthly readings over time, as applicable for carbon monoxide.

(iii) Include the date, time, staff person name, and description of findings for each visual observation for subsurface oxidation event.

1.8.1 Enhanced Monitoring for Wellhead Temperature Exceedances §63.1961(a)(5)

The enhanced monitoring requirements of §63.1961(a)(5) for temperature exceedances were not applicable during the reporting period.

1.8.2 Summary Trend Analyses for Wells Subject to Enhanced Monitoring Requirements

No wells were subject to the enhanced monitoring requirements of §63.1961(a)(5) during the reporting period.

1.8.3 Visual Observations for Wells to Enhanced Monitoring Requirements

No wells were subject to the enhanced monitoring requirements of §63.1961(a)(5) during the reporting period.

1.9 Enclosed Combustor Monitoring §63.1983(c)

§63.1983(c) Except as provided in §63.1981(d)(2), each owner or operator of a controlled landfill subject to the provisions of this subpart must keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in

§63.1961 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that must be recorded and reported under §63.1981(h):

(i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million Btu per hour) or greater, all 3-hour periods of operation during which the average temperature was more than 28 degrees Celsius (82 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with §63.1959(b)(2)(iii) was determined.

(ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under paragraph (b)(3) of this section.

The SVLRC operated in compliance with all enclosed combustor monitoring standards listed in §63.1983(c) during the reporting period. There were no reportable exceedances under §63.1983(c)(1)(i).

SVLRC operates two enclosed combustors in accordance with the Part 70 Title V Permit No. 01395 and the Temporary Permit to Operate (TPTO) No. 1395-351, issued by the Ventura County Air Pollution Control District (VCAPCD). As required, the enclosed combustors are equipped with thermocouple(s) that serve as the temperature monitoring device(s). The thermocouples send temperature monitoring data to the digital data recorder. Temperature data is continuously monitored and recorded at least once every 15 minutes.

The enclosed combustors are equipped with flow meters which monitor flow to the enclosed combustors. The flow meters send the data to the digital data recorder, which must record flow rate at least once every 15 minutes.

The enclosed flares are subject to a minimum operating temperature of 28°C (50°F) below the average combustion temperature during the most recent source test (3-hr block averages). The following thresholds apply to the enclosed flares during the reporting period:

Applicable 3-hr Block Average Temperature Limits

Flare No. 3

Parameter	June 29, 2021 Source Test Report
Avg. Test Temperature	1,554 °F
3-hr Min Combustion Temperature	1,504°F

Flare No. 4

Parameter	April 16, 2021 Source Test Report
Avg. Test Temperature	1,551 °F
3-hr Min Combustion Temperature	1,501°F

Appendix A

SEM Data

WASTE MANAGEMENT

172 98th Avenue
Oakland, CA 94603
(510) 430-8509

January 27, 2022

Mr. Mark Grady
2801 Madera Road
Simi Valley, California 93065

Fourth Quarter 2021 Surface Emissions and Component Leak Monitoring Report for the Simi Valley Landfill and Recycling Center

Dear Mr. Tignac:

This monitoring report for the **"Simi Valley Landfill and Recycling Center (SVLRC)"** contains the results of the Fourth Quarter 2021 Integrated and Instantaneous Surface Emissions Monitoring (SEM) and Component Leak Monitoring. Initial surface emissions monitoring was performed by Roberts Environmental Services, LLC. (RES). Re-monitoring of site-wide surface emissions and component leak monitoring was also conducted by RES personnel.

APPLICABLE REQUIREMENTS

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

Surface Emission Monitoring (SEM)

- 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).
- 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; and updated Title 40 CFR part 63, Subpart AAAA (63.1960), promulgated by the United States Environmental Protection Agency (USEPA).
- Ventura County Air Pollution Control District (VCAPCD) Rule 74.17.1 (Municipal Solid Waste Landfills)

Component Leak

- 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).

SVLRC Plan and Alternative Compliance Measures

An Alternative Compliance Option (ACO) Request was submitted to the California Air Resources Board (CARB) on May 24, 2011. A response from the CARB was not received to the ACO Request within 120 days from the date of submittal, therefore SVLRC assumes that the alternative compliance measures, monitoring requirements, and test measures and procedures were deemed acceptable as of September 21, 2011, per CCR Title 17 §95468(c).

All monitoring and reporting was completed in accordance with the 2011 SVLRC AB-32 SEM Plan.

PROCEDURES

General

The surface of the SVLRC disposal area has been divided into one-hundred eighty-five (185), (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 walking pattern as depicted the 2011 SVLRC 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) and 63.1960, 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. In addition, penetrations were monitoring per Title 40 CFR part 63, Subpart AAAA (63.1960).

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 (ppmv) methane, which meets or exceeds all guidelines set forth in the CCR Title 17 §95471(a). 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), CCR Title 17 §95471(c)(2), VCAPCD Rule 74.1.7, and 40 CFR part 63, Subpart AAAA 63.1960.

RES personnel walked the surface of the landfill on a grid-by-grid basis with the wand tip held at 3 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 ppmv (areas of concern) or 500 ppmv (exceedances) for instantaneous were recorded, flagged, and marked on an SEM Map, which, wherever required, is included in the Attachments of this report. Applicable corrective action and re-monitoring timelines are listed below:

- 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 ppmv 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 at 3 inches above the landfill surface. The Integrated monitoring procedures followed the requirements of CCR Title 17 §95471(c)(2).

Grids with results greater than 25 ppmv were recorded, marked on the SEM map, and flagged for remediation. Any grids with integrated concentrations greater than 25 ppmv are subject to the following corrective action and 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.

- If the second 10-day re-monitoring event shows a third grid exceedance, an additional well shall be installed within 120 days of the initial exceedance.

Component Leak Monitoring Procedures

RES personnel monitored the exposed LFG components under positive pressure (pipes, wellheads, valves, blowers, and other mechanical appurtenances) using a TVA 1000 calibrated to 500 ppmv. All leaks measured one half inch or less from the component exceeding the compliance limit of 500 ppmv 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) were recorded. Applicable corrective action and re-monitoring timelines are listed below:

- Leaks at or above 500 ppmv must be corrected and re-monitored within 10 days of the initial exceedance.

FOURTH QUARTER SEM AND COMPONENT LEAK RESULTS

The following is a summary of the SEM and Component leak monitoring results completed during the Fourth Quarter 2021.

Instantaneous Surface Emission Monitoring Results

The Instantaneous surface monitoring was performed on October 11, 2021, in accordance with the NSPS NESHAP, Rule 74.1.17, CCR Title 17 §95469 and ACO. Results and data from the monitoring are presented in Attachment A.

Initial Monitoring Event Exceedances of 500 ppmv

There were eleven (11) exceedances of 500 ppmv as methane detected during the initial monitoring events conducted on October 11, 2021. RES personnel remediated the locations, and the following re-monitoring was conducted as described below.

First Ten-Day Re-Monitoring Results

RES personnel performed the first ten-day re-monitoring events on October 21, 2021. No exceedances were observed during the first ten-day re-monitoring event.

Thirty-Day Re-Monitoring Results

RES personnel performed the thirty-day monitoring event on November 10, 2021. No exceedances were observed during the thirty-day re-monitoring event.

Readings between 200 ppmv and 499 ppmv (Initial and Re-monitored)

There were zero (0) readings between 200 ppmv and 499 ppmv, measured as methane detected during the initial monitoring event on October 11, 2021. Pursuant to CCR Title 17 §95471(c), instantaneous surface emissions exceeding 200 ppmv but below 500 ppmv are required to be recorded.

Integrated Surface Emissions Monitoring Results

The Integrated surface sampling (ISS) was performed on October 12 & 13, 2021, in accordance with the ACO, requirements outlined in CCR Title 17 §95469, and VCAPCD Rule 74.1.17. See Attachment B for details.

Initial Monitoring Event Exceedances of 25 ppmv

There were zero (0) grids with an exceedance above 25 ppmv as methane detected during the initial monitoring event conducted on October 12 & 13, 2021.

Ten-Day Re-Monitoring Results

No exceedances were observed during the initial monitoring events, therefore the 10-day re-monitoring was not required.

The average methane concentration of each grid was recorded during the monitoring event per applicable requirements. See Attachment B for details.

Component Leak Monitoring Results

Component leak monitoring was conducted per the applicable requirements on October 12, 2021. There were two (2) locations with a component leak detection of greater than 500 ppmv during the initial monitoring event. RES personnel remediated the locations, and the ten-day re-monitoring event was performed on October 21, 2021; no exceedances were observed. 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). These values are documented in the field data sheets. The chart data is scanned and included in Attachment D.

Precipitation Requirements

Per the SVLRC'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 ppmv in air for integrated sample analyses and 500 ppmv 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 the undersigned at (510) 714-6098.

Thank you,
Waste Management

Collin Pavelchik

Collin Pavelchik
Environmental Protection Air Quality Specialist

Attachment A – Instantaneous Surface Emission Monitoring Event Records

- Monitoring Logs and Exceedances
- Surface Monitoring Weather Data
- SEM Map

Attachment B – Integrated Surface Emission Monitoring Event Records

- Monitoring Logs and Exceedances
- Surface Monitoring Weather Data
- SEM Map

Attachment C – Component Leak Monitoring Event Records

- Component Leak Exceedances and Monitoring Logs

Attachment D – Weather Station Data

- Strip Chart Data and Legend

Attachment E – Calibration Records

- Instrument and Gas Calibration Records

Attachment A

Instantaneous Surface Emission Monitoring Event Records

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: S. Hershey, M. Partida, J. Spicer, D. Peralta, S. Pope, G. Robles, J. Wesson

Cal. Gas Exp. Date: 1-19-23

Date: 10-11-21 Instrument Used: TVA 1000 Grid Spacing: 25'

Temperature: 65° Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
1	SH	0800	0815	8	4	6	12	
2	DP	0800	0815	7	4	6	12	
3	GR	0800	0815	4	4	6	12	
4	MP	0800	0815	9	4	6	12	
5	SP	0800	0815	6	4	6	12	
6	JW	0800	0815	2	4	6	12	
7	JS	0800	0815	7	4	6	12	
8	SH	0815	0830	5	4	6	12	
9	DP	0815	0830	2	4	6	12	
10	GR	0815	0830	8	4	6	12	
11	MP	0815	0830	14	4	6	12	
12	SP	0815	0830	12	4	6	12	
13	JW	0815	0830	6	4	6	12	
14	JS	0815	0830	3	4	6	12	
15	SH	0830	0845	3	4	6	12	
16	DP	0830	0845	8	4	6	12	
17	GR	0830	0845	9	4	6	12	
18	MP	0830	0845	7	4	6	12	
19	SP	0830	0845	4	4	6	12	
20	JW	0830	0845	3	4	6	12	
21	JS	0830	0845	2	4	6	12	
22	SH	0845	0900	3	2	4	12	
23	DP	0845	0900	5	2	4	12	
24	GR	0845	0900	6	2	4	12	
25	MP	0845	0900	2	2	4	12	
26	SP	0845	0900	7	2	4	12	
27	JW	0845	0900	4	2	4	12	
28	JS	0845	0900	3	2	4	12	
29	SH	0900	0915	5	4	6	12	
30	DP	0900	0915	8	4	6	12	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: S. Hathaway, M. Partida, J. Spicer, O. Peralta, S. Lopez, G. Robles, J. Wesson

Cal. Gas Exp. Date: 1-19-23

Date: 10-11-21 Instrument Used: TVA 1000 Grid Spacing: 25'

Temperature: 70° Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
31	GR	0900	0915	5	4	6	12	
32	MP	0900	0915	2	4	6	12	
33	SP	0900	0915	5	4	6	12	
34	JW	0900	0915	6	4	6	12	
35	JS	0900	0915	6	4	6	12	
36	SH	0915	0930	4	4	5	12	
37	OP	0915	0930	2	4	5	12	
38	GR	0915	0930	7	4	5	12	
39	MP	0915	0930	4	4	5	12	
40	SP	0915	0930	5	4	5	12	
41	JW	0915	0930	6	4	5	12	
42	JS	0915	0930	3	4	5	12	
43	SH	0930	0945	2	4	5	12	
44	OP	0930	0945	4	4	5	12	
45	GR	0930	0945	8	4	5	12	
46	MP	0930	0945	5	4	5	12	
47	SP	0930	0945	7	4	5	12	
48	JW	0930	0945	4	4	5	12	
49	JS	0930	0945	4	4	5	12	
50	SH	0945	1000	3	4	7	12	
51	OP	0945	1000	9	4	7	12	
52	GR	0945	1000	6	4	7	12	
53	MP	0945	1000	4	4	7	12	
54	SP	0945	1000	5	4	7	12	
55	JW	0945	1000	4	4	7	12	
56	JS	0945	1000	2	4	7	12	
57	SH	1000	1015	8	3	4	12	
58	OP	1000	1015	3	3	4	12	
59	GR	1000	1015	5	3	4	12	
60	MP	1000	1015	9	3	4	12	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: S. Hershey, M. Martida, J. Spicuzza, D. Perrotta, S. Pope, G. Robles, J. Wilson

Cal. Gas Exp. Date: 1-19-23

Date: 10-11-21 Instrument Used: TVA 1000 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
61	SP	1000	1015	15	3	4	12	
62	JW	1000	1015	12	3	4	12	
63	JS	1000	1015	700	3	4	12	WOX 12R
64	SH	1045	1030	26	3	5	12	
65	OP	1015	1030	13	3	5	12	
66	GR	1015	1030	14	3	5	12	
67	MP	1015	1030	4	3	5	12	
68	SP	1015	1030	5	3	5	12	
69	JW	1015	1030	2	3	5	12	
70	JS	1015	1030	6	3	5	12	
71	SH	1030	1045	3	4	6	12	
72	OP	1030	1045	4	4	6	12	
73	GR	1030	1045	2	4	6	12	
74	MP	1030	1045	5	4	6	12	
75	SP	1030	1045	4	4	6	12	
76	JW	1030	1045	2	4	6	12	
77	JS	1030	1045	5	4	6	12	
78	SH	1045	1100	3	4	6	12	
79	OP	1045	1100	3	4	6	12	
80	GR	1045	1100	2	4	6	12	
81	MP	1045	1100	8	4	6	12	
82	SP	1045	1100	1500	4	6	12	GW 206(1)
83	JW	1045	1100	7	4	6	12	
84	JS	1045	1100	4	4	6	12	
85	SH	1200	1215	4	4	10	8	
86	OP	1200	1215	4211	4	10	8	GW # 109
87	GR	1200	1215	5	4	10	8	
88	MP	1200	1215	4	4	10	8	
89	SP	1200	1215	19	4	10	8	
90	JW	1200	1215	1700	4	10	8	Sump A

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: S. Hershey, O. Peralta, G. Robles, M. Partida, S. Pope, J. Iverson, J. Spicer

Cal. Gas Exp. Date: 1-19-25

Date: 10-11-24 Instrument Used: TVA 1000 Grid Spacing: 25

Temperature: 75° Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
91	JS	1200	1215	4	4	10	S	
92	SH	1215	1230	8	4	6	S	
93	OP	1215	1230	3	4	6	S	
94	GR	1215	1230	2	4	6	S	
95	MP	1215	1230	5	4	6	S	
96	SP	1215	1230	6	4	6	S	
97	JW	1215	1230	6	4	6	S	
98	JS	1215	1230	3	4	6	S	
99	SH	1230	1245	8	4	6	S	
100	OP	1230	1245	2	4	6	S	
101	GR	1230	1245	4	4	6	S	
102	MP	1230	1245	15	4	6	S	
103	SP	1230	1245	3000	4	6	S	GW 819
104	JW	1230	1245	13	4	6	S	
105	JS	1230	1245	10	4	6	S	
106	SH	1245	1300	8	4	8	S	
107	OP	1245	1300	10	4	8	S	
108	GR	1245	1300	2056	4	8	S	GW 19305
109	MP	1245	1300	12	4	8	S	
110	SP	1245	1300	576	4	8	S	GW 1176
111	JW	1245	1300	14	4	8	S	
112	JS	1245	1300	18	4	8	S	
113	SH	1300	1315	12	4	10	S	
114	OP	1300	1315	8	4	10	S	
115	GR	1300	1315	4	4	10	S	
116	MP	1300	1315	3	4	10	S	
117	SP	1300	1315	9	4	10	S	
118	JW	1300	1315	6	4	10	S	
119	JS	1300	1315	5	4	10	S	
120	SH	1315	1330	3800	4	10	S	unmarked pipe

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: S. Hershey, O. Peralta, G. Robles, M. Porter, S. Pope, J. Wesson, J. Spicer

Cal. Gas Exp. Date: 1-19-23

Date: 10-11-21 Instrument Used: TVA 1000 Grid Spacing: 25'

Temperature: 75° Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
121	OP	1315	1330	10	4	10	4	
122	GR	1315	1330	8	4	10	4	
123	MP	1315	1330	7	4	10	4	
124	SP	1315	1330	7	4	10	4	
125	JW	1315	1330	9	4	10	4	
126	JS	1315	1330	4	4	10	4	
127	SH	1330	1345	3	4	10	8	
128	OP	1330	1345	5	4	10	8	
129	GR	1330	1345	6	4	10	8	
130	MP	1330	1345	2	4	10	8	
131	SP	1330	1345	4	4	10	8	
132	JW	1330	1345	5	4	10	8	
133	JS	1330	1345	3	4	10	8	
134	SH	1345	1400	2	4	10	8	
135	OP	1345	1400	4	4	10	8	
136	GR	1345	1400	5	4	10	8	
137	MP	1345	1400	5	4	10	8	
138	SP	1345	1400	2500	4	10	8	GW 2004
139	JW	1345	1400	2200	4	10	8	GW 1815
140	JS	1345	1400	16	4	10	8	
141	SH	1400	1415	18	4	4	4	
142	OP	1400	1415	12	4	4	4	
143	GR	1400	1415	2000	4	4	4	GW1811
144	MP	1400	1415	10	4	4	4	
145	SP	1400	1415	10	4	4	4	
146	JW	1400	1415	19	4	4	4	
147	JS	1400	1415	12	4	4	4	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: S. Hershey, J. Iverson, J. Spicer, Diperalta, G. Robles, S. Pope, M. Partida

Cal. Gas Exp. Date: 1-18-23

Date: 10-12-21 Instrument Used: TVA 1000 Grid Spacing: 25'

Temperature: 68° Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
148	SH	0800	0815	10	4	5	S	
149	DP	0800	0815	8	4	5	S	
150	SP	0800	0815	7	4	5	S	
151	JW	0800	0815	3	4	5	S	
152	GR	0800	0815	9	4	5	S	
153	MP	0800	0815	6	4	5	S	
154	JS	0800	0815	6	4	5	S	
155	SH	0815	0830	12	4	6	S	
156	DP	0815	0830	8	4	6	S	

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 1

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: S. Hershey _____ _____ _____

_____ _____ _____

_____ _____ Cal. Gas Exp. Date: _____

Date: 10-12-21 Instrument Used: Active Trash 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	
157								
158								
159								
160								
161								
162								
163								
164								
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166								
167								
168								
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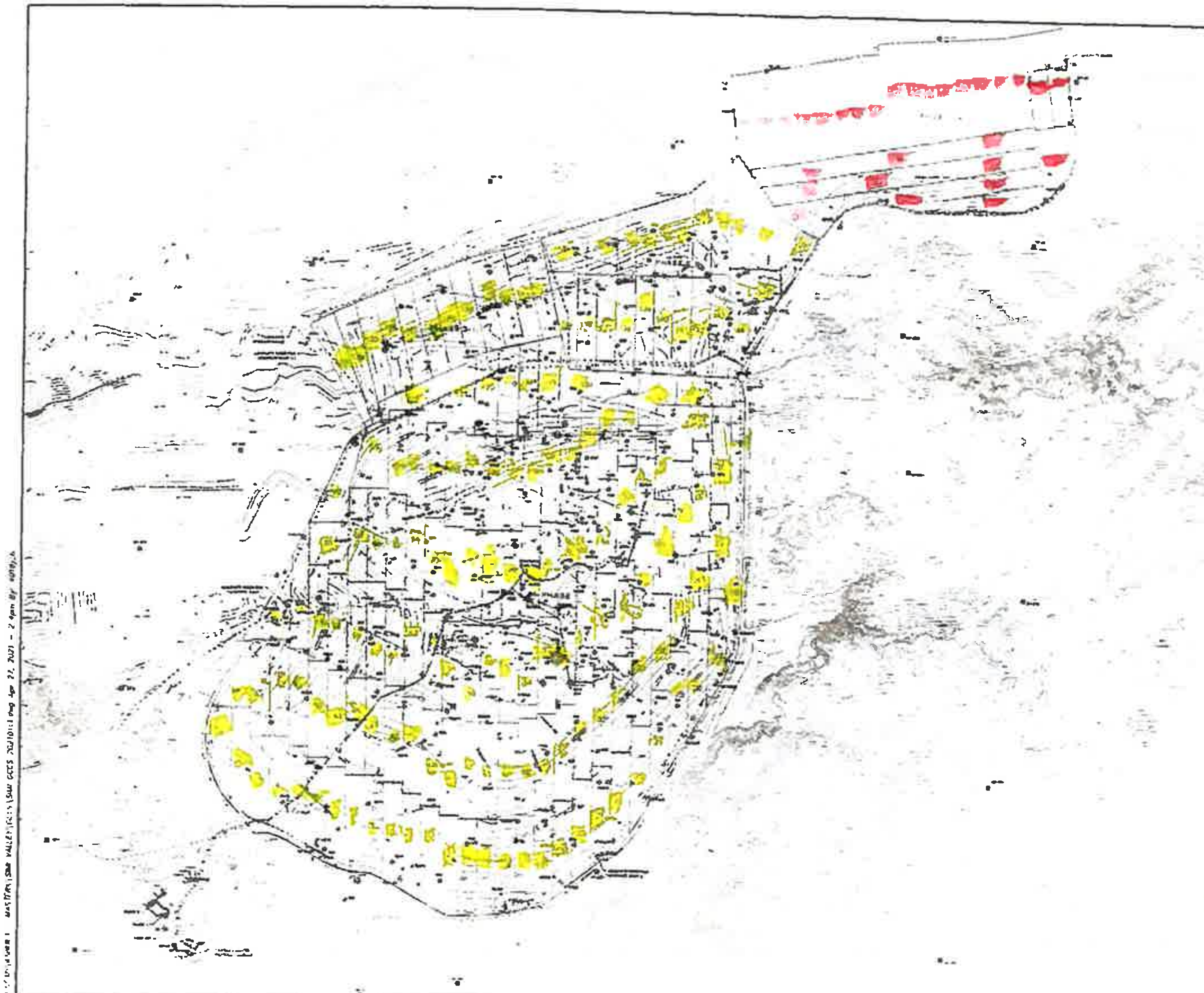
Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 1



SYMBOL LEGEND

- ACTIVE VERTICAL WELL
- VERTICAL WELL WITH TEMPERATURE VARIANCE
- HORIZONTAL COLLECTOR WELLHEAD
- HORIZ WELL WITH TEMPERATURE VARIANCE
- CONDENSATE SUMP
- REMOTE WELLHEAD
- LEACHATE RISER
- SOIL COVER PENETRATION
- MONITORING PROBE
- VALVE
- SVE WELL
- DECOMMISSIONED WELL
- DECOMMISSIONED MONITORING PROBE
- 24" HEADER
- 18" HEADER
- 12" HEADER
- 10" HEADER
- 8" LATERAL
- 6" LATERAL
- 4" LATERAL
- HORIZONTAL COLLECTOR - SOLID
- HORIZONTAL COLLECTOR - PERFORATED
- BELOW GRADE CONDENSATE FORCEMAIN
- ABOVE GRADE DEWATERING FORCEMAIN
- COMPRESSED AIR LINE
- 6" REMOTE MANIFOLD
- AIR RELEASE VALVE
- CONDENSATE FORCEMAIN ISOLATION VALVE
- CONDENSATE FORCEMAIN CLEANOUT
- WELL WITH PUMP AND BUBBLER
- WELL WITH BUBBLER
- PHASE BOUNDARY

TVA 10/12/20/11

Active Trash

Grids monitored

NOTES

AERIAL TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING DATED 2-10-21

SHEET TITLE: SSM PENETRATION MAP

PROJECT TITLE: 594 VALLEY LANDFILL AND RECYCLING CENTER, 5301 MADERA ROAD, SIMI VALLEY, CALIFORNIA 93065

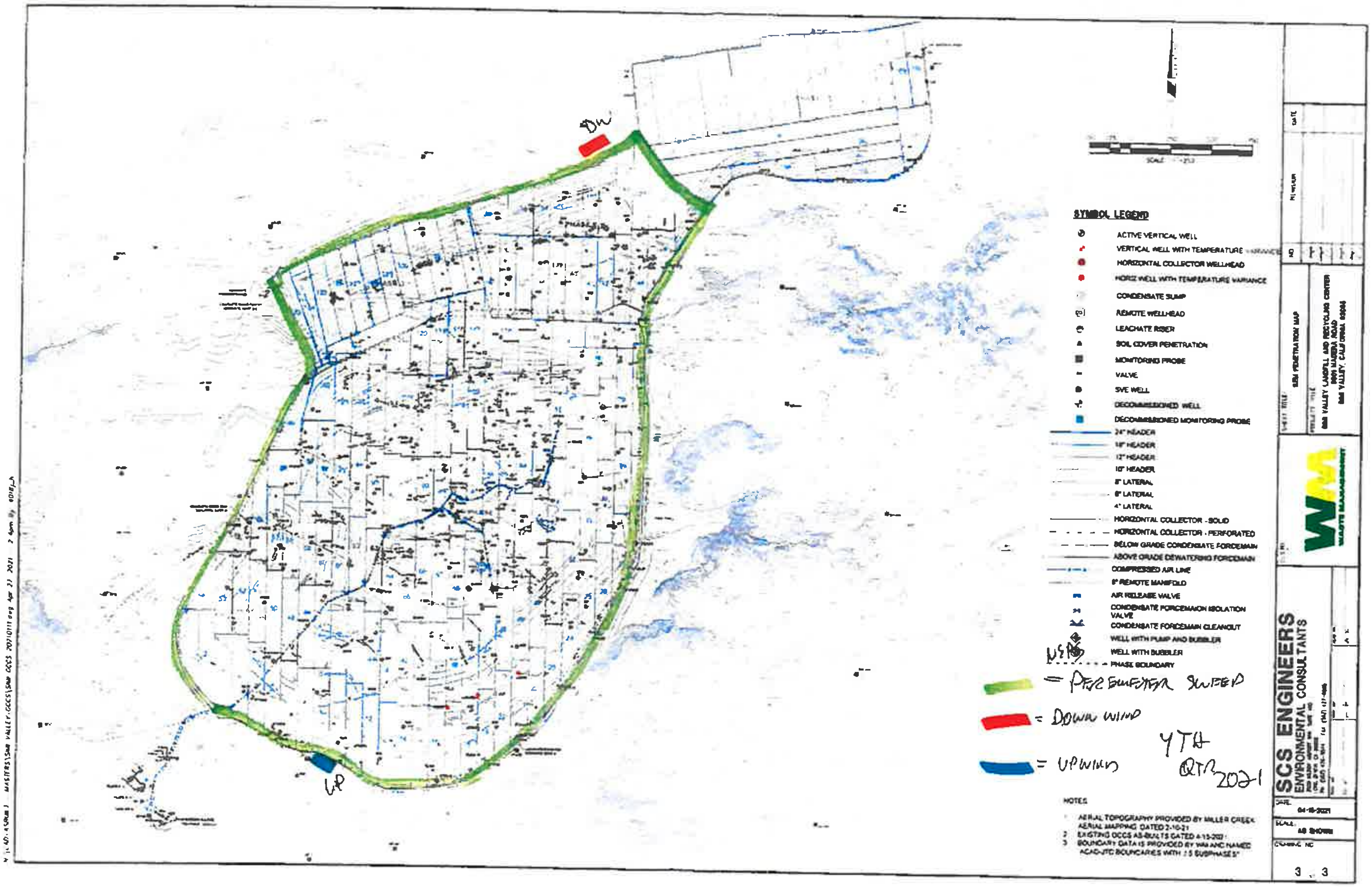
WM WASTE MANAGEMENT

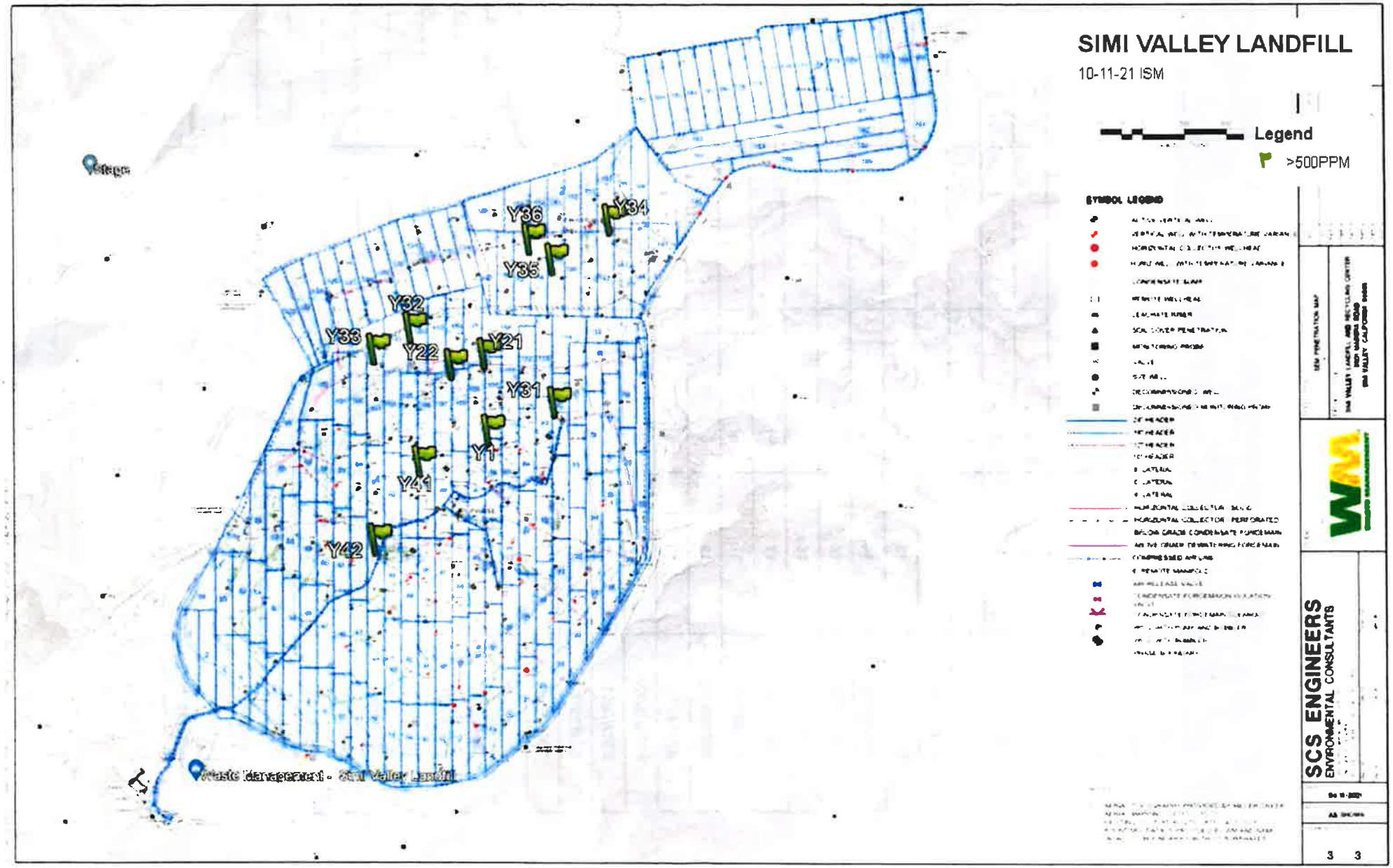
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS

DATE: 04-15-2021

SCALE: AS SHOWN

DRAWING NO.: 3 of 3


DW
UP
SYMBOL LEGEND
ACTIVE VERTICAL WELL
VERTICAL WELL WITH TEMPERATURE VARIANCE
HORIZONTAL COLLECTOR WELLHEAD
HORIZ WELL WITH TEMPERATURE VARIANCE
CONDENSATE SUMP
REMOTE WELLHEAD
LEACHATE RISER
SOIL COVER PENETRATION
MONITORING PROBE
VALVE
SVE WELL
DECOMMISSIONED WELL
DECOMMISSIONED MONITORING PROBE
24" HEADER
18" HEADER
12" HEADER
10" HEADER
8" LATERAL
6" LATERAL
4" LATERAL
HORIZONTAL COLLECTOR - SOLID
HORIZONTAL COLLECTOR - PERFORATED
BELOW GRADE CONDENSATE FORCEMAIN
ABOVE GRADE DEWATERING FORCEMAIN
COMPRESSED AIR LINE
6" REMOTE MANIFOLD
AIR RELEASE VALVE
CONDENSATE FORCEMAIN ISOLATION VALVE
CONDENSATE FORCEMAIN CLEANOUT
WELL WITH PUMP AND BUBBLER
WELL WITH BUBBLER
PHASE BOUNDARY
USPS
= PERIMETER SWEEP
= DOWN WIND
= UPWIND
4TH QTR 2021
NOTES
1 AERIAL TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING DATED 2-10-21
2 EXISTING GCCS AS-BUILTS DATED 4-15-2021
3 BOUNDARY DATA IS PROVIDED BY WM AND NAMED ACAD-JTC BOUNDARIES WITH 15 SUBPHASES
SEM PENETRATION MAP
SIMI VALLEY LANDFILL AND RECYCLING CENTER
2801 MADERA ROAD
SIMI VALLEY, CALIFORNIA 93065
WM
WASTE MANAGEMENT
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
DATE: 04-15-2021
SCALE: AS SHOWN
DRAWING NO
3 of 3


SIMI VALLEY LANDFILL
10-11-21 ISM
Legend
>500PPM
Y36
Y34
Y35
Y32
Y33
Y22
Y21
Y31
Y1
Y41
Y42
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS

SIMI VALLEY SEM MONITORING

DATE: 10-11-21

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIMW0019	4	5		
SIMW0001	6	8		
SIMW0002	6	7		
SIMW0808	7	4		
SIMW0020	8	9		
SIMW1808	8	3		
SIMW0004	9	3		
SIMW0006	10	4		
SIMW1015	13	2		
SIMW709D	14	6		
SIMW709S	14	5		
SIMH0017	16	2		
SIH1363B	17	4		
SIMW0708	17	8		
SIMW2006	18	3		
SIMH022S	19	7		
SIMW2007	20	4		
SIMW2008	20	20		
SIH1361B	21	15		
SIMSVE02	21	8		
SIMLR00B	21	3		
SIMH016N	22	9		
SIH1359B	24	4		
SIMI0905	24	7		
SIMI0904	25	6		
SIMH022N	27	9		
SIMI0903	27	3		
SIMI0901	29	3		
SIMI0902	30	4		
SIMW116R	31	2		
SIMW1565	31	8		

SIMI VALLEY SEM MONITORING

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIMW2084	31	8		
SIM1570D	32	4		
SIM1570S	32	9		
SIMW2045	33	3		
SIMW703D	33	2		
SIMW703S	33	9		
SIMW1785	35	4		
SIMW2083	35	6		
SIMW1233	36	12		
SIMW1790	36	15		
SIMW1571	37	8		
SIH1362B	38	3		
SIM1792D	38	2		
SIM1792S	38	2		
SIMW1232	39	6		
SIMW707D	39	7		
SIMW1791	40	3		
SIM2042D	41	9		
SIM2042S	41	4		
SIMW805D	41	8		
SIMW805S	41	2		
SIMW1231	42	12		
SIMW2041	43	6		
SIMW09RD	44	4		
SIMW1012	44	2		
SIMW1228	44	5		
SIMWO9RS	44	8		
SIMW010R	45	4		
SIMW007R	46	4		
SIMW1227	47	9		
SIMW1234	47	6		

SIMI VALLEY SEM MONITORING

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIM1572D	48	3		
SIM1572S	48	7		
SIMW810D	51	8		
SIMW810S	51	9		
SIMW0018	52	7		
SIMW0812	52	7		
SIMW0811	53	6		
SIMLR00D	55	4		
SIMW0003	57	5		
SIMW0813	57	8		
SIMW2009	57	2		
SIMW1014	58	9		
SIMW1107	59	4		
SIH1405B	60	6		
SIH1406B	60	6		
SIMW1806	60	3		
SIMW1013	61	2		
SIMW1226	62	8		
SIMW1011	63	7		
SIM1673S	64	4		
SIM1793D	64	6		
SIM1793S	64	2		
SIMW012R	64	700	60	4
SIH1406A	65	12		
SIM2044D	65	11		
SIM2044S	65	12		
SIMW1229	65	8		
SIM1788D	66	5		
SIM1788S	66	6		
SIH1362A	67	6		
SIH1404A	67	2		

SIMI VALLEY SEM MONITORING

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIMW1008	67	8		
SIMW1787	67	7		
SIM1789D	68	5		
SIM1789S	68	9		
SIM2054D	68	6		
SIM2054S	68	4		
SIMW1005	68	2		
SIMW1225	68	9		
SIM2043D	69	5		
SIM2043S	69	3		
SIMW1786	69	8		
SIM1573D	70	5		
SIM1573S	70	6		
SIM1783D	70	6		
SIM1783S	70	3		
SIM2064D	70	2		
SIM2064S	70	5		
SIMW2086	70	6		
SIM1805D	71	6		
SIM1805S	71	10		
SIMW1224	71	5		
SIMW1569	71	4		
SIH1359A	72	5		
SIM1927S	72	14		
SIMW1784	72	6		
SIMW1779	73	5		
SIM1568D	74	8		
SIM1568S	74	7		
SIM2052D	74	7		
SIM2052S	74	4		
SIMW2065	74	5		

SIMI VALLEY SEM MONITORING

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIM1564D	75	13		
SIM1564S	75	10		
SIMW0045	78	8		
SIMW1563	78	5		
SIM1562D	81	8		
SIM1562S	81	7		
SIMW0047	81	4		
SIM2061D	82	1500	58	19
SIM2061S	82	3		
SIM1778D	83	5		
SIM1778S	83	2		
SIMW1802	83	8		
SIMW822D	83	9		
SIMW822S	83	16		
SIMW1220	84	4		
SIMW2053	84	5		
SIM1780D	85	13		
SIM1780S	85	9		
SIMW1804	85	9		
SIH1401A	86	5		
SIMW1104	86	4211	90	7
SIMW2047	86	12		
SIMHL004	86	8		
SIH1403A	88	9		
SIM2081D	88	8		
SIM2081S	88	7		
SIMW1105	88	6		
SIMW1781	88	4		
SIMHL005	88	3		
SIM1782D	89	3		
SIM1782S	89	8		

SIMI VALLEY SEM MONITORING

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIM1928S	89	9		
SIMW2056	89	12		
SIMLR0AR	89	10		
SIMW1356	90	11		
SIMLR00A	90	1700		
SIM1929S	91	15	28	9
SIMW1797	91	8		
SIMW1801	91	3		
SIM1799D	92	6		
SIM1799S	92	4		
SIMW1222	93	8		
SIMW2046	93	4		
SIMW2049	93	5		
SIMW1798	94	7		
SIMW1010	95	7		
SIMW1355	95	9		
SIMW2048	95	6		
SIM1937S	96	8		
SIH1403B	97	6		
SIH1404B	97	6		
SIMW0814	98	4		
SIMLR602	99	2		
SIMLR603	99	9		
SIMW0816	99	5		
SIMW0817	100	3		
SIMW0818	101	2		
SIMW0819	103	3000	24	13
SIMW1102	103	6		
SIMW1796	103	14		
SIMW2055	104	18		
SIH1235A	105	10		

SIMI VALLEY SEM MONITORING

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIM1933S	105	12		
SIM1938S	105	18		
SIMW1354	105	16		
SIMW1794	105	3		
SIH2001A	106	4		
SIM1932S	106	3		
SIMW1007	106	5		
SIM1931S	107	8		
SIMW1807	107	9		
SIMW1353	108	6		
SIMW1795	108	7		
SIH2001B	109	7		
SIM1930S	109	2056	12	11
SIMW1803	109	4		
SIM1777D	110	7		
SIM1777S	110	8		
SIM1924S	110	4		
SIMW1101	110	3		
SIMW1219	110	9		
SIMW1776	110	576	8	15
SIMHL002	110	8		
SIMHL003	110	7		
SIMW2057	111	9		
SIMHL001	112	10		
SIMW0048	113	12		
SIMW1560	113	15		
SIMW2062	113	6		
SIMW1816	114	4		
SIMW2058	114	5		
SIMW1561	115	3		
SIMW2060	116	9		

SIMI VALLEY SEM MONITORING

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIMW0031	117	9		
SIMW2001	117	4		
SIMW2000	118	8		
SIH1401B	119	9		
SIMW2099	119	9		
SIMW0820	120	3800	15	10
SIMW2059	120	14		
SIMW2098	122	6		
SIMLR31A	123	3		
SIMW2076	126	9		
SIMW2096	127	12		
SIMW2097	127	8		
SIMW2077	128	3		
SIMW2095	129	5		
SIMW2074	130	8		
SIMW2078	131	9		
SIMW2073	132	8		
SIMW2094	132	7		
SIMW2079	133	8		
SIMW2072	134	5		
SIMW2093	134	3		
SIMW2080	135	9		
SIMW2002	136	2		
SIMW2071	136	6		
SIMW2087	136	4		
SIMW2088	137	2		
SIMW2003	138	5		
SIMW2004	138	2500	56	7
SIMW1809	139	20		
SIMW1815	139	2200	74	5
SIMW1814	141	18		

SIMI VALLEY SEM MONITORING

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIMW2005	141	13		
SIMW1817	142	8		
SIMW1811	143	2000	102	16
SIMW1813	143	9		
SIMW2082	143	4		
SIMW1812	144	3		
SIMW1821	144	2		
SIMW2070	144	7		
SIMSVE03	144	6		
SIH02004	145	8		
SIM1936S	145	9		
SIH2115F	146	4		
SIH02106	146	3		
SIMW1820	149	2		
SIMW2089	149	9		
SIMW1810	151	6		
SIMW1819	151	4		
SIMW1818	153	8		
SIMW2090	153	3		
SIMW2091	155	9		
SIMW2092	156	15		
SIH2115E	157	6		
SIH02107	157	14		
SIH02108	157	12		
SIH2115D	158	30		
SIH02109	158	14		
SIH02110	158	10		
SIH2115C	159	8		
SIH02111	159	11		
SIH02112	159	16		
SIH2115B	161	10		

SIMI VALLEY SEM MONITORING

PENETRATION ID	GRID NUMBER	INITIAL (PPM)	10 DAY (PPM)	30 DAY (PPM)
SIH2115A	168	15		
SIH02113	168	12		
SIH02114	168	16		
SIMLR22A	168	14		
SIMLR22B	168	21		
SIMHL010	172	36		
SIMHL009	175	14		
SIMHL008	177	11		
SIMHL007	179	28		
SIMHL006	182	19		
SIM2101S	184	31		
SIM2100S	185	16		
SIMLR22C	185	25		

Waste Management Instantaneous Landfill Surface Emissions Monitoring
Exceedance and Monitoring Logs

Quarter: 4th QTR 2021

Initial Monitoring Performed By: Shawn Hershey

Follow-up Monitoring Performed By: Michael Orue, Ricky Ramirez

Landfill Name: Simi Valley

Initial Monitoring Event				Corrective Action within 5 Days		1st 10-Day Follow-Up			1st 30-Day Follow-Up			Comments
Grid #	Flag #	Monitoring Date	Field Reading	Repair Date	Action taken to repair Exceedance	Monitoring Date	No Exceed. <500 ppm	Exceed. >500 ppm	Monitoring Date	No Exceed. <500 ppm	Exceed. >500 ppm	
86	41	10-11-21	4211			10-21-21	90		11-10-21	7		well 1104
110	421	↓	576			↓	8		↓	15		Gw 1176
106	422		2056				12			11		Gw 18303
82	431		1500				58			19		Gw 20617
120	432		3800				15			10		unmarked pipe
103	433		3000				24			13		Gw 819
143	434		2000				102			16		Gw 1811
139	435		2200				74			5		Gw 1815
138	436		2500				56			7		Gw 2004
90	441		1700				28			4		Sump A
63	442	↓	700			↓	60		↓	4		well 12R

Attachment B

Integrated Surface Emission Monitoring Event Records

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: S. Hershey, M. Partida, J. Spicer, D. Peraza, S. Pope, E. Robles, T. Wesson

Cal. Gas Exp. Date: 1-19-23

Date: 10-12-11 Instrument Used: TVA 1-7 Grid Spacing: 25'

Temperature: 78° Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
1	OP	0845	0910	4	333	4	5	N	
2	GR	0845	0910	2		4	5	N	
3	MP	0845	0910	5		4	5	N	
4	SP	0845	0910	3		4	5	N	
5	JW	0845	0910	3		4	5	N	
6	JS	0845	0910	2		4	5	N	
7	OP	0910	0935	4		4	8	N	
8	GR	0910	0935	5		4	8	N	
9	MP	0910	0935	2		4	8	N	
10	SP	0910	0935	1		4	8	N	
11	JW	0910	0935	3		4	8	N	
12	JS	0910	0935	4		4	8	N	
13	OP	0935	1000	5		4	N	N	
14	GR	0935	1000	3		4	N	N	
15	MP	0935	1000	3		4	N	N	
16	SP	0935	1000	2		4	N	N	
17	JW	0935	1000	1		4	N	N	
18	JS	0935	1000	4		4	N	N	
19	SH	1000	1025	5		4	6	N	
20	OP	1000	1025	2		4	6	N	
21	GR	1000	1025	5		4	6	N	
22	MP	1000	1025	3		4	6	N	
23	SP	1000	1025	3		4	6	N	
24	JW	1000	1025	3		4	6	N	
25	JS	1000	1025	5		4	6	N	
26	SH	1025	1050	3		4	6	K	
27	OP	1025	1050	2		4	6	8	
28	GR	1025	1050	4		4	6	8	
29	MP	1025	1050	1		4	6	8	
30	SP	1025	1050	3		4	6	8	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: S. Hershey | M. Partida | J. Spicer
O. Peralta | S. Pope |
G. Robles | J. Wesson | Cal. Gas Exp. Date: 1-19-23

Date: 10-12-21 Instrument Used: ISSI-7 Grid Spacing: 25

Temperature: 70 Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	REMARKS
31	JW	1025	1050	4	333	4	6	8	
32	JS	1025	1050	2		4	6	8	
33	SH	1200	1225	3		4	9	8	
34	OP	1200	1225	2		4	9	8	
35	GR	1200	1225	2		4	9	8	
36	MP	1200	1225	5		4	9	8	
37	SP	1200	1225	3		4	9	8	
38	JW	1200	1225	1		4	9	8	
39	JS	1200	1225	2		4	9	8	
40	SH	1225	1250	4		4	10	9	
41	OP	1225	1250	6		4	10	9	
42	GR	1225	1250	3		4	10	9	
43	MP	1225	1250	2		4	10	9	
44	SP	1225	1250	5		4	10	9	
45	JW	1225	1250	6		4	10	9	
46	JS	1225	1250	3		4	10	9	
47	SH	1250	1315	2		4	10	9	
48	OP	1250	1315	4		4	10	9	
49	GR	1250	1315	4		4	10	9	
50	MP	1250	1315	2		4	10	9	
51	SP	1250	1315	5		4	10	9	
52	JW	1250	1315	6		4	10	9	
53	JS	1250	1315	3		4	10	9	
54	SH	1315	1340	7		4	10	9	
55	OP	1315	1340	4		4	10	9	
56	GR	1315	1340	2		4	10	9	
57	MP	1315	1340	5		4	10	9	
58	SP	1315	1340	3		4	10	9	
59	JW	1325	1340	6		4	10	9	
60	JS	1315	1340	6		4	10	9	

Attach Calibration Sheet
Attach site map showing grid ID

Page 2 of 3

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: S. Hershberg, M. Padilla, J. Spicer, O. Penalta, S. Pope, G. Robles, J. Wesson

Cal. Gas Exp. Date: 1-19-23

Date: 10-12-21 Instrument Used: TVA 1-7 Grid Spacing: 25'

Temperature: 70 Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
61	SH	1340	1405	5	333	4	6	10	
62	OP	1340	1405	5	↓	4	6	10	
63	GR	1340	1405	3		4	6	10	
64	MP	1340	1405	4		4	6	10	
65	SP	1340	1405	2		4	6	10	
66	JW	1340	1405	5		4	6	10	
67	OS	1340	1405	8		4	6	10	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: M. ORuiz, J. Spicer, Gilberto Robles, O. Peralta, M. Partida, S. Pope, J. Wesson

Cal. Gas Exp. Date: 6/4/22

Date: 10-13-21 Instrument Used: ISS1-7 Grid Spacing: 25FT

Temperature: 52° Precip: 0 Upwind BG: 3 Downwind BG: 4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
68	MO	0730	0745	10	333	4	6	12	
69	OP	0730	0755	5	1	4	6	12	
70	SP	0730	0755	5		4	6	12	
71	JS	0730	0755	19		4	6	12	
72	MP	0730	0755	11		4	6	12	
73	JW	0730	0755	6		4	6	12	
74	GR	0730	0755	5		4	6	12	
75	MO	0755	0820	5		4	6	12	
76	OP	0755	0820	6		4	6	12	
77	SP	0755	0820	9		4	6	12	
78	JS	0755	0820	8		4	6	12	
79	MP	0755	0820	8		4	6	12	
80	JW	0755	0820	6		4	6	12	
81	GR	0755	0820	5		4	6	12	
82	MO	0820	0845	8		4	6	12	
83	OP	0820	0845	8		4	6	12	
84	SP	0820	0845	10		4	6	12	
85	JS	0820	0845	9		4	6	12	
86	MP	0820	0845	12		4	6	12	
87	JW	0820	0845	14		4	6	12	
88	GR	0820	0845	14		4	6	12	
89	MO	0845	0910	10		4	8	12	
90	OP	0845	0910	6		4	8	12	
91	SP	0845	0910	5		4	8	12	
92	JS	0845	0910	10		4	8	12	
93	MP	0845	0910	12		4	8	12	
94	JW	0845	0910	8		4	8	12	
95	GR	0845	0910	8		4	8	12	
96	MO	0910	0935	8		4	7	12	
97	OP	0910	0935	15	↓	4	7	12	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: M. ORUE, J. Spicer, G. Bibles, O. Peralta, M. Partida, S. Poa, J. Wessels

Cal. Gas Exp. Date: 6-4-22

Date: 10-13-21 Instrument Used: ISS.1-7 Grid Spacing: 25 FT

Temperature: 60° Precip: 0 Upwind BG: 3 Downwind BG: 4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
98	SP	0910	0935	7	333	4	8	12	
99	JS	0910	0935	6		4	8	12	
100	MP	0910	0935	10		4	8	12	
101	JW	0910	0935	15		4	8	12	
102	GR	0910	0935	12		4	8	12	
103	MO	0935	1000	10		4	8	12	
104	OP	0935	1000	10		4	8	12	
105	SP	0935	1000	9		4	8	12	
106	JS	0935	1000	8		4	8	12	
107	MP	0935	1000	7		4	8	12	
108	JW	0935	1000	9			8	12	
109	GR	0935	1000	6		4	8	12	
110	MO	1000	1025	6		4	8	12	
111	OP	1000	1025	9		4	8	12	
112	SP	1000	1025	6		4	8	12	
113	JS	1000	1025	14		4	8	12	
114	MP	1000	1025	14		4	8	12	
115	JW	1000	1025	5		4	8	12	
116	GR	1000	1025	10		4	8	12	
117	MO	1025	1050	8		4	8	12	
118	OP	1025	1050	6		4	8	12	
119	SP	1025	1050	6		4	8	12	
120	JS	1025	1050	8		4	8	12	
121	MP	1025	1050	7		4	8	12	
122	JW	1025	1050	7		4	8	12	
123	GR	1025	1050	6		4	8	12	
124	MO	1050	1115	5		4	8	12	
125	OP	1050	1115	4		4	8	12	
126	SP	1050	1115	6		4	8	12	
127	JS	1050	1115	8	↓	4	8	12	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: M. ORUE, J. Spicer, G. RIBLES, O. PERALTA, M. Portida, S. PAPP, J. WESSON

Cal. Gas Exp. Date: 6-4-22

Date: 10-13-21 Instrument Used: TSI-7 Grid Spacing: 25FT

Temperature: 70° Precip: 0 Upwind BG: 3 Downwind BG: 4

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
128	MP	1050	1115	6	333	4	8	12	
129	JW	1050	1115	8	"	4	8	12	
130	GR	1050	1115	6	"	4	8	12	
131	MO	1215	1240	6	"	3	4	12	
132	OP	1215	1240	5	"	3	4	12	
133	SP	1215	1240	7	"	3	4	12	
134	JS	1215	1240	6	"	3	4	11	
135	MP	1215	1240	5	"	3	4	12	
136	JW	1215	1240	7	"	3	4	12	
137	GR	1215	1240	6	"	3	4	12	
138	MO	1240	1305	5	"	3	4	D	
139	OP	1240	1305	8	"	3	4	D	
140	SP	1240	1305	14	"	3	4	D	
141	JS	1240	1305	6	"	3	4	D	
142	MP	1240	1305	5	"	3	4	D	
143	JW	1240	1305	5	"	3	4	D	
144	GR	1240	1305	10	"	3	4	D	
145	MO	1305	1330	8	"	4	5	D	
146	OP	1305	1330	6	"	4	5	D	
147	SP	1305	1330	5	"	4	5	D	
148	JS	1305	1330	6	"	4	5	D	
149	MP	1305	1330	6	"	4	5	D	
150	JW	1305	1330	5	"	4	5	D	
151	GR	1305	1330	7	"	4	5	D	
152	MO	1330	1355	6	"	4	6	D	
153	OP	1330	1355	5	"	4	6	D	
154	SP	1330	1355	6	"	4	6	D	
155	JS	1330	1355	8	"	4	6	D	
156	MP	1330	1355	9	"	4	6	D	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: M. ORUE _____ _____ _____

_____ _____ _____

_____ _____ Cal. Gas Exp. Date: _____

Date: 10-13-21 Instrument Used: _____ Grid Spacing: _____

Temperature: _____ Precip: _____ Upwind BG: _____ Downwind BG: _____

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
157									ACTIVE TRASH
158									
159									
160									
161									
162									
163									
164									
165									
166									
167									
168									
169									
170									
171									
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174									
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177									
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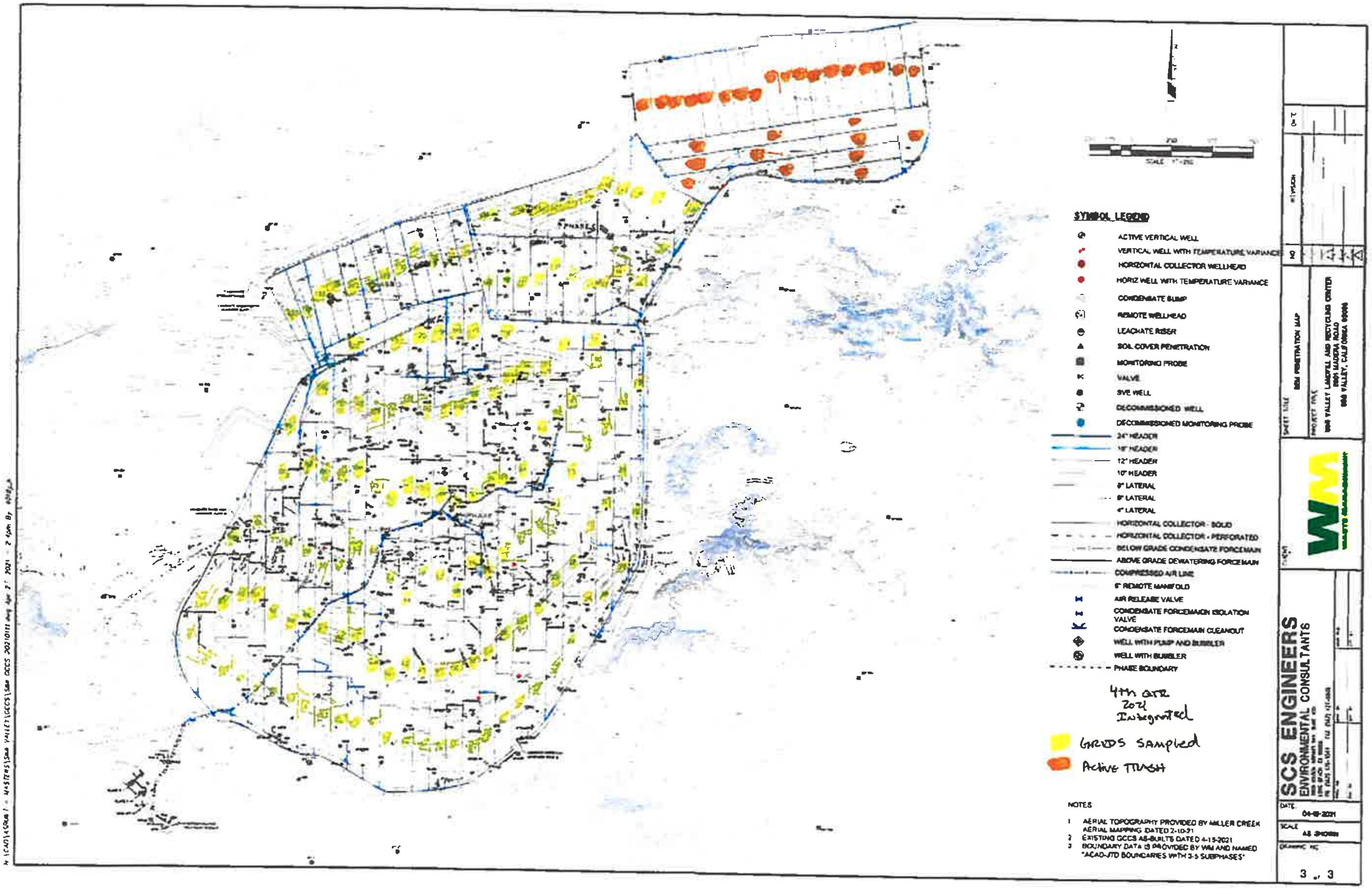
181									
182									
183									
184									
185									

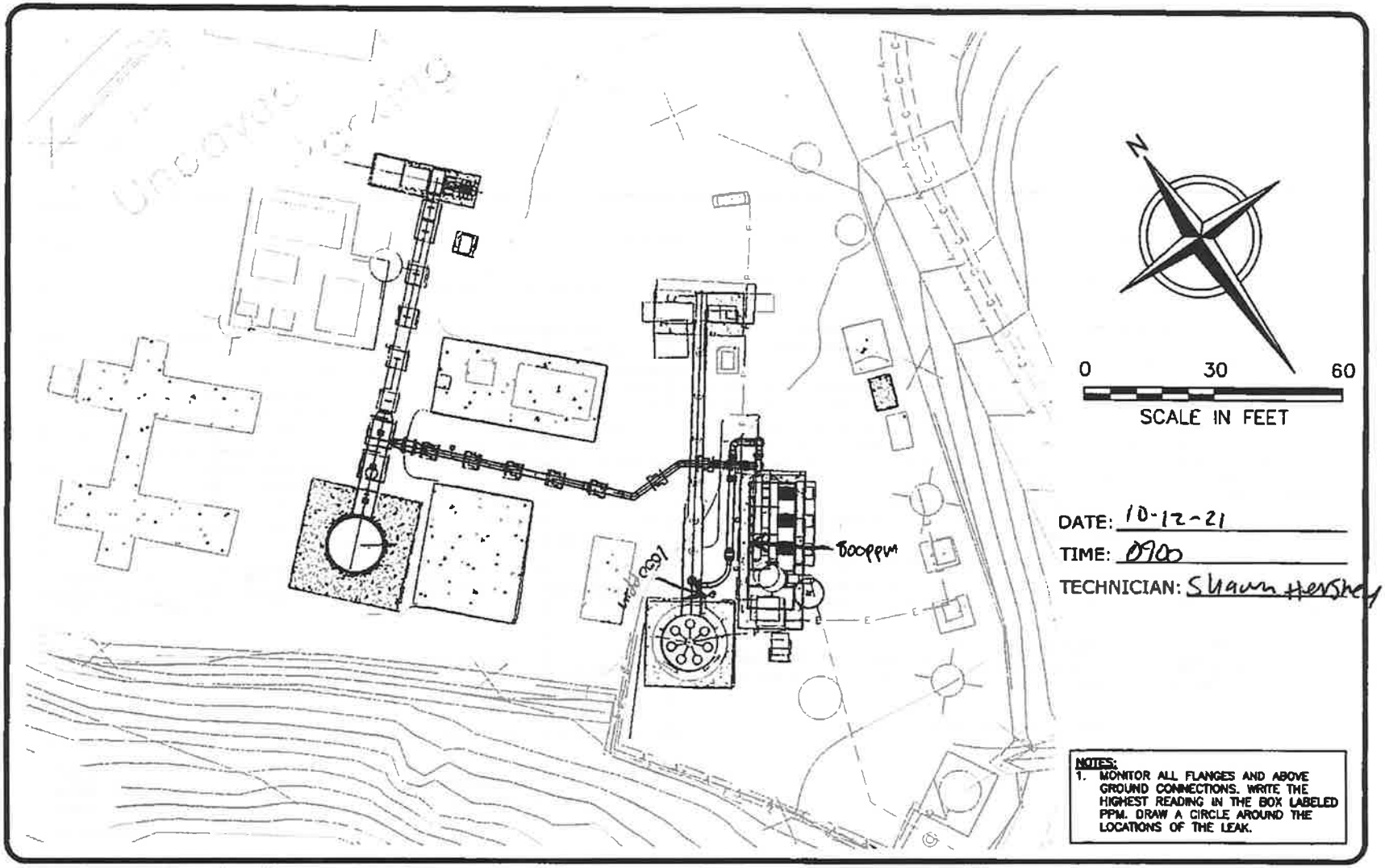
Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 1


SYMBOL LEGEND
ACTIVE VERTICAL WELL
VERTICAL WELL WITH TEMPERATURE VARIANCE
HORIZONTAL COLLECTOR WELLHEAD
HORIZ WELL WITH TEMPERATURE VARIANCE
CONDENSATE SUMP
REMOTE WELLHEAD
LEACHATE RISER
SOIL COVER PENETRATION
MONITORING PROBE
VALVE
SVE WELL
DECOMMISSIONED WELL
DECOMMISSIONED MONITORING PROBE
24" HEADER
18" HEADER
12" HEADER
10" HEADER
8" LATERAL
6" LATERAL
4" LATERAL
HORIZONTAL COLLECTOR - SOLID
HORIZONTAL COLLECTOR - PERFORATED
BELOW GRADE CONDENSATE FORCEMAIN
ABOVE GRADE DEWATERING FORCEMAIN
COMPRESSED AIR LINE
6" REMOTE MANIFOLD
AIR RELEASE VALVE
CONDENSATE FORCEMAIN ISOLATION VALVE
CONDENSATE FORCEMAIN CLEANOUT
WELL WITH PUMP AND BUBBLER
WELL WITH BUBBLER
PHASE BOUNDARY
4th QTR 2021 Integrated
GRIDS Sampled
Active TRASH
NOTES
1 AERIAL TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING DATED 2-10-21
2 EXISTING GCCS AS-BUILTS DATED 4-13-2021
3 BOUNDARY DATA IS PROVIDED BY WM AND NAMED "ACAD-JTD BOUNDARIES WITH 3-5 SUBPHASES"
SCALE
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
DATE
04-19-2021
SCALE
AS SHOWN
3 of 3
WM
SHEET TITLE
PENETRATION MAP
PROJECT TITLE
VALLEY LANDFILL AND RECYCLING CENTER
MADERA ROAD
NO
REVISION

Attachment C

Component Leak Monitoring Event Records



TETRA TECH

SIMI VALLEY LANDFILL
AND RECYCLING CENTER
SIMI VALLEY, CALIFORNIA
SEM RESULTS - FLARE STATION

FIGURE NO.
1
PROJECT NO.
200026

LANDFILL NAME:
QUARTERLY LFG COMPONENT LEAK MONITORING

INSTRUMENT FID
MAKE: Thermo Environr
MODEL: TVA 1000
S/N: 16320832

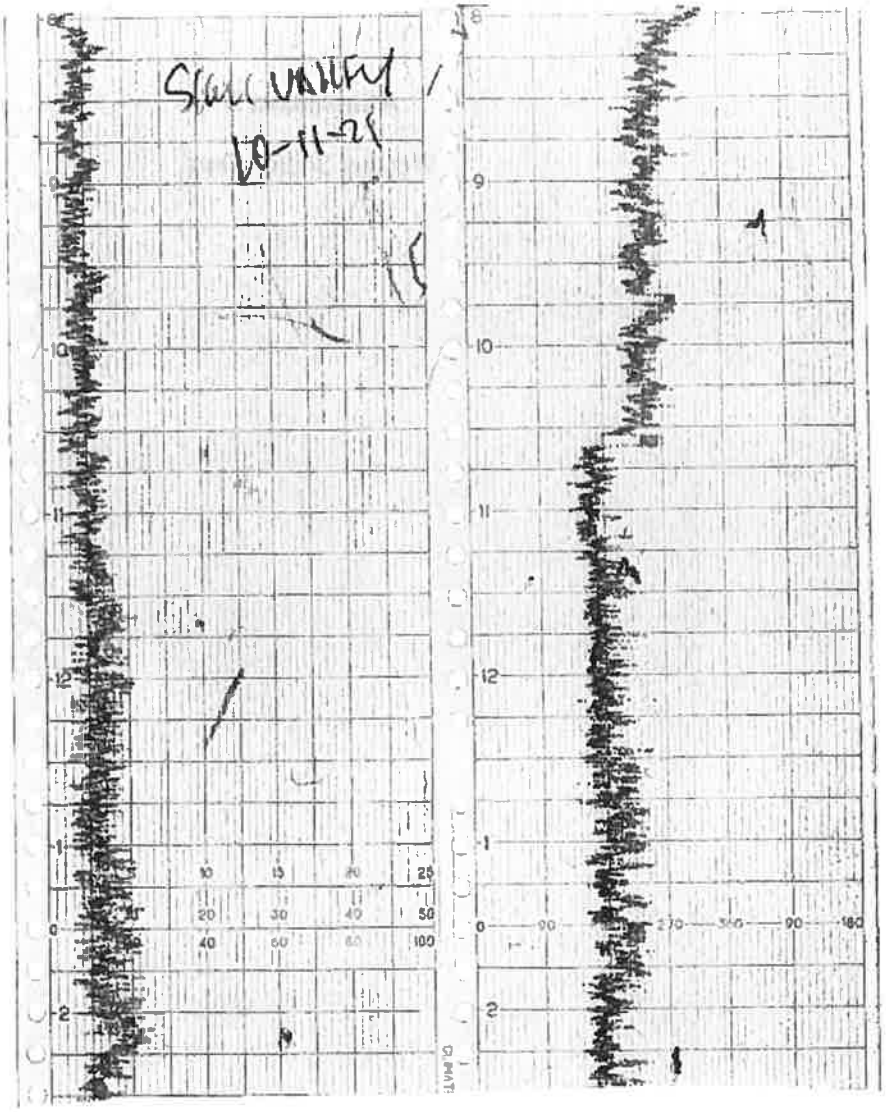
DATE OF SAMPLING: 10-12-21
TECHNICIAN: Shawn Hershey

LOCATION OF LEAK	LEAK CONCENTRATION (ppmv)	DATE OF DISCOVERY	TECHNICIAN	ACTION TAKEN TO REPAIR LEAK	DATE OF REPAIR	DATE OF ANY REQUIRED RE-MONITORING	RE-MONITORED CONCENTRATION (ppmv)
Front Left Blower	1000ppm	10-12-21	Shawn Hershey			10-21-21	8
middle Connection	800ppm	↓	↓			↓	7

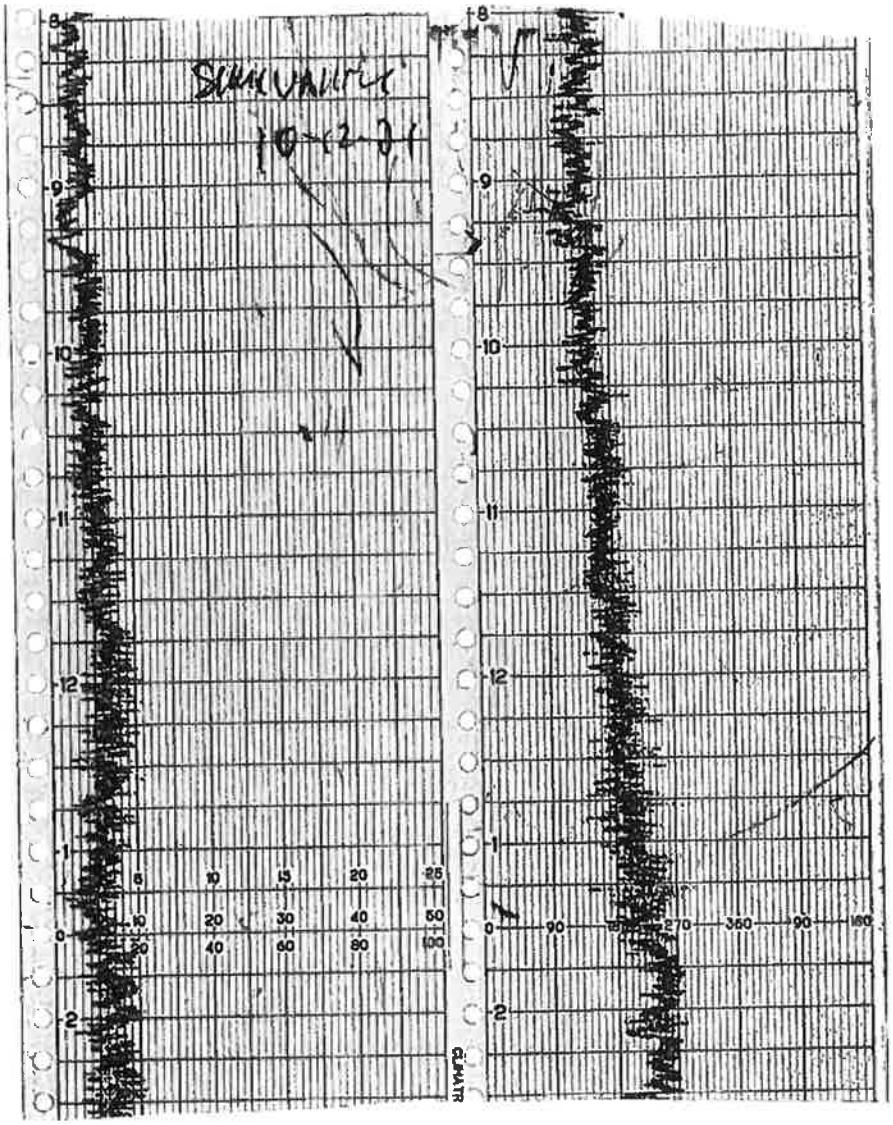
Attachment D

Weather Station Data

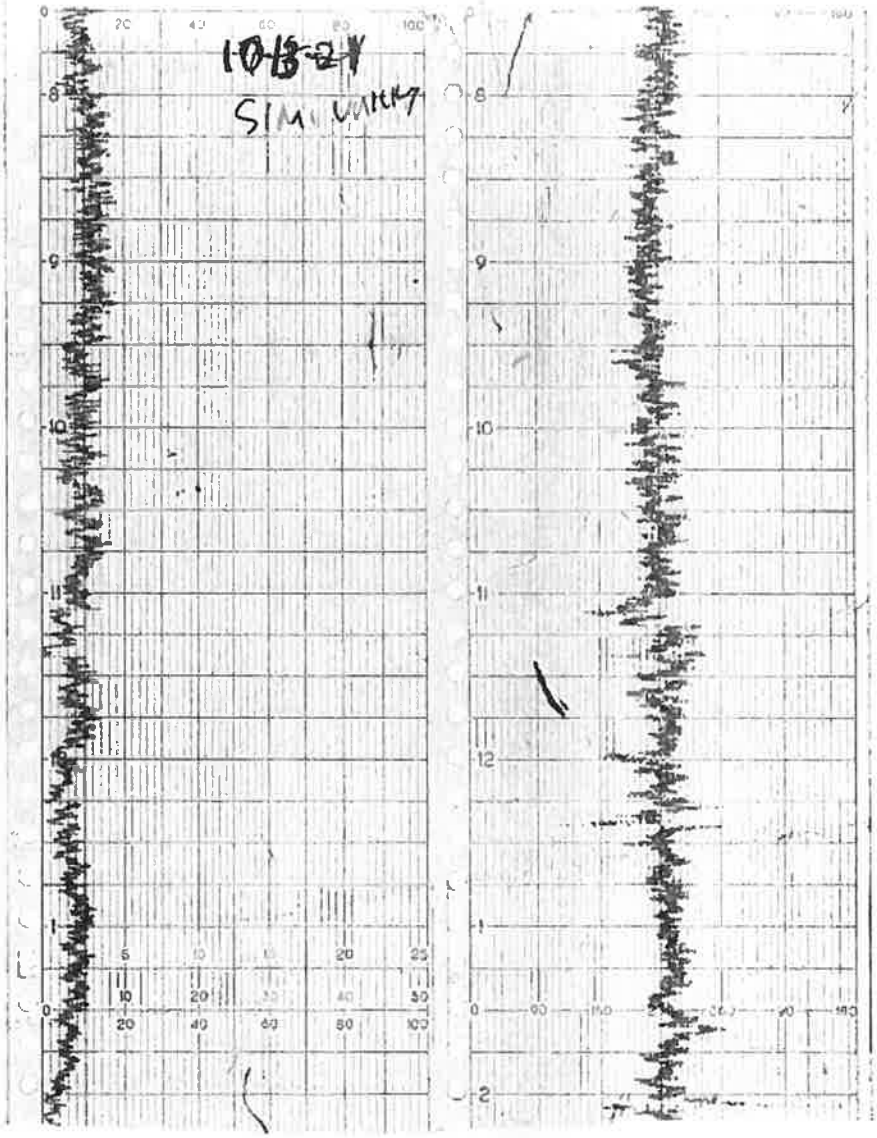
WIND SPEED & DIRECTION CHART ROLL



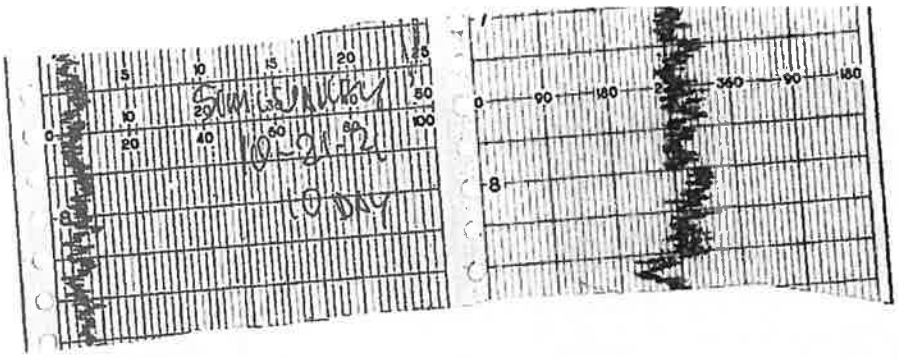
WIND SPEED & DIRECTION CHART ROLL



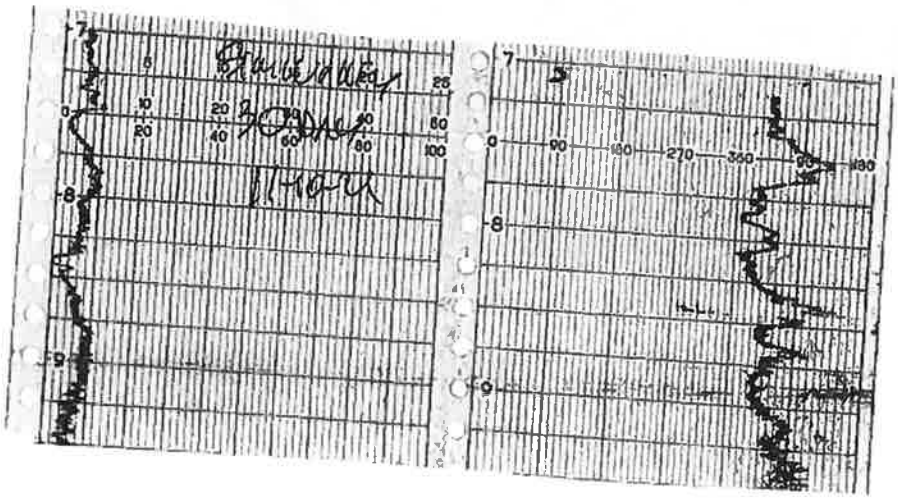
WIND SPEED & DIRECTION CHART ROLL



WIND SPEED & DIRECTION CHART ROLL



WIND SPEED & DIRECTION CHART ROLL



RES Environmental Inc.

16-POINT WIND DIRECTION INDEX

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

865 Via Lata ▪ Colton, California 92324 ▪ (909) 422-1001 Fax (909) 422-0707

Attachment E

Calibration Records

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE Thermo

MODEL: TVA 1000 EQUIPMENT #: 6 SERIAL #: 0720723666

MONITORING DATE: 10-11-21 TIME: 0755

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
1 ppm	2 ppm	2 ppm

Background Value = 1.5 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	501 ppm	450 ppm	10
#2	500 ppm	450 ppm	11
#3	500 ppm	450 ppm	9
Calculate Response Time (1+2+3) / 3			10 #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	0.0 ppm	501 ppm	501.00
#2	0.0 ppm	500 ppm	500.00
#3	1.0 ppm	500 ppm	499.00
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1% #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 10-11-21 / 0755

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 5 SERIAL #: 4911480

MONITORING DATE: 10-11-21 TIME: 0755

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
1 ppm	2 ppm	3 ppm

Background Value = 1.5 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	503 ppm	450 ppm	9
#2	501 ppm	450 ppm	11
#3	501 ppm	450 ppm	10
Calculate Response Time (1+2+3) / 3			10 #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	2.0 ppm	503 ppm	501.00
#2	2.0 ppm	501 ppm	499.00
#3	1.0 ppm	501 ppm	501.00
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1% #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 10-11-21 / 0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA-1000 EQUIPMENT #: 4 SERIAL #: 1631983O

MONITORING DATE: 10-18-21 TIME: 0755

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
1 ppm	5 ppm	3 ppm

Background Value = 3 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	502 ppm	450 ppm	10
#2	500 ppm	450 ppm	10
#3	501 ppm	450 ppm	10
Calculate Response Time (1+2+3)/3			10 #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	1.0 ppm	502 ppm	501.00
#2	1.0 ppm	500 ppm	499.00
#3	1.0 ppm	501 ppm	500.00
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1% #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 10-11-21/0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 5 SERIAL #: 15865884

MONITORING DATE: 10-11-21 TIME: 0755

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
1 ppm	2 ppm	2 ppm

Background Value = 2 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	501 ppm	450 ppm	10
#2	501 ppm	450 ppm	12
#3	501 ppm	450 ppm	8
Calculate Response Time (1+2+3) / 3			10 #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	1.50 ppm	501 ppm	499-50
#2	.50 ppm	501 ppm	500-50
#3	.50 ppm	501 ppm	500-50
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1% #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 10-11-21/0755

RES Environmental Inc

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 1 SERIAL #: 16320832

MONITORING DATE: 10-11-21 TIME: 0758

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
1 ppm	5 ppm	3 ppm

Background Value = 3 **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	501 ppm	450 ppm	8
#2	500 ppm	450 ppm	10
#3	501 ppm	450 ppm	12
Calculate Response Time (1+2+3)/3			10 #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	0.50 ppm	501 ppm	500.50
#2	0.0 ppm	500 ppm	500.00
#3	1.0 ppm	501 ppm	500.00
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1% #DIV/0! Must be less than 10%

Performed By: Sharon Hensley Date/Time: 10-11-21 / 0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT - INSTANTANEOUS

LANDFILL NAME: Simi valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 2 SERIAL #: 7784515

MONITORING DATE: 10-11-21 TIME: 0755

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
1 ppm	2 ppm	2 ppm

Background Value = 2 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	502 ppm	450 ppm	13
#2	500 ppm	450 ppm	7
#3	500 ppm	450 ppm	10
Calculate Response Time (1+2+3) / 3			10 #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	0.0 ppm	500 ppm	502-00
#2	1.0 ppm	500 ppm	499-00
#3	1.0 ppm	500 ppm	499-00
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1 / 500 X 100 / 1			1 % #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 10-11-21/0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 7 SERIAL #: 0720723626

MONITORING DATE: 10-11-21 TIME: 0755

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
2 ppm	3 ppm	5 ppm

Background Value = 1.5 **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	501 ppm	450 ppm	10
#2	502 ppm	450 ppm	10
#3	502 ppm	450 ppm	10
Calculate Response Time (1+2+3) / 3			10 #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	1.0 ppm	501 ppm	500.00
#2	2.0 ppm	502 ppm	500.00
#3	1.0 ppm	502 ppm	501.00
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1 % #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 10-11-21/0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 6 SERIAL #: 0720725626

MONITORING DATE: 10-12-21 TIME: 0755

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
1 ppm	2 ppm	2 ppm

Background Value = 2 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	502 ppm	450 ppm	7
#2	502 ppm	450 ppm	10
#3	501 ppm	450 ppm	13
Calculate Response Time (1+2+3) / 3			10 #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	1.0 ppm	502 ppm	501.00
#2	.50 ppm	502 ppm	501.50
#3	1.0 ppm	501 ppm	500.00
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1% #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 10-12-21/0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 5 SERIAL #: 49 19480

MONITORING DATE: 10-12-21 TIME: 0755

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
1 ppm	3 ppm	3 ppm

Background Value = 3 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	502 ppm	450 ppm	10
#2	500 ppm	450 ppm	12
#3	500 ppm	450 ppm	8
Calculate Response Time (1+2+3) / 3			10 #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	.50 ppm	502 ppm	501.50
#2	.50 ppm	500 ppm	499.50
#3	.0 ppm	500 ppm	500.00
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1% #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 10-12-21 / 0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 4 SERIAL #: 16319830

MONITORING DATE: 10-12-21 TIME: 0755

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
1 ppm	2 ppm	3 ppm

Background Value = 1.5 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	502 ppm	450 ppm	12
#2	502 ppm	450 ppm	8
#3	500 ppm	450 ppm	10
Calculate Response Time (1+2+3)/3			10 #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	1.0 ppm	502 ppm	501.00
#2	.50 ppm	502 ppm	501.50
#3	1.0 ppm	500 ppm	499.00
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1% #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time 10-12-21/0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi valley INSTRUMENT MAKE Thermo

MODEL: TVA1000 EQUIPMENT #: 3 SERIAL #: 1586 5884

MONITORING DATE: 10-12-21 TIME: 0755

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
1 ppm	3 ppm	3 ppm

Background Value = 3 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	502 ppm	450 ppm	10
#2	501 ppm	450 ppm	8
#3	500 ppm	450 ppm	12
Calculate Response Time (1+2+3) / 3			10 #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	.50 ppm	502 ppm	501.50
#2	1.50 ppm	501 ppm	499.50
#3	1.0 ppm	500 ppm	499.50
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1 / 500 X 100 / 1			1 % #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 0755/10-12-21

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 2 SERIAL # 7784545

MONITORING DATE: 10-12-21 TIME: 0755

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
1 ppm	2 ppm	2 ppm

Background Value = 2 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	500 ppm	450 ppm	7
#2	501 ppm	450 ppm	13
#3	500 ppm	450 ppm	10
Calculate Response Time (1+2+3) / 3			10 #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	.50 ppm	500 ppm	499.50
#2	1.0 ppm	501 ppm	500.00
#3	.50 ppm	500 ppm	499.50
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1 % #DIV/0! Must be less than 10%

Performed By: Shawn Horsley Date/Time: 10-12-21 / 0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 1 SERIAL #: 16320832

MONITORING DATE: 10-12-21 TIME: 0755

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
1 ppm	2 ppm	2 ppm

Background Value = 2 **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	501 ppm	450 ppm	8
#2	501 ppm	450 ppm	12
#3	502 ppm	450 ppm	10
Calculate Response Time (1+2+3)/3			10 #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	0.0 ppm	501 ppm	501.00
#2	1.0 ppm	501 ppm	500.00
#3	1.0 ppm	502 ppm	501.00
Calculate Precision	[STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1		1 % #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time 10-12-21 / 0755

RJES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 7 SERIAL #:

MONITORING DATE: 10-12-21 TIME: 0755

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
1 ppm	2 ppm	2 ppm

Background Value = 2 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	503 ppm	450 ppm	8
#2	500 ppm	450 ppm	12
#3	501 ppm	450 ppm	10
Calculate Response Time (1+2+3)/3			10 #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	1.0 ppm	503 ppm	502.00
#2	.50 ppm	500 ppm	499.50
#3	1.50 ppm	501 ppm	500.50
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			#DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 10-12-21/0755

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: SIMI VALLEY INSTRUMENT MAKE: TVA 1000

MODEL: THERMO EQUIPMENT #: 33 SERIAL #: 0000411015

MONITORING DATE: 11-10-21 TIME: 0730

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
2.3 ppm	2.5 ppm	2.4 ppm

Background Value = 2.4 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	500 ppm	450 ppm	5
#2	501 ppm	450 ppm	6
#3	503 ppm	450 ppm	4
Calculate Response Time (1+2+3) / 3			5 #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	0.49 ppm	500 ppm	0
#2	0.61 ppm	501 ppm	1
#3	0.38 ppm	503 ppm	3
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			0.2 #DIV/0! Must be less than 10%

Performed By: R. RAMIREZ Date/Time: 0730 11-10-21

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 32 SERIAL #: 0928538423

MONITORING DATE: 10-21-21 TIME: 0700-

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 503 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
2.5 ppm	3.8 ppm	3.1 ppm

Background Value = 3.1 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	505 ppm	450 ppm	6
#2	503 ppm	450 ppm	5
#3	503 ppm	450 ppm	6
Calculate Response Time (1+2+3) / 3			5.6 #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	0.93 ppm	505 ppm	5
#2	0.89 ppm	503 ppm	3
#3	0.87 ppm	503 ppm	3
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1 / 500 X 100 / 1			4.1% #DIV/0! Must be less than 10%

Performed By: [signature] Date/Time: 10-21-21/0700

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 32 SERIAL #: 0928538423

MONITORING DATE: 10-21-21 TIME: 0700-

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 503 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
2.5 ppm	3.8 ppm	3.1 ppm

Background Value = 3.1 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	505 ppm	450 ppm	6
#2	503 ppm	450 ppm	5
#3	503 ppm	450 ppm	6
Calculate Response Time (1+2+3)/3			5.6 #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	0.93 ppm	505 ppm	5
#2	0.89 ppm	503 ppm	3
#3	0.87 ppm	503 ppm	3
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			4.1% #DIV/0! Must be less than 10%

Performed By: [signature] Date/Time: 10-21-21/0700

RES
Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: THERMO

MODEL: TVA 1000 EQUIPMENT #: 7 SERIAL #: 0720723621

MONITORING DATE: 10-12-21 TIME: 0730

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
1 ppm	2 ppm	1.5 ppm

Background Value = 1.5 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	25.1 ppm	22.5 ppm	6
#2	25.8 ppm	22.5 ppm	5
#3	25.9 ppm	22.5 ppm	5
Calculate Response Time (1+2+3)/3			5.3 #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	0.69 ppm	25.1 ppm	0.1
#2	0.78 ppm	25.8 ppm	0.3
#3	0.64 ppm	25.9 ppm	0.4
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/25 X 100/1			1.0 #DIV/0! Must be less than 10%

Performed By: OMAR PERALTA Date/Time: 10-12-21 0730

RES
Environmental

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME Simi Valley INSTRUMENT MAKE THERMO

MODEL: TVA1000 EQUIPMENT #: 7 SERIAL #: 0720723627

MONITORING DATE: 10-13-21 TIME: 0730

Calibration Procedure:

1. Allow instrument to zero itself while introducing air
2. Introduce calibration gas into the probe. Stabilized reading = 25.8 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
3.3 ppm	4.9 ppm	4.1 ppm

Background Value = 4.1 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	26.5 ppm	22.5 ppm	6
#2	25.8 ppm	22.5 ppm	5
#3	25.8 ppm	22.5 ppm	6
Calculate Response Time (1+2+3) / 3			5.6 #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	0.98 ppm	26.5 ppm	1.5
#2	0.71 ppm	25.8 ppm	0.8
#3	0.87 ppm	25.8 ppm	0.8
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/25 X 100/1			0.2 % #DIV/0! Must be less than 10%

Performed By Michael ORus Date/Time 10-13-21 /0730

RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES UNIT # 1

SERIAL NUMBER: 16320832

TECHNICIAN: [signature] DATE: 10-2-21

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	10,003	+/- 2500
< 1	ZERO GAS	0.64	< 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.

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #2

SERIAL NUMBER: 7784545

TECHNICIAN: M Morris DATE: 10-2-21

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	501	+/- 125
10000	10000	10,100	+/- 2500
< 1	ZERO GAS	0.45	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES VAU #3

SERIAL NUMBER: 15865884

TECHNICIAN: M ABELIS DATE: 10-2-21

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	94	+/- 25
500	500	500	+/- 125
10000	10000	10,031	+/- 2500
< 1	ZERO GAS	0.79	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #4

SERIAL NUMBER: 1631980

TECHNICIAN: M Hicks DATE: 10-2-21

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	10,021	+/- 2500
< 1	ZERO GAS	0.65	< 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.

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #5

SERIAL NUMBER: 4919480

TECHNICIAN: M Huberts DATE: 10-2-21

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	501	+/- 125
10000	10000	10,001	+/- 2500
< 1	ZERO GAS	0.52	< 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.

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #6

SERIAL NUMBER: 07207236 26

TECHNICIAN: M Roberts DATE: 10-2-24

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	494	+/- 125
10000	10000	10,126	+/- 2500
< 1	ZERO GAS	0.79	< 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.

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #7

SERIAL NUMBER: 07207236 27

TECHNICIAN: M Nieto DATE: 10-2-21

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	10,101	+/- 2500
< 1	ZERO GAS	0,69	< 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.

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Van #9

SERIAL NUMBER: 105321138 01

TECHNICIAN: M Mbeus DATE: 10-2-21

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	0.67	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit # 29

SERIAL NUMBER: 1031445324

TECHNICIAN: M. Abeyta DATE: 10-2-21

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	10,000	+/- 2500
< 1	ZERO GAS	0.71	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES UNIT # 32

SERIAL NUMBER: 092853843

TECHNICIAN: M Kobes DATE: 10-2-21

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	0.69	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES VAN #33

SERIAL NUMBER: 000411015

TECHNICIAN: [illegible] DATE: 10-2-21

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	10,010	+/- 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #36

SERIAL NUMBER: 0332603195

TECHNICIAN: [illegible] DATE: 10-2-24

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	10,000	+/- 2500
< 1	ZERO GAS	0.64	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit # 10

SERIAL NUMBER: 1036346773

TECHNICIAN: M Ochoa DATE: 10-2-21

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	0.74	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #11

SERIAL NUMBER: 1036346774

TECHNICIAN: [illegible] DATE: 10-2-21

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	0.61	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit # 12

SERIAL NUMBER: 1036246741

TECHNICIAN: M Nieves DATE: 10-2-21

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	10,003	+/- 2500
< 1	ZERO GAS	0.64	< 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.

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #13

SERIAL NUMBER: 1102746275

TECHNICIAN: M. Nieves DATE: 10-2-21

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	0.72	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #14

SERIAL NUMBER: 1036346771

TECHNICIAN: M Roberts DATE: 10-2-21

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	0.63	< 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.

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES VAT #15

SERIAL NUMBER: 1036346772

TECHNICIAN: M ABERS DATE: 10-2-21

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	10,004	+/- 2500
< 1	ZERO GAS	0.63	< 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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Van # 16

SERIAL NUMBER: 1102746776

TECHNICIAN: M Roberts DATE: 10-2-20

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	0.63	< 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

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0600

Model # TVA 1000B

Serial # #1 16320832

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.6 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 5; 2. 5; 3. 6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 5.3
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: MM

Date: 10-2-21 **Time:** 0615

Model # TVA 1000B

Serial # #2 778454

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.6 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 5; 2. 5; 3. 6; Average 5.3
Factory calibration record w/Instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0630

Model # TVA-1000B

Serial # #3 15865884

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	1.9 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 6; 2. 6; 3. 5
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 5.6
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0645

Model # TVA-1000B

Serial # #4 163198330

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.3 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 4 / 2. 5 / 3. 6 / Average 5.0
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to Cbty gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0700

Model # TVA1000B

Serial # # 5 4919480

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.4 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm
Factory calibration record w/instrument within 3 months	(Pass) / Fail	1. 5 2. 5 3. 6 Average 5.3 Equal to or less than 30 seconds? (Y) N Instrument calibrated to Methy gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0715

Model # TVA 1000 B

Serial # #6 0720723626

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.1 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 6 / 2. 6 / 3. 6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 6.0
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0710

Model # TVA-1000 B

Serial # #7 0720723627

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.0 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 5 2. 6 3. 6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 5.6
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to Cly gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0745

Model # TVA-1000B

Serial # #9 0532113801

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.0 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 5 2. 4 3. 6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 5.0
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM

Date: 10-2-21 **Time:** 0800

Model # TVA-1000B

Serial # #29 1031445324

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.3 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 4 — 2. 5 — 3. 5 — Average 4.6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-22-21 **Time:** 0815

Model # MGA-100013

Serial # #32-0928538423

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.6 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 6; 2. 6; 3. 7
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 6.3
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0830

Model # TVA 1000B

Serial # #33 0004/1015

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	7.1 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 6 / 2. 6 / 3. 6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average 6.0
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to Air gas.

Comments: _____

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(909) 422-1001 Toll Free (888) 325-1098 Fax (909) 422-0707 www.resenvironmental.com

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: MH MH

Date: 10-2-21 **Time:** 0845

Model # TVA 1000B

Serial # #36 0332603195

INSTRUMENT INTEGRITY CHECKLIST	
Battery test	(Pass) / Fail
Reading following ignition	1.9 ppm
Leak test	(Pass) / Fail / NA
Clean system check (check valve chatter)	(Pass) / Fail / NA
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA
Date of last factory calibration	10-2-21
Factory calibration record w/instrument within 3 months	(Pass) / Fail

INSTRUMENT CALIBRATION

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy
500	500	100%

RESPONSE TIME

Calibration Gas, ppm 500

90% of Calibration Gas, ppm 450

Time required to attain 90% of Cal Gas ppm

1. 5
2. 6
3. 6

Average 5.6

Equal to or less than 30 seconds? (Y) N

Instrument calibrated to Clean gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM MM

Date: 10-2-21 **Time:** 0900

Model # TVA-1000 B

Serial # #10 1036346773

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.0 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm
Factory calibration record w/instrument within 3 months	(Pass) / Fail	1. 4 2. 5 3. 5 Average 4.6 Equal to or less than 30 seconds? (Y) N Instrument calibrated to Methane gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0915

Model # TVA 1000B

Serial # #11 1036346774

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.3 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 6 / 2. 6 / 3. 6 / Average 6.0
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM M

Date: 10-2-21 **Time:** 0930

Model # YA-1000B

Serial # #12 1036246711

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.7 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 7 / 2. 6 / 3. 6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 6.3
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 0945

Model # TVA 1000B

Serial # #13 1102746775

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.8 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 6 — 2. 6 — 3. 6 — Average 6.0
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to Cthy gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-21 **Time:** 1000

Model # TVA-1000B

Serial # #14 1036386771

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.1 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 6 2. 4 3. 4 Average 5.3
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to Clay gas.

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM JM

Date: 10-2-21 **Time:** 1015

Model # JUA 1000B

Serial # #15 1036346772

INSTRUMENT INTEGRITY CHECKLIST	
Battery test	(Pass) / Fail
Reading following ignition	2.5 ppm
Leak test	(Pass) / Fail / NA
Clean system check (check valve chatter)	(Pass) / Fail / NA
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA
Date of last factory calibration	10-2-21
Factory calibration record w/instrument within 3 months	(Pass) / Fail

INSTRUMENT CALIBRATION

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy
500	500	100%

RESPONSE TIME

Calibration Gas, ppm 500

90% of Calibration Gas, ppm 450

Time required to attain 90% of Cal Gas ppm

1. 5
2. 4
3. 6

Average 5.0

Equal to or less than 30 seconds? (Y) N

Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 10-2-2 **Time:** 1010

Model # TVA 1000B

Serial # #16 1102746776

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.6 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-2-21	Time required to attain 90% of Cal Gas ppm: 1. 6 2. 6 3. 6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 6.0
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

Composition	Certification	Analytical Accuracy
Air - Zero		
THC	< 2 PPM	
Oxygen	20.9%	± 2%
Nitrogen	Balance	

Lot # 19-6779

Mfg. Date: 4/3/2019

Parent Cylinder ID Number: 001739, 02268

Method of Preparation:
Gravimetric/Pressure Transfilled

Method of Analysis:
This 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: 4/3/2019


Accuracy
Exp Date
103 L
COA

INTERMOUNTAIN SPECIALTY GASES

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800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

Composition	Certification	Analytical Accuracy
Methane	25 ppm	± 5%
Air	Balance	

Lot # 17-6074

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


Service
INC.
Accuracy
+/- 5%
Lot#: 17-6074
P/N:23-0025
103 L
(949) 757-0363
103-23-0025
Nitrogen
103 L
Lot #
17-6074

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CERTIFICATE OF ANALYSIS

Composition	Certification	Analytical Accuracy
Methane	25 ppm	± 5%
Air	Balance	

Lot # 17-6074

Mfg. Date: 10/16/2017

Parent Cylinder ID Number: 17161

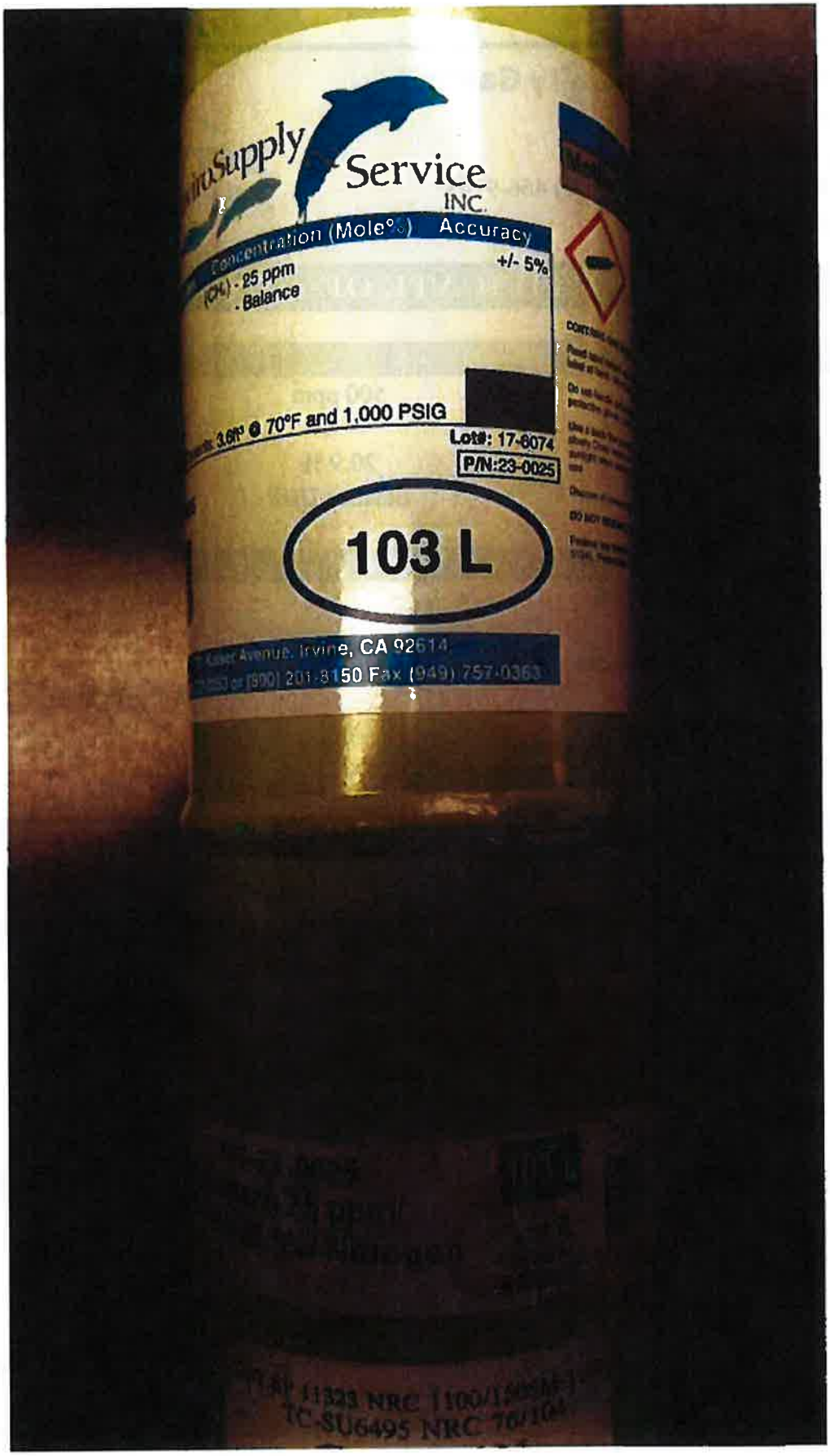
Method of Preparation:

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


Service
INC.
Concentration (Mole%)
Accuracy
+/- 5%
(CH4) - 25 ppm
. Balance
3.6ft³ @ 70°F and 1,000 PSIG
Lot#: 17-8074
P/N:23-0025
103 L
Irvine, CA 92614
Fax (949) 757-0363
TC-SU6495 NRC

Intermountain Specialty Gases
520 N. Kings Road
Nampa, ID 83687 (USA)
Phone (800) 552-5003, Fax (208) 466-9143
www.isgases.com

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"Your calibration gas manufacturer since 1992"

CERTIFICATE OF ANALYSIS

Composition	Certification	Analytical Accuracy (+/-)
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 Number:	TWC001763

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


Service
INC.
Accuracy
+/- 2%
Lot#: 20-7497
P/N:23-0500
103 L
103 L
Lot #
COA

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

Composition	Certification	Analytical Accuracy
Methane	500 ppm	± 2%
Air	Balance	

Lot # 19-6955

Mfg. Date: 7/24/2019

Parent Cylinder ID Number: 001763

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: 7/24/2019


Service
INC
Accuracy
Methane
Exp Date
Lot#:
P/N:
103 L
103 L
COA
Lot #
Nitrogen
NRC 1100/1505M-1102
SU6495 NRC 76/104
CAUTION
ERAL LAW FORBIDS
NSPORTATION IF
LLED-PENALTY UP
500,000 FINE AN
ARS IMPRISONM NT

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CERTIFICATE OF ANALYSIS

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

Lot #	18-6641
Mfg. Date:	12/18/2018
Expiration Date:	
Transfill Date:	see cylinder
Parent Cylinder ID Number:	001763

Method of Preparation:

Gravimetric/Pressure Transfilled

Method of Analysis:

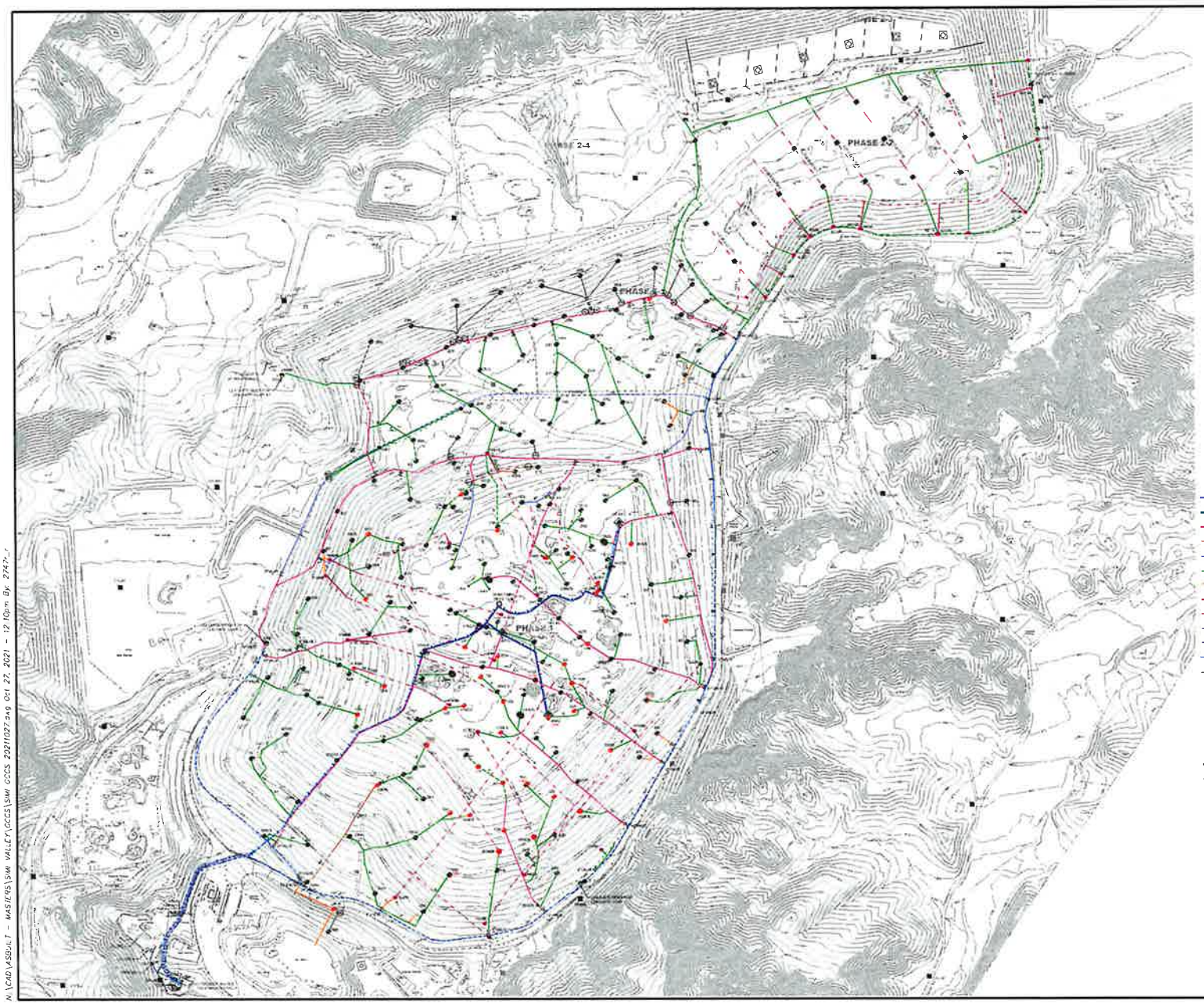
The parent mix was prepared gravimetrically and is traceable to the NIST by certified weights (ID #CA10814) used to calibrate the scale.

Analysis By: Tony Janquart
Title: Quality Assurance Manager
Certificate Date: 12/18/2018


Service
Concentration (Mole%)
Accuracy
500 ppm
+/- 2%
Balance
@ 70°F and 1,000 PSIG
Exp Date
103 L
Avenue, Irvine, CA 92614
(800) 201-8150 Fax (949) 757-0363
103 L
COA
Lot #
16-8641
1100/1505M-1102

Appendix B

GCCS Map



SYMBOL LEGEND

- ACTIVE VERTICAL WELL
- VERTICAL WELL WITH TEMPERATURE VARIANCE
- HORIZONTAL COLLECTOR WELLHEAD
- HORIZ WELL WITH TEMPERATURE VARIANCE
- CONDENSATE SUMP
- REMOTE WELLHEAD
- LEACHATE RISER
- MONITORING PROBE
- VALVE
- SVE WELL
- EXISTING GRAVEL PADS
- 2021 NEW GRAVEL PADS
- DECOMMISSIONED WELL
- DECOMMISSIONED MONITORING PROBE
- 24" HEADER
- 18" HEADER
- 12" HEADER
- 10" HEADER
- 8" LATERAL
- 6" LATERAL
- 4" LATERAL
- HORIZONTAL COLLECTOR - SOLID
- HORIZONTAL COLLECTOR - PERFORATED
- BELOW GRADE CONDENSATE FORCEMAIN
- ABOVE GRADE DEWATERING FORCEMAIN
- COMPRESSED AIR LINE
- REMOTE MANIFOLD
- AIR RELEASE VALVE
- CONDENSATE FORCEMAION ISOLATION VALVE
- CONDENSATE FORCEMAIN CLEANOUT
- WELL WITH PUMP AND BUBBLER
- WELL WITH BUBBLER
- PHASE BOUNDARY
- LCRS PIPE

NOTES

1. AERIAL TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING, DATED 2-10-21.
2. EXISTING GCCS AS-BUILTS DATED 6-11-2021.
3. BOUNDARY DATA IS PROVIDED BY WM AND NAMED "ACAD-JTD BOUNDARIES WITH 3-5 SUBPHASES".

NO | REVISION | DATE

SHEET TITLE: GCCS AND DEWATER LAYOUT

PROJECT TITLE: SIMI VALLEY LANDFILL AND RECYCLING CENTER
2801 MADERA ROAD
SIMI VALLEY, CALIFORNIA 93065

CLIENT: WASTE MANAGEMENT

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3900 KILROY AIRPORT WAY, SUITE 100
LONG BEACH, CA 90806
PH: (562) 426-9544 FAX: (562) 427-0525

DATE: 10-27-2021

SCALE: AS SHOWN

DRAWING NO: 2 of 3

N:\CAD\ASBUILT - MASTERS\SIMI VALLEY\GCCS\SIMI GCCS 20211027.dwg Oct 27, 2021 - 12:10pm By: 2747