

Vasco Road Landfill 4001 N Vasco Road, Livermore, CA 94551 o 925.447.0491 republicservices.com

August 31, 2020

TV Tracking #: 40

1. D RECEIVED IN ENFORCEMENT: 08/31/2020

Director of Compliance and Enforcement Bay Area Air Quality Management District 375 Beale Street Suite 600 San Francisco, CA 94105 Director of the Air Division USEPA, Region IX 75 Hawthorne Street San Francisco, CA 94105 Attn: Air-3

SUBJECT: Combined Title V Semi-Annual and Partial 8-34 Annual Report 40 CFR 63 Subpart AAAA Semi-Annual Report Vasco Road Landfill 4001 North Vasco Road Livermore, California 94550 Facility Number A5095

Dear Sir or Madam:

The Vasco Road Landfill (Vasco Road) is pleased to submit the attached Semi-Annual Report (SAR) and Partial 8-34 Annual Report for the period of February 1, 2020 through July 31, 2020 to the Bay Area Air Quality Management District (BAAQMD) and the United States Environmental Protection Agency (USEPA), Region IX. As required by 40 Code of Federal Regulations (CFR) Part 63 Subpart AAAA, the Semi-Annual Startup, Shutdown and Malfunction (SSM) Report is also enclosed. The Combined Title V Semi-Annual and Partial 8-34 Annual Report satisfies the requirements of the Title V Permit listed in Title V Permit Condition Number 818 Part 23 and Standard Condition I.F.

Based on the information and belief formed after reasonable inquiry, the statements and information contained in the document are true, accurate, and complete.

Sincerely, Vasco Road Landfill

Matt Ketchem General Manager

8-6-2020

Date Signed

Attachments: Combined Title V Semi-Annual and Partial 8-34 Annual Report

Combined Title V Semi-Annual and Partial 8-34 Annual Report

Vasco Road Landfill

February 1, 2020 through July 31, 2020

AUGUST 31, 2020

PRESENTED TO

Republic Services 4001 N. Vasco Road Livermore, CA 94551

SUBMITTED BY

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REPORT CERTIFICATION

The material and data in this report were prepared under the supervision and direction of the undersigned.

Annelliu

Environmental Scientist

8/31/2020

Date

Meghan Caesar Project Manager

8/31/2020

Date

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1.0 INTRODUCTION

1.1 PURPOSE

This document is a Combined Semi-Annual Title V and Partial 8-34 Annual Report for Republic Services (Republic) – Vasco Road Landfill (Vasco Road) pursuant to Title V Permit, Standard Condition 1.F and Condition Number 818 Part 23. This report satisfies the requirements of the Bay Area Air Quality Management District's (BAAQMD) Regulation (Reg) 8, Rule 34, Section 411, Title V Standard Condition 1.F and Title 40 Code of Federal Regulations (CFR), New Source Performance Standards (NSPS) for Municipal Solid Waste (MSW) landfills, Part 60 Subpart WWW, specifically 40 CFR §60.757(f). The Combined Report covers compliance activities conducted from February 1, 2020 through July 31, 2020. This Combined Report also includes the Semi-Annual Report of Start-up, Shutdown, and Malfunction (SSM) Plan activities pursuant to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, Subpart AAAA for Landfills.

Section 2 of this Combined Report contains the elements required to satisfy both BAAQMD Reg 8-34-411 and 40 CFR §60.757(f). Section 3 of this Combined Report includes a discussion of the data from the most recent Performance (Source) Test and satisfies compliance with BAAQMD Reg 8-34-412 and Title V Permit Condition Number 818, Part 20. A source test for the A-4 Flare was conducted on April 15, 2020 to meet the requirements of both BAAQMD Rule 8-34-413 and 40 CFR §60.758(g). The Performance Test Report results were included in Appendix R. Section 4 of this Combined Report includes the SAR of the SSM Plan activities pursuant to the NESHAP, 40 CFR Part 63, Subpart AAAA for Landfills.

1.2 RECORDKEEPING AND REPORTING

Records are maintained and available for inspection in accordance with BAAQMD Rule 8-34-501.12 and 40 CFR §60.758. The primary location for records storage is at the Vasco Road administrative building. Records are maintained at this location for a minimum of five years as required by federal regulations.

1.3 REPORT PREPARATION

The Combined Report has been prepared by Tetra Tech, as authorized by Republic.

2.0 COMBINED MONITORING REPORT

In accordance with Title V Permit Standard Condition 1.F, BAAQMD Rule 8-34-411 and §60.757(f) in the NSPS, this report is a Combined Semi-Annual Title V Report and Partial 8-34 Annual Report that is required to be submitted by Vasco Road. The Combined Report contains monitoring data for the operation of the landfill gas (LFG) collection and control system (GCCS). The operational records have been reviewed and summarized. The timeframe included in this report is February 1, 2020 through July 31, 2020. The following table lists the rules and regulations that are required to be included in this Combined Report.

Rule	Requirement	Location in Report
8-34-501.1 §60.757(f)(4)	All collection system downtime, including individual well shutdown times and the reason for the shutdown.	Section 2.1, Appendices C, D, & E
8-34-501.2 §60.757(f)(3)	All emission control system downtime and the reason for the shutdown.	Section 2.2, Appendix D & E
8-34-501.3, 8-34-507, §60.757(f)(1)	Continuous temperature for all operating flares and any enclosed combustor subject to Section 8-34-507.	Section 2.3, Appendix F
8-34-501.4, 8-34-505, 8-34-510	Monitoring and Testing performed to satisfy any of the requirements of this rule.	Section 2.4 & 2.10 Appendices G, J & K
8-34-501.5	Monthly LFG flow rates and well concentration readings for facilities subject to 8-34-404.	Section 2.5, 2.11 Appendix L
8-34-501.6, 8-34-503, 8- 34-506, §60.757(f)(5)	For operations subject to Section 8-34-503 and 8-34-506, records of all monitoring dates, leaks in excess of the limits in Section 8-34-301.2 or 8-34-303 that are discovered by the operator, including the location of the leak, leak concentration in parts per million by volume (ppmv), date of discovery, the action taken to repair the leak, date of the repair, date of any required remonitoring, and the re-monitored concentration in ppmv.	Section 2.6 & 2.7, Appendices H & I
8-34-501.7	Annual waste acceptance rate and current amount of waste in-place.	Section 2.8
8-34-501.8	Records of the nature, location, amount, and date of deposition of non-degradable wastes, for any landfill areas excluded from the collection system requirement as documented in the GCCS Design Plan.	Section 2.9
8-34-501.9, 8-34-505, §60.757(f)(1)	For operations subject to Section 8-34-505, records of all monitoring dates and any excesses of the limits stated in Section 8-34-305 that are discovered by the operator, including well identification number, the measured excess, the action taken to repair the excess, and the date of repair.	Section 2.10, 2.10.1, Appendices J & K
8-34-501.10, 8-34-508, §60.757(f)(1)	Continuous gas flow rate records for any site subject to Section 8-34-508.	Section 2.11, Appendix L
8-34-501.11, 8-34-509	For operations subject to Section 8-34-509, records or key emission control system operating parameters.	Section 2.2.2
8-34-501.12	The records required above shall be made available and retained for a period of five years.	Section 1.2
§60.757(f)(2)	Description and duration of all periods when the gas stream is diverted from the control device through a	Section 2.2.1

Table 2-1. Combined Report Requirements.

	bypass line or the indication of bypass flow as specified under §60.756.	
§60.757(f)(6)	The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), (c)(4) of §60.755.	Section 2.13, Appendices A & C
§60.10 (d)(5)(i)	Startup, Shutdown, Malfunction (SSM) Events	Section 4.0, Appendices C, D & E

2.1 COLLECTION SYSTEM OPERATION (BAAQMD 8-34-501.1 & §60.757(F)(4))

Appendix A contains a current map of Vasco Road's existing GCCS. Section 2.1.1 includes the GCCS downtime for the reporting period. The information contained in Section 2.1.2 includes wellfield SSM event information. Refer to Appendix C for the shutdown times and the reason for the shutdown.

2.1.1 Collection System Downtime

During the period covered in this report, the GCCS was not shut down for more than five days on any occasion. The downtime for the reporting period of February 1, 2020 through July 31, 2020 was 7.11 hours.

The total downtime for the 2020 calendar year, as of July 31, 2020, was 7.11 hours out of an allowable 240 hours per year.

Appendix D contains the A-4 Flare SSM Log for the reporting period. Appendix E contains the GCCS Downtime.

2.1.2 Wellfield Start-Up, Shutdown, and Malfunction Log

There were 18 wellfield SSM events that occurred during the reporting period as seven vertical LFG extraction wells were started up, eight wells were decommissioned, and three wells were returned online after being temporarily offline due to being located in the active area. Refer to Appendix C, Wellfield SSM Log for further details. Well Start-up and Decommissioning Notification Letters were submitted to the BAAQMD as required and are included in Appendix B.

Well Startup and Decommissioning Notification letters were submitted to the BAAQMD as required on March 13, April 7, May 1, and May 20, 2020, respectively.

At the end of the reporting period, there were 123 vertical LFG extraction wells and five horizontal LFG collectors connected to the GCCS at Vasco Road.

2.2 EMISSION CONTROL DEVICE DOWNTIME (BAAQMD 8-34-501.2 & §60.757(F)(3))

The emission control system consists of one flare (A-4), which began operation in June 2009 and one LFG to energy (LFGTE) facility, operated by Ameresco under their own Title V permit, consisting of two internal combustion (IC) engines which began operation in February 2014. The control system was not bypassed at any time during the reporting period. Raw LFG was not emitted during the reporting period. The SSM Log for the A-4 Flare noting downtime for the reporting period is located in Appendix D.

2.2.1 LFG Bypass Operations (§60.757(f)(2))

Title 40 CFR §60.757(f)(2) is not applicable at Vasco Road because a by-pass line has not been installed. LFG cannot be diverted from the control equipment.

2.2.2 Key Emission Control Operating Parameters (BAAQMD 8-34-501.11 & 8-34-509)

BAAQMD Regulation 8-34-501.11 and 8-34-509 are not applicable to the A-4 Flare because the A-4 Flare is subject to continuous temperature monitoring as required in BAAQMD Regulation 8-34-507 and §60.757(f)(1).

2.3 TEMPERATURE MONITORING RESULTS (BAAQMD 8-34-501.3, 8-34-507, & §60.757(F)(1))

The combustion zone temperature of the flare is monitored with Thermo-Electric Thermocouples. The temperature is recorded every two minutes with a Yokogawa FX100 digital recorder, and the data is downloaded and archived. There were four temperature deviations that occurred during planned maintenance events during the reporting period. Appendix F contains the Flare Temperature Deviation/Inoperative Monitor/Missing Data Report for February 1, 2020 through July 31, 2020.

2.4 MONTHLY COVER INTEGRITY MONITORING (BAAQMD 8-34-510)

The cover integrity monitoring was performed on the following dates:

- February 7, 2020;
- March 21, 2020;
- April 20, 2020;
- May 14 and 18, 2020;
- June 24, 2020; and
- July 16 and 27, 2020.

Refer to the Monthly Cover Integrity Monitoring Logs, included in Appendix G, for further details.

2.5 LESS THAN CONTINUOUS OPERATION (BAAQMD 8-34-501.5)

The Vasco Road GCCS operates under BAAQMD Regulation 8-34-404 (Less Than Continuous Operation) as of November 19, 2014.

Pursuant to Application Number 26049 Condition 818 Part 1 (b), the owner/operator may operate the A-4 Flare on a less than continuous basis. If the three-month rolling average of LFG methane content exceeds 50 percent, the owner/operator shall attempt to restart the A-4 Flare within one week of discovery of this excess. If the restart is successful, the A-4 Flare shall operate continuously until the remaining amount of LFG available for flaring is less than 800 standard cubic feet per minute (scfm) or the equivalent heat input rate for this excess LFG is less than 24 million British thermal units per hour (MMBTU/hour). The owner/operator shall attempt to restart the A-4 Flare once per week until the rolling average methane content calculated is below 50 percent methane pursuant to Title V Permit Condition Number 818 Part 3. The rolling average methane content is currently being calculated using the average of the inlet readings collected onsite.

2.6 SURFACE EMISSIONS MONITORING (BAAQMD 8-34-501.6, 8-34-506, §60.757(F)(5) & CALIFORNIA AIR RESOURCES BOARD ASSEMBLY BILL 32 METHANE CONTROL MEASURE [CARB AB-32 LF MCM])

Quarterly Surface Emissions Monitoring (SEM) was conducted during the reporting period on the following dates:

- First Quarter 2020– February 3, 4, 5, 6, 7, and 20, 2020; and
- Second Quarter 2020– June 2, 3, 4, 8, and 17, 2020.

Refer to the First and Second Quarter 2020 SEM Reports, located in Appendix H, for detailed results.

2.7 COMPONENT LEAK TESTING (BAAQMD 8-34-501.6 & 8-34-503)

Quarterly component leak testing, pursuant to BAAQMD Regulation 8-34-503, was conducted during the reporting period on the following dates:

- First Quarter 2020– February 3 and 7, March 24, 2020; and
- Second Quarter 2020– May 21 and June 2, 2020.

Refer to the Quarterly LFG Component Leak Monitoring Forms, located in Appendix I, for detailed results.

2.8 WASTE ACCEPTANCE RECORDS (BAAQMD 8-34-501.7)

The amount of waste accepted during the reporting period of February 1, 2020 through July 31, 2020 was approximately 240,980.08 tons. The current Waste-In-Place (WIP) as of July 31, 2020 is approximately 17,915,976.23 tons.

2.9 NON-DEGRADABLE WASTE ACCEPTANCE RECORDS (BAAQMD 8-34-501.8)

The GCCS Design Plan for Vasco Road does not have non-degradable waste areas that are excluded from the collection system. Therefore, BAAQMD Regulation 8-34-501.8 is not applicable.

2.10 WELLHEAD MONITORING DATA (BAAQMD 8-34-501.4 & 8-34-505)

Wellhead monitoring was performed on a monthly basis pursuant to 8-34-505. The well readings for February 1, 2020 through July 31, 2020 are included in Appendix J. Each well was monitored in accordance with the following requirements:

- 8-34-305.1 Each wellhead shall operate under a vacuum;
- 8-34-305.2 The LFG temperature in each wellhead shall be less than 55 degrees Celsius (°C) (131 degrees Fahrenheit [°F]); and
- 8-34-305.4 The oxygen concentration in each wellhead shall be less than five percent by volume.

Wellhead monitoring was performed on the following dates:

- February 6, 7, 13, 19, 21, and 24, 2020;
- March 3, 4, 9, 13, 20, 21, and 23, 2020;
- April 1, 2, 6, 13, 17, 20, and 27, 2020;
- May 4, 8, 14, 18, 27, 28, and 29, 2020;
- June 1, 5, 10, 16, 19, and 24, 2020; and
- July 1, 7, 9, 16, 20, and 21, 2020.

2.10.1 Wellhead Deviations (BAAQMD 8-34-501.9 & §60.757(f)(1))

There were 30 wells with exceedances from BAAQMD Regulation 8-34-305 during the reporting period. Corrective action for these wells was initiated within the required five-day time period and re-monitoring was completed pursuant to BAAQMD Regulation 8-34-414. Refer to Appendix K, the Wellfield Deviation Log, for further details.

2.10.2 Higher Operating Value (HOV) Wells

Temperature HOV Wells

Pursuant to Title V Permit Condition 818, Part 3(b)(i), the following wells are approved to operate at a temperature HOV of 140°F: EW-9 (VRLFEW09), EW-33A (VRLEW33A), and EW-44 (VRLFEW44).

Oxygen HOV Wells

Pursuant to Title V Permit Condition 818, Part 3(b)(ii), the oxygen concentration limit does not apply to the wells listed below, provided that the oxygen concentration in the LFG at the main header does not exceed five percent oxygen by volume (dry basis) and the methane concentration is greater than 35 percent by volume (dry basis): EW-9 (VRLFEW09), EW-27 (VRLFEW27), and EW-33A (VRLEW33A).

Pursuant to Title V Permit Condition 818, Part 3(c)(i-iv) four vertical leachate recirculation wells (VRLRW001, VRLRW002, VRLRW003 and VRLRW004) and two horizontal leachate recirculation wells (VR12GT4R and VR12GT05) are subject to an alternative oxygen limit of 15 percent by volume and are allowed to operate on a less than continuous basis and may be disconnected from the vacuum system if the wellhead oxygen concentration is above 15 percent or the wellhead temperature is greater than 131°F.

2.11 GAS FLOW MONITORING RESULTS (BAAQMD 8-34-501.10, 8-34-508, & §60.757(F)(1)

The A-4 Flare LFG flow rate is measured with a Veris Verabar flow meter with Rosemount transmitter. The General Electric data panel displays the LFG flow and the digital Yokogawa data recorder records LFG flow every two minutes and the data is downloaded and saved to a compact flash card. The flare flow meter meets the requirements of BAAQMD Regulation 8-34-508 by recording data at least every 15 minutes. The flow meter is maintained and calibrated pursuant to the manufacturer's recommendations. The flow data for the flare is available for review at Vasco Road. Appendix L contains a summary of the monthly LFG flow rates for the flare. No deviations of the flare flow were identified during the monitoring period. Table 2-2 below is a summary of the total LFG flow for the reporting period of February 1, 2020 through July 31, 2020.

Emission Control Device	Average Flow (SCFM)	Average CH₄ (%)*	Total LFG Volume (SCF)	Total CH₄ Volume (scf)	Heat Input (MMBTU)
A-4 Flare	1,155.3	49.3	78,857,095.40	38,877,290.67	39,382.70

scfm = standard cubic feet per minute

CH₄ = methane

scf = standard cubic feet

MMBTU = Million British Thermal Units

*Methane content determined from the monthly blower inlet readings pursuant to Title V Permit Condition 818 Part 13

2.12 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 818 PART 12

Pursuant to Title V Permit Condition Number 818 Part 12(a), the Permit Holder shall analyze the LFG for Hydrogen Sulfide (H₂S) concentration on a quarterly basis using a combination of field testing and laboratory analytical results. The field-testing procedure shall measure H₂S content in the LFG using a Draeger tube and calculated for total reduced sulfur (TRS) by multiplying the H₂S result by 1.2. The annual average TRS concentration shall be calculated and recorded for each rolling four-quarter period based on the TRS data recorded from the field and lab samples described above. The February 1, 2020 through July 31, 2020 Quarterly

H₂S readings, the calculated TRS, and the calculated TRS rolling annual average are included in Appendix N of this Combined Report. The TRS annual average as of the end of the reporting period was 29 ppmv, which is within the 320 ppmv permitted limit.

2.13 COMPLIANCE WITH §60.757(F)(6)

"The date of installation and the location of each well or collection system expansion added pursuant to (a)(3), (b), (c)(4) of §60.755."

The GCCS was modified pursuant to Title V Permit Number A3294 during the reporting period.

Eight vertical LFG extraction wells were decommissioned and seven vertical wells were started up during the reporting period, pursuant to Application Number (A/N) 29010. Well Startup and Decommissioning Notification Letters were submitted to the BAAQMD and are included in Appendix B.

On March 13, 2020 a Well Decommissioning Notification was submitted to the BAAQMD for one vertical well. On April 7, 2020, a Well Decommissioning Notification was submitted to the BAAQMD for one vertical well. On May 1, 2020, a Combined Well Startup and Decommissioning Notification was submitted to the BAAQMD for five vertical LFG well decommissionings and six vertical well startups. On May 29, 2020, a revised Well Notification was submitted to the BAAQMD to include an additional vertical well decommissioning to the May 1, 2020 Well Notification.

As of the end of the reporting period, A/N 29010 still allows for the replacement of unlimited vertical wells, installation of up to 77 new vertical wells, installation of up to 19 new horizontal collectors, the decommissioning of up to 126 vertical wells, and the decommissioning of up to 12 horizontal collectors.

As of July 31, 2020, the GCCS at Vasco Road consists of 123 vertical LFG extraction wells and five horizontal collectors.

2.14 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 818, PARTS 15 AND 16

No contaminated soil containing volatile organic compound (VOC) concentrations greater than 50 ppmv was received during this reporting period. The total amount of metal-laden and VOC-laden soil (containing less than 50 ppmv of VOCs) used as cover material did not exceed 180,000 tons during any consecutive 12-month period during the reporting period.

2.15 COMPLIANCE WITH TITLE V PERMIT CONDITION NUMBER 7523 FOR S-7 NON-RETAIL GASOLINE DISPENSING FACILITY G#9551

Pursuant to Title V Permit Condition Number 7523, Part 1, the annual gasoline throughput for S-7 shall not exceed 400,000 gallons in any consecutive 12-month period. The annual gasoline throughput did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Monthly gasoline throughput and consecutive 12-month gasoline usage for the reporting period of February 1, 2020 through July 31, 2020 are included in Appendix O.

2.16 COMPLIANCE WITH PERMIT TO OPERATE CONDITION NUMBER 25515 FOR S-14 GREEN WASTE PROCESSING OPERATION

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road,

therefore the tonnages for S-14 have been revised to accurately reflect site operations. Revised S-14 tonnages from August 1, 2018 to January 31, 2020 SARs are included in Appendix S. The amount of green waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Monthly and consecutive 12-month amounts of green waste processed for the reporting period of February 1, 2020 through July 31, 2020 are included in Appendix P.

2.17 COMPLIANCE WITH PTO CONDITION NUMBER 25516 FOR S-15 WOOD WASTE PROCESSING OPERATION

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations. Revised S-15 tonnages from August 1, 2018 to January 31, 2020 SARs are included in Appendix S. The amount of wood waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Monthly and consecutive 12-month amounts of wood waste processed for the reporting period of February 1, 2020 through July 31, 2020 are included in Appendix Q.

2.18 REPORTABLE EVENTS DURING THE REPORTING PERIOD

There were no reportable events during the reporting period.

3.0 PERFORMANCE (SOURCE) TEST REPORT

In accordance with BAAQMD Rule 8-34-413 and 40 CFR §60.757(g) in the NSPS, a Performance (Source) Test Report is required to be submitted from subject facilities containing performance and monitoring data for the operation of the GCCS. The operational records listed in Table 3-1 have been reviewed, summarized, and are included in the Performance (Source) Test Report section of this report. A copy of the most recent Performance (Source) Test conducted on April 15, 2020 is included in Appendix R.

Rule	Requirement	Location in Report
8-34-412, §60.8, §60.752(b)(2)(iii)(B), §60.754(d)	Compliance Demonstration Test	Section 3.1
§60.757(g)(1)	A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for future collection system expansion.	Section 3.2, Appendix A
§60.757(g)(2)	The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based.	Section 3.3
§60.757(g)(3)	The documentation of the presence of asbestos or non-degradable material for each area from which collection wells have been excluded based on the presence of asbestos or non-degradable material.	Section 3.4
§60.757(g)(4)	The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on non-productivity and the calculations of gas generation flow rate for each excluded area.	Section 3.5
§60.757(g)(5)	The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill.	Section 3.6
§60.757(g)(6)	The provisions for the control of off-site migration.	Section 3.7 Appendix M

Table 3-1. Performance Test Requirements.

3.1 FLARE (A-4) COMPLIANCE DEMONSTRATION TEST RESULTS (BAAQMD 8-34-412)

The Compliance Demonstration Test (Performance [Source] Test) was performed on the A-4 Flare by Blue Sky Environmental, Inc. (Blue Sky) on April 15, 2020, pursuant to BAAQMD Regulation 8-34-412. On March 18, 2020, Blue Sky submitted the Source Test Protocol (STP) to the BAAQMD. The final report was submitted to the BAAQMD on May 28, 2020.

The next Performance (Source) Test is due to be completed on or before April 15, 2021.

A summary of the results of the Performance Test for the A-4 Flare is provided in Appendix R.

3.2 COMPLIANCE WITH §60.757(G)(1)

"A diagram of the collection system showing collection system positioning including wells, horizontal collectors..."

A map of the LFG collection system showing the location of all vertical wells, horizontal collectors, and other LFG extraction devices is included in Appendix A.

3.3 COMPLIANCE WITH §60.757(G)(2)

"The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based."

The existing GCCS has historically provided LFG wells and collectors spaced in accordance with standard industry practices. Based on continuous compliance and operational experience, the installed collector density appears more than adequate for controlling surface emissions and subsurface LFG migration.

The landfill operator will conduct routine monitoring in accordance with NSPS requirements. If the GCCS at the Landfill does not meet the measures of performance set forth in the NSPS, the GCCS will be adjusted or modified as required.

The existing GCCS conveyance piping and emission control devices have sufficient capacity to handle all current and future LFG flow rates (based on quarterly surface emissions monitoring results and monthly wellhead readings). New emission control devices will be designed and permitted as appropriate for future LFG generation rates.

3.4 COMPLIANCE WITH §60.757(G)(3)

"The documentation of the presence of asbestos or non-degradable material for each area from which collection wells have been excluded based on the presence of asbestos or non-degradable material."

Segregated areas or accumulations of asbestos material were not documented for the site in the GCCS Design Plan. Therefore, 60.757(g)(3) is not applicable.

3.5 COMPLIANCE WITH §60.757(G)(4)

"The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on non-productivity and the calculations of gas generation flow rate for each excluded area."

There are no non-productive areas that have been excluded from the coverage of the GCCS. Therefore, §60.757(g)(4) is not applicable.

3.6 COMPLIANCE WITH §60.757(G)(5)

"The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill."

The existing GCCS conveyance piping and emission control devices have sufficient capacity to handle all current and future LFG flow rates. New emission control devices will be designed and permitted as appropriate for future LFG generation rates.

3.7 COMPLIANCE WITH §60.757(G)(6)

"The provisions for the control of off-site migration."

Quarterly LFG migration monitoring, including all probes and on-site buildings, occurred on the following dates:

- First Quarter 2020– March 13 and 24, 2020; and
- Second Quarter 2020– May 21 and June 12, 2020.

There were no exceedances detected during the First and Second Quarter 2020 Probe and In-Structure monitoring events. The LFG Probe and In-Structure Monitoring Reports for the First and Second Quarter 2020 are included in Appendix M.

The Landfill operator will continue surface and perimeter monitoring in accordance with the approved monitoring plans. If the GCCS at the Landfill does not meet the measures of performance set forth in the NSPS, the GCCS will be adjusted or modified in accordance with the NSPS requirements.

4.0 START-UP, SHUTDOWN, MALFUNCTION REPORT

4.1 SSM REPORT FOR THE GCCS AT VASCO ROAD

The NESHAP contained in 40 CFR Part 63, AAAA for MSW landfills to control hazardous air pollutants include the regulatory requirements for submittal of a semi-annual report (under 40 CFR §63.10(d)(5) of the general provisions) if an SSM event occurred during the reporting period. The reports required by §63.1980(a) of the NESHAP and §60.757(f) of the NSPS summarize the GCCS exceedances. These two semi-annual reports contain similar information and have been combined as allowed by §63.10(d)(5)(i) of the General Provisions.

NESHAP 40 CFR part 63, AAAA became effective on January 16, 2004. Those SSM events that occurred during the NSPS semi-annual reporting period are reported in this section (February 1, 2020 through July 31, 2020). The following information is included as required:

- During the reporting period, 138 A-4 Flare SSM events occurred. The A-4 Flare was shut down and restarted during the reporting period due to the reasons noted in Appendix D, Flare SSM Log.
- During the reporting period, 18 Wellfield SSM events occurred. Details are included in Appendix C, Well SSM Log.
- There were 156 events in total. In all 156 events, automatic systems and operator actions were consistent with the standard operating procedures contained in the SSM Plan. There were no deviations from the SSM Plan.
- Exceedances were not identified during the reporting period in any applicable emission limitation in the landfills NESHAP (§63.10(d)(5)(i)).
- Revisions of the SSM Plan to correct deficiencies in the landfill operations or procedures were neither required, nor prepared (§63.6(e)(3)(viii)).



Vasco Road Landfill 4001 N Vasco Road, Livermore, CA 94551 o 925.447.0491 republicservices.com

I certify the following:

Based on information and belief formed after reasonable inquiry, information on the startup, shutdown, malfunction forms, all accompanying reports, and other required certifications are true, accurate, and complete.

Signature of Responsible Official

B-6-2020 Date

Matt Ketchem Name of Responsible Official

5.0 LIMITATIONS

The work product included in the attached was undertaken in full conformity with generally accepted professional consulting principles and practices and to the fullest extent as allowed by law we expressly disclaim all warranties, express or implied, including warranties of merchantability or fitness for a particular purpose. The work product was completed in full conformity with the contract with our client and this document is solely for the use and reliance of our client (unless previously agreed upon that a third party could rely on the work product) and any reliance on this work product by an unapproved outside party is at such party's risk.

The work product herein (including opinions, conclusions, suggestions, etc.) was prepared based on the situations and circumstances as found at the time, location, scope and goal of our performance and thus should be relied upon and used by our client recognizing these considerations and limitations. Tetra Tech Environmental Group, LLC shall not be liable for the consequences of any change in environmental standards, practices, or regulations following the completion of our work and there is no warrant to the veracity of information provided by third parties, or the partial utilization of this work product.

APPENDIX A

SITE MAP



APPENDIX B

BAAQMD CORRESPONDENCE



March 13, 2020

Ms. Loi Chau Air Quality Engineer II Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

Re: Well Decommissioning Notification Title V Permit Condition Number 818, Part 2(b), Facility #A5095 Vasco Road Landfill, Livermore, California

Dear Ms. Chau:

Tetra Tech is submitting this letter on behalf of the Vasco Road Landfill (Vasco) to notify the Bay Area Air Quality Management District (BAAQMD) of the decommissioning of one vertical landfill gas (LFG) extraction well. This notification is being submitted pursuant to Title V Permit Condition Number 818, Part 2(b) and Change of Permit Conditions (COPC) Application Number (A/N) 29010, which states that the Permit Holder shall notify the BAAQMD of the expected installation or shut-down date prior to commencing any component alterations.

Change of Permit Conditions A/N 29010 allows for the installation of up to 100 new vertical LFG extraction wells and up to 20 new horizontal collectors, the decommissioning of up to 150 vertical LFG extraction wells and up to 15 horizontal collectors, and the unlimited replacement of vertical LFG extraction wells.

The following table is a summation of the proposed well action:

Well ID	Well Action	Date of Action
VRLEW115	Vertical well decommissioning	March 13, 2020 before 17:00

After the decommissioning of the well listed above, A/N 29010 still allows for the installation of 84 new vertical LFG extraction wells and 19 new horizontal collectors, and the decommissioning of 133 vertical LFG extraction wells and 12 horizontal collectors, and the unlimited replacement of vertical LFG extraction wells.

As stated in the most recent Well Decommissioning Notification Letter, submitted to the BAAQMD on October 1, 2019, there were 124 vertical LFG extraction wells and five horizontal LFG collectors connected to the gas collection and control system (GCCS) at Vasco Road. Including the well decommissioning outlined in this notification, there will be 123 vertical LFG extraction wells and five horizontal LFG collectors connected to the GCCS at Vasco Road.

Ms. Loi Chau March 13, 2020

If you have any questions regarding this notification, please do not hesitate to call Meghan Caesar at (925) 241-1074 or by email at meghan.caesar@tetratech.com.

Sincerely,

TETRA TECH

n Anne Liu

Environmental Scientist

cc: Lochlin Caffey, Vasco Road Suzan Pankenier, Tetra Tech Sami Ayass, Tetra Tech

alsa Meghan Caesar Project Manager





April 7, 2020

Ms. Loi Chau Air Quality Engineer Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

Re: Well Decommissioning Notification Letter Title V Permit Condition Number 818, Part 2(b), Facility #A5095 Vasco Road Landfill, Livermore, California

Dear Ms. Chau:

Tetra Tech is submitting this letter on behalf of the Vasco Road Landfill (Vasco) to notify the Bay Area Air Quality Management District (BAAQMD) of the decommissioning of one vertical landfill gas (LFG) extraction well. This notification is being submitted pursuant to Title V Permit Condition Number 818, Part 2(b) and Change of Permit Conditions (COPC) Application Number (A/N) 29010, which states that the Permit Holder shall notify the BAAQMD of the expected installation or shut-down date prior to commencing any component alterations.

Change of Permit Conditions A/N 29010 allows for the installation of up to 100 new vertical LFG extraction wells and up to 20 new horizontal collectors, the decommissioning of up to 150 vertical LFG extraction wells and up to 15 horizontal collectors, and the unlimited replacement of vertical LFG extraction wells.

The following table is a summation of the proposed well action:

Well ID	Well Action	Date of Action
VREW121A	Vertical well decommissioning	On or before April 13, 2020

After the decommissioning of the well listed above, A/N 29010 still allows for the installation of 84 new vertical LFG extraction wells and 19 new horizontal collectors, and the decommissioning of 132 vertical LFG extraction wells and 12 horizontal collectors, and the unlimited replacement of vertical LFG extraction wells.

As stated in the most recent Well Decommissioning Notification Letter, submitted to the BAAQMD on March 13, 2020, there were 123 vertical LFG extraction wells and five horizontal LFG collectors connected to the gas collection and control system (GCCS) at Vasco Road. Including the well decommissioning outlined in this notification, there will be 122 vertical LFG extraction wells and five horizontal LFG collectors connected to the GCCS at Vasco Road.

Ms. Loi Chau April 7, 2020

If you have any questions regarding this notification, please do not hesitate to call Meghan Caesar at (925) 241-1074 or by email at meghan.caesar@tetratech.com.

Sincerely,

TETRA TECH

Anne Liu Environmental Scientist

alsa Meghan Caesar

Project Manager

Attachment: GCCS As-Built Map

Lochlin Caffey, Vasco Road cc: Suzan Pankenier, Tetra Tech Justin Ruhle, Tetra Tech

GCCS AS-BUILT MAP





April 16, 2020

Mr. Raymond Salalila Air Quality Specialist Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

Re: Vasco Road Landfill - Facility Number A5095 Request for Limited Exemption (for Construction Activities) from Regulation 8, Rule 34 (Solid Waste Disposal Sites) Section 117 (117.1 through 117.6) (Gas Collection and System Components) Section 118 (Limited Exemption, Construction Activities)

Dear Mr. Salalila:

Tetra Tech on behalf of Vasco Road Landfill (Vasco Road) hereby requests a limited exemption from the requirements of the Bay Area Air Quality Management District's (BAAQMD) Regulation 8, Rule 34, Section 117.1 through 117.6 (Gas Collection and System Components) and Section 118 (Limited Exemption, Construction Activities) during wellfield construction activities at Vasco Road. This notification is being submitted pursuant to Regulation 8, Rule 34, Section 118, "Limited Exemptions for Construction Activities." The construction work consists of the staking and installation of seven vertical landfill gas (LFG) wells and the decommissioning of 16 vertical LFG wells and two horizontal collectors. Construction is estimated to begin on April 23, 2020 and conclude by May 22, 2020, for a total duration of approximately four weeks.

BAAQMD Regulation 8-34-117 provides for the limited exemption from 8-34-301.1, 301.2 and 305 when new wells are being connected to the gas collection and control system (GCCS). Specifically, it says: "*The requirements of Sections 8-34-301.1, 301.2, and 305 shall not apply to individual landfill gas collection system components that must be temporarily shut down in order to repair the components, to connect new landfill gas collection system...*"

Similarly, 8-34-118 provides for a limited exemption from 8-34.305 from "The requirements of Sections 8-34-303 shall not apply to the working face of the landfill or to areas of the landfill surface where the landfill cover material has been removed and refuse has been exposed for the express purpose of installing, expanding, replacing, or repairing components of the landfill gas, leachate, or gas condensate collection and removal systems..." Since 8-34-117 and 118 <u>allow for</u> the limited exemptions from 8-34.301.1, 301.2 and 305 we are seeking exemption from these Sections (8-34-117 and 118).

Construction activities will be covered by Title V Permit Condition Number 818 Part 2(b) and Change of Permit Conditions Application Number (A/N) 29019.

Mr. Raymond Salalila April 16, 2020

This letter also includes the BAAQMD-required Construction Plan for the completed work. The Construction Plan contains information required pursuant to Regulation 8, Rule 34, Section 118.1 and includes:

- Description of actions being taken;
- Description of landfill areas affected;
- Description of LFG components affected;
- Map showing the above areas and components as well as the approximate location of the new vertical collectors;
- Reason(s) requiring the action;
- Construction schedule; and
- Description of air quality mitigation measures planned.

No significant interruption of the current site LFG extraction and control operations is anticipated to occur during the construction work. During this construction event, minor modifications to the GCCS piping and LFG collectors in the construction area will completed, including but not limited to, installation of seven new vertical LFG wells, decommissioning of 16 vertical LFG wells and two horizontal collectors, installation of new piping, and temporarily taking LFG collectors offline in order to minimize impacts to GCCS operation in and around the construction area. All disconnection and reconnection times will be recorded pursuant to BAAQMD Regulations 8-34-117.6 and 118.9. This is outlined in the attached Construction Plan. Vasco Road personnel and/or a construction quality assurance (CQA) contractor of behalf of Vasco Road, will observe and record construction activities to ensure compliance with regulatory requirements.

Unless notified otherwise, Vasco Road will proceed in accordance with the attached Construction Plan. We deem submittal of this plan as approval by the BAAQMD to take necessary action to ensure compliance with regulations, which may include taking additional wells offline for an extended period of time pursuant to Regulation 8, Rule 34, Section 118.

If you have any questions, please do not hesitate to contact Meghan Caesar at (925) 241-1074. Thank you for your consideration.

Sincerely,

TETRA TECH

Anne Liu

Environmental Scientist

Project Manager

Enclosure: BAAQMD Regulation 8, Rule 34, Section 118 Construction Plan

cc: Lochlin Caffey, Vasco Road Justin Ruhle, Tetra Tech

BAAQMD RULE 8-34-118 CONSTRUCTION PLAN VASCO ROAD LANDFILL

APRIL 23, 2020 THROUGH MAY 22, 2020

Introduction

This Construction Plan is being submitted for the Vasco Road Landfill (Vasco Road) pursuant to Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 34 (8-34), Section 118: Limited Exemptions for Construction Activities for an exemption from the following 8-34 Sections:

- Section 117 (117.1 through 117.6); and
- Section 118.

To obtain the exemptions from 8-34 (various Sections), the operator shall submit a construction plan in writing to the Air Pollution Control Officer (APCO) prior to beginning any construction activities. 8-34-117 provides for the limited exemption from 8-34-301.1, 301.2 and 305 when new wells are being connected to the GCCS. Specifically, it says: "*The requirements of Sections 8-34-301.1, 301.2, and 305 shall not apply to individual landfill gas collection system components that must be temporarily shut down in order to repair the components, to connect new landfill gas collection system components to the existing system...*"

Similarly, 8-34-118 provides for a limited exemption from 8-34-305 from "*The requirements of Sections 8-34-303* shall not apply to the working face of the landfill or to areas of the landfill surface where the landfill cover material has been removed and refuse has been exposed for the express purpose of installing, expanding, replacing, or repairing components of the landfill gas, leachate, or gas condensate collection and removal systems..." Since 8-34-117 and 118 <u>allow for</u> the limited exemptions from 8-34-301.1, 301.2 and 305 we are seeking exemption from these Sections (8-34-117 and 118).

Regulation 8-34-303 requires maintaining the concentration of organic compounds and methane below 500 parts per million by volume (ppmv) at all points on the landfill surface. Regulation 8-34-118 provides an exemption from the surface emission standard for "….areas of the landfill surface where the landfill cover material has been removed and refuse has been exposed for the express purpose of installing, expanding, replacing, or repairing components of the landfill gas, leachate, or gas condensate collection and removal systems."

Pursuant to Regulation 8-34-118 (subsections 1.1 through 1.7), this work includes:

- Description of actions being taken;
- Description of landfill areas affected;
- Description of landfill gas (LFG) components affected;
- Map showing the affected areas and components;
- Reason(s) requiring the action;
- Construction schedule; and
- Description of air quality mitigation measures planned.

Additionally, pursuant to Regulation 8-34-117 (Subsections 1 through 6), this work addresses the following on an as-needed basis:

- List of GCCS components with planned repairs to maintain compliance;
- New GCCS components installed as required to maintain compliance;

- Other construction activities, where Regulation 8-34-118.1 through 118.9 must be met;
- Number of wells anticipated to be taken offline, not to exceed five or ten percent of the GCCS;
- Confirmation that no wells are planned to be disconnected from a vacuum source for longer than 24 consecutive hours, unless the operator received prior written approval from the APCO; and
- Well disconnection records.

Section 118.1.1: Actions Being Taken

The construction work will include the installation of seven new vertical LFG wells, decommissioning of 16 vertical LFG wells and two horizontal collectors, modifications to associated piping connections of the existing gas collection and control system (GCCS). The attached GCCS Improvement Plans include details of the planned construction activities. Removal and replacement of LFG components will be done to minimize the impact to the operation of the overall GCCS.

Sections 118.1.2 and 118.1.4: Affected Landfill Areas

The construction activities will occur in the areas shown on Sheets C-101, C-102, C-103, and C-104 of the attached GCCS Improvement Plans.

Section 118.1.3: Affected LFG Components

It is anticipated that the construction will have no significant impact on the routine continuous operation of the GCCS, pursuant to 8-34-301.1. The anticipated construction activities are independent of the ongoing operations of the GCCS. LFG wells within the radius of influence (ROI) of planned installations may be temporarily disconnected on an as-needed basis, pursuant to 8-34-117. Isolation valves installed within the existing GCCS piping network will be used to minimize the number of existing LFG collectors offline during connection of new LFG collectors to the existing GCCS.

Vasco Road personnel and/or a construction quality assurance (CQA) contractor on behalf of Vasco Road, will observe and record construction activities to ensure compliance, track construction activities, and record new LFG well installation and startup information and LFG well decommissioning information. All wellfield startup, shutdown, and malfunction (SSM) events will be recorded pursuant to 8-34-501.

Section 118.1.5: Reasons for Actions

The proposed construction work is planning to:

- Install seven new vertical LFG wells;
- Decommission 16 vertical LFG wells and two horizontal collectors; and
- Increase LFG collection efficiency to further reduce the potential for LFG migration and surface emissions.

The above action items will provide for increased GCCS efficiency and coverage, therefore promoting the facility's compliance with 8-34 Sections 301, 303, and 305, as well as Title 17 California Code of Regulations (CCR) Landfill Methane Rule (LMR) Sections 95464 and 95465, among other requirements.

Section 118.1.6: Construction Schedule

The construction period is anticipated to occur between April 23, 2020 through May 22, 2020 and is summarized in the table below.

Task	Project Week and Duration
Mobilize crew, equipment, and materials to site	April 23 – 24, 2020
Decommissioning, drilling and installation of LFG wells and horizontal collectors	April 27 – May 8, 2020
Installation of GCCS piping	May 11 – 15, 2020
Clean-up and demobilize crew and materials	May 18 – 22, 2020
Start-up of LFG wells	May 18 – 22, 2020

Table 1 – Preliminary Construction Schedule

Section 118.1.7: Air Quality Mitigation Measures

Emissions of raw LFG will be minimized during construction activities. Vasco Road anticipates minimal interruption of the overall site LFG extraction and control operations occurred during the work. Installation of the new LFG collectors is independent of ongoing operations of the existing GCCS. Air quality mitigation will be provided during the installation and removal of the new LFG collectors and the connection of the LFG collectors to the existing GCCS piping network.

Due to the minimal amount of excavation planned for this work, air quality impacts are also anticipated to be minimal. Air quality mitigation will be provided during the following work tasks:

- Drilling of seven new vertical LFG wells;
- Decommissioning of 16 vertical LFG wells and two horizontal collectors;
- Connection of new LFG wells to the existing GCCS piping network; and
- GCCS header improvements to accommodate new LFG wells.

During excavation through soil cover to the existing waste, air emissions will be controlled by implementing the following measures:

- Minimizing the installation time for each component;
- Minimizing the quantity of open excavations at any one time, by drilling one LFG well at a time;
- Covering excavated refuse immediately, and relocating it to the active waste disposal area within 24 hours or as soon as possible based on site operations; and
- Not leaving excavation areas open overnight without cover or for more than eight hours.

During connection of the new vertical LFG wells to the associated piping, air emissions will be controlled by implementing the following measures:

- Capping or blind flanging of all pipe and collector openings, which will remain sealed until time of connection to a vacuum source;
- Using isolation valves, where possible, when making connections into the existing GCCS piping network;
- Minimizing the installation time for making each connection;
- Minimizing the amount of open pipe during the installation, by using flange joints and flexible couplings; and

• Ensuring that the Republic Standard Operation Procedures (SOP) are followed and that all activities are performed in compliance with applicable regulations by stationing CQA personnel near the construction area to observe and record construction activities.

Section 117.1: Gas Collection System Components Repairs

During the construction that is anticipated to be completed by May 22, 2020, there will be seven vertical LFG wells installed, and 16 vertical LFG wells and two horizontal collectors decommissioned. Repairs of existing GCCS components will be completed on an as-needed basis. Repairs currently planned to occur during activities outlined in this Construction Plan are included on pages C-102 and C-103 of the attached GCCS Improvement Plans. Planned repairs include, but are not limited to, connecting remote lateral piping to existing wells, connecting existing wells to new vacuum lines, and salvaging damaged wellheads.

Section 117.2: Gas Collection System New Components

The construction and initial online dates and times of the new vertical LFG wells will be recorded, pursuant to 8-34-117 and 8-34-501.

The following LFG wells are currently planned to be installed during the GCCS construction events outlined in this Construction Plan.

Well IDs Planned for Startup
VREW2001
VREW2002
VREW2003
VREW2004
VREW2005
VREW2006
VREW2007

A Well Start-up Notification will be submitted to the BAAQMD pursuant to the Vasco Title V Permit Condition Number 818 Part 2(b) and Change of Permit Conditions A/N 29019. The well startup times will also be reported in the subsequent Semi-Annual Report, for the reporting period of February 2020 through July 2020, as required.

Section 117.3: Gas Collection System Additional Construction Activities

Refer to Section 8-34-118.1.1 Actions Being Taken for further details of the activities regarding the installation of the seven vertical LFG collectors and decommissioning of 16 vertical LFG collectors and two horizontal collectors at Vasco Road.

Sections 117.4, 117.5 and 117.6: Gas Collection System Components Offline

Pursuant to 8-34-117.4 and 8-34-117.5, Vasco Road will ensure the number of wells anticipated to be taken offline will not exceed five or 10 percent of the GCCS and ensure that no wells will be disconnected from a vacuum source for longer than 24 consecutive hours. During the construction outlined in this Construction Plan,

wells that need to be taken offline temporarily will be recorded pursuant to 8-34-117.6 and 8-34-501. Records of the wellfield SSMs will be included in the next Semi-Annual Report.

The following wells are currently planned to be decommissioned during the GCCS construction events.

Well IDs Planned for Decommissioning
VREW143A
VREW123A
VREW125A
VREW127A
VRLEW124*
VREW121A*
VREW137A
VR12GT02*
VRLEW118*
VRLEW119*
VRLFEW91*
VRLRW001
VRLFEW73*
VRLEW115*
VRLEW95A*
VRLFEW96
VRLFEW97*
VRLFEW70*

A total of 11 out of 18 wells scheduled for decommissioning during GCCS construction activities were previously decommissioned. Wells noted with an asterisk in the table above were previously decommissioned but will be physically removed during construction. Well Decommissioning Notification Letters for the wells noted with an asterisk have been previously submitted to the BAAQMD and their shutdown times were reported in their respective Semi-Annual Reports.

As stated above, a Well Start-Up and Decommissioning Notification Letter will be submitted to the BAAQMD prior to commencing any component alterations, pursuant to the Vasco Title V Permit Condition Number 818 Part 2(b) and Change of Permit Conditions A/N 29019.

Attachment: Vasco Road Landfill 2020 GCCS Improvement Plans

Vasco Road Landfill Livermore, California 2020 GCCS IMPROVEMENTS APRIL 13, 2020



NO.	REVISION DESCRIPTION	BY:



21700 Copley Drive, S Diamond Bar, C. TEL 909.860.7777 FAX 909.8

INDEX OF SHEETS

HEET NO.	DESCRIPTION
G-101	TITLE SHEET
C-101	SITE PLAN/SURVEY CONTROL/INDEX TO PLAN SHEETS
C-102	GCCS IMPROVEMENT AND DECOMMISSIONING PLAN
C-103	GCCS IMPROVEMENT AND DECOMMISSIONING PLAN
C-104	LANDFILL BASE PLAN WITH PROPOSED WELLS
C-501	WELL DRILLING SCHEDULE AND DETAILS
C-502	GCCS DETAILS
C-503	GCCS DETAILS

GENERAL NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH REPUBLIC SERVICES GENERAL, DRILLING, AND PIPELINE BID SPECIFICATIONS TERMS AND CONDITIONS.

2. DUE TO LANDFILL SETTLEMENT OR AREAS NEAR AN ACTIVE WASTE FACE. THE GRADES SHOWN ON THESE PLANS MAY BE DIFFERENT AT THE TIME OF CONSTRUCTION. IT IS THE CONTRACTORS'S RESPONSIBILITY TO ADJUST PIPE ALIGNMENTS OR TRENCH DEPTHS, AS DIRECTED BY THE ENGINEER OR CQA REPRESENTATIVE TO MEET THE ORIGINAL DESIGN INTENT.

3. THE CONTRACTOR SHALL NOT INTERFERE WITH EXISTING LANDFILL, RECYCLING, OR TRANSFER STATION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE TRAFFIC PATTERNS AND FLAGMEN.

4. THE CONTRACTOR SHALL PROVIDE 2-INCH DIAMETER PIPE RISERS ON TOP OF ALL BURIED PIPES TO COMPLETE AN AS-BUILT SURVEY. PIPE RISERS SHALL BE PLACED AT APPROXIMATELY 100 FEET ON CENTER, AND AT ANGLE POINTS.

5. THE CONTRACTOR SHALL VERIFY ALL WELL DEPTHS WITH CQA PERSON PRIOR TO DRILLING.

6. THE DESIGN ENGINEER WILL PERFORM A FINAL INSPECTION UPON SUBSTANTIAL COMPLETION OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE TO COORDINATE THE FINAL INSPECTION WITH THE CONTRACTOR. THE DESIGN ENGINEER OR CQA PERSON WILL PROVIDE A PUNCH LIST TO THE CONTRACTOR FOR ITEMS TO CORRECT OR COMPLETE. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IN WRITING IF ANY OF THE PUNCH LIST ITEMS WILL NOT BE ADDRESSED. THE CONTRACTOR SHALL PROVIDE JUSTIFICATION IN WRITING TO THE ENGINEER FOR NOT ADDRESSING ANY OF THE PUNCH LIST ITEMS.

ISSUED FOR CONSTRUCTION 4-13-2020

		VASCO ROAD LANDFILL						
		2020 GCCS IMPROVEMENTS						
uite 200 A 91765 360.8017								
	DRAWN BY :	S. ANGUS	DATE :	4/2020	FILE NO.:	G-101	oublic/	
		CHECKED BY :	S. AYASS, P.E.	DATE :	4/2020		0 4 0 4	/g/Re
		APPROVED BY :	G.E. ANDRAOS	DATE :	4/2020	SHEET G-10	G-101	wb/:




SITE SURVEY CONTROL POINTS

PANEL NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
301	463655.679	1643780.065	855.24	TARGET
302	462243.512	1646517.448	1179.27	TARGET
303	463373.270	1649133.063	1364.74	TARGET
304	459807.072	1643633.622	861.96	TARGET
306	459477.154	1649088.205	933.07	TARGET
309	455726.591	1648751.590	759.42	TARGET
310	457046.609	1644855.658	697.09	TARGET
41	455967.608	1646421.652	653.22	TARGET
51	457517.915	1646521.900	754.95	TARGET

MAP DATUM

HORIZONTAL DATUM:	NAD27
VERTICAL DATUM:	NGVD29
COORDINATE SYSTEM:	CALIFORNIA STATE PLANE
ZONE:	III
UNITS:	US SURVEY FEET

	ISSL	JED FOR COI	NSTRUCTIC	DN 4-13	3-2020
		VASCC	ROAD LANDF	ILL	
		2020 GCC		ENTS	
	SITE PLA	N/SURVEY CO	NTROL/INDE	X TO F	LAN SHEETS
	DESIGNED BY :	S. ANGUS	SCALE : AS SHOWN		
Suite 200	DRAWN BY :	S. ANGUS	DATE : 4/2020	FILE NO.:	C-101
60.8017	CHECKED BY :	S. AYASS, P.E.	DATE : 4/2020		0.404
	APPROVED BY :	G.E. ANDRAOS	DATE : 4/2020	SHEET	C-101





CONSTRUCTION NOTES

(1)	INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/C-501
2	INSTALL 2" LANDTEC VERTICAL ACCU-FLO WELLHEAD KIT PER DETAIL 1/C-502
3	INSTALL WELLBORE REINFORCEMENT GRATE
(4)	INSTALL REMOTE WELLHEAD PER DETAIL 2/C-502
(5)	INSTALL 12" HDPE FLANGE ADAPTER, BACK-UP RING, AND BOLT KIT
6	INSTALL 12" PVC BLIND FLANGE
$\overline{7}$	INSTALL 6" PVC BLIND FLANGE
(8)	INSTALL 12" SDR 17 HDPE PIPE, ON GRADE OR SOIL BERM
9	INSTALL 4" PVC BLIND FLANGE (@ EXISTING 4" HDPE FLANGE ADAPTER)
10	INSTALL 4" HDPE TEE
(11)	INSTALL 6" SDR 17 HDPE PIPE, BELOW GRADE PER DETAIL 4/C-502
(12)	INSTALL 6" HDPE TEE
(13)	INSTALL 12" BUTTERFLY VALVE ASSEMBLY PER DETAIL 4/C-503
(14)	INSTALL 6" HDPE 90° ELBOW
(15)	INSTALL 6" HDPE CAP
(16)	INSTALL 6" HDPE FLANGE ADAPTER, D.I. BACK-UP RINGS, AND BOLT PACK
(17)	INSTALL 12" CSP SLEEVE, BELOW GRADE PER DETAIL 5/C-502
(18)	JOIN EXISTING LINE (GAS, AIR, OR LIQUID)
(19)	INSTALL 6" x 4" HDPE REDUCER
20	INSTALL 4" x 2" HDPE REDUCER
21	CONNECT HEADER DRAIN LINE AND WELL PER DETAIL 1/C-503
(22)	INSTALL 2" REFLECTIVE TAPE
(23)	INSTALL REMOTE LATERAL AT EXISTING VERTICAL WELL PER DETAIL 2/C-501
(24)	INSTALL 4" HDPE FLANGE SET, D.I. BACK-UP RINGS AND BOLT PACK
(25)	INSTALL 12" HDPE TEE
(26)	INSTALL 12" HDPE ELBOW
(27)	INSTALL 12" X 2" HDPE GUSSET TEE
(28)	INSTALL 18" CSP SLEEVE BELOW GRADE ROAD CROSSING PER DETAIL 5/C-502
(29)	INSTALL 8" HDPE TEE
(30)	DECOMMISSION GAS EXTRACTION WELL PER DETAIL 2/C-503
(31)	INSTALL SOIL MOUND OVER PIPE AT TEE AND BRANCH CONNECTIONS
(32)	INSTALL WELL I.D. TAG PER DETAIL 3/C-502 OR ADHESIVE WELL LABEL
(33)	INSTALL 8" X 6" HDPE REDUCER
(34)	SALVAGE EXISTING WELLHEAD
(35)	CUT & CAP EXISTING HDPE LINE (4" OR 6")
(36)	INSTALL 2" SDR 11 HDPE PIPE
(37)	CONNECT EXISTING WELLHEAD FLEX HOSE TO NEW VACUUM LINE
(38)	INSTALL 4" SDR 17 HDPE PIPE ON GRADE/ABOVE GRADE
(39)	INSTALL 12" X 8" HDPE REDUCER
(40)	CONNECT REMOTE LATERAL TO NEW WELL PER DETAIL 3/C-501
(41)	INSTALL 12" X 6" HDPE GUSSET TEE OR 12" TEE AND REDUCERS
(42)	INSTALL #6 REBAR PIPE GUIDES @ 20' O.C. PER DETAIL 3/C-503
(43)	INSTALL 4" SDR 17 HDPE PIPE, BELOW GRADE PER DETAIL 4/C-502
(44)	INSTALL 10' X 10' X 6"Ø WELLBORE SEAL

- (45) INSTALL 12" SDR 17 HDPE BELOW GRADE PER DETAIL 4/C-502
 (46) INSTALL 6" SDR 11 HDPE PIPE ON GRADE/ABOVE GRADE

	VASCO ROAD LANDFILL						
	GCCS IN	IPROVEMENT	AND	DECON	MISSI	ONING PLAN	
uite 200 A 91765 60.8017	DESIGNED BY :	S. ANGUS	SCALE :	AS SHOWN			
	DRAWN BY :	S. ANGUS	DATE :	4/2020	FILE NO.:	C-102	
	CHECKED BY :	S. AYASS, P.E.	DATE :	4/2020		0.400	
	APPROVED BY :	G.E. ANDRAOS	DATE :	4/2020	SHEET	C-102	



NO.

REVISION DESCRIPTION

BY:

TEL 909.860.7777 FAX 909.8

	CONSTRUCTION NOTES:
(1)	INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/C-501
(2)	INSTALL 2" LANDTEC VERTICAL ACCU-FLO WELLHEAD KIT PER DETAIL 1/C-502
(3)	INSTALL WELLBORE REINFORCEMENT GRATE
(4)	INSTALL REMOTE WELLHEAD PER DETAIL 2/C-502
(5)	INSTALL 12" HDPE FLANGE ADAPTER, BACK-UP RING, AND BOLT KIT
(6)	INSTALL 12" PVC BLIND FLANGE
$(\overline{7})$	INSTALL 6" PVC BLIND FLANGE
(8)	INSTALL 12" SDR 17 HDPE PIPE, ON GRADE OR SOIL BERM
9	INSTALL 4" PVC BLIND FLANGE (@ EXISTING 4" HDPE FLANGE ADAPTER)
(10)	INSTALL 4" HDPE TEE
(11)	INSTALL 6" SDR 17 HDPE PIPE, BELOW GRADE PER DETAIL 4/C-502
(12)	INSTALL 6" HDPE TEE
(13)	INSTALL 12" BUTTERFLY VALVE ASSEMBLY PER DETAIL 4/C-503
(14)	INSTALL 6" HDPE 90° ELBOW
(15)	INSTALL 6" HDPE CAP
(16)	INSTALL 6" HDPE FLANGE ADAPTER, D.I. BACK-UP RINGS, AND BOLT PACK
(17)	INSTALL 12" CSP SLEEVE, BELOW GRADE PER DETAIL 5/C-502
(18)	JOIN EXISTING LINE (GAS, AIR, OR LIQUID)
(19)	INSTALL 6" x 4" HDPE REDUCER
(20)	INSTALL 4" x 2" HDPE REDUCER
(21)	CONNECT HEADER DRAIN LINE AND WELL PER DETAIL 1/C-503
(22)	INSTALL 2" REFLECTIVE TAPE
(23)	INSTALL REMOTE LATERAL AT EXISTING VERTICAL WELL PER DETAIL 2/C-501
24	INSTALL 4" HDPE FLANGE SET, D.I. BACK-UP RINGS AND BOLT PACK
(25)	INSTALL 12" HDPE TEE
	INSTALL 12" X 2" HDPE GUSSET TEE
	INSTALL 18" CSP SLEEVE BELOW GRADE ROAD CROSSING PER DETAIL 5/C-502
	DECOMMISSION GAS EXTRACTION WELL PER DETAIL 2/C-303
	INSTALL SOLE MOUND OVER FIFE AT THE AND BRANCH CONNECTIONS
	INSTALL WELE I.D. TAGTER DETAIL 3/0-302 OR ADHESIVE WELE LABEL
	SALVAGE EXISTING WELLHEAD
	CUT & CAP EXISTING HDPE LINE (4" OR 6")
	INSTALL 2" SDR 11 HDPF PIPF
	CONNECT EXISTING WELL HEAD FLEX HOSE TO NEW VACUUM LINE
(38)	INSTALL 4" SDR 17 HDPE PIPE ON GRADE/ABOVE GRADE
39	INSTALL 12" X 8" HDPE REDUCER
40	CONNECT REMOTE LATERAL TO NEW WELL PER DETAIL 3/C-501
(41)	INSTALL 12" X 6" HDPE GUSSET TEE OR 12" TEE AND REDUCERS
(42)	INSTALL #6 REBAR PIPE GUIDES @ 20' O.C. PER DETAIL 3/C-503
(43)	INSTALL 4" SDR 17 HDPE PIPE, BELOW GRADE PER DETAIL 4/C-502
(44)	INSTALL 10' X 10' X 6"Ø WELLBORE SEAL
\prec	

(45) INSTALL 12" SDR 17 HDPE BELOW GRADE PER DETAIL 4/C-502
(46) INSTALL 6" SDR 11 HDPE PIPE ON GRADE/ABOVE GRADE

	VASCO ROAD LANDFILL						s\202
			ad\Ga				
	GCCS IN	IPROVEMENT	AND	DECOM	IMISSI	ONING PLAN	sco Rc
	DESIGNED BY :	S. ANGUS	SCALE :	AS SHOWN			c/Va:
A 91765	DRAWN BY :	S. ANGUS	DATE :	4/2020	FILE NO.:	C-103	ildua
360.8017	CHECKED BY :	S. AYASS, P.E.	DATE :	4/2020		0.400	/a/Re
	APPROVED BY :	G.E. ANDRAOS	DATE :	4/2020	SHEET	C-103	vb/:



NO.	REVISION DESCRIPTION	BY:	



		VASCO	ROAE) LANDFI	LL	
	2020 GCCS IMPROVEMENTS					
	LAND	FILL BASE PLA	N WI	TH PRO	DPOSE	D WELLS
	DESIGNED BY :	S. ANGUS	SCALE :	AS SHOWN		
Suite 200 CA 91765 860.8017	DRAWN BY :	S. ANGUS	DATE :	4/2020	FILE NO.:	C-104
	CHECKED BY :	S. AYASS, P.E.	DATE :	4/2020		0.404
	APPROVED BY :	G.E. ANDRAOS	DATE :	4/2020	SHEET	C-104



S		JOB N 197-2	NO. 2020-0010	BY: S. ANGUS		DATE: 4/2020		
			CHECKED:			DATE:		
ION (FT. MSL)		BOREHOLE	PIPE LEN	GTH (FT.)			
EPTH OF WASTE (FT.)	BOTT OF BOREF	TOM = HOLE	DEPTH (FT.) (D _B)	PERF. PIPE (D _{P1})	SOLID PIPE (D _{S1})	GRAVEL PACK (FT.)		NOTES
116	91	7	96	75	20	78		
107	93	5	87	66	20	69		
130	91	0	110	89	20	92		
134	90	0	114	93	20	96		
94	94	6	74	53	20	56		
143	85	8	123	102	20	105		
108	92	8	88	67	20	70		

	VASCO ROAD SANITARY LANDFILL						
	2020 GCCS IMPROVEMENTS						
	WEL	L DRILLING S	SCHEDULE	AND DETAILS			
	DESIGNED BY :	S. ANGUS	SCALE : AS SHOWN				
Guite 200 A 91765 360.8017	DRAWN BY :	S. ANGUS	DATE : 4/2020	FILE NO.: C-501			
	CHECKED BY :	S. AYASS, P.E.	DATE : 4/2020	0 504			
	APPROVED BY :	G.E. ANDRAOS	DATE : 4/2020	SHEET C-501			



	CONSTRUCTION NOTES:
	1 INSTALL VERTICAL GAS EXTRACTION WELL PER DETAIL 1/C-501
	3 INSTALL VELLBORE REINFORCEMENT GRATE
	 (4) INSTALL REMOTE WELLHEAD PER DETAIL 2/C-502 (5) INSTALL 12" HDPE FLANGE ADAPTER, BACK-UP RING, AND BOLT KIT
	6 INSTALL 12" PVC BLIND FLANGE
	 (7) INSTALL 6" PVC BLIND FLANGE (8) INSTALL 12" SDR 17 HDPE PIPE ON GRADE OR SOIL BERM
	 INSTALL 12 ODK 17 HDFE FIN E, ON GRADE OR GOLE DERMI INSTALL 4" PVC BLIND FLANGE (@ EXISTING 4" HDPE FLANGE ADAPTER)
	(10) INSTALL 4" HDPE TEE (11) INSTALL 6" SDR 17 HDPE PIPE BELOW GRADE PER DETAIL 4/C-502
	(1) INSTALL 0 SDR 17 HDF L F II L, BELOW GRADE F ER BETAIL 4/0-302 (12) INSTALL 6" HDPE TEE
	(13) INSTALL 12" BUTTERFLY VALVE ASSEMBLY PER DETAIL 4/C-503 (14) INSTALL 6" HDPE 90° ELBOW
	(15) INSTALL 6" HDPE CAP
	(16) INSTALL 6" HDPE FLANGE ADAPTER, D.I. BACK-UP RINGS, AND BOLT PACK (17) INSTALL 12" CSP SLEEVE, BELOW GRADE PER DETAIL 5/C-502
3)	(1) INSTALL 12 CSP SLEEVE, BELOW GRADE PER DETAIL 5/C-502 (18) JOIN EXISTING LINE (GAS, AIR, OR LIQUID)
	19 INSTALL 6" x 4" HDPE REDUCER
	(20) INSTALL 4 X 2" HDPE REDUCER (21) CONNECT HEADER DRAIN LINE AND WELL PER DETAIL 1/C-503
	22 INSTALL 2" REFLECTIVE TAPE
	(23) INSTALL REMOTE LATERAL AT EXISTING VERTICAL WELL PER DETAIL 2/C-501 (24) INSTALL 4" HDPE FLANGE SET, D.I. BACK-UP RINGS AND BOLT PACK
	25 INSTALL 12" HDPE TEE
	(26) INSTALL 12" HDPE ELBOW (27) INSTALL 12" X 2" HDPE GUSSET TEE
	28 INSTALL 18" CSP SLEEVE BELOW GRADE ROAD CROSSING PER DETAIL 5/C-502
	(29) INSTALL 8" HDPE TEE (30) DECOMMISSION GAS EXTRACTION WELL PER DETAIL 2/C-503
	31 INSTALL SOIL MOUND OVER PIPE AT TEE AND BRANCH CONNECTIONS
N	(32) INSTALL WELLT.D. TAG PER DETAIL 3/C-502 OR ADHESIVE WELL LABEL (33) INSTALL 8" X 6" HDPE REDUCER
	34 SALVAGE EXISTING WELLHEAD
	(35) CUT & CAP EXISTING HDPE LINE (4" OR 6") (36) INSTALL 2" SDR 11 HDPE PIPE
	37 CONNECT EXISTING WELLHEAD FLEX HOSE TO NEW VACUUM LINE
	(38) INSTALL 4" SDR 17 HDPE PIPE ON GRADE/ABOVE GRADE (39) INSTALL 12" X 8" HDPE REDUCER
	40 CONNECT REMOTE LATERAL TO NEW WELL PER DETAIL 3/C-501
	 (41) INSTALL 12" X 6" HDPE GUSSET TEE OR 12" TEE AND REDUCERS (42) INSTALL #6 REBAR PIPE GUIDES @ 20' O.C. PER DETAIL 3/C-503
	43 INSTALL 4" SDR 17 HDPE PIPE, BELOW GRADE PER DETAIL 4/C-502
	(44) INSTALL 10' X 10' X 6"Ø WELLBORE SEAL (45) INSTALL 12" SDR 17 HDPE BELOW GRADE PER DETAIL 4/C-502
	(46) INSTALL 6" SDR 11 HDPE PIPE ON GRADE/ABOVE GRADE
	GCCS DETAILS
0.200	DESIGNED BY : S. ANGUS SCALE : AS SHOWN
e 200 91765	DRAWN BY :S. ANGUSDATE :4/2020FILE NO.:C-502CHECKED BY :S. AYASS, P.F.DATE :4/2020
.8017	APPROVED BY : G.E. ANDRAOS DATE : 4/2020 SHEET C-502



			= 0			
		TION NOT	ES:			
	(1) INSTALL VERTICAL	GAS EXTRACTIO	ON WELL PER DET	AIL 1/C-501	/C E02	
	(3) INSTALL 2 LANDTE	E REINFORCEME	ENT GRATE		/C-302	
	(4) INSTALL REMOTE V	/ELLHEAD PER I	DETAIL 2/C-502			
	(5) INSTALL 12" HDPE F	LANGE ADAPTE	R, BACK-UP RING	, AND BOLT KIT		
	(7) INSTALL 6" PVC BLI	ND FLANGE				
	8 INSTALL 12" SDR 17	HDPE PIPE, ON	GRADE OR SOIL E	BERM		
	(9) INSTALL 4" PVC BLI	ND FLANGE (@ Ⅰ ≔⊏	EXISTING 4" HDPE	FLANGE ADAPTER)		
	(11) INSTALL 6" SDR 17 I	-∟ HDPE PIPE, BEL	OW GRADE PER D	ETAIL 4/C-502		
	12 INSTALL 6" HDPE TE	E				
	(13) INSTALL 12" BUTTE	RFLY VALVE AS:	SEMBLY PER DET	AIL 4/C-503		
	(15) INSTALL 6" HDPE CA	\P				
	16 INSTALL 6" HDPE FL	ANGE ADAPTER	R, D.I. BACK-UP RI	NGS, AND BOLT PAC	СК	
	(17) INSTALL 12" CSP SL	EEVE, BELOW G	RADE PER DETAI עסוו וסו	L 5/C-502		
	(19) INSTALL 6" x 4" HDP	E REDUCER				
	20 INSTALL 4" x 2" HDP	E REDUCER				
	(21) CONNECT HEADER	DRAIN LINE ANI TIVE TAPE	D WELL PER DETA	IL 1/C-503		
	23 INSTALL REMOTE L	ATERAL AT EXIS	TING VERTICAL V	VELL PER DETAIL 2/	C-501	
	(24) INSTALL 4" HDPE FL	ANGE SET, D.I.	BACK-UP RINGS A	ND BOLT PACK		
	(25) INSTALL 12" HDPE T	EE HBOW				
	(27) INSTALL 12" X 2" HD	PE GUSSET TEE				
	28 INSTALL 18" CSP SL	EEVE BELOW G	RADE ROAD CRO	SSING PER DETAIL	5/C-502	
	(29) INSTALL 8" HDPE TE	E SEXTRACTION	WELL PER DETAIL	2/C-503		
	(31) INSTALL SOIL MOUN	ND OVER PIPE A	T TEE AND BRANG	CH CONNECTIONS		
	32 INSTALL WELL I.D. 1	AG PER DETAIL	3/C-502 OR ADHE	SIVE WELL LABEL		
	(33) INSTALL 8" X 6" HDF (34) SAI VAGE EXISTING	YE REDUCER				
	35 CUT & CAP EXISTIN	G HDPE LINE (4"	OR 6")			
	(36) INSTALL 2" SDR 11 I					
	(38) INSTALL 4" SDR 17 I	HDPE PIPE ON G	RADE/ABOVE GR			
	39 INSTALL 12" X 8" HD	PE REDUCER				
	(40) CONNECT REMOTE			AIL 3/C-501		
	(42) INSTALL #6 REBAR	PIPE GUIDES @	20' O.C. PER DET	AIL 3/C-503		
	(43) INSTALL 4" SDR 17 I	HDPE PIPE, BEL	OW GRADE PER D	ETAIL 4/C-502		
	(44) INSTALL 10' X 10' X ((45) INSTALL 12" SDB 17	6"Ø WELLBORE \$ THDPE BELOW (SEAL GRADE PER DETAI	L 4/C-502		
	(46) INSTALL 6" SDR 11 I	HDPE PIPE ON G	RADE/ABOVE GR	ADE		
		1991		ONSTRUCT	ION 4-1	3-2020
╈			VASCO R	OAD SANITARY		
			2020 (GCCS IMPROVE	MENTS	_
			G	CCS DETAIL	.S	
		DESIGNED BY :	S. ANGUS	SCALE : AS SHOW	VN	
		DRAWN BY :	S. ANGUS	DATE : 4/2020	FILE NO.:	C-503
		APPROVED BY :	G. E. ANDRAOS	DATE : 4/2020	SHEET	C-503

g\Republic\Vasco Road\Gas\2020 Design\C-503.dwg 4/10/20 14:31:14 scott.ang



May 1, 2020

Ms. Loi Chau Air Quality Engineer Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

Re: Combined Well Startup and Decommissioning Notification Letter Title V Permit Condition Number 818, Part 2(b), Facility #A5095 Vasco Road Landfill, Livermore, California

Dear Ms. Chau:

Tetra Tech is submitting this letter on behalf of the Vasco Road Landfill (Vasco) to notify the Bay Area Air Quality Management District (BAAQMD) of the decommissioning of five vertical landfill gas (LFG) extraction wells and the startup of seven vertical LFG extraction wells. This notification is being submitted pursuant to Title V Permit Condition Number 818, Part 2(b) and Change of Permit Conditions Application Number (A/N) 29010, which states that the Permit Holder shall notify the BAAQMD of the expected installation or shut-down date prior to commencing any component alterations. The wells that are noted as decommissioned in this notification were included in the Regulation 8-34-118 Construction Plan submitted to the BAAQMD on April 16, 2020.

Change of Permit Conditions A/N 29010 allows for the installation of up to 100 new vertical LFG extraction wells and up to 20 new horizontal collectors, the decommissioning of up to 150 vertical LFG extraction wells and up to 15 horizontal collectors, and the unlimited replacement of vertical LFG extraction wells.

The f	following	table is	a summation	of the	proposed we	ell actions:

Well ID	Well Action	Date of Action
VREW143A	Vertical well decommissioning	April 17, 2020 at 7:44
VREW125A	Vertical well decommissioning	April 17, 2020 at 8:36
VREW123A	Vertical well decommissioning	April 17, 2020 at 10:12
VREW127A	Vertical well decommissioning	April 17, 2020 at 11:55
VREW137A	Vertical well decommissioning	April 17, 2020 at 15:10
VREW2001	Vertical well startup	On or before May 7, 2020

VREW2002	Vertical well startup	On or before May 7, 2020
VREW2003	Vertical well startup	On or before May 7, 2020
VREW2004	Vertical well startup	On or before May 7, 2020
VREW2005	Vertical well startup	On or before May 7, 2020
VREW2006	Vertical well startup	On or before May 7, 2020
VREW2007	Vertical well startup	On or before May 7, 2020

After the decommissioning of five vertical LFG extraction wells and startup seven new vertical LFG extraction wells listed above, A/N 29010 still allows for the installation of 77 new vertical LFG extraction wells and 19 new horizontal collectors, and the decommissioning of 127 vertical LFG extraction wells and 12 horizontal collectors, and the unlimited replacement of vertical LFG extraction wells.

As stated in the most recent Well Decommissioning Notification Letter submitted to the BAAQMD on April 7, 2020, there were 122 vertical LFG extraction wells and five horizontal LFG collectors connected to the gas collection and control system (GCCS) at Vasco Road. Including the well actions outlined in this notification, there will be 124 vertical LFG extraction wells and five horizontal LFG collectors connected to the GCCS at Vasco Road.

If you have any questions regarding this notification, please do not hesitate to call Meghan Caesar at (925) 241-1074 or by email at meghan.caesar@tetratech.com.

Sincerely,

TETRA TECH

Anne Liu

Environmental Scientist

Attachment: GCCS As-Built Map

cc: Lochlin Caffey, Vasco Road Suzan Pankenier, Tetra Tech Justin Ruhle, Tetra Tech

Project Manager

GCCS AS-BUILT MAP





May 29, 2020

Ms. Loi Chau Air Quality Engineer Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

Re: Revised Combined Well Startup and Decommissioning Notification Letter Title V Permit Condition Number 818, Part 2(b), Facility #A5095 Vasco Road Landfill, Livermore, California

Dear Ms. Chau:

Tetra Tech is submitting this revised letter on behalf of the Vasco Road Landfill (Vasco) to notify the Bay Area Air Quality Management District (BAAQMD) of the decommissioning of one additional vertical well (VRLRW001) since the submittal of the original combined Well Startup and Decommissioning Notification Letter on May 1, 2020. This notification is being submitted pursuant to Title V Permit Condition Number 818, Part 2(b) and Change of Permit Conditions Application Number (A/N) 29010, which states that the Permit Holder shall notify the BAAQMD of the expected installation or shut-down date prior to commencing any component alterations. The additional well that is included in this revised notification letter was also included in the Regulation 8-34-118 Construction Plan (118 Plan) that was submitted to the BAAQMD on April 16, 2020.

Change of Permit Conditions A/N 29010 allows for the installation of up to 100 new vertical LFG extraction wells and up to 20 new horizontal collectors, the decommissioning of up to 150 vertical LFG extraction wells and up to 15 horizontal collectors, and the unlimited replacement of vertical LFG extraction wells.

The following revised table is a summation of the recent well actions. The startup times of wells that were scheduled to be started up after submittal of the May 1, 2020 notification have also been included.

Well ID	Well Action	Date of Action
VREW143A	Vertical well decommissioning	April 17, 2020 at 7:44
VREW125A	Vertical well decommissioning	April 17, 2020 at 8:36
VREW123A	Vertical well decommissioning	April 17, 2020 at 10:12
VREW127A	Vertical well decommissioning	April 17, 2020 at 11:55
VREW137A	Vertical well decommissioning	April 17, 2020 at 15:10

VRLRW001	Vertical well decommissioning	Discovered on May 28, 2020 at 14:43		
VREW2007	Vertical well startup	May 28, 2020 at 14:43		
VREW2006	Vertical well startup	May 28, 2020 at 14:52		
VREW2005	Vertical well startup	May 28, 2020 at 14:59		
VREW2004	Vertical well startup	May 28, 2020 at 15:10		
VREW2003	Vertical well startup	May 28, 2020 at 15:17		
VREW2002	Vertical well startup	May 28, 2020 at 15:27		
VREW2001	Vertical well startup	May 28, 2020 at 18:04		

After the decommissioning of six vertical LFG extraction wells and startup seven new vertical LFG extraction wells listed above, A/N 29010 still allows for the installation of 77 new vertical LFG extraction wells and 19 new horizontal collectors, and the decommissioning of 126 vertical LFG extraction wells and 12 horizontal collectors, and the unlimited replacement of vertical LFG extraction wells.

As stated in the most recent Well Decommissioning Notification Letter submitted to the BAAQMD on May 1, 2020, there were 124 vertical LFG extraction wells and five horizontal LFG collectors connected to the gas collection and control system (GCCS) at Vasco Road. Including the well revised actions outlined in this notification, there are now 123 vertical LFG extraction wells and five horizontal LFG collectors connected to the GCCS at Vasco Road.

If you have any questions regarding this notification, please do not hesitate to call Meghan Caesar at (925) 241-1074 or by email at meghan.caesar@tetratech.com.

Sincerely,

TETRA TECH

Anne Liu

Environmental Scientist

Attachment: Revised GCCS As-Built Map

cc: Lochlin Caffey, Vasco Road Suzan Pankenier, Tetra Tech Justin Ruhle, Tetra Tech

Meghan Cae Project Manager

GCCS AS-BUILT MAP



Liu, Anne

From:	Caesar, Meghan
Sent:	Thursday, June 18, 2020 12:50 PM
То:	Thuya Maw
Cc:	Caffey, Lochlin
Subject:	RE: Application no. 28462-Republic Service, INC. (Livermore, CA), Plant No. 5095
Attachments:	28462-Republic Service (Vasco)-Form G_20200528.pdf; AN 28462 Vasco Sorter
	Location.pdf

Hello Thuya,

See below for answers to your questions.

- 1. Do you use C&D stockpiles for this operation, C&D Screen Sorting? The C&D sort line is feed from stockpiled C&D.
 - a. If this C&D process does not use stockpiles, please provide me with process flow diagram. $\ensuremath{\mathsf{N/A}}$
- 2. What kind of building materials will be sorting in that C&D Screen Sorting process? Please specify list of materials.
 - C&D materials include clean drywall, plaster and/or stucco, clean brick, concrete and/or asphalt (no rebar).
- On Data Form G attached, which submitted to BAAQMD did not provide total material throughput and crucial important information. Please fill that out for me.
 The material throughput was provided in the revised PTO application submitted to the BAAQMD on September 14, 2017. The daily amount of material processed by the screener is 100 tons per day (tpd). A revised Data Form G reflecting this value has been attached for your convenience.
- Please mark the exact location of the S-16 C&D sorter powered by Diesel engine on the map and provide the heights of the building adjacent to the sources.
 Please refer to the attached updated map and close-up of the C&D area at Vasco. There are no adjacent buildings to the sources.

Please let us know if you have any further questions. Thank you,

Meghan Caesar | Project Manager Direct +1 (925) 241-1074 | meghan.caesar@tetratech.com Tetra Tech | Leading with Science[®] 7600 Dublin Boulevard, Suite 200 | Dublin, CA 95468 | tetratech.com

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From: Thuya Maw <tmaw@baaqmd.gov> Sent: Wednesday, June 3, 2020 3:16 PM To: Caesar, Meghan < Meghan.Caesar@tetratech.com> Subject: RE: Application no. 28462-Republic Service, INC. (Livermore, CA), Plant No. 5095

Hi,

Thank you for your reply.

Your application was in the Toxic screening now and we required little bit more information.



This map was provided with application package and the Toxic department asked for more information.

Require information:

Please mark the exact location of S-16 C&D sorter powered by Diesel engine on the map and provide the heights of the building adjacent to the sources.

Please feel free to call me or email me. Since we are working remotely, you can reach me at 650 245 0544.

Thank you.

From: Caesar, Meghan <<u>Meghan.Caesar@tetratech.com</u>>
Sent: Wednesday, June 3, 2020 2:56 PM
To: Thuya Maw <<u>tmaw@baaqmd.gov</u>>
Cc: Caffey, Lochlin <<u>LCaffey2@republicservices.com</u>>
Subject: RE: Application no. 28462-Republic Service, INC. (Livermore, CA), Plant No. 5095

Hello Thuya,

I am working with the site on responses to your previous questions. Please feel free to send any additional questions or requests for additional information and we can address those as well.

Thank you,

Meghan Caesar | Project Manager Direct +1 (925) 241-1074 | meghan.caesar@tetratech.com Tetra Tech | Leading with Science[®] 7600 Dublin Boulevard, Suite 200 | Dublin, CA 95468 | tetratech.com

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From: Thuya Maw <<u>tmaw@baaqmd.gov</u>>
Sent: Wednesday, June 3, 2020 2:51 PM
To: Caesar, Meghan <<u>Meghan.Caesar@tetratech.com</u>>
Subject: RE: Application no. 28462-Republic Service, INC. (Livermore, CA), Plant No. 5095

Hello,

I have one more question and need more information for the application to process.

Your application number 28462 needs additional information and I am also waiting for answers for questions that I emailed you two weeks ago. Can you please direct me a person who can answer me those required questions for your application?

Thank You.

From: Caesar, Meghan <<u>Meghan.Caesar@tetratech.com</u>>
Sent: Thursday, May 21, 2020 2:09 PM
To: Thuya Maw <<u>tmaw@baaqmd.gov</u>>
Cc: LCaffey2@republicservices.com; Pankenier, Suzan <<u>Suzan.Pankenier@tetratech.com</u>>
Subject: RE: Application no. 28462-Republic Service, INC. (Livermore, CA), Plant No. 5095

Hi Thuya,

Yes, I am able to assist in answering any questions you have. Loi Chau has been the permit engineer we have worked with in the past for items related to Vasco Road Landfill. Will you be the BAAQMD point of contact going forward or should we still direct submittals to Loi?

Thank you,

Meghan Caesar | Project Manager Direct +1 (925) 241-1074 | meghan.caesar@tetratech.com Tetra Tech | Leading with Science[®] 7600 Dublin Boulevard, Suite 200 | Dublin, CA 95468 | tetratech.com

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From: Thuya Maw <<u>tmaw@baaqmd.gov</u>>
Sent: Thursday, May 21, 2020 1:28 PM
To: Caesar, Meghan <<u>Meghan.Caesar@tetratech.com</u>>
Cc: LCaffey2@republicservices.com
Subject: Application no. 28462-Republic Service, INC. (Livermore, CA), Plant No. 5095

Hello Meghan Caesar,

I have recently learnt that the contact person I was given on my application is no longer Mr. Brandon Cawthon. About two months ago, I was given this overdue application and had a lot of question about this application, number 28462.

First of all, this application is for "Diesel-fired engine to power and operate Construction and Demolition (C&D) Screen at the Vasco Road Landfill (Vasco)." The given number for those sources are S-16 for C&D Screen Sorter and S-17 for John Deere, Model 6068TF275, 170 bhp.

If you can answer me some question for this application I will email you those questions that I have. Thank you.

Sincerely, Thuya Maw Air Quality Engineer Engineering Division Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105 www.baaqmd.gov



DATA FORM G General Air Pollution Source

BAY AREA AIR QUALITY	MANAGEMENT DISTRICT

375 Beale Street, Suite 600, San Francisco, CA 94105 (415) 749-4990 Fax (415) 749-5030 www.baaqmd.gov

Form G is for general air pollution sources. Use specific forms when applicable. If this source burns fuel, then also complete Form C.

1.	Business Name:			Plant No:			
2.	SIC No.: Date of Initial Operation				(if unknown, leave blank)		
3.	Name or Description:			Source	xe No.: <u>S-</u>		
4.	Make, Model, and Rated Cap	acity of Equipment:					
5	Process Code ¹	Material Code ²		Usage Unit ²			
6.	Total throughput, last 12 mos	usage unit	s ² Maxim	um operating rate:	usage units ² /hr		
7.	Typical % of total throughput:	Dec-Feb%	Mar-May	% Jun-Aug	<u>%</u> Sep-Nov%		
8.	Typical operating times:	hrs/day	days/week	weeks/yea	ar		
9.	For batch or cyclic processes	: minutes	s/cycle	minutes betw	een cycles		
10.	Exhaust gases from source:	Wet gas flowrate	cfm	at	°F		
	(at maximum operation)	Approximate water	vapor content	volume%			

EMISSION FACTORS (at maximum operating rate)

If this form is being submitted as part of an application for an **authority to construct**, completion of the following table is mandatory. If not, and the Source is *already in operation*, completion of the table is requested but not required.

If this source also burns fuel, do not include those combustion products in the emission factors below; they are accounted for on Form C. If source test or other data are available for composite emissions only, estimate from those data the emissions attributable to just the general process and show below.

Check box if factors apply to emissions *after* Abatement Device(s).

		Emission Factors Ib/Usage Unit ²	Basis Code ³
11.	Particulate		
12.	Organics		
13.	Nitrogen Oxides (as N0 ₂)		
14,	Sulfur Dioxide		
15.	Carbon Monoxide		
16.	Other:		
17.	Other:		

18. With regard to air pollutant flow from this source, what sources(s), abatement device(s) and/or emission point(s) are **immediately** downstream?

S	S-	S-	A	A	A	
P	P	P	P	P		
¹ See Tables (³ See Basis C	G-1 through G-7 for ode Table below	code	² See Table G5 (or the Material Co	des Table (availa	ble upon request)

Person completing this form:

Application Number 28462 – C&D Sorter Permit to Operate Vasco Road Landfill, Livermore, CA Facility ID A5095



Application Number 28462 – C&D Sorter Permit to Operate Vasco Road Landfill, Livermore, CA Facility ID A5095



APPENDIX C

WELL SSM LOG

AFFECTED EQUIPMENT: Wellfield

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From F	SSMP REPORT - From February 1, 2020 through July 31, 2020									
Identify Wall & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration				(7) Date		(8) Type of Event
Applicable Event	Date and Time	Date and Time	of Event (Hours)	Shutdown (Hours)	(5) Cause or Reason	(6	i) Applicable 8-34 Exemption	Form Completed	(Sta	tup and Shutdown Events Only)
Well ID Number: VRLEW138							113: Inspection and Maintenance		х	Manual
Startup Event	10/7/19 13:00	10/7/19 13:02	0.03			Х	116: Well Raising	10/7/2019		
X Shutdown Event				E EOE 62 hours	Mall is to manage the offling due to		117: Gas Collection	I I		Automatic
Well ID Number: VRI EW138				5,595.62 Hours	being in the active area		113: Inspection and Maintenance			
X Startup Event					being in the active area.	Х	116: Well Raising		Х	Manual
Shutdown Event	5/27/20 16:37	5/27/20 16:39	0.03			~~~	117: Gas Collection	5/27/2020		Andressettin
Malfunction Event							118: Construction Activities			Automatic
Well ID Number: VRLEW147							113: Inspection and Maintenance		v	Manual
Startup Event	12/24/19 10:44	12/24/19 10:46	0.03			Х	116: Well Raising	12/24/2019	^	Ivialiual
X Shutdown Event	12/24/13 10.44	12/24/19 10.40	0.05				117: Gas Collection	12/24/2013		Automatic
Malfunction Event				3,407.28 hours	Well is temporarily offline due to		118: Construction Activities			Automatio
Well ID Number: VRLEW147	-				being in the active area.		113: Inspection and Maintenance		Х	Manual
X Startup Event	5/14/20 10:01	5/14/20 10:03	0.03			Х	X 116: Well Raising	5/14/2020		
Shutdown Event	-						117: Gas Collection	Collection		Automatic
Malfunction Event							118: Construction Activities			
Viell ID Number: VRLEW130		1/20/20 12:25	0.03	2 760 02 hours	Well is temporarily offline due to	V	X 116: Well Raising 117: Gas Collection	1/20/2020	х	Manual
Startup Event	1/20/20 12:23					~				
Malfunction Event						-				Automatic
Well ID Number: VRI EW130				2,700.02 10015	being in the active area		113: Inspection and Maintenance			
Startup Event					Donig in the doube dreat	x	116: Well Raising		х	Manual
Shutdown Event	5/14/20 12:24	/20 12:24 5/14/20 12:26	0.03			117: Gas Collection	5/14/2020			
Malfunction Event								118: Construction Activities		
Well ID Number: VRLEW115							113: Inspection and Maintenance		V	Manual
Startup Event	2/12/20 0:45	2/12/20 0.47	0.02				116: Well Raising	2/12/2020	X	Manual
X Shutdown Event	3/13/20 9:45	3/13/20 9:47	0.03			Х	117: Gas Collection	3/13/2020		Automatic
Malfunction Event					vertical well decommissioning		118: Construction Activities			Automatic
Well ID Number:					(A/N) 29010		113: Inspection and Maintenance			Manual
Startup Event					(, , 200 . 0.		116: Well Raising			Mandai
Shutdown Event	-						117: Gas Collection			Automatic
Malfunction Event							118: Construction Activities			
Well ID Number: VREW121A	-						113: Inspection and Maintenance		х	Manual
Startup Event	4/13/20 11:48	4/13/20 11:50	0.03				116: Well Raising	4/13/2020		
X Shutdown Event	-) (artical well de complexitority)	V	117: Gas Collection			Automatic
Wall ID Number:					vertical well decommissioning	X	118: Construction Activities			
Startup Event	-				pursuant to A/N 29010.		116: Well Rejoins			Manual
Startup Event						-	117: Gas Collection			
Malfunction Event							118: Construction Activities			Automatic

AFFECTED EQUIPMENT: Wellfield

Vasco Road Landfill - Liv	ormoro Califor	nia		Completed By. Tetra Tech					
	ennore, califor	ilia	4 0000						
SSMP REPORT - From Fe	ebruary 1, 2020	through July 3	1, 2020						
Well ID Number: VREW143A						113: Inspection and Maintenance		x	Manual
Startup Event	4/17/20 7.44	4/17/20 7:46	0.03			116: Well Raising	4/17/2020	~	Mandai
X Shutdown Event	4/11/20 1.14	-1/11/2011:10	0.00			117: Gas Collection	4/11/2020		Automatic
Malfunction Event				Vertical well decommissioning	Х	118: Construction Activities			Automatic
Well ID Number:				pursuant to A/N 29010.		113: Inspection and Maintenance			Manual
Startup Event						116: Well Raising			Ivialiual
Shutdown Event						117: Gas Collection			Automatic
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VREW125A						113: Inspection and Maintenance		Y	Manual
Startup Event	1/17/20 9.26	1/17/20 0.20	0.02			116: Well Raising	4/17/2020	^	Ivialiual
X Shutdown Event	4/17/20 0.50	4/11/20 0.30	0.05			117: Gas Collection	4/11/2020		Automatia
Malfunction Event				Vertical well decommissioning	Х	118: Construction Activities			Adomatic
Well ID Number:				pursuant to A/N 29010.		113: Inspection and Maintenance			Manual
Startup Event						116: Well Raising			Marida
Shutdown Event						117: Gas Collection			Automatic
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VREW123A						113: Inspection and Maintenance		×	Manual
Startup Event	4/17/20 10:12	4/17/20 10:14	0.03			116: Well Raising	4/17/2020	^	Marida
X Shutdown Event	4/17/20 10.12	4/17/20 10.14	0.03			117: Gas Collection	4/17/2020		Automatic
Malfunction Event				Vertical well decommissioning	Х	118: Construction Activities			Automatic
Well ID Number:				pursuant to A/N 29010.		113: Inspection and Maintenance			Manual
Startup Event						116: Well Raising			Marida
Shutdown Event						117: Gas Collection			Automatic
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VREW127A						113: Inspection and Maintenance		Y	Manual
Startup Event	1/17/20 11:55	4/17/20 11:57	0.03			116: Well Raising	4/17/2020	^	Marida
X Shutdown Event	4/11/20 11:00	4/11/20 11:01	0.00			117: Gas Collection	4/11/2020		Automatic
Malfunction Event				Vertical well decommissioning	Х	118: Construction Activities			Automatic
Well ID Number:				pursuant to A/N 29010.		113: Inspection and Maintenance			Manual
Startup Event						116: Well Raising			Marida
Shutdown Event						117: Gas Collection			Automatic
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VREW137A						113: Inspection and Maintenance		Y	Manual
Startup Event	1/17/20 15:10	1/17/20 15:12	0.03			116: Well Raising	4/17/2020	^	Waliuai
X Shutdown Event	4/17/20 13.10	4/11/20 13.12	0.05			117: Gas Collection	4/11/2020		Automatic
Malfunction Event				Vertical well decommissioning	Х	118: Construction Activities			Automatic
Well ID Number:				pursuant to A/N 29010.		113: Inspection and Maintenance			Manual
Startup Event						116: Well Raising			Marida
Shutdown Event						117: Gas Collection			Automatic
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VRLRW001						113: Inspection and Maintenance		x	Manual
Startup Event	5/28/20 14:43	5/28/20 14:45	0.03			116: Well Raising	5/28/2020	^	Mandai
X Shutdown Event	5,20,20 17.40	5,20/20 14.40	0.00	Vertical well decommissioning	Х	117: Gas Collection	5/20/2020		Automatic
Malfunction Event				pursuant to A/N 29010.		118: Construction Activities			Automatic
Well ID Number:				Decommissioning time is date of		113: Inspection and Maintenance			Manual
Startup Event				discovery.		116: Well Raising			Mandai
Shutdown Event						117: Gas Collection			Automatic
Malfunction Event						118: Construction Activities			Automatic

AFFECTED EQUIPMENT: Wellfield

Vasco Road Landfill - Liv	ormore Califor	mia		Completed By. Tetra	Tech				
	ermore, camor		4 0000						
SSMP REPORT - From Fe	ebruary 1, 2020	through July 3	1, 2020						
Well ID Number: VREW2007						113: Inspection and Maintenance		х	Manual
X Startup Event	5/28/20 14:43	5/28/20 14:45	0.03			116: Well Raising	5/28/2020	~	Mandai
Shutdown Event	5/20/20 14:40	0/20/20 14.40	0.00			117: Gas Collection	5/20/2020		Automatic
Malfunction Event				Vertical well start up	p pursuant to	118: Construction Activities			Automatic
Well ID Number:				A/N 2901	0.	113: Inspection and Maintenance			Manual
Startup Event						116: Well Raising			Marida
Shutdown Event						117: Gas Collection			Automatia
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VREW2006						113: Inspection and Maintenance		v	Monual
X Startup Event	E/20/20 14.52	E/20/20 14-E4	0.02			116: Well Raising	E/20/2020	^	Mariual
Shutdown Event	5/26/20 14.52	5/26/20 14.54	0.03			117: Gas Collection	5/26/2020		A to
Malfunction Event				Vertical well start up	pursuant to	118: Construction Activities			Automatic
Well ID Number:				A/N 2901	0.	113: Inspection and Maintenance			Manual
Startup Event						116: Well Raising			Mariual
Shutdown Event						117: Gas Collection			Automotic
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VREW2005						113: Inspection and Maintenance		V	Manual
X Startup Event	E/00/00 44.E0	E/00/00 4E-04	0.02			116: Well Raising	5/00/0000	~	Manual
Shutdown Event	5/28/20 14:59	5/28/20 15:01	0.03			117: Gas Collection	5/28/2020		A uta na ati a
Malfunction Event				Vertical well start up	pursuant to	118: Construction Activities			Automatic
Well ID Number:				A/N 2901	0.	113: Inspection and Maintenance			Manual
Startup Event						116: Well Raising			Manual
Shutdown Event						117: Gas Collection			Automotic
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VREW2004						113: Inspection and Maintenance		V	Manual
X Startup Event	E/20/20 1E:10	E/00/00 1E:10	0.02			116: Well Raising	E/20/2020	^	Mariual
Shutdown Event	5/26/20 15.10	5/26/20 15.12	0.03			117: Gas Collection	5/26/2020		Automotic
Malfunction Event				Vertical well start up	pursuant to	118: Construction Activities			Automatic
Well ID Number:				A/N 2901	0.	113: Inspection and Maintenance			Monual
Startup Event						116: Well Raising			Mariual
Shutdown Event						117: Gas Collection			Automotio
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VREW2003						113: Inspection and Maintenance		v	Monual
X Startup Event	E/20/20 1E:47	E/20/20 1E:10	0.02			116: Well Raising	E/20/2020	~	iviariuar
Shutdown Event	5/26/20 15.17	5/26/20 15.19	0.03			117: Gas Collection	5/26/2020		A to
Malfunction Event				Vertical well start up	pursuant to	118: Construction Activities			Automatic
Well ID Number:				A/N 2901	0.	113: Inspection and Maintenance			Monuel
Startup Event						116: Well Raising			iviariuar
Shutdown Event						117: Gas Collection			Automatia
Malfunction Event						118: Construction Activities			Automatic
Well ID Number: VREW2002						113: Inspection and Maintenance		V	Manual
X Startup Event	E/20/20 1E:27	E/20/20 1E:20	0.02			116: Well Raising	E/20/2020	^	Mariual
Shutdown Event	JIZOIZU 13.21	JIZOIZU 13.29	0.03			117: Gas Collection	5/20/2020		Automatic
Malfunction Event				Vertical well start up	pursuant to	118: Construction Activities			Automatic
Well ID Number:				A/N 2901	0.	113: Inspection and Maintenance			Manual
Startup Event						116: Well Raising			wanuar
Shutdown Event						117: Gas Collection			Automatic
Malfunction Event						118: Construction Activities			Automatic

AFFECTED EQUIPMENT: Wellfield

	Completed By: Tetra Tech											
/asco Road Landfill - Livermore, California												
SSMP REPORT - From February 1, 2020 through July 31, 2020												
Well ID Number: VREW2001							113: Inspection and Maintenance		×	Manual		
X Startup Event	5/20/20 10:04	5/20/20 10:06	0.02				116: Well Raising	5/29/2020	^	Wallua		
Shutdown Event	5/20/20 10.04	5/20/20 10:00	0.03				117: Gas Collection	5/26/2020		Automatic		
Malfunction Event					Vertical well start up pursuant to	Х	118: Construction Activities			Automatic		
Well ID Number:					A/N 29010.		113: Inspection and Maintenance			Manual		
Startup Event							116: Well Raising			Walitai		
Shutdown Event							117: Gas Collection			Automatia		
Malfunction Event							118: Construction Activities			Autoillatic		

APPENDIX D

A-4 FLARE SSM LOG

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event	
Applicable Event	Date and Time	Date and Time	of Event (Hours)	Shutdown (Hours)			Completed	(Startup a	nd Shutdown Events Only)	
Component: A-4 Flare						113: Inspection and Maintenance			Manual	
Startup Event						116: Well Raising				
Malfunction Event				56.40 hours	Automatic shutdown to allow for the	117: Gas Collection			Automatic	
Component: A-4 Elare				as of Echruppy 1, 2020^{1}	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	0/0/00 00 04	0/0/00 00 00	0.00	as of rebluary 1, 2020	generating facility.**	116: Well Raising	0/0/0000		Manual	
Shutdown Event	2/3/20 08:24	2/3/20 08:26	0.03			117: Gas Collection	2/3/2020	v	Automotio	
Malfunction Event						118: Construction Activities		^	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/3/20 09:00	2/3/20 09:02	0.03			116: Well Raising	2/3/2020		manual	
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		х	Automatic	
Malfunction Event				0.13 hours	continuous operation of the power	118: Construction Activities				
X Startup Event					generating facility.	116: Well Raising			Manual	
Shutdown Event	2/3/20 09:08	2/3/20 09:10	0.03			117: Gas Collection	2/3/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/3/20 00:50	2/3/20 00.52	0.03			116: Well Raising	2/3/2020		Mariuai	
X Shutdown Event	2/3/20 09.30	213/20 09.32	0.03		Automatic shutdown to allow for the	117: Gas Collection	2/3/2020	х	Automatic	
Malfunction Event				0.37 hours	continuous operation of the power	118: Construction Activities		~	7 10101110110	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/3/20 10:12	2/3/20 10:14	0.03			116: Well Raising	2/3/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startup Event	0/0/00 44.00	0/0/00 44-04	0.00			116: Well Raising	0/0/0000		Manual	
X Shutdown Event	2/3/20 11.02	2/3/20 11:04	0.03		Automatic shutdown to allow for the	117: Gas Collection	2/3/2020	v	Automatic	
Malfunction Event				0.30 hours	continuous operation of the power	118: Construction Activities		~	Automatic	
Component: A-4 Flare				0.00 110010	generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/3/20 11:20	2/3/20 11:22	0.03		5 5 ,	116: Well Raising	2/3/2020			
Shutdown Event						117: Gas Collection		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startup Event						116: Well Raising			Manual	
X Shutdown Event	2/3/20 12:02	2/3/20 12:04	0.03			117: Gas Collection	2/3/2020			
Malfunction Event				0.47 h a	Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				0.17 nours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/3/20 12:12	2/3/20 12:14	0.03		generating facility.	116: Well Raising	2/3/2020		Walldal	
Shutdown Event	2/0/20 12:12	2,0,20 12.11	0.00			117: Gas Collection	2/0/2020	х	Automatic	
Malfunction Event						118: Construction Activities				
Component: A-4 Flare						A 113: Inspection and Maintenance			Manual	
X Shutdown Event	2/3/20 12:52	2/3/20 12:54	0.03			117: Gas Collection	2/3/2020			
Malfunction Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare			1	0.53 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/2/20 12:24	212120 12.26	0.02		generating facility.	116: Well Raising	2/2/2020		Manuai	
Shutdown Event	2/3/20 13:24	2/3/20 13:20	0.03			117: Gas Collection	2/3/2020	x	Automatic	
Malfunction Event						118: Construction Activities		^	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - Fro	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare Startup Event X Shutdown Event	2/3/20 14:18	2/3/20 14:20	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	2/3/2020	×	Manual	
Malfunction Event Component: A-4 Flare				0.13 hours	continuous operation of the power	118: Construction Activities X 113: Inspection and Maintenance		X	Automatic	
X Startup Event Shutdown Event Malfunction Event	2/3/20 14:26	2/3/20 14:28	0.03		generating facility.	116: Well Raising 117: Gas Collection 118: Construction Activities	2/3/2020	х	Automatic	
Component: A-4 Flare Startup Event	2/2/20 14:40	2/2/20 14-42	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/2/2020		Manual	
X Shutdown Event Malfunction Event	2/3/20 14.40	2/3/20 14.42	0.03	17.33 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities	2/3/2020	х	Automatic	
Component: A-4 Flare X Startup Event Sbutdown Event	2/4/20 08:00	2/4/20 08:02	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/4/2020		Manual	
Malfunction Event						117: Gas Collection 118: Construction Activities X 113: Inspection and Maintenance		Х	Automatic	
Startup Event X Shutdown Event	2/4/20 08:10	2/4/20 08:12	0.03		A. da ar efte e la deleure de ell'au ferdier	116: Well Raising 117: Gas Collection	2/4/2020	~	Manual	
Malfunction Event Component: A-4 Flare				0.23 hours	continuous operation of the power	118: Construction Activities X 113: Inspection and Maintenance		X	Automatic	
X Startup Event Shutdown Event Malfunction Event	2/4/20 08:24	2/4/20 08:26	0.03			116: Well Raising 117: Gas Collection 118: Construction Activities	2/4/2020	х	Automatic	
Component: A-4 Flare Startup Event X Shutdown Event	2/4/20 08:52	2/4/20 08:54	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	2/4/2020		Manual	
Malfunction Event Component: A-4 Flare				0.37 hours	Automatic shutdown to allow for the continuous operation of the power	118: Construction Activities X 113: Inspection and Maintenance		Х	Automatic	
X Startup Event Shutdown Event Malfunction Event	2/4/20 09:14	2/4/20 09:16	0.03		generating raciity.	116: Well Raising 117: Gas Collection 118: Construction Activities	2/4/2020	х	Automatic	
Component: A-4 Flare Startup Event	2/4/20 10:38	2/4/20 10:40	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/4/2020		Manual	
X Shutdown Event Malfunction Event	2, 1, 20, 10,000	2, 1120 10:10	0.00	0.10 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities	2,	Х	Automatic	
X Startup Event	2/4/20 10:44	2/4/20 10:46	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/4/2020		Manual	
Malfunction Event						117: Gas Conection 118: Construction Activities X 113: Inspection and Maintenance		Х	Automatic	
Startup Event X Shutdown Event	2/4/20 11:16	2/4/20 11:18	0.03			116: Well Raising 117: Gas Collection	2/4/2020	~~~~~	Manual	
Malfunction Event Component: A-4 Flare				0.07 hours	Automatic shutdown to allow for the continuous operation of the power	118: Construction Activities X 113: Inspection and Maintenance		Х	Automatic	
X Startup Event Shutdown Event Malfunction Event	2/4/20 11:20	2/4/20 11:22	0.03			116: Well Raising 117: Gas Collection 118: Construction Activities	2/4/2020	х	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare			, , , , , , , , , , , , , , , , , , ,			X 113: Inspection and Maintenance			Manual	
Startup Event	2/4/20 11:44	2/4/20 11:46	0.03			116: Well Raising	2/4/2020		Manual	
X Shutdown Event	2/4/20 11.44	2/4/20 11.40	0.00		Automatic shutdown to allow for the	117: Gas Collection	2/4/2020	х	Automatic	
Malfunction Event				0.13 hours	continuous operation of the power	118: Construction Activities				
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/4/20 11:52	2/4/20 11:54	0.03			116: Well Raising	2/4/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startup Event	0/4/00 40-40	0/4/00 40-40	0.00			116: Well Raising	0/4/0000		Manual	
X Shutdown Event	2/4/20 12:16	2/4/20 12:18	0.03		Automatic chutdown to allow for the	117: Gas Collection	2/4/2020	v	Automotio	
Malfunction Event				0.10 hours	continuous operation of the power	118: Construction Activities		^	Automatic	
Component: A-4 Flare				0.10 110010	generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/4/20 12:22	2/4/20 12:24	0.03		gigij-	116: Well Raising	2/4/2020			
Shutdown Event						117: Gas Collection		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startun Event						116: Well Raising			Manual	
X Shutdown Event	2/4/20 13:06	2/4/20 13:08	0.03			117: Gas Collection	2/4/2020			
Malfunction Event				1.02 hours	Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				1.05 110015	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/4/20 14:08	2/4/20 14.10	0.03		generating facility.	116: Well Raising	2/4/2020		Ivialiual	
Shutdown Event	2/4/20 14:00	2/4/20 14.10	0.00			117: Gas Collection	21412020	х	Automatic	
Malfunction Event						118: Construction Activities				
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	2/4/20 15:00	2/4/20 15:02	0.03			117: Gas Collection	2/4/2020			
Malfunction Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				0.17 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/4/20 15:10	2/1/20 15.12	0.03		generating facility.	116: Well Raising	2/4/2020		Manuai	
Shutdown Event	2/4/20 13.10	2/4/20 13.12	0.05			117: Gas Collection	2/4/2020	x	Automatic	
Malfunction Event						118: Construction Activities		~	, latoritatio	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/4/20 15:32	2/4/20 15:34	0.03			116: Well Raising	2/4/2020			
A Shuldown Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				0.10 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	011/00 15 00	0///00 15 10	0.00		generating facility.	116: Well Raising	0///0000		Manual	
Shutdown Event	2/4/20 15:38	2/4/20 15:40	0.03			117: Gas Collection	2/4/2020	v	Automotio	
Malfunction Event						118: Construction Activities		~	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/4/20 15:52	2/4/20 15:54	0.03			116: Well Raising	2/4/2020		manual	
X Shutdown Event					Automatic shutdown to allow for the	11/: Gas Collection		Х	Automatic	
Maitunction Event				16.23 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event					generating facility.	116: Well Raising			Manual	
Shutdown Event	2/5/20 08:06	2/5/20 08:08	0.03			117: Gas Collection	2/5/2020	X	A 1 1	
Malfunction Event						118: Construction Activities		X	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	:0							
Identify Flare & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form	8)) Type of Event	
Applicable Event	Date and Time	Date and Time	of Event (Hours)	Shutdown (Hours)	(-) -		Completed	(Startup a	nd Shutdown Events Only)	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	2/5/20 08:08	2/5/20 08:10	0.03			117: Gas Collection	2/5/2020			
Malfunction Event				0.17 hours	Automatic shutdown to allow for the	118: Construction Activities		X	Automatic	
Component: A-4 Flare				0.17 110015	generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/5/20 08:18	2/5/20 08:20	0.03		0 0 9	116: Well Raising	2/5/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/5/20 08:34	2/5/20 08:36	0.03			116: Well Raising	2/5/2020		Ivialiual	
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection	_, _,	х	Automatic	
Component: A-4 Flare				1.47 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	2/5/20 10:02	2/5/20 10:04	0.02		generating facility.	116: Well Raising	2/5/2020		Manual	
Shutdown Event	2/3/20 10.02	2/5/20 10.04	0.03			117: Gas Collection	2/3/2020	х	Automatic	
Malfunction Event						118: Construction Activities				
Startup Event						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	2/5/20 10:10	2/5/20 10:12	0.03			117: Gas Collection	2/5/2020	X	A 1 11	
Malfunction Event				0.73 hours	Automatic shutdown to allow for the	118: Construction Activities		X	Automatic	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event Shutdown Event	2/5/20 10:54	2/5/20 10:56	0.03		0 0 9	116: Well Raising	2/5/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/5/20 17:30	2/5/20 17:32	0.03			116: Well Raising	2/5/2020		manaai	
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				16.10 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	2/6/20 00.26	2/6/20 00.29	0.02		generating facility.	116: Well Raising	2/6/2020		Manual	
Shutdown Event	2/0/20 09.30	210/20 09:30	0.05			117: Gas Collection	2/0/2020	х	Automatic	
Malfunction Event						118: Construction Activities				
Startup Event						116: Well Raising			Manual	
X Shutdown Event	2/6/20 10:40	2/6/20 10:42	0.03		Automotion a but datum ta a llavu familia	117: Gas Collection	2/6/2020	v	Automotio	
Malfunction Event				0.13 hours	continuous operation of the power	118: Construction Activities		^	Automatic	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
Startup Event	2/6/20 10:48	2/6/20 10:50	0.03			117: Gas Collection	2/6/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/6/20 11:16	2/6/20 11:18	0.03			116: Well Raising	2/6/2020		manda	
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		х	Automatic	
Component: A-4 Flare				0.13 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	2/6/20 11.24	2/6/20 11.26	0.03		generating facility.	116: Well Raising	2/6/2020		Manual	
Shutdown Event	2/0/20 11.24	2/0/20 11.20	0.03			117: Gas Collection	2/0/2020	x	Automatic	
Malfunction Event						118: Construction Activities		~	Automatio	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	:0							
Identify Flare & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form	8) Startup a) Type of Event	
Component: A-4 Flare	Date and Time	Date and Time	or Eveni (Hours)	Shuldown (Hours)		X 113: Inspection and Maintenance	Completed	(Otartup a	na Shataown Events Only)	
Startup Event	0/0/00 11 10		0.00			116: Well Raising	0/0/0000		Manual	
X Shutdown Event	2/6/20 11:42	2/6/20 11:44	0.03		Automatic chutdown to allow for the	117: Gas Collection	2/6/2020	Y	Automatic	
Malfunction Event				0.17 hours	continuous operation of the power	118: Construction Activities		^	Automatic	
Component: A-4 Flare				0.11 Hours	generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/6/20 11:52	2/6/20 11:54	0.03		0 0 1	116: Well Raising	2/6/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startup Event	216/20 19.44	2/6/20 19:46	0.02			116: Well Raising	2/6/2020		Manual	
X Shutdown Event	2/0/20 10.44	2/0/20 16.40	0.03		Automatic shutdown to allow for the	117: Gas Collection	2/0/2020	x	Automatic	
Malfunction Event				15.03 hours	continuous operation of the power	118: Construction Activities		Λ	Automatic	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/7/20 09:46	2/7/20 09:48	0.03			116: Well Raising	2/7/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/7/20 11:38	2/7/20 11:40	0.03			116: Well Raising	2/7/2020		Manual	
X Shutdown Event	2/1/20 11.30	2/1/20 11.40	0.05		Automatic shutdown to allow for the	117: Gas Collection	2/1/2020	х	Automatic	
Malfunction Event				0.13 hours	continuous operation of the power	118: Construction Activities		~	, latoritatio	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
Shutdown Event	2/7/20 11:46	2/7/20 11:48	0.03			117: Gas Collection	2/7/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/7/20 17:52	2/7/20 17:54	0.03			116: Well Raising	2/7/2020		iviariuai	
X Shutdown Event	2///20 11/02	2///20 11:01	0.00		Automatic shutdown to allow for the	117: Gas Collection	2,172020	х	Automatic	
Malfunction Event				42.03 hours	continuous operation of the power	118: Construction Activities				
X Startup Event					generating facility.	116: Well Raising			Manual	
Shutdown Event	2/9/20 11:54	2/9/20 11:56	0.03			117: Gas Collection	2/9/2020	v	A	
Malfunction Event						118: Construction Activities		X	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/9/20 14:08	2/9/20 14:10	0.03			116: Well Raising	2/9/2020		manual	
X Shutdown Event				95 17 hours	Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				55.17 Hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	0/10/00 10 10	0/40/00 40 00	0.00		generating facility.	116: Well Raising	0/40/0000		Manual	
Shutdown Event	2/13/20 13:18	2/13/20 13:20	0.03			117: Gas Collection	2/13/2020	v	Automotio	
Malfunction Event						118: Construction Activities		^	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/13/20 18:50	2/13/20 18:52	0.03			116: Well Raising	2/13/2020			
A Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				12.77 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	2/14/20 07:26	2/14/20 07:29	0.02		generating facility.	116: Well Raising	2/14/2020		Manual	
Shutdown Event	2/14/20 07:30	2/14/20 07:30	0.03			117: Gas Collection	2/14/2020	x	Automatic	
Malfunction Event						118: Construction Activities		~	Automatio	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	:0							
Identify Flare & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form	(8) Startun a) Type of Event	
Component: A-4 Flare	Date and Time	Date and Time	or Eveni (Hours)	Silutuowii (Hours)		X 113: Inspection and Maintenance	Completed	(Startup a	na Shataown Events Only)	
Startup Event	0/10/00 10 50	0/40/00 00 00	0.00			116: Well Raising	0/40/0000		Manual	
X Shutdown Event	2/18/20 19:58	2/18/20 20:00	0.03		Automotic chutdown to allow for the	117: Gas Collection	2/18/2020	Y	Automatic	
Malfunction Event				16.00 hours	continuous operation of the power	118: Construction Activities		^	Automatic	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/19/20 11:58	2/19/20 12:00	0.03			116: Well Raising	2/19/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startup Event	2/10/20 12:06	2/10/20 12:09	0.02			116: Well Raising	2/10/2020		Manual	
X Shutdown Event	2/19/20 12.00	2/19/20 12:00	0.03		Automatic shutdown to allow for the	117: Gas Collection	2/19/2020	x	Automatic	
Malfunction Event				0.10 hours	continuous operation of the power	118: Construction Activities		~	Automatic	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	2/19/20 12:12	2/19/20 12:14	0.03			110: Well Raising	2/19/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/10/20 12:14	2/10/20 12:16	0.03			116: Well Raising	2/10/2020		Manual	
X Shutdown Event	2/19/20 12.14	2/19/20 12.10	0.05		Automatic shutdown to allow for the	117: Gas Collection	2/19/2020	х	Automatic	
Malfunction Event				0.10 hours	continuous operation of the power	118: Construction Activities		~	, latornalio	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
Shutdown Event	2/19/20 12:20	2/19/20 12:22	0.03			117: Gas Collection	2/19/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/19/20 12:22	2/19/20 12:24	0.03			116: Well Raising	2/19/2020		Ivialiual	
X Shutdown Event	2/10/20 12:22	2,10,20 12:21	0.00		Automatic shutdown to allow for the	117: Gas Collection	2,10,2020	х	Automatic	
Malfunction Event				0.13 hours	continuous operation of the power	118: Construction Activities				
X Startup Event					generating facility.	116: Well Raising			Manual	
Shutdown Event	2/19/20 12:30	2/19/20 12:32	0.03			117: Gas Collection	2/19/2020	V	A	
Malfunction Event						118: Construction Activities		X	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/19/20 15:08	2/19/20 15:10	0.03			116: Well Raising	2/19/2020		mandai	
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				0.30 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	0/10/00 15 00	0/40/00 45 00	0.00		generating facility.	116: Well Raising	0/40/0000		Manual	
Shutdown Event	2/19/20 15:26	2/19/20 15:28	0.03			117: Gas Collection	2/19/2020	×	Automotio	
Malfunction Event						118: Construction Activities		^	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/19/20 15:30	2/19/20 15:32	0.03			116: Well Raising	2/19/2020			
Malfunction Event					Automatic shutdown to allow for the	118: Construction Activities		х	Automatic	
Component: A-4 Flare				0.10 hours	continuous operation of the power	X 113: Inspection and Maintenance			Max	
X Startup Event	2/10/20 15:36	2/10/20 15:39	0.03		generating facility.	116: Well Raising	2/10/2020		Manual	
Shutdown Event	2/19/20 10:00	2/19/20 10:30	0.03			117: Gas Collection	2/19/2020	x	Automatic	
Malfunction Event						118: Construction Activities		~	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare Startup Event	2/10/20 16:04	2/10/20 16:06	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/10/2020		Manual	
X Shutdown Event Malfunction Event	2/19/20 10:04	2/19/20 10:00	0.03	2.07 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	2/19/2020	х	Automatic	
Component: A-4 Flare X Startup Event	2/19/20 18:08	2/19/20 18:10	0.03	2.07 110010	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/19/2020		Manual	
Shutdown Event Malfunction Event	2,10,20 10,00	2,10,2010110	0.00			117: Gas Collection 118: Construction Activities	2,10,2020	Х	Automatic	
Component: A-4 Flare Startup Event	2/19/20 18:24	2/19/20 18:26	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/19/2020		Manual	
X Shutdown Event Malfunction Event				37.47 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic	
Component: A-4 Flare X Startup Event	2/21/20 07:52	2/21/20 07:54	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/21/2020		Manual	
Shutdown Event Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic	
Startup Event	2/21/20 08:04	2/21/20 08:06	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/21/2020		Manual	
X Shutdown Event Malfunction Event				0.20 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic	
X Startup Event	2/21/20 08:16	2/21/20 08:18	0.03		generating facility.	113: Inspection and Maintenance 116: Well Raising	2/21/2020		Manual	
Malfunction Event						117: Gas Conection 118: Construction Activities		Х	Automatic	
Startup Event	2/21/20 08:18	2/21/20 08:20	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/21/2020		Manual	
X Shutdown Event Malfunction Event				0.03 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic	
X Startup Event	2/21/20 08:20	2/21/20 08:22	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/21/2020		Manual	
Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic	
Startup Event	2/21/20 09:48	2/21/20 09:50	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/21/2020		Manual	
X Shutdown Event Malfunction Event				2.60 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic	
Component: A-4 Flare X Startup Event	2/21/20 12:24	2/21/20 12:26	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/21/2020		Manual	
Shutdown Event Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic	
Component: A-4 Flare Startup Event	2/21/20 18:28	2/21/20 18:30	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/21/2020		Manual	
X Shutdown Event Malfunction Event				63.17 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic	
Component: A-4 Flare X Startup Event	2/24/20 09:38	2/24/20 09:40	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
Shutdown Event Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare Startup Event	0/04/00 00:40	0/04/00 00:44	0.00			X 113: Inspection and Maintenance 116: Well Raising	0/04/0000		Manual	
X Shutdown Event Malfunction Event	2/24/20 09:42	2/24/20 09:44	0.03	0.07 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	2/24/2020	х	Automatic	
Component: A-4 Flare X Startup Event	2/24/20 00:46	2/24/20 00:48	0.02	0.07 hours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
Shutdown Event Malfunction Event	2/24/20 09.40	2/24/20 09.48	0.03			117: Gas Collection 118: Construction Activities	2/24/2020	х	Automatic	
Component: A-4 Flare Startup Event	2/24/20 09:52	2/24/20 09:54	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
X Shutdown Event Malfunction Event	2124/20 03.32	2/24/20 00.04	0.00	0.07 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	212412020	х	Automatic	
Component: A-4 Flare X Startup Event	2/24/20 09:56	2/24/20 09:58	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
Shutdown Event Malfunction Event	2124120 00.00	2124120 00.00	0.00			117: Gas Collection 118: Construction Activities	LILHILOLO	х	Automatic	
Component: A-4 Flare Startup Event	2/24/20 10:14	2/24/20 10:16	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
X Shutdown Event Malfunction Event	2/2 // 20 10:11	2,2 , 20 10:10	0.00	0.13 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities	2/2 //2020	Х	Automatic	
Component: A-4 Flare X Startup Event	2/24/20 10:22	2/24/20 10:24	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
Shutdown Event Malfunction Event	2/2 // 20 10:22	2,2 , 20 10:21	0.00			117: Gas Collection 118: Construction Activities	2/2 //2020	Х	Automatic	
Component: A-4 Flare Startup Event	2/24/20 10:42	2/24/20 10:44	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
X Shutdown Event Malfunction Event	2/2 // 20 10:12	2,2 , 20 10111	0.00	0 17 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	2/2 //2020	х	Automatic	
Component: A-4 Flare X Startup Event	2/24/20 10:52	2/24/20 10:54	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
Shutdown Event Malfunction Event	2/2 // 20 10:02	2,2 ,720 10:01	0.00			117: Gas Collection 118: Construction Activities	2/2 //2020	х	Automatic	
Component: A-4 Flare Startup Event	2/24/20 12:26	2/24/20 12:28	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
X Shutdown Event Malfunction Event	2124120 12.20	2124120 12.20	0.00	0.70 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	LILHILOLO	х	Automatic	
Component: A-4 Flare X Startup Event	2/24/20 13:08	2/24/20 13:10	0.03	0.10 110410	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
Shutdown Event Malfunction Event	2/24/20 13:00	2/24/20 13:10	0.00			117: Gas Collection 118: Construction Activities	212412020	х	Automatic	
Component: A-4 Flare Startup Event	2/24/20 17:46	2/24/20 17:48	0.03			X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
X Shutdown Event Malfunction Event	2/24/20 17.40	2124120 11.40	0.03	14.33 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	212412020	х	Automatic	
Component: A-4 Flare X Startup Event	2/25/20 08:06	2/25/20 08:08	0.03	14.55 110015	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/25/2020		Manual	
Shutdown Event Malfunction Event	2/23/20 00.00	2123120 00.00	0.05			117: Gas Collection 118: Construction Activities	212512020	Х	Automatic	
AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	n February 1, 2020 t	through July 31, 202	0							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	2/25/20 11:24	2/25/20 11:26	0.03			116: Well Raising	2/25/2020		Manual	
X Shutdown Event				165 67 hours	Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				105.07 Hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	0/0/00 00 04	0/0/00 00 00	0.00		generating facility.	116: Well Raising	0/0/0000		Manual	
Shutdown Event	3/3/20 09:04	3/3/20 09:06	0.03			117: Gas Collection	3/3/2020	Y	Automatic	
Malfunction Event						118: Construction Activities		~	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/3/20 09:06	3/3/20 09:08	0.03			116: Well Raising	3/3/2020			
Malfunction Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				0.03 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	3/3/20 09:08	3/3/20 09:10	0.03		generating facility.	116: Well Raising	3/3/2020		Wallua	
Shutdown Event						117: Gas Collection		Х	Automatic	
Component: A 4 Elare						118: Construction Activities				
Startup Event						116: Well Raising			Manual	
X Shutdown Event	3/3/20 09:10	3/3/20 09:12	0.03		Automotio chutdoum to allow for the	117: Gas Collection	3/3/2020	v	Automotio	
Malfunction Event				0.10 hours	continuous operation of the power	118: Construction Activities		~	Automatic	
Component: A-4 Flare				0.10 110410	generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	3/3/20 09:16	3/3/20 09:18	0.03		5 5 ,	116: Well Raising	3/3/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/3/20 00.20	3/3/20 00.22	0.03			116: Well Raising	3/3/2020		Manual	
X Shutdown Event	3/3/20 03.20	5/5/20 03.22	0.00		Automatic shutdown to allow for the	117: Gas Collection	5/5/2020	х	Automatic	
Malfunction Event				0.07 hours	continuous operation of the power	118: Construction Activities				
X Startun Event					generating facility.	116: Well Raising			Manual	
Shutdown Event	3/3/20 09:24	3/3/20 09:26	0.03			117: Gas Collection	3/3/2020	X	A 1 1	
Malfunction Event						118: Construction Activities		X	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/3/20 11:46	3/3/20 11:48	0.03			116: Well Raising	3/3/2020		mandai	
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				1.83 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	2/2/20 12:26	2/2/20 42.20	0.02		generating facility.	116: Well Raising	2/2/2020		Manual	
Shutdown Event	3/3/20 13:36	3/3/20 13:38	0.03			117: Gas Collection	3/3/2020	x	Automatic	
Malfunction Event						118: Construction Activities		Λ	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	3/3/20 13:38	3/3/20 13:40	0.03			116: Well Raising	3/3/2020			
Malfunction Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				0.03 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	3/3/20 13:40	3/3/20 13:42	0.03		generating facility.	116: Well Raising	3/3/2020		wanuai	
Shutdown Event	5/0/20 10.40	0/0/20 10.72	0.00			117: Gas Collection	0,0,2020	х	Automatic	
Malfunction Event						118: Construction Activities				

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare Startup Event	3/3/20 23:34	3/3/20 23:36	0.03			X 113: Inspection and Maintenance 116: Well Raising 117: Gas Collection	3/3/2020		Manual	
Malfunction Event				9.80 hours	Automatic shutdown to allow for the continuous operation of the power	118: Construction Activities		Х	Automatic	
X Startup Event	3/4/20 09:22	3/4/20 09:24	0.03		generating facility.	116: Well Raising 117: Gas Collection	3/4/2020		Manual	
Malfunction Event						118: Construction Activities		Х	Automatic	
Startup Event	3/4/20 09:24	3/4/20 09:26	0.03			113: Inspection and Maintenance	3/4/2020		Manual	
Malfunction Event				0.17 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic	
X Startup Event	3/4/20 09:34	3/4/20 09:36	0.03		generating facility.	113: Inspection and Maintenance	3/4/2020		Manual	
Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic	
Component: A-4 Flare Startup Event	3/4/20 09:42	3/4/20 09:44	0.03			X 113: Inspection and Maintenance 116: Well Raising	3/4/2020		Manual	
X Shutdown Event Malfunction Event				0.30 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic	
Component: A-4 Flare X Startup Event	3/4/20 10:00	3/4/20 10:02	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	3/4/2020		Manual	
Shutdown Event Malfunction Event	014/20 10:00	014120 10:02	0.00			117: Gas Collection 118: Construction Activities	0/4/2020	х	Automatic	
Component: A-4 Flare Startup Event	3/4/20 10:12	3/4/20 10:14	0.03			X 113: Inspection and Maintenance 116: Well Raising	3/4/2020		Manual	
X Shutdown Event Malfunction Event	014/20 10.12	0,4720 10.14	0.00	3.53 bours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	0/4/2020	х	Automatic	
Component: A-4 Flare X Startup Event	3/4/20 13:44	3/4/20 13:46	0.03	3.33 Hours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	3/4/2020		Manual	
Shutdown Event Malfunction Event	5/4/20 13.44	5/4/20 13.40	0.00			117: Gas Collection 118: Construction Activities	3/4/2020	х	Automatic	
Component: A-4 Flare Startup Event	2/4/20 12:46	2/4/20 12:49	0.02			X 113: Inspection and Maintenance 116: Well Raising	2/4/2020		Manual	
X Shutdown Event Malfunction Event	3/4/20 13.40	3/4/20 13.40	0.03	1.90 bours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	3/4/2020	х	Automatic	
Component: A-4 Flare X Startup Event	2/4/20 15:40	2/4/20 15:42	0.02	1.30 Hours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/4/2020		Manual	
Shutdown Event Malfunction Event	3/4/20 13.40	3/4/20 13.42	0.03			117: Gas Collection 118: Construction Activities	3/4/2020	х	Automatic	
Component: A-4 Flare Startup Event	2/4/20 45.42	2/4/20 15:44	0.02			X 113: Inspection and Maintenance 116: Well Raising	2/4/2020		Manual	
X Shutdown Event Malfunction Event	3/4/20 13.42	3/4/20 13.44	0.05		Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	3/4/2020	х	Automatic	
Component: A-4 Flare X Startup Event	2/4/20 45.44	2/4/20 15:46	0.02	U.US NOURS	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/4/2020		Manual	
Shutdown Event Malfunction Event	3/4/20 15:44	3/4/20 15:40	0.03			117: Gas Collection 118: Construction Activities	3/4/2020	х	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - Fro	m February 1, 2020 t	hrough July 31, 202	:0							
Identify Flare & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event	
Applicable Event	Date and Time	Date and Time	of Event (Hours)	Shutdown (Hours)			Completed	(Startup a	nd Shutdown Events Only)	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/4/20 15:50	3/4/20 15:52	0.03			116: Well Raising	3/4/2020			
A Shuldown Event				39.80 hours	Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare					continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	2/6/20 07.20	2/6/20 07:40	0.02		generating facility.	116: Well Raising	2/6/2020		Manual	
Shutdown Event	3/0/20 07.30	5/0/20 07.40	0.03			117: Gas Collection	3/0/2020	х	Automatic	
Malfunction Event						118: Construction Activities		~	, latoritatio	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	3/6/20 18:36	3/6/20 18:38	0.03			116: Well Raising	3/6/2020			
Malfunction Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				63.03 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	3/9/20 09:38	3/9/20 09:40	0.03		generating facility.	116: Well Raising	3/9/2020		Ivialiual	
Shutdown Event	0/0/20 00.00	0/0/20 00.40	0.00			117: Gas Collection	0/0/2020	х	Automatic	
Malfunction Event						118: Construction Activities				
Startun Event						116: Well Baising			Manual	
X Shutdown Event	3/9/20 09:40	3/9/20 09:42	0.03			117: Gas Collection	3/9/2020			
Malfunction Event				0.40 h avera	Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				0.40 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	3/9/20 10:04	3/9/20 10:06	0.03		generating lacinty.	116: Well Raising	3/9/2020		Wandai	
Shutdown Event						117: Gas Collection		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startup Event						116: Well Raising			Manual	
X Shutdown Event	3/9/20 10:06	3/9/20 10:08	0.03		Automatic abutdours to allow for the	117: Gas Collection	3/9/2020	v	Automotio	
Malfunction Event				0.07 hours	continuous operation of the power	118: Construction Activities		~	Automatic	
Component: A-4 Flare				0.01 110010	generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	3/9/20 10:10	3/9/20 10:12	0.03		0 0 1	116: Well Raising	3/9/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/0/20 10.12	3/0/20 10-14	0.03			116: Well Raising	3/0/2020		Manual	
X Shutdown Event	3/9/20 10.12	5/9/20 10.14	0.03		Automatic shutdown to allow for the	117: Gas Collection	3/9/2020	х	Automatic	
Malfunction Event				0.03 hours	continuous operation of the power	118: Construction Activities		~	, latoritatio	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
Shutdown Event	3/9/20 10:14	3/9/20 10:16	0.03			117: Gas Collection	3/9/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/9/20 10:16	3/9/20 10.18	0.03			116: Well Raising	3/9/2020		ivialiual	
X Shutdown Event	0/0/20 10.10	0,0,20 10.10	0.00		Automatic shutdown to allow for the	117: Gas Collection	0,0,2020	х	Automatic	
Malfunction Event				0.13 hours	continuous operation of the power	118: Construction Activities				
X Startup Event					generating facility.	116: Well Raising			Manual	
Shutdown Event	3/9/20 10:24	3/9/20 10:26	0.03			117: Gas Collection	3/9/2020	X	A 1 1	
Malfunction Event						118: Construction Activities		X	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form	8)) Type of Event	
Applicable Event	Date and Time	Date and Time	of Event (Hours)	Shutdown (Hours)			Completed	(Startup a	nd Shutdown Events Only)	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	3/9/20 10:28	3/9/20 10:30	0.03			116: Well Raising	3/9/2020			
Malfunction Event				7.07.1	Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				7.27 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	3/9/20 17:44	3/9/20 17:46	0.03		generating facility.	116: Well Raising	3/9/2020		Ivialiual	
Shutdown Event	0/0/20 11111	0/0/20 11110	0.00			117: Gas Collection	0/0/2020	Х	Automatic	
Malfunction Event						118: Construction Activities				
Startun Event						116: Well Raising			Manual	
X Shutdown Event	3/9/20 17:50	3/9/20 17:52	0.03			117: Gas Collection	3/9/2020	X	A 1 1	
Malfunction Event				0.07 hours	Automatic shutdown to allow for the	118: Construction Activities		X	Automatic	
Component: A-4 Flare				0.07 Hours	denerating facility	X 113: Inspection and Maintenance			Manual	
X Startup Event	3/9/20 17:54	3/9/20 17:56	0.03		generaang laonity.	116: Well Raising	3/9/2020		manadi	
Shutdown Event						117: Gas Collection		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startup Event	0/0/00 10 00	0/0/00 40 04	0.00			116: Well Raising	0/0/0000		Manual	
X Shutdown Event	3/9/20 18:02	3/9/20 18:04	0.03		Automatic shutdown to allow for the	117: Gas Collection	3/9/2020	Y	Automatic	
Malfunction Event				38 03 hours	continuous operation of the power	118: Construction Activities		^	Automatic	
Component: A-4 Flare				conco mouno	generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	3/11/20 08:04	3/11/20 08:06	0.03		0 0 9	116: Well Raising	3/11/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/11/20 18:06	3/11/20 18:08	0.03			116: Well Raising	3/11/2020		Manual	
X Shutdown Event	0/11/20 10:00	3/11/20 10:00	0.00		Automatic shutdown to allow for the	117: Gas Collection	5/11/2020	х	Automatic	
Malfunction Event			-	185.50 hours	continuous operation of the power	118: Construction Activities				
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
Shutdown Event	3/19/20 11:36	3/19/20 11:38	0.03			117: Gas Collection	3/19/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/19/20 14:10	3/19/20 14:12	0.03			116: Well Raising	3/19/2020		Mariaa	
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				20.17 hours	continuous operation of the power	118: Construction Activities				
X Startup Event					generating facility.	116: Well Raising			Manual	
Shutdown Event	3/20/20 10:20	3/20/20 10:22	0.03			117: Gas Collection	3/20/2020	v	Automotio	
Malfunction Event						118: Construction Activities		~	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/20/20 10:24	3/20/20 10:26	0.03			116: Well Raising	3/20/2020			
A Shutdown Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				6.53 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	2/20/20 16:56	2/20/20 16-59	0.02		generating facility.	116: Well Raising	2/20/2020		Manual	
Shutdown Event	3/20/20 10.00	3/20/20 10:30	0.03			117: Gas Collection	3/20/2020	X	Automatic	
Malfunction Event						118: Construction Activities		~	Automatio	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8 Startup a)) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
X Shutdown Event Malfunction Event	3/20/20 17:00	3/20/20 17:02	0.03	10.001	Automatic shutdown to allow for the	116: Well Raising 117: Gas Collection 118: Construction Activities	3/20/2020	х	Automatic	
Component: A-4 Flare X Startup Event	0/01/00 00 11	0/01/00 00 10	0.00	16.23 hours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	0/04/0000		Manual	
Shutdown Event Malfunction Event	3/21/20 09:14	3/21/20 09:16	0.03			117: Gas Collection 118: Construction Activities	3/21/2020	х	Automatic	
Component: A-4 Flare Startup Event	0/01/00 00 10	0/01/00 00 00	0.00			X 113: Inspection and Maintenance 116: Well Raising	0/04/0000		Manual	
X Shutdown Event Malfunction Event	3/21/20 09:18	3/21/20 09:20	0.03	40.00 h	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	3/21/2020	х	Automatic	
Component: A-4 Flare X Startup Event	2/22/20 10:20	2/22/20 10:22	0.02	49.03 nours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/22/2020		Manual	
Shutdown Event Malfunction Event	3/23/20 10.20	3/23/20 10.22	0.03			117: Gas Collection 118: Construction Activities	3/23/2020	х	Automatic	
Component: A-4 Flare Startup Event	3/23/20 10:34	3/23/20 10:36	0.03			X 113: Inspection and Maintenance 116: Well Raising	3/23/2020		Manual	
X Shutdown Event Malfunction Event	3/23/20 10.34	3/23/20 10.30	0.03	0.10 bours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	5/25/2020	х	Automatic	
Component: A-4 Flare X Startup Event	2/22/20 10:40	2/22/20 10:42	0.02	0.10 Hours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/22/2020		Manual	
Shutdown Event Malfunction Event	3/23/20 10.40	3/23/20 10.42	0.03			117: Gas Collection 118: Construction Activities	3/23/2020	х	Automatic	
Component: A-4 Flare Startup Event	2/22/20 10/56	2/22/20 40-58	0.02			X 113: Inspection and Maintenance 116: Well Raising	2/22/2020		Manual	
X Shutdown Event Malfunction Event	3/23/20 10.30	3/23/20 10.38	0.03	22 17 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	3/23/2020	Х	Automatic	
Component: A-4 Flare X Startup Event	2/24/20 10:06	2/24/20 10:08	0.02	23.17 Hours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/24/2020		Manual	
Shutdown Event Malfunction Event	3/24/20 10.00	3/24/20 10.08	0.03			117: Gas Collection 118: Construction Activities	3/24/2020	х	Automatic	
Component: A-4 Flare Startup Event	2/25/20 10:26	2/25/20 10:28	0.02			X 113: Inspection and Maintenance 116: Well Raising	2/25/2020		Manual	
X Shutdown Event Malfunction Event	3/23/20 10.30	3/23/20 10.30	0.03	46.67 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	5/25/2020	х	Automatic	
Component: A-4 Flare X Startup Event	3/27/20 00:16	3/27/20 00:18	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	3/27/2020		Manual	
Shutdown Event Malfunction Event	3/2//20 09.10	3/2//20 09.10	0.03			117: Gas Collection 118: Construction Activities	5/21/2020	х	Automatic	
Component: A-4 Flare Startup Event	3/27/20 10:08	3/27/20 10:10	0.03			X 113: Inspection and Maintenance 116: Well Raising	3/27/2020		Manual	
X Shutdown Event Malfunction Event	3/2//20 10.00	3/2//20 10:10	0.05	70.00 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	312112020	х	Automatic	
Component: A-4 Flare X Startup Event	2/20/20 09:09	2/20/20 00-40	0.02	70.00 Hours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	2/20/2020		Manual	
Shutdown Event Malfunction Event	3130120 08:08	3/30/20 08:10	0.03			117: Gas Collection 118: Construction Activities	3/30/2020	х	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	3/30/20 10:52	3/30/20 10:54	0.03			116: Well Raising	3/30/2020		Mandai	
X Shutdown Event				46.63 hours	Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				40.00 Hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	4/4/20 00:20	4/4/20 00:22	0.02		generating facility.	116: Well Raising	4/4/2020		Manual	
Shutdown Event	4/1/20 09.30	4/1/20 09.32	0.03			117: Gas Collection	4/1/2020	х	Automatic	
Malfunction Event						118: Construction Activities				
Startup Event						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	4/1/20 09:32	4/1/20 09:34	0.03		Automotion alternation and a silicon familie a	117: Gas Collection	4/1/2020	V	A	
Malfunction Event				0.27 hours	Automatic shutdown to allow for the	118: Construction Activities		X	Automatic	
Component: A-4 Flare				0.27 Houro	generating facility.	X 113: Inspection and Maintenance			Manual	
X Startup Event	4/1/20 09:48	4/1/20 09:50	0.03			116: Well Raising	4/1/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	4/1/20 13:32	4/1/20 13:34	0.03			116: Well Raising	4/1/2020		Maridai	
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				2.33 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	4/1/20 15:52	4/1/20 15.54	0.02		generating facility.	116: Well Raising	4/1/2020		Manual	
Shutdown Event	4/1/20 13.32	4/1/20 15.54	0.05			117: Gas Collection	4/1/2020	х	Automatic	
Malfunction Event						118: Construction Activities				
Startup Event						116: Well Raising			Manual	
X Shutdown Event	4/2/20 08:06	4/2/20 08:08	0.03		Automotic chutdown to allow for the	117: Gas Collection	4/2/2020	v	Automatia	
Malfunction Event				1 27 hours	continuous operation of the power	118: Construction Activities		~	Automatic	
Component: A-4 Flare				nizi nouro	generating facility.	X 113: Inspection and Maintenance			Manual	
Shutdown Event	4/2/20 09:22	4/2/20 09:24	0.03			117: Gas Collection	4/2/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	4/2/20 15:02	4/2/20 15:04	0.03			116: Well Raising	4/2/2020			
X Shutdown Event Malfunction Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				0.77 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	4/2/20 15:48	4/2/20 15:50	0.03		generating facility.	116: Well Raising	4/2/2020		Manual	
Shutdown Event	4/2/20 10.40	-12/20 10:00	0.00			117: Gas Collection	4/2/2020	х	Automatic	
Malfunction Event					-	118: Construction Activities				
Startup Event		4/0/00 17 70	0.00			116: Well Raising	1000000		Manual	
X Shutdown Event	4/2/20 15:50	4/2/20 15:52	0.03		Automatic shutdown to allow for the	117: Gas Collection	4/2/2020	Y	Automatic	
Malfunction Event				20.63 hours	continuous operation of the power	118: Construction Activities		^	Automatic	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
Shutdown Event	4/3/20 12:28	4/3/20 12:30	0.03			117: Gas Collection	4/3/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California									
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20						
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
Startup Event	4/3/20 13:10	4/3/20 13:12	0.03			116: Well Raising	4/3/2020		mandai
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic
Component: A-4 Flare				1.77 hours	continuous operation of the power	X 113: Inspection and Maintenance			
X Startup Event	4/2/20 14/56	4/2/20 14-59	0.02		generating facility.	116: Well Raising	4/2/2020		Manual
Shutdown Event	4/3/20 14.50	4/3/20 14.56	0.03			117: Gas Collection	4/3/2020	x	Automatic
Malfunction Event						118: Construction Activities		Х	Automatio
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
X Shutdown Event	4/3/20 16:50	4/3/20 16:52	0.03			117: Gas Collection	4/3/2020		
Malfunction Event				05 00 h a	Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic
Component: A-4 Flare				65.20 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual
X Startup Event	4/6/20 10:02	4/6/20 10:04	0.03		generating taomy.	116: Well Raising	4/6/2020		Manaa
Shutdown Event						117: Gas Collection		Х	Automatic
Component: A-4 Flare						X 113: Inspection and Maintenance			
Startup Event	4/6/20 17:02	4/6/20 17:04	0.02			116: Well Raising	4/6/2020		Manual
X Shutdown Event	4/0/20 17.02	4/0/20 17.04	0.03		Automatic shutdown to allow for the	117: Gas Collection	4/0/2020	х	Automatic
Malfunction Event				161.00 hours	continuous operation of the power	118: Construction Activities		~	, latornatio
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual
Shutdown Event	4/13/20 10:02	4/13/20 10:04	0.03			117: Gas Collection	4/13/2020		
Malfunction Event						118: Construction Activities		Х	Automatic
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
Startup Event	4/13/20 11:06	4/13/20 11:08	0.03			116: Well Raising	4/13/2020		manda
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic
Component: A-4 Flare				0.30 hours	continuous operation of the power	X 113: Inspection and Maintenance			
X Startup Event	4/13/20 11:24	4/13/20 11:26	0.03		generating facility.	116: Well Raising	4/13/2020		Manual
Shutdown Event	4/10/20 11.24	4/10/20 11.20	0.00			117: Gas Collection	4/10/2020	х	Automatic
Malfunction Event						118: Construction Activities			
Startup Event						X 113: Inspection and Maintenance			Manual
X Shutdown Event	4/13/20 21:36	4/13/20 21:38	0.03			117: Gas Collection	4/13/2020	X	A 1 1
Malfunction Event				10.57 hours	Automatic shutdown to allow for the	118: Construction Activities		X	Automatic
Component: A-4 Flare				10.07 110013	generating facility.	X 113: Inspection and Maintenance			Manual
X Startup Event	4/14/20 08:10	4/14/20 08:12	0.03		5 5 ,	116: Well Raising	4/14/2020		
Malfunction Event						118: Construction Activities		Х	Automatic
Component: A-4 Flare						X 113: Inspection and Maintenance			
Startup Event	4/14/20 14.28	4/14/20 14:30	0.03			116: Well Raising	4/14/2020		Manual
X Shutdown Event	-// 17/20 17.20		0.00		Automatic shutdown to allow for the	117: Gas Collection	11112020	х	Automatic
Malfunction Event				17.13 hours	continuous operation of the power	118: Construction Activities			
X Startup Event					generating facility.	116: Well Raising			Manual
Shutdown Event	4/15/20 07:36	4/15/20 07:38	0.03			117: Gas Collection	4/15/2020	v	Automotio
Malfunction Event						118: Construction Activities		^	Automatic

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare Startup Event	4/15/20 10:14	A/15/20 10·16	0.03			X 113: Inspection and Maintenance 116: Well Raising	4/15/2020		Manual	
X Shutdown Event Malfunction Event	4/10/20 13:14	4/13/20 13:10	0.00	37 70 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities	4/10/2020	х	Automatic	
Component: A-4 Flare X Startup Event	4/17/20 08:56	4/17/20 08:58	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	4/17/2020		Manual	
Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic	
Startup Event	4/19/20 10:18	4/19/20 10:20	0.03			X 113: Inspection and Maintenance 116: Well Raising	4/19/2020		Manual	
X Shutdown Event Malfunction Event				22.70 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic	
X Startup Event	4/20/20 09:00	4/20/20 09:02	0.03		generating facility.	116: Well Raising	4/20/2020		Manual	
Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic	
Startup Event	4/21/20 06:54	4/21/20 06:56	0.03			116: Well Raising	4/21/2020		Manual	
Malfunction Event				23.67 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Conection 118: Construction Activities Y 113: Inspection and Maintenance		Х	Automatic	
X Startup Event	4/22/20 06:34	4/22/20 06:36	0.03		generating facility.	116: Well Raising	4/22/2020		Manual	
Malfunction Event						118: Construction Activities		Х	Automatic	
Startup Event	4/22/20 14:54	4/22/20 14:56	0.03			113: Inspection and Maintenance	4/22/2020		Manual	
Malfunction Event				0.30 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Conection 118: Construction Activities		Х	Automatic	
X Startup Event	4/22/20 15:12	4/22/20 15:14	0.03		generating facility.	116: Well Raising	4/22/2020		Manual	
Malfunction Event						118: Construction Activities		Х	Automatic	
Startup Event	4/22/20 15:24	4/22/20 15:26	0.03			116: Well Raising	4/22/2020		Manual	
X Malfunction Event				0.07 hours	Automatic shutdown due to low	117: Gas Conection 118: Construction Activities		Х	Automatic	
X Startup Event	4/22/20 15:28	4/22/20 15:30	0.03		temperature.	116: Well Raising	4/22/2020		Manual	
Malfunction Event						117: Gas Conection 118: Construction Activities		Х	Automatic	
Startup Event	4/22/20 15:42	4/22/20 15:44	0.03			113: Inspection and Maintenance	4/22/2020		Manual	
Malfunction Event				0.07 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic	
X Startup Event	4/22/20 15:46	4/22/20 15:48	0.03		generating facility.	116: Well Raising	4/22/2020		Manual	
Shutdown Event Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

SSMP REPORT - From February 1, 2020 through July 31, 2020 Status event (3) Duration of Event (Hours) (4) Duration of Event (Hours) (5) Cause or Reason (6) Applicable 3-34 Exemption (7) Date Form (Completed Istatus and Studiown (Surger of Event (Status and Studiown (Hours)) Struction Event Date and Time (2) End of Event (Hours) 0.03 (4) Duration of Event (Hours) (5) Cause or Reason (6) Applicable 3-34 Exemption (7) Date Form (Completed Istatus and Studiown (Surger of Event (Completed Istatus and Studiown (Hours)) Struction Event 4/22/20 15.48 4/22/20 15.50 0.03 Automatic shutdown to allow for the power (generating facility). 118: Vent Raining Maintania 4/22/200 X Automatic shutdown to allow for the power (generating facility). 118: Vent Raining Maintania 118: Vent Raining Maintania 118: Vent Raining Maintania 118: Vent Raining Maintania X X Automatic Shutdown to allow for the confinuous operation to the power (generating facility). 118: Vent Raining Maintania X X Automatic Shutdown to allow for the confinuous Automatic Shutdown to allow for the confinuous Spectration Automatic Shutdown to allow for the confinuous Spectration Nations 118: Vent Raining Maintania X Automatic Maintania Shutdown Event 4/22/20 16:34 0.03 0.27 hours 0.27 hours X Automatic Shutdown to allow for the conf
Identify Flare & Check (1) Start of Event (2) Event (3) Duration (4) Duration (6) Cause or Reason (6) Applicable 8-34 Exemption (7) Date Form (8) Type of Event Component A-4 Flare Applicable Pvent 4/22/20 15:48 4/22/20 15:50 0.03 Automatic shutdown to allow for the power 119: inspector and Mathemane 4/22/200 4/22/20 16:02 Manual Shutdown Event 4/22/20 16:02 4/22/20 16:02 0.03 0.03 Automatic shutdown to allow for the power 119: inspector and Mathemane 4/22/200 4/22/200 Manual Manual Shutdown Event 4/22/20 16:02 4/22/20 16:03 0.03 Automatic shutdown to allow for the power 119: inspector and Mathemane 4/22/200 Manual Manual X Automatic shutdown to allow for the power X Manual X Automatic shutdown to allow for the power X
Component: A Filter Control Contentes
Starup Event Mafunction Event 4/22/20 15:48 4/22/20 15:50 0.03 0.03 Automatic shutdown for high continuous operation of the power generating facility. 11: 5: water and the manage 11: 5: contruction Achies 4/22/2001 11: Canaditation and the manage 11: Canaditation Event 4/22/20 16:02 4/22/20 16:03 0.03 Automatic shutdown for high contruction Achies 4/22/2001 12: Contruction Achies 12: Contruction Achi
X Shuddown Event Mafunction Event 4122/20 10:30 0.03 0.03 0.03 117. Gas Collection 117. Gas Collection X Automatic Shudown to allow for the continuous operation of the power generating facility. 117. Gas Collection X Automatic Shudown to allow for the continuous operation of the power generating facility. 117. Gas Collection X Automatic Shudown to allow for the continuous operation of the power sentence operation detainter sentencon methanterance tits. Well Rasing tits. Gas
Mafunction Event Image: Construction Activities M Maturality X Strutiown Event 4/22/20 16:02 4/22/20 16:04 0.03 0.03 Image: Construction Section 116: Construction Activities M Manual Strutiown Event M 4/22/20 16:02 4/22/20 16:16 0.03 Image: Construction Activities M Manual Strutiown Event Mafunction Event Mafunction Event Mainet annee 116: Woll Raining 4/22/2020 Manual X Strutiown Event 4/22/20 16:16 4/22/20 16:34 0.03 Participant Mainetice 116: Woll Raining 4/22/2020 Manual X Strutiown Event 4/22/20 16:32 4/22/20 16:34 0.03 Participant Mainetice 118: Construction Activities Mainetine 4/22/2020 X Automatic Strutiown Event 4/22/20 16:32 4/22/20 20:18 0.03 Participant Mainetice 118: Construction Activities Mainetice X Automatic Strutiown Event 4/22/20 20:16 4/22/20 20:18 0.03 Participant Mainetice 113: Impectican and Maintennane ton the woll Raining 4/
Component: A-4 Flare 4/22/20 16:02 4/22/20 16:04 0.03 generating facility. X 13: Inspector and Maintenance in the Well Rasing in the We
A Shuld We Verit 4/22/20 16:02 4/22/20 16:04 0.03 110: Verif Raining 4/22/200 X Automatic Shuld own Event Malfunction Event 4/22/20 16:16 4/22/20 16:18 0.03 X Automatic Shuld own Event 4/22/20 16:16 4/22/20 16:32 0.03 Automatic shuldown due to low 118: Construction Activities 4/22/2020 X Automatic Shuld own Event 4/22/20 16:32 4/22/20 16:33 0.03 0.27 hours Automatic shuldown due to low 118: Construction Activities 4/22/2020 X Automatic Shuld own Event 4/22/20 16:32 4/22/20 02:16 0.03 0.27 hours Automatic shuldown due to low X 113: Inspection and Maintenance 4/22/2020 X Automatic Shuld own Event 4/22/20 20:16 4/22/20 20:16 0.03 X Automatic shuldown to allow for the continuous operation of the power X 113: Inspection and Maintenance X Automatic Shuld own Event 4/22/20 20:16 4/22/20 20:16 0.03 X Automatic shuldown to allow for the continuous operation of the power X 113: Inspection and Maintenance X Automatic <t< td=""></t<>
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Startup Event Maillunction Event 4/22/20 16:16 4/22/20 16:18 0.03 Part of the formation of the part of the
Shutdown Event Malled 10.10 <
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Automatic 4/22/20 16:32 4/22/20 16:34 0.03 117: Gas Collection 4/22/2020 X Automatic Shutdown Event Mafunction Event 4/22/20 20:16 4/22/20 20:18 0.03 17: Gas Collection 18: Construction Activities X Automatic Shutdown Event 4/22/20 20:16 4/22/20 20:18 0.03 Automatic shutdown to allow for the continuous operation of the power generating facility. 13: Inspection and Maintenance 116: Well Raising 4/22/2020 X Automatic X Shutdown Event 4/27/20 08:18 4/27/20 08:20 0.03 0.03 108.03 hours 108.03 hours X 113: Inspection and Maintenance 118: Construction Activities X Automatic X Shutdown Event 4/27/20 08:18 4/27/20 08:20 0.03 0.03 X 108.03 hours X 113: Inspection and Maintenance 118: Construction Activities X Automatic X Shutdown Event 4/27/20 08:18 4/27/20 08:20 0.03 0.03 X 113: Inspection and Maintenance 118: Construction Activities X Automatic X Shutdown Event 4/27/20 11:20 4/27/20 11:22 0.03 0.17 hours
Malfunction Event
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Startup Event Malfunction Event 4/22/20 20:16 4/22/20 20:18 0.03 4/22/20 20:18 0.03 116: Well Raising 4/22/2020 X Automatic Malfunction Event Malfunction Event 116: Well Raising 117: Gas Collection 118: Construction Activities X Automatic X Startup Event 4/27/20 08:18 4/27/20 08:20 0.03 108.03 hours 108.03 hours 118: Construction Activities X Automatic Shutdown Event 4/27/20 08:18 4/27/20 08:20 0.03 0.03 108.03 hours X Intervent X Automatic Malfunction Event 4/27/20 08:18 4/27/20 08:20 0.03 0.03 X Automatic X X Automatic Component: A-4 Flare X A/27/20 11:20 4/27/20 11:22 0.03 X Automatic shutdown to allow for the onthe
X Shutdown Event Malfunction Event L Shutdown Event Malfunction Event Automatic shutdown to allow for the continuous operation of the power generating facility. 117: Gas Collection X Automatic X Startup Event Shutdown Event 4/27/20 08:18 4/27/20 08:20 0.03 108.03 hours Automatic shutdown to allow for the continuous operation of the power generating facility. 117: Gas Collection 118: Construction Activities X Automatic X Shutdown Event 4/27/20 08:18 4/27/20 08:20 0.03 0.03 X Automatic shutdown to allow for the continuous operation of the power generating facility. 118: Construction Activities X Automatic X Shutdown Event 4/27/20 11:20 4/27/20 11:22 0.03 0.03 X Automatic shutdown to allow for the continuous operation of the power generating facility. X 118: Well Raising 116: Well Raising 4/27/2020 X Automatic X Shutdown Event 4/27/20 11:20 4/27/20 11:32 0.03 0.17 hours 0.17 hours X 118: Construction Activities X 118: X X Automatic X Shutdown Event 4/27/20 11:30 4/27/20 11:32 0.03 0.17 hours </td
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Shutdown Event 4/27/20 08:18 4/27/20 08:20 0.03 117: Gas Collection 4/27/200 X Automatic Malfunction Event 118: Construction Activities 118: Construction Activities X Automatic Component: A-4 Flare 4/27/20 11:20 4/27/20 11:22 0.03 X Automatic shutdown to allow for the continuous operation of the power generating facility. X 118: Well Raising 117: Gas Collection 4/27/200 X Automatic X Shutdown Event 4/27/20 11:20 4/27/20 11:22 0.03 0.17 hours Automatic shutdown to allow for the continuous operation of the power generating facility. 118: Well Raising 118: Sinspection and Maintenance 118: Construction Activities X Automatic X Startup Event 4/27/20 11:30 4/27/20 11:32 0.03 0.17 hours 0.17 hours 118: Well Raising 117: Gas Collection 4/27/200 X Automatic X Startup Event 4/27/20 11:30 4/27/20 11:32 0.03 0.17 hours 0.17 hours 118: Well Raising 117: Gas Collection 4/27/200 X Automatic X Startup Event 4/27/20 11:30 4/27/20 11:32 0.03 0.03 X Automatic A
Malfunction Event Malfunction Event 118: Construction Activities A Automatic Component: A-4 Flare A127/20 11:20 4/27/20 11:22 0.03 X 113: Inspection and Maintenance 4/27/20 10 Manual X Shutdown Event 4/27/20 11:20 4/27/20 11:22 0.03 0.17 hours 0.17 hours 116: Construction Activities 4/27/20 10 X Automatic X Startup Event Automatic shutdown to allow for the power generating facility. 118: Construction Activities X Automatic X Startup Event Automatic shutdown to allow for the power generating facility. 113: Inspection and Maintenance X Automatic X Startup Event Automatic Shutdown Event 116: Well Raising 4/27/2020 X Automatic Shutdown Event Automatic Shutdown Event Automatic Shutdown to allow for the power generating facility. 118: Construction Activities X Automatic X Startup Event Automatic Shutdown Event X Automatic X Automatic Shutdown Event Automatic Shutdown Event Automatic Shutdown Event X Automatic X X <
Component: A-4 Flare X X 113: Inspection and Maintenance X Manual Startup Event 4/27/20 11:20 4/27/20 11:22 0.03 0.17 hours Automatic shutdown to allow for the power generating facility. 116: Well Raising 4/27/2020 X Automatic X Startup Event 4/27/20 11:30 4/27/20 11:32 0.03 0.17 hours 0.17 hours 118: Construction Activities 118: Construction Activities X Automatic X Startup Event 4/27/20 11:30 4/27/20 11:32 0.03 0.03 0.17 hours 0.17 hours 118: Construction Activities X Automatic X Startup Event 4/27/20 11:30 4/27/20 11:32 0.03 0.03 0.17 hours X 113: Inspection and Maintenance generating facility. 116: Well Raising 4/27/2020 X Automatic Shutdown Event 4/27/20 11:30 4/27/20 11:32 0.03 0.03 X Automatic 116: Well Raising 4/27/2020 X Automatic X Shutdown Event 4/27/20 11:30 4/27/20 11:32 0.03 X Automatic X 117: Gas Collection X<
Startup Event 4/27/20 11:20 4/27/20 11:22 0.03 116: Well Raising 4/27/2020 X Shutdown Event Malfunction Event 116: Construction Activities 117: Gas Collection X Automatic Component: A-4 Flare 4/27/20 11:30 4/27/20 11:32 0.03 0.17 hours 0.17 hours 118: Construction Activities 118: Construction Activities X Automatic Shutdown Event 4/27/20 11:30 4/27/20 11:32 0.03 0.03 117: Gas Collection 4/27/2020 X Automatic
X Shutdown Event Automatic shutdown to allow for the continuous operation of the power generating facility. In: Sea Collection X Automatic Malfunction Event 4/27/20 11:30 4/27/20 11:32 0.03 0.17 hours Automatic shutdown to allow for the continuous operation of the power generating facility. 118: Construction Activities X Automatic X Startup Event 4/27/20 11:30 4/27/20 11:32 0.03 0.03 Automatic shutdown to allow for the continuous operation of the power generating facility. 118: Well Raising 4/27/2020 Manual 116: Well Raising 117: Gas Collection 117: Gas Collection X Automatic
Component: A-4 Flare X Startup Event 4/27/20 11:30 4/27/20 11:32 0.03 0.17 hours continuous operation of the power generating facility. X X X X Manual Shutdown Event 4/27/20 11:30 4/27/20 11:32 0.03 0.03 0.17 hours 0.17 hours 0.17 hours 0.17 hours X X X X X Manual
X Startup Event 4/27/20 11:30 4/27/20 11:32 0.03 generating facility. 116: Well Raising 4/27/2020 Shutdown Event 4/27/20 11:32 0.03 117: Gas Collection 4/27/2020 X Automatic
Shutdown Event 4/2//2011.30 4/2//2011.32 0.03 117: Gas Collection 4/2//2020 X Automatic
Malfunction Event 118: Construction Activities 114: Construction Activities
Component: A-4 Flare X 113: Inspection and Maintenance Manual
Startup Event 4/29/20 08:24 4/29/20 08:26 0.03
Malfunction Event Automatic shutdown to allow for the 118: Construction Activities X Automatic
Component: A-4 Flare 3.87 hours continuous operation of the power X 113: Inspection and Maintenance Manual
X Startup Event 4/29/20 12:16 4/29/20 12:18 0.03 generating lacinity. 116: Well Raising 4/29/2020
Shutdown Event 117: Gas Collection X Automatic
Maltunction Event 118: Construction Activities 2000
Statistic Event
4/29/20 14:36 4/29/20 14:38 0.03 117: Gas Collection 4/29/2020
X Malfunction Event 41.30 hours Automatic shutdown due to low 118: Construction Activities X Automatic
Component: A-4 Flare temperature. X 113: Inspection and Maintenance Manual
X Startup Event 5/1/20 07:54 5/1/20 07:56 0.03 116: Well Raising 5/1/2020
Sinulation Event 118: Construction Activities X Automatic

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	:0							
Identify Flare & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event	
Applicable Event	Date and Time	Date and Time	of Event (Hours)	Shutdown (Hours)			Completed	(Startup a	nd Shutdown Events Only)	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	5/1/20 13:26	5/1/20 13:28	0.03			11b: Well Raising	5/1/2020			
Malfunction Event				0.071	Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				0.07 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	5/1/20 13:30	5/1/20 13:32	0.03		generating lacinty.	116: Well Raising	5/1/2020		Wandai	
Shutdown Event						117: Gas Collection		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startup Event	5/4/00 40:44	5/4/00 40-40	0.00			116: Well Raising	5/4/0000		Manual	
X Shutdown Event	5/1/20 13:44	5/1/20 13:46	0.03		Automatic shutdown to allow for the	117: Gas Collection	5/1/2020	x	Automatic	
Malfunction Event				67.77 hours	continuous operation of the power	118: Construction Activities		X	Automatio	
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual	
Shutdown Event	5/4/20 09:30	5/4/20 09:32	0.03			117: Gas Collection	5/4/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	5/4/20 09:32	5/4/20 09:34	0.03			116: Well Raising	5/4/2020		manda	
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic	
Component: A-4 Flare				9.37 hours	continuous operation of the power	X 113: Inspection and Maintenance				
X Startup Event	5/4/20 19:54	E/4/20 19-E6	0.02		generating facility.	116: Well Raising	5/4/2020		Manual	
Shutdown Event	5/4/20 16.54	5/4/20 16.50	0.03			117: Gas Collection	5/4/2020	х	Automatic	
Malfunction Event						118: Construction Activities				
Startun Event						116: Well Baising			Manual	
Shutdown Event	5/4/20 19:06	5/4/20 19:08	0.03			117: Gas Collection	5/4/2020	X	A 1 1	
X Malfunction Event				0.07 hours	Automatic shutdown due to low	118: Construction Activities		X	Automatic	
Component: A-4 Flare				0.07 110015	temperature.	X 113: Inspection and Maintenance			Manual	
X Startup Event	5/4/20 19:10	5/4/20 19:12	0.03			116: Well Raising	5/4/2020			
Malfunction Event						118: Construction Activities		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	5/4/20 22:54	5/4/20 22:56	0.03			116: Well Raising	5/4/2020		ivianuai	
X Shutdown Event	5/4/20 22.04	514720 22.50	0.00		Automatic shutdown to allow for the	117: Gas Collection	5/4/2020	х	Automatic	
Malfunction Event				82.07 hours	continuous operation of the power	118: Construction Activities				
X Startup Event					generating facility.	116: Well Raising			Manual	
Shutdown Event	5/8/20 08:58	5/8/20 09:00	0.03			117: Gas Collection	5/8/2020	V	A t t	
Malfunction Event						118: Construction Activities		X	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
Startup Event	5/9/20 18:30	5/9/20 18:32	0.03			116: Well Raising	5/9/2020			
Malfunction Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare				85.47 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
X Startup Event	5/13/20 07:58	5/13/20 08:00	0.03		generating facility.	116: Well Raising	5/13/2020		wanuai	
Shutdown Event	3, 13, 23 01.00	0, 10, 20 00.00	0.00			117: Gas Collection	0, 10, 2020	х	Automatic	
Malfunction Event						118: Construction Activities				

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8 (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare Startup Event	5/13/20 14:02	5/13/20 14:04	0.03			X 113: Inspection and Maintenance 116: Well Raising	5/13/2020		Manual	
X Shutdown Event Malfunction Event	3/13/20 14.02	3/13/20 14.04	0.00	19.37 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities	3/13/2020	х	Automatic	
Component: A-4 Flare X Startup Event	5/14/20 09:24	5/14/20 09:26	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	5/14/2020		Manual	
Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic	
Startup Event	5/15/20 06:30	5/15/20 06:32	0.03			116: Well Raising	5/15/2020		Manual	
Malfunction Event				6.00 hours	Automatic shutdown to allow for the continuous operation of the power	118: Construction Activities		Х	Automatic	
X Startup Event	5/15/20 12:30	5/15/20 12:32	0.03		generating facility.	116: Well Raising	5/15/2020		Manual	
Malfunction Event						118: Construction Activities X 113: Inspection and Maintenance		Х	Automatic	
Startup Event X Shutdown Event	5/15/20 13:58	5/15/20 14:00	0.03			116: Well Raising 117: Gas Collection	5/15/2020		Manual	
Malfunction Event Component: A-4 Flare				67.57 hours	continuous operation of the power	118: Construction Activities X 113: Inspection and Maintenance		X	Automatic	
X Startup Event Shutdown Event	5/18/20 09:32	5/18/20 09:34	0.03		generating facility.	116: Well Raising 117: Gas Collection	5/18/2020	×		
Malfunction Event Component: A-4 Flare						118: Construction Activities X 113: Inspection and Maintenance		^	Manual	
Startup Event X Shutdown Event	5/18/20 19:54	5/18/20 19:56	0.03		Automatic shutdown to allow for the	116: Well Raising 117: Gas Collection	5/18/2020	х	Automatic	
Component: A-4 Flare				36.17 hours	continuous operation of the power generating facility.	X 113: Inspection and Maintenance			Manual	
Shutdown Event Malfunction Event	5/20/20 08:04	5/20/20 08:06	0.03			117: Gas Collection 118: Construction Activities	5/20/2020	Х	Automatic	
Component: A-4 Flare Startup Event	5/04/00 00:40	5/04/00 00:40	0.00			X 113: Inspection and Maintenance 116: Well Raising	5/04/0000		Manual	
X Shutdown Event Malfunction Event	5/21/20 03:46	5/21/20 03:48	0.03	6 47 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	5/21/2020	х	Automatic	
Component: A-4 Flare X Startup Event	5/21/20 10:14	5/21/20 10:16	0.03	0.47 hours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	5/21/2020		Manual	
Shutdown Event Malfunction Event	5/21/20 10.14	3/21/20 10.10	0.03			117: Gas Collection 118: Construction Activities	5/21/2020	х	Automatic	
Component: A-4 Flare Startup Event	5/21/20 23:12	5/21/20 23:14	0.03			X 113: Inspection and Maintenance 116: Well Raising	5/21/2020		Manual	
X Shutdown Event Malfunction Event	5/21/20 20.12	5/2 1/20 20.1-4	0.00	129.17 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities	SIE HEOED	Х	Automatic	
Component: A-4 Flare X Startup Event	5/27/20 08:22	5/27/20 08:24	0.03	.20	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	5/27/2020		Manual	
Shutdown Event Malfunction Event	SILITLO US.LL	5/21/20 00.24	0.00			117: Gas Collection 118: Construction Activities	5/27/2020	Х	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill - Livermore, California										
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	0							
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	5/27/20 22:48	5/27/20 22:50	0.03		Automatic shutdown to allow for the	117: Gas Collection	5/27/2020	х	Automatic	
Component: A-4 Flare				15.43 hours	continuous operation of the power generating facility.	X 113: Inspection and Maintenance			Manual	
Shutdown Event	5/28/20 14:14	5/28/20 14:16	0.03			117: Gas Collection	5/28/2020	х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance				
Startup Event	5/29/20 18:36	5/29/20 18:38	0.03		Automotic chattana das to loss	116: Well Raising	5/29/2020		Manual	
X Malfunction Event				62.87 hours	temperature and to allow for the	118: Construction Activities		Х	Automatic	
Component: A-4 Flare X Startup Event	6/1/20 09:28	6/1/20 09:30	0.03		continuous operation of the power generating facility.	X 113: Inspection and Maintenance 116: Well Raising	6/1/2020		Manual	
Shutdown Event Malfunction Event	0/1/20 09.20	0/1/20 09:30	0.03			117: Gas Collection 118: Construction Activities	0/1/2020	х	Automatic	
Component: A-4 Flare Startup Event						X 113: Inspection and Maintenance	0/0/0000		Manual	
Shutdown Event	6/2/20 23:58	6/3/20 00:00	0.03		Automatic shutdown due to low	117: Gas Collection	6/2/2020	х	Automatic	
Component: A-4 Flare				8.50 hours	temperature.	X 113: Inspection and Maintenance		х	Manual	
Shutdown Event	6/3/20 08:28	6/3/20 08:30	0.03			117: Gas Collection	6/3/2020		Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual	
X Shutdown Event	6/3/20 13:00	6/3/20 13:02	0.03		Automatic shutdown to allow for the	116: Well Raising 117: Gas Collection	6/3/2020	х	Automatic	
Malfunction Event				44.67 hours	continuous operation of the power	118: Construction Activities				
X Startup Event	6/5/20 00:40	6/5/20 00:42	0.03		generating facility.	116: Well Raising	6/5/2020		Manual	
Shutdown Event Malfunction Event	0/0/20 00.40	0,0,20 00.42	0.00			117: Gas Collection 118: Construction Activities	0/0/2020	Х	Automatic	
Component: A-4 Flare Startup Event						X 113: Inspection and Maintenance			Manual	
Shutdown Event	6/6/20 21:34	6/6/20 21:36	0.03		Automatic shutdown due to low temperature and to allow for the	117: Gas Collection	6/6/2020	Х	Automatic	
Component: A-4 Flare				36.17 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual	
Shutdown Event	6/8/20 09:44	6/8/20 09:46	0.03		generating facility.	116: Well Raising 117: Gas Collection	6/8/2020	х	Automatic	
Malfunction Event						118: Construction Activities				
Startup Event	6/8/20 09:56	6/8/20 09:58	0.03			116: Well Raising	6/8/2020		Manual	
Shutdown Event X Malfunction Event				0.20 bours	Automatic shutdown due to low	117: Gas Collection 118: Construction Activities		х	Automatic	
Component: A-4 Flare X Startup Event	0/0/00 40 00		0.00	0.20 110015	temperature.	X 113: Inspection and Maintenance 116: Well Raising	0/0/0000		Manual	
Shutdown Event Malfunction Event	6/8/20 10:08	6/8/20 10:10	0.03			117: Gas Collection 118: Construction Activities	6/8/2020	х	Automatic	

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill	 Livermore, Califorr 	nia							
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20						
Identify Flare & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration	(5) 0	(C) Analizable C 04 Evenentian	(7) Date Form	(8) Type of Event
Applicable Event	Date and Time	Date and Time	of Event (Hours)	Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	Completed	(Startup a	nd Shutdown Events Only)
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
Startup Event	6/8/20 10:22	6/8/20 10:24	0.03			116: Well Raising	6/8/2020		iviariuai
Shutdown Event	0/0/20 10.22	0/0/20 10.24	0.00			117: Gas Collection	0/0/2020	x	Automatic
X Malfunction Event				2.30 hours	Automatic shutdown due to low	118: Construction Activities		Х	Automatio
Component: A-4 Flare					temperature.	X 113: Inspection and Maintenance		х	Manual
X Startup Event	6/8/20 12:40	6/8/20 12:42	0.03			116: Well Raising	6/8/2020		
Shutdown Event						117: Gas Collection			Automatic
Malfunction Event						118: Construction Activities			
Stortup Event						A 115: Inspection and Maintenance			Manual
X Shutdown Event	6/8/20 17:06	6/8/20 17:08	0.03			117: Gas Collection	6/8/2020		
Malfunction Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic
Component: A-4 Flare				16.80 hours	continuous operation of the power	X 113: Inspection and Maintenance			
X Startup Event	6/0/20 00/54	6/0/20 00/56	0.02		generating facility.	116: Well Raising	6/0/2020		Manual
Shutdown Event	6/9/20 09:54	6/9/20 09:56	0.03			117: Gas Collection	6/9/2020	v	Automotio
Malfunction Event						118: Construction Activities		^	Automatic
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
Startup Event	6/9/20 16:20	6/9/20 16:22	0.03			116: Well Raising	6/9/2020		Mariaa
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		х	Automatic
Malfunction Event				16.57 hours	continuous operation of the power	118: Construction Activities			
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual
X Startup Event	6/10/20 08:54	6/10/20 08:56	0.03			116: Well Raising	6/10/2020		
Malfunction Event						118: Construction Activities		Х	Automatic
Component: A-4 Flare						X 113: Inspection and Maintenance			
Startup Event						116: Well Raising			Manual
Shutdown Event	6/14/20 21:34	6/14/20 21:36	0.03			117: Gas Collection	6/14/2020	V	A 1 1
X Malfunction Event				10.47 hours	Automatic shutdown due to low	118: Construction Activities		X	Automatic
Component: A-4 Flare				10.47 nours	temperature.	X 113: Inspection and Maintenance		x	Manual
X Startup Event	6/15/20 08:02	6/15/20 08:04	0.03			116: Well Raising	6/15/2020	~	Inditidal
Shutdown Event	0/10/20 00.02	0/10/20 00.04	0.00			117: Gas Collection	0/10/2020		Automatic
Malfunction Event						118: Construction Activities			
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
Startup Event	6/17/20 09:12	6/17/20 09:14	0.03			116: Well Raising	6/17/2020		
A Shuldown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic
Component: A-4 Flare				23.03 hours	continuous operation of the power	X 113: Inspection and Maintenance			
X Startup Event					generating facility.	116: Well Raising			Manual
Shutdown Event	6/18/20 08:14	6/18/20 08:16	0.03			117: Gas Collection	6/18/2020	X	A 1 1
Malfunction Event						118: Construction Activities		X	Automatic
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
Startup Event	6/18/20 16:42	6/18/20 16:44	0.03			116: Well Raising	6/18/2020		Ivianuai
X Shutdown Event	5/10/20 10.72	5/10/20 10.74	0.00		Automatic shutdown to allow for the	117: Gas Collection	0/10/2020	x	Automatic
Malfunction Event				16.23 hours	continuous operation of the power	118: Construction Activities		~	,
Component: A-4 Flare					generating facility.	X 113: Inspection and Maintenance			Manual
X Startup Event	6/19/20 08:56	6/19/20 08:58	0.03			110: Well Kalsing	6/19/2020		
Malfunction Event						118: Construction Activities		Х	Automatic
			-		L	o. Oonsi uouon Aouvides	1		

AFFECTED EQUIPMENT: A-4 Flare

Vasco Road Landfill	- Livermore, Califorr	nia							
SSMP REPORT - From	m February 1, 2020 t	through July 31, 202	20						
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	(8) (Startup a) Type of Event nd Shutdown Events Only)
Component: A-4 Flare Startup Event	6/19/20 11:36	6/19/20 11:38	0.03			X 113: Inspection and Maintenance 116: Well Raising	6/19/2020		Manual
X Shutdown Event Malfunction Event				0.10 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic
Component: A-4 Flare X Startup Event	6/19/20 11:42	6/19/20 11:44	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	6/19/2020		Manual
Shutdown Event Malfunction Event						117: Gas Collection 118: Construction Activities		Х	Automatic
Component: A-4 Flare Startup Event	6/19/20 12:46	6/19/20 12:48	0.03			X 113: Inspection and Maintenance 116: Well Raising	6/19/2020		Manual
X Shutdown Event Malfunction Event				0.40 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		Х	Automatic
Component: A-4 Flare X Startup Event	6/19/20 13:10	6/19/20 13:12	0.03		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	6/19/2020		Manual
Shutdown Event Malfunction Event								Х	Automatic
Component: A-4 Flare Startup Event	6/20/20 02:14	6/20/20 02:16	0.03			X 113: Inspection and Maintenance 116: Well Raising	6/20/2020		Manual
X Shutdown Event Malfunction Event				101 90 hours	Automatic shutdown to allow for the continuous operation of the power	117: Gas Collection 118: Construction Activities		х	Automatic
Component: A-4 Flare X Startup Event	6/24/20 08:08	6/24/20 08:10	0.03	io noti io noti o	generating facility.	X 113: Inspection and Maintenance 116: Well Raising 6/24/202	6/24/2020		Manual
Shutdown Event Malfunction Event	0/2 // 20 00:00	0/2 //20 00:10	0.00			117: Gas Collection 118: Construction Activities	0/2 1/2020	х	Automatic
Component: A-4 Flare Startup Event	6/25/20 08:00	6/25/20 08:02	0.03			X 113: Inspection and Maintenance 116: Well Raising	6/25/2020		Manual
X Shutdown Event Malfunction Event	0/20/20 00:00	0,20,20 00.02	0.00	128.40 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	0,20,2020	х	Automatic
Component: A-4 Flare X Startup Event	6/30/20 16:24	6/30/20 16:26	0.03	120.40 hours	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	6/30/2020		Manual
Shutdown Event Malfunction Event	0/00/20 10:24	0/00/20 10:20	0.00			117: Gas Collection 118: Construction Activities	0/00/2020	х	Automatic
Component: A-4 Flare Startup Event	6/30/20 17:08	6/30/20 17:10	0.03			X 113: Inspection and Maintenance 116: Well Raising	6/30/2020		Manual
X Shutdown Event Malfunction Event	0/30/20 17.00	0/30/20 11:10	0.00	0.20 bours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	0/30/2020	х	Automatic
Component: A-4 Flare X Startup Event	6/30/20 17:20	6/30/20 17:22	0.03	0.20 10013	generating facility.	X 113: Inspection and Maintenance 116: Well Raising	6/30/2020		Manual
Shutdown Event Malfunction Event	0/30/20 17.20	0/30/20 17.22	0.03			117: Gas Collection 118: Construction Activities	0/30/2020	х	Automatic
Component: A-4 Flare Startup Event	7/2/20 10:24	7/2/20 10:26	0.02			X 113: Inspection and Maintenance 116: Well Raising	7/2/2020		Manual
X Shutdown Event Malfunction Event	112120 10.34	112/20 10.30	0.03	118.97 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	11212020	х	Automatic
Component: A-4 Flare X Startup Event	7/7/20 00:22	7/7/20 00:24	0.02		generating facility.	X 113: Inspection and Maintenance 116: Well Raising	7/7/2020		Manual
Shutdown Event Malfunction Event	111120 09.32	111120 09:34	0.03			117: Gas Collection 118: Construction Activities	////2020	х	Automatic

AFFECTED EQUIPMENT: A-4 Flare

Completed F	v · Tetra Tech
Completed L	

Vasco Road Landfill -	 Livermore, Califorr 	nia							
SSMP REPORT - From	m February 1, 2020 t	hrough July 31, 202	20						
Identify Flare & Check	(1) Start of Event	(2) End of Event	(3) Duration	(4) Duration	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form	(8) Type of Event
Applicable Event	Date and Time	Date and Time	of Event (Hours)	Shutdown (Hours)			Completed	(Startup a	nd Shutdown Events Only)
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
Startup Event	7/9/20 21:24	7/9/20 21:26	0.03			116: Well Raising	7/9/2020		
X Shutdown Event					Automatic shutdown to allow for the	117: Gas Collection		Х	Automatic
Component: A-4 Flare				72.57 hours	continuous operation of the power	X 113: Inspection and Maintenance			
X Startup Event	7/10/00 01 50	7/10/00 00 00	0.00		generating facility.	116: Well Raising	7/10/0000		Manual
Shutdown Event	7/12/20 21:58	//12/20 22:00	0.03			117: Gas Collection	7/12/2020	Y	Automatic
Malfunction Event						118: Construction Activities		~	Automatic
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
Startup Event	7/13/20 10:18	7/13/20 10:20	0.03			116: Well Raising	7/13/2020		
A Shuldown Event					Automatic shutdown to allow for the	118: Construction Activities		Х	Automatic
Component: A-4 Flare				46.07 hours	continuous operation of the power	X 113: Inspection and Maintenance			
X Startup Event	7/15/20 09:22	7/15/20 08:24	0.02		generating facility.	116: Well Raising	7/15/2020		Manual
Shutdown Event	1/15/20 06.22	7/15/20 06.24	0.03			117: Gas Collection	7/15/2020	х	Automatic
Malfunction Event						118: Construction Activities		~	Automatio
Component: A-4 Flare						X 113: Inspection and Maintenance			Manual
X Shutdown Event	7/19/20 02:04	7/19/20 02:06	0.03			117: Gas Collection	7/19/2020		
Malfunction Event				00.001	Automatic shutdown to allow for the	118: Construction Activities	118: Construction Activities		Automatic
Component: A-4 Flare				32.30 hours	continuous operation of the power	X 113: Inspection and Maintenance			Manual
X Startup Event	7/20/20 10:22	7/20/20 10:24	0.03		generating facility.	116: Well Raising	Well Raising 7/20/2020		Waliuai
Shutdown Event						117: Gas Collection		х	Automatic
Malfunction Event						118: Construction Activities			
Startup Event						116: Well Raising			Manual
X Shutdown Event	7/22/20 21:20	7/22/20 21:22	0.03		Australia alexitativan ta allari fan tha	117: Gas Collection	7/22/2020	v	A
Malfunction Event				106.93 hours	Automatic shutdown to allow for the	118: Construction Activities		X	Automatic
Component: A-4 Flare				100.95 10015	denerating facility.	X 113: Inspection and Maintenance			Manual
X Startup Event	7/27/20 08:16	7/27/20 08:18	0.03		g	116: Well Raising	7/27/2020		
Malfunction Event	Event				117: Gas Collection		Х	Automatic	
Component: A-4 Flare						X 113: Inspection and Maintenance			
Startup Event	7/07/00 40 40	7/07/00 40 44	0.00			116: Well Raising	7/07/0000		Manual
X Shutdown Event	//2//20/10:42	//2//20 10:44	0.03		Automatic shutdown to allow for the	117: Gas Collection	//2//2020	Y	Automatic
Malfunction Event				21.57 hours	continuous operation of the power	118: Construction Activities		^	Automatic
Component: A-4 Flare				21.07 1.04.0	generating facility.	X 113: Inspection and Maintenance			Manual
A Startup Event	7/28/20 08:16	7/28/20 08:18	0.03			11b: Well Raising	7/28/2020		
Malfunction Event					117. G			Х	Automatic

AFFECTED EQUIPMENT: A-4 Flare

					Completed By : Tetra Tech				
Vasco Road Landfill SSMP REPORT - Fro	- Livermore, Califorı m February 1, 2020 t	nia through July 31, 202	20						
Identify Flare & Check Applicable Event	(1) Start of Event Date and Time	(2) End of Event Date and Time	(3) Duration of Event (Hours)	(4) Duration Shutdown (Hours)	(5) Cause or Reason	(6) Applicable 8-34 Exemption	(7) Date Form Completed	8) ہ (Startup)	 Type of Event Shutdown Events Only)
Component: A-4 Flare Startup Event	7/20/20 21:38	7/20/20 21-40	0.03			X 113: Inspection and Maintenance 116: Well Raising	7/20/2020		Manual
X Shutdown Event Malfunction Event	1123120 21.30	1123/20 21.40	0.00	50.37 hours	Automatic shutdown to allow for the	117: Gas Collection 118: Construction Activities	1123/2020	х	Automatic
Component: A-4 Flare Startup Event				as of August 1, 2020 ¹	generating facility.	113: Inspection and Maintenance 116: Well Raising		<u> </u>	Manual
Shutdown Event Malfunction Event						117: Gas Collection 118: Construction Activities			Automatic
TOTAL A-4 FLARE DOWN TOTAL AVAILABLE HOUF TOTAL RUNTIME FEBRU	ITIME RS FEBRUARY 1, 2020 T ARY 1, 2020 THROUGH	HROUGH JULY 31, 2020 JULY 31, 2020 (HOURS)	*.	3,174.13 4,367.00 1,192.87]				

 RUNTIME PERCENTAGE:
 27.32%

 TOTAL NUMBER OF SSM EVENTS:
 138

*There were 696.00 hours in February 2020 due to the year 2020 being a Leap Year. There were 743 hours in March 2020 due to Daylight Savings Time.

**Per the Startup, Shutdown, and Malfunction (SSM) forms, a flare flame failure shutdown is due to limited gas available while acting as a back-up device to the engine plant

¹The A-4 flare remained offline at the beginning and end of the reporting period. For reporting purposes, the startup and shutdown is calculated as having begun on February 1, 2019 at 00:00 and having ended August 1, 2020 at 0:00.

APPENDIX E

GCCS DOWNTIME

Emission Control Devices Total Gas Collection and Control System (GCCS) Downtime

Vasco Road Landfill - Livermore, California

ACCS DOWNTIME REPORT Period February 1, 2020 through July 31, 2020								
SHUTDOWN DATE/TIME	START-UP DATE/TIME	TOTAL DOWNTIME (hours)	Ameresco Facility COMMENTS OR REASONS	A-4 Flare COMMENTS OR REASONS	ACTION TAKEN			
3/14/2020 8:14	3/14/2020 8:27	0.22	Unplanned engine shutdown due to electrical utility.	Automatic shutdown due to flame failure, remained offline to allow for continuous operation of the power generating facility.	Restart engines only.			
4/15/20 7:35	4/15/2020 7:36	0.02	Unplanned shutdown due to landfill vacuum and limited gas.	Automatic shutdown due to flame failure, remained offline to allow for continuous operation of the power generating facility.	Restart engines only.			
4/22/20 14:54	4/22/20 15:12	0.31	Engine 1 proactively shutdown due to engine issues. Engine 2 experienced an unplanned shutdown due to oxygen levels.	Automatic shutdown due to flame failure, remained offline to allow for continuous operation of the power generating facility.	Restart engines only.			
4/22/20 15:24	4/22/20 15:28	0.07	Engine 1 proactively shutdown due to engine issues. Engine 2 experienced an unplanned shutdown due to oxygen levels.	Automatic shutdown due to low temperature.	Restart engines only.			
4/22/20 15:42	4/22/20 15:46	0.07	Engine 1 proactively shutdown due to engine issues. Engine 2 experienced an unplanned shutdown due to oxygen levels.	Automatic shutdown due to flame failure, remained offline to allow for continuous operation of the power generating facility.	Restart engines only.			
4/22/20 15:48	4/22/20 16:02	0.24	Engine 1 proactively shutdown due to engine issues. Engine 2 experienced an unplanned shutdown due to oxygen levels.	Automatic shutdown due to flame failure, remained offline to allow for continuous operation of the power generating facility.	Restart engines only.			
4/22/20 16:16	4/22/20 16:32	0.28	Engine 1 proactively shutdown due to engine issues. Engine 2 experienced an unplanned shutdown due to oxygen levels.	Automatic shutdown due to low temperature.	Restart engines only.			
4/29/2020 8:24	4/29/2020 12:16	4.03	Unplanned shutdown due to landfill vacuum and limited gas.	Automatic shutdown due to flame failure, remained offline to allow for continuous operation of the power generating facility.	Restart engines only.			
5/1/20 7:45	5/1/2020 7:54	0.16	Unplanned shutdown due to landfill vacuum and limited gas.	Automatic shutdown due to low temperature.	Restart engines only.			
6/9/20 9:21	6/9/20 9:54	0.57	Unplanned shutdown due to line and substation maintenance.	Automatic shutdown due to flame failure, flare remained offline to allow for continuous operation of the power generating facility.	Restart engines only.			
6/30/20 15:33	6/30/20 16:24	0.89	Unplanned shutdown due to valve issues.	Automatic shutdown due to flame failure, flare remained offline to allow for continuous operation of the power generating facility.	Restart engines only.			
7/12/20 21:43	7/12/2020 21:58	0.26	Proactive shutdown due to engine issues.	Automatic shutdown due to flame failure, flare remained offline to allow for continuous operation of the power generating facility.	Replace engine and restart.			

Combined Emission Control Devices							
FEBRUARY 1, 2020 THROUGH JULY 31, 2020 TOTAL DOWNTIME (HOURS):	7.11						
2020 TOTAL DOWNTIME AS OF JULY 31, 2020 (HOURS):	7.11						
TOTAL PERMITTED DOWNTIME (HOURS):	240						
2020 DOWNTIME PERCENT OF 240 HOURS:	2.96%						
	Element and the second second	7					

GCCS Downtime is when all emission control devices, Ameresco Engines and A-4 Flare, are not operating.

APPENDIX F

TEMPERATURE DEVIATION/INOPERATIVE MONITOR/MISSING DATA REPORT

Vasco Road Landfill, Livermore, California A-4 FLARE TEMPERATURE DEVIATION/ INOPERATIVE MONITOR REPORT FEBRUARY 1, 2020 THROUGH JULY 31, 2020

REPORT PREPARED BY: Tetra Tech **TEMPERATURE SENSING DEVICE:** Thermocouple **DATE:** August 1, 2020 **MODEL:** Thermo-Electric

START DATE & TIME	END DATE & TIME	DURATION	CAUSE	EXPLANATION	ACTION TAKEN
4/19/20 7:44	4/19/20 8:58	1.23	A-4 Flare 3-hour average temperature was below the minimum temperature of 1,402°F while the flare was in operation.	The A-4 Flare temperature deviations were due to Operations and Maintenance (O&M) personnel's ongoing maintenance and testing of new set points to allow for increased operation.	O&M personnel set the A-4 flare's low temperature shutdown to 1,500°F and will complete additional adjustments and maintenance as needed.
4/21/20 2:48	4/21/20 6:52	4.07	A-4 Flare 3-hour average temperature was below the minimum temperature of 1,402°F while the flare was in operation.	The A-4 Flare temperature deviations were due to O&M personnel's ongoing maintenance and testing of new set points to allow for increased operation.	O&M personnel set the A-4 flare's low temperature shutdown to 1,500°F and will complete additional adjustments and maintenance as needed.
4/28/20 10:50	4/28/20 12:48	1.97	A-4 Flare 3-hour average temperature was below the minimum temperature of 1,402°F while the flare was in operation.	The A-4 Flare temperature deviations were due to O&M personnel's ongoing maintenance and testing of new set points to allow for increased operation.	O&M personnel set the A-4 flare's low temperature shutdown to 1,500°F and will complete additional adjustments and maintenance as needed.
4/28/20 21:52	4/29/20 8:24	10.53	A-4 Flare 3-hour average temperature was below the minimum temperature of 1,402°F while the flare was in operation.	The A-4 Flare temperature deviations were due to O&M personnel's ongoing maintenance and testing of new set points to allow for increased operation.	O&M personnel set the A-4 flare's low temperature shutdown to 1,500°F and will complete additional adjustments and maintenance as needed.

COMMENTS:

In accordance with Permit to Operate (PTO) Condition Number 818, Part 5, the A-4 Flare combustion zone 3-hour average temperature did not drop below 1 1,402 degrees Fahrenheit (°F) while the flare was in operation.

APPENDIX G

COVER INTEGRITY MONITORING REPORTS



No cover integrity issues were identified during the reporting period.

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT COVER INTEGRITY INSPECTION

LOCATION:	Vasco Road Disposal Site
INSPECTION DATE:	2-7-20
TECHNICIAN:	Jorge Contreras

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	Х		
Signs clearly posted	Х		
Evidence of trespassing		Х	
Litter or debris on-site		Х	
Fence in good condition	Х		

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		Х	
Erosion on cap system		Х	
Erosion on side slopes		Х	
Ponding of water on cap		Х	
Surface cracking		Х	
Acceptable vegetation	Х		
Exposed waste		Х	

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	Х		
Flare/Blower station secured	Х		



No cover integrity issues were identified during the reporting period.

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT COVER INTEGRITY INSPECTION

LOCATION:	Vasco Road
INSPECTION DATE:	3-21-20
TECHNICIAN:	Jorge Contreras

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	Х		
Signs clearly posted	Х		
Evidence of trespassing		Х	
Litter or debris on-site		Х	
Fence in good condition	Х		

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		Х	
Erosion on cap system		Х	
Erosion on side slopes		Х	
Ponding of water on cap		Х	
Surface cracking		Х	
Acceptable vegetation	Х		
Exposed waste		Х	

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	Х		
Flare/Blower station secured	Х		



No cover integrity issues were identified during the reporting period.

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT COVER INTEGRITY INSPECTION

LOCATION:	Vasco Road
INSPECTION DATE:	4-20-20
TECHNICIAN:	Jorge Contreras

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	Х		
Signs clearly posted	Х		
Evidence of trespassing		Х	
Litter or debris on-site		Х	
Fence in good condition	Х		

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		Х	
Erosion on cap system		Х	
Erosion on side slopes		Х	
Ponding of water on cap		Х	
Surface cracking		Х	
Acceptable vegetation	Х		
Exposed waste		Х	

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	Х		
Flare/Blower station secured	Х		

Cover Integrity



Vasco Road

Timestamp	Site Conditions	Weather Conditions	ltem Keywords	Item Description	Recommended Remedy	Field Image	Image Description	Technician	Completed
5/14/2020	dry	overcast	Erosion	Hole near well LRW002	Fill with dirt/ re- grade		Lat: 37.760103 Long: -121.72396	max.polkabla	
5/14/2020	dry	overcast	Erosion	Erosion at EW160	Fill with dirt and grade		Lat: 37.760887 Long: -121.72937	max.polkabla	

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT COVER INTEGRITY INSPECTION

LOCATION:	Vasco Road
INSPECTION DATE:	5-18-20
TECHNICIAN:	Jorge Contreras

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	Х		
Signs clearly posted	Х		
Evidence of trespassing		Х	
Litter or debris on-site		Х	
Fence in good condition	Х		

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		Х	
Erosion on cap system		Х	
Erosion on side slopes		Х	
Ponding of water on cap		Х	
Surface cracking		Х	
Acceptable vegetation	Х		
Exposed waste		Х	

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	Х		
Flare/Blower station secured	Х		



No cover integrity issues were identified during the reporting period.

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT COVER INTEGRITY INSPECTION

LOCATION:	Vasco Road
INSPECTION DATE:	6-24-20
TECHNICIAN:	Jorge Contreras

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	Х		
Signs clearly posted	Х		
Evidence of trespassing		Х	
Litter or debris on-site		Х	
Fence in good condition	Х		

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		Х	
Erosion on cap system		Х	
Erosion on side slopes		Х	
Ponding of water on cap		Х	
Surface cracking		Х	
Acceptable vegetation	Х		
Exposed waste		Х	

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition	Х		
Flare/Blower station secured	Х		

Cover Integrity



Vasco Road 7/1/2020 - 7/31/2020

Timestamp	Site Conditions	Weather Conditions	ltem Keywords	Item Description	Recommended Remedy	Field Image	Image Description	Technician	Completed
7/16/2020	dry	clear	Erosion	Hole at base of well casing	Fill in hole with sediment		Lat: 37.760919 Long: -121.72938	Jorge.contreras	

OPERATIONS AND MAINTENANCE SITE INSPECTION REPORT COVER INTEGRITY INSPECTION

LOCATION:	Vasco Road			
INSPECTION DATE:	7-27-20			
TECHNICIAN:	Jorge Contreras			

SECURITY & ACCESS	YES	NO	COMMENTS
Entrance locked and secured	Х		
Signs clearly posted	Х		
Evidence of trespassing		Х	
Litter or debris on-site		Х	
Fence in good condition	Х		

COVER & VEGETATION	YES	NO	COMMENTS
Settling of cap		Х	
Erosion on cap system		Х	
Erosion on side slopes		Х	
Ponding of water on cap		Х	
Surface cracking		Х	
Acceptable vegetation	Х		
Exposed waste		Х	

LFG SYSTEM	YES	NO	COMMENTS
Extraction wells in good condition		Х	Foot hole near well EW160; see detailed report
Flare/Blower station secured	Х		

APPENDIX H

SURFACE EMISSIONS MONITORING REPORTS



Vasco Road Landfill

Quarterly Surface Emissions Monitoring Report – First Quarter 2020







April 29, 2020

Mr. Lochlin Caffey Republic Services Vasco Road Landfill 4001 N Vasco Rd Livermore, CA 94551

Subject: First Quarter 2020 Surface Emissions Monitoring Results for the Vasco Road Landfill, Livermore, CA

Dear Mr. Caffey:

This report provides results of the first quarter 2020 New Source Performance Standards (NSPS) and California Air Resources Board (CARB) Landfill Methane Rule (LMR) surface emissions monitoring (SEM) performed by Tetra Tech at the subject site. All work was performed in accordance with Republic Standard Operating Procedures (SOP), NSPS and LMR requirements.

SUMMARY AND CONCLUSIONS

As stipulated in the LMR, if uncorrectable exceedances within the 10-day limitation are detected or emissions are discovered during an inspection by Regulatory Agencies, the landfill must perform monitoring on a 25-foot pathway on a quarterly basis for active disposal sites. If four (4) consecutive quarters of monitoring are performed without any exceedances, as stipulated in the LMR, the landfill may increase the spacing to 100-foot pathways. Therefore, based on the previous monitoring events, in which exceedances were observed, the monitoring at the Vasco Road Landfill was performed on 25-foot pathways in accordance with the LMR.

As required by the LMR, the landfill was divided into 50,000 square foot or less (partial) areas. The Vasco Road Landfill surface area was, therefore, divided into two hundred and thirty-three (233) individual grids as shown in Appendix A.

The first quarter 2020 SEM testing results indicated zero (0) exceedances of the LMR integrated threshold limit of 25 parts per million by volume (ppmv) as measured as methane above background and twelve (12) locations that exceeded the NSPS (Grids) and LMR (Grids and Penetrations) instantaneous level of 500 ppmv during the initial monitoring event. System adjustments and repair work was performed by Tetra Tech and site personnel. Subsequent re-monitoring occurred within the required timelines from NSPS and LMR. Re-monitoring indicated there were zero (0) locations with remaining instantaneous exceedances. These results are discussed in a subsequent section of this report.

Additionally, during this event, some grids were not monitored as these areas were deemed unsafe by Tetra Tech and site personnel for entry due to active filling operations or soil management operations, which could cause a potential for injury of monitoring personnel as follows:
- Full grids 14, 27, 31, 35, 36, 37, 41, 42, 49, 50, 51, 52, 58, 59, 60, 66, 67, 68, 69, 74, 75, 76, 77, 83, 84, 85, 86, 94, 95, 96, 102, 103, 104, 105, 113, 114, 115, 123, 124, 134, 135, 136, 137, 147, 148, 149, 150, 160, 161, 162, 163, 164, 174, 175, 176, 177, 187, 188, 189, 190, 191, 192, 193, 201, 202, 203, 211, 212, 213, 214, 215, 223, 224, 225, 227, 228, 229, 230, 231, 232, and 233 were not monitored due to active construction, heavy equipment traffic, or steep slopes (steeper than 33.5% or 18 degrees) which resulted in unsafe conditions. (see Appendix A).
- Partial grids 2, 4, 11, 13, 15, 17, 19, 23, 26, 30, 34, 40, 43, 44, 45, 48, 53, 54, 57, 61, 62, 70, 78, 79, 87, 93, 112, 122, 133, 138, 146, 151, 159, 173, 178, 185, 186, 194, 195, 200, 204, 205, 210, 216, 222, and 226 were not monitored due to active construction, heavy equipment traffic, or steep slopes (steeper than 33.5% or 18 degrees) which resulted in unsafe conditions. (see Appendix A).

Areas consisting of native soil (no waste in place) were also exempted from monitoring, in accordance with the LMR.

Any wells located in grids noted as exempt from monitoring due to health and safety concerns that remained accessible were monitored on an as-needed basis.

Excluded areas are provided on the field map in Appendix A.

Further, as required under the LMR, any location on the landfill that has an observed instantaneous methane concentration greater than or equal to 500 ppmv, must be stake-marked and Global Positioning System (GPS) located on a site figure. When concentrations greater than or equal to 500 ppmv are observed during monitoring events, they are reported to site personnel and included in the quarterly report for that event for inclusion into the annual report as required.

Locations with concentrations between 200 ppmv and 499 ppmv are for reporting purposes only and require no remediation, as they are not an exceedance. Five (5) locations were found during the monitoring between the LMR instantaneous recording levels of 200 ppmv to 499 ppmv.

Finally, to help prevent potential future exceedances, Tetra Tech recommends that the landfill surface be routinely inspected, and any observed surface erosion be routinely repaired and flowrates to the destruction devices be maximized.

BACKGROUND

The Vasco Road Landfill is an active organic refuse disposal site. By way of background, organic materials buried in a landfill decompose anaerobically (in the absence of oxygen) producing a combustible gas, which contains approximately 50 to 60 percent methane, 40 to 50 percent carbon dioxide, and trace amounts of various other gases, some of which are odorous. The Vasco Road Landfill property contains a Gas Collection and Control System (GCCS) to control the combustible gases generated in the landfill that may otherwise either vent vertically to the atmosphere or migrate horizontally through subsurface soil to locations on adjacent properties.

SURFACE EMISSIONS MONITORING

Instantaneous and integrated SEM was performed over the surface of the subject site on February 3, 4, 5, 6, 7, and 20, 2020. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the NSPS and/or LMR threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring in the 50,000 square foot grids as required under the LMR. During this event Tetra Tech performed the monitoring on 25-foot pathways in all accessible areas, in accordance with the rules as required.

EMISSIONS TESTING INSTRUMENTATION/CALIBRATION

Instruments used to perform the landfill surface emission testing consisted of the following:

- Trimble SiteFID Landfill Gas Monitor Portable Flame Ionization Detector (FID). This instrument
 measures methane in air over a range of 1 to 50,000 ppmv. The SiteFID meets the CARB
 requirements for combined instantaneous and integrated monitoring and was calibrated in
 accordance with United States Environmental Protection Agency (US EPA) Method 21 and
 manufacturers specifications.
- A portable wind data logger by Secure Digital is used to monitor and log wind speeds while performing emissions monitoring. Field observations and local weather station information is used to track weather conditions and rain events.

Instrument calibration logs and instantaneous weather information are shown in Appendix D and E.

SURFACE EMISSIONS MONITORING PROCEDURES

Instantaneous and integrated SEM was conducted in accordance with NSPS and LMR requirements. Monitoring was performed with the FID inlet held within 2 inches of the landfill surface while a technician walked a grid in parallel paths not more than 25-feet apart over the surface of the landfill unless site safety conditions or prior monitoring results allowed 100-foot pathways. Cracks, holes and all cover penetrations in the surface were also tested. Instantaneous surface emissions readings were monitored continuously and recorded every 5 seconds. Any areas in exceedance of the 200 or 500 ppmv standards (reporting and compliance levels, respectively) were GPS tagged, any locations exceeding the 500 ppmv standard were also stake-marked for on-site personnel to perform remediation or repairs.

The integrated average is based on the readings stored on the instrument which are recorded every 5 seconds. The readings are then downloaded, and the averages are calculated for each grid using software provided by the instrument manufacturer. The readings are not provided in the report due to the volume of data but can be furnished upon request.

Recorded wind speed results are shown in Appendix F. Wind speed 15-minute averages were observed to remain below the approved Alternative Compliance Option (ACO) 10 miles per hour (based on 60 second intervals), and no instantaneous speeds exceeded 20 miles per hour during the testing. Monitoring was terminated in any instance average wind speeds exceeded 10 miles per hour until observed below the limit. No rainfall occurred during or within 24 hours of monitoring, in accordance

with the alternative compliance condition. Therefore, site meteorological conditions were within the approved alternatives of the LMR requirements on the above-mentioned dates.

TESTING RESULTS

During this SEM event Tetra Tech performed the monitoring on 25-foot pathways in accordance with the rules as required under the LMR and NSPS. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the NSPS and/or LMR threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring.

During the initial monitoring events on February 3, 4, 5, and 6, 2020, there were zero (0) exceedances of the LMR integrated threshold limit of 25 ppmv as measured as methane above background and twelve (12) locations that exceeded the NSPS (Grids) and LMR (Grids and Penetrations) instantaneous level of 500 ppmv. System adjustments and repair work (repair of boreholes, vacuum increases to nearby extraction wells and re-compaction of soil) was performed by site personnel and subsequent 10-day re-monitoring on February 7, 2020 indicated that all the twelve (12) areas that were initially in exceedance had returned to compliance.

Follow-up monitoring was conducted at the one-month interval as required on February 20, 2020. All areas of initial exceedance were re-monitored during this time following additional abatement activities by site personnel. After the one-month confirmation re-monitoring event, zero (0) instantaneous locations remained above the NSPS and LMR thresholds of compliance. Based on these results no further testing is required until the second quarter of 2020. Results of the monitoring are shown in Appendix B and C (Tables 1, 2, and 3). Calibration logs for the monitoring equipment are provided in Appendix D.

Furthermore, as required by the NSPS for surface emissions, the landfill perimeter was walked and tested. Results of this testing indicated that no exceedances of the 500 ppmv limit were observed, therefore the site perimeter was in compliance with the requirements of the rule.

As mentioned above:

- Full grids 14, 27, 31, 35, 36, 37, 41, 42, 49, 50, 51, 52, 58, 59, 60, 66, 67, 68, 69, 74, 75, 76, 77, 83, 84, 85, 86, 94, 95, 96, 102, 103, 104, 105, 113, 114, 115, 123, 124, 134, 135, 136, 137, 147, 148, 149, 150, 160, 161, 162, 163, 164, 174, 175, 176, 177, 187, 188, 189, 190, 191, 192, 193, 201, 202, 203, 211, 212, 213, 214, 215, 223, 224, 225, 227, 228, 229, 230, 231, 232, and 233 were not monitored due to active construction, heavy equipment traffic, or steep slopes (steeper than 33.5% or 18 degrees) which resulted in unsafe conditions. (see Appendix A).
- Partial grids 2, 4, 11, 13, 15, 17, 19, 23, 26, 30, 34, 40, 43, 44, 45, 48, 53, 54, 57, 61, 62, 70, 78, 79, 87, 93, 112, 122, 133, 138, 146, 151, 159, 173, 178, 185, 186, 194, 195, 200, 204, 205, 210, 216, 222, and 226 were not monitored due to active construction, heavy equipment traffic, or steep slopes (steeper than 33.5% or 18 degrees) which resulted in unsafe conditions. (see Appendix A).

As these areas were deemed unsafe by Tetra Tech personnel for entry due to active filling operations, construction, and other dangerous or unsafe conditions, which could cause a potential for injury of monitoring personnel (Appendix A).

Areas consisting of native soil (no waste in place) are also exempt from monitoring, in accordance with the LMR.

Any wells located in grids noted as exempt from monitoring due to health and safety concerns that remained accessible were monitored on an as-needed basis.

PROJECT SCHEDULE

Following the initial events performed on February 3, 4, 5, and 6, 2020, subsequent re-monitoring was scheduled within 10 days. The first 10-day re-monitoring event was performed on February 7, 2020, and one-month confirmation testing of abated instantaneous readings was performed on February 20, 2020.

In accordance with the approved Scope of Work, Tetra Tech is scheduled to perform the second quarter NSPS and LMR monitoring event by the end of June 2020 in all areas deemed safe for entry.

STANDARD PROVISIONS

This report addresses conditions of the subject site during the testing dates only. Accordingly, we assume no responsibility for any changes that may occur subsequent to testing which could affect the surface emissions at the subject site or adjacent properties.

If you have any questions regarding this report, please contact Sami Ayass at (909) 655-3255.

Thank you,

Sami H Ayass, P.E. - Project Manager

This report contains the following Appendices:

Appendix A: Surface Grid Map

Appendix B: Instantaneous Monitoring Results

Appendix C: Integrated Monitoring Results

Appendix D: Calibration Logs

Appendix E: Weather Data

Appendix F: Wind Speed Data

APPENDIX A Surface Grid Map



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Vasco Road Landfill - 1Q2020 SEM

Annotated Map

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Legend

Integrated Walking Paths



APPENDIX B Instantaneous Monitoring Results

Google Earth

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Table 1SUMMARY OF INSTANTANEOUS METHANE CONCENTRATIONS BETWEEN 200-499 PPMV1Q2020 Vasco Road Landfill

FILE NAME		GRID NO. / WEIL ID.	ID NO.	IATHTUDE WGS84	LONGIIUDE WGS84	METHANE CONCENTRATION (ppmv)
MONITOR_Vasco_GRID_10_2020_Q1_Initial.csv	2/6/2020	10	59	37.759408	-121.723467	278.7
MONITOR_Vasco_GRID_16_2020_Q1_Initial.csv	2/6/2020	16	118	37.759102	-121.724167	256.7
MONITOR_Vasco_GRID_125_2020_Q1_Initial.csv	2/6/2020	125	22	37.756387	-121.727783	263.2
MONITOR_Vascowells_GRID_EW1001_2020_Q1_Initial.csv	2/3/2020	EW1001	EW1001	37.756177	-121.725877	354.2
MONITOR_Vascowells_GRID_EW128_2020_Q1_Initial.csv	2/3/2020	EW128	EW128	37.759713	-121.727627	370.6

Table 2SUMMARY OF INSTANTANEOUS METHANE CONCENTRATIONS >= 500 PPMVINCLUDING REMONITORING RESULTS1Q2020 Vasco Road Landfill

FILE NAME		GRID NO. / WELL ID.	ID NO.	IATHUDE WGS84	LONGIIUDE WGS84	METHANE CONCENTRATION (ppmv)
MONITOR_Vasco_GRID_12_2020_Q1_Initial.csv	2/6/2020	12	115	37.758945	-121.723525	937.7
MONITOR_Vasco_GRID_12_2020_Q1_10Day_1.csv	2/7/2020	12	115	37.758965	-121.723522	112.1
MONITOR_Vasco_GRID_12_2020_Q1_Month.csv	2/20/2020	12	115	37.758968	-121.723535	254.4
MONITOR_Vascowells_GRID_EW0908_2020_Q1_Initial.csv	2/3/2020	EW0908	EW0908	37.757242	-121.726137	796.6
MONITOR_Vascowells_GRID_EW0908_2020_Q1_10Day_1.csv	2/7/2020	EW0908	EW0908	37.757233	-121.726152	253.6
MONITOR_Vascowells_GRID_EW0908_2020_Q1_Month.csv	2/20/2020	EW0908	EW0908	37.757238	-121.726150	211.5
MONITOR_Vascowells_GRID_EW1004_2020_Q1_Initial.csv	2/3/2020	EW1004	EW1004	37.756165	-121.725875	3411.9
MONITOR_Vascowells_GRID_EW1004_2020_Q1_10Day_1.csv	2/7/2020	EW1004	EW1004	37.756173	-121.725868	30.4
MONITOR_Vascowells_GRID_EW1004_2020_Q1_Month.csv	2/20/2020	EW1004	EW1004	37.756180	-121.725878	18.0
MONITOR_Vascowells_GRID_EW1005_2020_Q1_Initial.csv	2/3/2020	EW1005	EW1005	37.756108	-121.726488	6925.3
MONITOR_Vascowells_GRID_EW1005_2020_Q1_10Day_1.csv	2/7/2020	EW1005	EW1005	37.756097	-121.726505	404.7
MONITOR_Vascowells_GRID_EW1005_2020_Q1_Month.csv	2/20/2020	EW1005	EW1005	37.756103	-121.726485	188.5
MONITOR_Vascowells_GRID_EW110_2020_Q1_Initial.csv	2/3/2020	EW110	EW110	37.758778	-121.725633	1559.3
MONITOR_Vascowells_GRID_EW110_2020_Q1_10Day_1.csv	2/7/2020	EW110	EW110	37.758772	-121.725640	156.3
MONITOR_Vascowells_GRID_EW110_2020_Q1_Month.csv	2/20/2020	EW110	EW110	37.758787	-121.725652	299.8
MONITOR_Vascowells_GRID_EW111_2020_Q1_Initial.csv	2/3/2020	EW111	EW111	37.759232	-121.725207	827.3
MONITOR_Vascowells_GRID_EW111_2020_Q1_10Day_1.csv	2/7/2020	EW111	EW111	37.759207	-121.725237	186.4
MONITOR_Vascowells_GRID_EW111_2020_Q1_Month.csv	2/20/2020	EW111	EW111	37.759213	-121.725220	292.2
MONITOR_Vascowells_GRID_EW114_2020_Q1_Initial.csv	2/3/2020	EW114	EW114	37.759368	-121.724143	11649.5
MONITOR_Vascowells_GRID_EW114_2020_Q1_10Day_1.csv	2/7/2020	EW114	EW114	37.759373	-121.724142	18.5
MONITOR_Vascowells_GRID_EW114_2020_Q1_Month.csv	2/20/2020	EW114	EW114	37.759397	-121.724155	156.7
MONITOR_Vascowells_GRID_EW130_2020_Q1_Initial.csv	2/3/2020	EW130	EW130	37.759117	-121.726818	12798.1
MONITOR_Vascowells_GRID_EW130_2020_Q1_10Day_1.csv	2/7/2020	EW130	EW130	37.759092	-121.726828	279.6
MONITOR_Vascowells_GRID_EW130_2020_Q1_Month.csv	2/20/2020	EW130	EW130	37.759117	-121.726810	252.3
MONITOR_Vascowells_GRID_EW84_2020_Q1_Initial.csv	2/3/2020	EW84	EW84	37.751825	-121.722425	3115.8
MONITOR_Vascowells_GRID_EW84_2020_Q1_10Day_1.csv	2/7/2020	EW84	EW84	37.751847	-121.722438	11.9
MONITOR_Vascowells_GRID_EW84_2020_Q1_Month.csv	2/20/2020	EW84	EW84	37.751823	-121.722410	0.0
MONITOR_Vascowells_GRID_EW90A_2020_Q1_Initial.csv	2/3/2020	EW90A	EW90A	37.760020	-121.724823	2050.3
MONITOR_Vascowells_GRID_EW90A_2020_Q1_10Day_1.csv	2/7/2020	EW90A	EW90A	37.759985	-121.724790	123.4
MONITOR_Vascowells_GRID_EW90A_2020_Q1_Month.csv	2/20/2020	EW90A	EW90A	37.759998	-121.724793	39.9
MONITOR_Vascowells_GRID_EW94_2020_Q1_Initial.csv	2/3/2020	EW94	EW94	37.757573	-121.726058	2108.8
MONITOR_Vascowells_GRID_EW94_2020_Q1_10Day_1.csv	2/7/2020	EW94	EW94	37.757587	-121.726062	89.2
MONITOR_Vascowells_GRID_EW94_2020_Q1_Month.csv	2/20/2020	EW94	EW94	37.757582	-121.726043	200.9
MONITOR_Vascowells_GRID_RW001_2020_Q1_Initial.csv	2/3/2020	RW001	RW001	37.760110	-121.724367	690.2
MONITOR_Vascowells_GRID_RW001_2020_Q1_10Day_1.csv	2/7/2020	RW001	RW001	37.760107	-121.724398	115.8
MONITOR_Vascowells_GRID_RW001_2020_Q1_Month.csv	2/20/2020	RW001	RW001	37.760122	-121.724385	47.5

APPENDIX C Integrated Monitoring Results

Google Earth

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Vasco Road Landfill - 1Q2020 SEM





Table 3SUMMARY OF INTEGRATED METHANE CONCENTRATIONSINCLUDING REMONITORING RESULTS1Q2020 Vasco Road Landfill

FILE NAME	DATE	GRID NO.	INTEGRATED METHANE CONCENTRATION (ppmv)
MONITOR Vasco GRID 1 2020 O1 Initial csv	2/6/2020	1	0.4
MONITOR Vasco GRID 2 2020 01 Initial csv	2/6/2020	2	14
MONITOR Vasco GRID 3 2020 O1 Initial csv	2/6/2020	3	1.1
MONITOR Vasco GRID 4 2020 01 Initial csv	2/6/2020	4	1.0
MONITOR Vasco CRID 5 2020 01 Initial csv	2/6/2020	5	36
MONITOR Vasco CRID 6 2020 O1 Initial csv	2/6/2020	6	J.U 1 3
MONITOR Vasco CRID 7 2020 01 Initial csv	2/6/2020	7	19.8
MONITOR Vasco CRID 8 2020 O1 Initial csv	2/6/2020	8	58
MONITOR Vasco CRID 0 2020 O1 Initial csv	2/6/2020	9	9.0 8.0
MONITOR Vasco CRID 10 2020 O1 Initial csv	2/6/2020	10	85
MONITOR Vasco CDD 11 2020 Q1_Initial.csv	2/0/2020 9/6/9090	10	0.J 7 G
MONITOR Vasco CDD 12 2020 O1 Initial cov	2/0/2020	11	7.0 17.6
MONITOR Vasco CDD 12 2020 Q1 Initial csv	2/0/2020	12	17.0
MONITOR_Vasco_CRID_15_2020_Q1_IIIIIIal.csv	2/0/2020	15	2.4
MONITOR_Vasco_GRID_15_2020_Q1_IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	2/0/2020 9/0/2020	10	2.4 19.9
MONITOR_VASCO_GRID_10_2020_Q1_IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	2/0/2020	10	13.2
MONITOR_Vasco_GRID_17_2020_Q1_IIIIIai.csv	2/0/2020 9/0/2020	10	0.2
MONITOR_Vasco_GRID_18_2020_Q1_Initial.csv	2/0/2020	18	1.4
MONITOR_VASCO_GRID_19_2020_Q1_Initial.csv	2/0/2020	19	14.5
MONITOR_VASCO_GRID_20_2020_Q1_Initial.csv	2/0/2020	20	0.1
MONITOR_VASCO_GRID_21_2020_Q1_Initial.csv	2/0/2020	21	0.2
MONITOR_Vasco_GRID_22_2020_Q1_Initial.csv	2/0/2020	22	1.8
MONITOR_Vasco_GRID_23_2020_Q1_Initial.csv	2/6/2020	23	24.0
MONITOR_Vasco_GRID_24_2020_Q1_Initial.csv	2/0/2020	24	0.4
MONITOR_Vasco_GRID_25_2020_Q1_Initial.csv	2/0/2020	25	0.3
MONITOR_Vasco_GRID_26_2020_Q1_Initial.csv	2/0/2020	26	0.2
MUNITOR_Vasco_GRID_28_2020_Q1_Initial.csv	2/0/2020	28	0.3
MONITOR_Vasco_GRID_29_2020_Q1_Initial.csv	2/0/2020	29	0.2
MONITOR_Vasco_GRID_30_2020_Q1_Initial.csv	2/0/2020	30	0.Z
MONITOR_Vasco_GRID_32_2020_Q1_Initial.csv	2/0/2020	32	0.1
MONITOR_Vasco_GRID_33_2020_Q1_Initial.csv	2/6/2020	33	0.2
MONITOR_Vasco_GRID_34_2020_Q1_Initial.csv	2/0/2020	34	0.3
MONITOR_Vasco_GRID_38_2020_Q1_Initial.csv	2/0/2020	38	1.4
MONITOR_Vasco_GRID_39_2020_Q1_Initial.csv	2/6/2020	39	0.3
MONITOR_Vasco_GRID_40_2020_Q1_Initial.csv	2/0/2020	40	0.3
MONITOR_Vasco_GRID_43_2020_Q1_Initial.csv	2/3/2020	43	0.2
MONITOR_Vasco_GRID_44_2020_Q1_Initial.csv	2/3/2020	44	0.4
MONITOR_Vasco_GRID_45_2020_Q1_Initial.csv	2/3/2020	45	0.8
MONITOR_Vasco_GRID_46_2020_Q1_Initial.csv	2/0/2020	46	0.5
MONITOR_Vasco_GRID_47_2020_Q1_Initial.csv	2/0/2020	47	1.4
MONITOR_Vasco_GRID_48_2020_Q1_Initial.csv	2/0/2020	48	0.4
MONITOR_Vasco_GRID_53_2020_Q1_Initial.csv	2/3/2020	53	0.2
MONITOR_Vasco_GRID_54_2020_Q1_Initial.csv	2/3/2020	54	0.3
MONITOR_Vasco_GRID_55_2020_Q1_Initial.csv	2/3/2020	55	0.3
MONITOR_Vasco_GRID_56_2020_Q1_Initial.csv	2/3/2020	50	0.6
WONTOR VASCO_GRID_0/_ZUZU_UI_MITIAL.CSV	2/J/2020))/ 01	0.5
WONTOR VASCO_GRUD_01_2UZU_U1_MITIAL.CSV	2/J/2020	01	0.3
MONITOR Vasco CDD 62 2020 OI Total CSV	2/J/2020	02	0.2
MONTOD Vacco CDD 64 2020 01 Little	2/J/2020	03	0.2
MONITOR Vasco CDD 65 2020 01 Little	2/J/2020	04	0.2
MONITOR Vasco CDID 70 2020 01 Little	2/J/2020	00	0.2
MONTOR Vasco CRM 71 2020 O1 Initial.CSV	2/5/2020	71	U.3 0 1
11111111111111111111111111111111111111	w/0/2020	/1	U.1

Table 3SUMMARY OF INTEGRATED METHANE CONCENTRATIONSINCLUDING REMONITORING RESULTS1Q2020 Vasco Road Landfill

FILE NAME	DATE	GRID NO.	INTEGRATED METHANE CONCENTRATION (ppmv)
MONITOR_Vasco_GRID_72_2020_Q1_Initial.csv	2/5/2020	72	0.2
MONITOR_Vasco_GRID_73_2020_Q1_Initial.csv	2/5/2020	73	0.2
MONITOR_Vasco_GRID_78_2020_Q1_Initial.csv	2/5/2020	78	0.0
MONITOR_Vasco_GRID_79_2020_Q1_Initial.csv	2/5/2020	79	0.3
MONITOR_Vasco_GRID_80_2020_Q1_Initial.csv	2/5/2020	80	0.2
MONITOR_Vasco_GRID_81_2020_Q1_Initial.csv	2/5/2020	81	0.1
MONITOR_Vasco_GRID_82_2020_Q1_Initial.csv	2/5/2020	82	0.2
MONITOR_Vasco_GRID_87_2020_Q1_Initial.csv	2/5/2020	87	0.3
MONITOR_Vasco_GRID_88_2020_Q1_Initial.csv	2/5/2020	88	0.2
MONITOR_Vasco_GRID_89_2020_Q1_Initial.csv	2/5/2020	89	0.1
MONITOR_Vasco_GRID_90_2020_Q1_Initial.csv	2/5/2020	90	0.3
MONITOR_Vasco_GRID_91_2020_Q1_Initial.csv	2/4/2020	91	0.1
MONITOR_Vasco_GRID_92_2020_Q1_Initial.csv	2/4/2020	92	3.0
MONITOR_Vasco_GRID_93_2020_Q1_Initial.csv	2/4/2020	93	0.0
MONITOR_Vasco_GRID_97_2020_Q1_Initial.csv	2/5/2020	97	0.4
MONITOR_Vasco_GRID_98_2020_Q1_Initial.csv	2/5/2020	98	0.1
MONITOR_Vasco_GRID_99_2020_Q1_Initial.csv	2/5/2020	99	0.1
MONITOR_Vasco_GRID_100_2020_Q1_Initial.csv	2/5/2020	100	0.1
MONITOR_Vasco_GRID_101_2020_Q1_Initial.csv	2/5/2020	101	0.2
MONITOR_Vasco_GRID_106_2020_Q1_Initial.csv	2/5/2020	106	0.5
MONITOR_Vasco_GRID_107_2020_Q1_Initial.csv	2/5/2020	107	0.2
MONITOR_Vasco_GRID_108_2020_Q1_Initial.csv	2/5/2020	108	0.2
MONITOR_Vasco_GRID_109_2020_Q1_Initial.csv	2/4/2020	109	0.2
MONITOR_Vasco_GRID_110_2020_Q1_Initial.csv	2/4/2020	110	0.1
MONITOR_Vasco_GRID_111_2020_Q1_Initial.csv	2/4/2020	111	0.5
MONITOR_Vasco_GRID_112_2020_Q1_Initial.csv	2/4/2020	112	0.1
MONITOR_Vasco_GRID_116_2020_Q1_Initial.csv	2/5/2020	116	0.3
MONITOR_Vasco_GRID_117_2020_Q1_Initial.csv	2/5/2020	117	0.2
MONITOR_Vasco_GRID_118_2020_Q1_Initial.csv	2/5/2020	118	0.2
MONITOR_Vasco_GRID_119_2020_Q1_Initial.csv	2/4/2020	119	0.2
MONITOR_Vasco_GRID_120_2020_Q1_Initial.csv	2/4/2020	120	0.1
MONITOR_Vasco_GRID_121_2020_Q1_Initial.csv	2/4/2020	121	0.6
MONITOR_Vasco_GRID_122_2020_Q1_Initial.csv	2/4/2020	122	4.0
MONITOR_Vasco_GRID_125_2020_Q1_Initial.csv	2/6/2020	125	7.8
MONITOR_Vasco_GRID_126_2020_Q1_Initial.csv	2/6/2020	126	4.2
MONITOR_Vasco_GRID_127_2020_Q1_Initial.csv	2/5/2020	127	0.3
MONITOR_Vasco_GRID_128_2020_Q1_Initial.csv	2/5/2020	128	0.1
MONITOR_Vasco_GRID_129_2020_Q1_Initial.csv	2/5/2020	129	0.3
MONITOR_Vasco_GRID_130_2020_Q1_Initial.csv	2/4/2020	130	0.2
MONITOR_Vasco_GRID_131_2020_Q1_Initial.csv	2/4/2020	131	0.1
MONITOR_Vasco_GRID_132_2020_Q1_Initial.csv	2/4/2020	132	0.2
MONITOR_Vasco_GRID_133_2020_Q1_Initial.csv	2/4/2020	133	0.1
MONITOR_Vasco_GRID_138_2020_Q1_Initial.csv	2/6/2020	138	1.3
MONIFOR_Vasco_GRID_139_2020_Q1_Initial.csv	2/6/2020	139	0.3
MONITOR_Vasco_GRID_140_2020_Q1_Initial.csv	2/6/2020	140	0.3
MONITOR_Vasco_GRID_141_2020_Q1_Initial.csv	2/6/2020	141	0.1
MONITOR_Vasco_GRID_142_2020_Q1_Initial.csv	2/5/2020	142	0.5
MONITOR_Vasco_GRID_143_2020_Q1_Initial.csv	2/4/2020	143	0.1
MONITOR_Vasco_GRID_144_2020_Q1_Initial.csv	2/4/2020	144	0.1
MONITOR_Vasco_GRID_145_2020_Q1_Initial.csv	2/4/2020	145	0.0
MONITOR_Vasco_GRID_146_2020_Q1_Initial.csv	2/4/2020	146	0.1
MONITOR_Vasco_GRID_151_2020_Q1_Initial.csv	2/6/2020	151	0.4

Table 3SUMMARY OF INTEGRATED METHANE CONCENTRATIONSINCLUDING REMONITORING RESULTS1Q2020 Vasco Road Landfill

FILE NAME	DATE	GRID NO.	INTEGRATED METHANE CONCENTRATION (ppmv)
MONITOR_Vasco_GRID_152_2020_Q1_Initial.csv	2/6/2020	152	0.3
MONITOR_Vasco_GRID_153_2020_Q1_Initial.csv	2/6/2020	153	0.2
MONITOR_Vasco_GRID_154_2020_Q1_Initial.csv	2/6/2020	154	0.2
MONITOR_Vasco_GRID_155_2020_Q1_Initial.csv	2/5/2020	155	0.2
MONITOR Vasco GRID 156 2020 Q1 Initial.csv	2/4/2020	156	0.1
MONITOR Vasco GRID 157 2020 Q1 Initial.csv	2/4/2020	157	0.1
MONITOR Vasco GRID 158 2020 Q1 Initial.csv	2/4/2020	158	0.0
MONITOR Vasco GRID 159 2020 Q1 Initial.csv	2/4/2020	159	0.0
MONITOR Vasco GRID 165 2020 Q1 Initial.csv	2/6/2020	165	0.9
MONITOR Vasco GRID 166 2020 Q1 Initial.csv	2/6/2020	166	0.3
MONITOR Vasco GRID 167 2020 Q1 Initial csv	2/6/2020	167	0.2
MONITOR Vasco GRID 168 2020 Q1 Initial csv	2/6/2020	168	0.3
MONITOR Vasco GRID 169 2020 Q1 Initial csv	2/5/2020	169	0.2
MONITOR Vasco GRID 170 2020_01 Initial csv	2/0/2020	170	0.2
MONITOR Vasco CRID 171 2020 Q1 Initial csv	2/4/2020	171	0.1
MONITOR Vasco CRID 172 2020 Q1 Initial csv	2/4/2020	179	0.1
MONITOR Vasco CRID 173 2020 Q1 Initial csv	2/1/2020	172	0.0
MONITOR_Vasco_CRID_178_2020_Q1_mitial.csv	2/6/2020	179	0.1
MONITOR Vasco CPID 170 2020 Q1_Initial.csv	2/0/2020 9/6/9090	170	1.1
MONTION Vasco CDID 180 2020 OI Initial CSV	2/6/2020	175	0.2
MONITOR_VASCO_GRID_160_2020_Q1_IIIIIIALCSV	2/0/2020	100	0.2
MONITOR_VASCO_GRID_181_2020_Q1_IIIIIIALCSV	2/0/2020	101	0.4
MONITOR_VASCO_GRID_182_2020_Q1_IIIIIIALCSV	2/3/2020	102	0.3
MONITOR_VASCO_GRID_105_2020_Q1_IIIIdal.CSV	2/4/2020	103	0.2
MONITOR_VASCO_GRID_184_2020_Q1_IIIIIIIII.CSV	2/4/2020	104	0.1
MONITOR_VASCO_GRID_185_2020_Q1_IIIIIIALCSV	2/4/2020	100	0.0
MONITOR_VASCO_GRID_186_2020_Q1_Initial.csv	2/4/2020	180	0.2
MONITOR_Vasco_GRID_194_2020_Q1_IIIIIIal.csv	2/0/2020 9/0/2020	194	0.3
MONITOR_VASCO_GRID_195_2020_Q1_Initial.csv	2/0/2020	195	0.3
MUNITOR_Vasco_GRID_196_2020_Q1_Initial.csv	2/0/2020	196	0.2
MUNITOR_Vasco_GRID_197_2020_Q1_Initial.csv	2/3/2020	197	0.4
MONITOR_Vasco_GRID_198_2020_Q1_Initial.csv	2/4/2020	198	0.2
MONITOR_Vasco_GRID_199_2020_Q1_Initial.csv	2/4/2020	199	0.1
MONITOR_Vasco_GRID_200_2020_Q1_Initial.csv	2/4/2020	200	0.0
MONITOR_Vasco_GRID_204_2020_Q1_Initial.csv	2/6/2020	204	0.2
MONITOR_Vasco_GRID_205_2020_Q1_Initial.csv	2/6/2020	205	0.1
MONITOR_Vasco_GRID_206_2020_Q1_Initial.csv	2/5/2020	206	1.3
MONITOR_Vasco_GRID_207_2020_Q1_Initial.csv	2/5/2020	207	0.2
MONITOR_Vasco_GRID_208_2020_Q1_Initial.csv	2/4/2020	208	0.1
MONITOR_Vasco_GRID_209_2020_Q1_Initial.csv	2/4/2020	209	0.1
MONITOR_Vasco_GRID_210_2020_Q1_Initial.csv	2/4/2020	210	0.0
MONITOR_Vasco_GRID_216_2020_Q1_Initial.csv	2/4/2020	216	0.2
MONITOR_Vasco_GRID_217_2020_Q1_Initial.csv	2/4/2020	217	0.2
MONITOR_Vasco_GRID_218_2020_Q1_Initial.csv	2/4/2020	218	0.2
MONITOR_Vasco_GRID_219_2020_Q1_Initial.csv	2/4/2020	219	0.2
MONITOR_Vasco_GRID_220_2020_Q1_Initial.csv	2/4/2020	220	0.2
MONITOR_Vasco_GRID_221_2020_Q1_Initial.csv	2/4/2020	221	0.1
MONITOR_Vasco_GRID_222_2020_Q1_Initial.csv	2/4/2020	222	0.0
MONITOR_Vasco_GRID_226_2020_Q1_Initial.csv	2/4/2020	226	0.0

APPENDIX D Calibration Logs



MONITOR TYPE CALIBRATION SUMMARY	OPERATOR NAME Leon	<u>FID ID</u> 886B0F62C147	FILE SAVE TIME 2/3/2020 8:14	AVG PRECISION (%) -0.3	AVG RESPONSE TIME (SECONDS) 5.7				
MONITOR TYPE PRECISION MEASUREMENT	CAL GAS SERIAL NUMBER	CAL GAS TYPE CH4 (Methane)	CAL GAS CONCENTRATION (ppmv) 500	MEASURED CONCENTRATION (ppmv) 497.5	DIFFERENCE (ppmv) -2.5	DIFFERENCE (%) -0.5	ZERO AIR PPM 0	TIMESTAMP 2/3/2020 8:10	FID ID 886B0F62C147
PRECISION MEASUREMENT		CH4 (Methane)	500	498.8	-1.2	-0.2	0	2/3/2020 8:12	886B0F62C147
PRECISION MEASUREMENT		CH4 (Methane)	500	499.5	-0.5	-0.1	0	2/3/2020 8:12	886B0F62C147
MONITOR TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	FID ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	473.7	0	6	2/3/2020 8:13	886B0F62C147	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	473.7	0	5	2/3/2020 8:14	886B0F62C147	
		. ,							
MONITOR TYPE CALIBRATION SUMMARY	OPERATOR NAME Leon	<u>FID ID</u> 886B0F62C147	FILE SAVE TIME 2/4/2020 8:11	AVG PRECISION (%) -0.3	AVG RESPONSE TIME (SECONDS) 5				
	CAL GAS SEDIAL NUMBER	CAL GAS TYPE		MEASURED CONCENTRATION (ppm)	DIEEEBENCE (approv)	DIECEDENCE (%)		TIMESTAND	
PRECISION MEASUREMENT	CAL GAS SERIAL NOWIDER	CH4 (Methane)	500	498.4	-1.6	-0.3		2/4/2020 8:07	886B0E62C147
PRECISION MEASUREMENT		CH4 (Methane)	500	497.8	-2.2	-0.4	0	2/4/2020 8:08	886B0F62C147
PRECISION MEASUREMENT		CH4 (Methane)	500	499.2	-0.8	-0.2	0	2/4/2020 8:09	886B0F62C147
MONITOR TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	FID ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	473.6	0	5	2/4/2020 8:10	886B0F62C147	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	473.6	0	5	2/4/2020 8:10	886B0F62C147	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	473.6	U	5	2/4/2020 8:11	886B0F62C147	
MONITOR TYPE	OPERATOR NAME	FID ID	FILE SAVE TIME	AVG PRECISION (%)	AVG RESPONSE TIME (SECONDS)				
CALIBRATION SUMMARY	Leon	886B0F62C147	2/6/2020 8:48	-0.3	5.7				
MONITOR TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	MEASURED CONCENTRATION (ppmv)	DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	FID ID
PRECISION MEASUREMENT		CH4 (Methane)	500	497.2	-2.8	-0.6	0	2/6/2020 7:55	886B0F62C147
PRECISION MEASUREMENT		CH4 (Methane)	500	499.2	-0.8	-0.2	0	2/6/2020 8:11	886B0F62C147
PRECISION MEASUREMENT		CH4 (Methane)	500	499.6	-0.4	-0.1	0	2/6/2020 8:11	886B0F62C147
	CAL GAS SEDIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (pppy)	TARGET CONCENTRATION (nomy)		RESPONSE TIME (coconds)	TIMESTAMD		
RESPONSE TIME MEASUREMENT	CAL GAS SERIAL NOWBER	CH4 (Methane)	500	473.7	0	5	2/6/2020 8:48	886B0E62C147	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	473 7	0	6	2/6/2020 8:48	886B0F62C147	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	473.7	0	6	2/6/2020 8:48	886B0F62C147	
MONITORING TYPE	OPERATOR NAME	INSTRUMENT ID	FILE SAVE TIME	AVG PRECISION (%)	AVG RESPONSE TIME (SECONDS)				
VERIFICATION SUMMARY	Joel	000780DABAC4	2/3/2020 7:45	-0.1	5.3				
				DETECTOR CONCENTRATION (TINATCTANAD	
MONITORING TYPE	CAL GAS SERIAL NUMBER	CH4 (Mothano)	CAL GAS CONCENTRATION (ppmv)	499.1		DIFFERENCE [%]		2/2/2020 7:27	
PRECISION MEASUREMENT		CH4 (Methane)	500	500.9	-0.9	-0.2	0	2/3/2020 7:37	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	497.8	-2.2	-0.4	0	2/3/2020 7:39	000780DABAC4
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	4/4.3	0	6	2/3/2020 7:43	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	474.3	0	5	2/3/2020 7:44	000780DABAC4	
RESPONSE HIME MERSOREMENT		Cri4 (Methane)	500	4/4.5	U	J.	2/3/2020 7:43	000780DABAC4	
				AVC DECISION (%)	AVC RESPONSE TIME (SECONDS)				
VERIFICATION SUMMARY	Joel	000780DABAC4	2/4/2020 7:54	0.3	5				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	DETECTOR CONCENTRATION (ppmv)	DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
PRECISION MEASUREMENT		CH4 (Methane)	500	499.5	-0.5	-0.1	U	2/4/2020 7:51	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	501.6	1.6	0.3	U	2/4/2020 7:51	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	504.1	4.1	U.8	U	2/4/2020 7:52	UUU780DABAC4
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	476.6	0	5	2/4/2020 7:53	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	476.6	0	5	2/4/2020 7:53	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	476.6	0	5	2/4/2020 7:54	000780DABAC4	



MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Joel	INSTRUMENT ID 000780DABAC4	FILE SAVE TIME 2/5/2020 8:04	AVG PRECISION (%) -0.2	AVG RESPONSE TIME (SECONDS) 5.3				
MONITORING TYPE PRECISION MEASUREMENT	CAL GAS SERIAL NUMBER	CAL GAS TYPE CH4 (Methane)	CAL GAS CONCENTRATION (ppmv) 500	DETECTOR CONCENTRATION (ppmv) 500.5	DIFFERENCE (ppmv) 0.5	DIFFERENCE (%) 0.1	ZERO AIR PPM 0	TIMESTAMP 2/5/2020 8:00	INSTRUMENT ID 000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	499.1	-0.9	-0.2	0	2/5/2020 8:01	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	497.7	-2.3	-0.5	0	2/5/2020 8:01	000780DABAC4
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmy)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	474.2	0	5	2/5/2020 8:03	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	474.2	0	5	2/5/2020 8:03	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	474.2	0	6	2/5/2020 8:04	000780DABAC4	
MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Joel	INSTRUMENT ID 000780DABAC4	FILE SAVE TIME 2/6/2020 8:52	AVG PRECISION (%) -1.6	AVG RESPONSE TIME (SECONDS) 5				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	DETECTOR CONCENTRATION (ppmy)	DIFFERENCE (ppmy)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
PRECISION MEASUREMENT		CH4 (Methane)	500	492.3	-7.7	-1.5	0	2/6/2020 8:49	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	491.5	-8.5	-1.7	0	2/6/2020 8:50	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	492	-8	-1.6	0	2/6/2020 8:51	000780DABAC4
		CAL C					71845070000		
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	467.4	0	5	2/6/2020 8:51	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	467.4	0	5	2/6/2020 8:52	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Wethate)	500	407.4	0	5	2/0/2020 8.52	000780DABAC4	
			2/20/2020 7:28	AVG PRECISION (%)	AVG RESPONSE TIME (SECONDS)				
VERIFICATION SOMMARY	1991	000780DABAC4	2/20/2020 7.28	-2.2	5.5				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	DETECTOR CONCENTRATION (ppmv)	DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
PRECISION MEASUREMENT		CH4 (Methane)	500	486.5	-13.5	-2.7	0	2/20/2020 7:27	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	490.6	-9.4	-1.9	0	2/20/2020 7:26	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	489.3	-10.7	-2.1	0	2/20/2020 7:27	000780DABAC4
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE		TARGET CONCENTRATION (ppmy)	INITIAL CONCENTRATION (npmy)	RESPONSE TIME (seconds)	TIMESTAMP		
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	464.4	0	5	2/20/2020 7.27	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	464.4	0	-	2/20/2020 7:28	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	464.4	0	5	2/20/2020 7:28	000780DABAC4	
		,		-	-				
MONITORING TYPE	OPERATOR NAME	INSTRUMENT ID	FILE SAVE TIME	AVG PRECISION (%)	AVG RESPONSE TIME (SECONDS)				
VERIFICATION SUMMARY	Jims	886B0F30CBDE	2/3/2020 10:26	0.1	7				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	DETECTOR CONCENTRATION (ppmv)	DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
PRECISION MEASUREMENT		CH4 (Methane)	500	505.6	5.6	1.1	0	2/3/2020 10:24	886B0F30CBDE
PRECISION MEASUREMENT		CH4 (Methane)	500	494.7	-5.3	-1.1	0	2/3/2020 10:25	886B0F30CBDE
PRECISION MEASUREMENT		CH4 (Methane)	500	501.2	1.2	0.2	0	2/3/2020 10:25	886B0F30CBDE
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	475.5	2.4	7	2/3/2020 10:25	886B0F30CBDE	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	475.5	2.3	8	2/3/2020 10:26	886B0F30CBDE	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	475.5	3.1	6	2/3/2020 10:26	886B0F30CBDE	
MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Joel	INSTRUMENT ID 886B0FA6E68F	FILE SAVE TIME 2/3/2020 10:22	AVG PRECISION (%) -0.9	AVG RESPONSE TIME (SECONDS) 5				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	DETECTOR CONCENTRATION (ppmv)	DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
PRECISION MEASUREMENT		CH4 (Methane)	500	499.2	-0.8	-0.2	0	2/3/2020 10:17	886B0FA6E68F
PRECISION MEASUREMENT		CH4 (Methane)	500	494.4	-5.6	-1.1	0	2/3/2020 10:19	886B0FA6E68F
PRECISION MEASUREMENT		CH4 (Methane)	500	492.6	-7.4	-1.5	0	2/3/2020 10:20	886B0FA6E68F
		CAL GAS TYPE	CAL GAS CONCENTRATION (TARGET CONCENTRATION (mages)		DECONNEE TIME (accord-)	TIMECTANAD		
	CAL GAS SENIAL NUMBER	CAL GAS TIPE	CAL GAS CONCLATRATION (PPMV)	TANGET CONCENTRATION (ppmV)	INTIAL CONCLUTRATION (ppmv)	ILSE ONSE THRE (SECONDS)	INVILUTAIVIP		
		CH4 (Methane)	500	470.6	0	5	2/3/2020 10:21	886B()FA6F68F	
RESPONSE TIME MEASUREMENT		CH4 (Methane) CH4 (Methane)	500 500	470.6 470.6	0	5	2/3/2020 10:21 2/3/2020 10:21	886B0FA6E68F 886B0FA6F68F	



MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Joel	INSTRUMENT ID 886B0FA6E68F	FILE SAVE TIME 2/4/2020 7:58	AVG PRECISION (%) -0.4	AVG RESPONSE TIME (SECONDS) 5				
MONITOPING TYPE	CAL GAS SEDIAL NUMBER		CAL GAS CONCENTRATION (nomy)	DETECTOR CONCENTRATION (name)	DIFFERENCE (nomy) DIFFERENCE (%			TIMESTAMD	
PRECISION MEASUREMENT	CAL GAS SERIAL NOMBER	CH4 (Methane)	500	198 4	-1.6	-0.3		2/4/2020 7:56	886B0E46E68E
PRECISION MEASUREMENT		CH4 (Methane)	500	499.3	-0.7	-0.1	0	2/4/2020 7:56	886B0EA6E68E
PRECISION MEASUREMENT		CH4 (Methane)	500	496.2	-3.8	-0.8	0	2/4/2020 7:57	886B0FA6F68F
		err (methane)	500	15012	5.0	0.0	Ū	2, 1, 2020 7.37	0000011102001
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	473.1	0	5	2/4/2020 7:57	886B0FA6E68F	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	473.1	0	6	2/4/2020 7:58	886B0FA6E68F	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	<u>500</u>	<u>473.1</u>	<u>0</u>	4	43865.33223	886B0FA6E68F	
MONITORING TYPE	OPERATOR NAME	INSTRUMENT ID	FILE SAVE TIME	AVG PRECISION (%)	AVG RESPONSE TIME (SECONDS)				
VERIFICATION SUMMARY	IBOL	SSOBUFADEDSF	2/5/2020 7:56	0.1	5.3				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	DETECTOR CONCENTRATION (ppmv)	DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
PRECISION MEASUREMENT		CH4 (Methane)	500	500	0	0	0	2/5/2020 7:54	886B0FA6E68F
PRECISION MEASUREMENT		CH4 (Methane)	500	500.2	0.2	0	0	2/5/2020 7:54	886B0FA6E68F
PRECISION MEASUREMENT		CH4 (Methane)	500	501.5	1.5	0.3	0	2/5/2020 7:55	886B0FA6E68F
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	475.5	2.1	6	2/5/2020 7:55	886B0FA6E68F	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	475.5	0	5	2/5/2020 7:55	886B0FA6E68F	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	<u>500</u>	<u>475.5</u>	<u>1</u>	5	43866.33076	886B0FA6E68F	
MONITORING TYPE	OPERATOR NAME	INSTRUMENT ID	FILE SAVE TIME	AVG PRECISION (%)	AVG RESPONSE TIME (SECONDS)				
MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Joel	INSTRUMENT ID 886B0FA6E68F	File SAVE TIME 2/6/2020 8:43	AVG PRECISION (%) -0.8	AVG RESPONSE TIME (SECONDS) 5.3				
MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Joel	INSTRUMENT ID 886B0FA6E68F	FILE SAVE TIME 2/6/2020 8:43	AVG PRECISION (%) -0.8	AVG RESPONSE TIME (SECONDS) 5.3				
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE	OPERATOR NAME Joel CAL GAS SERIAL NUMBER	INSTRUMENT ID 886B0FA6E68F CAL GAS TYPE	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv)	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv)	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT	OPERATOR NAME Joel CAL GAS SERIAL NUMBER	INSTRUMENT ID 886B0FA6E68F CAL GAS TYPE CH4 (Methane)	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv) 500	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv) 497.6	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4	DIFFERENCE (%) -0.5	ZERO AIR PPM 0	TIMESTAMP 2/6/2020 8:41	INSTRUMENT ID 88680FA6E68F
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT	OPERATOR NAME Joel CAL GAS SERIAL NUMBER	INSTRUMENT ID 886B0FA6E68F CAL GAS TYPE CH4 (Methane) CH4 (Methane)	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv) 500 500 500	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv) 497.6 497.6	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4 -2.4 -2.4	DIFFERENCE (%) -0.5 -0.5	ZERO AIR PPM 0 0	TIMESTAMP 2/6/2020 8:41 2/6/2020 8:41	INSTRUMENT ID 886B0FA6E68F 886B0FA6E68F
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT	OPERATOR NAME Joel CAL GAS SERIAL NUMBER	INSTRUMENT ID 88660FA6E68F CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane)	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv) 500 500 500 500 500	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv) 497.6 497.6 492.9	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4 -7.1	DIFFERENCE (%) -0.5 -0.5 -1.4	<mark>ZERO AIR PPM</mark> 0 0 0	<u>TIMESTAMP</u> 2/6/2020 8:41 2/6/2020 8:41 2/6/2020 8:42	INSTRUMENT ID 88680FA6E68F 88680FA6E68F 88680FA6E68F
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT MONITORING TYPE	OPERATOR NAME Joel CAL GAS SERIAL NUMBER	INSTRUMENT ID 88680FA6E68F CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane) CAL GAS TYPE	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv) 500 500 500 500 500 500 500	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv) 497.6 497.6 492.9 TARGET CONCENTRATION (ppmv)	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4 -7.1 INITIAL CONCENTRATION (ppmv)	DIFFERENCE (%) -0.5 -0.5 -1.4 RESPONSE TIME (seconds)	ZERO AIR PPM 0 0 0 TIMESTAMP	<u>TIMESTAMP</u> 2/6/2020 8:41 2/6/2020 8:41 2/6/2020 8:42 INSTRUMENT ID	INSTRUMENT ID 88680FA6E68F 88680FA6E68F 88680FA6E68F
MONITORING TYPE VERIFICATION SUMMARY <u>MONITORING TYPE</u> PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT <u>MONITORING TYPE</u> RESPONSE TIME MEASUREMENT	OPERATOR NAME Joel Cal Gas Serial NUMBER	INSTRUMENT ID 88680FA6E68F CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane)	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv) 500 500 CAL GAS CONCENTRATION (ppmv) 500 500 500 500 500	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv) 497.6 497.6 492.9 TARGET CONCENTRATION (ppmv) 471.3	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4 -7.1 INITIAL CONCENTRATION (ppmv) 4.2	DIFFERENCE (%) -0.5 -0.5 -1.4 RESPONSE TIME (seconds) 5	ZERO AIR PPM 0 0 0 TIMESTAMP 2/6/2020 8:42	<u>TIMESTAMP</u> 2/6/2020 8:41 2/6/2020 8:41 2/6/2020 8:42 <u>INSTRUMENT ID</u> 886B0FA6E68F	INSTRUMENT ID 88680FA6E68F 88680FA6E68F 88680FA6E68F
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT MONITORING TYPE RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT	OPERATOR NAME Joel CAL GAS SERIAL NUMBER	INSTRUMENT ID 88680FA6E68F CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane)	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv) 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv) 497.6 497.6 492.9 TARGET CONCENTRATION (ppmv) 471.3 471.3	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4 -7.1 INITIAL CONCENTRATION (ppmv) 4.2 4	DIFFERENCE (%) -0.5 -0.5 -1.4 RESPONSE TIME (seconds) 5 5	ZERO AIR PPM 0 0 0 TIMESTAMP 2/6/2020 8:42 2/6/2020 8:42	TIMESTAMP 2/6/2020 8:41 2/6/2020 8:41 2/6/2020 8:42 INSTRUMENT ID 886B0FA6E68F 886B0FA6E68F	INSTRUMENT ID 88680FA6E68F 88680FA6E68F 88680FA6E68F
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MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT MONITORING TYPE RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT	OPERATOR NAME Joel CAL GAS SERIAL NUMBER CAL GAS SERIAL NUMBER	INSTRUMENT ID 886807-A6E68F CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane)	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv) 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv) 497.6 497.6 492.9 TARGET CONCENTRATION (ppmv) 471.3 471.3 471.3	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4 -7.1 INITIAL CONCENTRATION (ppmv) 4.2 4 1.9	DIFFERENCE (%) -0.5 -0.5 -1.4 RESPONSE TIME (seconds) 5 5 6	2ERO AIR PPM 0 0 TIMESTAMP 2/6/2020 8:42 2/6/2020 8:42 43867.36341	TIMESTAMP 2/6/2020 8:41 2/6/2020 8:41 2/6/2020 8:42 INSTRUMENT ID 886B0FA6E68F 886B0FA6E68F 886B0FA6E68F	INSTRUMENT ID 88680FA6E68F 88680FA6E68F 88680FA6E68F
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MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT MONITORING TYPE	OPERATOR NAME Joel CAL GAS SERIAL NUMBER CAL GAS SERIAL NUMBER OPERATOR NAME Joel CAL GAS SERIAL NUMBER	INSTRUMENT ID 886B0FA6E68F CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane)	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv) 500 500 CAL GAS CONCENTRATION (ppmv) 500 S00 500	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv) 497.6 497.6 492.9 TARGET CONCENTRATION (ppmv) 471.3 471.3 471.3 AVG PRECISION (%) -2.2	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4 -7.1 INITIAL CONCENTRATION (ppmv) 4.2 4 1.9 AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (opmv)	DIFFERENCE (%) -0.5 -0.5 -1.4 RESPONSE TIME (seconds) 5 5 6	ZERO AIR PPM 0 0 0 TIMESTAMP 2/6/2020 8:42 2/6/2020 8:42 43867.36341	TIMESTAMP 2/6/2020 8:41 2/6/2020 8:42 INSTRUMENT ID 88680FA6E68F 88680FA6E68F 88680FA6E68F	INSTRUMENT ID 88680FAGE68F 88680FAGE68F 88680FAGE68F
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT	OPERATOR NAME Joel CAL GAS SERIAL NUMBER CAL GAS SERIAL NUMBER Joel CAL GAS SERIAL NUMBER	INSTRUMENT ID 886607-6668F CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) INSTRUMENT ID 886607-66668F CAL GAS TYPE CH4 (Methane)	FILE SAVE TIME 2/6/2020 8:43 CAL GAS CONCENTRATION (ppmv) 500	AVG PRECISION (%) -0.8 DETECTOR CONCENTRATION (ppmv) 497.6 497.6 492.9 TARGET CONCENTRATION (ppmv) 471.3 471.3 471.3 471.3 471.3 471.3 471.3 471.3 471.3	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4 -7.1 INITIAL CONCENTRATION (ppmv) 4.2 4 1.9 AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -8.7	DIFFERENCE (%) -0.5 -0.5 -1.4 RESPONSE TIME (seconds) 5 5 6 DIFFERENCE (%) -1.7	2ERO AIR PPM 0 0 0 TIMESTAMP 2/6/2020 8:42 2/6/2020 8:42 43867.36341 2/ERO AIR PPM 0	<u>TIMESTAMP</u> 2/6/2020 8:41 2/6/2020 8:42 <u>INSTRUMENT ID</u> 886B0FA6E68F 886B0FA6E68F 886B0FA6E68F 886B0FA6E68F 2/7/2020 13:30	INSTRUMENT ID 88680FA6E68F 88680FA6E68F 88680FA6E68F INSTRUMENT ID 88680FA6E68F
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APPENDIX E Weather Data



Date/Time	Temperature (°F)	Average Wind Speed (mph)	Wind Direction	Sky Condition	Precipitation
2/3/2020 7:53	44	9	S	Sunny	None
2/4/2020 8:13	39	6	NW	Clear	None
2/4/2020 8:18	39	6	NW	Clear	None
2/5/2020 8:26	32	1	NW	Clear	None
2/5/2020 8:36	32	1	NW	Clear	None
2/6/2020 9:02	42	1	SW	Clear	None
2/6/2020 9:04	42	1	SW	Clear	None
2/6/2020 9:10	46	1	S	Clear	None
2/7/2020 14:35	65	2	NE	Clear	None
2/20/2020 7:53	42	1	S	Sunny	None

APPENDIX F Wind Speed Data



Wind Log - Vasco Road Landfill February 5, 2020



Wind Log - Vasco Road Landfill

February 7, 2020





February 4, 2020



Wind Log - Vasco Road Landfill

February 6, 2020



Wind Log - Vasco Road Landfill

February 20, 2020





Vasco Road Landfill

Quarterly Surface Emissions Monitoring Report – Second Quarter 2020







July 21, 2020

Mr. Lochlin Caffey Republic Services Vasco Road Landfill 4001 N Vasco Rd Livermore, CA 94551

Subject: Second Quarter 2020 Surface Emissions Monitoring Results for the Vasco Road Landfill, Livermore, CA

Dear Mr. Caffey:

This report provides results of the second quarter 2020 New Source Performance Standards (NSPS) and California Air Resources Board (CARB) Landfill Methane Rule (LMR) surface emissions monitoring (SEM) performed by Tetra Tech at the Vasco Road Landfill. All work was performed in accordance with Republic Standard Operating Procedures (SOP), NSPS and LMR requirements.

SUMMARY AND CONCLUSIONS

As stipulated in the LMR, if uncorrectable exceedances within the 10-day limitation are detected or emissions are discovered during an inspection by Regulatory Agencies, the landfill must perform monitoring on a 25-foot pathway on a quarterly basis for active disposal sites. If four (4) consecutive quarters of monitoring are performed without any exceedances, as stipulated in the LMR, the landfill may increase the spacing to 100-foot pathways. Therefore, based on the previous monitoring events, in which exceedances were observed, the monitoring at the Vasco Road Landfill was performed on 25-foot pathways in accordance with the LMR.

As required by the LMR, the landfill was divided into 50,000 square foot or less (partial) areas. The Vasco Road Landfill surface area was, therefore, divided into two hundred and thirty-three (233) individual grids as shown in Appendix A.

The second quarter 2020 SEM testing results indicated zero (0) exceedances of the LMR integrated threshold limit of 25 parts per million by volume (ppmv) as measured as methane above background and five (5) locations that exceeded the NSPS (Grids) and LMR (Grids and Penetrations) instantaneous level of 500 ppmv during the initial monitoring event. System adjustments and repair work was performed by Tetra Tech and site personnel. Subsequent re-monitoring occurred within the required timelines from NSPS and LMR. Re-monitoring indicated there were zero (0) locations with remaining instantaneous exceedances. These results are discussed in a subsequent section of this report.

Additionally, during this event, some grids were not monitored as these areas were deemed unsafe by Tetra Tech and site personnel for entry due to active filling operations or soil management operations, which could cause a potential for injury of monitoring personnel as follows:

- Full grids 26, 30, 31, 35, 36, 41, 42, 49, 52, 58, 59, 61, 66, 67, 74, 75, 78, 83, 84, 94, 102, 103, 113, 123, 124, 134, 135, 136, 137, 147, 148, 149, 150, 160, 161, 162, 163, 164, 174, 175, 176, 177, 180, 187, 188, 189, 190, 191, 192, 193, 201, 202, 203, 211, 212, 213, 214, 215, 223, 224, 225, 227, 228, 229, 230, 231, 232, and 233 were not monitored due to active construction, heavy equipment traffic, or steep slopes (steeper than 33.5% or 18 degrees) which resulted in unsafe conditions. (see Appendix A).
- Partial grids 2, 4, 19, 22, 23, 27, 34, 40, 48, 50, 51, 60, 62, 68, 70, 76, 79, 85, 87, 93, 95, 97, 104, 112, 114, 125, 138, 159, 165, 173, 178, 185, 186, 194, 195, 200, 204, 205, 210, 216, 222, and 226 were not monitored due to active construction, heavy equipment traffic, or steep slopes (steeper than 33.5% or 18 degrees) which resulted in unsafe conditions. (see Appendix A).

Areas consisting of native soil (no waste in place) were also exempted from monitoring, in accordance with the LMR.

Any wells located in grids noted as exempt from monitoring due to health and safety concerns that remained accessible were monitored on an as-needed basis.

Excluded areas are provided on the field map in Appendix A.

Further, as required under the LMR, any location on the landfill that has an observed instantaneous methane concentration greater than or equal to 500 ppmv, must be stake-marked and Global Positioning System (GPS) located on a site figure. When concentrations greater than or equal to 500 ppmv are observed during monitoring events, they are reported to site personnel and included in the quarterly report for that event for inclusion into the annual report as required.

Locations with concentrations between 200 ppmv and 499 ppmv are for reporting purposes only and require no remediation, as they are not an exceedance. Seven (7) locations were found during the monitoring between the LMR instantaneous recording levels of 200 ppmv to 499 ppmv.

Finally, to help prevent potential future exceedances, Tetra Tech recommends that the landfill surface be routinely inspected, and any observed surface erosion be routinely repaired and flowrates to the destruction devices be maximized.

BACKGROUND

The Vasco Road Landfill is an active organic refuse disposal site. By way of background, organic materials buried in a landfill decompose anaerobically (in the absence of oxygen) producing a combustible gas, which contains approximately 50 to 60 percent methane, 40 to 50 percent carbon dioxide, and trace amounts of various other gases, some of which are odorous. The Vasco Road Landfill property contains a Gas Collection and Control System (GCCS) to control the combustible gases generated in the landfill that may otherwise either vent vertically to the atmosphere or migrate horizontally through subsurface soil to locations on adjacent properties.

SURFACE EMISSIONS MONITORING

Instantaneous and integrated SEM was performed over the surface of the subject site on June 2, 3, 4, 8, and 17, 2020. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the NSPS and/or LMR threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring in the 50,000 square foot grids as required under the LMR. During this event Tetra Tech performed the monitoring on 25-foot pathways in all accessible areas, in accordance with the rules as required.

EMISSIONS TESTING INSTRUMENTATION/CALIBRATION

Instruments used to perform the landfill surface emission testing consisted of the following:

- Trimble SiteFID Landfill Gas Monitor Portable Flame Ionization Detector (FID). This instrument measures methane in air over a range of 1 to 50,000 ppmv. The SiteFID meets the CARB requirements for combined instantaneous and integrated monitoring and was calibrated in accordance with United States Environmental Protection Agency (US EPA) Method 21 and manufacturers specifications.
- A portable wind data logger by Secure Digital is used to monitor and log wind speeds while performing emissions monitoring. Field observations and local weather station information is used to track weather conditions and rain events.

Instrument calibration logs and instantaneous weather information are shown in Appendix D and E.

SURFACE EMISSIONS MONITORING PROCEDURES

Instantaneous and integrated SEM was conducted in accordance with NSPS and LMR requirements. Monitoring was performed with the FID inlet held within 2 inches of the landfill surface while a technician walked a grid in parallel paths not more than 25-feet apart over the surface of the landfill unless site safety conditions or prior monitoring results allowed 100-foot pathways. Cracks, holes and all cover penetrations in the surface were also tested. Instantaneous surface emissions readings were monitored continuously and recorded every 5 seconds. Any areas in exceedance of the 200 or 500 ppmv standards (reporting and compliance levels, respectively) were GPS tagged, any locations exceeding the 500 ppmv standard were also stake-marked for on-site personnel to perform remediation or repairs.

The integrated average is based on the readings stored on the instrument which are recorded every 5 seconds. The readings are then downloaded, and the averages are calculated for each grid using software provided by the instrument manufacturer. The readings are not provided in the report due to the volume of data but can be furnished upon request.

Recorded wind speed results are shown in Appendix F. Wind speed 15-minute averages were observed to remain below the approved Alternative Compliance Option (ACO) 10 miles per hour (based on 60 second intervals), and no instantaneous speeds exceeded 20 miles per hour during the testing. Monitoring was terminated in any instance average wind speeds exceeded 10 miles per hour until observed below the limit. No rainfall occurred during or within 24 hours of monitoring, in accordance

with the alternative compliance condition. Therefore, site meteorological conditions were within the approved alternatives of the LMR requirements on the above-mentioned dates.

TESTING RESULTS

During this SEM event Tetra Tech performed the monitoring on 25-foot pathways in accordance with the rules as required under the LMR and NSPS. The intent of the monitoring was to identify any specific locations or areas of the landfill surface with organic compound concentrations exceeding the NSPS and/or LMR threshold limit values of 500 ppmv measured as methane for instantaneous monitoring, or an average methane concentration of 25 ppmv for the integrated monitoring.

During the initial monitoring events on June 2, 3, 4, and 8, 2020, there were zero (0) exceedances of the LMR integrated threshold limit of 25 ppmv as measured as methane above background and five (5) locations that exceeded the NSPS (Grids) and LMR (Grids and Penetrations) instantaneous level of 500 ppmv. System adjustments and repair work (repair of boreholes, vacuum increases to nearby extraction wells and re-compaction of soil) was performed by site personnel and subsequent 10-day re-monitoring on June 8, 2020 indicated that all the five (5) areas that were initially in exceedance had returned to compliance.

Follow-up monitoring was conducted at the one-month interval as required on June 17, 2020. All areas of initial exceedance were re-monitored during this time following additional abatement activities by site personnel. After the one-month confirmation re-monitoring event, zero (0) instantaneous locations remained above the NSPS and LMR thresholds of compliance. Based on these results no further testing is required until the third quarter of 2020. Results of the monitoring are shown in Appendix B and C (Tables 1, 2, and 3). Calibration logs for the monitoring equipment are provided in Appendix D.

Furthermore, as required by the NSPS for surface emissions, the landfill perimeter was walked and tested. Results of this testing indicated that no exceedances of the 500 ppmv limit were observed, therefore the site perimeter was in compliance with the requirements of the rule.

As mentioned above:

- Full grids 26, 30, 31, 35, 36, 41, 42, 49, 52, 58, 59, 61, 66, 67, 74, 75, 78, 83, 84, 94, 102, 103, 113, 123, 124, 134, 135, 136, 137, 147, 148, 149, 150, 160, 161, 162, 163, 164, 174, 175, 176, 177, 180, 187, 188, 189, 190, 191, 192, 193, 201, 202, 203, 211, 212, 213, 214, 215, 223, 224, 225, 227, 228, 229, 230, 231, 232, and 233 were not monitored due to active construction, heavy equipment traffic, or steep slopes (steeper than 33.5% or 18 degrees) which resulted in unsafe conditions. (see Appendix A).
- Partial grids 2, 4, 19, 22, 23, 27, 34, 40, 48, 50, 51, 60, 62, 68, 70, 76, 79, 85, 87, 93, 95, 97, 104, 112, 114, 125, 138, 159, 165, 173, 178, 185, 186, 194, 195, 200, 204, 205, 210, 216, 222, and 226 were not monitored due to active construction, heavy equipment traffic, or steep slopes (steeper than 33.5% or 18 degrees) which resulted in unsafe conditions. (see Appendix A).

As these areas were deemed unsafe by Tetra Tech personnel for entry due to active filling operations, construction, and other dangerous or unsafe conditions, which could cause a potential for injury of monitoring personnel (Appendix A).

Areas consisting of native soil (no waste in place) are also exempt from monitoring, in accordance with the LMR.

Any wells located in grids noted as exempt from monitoring due to health and safety concerns that remained accessible were monitored on an as-needed basis.

PROJECT SCHEDULE

Following the initial events performed on June 2, 3, 4, and 8, 2020, subsequent re-monitoring was scheduled within 10 days. The first 10-day re-monitoring event was performed on June 8, 2020, and one-month confirmation testing of abated instantaneous readings was performed on June 17, 2020.

In accordance with the approved Scope of Work, Tetra Tech is scheduled to perform the third quarter NSPS and LMR monitoring event by the end of September 2020 in all areas deemed safe for entry.

STANDARD PROVISIONS

This report addresses conditions of the subject site during the testing dates only. Accordingly, we assume no responsibility for any changes that may occur subsequent to testing which could affect the surface emissions at the subject site or adjacent properties.

If you have any questions regarding this report, please contact Justin Ruhle at (925) 323-6866.

Thank you,

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Justin Ruhle - O&M West Area Manager

This report contains the following Appendices:

- Appendix A: Surface Grid Map
- Appendix B: Instantaneous Monitoring Results
- Appendix C: Integrated Monitoring Results
- Appendix D: Calibration Logs
- Appendix E: Weather Data
- Appendix F: Wind Speed Data

APPENDIX A Surface Grid Map



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1/2"



Vasco Road Landfill - 2Q2020 SEM

Annotated Map

Legend



Integrated Walking Paths

Active Working Face Wood Grinding Area **Landfill Operations Heavy Traffic Steep Slopes** Overgrown **Native Soil**

APPENDIX B Instantaneous Monitoring Results

Google Earth

-58

2000 ft

.94

-50

178 -

_36



Vasco Road Landfill - 2Q2020 SEM

Instantaneous Exceedance Map

Legend

-200

Instantaneous Point >= 500 ppmv (Corrected) Δ Instantaneous Point >= 500 ppmv (Remaining) Δ

148.

-202

186.

-211

-228



Table 1SUMMARY OF INSTANTANEOUS METHANE CONCENTRATIONS BETWEEN 200-499 PPMV2Q2020 Vasco Road Landfill

FILE NAME	DATE	GRID NO.	ID NO.	IATHUDE WGS84	LONGIIUDE WGS84	METHANE CONCENTRATION (ppmv)
MONITOR_Vasco_GRID_8_2020_Q2_Initial.csv	6/3/2020	8	4	37.759450	-121.723095	207.4
MONITOR_Vasco_GRID_8_2020_Q2_Initial.csv	6/3/2020	8	72	37.759667	-121.723243	218.6
MONITOR_Vasco_GRID_8_2020_Q2_Initial.csv	6/3/2020	8	73	37.759643	-121.723220	232.8
MONITOR_Vasco_GRID_8_2020_Q2_Initial.csv	6/3/2020	8	101	37.759738	-121.723202	223.3
MONITOR_Vasco_GRID_96_2020_Q2_Initial.csv	6/4/2020	96	57	37.755827	-121.725732	219.6
MONITOR_Vasco_GRID_105_2020_Q2_Initial.csv	6/4/2020	105	65	37.755563	-121.725872	270.3
MONITOR_Vasco_GRID_114_2020_Q2_Initial.csv	6/3/2020	114	56	37.756153	-121.727285	252.7
Table 2 SUMMARY OF INSTANTANEOUS METHANE CONCENTRATIONS ≥500 PPMV INCLUDING REMONITORING RESULTS 2Q2020 Vasco Road Landfill

FILE NAME	DATE	GRID NO. / WEIL ID.	ID NO.	LATTIUDE WGS84	LONGHUDE WGS84	METHANE CONCENTRATION (ppmv)
MONITOR_Vascowells_GRID_EW1001_2020_Q2_Initial.csv	6/2/2020	EW1001	NA	37.758377	-121.726012	668.1
MONITOR_Vascowells_GRID_EW1001_2020_Q2_10Day_1.csv	6/8/2020	EW1001	NA	37.758363	-121.726007	11.5
MONITOR_Vascowells_GRID_EW1001_2020_Q2_Month.csv	6/17/2020	EW1001	NA	37.758395	-121.726005	22.2
MONITOR_Vascowells_GRID_EW110_2020_Q2_Initial.csv	6/2/2020	EW110	NA	37.758802	-121.725615	1430.4
MONITOR_Vascowells_GRID_EW110_2020_Q2_10Day_1.csv	6/8/2020	EW110	NA	37.758817	-121.725630	60.6
MONITOR_Vascowells_GRID_EW110_2020_Q2_Month.csv	6/17/2020	EW110	NA	37.758847	-121.725592	5.0
MONITOR_Vascowells_GRID_EW113_2020_Q2_Initial.csv	6/2/2020	EW113	NA	37.760287	-121.723780	1339.7
MONITOR_Vascowells_GRID_EW113_2020_Q2_10Day_1.csv	6/8/2020	EW113	NA	37.760325	-121.723762	0.0
MONITOR_Vascowells_GRID_EW113_2020_Q2_Month.csv	6/17/2020	EW113	NA	37.760323	-121.723758	0.0
MONITOR_Vascowells_GRID_EW139_2020_Q2_Initial.csv	6/2/2020	EW139	NA	37.757402	-121.726077	1048.0
MONITOR_Vascowells_GRID_EW139_2020_Q2_10Day_1.csv	6/8/2020	EW139	NA	37.757387	-121.726073	2.5
MONITOR_Vascowells_GRID_EW139_2020_Q2_Month.csv	6/17/2020	EW139	NA	37.757405	-121.726083	0.0
MONITOR_Vascowells_GRID_EW92_2020_Q2_Initial.csv	6/2/2020	EW92	NA	37.758128	-121.725912	1899.8
MONITOR_Vascowells_GRID_EW92_2020_Q2_10Day_1.csv	6/8/2020	EW92	NA	37.758143	-121.725873	80.7
MONITOR_Vascowells_GRID_EW92_2020_Q2_Month.csv	6/17/2020	EW92	NA	37.758110	-121.725880	296.2

APPENDIX C Integrated Monitoring Results

Google Earth

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FILE NAME	DATE	GRID NO.	INTEGRATED METHANE CONCENTRATION (ppmv)
MONITOR Vasco CRID 1 2020 O2 Initial csv	6/3/2020	1	0.4
MONITOR_Vasco_GRID_2_2020_Q2_initial.csv	6/3/2020	2	0.9
MONITOR Vasco GRID 3 2020 Q2 Initial csv	6/3/2020	3	2.3
MONITOR Vasco GRID 4 2020 Q2 Initial csv	6/3/2020	4	2.2
MONITOR Vasco GRID 5 2020 Q2 Initial csv	6/2/2020	5	0.1
MONITOR Vasco GRID 6 2020 Q2 Initial csv	6/3/2020	6	6.1
MONITOR Vasco GRID 7 2020 Q2 Initial.csv	6/2/2020	7	0.1
MONITOR Vasco GRID 8 2020 Q2 Initial.csv	6/3/2020	8	17.5
MONITOR Vasco GRID 9 2020 Q2 Initial.csv	6/2/2020	9	0.2
MONITOR Vasco GRID 10 2020 Q2 Initial.csv	6/3/2020	10	8.9
MONITOR Vasco GRID 11 2020 Q2 Initial.csv	6/2/2020	11	0.0
MONITOR Vasco GRID 12 2020 Q2 Initial.csv	6/2/2020	12	5.8
MONITOR Vasco GRID 13 2020 Q2 Initial.csv	6/2/2020	13	2.6
MONITOR Vasco GRID 14 2020 Q2 Initial.csv	6/2/2020	14	0.4
MONITOR Vasco GRID 15 2020 Q2 Initial.csv	6/2/2020	15	0.0
MONITOR Vasco GRID 16 2020 Q2 Initial.csv	6/2/2020	16	4.5
MONITOR Vasco GRID 17 2020 Q2 Initial csv	6/2/2020	17	0.0
MONITOR Vasco GRID 18 2020 Q2 Initial csv	6/2/2020	18	12
MONITOR Vasco GRID 19 2020 02 Initial csv	6/2/2020	19	73
MONITOR Vasco GRID 20 2020 Q2 Initial csv	6/2/2020	20	0.5
MONITOR Vasco GRID 21 2020 Q2 Initial csv	6/2/2020	21	0.0
MONITOR Vasco GRID 22 2020 02 Initial csv	6/2/2020	22	0.6
MONITOR Vasco GRID 23 2020 Q2 Initial csv	6/2/2020	23	13.4
MONITOR Vasco GRID 24 2020 02 Initial csv	6/2/2020	24	0.0
MONITOR Vasco CRID 25 2020 Q2 Initial csv	6/2/2020	25	0.0
MONITOR Vasco CRID 27 2020 Q2 Initial csv	6/2/2020	20 27	59
MONITOR Vasco_GRID 28 2020 Q2 Initial csv	6/2/2020	28	0.0
MONITOR Vasco GRID 29 2020 02 Initial csv	6/2/2020	29	0.0
MONITOR Vasco GRID 32 2020 Q2 Initial csv	6/2/2020	32	0.0
MONITOR Vasco GRID 33 2020 O2 Initial csv	6/2/2020	33	0.0
MONITOR Vasco GRID 34 2020 Q2 Initial csv	6/2/2020	34	0.0
MONITOR Vasco GRID 37 2020 Q2 Initial csv	6/3/2020	37	0.5
MONITOR Vasco GRID 38 2020 02 Initial csv	6/2/2020	38	0.9
MONITOR Vasco GRID 39 2020 02 Initial csv	6/2/2020	39	0.0
MONITOR Vasco_GRID 40 2020 Q2 Initial csv	6/2/2020	40	0.0
MONITOR Vasco GRID 43 2020 02 Initial csv	6/3/2020	43	0.1
MONITOR Vasco GRID 44 2020 02 Initial csv	6/3/2020	44	0.7
MONITOR Vasco GRID 45 2020 02 Initial csv	6/3/2020	45	1.0
MONITOR Vasco GRID 46 2020 02 Initial csv	6/2/2020	46	0.4
MONITOR Vasco GRID 47 2020 Q2 Initial.csv	6/2/2020	47	0.0
MONITOR Vasco GRID 48 2020 Q2 Initial csv	6/2/2020	48	0.0
MONITOR Vasco GRID 50 2020 Q2 Initial csv	6/3/2020	50	0.9
MONITOR Vasco GRID 51 2020 02 Initial csv	6/4/2020	51	0.0
MONITOR Vasco GRID 53 2020 Q2 Initial csv	6/8/2020	53	0.0
MONITOR Vasco GRID 54 2020 Q2 Initial csv	6/8/2020	54	0.0
MONITOR Vasco GRID 55 2020 Q2 Initial.csv	6/4/2020	55	1.7
MONITOR Vasco GRID 56 2020 02 Initial csv	6/4/2020	56	0.1
MONITOR Vasco GRID 57 2020 Q2 Initial.csv	6/3/2020	57	0.2
MONITOR Vasco GRID 60 2020 02 Initial csv	6/3/2020	60	0.6
MONITOR Vasco GRID 62 2020 02 Initial csv	6/8/2020	62	0.0
MONITOR Vasco GRID 63 2020 02 Initial csv	6/4/2020	63	0.0
MONITOR_Vasco_GRID_64_2020 Q2 Initial.csv	6/4/2020	64	0.1

FILE NAME	DATE	GRID NO.	INTEGRATED METHANE CONCENTRATION (ppmv)
MONITOR Vasco GRID 65 2020 Q2 Initial.csv	6/3/2020	65	0.2
MONITOR Vasco GRID 68 2020 Q2 Initial.csv	6/3/2020	68	0.4
MONITOR_Vasco_GRID_69_2020_Q2_Initial.csv	6/4/2020	69	1.2
MONITOR Vasco GRID 70 2020 Q2 Initial.csv	6/8/2020	70	0.1
MONITOR Vasco GRID 71 2020 Q2 Initial.csv	6/4/2020	71	0.0
MONITOR_Vasco_GRID_72_2020_Q2_Initial.csv	6/4/2020	72	0.1
MONITOR_Vasco_GRID_73_2020_Q2_Initial.csv	6/3/2020	73	0.1
MONITOR_Vasco_GRID_76_2020_Q2_Initial.csv	6/3/2020	76	2.9
MONITOR_Vasco_GRID_77_2020_Q2_Initial.csv	6/4/2020	77	0.9
MONITOR_Vasco_GRID_79_2020_Q2_Initial.csv	6/8/2020	79	0.1
MONITOR Vasco GRID 80 2020 Q2 Initial.csv	6/4/2020	80	0.0
MONITOR Vasco GRID 81 2020 Q2 Initial.csv	6/4/2020	81	0.1
MONITOR Vasco GRID 82 2020 Q2 Initial.csv	6/3/2020	82	0.1
MONITOR Vasco GRID 85 2020 Q2 Initial.csv	6/3/2020	85	0.2
MONITOR Vasco GRID 86 2020 Q2 Initial.csv	6/4/2020	86	5.2
MONITOR Vasco GRID 87 2020 Q2 Initial.csv	6/8/2020	87	0.0
MONITOR Vasco GRID 88 2020 Q2 Initial csv	6/4/2020	88	0.0
MONITOR Vasco GRID 89 2020 Q2 Initial csv	6/4/2020	89	0.1
MONITOR Vasco GRID 90 2020 Q2 Initial csv	6/3/2020	90	0.2
MONITOR Vasco GRID 91 2020 Q2 Initial csv	6/3/2020	91	0.1
MONITOR Vasco GRID 92 2020 02 Initial csv	6/3/2020	92	0.5
MONITOR Vasco CRID 93 2020 02 Initial csv	6/3/2020	93	0.0
MONITOR Vasco GRID 95 2020 Q2 Initial csv	6/3/2020	95	4.0
MONITOR Vasco CRID 96 2020 02 Initial csv	6/4/2020	96	9 1
MONITOR Vasco CRID 97 2020 02 Initial csv	6/4/2020	97	0.1
MONITOR Vasco CRID 98 2020 02 Initial csv	6/8/2020	98	0.0
MONITOR Vasco GRID 99 2020 Q2 Initial csv	6/4/2020	99	0.0
MONITOR Vasco GRID 100 2020 02 Initial csv	6/4/2020	100	0.0
MONITOR Vasco GRID 101 2020 Q2 Initial csv	6/3/2020	101	0.2
MONITOR Vasco GRID 104 2020 Q2 Initial csv	6/3/2020	104	4.2
MONITOR Vasco GRID 105 2020 Q2 Initial csv	6/4/2020	105	18.2
MONITOR Vasco GRID 106 2020 Q2 Initial csv	6/4/2020	106	16
MONITOR Vasco GRID 107 2020 Q2 Initial csv	6/8/2020	107	0.1
MONITOR Vasco GRID 108 2020 02 Initial csv	6/4/2020	108	0.2
MONITOR Vasco GRID 109 2020 Q2 Initial csv	6/4/2020	109	0.0
MONITOR Vasco GRID 110 2020 Q2 Initial csv	6/3/2020	110	0.1
MONITOR Vasco GRID 111 2020 Q2 Initial csv	6/3/2020	111	1.2
MONITOR Vasco GRID 112 2020 Q2 Initial csv	6/3/2020	112	0.4
MONITOR Vasco GRID 114 2020 Q2 Initial csv	6/3/2020	114	20.2
MONITOR Vasco GRID 115 2020 Q2 Initial csv	6/4/2020	115	24.2
MONITOR Vasco GRID 116 2020 Q2 Initial csv	6/4/2020	116	0.0
MONITOR Vasco GRID 117 2020 Q2 Initial csv	6/8/2020	117	0.1
MONITOR Vasco GRID 118 2020 Q2 Initial csv	6/4/2020	118	1.2
MONITOR Vasco GRID 119 2020 Q2 Initial.csv	6/4/2020	119	0.2
MONITOR Vasco GRID 120 2020 Q2 Initial csv	6/3/2020	120	0.1
MONITOR Vasco GRID 121 2020 02 Initial csv	6/3/2020	121	0.2
MONITOR Vasco GRID 122 2020 Q2 Initial csv	6/3/2020	122	1.2
MONITOR Vasco GRID 125 2020 Q2 Initial.csv	6/3/2020	125	4.5
MONITOR Vasco GRID 126 2020 O2 Initial.csv	6/4/2020	126	2.0
MONITOR Vasco GRID 127 2020 O2 Initial.csv	6/4/2020	127	0.1
MONITOR Vasco GRID 128 2020 02 Initial csv	6/8/2020	128	0.0
MONITOR_Vasco_GRID_129_2020_Q2_Initial.csv	6/4/2020	129	0.2

FILE NAME	DATE	GRID NO.	INTEGRATED METHANE CONCENTRATION (ppmv)
MONITOR Vasco GRID 130 2020 Q2 Initial.csv	6/4/2020	130	0.1
MONITOR Vasco GRID 131 2020 Q2 Initial.csv	6/3/2020	131	0.0
MONITOR_Vasco_GRID_132_2020_Q2_Initial.csv	6/3/2020	132	0.1
MONITOR_Vasco_GRID_133_2020_Q2_Initial.csv	6/3/2020	133	0.1
MONITOR_Vasco_GRID_138_2020_Q2_Initial.csv	6/3/2020	138	0.2
MONITOR_Vasco_GRID_139_2020_Q2_Initial.csv	6/4/2020	139	0.0
MONITOR_Vasco_GRID_140_2020_Q2_Initial.csv	6/4/2020	140	0.0
MONITOR_Vasco_GRID_141_2020_Q2_Initial.csv	6/8/2020	141	0.0
MONITOR_Vasco_GRID_142_2020_Q2_Initial.csv	6/4/2020	142	0.6
MONITOR_Vasco_GRID_143_2020_Q2_Initial.csv	6/4/2020	143	0.1
MONITOR_Vasco_GRID_144_2020_Q2_Initial.csv	6/3/2020	144	0.1
MONITOR_Vasco_GRID_145_2020_Q2_Initial.csv	6/3/2020	145	0.0
MONITOR_Vasco_GRID_146_2020_Q2_Initial.csv	6/3/2020	146	0.0
MONITOR_Vasco_GRID_151_2020_Q2_Initial.csv	6/3/2020	151	0.0
MONITOR_Vasco_GRID_152_2020_Q2_Initial.csv	6/4/2020	152	0.0
MONITOR_Vasco_GRID_153_2020_Q2_Initial.csv	6/4/2020	153	0.0
MONITOR_Vasco_GRID_154_2020_Q2_Initial.csv	6/8/2020	154	0.0
MONITOR_Vasco_GRID_155_2020_Q2_Initial.csv	6/4/2020	155	0.7
MONITOR_Vasco_GRID_156_2020_Q2_Initial.csv	6/4/2020	156	0.1
MONITOR_Vasco_GRID_157_2020_Q2_Initial.csv	6/3/2020	157	0.2
MONITOR_Vasco_GRID_158_2020_Q2_Initial.csv	6/3/2020	158	0.0
MONITOR_Vasco_GRID_159_2020_Q2_Initial.csv	6/3/2020	159	0.0
MONITOR_Vasco_GRID_165_2020_Q2_Initial.csv	6/3/2020	165	0.0
MONITOR_Vasco_GRID_166_2020_Q2_Initial.csv	6/3/2020	166	0.0
MONITOR_Vasco_GRID_167_2020_Q2_Initial.csv	6/4/2020	167	0.0
MONITOR_Vasco_GRID_168_2020_Q2_Initial.csv	6/8/2020	168	0.1
MONITOR_Vasco_GRID_169_2020_Q2_Initial.csv	6/4/2020	169	0.2
MONITOR_Vasco_GRID_170_2020_Q2_Initial.csv	6/4/2020	170	0.1
MONITOR_Vasco_GRID_171_2020_Q2_Initial.csv	6/3/2020	171	0.2
MONITOR_Vasco_GRID_172_2020_Q2_Initial.csv	6/3/2020	172	0.1
MONITOR_Vasco_GRID_173_2020_Q2_Initial.csv	6/3/2020	173	0.0
MONITOR_Vasco_GRID_178_2020_Q2_Initial.csv	6/3/2020	178	0.9
MONITOR_Vasco_GRID_179_2020_Q2_Initial.csv	6/3/2020	179	0.0
MONITOR_Vasco_GRID_181_2020_Q2_Initial.csv	6/8/2020	181	0.1
MONITOR_Vasco_GRID_182_2020_Q2_Initial.csv	6/4/2020	182	1.1
MONITOR_Vasco_GRID_183_2020_Q2_Initial.csv	6/4/2020	183	0.2
MONITOR_Vasco_GRID_184_2020_Q2_Initial.csv	6/3/2020	184	0.1
MONITOR_Vasco_GRID_185_2020_Q2_Initial.csv	6/3/2020	185	0.0
MONITOR_Vasco_GRID_186_2020_Q2_Initial.csv	6/3/2020	186	0.0
MONITOR_Vasco_GRID_194_2020_Q2_Initial.csv	6/3/2020	194	0.0
MONITOR_Vasco_GRID_195_2020_Q2_Initial.csv	6/4/2020	195	0.2
MONITOR_Vasco_GRID_196_2020_Q2_Initial.csv	6/8/2020	196	0.1
MONITOR_Vasco_GRID_197_2020_Q2_Initial.csv	6/4/2020	197	1.3
MONITOR_Vasco_GRID_198_2020_Q2_Initial.csv	6/4/2020	198	0.1
MONITOR_Vasco_GRID_199_2020_Q2_Initial.csv	6/3/2020	199	0.1
MONITOR_Vasco_GRID_200_2020_Q2_Initial.csv	6/3/2020	200	0.0
MONITOR_Vasco_GRID_204_2020_Q2_Initial.csv	6/3/2020	204	0.0
MONITOR_Vasco_GRID_205_2020_Q2_Initial.csv	6/4/2020	205	0.1
MONITOR_Vasco_GRID_206_2020_Q2_Initial.csv	6/8/2020	206	0.0
MONITOR_Vasco_GRID_207_2020_Q2_Initial.csv	6/4/2020	207	0.1
MONITOR_Vasco_GRID_208_2020_Q2_Initial.csv	6/4/2020	208	0.4
MONITOR_Vasco_GRID_209_2020_Q2_Initial.csv	6/3/2020	209	0.1

FILE NAME	DATE	GRID NO.	INTEGRATED METHANE CONCENTRATION (ppmv)
MONITOR_Vasco_GRID_210_2020_Q2_Initial.csv	6/3/2020	210	0.1
MONITOR_Vasco_GRID_216_2020_Q2_Initial.csv	6/8/2020	216	0.0
MONITOR_Vasco_GRID_217_2020_Q2_Initial.csv	6/4/2020	217	0.9
MONITOR_Vasco_GRID_218_2020_Q2_Initial.csv	6/4/2020	218	0.1
MONITOR_Vasco_GRID_219_2020_Q2_Initial.csv	6/4/2020	219	0.1
MONITOR_Vasco_GRID_220_2020_Q2_Initial.csv	6/4/2020	220	0.1
MONITOR_Vasco_GRID_221_2020_Q2_Initial.csv	6/3/2020	221	0.1
MONITOR_Vasco_GRID_222_2020_Q2_Initial.csv	6/3/2020	222	0.1
MONITOR_Vasco_GRID_226_2020_Q2_Initial.csv	6/4/2020	226	0.2

APPENDIX D Calibration Logs



MONITOR TYPE VERIFICATION SUMMARY	OPERATOR NAME Field Solutions, Inc.	FID ID 886B0FA6E68F	FILE SAVE TIME 6/2/2020 7:39	AVG PRECISION (%) -0.9	AVG RESPONSE TIME (SECONDS) 5				
MONITOR TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT	<u>CAL GAS SERIAL NUMBER</u>	CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane)	CAL GAS CONCENTRATION (ppmv) 500 500 500	MEASURED CONCENTRATION (ppmv) 500.5 492.1 493.4	DIFFERENCE (ppmv) 0.5 -7.9 -6.6	DIFFERENCE (%) 0.1 -1.6 -1.3	ZERO AIR PPM 0 0 0	<u>TIMESTAMP</u> 6/2/2020 7:37 6/2/2020 7:38 6/2/2020 7:38	<u>FID ID</u> 886B0FA6E68F 886B0FA6E68F 886B0FA6E68F
MONITOR TYPE RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT	<u>CAL GAS SERIAL NUMBER</u>	CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane)	CAL GAS CONCENTRATION (ppmv) 500 500 500 500	TARGET CONCENTRATION (ppmv) 470.6 470.6 470.6 470.6	INITIAL CONCENTRATION (ppmv) 0 0 0	RESPONSE TIME (seconds) 5 5 5 5	TIMESTAMP 6/2/2020 7:38 6/2/2020 7:39 6/2/2020 7:39	FID ID 886B0FA6E68F 886B0FA6E68F 886B0FA6E68F	
MONITOR TYPE VERIFICATION SUMMARY	OPERATOR NAME Field Solutions, Inc.	FID ID 886B0F62C147	File SAVE TIME 6/2/2020 7:40	AVG PRECISION (%) -0.8	AVG RESPONSE TIME (SECONDS) 5				
MONITOR TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT	CAL GAS SERIAL NUMBER	CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane)	CAL GAS CONCENTRATION (ppmv) 500 500 500 CAL GAS CONCENTRATION (ppmv)	MEASURED CONCENTRATION (ppmv) 495.7 496.1 496.9	DIFFERENCE (ppmv) -4.3 -3.9 -3.1	DIFFERENCE (%) -0.9 -0.8 -0.6 RESPONSE TIME (seconds)	ZERO AIR PPM 0 0 0 TIMESTAMP	TIMESTAMP 6/2/2020 7:37 6/2/2020 7:37 6/2/2020 7:38	FID ID 886B0F62C147 886B0F62C147 886B0F62C147
RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT		CH4 (Methane) CH4 (Methane) CH4 (Methane)	500 500	471.4 471.4 471.4	0 0 0	5 5 5 5	6/2/2020 7:39 6/2/2020 7:40 6/2/2020 7:40	886B0F62C147 886B0F62C147 886B0F62C147	
MONITOR TYPE VERIFICATION SUMMARY	OPERATOR NAME Field Solutions, Inc.	FID ID 000780DABAC4	FILE SAVE TIME 6/2/2020 7:47	AVG PRECISION (%) -0.6	AVG RESPONSE TIME (SECONDS) 5				
MONITOR TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT	CAL GAS SERIAL NUMBER	CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane)	CAL GAS CONCENTRATION (ppmv) 500 500 500	MEASURED CONCENTRATION (ppmv) 495.2 496.5 499.2	DIFFERENCE (ppmv) -4.8 -3.5 -0.8	DIFFERENCE (%) -1 -0.7 -0.2	ZERO AIR PPM 0 0 0 TIMESTAMP	TIMESTAMP 6/2/2020 7:41 6/2/2020 7:42 6/2/2020 7:42	FID ID 000780DABAC4 000780DABAC4 000780DABAC4
RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT	CAL GAS SERIAL NUIVIDER	CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane)	500 500	472.1 472.1 472.1	0 0 0 0	<u>KESPOINSE TIME (Seconds)</u> 5 5 5 5	6/2/2020 7:44 6/2/2020 7:44 6/2/2020 7:45	000780DABAC4 000780DABAC4 000780DABAC4	
MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Field Solutions, Inc.	INSTRUMENT ID 886B0F62C147	FILE SAVE TIME 6/3/2020 7:43	AVG PRECISION (%) -0.7	AVG RESPONSE TIME (SECONDS) 5				
MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT	<u>CAL GAS SERIAL NUMBER</u>	<u>CAL GAS TYPE</u> CH4 (Methane) CH4 (Methane) CH4 (Methane)	CAL GAS CONCENTRATION (ppmv) 500 500 500 500	DETECTOR CONCENTRATION (ppmv) 496.5 496.3 496.8	DIFFERENCE (ppmv) -3.5 -3.7 -3.2	DIFFERENCE (%) -0.7 -0.7 -0.6	ZERO AIR PPM 0 0 0	TIMESTAMP 6/3/2020 7:41 6/3/2020 7:41 6/3/2020 7:42	INSTRUMENT ID 886B0F62C147 886B0F62C147 886B0F62C147
MONITORING TYPE RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT	<u>CAL GAS SERIAL NUMBER</u>	CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane)	CAL GAS CONCENTRATION (ppmv) 500 500 500 500	TARGET CONCENTRATION (ppmv) 471.7 471.7 471.7 471.7	INITIAL CONCENTRATION (ppmv) 0 0 0	RESPONSE TIME (seconds) 5 5 5 5	TIMESTAMP 6/3/2020 7:42 6/3/2020 7:43 6/3/2020 7:43	INSTRUMENT ID 886B0F62C147 886B0F62C147 886B0F62C147	



MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Field Solutions, Inc.	INSTRUMENT ID 886B0FA6E68F	FILE SAVE TIME 6/3/2020 7:48	AVG PRECISION (%) -1.1	AVG RESPONSE TIME (SECONDS) 4.7				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (npmy)	DETECTOR CONCENTRATION (npmy)	DIFFERENCE (ppmy)	DIFFERENCE (%)		TIMESTAMP	INSTRUMENT ID
	CAL GAS SERIAL NOWBER	CH4 (Methane)	500	491.8	-8.2	-1.6		6/3/2020 7:45	886B0EA6E68E
PRECISION MEASUREMENT		CH4 (Methane)	500	496.3	-3.7	-0.7	0	6/3/2020 7:46	886B0FA6F68F
PRECISION MEASUREMENT		CH4 (Methane)	500	495.1	-4.9	-1	0	6/3/2020 7:46	886B0FA6E68F
		· · · · · · · · · · · · · · · · · · ·							
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	469.7	0	5	6/3/2020 7:47	886B0FA6E68F	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	469.7	2.9	5	6/3/2020 7:47	886B0FA6E68F	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	469.7	0	4	6/3/2020 7:48	886B0FA6E68F	
MONITORING TYPE	OPERATOR NAME	INSTRUMENT ID	FILE SAVE TIME	AVG PRECISION (%)	AVG RESPONSE TIME (SECONDS)				
VERIFICATION SUMMARY	Field Solutions, Inc.	000780DABAC4	6/3/2020 7:50	-0.5	5.3				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	DETECTOR CONCENTRATION (ppmv)	DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
PRECISION MEASUREMENT		CH4 (Methane)	500	497.7	-2.3	-0.5	0	6/3/2020 7:45	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	497.1	-2.9	-0.6	0	6/3/2020 7:46	000780DABAC4
PRECISION MEASUREMENT		CH4 (Methane)	500	497.2	-2.8	-0.6	0	6/3/2020 7:46	000780DABAC4
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	472.5	0	5	6/3/2020 7:47	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	472.5	0	6	6/3/2020 7:47	000780DABAC4	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	472.5	0	5	6/3/2020 7:48	000780DABAC4	
MONITORING TYPE	OPERATOR NAME	INSTRUMENT ID	FILE SAVE TIME	AVG PRECISION (%)	AVG RESPONSE TIME (SECONDS)				
MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Field Solutions, Inc.	INSTRUMENT ID 000780DABAC4	FILE SAVE TIME 6/4/2020 7:43	AVG PRECISION (%) -0.5	AVG RESPONSE TIME (SECONDS) 5.3				
MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Field Solutions, Inc.	INSTRUMENT ID 000780DABAC4	FILE SAVE TIME 6/4/2020 7:43	AVG PRECISION (%) -0.5	AVG RESPONSE TIME (SECONDS) 5.3				
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE	OPERATOR NAME Field Solutions, Inc. CAL GAS SERIAL NUMBER	INSTRUMENT ID 000780DABAC4 CAL GAS TYPE	<u>FILE SAVE TIME</u> 6/4/2020 7:43 CAL GAS CONCENTRATION (ppmv)	AVG PRECISION (%) -0.5 DETECTOR CONCENTRATION (ppmv)	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT	OPERATOR NAME Field Solutions, Inc. CAL GAS SERIAL NUMBER	INSTRUMENT ID 000780DABAC4 CAL GAS TYPE CH4 (Methane)	FILE SAVE TIME 6/4/2020 7:43 CAL GAS CONCENTRATION (ppmv) 500	AVG PRECISION (%) -0.5 DETECTOR CONCENTRATION (ppmv) 497.6	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4	DIFFERENCE (%) -0.5	<mark>ZERO AIR PPM</mark> 0	<u>TIMESTAMP</u> 6/4/2020 7:40	INSTRUMENT ID 000780DABAC4
MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT	OPERATOR NAME Field Solutions, Inc. CAL GAS SERIAL NUMBER	INSTRUMENT ID 000780DABAC4 CAL GAS TYPE CH4 (Methane) CH4 (Methane)	FILE SAVE TIME 6/4/2020 7:43 CAL GAS CONCENTRATION (ppmv) 500 500	AVG PRECISION (%) -0.5 DETECTOR CONCENTRATION (ppmv) 497.6 497.6	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4	DIFFERENCE (%) -0.5 -0.5	<mark>ZERO AIR PPM</mark> O O	TIMESTAMP 6/4/2020 7:40 6/4/2020 7:41	INSTRUMENT ID 000780DABAC4 000780DABAC4
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MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT MONITORING TYPE RESPONSE TIME MEASUREMENT	OPERATOR NAME Field Solutions, Inc. CAL GAS SERIAL NUMBER	INSTRUMENT ID 000780DABAC4 CAL GAS TYPE CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 GAS TYPE CH4 (Methane)	FILE SAVE TIME 6/4/2020 7:43 CAL GAS CONCENTRATION (ppmv) 500 500 500 500 500 500 500 500 500 500 500	AVG PRECISION (%) -0.5 DETECTOR CONCENTRATION (ppmv) 497.6 497.6 497.7 TARGET CONCENTRATION (ppmv) 472.7	AVG RESPONSE TIME (SECONDS) 5.3 DIFFERENCE (ppmv) -2.4 -2.4 -2.3 INITIAL CONCENTRATION (ppmv) 0	DIFFERENCE (%) -0.5 -0.5 -0.5 -0.5 RESPONSE TIME (seconds) 6	ZERO AIR PPM 0 0 0 TIMESTAMP 6/4/2020 7:42	TIMESTAMP 6/4/2020 7:40 6/4/2020 7:41 6/4/2020 7:41 INSTRUMENT ID 000780DABAC4	INSTRUMENT ID 000780DABAC4 000780DABAC4 000780DABAC4
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MONITORING TYPE VERIFICATION SUMMARY MONITORING TYPE PRECISION MEASUREMENT PRECISION MEASUREMENT PRECISION MEASUREMENT MONITORING TYPE RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT RESPONSE TIME MEASUREMENT	OPERATOR NAME Field Solutions, Inc. CAL GAS SERIAL NUMBER	INSTRUMENT ID 88680FA6E68F CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane) CH4 (Methane)	FILE SAVE TIME 6/4/2020 7:51 CAL GAS CONCENTRATION (ppmv) 500 500 CAL GAS CONCENTRATION (ppmv) 500	AVG PRECISION (%) 0.2 DETECTOR CONCENTRATION (ppmv) 497.1 501.8 504.8 TARGET CONCENTRATION (ppmv) 476.2 476.2 476.2	AVG RESPONSE TIME (SECONDS) 5 DIFFERENCE (ppmv) -2.9 1.8 4.8 INITIAL CONCENTRATION (ppmv) 0 0 0 0	DIFFERENCE (%) -0.6 0.4 1 RESPONSE TIME (seconds) 5 5 5 5 5 5	2ERO AIR PPM 0 0 0 TIMESTAMP 6/4/2020 7:50 6/4/2020 7:51	TIMESTAMP 6/4/2020 7:49 6/4/2020 7:49 6/4/2020 7:49 INSTRUMENT ID 88680FA6E68F 88680FA6E68F 88680FA6E68F 88680FA6E68F	INSTRUMENT ID 88680FA6E68F 88680FA6E68F 88680FA6E68F
MONITORING TYPE	OPERATOR NAME	INSTRUMENT ID	FILE SAVE TIME	AVG PRECISION (%)	AVG RESPONSE TIME (SECONDS)				
VERIFICATION SUMMARY	Field Solutions, Inc.	886B0FA6E68F	6/8/2020 7:55	1.8	5				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	DETECTOR CONCENTRATION (ppmv)	DIFFERENCE (ppmv)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
PRECISION MEASUREMENT		CH4 (Methane)	500	509.8	9.8	2	0	6/8/2020 7:52	886B0FA6E68F
PRECISION MEASUREMENT		CH4 (Methane)	500	510.1	10.1	2	0	6/8/2020 7:52	886B0FA6E68F
PRECISION MEASUREMENT		CH4 (Methane)	500	506.6	6.6	1.3	0	6/8/2020 7:53	886B0FA6E68F
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	TARGET CONCENTRATION (ppmv)	INITIAL CONCENTRATION (ppmv)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	483.4	0	5	6/8/2020 7:54	886B0FA6E68F	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	483.4	0	5	6/8/2020 7:54	886B0FA6E68F	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	483.4	0	5	6/8/2020 7:55	886B0FA6E68F	
MONITORING TYPE VERIFICATION SUMMARY	OPERATOR NAME Field Solutions, Inc.	INSTRUMENT ID 886B0FA6E68F	File SAVE TIME 6/17/2020 8:07	AVG PRECISION (%) -0.9	AVG RESPONSE TIME (SECONDS) 5.3				
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (ppmv)	DETECTOR CONCENTRATION (ppmv)	DIFFERENCE (ppmy)	DIFFERENCE (%)	ZERO AIR PPM	TIMESTAMP	INSTRUMENT ID
PRECISION MEASUREMENT	<u></u>	CH4 (Methane)	500	496.8	-3.2	-0.6	0	6/17/2020 8:05	886B0FA6E68F
PRECISION MEASUREMENT		CH4 (Methane)	500	494.3	-5.7	-1.1	0	6/17/2020 8:06	886B0FA6F68F
PRECISION MEASUREMENT		CH4 (Methane)	500	495.9	-4.1	-0.8	0	6/17/2020 8:06	886B0FA6E68F
MONITORING TYPE	CAL GAS SERIAL NUMBER	CAL GAS TYPE	CAL GAS CONCENTRATION (npmy)	TARGET CONCENTRATION (ppmy)	INITIAL CONCENTRATION (npmy)	RESPONSE TIME (seconds)	TIMESTAMP	INSTRUMENT ID	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	470.9	0	5	6/17/2020 8:07	886B0EA6E68E	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	470.9	0	6	6/17/2020 8:07	886B0EA6E68E	
RESPONSE TIME MEASUREMENT		CH4 (Methane)	500	470.9	0	5	6/17/2020 8:07	886B0FA6E68F	
		- ,/							

APPENDIX E Weather Data



Date/Time	Temperature (°F)	Average Wind Speed (mph)	Wind Direction	Sky Condition	Precipitation
6/2/2020 7:42	63	1	South-West	Clear	None
6/2/2020 8:01	64	0	North-West	Clear	None
6/2/2020 7:51	63	1	East	Clear	None
6/3/2020 8:01	70	1	North-East	Clear	None
6/3/2020 8:08	72	1	North-East	Clear	None
6/3/2020 8:08	72	1	North-East	Clear	None
6/4/2020 7:51	69	1	West	Clear	None
6/4/2020 8:06	70	1	West	Clear	None
6/4/2020 8:00	67	1	South-West	Clear	None
6/8/2020 8:16	61	3	North	Clear	None
6/8/2020 9:19	64	5	North-West	Clear	None
6/17/2020 8:17	66	3	North-West	Clear	None

Field Solutions, Inc. portable wind meter

APPENDIX F Wind Speed Data



Wind Log - Vasco Road Landfill

June 4, 2020



Wind Log - Vasco Road Landfill

June 8, 2020







APPENDIX I

COMPONENT LEAK CHECKS

Vasco Road Landfill, Livermore, California

1st QUARTER WELLFIELD COMPONENT LEAK MONITORING

SITE NAME: SERIAL NUMBER:	Vasco TLCF0303		DATE: TECHNICIAN:	February 3 and 7, 2020 Mike Schorer			
INSTRUMENT USED:	TRIMBLE		CAL. GAS EXP:	11/28/2022			
LOCATION OF LEAK	LEAK CONCENTRATION (ppmv)	DATE OF DISCOVERY	DESCRIPTION OF EQUIPMENT	ACTION TAKEN TO REPAIR LEAK	DATE OF REPAIR	DATE OF ANY REQUIRED RE- MONITORING	RE-MONITORED CONCENTRATION (ppmv)
VREW0908	42,205.6	2/3/2020	NA	NONE	02/07/20	NONE	1.3
VR12LR02	1,149.0	2/3/2020	NA	NONE	02/07/20	NONE	0.0
Note:	Leaks over 500 ppmv r 10, Article 4, Subarticle Regulation 8-34-301.2. and that contains landf connectors, but exclud landfill, are considered	methane are exce e 6, Section 9546 BAAQMD Regu ill gas including, ing landfill gas ar to be componen	eedances at any compo 4(b)(1)(B). Leaks over lation 8-34-228 Defines but not limited to, wells, nalyzers. Vaults contain ts, unless the operator	nent containing landfill gas, pursuant to 1,000 ppmv methane are exceedances a Component as: Any equipment that pipes, flanges, fittings, valves, flame a ing gas collection system equipment, w can demonstrate to the satisfaction of t	o CARB Title 17 of at any component is part of the gas c rrestors, knock-ou there the top of the he APCO that the	California Code of Reg containing landfill gas, ollection system or emis ts, sampling ports, blow vault is located at or ne collection system equip	ulations Subchapter pursuant to BAAQMD ssion control system vers, compressors, or ear the surface of the ment contained within

Vasco Road Landfill, Livermore, California 1st

QUARTER FLARE LFG COMPONENT LEAK MONITORING FLARE STATION

SITE:	Vasco			
INSTRUMENT				
MAKE:	Thermo Scientific	DATE OF SAMPLING:	March 24, 2020	
MODEL:	TVA 2020	TECHNICIAN:	Max Polkabla	
S/N:	2020-17112964			

LOCATION OF	CONCENTRATION	DATE OF	TECHNICIAN	ACTION TAKEN TO BEDAID LEAK	DATE OF		RE-MONITORED
LEAK	(ppmv)	DISCOVERY	TECHNICIAN	ACTION TAKEN TO REPAIR LEAR	REPAIR	MONITORING	(ppmv)
КОР	0.0	3/24/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A
Flanges Vac side	0.0	3/24/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A
Blowers	0.0	3/24/2020	Max Polkabla	NONE-REQUIRED	N/A	N/A	N/A
instruments	0.0	3/24/2020	Max Polkabla	NONE-REQUIRED	N/A	N/A	N/A
Flanges Pos side	0.0	3/24/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A
Flame Arrestor	50.0	3/24/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A
Panels	0.0	3/24/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A
Flare	0.0	3/24/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A
Fittings to Blowers	0.0	3/24/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A
Comments:							
Note:	In the event that an ex Leaks over 500 ppmv i 10, Article 4, Subarticle Leaks over 1,000 ppm	ceedance is deter methane are exce e 6, Section 9546 w methane are ex	cted, please initiate con eedances at any compo 4(b)(1)(B). cceedances at any com	rrective action and re-monitor the excee onent containing landfill gas pursuant to nponent containing landfill gas pursuant	Adance location wite CARB Title 17 of to BAAQMD Regu	hin 7 days of the initial e California Code of Regu Ilation 8-34-301.2.	exceedance. ulations Subchapter

VASCO ROAD Q-2-20 LFG FLARE COMPONENT LEAK MONITORING

INSTRUMENT MAKE: MODEL: S/N:	Thermo Scientific TVA 2020 2020-17112964		DATE OF SAMPLING: TECHNICIAN:	5/21/2020 Max Polkabla		
LOCATION OF LEAK	CONCENTRATION (ppmv)	DATE OF DISCOVERY	TECHNICIAN	ACTION TAKEN TO REPAIR LEAK	DATE OF REPAIR	DATE OF ANY REQUIRED RE-MONITORING

KOP	0	5/21/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A				
Flanges Vac side	0	5/21/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A				
Blowers	0	5/21/2020	Max Polkabla	NONE-REQUIRED	N/A	N/A	N/A				
insturments	0	5/21/2020	Max Polkabla	NONE-REQUIRED	N/A	N/A	N/A				
FInges Pos side	0	5/21/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A				
Flame Arrestor	62	5/21/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A				
Panels	0	5/21/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A				
Flare	0	5/21/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A				
Fittings to Blowers	0	5/21/2020	Max Polkabla	NONE-REQUIRED	N/A	NA	N/A				
Comments:											
Note:	In the event that an exceedance is detected, please intiate corrective action and re-monitor the exceedance location within 7 days of the initial exceedance. Leaks over 500 ppmv methane are exceedances at any component containing landfill gas pursuant to CARB Title 17 of California Code of Regulations Subchapter 10, Article 4, Subarticle 6, Section 95464(b)(1)(B).										
	Leaks over 1,000 ppm	iv methane are e	exceedances at any compo	nent containing landfill gas pursuant to B	AAQMD Reg	gulation 8-34-301.2.					

RE-MONITORED

CONCENTRATION (ppmv)

Vasco Road Landf	ill Livermore California						
2nd	QUARTER LFG COMPONENT LEAK MO	NITORING - WEI	LFIELD				
SITE: INSTRUMENT MAKE: MODEL: S/N:	VASCO ROAD IRWIN METHANE LEAK DETECTOR INFICON IRWIN SX 92000673	- - - -	DATE OF SAMPLING: TECHNICIAN:	June 2, 2020 Field Services, Inc.			
LOCATION OF LEAK	LEAK CONCENTRATION (ppmv)	DATE OF DISCOVERY	DESCRIPTION OF EQUIPMENT	ACTION TAKEN TO REPAIR LEAK	DATE OF REPAIR	DATE OF ANY REQUIRED RE- MONITORING	RE-MONITORED CONCENTRATION (ppmv)
No leaks detected							
Note:	In the event that an exceedance is detected Leaks over 500 ppmv methane are exceed Article 4, Subarticle 6, Section 95464(b)(1) Regulation 8-34-301.2. N/A - Not Applicable LFG - Landfill Gas	L d, please initiate c ances at any com (B). Leaks over 1,	corrective action and re-n ponent containing landfi ,000 ppmv methane are	nonitor the exceedance l ll gas pursuant to CARB exceedances at any com	ocation within 7 Title 17 of Calife aponent containi	days of the initial excee ornia Code of Regulatic ng landfill gas pursuant	edance. ns Subchapter 10, to BAAQMD

APPENDIX J

WELLFIELD MONITORING LOGS

VASCO ROAD LANDFILL Wellfield Monitoring Report - February 6, 7, 13, 19, 21, and 24, 2020

Device ID	Date and Time	CH₄	CO2	02	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VR12GT03	2/6/2020 12:11	49.6	36.8	1.3	12.3	-0.1	-0.1	-7.1	70.3	4.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VR12GT03	2/19/2020 16:25	43.3	34.2	2.4	20.1	-0.1	-0.1	-3.9	73.2	9.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT05	2/7/2020 14:43	52.7	34.4	1.7	11.2	-0.1	-0.1	-6.6	82.8	12.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VR12GT05	2/24/2020 16:41	14.3	14.5	11.6	59.6	-0.1	0.0	-7.3	78.1	7.6	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""
VR12GT05	2/24/2020 16:43	16.6	15.7	10.6	57.1	-0.1	0.0	-7.5	79.0	6.9	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""
VR12LR01	2/6/2020 10:57	49.2	35.8	2.5	12.5	-0.2	-0.2	-6.2	85.5	33.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VR12LR01	2/19/2020 13:36	53.3	37.0	1.3	8.4	-0.3	-0.7	-7.1	86.0	30.0	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VR12LR01	2/19/2020 13:38	46.6	34.5	2.9	16.0	-0.6	-0.6	-6.1	86.2	47.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VR12LR02	2/6/2020 11:05	59.8	40.2	0.0	0.0	-3.7	-3.5	-4.2	88.2	47.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR02	2/19/2020 14:33	59.2	40.8	0.0	0.0	-4.0	-4.0	-5.0	88.9	49.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	2/6/2020 12:05	60.2	39.8	0.0	0.0	-2.4	-2.4	-4.0	94.6	69.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	2/19/2020 16:22	59.4	40.6	0.0	0.0	-1.6	-1.6	-2.2	93.7	58.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0901	2/13/2020 15:58	50.7	37.3	2.1	9.9	-9.3	-9.3	-9.5	67.6	21.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0901	2/24/2020 17:05	51.0	38.1	0.2	10.7	-10.3	-10.3	-10.2	75.0	16.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0906	2/7/2020 12:46	50.4	37.0	0.0	12.6	-0.5	-0.5	-13.0	96.6	49.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0906	2/24/2020 13:57	53.5	34.4	0.0	12.1	-0.3	-0.3	-14.0	97.2	40.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0907	2/13/2020 15:16	41.5	31.4	4.8	22.3	-1.7	-0.1	-11.7	99.0	31.0	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW0907	2/13/2020 15:18	52.5	34.8	0.5	12.2	-0.2	-0.2	-11.4	97.5	16.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0907	2/21/2020 9:11	58.8	41.2	0.0	0.0	-0.1	-1.0	-11.9	100.9	19.6	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VREW0907	2/21/2020 9:13	58.5	41.2	0.3	0.0	-1.2	-1.1	-11.8	102.0	29.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0908	2/7/2020 15:02	62.5	37.4	0.1	0.0	17.1	17.1	17.3	78.6	2.1	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0908	2/7/2020 15:05	62.6	37.4	0.0	0.0	17.0	16.9	17.3	79.2	1.2	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0908	2/19/2020 17:48	63.4	36.6	0.0	0.0	21.1	21.1	21.5	60.4	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0909	2/13/2020 14:51	61.9	38.1	0.0	0.0	2.0	2.0	2.1	73.9	1.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW0909	2/13/2020 14:53	62.6	37.4	0.0	0.0	2.0	2.0	2.1	74.1	2.5	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0909	2/21/2020 8:51	62.1	37.9	0.0	0.0	1.4	1.4	1.4	68.4	1.8	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0910	2/13/2020 14:35	51.2	36.6	0.0	12.2	-4.1	-4.1	-6.6	107.8	99.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0910	2/21/2020 8:33	48.1	38.0	0.2	13.7	-4.7	-4.7	-7.2	107.4	115.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0911	2/13/2020 14:06	56.9	35.6	0.0	7.5	0.0	-0.5	-11.8	69.3	22.8	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0911	2/13/2020 14:08	54.6	34.4	0.0	11.0	-0.6	-0.6	-11.8	70.0	34.3	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0911	2/21/2020 9:41	31.3	27.3	2.3	39.1	-1.6	-1.1	-12.3	77.4	37.2	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0911	2/21/2020 9:44	28.8	25.0	4.1	42.1	-1.0	-1.0	-13.1	76.3	15.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0912	2/13/2020 11:53	48.3	37.9	0.0	13.8	-0.5	-0.5	-5.5	106.9	10.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0912	2/21/2020 9:56	48.8	38.0	0.0	13.2	-1.0	-1.0	-7.1	106.9	15.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1001	2/6/2020 16:18	49.2	29.1	4.7	17.0	-2.4	-2.4	-9.8	73.9	4.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1001	2/21/2020 9:20	64.0	36.0	0.0	0.0	-0.3	-10.3	-10.9	70.9	8.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1003	2/13/2020 15:00	61.7	38.3	0.0	0.0	1.8	1.8	1.7	68.7	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1003	2/13/2020 15:01	61.7	38.3	0.0	0.0	2.1	2.1	2.2	69.1	0.0	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1003	2/21/2020 8:58	61.7	38.3	0.0	0.0	1.6	1.6	1.7	67.1	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 to 1 turn";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1004	2/13/2020 14:39	60.1	39.9	0.0	0.0	-9.5	-9.4	-9.6	88.0	35.1	Valve Adjustment:"No change, Valve 100% open":Well Condition:"":Well Repairs:""
VREW1004	2/21/2020 8:41	59.6	40.3	0.1	0.0	-9.7	-9.7	-10.2	87.8	45.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW1005	2/13/2020 14:43	59.4	40.6	0.0	0.0	0.6	0.6	0.7	95.2	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1005	2/13/2020 14:44	58.9	41.1	0.0	0.0	0.6	0.6	0.7	95.0	0.0	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1005	2/21/2020 8:44	59.4	40.6	0.0	0.0	0.3	0.3	0.6	88.9	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1009	2/13/2020 11:07	50.1	38.3	0.0	11.6	-2.5	-2.5	-4.7	80.8	23.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1009	2/21/2020 11:01	43.6	38.2	0.0	18.2	-2.9	-2.1	-5.1	81.1	21.8	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1009	2/21/2020 11:03	42.0	38.0	0.0	20.0	-1.9	-2.0	-4.9	80.6	19.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1010	2/7/2020 15:27	51.1	37.5	0.0	11.4	-1.1	-1.1	-10.1	117.5	35.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW1010	2/24/2020 15:14	48.8	37.0	0.0	14.2	-1.1	-1.1	-10.3	117.1	46.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1011	2/7/2020 15:45	44.1	35.6	0.0	20.3	-0.6	-0.2	-9.5	115.2	26.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1011	2/7/2020 15:46	44.1	35.3	0.0	20.6	-0.3	-0.3	-10.1	112.3	32.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1011	2/24/2020 15:10	46.3	36.2	0.0	17.5	0.0	0.0	-9.8	109.8	12.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1012	2/7/2020 15:50	46.7	36.2	0.0	17.1	-2.2	-2.1	-9.0	113.7	74.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1012	2/24/2020 15:07	46.7	36.4	0.0	16.9	-2.0	-2.0	-8.1	113.5	66.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW120A	2/6/2020 13:57	45.7	34.0	0.2	20.1	-9.6	-9.6	-9.8	108.0	17.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW120A	2/19/2020 16:05	45.0	34.9	0.2	19.9	-6.5	-6.1	-6.3	124.2	21.0	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW121A	2/13/2020 15:47	14.3	16.4	7.5	61.8	-10.3	-10.3	-11.2	109.4	9.7	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW121A	2/24/2020 16:06	11.9	15.1	7.8	65.2	-10.3	-10.2	-12.0	116.2	7.1	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW122A	2/6/2020 13:53	49.6	36.3	0.0	14.1	-7.6	-7.7	-9.8	106.0	56.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW122A	2/19/2020 16:01	46.7	35.5	0.0	17.8	-6.1	-6.1	-7.0	124.5	35.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW123A	2/6/2020 13:08	45.5	37.5	0.0	17.0	-3.5	-3.6	-5.2	122.5	53.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW123A	2/19/2020 14:58	43.0	36.3	0.0	20.7	-4.2	-4.2	-6.0	122.0	52.4	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW125A	2/6/2020 12:47	49.1	37.8	0.0	13.1	-2.2	-2.2	-4.7	124.3	51.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW125A	2/19/2020 14:08	45.0	36.0	0.1	18.9	-2.4	-2.4	-5.8	124.2	55.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW126A	2/6/2020 12:43	56.2	43.3	0.0	0.5	-1.1	-1.1	-5.4	129.6	9.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW126A	2/19/2020 14:46	51.9	41.8	0.3	6.0	-1.3	-1.3	-6.6	128.7	0.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW127A	2/6/2020 13:03	32.9	33.7	0.1	33.3	-0.7	-0.2	-5.8	122.4	21.0	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW127A	2/6/2020 13:04	41.6	39.0	0.0	19.4	-0.1	-0.1	-5.4	117.5	27.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW127A	2/19/2020 15:04	38.6	37.2	0.0	24.2	-0.1	-0.1	-6.6	121.1	26.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW137A	2/6/2020 14:04	49.2	35.4	2.5	12.9	-7.6	-7.6	-9.4	102.0	46.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW137A	2/19/2020 16:12	50.4	37.3	2.2	10.1	-4.5	-4.5	-5.6	122.2	43.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW143A	2/6/2020 12:34	45.6	36.0	0.2	18.2	-3.1	-3.0	-5.5	124.9	38.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	Сн₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW143A	2/19/2020 14:17	42.7	35.8	0.2	21.3	-3.5	-3.0	-6.0	124.0	40.3	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW143A	2/19/2020 14:18	42.6	35.7	0.2	21.5	-2.8	-2.9	-6.1	123.8	33.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRL0601R	2/7/2020 12:20	50.9	42.9	1.7	4.5	-12.4	-12.4	-15.6	70.2	5.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0601R	2/24/2020 14:35	55.7	40.9	0.9	2.5	-14.0	-16.1	-17.3	76.5	10.6	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRL0601R	2/24/2020 14:37	56.8	41.7	0.4	1.1	-16.7	-16.7	-17.2	77.5	13.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRL0603R	2/7/2020 12:33	46.7	41.8	0.0	11.5	-1.3	-1.3	-18.0	112.6	26.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0603R	2/24/2020 14:05	46.4	37.8	0.0	15.8	-1.1	-1.2	-20.0	113.0	28.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0604R	2/7/2020 12:41	40.1	37.6	0.0	22.3	-0.2	-0.2	-12.9	97.7	30.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRL0604R	2/24/2020 14:01	42.8	34.4	0.0	22.8	-0.1	-0.1	-14.1	97.7	17.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW100	2/7/2020 11:50	46.3	38.4	0.0	15.3	-4.5	-4.5	-15.6	100.0	63.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW100	2/24/2020 14:50	46.0	35.8	0.0	18.2	-4.8	-4.8	-16.1	100.0	78.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW101	2/13/2020 14:17	55.4	29.8	0.0	14.8	-0.4	-1.5	-14.1	83.1	9.1	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW101	2/13/2020 14:18	53.5	29.2	0.0	17.3	-1.9	-1.9	-14.9	90.3	15.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW101	2/21/2020 9:36	44.1	28.3	0.5	27.1	-3.0	-2.1	-14.3	96.8	17.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW101	2/21/2020 9:37	44.0	28.6	0.4	27.0	-1.8	-1.8	-14.9	94.1	12.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW102	2/13/2020 11:50	51.6	38.0	0.0	10.4	-3.6	-3.6	-3.7	111.7	43.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW102	2/21/2020 10:05	51.2	38.2	0.0	10.6	-4.4	-4.4	-4.4	111.7	38.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW103	2/13/2020 11:46	41.6	36.8	0.0	21.6	-0.2	-0.2	-5.1	89.6	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW103	2/21/2020 10:09	43.6	37.5	0.0	18.9	-0.4	-0.4	-5.2	76.1	31.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW104	2/7/2020 12:54	57.0	43.0	0.0	0.0	0.1	0.1	0.8	100.8	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW104	2/19/2020 9:01	60.2	39.8	0.0	0.0	-0.6	-0.5	-1.0	97.3	17.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW104	2/19/2020 9:03	60.0	40.0	0.0	0.0	-0.6	-0.5	-0.8	97.5	18.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	2/13/2020 11:11	54.4	39.9	0.0	5.7	-4.2	-4.2	-4.3	103.6	24.9	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	2/21/2020 11:11	53.9	39.7	0.0	6.4	-4.5	-4.4	-4.4	104.0	27.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW106	2/7/2020 16:05	58.7	38.9	0.0	2.4	-0.1	-0.4	-10.2	83.7	13.8	valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW106	2/7/2020 16:06	59.0	38.5	0.0	2.5	-0.4	-0.4	-10.3	97.9	20.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW106	2/21/2020 12:10	55.0	37.1	0.0	7.9	-0.5	-0.5	-4.4	104.4	17.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW107	2/7/2020 15:58	42.4	34.9	0.0	22.7	-1.0	-0.3	-8.8	109.0	35.7	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW107	2/7/2020 16:00	46.3	36.2	0.0	17.5	-0.3	-0.3	-9.5	108.3	40.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW107	2/24/2020 15:03	48.1	36.3	0.0	15.6	-0.1	-0.2	-10.2	107.4	20.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW108	2/7/2020 13:07	43.2	39.5	0.0	17.3	-2.7	-2.1	-9.8	113.9	60.1	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW108	2/7/2020 13:09	42.8	39.2	0.0	18.0	-2.0	-2.0	-9.9	113.7	57.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW108	2/24/2020 13:43	44.3	36.0	0.0	19.7	-1.7	-1.4	-11.6	113.9	53.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW108	2/24/2020 13:44	45.3	36.3	0.0	18.4	-1.2	-1.2	-10.7	113.5	40.3	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW109	2/13/2020 10:52	53.8	39.6	0.1	6.5	-4.3	-4.3	-4.5	112.3	46.8	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW109	2/21/2020 10:31	53.0	40.7	0.1	6.2	-4.7	-4.7	-5.1	111.7	92.3	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW110	2/6/2020 14:48	62.1	37.8	0.1	0.0	-9.5	-9.5	-9.5	86.0	8.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW110	2/19/2020 17:36	61.5	38.3	0.2	0.0	-5.5	-5.4	-5.1	82.6	5.1	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW111	2/6/2020 14:51	63.0	37.0	0.0	0.0	52.9	53.2	53.0	70.0	0.0	turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW111	2/6/2020 14:54	62.8	37.2	0.0	0.0	53.7	53.8	54.0	70.0	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss":Well Repairs:""
VRLEW111	2/19/2020 17:32	61.6	38.4	0.0	0.0	51.9	52.1	52.7	62.4	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum
VRLEW112	2/6/2020 15:11	60.6	39.4	0.0	0.0	-7.8	-7.8	-7.8	105.8	20.8	Valve Adjustment:"No change,Valve 100% open":Well Condition:"":Well Repairs:""
VRLEW112	2/19/2020 16:40	59.4	40.6	0.0	0.0	-4.4	-4.3	-4.5	103.3	14.8	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	2/6/2020 15:18	59.3	39.8	0.4	0.5	-8.5	-8.5	-8.4	88.9	14.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	2/19/2020 16:47	58.9	40.9	0.2	0.0	-4.5	-4.6	-4.4	84.4	13.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW114	2/6/2020 15:43	44.1	30.0	4.7	21.2	-7.3	-7.3	-7.8	74.7	9.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW114	2/19/2020 17:18	43.9	31.0	4.9	20.2	-2.4	-2.4	-3.7	66.7	9.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW115	2/13/2020 15:36	18.0	10.1	15.3	56.6	-7.9	-7.9	-10.0	67.8	6.0	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW115	2/24/2020 15:56	25.5	16.6	11.3	46.6	-9.2	-9.2	-9.5	75.7	7.5	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW116	2/6/2020 15:28	53.1	34.6	0.2	12.1	-9.2	-9.2	-9.1	67.8	8.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW116	2/19/2020 17:01	41.6	32.7	4.8	20.9	-4.9	-4.8	-4.8	67.3	2.0	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW117	2/6/2020 15:24	48.9	35.9	0.0	15.2	-5.8	-5.8	-8.1	90.7	26.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW117	2/19/2020 16:54	48.2	36.7	0.0	15.1	-3.6	-3.6	-4.6	89.4	19.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW128	2/6/2020 13:26	50.2	40.4	1.5	7.9	-5.2	-5.3	-5.5	79.9	10.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW128	2/19/2020 15:45	50.1	41.0	0.4	8.5	-6.1	-6.1	-6.1	86.0	6.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW129	2/6/2020 13:45	57.9	42.0	0.1	0.0	1.8	1.8	2.0	79.0	0.0	Valve Adjustment:"NSPS/CAI,Opened valve < 10%";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW129	2/6/2020 13:47	57.9	42.0	0.1	0.0	1.7	1.7	2.0	79.0	1.9	Valve Adjustment:"NSPS/CAI,Opened valve < 10%";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW129	2/19/2020 15:50	58.4	41.6	0.0	0.0	1.5	1.5	1.7	73.6	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW131	2/13/2020 15:51	59.3	40.7	0.0	0.0	1.2	1.2	1.4	97.3	0.0	Valve Adjustment:"NSPS/CAI,Opened valve < 10%";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW131	2/13/2020 15:53	59.2	40.8	0.0	0.0	1.2	1.2	1.4	97.3	0.0	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW131	2/19/2020 17:42	59.6	40.4	0.0	0.0	1.6	1.6	1.9	92.8	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW133	2/6/2020 13:31	57.9	42.1	0.0	0.0	2.0	1.9	2.0	123.3	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW133	2/6/2020 13:38	58.0	42.0	0.0	0.0	1.8	1.9	2.3	125.2	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW133	2/19/2020 15:47	57.3	42.7	0.0	0.0	1.6	1.6	1.9	126.5	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW134	2/13/2020 14:11	51.3	34.6	0.6	13.5	-3.2	-3.2	-11.5	71.2	31.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW134	2/21/2020 9:47	48.4	35.6	1.0	15.0	-2.6	-2.6	-6.9	70.9	23.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW135	2/6/2020 12:50	24.7	18.0	4.7	52.6	-0.7	-0.7	-6.5	64.9	8.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW135	2/24/2020 16:22	20.0	14.5	6.1	59.4	-0.5	-0.5	-6.1	85.8	6.8	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW135	2/24/2020 16:26	20.1	14.5	6.1	59.3	-0.5	-0.5	-6.5	83.0	6.0	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW136	2/6/2020 12:55	57.1	40.2	0.0	2.7	-6.1	-6.1	-5.1	68.4	5.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW136	2/19/2020 15:54	51.4	38.3	0.7	9.6	-7.4	-7.4	-6.6	79.2	10.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW139	2/7/2020 12:13	54.6	43.6	0.0	1.8	-1.9	-0.5	-10.6	115.5	29.7	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW139	2/7/2020 12:15	54.7	44.4	0.0	0.9	-0.7	-0.7	-10.9	111.6	41.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW139	2/24/2020 14:27	58.5	41.5	0.0	0.0	-0.1	-1.0	-11.4	109.6	17.7	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW139	2/24/2020 14:28	58.6	41.4	0.0	0.0	-1.3	-1.3	-12.5	113.7	25.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW140	2/7/2020 12:09	45.6	39.2	0.2	15.0	-5.0	-5.0	-10.7	118.6	65.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW140	2/24/2020 14:23	46.2	36.3	0.3	17.2	-5.2	-5.2	-11.8	118.9	62.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW141	2/7/2020 12:05	45.4	38.6	0.0	16.0	-2.4	-2.4	-11.5	115.0		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW141	2/24/2020 14:18	45.4	35.7	0.0	18.9	-2.3	-2.4	-12.6	115.0		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW142	2/7/2020 12:25	44.9	42.2	0.0	12.9	-4.1	-3.3	-9.8	126.0	97.3	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW142	2/7/2020 12:26	44.3	42.2	0.0	13.5	-3.3	-3.4	-11.1	125.6	90.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW142	2/24/2020 14:40	47.2	39.3	0.0	13.5	-2.9	-2.9	-12.2	125.8	84.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW145	2/6/2020 12:25	58.4	41.6	0.0	0.0	-6.8	-6.8	-6.5	93.2	10.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW145	2/19/2020 14:01	58.7	41.2	0.1	0.0	-7.6	-7.6	-7.3	98.2	15.5	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW146	2/6/2020 14:01	54.0	38.0	0.0	8.0	-7.2	-7.1	-8.6	86.0	67.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW146	2/19/2020 16:08	50.9	38.0	0.0	11.1	-4.7	-4.7	-5.4	91.9	49.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW148	2/6/2020 11:28	48.1	35.5	0.0	16.4	-3.1	-3.1	-7.1	112.8	38.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW148	2/19/2020 13:50	43.9	34.9	0.0	21.2	-3.3	-2.5	-7.0	112.6	34.7	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW148	2/19/2020 13:52	44.0	35.3	0.0	20.7	-2.7	-2.7	-7.2	112.5	31.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW149	2/6/2020 12:31	49.3	36.7	2.3	11.7	-1.1	-1.1	-6.3	121.5	36.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW149	2/19/2020 14:14	51.3	38.3	1.7	8.7	-1.1	-1.1	-7.1	120.7	30.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW150	2/6/2020 11:58	48.0	32.9	3.3	15.8	-0.8	-0.8	-6.1	101.7	15.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW150	2/19/2020 13:54	47.0	33.3	3.4	16.3	-0.8	-0.8	-7.0	101.7	13.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW151	2/6/2020 12:01	53.9	36.7	1.9	7.5	-7.2	-7.1	-7.2	74.1	6.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW151	2/19/2020 13:58	53.7	36.6	1.5	8.2	-7.5	-7.5	-7.3	82.2	12.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW152	2/6/2020 12:14	48.7	36.5	0.1	14.7	-1.4	-1.4	-7.3	72.1	23.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW152	2/19/2020 16:29	42.0	34.5	0.2	23.3	-1.1	-0.8	-4.5	73.8	19.7	Valve Adjustment:"Closed valve < 10%,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW152	2/19/2020 16:30	42.5	35.0	0.2	22.3	-0.7	-0.7	-4.5	73.6	7.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW153	2/6/2020 12:17	59.2	40.8	0.0	0.0	-6.4	-6.4	-6.5	68.4	31.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW153	2/19/2020 16:33	59.3	40.7	0.0	0.0	-4.0	-4.0	-3.9	75.2	23.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW154	2/6/2020 12:20	58.7	41.3	0.0	0.0	-7.8	-7.8	-7.5	69.4	11.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW154	2/19/2020 16:18	57.6	42.3	0.1	0.0	-4.5	-4.4	-4.5	70.3	15.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW155	2/6/2020 12:28	51.9	40.6	0.7	6.8	-6.5	-6.5	-6.5	63.9	15.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW155	2/19/2020 14:11	51.8	40.7	0.4	7.1	-7.2	-7.2	-7.3	66.6	8.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW156	2/6/2020 11:19	48.9	33.8	0.9	16.4	-4.2	-4.2	-4.8	105.3	31.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW156	2/19/2020 13:42	42.4	32.7	0.9	24.0	-5.4	-4.8	-5.9	105.8	45.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW156	2/19/2020 13:44	42.0	32.6	0.9	24.5	-5.0	-5.0	-5.6	105.8	39.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW157	2/6/2020 11:23	41.4	30.7	0.9	27.0	-4.7	-4.4	-5.4	110.3	25.7	Valve Adjustment:"Closed valve 10%-25%";Well Condition:"";Well Repairs:""
VRLEW157	2/6/2020 11:24	41.2	30.7	0.8	27.3	-4.5	-4.5	-5.7	109.9	27.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW157	2/19/2020 13:46	37.9	29.8	0.9	31.4	-4.7	-4.3	-6.0	109.6	20.2	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW157	2/19/2020 13:47	37.6	29.7	0.9	31.8	-4.3	-4.3	-6.2	109.2	24.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW158	2/6/2020 11:15	44.6	29.1	4.7	21.6	-3.2	-2.9	-3.4	106.3	19.0	Valve Adjustment:"Closed valve 10%-25%";Well Condition:"";Well Repairs:""
VRLEW158	2/6/2020 11:16	44.4	28.6	4.9	22.1	-2.9	-2.9	-3.1	105.4	17.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW158	2/19/2020 14:24	44.4	28.4	4.8	22.4	-5.5	-5.1	-6.0	106.5	20.8	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW158	2/19/2020 14:25	44.0	28.3	4.8	22.9	-5.1	-5.1	-6.0	106.3	26.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW159	2/6/2020 12:37	60.1	38.7	0.0	1.2	-5.5	-5.5	-5.1	122.5	29.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW159	2/19/2020 14:21	59.2	38.7	0.0	2.1	-6.5	-6.5	-6.5	122.4	14.4	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW160	2/6/2020 11:10	46.2	33.6	0.0	20.2	-5.0	-4.5	-5.8	122.4	27.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW160	2/6/2020 11:11	45.1	33.0	0.0	21.9	-4.4	-4.5	-5.8	122.0	25.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW160	2/19/2020 14:28	40.3	32.1	0.0	27.6	-4.8	-4.2	-6.3	121.6	25.4	Condition:"";Well Repairs:""
VRLEW160	2/19/2020 14:29	39.9	32.7	0.0	27.4	-3.9	-3.9	-6.6	120.9	16.5	Condition:"";Well Repairs:""
VRLEW161	2/6/2020 12:40	45.8	33.0	2.1	19.1	-4.0	-3.9	-5.4	118.6	20.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW161	2/19/2020 14:41	40.7	31.9	2.5	24.9	-4.3	-3.7	-6.2	117.5	19.3	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW161	2/19/2020 14:42	40.3	31.9	2.7	25.1	-3.5	-3.5	-6.7	116.2	15.3	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW162	2/6/2020 13:13	48.6	35.4	0.0	16.0	-3.7	-3.7	-5.5	124.2	34.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW162	2/19/2020 14:49	43.9	35.4	0.0	20.7	-4.2	-3.8	-6.3	123.6	36.2	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW162	2/19/2020 14:51	43.8	35.5	0.0	20.7	-3.7	-3.7	-6.7	123.4	31.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW163	2/6/2020 13:10	45.4	33.0	0.0	21.6	-0.2	-0.3	-5.9	127.2	34.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW163	2/19/2020 14:55	41.9	31.8	0.0	26.3	-0.1	-0.1	-6.3	127.0	3.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW31A	2/7/2020 15:18	47.6	35.9	0.0	16.5	-4.6	-4.7	-9.0	100.4		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW31A	2/24/2020 15:20	46.9	36.4	0.0	16.7	-4.5	-4.5	-8.1	100.4		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW33A	2/13/2020 11:15	55.1	35.2	0.4	9.3	-4.4	-4.5	-4.4	70.0	16.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW33A	2/21/2020 11:08	53.2	34.9	0.4	11.5	-4.4	-4.4	-4.2	74.1	10.6	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW34A	2/7/2020 15:22	45.9	36.4	0.0	17.7	-0.4	-0.5	-9.8	113.5	30.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW34A	2/24/2020 15:16	48.8	37.7	0.0	13.5	-0.5	-0.5	-9.3	113.2	31.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW38A	2/13/2020 10:30	34.5	34.6	0.1	30.8	-0.1	-0.1	-5.4	73.0	12.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW38A	2/24/2020 15:47	40.2	34.6	0.0	25.2	0.0	-0.1	-9.2	90.5	11.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW68A	2/13/2020 10:44	41.5	34.8	3.6	20.1	-0.4	-0.2	-4.8	109.6	21.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW68A	2/13/2020 10:46	48.6	37.6	1.7	12.1	-0.1	-0.1	-5.1	105.3	25.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW68A	2/21/2020 11:27	56.9	43.1	0.0	0.0	-0.1	-0.4	-4.0	99.3	25.2	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW68A	2/21/2020 11:28	57.0	43.0	0.0	0.0	-0.5	-0.4	-4.4	115.3	34.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW71B	2/13/2020 13:59	60.4	39.6	0.0	0.0	-0.1	-0.4	-13.3	76.5	15.4	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW71B	2/13/2020 14:01	59.3	39.7	0.0	1.0	-0.7	-0.6	-14.1	105.3	30.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW71B	2/21/2020 9:51	28.1	29.3	1.6	41.0	-1.1	-0.8	-5.8	115.3	21.8	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW71B	2/21/2020 9:53	26.2	28.7	1.6	43.5	-0.7	-0.7	-5.9	109.9	9.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW72R	2/7/2020 12:49	55.1	43.2	0.0	1.7	-9.7	-9.7	-11.0	114.3	73.5	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW72R	2/24/2020 13:54	57.4	39.9	0.0	2.7	-9.9	-9.9	-11.0	114.3	71.4	open";Well Condition:"";Well Repairs:""
VRLEW74A	2/6/2020 15:47	60.4	37.4	0.4	1.8	-8.0	-8.0	-7.8	66.4	8.3	open";Well Condition:"";Well Repairs:""
VRLEW74A	2/19/2020 17:15	61.6	38.3	0.1	0.0	-4.0	-4.0	-4.0	62.2	6.3	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW86A	2/13/2020 10:35	42.7	37.0	0.0	20.3	-0.4	-0.2	-4.6	105.6	23.7	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW86A	2/13/2020 10:37	43.3	37.5	0.0	19.2	-0.2	-0.2	-4.4	100.6	9.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW86A	2/21/2020 11:21	55.9	41.2	0.0	2.9	-0.1	-0.3	-5.0	94.8	21.8	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW86A	2/21/2020 11:22	54.3	40.9	0.0	4.8	-0.5	-0.5	-4.6	108.3	34.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW90A	2/6/2020 15:02	60.1	39.1	0.2	0.6	-7.9	-7.9	-7.8	82.4	10.4	valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW90A	2/19/2020 16:37	57.3	40.1	0.6	2.0	-4.5	-4.5	-4.2	78.6	12.3	valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW93A	2/13/2020 15:11	57.9	41.8	0.3	0.0	-11.6	-11.6	-11.4	76.3	2.9	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW93A	2/21/2020 9:07	57.7	42.0	0.3	0.0	-11.8	-11.7	-11.6	74.5	5.1	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLFEW09	2/7/2020 11:10	51.2	38.2	2.3	8.3	-11.1	-11.0	-11.5	69.6	6.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW09	2/24/2020 11:20	51.6	36.6	1.3	10.5	-9.4	-9.4	-14.3	69.1	12.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW14	2/7/2020 11:14	57.5	42.5	0.0	0.0	-9.8	-9.8	-9.5	114.4		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW14	2/24/2020 11:17	57.4	42.6	0.0	0.0	-12.5	-12.5	-12.0	114.3		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW19	2/7/2020 11:02	49.3	38.2	3.0	9.5	-9.8	-9.8	-10.1	92.1	31.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW19	2/24/2020 11:03	50.6	37.7	2.8	8.9	-12.4	-12.4	-12.2	91.8	55.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW23	2/13/2020 11:30	52.3	38.4	0.0	9.3	-4.1	-4.1	-4.3	97.2	23.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW23	2/21/2020 10:18	50.7	37.9	0.1	11.3	-4.5	-4.6	-4.3	97.3	31.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW25	2/7/2020 11:20	57.8	42.2	0.0	0.0	-8.4	-8.4	-8.1	95.9		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW25	2/24/2020 11:31	58.0	42.0	0.0	0.0	-10.3	-10.3	-10.3	98.4		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	2/7/2020 15:13	60.2	38.2	0.6	1.0	-1.5	-6.9	-11.0	73.8		Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	2/7/2020 15:15	59.5	39.1	0.6	0.8	-7.2	-7.2	-11.2	71.8		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	2/24/2020 15:24	60.1	39.9	0.0	0.0	-9.2	-10.3	-10.2	77.0		Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	2/24/2020 15:27	60.0	40.0	0.0	0.0	-9.9	-9.9	-10.2	76.1		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	2/7/2020 13:03	56.0	44.0	0.0	0.0	-9.9	-9.8	-10.4	87.3		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	2/24/2020 13:49	58.8	41.2	0.0	0.0	-10.9	-10.9	-11.9	91.6		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	2/13/2020 13:54	51.9	32.6	0.0	15.5	-6.1	-6.1	-6.1	108.1		Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW41	2/21/2020 10:01	49.8	34.9	0.0	15.3	-3.8	-3.7	-3.5	105.1		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	2/7/2020 16:10	61.1	38.9	0.0	0.0	-10.2	-10.2	-10.2	64.6		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	2/21/2020 12:06	60.7	39.3	0.0	0.0	-4.6	-4.6	-5.1	70.9		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	2/7/2020 11:25	44.1	40.1	0.0	15.8	-4.9	-4.1	-9.3	110.1		Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	2/7/2020 11:27	44.0	40.0	0.0	16.0	-3.7	-3.8	-9.3	109.8		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW44	2/24/2020 11:36	45.8	39.9	0.0	14.3	-3.7	-3.8	-13.0	109.2		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	2/7/2020 15:55	35.5	29.2	0.2	35.1	-0.2	-0.2	-8.3	74.8		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	2/24/2020 13:38	32.4	28.2	0.0	39.4	-0.2	-0.2	-10.2	78.3		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	2/13/2020 11:35	54.3	38.3	0.0	7.4	-3.2	-3.2	-3.1	63.3		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	2/21/2020 10:22	48.2	37.6	0.0	14.2	-4.4	-4.5	-4.3	61.9		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW65	2/13/2020 11:24	57.9	42.1	0.0	0.0	-4.2	-4.2	-4.2	70.0	21.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW65	2/21/2020 10:27	57.2	42.7	0.1	0.0	-4.7	-4.8	-4.8	66.6	7.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW76	2/7/2020 11:54	52.3	38.9	0.5	8.3	-1.7	-1.7	-23.8	94.5	25.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW76	2/24/2020 12:03	51.4	38.1	0.5	10.0	-1.6	-1.5	-24.8	87.3	24.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW77	2/7/2020 10:38	45.4	37.6	0.0	17.0	-10.4	-9.9	-12.1	91.6	81.1	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW77	2/7/2020 10:39	45.2	37.9	0.0	16.9	-9.7	-9.7	-11.3	91.6	80.3	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW77	2/24/2020 10:51	43.9	36.9	0.0	19.2	-12.2	-11.1	-15.8	91.0	96.6	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW77	2/24/2020 10:53	44.2	37.3	0.0	18.5	-10.6	-10.5	-15.0	91.0	87.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW78	2/7/2020 10:45	42.4	37.6	0.0	20.0	-2.1	-1.2	-11.9	92.8	37.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW78	2/7/2020 10:46	42.2	37.7	0.0	20.1	-1.2	-1.2	-13.5	92.7	18.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW78	2/24/2020 10:56	50.7	39.3	0.0	10.0	-0.6	-0.7	-15.6	91.4	19.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW79	2/7/2020 10:49	43.9	37.8	0.0	18.3	-3.2	-2.5	-13.1	91.0	24.3	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW79	2/7/2020 10:50	44.3	37.9	0.0	17.8	-2.4	-2.4	-13.2	89.6	13.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW79	2/24/2020 10:59	52.9	38.6	0.0	8.5	-0.9	-0.9	-15.8	87.6	13.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW80	2/13/2020 11:40	45.4	38.2	0.0	16.4	-2.7	-2.2	-4.5	114.4	24.6	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW80	2/13/2020 11:41	44.8	38.1	0.0	17.1	-2.2	-2.1	-4.5	114.3	26.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW80	2/21/2020 10:12	44.9	38.2	0.0	16.9	-2.3	-1.8	-5.5	114.1	30.3	less";Well Condition:"";Well Repairs:""
VRLFEW80	2/21/2020 10:13	44.7	38.1	0.0	17.2	-1.6	-1.6	-5.1	113.0	16.3	Condition:"";Well Repairs:""
VRLFEW81	2/13/2020 11:00	48.4	38.0	0.0	13.6	-2.3	-2.3	-3.7	99.5	40.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW81	2/21/2020 10:54	44.4	37.9	0.0	17.7	-2.6	-2.6	-3.7	99.7	37.7	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW82	2/13/2020 10:55	59.1	40.9	0.0	0.0	-3.4	-3.4	-3.4	111.2	24.4	valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW82	2/21/2020 10:45	58.6	41.3	0.1	0.0	-3.8	-3.7	-3.6	111.2	25.4	valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW83	2/13/2020 11:04	50.8	36.9	2.7	9.6	-0.1	-0.1	-0.3	64.9	2.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW83	2/21/2020 10:57	56.5	41.7	0.3	1.5	-0.3	-0.3	-0.3	72.0	13.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW84	2/7/2020 12:58	56.8	43.2	0.0	0.0	0.1	0.1	0.8	106.2	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss":Well Repairs:""
VRLFEW84	2/19/2020 9:09	59.6	40.4	0.0	0.0	-0.5	-0.5	-0.7	102.0	11.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW84	2/19/2020 9:11	59.7	40.3	0.0	0.0	-0.5	-0.5	-0.5	102.2	15.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW85	2/7/2020 10:55	43.6	37.8	0.0	18.6	-1.3	-0.8	-11.7	90.7	59.7	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW85	2/7/2020 10:56	43.6	38.1	0.0	18.3	-0.7	-0.7	-11.3	90.5	37.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW85	2/24/2020 11:06	48.6	38.6	0.0	12.8	-0.5	-0.5	-12.6	90.1	39.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW87	2/7/2020 11:31	43.4	39.7	0.0	16.9	-2.5	-2.1	-10.5	116.4	68.9	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW87	2/7/2020 11:32	43.5	40.0	0.0	16.5	-2.1	-2.1	-9.7	116.2	61.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW87	2/24/2020 11:40	44.1	39.2	0.0	16.7	-1.8	-0.8	-10.8	116.1	56.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW87	2/24/2020 11:41	46.4	40.3	0.0	13.3	-0.7	-0.7	-10.8	115.3	29.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW88	2/7/2020 11:37	44.0	38.8	0.0	17.2	-0.2	-0.2	-5.2	100.4	23.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLFEW88	2/24/2020 11:46	47.0	38.9	0.0	14.1	-0.4	-0.5	-11.4	103.6	39.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW89	2/7/2020 11:41	41.9	36.0	0.0	22.1	-0.3	-0.1	-9.7	88.9	42.5	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLFEW89	2/7/2020 11:42	41.4	35.7	0.0	22.9	-0.1	-0.1	-9.9	87.3	20.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW89	2/24/2020 11:53	55.5	37.5	0.0	7.0	-0.1	-0.4	-10.9	86.9	0.0	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLFEW89	2/24/2020 11:55	57.2	37.8	0.0	5.0	-0.6	-0.6	-10.6	99.1	5.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW92	2/13/2020 15:21	60.2	39.5	0.3	0.0	-10.3	-10.3	-11.2	85.6	10.2	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW92	2/21/2020 9:16	60.2	39.6	0.2	0.0	-10.3	-10.3	-10.9	85.6	10.9	Valve Adjustment: "Opened Valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW94	2/13/2020 15:06	60.2	39.8	0.0	0.0	0.7	0.7	0.7	72.5	1.6	turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLFEW94	2/13/2020 15:07	59.7	40.3	0.0	0.0	0.7	0.7	0.7	73.0	1.6	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""
VRLFEW94	2/21/2020 9:02	60.5	39.5	0.0	0.0	0.6	0.6	0.7	68.9	2.2	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLFEW96	2/13/2020 14:56	50.6	36.6	1.8	11.0	-2.4	-2.4	-2.3	70.7	2.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW96	2/21/2020 8:55	50.3	37.0	2.0	10.7	-4.1	-4.1	-4.1	63.9	1.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW98	2/13/2020 14:48	50.1	38.7	1.5	9.7	-1.4	-1.4	-1.3	68.0	8.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW98	2/21/2020 8:48	57.1	42.2	0.3	0.4	-1.6	-1.6	-1.4	65.8	7.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	02	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW99	2/7/2020 12:00	45.1	38.6	0.0	16.3	-1.5	-1.5	-16.0	115.3	25.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW99	2/24/2020 14:13	42.1	35.6	0.0	22.3	-1.3	-0.4	-18.2	115.3	24.9	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW99	2/24/2020 14:15	42.6	35.3	0.0	22.1	-0.3	-0.3	-17.0	112.3	9.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLRW001	2/6/2020 15:07	60.5	39.5	0.0	0.0	-1.2	-2.9	-7.8	83.8		Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLRW001	2/6/2020 15:08	60.7	39.2	0.1	0.0	-3.8	-3.8	-6.0	89.8		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""
VRLRW001	2/19/2020 16:44	59.1	40.8	0.1	0.0	-3.4	-3.4	-3.2	88.2		Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLRW002	2/6/2020 15:16	59.5	40.0	0.0	0.5	-8.5	-8.5	-8.4	71.4	216.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLRW002	2/19/2020 16:51	58.9	41.1	0.0	0.0	-4.7	-4.7	-4.6	68.7	165.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLRW003	2/6/2020 15:39	55.2	30.6	3.4	10.8	-8.5	-8.5	-8.4	71.1	8.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLRW003	2/19/2020 17:22	59.0	35.3	0.4	5.3	-4.6	-4.6	-4.6	66.4	15.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLRW004	2/6/2020 15:34	51.6	21.8	4.8	21.8	-8.5	-8.5	-8.4	66.7	6.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLRW004	2/19/2020 17:11	51.7	22.6	4.9	20.8	-4.4	-4.4	-4.5	64.6	0.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Bold Italics = HOV approval from BAAQMD *Some flow readings not available due to no/low flow conditions recorded by the ENVISION

¹Blower Inlet Reading

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH4 = Methane CO2 = Carbon Dioxide O2 = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute % = percent

140°F Temperature HOV	Oxygen HO	V - No Limit**	Oxygen HOV - 15%				
(Condition #818 Part 3(b)(i))	(Condition #8	18 Part 3 (b)(ii))	(Condition #8	18 Part 3 (c)(ii))			
EW-9***	EW-9***	EW-33A***	VRLRW001	VRLRW003			
EW-33A***	EW-27		VRLRW002	VRLRW004			
EW-44			VR12GT4R	VR12GT05			

**Oxygen concentration shall not apply to these wells as long as the landfill gas (LFG) in the main header has less than 5% O₂ AND greater than 35% CH₂

***Approved for both Oxygen and Temperature Higher Operating Value (HOV)

VASCO ROAD LANDFILL Wellfield Monitoring Report - March 3, 4, 9, 13, 20, 21, and 23, 2020

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VR12GT03	3/3/2020 14:56	53.3	37.9	0.9	7.9	0.0	-0.1	-9.5	81.7	9.0	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VR12GT03	3/20/2020 13:36	55.0	39.7	0.8	4.5	0.0	-0.2	-4.6	72.1	7.9	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VR12GT03	3/20/2020 13:38	47.4	36.5	2.4	13.7	-0.2	-0.2	-4.3	73.9	16.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VR12GT05	3/3/2020 15:19	50.2	35.0	1.7	13.1	-0.2	-0.2	-8.5	84.7	19.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VR12GT05	3/20/2020 11:31	49.2	36.5	1.6	12.7	-0.1	-0.1	-4.5	71.6	8.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VR12LR01	3/3/2020 15:23	59.7	40.3	0.0	0.0	-0.2	-0.5	-8.2	89.6	22.6	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VR12LR01	3/3/2020 15:24	59.6	40.2	0.2	0.0	-0.5	-0.5	-8.0	88.2	43.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VR12LR01	3/20/2020 11:33	53.6	39.8	1.3	5.3	-0.3	-0.4	-4.5	84.2	34.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VR12LR02	3/3/2020 10:42	57.7	42.3	0.0	0.0	-4.3	-4.3	-5.3	89.1	47.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR02	3/20/2020 12:05	58.1	41.9	0.0	0.0	-2.3	-2.4	-2.7	88.7	37.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	3/3/2020 14:52	59.4	40.6	0.0	0.0	-3.0	-2.9	-5.2	95.4	76.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	3/20/2020 13:33	58.9	41.1	0.0	0.0	-1.6	-1.5	-2.5	93.2	52.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0901	3/9/2020 17:05	52.0	31.8	0.4	15.8	-5.9	-5.9	-6.3	81.0	8.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0901	3/20/2020 12:57	50.4	37.9	0.0	11.7	-4.9	-4.8	-4.8	75.2	7.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0906	3/9/2020 13:08	51.9	37.1	0.0	11.0	-0.4	-0.3	-7.5	94.5	40.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0906	3/21/2020 11:15	54.0	37.2	0.0	8.8	-0.3	-0.3	-8.2	93.2	41.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0907	3/4/2020 15:14	43.5	32.3	4.3	19.9	-0.7	-0.1	-6.2	99.3	25.5	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW0907	3/4/2020 15:15	50.8	36.0	2.1	11.1	-0.2	-0.1	-6.7	99.7	18.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0907	3/20/2020 16:23	60.8	39.2	0.0	0.0	-0.2	-0.4	-7.2	100.6	23.1	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VREW0907	3/20/2020 16:24	60.2	39.8	0.0	0.0	-0.4	-0.4	-6.4	101.5	41.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0908	3/4/2020 15:03	63.5	36.5	0.0	0.0	22.9	22.9	22.7	83.3	0.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0908	3/23/2020 14:31	63.9	36.1	0.0	0.0	21.3	21.1	21.1	54.1	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0909	3/4/2020 14:32	62.4	37.6	0.0	0.0	2.2	2.2	1.9	85.3	3.6	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0909	3/23/2020 14:22	62.8	37.2	0.0	0.0	1.9	1.9	2.0	54.3	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0910	3/4/2020 14:15	49.5	36.5	0.0	14.0	-2.9	-2.9	-5.1	107.8	87.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0910	3/23/2020 14:12	49.7	36.4	0.0	13.9	-3.2	-3.2	-5.0	106.2	97.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0911	3/4/2020 14:03	47.4	31.1	0.3	21.2	-0.1	-0.1	-6.0	80.2	11.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0911	3/23/2020 13:12	40.3	29.9	0.0	29.8	-0.9	-0.8	-6.2	73.4	11.3	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0912	3/4/2020 12:36	48.2	38.0	0.0	13.8	-0.7	-0.7	-6.2	107.2	14.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW0912	3/23/2020 13:23	50.2	36.6	0.0	13.2	-1.3	-1.2	-7.7	102.0	11.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1001	3/9/2020 16:11	64.6	34.1	0.5	0.8	-0.2	-2.7	-5.5	75.4	0.0	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1001	3/9/2020 16:12	59.2	32.3	2.3	6.2	-4.3	-4.3	-6.1	75.2	6.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1001	3/20/2020 16:15	64.0	34.7	1.3	0.0	-5.8	-5.8	-5.8	74.1	6.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1003	3/4/2020 15:00	62.0	38.0	0.0	0.0	2.0	2.0	1.4	82.9	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1003	3/23/2020 14:28	63.0	37.0	0.0	0.0	1.5	1.5	1.8	53.8	6.7	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1004	3/4/2020 14:19	60.2	39.7	0.1	0.0	-6.1	-6.1	-6.1	88.9	23.5	Valve Adjustment:"No change,Valve 100% open":Well Condition:"";Well Repairs:""
VREW1004	3/23/2020 14:09	59.5	38.3	0.1	2.1	-6.3	-6.3	-6.7	86.0	23.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW1005	3/4/2020 14:22	59.9	40.1	0.0	0.0	0.6	0.6	0.6	90.5	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less":Well Condition:"";Well Repairs:""
VREW1005	3/23/2020 14:16	60.4	39.4	0.0	0.2	0.5	0.5	0.6	57.9	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1009	3/4/2020 11:31	46.3	38.9	0.0	14.8	-2.0	-1.0	-5.3	81.1	15.2	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1009	3/4/2020 11:32	43.7	38.6	0.0	17.7	-0.9	-0.9	-5.4	80.6	13.3	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1009	3/23/2020 12:01	57.2	39.2	0.0	3.6	-0.8	-1.0	-6.5	70.2	8.0	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1009	3/23/2020 12:02	57.1	39.0	0.0	3.9	-1.1	-1.1	-5.7	72.1	12.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1010	3/4/2020 10:47	42.8	38.0	0.1	19.1	-1.0	-0.5	-5.0	114.4	29.3	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1010	3/4/2020 10:49	38.5	36.4	0.2	24.9	-0.5	-0.5	-4.9	111.0	15.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1010	3/23/2020 11:25	56.0	39.7	0.0	4.3	-0.3	-0.4	-5.4	105.6	10.5	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1010	3/23/2020 11:26	56.6	39.6	0.0	3.8	-0.4	-0.4	-5.9	109.4	40.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1011	3/4/2020 10:43	31.9	33.7	0.0	34.4	-0.4	-0.4	-4.5	106.2	29.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1011	3/23/2020 11:22	38.4	34.8	0.0	26.8	-0.2	-0.2	-5.7	101.3	12.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1012	3/4/2020 10:24	42.3	36.9	0.0	20.8	-1.4	-0.7	-4.7	113.0	47.1	Valve Adjustment:"Closed valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VREW1012	3/4/2020 10:25	40.1	36.6	0.0	23.3	-0.7	-0.6	-5.0	111.9	25.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1012	3/23/2020 11:19	44.8	35.8	0.0	19.4	-0.6	-0.5	-6.2	107.1	21.0	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW120A	3/3/2020 12:30	45.1	35.7	0.2	19.0	-4.8	-4.8	-5.4	124.3	13.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW120A	3/20/2020 13:18	49.7	38.1	0.0	12.2	-5.7	-5.6	-6.2	122.9	15.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW121A	3/9/2020 16:51	0.3	0.1	21.3	78.3	-5.6	-5.6	-6.3	64.8	5.9	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW121A	3/20/2020 13:03	0.3	0.1	21.5	78.1	-5.7	-5.7	-6.0	59.9	2.5	Valve Adjustment:"NSPS/CAI,Closed valve < 10%,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW122A	3/3/2020 12:22	49.7	38.1	0.0	12.2	-4.8	-4.7	-5.4	124.2	41.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW122A	3/20/2020 12:59	50.7	38.0	0.0	11.3	-5.3	-5.3	-5.8	124.5	35.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW123A	3/3/2020 12:06	43.6	38.5	0.0	17.9	-2.5	-2.2	-3.1	121.8	30.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
Device ID	Date and Time	СН₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
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		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW123A	3/3/2020 12:07	43.9	38.1	0.0	18.0	-2.2	-2.2	-3.5	121.8	30.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW123A	3/20/2020 12:12	47.9	38.8	0.0	13.3	-2.2	-2.2	-3.9	122.0	34.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW125A	3/3/2020 11:11	45.2	37.7	0.1	17.0	-2.8	-2.5	-6.5	124.0	50.8	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW125A	3/3/2020 11:12	45.7	37.8	0.0	16.5	-2.6	-2.5	-6.8	124.0	45.7	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW125A	3/20/2020 11:52	48.4	39.1	0.0	12.5	-1.7	-1.7	-4.1	122.5	40.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW126A	3/3/2020 11:50	54.4	45.5	0.1	0.0	-1.0	-1.2	-5.7	83.1	12.0	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VREW126A	3/3/2020 11:52	54.4	45.6	0.0	0.0	-1.3	-1.3	-6.9	117.3	58.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW126A	3/20/2020 11:55	53.3	42.8	0.0	3.9	-0.9	-0.9	-4.1	130.1	5.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW127A	3/3/2020 12:02	44.5	42.2	0.0	13.3	-0.2	-0.1	-4.2	118.2	12.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW127A	3/20/2020 12:19	42.8	41.9	0.0	15.3	-0.1	-0.1	-3.7	112.1	16.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW137A	3/3/2020 12:36	50.6	39.0	2.0	8.4	-4.2	-4.3	-5.4	122.0	30.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW137A	3/20/2020 13:13	49.8	39.3	1.9	9.0	-4.6	-4.6	-5.4	121.3	24.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW143A	3/3/2020 11:22	45.4	38.1	0.2	16.3	-3.1	-3.1	-7.3	123.8	36.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW143A	3/20/2020 11:43	48.7	38.9	0.2	12.2	-1.5	-1.5	-4.4	122.7	15.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0601R	3/9/2020 13:47	53.7	43.3	3.0	0.0	-8.1	-8.1	-8.1	70.7	7.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0601R	3/21/2020 11:51	49.6	42.1	4.6	3.7	-9.3	-9.3	-9.5	65.3	2.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0603R	3/9/2020 13:15	45.3	40.3	0.0	14.4	-0.8	-0.6	-11.7	112.5	20.3	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRL0603R	3/9/2020 13:16	46.4	41.2	0.0	12.4	-0.5	-0.4	-11.1	111.2	13.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRL0603R	3/21/2020 11:24	50.2	41.4	0.0	8.4	-1.2	-1.2	-10.1	109.9	79.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0604R	3/9/2020 13:12	38.9	35.9	0.0	25.2	-0.1	-0.1	-9.5	93.4	24.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRL0604R	3/21/2020 11:19	41.4	36.3	0.0	22.3	-0.1	-0.1	-9.2	90.0	6.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW100	3/9/2020 14:04	48.1	38.5	0.0	13.4	-1.9	-1.9	-6.5	99.5	35.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW100	3/21/2020 12:07	49.1	38.4	0.0	12.5	-2.2	-2.2	-6.7	99.5	41.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW101	3/4/2020 14:10	49.9	28.3	0.0	21.8	-0.5	-0.4	-6.1	87.1	11.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW101	3/23/2020 13:07	40.9	28.3	0.2	30.6	-1.0	-0.8	-5.4	76.3	6.0	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW102	3/4/2020 12:32	49.8	38.4	0.0	11.8	-4.5	-4.4	-4.6	112.1	45.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW102	3/23/2020 13:26	52.3	36.7	0.0	11.0	-4.7	-4.7	-5.4	109.6	46.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW103	3/4/2020 12:27	43.0	37.7	0.0	19.3	-0.3	-0.3	-5.2	82.4	37.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW103	3/23/2020 13:02	49.6	37.4	0.0	13.0	-0.5	-0.5	-5.8	66.9	28.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW104	3/9/2020 13:01	57.5	42.5	0.0	0.0	-0.1	-0.1	-0.2	99.0	27.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW104	3/21/2020 11:04	58.2	41.8	0.0	0.0	0.3	0.3	1.0	97.9	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW104	3/21/2020 11:05	58.2	41.8	0.0	0.0	0.2	0.3	1.0	97.9	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW105	3/4/2020 12:07	54.3	40.0	0.0	5.7	-5.0	-4.9	-4.8	104.5	27.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	3/23/2020 12:09	54.3	37.9	0.0	7.8	-5.8	-5.8	-6.1	100.4	37.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW106	3/4/2020 10:11	50.0	37.6	0.1	12.3	-1.5	-1.5	-5.2	108.3	18.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW106	3/23/2020 11:08	48.3	36.2	0.0	15.5	-1.6	-1.6	-6.4	104.9	21.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW107	3/4/2020 10:15	38.2	35.2	0.0	26.6	-0.3	-0.3	-5.6	106.3	8.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW107	3/23/2020 11:12	60.0	40.0	0.0	0.0	-0.2	-0.2	-5.3	78.6	23.2	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW108	3/9/2020 12:33	42.8	37.3	0.0	19.9	-0.6	-0.3	-5.2	111.0	15.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW108	3/9/2020 12:36	41.4	37.4	0.0	21.2	-0.2	-0.2	-5.1	103.3	31.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW108	3/21/2020 10:37	56.3	41.0	0.0	2.7	-0.1	-0.3	-4.8	81.7	18.8	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW108	3/21/2020 10:38	56.7	41.7	0.0	1.6	-0.5	-0.5	-5.7	103.5	23.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW109	3/4/2020 11:17	52.2	40.6	0.1	7.1	-4.7	-4.8	-5.0	112.3	39.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW109	3/23/2020 11:47	52.4	38.6	0.1	8.9	-5.1	-5.1	-5.9	109.8	53.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW110	3/3/2020 13:51	61.8	37.9	0.3	0.0	-10.3	-10.3	-10.5	93.9	11.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW110	3/20/2020 16:07	60.8	38.5	0.7	0.0	-5.1	-5.1	-5.1	85.1	6.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW111	3/3/2020 13:55	62.0	38.0	0.0	0.0	53.9	53.9	53.8	77.2	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW111	3/20/2020 16:02	61.4	38.6	0.0	0.0	46.8	47.1	46.8	69.3	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW112	3/3/2020 14:43	59.1	40.9	0.0	0.0	-9.9	-9.9	-10.3	106.5	28.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW112	3/20/2020 15:09	59.8	40.2	0.0	0.0	-4.7	-4.7	-4.8	102.2	13.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	3/3/2020 14:35	59.0	40.8	0.2	0.0	-10.2	-10.2	-10.2	92.8	12.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	3/20/2020 15:16	59.4	40.5	0.1	0.0	-5.1	-5.1	-5.1	82.2	9.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW114	3/3/2020 14:08	49.2	33.3	3.1	14.4	-8.9	-8.9	-9.2	75.9	9.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW114	3/23/2020 14:56	43.7	28.8	3.6	23.9	-5.0	-4.8	-5.0	59.9	11.1	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW115	3/9/2020 16:45	34.0	22.8	9.6	33.6	-4.6	-4.3	-5.3	67.6	6.5	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW115	3/13/2020 9:42	34.1	24.0	8.4	33.5	-1.1	-1.0	-5.4	59.7	8.6	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW115	3/13/2020 9:44	33.1	23.3	9.0	34.6	-2.0	-2.0	-5.4	60.3	8.0	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW116	3/3/2020 14:23	54.7	36.6	0.2	8.5	-10.3	-10.2	-11.5	75.7	12.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW116	3/20/2020 15:24	43.0	32.3	4.9	19.8	-5.2	-5.2	-5.1	63.1	5.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW117	3/3/2020 14:26	47.1	36.1	0.1	16.7	-7.1	-7.1	-11.5	91.4	39.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW117	3/20/2020 15:28	47.6	35.7	0.1	16.6	-3.9	-3.9	-5.2	89.1	21.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW128	3/3/2020 12:11	48.3	43.1	2.0	6.6	-3.8	-3.9	-3.7	81.9	5.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW128	3/20/2020 12:28	52.4	46.0	0.6	1.0	-4.1	-4.1	-4.1	75.0	4.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW129	3/3/2020 12:18	56.5	43.5	0.0	0.0	1.8	1.8	2.1	76.8	3.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW129	3/20/2020 12:32	56.8	43.2	0.0	0.0	1.7	1.7	2.0	68.0	1.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW131	3/9/2020 17:13	61.2	38.8	0.0	0.0	-0.1	-0.1	-0.7	73.6	0.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW131	3/20/2020 12:46	53.1	42.6	0.2	4.1	0.0	0.0	-0.3	65.3	0.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW133	3/3/2020 12:15	56.1	43.9	0.0	0.0	1.8	1.8	2.3	123.8	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW133	3/20/2020 12:30	55.8	44.2	0.0	0.0	1.7	1.7	2.4	120.9	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW134	3/4/2020 14:06	47.7	33.3	0.7	18.3	-2.0	-2.0	-6.9	73.6	23.0	Valve Adjustment:"No change,Valve at optimum position":Well Condition:"":Well Repairs:""
VRLEW134	3/23/2020 13:16	49.8	35.6	0.1	14.5	-3.3	-3.3	-7.2	64.8	22.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW135	3/3/2020 11:07	30.1	21.9	4.7	43.3	-0.9	-0.9	-6.5	69.8	10.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW135	3/20/2020 13:31	18.3	15.5	3.8	62.4	-0.5	-0.5	-3.4	72.0	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW136	3/3/2020 12:25	51.0	40.4	0.2	8.4	-4.0	-4.0	-2.4	75.2	5.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW136	3/20/2020 12:23	52.4	41.7	0.3	5.6	-4.6	-4.6	-1.4	65.7	3.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW139	3/9/2020 13:40	55.6	44.4	0.0	0.0	-1.0	-1.9	-6.7	114.3	17.5	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW139	3/9/2020 13:41	55.8	44.2	0.0	0.0	-2.4	-2.4	-7.4	115.7	40.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW139	3/21/2020 11:43	50.4	41.5	0.0	8.1	-2.5	-2.5	-6.2	116.2	30.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW140	3/9/2020 13:34	44.4	38.7	0.2	16.7	-3.6	-3.1	-6.5	119.1	49.3	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW140	3/9/2020 13:35	43.7	38.8	0.3	17.2	-2.8	-2.8	-6.7	119.8	40.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW140	3/21/2020 11:39	50.9	39.9	0.0	9.2	-2.5	-2.5	-6.2	119.5	39.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW141	3/9/2020 13:26	44.1	38.2	0.0	17.7	-1.6	-0.8	-7.0	114.3		Valve Adjustment:"Closed valve < 10%";Well Condition:"No flow device";Well Repairs:""
VRLEW141	3/9/2020 13:29	44.8	38.4	0.0	16.8	-0.6	-0.6	-7.1	109.4		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""
VRLEW141	3/21/2020 11:32	52.9	39.7	0.0	7.4	-0.4	-0.4	-6.1	107.8		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW142	3/9/2020 13:53	45.4	42.0	0.0	12.6	-2.0	-1.2	-6.9	125.4	70.8	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW142	3/9/2020 13:55	45.3	42.2	0.0	12.5	-1.0	-0.9	-7.3	124.9	45.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW142	3/21/2020 11:54	53.0	43.6	0.1	3.3	-0.8	-0.8	-6.4	125.8	42.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW145	3/3/2020 11:04	57.4	42.6	0.0	0.0	-7.0	-7.0	-7.1	62.4	20.9	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW145	3/20/2020 11:02	57.3	42.7	0.0	0.0	-4.9	-4.9	-4.9	88.2	9.2	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW146	3/3/2020 12:33	54.8	40.4	0.0	4.8	-4.2	-4.3	-4.5	91.6	46.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW146	3/20/2020 13:15	54.8	41.1	0.0	4.1	-4.8	-4.9	-4.8	85.3	52.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW148	3/3/2020 10:53	53.3	38.5	0.0	8.2	-2.7	-2.7	-8.5	111.9	37.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW148	3/20/2020 11:18	51.6	38.1	0.0	10.3	-1.9	-1.9	-4.8	111.4	27.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW149	3/3/2020 11:19	54.3	44.6	0.4	0.7	-1.0	-1.0	-7.8	118.6	28.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW149	3/20/2020 11:46	47.0	37.5	2.8	12.7	-1.2	-1.2	-4.5	125.4	38.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW150	3/3/2020 10:56	48.0	35.0	3.5	13.5	-0.8	-0.8	-8.1	102.7	15.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW150	3/20/2020 11:15	45.1	33.8	4.2	16.9	-0.5	-0.5	-4.9	97.7	6.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW151	3/3/2020 11:00	52.4	38.4	2.1	7.1	-8.0	-8.0	-8.2	77.9	12.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW151	3/20/2020 11:12	42.8	33.1	4.3	19.8	-4.9	-4.9	-4.8	70.9	2.8	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW152	3/3/2020 14:59	60.3	39.7	0.0	0.0	-0.9	-1.1	-9.5	87.6	15.1	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW152	3/3/2020 15:00	60.0	40.0	0.0	0.0	-1.2	-1.3	-9.0	84.0	15.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW152	3/20/2020 13:40	47.1	38.4	0.0	14.5	-0.7	-0.7	-4.5	68.5	9.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW153	3/3/2020 15:03	59.4	40.6	0.0	0.0	-7.9	-7.9	-8.8	79.7	33.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW153	3/20/2020 13:42	58.0	42.0	0.0	0.0	-4.4	-4.4	-4.3	66.2	22.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW154	3/3/2020 15:06	57.9	42.1	0.0	0.0	-9.2	-9.2	-9.7	76.3	17.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW154	3/20/2020 13:45	56.7	43.3	0.0	0.0	-4.7	-4.8	-4.8	65.8	9.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW155	3/3/2020 11:15	52.8	44.4	1.0	1.8	-7.0	-7.0	-7.1	69.6	14.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW155	3/20/2020 11:49	53.6	44.9	1.5	0.0	-4.8	-4.8	-4.7	60.6	7.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW156	3/3/2020 10:46	49.3	35.4	1.1	14.2	-5.3	-5.3	-6.5	105.8	48.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW156	3/20/2020 11:25	48.0	34.9	1.0	16.1	-3.8	-3.8	-4.0	104.0	23.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW157	3/3/2020 10:49	40.7	31.9	1.0	26.4	-4.7	-3.6	-7.3	109.6	27.9	Valve Adjustment:"Closed valve 10%-25%";Well Condition:"";Well Repairs:""
VRLEW157	3/3/2020 10:50	40.2	31.7	1.0	27.1	-3.2	-3.2	-7.2	107.4	17.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW157	3/20/2020 11:20	43.3	32.3	0.8	23.6	-1.6	-1.3	-4.1	104.0	10.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW157	3/20/2020 11:21	42.8	32.1	0.9	24.2	-1.2	-1.2	-4.2	101.3	5.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW158	3/3/2020 15:13	50.7	35.3	4.8	9.2	-4.8	-4.8	-8.1	107.6	31.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW158	3/20/2020 11:37	44.8	30.9	4.3	20.0	-2.9	-2.6	-4.2	104.5	14.2	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW159	3/3/2020 11:25	58.5	40.4	0.0	1.1	-7.3	-7.3	-7.1	123.8	19.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW159	3/20/2020 11:40	59.4	39.0	0.0	1.6	-4.6	-4.6	-4.4	120.6	7.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW160	3/3/2020 11:40	45.0	34.7	0.0	20.3	-4.2	-2.9	-7.9	120.9	27.3	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW160	3/3/2020 11:41	45.2	34.9	0.0	19.9	-2.5	-2.5	-7.5	118.8	12.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW160	3/20/2020 12:01	58.3	37.0	0.0	4.7	-1.0	-1.6	-4.4	114.6	9.5	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW160	3/20/2020 12:02	58.4	37.6	0.0	4.0	-2.1	-2.1	-4.5	118.8	14.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW161	3/3/2020 11:46	43.7	34.8	2.5	19.0	-3.7	-2.2	-7.4	117.9	24.1	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW161	3/3/2020 11:47	43.0	33.7	3.3	20.0	-1.9	-1.9	-4.8	113.9	11.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW161	3/20/2020 11:58	50.8	36.9	2.3	10.0	-1.1	-1.1	-4.2	109.2	5.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW162	3/3/2020 11:55	51.0	39.0	0.0	10.0	-2.9	-2.9	-4.2	123.1	26.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW162	3/20/2020 12:09	48.6	37.6	0.0	13.8	-2.5	-2.5	-4.2	122.7	25.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW163	3/3/2020 11:58	54.7	36.7	0.0	8.6	-0.1	-0.3	-4.1	116.1	22.5	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW163	3/3/2020 11:59	55.4	36.3	0.0	8.3	-0.3	-0.3	-4.0	124.0	30.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW163	3/20/2020 12:15	44.0	34.8	0.0	21.2	-0.2	-0.2	-4.3	124.7	30.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW31A	3/4/2020 11:01	46.1	38.7	0.0	15.2	-2.9	-2.9	-4.8	99.5		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW31A	3/23/2020 11:33	49.6	37.6	0.0	12.8	-3.0	-3.0	-5.4	95.7		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW33A	3/4/2020 12:03	49.3	34.3	0.6	15.8	-4.7	-4.8	-4.4	78.6	29.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW33A	3/23/2020 12:06	50.6	33.2	0.5	15.7	-6.5	-6.5	-6.5	60.4	13.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW34A	3/4/2020 10:55	44.9	37.9	0.0	17.2	-0.7	-0.3	-5.0	111.4	21.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW34A	3/4/2020 10:57	46.1	38.6	0.2	15.1	-0.3	-0.3	-5.2	102.9	43.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW34A	3/23/2020 11:30	58.6	41.4	0.0	0.0	-0.2	-0.2	-5.8	57.2	34.7	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW38A	3/9/2020 17:24	40.6	34.2	0.0	25.2	-0.2	-0.1	-6.0	96.6	21.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW38A	3/23/2020 12:21	25.9	26.0	4.9	43.2	-0.8	-0.3	-6.2	109.0	19.8	Valve Adjustment:"Closed valve 10%-25%,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW68A	3/4/2020 11:53	40.5	34.5	4.0	21.0	-1.3	-0.8	-5.5	109.0	43.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW68A	3/4/2020 11:55	40.7	34.1	3.9	21.3	-0.7	-0.6	-4.9	108.5	23.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW68A	3/23/2020 12:14	40.0	33.3	3.7	23.0	-0.6	-0.4	-5.7	108.0	18.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW71B	3/4/2020 13:58	34.1	30.6	0.0	35.3	-0.1	-0.1	-6.1	102.2	21.8	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW71B	3/23/2020 13:20	27.9	29.3	0.1	42.7	-0.8	-0.7	-8.3	79.3	6.0	Valve Adjustment:"Closed valve < 10%,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW72R	3/9/2020 13:04	56.1	42.2	0.0	1.7	-5.3	-5.3	-5.8	113.5	43.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW72R	3/21/2020 11:11	57.4	42.6	0.0	0.0	-5.0	-5.0	-5.1	113.5	52.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	3/3/2020 14:03	61.5	38.3	0.2	0.0	-9.6	-9.5	-9.5	70.9	8.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	3/20/2020 15:45	59.8	37.2	0.3	2.7	-4.6	-4.6	-4.4	62.4	0.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW86A	3/4/2020 11:37	41.7	37.6	0.0	20.7	-1.0	-0.7	-5.1	108.3	37.8	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW86A	3/4/2020 11:38	42.0	38.4	0.0	19.6	-0.6	-0.6	-5.0	107.4	21.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW86A	3/23/2020 12:25	43.0	36.7	0.1	20.2	-0.6	-0.3	-6.5	104.0	21.5	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW86A	3/23/2020 12:26	43.3	36.9	0.0	19.8	-0.3	-0.3	-6.6	97.2	41.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW90A	3/3/2020 14:47	58.0	40.6	0.7	0.7	-9.9	-9.9	-10.2	89.1	13.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW90A	3/20/2020 15:03	58.3	39.8	0.6	1.3	-4.8	-4.9	-4.9	74.3	6.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW93A	3/4/2020 15:10	38.9	30.4	4.2	26.5	-6.2	-6.2	-6.1	81.9	3.3	Valve Adjustment:"Closed valve 10%-25%";Well Condition:"";Well Repairs:""
VRLEW93A	3/20/2020 16:28	52.8	39.4	1.8	6.0	-6.8	-6.8	-6.8	67.5	1.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW09	3/9/2020 11:51	50.6	37.4	2.8	9.2	-8.1	-8.1	-7.8	67.6	24.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW09	3/21/2020 9:48	50.3	37.8	0.2	11.7	-8.1	-8.1	-7.8	48.4	25.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW14	3/9/2020 11:56	57.9	42.1	0.0	0.0	-6.2	-6.1	-6.7	111.2		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW14	3/21/2020 9:51	58.3	41.7	0.0	0.0	-7.1	-7.0	-7.2	109.4		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW19	3/9/2020 11:28	49.7	37.8	2.4	10.1	-6.0	-6.0	-6.5	85.8	20.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW19	3/21/2020 10:01	52.3	38.6	2.3	6.8	-5.0	-5.1	-5.9	84.4	19.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW23	3/4/2020 12:13	50.7	38.5	0.2	10.6	-4.3	-4.3	-4.2	98.1	28.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW23	3/23/2020 12:57	50.1	36.7	0.2	13.0	-5.1	-5.1	-5.4	96.1	29.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW25	3/9/2020 12:07	57.8	42.2	0.0	0.0	-5.7	-5.7	-5.7	111.4		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW25	3/21/2020 10:09	58.4	41.6	0.0	0.0	-5.0	-5.0	-5.0	111.2		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	3/4/2020 11:06	40.5	32.4	4.7	22.4	-4.8	-4.8	-5.3	77.7		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	3/23/2020 11:38	48.7	35.6	2.9	12.8	-2.9	-2.9	-5.8	55.0		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	3/9/2020 12:51	56.3	43.1	0.4	0.2	-5.3	-5.3	-5.4	71.4		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	3/21/2020 10:48	56.9	42.7	0.4	0.0	-5.4	-5.3	-5.2	58.5		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	3/4/2020 13:51	49.9	31.5	0.0	18.6	-3.8	-3.7	-4.0	106.7		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	3/23/2020 12:49	50.2	34.0	0.0	15.8	-4.2	-4.3	-4.4	104.2		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	3/3/2020 15:44	60.6	39.3	0.1	0.0	-11.6	-11.7	-11.5	72.9		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	3/20/2020 16:35	60.7	39.3	0.0	0.0	-5.5	-5.5	-5.8	64.4		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	3/9/2020 12:12	49.1	40.4	0.0	10.5	-2.3	-2.3	-5.9	109.2		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	3/21/2020 10:13	52.2	41.1	0.0	6.7	-2.3	-2.2	-6.2	108.9		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	3/4/2020 10:19	33.8	30.2	0.4	35.6	-0.2	-0.2	-5.4	79.3		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW63	3/23/2020 11:15	50.7	33.8	0.0	15.5	-0.3	-0.2	-6.4	53.2		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	3/4/2020 12:19	49.2	38.4	0.0	12.4	-4.4	-4.3	-4.7	75.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	3/23/2020 12:53	47.7	35.8	0.4	16.1	-4.8	-4.7	-5.0	55.6		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW65	3/4/2020 11:11	56.5	43.4	0.1	0.0	-4.8	-4.7	-5.1	81.5	9.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW65	3/23/2020 11:42	57.9	41.0	0.3	0.8	-5.8	-5.8	-5.9	58.3	29.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW76	3/9/2020 14:01	53.3	40.6	0.3	5.8	-0.9	-0.9	-13.1	94.1	14.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW76	3/21/2020 12:01	54.6	39.6	0.4	5.4	-0.9	-1.5	-11.5	93.9	15.8	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW76	3/21/2020 12:03	54.7	39.2	0.3	5.8	-1.5	-1.5	-12.2	94.0	24.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW77	3/9/2020 11:01	46.9	37.4	0.0	15.7	-6.4	-6.4	-8.1	90.9	54.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW77	3/21/2020 9:27	45.2	37.1	0.0	17.7	-6.5	-6.4	-8.4	90.1	51.6	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW78	3/9/2020 11:05	53.7	40.1	0.0	6.2	-0.7	-1.4	-8.3	89.8	9.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW78	3/9/2020 11:07	53.6	39.8	0.0	6.6	-1.6	-1.5	-8.5	91.2	27.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW78	3/21/2020 9:30	46.7	38.3	0.0	15.0	-1.7	-1.7	-9.1	89.1	25.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW79	3/9/2020 11:17	54.9	38.4	0.0	6.7	-0.9	-1.6	-9.7	84.9	4.0	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW79	3/9/2020 11:20	55.9	38.4	0.0	5.7	-1.6	-1.6	-7.7	87.8	13.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW79	3/21/2020 9:34	56.1	38.4	0.0	5.5	-2.6	-3.4	-9.5	87.3	14.2	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW79	3/21/2020 9:36	56.3	38.1	0.0	5.6	-3.5	-3.5	-8.0	88.9	25.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW80	3/4/2020 12:24	46.8	38.4	0.0	14.8	-1.4	-1.4	-5.1	113.4	18.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW80	3/23/2020 13:00	50.1	36.8	0.0	13.1	-1.7	-1.7	-6.9	110.3	22.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW81	3/4/2020 11:24	47.3	38.5	0.0	14.2	-2.3	-2.3	-3.7	100.0	35.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW81	3/23/2020 11:54	46.4	37.7	0.0	15.9	-2.8	-2.8	-5.0	97.7	34.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW82	3/4/2020 11:20	57.9	42.0	0.1	0.0	-4.4	-4.5	-4.2	112.5	34.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW82	3/23/2020 11:51	59.6	40.3	0.1	0.0	-5.2	-5.2	-5.1	107.6	60.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW83	3/4/2020 11:27	56.7	41.7	0.6	1.0	-0.3	-0.3	-0.3	80.8	3.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW83	3/23/2020 11:57	59.5	40.2	0.3	0.0	-0.6	-0.5	-0.3	57.7	6.9	Valve Adjustment:"No change,Valve 100% open,Well vacuum limited";Well Condition:"";Well Repairs:""
VRLFEW84	3/9/2020 12:56	57.0	43.0	0.0	0.0	-0.1	-0.1	-0.3	104.0	12.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW84	3/21/2020 10:57	58.1	41.9	0.0	0.0	0.2	0.1	0.9	101.3	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLFEW84	3/21/2020 10:59	58.2	41.8	0.0	0.0	0.2	0.2	0.9	102.0	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLFEW85	3/9/2020 11:32	51.4	38.8	0.0	9.8	-0.5	-0.5	-6.6	89.8	28.8	Valve Adjustment:"No change, Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW85	3/21/2020 10:04	52.8	39.1	0.0	8.1	-0.3	-0.3	-5.9	88.7	28.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW87	3/9/2020 12:16	51.5	40.7	0.0	7.8	-0.3	-0.3	-5.4	112.5	19.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW87	3/21/2020 10:17	55.2	41.2	0.0	3.6	-0.2	-0.4	-5.5	111.6	35.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW87	3/21/2020 10:19	55.4	40.9	0.0	3.7	-0.4	-0.4	-5.1	112.6	31.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW88	3/9/2020 12:20	50.0	38.5	0.0	11.5	-0.2	-0.2	-5.5	100.6	31.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW88	3/21/2020 10:23	52.0	38.7	0.0	9.3	-0.2	-0.2	-4.8	71.2	27.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW89	3/9/2020 12:24	41.9	35.8	0.0	22.3	-0.9	-0.7	-5.4	88.0	12.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLFEW89	3/21/2020 10:27	46.0	36.8	0.0	17.2	-0.7	-0.7	-5.2	52.9	28.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW92	3/9/2020 16:15	62.7	37.2	0.1	0.0	-6.1	-6.1	-6.5	83.3	9.2	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW92	3/20/2020 16:19	61.9	38.1	0.0	0.0	-5.8	-5.8	-5.8	81.0	6.3	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW94	3/4/2020 15:06	60.4	39.6	0.0	0.0	0.5	0.6	0.3	84.6	1.7	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLFEW94	3/23/2020 14:34	62.8	37.2	0.0	0.0	0.5	0.5	0.8	53.1	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLFEW96	3/4/2020 14:55	42.4	31.8	4.9	20.9	-4.4	-4.4	-4.7	83.3	0.6	Valve Adjustment:"Closed valve > 1 turn";Well Condition:"";Well Repairs:""
VRLFEW96	3/23/2020 14:25	45.1	33.0	3.5	18.4	-2.2	-2.2	-2.1	52.7	0.0	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW98	3/4/2020 14:25	55.7	40.5	0.8	3.0	-1.1	-1.1	-1.4	81.5	7.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW98	3/23/2020 14:19	46.2	35.2	3.0	15.6	-0.7	-0.6	-0.6	52.2	2.6	Valve Adjustment:"No change,Well vacuum limited,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW99	3/9/2020 13:20	54.3	39.4	0.0	6.3	-0.1	-0.7	-9.0	101.7	7.4	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW99	3/9/2020 13:22	48.8	38.4	0.0	12.8	-0.5	-0.6	-9.9	109.4	13.7	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW99	3/21/2020 11:28	51.1	40.3	0.0	8.6	-0.5	-0.5	-9.1	113.0	13.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLRW001	3/3/2020 14:41	58.8	40.9	0.3	0.0	-8.5	-8.5	-8.5	94.8		Valve Adjustment:"Opened valve 1/2 to 1 turn";Well Condition:"No flow device";Well Repairs:""
VRLRW001	3/20/2020 15:07	60.0	39.9	0.1	0.0	-4.1	-4.1	-4.0	85.8		Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW002	3/3/2020 14:32	58.6	41.4	0.0	0.0	-10.2	-10.2	-10.2	79.9		Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW002	3/20/2020 15:13	59.9	40.1	0.0	0.0	-5.1	-5.1	-5.1	66.4		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLRW003	3/3/2020 13:59	62.7	36.6	0.7	0.0	-9.9	-9.9	-10.2	73.8	7.1	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLRW003	3/20/2020 15:56	63.1	36.4	0.5	0.0	-5.1	-5.1	-5.1	70.0	8.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLRW004	3/9/2020 16:39	52.0	22.6	4.7	20.7	-4.9	-4.9	-5.1	64.9	7.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLRW004	3/20/2020 15:43	38.0	17.5	2.6	41.9	-5.1	-5.0	-5.1	63.3	5.7	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""

Bold Italics = HOV approval from BAAQMD *Some flow readings not available due to no/low flow conditions recorded by the ENVISION

¹Blower Inlet Reading

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH4 = Methane CO2 = Carbon Dioxide O2 = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute % = percent

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	

140°F Temperature HOV (Condition #818 Part 3(b)(i))	Oxygen HO (Condition #8	V - No Limit** 18 Part 3 (b)(ii))	Oxygen H (Condition #8	HOV - 15% 18 Part 3 (c)(ii))
EW-9***	EW-9***	EW-33A***	VRLRW001	VRLRW003
EW-33A***	EW-27		VRLRW002	VRLRW004
EW-44			VR12GT4R	VR12GT05

Oxygen concentration shall not apply to these wells as long as the landfill gas (LFG) in the main header has less than 5% O_x AND greater than 35% CH_x *Approved for both Oxygen and Temperature Higher Operating Value (HOV)

VASCO ROAD LANDFILL Wellfield Monitoring Report - April 1, 2, 6, 13, 17, 20, and 27, 2020

Device ID	Date and Time	СН₄	CO2	02	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VR12GT03	4/1/2020 15:19	43.2	31.5	3.3	22.0	-0.1	-0.1	-4.8	80.1	12.8	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT03	4/20/2020 12:42	48.7	36.9	0.1	14.3	-0.5	-0.5	-12.6	80.6	19.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VR12GT05	4/1/2020 12:50	43.5	32.7	3.8	20.0	-0.1	-0.1	-9.8	74.5	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT05	4/20/2020 11:27	40.7	31.6	4.3	23.4	-0.1	-0.1	-11.2	71.5	5.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12LR01	4/1/2020 12:53	43.5	32.7	3.9	19.9	-0.7	-0.2	-9.4	86.0	49.8	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VR12LR01	4/1/2020 12:55	51.9	35.9	1.4	10.8	-0.2	-0.3	-10.2	85.8	35.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VR12LR01	4/20/2020 11:31	47.7	35.3	2.1	14.9	-0.3	-0.3	-12.0	81.7	22.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VR12LR02	4/1/2020 13:33	60.4	39.6	0.0	0.0	-2.8	-2.7	-3.7	90.9	43.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR02	4/20/2020 12:00	54.4	39.4	0.4	5.8	-7.1	-7.0	-8.8	90.5	63.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	4/1/2020 15:22	60.4	39.6	0.0	0.0	-1.7	-1.7	-3.0	94.8	57.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	4/20/2020 12:37	56.1	40.4	0.0	3.5	-4.2	-4.2	-7.1	95.7	87.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0901	4/6/2020 13:39	42.5	28.8	4.7	24.0	-15.2	-15.2	-15.1	47.3	13.5	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0901	4/27/2020 13:24	12.6	8.1	16.3	63.0	-6.5	-6.3	-14.9	88.3	4.4	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0901	4/27/2020 13:27	12.1	7.9	16.5	63.5	-12.0	-12.0	-14.6	88.2	4.2	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0906	4/2/2020 11:41	52.6	35.1	0.0	12.3	-0.9	-0.9	-17.9	96.6	71.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0906	4/17/2020 14:05	49.6	34.8	0.3	15.3	-0.7	-0.6	-19.1	96.1	60.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0907	4/6/2020 13:53	22.9	18.3	12.1	46.7	-0.5	-0.3	-16.3	89.6	10.3	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW0907	4/6/2020 13:55	25.6	20.6	11.0	42.8	-0.4	-0.4	-15.1	86.9	43.5	Valve Adjustment:"NSPS/CAI";Well Condition:"";Well Repairs:""
VREW0907	4/13/2020 12:29	52.4	40.3	0.2	7.1	-0.3	-0.3	-14.1	97.7	32.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0907	4/20/2020 13:54	44.9	33.1	4.2	17.8	-1.0	-0.1	-15.0	99.1	21.6	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW0907	4/20/2020 13:56	52.7	37.8	1.2	8.3	-0.1	-0.1	-16.1	97.7	29.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0908	4/6/2020 15:51	63.6	36.4	0.0	0.0	23.7	23.7	23.6	57.6	0.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0908	4/27/2020 12:52	58.9	41.1	0.0	0.0	25.0	25.0	25.1	83.3	3.4	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0909	4/6/2020 15:40	61.0	39.0	0.0	0.0	1.6	1.6	0.9	63.3	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss":Well Repairs:""

Device ID	Date and Time	CH4	CO ₂	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW0909	4/27/2020 12:36	56.1	43.9	0.0	0.0	1.2	1.3	0.7	87.3	1.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW0910	4/6/2020 15:25	48.9	36.2	0.0	14.9	-5.6	-5.6	-8.9	107.2	122.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0910	4/27/2020 12:23	45.5	38.9	0.0	15.6	-4.7	-4.7	-9.7	107.4	119.3	Valve Adjustment:"Closed valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VREW0911	4/6/2020 12:28	58.0	34.6	0.0	7.4	-0.8	-1.2	-18.3	70.9	5.5	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0911	4/27/2020 12:11	32.8	27.9	2.3	37.0	-1.1	-0.8	-15.8	77.4	22.7	Valve Adjustment:"Closed valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VREW0911	4/27/2020 12:13	31.0	25.3	2.6	41.1	-0.6	-0.6	-16.6	77.7	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0912	4/6/2020 12:41	49.9	37.3	0.0	12.8	-1.9	-1.9	-15.7	103.1	20.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0912	4/27/2020 11:48	47.7	38.2	0.0	14.1	-1.5	-1.5	-15.2	107.4	17.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1001	4/6/2020 13:41	58.4	35.2	2.1	4.3	-14.2	-14.2	-14.3	46.9	6.3	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1001	4/20/2020 13:46	56.3	38.9	4.4	0.4	-13.3	-13.3	-13.2	70.3	3.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1003	4/6/2020 15:47	62.4	37.6	0.0	0.0	1.3	1.3	1.4	58.8	7.4	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1003	4/20/2020 13:25	60.2	36.8	0.2	2.8	-13.3	-13.3	-13.3	67.8	31.7	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VREW1003	4/27/2020 12:42	57.8	41.9	0.0	0.3	0.9	0.9	1.4	81.0	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1003	4/27/2020 12:44	58.1	41.9	0.0	0.0	0.9	1.0	1.4	82.9	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1004	4/6/2020 15:19	59.3	39.2	0.1	1.4	-11.4	-11.4	-12.0	88.2	38.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW1004	4/27/2020 12:27	56.1	43.7	0.1	0.1	-10.8	-10.8	-11.4	89.6	37.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW1005	4/6/2020 15:30	59.9	40.1	0.0	0.0	0.2	0.2	0.1	67.5	4.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1005	4/27/2020 12:30	55.8	44.2	0.0	0.0	0.1	0.1	0.7	83.3	4.2	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VREW1009	4/6/2020 11:46	53.0	40.0	0.0	7.0	-2.5	-2.5	-13.8	77.4	15.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1009	4/27/2020 10:49	48.1	39.4	0.0	12.5	-1.8	-1.8	-10.3	81.0	14.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1010	4/2/2020 15:19	56.1	37.8	0.0	6.1	-0.1	-0.3	-6.5	115.3	17.0	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1010	4/2/2020 15:20	56.0	38.1	0.0	5.9	-1.6	-1.7	-6.4	116.6	87.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1010	4/17/2020 15:59	50.0	39.1	0.0	10.9	-0.8	-0.8	-10.7	116.1	29.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1011	4/2/2020 15:15	51.5	36.7	0.0	11.8	-0.1	-0.1	-6.6	108.3	25.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	02	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW1011	4/17/2020 15:52	46.6	36.7	0.0	16.7	-0.2	-0.2	-10.1	113.4	33.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1012	4/2/2020 15:11	53.8	36.5	0.0	9.7	-0.1	-0.3	-6.3	111.4	20.1	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1012	4/17/2020 15:38	48.5	37.9	0.0	13.6	-0.3	-0.3	-3.3	111.6	40.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW120A	4/1/2020 14:59	48.2	34.9	0.1	16.8	-5.8	-5.8	-6.5	123.6	7.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW120A	4/20/2020 12:18	47.4	30.9	0.0	21.7	-14.7	-14.7	-15.1	115.0	18.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW121A	4/1/2020 14:43	0.6	0.1	20.6	78.7	-6.7	-6.6	-6.7	63.9	0.0	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW121A	4/6/2020 16:27	0.0	0.0	21.3	78.7	-14.5	-14.5	-15.2	52.5	7.9	Valve Adjustment:"NSPS/CAI,Closed valve 10%- 25%";Well Condition:"";Well Repairs:""
VREW121A	4/6/2020 16:29	0.0	0.0	21.2	78.8	-14.6	-14.6	-15.7	51.3	6.5	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW121A	4/13/2020 11:46	0.3	0.1	21.1	78.5	-14.1	-14.2	-14.8	79.9	30.7	Valve Adjustment:"NSPS/CAI,Closed valve < 10%,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW121A	4/13/2020 11:48	0.1	0.0	21.1	78.8	-14.2	-14.2	-14.2	80.4	36.6	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW122A	4/1/2020 14:40	51.3	35.5	0.0	13.2	-5.5	-5.5	-6.7	125.8	29.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW122A	4/20/2020 12:27	46.3	34.9	0.0	18.8	-11.1	-11.1	-14.2	126.3	67.1	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VREW123A	4/1/2020 14:16	46.7	35.6	0.0	17.7	-2.1	-2.1	-4.2	123.6	40.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW125A	4/1/2020 13:13	46.4	35.3	0.0	18.3	-2.4	-2.4	-7.1	124.2	46.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW126A	4/1/2020 13:19	52.1	42.0	0.1	5.8	-1.5	-1.5	-8.1	130.0	7.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW126A	4/20/2020 11:44	51.4	39.5	0.1	9.0	-0.7	-0.6	-11.8	130.0	13.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW127A	4/1/2020 14:20	40.5	36.9	0.0	22.6	-0.1	-0.1	-3.9	120.6	15.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW137A	4/1/2020 15:02	50.8	36.1	1.9	11.2	-4.6	-4.6	-5.7	122.7	36.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW143A	4/1/2020 13:06	49.3	35.8	0.2	14.7	-4.0	-4.0	-9.6	124.3	86.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0601R	4/2/2020 12:10	55.4	41.7	0.7	2.2	-19.4	-19.4	-19.2	64.6	12.2	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRL0601R	4/17/2020 14:38	51.8	42.0	0.7	5.5	-20.4	-20.4	-20.6	68.7	17.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0603R	4/2/2020 11:48	51.0	40.0	0.0	9.0	-0.8	-0.8	-22.7	111.4	14.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	02	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRL0603R	4/17/2020 14:12	50.7	40.0	0.0	9.3	-0.7	-0.6	-24.1	111.0	18.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0604R	4/2/2020 11:45	38.5	34.0	0.0	27.5	-0.4	-0.4	-16.9	94.8	10.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRL0604R	4/17/2020 14:09	40.2	34.2	0.0	25.6	-0.3	-0.3	-17.8	95.0	6.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW100	4/2/2020 12:25	44.9	37.0	0.0	18.1	-4.5	-3.7	-18.2	100.0	59.8	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW100	4/2/2020 12:27	44.6	36.7	0.0	18.7	-3.5	-3.6	-17.0	99.9	43.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW100	4/17/2020 14:57	48.4	36.7	0.0	14.9	-3.1	-3.1	-17.6	99.3	50.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW101	4/6/2020 12:20	48.6	31.5	0.0	19.9	-0.7	-0.6	-19.6	68.4	5.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW101	4/27/2020 12:17	47.2	30.9	0.1	21.8	-0.5	-0.6	-16.0	78.8	4.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW102	4/6/2020 12:45	51.6	38.2	0.0	10.2	-10.4	-10.5	-12.3	112.5	84.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW102	4/27/2020 11:52	48.9	38.5	0.0	12.6	-8.8	-8.8	-10.4	112.5	76.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW103	4/6/2020 12:14	49.3	39.1	0.0	11.6	-0.9	-0.9	-13.8	65.5	5.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW103	4/27/2020 11:19	40.1	37.2	0.0	22.7	-0.6	-0.6	-7.5	83.5	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW104	4/2/2020 11:34	58.7	41.3	0.0	0.0	-1.0	-1.1	-0.8	100.4	22.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW104	4/17/2020 13:58	55.6	41.8	0.0	2.6	-0.3	-0.3	-0.6	100.9	19.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	4/6/2020 11:20	54.3	41.0	0.0	4.7	-11.4	-11.4	-12.6	104.9	47.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	4/27/2020 10:56	51.8	40.5	0.0	7.7	-8.1	-8.1	-9.2	105.3	55.5	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW106	4/2/2020 14:55	50.6	35.0	0.0	14.4	-2.2	-2.2	-14.3	109.6	30.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW106	4/17/2020 15:10	48.5	36.9	0.0	14.6	-2.4	-2.4	-14.5	108.9	28.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW107	4/2/2020 14:58	53.2	36.7	0.0	10.1	-0.1	-0.3	-13.3	107.2	18.8	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW107	4/2/2020 15:00	51.7	36.9	0.0	11.4	-0.4	-0.4	-13.5	108.9	32.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW107	4/17/2020 15:17	46.4	37.0	0.0	16.6	-0.7	-0.7	-13.8	108.3	35.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW108	4/2/2020 11:22	46.9	37.5	0.0	15.6	-1.8	-1.8	-12.0	113.0	38.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW108	4/17/2020 13:46	47.2	36.6	0.0	16.2	-1.5	-1.5	-12.2	112.6	39.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW109	4/6/2020 11:29	51.5	39.3	0.1	9.1	-10.5	-10.6	-12.2	113.2	76.3	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW109	4/27/2020 10:36	50.5	39.5	0.2	9.8	-7.6	-7.6	-8.1	112.6	59.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	02	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW110	4/1/2020 15:33	61.3	37.2	0.5	1.0	-5.5	-5.5	-5.7	85.3	3.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW110	4/20/2020 13:40	56.3	38.2	0.9	4.6	-14.0	-14.0	-13.9	87.8	6.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW111	4/1/2020 15:30	61.6	38.4	0.0	0.0	34.5	34.9	34.0	78.3	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss":Well Repairs:""
VRLEW111	4/20/2020 13:37	58.4	39.9	0.0	1.7	8.3	8.4	8.5	71.1	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss":Well Repairs:""
VRLEW112	4/2/2020 12:52	60.3	39.7	0.0	0.0	-11.3	-11.3	-11.1	105.4	49.2	Valve Adjustment:"No change, Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW112	4/20/2020 13:00	57.1	41.0	0.0	1.9	-13.0	-13.0	-13.2	105.1	46.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	4/2/2020 13:00	60.0	39.7	0.3	0.0	-12.3	-12.3	-12.2	90.5	10.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	4/20/2020 13:07	57.2	41.0	0.3	1.5	-13.6	-13.6	-13.9	93.4	14.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW114	4/2/2020 13:25	51.6	33.1	2.4	12.9	-11.6	-11.6	-11.8	69.1	12.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW114	4/20/2020 13:29	58.7	38.4	0.4	2.5	-13.0	-13.0	-12.9	70.2	5.2	Valve Adjustment:"Opened valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VRLEW116	4/2/2020 13:04	59.7	39.5	0.1	0.7	-12.2	-12.3	-12.2	64.8	15.5	Valve Adjustment:"Opened valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VRLEW116	4/20/2020 13:11	55.4	39.9	0.3	4.4	-13.7	-13.7	-13.9	67.1	17.1	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW117	4/2/2020 13:07	48.1	35.4	0.1	16.4	-8.2	-8.2	-12.5	91.6	35.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW117	4/20/2020 13:14	47.8	36.3	0.1	15.8	-8.9	-8.9	-13.8	91.2		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW128	4/1/2020 14:30	53.9	42.8	0.6	2.7	-4.4	-4.4	-4.4	77.4	0.0	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW128	4/27/2020 14:12	53.0	37.3	0.9	8.8	-12.6	-12.6	-11.5	95.2	5.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW129	4/1/2020 14:36	59.3	40.7	0.0	0.0	2.1	2.1	2.1	68.2	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW129	4/27/2020 14:05	56.9	41.4	0.0	1.7	2.0	2.1	2.1	99.0	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss":Well Repairs:""
VRLEW131	4/6/2020 13:25	50.7	36.3	4.1	8.9	0.0	0.0	-0.3	50.9	0.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW131	4/27/2020 14:21	51.5	36.0	0.4	12.1	-2.4	-2.4	-2.0	109.4	8.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW133	4/1/2020 14:34	58.4	41.6	0.0	0.0	2.0	2.1	2.1	123.4	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW133	4/27/2020 14:04	56.8	41.1	0.0	2.1	2.0	2.3	2.1	113.5	0.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW134	4/6/2020 12:33	48.4	35.7	0.0	15.9	-7.0	-7.0	-15.9	60.3	30.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW134	4/27/2020 12:06	43.1	35.7	0.7	20.5	-4.9	-1.9	-14.3	70.3	35.1	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW134	4/27/2020 12:07	43.3	35.5	0.8	20.4	-1.8	-1.8	-15.4	70.5	11.2	Valve Adjustment:"No change ["] ;Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW135	4/1/2020 12:28	24.9	18.4	4.4	52.3	-1.1	-1.1	-8.4	68.5	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW135	4/20/2020 10:29	58.9	32.7	0.0	8.4	-0.6	-2.4	-12.7	74.8	4.2	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW135	4/20/2020 10:31	59.2	32.6	0.0	8.2	-2.4	-2.4	-12.5	84.9	6.3	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW136	4/1/2020 14:25	54.9	38.9	0.3	5.9	-4.4	-4.4	-3.4	73.9	6.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW136	4/20/2020 10:44	52.9	36.2	0.7	10.2	-12.3	-12.3	-8.2	72.9	4.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW139	4/2/2020 12:04	48.4	40.2	0.0	11.4	-4.6	-4.7	-15.7	117.0	47.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW139	4/17/2020 14:31	50.4	41.1	0.0	8.5	-4.8	-4.9	-16.6	116.2	50.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW140	4/2/2020 12:00	47.3	38.7	0.3	13.7	-4.5	-4.5	-14.6	118.9	54.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW140	4/17/2020 14:27	48.2	38.2	0.2	13.4	-4.2	-4.2	-12.8	118.0	50.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW141	4/2/2020 11:55	53.0	38.5	0.0	8.5	-0.7	-0.8	-14.5	106.0		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW141	4/17/2020 14:23	52.3	38.8	0.0	8.9	-0.9	-0.8	-16.2	108.7		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW142	4/2/2020 12:13	52.4	41.4	0.0	6.2	-2.0	-2.1	-15.3	125.6	63.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW142	4/17/2020 14:42	50.8	41.8	0.0	7.4	-2.0	-2.0	-17.4	125.4	66.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW145	4/1/2020 12:15	57.7	40.7	0.2	1.4	-8.9	-8.9	-8.8	95.4	36.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW145	4/20/2020 10:26	57.5	39.6	0.2	2.7	-13.4	-13.4	-13.6	98.4	15.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW146	4/1/2020 15:05	51.7	36.7	0.0	11.6	-4.9	-5.0	-6.1	90.3	62.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW146	4/20/2020 12:21	49.5	37.0	0.0	13.5	-10.6	-10.6	-12.9	94.8	82.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW148	4/1/2020 12:36	46.6	34.5	0.0	18.9	-3.1	-3.1	-10.9	113.2	34.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW148	4/20/2020 11:01	41.5	33.9	0.0	24.6	-3.6	-2.3	-12.9	112.5	43.8	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW148	4/20/2020 11:02	41.0	33.7	0.0	25.3	-2.1	-2.1	-13.0	111.4	23.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW149	4/1/2020 13:10	46.7	34.7	2.9	15.7	-2.1	-2.1	-8.4	129.2	32.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW149	4/20/2020 10:58	47.4	35.1	2.5	15.0	-1.3	-1.3	-11.2	127.8	41.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW150	4/1/2020 12:33	46.2	32.1	3.7	18.0	-0.7	-0.7	-10.1	102.4	10.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW150	4/20/2020 11:05	49.3	33.7	3.2	13.8	-0.6	-0.6	-11.9	101.5	11.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW151	4/1/2020 12:20	44.4	32.1	4.1	19.4	-10.6	-10.0	-10.5	72.0	3.5	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW151	4/1/2020 12:21	44.9	32.3	3.2	19.6	-10.0	-9.9	-10.2	72.9	28.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW151	4/20/2020 10:21	48.8	33.9	2.5	14.8	-12.0	-12.0	-11.9	63.1	22.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW152	4/1/2020 15:13	42.6	33.2	0.0	24.2	-0.8	-0.6	-4.6	73.9	8.1	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW152	4/1/2020 15:14	42.2	33.1	0.0	24.7	-0.6	-0.6	-4.7	75.2	0.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW152	4/20/2020 12:44	52.7	37.8	0.0	9.5	-1.3	-1.3	-12.4	78.3	6.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW153	4/1/2020 15:17	59.9	40.0	0.0	0.1	-4.5	-4.5	-4.4	74.3	24.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW153	4/20/2020 12:46	54.9	40.3	0.0	4.8	-11.0	-11.1	-11.9	82.0	48.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW154	4/1/2020 15:09	58.0	41.1	0.1	0.8	-5.0	-5.0	-5.1	69.8	11.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW154	4/20/2020 12:33	56.3	42.0	0.0	1.7	-12.7	-12.7	-12.8	81.0	24.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW155	4/1/2020 12:24	51.0	40.4	0.2	8.4	-8.5	-8.5	-9.1	62.1	9.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW155	4/20/2020 10:55	55.3	40.1	0.4	4.2	-12.3	-12.3	-12.9	62.2	9.6	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW156	4/1/2020 12:42	44.4	31.4	1.2	23.0	-7.0	-6.5	-9.0	106.3	42.4	Valve Adjustment:"Closed valve 10%-25%";Well Condition:"";Well Repairs:""
VRLEW156	4/1/2020 12:44	43.9	31.8	1.3	23.0	-6.4	-6.5	-8.7	106.2	42.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW156	4/20/2020 11:13	36.4	29.7	1.6	32.3	-7.8	-5.8	-10.8	104.7	48.5	Valve Adjustment:"Closed valve 10%-25%";Well Condition:"";Well Repairs:""
VRLEW156	4/20/2020 11:15	36.1	29.8	1.6	32.5	-5.7	-5.7	-12.0	104.0	28.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW157	4/1/2020 12:39	46.5	31.0	0.8	21.7	-1.3	-1.3	-9.5	105.1	6.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW157	4/20/2020 11:10	48.7	31.2	0.6	19.5	-1.5	-1.5	-11.5	102.9	10.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW158	4/1/2020 12:59	46.2	28.5	4.3	21.0	-4.4	-4.4	-9.1	107.8	21.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW158	4/20/2020 11:36	46.6	28.5	4.2	20.7	-4.9	-4.9	-11.6	106.2	26.8	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLEW159	4/1/2020 13:03	59.9	36.7	0.0	3.4	-8.9	-8.9	-9.1	124.5	0.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW159	4/20/2020 11:40	55.1	36.1	0.0	8.8	-11.3	-11.3	-11.4	124.2	20.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW160	4/1/2020 13:25	46.2	32.7	0.0	21.1	-4.1	-4.1	-7.9	122.0	14.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW160	4/20/2020 11:52	37.2	31.2	0.0	31.6	-5.7	-3.2	-12.2	120.9	29.1	Valve Adjustment:"Closed valve 10%-25%";Well Condition:"";Well Repairs:""
VRLEW160	4/20/2020 11:53	38.8	32.0	0.0	29.2	-2.4	-2.4	-12.2	115.9	5.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW161	4/1/2020 13:22	48.9	32.8	3.0	15.3	-1.8	-1.7	-8.2	113.2	7.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	02	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW161	4/20/2020 11:47	47.3	34.3	2.3	16.1	-1.5	-1.5	-11.7	115.7	7.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW162	4/1/2020 14:14	47.3	34.0	0.0	18.7	-2.4	-2.4	-4.2	124.2	19.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW162	4/20/2020 12:06	48.7	35.0	0.0	16.3	-4.8	-4.8	-12.6	124.3	49.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW163	4/1/2020 14:11	47.2	31.2	0.0	21.6	-0.1	-0.1	-4.3	125.2	9.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW163	4/20/2020 12:10	51.3	33.8	0.0	14.9	-0.4	-0.4	-12.3	126.1	16.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW31A	4/2/2020 15:28	49.3	36.3	0.0	14.4	-3.3	-3.3	-6.5	100.2		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW31A	4/27/2020 10:23	47.6	38.4	0.0	14.0	-4.6	-4.6	-9.6	100.4		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW33A	4/6/2020 11:25	50.7	35.1	0.6	13.6	-13.5	-13.5	-13.3	67.5	18.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW33A	4/27/2020 11:00	43.9	32.6	0.7	22.8	-11.9	-10.6	-11.7	78.1	30.6	Valve Adjustment:"Closed valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VRLEW33A	4/27/2020 11:04	44.0	33.0	0.8	22.2	-10.6	-10.6	-10.8	78.3	23.2	Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""
VRLEW34A	4/2/2020 15:23	57.9	39.6	0.0	2.5	-0.1	-0.3	-7.0	106.9	18.5	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW34A	4/2/2020 15:24	58.0	39.7	0.0	2.3	-0.4	-0.4	-6.8	114.4	33.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW34A	4/27/2020 10:19	50.1	39.2	0.0	10.7	-1.3	-1.2	-10.9	113.2	40.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW38A	4/6/2020 11:12	32.0	33.6	0.0	34.4	-0.3	-0.3	-15.3	80.8	7.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW38A	4/27/2020 11:09	13.8	26.2	0.9	59.1	-0.2	-0.2	-10.4	88.9	5.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW68A	4/6/2020 11:16	51.3	43.5	0.1	5.1	-0.4	-0.3	-12.2	85.8	4.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW68A	4/27/2020 11:12	42.6	41.3	0.4	15.7	-0.2	-0.2	-11.7	96.4	7.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW71B	4/6/2020 12:37	40.6	34.4	0.2	24.8	-1.0	-1.0	-15.0	64.4	5.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW71B	4/27/2020 12:02	27.7	30.7	0.5	41.1	-0.7	-0.7	-16.1	85.8	5.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW72R	4/2/2020 11:38	56.6	40.9	0.0	2.5	-13.3	-13.3	-14.1	114.3	76.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW72R	4/17/2020 14:02	52.6	40.1	0.1	7.2	-13.6	-13.6	-15.1	113.7	84.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	4/2/2020 13:22	61.9	38.0	0.1	0.0	-11.3	-11.3	-11.7	65.8	7.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	4/20/2020 13:32	57.2	37.7	0.2	4.9	-13.0	-13.0	-12.9	67.8	7.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW86A	4/6/2020 11:06	54.0	40.1	0.0	5.9	-0.4	-0.7	-15.9	91.9	27.9	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW86A	4/6/2020 11:07	56.3	40.4	0.0	3.3	-0.8	-0.8	-15.1	104.5	31.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW86A	4/27/2020 11:05	45.1	37.8	0.0	17.1	-0.7	-0.4	-10.8	107.8	30.8	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW86A	4/27/2020 11:07	45.1	38.4	0.0	16.5	-0.3	-0.3	-11.2	105.4	37.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW90A	4/2/2020 12:46	58.3	38.6	0.6	2.5	-11.4	-11.4	-11.5	78.6	48.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW90A	4/20/2020 12:53	56.2	40.5	0.3	3.0	-13.3	-13.3	-13.2	77.2	13.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW93A	4/6/2020 14:01	57.1	42.7	0.2	0.0	-15.6	-15.6	-15.7	57.4	8.4	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""
VRLEW93A	4/27/2020 12:57	56.4	43.6	0.0	0.0	-0.5	-0.5	-15.8	100.9	6.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW09	4/2/2020 10:45	52.1	37.1	0.7	10.1	-18.7	-18.6	-18.3	67.1	30.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW09	4/17/2020 13:05	55.6	39.4	0.4	4.6	-18.2	-18.3	-18.0	72.9	41.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW14	4/2/2020 10:50	59.3	40.7	0.0	0.0	-15.3	-15.3	-15.5	114.1		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW14	4/17/2020 13:09	55.4	41.1	0.0	3.5	-16.0	-16.0	-15.8	113.9		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW19	4/2/2020 10:28	49.4	36.0	3.4	11.2	-13.5	-13.6	-13.7	91.6	43.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW19	4/17/2020 12:45	47.3	35.5	3.5	13.7	-13.6	-13.6	-14.4	92.5	39.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW23	4/6/2020 12:05	48.8	37.2	0.3	13.7	-11.2	-11.1	-11.9	98.1	50.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW23	4/27/2020 11:43	48.2	38.6	0.3	12.9	-10.3	-10.2	-10.9	98.4	49.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW25	4/2/2020 11:01	59.3	40.7	0.0	0.0	-12.6	-12.6	-13.2	113.9		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW25	4/17/2020 13:16	55.3	41.0	0.0	3.7	-13.6	-13.6	-14.3	112.8		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	4/2/2020 15:31	48.6	34.7	3.2	13.5	-0.6	-0.5	-6.1	74.5		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	4/27/2020 10:30	42.3	33.6	0.8	23.3	-1.7	-1.7	-10.0	75.5		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	4/2/2020 11:28	58.0	41.9	0.1	0.0	-15.3	-15.4	-15.9	89.1		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	4/17/2020 13:51	54.2	43.0	0.2	2.6	-14.9	-16.0	-15.7	87.8		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	4/6/2020 11:56	49.9	35.1	0.0	15.0	-9.0	-9.0	-9.6	107.4		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	4/27/2020 11:57	45.0	34.8	0.0	20.2	-8.4	-6.1	-8.4	108.0		Valve Adjustment:"Closed valve 1/2 to 1 turn";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	4/27/2020 11:59	44.2	34.2	0.0	21.6	-6.4	-6.4	-10.4	107.1		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	02	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW42	4/1/2020 15:38	61.8	37.8	0.0	0.4	-5.8	-5.8	-6.1	66.6		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	4/17/2020 15:05	53.9	37.9	0.8	7.4	-15.6	-15.6	-15.4	68.5		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	4/2/2020 11:05	50.9	39.4	0.0	9.7	-4.9	-4.9	-14.6	109.6		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	4/17/2020 13:21	49.2	39.2	0.0	11.6	-4.5	-4.4	-14.3	109.2		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	4/2/2020 15:05	53.7	33.5	0.0	12.8	-0.2	-1.0	-6.8	72.1		Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	4/2/2020 15:07	54.5	32.6	0.0	12.9	-1.1	-1.0	-6.5	68.2		Valve Adjustment:"No change";Well
VRLFEW63	4/17/2020 15:21	40.4	31.7	0.4	27.5	-0.4	-0.4	-14.5	70.5		Valve Adjustment:"No change, Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	4/6/2020 12:00	47.6	36.4	0.2	15.8	-12.6	-12.5	-12.9	55.9		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	4/27/2020 11:27	39.2	36.3	0.0	24.5	-8.4	-8.2	-8.1	76.1		Valve Adjustment:"Closed valve 1/2 to 1 turn";Well Condition:"No flow device";Well Repairs:""
VRLFEW65	4/2/2020 15:35	56.6	39.3	0.3	3.8	-5.9	-5.8	-5.8	76.5	9.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW65	4/27/2020 10:32	55.3	42.9	0.1	1.7	-8.1	-8.1	-8.1	75.7	18.1	Valve Adjustment:"No change,Valve 100%
VRLFEW76	4/2/2020 12:21	50.5	38.3	0.4	10.8	-3.3	-3.2	-27.8	94.8	34.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW76	4/17/2020 14:54	49.7	37.2	0.3	12.8	-3.0	-3.0	-26.0	94.6	33.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW77	4/2/2020 10:11	43.8	35.4	0.0	20.8	-13.1	-11.9	-17.0	91.2	73.3	Valve Adjustment:"Closed valve 1/2 turn or less":Well Condition:"":Well Repairs:""
VRLFEW77	4/2/2020 10:13	44.4	35.8	0.0	19.8	-11.8	-11.7	-18.0	91.0	82.0	Valve Adjustment:"No change";Well Condition:"":Well Repairs:""
VRLFEW77	4/17/2020 12:32	47.1	35.2	0.0	17.7	-11.9	-11.9	-19.0	91.4	86.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW78	4/2/2020 10:17	42.0	36.0	0.0	22.0	-3.1	-2.3	-17.4	91.2	36.1	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW78	4/2/2020 10:18	41.3	36.4	0.0	22.3	-2.2	-2.2	-17.7	90.7	22.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW78	4/17/2020 12:34	47.0	37.0	0.0	16.0	-1.4	-1.4	-17.9	91.0	25.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW79	4/2/2020 10:23	49.7	36.7	0.0	13.6	-8.8	-8.8	-18.0	92.5	40.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW79	4/17/2020 12:40	46.2	35.9	0.0	17.9	-9.0	-7.3	-20.7	92.3	31.8	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW79	4/17/2020 12:41	45.2	36.1	0.0	18.7	-6.5	-6.5	-19.0	90.9	12.0	Valve Adjustment:"No change ["] ;Well Condition:"";Well Repairs:""
VRLFEW80	4/6/2020 12:11	49.7	38.1	0.0	12.2	-3.0	-3.0	-14.3	113.7	23.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW80	4/27/2020 11:16	44.2	39.6	0.0	16.2	-2.2	-1.5	-11.3	115.2	22.7	Valve Adjustment:"Closed valve 1/2 turn or less":Well Condition:"":Well Repairs:""
VRLFEW80	4/27/2020 11:17	44.4	39.2	0.0	16.4	-1.4	-1.4	-11.2	113.9	9.0	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW81	4/6/2020 11:37	42.4	37.4	0.0	20.2	-5.0	-4.2	-11.2	100.2	61.1	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW81	4/6/2020 11:38	40.7	36.9	0.0	22.4	-4.0	-4.0	-11.2	99.5	40.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW81	4/27/2020 10:42	42.1	36.8	0.0	21.1	-2.6	-1.8	-7.7	99.7	29.5	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW81	4/27/2020 10:43	41.4	37.0	0.0	21.6	-1.6	-1.5	-8.3	98.4	10.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW82	4/6/2020 11:33	58.6	41.4	0.0	0.0	-9.4	-9.4	-9.8	114.6	32.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW82	4/27/2020 10:38	56.5	42.0	0.1	1.4	-7.6	-7.6	-7.5	115.0	36.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW83	4/6/2020 11:42	58.1	41.9	0.0	0.0	-5.6	-5.5	-7.1	88.0	84.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW83	4/27/2020 10:46	54.0	41.8	0.0	4.2	-2.3	-2.4	-2.0	87.3	44.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW84	4/2/2020 11:31	58.3	41.7	0.0	0.0	-1.0	-1.0	-0.8	106.0	23.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW84	4/17/2020 13:55	55.4	41.4	0.0	3.2	-0.4	-0.4	-0.6	106.5	21.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW85	4/2/2020 10:30	50.2	37.1	0.0	12.7	-1.0	-1.0	-14.3	90.1	42.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW85	4/17/2020 12:49	50.1	37.3	0.0	12.6	-0.8	-0.7	-14.3	90.3	45.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW87	4/2/2020 11:08	53.2	39.4	0.0	7.4	-1.4	-1.5	-15.3	115.0	45.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW87	4/17/2020 13:26	51.4	39.3	0.0	9.3	-1.2	-1.2	-14.8	115.5	36.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW88	4/2/2020 11:11	52.0	38.1	0.0	9.9	-0.9	-0.9	-13.0	98.4	38.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW88	4/17/2020 13:33	50.7	37.2	0.0	12.1	-0.6	-0.7	-16.9	103.5	43.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW89	4/2/2020 11:15	44.7	34.9	0.0	20.4	-1.3	-1.1	-15.1	81.3	8.9	Valve Adjustment:"Closed valve < 10%";Well Condition:"";Well Repairs:""
VRLFEW89	4/2/2020 11:16	44.1	35.1	0.0	20.8	-1.0	-1.0	-14.7	83.5	8.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW89	4/17/2020 13:39	47.1	34.8	0.0	18.1	-0.5	-0.5	-14.6	90.1	44.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW92	4/6/2020 13:45	60.3	39.7	0.0	0.0	-13.9	-13.9	-14.3	79.7	8.4	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW92	4/20/2020 13:50	58.8	39.4	0.2	1.6	-14.3	-14.3	-14.9	87.8	7.6	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW94	4/6/2020 15:54	62.3	37.7	0.0	0.0	0.2	0.2	0.1	56.7	1.6	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLFEW94	4/27/2020 13:00	56.5	43.5	0.0	0.0	0.2	0.2	1.0	81.3	2.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss":Well Repairs:""
VRLFEW96	4/6/2020 15:44	52.3	36.6	1.4	9.7	-2.9	-2.9	-3.0	58.3	1.5	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW96	4/27/2020 12:39	47.4	38.8	3.1	10.7	-1.9	-1.9	-1.4	78.8	0.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW98	4/6/2020 15:37	51.2	37.7	1.2	9.9	-0.9	-0.9	-0.9	59.0	3.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	02	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW98	4/27/2020 12:33	54.2	43.6	1.3	0.9	-0.8	-0.8	-0.7	79.9	5.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW99	4/2/2020 11:51	52.5	39.5	0.0	8.0	-1.1	-1.1	-19.3	114.6	18.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW99	4/17/2020 14:46	51.6	39.8	0.0	8.6	-1.1	-1.1	-21.9	114.3	14.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLRW001	4/2/2020 12:49	60.0	39.3	0.3	0.4	-10.0	-10.0	-10.1	93.7		Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW001	4/20/2020 12:57	56.5	39.8	0.4	3.3	-11.2	-11.2	-10.9	93.7	10.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW002	4/2/2020 12:56	60.3	39.7	0.0	0.0	-12.0	-12.0	-11.9	68.4		Valve Adjustment:"No change, Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLRW002	4/20/2020 13:04	58.1	40.9	0.0	1.0	-13.4	-13.3	-13.3	71.1	274.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLRW003	4/2/2020 13:29	63.8	35.6	0.2	0.4	-12.7	-12.7	-12.6	67.6	11.2	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLRW003	4/27/2020 13:34	52.1	29.7	0.7	17.5	-14.0	-14.0	-14.1	82.0	25.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLRW004	4/2/2020 13:20	46.6	20.8	4.5	28.1	-12.0	-12.0	-12.2	67.3	10.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLRW004	4/20/2020 13:21	49.4	27.4	0.7	22.5	-13.3	-13.4	-13.2	66.7	7.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Bold Italics = HOV approval from BAAQMD

*Some flow readings not available due to no/low flow conditions recorded by the ENVISION

¹Blower Inlet Reading

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH4 = Methane CO2 = Carbon Dioxide O2 = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute % = percent

140°F Temperature HOV	Oxygen HO	V - No Limit**	Oxygen I	HOV - 15%
(Condition #818 Part 3(b)(i))	(Condition #8	18 Part 3 (b)(ii))	(Condition #8	18 Part 3 (c)(ii))
EW-9***	EW-9***	EW-33A***	VRLRW001	VRLRW003
EW-33A***	EW-27		VRLRW002	VRLRW004
EW-44			VR12GT4R	VR12GT05

Oxygen concentration shall not apply to these wells as long as the landfill gas (LFG) in the main header has less than 5% O₂ AND greater than 35% CH₄ *Approved for both Oxygen and Temperature Higher Operating Value (HOV)

VASCO ROAD LANDFILL Wellfield Monitoring Report - May 4, 8, 14, 18, 27, 28, and 29, 2020

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VR12GT03	5/14/2020 11:05	18.2	16.3	12.6	52.9	-0.2	-0.2	-18.6	79.0	13.5	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VR12GT03	5/14/2020 11:06	14.6	12.5	15.7	57.2	-0.2	-0.2	-19.0	80.1	6.8	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VR12GT03	5/18/2020 13:37	14.9	13.7	12.9	58.5	-0.2	-0.2	-18.5	78.1	4.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT05	5/14/2020 11:55	4.5	6.9	16.9	71.7	-0.1	-0.1	-19.5	76.8	8.3	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VR12GT05	5/14/2020 11:58	4.1	6.5	16.8	72.6	-0.1	-0.1	-18.9	77.0	11.4	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT05	5/27/2020 16:49	10.6	18.3	7.7	63.4	-0.1	-0.1	-17.6	102.4	9.7	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT05	5/28/2020 15:54	49.1	36.1	1.2	13.6	-0.1	-0.1	-16.1	98.8	12.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12LR01	5/14/2020 11:51	26.6	20.2	10.3	42.9	-0.5	-0.1	-19.1	85.1	34.9	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VR12LR01	5/14/2020 11:53	25.4	18.7	10.1	45.8	-0.1	-0.1	-19.1	85.3	11.3	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VR12LR01	5/28/2020 15:58	51.2	35.8	0.1	12.9	-0.1	-0.1	-17.4	104.0	14.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VR12LR02	5/14/2020 11:59	50.9	35.9	1.0	12.2	-14.1	-10.9	-14.8	91.0	68.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR02	5/18/2020 12:19	52.4	38.1	0.7	8.8	-11.2	-11.1	-13.0	91.6	82.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	5/14/2020 11:09	54.2	37.6	0.3	7.9	-5.8	-6.1	-11.6	96.6	105.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	5/18/2020 13:42	51.7	38.7	0.4	9.2	-18.1	-18.1	-13.5	97.2	260.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"Flow surging in well";Well Repairs:""
VREW0901	5/8/2020 14:14	1.1	0.3	20.0	78.6	-17.8	-17.8	-19.0	102.7	7.1	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0901	5/27/2020 16:34	50.5	36.0	3.3	10.2	-19.1	-19.1	-20.2	102.6	11.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0906	5/8/2020 13:11	50.0	33.5	0.0	16.5	-0.6	-0.7	-16.0	99.7	61.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW0906	5/28/2020 18:04	49.7	33.3	0.0	17.0	-0.7	-0.7	-14.7	99.9	55.4	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0907	5/4/2020 14:42	58.3	40.3	0.0	1.4	-0.2	-0.3	-7.3	91.0	33.7	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0907	5/4/2020 14:43	58.4	41.1	0.0	0.5	-0.5	-0.4	-7.2	100.4	36.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW0907	5/27/2020 16:14	43.2	30.1	4.7	22.0	-7.9	-5.5	-21.0	103.3	43.9	Valve Adjustment:"Closed valve 10%- 25%";Well Condition:"";Well Repairs:""
VREW0907	5/27/2020 16:17	44.9	31.6	4.1	19.4	-6.1	-6.1	-21.1	103.5	23.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0908	5/4/2020 14:27	57.1	38.3	0.1	4.5	-8.2	-8.2	-7.5	84.6	1.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0908	5/27/2020 15:49	57.3	38.0	0.4	4.3	-20.9	-20.9	-20.7	101.1	1.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0909	5/4/2020 14:12	57.1	41.5	0.1	1.3	-1.4	-2.1	-7.4	91.8	0.3	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0909	5/4/2020 14:13	57.1	41.2	0.1	1.6	-2.1	-2.1	-7.8	96.1	3.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0909	5/27/2020 15:37	54.0	41.1	0.7	4.2	-9.2	-14.0	-22.0	118.8	2.6	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0909	5/27/2020 15:39	54.7	41.2	0.5	3.6	-13.7	-13.6	-21.7	122.9	2.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW0910	5/4/2020 13:10	45.0	38.1	0.0	16.9	-3.3	-2.0	-5.9	107.6	93.6	Valve Adjustment: "Closed valve 1/2 turn or less": Well Condition: "": Well Repairs: ""
VREW0910	5/4/2020 13:14	44.7	38.4	0.0	16.9	-2.1	-2.2	-10.0	107.6	74.0	Valve Adjustment:"No change";Well Condition:"":Well Repairs:""
VREW0910	5/27/2020 13:37	47.0	36.2	0.0	16.8	-3.3	-2.5	-16.2	108.0	90.1	Valve Adjustment: "Closed valve 1/2 turn or less": Well Condition: ""'Well Repairs: ""
VREW0910	5/27/2020 13:39	46.9	36.8	0.0	16.3	-2.8	-2.7	-18.3	108.0	78.8	Valve Adjustment:"No change";Well Condition:"":Well Repairs:""
VREW0911	5/4/2020 12:58	48.3	32.1	1.1	18.5	-0.1	-0.1	-8.9	81.7	5.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0911	5/27/2020 13:13	44.7	29.3	1.3	24.7	-0.2	-0.2	-16.6	86.2	4.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0912	5/4/2020 12:31	44.7	36.2	0.0	19.1	-1.0	-1.0	-9.0	106.7	4.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0912	5/27/2020 12:53	51.3	37.0	0.0	11.7	-0.6	-0.5	-15.1	106.5	7.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1001	5/14/2020 10:07	60.4	35.6	0.2	3.8	-0.5	-17.8	-21.0	68.5	6.8	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1001	5/14/2020 10:08	55.3	32.2	2.8	9.7	-15.7	-15.7	-20.7	68.7	8.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1001	5/27/2020 16:23	60.6	36.5	0.0	2.9	-0.2	-19.9	-21.0	104.0	7.7	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1001	5/27/2020 16:26	45.0	26.9	4.6	23.5	-20.5	-18.8	-20.4	99.5	13.7	Valve Adjustment:"Closed valve 1/2 turn or less":Well Condition:"":Well Repairs:""
VREW1003	5/4/2020 14:20	58.2	39.3	0.2	2.3	-7.9	-7.9	-7.5	99.5	17.1	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1003	5/27/2020 15:44	56.3	38.2	0.7	4.8	-21.5	-21.5	-21.3	104.4	18.4	Valve Adjustment:"Opened valve 1/2 turn or less":Well Condition:"":Well Repairs:""
VREW1004	5/4/2020 13:18	56.1	42.6	0.2	1.1	-4.8	-5.5	-7.6	90.1	21.7	Valve Adjustment:"Opened valve 1/2 turn or less":Well Condition:"":Well Repairs:""
VREW1004	5/27/2020 13:56	56.4	40.6	0.1	2.9	-2.4	-3.8	-21.3	96.4	14.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"":Well Repairs:""
VREW1004	5/27/2020 13:58	56.8	41.2	0.1	1.9	-4.3	-4.3	-22.1	97.3	27.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1005	5/4/2020 13:24	55.4	44.6	0.0	0.0	-0.1	-0.5	-7.6	109.0	12.7	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW1005	5/4/2020 13:25	55.5	44.5	0.0	0.0	-0.6	-0.6	-7.3	110.5	21.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1005	5/27/2020 13:52	54.5	42.8	0.1	2.6	-13.3	-17.4	-22.1	111.0	39.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1005	5/27/2020 13:54	54.6	43.0	0.2	2.2	-18.1	-18.1	-22.1	112.1	39.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW1009	5/4/2020 11:22	44.3	38.0	0.0	17.7	-0.8	-0.5	-7.2	79.9	8.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1009	5/4/2020 11:23	44.1	37.4	0.0	18.5	-0.4	-0.4	-7.0	82.4	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1009	5/27/2020 11:37	52.3	37.5	0.1	10.1	-0.5	-0.5	-14.6	107.8	5.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1010	5/4/2020 10:34	48.4	38.1	0.0	13.5	-0.7	-0.7	-9.1	116.2	26.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1010	5/27/2020 10:33	49.7	36.9	0.0	13.4	-0.9	-0.9	-15.7	118.2	28.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1011	5/4/2020 10:29	45.5	36.6	0.0	17.9	-0.2	-0.3	-10.3	112.3	12.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1011	5/27/2020 10:26	46.4	35.6	0.0	18.0	-0.2	-0.2	-14.3	114.3	11.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1012	5/4/2020 10:26	49.2	37.7	0.0	13.1	-0.7	-0.6	-9.9	112.8	36.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW1012	5/27/2020 10:22	49.9	35.9	0.0	14.2	-0.7	-0.7	-14.9	114.1	41.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW120A	5/14/2020 12:32	47.1	30.8	0.2	21.9	-19.5	-19.4	-19.1	117.0	16.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW120A	5/18/2020 13:15	46.3	31.8	0.3	21.6	-18.8	-17.8	-19.4	116.6	20.3	Valve Adjustment:"Closed valve 10%- 25%";Well Condition:"";Well Repairs:""
VREW120A	5/18/2020 13:17	45.9	31.6	0.3	22.2	-17.8	-17.8	-20.2	116.2	21.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VREW122A	5/4/2020 15:07	52.1	35.8	0.0	12.1	-6.5	-6.5	-7.3	126.7	41.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW122A	5/14/2020 12:39	46.2	33.5	0.0	20.3	-15.3	-12.6	-18.7	127.0	72.6	Valve Adjustment:"Closed valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VREW122A	5/18/2020 13:03	48.4	35.7	0.0	15.9	-11.5	-11.5	-22.5	127.2	63.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW126A	5/14/2020 11:31	54.4	40.1	0.1	5.4	-1.1	-1.3	-19.8	135.0	19.1	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW126A	5/14/2020 11:32	54.4	41.0	0.1	4.5	-1.5	-1.5	-19.9	135.3	27.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW126A	5/18/2020 12:05	51.7	38.2	0.3	9.8	-2.1	-2.1	-19.3	130.2	23.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VREW2001	5/28/2020 15:37	53.2	45.4	0.0	1.4	0.1	0.1	-18.0	102.9	10.0	Valve Adjustment:"No change,Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW2001	5/28/2020 15:40	53.3	45.1	0.0	1.6	0.0	-0.1	-19.0	103.1	9.6	Valve Adjustment:"Valve at minimum position,Opened valve 10% or less";Well Condition:"";Well Repairs:""
VREW2001	5/28/2020 16:49	52.9	44.8	0.0	2.3	-0.1	-0.3	-18.3	112.3	11.5	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2001	5/28/2020 16:50	52.5	45.6	0.0	1.9	-0.2	-0.3	-18.6	119.7	12.3	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2002	5/28/2020 15:27	55.3	42.3	0.0	2.4	2.4	2.4	-19.0	102.9	9.3	Valve Adjustment:"No change,Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""
VREW2002	5/28/2020 15:32	55.5	42.0	0.0	2.5	2.4	-0.1	-19.0	103.6	12.9	Valve Adjustment:"Opened valve >10%,Valve 30% open";Well Condition:"";Well Repairs:""
VREW2002	5/28/2020 16:43	54.9	41.9	0.0	3.2	-1.7	-0.3	-19.9	124.5	63.6	Valve Adjustment:"Closed valve >10%,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2002	5/28/2020 16:45	55.1	42.3	0.0	2.6	-0.3	-0.2	-20.6	120.6	29.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2003	5/28/2020 15:17	55.5	42.6	0.0	1.9	1.8	1.8	-19.9	102.7	9.3	Valve Adjustment:"No change,Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""
VREW2003	5/28/2020 15:21	55.1	43.7	0.0	1.2	1.8	-0.1	-19.3	103.6	10.7	Valve Adjustment:"Opened valve >10%,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2003	5/28/2020 16:37	55.4	41.6	0.0	3.0	-1.2	-0.3	-19.1	130.1	29.6	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2003	5/28/2020 16:39	55.1	41.9	0.0	3.0	-0.3	-0.3	-18.5	130.0	19.1	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2004	5/28/2020 15:10	58.0	37.9	0.1	4.0	-0.2	-0.2	-19.0	100.4	9.4	Valve Adjustment:"No change,Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""
VREW2004	5/28/2020 15:13	55.7	36.9	0.0	7.4	-0.1	-0.2	-19.3	101.5	11.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW2004	5/28/2020 16:31	57.5	37.9	0.0	4.6	-0.4	-0.4	-18.7	102.2	10.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW2004	5/28/2020 16:32	57.1	38.7	0.4	3.8	-0.3	-0.3	-18.5	100.0	12.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW2005	5/28/2020 14:59	59.0	38.3	0.0	2.7	0.2	0.2	-21.3	101.1	10.4	Valve Adjustment:"No change,Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""
VREW2005	5/28/2020 15:02	59.1	37.8	0.0	3.1	0.2	0.0	-20.0	100.9	11.6	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2005	5/28/2020 16:24	57.8	38.8	0.0	3.4	-0.1	-0.2	-20.1	98.6	21.4	Valve Adjustment:"Opened valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""
VREW2005	5/28/2020 16:25	58.3	38.1	0.0	3.6	-0.3	-0.3	-20.9	99.9	25.1	Valve Adjustment:"No change, Valve 15% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW2006	5/28/2020 14:52	56.4	40.5	0.0	3.1	1.0	1.0	-21.0	102.0	11.7	Valve Adjustment:"No change,Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""
VREW2006	5/28/2020 14:55	56.0	41.0	0.0	3.0	1.1	0.0	-21.1	104.4	10.7	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2006	5/28/2020 16:18	54.7	41.9	0.0	3.4	-0.1	-0.3	-20.9	91.4	17.5	Valve Adjustment:"Opened valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""
VREW2006	5/28/2020 16:20	54.3	42.4	0.0	3.3	-0.3	-0.3	-20.0	92.1	18.3	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""
VREW2007	5/28/2020 14:43	57.4	39.8	0.0	2.8	0.3	0.3	-21.1	100.8	11.3	Valve Adjustment:"No change";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""
VREW2007	5/28/2020 14:48	57.3	39.3	0.0	3.4	0.0	-0.1	-21.4	100.4	26.4	Valve Adjustment:"Opened valve >10%,Valve 15% open";Well Condition:"";Well Repairs:""
VREW2007	5/28/2020 16:13	55.6	41.1	0.0	3.3	-0.3	-0.2	-20.3	109.8	27.5	Valve Adjustment:"Closed valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""
VREW2007	5/28/2020 16:15	55.2	41.4	0.0	3.4	-0.3	-0.3	-21.0	109.9	30.4	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""
VRL0601R	5/8/2020 13:40	52.2	39.0	0.6	8.2	-21.7	-21.7	-21.8	96.6	5.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0601R	5/27/2020 15:09	54.2	40.3	0.7	4.8	-21.6	-21.5	-22.4	106.2	11.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRL0603R	5/8/2020 13:18	52.8	39.0	0.0	8.2	-0.6	-0.6	-23.3	113.2	17.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRL0603R	5/28/2020 18:10	51.0	38.6	0.0	10.4	-0.7	-0.7	-22.6	112.6	15.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRL0604R	5/8/2020 13:15	41.0	32.9	0.0	26.1	-0.2	-0.2	-19.6	101.8	11.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRL0604R	5/28/2020 18:07	41.0	32.9	0.0	26.1	-0.2	-0.2	-17.4	101.1	10.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW100	5/8/2020 13:55	49.6	35.7	0.0	14.7	-3.0	-3.0	-18.3	101.1	47.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW100	5/27/2020 17:24	49.7	35.7	0.0	14.6	-2.8	-2.9	-17.1	101.5	48.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW101	5/4/2020 13:02	50.4	30.6	0.1	18.9	-0.2	-0.2	-9.8	82.8	0.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW101	5/27/2020 13:22	57.8	30.2	0.0	12.0	-0.4	-3.3	-18.9	93.6	5.1	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW101	5/27/2020 13:24	56.9	29.3	0.0	13.8	-3.8	-3.7	-18.1	93.9	20.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW102	5/4/2020 12:43	46.8	36.9	0.0	16.3	-5.5	-5.5	-5.8	112.5	48.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW102	5/27/2020 12:38	49.0	35.1	0.0	15.9	-8.7	-8.7	-10.3	113.2	74.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW103	5/4/2020 12:03	33.8	33.8	0.1	32.3	-0.6	-0.5	-7.5	86.7	5.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW103	5/27/2020 12:21	48.3	37.1	0.0	14.6	-0.2	-0.2	-12.2	98.6	5.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW104	5/8/2020 13:04	57.6	41.3	0.0	1.1	-0.1	-0.1	-0.8	103.3	32.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW104	5/28/2020 17:59	57.5	40.2	0.0	2.3	-0.3	-0.3	-0.2	102.7	30.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	5/4/2020 11:35	50.9	38.7	0.1	10.3	-6.1	-6.1	-6.5	105.4	21.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW105	5/27/2020 11:48	50.6	37.0	0.0	12.4	-12.0	-12.0	-13.2	106.7	55.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW106	5/4/2020 10:11	45.5	36.5	0.1	17.9	-1.9	-1.0	-9.8	108.9	26.4	Valve Adjustment:"Closed valve 1/2 turn or less":Well Condition:"":Well Repairs:""
VRLEW106	5/4/2020 10:13	45.3	36.5	0.0	18.2	-0.9	-0.9	-9.8	107.2	15.9	Valve Adjustment:"No change";Well Condition:"":Well Repairs:""
VRLEW106	5/27/2020 10:08	51.5	36.1	0.0	12.4	-0.5	-0.5	-15.3	106.0	9.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW107	5/4/2020 10:16	44.1	35.8	0.0	20.1	-0.5	-0.2	-8.4	108.5	29.5	Valve Adjustment: "Closed valve 1/2 turn or less": Well Condition: ""'Well Repairs: ""
VRLEW107	5/4/2020 10:18	44.6	36.0	0.0	19.4	-0.2	-0.2	-10.1	107.2	34.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW107	5/27/2020 10:12	51.1	36.3	0.0	12.6	-0.1	-0.1	-14.9	107.1	10.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW108	5/8/2020 12:53	48.1	35.8	0.0	16.1	-1.7	-1.7	-15.8	114.1	43.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW108	5/28/2020 17:46	47.7	36.2	0.0	16.1	-1.5	-1.5	-14.8	114.3	42.6	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""
VRLEW109	5/4/2020 11:00	47.5	38.0	0.7	13.8	-6.4	-6.4	-6.9	111.4	48.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW109	5/27/2020 11:05	49.9	37.5	0.1	12.5	-11.3	-11.3	-13.5	114.3	92.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW110	5/4/2020 15:12	57.7	38.6	0.5	3.2	-7.5	-7.5	-7.0	98.4	4.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW110	5/18/2020 15:15	57.4	38.5	0.8	3.3	-18.8	-18.8	-19.0	88.9	16.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW111	5/14/2020 10:15	32.0	21.8	11.0	35.2	5.7	6.0	5.7	68.7	13.2	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW111	5/14/2020 10:15	31.7	21.7	10.6	36.0	7.7	7.7	7.5	68.7	13.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW111	5/18/2020 14:08	58.5	40.0	0.0	1.5	7.4	7.9	7.5	73.4	11.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW111	5/29/2020 15:32	55.3	38.8	0.8	5.1	-15.4	-15.7	-15.3	86.9	13.3	Valve Adjustment:"Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW111	5/29/2020 15:33	56.1	39.5	0.5	3.9	-15.7	-15.7	-15.6	87.4	8.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW112	5/14/2020 10:31	59.0	40.0	0.0	1.0	-19.2	-18.8	-19.3	106.0	39.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW112	5/18/2020 14:15	57.9	40.5	0.0	1.6	-18.2	-18.1	-18.8	106.3	41.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	5/14/2020 10:54	59.0	41.0	0.0	0.0	-19.8	-19.5	-19.4	96.6	12.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	5/18/2020 14:29	56.6	40.8	0.4	2.2	-18.8	-18.8	-18.7	93.9	9.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW114	5/14/2020 10:22	60.2	38.0	0.0	1.8	-18.8	-18.7	-18.0	69.4	15.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW114	5/18/2020 14:56	55.1	36.5	1.4	7.0	-19.1	-19.1	-19.0	71.8	13.5	Valve Adjustment:"Opened valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VRLEW116	5/14/2020 10:47	58.4	41.6	0.0	0.0	-19.1	-19.1	-18.8	68.2	24.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW116	5/18/2020 14:35	56.6	41.2	0.1	2.1	-20.1	-20.2	-20.3	70.2	5.5	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW117	5/14/2020 10:51	44.8	34.0	0.0	21.2	-11.6	-9.9	-19.5	92.1	0.5	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW117	5/18/2020 14:39	44.3	35.5	0.0	20.2	-8.2	-5.1	-20.7	92.1		Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLEW117	5/18/2020 14:40	44.4	34.9	0.0	20.7	-4.7	-4.7	-18.9	91.0		Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW128	5/14/2020 12:18	56.4	42.3	0.0	1.3	-19.5	-19.5	-19.9	78.8	5.8	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW128	5/18/2020 12:35	51.8	41.7	0.7	5.8	-19.5	-19.5	-21.1	75.7	11.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW129	5/14/2020 12:26	56.5	40.5	0.3	2.7	-19.5	-19.5	-20.0	75.9	10.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW129	5/18/2020 12:46	56.4	41.3	0.1	2.2	-20.2	-20.2	-20.4	76.6	0.0	Valve Adjustment:"Opened valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW130	5/14/2020 12:24	51.7	33.4	1.7	13.2	-20.9	-20.9	-20.0	76.6	27.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW130	5/18/2020 12:51	57.3	37.8	0.5	4.4	-20.8	-20.8	-20.5	75.2	9.0	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW131	5/4/2020 15:04	54.8	40.2	0.6	4.4	-7.2	-7.2	-7.4	89.6	5.3	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW131	5/18/2020 13:08	54.6	36.7	1.0	7.7	-20.1	-20.8	-20.1	70.3	8.1	Valve Adjustment:"Opened valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW131	5/18/2020 13:10	49.4	33.6	1.9	15.1	-20.1	-20.1	-20.2	68.9	5.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW133	5/14/2020 12:21	55.6	43.5	0.0	0.9	-3.1	-3.1	-20.6	132.6	23.4	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW133	5/14/2020 12:23	55.9	43.9	0.0	0.2	-3.0	-3.1	-19.6	133.0	24.0	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW133	5/18/2020 12:41	51.3	42.6	0.1	6.0	-3.5	-3.5	-19.6	130.3	24.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW134	5/4/2020 12:51	40.2	34.4	0.7	24.7	-0.9	-0.4	-9.2	74.7	12.0	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW134	5/4/2020 12:53	40.6	34.2	0.9	24.3	-0.4	-0.4	-9.0	77.7	3.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW134	5/27/2020 13:17	54.1	36.4	0.0	9.5	-0.2	-0.8	-15.4	94.5	5.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW134	5/27/2020 13:19	54.1	36.8	0.0	9.1	-0.8	-0.8	-15.0	83.7	11.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW135	5/14/2020 11:18	58.3	37.1	0.3	4.3	-2.7	-7.8	-16.3	106.5	35.5	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW135	5/18/2020 12:01	51.0	33.7	2.3	13.0	-7.2	-7.2	-12.8	109.9	17.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW136	5/14/2020 12:29	57.4	38.8	0.4	3.4	-13.6	-13.6	-13.1	88.0	3.8	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW136	5/18/2020 12:59	55.4	38.6	0.8	5.2	-13.3	-13.3	-11.2	81.1	9.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW138	5/27/2020 16:37	56.0	40.7	0.0	3.3	-19.5	-20.1	-20.0	102.0	6.2	Valve Adjustment:"Opened valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW138	5/27/2020 16:40	56.3	41.2	0.0	2.5	-20.2	-20.3	-20.1	102.4	11.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW139	5/14/2020 9:57	58.5	39.6	0.0	1.9	-0.1	-2.9	-21.7	74.8	35.9	Valve Adjustment:"Opened valve > 1 turn";Well Condition:"";Well Repairs:""
VRLEW139	5/14/2020 9:58	58.4	41.2	0.0	0.4	-3.2	-3.1	-21.4	76.6	45.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW139	5/27/2020 15:55	51.4	39.0	0.1	9.5	-3.9	-3.9	-21.9	98.8	38.8	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW140	5/8/2020 13:32	49.6	37.0	0.3	13.1	-5.5	-5.5	-18.7	118.8	65.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW140	5/27/2020 15:19	43.4	33.9	0.5	22.2	-5.8	-4.4	-20.1	120.0	66.9	Valve Adjustment:"Closed valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW140	5/27/2020 15:20	41.2	34.0	0.6	24.2	-3.8	-3.8	-20.1	122.7	38.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW141	5/8/2020 13:28	53.4	37.8	0.0	8.8	-1.0	-0.9	-19.7	114.8		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW141	5/27/2020 15:13	51.5	37.1	0.0	11.4	-1.0	-1.0	-20.7	116.2		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW142	5/8/2020 13:44	51.0	40.1	0.0	8.9	-2.3	-2.2	-20.4	126.1	76.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW142	5/14/2020 9:48	48.9	37.6	0.0	13.5	-2.6	-2.4	-21.9	125.4	71.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW142	5/27/2020 13:43	46.7	39.5	0.0	13.8	-2.3	-1.4	-20.3	126.1	74.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW142	5/27/2020 13:46	46.5	40.0	0.0	13.5	-1.3	-1.2	-20.9	125.8	38.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW145	5/14/2020 11:15	57.1	39.0	0.0	3.9	-16.8	-16.9	-16.3	106.5	17.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW145	5/18/2020 11:14	57.5	39.6	0.1	2.8	-13.3	-13.3	-12.6	99.5	22.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW146	5/14/2020 12:34	48.2	36.8	0.0	15.0	-13.7	-14.0	-17.8	98.6	93.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW146	5/18/2020 13:20	47.2	37.0	0.0	15.8	-13.4	-13.5	-18.1	98.8	99.1	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW147	5/14/2020 10:01	59.4	39.5	0.0	1.1	-0.8	-5.7	-21.4	75.0	49.2	Valve Adjustment:"Opened valve > 1 turn";Well Condition:"";Well Repairs:""
VRLEW147	5/14/2020 10:03	54.3	34.5	2.4	8.8	-2.5	-2.6	-21.9	75.6	20.7	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW147	5/27/2020 16:03	57.8	39.9	0.0	2.3	-0.8	-3.5	-20.4	93.6	17.9	Valve Adjustment:"Opened valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW147	5/27/2020 16:05	54.8	37.4	1.3	6.5	-3.7	-3.8	-21.6	92.7	47.7	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW148	5/14/2020 11:35	53.3	36.7	0.0	10.0	-2.3	-3.4	-18.9	112.5	27.2	Valve Adjustment:"Opened valve 1/2 turn or less":Well Condition:"":Well Repairs:""
VRLEW148	5/18/2020 11:25	48.4	34.6	0.0	17.0	-4.4	-4.4	-18.6	113.2	51.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW149	5/14/2020 11:26	51.4	35.3	2.1	11.2	-1.4	-1.4	-18.6	128.5	36.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW149	5/18/2020 11:55	48.5	34.8	2.9	13.8	-1.9	-1.9	-18.3	128.7	18.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW150	5/14/2020 11:24	52.7	34.2	2.7	10.4	-0.7	-1.0	-18.6	103.6	31.6	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW150	5/18/2020 11:22	48.5	32.8	3.6	15.1	-1.5	-1.5	-18.2	103.8	18.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW151	5/14/2020 11:13	54.2	36.3	1.6	7.9	-19.2	-19.5	-18.6	80.4	12.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW151	5/18/2020 11:18	53.2	36.6	1.9	8.3	-18.3	-18.2	-18.3	73.2	9.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW152	5/14/2020 11:03	53.9	37.9	0.0	8.2	-1.7	-1.8	-18.3	80.6	4.8	Valve Adjustment:"Opened valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VRLEW152	5/18/2020 13:32	45.2	35.0	0.1	19.7	-2.3	-2.0	-18.6	78.3	16.0	Valve Adjustment:"Closed valve 10%- 25%,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW152	5/18/2020 13:34	44.9	35.5	0.2	19.4	-2.0	-2.0	-18.5	78.3	6.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW153	5/14/2020 11:01	56.1	39.3	0.0	4.6	-16.7	-16.4	-17.3	93.0	69.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW153	5/18/2020 13:28	55.1	40.7	0.0	4.2	-15.8	-15.8	-17.6	93.7	53.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW154	5/14/2020 10:59	58.0	41.1	0.0	0.9	-19.1	-19.7	-18.4	80.2	20.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW154	5/18/2020 13:25	56.4	42.7	0.0	0.9	-18.3	-18.3	-18.8	80.8	22.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW155	5/14/2020 11:22	57.8	39.9	0.0	2.3	-13.7	-13.9	-13.4	76.3	12.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW155	5/18/2020 11:58	55.3	40.8	0.5	3.4	-13.3	-13.3	-13.1	71.6	8.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW156	5/14/2020 11:41	37.1	27.4	3.6	31.9	-6.5	-4.0	-20.6	105.3	39.1	Valve Adjustment:"Closed valve > 1 turn";Well Condition:"";Well Repairs:""
VRLEW156	5/18/2020 11:35	31.8	25.8	4.5	37.9	-1.6	-1.2	-18.2	101.3	36.1	Valve Adjustment:"Closed valve 10%- 25%,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW156	5/18/2020 11:36	32.9	26.8	3.3	37.0	-0.9	-0.9	-18.3	95.2	6.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW157	5/14/2020 11:38	47.8	30.2	1.7	20.3	-1.7	-1.7	-19.4	107.4	7.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW157	5/18/2020 11:29	46.8	30.7	1.5	21.0	-1.4	-0.9	-18.0	106.3	17.6	Valve Adjustment:"Closed valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW157	5/18/2020 11:32	46.2	29.8	1.7	22.3	-0.8	-0.8	-19.0	99.0	5.4	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW158	5/14/2020 11:46	45.4	26.9	5.3	22.4	-2.0	-2.0	-19.2	107.4	9.7	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW158	5/14/2020 11:49	45.4	26.7	5.2	22.7	-2.0	-1.9	-19.2	107.1	13.7	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW158	5/18/2020 11:47	45.2	27.8	4.9	22.1	-1.7	-1.7	-19.0	106.2	12.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW159	5/14/2020 11:43	55.4	36.8	0.0	7.8	-18.8	-18.8	-19.3	125.4	33.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW159	5/18/2020 11:50	54.2	35.9	0.0	9.9	-17.8	-17.8	-18.3	124.7	26.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW160	5/14/2020 12:06	61.4	34.9	0.0	3.7	-0.8	-3.1	-19.1	115.7	8.0	Valve Adjustment:"Opened valve > 1 turn";Well Condition:"";Well Repairs:""
VRLEW160	5/18/2020 12:13	45.1	33.2	0.0	21.7	-6.5	-4.1	-19.1	120.6	35.6	Valve Adjustment:"Closed valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW160	5/18/2020 12:16	44.7	33.5	0.0	21.8	-3.4	-3.4	-19.0	118.6	10.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW161	5/14/2020 12:09	52.3	32.8	2.9	12.0	-1.4	-1.4	-19.2	115.0	28.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW161	5/18/2020 12:09	49.4	34.2	2.4	14.0	-4.0	-4.0	-18.9	119.5	14.3	valve Adjustment:"No change, valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW162	5/14/2020 12:12	55.4	38.1	0.0	6.5	-6.9	-9.6	-21.8	124.5	59.6	Valve Adjustment:"Opened valve > 1 turn";Well Condition:"";Well Repairs:""
VRLEW162	5/18/2020 12:24	53.6	38.7	0.0	7.7	-10.5	-10.9	-16.8	125.1	69.0	Valve Adjustment:"Opened valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW162	5/18/2020 12:25	53.6	39.4	0.0	7.0	-11.0	-10.9	-16.6	125.1	82.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW163	5/14/2020 12:15	54.4	35.1	0.0	10.5	-0.5	-2.1	-20.4	126.3	28.6	Valve Adjustment:"Opened valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VRLEW163	5/18/2020 12:29	36.2	31.6	0.1	32.1	-3.0	-2.2	-22.3	128.3	53.6	Valve Adjustment:"Closed valve 10%- 25%";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW163	5/18/2020 12:31	35.5	31.6	0.1	32.8	-2.0	-1.9	-23.0	128.1	44.3	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW31A	5/4/2020 10:47	45.6	37.0	0.0	17.4	-3.7	-3.4	-7.2	101.1		Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLEW31A	5/4/2020 10:49	45.0	36.6	0.0	18.4	-3.3	-3.4	-7.0	101.0		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW31A	5/27/2020 10:46	47.0	35.7	0.0	17.3	-4.9	-4.8	-12.5	102.4		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW33A	5/4/2020 11:30	40.7	32.0	0.4	26.9	-5.6	-4.4	-5.4	83.7	19.0	Valve Adjustment:"Closed valve > 1 turn";Well Condition:"";Well Repairs:""
VRLEW33A	5/4/2020 11:32	41.1	32.0	0.4	26.5	-4.7	-4.7	-5.1	84.0	9.3	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW33A	5/27/2020 11:43	41.1	29.5	1.1	28.3	-9.2	-3.4	-13.8	104.4	8.6	Valve Adjustment:"Closed valve 1/2 turn or less,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW33A	5/27/2020 11:45	41.9	29.8	0.2	28.1	-3.4	-3.3	-14.1	106.5	2.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW34A	5/4/2020 10:37	50.1	38.9	0.0	11.0	-0.9	-1.0	-9.1	113.9	34.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW34A	5/27/2020 10:38	50.4	37.3	0.0	12.3	-1.2	-1.2	-14.7	114.3	43.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW38A	5/4/2020 11:47	26.1	30.2	2.0	41.7	-0.1	-0.1	-7.2	92.1	4.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW38A	5/27/2020 11:59	53.6	39.9	0.0	6.5	-0.1	-0.4	-14.3	101.5	20.5	Valve Adjustment:"Opened valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW38A	5/27/2020 12:00	53.0	40.1	0.0	6.9	-0.4	-0.4	-14.9	108.7	23.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW68A	5/4/2020 11:50	47.9	40.5	1.1	10.5	-0.1	-0.1	-7.1	96.8	4.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW68A	5/27/2020 12:03	53.8	41.7	0.0	4.5	-0.1	-0.5	-13.8	107.8	2.9	Valve Adjustment:"Opened valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW68A	5/27/2020 12:05	54.3	42.8	0.0	2.9	-0.7	-0.7	-14.1	117.5	26.9	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW71B	5/4/2020 12:47	16.6	24.0	0.8	58.6	-0.2	-0.2	-10.2	88.5	3.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW71B	5/27/2020 12:49	58.0	39.9	0.0	2.1	-0.1	-0.6	-15.7	102.7	7.2	Valve Adjustment:"Opened valve 10%- 25%";Well Condition:"";Well Repairs:""
VRLEW71B	5/27/2020 12:51	57.5	40.0	0.0	2.5	-0.7	-0.7	-15.0	111.4	33.2	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLEW72R	5/8/2020 13:08	52.6	39.0	0.1	8.3	-13.3	-13.4	-14.8	114.8	79.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW72R	5/28/2020 18:02	53.5	38.9	0.1	7.5	-13.0	-12.9	-14.6	114.4	79.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	5/14/2020 10:20	59.3	36.9	0.4	3.4	-18.9	-18.8	-18.3	71.8	7.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	5/18/2020 14:59	56.3	37.1	0.4	6.2	-18.8	-18.8	-18.5	70.0	11.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW86A	5/4/2020 11:43	41.4	36.3	0.0	22.3	-0.1	-0.1	-6.5	98.8	7.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW86A	5/27/2020 11:53	51.5	38.3	0.0	10.2	-0.1	-0.1	-14.5	107.4	24.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLEW90A	5/14/2020 10:28	57.9	39.4	0.0	2.7	-19.8	-20.2	-19.0	89.1	28.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW90A	5/18/2020 14:12	57.1	40.6	0.2	2.1	-19.1	-19.1	-19.0	83.8	8.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW93A	5/14/2020 9:55	44.9	31.3	4.0	19.8	-11.2	-7.8	-22.5	72.9	21.0	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW93A	5/27/2020 15:53	44.4	28.6	3.6	23.4	-4.5	-4.4	-20.7	94.3	1.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLFEW09	5/8/2020 11:27	55.3	43.5	0.6	0.6	-17.4	-17.4	-17.1	89.8	24.2	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW09	5/28/2020 17:38	56.2	39.5	0.6	3.7	-17.4	-17.4	-16.6	95.0	21.2	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW14	5/8/2020 11:31	55.3	44.7	0.0	0.0	-15.3	-15.4	-15.2	115.3		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW14	5/28/2020 17:35	57.1	41.5	0.0	1.4	-14.4	-14.3	-13.6	114.6		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW19	5/8/2020 11:16	48.2	38.9	3.2	9.7	-13.7	-13.7	-15.0	93.7	39.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW19	5/28/2020 17:28	50.1	35.3	3.2	11.4	-14.0	-14.0	-14.6	94.8	34.3	Valve Adjustment:"No change,Valve 80% open";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW23	5/4/2020 12:23	46.6	37.6	0.4	15.4	-6.2	-3.5	-6.5	98.8	31.2	Valve Adjustment:"Closed valve 1/2 to 1 turn";Well Condition:"";Well Repairs:""
VRLFEW23	5/4/2020 12:25	45.6	37.1	0.5	16.8	-3.3	-3.3	-7.3	98.1	17.6	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW23	5/27/2020 12:33	47.6	36.0	0.1	16.3	-4.1	-4.2	-14.8	99.3	29.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW25	5/8/2020 11:36	55.3	44.7	0.0	0.0	-13.8	-13.8	-13.4	115.2		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW25	5/28/2020 17:21	57.1	41.3	0.0	1.6	-14.1	-14.1	-14.4	115.2		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	5/14/2020 9:38	42.4	29.5	6.2	21.9	-6.4	-6.4	-14.5	64.9		Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW27	5/14/2020 9:39	42.6	29.5	6.2	21.7	-5.3	-4.1	-15.4	65.0		Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW27	5/27/2020 10:56	41.7	29.5	1.0	27.8	-1.2	-1.2	-15.5	103.0		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	5/8/2020 12:57	56.5	41.6	0.0	1.9	-16.6	-16.5	-16.7	97.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW30	5/28/2020 17:51	56.5	41.7	0.0	1.8	-15.0	-15.0	-13.6	99.9		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	5/4/2020 12:36	43.3	33.8	0.0	22.9	-3.6	-2.3	-4.3	106.7		Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	5/4/2020 12:38	42.8	33.4	0.0	23.8	-1.9	-1.9	-7.4	106.0		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	5/27/2020 12:43	58.9	38.6	0.0	2.5	-0.1	-1.0	-14.9	108.5		Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	5/27/2020 12:45	59.2	38.3	0.0	2.5	-1.2	-1.2	-14.4	109.0		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	5/4/2020 15:18	57.4	37.9	0.5	4.2	-7.5	-7.5	-7.4	84.7		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	5/27/2020 17:08	56.9	38.8	0.4	3.9	-15.4	-15.4	-15.1	98.8		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	5/8/2020 11:40	48.7	42.2	0.0	9.1	-4.7	-4.7	-14.0	110.1		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	5/28/2020 17:17	48.8	38.2	0.0	13.0	-4.4	-4.5	-14.0	109.9		Valve Adjustment:"No change,Valve 50% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	5/4/2020 10:21	32.3	30.1	0.2	37.4	-0.2	-0.2	-9.2	79.9		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	5/27/2020 10:17	50.4	33.3	0.1	16.2	-0.3	-0.2	-14.3	97.5		Valve Adjustment:"No change,Valve at optimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	5/4/2020 12:13	36.0	34.0	0.0	30.0	-6.1	-4.8	-6.1	80.8		Valve Adjustment:"Closed valve 1/2 to 1 turn";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	5/4/2020 12:15	35.8	34.2	0.0	30.0	-4.9	-4.9	-6.5	81.0		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	5/27/2020 12:27	43.4	35.0	0.0	21.6	-8.9	-5.1	-12.3	107.8		Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	5/27/2020 12:29	43.0	34.4	0.0	22.6	-5.5	-5.5	-13.9	108.0		Valve Adjustment:"No change";Well Condition:"No flow device";Well Repairs:""
VRLFEW65	5/4/2020 10:57	56.4	42.8	0.1	0.7	-6.9	-6.8	-6.5	81.1	9.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW65	5/27/2020 10:58	56.0	40.7	0.1	3.2	-12.6	-12.6	-13.1	97.2	30.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW76	5/8/2020 13:52	51.7	36.8	0.2	11.3	-2.8	-2.8	-25.9	98.1	35.5	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW76	5/27/2020 17:27	50.8	36.3	0.2	12.7	-2.9	-3.0	-27.5	98.8	36.0	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW77	5/8/2020 10:59	42.5	36.6	0.1	20.8	-11.6	-10.3	-19.3	91.9	83.5	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW77	5/8/2020 11:02	42.6	36.4	0.1	20.9	-10.6	-10.6	-19.6	91.9	72.8	Valve Adjustment:"No change";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW77	5/27/2020 17:14	47.0	35.1	0.0	17.9	-10.6	-10.6	-18.7	93.0	75.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW78	5/8/2020 11:04	45.8	39.9	0.0	14.3	-1.4	-1.0	-19.5	95.2	25.4	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW78	5/8/2020 11:06	46.5	40.4	0.0	13.1	-0.8	-0.9	-18.2	95.5	15.5	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW78	5/27/2020 17:17	52.2	38.5	0.0	9.3	-0.6	-0.6	-18.4	98.1	16.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW79	5/8/2020 11:09	48.2	39.3	0.0	12.5	-3.3	-3.3	-18.5	93.7	16.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW79	5/27/2020 17:20	52.1	36.3	0.0	11.6	-3.1	-3.1	-17.6	94.5	20.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW80	5/4/2020 11:59	31.3	28.9	4.9	34.9	-0.9	-0.9	-7.9	111.4	7.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLFEW80	5/27/2020 12:17	55.2	41.4	0.0	3.4	-0.4	-1.1	-14.9	113.7	6.5	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW80	5/27/2020 12:19	55.3	40.9	0.0	3.8	-1.3	-1.2	-15.2	116.2	16.8	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW81	5/4/2020 11:12	55.0	40.7	0.1	4.2	-0.6	-1.0	-6.2	94.5	5.1	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW81	5/4/2020 11:14	54.3	41.2	0.0	4.5	-1.1	-1.1	-5.8	97.2	20.1	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW81	5/27/2020 11:17	47.5	36.1	0.0	16.4	-1.8	-1.2	-11.9	100.9	26.0	Valve Adjustment:"Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW81	5/27/2020 11:19	46.0	36.1	0.0	17.9	-1.1	-1.1	-12.4	100.2	17.3	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW82	5/4/2020 11:08	56.2	41.0	0.1	2.7	-6.2	-6.2	-6.5	114.6	25.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW82	5/27/2020 11:08	56.5	39.7	0.0	3.8	-11.3	-11.3	-12.1	117.5	49.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW83	5/4/2020 11:18	46.1	38.6	0.0	15.3	-0.6	-0.6	-1.1	88.3	39.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW83	5/27/2020 11:31	52.7	39.5	0.0	7.8	-4.8	-4.7	-7.0	90.9	80.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW84	5/8/2020 13:00	57.4	40.8	0.0	1.8	-0.2	-0.1	-0.4	109.4	24.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW84	5/28/2020 17:55	57.2	40.1	0.0	2.7	-0.3	-0.4	-0.3	109.2	34.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW85	5/8/2020 11:19	49.4	40.4	0.0	10.2	-0.7	-0.7	-14.9	91.6	44.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW85	5/28/2020 17:24	51.8	37.5	0.0	10.7	-0.6	-0.6	-13.7	91.9	39.3	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW87	5/8/2020 11:43	51.1	42.6	0.0	6.3	-1.2	-1.2	-14.4	116.8	45.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW87	5/28/2020 17:13	51.5	38.5	0.0	10.0	-1.1	-1.0	-14.6	116.4	46.4	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW88	5/8/2020 11:46	50.2	40.7	0.0	9.1	-0.7	-0.7	-15.4	110.8	44.7	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW88	5/28/2020 17:11	50.5	35.9	0.0	13.6	-0.6	-0.7	-15.5	113.0	35.4	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW89	5/8/2020 11:49	47.3	37.4	0.0	15.3	-0.6	-0.6	-14.3	117.1	29.4	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW89	5/28/2020 17:08	50.0	33.9	0.0	16.1	-0.5	-0.5	-14.3	103.8	34.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW92	5/4/2020 14:47	50.2	33.1	2.6	14.1	-6.5	-6.5	-7.4	86.9	10.6	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""
VRLFEW92	5/27/2020 16:20	57.5	38.3	0.4	3.8	-18.4	-18.4	-20.4	96.6	12.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW94	5/4/2020 14:32	57.3	39.8	0.4	2.5	-7.9	-7.9	-7.5	100.4	1.8	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW94	5/27/2020 16:08	55.5	38.6	0.7	5.2	-20.8	-20.8	-21.0	111.0	2.7	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW96	5/4/2020 14:17	56.2	41.4	0.3	2.1	-8.2	-8.2	-7.4	98.6	9.9	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW96	5/27/2020 15:41	55.1	39.9	0.5	4.5	-21.0	-20.9	-20.4	113.0	8.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW98	5/4/2020 14:07	56.2	41.0	1.1	1.7	-8.5	-8.5	-7.8	86.9	5.5	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW98	5/27/2020 13:49	53.4	41.3	0.4	4.9	-21.5	-21.5	-22.1	101.1	5.6	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW99	5/8/2020 13:47	53.5	38.9	0.0	7.6	-1.1	-1.9	-21.5	116.1	29.1	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW99	5/8/2020 13:50	53.9	38.2	0.0	7.9	-1.9	-1.9	-21.3	116.4	38.7	Valve Adjustment:"No change";Well Condition:"";Well Repairs:""
VRLFEW99	5/28/2020 18:12	48.0	36.8	0.0	15.2	-2.2	-2.2	-21.0	117.0	31.9	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLRW001	5/14/2020 12:57	54.4	37.8	0.1	7.7	-19.4	-19.2	-18.6	90.1	9.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLRW002	5/14/2020 10:36	59.1	40.6	0.0	0.3	-18.5	-18.5	-18.3	80.0		Valve Adjustment:"No change,Valve 100% open";Well Comment:"too tall to adjust valve";Well Condition:"";Well Repairs:""
VRLRW002	5/18/2020 14:21	57.8	40.9	0.0	1.3	-18.1	-18.1	-18.0	79.2		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLRW003	5/14/2020 10:25	62.1	37.0	0.0	0.9	-18.8	-18.7	-18.4	71.8	16.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW003	5/18/2020 14:53	59.8	36.3	0.8	3.1	-18.1	-18.1	-18.0	71.1	9.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW004	5/14/2020 10:39	46.4	20.6	7.7	25.3	-20.2	-19.9	-20.0	68.5	9.6	Valve Adjustment:"Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW004	5/14/2020 10:39	46.4	20.2	7.6	25.8	-19.8	-19.9	-18.9	68.9	11.6	Valve Adjustment:"Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW004	5/18/2020 14:50	44.6	26.3	1.1	28.0	-19.5	-19.5	-19.0	69.3	5.9	Valve Adjustment:"Closed valve 1/2 to 1 turn,Valve at minimum position";Well Condition:"";Well Repairs:""

Bold Italics

= HOV approval from BAAQMD
Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	

*Some flow readings not available due to no/low flow conditions recorded by the ENVISION

¹Blower Inlet Reading

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH₄ = Methane CO₂ = Carbon Dioxide O₂ = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute % = percent

140°F Temperature HOV	Oxygen HO	V - No Limit**	Oxygen I	HOV - 15%
(Condition #818 Part 3(b)(i))	(Condition #8	18 Part 3 (b)(ii))	(Condition #8	18 Part 3 (c)(ii))
EW-9***	EW-9***	EW-33A***	VRLRW001	VRLRW003
EW-33A***	EW-27		VRLRW002	VRLRW004
EW-44			VR12GT4R	VR12GT05

**Oxygen concentration shall not apply to these wells as long as the landfill gas (LFG) in the main header has less than 5% O₂ AND greater than 35% CH₄

***Approved for both Oxygen and Temperature Higher Operating Value (HOV)

VASCO ROAD LANDFILL Wellfield Monitoring Report - June 1, 5, 10, 16, 19, and 24, 2020

Device ID	Date and Time	СН₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VR12GT03	6/10/2020 16:32	21.1	16.5	3.9	58.5	-0.2	-0.1	-16.5	99.0	6.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT03	6/16/2020 14:50	39.8	30.5	4.9	24.8	-0.1	-0.1	-16.9	87.0	4.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT05	6/10/2020 16:51	51.7	34.5	0.1	13.7	-0.1	-0.2	-16.8	102.0	6.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT05	6/16/2020 11:43	44.3	28.4	4.6	22.7	-0.1	-0.1	-16.5	85.0	10.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12LR01	6/10/2020 16:54	51.0	34.2	0.2	14.6	-0.1	-0.1	-15.9	104.0	10.7	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VR12LR01	6/16/2020 11:36	35.6	29.2	4.9	30.3	-0.1	-0.1	-17.3	96.0	11.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12LR02	6/1/2020 11:56	56.0	38.6	0.1	5.3	-10.6	-10.6	-13.2	91.6	60.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR02	6/16/2020 12:34	54.5	39.0	0.0	6.5	-11.4	-11.3	-13.0	95.0	57.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	6/1/2020 13:50	56.2	40.1	0.1	3.6	-5.3	-5.3	-10.7	97.3	97.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	6/16/2020 14:54	55.0	40.7	0.2	4.1	-5.3	-5.2	-10.1	95.0	84.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0901	6/1/2020 14:37	48.8	34.9	2.7	13.6	-19.1	-19.1	-19.3	86.0	7.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0901	6/16/2020 13:49	46.9	34.4	2.8	15.9	-18.4	-18.5	-18.6	82.0	6.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0906	6/5/2020 13:18	48.9	34.2	0.0	16.9	-0.8	-0.9	-16.2	97.5	55.8	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0906	6/19/2020 12:31	47.7	37.1	0.0	15.2	-0.5	-0.5	-11.8	97.0	49.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0907	6/10/2020 15:48	51.4	36.3	1.6	10.7	-1.8	-1.8	-17.8	102.0	27.6	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""
VREW0907	6/24/2020 15:49	51.5	36.8	1.4	10.3	-1.6	-1.6	-18.3	102.0	23.7	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""
VREW0908	6/10/2020 15:15	58.8	38.7	0.1	2.4	-18.8	-18.8	-19.0	110.0	7.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0908	6/24/2020 15:09	57.5	40.0	0.1	2.4	-20.1	-20.1	-20.0	100.0	6.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0909	6/10/2020 14:40	56.6	40.9	0.0	2.5	-12.6	-18.8	-21.6	110.0	11.5	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 80% open";Well Condition:"";Well Repairs:""
VREW0909	6/10/2020 14:42	56.6	41.6	0.0	1.8	-18.1	-18.1	-20.0	101.0	19.3	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VREW0909	6/24/2020 14:39	54.7	41.2	0.1	4.0	-19.1	-19.1	-19.7	110.0	32.1	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 90% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW0910	6/10/2020 14:08	47.8	35.9	0.0	16.3	-2.2	-2.2	-16.3	106.0	74.7	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW0910	6/24/2020 14:12	45.8	35.2	0.0	19.0	-2.3	-1.6	-16.3	108.0	73.5	Valve Adjustment:"Closed valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0910	6/24/2020 14:14	46.2	35.6	0.0	18.2	-1.5	-1.6	-15.3	108.0	57.8	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0911	6/10/2020 13:00	50.7	36.6	0.7	12.0	-0.1	-0.1	-16.2	88.7	3.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0911	6/24/2020 13:02	55.5	38.2	0.0	6.3	-0.1	-0.5	-13.7	90.0	0.0	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0911	6/24/2020 13:03	54.4	37.5	0.6	7.5	-0.5	-0.5	-13.0	90.0	25.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0912	6/10/2020 12:45	50.6	40.8	0.0	8.6	-0.5	-0.5	-16.0	107.2	7.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0912	6/24/2020 12:54	50.0	40.4	0.0	9.6	-0.5	-0.4	-14.6	100.0	5.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1001	6/10/2020 15:59	61.2	37.1	0.0	1.7	-1.2	-18.1	-18.6	95.0	4.0	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1001	6/10/2020 16:00	56.6	33.8	1.9	7.7	-18.1	-18.1	-18.2	95.0	10.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1001	6/24/2020 15:59	45.2	28.0	4.7	22.1	-18.8	-18.8	-20.0	95.0	12.3	Valve Adjustment:"Valve at minimum position,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1003	6/10/2020 15:01	57.8	39.8	0.1	2.3	-19.3	-19.3	-19.9	111.0	11.3	Valve Adjustment:"Opened valve 1/2 to 1 turn ,Valve 80% open";Well Condition:"";Well Repairs:""
VREW1003	6/24/2020 14:57	58.0	39.6	0.2	2.2	-19.7	-19.7	-19.5	100.0	6.2	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 90% open";Well Condition:"";Well Repairs:""
VREW1004	6/10/2020 14:16	58.2	39.0	0.0	2.8	-5.1	-8.2	-21.1	98.0	19.4	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 40% open";Well Condition:"";Well Repairs:""
VREW1004	6/10/2020 14:19	58.0	39.3	0.0	2.7	-8.9	-8.9	-21.4	98.0	29.5	Valve Adjustment:"No change,Valve 40% open";Well Condition:"";Well Repairs:""
VREW1004	6/24/2020 14:51	54.7	40.3	0.0	5.0	-9.3	-13.0	-20.2	97.0	30.9	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 50% open";Well Condition:"";Well Repairs:""
VREW1004	6/24/2020 14:53	54.6	40.6	0.0	4.8	-14.0	-14.0	-21.2	97.0	42.0	Valve Adjustment:"No change,Valve 50% open";Well Condition:"";Well Repairs:""
VREW1005	6/10/2020 14:27	56.9	40.7	0.0	2.4	-16.7	-18.8	-20.5	102.0	33.8	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 80% open";Well Condition:"";Well Repairs:""
VREW1005	6/10/2020 14:28	56.5	40.7	0.0	2.8	-18.1	-18.1	-20.4	102.0	45.6	Valve Adjustment:"No change,Valve 80% open";Well Condition:"Flow surging in well";Well Repairs:""
VREW1005	6/24/2020 14:21	55.1	41.8	0.0	3.1	-19.7	-19.8	-20.1	102.0	39.3	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 90% open";Well Condition:"";Well Repairs:""
VREW1009	6/10/2020 11:39	49.9	41.5	0.1	8.5	-0.2	-0.2	-14.1	99.7	5.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1009	6/24/2020 11:44	50.0	41.5	0.0	8.5	-0.3	-0.2	-14.7	99.0	16.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1010	6/5/2020 14:42	49.1	37.5	0.0	13.4	-0.9	-0.9	-12.9	115.9	34.9	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW1010	6/24/2020 10:27	49.1	39.9	0.0	11.0	-0.8	-0.8	-12.3	111.0	27.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1011	6/5/2020 14:39	45.6	35.6	0.0	18.8	-0.2	-0.3	-12.5	109.9	10.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1011	6/24/2020 10:23	47.8	38.8	0.0	13.4	-0.1	-0.1	-14.2	103.0	11.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1012	6/5/2020 14:36	48.8	36.8	0.0	14.4	-1.1	-1.2	-12.2	112.1	31.1	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1012	6/24/2020 10:19	49.5	38.7	0.0	11.8	-0.6	-0.6	-12.4	112.0	34.7	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW120A	6/1/2020 13:20	42.5	30.6	0.3	26.6	-16.4	-14.9	-19.0	118.8	22.5	Valve Adjustment:"Closed valve 10% or less,Valve 25% open";Well Condition:"";Well Repairs:""
VREW120A	6/1/2020 13:21	42.2	30.1	0.3	27.4	-14.8	-14.9	-19.0	118.2	13.7	Valve Adjustment:"No change,Valve 25% open";Well Condition:"";Well Repairs:""
VREW120A	6/16/2020 14:22	37.9	31.5	0.5	30.1	-13.6	-10.9	-18.3	110.0	18.8	Valve Adjustment:"Closed valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW120A	6/16/2020 14:24	38.2	31.6	0.5	29.7	-9.2	-9.2	-18.5	110.0	11.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW122A	6/10/2020 16:06	46.2	33.8	0.0	20.0	-10.2	-9.0	-18.2	114.0	63.7	Valve Adjustment:"Closed valve 10% or less,Valve 40% open";Well Condition:"";Well Repairs:""
VREW122A	6/10/2020 16:09	45.7	34.1	0.0	20.2	-8.9	-8.9	-19.1	114.0	47.0	Valve Adjustment:"No change,Valve 40% open";Well Condition:"";Well Repairs:""
VREW122A	6/16/2020 13:30	43.4	35.3	0.0	21.3	-9.2	-7.0	-19.6	111.0	51.4	Valve Adjustment:"Closed valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VREW122A	6/16/2020 13:33	43.0	35.5	0.0	21.5	-6.6	-6.6	-20.4	111.0	45.5	Valve Adjustment:"No change,Valve 30% open":Well Condition:"":Well Repairs:""
VREW126A	6/1/2020 11:41	49.8	38.1	0.3	11.8	-1.9	-2.0	-18.2	130.3	19.9	Valve Adjustment:"No change,Valve 20% open":Well Condition:"":Well Repairs:""
VREW126A	6/16/2020 12:10	46.5	38.7	0.2	14.6	-1.8	-1.0	-18.2	122.0	22.0	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW126A	6/16/2020 12:13	47.5	39.5	0.1	12.9	-0.9	-0.9	-17.1	122.0	6.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2001	6/1/2020 12:43	52.9	46.0	0.0	1.1	-0.2	-0.8	-19.3	130.3	8.3	Valve Adjustment:"NSPS/CAI,Opened valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""
VREW2001	6/1/2020 12:45	53.2	44.1	0.0	2.7	-0.9	-0.9	-19.8	136.6	21.4	Valve Adjustment:"NSPS,Valve 15% open";Well Condition:"";Well Repairs:""
VREW2001	6/10/2020 16:41	54.2	43.7	0.0	2.1	-0.7	-1.0	-18.4	125.0	16.7	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2001	6/10/2020 16:43	54.8	42.7	0.0	2.5	-1.1	-1.1	-18.1	126.0	26.8	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2001	6/16/2020 12:51	52.1	43.5	0.0	4.4	-1.2	-1.1	-19.0	123.0	30.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2002	6/1/2020 14:00	55.4	40.7	0.0	3.9	-0.2	-0.6	-20.2	122.7	47.8	Valve Adjustment:"Opened valve >10%,Valve 25% open";Well Condition:"";Well Repairs:""
VREW2002	6/1/2020 14:04	55.4	41.1	0.0	3.5	-0.7	-0.6	-21.3	124.9	54.7	Valve Adjustment:"No change,Valve 25% open";Well Condition:"";Well Repairs:""
VREW2002	6/16/2020 14:06	56.3	43.5	0.0	0.2	-1.9	-2.3	-20.1	119.0	40.8	Valve Adjustment:"Opened valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO ₂	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW2002	6/16/2020 14:09	55.6	44.4	0.0	0.0	-2.5	-2.5	-19.5	120.0	57.9	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""
VREW2003	6/1/2020 14:07	55.3	41.8	0.0	2.9	-0.1	-0.8	-18.0	129.7	12.1	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2003	6/1/2020 14:10	55.3	41.1	0.0	3.6	-1.2	-1.2	-19.3	130.3	46.4	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2003	6/16/2020 14:01	57.0	41.8	0.0	1.2	-2.0	-3.2	-19.2	125.0	29.2	Valve Adjustment:"Opened valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VREW2003	6/16/2020 14:04	57.0	42.5	0.0	0.5	-3.8	-3.8	-18.8	127.0	49.5	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""
VREW2004	6/1/2020 14:26	54.9	34.1	1.0	10.0	-0.3	-0.8	-18.6	88.2	4.7	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2004	6/1/2020 14:29	54.7	35.2	0.0	10.1	-1.0	-0.9	-19.5	103.8	12.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2004	6/16/2020 13:35	54.5	40.6	0.8	4.1	-0.9	-1.9	-18.6	105.0	9.8	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2004	6/16/2020 13:38	55.9	40.7	0.4	3.0	-2.2	-2.2	-18.4	105.0	25.7	Valve Adjustment:"No change,Valve 20% open":Well Condition:"":Well Repairs:""
VREW2005	6/1/2020 15:57	60.2	37.8	0.0	2.0	-0.3	-0.8	-20.9	104.4	29.2	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2005	6/1/2020 15:58	60.6	37.1	0.0	2.3	-0.8	-0.8	-20.8	105.1	40.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2005	6/10/2020 15:07	57.2	35.8	0.0	7.0	-0.8	-1.8	-21.2	108.0	35.7	Valve Adjustment:"Opened valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VREW2005	6/10/2020 15:09	57.4	35.6	0.0	7.0	-1.8	-1.9	-22.2	109.0	60.2	Valve Adjustment:"No change, Valve 30% open";Well Condition:"";Well Repairs:""
VREW2005	6/24/2020 15:13	44.7	34.0	0.0	21.3	-1.5	-0.8	-21.4	110.0	56.7	Valve Adjustment:"Closed valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2005	6/24/2020 15:15	44.9	33.7	0.0	21.4	-0.7	-0.7	-21.8	110.0	32.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2006	6/1/2020 15:51	55.2	42.3	0.0	2.5	-0.4	-1.4	-21.1	104.9	14.5	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2006	6/1/2020 15:53	55.2	42.2	0.0	2.6	-1.7	-1.6	-21.5	106.2	27.7	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2006	6/10/2020 14:45	47.6	37.2	0.2	15.0	-2.1	-2.2	-22.8	103.0	36.8	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2006	6/24/2020 14:34	47.0	37.0	0.4	15.6	-2.0	-0.8	-20.7	112.0	27.5	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2006	6/24/2020 14:35	46.6	37.2	0.3	15.9	-0.5	-0.5	-20.0	112.0	11.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2007	6/1/2020 15:47	56.1	41.2	0.0	2.7	-0.5	-0.8	-22.4	115.2	33.4	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2007	6/1/2020 15:49	56.3	42.5	0.0	1.2	-0.9	-0.9	-22.4	115.3	42.0	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2007	6/10/2020 14:56	55.9	40.3	0.0	3.8	-0.9	-1.6	-21.6	113.0	39.1	Valve Adjustment:"Opened valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VREW2007	6/10/2020 14:58	56.0	40.9	0.0	3.1	-1.7	-1.7	-22.1	114.0	67.8	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW2007	6/24/2020 14:46	49.1	38.1	0.0	12.8	-2.1	-2.1	-22.2	112.0	59.4	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""
VRL0601R	6/5/2020 13:35	55.0	41.6	0.3	3.1	-21.2	-21.1	-20.8	77.0	137.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRL0601R	6/19/2020 12:05	51.7	43.3	1.3	3.7	-16.8	-16.8	-16.8	77.0	20.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRL0603R	6/5/2020 13:24	50.9	38.8	0.0	10.3	-0.7	-0.7	-23.5	111.2	13.6	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRL0603R	6/19/2020 12:22	48.6	42.6	0.0	8.8	-0.5	-0.5	-16.8	103.0	12.4	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRL0604R	6/5/2020 13:21	40.3	33.5	0.0	26.2	-0.3	-0.3	-18.0	96.6	7.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRL0604R	6/19/2020 12:26	40.4	37.1	0.0	22.5	-0.1	-0.2	-15.1	95.0	3.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW100	6/5/2020 13:57	50.1	36.3	0.0	13.6	-3.1	-3.2	-16.7	99.9	47.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW100	6/19/2020 10:33	49.1	36.6	0.2	14.1	-2.2	-2.2	-12.0	98.0	35.1	Valve Adjustment:"No change, Valve 20% open":Well Condition:"":Well Repairs:""
VRLEW101	6/10/2020 13:04	45.0	29.8	0.5	24.7	-4.8	-3.0	-17.3	100.4	16.9	Valve Adjustment:"Closed valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW101	6/10/2020 13:05	44.3	29.6	0.5	25.6	-2.4	-2.4	-17.8	99.0	5.1	Valve Adjustment:"No change, Valve 10% open":Well Condition:"":Well Repairs:""
VRLEW101	6/24/2020 13:11	49.9	31.3	0.0	18.8	-0.7	-0.7	-12.6	92.0	5.4	Valve Adjustment:"No change,Valve 10% open":Well Condition:"":Well Repairs:""
VRLEW102	6/10/2020 12:21	49.9	38.6	0.0	11.5	-8.2	-8.2	-10.3	113.2	77.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW102	6/24/2020 12:38	49.0	39.4	0.1	11.5	-8.2	-8.2	-10.1	107.0	77.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW103	6/10/2020 12:03	49.0	41.8	0.0	9.2	-0.2	-0.2	-12.1	95.2	5.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW103	6/24/2020 12:32	47.5	41.4	0.0	11.1	-0.2	-0.2	-12.0	96.0	5.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW104	6/5/2020 13:12	58.1	40.8	0.0	1.1	-0.4	-0.4	-0.6	99.1	18.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW104	6/19/2020 12:41	55.8	44.2	0.0	0.0	-0.1	-0.1	-0.1	102.0	15.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	6/10/2020 11:32	49.1	39.6	0.0	11.3	-10.6	-10.6	-12.3	106.7	50.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	6/24/2020 12:10	49.6	41.4	0.0	9.0	-9.9	-9.9	-11.8	102.0	50.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW106	6/5/2020 14:19	54.0	37.5	0.0	8.5	-0.8	-2.2	-13.2	104.0	13.6	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW106	6/5/2020 14:21	54.1	37.0	0.0	8.9	-2.5	-2.5	-13.3	108.3	39.6	Valve Adjustment:"No change, Valve 20% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW106	6/19/2020 13:15	43.1	39.8	0.0	17.1	-2.9	-1.1	-12.1	104.0	35.5	Valve Adjustment:"Valve at minimum position,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW106	6/19/2020 13:18	42.7	39.5	0.0	17.8	-0.7	-0.6	-13.5	103.0	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW107	6/5/2020 14:24	54.3	38.0	0.0	7.7	-0.1	-0.6	-11.8	103.1	10.7	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW107	6/5/2020 14:26	54.4	38.1	0.0	7.5	-0.8	-0.8	-11.1	108.3	42.1	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW107	6/19/2020 13:22	42.6	39.4	0.0	18.0	-1.0	-0.3	-12.3	103.0	43.7	Valve Adjustment:"Valve at minimum position,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLEW107	6/19/2020 13:23	44.1	39.8	0.0	16.1	-0.2	-0.2	-15.3	103.0	38.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW108	6/5/2020 12:50	46.0	35.8	0.0	18.2	-1.7	-1.1	-13.7	112.3	40.1	Valve Adjustment:"Closed valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW108	6/5/2020 12:52	45.7	36.0	0.0	18.3	-0.9	-1.0	-13.7	109.9	32.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW108	6/19/2020 12:57	45.3	39.9	0.0	14.8	-0.2	-0.2	-5.9	108.0	9.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW109	6/10/2020 11:56	48.6	40.7	0.1	10.6	-9.9	-9.9	-12.3	114.3	79.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW109	6/24/2020 11:20	48.8	40.7	0.1	10.4	-9.6	-9.6	-11.8	108.0	75.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW110	6/1/2020 14:40	55.6	38.0	0.5	5.9	-17.8	-17.8	-18.0	97.5	7.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW110	6/16/2020 13:53	57.8	41.5	0.2	0.5	-17.8	-17.8	-17.5	92.0	13.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW111	6/1/2020 14:13	55.0	39.6	0.8	4.6	-18.1	-18.1	-18.5	93.6	8.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW111	6/16/2020 13:56	56.3	41.1	0.1	2.5	-18.4	-18.5	-18.3	90.0	14.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW112	6/1/2020 15:03	57.3	39.5	0.1	3.1	-17.5	-17.5	-17.6	107.4	27.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW112	6/16/2020 15:53	58.1	39.8	0.0	2.1	-17.1	-17.1	-17.0	105.0	28.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	6/1/2020 15:16	56.6	39.9	0.4	3.1	-17.8	-17.8	-17.7	99.9	11.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	6/16/2020 16:00	57.9	39.3	0.0	2.8	-17.1	-17.1	-17.0	90.0	10.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW114	6/1/2020 15:40	51.3	33.5	3.6	11.6	-17.4	-17.4	-17.5	86.0	11.5	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 60% open";Well Condition:"";Well Repairs:""
VRLEW114	6/1/2020 15:41	51.1	33.6	2.0	13.3	-17.8	-17.8	-17.9	84.9	14.8	Valve Adjustment:"No change,Valve 60% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW114	6/16/2020 16:17	52.3	34.1	1.7	11.9	-17.6	-17.6	-17.5	81.0	17.2	Valve Adjustment:"No change,Valve 60% open";Well Condition:"";Well Repairs:""
VRLEW116	6/1/2020 15:20	53.0	37.0	0.3	9.7	-18.5	-18.5	-18.4	87.1	18.0	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 80% open";Well Condition:"";Well Repairs:""
VRLEW116	6/16/2020 16:05	57.7	39.5	0.1	2.7	-18.1	-18.1	-18.1	85.0	17.3	Valve Adjustment:"Opened valve 1/2 to 1 turn ,Valve 90% open";Well Condition:"";Well Repairs:""
VRLEW117	6/1/2020 15:24	48.6	35.2	0.1	16.1	-2.9	-2.8	-19.3	91.8		Valve Adjustment:"No change,Valve 20% open";Well Condition:"No flow device";Well Repairs:""
VRLEW117	6/16/2020 16:08	48.1	35.2	0.0	16.7	-3.7	-3.8	-17.8	90.0		Valve Adjustment:"No change,Valve 20% open";Well Condition:"No flow device";Well Repairs:""
VRLEW128	6/1/2020 12:50	52.8	41.8	0.2	5.2	-18.5	-19.1	-18.7	86.5	13.0	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 80% open";Well Condition:"";Well Repairs:""
VRLEW128	6/1/2020 12:53	53.3	42.2	0.6	3.9	-19.1	-19.1	-18.6	83.5	8.2	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VRLEW128	6/16/2020 12:55	50.6	43.4	0.1	5.9	-18.5	-18.4	-18.4	80.0	9.6	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VRLEW129	6/1/2020 13:05	54.3	40.3	0.6	4.8	-19.1	-19.1	-18.9	88.0	3.7	Valve Adjustment:"Opened valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW129	6/1/2020 13:07	54.3	39.1	0.7	5.9	-19.1	-19.1	-18.6	87.3	10.5	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW129	6/16/2020 13:18	44.4	34.8	4.1	16.7	-18.4	-18.4	-18.4	83.0	3.6	Valve Adjustment:"Closed valve >10%,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW130	6/1/2020 13:10	51.2	32.4	1.2	15.2	-19.1	-19.1	-18.6	84.9	9.0	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW130	6/16/2020 13:22	57.7	42.3	0.0	0.0	-18.5	-18.5	-18.4	85.0	6.7	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 40% open";Well Condition:"";Well Repairs:""
VRLEW131	6/10/2020 16:18	46.4	31.8	2.3	19.5	-17.4	-17.4	-17.2	97.0	8.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW131	6/16/2020 13:27	51.3	37.4	1.2	10.1	-18.4	-18.4	-18.6	90.0	7.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW133	6/1/2020 12:57	54.6	42.0	0.0	3.4	-0.4	-2.2	-19.6	128.5	37.0	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW133	6/1/2020 13:00	54.3	42.9	0.0	2.8	-2.5	-2.5	-19.5	130.3	14.9	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW133	6/16/2020 13:11	54.5	45.1	0.0	0.4	-2.8	-5.8	-17.8	118.0	18.1	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW133	6/16/2020 13:14	54.4	45.2	0.0	0.4	-6.4	-6.4	-17.9	118.0	36.3	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW134	6/10/2020 12:56	49.4	38.0	0.6	12.0	-0.9	-0.9	-16.2	79.0	13.9	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW134	6/24/2020 13:07	49.4	37.4	0.6	12.6	-0.8	-0.8	-13.9	90.0	11.1	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW135	6/1/2020 11:36	48.5	32.9	2.3	16.3	-7.2	-7.2	-11.1	109.8	17.3	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW135	6/16/2020 12:02	44.6	32.3	2.6	20.5	-7.2	-2.0	-11.5	99.0	16.4	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW135	6/16/2020 12:06	44.3	32.4	2.5	20.8	-2.0	-2.0	-14.6	99.0	6.9	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW136	6/1/2020 13:14	48.9	35.8	0.9	14.4	-12.3	-12.3	-11.2	97.2	6.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW136	6/16/2020 13:04	38.1	35.6	0.4	25.9	-14.7	-12.3	-10.1	92.0	5.0	Valve Adjustment:"Valve at minimum position,Closed valve > 1 turn";Well Condition:"";Well Repairs:""
VRLEW136	6/16/2020 13:08	37.7	35.7	0.3	26.3	-12.3	-12.3	-10.1	92.0	2.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW138	6/1/2020 14:31	55.8	40.7	0.1	3.4	-19.1	-19.1	-19.3	87.8	9.0	Valve Adjustment:"Opened valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW138	6/1/2020 14:32	55.9	41.3	0.0	2.8	-19.1	-19.1	-18.6	88.3	21.3	Valve Adjustment:"No change, Valve 30% open":Well Condition:"":Well Repairs:""
VRLEW138	6/16/2020 13:45	52.3	40.2	0.7	6.8	-18.8	-18.8	-18.6	90.0	5.6	Valve Adjustment:"No change,Valve 30% open":Well Condition:"":Well Repairs:""
VRLEW139	6/10/2020 15:22	53.6	39.9	0.0	6.5	-3.5	-5.1	-17.7	99.0	40.3	Valve Adjustment:"Opened valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW139	6/10/2020 15:24	53.9	40.1	0.0	6.0	-5.2	-5.1	-17.5	100.0	54.0	Valve Adjustment:"No change, Valve 30% open":Well Condition:"":Well Repairs:""
VRLEW139	6/24/2020 15:37	49.8	39.1	0.0	11.1	-6.5	-6.5	-17.0	103.0	52.5	Valve Adjustment:"No change, Valve 30%
VRLEW140	6/5/2020 13:40	49.3	37.3	0.1	13.3	-2.6	-2.5	-20.3	118.4	32.8	Valve Adjustment:"No change, Valve 20%
VRLEW140	6/19/2020 11:56	47.7	40.7	0.0	11.6	-2.2	-2.2	-13.5	110.0	27.5	Valve Adjustment:"No change, Valve 20%
VRLEW141	6/5/2020 13:43	51.1	37.1	0.0	11.8	-1.0	-1.0	-19.7	107.4		Valve Adjustment:"No change,Valve 15% open";Well Condition:"No flow device";Well Renairs:""
VRLEW141	6/19/2020 11:51	49.2	40.5	0.0	10.3	-0.9	-0.9	-15.1	108.0		Valve Adjustment:"No change,Valve 15% open";Well Condition:"No flow device";Well Repairs:""
VRLEW142	6/5/2020 13:31	51.5	40.6	0.0	7.9	-0.6	-0.6	-18.6	124.9	42.6	Valve Adjustment:"No change, Valve 20%
VRLEW142	6/19/2020 12:10	49.7	43.2	0.0	7.1	-0.8	-0.8	-14.3	120.0	34.1	Valve Adjustment:"No change, Valve 20%
VRLEW145	6/1/2020 10:38	54.9	38.6	0.1	6.4	-12.9	-12.9	-12.6	104.7	17.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW145	6/16/2020 11:07	57.7	40.5	0.1	1.7	-12.4	-12.4	-12.0	94.0	10.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW146	6/1/2020 13:26	44.4	35.3	0.1	20.2	-12.8	-12.3	-17.1	99.7	86.3	Valve Adjustment:"Closed valve >10%,Valve 80% open";Well Condition:"";Well Repairs:""
VRLEW146	6/1/2020 13:28	44.4	35.4	0.1	20.1	-12.3	-12.3	-17.4	99.5	82.1	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VRLEW146	6/16/2020 14:16	33.9	34.5	0.0	31.6	-12.0	-11.0	-16.0	92.0	85.6	Valve Adjustment:"Closed valve >10%,Valve 50% open";Well Condition:"";Well Repairs:""
VRLEW146	6/16/2020 14:19	33.9	34.2	0.0	31.9	-10.9	-11.0	-17.2	92.0	73.0	Valve Adjustment:"No change,Valve 50% open";Well Condition:"":Well Repairs:""
VRLEW147	6/10/2020 15:27	57.9	40.7	0.0	1.4	-12.5	-14.0	-18.4	97.0	25.1	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW147	6/10/2020 15:29	58.2	40.1	0.0	1.7	-14.3	-14.3	-18.1	98.0	25.7	Valve Adjustment:"No change, Valve 20% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW147	6/24/2020 15:28	45.8	32.1	4.3	17.8	-17.8	-10.9	-17.6	92.0	34.9	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW147	6/24/2020 15:34	49.3	35.0	2.4	13.3	-0.9	-0.9	-17.7	92.0	11.7	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW148	6/1/2020 11:02	42.5	33.2	0.0	24.3	-4.3	-3.1	-19.3	113.0	46.6	Valve Adjustment:"Closed valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW148	6/1/2020 11:03	42.1	33.3	0.0	24.6	-2.9	-2.9	-18.7	112.6	33.3	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW148	6/16/2020 11:19	43.9	35.0	0.0	21.1	-2.4	-1.3	-17.6	102.0	34.4	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW148	6/16/2020 11:21	43.6	35.0	0.0	21.4	-1.1	-1.1	-17.1	102.0	7.8	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW149	6/1/2020 11:29	46.3	34.1	2.6	17.0	-1.5	-1.2	-17.5	127.9	15.4	Valve Adjustment:"Closed valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW149	6/1/2020 11:31	45.4	34.0	2.9	17.7	-1.1	-1.1	-17.9	126.9	10.5	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW149	6/16/2020 11:54	51.3	37.7	1.6	9.4	-0.6	-0.6	-17.1	120.0	7.3	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW150	6/1/2020 10:57	46.4	32.4	3.3	17.9	-1.3	-0.6	-17.0	104.5	17.8	Valve Adjustment:"Closed valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW150	6/1/2020 10:59	46.1	32.3	3.5	18.1	-0.6	-0.6	-17.2	103.3	9.3	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW150	6/16/2020 11:16	51.1	34.9	2.5	11.5	-0.3	-0.4	-16.8	94.0	39.5	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW151	6/1/2020 10:52	56.7	37.3	0.6	5.4	-17.8	-17.8	-17.5	82.6	8.8	Valve Adjustment:"Opened valve 10% or less,Valve 90% open";Well Condition:"";Well Repairs:""
VRLEW151	6/16/2020 11:12	55.8	37.8	0.1	6.3	-17.2	-17.2	-17.3	82.0	6.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW152	6/1/2020 13:42	53.9	37.0	0.0	9.1	-1.6	-1.7	-17.4	91.8	6.0	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW152	6/1/2020 13:43	54.0	36.7	0.0	9.3	-1.8	-1.8	-17.1	93.9	8.9	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW152	6/16/2020 14:40	35.2	32.8	0.2	31.8	-1.9	-1.8	-17.8	90.0	10.3	Valve Adjustment:"Valve at minimum position,Closed valve 10% or less";Well Condition:"";Well Repairs:""
VRLEW152	6/16/2020 14:42	34.9	32.5	0.2	32.4	-1.7	-1.7	-16.8	90.0	6.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW153	6/1/2020 13:37	51.8	38.5	0.0	9.7	-15.3	-15.3	-17.0	96.6	42.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW153	6/16/2020 14:46	35.9	33.7	0.0	30.4	-14.9	-14.3	-16.6	95.0	54.6	Valve Adjustment:"Closed valve >10%,Valve 60% open";Well Condition:"";Well Repairs:""
VRLEW153	6/16/2020 14:48	35.9	34.1	0.0	30.0	-14.3	-14.3	-16.6	95.0	45.9	Valve Adjustment:"No change,Valve 60% open";Well Condition:"";Well Repairs:""
VRLEW154	6/1/2020 13:32	55.8	41.4	0.0	2.8	-17.8	-17.8	-18.1	84.7	23.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW154	6/16/2020 14:36	56.4	42.6	0.0	1.0	-17.0	-17.1	-17.3	83.0	27.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"Flow surging in well";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW155	6/1/2020 11:33	54.1	39.4	0.5	6.0	-13.0	-13.0	-12.8	79.0	10.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW155	6/16/2020 11:58	55.9	41.9	0.0	2.2	-12.3	-12.3	-12.2	80.0	13.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW156	6/1/2020 11:10	43.8	29.4	1.9	24.9	-0.5	-0.5	-17.5	92.1	28.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW156	6/16/2020 11:29	50.2	33.0	1.1	15.7	-0.5	-0.5	-16.9	90.0	23.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW157	6/1/2020 11:07	56.0	32.6	0.0	11.4	-0.2	-0.8	-18.0	88.2	6.7	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW157	6/1/2020 11:08	56.4	32.1	0.0	11.5	-0.9	-1.0	-17.7	95.5	11.4	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW157	6/16/2020 11:24	46.2	31.6	1.4	20.8	-1.4	-0.9	-17.6	96.0	9.9	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW157	6/16/2020 11:25	46.2	31.5	1.4	20.9	-0.7	-0.7	-17.6	96.0	5.1	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW158	6/1/2020 11:22	47.5	28.8	4.1	19.6	-1.5	-1.4	-18.3	109.0	11.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW158	6/16/2020 11:47	46.7	29.0	4.5	19.8	-1.4	-1.4	-17.1	99.0	12.3	Valve Adjustment:"No change,Valve 10% open";Well Condition:"Valve needs replacement";Well Repairs:""
VRLEW159	6/1/2020 11:25	53.4	35.1	0.0	11.5	-17.1	-17.1	-17.4	124.7	32.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW159	6/16/2020 11:50	52.2	35.9	0.0	11.9	-16.7	-16.7	-16.8	110.0	27.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW160	6/1/2020 11:50	53.5	33.2	0.0	13.3	-1.4	-2.4	-18.2	119.3	9.8	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW160	6/1/2020 11:52	53.6	33.1	0.0	13.3	-2.8	-2.8	-18.3	121.1	22.9	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW160	6/16/2020 12:24	38.7	31.8	0.0	29.5	-4.1	-2.1	-18.2	110.0	21.3	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW160	6/16/2020 12:26	42.9	33.7	0.0	23.4	-1.5	-1.5	-17.4	110.0	7.3	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW161	6/1/2020 11:45	45.5	32.3	3.2	19.0	-3.2	-2.1	-18.1	117.9	14.8	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW161	6/1/2020 11:47	46.2	32.7	2.9	18.2	-1.4	-1.3	-17.8	111.9	5.3	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW161	6/16/2020 12:18	40.9	29.5	4.8	24.8	-0.7	-0.7	-17.2	100.0	5.3	Valve Adjustment:"Valve at minimum position,Closed valve 10% or less";Well Condition:"";Well Repairs:""
VRLEW161	6/16/2020 12:21	40.5	29.4	4.7	25.4	-0.7	-0.7	-17.1	98.0	5.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW162	6/1/2020 12:10	50.3	36.4	0.0	13.3	-10.7	-10.7	-16.4	124.2	70.3	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VRLEW162	6/16/2020 12:39	47.6	37.5	0.0	14.9	-10.3	-10.3	-15.8	115.0	65.2	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW163	6/1/2020 12:37	29.7	27.9	0.1	42.3	-1.7	-0.6	-21.0	126.9	37.8	Valve Adjustment:"Closed valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW163	6/1/2020 12:39	29.5	28.2	0.1	42.2	-0.5	-0.5	-19.8	126.3	13.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW163	6/16/2020 12:45	36.5	30.5	0.0	33.0	-0.3	-0.1	-18.7	113.0	11.3	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW163	6/16/2020 12:48	35.9	30.4	0.0	33.7	-0.1	-0.1	-18.5	113.0	6.8	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW31A	6/5/2020 14:48	45.7	36.1	0.0	18.2	-4.1	-4.2	-12.6	99.7		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW31A	6/24/2020 10:45	45.6	38.8	0.0	15.6	-4.2	-4.2	-13.2	111.0		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"Header vacuum loss";Well Repairs:""
VRLEW33A	6/10/2020 11:29	40.1	32.1	0.3	27.5	-1.4	-1.4	-12.3	96.1	3.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW33A	6/24/2020 12:03	40.5	32.3	0.2	27.0	-1.0	-1.0	-10.2	93.0	10.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW34A	6/5/2020 14:44	49.0	37.6	0.0	13.4	-1.3	-1.3	-12.3	112.6	32.8	Valve Adjustment:"No change,Valve 25% open";Well Condition:"";Well Repairs:""
VRLEW34A	6/24/2020 10:36	48.2	39.9	0.0	11.9	-1.1	-1.1	-13.2	110.0	38.5	Valve Adjustment:"No change,Valve 25% open";Well Condition:"";Well Repairs:""
VRLEW38A	6/10/2020 11:19	27.5	28.4	4.9	39.2	-0.9	-0.4	-13.7	112.6	16.5	Valve Adjustment:"Closed valve 10% or less,Valve 5% open";Well Condition:"";Well Repairs:""
VRLEW38A	6/10/2020 11:21	24.7	27.5	4.5	43.3	-0.4	-0.4	-14.0	112.3	5.4	Valve Adjustment:"No change, Valve 5% open";Well Condition:"";Well Repairs:""
VRLEW38A	6/24/2020 11:06	53.3	42.8	0.0	3.9	-0.1	-0.6	-13.7	96.0	9.6	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW38A	6/24/2020 11:08	52.5	42.6	0.0	4.9	-0.7	-0.7	-13.3	96.0	29.2	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW68A	6/10/2020 11:24	45.5	37.4	2.9	14.2	-0.9	-0.5	-13.5	116.4	32.6	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW68A	6/10/2020 11:27	46.2	38.0	2.7	13.1	-0.4	-0.4	-13.2	115.0	34.3	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW68A	6/24/2020 11:13	54.7	45.3	0.0	0.0	-0.1	-0.6	-13.0	106.0	6.0	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW68A	6/24/2020 11:14	54.5	45.5	0.0	0.0	-0.6	-0.6	-13.1	106.0	27.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW71B	6/10/2020 12:39	35.1	33.0	0.6	31.3	-1.1	-0.5	-14.6	115.9	36.2	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW71B	6/10/2020 12:42	34.5	32.8	0.6	32.1	-0.4	-0.4	-14.4	114.8	11.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW71B	6/24/2020 12:49	40.6	35.6	0.2	23.6	-0.2	-0.2	-15.2	108.0	16.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW72R	6/5/2020 13:15	53.7	39.1	0.1	7.1	-12.3	-12.3	-13.8	114.1	71.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW72R	6/19/2020 12:36	51.0	42.1	0.0	6.9	-9.6	-9.6	-11.6	107.0	75.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	6/1/2020 15:37	56.5	36.2	0.8	6.5	-17.8	-17.8	-17.8	84.7	10.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	6/16/2020 16:20	58.8	38.7	0.1	2.4	-17.1	-17.1	-17.6	80.0	10.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW86A	6/10/2020 11:12	53.0	42.4	0.0	4.6	-0.1	-0.5	-13.5	106.3	7.0	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW86A	6/10/2020 11:14	50.9	41.2	0.0	7.9	-0.6	-0.6	-13.1	110.1	32.3	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW86A	6/24/2020 11:02	47.7	39.7	0.0	12.6	-0.7	-0.7	-12.5	112.0	29.9	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW90A	6/1/2020 14:59	55.2	39.1	0.5	5.2	-17.5	-17.4	-18.0	95.2	22.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW90A	6/16/2020 15:48	58.2	39.4	0.0	2.4	-17.5	-17.4	-17.4	90.0	13.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW93A	6/10/2020 15:19	49.2	33.5	2.5	14.8	-4.4	-4.3	-18.9	98.0	9.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW93A	6/24/2020 15:40	49.3	33.9	2.2	14.6	-6.8	-6.8	-19.3	95.0	7.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLFEW09	6/5/2020 12:10	56.3	40.4	0.6	2.7	-18.1	-18.4	-17.7	87.1	12.3	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW09	6/5/2020 12:12	56.4	41.1	0.7	1.8	-18.5	-18.4	-18.5	86.4	63.8	Valve Adjustment:"No change,Valve 80% open";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW09	6/19/2020 11:04	49.0	38.0	0.2	12.8	-13.0	-13.0	-12.8	86.0	20.1	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW14	6/5/2020 12:15	56.7	42.9	0.0	0.4	-14.0	-14.0	-13.2	114.4		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW14	6/19/2020 11:06	57.0	43.0	0.0	0.0	-8.9	-8.9	-8.8	112.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW19	6/5/2020 11:48	50.2	37.2	3.2	9.4	-13.7	-13.7	-14.2	93.6	40.4	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW19	6/19/2020 10:48	47.7	35.5	3.9	12.9	-9.6	-9.6	-9.7	90.0	39.5	Valve Adjustment:"No change, Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW23	6/10/2020 12:16	48.0	39.2	0.0	12.8	-3.9	-3.9	-13.2	98.1	25.7	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW23	6/24/2020 12:24	48.4	40.5	0.0	11.1	-3.8	-3.8	-12.1	97.0	16.4	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW25	6/5/2020 12:19	57.1	42.9	0.0	0.0	-14.1	-14.1	-13.6	113.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW25	6/19/2020 11:14	56.8	43.2	0.0	0.0	-8.9	-8.9	-8.3	110.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	6/5/2020 14:54	38.3	27.9	6.8	27.0	-1.0	-1.1	-11.3	71.2		Valve Adjustment:"NSPS/CAI,Valve at minimum position,Closed valve 1/2 turn or less";Well Condition:"No flow device";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW27	6/5/2020 14:56	38.2	27.9	6.9	27.0	-1.2	-1.2	-11.4	71.0		Valve Adjustment:"NSPS,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	6/24/2020 10:51	35.2	27.6	7.9	29.3	-0.9	-0.8	-13.6	92.0		Valve Adjustment:"NSPS,No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	6/5/2020 13:05	57.1	41.9	0.0	1.0	-14.0	-13.9	-13.7	92.8		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	6/19/2020 12:53	54.8	45.2	0.0	0.0	-5.6	-5.8	-7.0	91.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	6/10/2020 12:33	52.7	35.9	0.0	11.4	-2.1	-3.5	-13.5	107.1		Valve Adjustment:"Opened valve 1/2 turn or less,Valve 20% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	6/10/2020 12:35	52.6	35.6	0.0	11.8	-3.5	-3.6	-12.3	107.0		Valve Adjustment:"No change,Valve 20% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	6/24/2020 12:44	49.0	36.0	0.0	15.0	-4.0	-4.0	-10.6	107.0		Valve Adjustment:"No change,Valve 20% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	6/5/2020 15:04	57.1	39.3	0.3	3.3	-13.0	-12.9	-12.9	75.9		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	6/19/2020 13:12	55.8	42.9	0.3	1.0	-13.3	-13.3	-13.7	96.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	6/5/2020 12:22	49.0	39.8	0.0	11.2	-4.5	-4.5	-13.2	109.2		Valve Adjustment:"No change,Valve 50% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	6/19/2020 11:25	48.3	42.0	0.0	9.7	-3.2	-3.2	-9.0	109.0		Valve Adjustment:"No change,Valve 50% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	6/5/2020 14:32	49.2	32.7	0.1	18.0	-0.1	-0.2	-11.5	71.4		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	6/19/2020 13:27	34.1	34.3	0.0	31.6	-0.1	-0.1	-14.4	100.0		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	6/10/2020 12:09	45.3	38.5	0.0	16.2	-4.9	-2.7	-13.0	99.0		Valve Adjustment:"Closed valve 1/2 turn or less,Valve 10% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	6/10/2020 12:11	44.7	38.1	0.0	17.2	-2.7	-2.7	-14.8	98.0		Valve Adjustment:"No change,Valve 10% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	6/24/2020 12:18	48.2	40.4	0.0	11.4	-2.5	-2.5	-12.6	95.0		Valve Adjustment:"No change,Valve 10% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW65	6/5/2020 15:00	56.2	41.5	0.2	2.1	-12.0	-12.0	-11.9	72.5	28.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW65	6/24/2020 10:57	55.4	44.5	0.1	0.0	-12.6	-12.6	-11.9	88.0	38.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW76	6/5/2020 13:53	51.3	36.9	0.2	11.6	-3.0	-3.0	-26.0	94.8	32.4	Valve Adjustment:"No change, Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW76	6/19/2020 10:30	50.2	36.5	0.1	13.2	-2.4	-2.4	-18.8	90.0	26.5	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW77	6/5/2020 11:35	45.8	36.2	0.2	17.8	-9.5	-7.7	-16.7	91.6	69.2	Valve Adjustment:"Closed valve 1/2 turn or less,Valve 40% open";Well Condition:"";Well Repairs:""
VRLFEW77	6/5/2020 11:38	45.4	36.2	0.1	18.3	-7.4	-7.4	-17.1	91.6	47.3	Valve Adjustment:"No change,Valve 40% open";Well Condition:"";Well Repairs:""
VRLFEW77	6/19/2020 10:36	48.1	36.0	0.0	15.9	-4.9	-4.8	-12.1	91.0	37.2	Valve Adjustment:"No change,Valve 40% open";Well Condition:"";Well Repairs:""
VRLFEW78	6/5/2020 11:40	53.0	40.0	0.0	7.0	-0.8	-1.3	-17.6	91.6	13.9	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW78	6/5/2020 11:42	53.2	40.4	0.0	6.4	-1.5	-1.5	-17.2	92.1	22.7	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW78	6/19/2020 10:40	48.3	38.2	0.0	13.5	-1.1	-1.1	-11.8	94.0	17.4	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW79	6/5/2020 11:44	52.6	38.7	0.0	8.7	-3.2	-3.2	-17.6	91.6	15.7	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW79	6/19/2020 10:43	52.0	37.9	0.0	10.1	-2.4	-2.4	-12.7	92.0	13.8	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW80	6/10/2020 12:01	50.8	41.7	0.0	7.5	-1.3	-1.3	-13.3	117.0	19.3	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW80	6/24/2020 12:29	50.8	42.8	0.0	6.4	-1.3	-1.3	-13.9	110.0	20.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW81	6/10/2020 11:47	56.1	43.5	0.0	0.4	-0.2	-0.8	-12.1	99.5	12.8	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW81	6/10/2020 11:49	56.2	43.8	0.0	0.0	-0.9	-0.9	-11.6	100.6	31.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW81	6/24/2020 11:36	48.1	40.6	0.0	11.3	-1.5	-1.5	-11.2	99.0	25.7	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW82	6/10/2020 11:52	56.3	43.3	0.0	0.4	-9.6	-9.6	-10.4	117.9	46.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW82	6/24/2020 11:32	56.2	43.8	0.0	0.0	-9.9	-9.9	-10.6	110.0	58.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW83	6/10/2020 11:43	53.1	42.1	0.0	4.8	-3.7	-3.8	-6.5	91.6	59.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW83	6/24/2020 11:40	53.8	42.4	0.0	3.8	-4.9	-4.9	-4.7	93.0	68.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW84	6/5/2020 13:07	57.4	40.9	0.0	1.7	-0.3	-0.3	-0.6	106.3	19.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW84	6/19/2020 12:48	55.8	44.1	0.1	0.0	-0.1	-0.1	-0.1	103.0	18.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW85	6/5/2020 11:51	50.3	38.3	0.0	11.4	-0.9	-0.9	-15.4	90.7	34.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW85	6/19/2020 10:51	50.0	38.3	0.0	11.7	-0.4	-0.5	-9.0	90.0	32.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW87	6/5/2020 12:26	51.3	39.9	0.0	8.8	-1.2	-1.3	-13.2	115.5	32.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW87	6/19/2020 11:28	50.6	41.8	0.0	7.6	-0.9	-1.0	-9.2	112.0	33.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW88	6/5/2020 12:29	50.3	39.0	0.0	10.7	-0.7	-0.7	-13.6	107.6	40.0	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW88	6/19/2020 11:32	49.2	39.9	0.0	10.9	-0.6	-0.6	-10.1	104.0	30.6	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW89	6/5/2020 12:32	46.2	36.0	0.0	17.8	-0.3	-0.3	-12.8	90.0	19.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW89	6/19/2020 11:37	48.1	37.5	0.0	14.4	-0.1	-0.2	-3.8	96.0	20.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLFEW92	6/10/2020 15:53	58.2	38.6	0.3	2.9	-15.8	-16.0	-20.2	107.0	39.9	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW92	6/10/2020 15:55	58.5	38.4	0.2	2.9	-16.2	-16.2	-19.0	107.0	64.0	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW92	6/24/2020 15:53	57.0	38.6	0.2	4.2	-17.1	-17.1	-18.7	102.0	29.8	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 90% open";Well Condition:"";Well Repairs:""
VRLFEW94	6/10/2020 15:32	57.5	40.0	0.1	2.4	-18.1	-18.1	-18.5	104.0	74.1	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW94	6/24/2020 15:21	54.7	39.6	0.3	5.4	-18.8	-18.8	-19.3	111.0	48.3	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 90% open";Well Condition:"";Well Repairs:""
VRLFEW96	6/10/2020 14:51	56.4	40.9	0.1	2.6	-19.8	-19.8	-19.9	108.0	13.1	Valve Adjustment:"Opened valve 1/2 to 1 turn ,Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW96	6/24/2020 15:03	56.1	42.0	0.1	1.8	-19.7	-19.6	-19.6	104.0	20.8	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 90% open";Well Condition:"";Well Repairs:""
VRLFEW98	6/10/2020 14:35	56.0	40.9	0.3	2.8	-20.4	-20.4	-20.6	96.0	7.2	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 70% open";Well Condition:"";Well Repairs:""
VRLFEW98	6/24/2020 14:27	52.0	38.4	0.8	8.8	-19.8	-19.8	-19.7	91.0	19.2	Valve Adjustment:"No change,Valve 70% open";Well Condition:"";Well Repairs:""
VRLFEW99	6/5/2020 13:28	47.5	37.0	0.0	15.5	-2.2	-2.2	-24.4	115.7	31.8	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""
VRLFEW99	6/19/2020 11:47	45.0	39.0	0.0	16.0	-2.0	-0.6	-17.9	108.0	32.6	Valve Adjustment:"Valve at minimum position,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW99	6/19/2020 11:48	44.8	39.6	0.0	15.6	-0.5	-0.5	-17.2	108.0	7.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLRW002	6/1/2020 15:11	57.9	39.9	0.0	2.2	-16.4	-16.4	-16.6	96.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLRW002	6/16/2020 15:57	58.0	39.4	0.0	2.6	-16.4	-16.4	-16.3	92.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLRW003	6/1/2020 15:33	59.9	35.7	0.4	4.0	-14.0	-14.0	-13.9	88.3	58.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW003	6/16/2020 16:23	60.4	36.4	0.0	3.2	-14.6	-14.5	-14.3	86.0	12.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW004	6/10/2020 16:25	51.9	24.4	4.7	19.0	-16.2	-16.2	-16.1	98.0	6.2	Valve Adjustment:"No change,Valve 90% open";Well Condition:"";Well Repairs:""
VRLRW004	6/16/2020 16:13	57.2	24.1	3.7	15.0	-17.5	-17.4	-17.4	95.0	8.8	Valve Adjustment:"Valve 100% open,Opened valve 1/2 to 1 turn ";Well Condition:"";Well Repairs:""

Bold Italics = HOV approval from BAAQMD

*Some flow readings not available due to no/low flow conditions recorded by the ENVISION

¹Blower Inlet Reading

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH₄ = Methane CO₂ = Carbon Dioxide O₂ = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute % = percent

140°F Temperature HOV (Condition #818 Part 3(b)(i))	Oxygen HC (Condition #8	V - No Limit** 318 Part 3 (b)(ii))	Oxygen I (Condition #8	HOV - 15% 18 Part 3 (c)(ii))
EW-9***	EW-9***	EW-33A***	VRLRW001	VRLRW003
EW-33A***	EW-27		VRLRW002	VRLRW004

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	

 EW-44
 VR12GT4R
 VR12GT05

 **Oxygen concentration shall not apply to these wells as long as the landfill gas (LFG) in the main header has less than 5% O₂ AND greater than 35% CH₄

 ***Approved for both Oxygen and Temperature Higher Operating Value (HOV)

VASCO ROAD LANDFILL Wellfield Monitoring Report - July 1, 7, 9, 16, 20, and 21, 2020

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VR12GT03	7/1/2020 11:04	43.4	30.5	4.7	21.4	-0.1	-0.1	-17.3	95.0	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT03	7/16/2020 14:41	42.8	35.1	0.0	22.1	-0.1	-0.1	-15.2	93.2	21.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT05	7/9/2020 16:31	13.0	19.3	4.7	63.0	-0.1	-0.1	-17.0	97.0	11.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12GT05	7/16/2020 11:29	48.5	36.5	0.2	14.8	-0.2	-0.2	-15.6	91.6	10.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12LR01	7/1/2020 11:45	51.3	34.8	0.1	13.8	-0.1	-0.1	-17.3	92.0	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12LR01	7/16/2020 11:24	52.5	36.6	0.3	10.6	-0.1	-0.1	-16.6	88.2	12.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VR12LR02	7/1/2020 12:51	52.9	35.6	0.9	10.6	-13.0	-13.0	-14.3	98.0	77.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"Flow surging in well";Well Repairs:""
VR12LR02	7/16/2020 12:12	56.0	38.8	0.0	5.2	-13.3	-13.6	-13.9	94.5	56.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"Flow surging in well";Well Repairs:""
VR12LR03	7/1/2020 11:09	55.2	38.7	0.1	6.0	-5.8	-5.8	-10.4	96.0	91.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VR12LR03	7/16/2020 11:02	54.0	38.0	0.2	7.8	-5.6	-5.6	-10.1	98.1	88.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0901	7/1/2020 14:01	40.0	28.9	4.8	26.3	-18.5	-18.5	-19.0	92.0	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0901	7/16/2020 13:25	43.7	31.9	4.7	19.7	-17.5	-17.5	-18.1	90.0	5.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0906	7/7/2020 12:31	48.8	37.1	0.0	14.1	-0.5	-0.6	-17.3	94.0	54.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0906	7/20/2020 13:25	50.5	34.1	0.0	15.4	-0.4	-0.4	-16.0	98.8	44.2	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""
VREW0907	7/9/2020 15:24	49.8	32.9	2.0	15.3	-2.2	-2.2	-18.8	104.9	24.7	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""
VREW0907	7/21/2020 15:29	53.0	36.7	1.5	8.8	-2.0	-2.5	-19.1	103.6	27.0	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW0907	7/21/2020 15:31	52.3	36.8	1.5	9.4	-2.6	-2.6	-19.5	103.6	27.8	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW0908	7/7/2020 18:09	57.4	42.5	0.1	0.0	-19.1	-19.1	-19.3	94.0	12.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0908	7/21/2020 15:08	58.9	38.8	0.0	2.3	-20.1	-20.1	-20.1	98.6	10.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0909	7/7/2020 17:51	54.1	45.8	0.1	0.0	-19.5	-19.4	-19.4	103.0	34.0	Valve Adjustment:"Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW0909	7/21/2020 14:47	55.1	40.5	0.0	4.4	-20.0	-20.1	-20.1	123.6	11.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW0910	7/7/2020 17:21	47.9	38.8	0.0	13.3	-1.5	-1.6	-16.3	104.0	58.4	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0910	7/21/2020 14:26	48.3	34.9	0.0	16.8	-1.5	-1.6	-21.9	108.1	64.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"Flow surging in well";Well Repairs:""
VREW0911	7/7/2020 17:06	35.9	29.6	1.0	33.5	-0.8	-0.3	-13.3	93.0	30.1	Valve Adjustment:"Valve at minimum position,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW0911	7/7/2020 17:08	31.7	26.4	3.3	38.6	-0.2	-0.2	-14.7	93.0	9.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW0911	7/21/2020 13:05	58.7	38.8	0.5	2.0	-0.1	-0.6	-14.5	90.0	9.2	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0911	7/21/2020 13:07	57.9	38.6	0.6	2.9	-0.6	-0.6	-13.6	90.0	30.9	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW0912	7/7/2020 16:44	52.3	40.2	0.0	7.5	-0.4	-0.4	-15.7	104.0	6.1	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""
VREW0912	7/21/2020 12:43	48.7	38.7	0.0	12.6	-0.6	-0.6	-14.3	104.7	7.3	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""
VREW1001	7/9/2020 15:18	46.7	26.6	4.7	22.0	-14.7	-14.7	-18.8	99.5	7.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1001	7/21/2020 15:38	61.9	36.5	0.0	1.6	-0.2	-19.5	-20.1	88.0	0.0	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1001	7/21/2020 15:39	53.2	31.5	2.9	12.4	-19.4	-19.4	-19.1	88.3	8.2	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1003	7/7/2020 18:00	57.6	41.7	0.2	0.5	-19.8	-19.8	-19.8	96.0	12.1	Valve Adjustment:"Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1003	7/21/2020 15:00	59.1	38.3	0.0	2.6	-20.2	-20.2	-20.3	103.5	23.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW1004	7/7/2020 17:27	52.7	42.0	0.0	5.3	-14.1	-15.4	-20.3	98.0	77.9	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 60% open";Well Condition:"";Well Repairs:""
VREW1004	7/7/2020 17:28	52.9	41.7	0.0	5.4	-15.7	-15.7	-20.7	98.0	96.3	Valve Adjustment:"No change,Valve 60% open";Well Condition:"";Well Repairs:""
VREW1004	7/21/2020 14:18	52.4	36.9	0.1	10.6	-15.7	-15.7	-20.3	94.8	47.4	Valve Adjustment:"No change,Valve 60% open";Well Condition:"";Well Repairs:""
VREW1005	7/7/2020 17:32	54.6	45.1	0.0	0.3	-19.3	-19.4	-19.6	100.0	31.7	Valve Adjustment:"Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VREW1005	7/21/2020 14:34	55.7	40.7	0.0	3.6	-20.5	-20.5	-20.7	109.9	50.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VREW1009	7/7/2020 16:19	53.5	38.9	0.0	7.6	-0.2	-0.8	-13.4	102.0	6.1	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1009	7/7/2020 16:21	53.7	39.2	0.0	7.1	-0.9	-0.9	-13.4	102.0	16.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1009	7/21/2020 11:48	36.8	37.4	0.0	25.8	-0.9	-0.6	-14.6	82.8	5.1	Valve Adjustment:"Valve at minimum position,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW1009	7/21/2020 11:49	36.4	37.6	0.0	26.0	-0.5	-0.5	-15.1	85.8	5.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1010	7/7/2020 14:45	50.1	37.9	0.0	12.0	-0.6	-0.6	-12.9	110.0	30.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1010	7/21/2020 10:28	47.8	38.3	0.0	13.9	-0.8	-0.8	-13.7	118.0	27.9	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1011	7/7/2020 14:37	49.3	36.9	0.0	13.8	-0.1	0.0	-13.2	109.0	15.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1011	7/21/2020 10:24	44.3	36.9	0.3	18.5	-0.1	-0.1	-14.1	113.9	10.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VREW1012	7/7/2020 14:32	51.0	37.6	0.0	11.4	-0.6	-0.5	-13.2	110.0	33.8	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW1012	7/21/2020 10:20	49.0	38.4	0.0	12.6	-0.7	-0.7	-14.3	113.2	41.4	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW120A	7/1/2020 14:30	42.8	32.0	0.2	25.0	-7.3	-3.4	-17.9	112.0	0.0	Valve Adjustment:"Closed valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""
VREW120A	7/1/2020 14:32	43.0	31.5	0.2	25.3	-1.7	-1.6	-17.7	112.0	0.0	Valve Adjustment:"No change,Valve 15% open":Well Condition:"":Well Repairs:""
VREW120A	7/16/2020 13:59	54.6	44.7	0.0	0.7	-0.5	-1.9	-17.0	111.9	0.0	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW120A	7/16/2020 14:01	55.7	43.4	0.0	0.9	-3.8	-3.8	-17.4	126.1	11.0	Valve Adjustment:"No change,Valve 20% open":Well Condition:"":Well Repairs:""
VREW122A	7/9/2020 16:24	37.2	30.1	0.0	32.7	-6.1	-4.0	-19.9	128.1	35.3	Valve Adjustment:"Closed valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW122A	7/9/2020 16:26	36.7	30.7	0.0	32.6	-3.7	-3.7	-19.3	127.0	16.4	Valve Adjustment:"No change, Valve 20% open":Well Condition:"":Well Repairs:""
VREW122A	7/16/2020 13:08	44.1	34.0	0.0	21.9	-2.7	-1.5	-17.8	126.1	18.4	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW122A	7/16/2020 13:11	44.3	33.8	0.0	21.9	-1.2	-1.2	-17.6	121.1	3.7	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW126A	7/1/2020 12:31	54.3	41.5	0.0	4.2	-0.5	-0.9	-17.3	101.0	0.0	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW126A	7/1/2020 12:33	53.7	42.2	0.0	4.1	-0.9	-0.9	-19.0	101.0	24.8	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW126A	7/16/2020 11:56	52.3	41.4	0.3	6.0	-1.1	-1.1	-17.0	130.1	13.3	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2001	7/1/2020 13:06	51.6	38.1	0.0	10.3	-1.2	-1.3	-19.9	112.0	11.9	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2001	7/16/2020 12:27	54.6	42.5	0.0	2.9	-1.3	-2.3	-18.4	130.0	24.0	Valve Adjustment:"Opened valve 10% or less,Valve 25% open";Well Condition:"";Well Repairs:""
VREW2001	7/16/2020 12:30	54.4	42.7	0.0	2.9	-2.3	-2.4	-18.5	130.2	46.2	Valve Adjustment:"No change, Valve 25% open";Well Condition:"";Well Repairs:""
VREW2002	7/1/2020 14:18	55.5	39.9	0.0	4.6	-2.8	-3.3	-19.4	111.0	55.6	Valve Adjustment:"Opened valve 10% or less,Valve 40% open";Well Condition:"";Well Repairs:""
VREW2002	7/1/2020 14:20	55.5	40.8	0.0	3.7	-3.7	-3.7	-18.7	111.0	60.5	Valve Adjustment:"No change,Valve 40% open";Well Condition:"";Well Repairs:""
VREW2002	7/16/2020 13:47	52.7	39.5	0.0	7.8	-3.9	-4.9	-17.3	124.0	70.9	Valve Adjustment:"Opened valve 10% or less,Valve 50% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VREW2002	7/16/2020 13:49	52.5	40.2	0.0	7.3	-4.5	-4.5	-16.6	124.0	88.0	Valve Adjustment:"No change,Valve 50% open";Well Condition:"";Well Repairs:""
VREW2003	7/1/2020 14:13	55.0	38.6	0.1	6.3	-4.5	-5.9	-18.5	115.0	37.6	Valve Adjustment:"Opened valve 10% or less,Valve 40% open";Well Condition:"";Well Repairs:""
VREW2003	7/1/2020 14:14	55.2	38.2	0.1	6.5	-6.5	-6.6	-17.4	115.0	52.1	Valve Adjustment:"No change,Valve 40% open";Well Condition:"";Well Repairs:""
VREW2003	7/16/2020 13:37	53.5	38.9	0.2	7.4	-6.9	-8.3	-16.6	125.8	53.9	Valve Adjustment:"Opened valve 10% or less,Valve 50% open";Well Condition:"";Well Repairs:""
VREW2003	7/16/2020 13:40	53.0	38.3	0.2	8.5	-8.3	-8.3	-15.9	125.8	58.8	Valve Adjustment:"No change,Valve 50% open";Well Condition:"";Well Repairs:""
VREW2004	7/1/2020 13:49	54.3	37.5	1.1	7.1	-2.5	-4.1	-19.3	114.0	18.1	Valve Adjustment:"Opened valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VREW2004	7/1/2020 13:52	55.1	37.5	0.8	6.6	-4.4	-4.5	-19.3	114.0	46.0	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""
VREW2004	7/16/2020 13:16	47.2	33.0	3.2	16.6	-4.5	-3.8	-18.5	124.7	56.4	Valve Adjustment:"Closed valve 10% or less,Valve 25% open";Well Condition:"";Well Repairs:""
VREW2004	7/16/2020 13:18	46.6	32.8	3.5	17.1	-3.6	-3.5	-18.5	124.5	39.9	Valve Adjustment:"No change,Valve 25% open";Well Condition:"";Well Repairs:""
VREW2005	7/7/2020 18:03	47.0	36.0	0.0	17.0	-0.9	-0.4	-21.0	104.0	41.7	Valve Adjustment:"Closed valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""
VREW2005	7/7/2020 18:05	47.3	36.6	0.0	16.1	-0.3	-0.3	-21.2	108.0	20.4	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""
VREW2005	7/21/2020 15:03	54.6	36.2	0.0	9.2	-0.2	-0.7	-21.6	109.2	20.7	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2005	7/21/2020 15:05	54.3	35.6	0.0	10.1	-0.8	-0.7	-22.7	110.8	30.2	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2006	7/7/2020 17:46	53.9	46.1	0.0	0.0	-0.1	-1.1	-20.7	102.0	25.1	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2006	7/7/2020 17:48	53.2	46.8	0.0	0.0	-1.6	-1.6	-20.8	102.0	29.6	Valve Adjustment:"No change, Valve 20% open";Well Condition:"";Well Repairs:""
VREW2006	7/21/2020 14:50	45.3	36.0	0.6	18.1	-2.0	-0.7	-22.0	119.1	30.2	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2006	7/21/2020 14:53	44.9	36.1	0.6	18.4	-0.5	-0.4	-21.5	117.5	39.5	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VREW2007	7/7/2020 17:54	47.0	41.1	0.1	11.8	-2.0	-1.3	-22.3	118.0	57.0	Valve Adjustment:"Closed valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2007	7/7/2020 17:56	46.7	40.3	0.1	12.9	-1.1	-1.1	-23.2	118.0	38.9	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VREW2007	7/21/2020 14:55	49.6	38.4	0.0	12.0	-0.7	-0.7	-22.5	126.0	33.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRL0601R	7/7/2020 12:59	52.5	44.9	0.9	1.7	-20.8	-20.7	-21.0	90.0	12.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"Flow surging in well";Well Repairs:""
VRL0601R	7/20/2020 13:49	51.9	39.7	1.0	7.4	-21.0	-21.0	-21.6	88.7	75.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"Flow surging in well":Well Repairs:""
VRL0603R	7/7/2020 12:40	51.1	43.0	0.0	5.9	-0.5	-0.4	-23.5	104.0	15.6	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRL0603R	7/20/2020 13:33	52.4	38.8	0.0	8.8	-0.3	-0.8	-23.2	112.6	13.7	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRL0603R	7/20/2020 13:39	52.3	39.0	0.0	8.7	-1.1	-1.1	-23.5	113.2	31.8	Valve Adjustment:"No change,Valve 10% open":Well Condition:"":Well Repairs:""
VRL0604R	7/7/2020 12:35	46.4	38.4	0.0	15.2	-0.1	-0.1	-18.7	92.0	5.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRL0604R	7/20/2020 13:29	47.1	35.1	0.0	17.8	-0.1	-0.1	-19.2	100.8	24.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW100	7/7/2020 13:20	49.8	40.2	0.0	10.0	-2.8	-2.8	-14.6	95.0	47.5	Valve Adjustment:"No change, Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW100	7/20/2020 11:18	48.9	38.0	0.0	13.1	-2.8	-2.7	-16.4	100.2	44.2	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW101	7/7/2020 17:16	52.0	30.3	0.0	17.7	-0.6	-0.6	-14.7	92.0	5.6	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW101	7/21/2020 13:15	52.8	31.2	0.0	16.0	-0.6	-1.9	-16.4	91.9	2.8	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW101	7/21/2020 13:16	51.2	30.5	0.0	18.3	-2.7	-2.7	-16.2	95.7	15.9	Valve Adjustment:"No change, Valve 20% open":Well Condition:"":Well Repairs:""
VRLEW102	7/7/2020 16:49	51.1	38.2	0.0	10.7	-8.9	-8.9	-10.6	106.0	75.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW102	7/21/2020 12:46	49.2	38.2	0.1	12.5	-8.7	-8.7	-10.6	112.6	68.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW103	7/7/2020 16:28	49.3	37.5	0.0	13.2	-0.1	-0.2	-13.2	100.0	5.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW103	7/21/2020 12:18	41.7	37.2	0.0	21.1	-0.3	-0.3	-12.5	97.0	3.3	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW104	7/7/2020 12:18	56.3	43.7	0.0	0.0	-0.2	-0.2	-0.2	95.0	14.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW104	7/20/2020 13:19	57.4	40.2	0.0	2.4	-0.1	-0.1	-0.5	100.0	25.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	7/7/2020 15:28	49.7	37.0	0.0	13.3	-11.3	-11.3	-11.4	102.0	51.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW105	7/21/2020 12:00	48.9	39.1	0.0	12.0	-11.4	-11.4	-12.5	106.2	43.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW106	7/7/2020 14:06	56.9	37.3	0.0	5.8	-0.1	-0.8	-15.7	95.0	9.0	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW106	7/7/2020 14:07	56.8	37.9	0.0	5.3	-0.8	-0.9	-14.3	95.0	19.9	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW106	7/21/2020 9:56	50.0	37.9	0.0	12.1	-1.2	-1.2	-14.2	70.2	20.4	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW107	7/7/2020 14:13	53.3	39.2	0.0	7.5	-0.1	-0.4	-12.6	101.0	15.7	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW107	7/7/2020 14:14	50.1	39.0	0.0	10.9	-0.3	-0.3	-13.1	101.0	25.9	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW107	7/21/2020 10:05	44.6	36.2	0.0	19.2	-0.5	-0.1	-14.2	70.2	29.5	Valve Adjustment:"Valve at minimum position,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW107	7/21/2020 10:07	44.2	36.1	0.0	19.7	-0.1	-0.1	-14.3	70.2	33.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW108	7/7/2020 11:59	47.4	39.9	0.0	12.7	-0.4	-0.4	-13.0	98.0	14.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW108	7/20/2020 12:58	51.6	37.8	0.0	10.6	-0.1	-0.2	-14.4	108.3	20.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW109	7/7/2020 15:58	49.4	37.3	0.1	13.2	-10.2	-10.2	-12.6	108.0	79.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW109	7/21/2020 11:18	47.2	38.5	0.1	14.2	-11.1	-11.1	-13.3	112.6	86.0	Valve Adjustment:"Closed valve 1/2 to 1 turn ,Valve 90% open";Well Condition:"";Well Repairs:""
VRLEW110	7/1/2020 14:05	57.1	38.2	0.1	4.6	-17.4	-17.5	-17.7	93.0	39.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW110	7/16/2020 13:28	58.3	39.2	0.1	2.4	-16.5	-16.5	-16.9	101.5	9.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW111	7/1/2020 14:09	56.0	39.7	0.6	3.7	-17.1	-17.1	-17.7	94.0	72.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW111	7/16/2020 13:32	56.2	40.5	0.0	3.3	-15.8	-15.8	-16.2	95.0	10.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW112	7/9/2020 15:32	55.0	38.2	0.0	6.8	-16.3	-16.4	-16.6	108.5	28.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW112	7/16/2020 14:10	56.2	40.8	0.0	3.0	-15.4	-15.4	-15.9	107.6	24.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	7/9/2020 15:49	48.1	32.4	1.3	18.2	-17.1	-17.1	-17.3	102.9	14.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW113	7/16/2020 14:13	56.7	40.9	0.0	2.4	-15.8	-15.8	-16.4	101.3	10.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW114	7/9/2020 16:14	51.5	33.3	0.6	14.6	-17.2	-17.2	-17.3	101.5	10.9	Valve Adjustment:"No change, Valve 60% open";Well Condition:"";Well Repairs:""
VRLEW114	7/16/2020 14:34	57.1	38.4	0.2	4.3	-16.1	-16.1	-16.4	91.6	5.8	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 70% open";Well Condition:"";Well Repairs:""
VRLEW116	7/9/2020 15:57	52.4	36.4	4.8	6.4	-17.1	-17.1	-17.3	99.0	12.0	Valve Adjustment:"No change,Valve 90%
VRLEW116	7/16/2020 14:19	52.2	39.8	0.1	7.9	-16.9	-16.8	-17.3	87.1	6.1	Valve Adjustment:"No change, Valve 90% open";Well Condition:"";Well Repairs:""
VRLEW117	7/9/2020 16:01	45.1	33.6	0.0	21.3	-4.3	-2.1	-17.6	94.3		Valve Adjustment:"Closed valve 1/2 turn or less,Valve 10% open";Well Condition:"No flow device";Well Repairs:""
VRLEW117	7/9/2020 16:03	45.2	33.3	0.0	21.5	-1.8	-1.8	-18.0	95.2		Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW117	7/16/2020 14:22	52.5	36.8	0.0	10.7	-0.1	-0.7	-17.3	90.1	6.0	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 15% open";Well Condition:"";Well Repairs:""
VRLEW117	7/16/2020 14:24	52.2	36.7	0.0	11.1	-0.9	-0.9	-17.6	91.0	8.5	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	СН₄	CO ₂	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW128	7/1/2020 13:10	51.7	41.5	0.2	6.6	-17.8	-17.8	-18.3	90.0	95.2	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VRLEW128	7/16/2020 12:32	46.7	41.5	0.0	11.8	-17.8	-16.9	-18.0	92.5	10.9	Valve Adjustment:"Closed valve 1/2 turn or less,Valve 70% open";Well Condition:"";Well Repairs:""
VRLEW128	7/16/2020 12:35	46.3	41.8	0.0	11.9	-16.8	-16.8	-17.4	92.8	7.3	Valve Adjustment:"No change,Valve 70% open";Well Condition:"";Well Repairs:""
VRLEW129	7/1/2020 13:29	51.5	37.3	0.1	11.1	-17.8	-17.8	-19.2	92.0	48.4	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW129	7/16/2020 12:45	45.8	34.6	1.3	18.3	-16.8	-15.8	-17.3	89.6	6.4	Valve Adjustment:"Valve at minimum position,Closed valve 10% or less";Well Condition:"":Well Repairs:""
VRLEW129	7/16/2020 12:48	50.1	38.2	1.3	10.4	-16.8	-16.9	-17.4	89.4	5.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW130	7/1/2020 13:36	57.8	40.3	0.0	1.9	-17.8	-17.8	-18.4	90.0	16.2	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 50% open";Well Condition:"";Well Repairs:""
VRLEW130	7/16/2020 12:52	57.8	40.8	0.0	1.4	-16.8	-16.8	-17.3	102.9	10.5	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 60% open";Well Condition:"";Well Repairs:""
VRLEW131	7/1/2020 13:44	40.4	32.6	0.2	26.8	-17.8	-17.8	-19.0	90.0	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW131	7/16/2020 13:06	23.0	16.3	3.3	57.4	-17.0	-17.1	-17.0	91.0	5.8	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW133	7/1/2020 13:23	53.9	43.6	0.0	2.5	-7.5	-11.4	-18.4	120.0	21.0	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW133	7/1/2020 13:25	53.9	43.7	0.0	2.4	-11.8	-11.8	-18.9	120.0	48.1	Valve Adjustment:"No change, Valve 30% open":Well Condition:"":Well Repairs:""
VRLEW133	7/16/2020 12:42	51.9	39.6	0.0	8.5	-12.0	-12.0	-17.7	130.2	45.2	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW134	7/7/2020 17:11	51.2	37.9	0.7	10.2	-0.8	-0.9	-15.4	90.0	12.4	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW134	7/21/2020 13:10	48.6	37.2	0.8	13.4	-0.8	-0.9	-15.2	79.2	15.1	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW135	7/1/2020 12:23	55.5	37.3	0.7	6.5	-1.7	-4.3	-13.2	96.0	0.0	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW135	7/1/2020 12:28	55.4	36.8	0.7	7.1	-4.3	-4.3	-12.2	98.0	0.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW135	7/16/2020 11:51	51.2	34.8	2.1	11.9	-3.9	-3.9	-11.2	106.7	9.1	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW136	7/1/2020 13:18	48.6	35.9	0.4	15.1	-9.3	-9.3	-6.5	94.0	19.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW136	7/16/2020 12:37	47.7	37.3	0.4	14.6	-8.3	-8.3	-7.6	97.2	10.4	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW138	7/1/2020 13:56	55.7	40.4	0.1	3.8	-18.1	-18.1	-18.3	89.0	24.1	Valve Adjustment:"Opened valve 10% or less,Valve 40% open";Well Condition:"";Well Repairs:""
VRLEW138	7/16/2020 13:22	52.3	39.0	1.4	7.3	-17.5	-17.5	-18.0	90.7	9.3	Valve Adjustment:"No change, Valve 40% open";Well Condition:"";Well Repairs:""
VRLEW139	7/7/2020 18:17	50.4	42.6	0.0	7.0	-6.1	-6.2	-19.1	101.0	48.5	Valve Adjustment:"No change, Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW139	7/21/2020 15:12	48.5	36.7	0.0	14.8	-6.1	-6.2	-18.1	109.0	53.8	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO ₂	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW140	7/7/2020 13:03	51.9	43.1	0.0	5.0	-1.9	-1.9	-18.0	110.0	26.8	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW140	7/20/2020 13:53	49.9	37.3	0.4	12.4	-1.8	-1.8	-17.2	117.0	30.7	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW141	7/7/2020 13:09	51.7	42.1	0.0	6.2	-0.9	-0.9	-18.3	100.0		Valve Adjustment:"No change,Valve 15% open";Well Condition:"No flow device";Well Repairs:""
VRLEW141	7/20/2020 13:58	51.7	37.9	0.0	10.4	-0.8	-0.8	-18.9	112.3		Valve Adjustment:"No change,Valve 15% open";Well Condition:"No flow device";Well Repairs:""
VRLEW142	7/7/2020 12:52	52.1	45.7	0.0	2.2	-0.9	-0.9	-18.0	116.0	38.8	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW142	7/20/2020 13:45	50.8	40.7	0.0	8.5	-0.8	-0.8	-20.4	126.0	40.4	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW145	7/1/2020 12:18	56.9	39.2	0.0	3.9	-16.8	-16.8	-16.8	97.0	0.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW145	7/16/2020 11:47	57.3	41.0	0.1	1.6	-13.0	-13.1	-13.2	108.3	12.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW146	7/1/2020 14:24	43.0	33.6	0.0	23.4	-9.9	-8.6	-17.1	99.0	55.3	Valve Adjustment:"Closed valve 10% or less,Valve 40% open";Well Condition:"";Well Repairs:""
VRLEW146	7/1/2020 14:26	42.7	33.7	0.0	23.6	-9.1	-9.0	-17.9	99.0	57.6	Valve Adjustment:"No change,Valve 40% open";Well Condition:"";Well Repairs:""
VRLEW146	7/16/2020 13:52	41.4	34.4	0.0	24.2	-8.3	-6.9	-16.2	100.6	56.6	Valve Adjustment:"Closed valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW146	7/16/2020 13:55	41.0	34.4	0.0	24.6	-6.6	-6.6	-19.5	100.6	51.5	Valve Adjustment:"No change, Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW147	7/7/2020 18:21	47.8	37.1	3.0	12.1	-1.1	-1.1	-18.3	92.0	10.1	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW147	7/21/2020 15:16	53.0	36.6	1.6	8.8	-7.6	-13.0	-19.0	90.1	20.4	Valve Adjustment:"Opened valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""
VRLEW147	7/21/2020 15:19	48.1	33.3	3.2	15.4	-11.3	-11.3	-18.6	90.5	29.6	Valve Adjustment:"No change, Valve 15% open";Well Condition:"";Well Repairs:""
VRLEW148	7/1/2020 11:28	55.2	35.6	0.0	9.2	-0.5	-1.8	-18.3	100.0	0.0	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW148	7/1/2020 11:30	54.7	35.6	0.0	9.7	-1.9	-1.9	-17.6	100.0	7.4	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW148	7/16/2020 11:12	50.9	36.0	0.0	13.1	-2.5	-2.5	-18.2	112.8	32.2	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW149	7/1/2020 12:08	51.6	37.0	1.1	10.3	-0.5	-0.5	-17.3	111.0	15.3	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW149	7/16/2020 11:40	51.3	37.5	1.5	9.7	-0.6	-0.6	-16.4	126.9	6.9	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW150	7/1/2020 11:20	59.1	36.3	0.0	4.6	-0.1	-1.5	-18.0	100.0	0.0	Valve Adjustment:"Opened valve 10% or less,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW150	7/1/2020 11:21	59.0	36.8	0.0	4.2	-1.6	-1.6	-17.7	100.0	20.2	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW150	7/16/2020 11:09	49.6	34.3	2.5	13.6	-1.8	-1.8	-17.0	104.2	22.2	Valve Adjustment:"No change,Valve 30% open";Well Condition:"";Well Repairs:""
VRLEW151	7/1/2020 11:14	58.0	37.4	0.1	4.5	-17.5	-17.5	-17.3	89.0	49.7	Valve Adjustment:"Valve 100% open,Opened valve 10% or less";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW151	7/16/2020 11:06	57.8	38.7	0.1	3.4	-16.5	-16.5	-16.9	88.0	7.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW152	7/1/2020 11:00	52.2	36.2	0.0	11.6	-1.5	-1.5	-17.3	94.0	0.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW152	7/16/2020 10:54	50.3	35.9	0.0	13.8	-1.5	-1.5	-16.3	92.1	11.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW153	7/1/2020 10:55	46.7	34.2	0.0	19.1	-14.3	-13.4	-17.2	92.0	36.8	Valve Adjustment:"Closed valve 10% or less,Valve 50% open";Well Condition:"";Well Repairs:""
VRLEW153	7/1/2020 10:57	46.3	34.6	0.0	19.1	-13.4	-13.4	-17.1	92.0	43.8	Valve Adjustment:"No change,Valve 50% open";Well Condition:"";Well Repairs:""
VRLEW153	7/16/2020 10:52	48.3	36.2	0.0	15.5	-12.7	-12.7	-16.0	98.4	41.4	Valve Adjustment:"No change,Valve 50% open";Well Condition:"";Well Repairs:""
VRLEW154	7/1/2020 10:50	57.2	38.1	0.0	4.7	-16.8	-16.8	-17.4	90.0	65.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW154	7/16/2020 10:48	56.9	39.4	0.0	3.7	-16.8	-16.8	-17.2	95.9	15.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW155	7/1/2020 12:13	56.1	39.4	0.2	4.3	-16.1	-16.1	-16.6	91.0	11.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW155	7/16/2020 11:44	55.7	41.7	0.0	2.6	-13.1	-13.1	-13.0	90.9	23.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW156	7/1/2020 11:40	44.3	28.1	3.1	24.5	-0.4	-0.4	-17.8	91.0	36.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW156	7/16/2020 11:19	50.0	30.6	2.5	16.9	-0.5	-0.5	-17.2	94.8	3.8	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW157	7/1/2020 11:34	53.6	31.1	0.4	14.9	-0.1	-0.9	-17.8	90.0	0.0	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW157	7/1/2020 11:37	54.7	31.7	0.3	13.3	-1.4	-1.4	-17.9	90.0	24.7	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW157	7/16/2020 11:15	49.3	32.3	1.2	17.2	-1.9	-1.9	-17.0	109.2	13.3	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW158	7/1/2020 11:55	48.3	28.7	3.9	19.1	-1.2	-1.2	-17.7	100.0	0.0	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW158	7/16/2020 11:33	50.1	29.9	3.7	16.3	-1.1	-1.1	-16.6	110.1	8.4	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW159	7/1/2020 12:02	56.6	35.3	0.0	8.1	-16.1	-16.1	-16.8	110.0	9.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW159	7/16/2020 11:36	56.4	36.4	0.0	7.2	-15.8	-15.8	-16.6	124.2	33.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW160	7/1/2020 12:44	56.7	34.9	0.0	8.4	-0.2	-0.2	-18.0	105.0	0.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW160	7/16/2020 12:05	60.4	36.3	0.0	3.3	-0.1	-1.1	-16.4	112.1	6.5	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW160	7/16/2020 12:08	60.2	36.5	0.0	3.3	-1.6	-1.6	-17.7	118.6	15.3	Valve Adjustment:"No change, Valve 20% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW161	7/1/2020 12:39	55.2	33.8	0.7	10.3	-0.6	-0.6	-17.8	93.0	0.0	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW161	7/16/2020 11:59	53.1	35.5	1.6	9.8	-0.7	-1.0	-16.8	97.0	3.1	Valve Adjustment:"Opened valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""
VRLEW161	7/16/2020 12:02	53.4	35.0	2.2	9.4	-1.3	-1.3	-16.9	108.7	9.6	Valve Adjustment:"No change,Valve 15% open";Well Condition:"";Well Repairs:""
VRLEW162	7/1/2020 12:56	52.8	36.8	0.0	10.4	-9.9	-9.9	-17.1	112.0	72.7	Valve Adjustment:"No change,Valve 80% open";Well Condition:"";Well Repairs:""
VRLEW162	7/16/2020 12:17	53.0	38.7	0.0	8.3	-10.0	-9.9	-15.4	123.4	82.1	Valve Adjustment:"Opened valve 10% or less,Valve 90% open";Well Condition:"";Well Repairs:""
VRLEW163	7/1/2020 13:00	48.9	31.8	0.0	19.3	-0.1	-0.1	-18.5	108.0	0.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW163	7/16/2020 12:21	55.1	35.1	0.0	9.8	-0.1	-0.4	-17.1	118.8	5.5	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW163	7/16/2020 12:24	55.1	35.4	0.0	9.5	-0.5	-0.5	-17.8	126.3	21.7	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW31A	7/7/2020 14:59	45.6	35.8	0.0	18.6	-3.8	-3.7	-12.0	100.0		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW31A	7/21/2020 10:37	45.4	37.6	0.0	17.0	-3.9	-3.9	-14.0	101.1		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLEW33A	7/7/2020 15:25	37.4	28.6	0.0	34.0	-0.7	-0.7	-12.6	93.0	6.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW33A	7/21/2020 12:03	34.5	28.3	0.6	36.6	-0.8	-0.8	-13.7	92.3	1.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW34A	7/7/2020 14:53	47.5	37.5	0.0	15.0	-1.1	-0.7	-13.5	110.0	38.6	Valve Adjustment:"Closed valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW34A	7/7/2020 14:56	48.0	37.6	0.0	14.4	-0.7	-0.6	-14.2	110.0	26.9	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW34A	7/21/2020 10:33	48.6	38.6	0.0	12.8	-0.7	-0.7	-15.2	114.1	22.8	Valve Adjustment:"No change, Valve 20% open";Well Condition:"";Well Repairs:""
VRLEW38A	7/7/2020 15:44	30.1	26.8	4.9	38.2	-1.1	-0.5	-13.7	108.0	29.2	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW38A	7/21/2020 11:08	18.9	22.6	4.0	54.5	-0.1	-0.1	-13.5	107.5	4.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW68A	7/7/2020 15:53	46.6	35.4	2.9	15.1	-0.8	-0.4	-14.0	110.0	33.8	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW68A	7/7/2020 15:54	47.4	35.5	2.5	14.6	-0.3	-0.3	-14.0	110.0	41.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW68A	7/21/2020 11:00	45.9	37.7	1.8	14.6	-0.1	-0.1	-14.0	114.3	35.5	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW71B	7/7/2020 16:58	39.1	33.9	0.0	27.0	-0.2	-0.2	-14.6	108.0	38.1	Valve Adjustment:"Valve at minimum position,Closed valve 10% or less";Well Condition:"";Well Repairs:""
VRLEW71B	7/7/2020 17:02	38.9	35.0	0.0	26.1	-0.1	-0.1	-14.3	108.0	6.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH4	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLEW71B	7/21/2020 12:51	40.2	35.4	0.0	24.4	-0.1	-0.1	-16.3	98.2	20.7	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW72R	7/7/2020 12:24	53.0	42.3	0.0	4.7	-12.3	-12.3	-13.7	103.0	76.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW72R	7/20/2020 13:22	52.8	38.9	0.0	8.3	-12.0	-12.0	-13.9	114.3	76.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	7/9/2020 16:11	55.9	36.2	0.1	7.8	-17.1	-17.1	-17.3	95.2	7.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW74A	7/16/2020 14:31	55.0	36.9	0.1	8.0	-16.1	-16.1	-16.3	90.1	5.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW86A	7/7/2020 15:36	47.4	36.9	0.0	15.7	-0.6	-0.3	-13.2	107.0	29.0	Valve Adjustment:"Closed valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""
VRLEW86A	7/7/2020 15:39	48.2	37.8	0.0	14.0	-0.3	-0.3	-14.6	107.0	32.9	Valve Adjustment:"No change, Valve 15% open";Well Condition:"";Well Repairs:""
VRLEW86A	7/21/2020 11:11	47.0	38.7	0.0	14.3	-0.3	-0.1	-14.1	108.7	14.4	Valve Adjustment:"Valve at minimum position,Closed valve 10% or less";Well Condition:"";Well Repairs:""
VRLEW86A	7/21/2020 11:15	46.9	38.8	0.0	14.3	-0.1	-0.1	-13.7	104.9	5.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLEW90A	7/9/2020 15:29	54.3	38.1	0.1	7.5	-16.9	-16.8	-16.7	104.0	22.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW90A	7/16/2020 14:08	55.8	41.9	0.3	2.0	-16.5	-16.5	-16.3	97.0	14.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLEW93A	7/7/2020 18:13	52.7	40.2	0.8	6.3	-7.8	-9.6	-19.6	92.0	13.0	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW93A	7/7/2020 18:14	53.0	41.0	0.8	5.2	-10.9	-10.9	-19.7	92.0	34.9	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLEW93A	7/21/2020 15:10	52.2	33.6	1.7	12.5	-18.8	-18.8	-19.5	91.9	5.2	Valve Adjustment:"No change,Valve 10% open":Well Condition:"":Well Repairs:""
VRLFEW09	7/7/2020 11:20	56.7	42.7	0.5	0.1	-16.3	-16.4	-15.2	83.0	49.1	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 90% open";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW09	7/20/2020 12:02	56.7	41.6	0.0	1.7	-18.6	-18.5	-18.5	90.7	22.5	Valve Adjustment:"Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW14	7/7/2020 11:25	56.3	43.7	0.0	0.0	-15.7	-15.7	-15.9	109.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW14	7/20/2020 12:06	56.9	42.8	0.0	0.3	-13.9	-13.9	-13.8	114.6		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW19	7/7/2020 11:03	50.3	38.7	2.9	8.1	-14.1	-14.0	-14.8	91.0	30.3	Valve Adjustment:"No change, Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW19	7/20/2020 11:41	49.3	37.6	3.0	10.1	-12.6	-12.6	-13.7	94.5	32.5	Valve Adjustment:"No change, Valve 80% open";Well Condition:"":Well Repairs:""
VRLFEW23	7/7/2020 16:37	50.1	36.4	0.0	13.5	-3.4	-3.5	-13.0	95.0	23.3	Valve Adjustment:"No change, Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW23	7/21/2020 12:39	48.5	38.7	0.1	12.7	-3.9	-3.9	-13.7	97.0	27.2	Valve Adjustment:"No change, Valve 20% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW25	7/7/2020 11:31	56.3	43.7	0.0	0.0	-13.3	-13.3	-13.7	82.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW25	7/20/2020 12:14	55.7	42.6	0.0	1.7	-13.1	-13.1	-13.3	114.3		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	7/7/2020 15:11	34.6	25.4	8.2	31.8	-0.8	-0.8	-12.9	98.0		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	7/21/2020 10:42	30.6	24.2	9.7	35.5	-0.8	-0.8	-14.5	79.7		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW27	7/21/2020 10:44	30.2	24.2	9.8	35.8	-1.1	-1.1	-14.2	80.0		Valve Adjustment:"No change, Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	7/7/2020 12:06	54.6	45.4	0.0	0.0	-14.6	-14.5	-14.1	93.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW30	7/20/2020 13:02	56.6	40.5	0.0	2.9	-14.8	-14.8	-14.8	98.1		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	7/7/2020 16:53	50.4	35.7	0.0	13.9	-4.0	-4.0	-11.2	102.0		Valve Adjustment:"No change,Valve 20% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW41	7/21/2020 12:57	47.9	34.8	0.0	17.3	-4.2	-4.2	-12.0	107.2		Valve Adjustment:"No change,Valve 20% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	7/7/2020 14:01	58.2	38.4	0.2	3.2	-15.8	-15.7	-15.7	102.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW42	7/21/2020 9:52	57.0	39.7	0.3	3.0	-14.5	-14.5	-14.6	82.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	7/7/2020 11:34	48.5	41.9	0.0	9.6	-4.4	-4.4	-14.0	102.0		Valve Adjustment:"No change,Valve 50% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW44	7/20/2020 12:19	48.2	40.1	0.0	11.7	-4.4	-4.5	-14.6	109.4		Valve Adjustment:"No change,Valve 50% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	7/7/2020 14:19	42.7	31.8	0.0	25.5	-0.1	-0.1	-13.0	100.0		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW63	7/21/2020 10:12	40.5	33.2	0.0	26.3	-0.1	-0.2	-14.1	70.2		Valve Adjustment:"No change,Valve at minimum position";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	7/7/2020 16:34	51.4	37.5	0.0	11.1	-2.5	-2.4	-13.3	96.0		Valve Adjustment:"No change,Valve 10% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW64	7/21/2020 12:28	49.1	39.8	0.0	11.1	-2.6	-2.6	-13.7	84.9		Valve Adjustment:"No change,Valve 10% open";Well Condition:"No flow device";Well Repairs:""
VRLFEW65	7/7/2020 15:17	55.8	41.3	0.3	2.6	-13.3	-13.3	-13.4	94.0	18.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW65	7/21/2020 10:52	56.1	42.6	0.1	1.2	-12.8	-12.8	-12.9	84.4	29.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW76	7/7/2020 13:17	50.9	41.4	0.1	7.6	-2.8	-2.8	-25.9	94.0	27.7	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	0 ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW76	7/20/2020 11:14	49.4	37.8	0.1	12.7	-2.7	-2.7	-26.1	95.5	28.6	Valve Adjustment:"No change,Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW77	7/7/2020 10:47	52.2	38.8	0.1	8.9	-6.1	-6.1	-17.2	90.0	49.9	Valve Adjustment:"No change,Valve 40% open";Well Condition:"";Well Repairs:""
VRLFEW77	7/20/2020 11:22	48.8	38.1	0.0	13.1	-5.6	-5.6	-16.1	91.9	49.5	Valve Adjustment:"No change, Valve 40% open";Well Condition:"";Well Repairs:""
VRLFEW78	7/7/2020 10:51	49.8	39.6	0.0	10.6	-1.5	-1.5	-18.5	90.0	27.9	Valve Adjustment:"No change, Valve 20% open":Well Condition:"":Well Repairs:""
VRLFEW78	7/20/2020 11:26	48.0	38.8	0.0	13.2	-1.3	-1.3	-18.1	92.7	23.7	Valve Adjustment:"No change, Valve 20% open":Well Condition:"":Well Repairs:""
VRLFEW79	7/7/2020 10:55	53.8	39.6	0.0	6.6	-3.0	-4.2	-18.6	90.0	34.8	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 30% open";Well Condition:"";Well Repairs:""
VRLFEW79	7/7/2020 10:58	53.8	39.6	0.0	6.6	-4.4	-4.5	-18.7	90.0	29.2	Valve Adjustment:"No change, Valve 30% open":Well Condition:"":Well Repairs:""
VRLFEW79	7/20/2020 11:35	48.6	37.9	0.0	13.5	-5.4	-5.5	-17.8	93.6	29.0	Valve Adjustment:"No change, Valve 30% open":Well Condition:"":Well Repairs:""
VRLFEW80	7/7/2020 16:24	52.6	38.9	0.0	8.5	-1.2	-2.0	-13.6	110.0	19.8	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 20% open";Well Condition:"";Well Repairs:""
VRLFEW80	7/7/2020 16:26	52.3	39.1	0.0	8.6	-2.1	-2.1	-14.8	110.0	33.0	Valve Adjustment:"No change, Valve 20% open":Well Condition:"":Well Repairs:""
VRLFEW80	7/21/2020 12:15	48.1	39.5	0.0	12.4	-2.6	-2.6	-14.2	116.8	25.6	Valve Adjustment:"No change, Valve 20%
VRLFEW81	7/7/2020 16:10	49.3	37.5	0.0	13.2	-1.5	-1.6	-11.3	110.0	23.8	Valve Adjustment:"No change, Valve 10% open":Well Condition:"":Well Repairs:""
VRLFEW81	7/21/2020 11:33	43.6	36.5	0.0	19.9	-1.9	-0.9	-12.6	100.0	25.4	Valve Adjustment:"Valve at minimum position,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW81	7/21/2020 11:34	42.9	37.6	0.0	19.5	-0.7	-0.7	-13.5	97.7	5.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLFEW82	7/7/2020 16:05	56.7	40.5	0.0	2.8	-10.9	-11.0	-11.6	111.0	44.7	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW82	7/21/2020 11:25	56.4	41.5	0.0	2.1	-11.5	-11.4	-11.9	116.2	51.5	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW83	7/7/2020 16:14	52.8	39.0	0.0	8.2	-3.8	-3.9	-6.1	94.0	79.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW83	7/21/2020 11:42	45.4	38.5	0.0	16.1	-3.1	-2.2	-7.6	90.0	56.0	Valve Adjustment:"Closed valve 1/2 to 1 turn ,Valve 90% open";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW83	7/21/2020 11:44	45.5	39.2	0.0	15.3	-2.6	-2.7	-7.9	90.1	77.7	Valve Adjustment:"No change,Valve 90% open";Well Condition:"Flow surging in well";Well Repairs:""
VRLFEW84	7/7/2020 12:15	56.4	43.6	0.0	0.0	-0.2	-0.2	-0.3	100.0	19.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW84	7/20/2020 13:08	57.3	40.8	0.0	1.9	0.2	0.1	0.1	108.1	16.4	Valve Adjustment:"NSPS/CAI,Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""
VRLFEW84	7/20/2020 13:12	57.8	40.3	0.0	1.9	-0.1	-0.1	-0.2	108.1	26.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW85	7/7/2020 11:07	50.4	40.0	0.0	9.6	-0.7	-0.7	-15.2	89.0	38.9	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLFEW85	7/20/2020 11:45	49.2	38.7	0.0	12.1	-0.6	-0.6	-15.1	91.2	41.7	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW87	7/7/2020 11:39	51.3	42.5	0.0	6.2	-1.3	-1.3	-14.9	105.0	40.5	Valve Adjustment:"No change, Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW87	7/20/2020 12:22	49.8	39.8	0.0	10.4	-1.1	-1.0	-14.6	116.1	48.8	Valve Adjustment:"No change, Valve 10% open":Well Condition:"":Well Repairs:""
VRLFEW88	7/7/2020 11:43	50.1	40.1	0.0	9.8	-0.7	-0.7	-14.0	102.0	40.1	Valve Adjustment:"No change,Valve 10% open":Well Condition:"":Well Repairs:""
VRLFEW88	7/20/2020 12:26	49.4	38.3	0.0	12.3	-0.6	-0.6	-14.2	108.7	38.7	Valve Adjustment:"No change,Valve 10% open":Well Condition:"":Well Repairs:""
VRLFEW89	7/7/2020 11:50	49.0	38.2	0.0	12.8	-0.1	-0.1	-13.9	82.0	11.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLFEW89	7/20/2020 12:32	50.2	35.8	0.0	14.0	-0.2	-0.1	-14.9	96.3	33.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""
VRLFEW92	7/9/2020 15:22	57.5	35.0	0.1	7.4	-16.3	-16.3	-18.5	98.4	9.9	Valve Adjustment:"Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW92	7/21/2020 15:33	59.3	38.7	0.0	2.0	-17.1	-17.1	-19.2	95.2	7.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW94	7/7/2020 18:27	54.9	43.0	0.2	1.9	-19.5	-19.5	-20.1	98.0	13.0	Valve Adjustment:"Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW94	7/21/2020 15:23	56.4	39.5	0.1	4.0	-19.4	-19.4	-20.7	114.1	48.8	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW96	7/7/2020 17:43	55.0	44.9	0.1	0.0	-19.3	-19.3	-19.8	100.0	13.8	Valve Adjustment:"Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""
VRLFEW96	7/21/2020 14:43	55.9	41.1	0.0	3.0	-20.1	-20.1	-20.7	106.5	30.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLFEW98	7/7/2020 17:38	54.0	44.2	0.5	1.3	-20.5	-20.5	-20.4	86.0	27.3	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 80% open";Well Condition:"";Well Repairs:""
VRLFEW98	7/21/2020 14:39	54.9	39.8	0.8	4.5	-20.1	-20.0	-20.4	88.5	19.1	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 90% open";Well Condition:"";Well Repairs:""
VRLFEW99	7/7/2020 12:47	54.9	41.7	0.0	3.4	-0.2	-0.7	-21.5	100.0	6.8	Valve Adjustment:"Opened valve 1/2 turn or less,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW99	7/7/2020 12:50	54.3	41.8	0.0	3.9	-0.7	-0.8	-22.4	100.0	18.4	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLFEW99	7/20/2020 13:41	51.0	38.4	0.0	10.6	-0.9	-0.9	-23.3	115.5	22.0	Valve Adjustment:"No change,Valve 10% open";Well Condition:"";Well Repairs:""
VRLRW002	7/9/2020 15:52	55.4	38.4	0.0	6.2	-16.2	-16.3	-16.1	103.8		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLRW002	7/16/2020 14:15	56.7	40.7	0.0	2.6	-15.2	-15.1	-15.4	95.0		Valve Adjustment:"No change,Valve 100% open";Well Condition:"No flow device";Well Repairs:""
VRLRW003	7/9/2020 16:09	58.5	34.4	0.0	7.1	-14.0	-14.0	-14.3	102.4	8.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW003	7/16/2020 14:29	59.5	36.5	0.0	4.0	-13.0	-13.1	-13.2	91.2	5.2	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Device ID	Date and Time	CH₄	CO2	O ₂	BAL	Initial Static Pressure	Adjusted Static Pressure	Lateral Pressure	Initial Temperature	Initial Flow ¹	Comments
		%	%	%	%	in-wc.	in-wc.	in-wc.	Deg. F	scfm	
VRLRW004	7/9/2020 16:05	47.8	19.6	4.8	27.8	-16.3	-16.4	-16.5	97.3	6.9	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""
VRLRW004	7/16/2020 14:26	56.6	24.9	3.1	15.4	-15.8	-15.8	-16.2	90.7	4.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""

Bold Italics = HOV approval from BAAQMD

*Some flow readings not available due to no/low flow conditions recorded by the ENVISION

¹Blower Inlet Reading

NSPS CAI = New Source Performance Standards Corrective Action Initiated

CH₄ = Methane CO₂ = Carbon Dioxide O₂ = Oxygen BAL = Balance Gas, usually nitrogen in-wc. = inches of water column Deg. F. = degrees in Fahrenheit scfm = standard cubic feet per minute % = percent

140°F Temperature HOV	Oxygen HO	V - No Limit**	Oxygen I	HOV - 15%
(Condition #818 Part 3(b)(i))	(Condition #8	18 Part 3 (b)(ii))	(Condition #8	18 Part 3 (c)(ii))
EW-9***	EW-9***	EW-33A***	VRLRW001	VRLRW003
EW-33A***	EW-27		VRLRW002	VRLRW004
EW-44			VR12GT4R	VR12GT05

**Oxygen concentration shall not apply to these wells as long as the landfill gas (LFG) in the main header has less than 5% O2 AND greater than 35% CH4

***Approved for both Oxygen and Temperature Higher Operating Value (HOV)

APPENDIX K

WELLFIELD DEVIATION LOG

					FEBRUA	RY 1, 2020 THR	VASCO F	ROAD LANDFILL / 31, 2020 WELLFIELD DEVIATION REPORT	
REPORT PREPARE UPDATED DATE: LFG MONITORING MODEL: 2000 DATE LAST CALIBI	D BY: Tetra Tech 8/1/2020 DEVICE: GEM 2000 RATED: DAILY								
Well ID	Date and Time	CH₄	CO ₂	O ₂	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days
VR12GT03	5/14/2020 11:05	18.2	16.3	12.6	52.9	-0.2	79.0	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VR12GT03	5/14/2020 11:06	14.6	12.5	15.7	57.2	-0.2	80.1	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VR12GT03	5/18/2020 13:37	14.9	13.7	12.9	58.5	-0.2	78.1	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VR12GT03	6/10/2020 16:32	21.1	16.5	3.9	58.5	-0.2	99.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""	27
Comments: An oxyg	en exceedance was detecte	ed at VR1	2GT03 c	n May 1	4, 2020. T	etra Tech O&M	personnel in	itiated corrective action and the well was adjusted and re-monitored or ted	the same day and the date noted above, but the
VR12GT05	5/14/2020 11:55	4.5	6.9	16.9	71.7	-0.1	76.8	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"":Well Repairs:""	
VR12GT05	5/14/2020 11:58	4.1	6.5	16.8	72.6	-0.1	77.0	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less,Valve at minimum position";Well Condition:"";Well Repairs:""	
VR12GT05	5/27/2020 16:49	10.6	18.3	7.7	63.4	-0.1	102.4	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""	13
Comments: An oxyg	en exceedance was detecte	ed at VR1	2GT05 o	n May 1	4, 2020. VI	R12GT05 has a	in oxygen HC	V of 15%.Tetra Tech O&M personnel initiated corrective action and the	well was adjusted and re-monitored on the same
day, but the well ten		ven was n			ay 27, 202		exceedance	Valve Adjustment:"NSPS/CAI.Closed valve 1/2 turn or less":Well	
VR12LR01	5/14/2020 11:51	26.6	20.2	10.3	42.9	-0.5	85.1	Condition:"";Well Repairs:"" Valve Adjustment:"NSPS/CALClosed valve 1/2 turn or less":Well	
VR12LR01	5/14/2020 11:53	25.4	18.7	10.1	45.8	-0.1	85.3	Condition:"";Well Repairs:""	
VR12LR01	5/28/2020 15:58	51.2	35.8	0.1	12.9	-0.1	104.0	Condition:"";Well Repairs:""	14
Comments: An oxyg The well was re-mor	en exceedance was detecte itored on May 28, 2020, an	d at VR12 d no furthe	2LR01 or er exceed	i May 14 dance wa	, 2020. Tet as detected	tra Tech O&M p 1.	ersonnel initia	ated corrective action and the well was adjusted and re-monitored on the	e same day, but the well remained in exceedance.
VREW0901	4/27/2020 13:24	12.6	8.1	16.3	63.0	-6.5	88.3	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well	
VREW0901	4/27/2020 13:27	12.1	7.9	16.5	63.5	-12.0	88.2	Valve Adjustment:"NSPS/CAI, Valve at minimum position";Well	
VREW0901	5/8/2020 14:14	1.1	0.3	20.0	78.6	-17.8	102.7	Valve Adjustment:"NSPS/CAI, Valve at minimum position";Well Condition:"":Well Renairs:""	
VREW0901	5/27/2020 16:34	50.5	36.0	3.3	10.2	-19.1	102.6	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"":Well Repairs:""	30
Comments: An oxyg	en exceedance was detecte	ed at VRE	W0901 o	on April 2	27, 2020. T	Tetra Tech O&M	1 personnel ir	itiated corrective action and the well was adjusted and re-monitored or	the same day and the date noted above, but the
	4/6/2020 12:52	22.0	10.2	12.1				Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well	
	4/0/2020 13:33	22.3	10.0	12.1	40.7	-0.5	09.0	Condition:"";Well Repairs:""	
VREW0907	4/6/2020 13:55	25.6	20.6	11.0	42.8	-0.4	86.9	Valve Adjustment:"NSPS/CAI";Well Condition:"";Well Repairs:""	
VREW0907	4/13/2020 12:29	52.4	40.3	0.2	7.1	-0.3	97.7	Condition:"";Well Repairs:""	7
The well was re-mor	en exceedance was detecte iitored on April 13, 2020. an	d no furth	vvu907 o er excee	n April 6 dance w	, 2020. Tet as detected	ura ⊺ecn O&M p∘ d.	ersonnel initia	ared corrective action and the well was adjusted and re-monitored on the	e same day, but the well remained in exceedance.
VREW0908	2/7/2020 15:02	62.5	37.4	0.1	0.0	17.1	78.6	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	

Well ID	Date and Time	CH₄	CO2	02	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period	
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days	
VREW0908	2/7/2020 15:05	62.6	37.4	0.0	0.0	17.0	79.2	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0908	2/19/2020 17:48	63.4	36.6	0.0	0.0	21.1	60.4	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0908	3/4/2020 15:03	63.5	36.5	0.0	0.0	22.9	83.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0908	3/23/2020 14:31	63.9	36.1	0.0	0.0	21.3	54.1	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0908	4/6/2020 15:51	63.6	36.4	0.0	0.0	23.7	57.6	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0908	4/27/2020 12:52	58.9	41.1	0.0	0.0	25.0	83.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0908	5/4/2020 14:27	57.1	38.3	0.1	4.5	-8.2	84.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""	87	
Comments: A pressure exceedance was detected at VREW0908 on February 7, 2020. Tetra Tech O&M personnel initiated corrective action and the well was adjusted and re-monitored on the same day and the dates noted above, but										
the well remained in exceedance. The well was re-monitored on May 4, 2020, and no further exceedance was detected.										
VREW0909	1/15/2020 12:17	60.9	39.1	0.0	0.0	3.0	53	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0909	1/15/2020 12:19	61.4	38.6	0.0	0.0	3.0	54	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0909	1/28/2020 10:17	60.9	39.1	0.0	0.0	0.3	55	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0909	1/28/2020 10:18	61.2	38.8	0.0	0.0	0.4	56	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0909	2/13/2020 14:51	61.9	38.1	0.0	0.0	2.0	73.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0909	2/13/2020 14:53	62.6	37.4	0.0	0.0	2.0	74.1	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0909	2/21/2020 8:51	62.1	37.9	0.0	0.0	1.4	68.4	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0909	3/4/2020 14:32	62.4	37.6	0.0	0.0	2.2	85.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""		
VREW0909	3/23/2020 14:22	62.8	37.2	0.0	0.0	1.9	54.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0909	4/6/2020 15:40	61.0	39.0	0.0	0.0	1.6	63.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW0909	4/27/2020 12:36	56.1	43.9	0.0	0.0	1.2	87.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss":Well Repairs:""		
VREW0909	5/4/2020 14:12	57.1	41.5	0.1	1.3	-1.4	91.8	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"":Well Repairs:""	110	
Comments: A pressure exceedance was detected at VREW0909 on January 15, 2020. Tetra Tech O&M personnel initiated corrective action and the well was adjusted and re-monitored on the same day and the dates noted above, but the well remained in exceedance. The well was re-monitored on May 4, 2020, and no further exceedance was detected.										
VREW1001	1/21/2020 16:53	16.6	9.8	15.3	58.3	-9.9	54	Valve Adjustment:"NSPS/CAI,Closed valve > 1 turn";Well Condition:"":Well Repairs:""		
VREW1001	1/21/2020 16:54	21.3	13.1	13.4	52.2	-6.1	54	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position":Well Condition:"":Well Repairs:""		
VREW1001	1/30/2020 14:43	27.4	17.3	10.9	44.4	-2.7	76	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less":Well Condition:"":Well Repairs:""		
VREW1001	2/6/2020 16:18	49.2	29.1	4.7	17.0	-2.4	73.9	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"":Well Repairs:""	39	
Comments: An oxygen exceedance was detected at VREW1001 on January 21, 2020. Tetra Tech O&M personnel initiated corrective action and the well was adjusted and re-monitored on the same day and the date noted above, but the well remained in exceedance. The well was re-monitored on February 6, 2020, and no further exceedance was detected.										

Well ID	Date and Time	CH₄	CO2	O ₂	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period	
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days	
VREW1003	2/13/2020 15:00	61.7	38.3	0.0	0.0	1.8	68.7	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1003	2/13/2020 15:01	61.7	38.3	0.0	0.0	2.1	69.1	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1003	2/21/2020 8:58	61.7	38.3	0.0	0.0	1.6	67.1	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 to 1 turn";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1003	3/4/2020 15:00	62.0	38.0	0.0	0.0	2.0	82.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""		
VREW1003	3/23/2020 14:28	63.0	37.0	0.0	0.0	1.5	53.8	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1003	4/6/2020 15:47	62.4	37.6	0.0	0.0	1.3	58.8	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1003	4/20/2020 13:25	60.2	36.8	0.2	2.8	-13.3	67.8	Valve Adjustment:"Opened valve < 10%";Well Condition:"";Well Repairs:""	67	
Comments: A pressure exceedance was detected at VREW1003 on February 13, 2020. Tetra Tech O&M personnel initiated corrective action and the well was adjusted and re-monitored on the same day and the dates noted above, but										
the well remained in e	exceedance. The well was i	e-monitor	red on Ap	oril 20, 2	020, and n	o further exceed	ance was de	tected.		
VREW1003	4/27/2020 12:42	57.8	41.9	0.0	0.3	0.9	81.0	Condition:"Header vacuum loss";Well Repairs:""		
VREW1003	4/27/2020 12:44	58.1	41.9	0.0	0.0	0.9	82.9	Valve Adjustment: NSPS/CAI,Opened valve 1/2 turn or less ;/veil Condition:"Header vacuum loss";/veil Repairs:""		
VREW1003	5/4/2020 14:20	58.2	39.3	0.2	2.3	-7.9	99.5	Condition:"";Well Repairs:""	7	
Comments: A pressu	ire exceedance was detec	ted at VF	REW100	3 on Ap	ril 27, 202	0. Tetra Tech C	D&M personr	el initiated corrective action and the well was adjusted and re-monit	ored on the same day, but the well remained in	
exceedance. The we	II was re-monitored on May	4, 2020,	and no fu	urther ex	ceedance	was detected.				
VREW1005	1/15/2020 12:08	59.6	40.4	0.0	0.0	1.0	97	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	1/15/2020 12:10	59.7	40.3	0.0	0.0	1.0	97	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	1/28/2020 10:23	58.9	41.1	0.0	0.0	0.2	97	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	1/28/2020 10:25	58.4	41.6	0.0	0.0	0.2	97	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	2/13/2020 14:43	59.4	40.6	0.0	0.0	0.6	95.2	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	2/13/2020 14:44	58.9	41.1	0.0	0.0	0.6	95.0	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	2/21/2020 8:44	59.4	40.6	0.0	0.0	0.3	88.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	3/4/2020 14:22	59.9	40.1	0.0	0.0	0.6	90.5	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""		
VREW1005	3/23/2020 14:16	60.4	39.4	0.0	0.2	0.5	57.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	4/6/2020 15:30	59.9	40.1	0.0	0.0	0.2	67.5	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	4/27/2020 12:30	55.8	44.2	0.0	0.0	0.1	83.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""		
VREW1005	5/4/2020 13:24	55.4	44.6	0.0	0.0	-0.1	109.0	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"":Well Repairs:""	110	
Well ID	Date and Time	CH₄	CO2	02	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period	
---	--	------------------------	----------------------	-----------------------	-----------------------------	--------------------------------------	-------------------------------	---	--	
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days	
Comments: A pressu well remained in exce	re exceedance was detect eedance. The well was re-n	ed at VRE nonitored	EW1005 (on May 4	on Janua , 2020, a	ary 15, 202 and no furtl	0. Tetra Tech C her exceedance	&M personne was detecte	el initiated corrective action and the well was adjusted and re-monitored d.	I on the same day and dates noted above, but the	
VREW121A	12/16/2019 14:02	16.9	18.9	9.3	54.9	-8.1	120	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	12/16/2019 14:05	19.3	20.3	5.8	54.6	-8.1	103	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	12/24/2019 14:58	17.8	18.5	5.8	57.9	-4.9	115	Valve Adjustment:"Closed valve < 10%,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	12/24/2019 15:04	16.8	17.2	6.6	59.4	-4.5	99	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	1/14/2020 11:52	13.3	14.8	7.7	64.2	-8.3	57	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""		
VREW121A	1/14/2020 11:53	13.3	14.8	7.7	64.2	-8.5	58	Valve Adjustment:"NSPS/CAI";Well Condition:"";Well Repairs:""		
VREW121A	1/21/2020 13:02	13.7	16.7	7.0	62.6	-8.8	97	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	2/13/2020 15:47	14.3	16.4	7.5	61.8	-10.3	109.4	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""		
VREW121A	2/24/2020 16:06	11.9	15.1	7.8	65.2	-10.3	116.2	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""		
VREW121A	3/9/2020 16:51	0.3	0.1	21.3	78.3	-5.6	64.8	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	3/20/2020 13:03	0.3	0.1	21.5	78.1	-5.7	59.9	Valve Adjustment:"NSPS/CAI,Closed valve < 10%,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	4/1/2020 14:43	0.6	0.1	20.6	78.7	-6.7	63.9	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	4/6/2020 16:27	0.0	0.0	21.3	78.7	-14.5	52.5	Valve Adjustment:"NSPS/CAI,Closed valve 10%-25%";Well Condition:"";Well Repairs:""		
VREW121A	4/6/2020 16:29	0.0	0.0	21.2	78.8	-14.6	51.3	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	4/13/2020 11:46	0.3	0.1	21.1	78.5	-14.1	79.9	Valve Adjustment:"NSPS/CAI,Closed valve < 10%,Valve at minimum position";Well Condition:"";Well Repairs:""		
VREW121A	4/13/2020 11:48	0.1	0.0	21.1	78.8	-14.2	80.4	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	119 (on the date of decommissioning)	
Comments: An oxyge but the well remained	en exceedance was detecto I in exceedance. The well v	ed at VRE vas decon	W121A	on Dece ed on Ap	mber 16, 2 oril 13, 2020	2019. Tetra Tecl 0. Refer to Appe	h O&M perso endix C, the V	nnel initiated corrective action and the well was adjusted and re-monito Vellfield SSM Log, for additional details.	ored on the same day and the dates noted above,	
VREW126A	5/14/2020 11:31	54.4	40.1	0.1	5.4	-1.1	135.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"":Well Repairs:""		
VREW126A	5/14/2020 11:32	54.4	41.0	0.1	4.5	-1.5	135.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""		
VREW126A	5/18/2020 12:05	51.7	38.2	0.3	9.8	-2.1	130.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""	4	
Comments: A tempe exceedance. The wel	rature exceedance was de I was re-monitored on May	tected at 18, 2020	VREW1	26A on er excee	May 14, 2 dance was	020. Tetra Tecl detected.	h O&M perso	nnel initiated corrective action and the well was adjusted and re-mon	itored on the same day, but the well remained in	
VREW2001	5/28/2020 15:37	53.2	45.4	0.0	1.4	0.1	102.9	Valve Adjustment:"No change,Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""		
VREW2001	5/28/2020 15:40	53.3	45.1	0.0	1.6	0.0	103.1	Valve Adjustment:"Valve at minimum position,Opened valve 10% or less";Well Condition:"";Well Repairs:""		
VREW2001	5/28/2020 16:49	52.9	44.8	0.0	2.3	-0.1	112.3	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""	<1	
Comments: A pressu detected.	ire exceedance was detect	ed at VRI	EW2001	on May	28, 2020.	Tetra Tech O&	M personnel	initiated corrective action and the well was adjusted and re-monitored	on the same day and no further exceedance was	
VREW2001	6/1/2020 12:45	53.2	44.1	0.0	2.7	-0.9	136.6	Valve Adjustment:"NSPS,Valve 15% open";Well Condition:"";Well Repairs:""		

Well ID	Date and Time	CH₄	CO2	O ₂	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days
VREW2001	6/10/2020 16:41	54.2	43.7	0.0	2.1	-0.7	125.0	Valve Adjustment:"Opened valve 10% or less,Valve 20% open";Well Condition:"";Well Repairs:""	9
Comments: A temper exceedance. The well	rature exceedance was de I was re-monitored on June	etected at e 10, 2020	VREW2 , and no	001 on further e	June 1, 20 exceedance	20. Tetra Tech was detected.	O&M persor	nnel initiated corrective action and the well was adjusted and re-moni	tored on the same day, but the well remained in
VREW2002	5/28/2020 15:27	55.3	42.3	0.0	2.4	2.4	102.9	Valve Adjustment:"No change,Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""	
VREW2002	5/28/2020 15:32	55.5	42.0	0.0	2.5	2.4	103.6	Valve Adjustment:"Opened valve >10%,Valve 30% open";Well Condition:"";Well Repairs:""	
VREW2002	5/28/2020 16:43	54.9	41.9	0.0	3.2	-1.7	124.5	Valve Adjustment:"Closed valve >10%,Valve 10% open";Well Condition:"";Well Repairs:""	<1
Comments: A pressu detected.	re exceedance was detect	ed at VRI	EW2002	on May	28, 2020.	Tetra Tech O&N	A personnel i	nitiated corrective action and the well was adjusted and re-monitored	on the same day and no further exceedance was
		1						Valve Adjustment:"No change Valve at minimum position".Well	
VREW2003	5/28/2020 15:17	55.5	42.6	0.0	1.9	1.8	102.7	Comment:"First reading on new well";Well Condition:"";Well Repairs:""	
VREW2003	5/28/2020 15:21	55.1	43.7	0.0	1.2	1.8	103.6	Valve Adjustment:"Opened valve >10%,Valve 20% open";Well Condition:"";Well Repairs:""	
VREW2003	5/28/2020 16:37	55.4	41.6	0.0	3.0	-1.2	130.1	Valve Adjustment:"Closed valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""	<1
Comments: A pressu	re exceedance was detect	ed at VRI	EW2003	on May	28, 2020.	Tetra Tech O&N	/ personnel i	initiated corrective action and the well was adjusted and re-monitored	on the same day and no further exceedance was
detected.		1	r						
VREW2005	5/28/2020 14:59	59.0	38.3	0.0	2.7	0.2	101.1	Valve Adjustment:"No change, Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""	
VREW2005	5/28/2020 15:02	59.1	37.8	0.0	3.1	0.2	100.9	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""	
VREW2005	5/28/2020 16:24	57.8	38.8	0.0	3.4	-0.1	98.6	Valve Adjustment:"Opened valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""	<1
Comments: A pressu detected.	re exceedance was detect	ed at VRI	EW2005	on May	28, 2020.	Tetra Tech O&N	A personnel i	initiated corrective action and the well was adjusted and re-monitored	on the same day and no further exceedance was
VREW2006	5/28/2020 14:52	56.4	40.5	0.0	3.1	1.0	102.0	Valve Adjustment:"No change,Valve at minimum position";Well Comment:"First reading on new well";Well Condition:"";Well Repairs:""	
VREW2006	5/28/2020 14:55	56.0	41.0	0.0	3.0	1.1	104.4	Valve Adjustment:"Opened valve 10% or less,Valve 10% open";Well Condition:"";Well Repairs:""	
VREW2006	5/28/2020 16:18	54.7	41.9	0.0	3.4	-0.1	91.4	Valve Adjustment:"Opened valve 10% or less,Valve 15% open";Well Condition:"";Well Repairs:""	<1
Comments: A pressu detected.	re exceedance was detect	ed at VRI	EW2006	on May	28, 2020.	Tetra Tech O&N	A personnel i	nitiated corrective action and the well was adjusted and re-monitored	on the same day and no further exceedance was
VREW2007	5/28/2020 14:43	57.4	39.8	0.0	2.8	0.3	100.8	Valve Adjustment:"No change";Well Comment:"First reading on new	
VREW2007	5/28/2020 14:48	57.3	39.3	0.0	3.4	0.0	100.4	Valve Adjustment:"Opened valve >10%,Valve 15% open";Well	<1
Comments: A pressu	re exceedance was detect	ed at VRI	EW2007	on May	28, 2020.	Tetra Tech O&N	/ personnel i	initiated corrective action and the well was adjusted and re-monitored	on the same day and no further exceedance was
delecied.		1	1					Valva Adjustment:"NSPS/CAL Closed valva 1/2 turn or	· · · · · · · · · · · · · · · · · · ·
VRL0601R	1/30/2020 14:15	7.4	5.3	18.1	69.2	-6.8	72	less,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRL0601R	1/30/2020 14:19	7.5	5.3	17.9	69.3	-6.1	71 Valve Adjustment:"NSPS/CAI";Well Condition:"";Well Repairs:""		
VRL0601R	2/7/2020 12:20	50.9	42.9	1.7	4.5	-12.4	70.2	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""	8
Comments: An oxyge exceedance. The well	en exceedance was detect I was re-monitored on Febr	ted at VR ruary 7, 20	L0601R 020, and	on Janu no furthe	ary 30, 20 er exceeda	20. Tetra Tech nce was detecte	O&M person d.	nel initiated corrective action and the well was adjusted and re-monit	ored on the same day, but the well remained in

Well ID	Date and Time	CH₄	CO2	02	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days
VRLEW104	11/4/2019 12:23	57.2	42.8	0.0	0.0	0.5	92	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW104	11/4/2019 12:25	57.4	42.6	0.0	0.0	0.5	92	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW104	11/18/2019 10:36	58.7	41.3	0.0	0.0	1.2	90	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss":Well Repairs:""	
VRLEW104	12/11/2019 12:19	59.5	40.5	0.0	0.0	0.3	98	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss":Well Repairs:""	
VRLEW104	12/11/2019 12:21	59.6	40.4	0.0	0.0	0.3	98	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss":Well Repairs:""	
VRLEW104	12/24/2019 13:39	59.6	40.4	0.0	0.0	0.5	99	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss":Well Repairs:""	
VRLEW104	12/24/2019 13:41	59.7	40.3	0.0	0.0	0.4	99	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss":Well Repairs:""	
VRLEW104	1/2/2020 14:32	57.2	42.8	0.0	0.0	0.6	100	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less":Well Condition:"Header vacuum loss":Well Repairs:""	
VRLEW104	1/2/2020 14:35	57.2	42.8	0.0	0.0	0.6	101	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less":Well Condition:"Header vacuum loss":Well Repairs:""	
VRLEW104	1/30/2020 16:45	59.7	40.3	0.0	0.0	0.5	98	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less":Well Condition:"Header vacuum loss":Well Repairs:""	
VRLEW104	2/7/2020 12:54	57.0	43.0	0.0	0.0	0.1	100.8	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less":Well Condition:"Header vacuum loss":Well Repairs:""	
VRLEW104	2/19/2020 9:01	60.2	39.8	0.0	0.0	-0.6	97.3	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""	106
Comments: A pressu	re exceedance was detecte	ed at VRL	EW104 c	n Noven	mber 4, 20	19. Tetra Tech (D&M personn	el initiated corrective action and the well was adjusted and re-monitore	d on the same day and the dates noted above, but
the weil remained in e	exceedance. The well was	re-monito		bruary i	9, 2020, a		ceedance wa	Valve Adjustment:"NSPS/CAI Opened valve 1/2 turn or	
VRLEW104	3/21/2020 11:04	58.2	41.8	0.0	0.0	0.3	97.9	less";Well Condition:"Header vacuum loss";Well Repairs:"" Valve Adjustment:"INSPS/CAL Opened valve 1/2 turn or	
VRLEW104	3/21/2020 11:05	58.2	41.8	0.0	0.0	0.2	97.9	less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW104	4/2/2020 11:34	58.7	41.3	0.0	0.0	-1.0	100.4	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""	12
Comments: A pressu	ire exceedance was detec	ted at VR	RLEW104	on Mar	ch 21, 202	20. Tetra Tech	O&M person	nel initiated corrective action and the well was adjusted and re-moni	tored on the same day, but the well remained in
exceedance. The wei	i was re-monitored on April	2, 2020,	and no tu	Inther exc	ceedance \	vas detected.	-	Volvo Adjustmont:"NSPS/CAL Opened volvo 1/2 turn or loss":Well	
VRLEW111	2/6/2020 14:51	63.0	37.0	0.0	0.0	52.9	70.0	Condition:"Header vacuum loss";Well Repairs:""	
VRLEW111	2/6/2020 14:54	62.8	37.2	0.0	0.0	53.7	70.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW111	2/19/2020 17:32	61.6	38.4	0.0	0.0	51.9	62.4	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW111	3/3/2020 13:55	62.0	38.0	0.0	0.0	53.9	77.2	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW111	3/20/2020 16:02	61.4	38.6	0.0	0.0	46.8	69.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW111	4/1/2020 15:30	61.6	38.4	0.0	0.0	34.5	78.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW111	4/20/2020 13:37	58.4	39.9	0.0	1.7	8.3	71.1	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW111	5/14/2020 10:15	32.0	21.8	11.0	35.2	5.7	68.7	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW111	5/14/2020 10:15	31.7	21.7	10.6	36.0	7.7	68.7	68.7 Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW111	5/18/2020 14:08	58.5	40.0	0.0	1.5	7.4	73.4	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:"" 4 (oxygen)	

Well ID	Date and Time	CH₄	CO ₂	02	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days
VRLEW111	5/29/2020 15:32	55.3	38.8	0.8	5.1	-15.4	86.9	Valve Adjustment:"Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""	113 (pressure) (total in exceedance)
Comments: A pressu	re exceedance was detecte	ed at VRL	EW111 c	on Febru	ary 6, 2020	0. Tetra Tech O	&M personne	el initiated corrective action and the well was adjusted and re-monitored	I on the same day and the dates noted above, but
the same day and the	e date noted above, and no	further ox	xygen exc	eedance	e was detec	cted, but the pre	ssure exceed	lance remained. The well was re-monitored on May 29, 2020, and no fur	ther exceedance was detected.
VRLEW115	11/20/2019 14:04	40.8	25.6	5.5	28.1	-5.1	73	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRLEW115	11/20/2019 14:04	40.8	25.6	5.5	28.1	-5.1	73	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRLEW115	11/20/2019 14:06	41.3	25.4	5.5	27.8	-5.1	73	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRLEW115	11/20/2019 14:06	41.3	25.4	5.5	27.8	-5.1	73	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRLEW115	12/3/2019 16:20	36.9	23.8	7.6	31.7	-5.8	53	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRLEW115	12/3/2019 16:28	30.2	19.4	9.8	40.6	-3.7	53	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRLEW115	12/16/2019 15:29	29.9	18.9	9.5	41.7	-7.4	63	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRLEW115	12/16/2019 15:37	24.0	15.2	11.5	49.3	-7.4	63	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRLEW115	1/15/2020 13:28	14.9	8.1	16.1	60.9	-5.1	50	Valve Adjustment:"NSPS/CAI,No change,Valve at minimum position";Well Condition:"";Well Repairs:""	
VRLEW115	1/21/2020 15:09	21.3	13.3	13.4	52.0	-8.5	57	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW115	1/21/2020 15:14	20.7	12.8	13.8	52.7	-6.8	57	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW115	2/13/2020 15:36	18.0	10.1	15.3	56.6	-7.9	67.8	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less":Well Condition:"":Well Repairs:""	
VRLEW115	2/24/2020 15:56	25.5	16.6	11.3	46.6	-9.2	75.7	Valve Adjustment:"NSPS/CAI Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW115	3/9/2020 16:45	34.0	22.8	9.6	33.6	-4.6	67.6	Valve Adjustment:"NSPS/CAI Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW115	3/13/2020 9:42	34.1	24.0	8.4	33.5	-1.1	59.7	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less,Valve at minimum position";Well Condition:"";Well	
								Repairs:""	
VRLEW115	3/13/2020 9:44	33.1	23.3	9.0	34.6	-2.0	60.3	Valve Adjustment:"NSPS/CAI,Valve at minimum position";Well Condition:"";Well Repairs:""	113 (on the date of decommissioning)
Comments: An oxyge	n exceedance was detecte	d at VRLE	EW115 oi	n Novem	ber 20, 20	19. Tetra Tech (D&M personn	el initiated corrective action and the well was adjusted and re-monitored	d on the same day and the dates noted above, but
		2020, 116	40.0					Valve Adjustment:"NSPS/CAI,Opened valve < 10%";Well	
VRLEW129	2/6/2020 13:45	57.9	42.0	0.1	0.0	1.8	79.0	Condition:"Header vacuum loss";Well Repairs:"" Valve Adjustment:"NSPS/CAL Opened valve < 10%":Well	
VRLEW129	2/6/2020 13:47	57.9	42.0	0.1	0.0	1.7	79.0	Condition:"Header vacuum loss";Well Repairs:""	
VRLEW129	2/19/2020 15:50	58.4	41.6	0.0	0.0	1.5	73.6	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW129	3/3/2020 12:18	56.5	43.5	0.0	0.0	1.8	76.8	Valve Adjustment: "NSPS/CAI, opened valve 1/2 turn or less"; well Condition:"";Well Repairs:""	
VRLEW129	3/20/2020 12:32	56.8	43.2	0.0	0.0	1.7	68.0	68.0 Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW129	4/1/2020 14:36	59.3	40.7	0.0	0.0	2.1	68.2	Condition:"Header vacuum loss";Well Repairs:""	
VRLEW129	4/27/2020 14:05	56.9	41.4	0.0	1.7	2.0	99.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	

Well ID	Date and Time	CH₄	CO2	O ₂	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days
VRLEW129	5/14/2020 12:26	56.5	40.5	0.3	2.7	-19.5	75.9	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""	98
Comments: A pressu the well remained in e	re exceedance was detecte exceedance. The well was	ed at VRL re-monito	EW129 (red on M	on Febru ay 14, 20	uary 6, 202 020, and n	0. Tetra Tech C o further exceed	&M personne ance was det	el initiated corrective action and the well was adjusted and re-monitored tected.	I on the same day and the dates noted above, but
VRLEW131	2/13/2020 15:51	59.3	40.7	0.0	0.0	1.2	97.3	Valve Adjustment:"NSPS/CAI,Opened valve < 10%";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW131	2/13/2020 15:53	59.2	40.8	0.0	0.0	1.2	97.3	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW131	2/19/2020 17:42	59.6	40.4	0.0	0.0	1.6	92.8	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW131	3/9/2020 17:13	61.2	38.8	0.0	0.0	-0.1	73.6	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""	25
Comments: A pressu the well remained in e	re exceedance was detecte exceedance. The well was	ed at VRL re-monito	EW131 o pred on N	on Febru Iarch 9, 3	uary 13, 20 2020, and	20. Tetra Tech no further excee	O&M personr dance was d	nel initiated corrective action and the well was adjusted and re-monitore etected.	ed on the same day and the date noted above, but
VRLEW133	2/6/2020 13:31	57.9	42.1	0.0	0.0	2.0	123.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW133	2/6/2020 13:38	58.0	42.0	0.0	0.0	1.8	125.2	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW133	2/19/2020 15:47	57.3	42.7	0.0	0.0	1.6	126.5	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW133	3/3/2020 12:15	56.1	43.9	0.0	0.0	1.8	123.8	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW133	3/20/2020 12:30	55.8	44.2	0.0	0.0	1.7	120.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW133	4/1/2020 14:34	58.4	41.6	0.0	0.0	2.0	123.4	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW133	4/27/2020 14:04	56.8	41.1	0.0	2.1	2.0	113.5	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLEW133	5/14/2020 12:21	55.6	43.5	0.0	0.9	-3.1	132.6	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""	98 (pressure)
VRLEW133	5/14/2020 12:23	55.9	43.9	0.0	0.2	-3.0	133.0	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW133	5/18/2020 12:41	51.3	42.6	0.1	6.0	-3.5	130.3	Valve Adjustment:"No change,Valve at optimum position";Well Condition:"";Well Repairs:""	4 (temperature) 102 (total in exceedance)
Comments: A pressu the well remains in e action and the well w	re exceedance was detect xceedance. The well was r as adjusted and re-monitor	ed at VRL e-monitor ed on the	EW133 (ed on Ma same da	on Febru ay 14, 20 y, but the	ary 6, 202 20, and no e well rema	0. Tetra Tech C o further pressur ained in exceeda	&M personne e exceedanc ance for temp	el initiated corrective action and the well was adjusted and re-monitored e was detected, but an additional temperature exceedance was detect erature. The well was re-monitored on May 18, 2020, and no further exceedance	d on the same day and the dates noted above, but ed. Tetra Tech O&M personnel initiated corrective seedance was detected.
VRLEW135	2/24/2020 16:22	20.0	14.5	6.1	59.4	-0.5	85.8	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""	
VRLEW135	2/24/2020 16:26	20.1	14.5	6.1	59.3	-0.5	83.0	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""	
VRLEW135	3/3/2020 11:07	30.1	21.9	4.7	43.3	-0.9	69.8	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""	8
Comments: An oxyge exceedance. The wel	en exceedance was detect I was re-monitored on Marc	ted at VR ch 3, 2020	LEW135), and no	on Febi further e	ruary 24, 2 exceedance	2020. Tetra Tec e was detected.	n O&M perso	onnel initiated corrective action and the well was adjusted and re-mon	itored on the same day, but the well remained in
VRLEW158	5/14/2020 11:46	45.4	26.9	5.3	22.4	-2.0	107.4	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW158	5/14/2020 11:49	45.4	26.7	5.2	22.7	-2.0	107.1	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or less";Well Condition:"";Well Repairs:""	
VRLEW158	5/18/2020 11:47	45.2	27.8	4.9	22.1	-1.7	106.2	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""	4
Comments: An oxyge exceedance. The well	en exceedance was detec I was re-monitored on May	ted at VF 18, 2020	RLFEW15 , and no f	58 on Ma further ea	ay 14, 201 xceedance	 Tetra Tech was detected. 	O&M person	nel initiated corrective action and the well was adjusted and re-monit	ored on the same day, but the well remained in

Well ID	Date and Time	CH₄	CO2	02	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days
VRLEW38A	1/14/2020 12:00	9.3	19.1	7.1	64.5	-0.5	105	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""	
VRLEW38A	1/14/2020 12:04	9.7	19.5	6.6	64.2	-0.6	112	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"";Well Repairs:""	
VRLEW38A	1/28/2020 9:58	17.8	22.2	5.9	54.1	-0.4	112	Valve Adjustment:"NSPS/CAI,Closed valve < 10%";Well Condition:"";Well Repairs:""	
VRLEW38A	1/28/2020 10:00	16.9	21.9	6.5	54.7	-0.2	101	Valve Adjustment:"NSPS/CAI";Well Condition:"";Well Repairs:""	
VRLEW38A	2/13/2020 10:30	34.5	34.6	0.1	30.8	-0.1	73.0	Valve Adjustment:"No change,Valve at minimum position";Well Condition:"";Well Repairs:""	30
Comments: An oxyge	n exceedance was detecte	ed at VRL	EW38A	on Janua	ary 14, 202	0. Tetra Tech C	&M personne	el initiated corrective action and the well was adjusted and re-monitore	d on the same day and the date noted above, but
the well remained in e	exceedance. The well was	re-monito	red on Fe	bruary 1	3, 2020, a	nd no further exe	ceedance wa	s detected.	
VRLFEW84	11/4/2019 12:17	56.9	43.1	0.0	0.0	0.4	100	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW84	11/4/2019 12:18	56.9	43.1	0.0	0.0	0.4	100	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW84	11/18/2019 10:31	58.5	41.5	0.0	0.0	1.0	92	Valve Adjustment:"NSPS/CAI,No change";Well	
	12/11/2010 12:14	59.1	10.9	0.0	0.0	0.2	94	Valve Adjustment:"NSPS/CAI,No change";Well	
VKLFEVV04	12/11/2013 12.14	39.1	40.9	0.0	0.0	0.2	54	Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW84	12/11/2019 12:15	59.0	41.0	0.0	0.0	0.2	94	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW84	12/24/2019 13:34	59.1	40.9	0.0	0.0	0.4	104	Valve Adjustment:"NSPS/CAI,No change";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW84	12/24/2019 13:36	58.9	41.1	0.0	0.0	0.4	103	Valve Adjustment:"NSPS/CAI,No change";Well	
VRLFEW84	1/2/2020 14:26	56.8	43.2	0.0	0.0	0.5	106	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or	
VRLFEW84	1/2/2020 14:28	56.6	43.4	0.0	0.0	0.5	106	Valve Adjustment:"NSPS/CAI,Closed valve 1/2 turn or	
	1/30/2020 16:41	59.4	40.6	0.0		0.4	61	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or	
	1/30/2020 10.41	53.4	40.0	0.0	0.0	0.4		less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW84	2/7/2020 12:58	56.8	43.2	0.0	0.0	0.1	106.2	Valve Adjustment: NSPS/CAI, Opened valve 1/2 turn of less". Well Condition: "Header vacuum loss": Well Repairs: ""	
VRLFEW84	2/19/2020 9:09	59.6	40.4	0.0	0.0	-0.5	102.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"":Well Renairs:""	107
Comments: A pressur	re exceedance was detected	ed at VRL	FEW84 c	on Nover	mber 4, 20	19. Tetra Tech (J&M personn	lel initiated corrective action and the well was adjusted and re-monitorer	d on the same day and the dates noted above, but
the well remained in e	exceedance. The well was	re-monito	red on Fe	ebruary 1	9, 2020, a	nd no further ex	ceedance wa	s detected.	
VRLFEW84	3/21/2020 10:57	58.1	41.9	0.0	0.0	0.2	101.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW84	3/21/2020 10:59	58.2	41.8	0.0	0.0	0.2	102.0	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW84	4/2/2020 11:31	58.3	41.7	0.0	0.0	-1.0	106.0	Valve Adjustment:"No change,Valve 100% open";Well Condition:"";Well Repairs:""	12
Comments: A pressure exceedance. The well	re exceedance was detec I was re-monitored on Apri	ted at VF 12, 2020,	LFEW84	i on Mar urther ex	rch 21, 20 [°] ceedance v	19. Tetra Tech was detected.	O&M person	nel initiated corrective action and the well was adjusted and re-monit	ored on the same day, but the well remained in
VRLFEW84	7/20/2020 13:08	57.3	40.8	0.0	1.9	0.2	108.1	Valve Adjustment:"NSPS/CAI,Valve 100% open,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW84	7/20/2020 13:12	57.8	40.3	0.0	1.9	-0.1	108.1	Valve Adjustment:"No change,Valve 100% open";Well Condition:"":Well Repairs:""	<1
Comments: A pressur detected.	re exceedance was detect	ted at VRI	LFEW84	on July	20, 2020.	Tetra Tech O&N	I personnel i	nitiated corrective action and the well was adjusted and re-monitored of	on the same day, and no further exceedance was

Well ID	Date and Time	CH₄	CO2	02	Balance Gas	Static Pressure	Temp.	Comments as Noted By Field Technician	Duration of Exceedance By End of Reporting Period
		(%)	(%)	(%)	(%)	(in-wc.)	(Deg F.)		Days
VRLFEW94	2/13/2020 15:06	60.2	39.8	0.0	0.0	0.7	72.5	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW94	2/13/2020 15:07	59.7	40.3	0.0	0.0	0.7	73.0	Valve Adjustment:"NSPS/CAI";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW94	2/21/2020 9:02	60.5	39.5	0.0	0.0	0.6	68.9	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW94	3/4/2020 15:06	60.4	39.6	0.0	0.0	0.5	84.6	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW94	3/23/2020 14:34	62.8	37.2	0.0	0.0	0.5	53.1	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW94	4/6/2020 15:54	62.3	37.7	0.0	0.0	0.2	56.7	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW94	4/27/2020 13:00	56.5	43.5	0.0	0.0	0.2	81.3	Valve Adjustment:"NSPS/CAI,Opened valve 1/2 turn or less";Well Condition:"Header vacuum loss";Well Repairs:""	
VRLFEW94	5/4/2020 14:32	57.3	39.8	0.4	2.5	-7.9	100.4	Valve Adjustment:"Opened valve 1/2 turn or less";Well Condition:"";Well Repairs:""	81
Comments: A pressur in exceedance. The w	Comments: A pressure exceedance was detected at VRLFEW94 on February 13, 2019. Tetra Tech O&M personnel initiated corrective action and the well was adjusted and re-monitored on the dates noted above, but the well remained n exceedance. The well was re-monitored on May 4, 2020, and no further exceedance was detected.								

APPENDIX L

MONTHLY LANDFILL GAS FLOW RATES

MONTHLY LFG Input to Flare (A-4)

VASCO ROAD LANDFILL, Livermore, California

Month	Total Available Runtime (hours)	Total Downtime (hours)	Total Runtime (hours)	Average Flow (scfm)	CH ₄ (%)*	3-Month Rolling Average CH ₄ (%)**	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Total Heat Input (MMBTU)	12-Month Rolling Heat Input (MMBTU)***
February-20 ¹	696.00	524.27	171.73	1,270.9	48.1	48.8	13,387,571.0	6,509,045.9	6,593.7	109,226.4
March-20 ¹	743.00	677.23	65.77	1,265.8	49.9	49.1	5,107,644.0	2,542,068.0	2,575.1	101,658.5
April-20	720.00	521.20	198.80	1,187.3	49.7	49.2	13,165,643.0	6,555,937.0	6,641.2	96,723.6
May-20	744.00	586.27	157.73	1,056.7	49.2	49.6	9,842,867.0	4,846,729.4	4,909.7	93,592.9
June-20	720.00	415.40	304.60	1,074.7	49.5	49.5	18,724,970.8	9,286,966.2	9,407.7	95,790.6
July-20	744.00	448.77	295.23	1,076.7	49.0	49.3	18,628,399.7	9,136,544.2	9,255.3	95,514.4
TOTALS/ AVERAGE:	4,367.00	3,173.13	1,193.87	1,155.3	49.3	49.3	78,857,095.40	38,877,290.67	39,382.70	95,514.4

NOTES:

¹There were 696.00 hours in February 2020 due to the year 2020 being a Leap Year. There were 743 hours in March 2020 due to Daylight Savings Time.

*Methane content determined from the monthly blower inlet readings pursuant to Title V Permit Condition 818 Part 13. On days when multiple blower inlet readings were taken, the initial blower inlet reading was used for that day.

^{**} If this average landfill gas methane content exceeds 50 percent, the owner/operator shall attempt to restart the A-4 flare within one week of discovery of this excess. If the restart is successful, A-4 shall operate continuously until the remaining amount of landfill gas available for flaring is less than 800 scfm or the equivalent heat input rate for this excess landfill gas is less than 24 MMBTU/hour. The owner/operator shall attempt to restart the A-4 flare once per week until the rolling average methane content calculated above is below 50 percent methane pursuant to Title V Permit Condition Number 818 Part 3. The rolling average methane content is currently being calculated using the average of the flare inlet readings.

"The 12-month rolling heat input total for each month represents the sum of the monthly heat input rates calculated using the preceding 12 consecutive months. Pursuant to Title V Permit Condition Number 818 Part 13, the A-4 Flare shall not exceed the 1,051,200 million BTU limit during any consecutive 12-month period.

Pursuant to Permit to Operate (PTO) Condition 818, Part 13, the heat input to the A-4 Flare shall not exceed 2,880 MMBTU per day or 1,051,200 MMBTU per year.

scfm= standard cubic feet per minute CH₄= methane LFG= landfill gas scf= standard cubic feet MMBTU= million British thermal units % = percent

Heat Input Rate

A-4 Flare

MONTH:	February-20						
Date	Runtime (hours)	CH ₄ (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
2/1/2020	0.00	46.3	0.0	0.0	0.0	1,013.0	0.0
2/2/2020	0.00	46.3	0.0	0.0	0.0	1,013.0	0.0
2/3/2020	4.63	46.3	1,093.3	303,949.0	140,728.4	1,013.0	142.6
2/4/2020	5.57	46.3	1,156.7	386,352.0	178,881.0	1,013.0	181.2
2/5/2020	7.03	46.3	1,257.5	530,646.0	245,689.1	1,013.0	248.9
2/6/2020	8.70	48.4	1,212.5	632,935.0	306,340.5	1,013.0	310.3
2/7/2020	7.97	48.1	1,162.4	555,622.0	267,254.2	1,013.0	270.7
2/8/2020	0.00	48.1	0.0	0.0	0.0	1,013.0	0.0
2/9/2020	2.23	48.1	1,393.0	186,660.0	89,783.5	1,013.0	91.0
2/10/2020	0.00	48.1	0.0	0.0	0.0	1,013.0	0.0
2/11/2020	0.00	48.1	0.0	0.0	0.0	1,013.0	0.0
2/12/2020	0.00	48.1	0.0	0.0	0.0	1,013.0	0.0
2/13/2020	5.53	49.1	1,190.2	395,160.0	194,023.6	1,013.0	196.5
2/14/2020	16.40	49.1	1,540.3	1,515,614.0	744,166.5	1,013.0	753.8
2/15/2020	24.00	49.1	1,376.0	1,981,445.0	972,889.5	1,013.0	985.5
2/16/2020	24.00	49.1	1,287.2	1,853,623.0	910,128.9	1,013.0	922.0
2/17/2020	24.00	49.1	1,305.4	1,879,725.0	922,945.0	1,013.0	934.9
2/18/2020	19.97	49.1	1,310.3	1,569,793.0	770,768.4	1,013.0	780.8
2/19/2020	3.63	47.8	1,178.7	256,963.0	122,828.3	1,013.0	124.4
2/20/2020	0.00	47.8	0.0	0.0	0.0	1,013.0	0.0
2/21/2020	7.77	48.4	1,188.3	553,730.0	268,005.3	1,013.0	271.5
2/22/2020	0.00	48.4	0.0	0.0	0.0	1,013.0	0.0
2/23/2020	0.00	48.4	0.0	0.0	0.0	1,013.0	0.0
2/24/2020	7.00	47.7	1,145.5	481,120.0	229,494.2	1,013.0	232.5
2/25/2020	3.30	47.7	1,536.5	304,234.0	145,119.6	1,013.0	147.0
2/26/2020	0.00	47.7	0.0	0.0	0.0	1,013.0	0.0
2/27/2020	0.00	47.7	0.0	0.0	0.0	1,013.0	0.0
2/28/2020	0.00	47.7	0.0	0.0	0.0	1,013.0	0.0
2/29/2020	0.00	47.7	0.0	0.0	0.0	1,013.0	0.0
Totals/ Average:	171.73	48.1	1,270.9	13,387,571.0	6,509,045.9	1,013.0	6,593.7

NOTES:

*Methane content determined from the monthly blower inlet readings taken January 30, February 6, 7, 13, 19, 21, and 24, 2020. (Title V Permit Condition 818 Part 13). On days when multiple blower inlet readings were taken, the initial blower inlet reading was used for that day. If the A-4 Flare was not operational on a given day, the methane value for that day is not included in the monthly average calculation.

The daily heat input rate for the A-4 Flare shall not exceed 2,880 MMBTU (PTO Condition 818 Part 13).

CH4= methane scfm= standard cubic feet per minute LFG= landfill gas scf= standard cubic feet NA= Not Available (flare did not operate)

Heat Input Rate A-4 Flare

MONITU

MONTH:	March-20						
Date	Runtime (hours)	CH4 (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
3/1/2020	0.00	47.7	0.0	0.0	0.0	1,013.0	0.0
3/2/2020	0.00	47.7	0.0	0.0	0.0	1,013.0	0.0
3/3/2020	12.43	48.9	1,207.6	900,902.0	440,541.1	1,013.0	446.3
3/4/2020	0.53	48.2	1,103.0	35,297.0	17,013.2	1,013.0	17.2
3/5/2020	0.00	48.2	0.0	0.0	0.0	1,013.0	0.0
3/6/2020	10.97	48.2	1,292.8	850,647.0	410,011.9	1,013.0	415.3
3/7/2020	0.00	48.2	0.0	0.0	0.0	1,013.0	0.0
3/8/2020	0.00	48.2	0.0	0.0	0.0	1,013.0	0.0
3/9/2020	0.43	51.1	1,184.0	30,785.0	15,731.1	1,013.0	15.9
3/10/2020	0.00	51.1	0.0	0.0	0.0	1,013.0	0.0
3/11/2020	10.03	51.1	1,384.8	833,674.0	426,007.4	1,013.0	431.5
3/12/2020	0.00	51.1	0.0	0.0	0.0	1,013.0	0.0
3/13/2020	0.00	51.1	0.0	0.0	0.0	1,013.0	0.0
3/14/2020	0.00	51.1	0.0	0.0	0.0	1,013.0	0.0
3/15/2020	0.00	51.1	0.0	0.0	0.0	1,013.0	0.0
3/16/2020	0.00	51.1	0.0	0.0	0.0	1,013.0	0.0
3/17/2020	0.00	51.1	0.0	0.0	0.0	1,013.0	0.0
3/18/2020	0.00	51.1	0.0	0.0	0.0	1,013.0	0.0
3/19/2020	2.57	51.1	1,422.5	219,070.0	111,944.8	1,013.0	113.4
3/20/2020	0.13	49.5	1,208.3	9,666.0	4,784.7	1,013.0	4.8
3/21/2020	0.07	50.2	1,207.8	4,831.0	2,425.2	1,013.0	2.5
3/22/2020	0.00	50.2	0.0	0.0	0.0	1,013.0	0.0
3/23/2020	0.50	50.1	1,151.6	34,549.0	17,309.0	1,013.0	17.5
3/24/2020	13.90	50.1	1,300.8	1,084,859.0	543,514.4	1,013.0	550.6
3/25/2020	10.60	50.1	1,244.0	791,177.0	396,379.7	1,013.0	401.5
3/26/2020	0.00	50.1	0.0	0.0	0.0	1,013.0	0.0
3/27/2020	0.87	50.1	1,236.5	64,299.0	32,213.8	1,013.0	32.6
3/28/2020	0.00	50.1	0.0	0.0	0.0	1,013.0	0.0
3/29/2020	0.00	50.1	0.0	0.0	0.0	1,013.0	0.0
3/30/2020	2.73	50.1	1,511.5	247,888.0	124,191.9	1,013.0	125.8
3/31/2020	0.00	50.1	0.0	0.0	0.0	1,013.0	0.0
Totals/ Average:	65.77	49.9	1.265.8	5.107.644.0	2.542.068.0	1.013.0	2.575.1

NOTES:

*Methane content determined from the monthly blower inlet readings taken February 24, March 3, 4, 9, 20, 21, and 23, 2020. (Title V Permit Condition 818 Part 13). On days when multiple blower inlet readings were taken, the initial blower inlet reading was used for that day. If the A-4 Flare was not operational on a given day, the methane value for that day is not included in the monthly average calculation.

The daily heat input rate for the A-4 Flare shall not exceed 2,880 MMBTU (PTO Condition 818 Part 13).

CH₄= methane scfm= standard cubic feet per minute LFG= landfill gas scf= standard cubic feet NA= Not Available (flare did not operate)

Heat Input Rate A-4 Flare

MONTH:	April-20						
Date	Runtime (hours)	CH ₄ (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
4/1/2020	11.90	50.9	1,306.3	932,685.0	474,736.7	1,013.0	480.9
4/2/2020	13.80	48.0	1,197.6	991,599.0	475,967.5	1,013.0	482.2
4/3/2020	2.60	48.0	1,725.3	269,147.0	129,190.6	1,013.0	130.9
4/4/2020	0.00	48.0	0.0	0.0	0.0	1,013.0	0.0
4/5/2020	0.00	48.0	0.0	0.0	0.0	1,013.0	0.0
4/6/2020	7.00	50.3	1,264.5	531,107.0	267,146.8	1,013.0	270.6
4/7/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
4/8/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
4/9/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
4/10/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
4/11/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
4/12/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
4/13/2020	11.27	50.2	1,229.9	831,439.0	417,382.4	1,013.0	422.8
4/14/2020	6.30	50.2	1,853.6	700,666.0	351,734.3	1,013.0	356.3
4/15/2020	11.63	50.2	1,630.0	1,137,737.0	571,144.0	1,013.0	578.6
4/16/2020	0.00	50.2	0.0	0.0	0.0	1,013.0	0.0
4/17/2020	15.07	51.6	1,088.7	984,188.0	507,841.0	1,013.0	514.4
4/18/2020	24.00	51.6	925.4	1,332,507.0	687,573.6	1,013.0	696.5
4/19/2020	10.30	51.6	994.8	614,770.0	317,221.3	1,013.0	321.3
4/20/2020	15.00	48.2	918.8	826,919.0	398,575.0	1,013.0	403.8
4/21/2020	6.90	48.2	804.7	333,136.0	160,571.6	1,013.0	162.7
4/22/2020	12.77	48.2	1,436.3	1,100,173.0	530,283.4	1,013.0	537.2
4/23/2020	0.00	48.2	0.0	0.0	0.0	1,013.0	0.0
4/24/2020	0.00	48.2	0.0	0.0	0.0	1,013.0	0.0
4/25/2020	0.00	48.2	0.0	0.0	0.0	1,013.0	0.0
4/26/2020	0.00	48.2	0.0	0.0	0.0	1,013.0	0.0
4/27/2020	15.53	49.1	936.3	872,586.0	428,439.7	1,013.0	434.0
4/28/2020	24.00	49.1	781.2	1,124,871.0	552,311.7	1,013.0	559.5
4/29/2020	10.73	49.1	903.9	582,113.0	285,817.5	1,013.0	289.5
4/30/2020	0.00	49.1	0.0	0.0	0.0	1,013.0	0.0
Totals/ Average:	198.80	49.7	1,187.3	13,165,643.0	6,555,937.0	1,013.0	6,641.2

NOTES:

*Methane content determined from the monthly blower inlet readings taken April 1, 2, 6, 13, 17, 20, and 27, 2020. (Title V Permit Condition 818 Part 13). On days when multiple blower inlet readings were taken, the initial blower inlet reading was used for that day. If the A-4 Flare was not operational on a given day, the methane value for that day is not included in the monthly average calculation.

The daily heat input rate for the A-4 Flare shall not exceed 2,880 MMBTU (PTO Condition 818 Part 13).

CH4= methane scfm= standard cubic feet per minute LFG= landfill gas scf= standard cubic feet NA= Not Available (flare did not operate)

Heat Input Rate A-4 Flare

MONTH:

MONTH:	May-20						
Date	Runtime (hours)	CH ₄ (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
5/1/2020	5.77	49.1	1,188.3	408,758.0	200,700.2	1,013.0	203.3
5/2/2020	0.00	49.1	0.0	0.0	0.0	1,013.0	0.0
5/3/2020	0.00	49.1	0.0	0.0	0.0	1,013.0	0.0
5/4/2020	3.97	49.1	888.4	211,445.0	103,819.5	1,013.0	105.2
5/5/2020	0.00	49.1	0.0	0.0	0.0	1,013.0	0.0
5/6/2020	0.00	49.1	0.0	0.0	0.0	1,013.0	0.0
5/7/2020	0.00	49.1	0.0	0.0	0.0	1,013.0	0.0
5/8/2020	15.03	49.9	1,011.6	912,490.0	455,332.5	1,013.0	461.3
5/9/2020	18.50	49.9	859.4	953,932.0	476,012.1	1,013.0	482.2
5/10/2020	0.00	49.9	0.0	0.0	0.0	1,013.0	0.0
5/11/2020	0.00	49.9	0.0	0.0	0.0	1,013.0	0.0
5/12/2020	0.00	49.9	0.0	0.0	0.0	1,013.0	0.0
5/13/2020	6.07	49.9	1,297.3	472,217.0	235,636.3	1,013.0	238.7
5/14/2020	14.60	49.1	1,105.7	968,622.0	475,593.4	1,013.0	481.8
5/15/2020	7.97	49.1	1,060.3	506,804.0	248,840.8	1,013.0	252.1
5/16/2020	0.00	49.1	0.0	0.0	0.0	1,013.0	0.0
5/17/2020	0.00	49.1	0.0	0.0	0.0	1,013.0	0.0
5/18/2020	10.37	48.7	1,060.4	659,559.0	321,205.2	1,013.0	325.4
5/19/2020	0.00	48.7	0.0	0.0	0.0	1,013.0	0.0
5/20/2020	15.93	48.7	1,058.7	1,012,099.0	492,892.2	1,013.0	499.3
5/21/2020	16.73	48.7	1,027.2	1,031,314.0	502,249.9	1,013.0	508.8
5/22/2020	0.00	48.7	0.0	0.0	0.0	1,013.0	0.0
5/23/2020	0.00	48.7	0.0	0.0	0.0	1,013.0	0.0
5/24/2020	0.00	48.7	0.0	0.0	0.0	1,013.0	0.0
5/25/2020	0.00	48.7	0.0	0.0	0.0	1,013.0	0.0
5/26/2020	0.00	48.7	0.0	0.0	0.0	1,013.0	0.0
5/27/2020	14.43	48.4	1,068.5	925,351.0	447,869.9	1,013.0	453.7
5/28/2020	9.77	49.8	1,086.1	636,447.0	316,950.6	1,013.0	321.1
5/29/2020	18.60	49.8	1,024.9	1,143,829.0	569,626.8	1,013.0	577.0
5/30/2020	0.00	49.8	0.0	0.0	0.0	1,013.0	0.0
5/31/2020	0.00	49.8	0.0	0.0	0.0	1,013.0	0.0
Totals/ Average:	157.73	49.2	1,056.7	9,842,867.0	4,846,729.4	1,013.0	4,909.7

NOTES:

*Methane content determined from the monthly blower inlet readings taken April 27, May 8, 14, 18, 27, and 28, 2020. (Title V Permit Condition 818 Part 13). On days when multiple blower inlet readings were taken, the initial blower inlet reading was used for that day. If the A-4 Flare was not operational on a given day, the methane value for that day is not included in the monthly average calculation.

The daily heat input rate for the A-4 Flare shall not exceed 2,880 MMBTU (PTO Condition 818 Part 13).

CH4= methane scfm= standard cubic feet per minute LFG= landfill gas scf= standard cubic feet NA= Not Available (flare did not operate)

Heat Input Rate A-4 Flare

MONTH:

MONTH:	June-20						
Date	Runtime (hours)	CH ₄ (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH ₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
6/1/2020	14.53	49.2	1,058.5	923,005.0	454,118.5	1,013.0	460.0
6/2/2020	23.97	49.2	960.7	1,381,513.0	679,704.4	1,013.0	688.5
6/3/2020	4.53	49.2	1,516.3	412,424.0	202,912.6	1,013.0	205.6
6/4/2020	0.00	49.2	0.0	0.0	0.0	1,013.0	0.0
6/5/2020	14.33	50.5	992.6	853,621.0	431,078.6	1,013.0	436.7
6/6/2020	21.57	50.5	933.1	1,207,488.0	609,781.4	1,013.0	617.7
6/7/2020	0.00	50.5	0.0	0.0	0.0	1,013.0	0.0
6/8/2020	4.87	50.5	1,080.5	315,493.0	159,324.0	1,013.0	161.4
6/9/2020	6.43	50.5	1,510.7	583,116.0	294,473.6	1,013.0	298.3
6/10/2020	15.10	50.2	1,205.9	1,092,506.8	548,438.4	1,013.0	555.6
6/11/2020	24.00	50.2	1,068.6	1,538,715.0	772,434.9	1,013.0	782.5
6/12/2020	24.00	50.2	993.8	1,431,018.0	718,371.0	1,013.0	727.7
6/13/2020	24.00	50.2	935.1	1,346,472.0	675,928.9	1,013.0	684.7
6/14/2020	21.57	50.2	874.0	1,130,925.0	567,724.4	1,013.0	575.1
6/15/2020	15.97	50.2	961.1	920,767.0	462,225.0	1,013.0	468.2
6/16/2020	24.00	46.6	898.7	1,283,365.8	598,048.4	1,013.0	605.8
6/17/2020	9.20	46.6	934.1	515,597.0	240,268.2	1,013.0	243.4
6/18/2020	8.47	46.6	1,316.0	668,522.0	311,531.3	1,013.0	315.6
6/19/2020	14.57	49.5	1,132.9	990,198.0	490,148.0	1,013.0	496.5
6/20/2020	2.23	49.5	977.8	131,026.0	64,857.9	1,013.0	65.7
6/21/2020	0.00	49.5	0.0	0.0	0.0	1,013.0	0.0
6/22/2020	0.00	49.5	0.0	0.0	0.0	1,013.0	0.0
6/23/2020	0.00	49.5	0.0	0.0	0.0	1,013.0	0.0
6/24/2020	15.87	50.3	1,056.2	1,005,501.2	505,767.1	1,013.0	512.3
6/25/2020	8.00	50.3	926.9	444,917.0	223,793.3	1,013.0	226.7
6/26/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
6/27/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
6/28/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
6/29/2020	0.00	50.3	0.0	0.0	0.0	1,013.0	0.0
6/30/2020	7.40	50.3	1,236.0	548,780.0	276,036.3	1,013.0	279.6
Totals/ Average:	304.60	49.5	1,074.7	18,724,970.8	9,286,966.2	1,013.0	9,407.7

NOTES:

*Methane content determined from the monthly blower inlet readings taken June 1, 5, 10, 16, 19, and 24, 2020. (Title V Permit Condition 818 Part 13). On days when multiple blower inlet readings were taken, the initial blower inlet reading was used for that day. If the A-4 Flare was not operational on a given day, the methane value for that day is not included in the monthly average calculation.

The daily heat input rate for the A-4 Flare shall not exceed 2,880 MMBTU (PTO Condition 818 Part 13).

CH4= methane scfm= standard cubic feet per minute LFG= landfill gas scf= standard cubic feet NA= Not Available (flare did not operate)

Heat Input Rate A-4 Flare

MONTH:

MONTH:	July-20						
Date	Runtime (hours)	CH4 (%)*	Average Flow (scfm)	Total LFG Volume (scf)	Total CH₄ Volume (scf)	Heating Value of CH ₄ (BTU/scf)	Heat Input (MMBTU)/Day
7/1/2020	24.00	49.3	1,233.9	1,776,875.4	875,999.6	1,013.0	887.4
7/2/2020	10.57	49.3	1,086.2	688,646.0	339,502.5	1,013.0	343.9
7/3/2020	0.00	49.3	0.0	0.0	0.0	1,013.0	0.0
7/4/2020	0.00	49.3	0.0	0.0	0.0	1,013.0	0.0
7/5/2020	0.00	49.3	0.0	0.0	0.0	1,013.0	0.0
7/6/2020	0.00	49.3	0.0	0.0	0.0	1,013.0	0.0
7/7/2020	14.47	50.4	1,189.1	1,032,146.2	520,201.7	1,013.0	527.0
7/8/2020	24.00	50.4	1,099.1	1,582,726.0	797,693.9	1,013.0	808.1
7/9/2020	21.40	48.4	1,026.2	1,317,577.0	637,707.3	1,013.0	646.0
7/10/2020	0.00	48.4	0.0	0.0	0.0	1,013.0	0.0
7/11/2020	0.00	48.4	0.0	0.0	0.0	1,013.0	0.0
7/12/2020	2.03	48.4	1,521.8	185,663.0	89,860.9	1,013.0	91.0
7/13/2020	10.30	48.4	1,014.3	626,817.0	303,379.4	1,013.0	307.3
7/14/2020	0.00	48.4	0.0	0.0	0.0	1,013.0	0.0
7/15/2020	15.63	48.4	1,027.6	963,862.0	466,509.2	1,013.0	472.6
7/16/2020	24.00	49.2	971.8	1,399,409.1	688,509.3	1,013.0	697.5
7/17/2020	24.00	49.2	1,017.5	1,465,204.0	720,880.4	1,013.0	730.3
7/18/2020	24.00	49.2	984.7	1,417,921.0	697,617.1	1,013.0	706.7
7/19/2020	2.07	49.2	909.4	112,766.0	55,480.9	1,013.0	56.2
7/20/2020	13.63	49.0	1,123.5	919,017.7	450,318.7	1,013.0	456.2
7/21/2020	24.00	47.6	1,071.4	1,542,876.0	734,409.0	1,013.0	744.0
7/22/2020	21.33	47.6	999.4	1,279,230.0	608,913.5	1,013.0	616.8
7/23/2020	0.00	47.6	0.0	0.0	0.0	1,013.0	0.0
7/24/2020	0.00	47.6	0.0	0.0	0.0	1,013.0	0.0
7/25/2020	0.00	47.6	0.0	0.0	0.0	1,013.0	0.0
7/26/2020	0.00	47.6	0.0	0.0	0.0	1,013.0	0.0
7/27/2020	2.43	49.6	1,177.5	171,919.3	85,272.0	1,013.0	86.4
7/28/2020	15.73	49.6	1,002.9	946,772.0	469,598.9	1,013.0	475.7
7/29/2020	21.63	49.6	923.7	1,198,972.0	594,690.1	1,013.0	602.4
7/30/2020	0.00	49.6	0.0	0.0	0.0	1,013.0	0.0
7/31/2020	0.00	49.6	0.0	0.0	0.0	1,013.0	0.0
Totals/ Average:	295.23	49.0	1,076.7	18,628,399.7	9,136,544.2	1,013.0	9,255.3

NOTES:

*Methane content determined from the monthly blower inlet readings taken July 1, 7, 9, 16, 20, 21, and 27, 2020. (Title V Permit Condition 818 Part 13). On days when multiple blower inlet readings were taken, the initial blower inlet reading was used for that day. If the A-4 Flare was not operational on a given day, the methane value for that day is not included in the monthly average calculation.

The daily heat input rate for the A-4 Flare shall not exceed 2,880 MMBTU (PTO Condition 818 Part 13).

CH4= methane scfm= standard cubic feet per minute LFG= landfill gas scf= standard cubic feet NA= Not Available (flare did not operate)

APPENDIX M

GAS MIGRATION MONITORING REPORTS



March 27, 2020

Mr. Lochlin Caffey Environmental Manager Vasco Road Landfill 4001 N Vasco Road Livermore, CA 94550

Re: First Quarter 2020 Perimeter Probe and Methane In-Structure Monitoring Report Vasco Road Landfill

Dear Mr. Caffey:

Tetra Tech respectfully submits this First Quarter 2020 Perimeter Probe and Methane In-Structure Monitoring Report for the Vasco Road Landfill (Vasco Road). The monitoring was conducted in accordance with requirements set forth in California Code of Regulations (CCR) Title 27, Division 2, Chapter 3, Subchapter 4, Article 6, Section (§) 20921.

Tetra Tech operations and maintenance (O&M) personnel performed the following events during the First Quarter 2020 Perimeter Probe and Methane In-Structure Monitoring:

- Perimeter probe monitoring conducted on March 13, 2020;
- Calibrated and inspected the permanent methane in-structure monitors (Sierra Monitors) on March 24, 2020; and
- Conducted the methane in-structure monitoring on March 24, 2020.

Perimeter Gas Probe Monitoring

Equipment and Methodology

Perimeter probe monitoring was conducted on March 13, 2020 with a CES-Landtec Envision Gas Extraction Monitor (GEM). Per the Republic Services (Republic) Landfill Gas Management Standard Operating Procedures (SOP), Tetra Tech O&M personnel calibrated the GEM in the field immediately prior to use. The static pressure of each probe was measured using the GEM's internal pressure transducers. Each probe was monitored to determine the concentration of methane as percent volume in air. The monitoring data was recorded into the GEM memory and submitted to the SCS eTools database. Results can be found in Table 1 of this report.

Gas Probe Monitoring Results

The First Quarter 2020 perimeter gas probe monitoring was conducted by Tetra Tech O&M personnel on March 13, 2020. Methane levels were below the regulatory limit of five percent during the First Quarter 2020, indicating that the perimeter monitoring probes were in compliance with the limits set forth in CCR Title 27 §20921. See Table 1 for results.

Methane In-Structure Monitoring

Equipment and Methodology

Tetra Tech O&M personnel conducted the First Quarter 2020 Methane In-Structure monitoring using a Trimble Flame Ionization Detector (FID) on March 24, 2020. The FID was calibrated to 500 parts per million by volume (ppmv) methane in the field immediately prior to use. Tetra Tech O&M personnel monitored buildings and structures at Vasco Road for the presence of methane above 1.25 percent. As required by the SOP, during monitoring the tip of the FID was held approximately one foot off the floor within on-site buildings and structures and included spaces where methane could accumulate if it were migrating into the buildings through the foundation system, utility conduits, and/or other paths of least resistance between the landfill and onsite structures.

Results, locations monitored, and calibration forms can be found in Table 2 of this report.

Methane In-Structure Monitoring Results

The First Quarter 2020 Methane In-Structure monitoring was conducted using an FID on March 24, 2020. Methane concentrations were monitored at each of the following five structures onsite to detect the presence of combustible gas accumulation in confined areas: main office reception, office area, maintenance office, maintenance break room, and scale house.

Methane was not detected above 1.25 percent by volume in any structures monitored. All in-structure readings were in compliance with CCR Title 27 §20921. Results of in-structure monitoring are provided in Table 2.

In-Structure Permanent Methane Monitors (Sierra Monitors)

Tetra Tech O&M personnel calibrated the Sierra monitors in the office area, main office reception, maintenance break room, maintenance office, and scalehouse for First Quarter 2020 on March 24, 2020. No exceedances were detected. Refer to Table 3 of this report for details.

Weather Conditions

The monitoring discussed in this report was conducted in accordance with the weather requirements set forth in Title 27 CCR §20934. Refer to Table 4 of this report for details.

If you have any questions regarding this report, please do not hesitate to contact Meghan Caesar at (925) 241-1074.

Sincerely,

TETRA TECH

Anne Liu

Environmental Scientist

Meghan Caesar Project Manager

Enclosures:

Table 1 - Perimeter Gas Probe Monitoring Results Table 2 – Methane In-Structure Monitoring Data Table 3 - Permanent Structure Monitor Calibration Data Table 4 – Weather Conditions Calibration Records

Vasco Road Landfill Table 1 - Perimeter Gas Probe Monitoring Results First Quarter 2020

Analyst: Michael Yes (Tetra Tech)

Date: March 13, 2020

Instrument: Landtec Envision GEM

Probe ID	Date/Time	CH₄ (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Relative Pressure (in wc)	Comments
VRLFMP01	3/13/2020 10:53	0.0	0.2	20.5	79.3	0.00	None
VRLFMP02	3/13/2020 16:09	0.0	0.0	20.9	79.1	0.00	None
VRLFMP03	3/13/2020 14:40	0.0	0.1	20.6	79.3	0.00	None
VRLFMP04	3/13/2020 15:28	0.0	0.7	20.1	79.2	0.00	None
VRLFMP05	3/13/2020 10:27	0.0	2.1	18.6	79.3	0.00	None
VRLFMP06	3/13/2020 11:09	0.0	0.2	20.0	79.8	0.00	None
VRLFMP07	3/13/2020 14:19	0.0	1.9	13.0	85.1	0.00	None
VRLFMP08	3/13/2020 14:58	0.0	0.3	20.0	79.7	0.00	None
VRLGP01B	3/13/2020 10:46	0.0	0.0	20.9	79.1	0.00	None
VRLGP01C	3/13/2020 10:43	0.0	0.1	20.3	79.6	0.00	None
VRLGP03A	3/13/2020 14:46	0.0	0.3	20.1	79.6	0.00	None
VRLGP03B	3/13/2020 14:48	0.0	0.2	19.2	80.6	0.00	None
VRLGP03C	3/13/2020 14:52	0.0	0.2	18.1	81.7	0.00	None
VRLGP04A	3/13/2020 13:38	0.0	0.4	19.4	80.2	0.00	None
VRLGP04B	3/13/2020 13:40	0.0	0.4	18.7	80.9	0.00	None
VRLGP04C	3/13/2020 13:44	0.0	0.3	13.4	86.3	0.00	None
VRLGP06B	3/13/2020 11:00	0.0	0.2	20.0	79.8	0.00	None
VRLGP06C	3/13/2020 11:05	0.0	0.0	20.5	79.5	0.10	None

VRLGP07A	3/13/2020 16:34	0.0	0.0	21.0	79.0	0.00	None
VRLGP07B	3/13/2020 16:36	0.0	0.1	20.4	79.5	0.00	None
VRLGP07C	3/13/2020 16:37	0.0	0.0	21.0	79.0	0.00	None
VRLGP09A	3/13/2020 12:21	0.0	0.1	19.8	80.1	0.00	None
VRLGP09B	3/13/2020 12:24	0.0	0.3	18.2	81.5	0.00	None
VRLGP09C	3/13/2020 12:28	0.0	0.1	19.7	80.2	0.00	None
VRLGP10A	3/13/2020 12:00	0.0	0.2	19.4	80.4	0.00	None
VRLGP10B	3/13/2020 12:04	0.0	0.8	17.0	82.2	0.00	None
VRLGP10C	3/13/2020 12:07	0.0	0.4	18.6	81.0	0.10	None
VRLGP11A	3/13/2020 11:50	0.0	0.3	19.6	80.1	0.00	None
VRLGP11B	3/13/2020 11:53	0.0	0.3	19.5	80.2	0.00	None
VRLGP12A	3/13/2020 11:40	0.0	0.3	19.6	80.1	0.00	None
VRLGP12B	3/13/2020 11:42	0.0	0.2	19.0	80.8	0.00	None
VRLGP13A	3/13/2020 11:33	0.0	0.0	20.3	79.7	0.00	None
VRLGP14A	3/13/2020 11:21	0.0	1.1	18.9	80.0	0.00	None
VRLGP14B	3/13/2020 11:26	0.0	0.0	20.4	79.6	0.00	None
VRLGP14C	3/13/2020 11:28	0.0	0.0	20.3	79.7	0.00	None
VRLGP15A	3/13/2020 12:59	0.0	0.4	19.0	80.6	0.00	None
VRLGP15B	3/13/2020 13:02	0.0	0.3	18.8	80.9	0.00	None
VRLGP15C	3/13/2020 13:05	0.0	0.8	15.8	83.4	0.00	None
VRLGP16A	3/13/2020 13:13	0.0	0.1	19.6	80.3	0.00	None
VRLGP16B	3/13/2020 13:15	0.0	0.1	19.1	80.8	0.00	None
VRLGP16C	3/13/2020 13:17	0.0	0.3	18.7	81.0	0.00	None
VRLGP17A	3/13/2020 13:24	0.0	0.2	19.5	80.3	0.00	None
VRLGP17B	3/13/2020 13:28	0.0	0.1	19.3	80.6	0.00	None
VRLGP17C	3/13/2020 13:31	0.0	1.6	7.3	91.1	0.00	None
VRLGP18A	3/13/2020 15:13	0.0	6.0	9.8	84.2	0.00	None
VRLGP18B	3/13/2020 15:17	0.0	2.3	8.5	89.2	0.00	None

VRLGP18C	3/13/2020 15:19	0.0	0.1	17.9	82.0	0.00	None
VRLGP19A	3/13/2020 14:26	0.0	0.3	19.1	80.6	0.00	None
VRLGP19B	3/13/2020 14:33	0.0	0.5	19.1	80.4	0.00	None
VRLGP20A	3/13/2020 15:58	0.0	2.8	16.4	80.8	0.00	None
VRLGP20B	3/13/2020 16:00	0.0	2.9	16.3	80.8	0.00	None
VRLGP20C	3/13/2020 16:02	0.0	3.3	15.4	81.3	0.00	None
VRLGP21A	3/13/2020 10:34	0.0	2.3	19.2	78.5	0.00	None
VRLGP22A	3/13/2020 12:38	0.0	0.1	19.5	80.4	0.00	None
VRLGP22B	3/13/2020 12:41	0.0	0.5	17.8	81.7	0.00	None
VRLGP22C	3/13/2020 12:45	0.0	0.0	19.8	80.2	0.00	None

Notes:

1. % – percent CH₄ – methane CO₂ – carbon dioxide O₂ – oxygen in. wc. – inches in water column 2. CCR Title 27, Division 2, Chapter 3, Article 6, §20921 require that: the concentration of methane gas migrating from the disposal site must not exceed 5 percent by volume in air at the disposal site permitted facility boundary or an alternative boundary approved in accordance with §20925.

Vasco Road Landfill Table 2 - Methane In-Structure Monitoring Data First Quarter 2020

Analyst: Max Polkabla (Tetra Tech) Date: March 24, 2020

Instrument: Thermo Scientific TVA 2020

Serial Number: 2020-17112964

Monitored Location	Date and Time	Methane (ppm)	Methane (%)	Comments
Office Area	3/24/2020 11:00	0.0	0.00000	None
Main Office Reception	3/24/2020 11:07	0.0	0.00000	None
Maintenance Office	3/24/2020 11:15	3.2	0.00032	None
Maintenance Breakroom	3/24/2020 11:20	0.0	0.00000	None
Scale House	3/24/2020 11:28	0.0	0.00000	None

Notes:

ppm = parts per million % = percent
 California Code of Regulations Title 27, Division 2, Chapter 3, Article 6, §20921 require that: The concentration of methane gas must not exceed 1.25 percent by volume in air within any portion of any on-site structures.

Vasco Road Landfill

Table 3 - Permanent Structure Monitor Calibration DataFirst Quarter 2020

Analyst: Max Polkabla (Tetra Tech)

Date: March 24, 2020

Instrument: SMC Model 26 Calibration Unit

Sensor Location	Sensor Calibration Completed (Yes/No)	Alarms (Yes/No)	Calibrate Zero (Yes/No)	Calibrated to ppm of Methane	Comments
Main Office Reception	Yes	Yes	Yes	5,000	None
Office Area	Yes	Yes	Yes	5,000	None
Maintenance Office	Yes	Yes	Yes	5,000	None
Maintenance Break Room	Yes	Yes	Yes	5,000	None
Scale House	Yes	Yes	Yes	5,000	None

Note: ppm = parts per million

Vasco Road Landfill

Table 4 – Weather Conditions

First Quarter 2020

Date	Conditions	Ambient Air Temperature (°F)	Wind Direction	Wind Speed (MPH)	Barometric Pressure (IN. HG)
3/13/2020	Fair	67.0	WSW	20.0	29.32
3/24/2020	Cloudy	56.0	SSW	13.0	29.72

Notes:1. °F – degrees Fahrenheit mph – miles per hour in. Hg – inches mercury S – South SSW – South Southwest 2. Weather data obtained from <u>http://www.wunderground.com</u>; Station ID KLVK

CALIBRATION RECORDS



ENVISION Calibration Log

Date:	3/13/2020						
Site:	Vasco Road						
Technician:	Jorge Contreras	6					
Instrument S/N:	1504203						
Instrument Type:	ENVISION						
Arrival Time:	8:30						
Departure Time:	17:00						
Calibration No. 1							
	FLOW Temp	: <u>53 F</u>					
Lot	#: 50% CH4 / 35% CO2 / Balance Gas:	122-401417675-1	9:32				
(Probes Only) Lot	#: 15% CH4 / 15% CO2 / Balance Gas:						
Lot	#: 4% O2 / Balance Gas:	105-401417676-1	9:32				
Calibration No. 2							
	FLOW Temp	: 54 F					
Lot	#: 50% CH4 / 35% CO2 / Balance Gas:	126-401417677-1	10:10				
(Probes Only) Lot	#: 15% CH4 / 15% CO2 / Balance Gas:						
Lot	#: 4% O2 / Balance Gas:	105-401417676-1	10:10				
Calibration No. 3							
	FLOW Temp	: 66 F					
Lot	#: 50% CH4 / 35% CO2 / Balance Gas:	126-401417677-1	14:10				
(Probes Only) Lot	#: 15% CH4 / 15% CO2 / Balance Gas:						
Lot	#: 4% O2 / Balance Gas:	105-401417676-1	14:10				
Calibration No. 4							
	FLOW Temp	: <u>63 F</u>					
	#: 50% CH4 / 35% CO2 / Balance Gas:	126-401417677-1	16:52				
(Probes Only) Lot	#: 15% CH4 / 15% CO2 / Balance Gas:	105-401417676-1	16.52				
LU		100-401417070-1	10.52				



INSTRUMENT RESPONSE TIME TEST RECORD

LANDFILL NAME:		VASCO ROAD							
MONITORING DATE	<u> </u>	3/24/2020			8:30 AM				
INSTRUMENT MAKE	Thermo Scientific	MODEL:	TVA2020	S/N:	2020-17112964				
MEASUREMENT	# 1:								
Stabilized	Reading Using Calibrati	on Gas:		499.0	ppm				
90% of the	e Stabilized Reading:			449.1	ррт				
Time to Re switching f	each 90% of Stabilized re from Zero Air to Calibra	eading after ation Gas		5.0	seconds (1)				
MEASUREMENT	# 2:								
Stabilized	Reading Using Calibrati	on Gas:		505.0	ppm				
90% of the	e Stabilized Reading:			454.5	ppm				
Time to Re switching f	each 90% of Stabilized ro from Zero Air to Calibra	eading after ation Gas		5.0	seconds (2)				
MEASUREMENT	# 3:								
Stabilized	Reading Using Calibrati	on Gas:		504.0	ppm				
90% of the	e Stabilized Reading:			453.6	ррт				
Time to Reach 90% of Stabilized reading after5.0secondsswitching from Zero Air to Calibration Gas									
CALCULATE RESPO	ONSE TIME:	$\frac{(1) + (2) + (3)}{3}$	<u>)</u>						
	= 5.000	SECON	NDS (MUST	BE LESS TH	AN 30 SECONDS)				

PERFORMED BY: Max Polkabla



CALIBRATION PRECISION TEST RECORD

LANDFILL NAME:		VASCO ROA	D	
MONITORING DATE:	3/24/2020	PERFORMED BY:	М	ax Polkabla
QUARTERLY EVENT:			TIME:	8:30 AM
INSTRUMENT MAKE:	Thermo Scientific	MODEL: TVA2020	S/N:	2020-17112964
Calibration Gas Stan	dard 500ppm CH4 (STD)		
MEASUREMENT # 1	1:			
Meter Readin	g for Zero Air:	-	0.0	ppm (1)
Meter Readin	g for Calibration Gas:		499.0	ppm (2)
MEASUREMENT # 2	2:			
Meter Readin	g for Zero Air:	-	0.0	ppm (3)
Meter Readin	g for Calibration Gas:		505.0	ppm (4)
MEASUREMENT # 3	3:			
Meter Readin	g for Zero Air:		0.0	ppm (5)
Meter Readin	g for Calibration Gas:		504.0	ppm (6)
CALCULATE PREC	ISION:			
[500 - (2)] +	[500 - (4)] + [500 - (6)] 3	x <u>1</u> 500	x -	<u>100</u> 1
=	0.667%	% (mus	st be less than	10%)



CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

LANDFILL NAME:		VAS	SCO ROAD	
INSTRUMENT MAKE: Thermo Scientific	MODEL:	TVA2020	S/N:	2020-17112964
Calibration Procedure				
1. Allow instrument to internally zero itself w	hile introduc	ing zero air.		
2. Introduce the calibration gas into the prob Stable Reading= <u>499.0</u>	e. _ppm			
3. Adjust meter to read 500 ppm.				
BACKGROUND DETERMINATION PROC	EDURE			
1. Upwind Reading (highest in 30 seconds): Location: <u>plant</u>		0.0	opm (1)	
2. Downwind Reading (highest in 30 seconds) Location: <u>office</u>	:	0.0	opm (2)	
Calculate Background Value:	<u>(1) +</u> 2	<u>- (2)</u> 2		
Background = 0.00	_ppm			
PERFORMED BY: Max Polkat	ola		TIME:	8:30 AM
DATE: <u>3/24/2020</u>				



June 16, 2020

Mr. Lochlin Caffey Environmental Manager Vasco Road Landfill 4001 N Vasco Road Livermore, CA 94550

Re: Second Quarter 2020 Perimeter Probe and Methane In-Structure Monitoring Report Vasco Road Landfill

Dear Mr. Caffey:

Tetra Tech respectfully submits this Second Quarter 2020 Perimeter Probe and Methane In-Structure Monitoring Report for the Vasco Road Landfill (Vasco Road). The monitoring was conducted in accordance with requirements set forth in California Code of Regulations (CCR) Title 27, Division 2, Chapter 3, Subchapter 4, Article 6, Section (§) 20921.

Tetra Tech operations and maintenance (O&M) personnel performed the following events during the Second Quarter 2020 Perimeter Probe and Methane In-Structure Monitoring:

- Perimeter probe monitoring conducted on June 12, 2020;
- Permanent methane in-structure monitors (Sierra Monitors) calibrated and inspected on May 21, 2020; and
- Methane in-structure monitoring conducted on May 21, 2020.

Perimeter Gas Probe Monitoring

Equipment and Methodology

Perimeter probe monitoring was conducted with a CES-Landtec Envision Gas Extraction Monitor (GEM). Per the Republic Services (Republic) Landfill Gas Management Standard Operating Procedures (SOP), Tetra Tech O&M personnel calibrated the GEM in the field immediately prior to use. The static pressure of each probe was measured using the GEM's internal pressure transducers. Each probe was monitored to determine the concentration of methane as percent volume in air. The monitoring data was recorded into the GEM memory and submitted to the SCS eTools database. Results can be found in Table 1 of this report.

Gas Probe Monitoring Results

The Second Quarter 2020 perimeter gas probe monitoring was conducted by Tetra Tech O&M personnel on June 12, 2020. Methane levels were below the regulatory limit of five percent during Second Quarter 2020, indicating that the perimeter monitoring probes were in compliance with the limits set forth in CCR Title 27 §20921. See Table 1 for results.

Methane In-Structure Monitoring

Equipment and Methodology

Tetra Tech O&M personnel conducted the Second Quarter 2020 Methane In-Structure monitoring using a Trimble Flame Ionization Detector (FID) on May 21, 2020. The FID was calibrated to 500 parts per million by volume (ppmv) methane in the field immediately prior to use. Tetra Tech O&M personnel monitored buildings and structures at Vasco Road for the presence of methane above 1.25 percent. As required by the SOP, during monitoring, the tip of the FID was held approximately one foot off the floor within on-site buildings and structures and included spaces where methane could accumulate if it were migrating into the buildings through the foundation system, utility conduits, and/or other paths of least resistance between the landfill and onsite structures.

Results, locations monitored, and calibration forms can be found in Table 2 of this report.

Methane In-Structure Monitoring Results

The Second Quarter 2020 Methane In-Structure monitoring was conducted using an FID on May 21, 2020. Methane concentrations were monitored at each of the following five structures onsite to detect the presence of combustible gas accumulation in confined areas: main office reception, office area, maintenance office, maintenance break room, and scale house.

Methane was not detected above 1.25 percent by volume in any structures monitored. All in-structure readings were in compliance with CCR Title 27 §20921. Results of in-structure monitoring are provided in Table 2.

In-Structure Permanent Methane Monitors (Sierra Monitors)

Tetra Tech O&M personnel calibrated the Sierra monitors in the office area, main office reception, maintenance break room, maintenance office, and scalehouse for Second Quarter 2020 on May 21, 2020. No exceedances were detected. Refer to Table 3 of this report for details.

Weather Conditions

The monitoring discussed in this report was conducted in accordance with the weather requirements set forth in Title 27 CCR §20934. Refer to Table 4 of this report for details.

If you have any questions regarding this report, please do not hesitate to contact Meghan Caesar at (925) 241-1074.

Sincerely,

TETRA TECH

Anne Liu

Environmental Scientist

Meghan Caesar Project Manager

Enclosures:

Table 1 - Perimeter Gas Probe Monitoring ResultsTable 2 - Methane In-Structure Monitoring DataTable 3 - Permanent Structure Monitor Calibration DataTable 4 - Weather ConditionsCalibration Records

Vasco Road Landfill Table 1 - Perimeter Gas Probe Monitoring Results Second Quarter 2020

Analyst: Jorge Contreras (Tetra Tech O&M)

Date: June 12, 2020

Instrument: Landtec Envision GEM

Probe ID	Date/Time	CH₄ (%)	CO2 (%)	O2 (%)	Balance Gas (%)	Relative Pressure (in wc)	Comments
VRLFMP01	6/12/20 9:58	0.0	0.1	21.4	78.5	0.00	None
VRLFMP02	6/12/20 14:29	0.0	0.0	21.1	78.9	0.00	None
VRLFMP03	6/12/20 13:06	0.0	0.1	20.7	79.2	0.02	None
VRLFMP04	6/12/20 12:31	0.0	0.1	20.9	79.0	0.01	None
VRLFMP05	6/12/20 9:45	0.0	3.1	18.2	78.7	0.00	None
VRLFMP06	6/12/20 14:12	0.0	0.3	20.5	79.2	0.00	None
VRLFMP07	6/12/20 12:56	0.0	2.0	13.3	84.7	0.02	None
VRLFMP08	6/12/20 13:29	0.0	0.2	20.5	79.3	-0.01	None
VRLGP01B	6/12/20 10:07	0.0	0.0	21.6	78.4	0.00	None
VRLGP01C	6/12/20 10:09	0.0	0.0	21.1	78.9	-0.05	None
VRLGP03A	6/12/20 13:10	0.0	0.3	20.4	79.3	0.00	None
VRLGP03B	6/12/20 13:11	0.0	0.2	19.8	80.0	0.00	None
VRLGP03C	6/12/20 13:13	0.0	0.1	18.8	81.1	-0.05	None
VRLGP04A	6/12/20 12:03	0.0	0.6	20.4	79.0	0.01	None
VRLGP04B	6/12/20 12:04	0.0	0.3	19.8	79.9	-0.05	None
VRLGP04C	6/12/20 12:07	0.0	0.1	16.4	83.5	0.02	None
VRLGP06B	6/12/20 10:31	0.0	0.1	20.8	79.1	0.02	None
VRLGP06C	6/12/20 10:33	0.0	0.0	21.2	78.8	-0.08	None

VRLGP07A	6/12/20 12:12	0.0	0.0	21.0	79.0	0.00	None
VRLGP07B	6/12/20 12:14	0.0	0.1	20.1	79.8	0.03	None
VRLGP07C	6/12/20 12:15	0.0	0.0	20.9	79.1	0.00	None
VRLGP09A	6/12/20 11:09	0.0	0.1	20.7	79.2	0.02	None
VRLGP09B	6/12/20 11:10	0.0	0.3	19.1	80.6	0.00	None
VRLGP09C	6/12/20 11:12	0.0	0.0	20.7	79.3	0.00	None
VRLGP10A	6/12/20 11:01	0.0	0.3	20.6	79.1	0.00	None
VRLGP10B	6/12/20 11:02	0.0	0.4	19.3	80.3	0.02	None
VRLGP10C	6/12/20 11:04	0.0	0.3	19.8	79.9	0.00	None
VRLGP11A	6/12/20 10:54	0.0	0.5	20.6	78.9	0.00	None
VRLGP11B	6/12/20 10:56	0.0	0.2	20.6	79.2	0.00	None
VRLGP12A	6/12/20 10:47	0.0	0.3	20.7	79.0	0.00	None
VRLGP12B	6/12/20 10:49	0.0	0.1	20.0	79.9	0.00	None
VRLGP13A	6/12/20 10:41	0.0	0.0	21.3	78.7	-0.02	None
VRLGP14A	6/12/20 10:22	0.0	1.3	20.2	78.5	0.00	None
VRLGP14B	6/12/20 10:24	0.0	0.0	21.3	78.7	-0.03	None
VRLGP14C	6/12/20 10:25	0.0	0.0	21.3	78.7	-0.05	None
VRLGP15A	6/12/20 11:38	0.0	0.4	20.3	79.3	0.02	None
VRLGP15B	6/12/20 11:40	0.0	0.1	20.2	79.7	0.00	None
VRLGP15C	6/12/20 11:41	0.0	0.1	20.3	79.6	-0.05	None
VRLGP16A	6/12/20 11:47	0.0	0.1	20.7	79.2	0.00	None
VRLGP16B	6/12/20 11:48	0.0	0.1	20.3	79.6	0.00	None
VRLGP16C	6/12/20 11:50	0.0	0.2	19.9	79.9	0.00	None
VRLGP17A	6/12/20 11:55	0.0	0.3	20.6	79.1	-0.01	None
VRLGP17B	6/12/20 11:56	0.0	0.1	20.4	79.5	0.02	None
VRLGP17C	6/12/20 11:58	0.0	0.4	15.3	84.3	0.00	None
VRLGP18A	6/12/20 12:40	0.0	0.7	18.3	81.0	0.03	None
VRLGP18B	6/12/20 12:43	0.0	1.0	15.0	84.0	0.05	None

VRLGP18C	6/12/20 12:45	0.0	0.1	16.4	83.5	0.00	None
VRLGP19A	6/12/20 13:01	0.0	0.4	19.3	80.3	0.00	None
VRLGP19B	6/12/20 13:02	0.0	0.4	19.4	80.2	-0.02	None
VRLGP20A	6/12/20 14:20	0.0	2.3	18.2	79.5	0.05	None
VRLGP20B	6/12/20 14:21	0.0	2.6	18.1	79.3	0.06	None
VRLGP20C	6/12/20 14:24	0.0	2.3	18.2	79.5	0.07	None
VRLGP21A	6/12/20 9:53	0.0	2.1	19.6	78.3	0.00	None
VRLGP22A	6/12/20 11:25	0.0	0.2	20.7	79.1	0.00	None
VRLGP22B	6/12/20 11:26	0.0	0.2	19.5	80.3	0.01	None
VRLGP22C	6/12/20 11:28	0.0	0.0	20.8	79.2	-0.05	None

Notes:

1. % – percent CH₄ – methane CO₂ – carbon dioxide O₂ – oxygen in. wc. – inches in water column 2. CCR Title 27, Division 2, Chapter 3, Article 6, §20921 require that: the concentration of methane gas migrating from the disposal site must not exceed 5 percent by volume in air at the disposal site permitted facility boundary or an alternative boundary approved in accordance with §20925.

Vasco Road Landfill Table 2 - Methane In-Structure Monitoring Data Second Quarter 2020

Analyst: Max Polkabla (Tetra Tech O&M) Date: May 21, 2020

Instrument: Thermo Scientific TVA 2020

Serial Number: 2020-17112964

Monitored Location	Date and Time	Methane (ppm)	Methane (%)	Comments
Main Office	5/21/2020 14:15	0.0	0.00000	None
Main Office Reception	5/21/2020 14:19	0.0	0.00000	None
Maintenance Office	5/21/2020 14:24	0.0	0.00000	None
Maintenance Breakroom	5/21/2020 14:28	0.0	0.00000	None
Scale House	5/21/2020 14:32	5.0	0.00050	None

Notes:

ppm = parts per million % = percent
 California Code of Regulations Title 27, Division 2, Chapter 3, Article 6, §20921 require that: The concentration of methane gas must not exceed 1.25 percent by volume in air within any portion of any on-site structures.
Vasco Road Landfill

Table 3 - Permanent Structure Monitor Calibration DataSecond Quarter 2020

Analyst: Max Polkabla (Tetra Tech O&M)

Date: May 21, 2020

Instrument: SMC Model 26 Calibration Unit

Sensor Location	Sensor Calibration Completed (Yes/No)	Alarms (Yes/No)	Calibrate Zero (Yes/No)	Calibrated to ppm of Methane	Comments
Main Office Reception	Yes	Yes	Yes	5,000	None
Office Area	Yes	Yes	Yes	5,000	None
Maintenance Office	Yes	Yes	Yes	5,000	None
Maintenance Break Room	Yes	Yes	Yes	5,000	Unplugged. Plugged in and calibrated.
Scale House	Yes	Yes	Yes	5,000	None

Note: ppm = parts per million

Vasco Road Landfill

Table 4 – Weather Conditions

Second Quarter 2020

Date	Conditions	Ambient Air Temperature (°F)	Wind Direction	Wind Speed (MPH)	Barometric Pressure (IN. HG)
5/21/2020	Fair	82.0	WNW	5.0	29.54
6/12/2020	Fair	63.0	SW	13.0	29.61

Notes: 1. °F – degrees Fahrenheit mph – miles per hour in. Hg – inches mercury WNW – West Northwest SW – Southwest 2. Weather data obtained from <u>http://www.wunderground.com</u>; Station ID: KLVK

CALIBRATION RECORDS



ENVISION Calibration Log

Date:		6/12/2020					
Site:		Vasco Road					
Technician:	Jorge Contreras						
Instrument S/N:		1504203					
Instrument Type:		ENVISION					
Arrival Time:		8:30					
Departure Time:		15:00					
Calibration No. 1							
Calibration NO. 1			00 F				
			50 F	0.07			
	LOT#:	50% CH4 / 35% CO2 / Balance Gas:	126-401417677-1	9:37			
(Probes Only)	Lot#:	15% CH4 / 15% CO2 / Balance Gas:					
	Lot#:	4% O2 / Balance Gas:	105-401417676-1	9:37			
Calibration No. 2							
		FLOW Temp	: 66 F				
	Lot#:	50% CH4 / 35% CO2 / Balance Gas:	126-401417677-1	14:08			
(Probes Only)	Lot#:	15% CH4 / 15% CO2 / Balance Gas:					
	Lot#:	4% O2 / Balance Gas:	105-401417676-1	14:08			
Calibration No. 3							
Calibration No. 5		FLOW Temp	: 66 F				
	Lot#:	50% CH4 / 35% CO2 / Balance Gas:	126-401417677-1	14:45			
(Probes Onlv)	Lot#:	15% CH4 / 15% CO2 / Balance Gas:					
Lc		4% O2 / Balance Gas:	105-401417676-1	14:45			
Calibration No. 4							
	۱. – ۱. – ۱. – ۱. – ۱. – ۱. – ۱. – ۱.	FLOW Temp					
(Probes Oply)	LOU#:	50% CH4 / 35% CO2 / Balance Gas:					
(i tobes Only)	Lot#	11% O2 / Balance Gas:					
	•						



INSTRUMENT RESPONSE TIME TEST RECORD

LANDFILL NAME:	: VASCO ROAD					
MONITORING DATE:	5/21/2020		Time:	8:30 AM		
INSTRUMENT MAKE: Thermo Scientific MODEL: TVA2020			S/N:	2020-17112964		
MEASUREMENT #	1:					
Stabilized Reading Using Calibration Gas:				ppm		
90% of the S	abilized Reading:	-	437.4	ppm		
Time to Reac switching fro	h 90% of Stabilized reading a m Zero Air to Calibration Ga	fters	5.0	seconds (1)		
MEASUREMENT #	2:					
Stabilized Re	ading Using Calibration Gas:	-	490.0	ppm		
90% of the Stabilized Reading:				ppm		
Time to Reac switching fro	h 90% of Stabilized reading a m Zero Air to Calibration Ga	fters	5.0	seconds (2)		
MEASUREMENT #	3:					
Stabilized Re	ading Using Calibration Gas:	-	488.0	ppm		
90% of the S	abilized Reading:	-	439.2	ppm		
Time to Reach 90% of Stabilized reading after switching from Zero Air to Calibration Gas				seconds (3)		
CALCULATE RESPONS	SE TIME: <u>(1) + (2</u> 3	<u>) +(3)</u>				
= <u>5.000</u> SECONDS (MUST BE LESS THAN 30 SECONDS)						
PERFORMED BY: Max Polkabla						



CALIBRATION PRECISION TEST RECORD

LANDFILL NAME:		VASCO ROA	D	
MONITORING DATE:	5/21/2020	PERFORMED BY:	Ν	Iax Polkabla
QUARTERLY EVENT:		-	TIME:	8:30 AM
INSTRUMENT MAKE: _	Thermo Scientific	MODEL: TVA2020	S/N:	2020-17112964
Calibration Gas Stands	ard 500ppm CH4 (S	STD)		
MEASUREMENT # 1:	:			
Meter Reading	for Zero Air:	-	0.0	ppm (1)
Meter Reading	for Calibration Gas:	-	486.0	ppm (2)
MEASUREMENT # 2:	:			
Meter Reading	for Zero Air:	_	0.0	ppm (3)
Meter Reading	for Calibration Gas:	-	490.0	ppm (4)
MEASUREMENT # 3:	:			
Meter Reading	for Zero Air:	-	0.0	ppm (5)
Meter Reading	for Calibration Gas:	-	488.0	ppm (6)
CALCULATE PRECI	SION:			
<u>[500 - (2)] + [</u> 5	<u>500 - (4)] + [500 - (6)]</u> 3	x <u>1</u> 500	x	<u>100</u> 1
=_	2.400%	% (mus	t be less tha	n 10%)



CALIBRATION PROCEDURE AND BACKGROUND DETERMINATION REPORT

LANDFILL NAME:		VAS	CO ROAD		
INSTRUMENT MAKE:	Thermo Scientific MO	DEL: <u>TVA2020</u>	S/N:	2020-17112964	
Calibration Procedu	<u>re</u>				
1. Allow instrument to in	ternally zero itself while in	troducing zero air.			
2. Introduce the calibrat Stable Res	ion gas into the probe. ading= <u>486.0</u> ppm				
3. Adjust meter to read 5	500 ppm.				
BACKGROUND DETER	RMINATION PROCEDUR	RE			
1. Upwind Reading (high Location: <u>p</u>	nest in 30 seconds): <u>lant</u>	<u> </u>	pm (1)		
2. Downwind Reading (h Location: <u>o</u>	ighest in 30 seconds): <u>ffice</u>	<u> </u>	pm (2)		
Calculate Ba	ckground Value:	$\frac{(1) + (2)}{2}$			
Back	cground = <u>0.00</u> ppm				
PERFORMED BY:	Max Polkabla		TIME:	8:30 AM	
DATE:	5/21/2020				

APPENDIX N

QUARTERLY TRS

Vasco Road, Livermore, California Quarterly Total Reduced Sulfur

Quarter	Date	H ₂ S Reading (ppmv)	Calculated TRS (ppmv)	Rolling Annual Average TRS (ppmv)
Q3 2019	9/18/2019	10	12	26
Q4 2019	11/25/2019	0	0	11
Q1 2020	3/27/2020	46	55	19
Q2 2020	6/11/2020	40	48	29

Pursuant to Title V Permit Condition Number 818 Part 12a, as modified by Application Number 23770 issued and approved on March 14, 2012, the Permit Holder shall analyze the landfill gas (LFG) for TRS on a quarterly basis using a combination of field testing and laboratory analytical results. The field testing procedure shall measure H_2S content in the LFG using a Draeger tube, and calculated for TRS by multiplying the H_2S result by 1.2. The concentration of TRS compounds in the collected LFG shall not exceed an annual average of 320 ppmv, reported as H_2S (dry). The annual average TRS concentration shall be calculated and recorded for each rolling 4-quarter period based on the TRS data recorded from the field and lab samples described above.

H₂S= hydrogen sulfide

ppmv= parts per million by volume

TRS= total reduced sulfur

Draeger Tubes



)20

Tt ·	TETRA T	ECH					Draeger Tube Vasco Roa 3/1/2020 - 3/27/20		
Point ID	Date	Chemical Tested For	Approximate Concentration	Concentration Units	Draeger Notes	Technician	Image		
VRLFBLIN	3/27/2020 12:24:39 PM	H2S	46	ppm		Max Polkabla			

Draeger Tubes



6/1/2020 - 6/11/2020



Point ID	Date	Chemical Tested For	Approximate Concentration	Concentration Units	Draeger Notes	Technician	Image
VRLFBLIN	6/11/2020 2:42:35 PM	H2S	40	ppm		Max Polkabla	

APPENDIX O

S-7 NON-RETAIL GASOLINE DISPENSING FACILITY

Vasco Road Landfill S-7 Non-Retail Gasoline Dispensing Facility

Month	Monthly Gasoline Throughput (Gal)	12-Month Consecutive Total (Gal)
August-19	290.8	3,457.4
September-19	218.4	3,296.6
October-19	233.2	3,279.7
November-19	180.8	3,184.1
December-19	274.6	3,208.7
January-20	201.4	3,129.8
February-20	217.9	3,094.6
March-20	192.7	3,008.0
April-20	189.5	2,922.6
May-20	259.5	2,920.8
June-20	262.3	2,823.7
July-20	225.3	2,746.4

Gal = gallons

Pursuant to Title V Permit Condition Number 7523, Part 1, the annual gasoline throughput for S-7 shall not exceed 400,000 gallons in any consecutive 12-month period.

APPENDIX P

S-14 GREEN WASTE PROCESSING OPERATION

Vasco Road Landfill S-14 Green Waste Processing Operation

Month	Monthly Throughput (tons)	12-Month Consecutive Total (tons)
August-19*	0.0	0.0
September-19*	0.0	0.0
October-19*	0.0	0.0
November-19*	0.0	0.0
December-19*	0.0	0.0
January-20*	0.0	0.0
February-20	0.0	0.0
March-20	0.0	0.0
April-20	0.0	0.0
May-20	0.0	0.0
June-20	0.0	0.0
July-20	0.0	0.0

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road, therefore the tonnages for S-14 have been revised to accurately reflect site operations.

APPENDIX Q

S-15 WOOD WASTE PROCESSING OPERATION

Vasco Road Landfill S-15 Wood Waste Processing Operation

Month	Monthly Throughput (tons)	12-Month Consecutive Total (tons)
August-19*	0.0	0.0
September-19*	0.0	0.0
October-19*	0.0	0.0
November-19*	0.0	0.0
December-19*	0.0	0.0
January-20*	0.0	0.0
February-20	0.0	0.0
March-20	0.0	0.0
April-20	0.0	0.0
May-20	0.0	0.0
June-20	0.0	0.0
July-20	0.0	0.0

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations.

APPENDIX R

A-4 FLARE SOURCE TEST RESULTS

Republic Services

BAAQMD PLANT NO: A5095

Compliance Emissions Test Report #20111 Perennial Flare (A-4)

Located at: Vasco Road Landfill 4001 North Vasco Rd Livermore, CA 94551

Prepared For:

Republic Services Lochlin Caffey 3260 Blume Drive, Suite 200 Richmond, CA 94806 LCaffey2@republicservices.com

For Submittal To:

Marco Hernandez & Gloria Espena The Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105 mhernandez@baaqmd.gov & gespena@baaqmd.gov sourcetest@baaqmd.gov

Testing Performed On:

April 15th, 2020

Final Report Submitted On:

May 28th, 2020

Performed and Reported by:

Blue Sky Environmental, Inc. 624 San Gabriel Avenue Albany, CA 94706 bluesky@blueskyenvironmental.com Office (510) 525 1261/ Cell (510) 508 3469



Blue Sky Environmental, Inc 624 San Gabriel Avenue Albany, CA 94706 Office (510) 525 1261 Cell (510) 508 3469 bluesky@blueskyenvironmental.com

May 28th, 2020

Republic Services 3260 Blume Drive, Suite 200 Richmond, CA 94806

Attn: Lochlin Caffey

<u>Subject:</u> Source test emission report for Flare (A-4) located at the Vasco Road Landfill, 4001 N. Vasco Road, Livermore, CA 94551. Facility #A5095.

Test Date(s): April 15th, 2020.

Sampling Location: The flare is located at the above address. Sampling was conducted via two flange ports in the 153 inch inside diameter flare exhaust stack.

Sampling Personnel: Sampling was performed by Chuck Arrivas and Timothy Eandi of Blue Sky Environmental, Inc.

Observing Personnel: The BAAQMD were notified in a Source Test Plan dated March 18th and revised on April 13th, 2020 (NST #5926). There were no representatives from the BAAQMD present during the test program. Max Polkabla of Tetra Tech was present to assist with operations.

Process Description: The flare is used to burn landfill gas. The landfill gas flow rate and the flare actual operating temperature are continuously recorded. The flare was operated at a control temperature set-point of $1,620^{\circ}F$ with a landfill gas flow rate of ~1,721 standard cubic feet per minute (SCFM). The Flare operating temperature (min/max) values and the landfill gas flow rate (min/max) values are recorded by a Yokogawa recorder onsite.

<u>**Test Program</u>**: The test program was performed while the Flare was controlled on the middle thermocouple at normal operating conditions. The testing was performed to comply with the prevailing permit requirements presented in the following Table.</u>

Three 36-minute tests were performed on the flare. The sampling system was checked for leaks prior to testing, and was calibrated before and after each run with certified calibration gas standards. A stratification traverse was performed during all runs, at 16 points (8 per port).

BAAQMD Source #	(A-4)	
Source Description	Flare	
Permit Conditions	818-20, 818-21 and parts 8-13	
Parameter & Emissions Limits	NOx <11 ppm @ 15% O ₂ , <0.049 NO _x Lbs/MMBTU <141.1 NO _x lbs/day CO <73 ppm @ 15% O ₂ lbs/day, <0.19 CO lbs/MMBtu, <547.2 CO lbs/day NMOC <30 ppm @ 3% O ₂ , or D.E. 98% CH ₄ DE 99% LFG-TRS <320 ppm	

<u>Sampling & Analytical Methods</u>: The sampling methods listed below were used.

EPA Method 1	Sample and Traverse Point Determination
EPA Method 3A	O2 and CO2, Stack Gas Molecular Weight
EPA 4 part 16.4	Moisture Calculated
EPA 7E	NO _x Emissions & NO ₂ Converter Efficiency
EPA 10	CO Emissions
EPA Method 19	Calculation of Stack Gas Flow Rate
EPA 25A/ALT-097	THC, CH4 & NMHC Emissions
ASTM 1945/3588	Fuel Analysis for BTU and F-Factors
EPA 25C	Analysis of landfill gas for TNMHC (NMOC)
EPA TO-15	Analysis for volatile organic species by GCMS

Sampling & Traverse Points Selection by EPA Method 1. This method is used to determine the duct or stack area and appropriate traverse points that represent equal areas of the duct for sampling and velocity measurements.

Stack Gas Molecular Weight by EPA Method 3/3A. This method is used to determine the molecular weight of the stack gas. Measurements of gas constituents $%O_2$ and $%CO_2$ were obtained from the CEMS system.

Stack Gas Moisture by EPA Method 4-16.4 is an acceptable alternative to EPA Method 4 for the determination of moisture using F-factors. In this case the mole fraction of the moisture in the ambient air is calculated using equations in EPA Method 4-16.4 from 1) the measured ambient relative humidity, ambient temperature and barometric pressure, 2) the mole fraction from free water in the fuel, calculated from the moisture % in the fuel which is determined by the analytical lab to be the balance after all the major gaseous components have been summed, and 3) the mole fraction from the hydrogen in the fuel. To determine the moisture in the fuel, the raw fuel analysis before normalization to 100% is referenced.

EPA Method 3A (O₂, CO₂), 10 (CO) and 7E (NO_x) are continuous monitoring techniques using instrumental analyzers. Sampling is performed by extracting exhaust flue gas from the stack, conditioning the sample and analyzing it by continuous monitoring gas analyzers in a CEM test van. The sampling system consists of a stainless steel sample probe, Teflon sample line, glass-fiber particulate filter, glass moisture-knockout condensers in ice, followed by thermoelectric coolers (optional), Teflon sample transfer tubing, diaphragm pump and a stainless steel/Teflon manifold and flow control/delivery system. A constant sample and calibration gas supply pressure of 5 PSI was provided to each analyzer to avoid pressure variable response differences. The entire sampling system was leak checked prior to and at the end of the sampling program.

EPA Method 19 (gas) was used to determine stack gas volumetric flow rates using oxygen based F-factors. F-factors are ratios of combustion gas volumes generated from heat input. The heating value of the fuel in Btu per cubic foot is determined from analysis of the fuel gas samples using ASTM D1946/3588 gas chromatography analytical procedures. Total fuel consumption was measured by CARB Method 1, 2, 3 and 4. The total cubic feet per hour of fuel multiplied times the Btu/cf provides million Btu per hour (MMBtu) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates were used to determine emission rates.

EPA Method 25A/ALT-097: Sampling for Total Hydrocarbons, Methane and Non-Methane Hydrocarbons. EPA Method 25A (FID/GC Method) employs a heated TECO 55C FID with GC column, heated Teflon sample gas transfer lines to provide a continuous sample to the heated FID/GC Hydrocarbon Analyzer. Heated lines are used to avoid moisture or hydrocarbon condensation. Methane is determined by the calibrated GC method in the TECO 55C NMHC/CH4/THC Analyzer. Calibration gases are selected to fall within 25-35%, 45-55% and 80-90% of Range for Methane, Total Hydrocarbon and Non-Methane Hydrocarbons

Calibrations are performed through the probe and entire sample system. The system linearity check was performed prior to testing and during testing and calibration drift checks were performed after every run. All data was corrected according to EPA Method 25A.

The sampling and analytical system (for EPA Methods) was checked for linearity with zero, mid (40-60%) and high span (80-100%) calibrations, and is checked for system bias at the beginning and end of each run. System bias is determined by introducing calibration gas to the probe and pulling it through the entire sampling system. Individual test run calibrations usually use the calibration gas that most closely matches the stack gas effluent. Along with the Sampling System Bias, the Zero and Calibration Drift values were determined for each test. Methods 3A, 7E and 10 all defer to EPA Method 7E for the calculations of effluent concentration, Span, Calibration Gas, Analyzer Calibration Error (Linearity), Sampling System Bias, Zero Drift, Calibration Drift and Response Time. In addition, the NOx analyzer NO₂ to NO conversion efficiency check defers to EPA Method 7E for the criteria and procedure.

All calibration gases are EPA Protocol #1. The analyzer data recording system consists of a Honeywell DPR3000 strip chart recorder supported by a Data Acquisition System (DAS).

EPA Method 25C for NMOC (ROC) is the method adopted for this because EPA 25A and CARB 100 has complications associated with high methane to NMOC ratios, and EPA 25 is not appropriated for sampling lower than 50 ppm of NMOC and in high CO_2 and Moisture situations. The Method is written for evacuated tank sampling but is adaptable to Tedlar bag sampling procedures as in EPA Method 18, CARB 410 and CARB 422. The sampling equipment comprises a stainless steel or glass lined probe with a short Teflon transfer line in to a tedlar bag housed in a sealed chamber. The chamber is evacuated by pump at a prescribed rate for the test duration and the Tedlar bag capacity so the tedlar bag sample is integrated over the test period. The equipment used for analysis is exactly the same as used in EPA 25 and 25C. The sample is injected into a GC column where the methane and CO_2 are flushed through and removed then the NMOC (ROC) fraction is oxidized to form CO_2 then reduced to methane and analyzed.

ASTM D1945/3588 gas chromotography analytical procedures. Total fuel consumption for each source is monitored by a dedicated fuel gas meter. The total cubic feet per hour of fuel multiplied times the Btu/cf provides million Btu per hour (MMBtu) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates were used to determine emission rates.

TO-15 Volatile Organics and Sulfur Compounds by SILCO SUMMA® Canister. Sampling consists of collecting gases in pre-evacuated 6-Liter SUMMA canisters with pre-set flow controllers set to integrate over the desired test duration. The SUMMA® passivated canisters allow holding times up to 14 days for the TO-15 Method list of volatile organics. The SILCO canisters have a silanized (glass) lining that permits longer holding times (up to 72 hours) for reactive sulfur compounds. The sample gas is drawn by the canister vacuum through a micro-filter, pre-set orifice flow controller and on/off valve into the canister. The canister vacuum is monitored with a vacuum gauge to verify sample collection. In this case, the flow controller consisted of capillary orifice tubing designed to sample for a pre-set duration of 1.0 hrs.

The samples are analyzed for volatile organics by EPA Method TO-15 using GC/MS (gas chromatography/mass spectroscopy and for tentatively identified compounds, not included in the TO-15 list. The samples were also analyzed for 20 sulfur compounds by ASTM Method D-5504 GC/SCD (gas chromatography/sulfur chemiluminescent detector).

Instrument	Analyte	Principle
Servomex 1440	O ₂	Paramagnetic
Servomex 1440	CO ₂	IR
TECO 42C	NO _X	Chemiluminescence
TECO 48C	СО	GFC/IR
TECO 55C	THC/CH ₄ /NMOC	GC/FID

Instrumentation: The following continuous emissions analyzers were used:

<u>**Test Results</u>**: Testing was performed according to the Source Test Plan. All emissions were equal to or below limits. The emission results are presented in Table 1 and Target Toxic Air Contaminant concentrations in the landfill gas are shown in Table 2, and are summarized as follows:</u>

Emission Parameter	Flare (A-4) Average	Limit	Status
NO _x ppm @ 15% O ₂	10.9	11	PASS
NO _x lbs/day	53.7	141.1	PASS
NO _x , lbs/MMBtu	0.044	0.049	PASS
CO, ppm @ 15% O ₂	43.2	73	PASS
CO lbs/day	129.7	547.2	PASS
CO, lbs/MMBtu	0.105	0.19	PASS
TNMHC ppm @ 3% O ₂	<6.2	30	PASS
Landfill Gas TRS as SO ₂ ppm	7.09	320	PASS
CH₄ Removal Efficiency	99.727	99	PASS

The appendices are organized as follows:

Calculations

All the calculations performed on the continuous emissions monitoring (CEM) data and flow rate calculations are presented in this section.

Laboratory Reports All laboratory reports and chain of custody. Field Data Sheets All the CEMS data, any transcribed data from the strip charts. Process Information Facility Process Data. Calibration Gas Certifications Certifications for the calibration gas standards. Stack Diagram Sketch or photograph of the stack. Sample System Diagram Schematic of the sampling system configuration Permit to Operate / ATC Permit to Operate / Authority to Construct Source Test Plan Sampling protocols submitted to the BAAQMD prior to testing

Comments: Due to large spikes in the Methane emissions in the stack that exceeded the available calibration gases for the 25A FID (50 PPM range), the testing was instead conducted with a TECO 55C (Modified Method 25A - ALT 097) and the test runs were extended to 36 minutes (18 minutes per port). The measured emissions meet the Permit required limits, no other deviations from the protocol or abnormalities during the test were observed.

The work performed herein was conducted under my supervision, and I certify that: a) the details and results contained within this report are to the best of my knowledge an authentic and accurate representation of the test program: b) that the sampling and analytical procedures and data presented in the report is authentic and accurate: c) that all testing details and conclusions are accurate and valid, and: d) that the production rate and/or heat input rate during the source test are reported accurately.

If this report is submitted for Compliance purposes it should only be reproduced in its entirety. If there are any questions concerning this report, please contact Jeramie Richardson at (810) 923-3181, Chuck Arrivas at (925) 338-4875 or Guy Worthington at (510) 508-3469.

Prepared by

Junkin

Jessica Morris

Reviewed by,

Mulli

Chuck Arrivas, QSTI Project Manager

TABLE #1

Republic Services Vasco Landfill Flare A-4

Normal

RUN	1	2	3	AVERAGE	LIMITS
Test Date	4/15/20	4/15/20	4/15/20		
Test Time	1240-1322	1355-1438	1510-1600		
Standard Temp., °F	70	70	70		
Flare Temperature, °F Average	1,652	1,650	1,649	1,650	
Fuel Flow Rate, SCFM	1,725	1,721	1,718	1,721	
Fuel Heat Input, MMBTU/Hr	50.6	51.5	51.7	51.3	
Exhaust Flow Rate, DSCFM (Method 19)	28,647	30,160	28,750	29,186	
Oxygen, O ₂ , %	15.0	15.2	15.0	15.1	
Carbon Dioxide, CO ₂ , %	4.8	4.6	4.8	4.7	
Water Vapor, H ₂ O, % M4.16	3.5	3.4	3.5	3.5	
NOx, ppm	9.8	10.9	11.4	10.7	
NOx, ppm @ 15% O ₂	9.9	11.3	11.5	10.9	11
NOx, lbs/hr	2.01	2.36	2.35	2.24	
NOx, lbs/day	48.2	56.6	56.4	53.7	141.1
NOx, lbs/MMBTU	0.040	0.046	0.045	0.044	0.049
CO, ppm	43.3	38.9	45.9	42.7	
CO, ppm @ 15% O ₂	43.4	40.2	46.1	43.2	73
CO, lbs/hr	5.38	5.10	5.73	5.40	
CO, lbs/day	129.2	122.5	137.5	129.7	547.2
CO, lbs/MMBTU	0.106	0.099	0.111	0.105	0.19
Inlet H ₂ S in fuel, ppm	1.96	< 0.095	15.7	5.92	
Inlet TRS in fuel, ppm	3.09	1.19	17.0	7.09	320
THC, ppm (25A) wet	<102.0	<102.0	<102.0	<102.0	
THC, ppm (dry)	<105.7	<105.6	<105.7	<105.7	
THC, lbs/hr as CH ₄	<7.52	<7.91	<7.54	<7.66	
CH ₄ , ppm (wet) (M25A)	<100.0	<100.0	<100.0	<100.0	
CH ₄ , ppm (dry)	<103.6	<103.5	<32.5	<79.9	
CH ₄ , lbs/hr	<7.4	<7.8	<2.3	<5.8	
NMOC, ppm as CH ₄	<2.0	<2.0	<2.0	<2.0	
NMOC, lbs/hr as CH ₄	< 0.14	< 0.15	< 0.14	< 0.14	
NMOC, ppm (a) 3% O ₂ as CH ₄	<6.1	<6.3	<6.1	<6.2	30
INLET TNMOC (Method 25C)	944	1,021	1,331	1,099	0*
INLET NMOC lbs/hr as CH ₄	4.0	4.4	5.7	4.7	01
NMOC Removal Efficiency	96.48%	96.57%	97.49%	96.84%	98
INLET CH ₄ , ppm	491,000	501,000	504,000	498,667	
INLET CH ₄ lbs/hr	2,102.5	2,140.4	2,149.5	2,131	
CH ₄ Removal Efficiency	>99.650%	>99.638%	>99.892%	>99.727%	99
INLET THC (TOC) ppm as CH ₄	491,944	502,021	505,331	499,765	
INLET THC (TOC) lbs/hr as CH ₄	2,107	2,145	2,155	2,135	
THC (TOC) Removal Efficiency	99.643%	99.631%	99.650%	99.642%	98

< Value = 2% of Analyzer Range

WHERE,

 $\begin{array}{l} ppm = Parts \ Per \ Million \ Concentration \\ Lbs/hr = Pound \ Per \ Hour \ Emission \ Rate \\ Tstd. = Standard \ Temp. (^R = ^F+460) \\ MW = Molecular \ Weight \\ DSCFM = Dry \ Standard \ Cubic \ Feet \ Per \ Minute \\ NOx = Oxides \ of \ Nitrogen \ as \ NO_2 \ (MW = 46) \\ CO = Carbon \ Monoxide \ (MW = 28) \\ TOC = THC = Total \ Organic \ Carbon \ as \ Methane \ including \ CH_4 \ (MW = 16) \\ THC = Total \ Hydrocarbons \ as \ Methane \ (MW = 16) \\ NMOC = Total \ Non-Methane \ Organic \ Carbon \ as \ Methane \ (MW = 16) \\ SO_2 = Sulfur \ Dioxide \ as \ SO_2 \ (MW = 64.1) \end{array}$

CALCULATIONS,

 $\begin{array}{l} \label{eq:ppm} PPM @.15\% O_2 = ppm * 5.9 / (20.9 - \%O_2) \\ PPM @.3\% O_2 = ppm * 17.9 / (20.9 - \%O_2) \\ \mbox{Lbs/hr} = ppm x 8.223 E-05 x DSCFM x MW / Tstd. ^R \\ \mbox{Lbs/day} = Lbs/hr * 24 \\ \mbox{Removal Efficiency} = (inlet lbs/hr- outlet lbs/hr) / inlet lbs/hr \\ \mbox{SO}_2 emission ppm = H2S in fuel * Fuel Flow/Stack Gas Flow} \end{array}$

TABLE # 2

Republic Services Vasco Landfill (A-4) Landfill Gas Toxic Air Contaminants

RUN		1	2	3	LIMITS
Test Date		4/15/20	04/15/20	04/15/20	
Test Time		1242-1320	1357-1438	1515-1553	
Acrylonitrile	dad	<175	<190	<318	
Benzene	daa	804	808	1,490	
Benzyl Chloride	ppb	<87.3	<95.0	<159	
Carbon Tetrachloride	ppb	<87.3	<95.0	<159	
Chlorobenzene	ppb	<87.3	<95.0	<159	
Chlorodifluoromethane	ppb	328	392	636	
Chloroethane	ppb	<87.3	<95.0	<159	
Chloroform	ppb	<87.3	<95.0	<159	
1,1 Dichloroethane	ppb	<87.3	<95.0	<159	
1,1 Dichloroethene	ppb	<87.3	<95.0	<159	
1,2 Dichloroethane	ppb	<87.3	<95.0	<159	
1,4 Dichlorobenzene	ppb	<87.3	<95.0	<159	
Dichlorodifluoromethane (CFC-12)	ppb	236	239	426	
Dichlorofluoromethane	ppb	<87.3	<95.0	161	
Ethylbenzene	ppb	1,280	1,400	2,260	
Ethlyene Dibromide (1,2 Dibromoethane)	ppb	<87.3	<95.0	<159	
Trichlorofluoromethane	ppb	<87.3	<95.0	<159	
Hexane	ppb	552	583	1,000	
Isopropyl Alcohol (2-Propanol)	ppb	3,510	4,470	7,420	
Methyl Ethyl Ketone (2-Butanone)(MEK)	ppb	7,830	9,570	15,300	
Methylene Chloride (Dichloromethane)	ppb	<175	<190	<318	
Perchloroethylene (Tetrachloroethene)	ppb	<87.3	<95.0	<159	
Toluene	ppb	3,820	4,400	6,970	
1,1,1 Trichlororethane	ppb	<87.3	<95.0	<159	
1,1,2,2 Tetrachloroethane	ppb	<87.3	<95.0	<159	
Trichloroethylene (Trichloroethene)	ppb	<87.3	<95.0	<159	
Vinyl Chloride	ppb	<87.3	<95.0	<159	
Xylenes m & p	ppb	1,850	2,010	3,210	
Xylenes o	ppb	569	644	963	
ASTM-5504					
Hydrogen Sulfide	ppm	1.96	< 0.095	15.7	
Carbon Disulfide	ppm	< 0.087	< 0.095	< 0.159	
Carbonyl Sulfide	ppm	0.364	0.390	0.318	
Dimethyl Sulfide	ppm	0.842	0.892	0.981	
Ethyl Mercaptan	ppm	< 0.087	< 0.095	< 0.159	
Methyl Mercaptan	ppm	< 0.087	< 0.095	0.337	
Total Reduced Sulfur (TRS)	ppm	3.09	1.19	17.0	320

APPENDICES

Calculations

Laboratory Reports

Field Data Sheets

Process Information

QC Calibration Gas Certifications

Stack Diagram

Sample System Diagram

Permit/Authority to Construct

Source Test Plan

APPENDIX S

AMENDED S-14 AND S-15 VALUES FROM FEBRUARY 1, 2018 TO JANUARY 31, 2020 SARS



Building lifetime relationships with our clients and employees.

Combined Title V Semi-Annual and Partial 8-34 Annual Report

February 1, 2018 through July 31, 2018

Vasco Road Landfill

August 2018

Revised August 28, 2020

Prepared for: Republic Services 4001 N. Vasco Road Livermore, CA 94551



7600 Dublin Blvd., Suite 200 Dublin, CA 94568 (877) 633-5520

2.16 Compliance with Permit to Operate Condition Number 25515 for S-14 Green Waste Processing Operation

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road, therefore the tonnages for S-14 have been revised to accurately reflect site operations. The amount of green waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Revised monthly and consecutive 12-month amounts of green waste processed for the reporting period of February 1, 2018 through July 31, 2018 are included in Appendix P.

2.17 Compliance with PTO Condition Number 25516 for S-15 Wood Waste Processing Operation

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations. The amount of wood waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Revised monthly and consecutive 12-month amounts of wood waste processed for the reporting period of February 1, 2018 through July 31, 2018 are included in Appendix Q.



APPENDIX P REVISED S-14 GREEN WASTE PROCESSING OPERATION

Vasco Road Landfill S-14 Green Waste Processing Operation

Month	Monthly Throughput	12-Month Consecutive
August-17	954.6	12,914.4
September-17	1,023.9	13,016.8
October-17	1,054.0	13,123.8
November-17	1,216.8	13,198.3
December-17	1,350.5	13,006.3
January-18	1,234.8	13,058.1
February-18*	0.0	12,254.6
March-18*	0.0	11,207.8
April-18*	0.0	9,672.4
May-18*	0.0	8,643.2
June-18*	0.0	7,701.7
July-18*	0.0	6,834.5

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road, therefore the tonnages for S-14 have been revised to accurately reflect site operations.

APPENDIX Q REVISED S-15 WOOD WASTE PROCESSING OPERATION

Vasco Road Landfill S-15 Wood Waste Processing Operation

Month	Monthly Throughput (tons)	12-Month Consecutive Total (tons)
August-17	309.1	2,955.6
September-17	214.5	2,946.0
October-17	246.3	2,918.8
November-17	346.9	2,957.0
December-17	244.3	2,839.2
January-18	350.2	3,039.5
February-18*	0.0	2,850.3
March-18*	0.0	2,587.3
April-18*	0.0	2,521.7
May-18*	0.0	2,451.4
June-18*	0.0	2,384.8
July-18*	0.0	1,711.3

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations.



Building lifetime relationships with our clients and employees.

Combined Title V Semi-Annual and Partial 8-34 Annual Report

August 1, 2018 through January 31, 2019

Vasco Road Landfill

February 2019

Revised August 28, 2020

Prepared for: Republic Services 4001 N. Vasco Road Livermore, CA 94551



7600 Dublin Blvd., Suite 200 Dublin, CA 94568 (877) 633-5520
2.16 Compliance with Permit to Operate Condition Number 25515 for S-14 Green Waste Processing Operation

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road, therefore the tonnages for S-14 have been revised to accurately reflect site operations. The amount of green waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Revised monthly and consecutive 12-month amounts of green waste processed for the reporting period of August 1, 2018 through January 31, 2019 are included in Appendix P.

2.17 Compliance with PTO Condition Number 25516 for S-15 Wood Waste Processing Operation

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations. The amount of wood waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Revised monthly and consecutive 12-month amounts of wood waste processed for the reporting period of August 1, 2018 through January 31, 2019 are included in Appendix Q.



APPENDIX P REVISED S-14 GREEN WASTE PROCESSING OPERATION

Vasco Road Landfill S-14 Green Waste Processing Operation

Month	Monthly Throughput	12-Month Consecutive
	(tons)	Total (tons)
February-18*	0.0	12,254.6
March-18*	0.0	11,207.8
April-18*	0.0	9,672.4
May-18*	0.0	8,643.2
June-18*	0.0	7,701.7
July-18*	0.0	6,834.5
August-18*	0.0	5,879.9
September-18*	0.0	4,856.1
October-18*	0.0	3,802.0
November-18*	0.0	2,585.2
December-18*	0.0	1,234.8
January-19*	0.0	0.0

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road, therefore the tonnages for S-14 have been revised to accurately reflect site operations.

APPENDIX Q REVISED S-15 WOOD WASTE PROCESSING OPERATION

Vasco Road Landfill S-15 Wood Waste Processing Operation

Month	Monthly Throughput (tons)	12-Month Consecutive Total (tons)
February-18*	0.0	2,850.3
March-18*	0.0	2,587.3
April-18*	0.0	2,521.7
May-18*	0.0	2,451.4
June-18*	0.0	2,384.8
July-18*	0.0	1,711.3
August-18*	0.0	1,402.2
September-18*	0.0	1,187.7
October-18*	0.0	941.3
November-18*	0.0	594.5
December-18*	0.0	350.2
January-19*	0.0	0.0

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations.

Combined Title V Semi-Annual and Partial 8-34 Annual Report

Vasco Road Landfill

February 1, 2019 through July 31, 2019

AUGUST 30, 2019 AMENDED AUGUST 28, 2020

PRESENTED TO

Republic Services 4001 N. Vasco Road Livermore, CA 94551

SUBMITTED BY

Cornerstone Environmental Group, LLC 7600 Dublin Blvd., Suite 200 Dublin, CA 94568 P +1.877.294.9070 F +1.877.845.1456 tetratech.com

REPORT CERTIFICATION

The material and data in this report were prepared under the supervision and direction of the undersigned.

Anne Liu

8/28/2020

Environmental Scientist

Date

Meghan Caesar Project Manager

8/28/2020

Date

2.16 COMPLIANCE WITH PERMIT TO OPERATE CONDITION NUMBER 25515 FOR S-14 GREEN WASTE PROCESSING OPERATION

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road, therefore the tonnages for S-14 have been revised to accurately reflect site operations. The amount of green waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Revised monthly and consecutive 12-month amounts of green waste processed for the reporting period of February 1, 2019 through July 31, 2019 are included in Appendix P.

2.17 COMPLIANCE WITH PTO CONDITION NUMBER 25516 FOR S-15 WOOD WASTE PROCESSING OPERATION

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations. The amount of wood waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Revised monthly and consecutive 12-month amounts of wood waste processed for the reporting period of February 1, 2019 through July 31, 2019 are included in Appendix Q.

2.18 REPORTABLE EVENTS DURING THE REPORTING PERIOD

On February 20, 2019, immediately upon discovery, Cornerstone submitted a combined Reportable Compliance Activity (RCA) to the BAAQMD regarding a brief, off-site power related outage that caused the A-4 Flare and the LFGTE Ameresco plant to shut down on February 20, 2019 from approximately 8:46 to 9:20. On February 22, 2019, BAAQMD Inspector Mr. Peter Nelson conducted a site visit regarding the utility trip and issued Notice of Violation (NOV) Number A57390 for an alleged failure to continuously abate emissions. On March 1, 2019, Cornerstone submitted a Combined 10-Day Response to NOV Number A57390 and 10-day and 30-day Title V Reports Notification.

On March 6, 2019, immediately upon discovery, Cornerstone submitted an RCA, requesting breakdown relief, to the BAAQMD regarding a site-wide power outage that occurred on March 6, 2019 at approximately 15:43 until 17:41, which was caused by an off-site Pacific Gas and Electric (PG&E) equipment malfunction. Breakdown Relief Request Number 07L41 was assigned on March 7, 2019, and Mr. Nelson with the BAAQMD visited the site to discuss the event with Cornerstone and Republic personnel, noting that the breakdown relief would be granted. A 30-day Breakdown Relief Report was submitted to the BAAQMD regarding this granted breakdown relief request.

On May 3, 2019, during a records inspection, Mr. Peter Nelson of the BAAQMD issued Notice of Violation (NOV) Numbers A57392 and A57393 for alleged failure to abate emissions on January 19, 2019 and March 6, 2019. Cornerstone and Republic previously submitted RCA forms and requested breakdown relief for these events, per the guidance of the BAAQMD. On May 13, 2019, Cornerstone submitted the final combined 10-Day Response to NOV Numbers A57392 and A57393 and 10-Day and 30-Day Title V Reports to the BAAQMD. Republic has requested a meeting with the BAAQMD to discuss policy going forward regarding GCCS downtime events outside of the site's control.

APPENDIX P

REVISED S-14 GREEN WASTE PROCESSING OPERATION

Vasco Road Landfill S-14 Green Waste Processing Operation

Month	Monthly Throughput	12-Month Consecutive Total (tons)
August-18*	0.0	5,879.9
September-18*	0.0	4,856.1
October-18*	0.0	3,802.0
November-18*	0.0	2,585.2
December-18*	0.0	1,234.8
January-19*	0.0	0.0
February-19*	0.0	0.0
March-19*	0.0	0.0
April-19*	0.0	0.0
May-19*	0.0	0.0
June-19*	0.0	0.0
July-19*	0.0	0.0

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road, therefore the tonnages for S-14 have been revised to accurately reflect site operations.

APPENDIX Q

REVISED S-15 WOOD WASTE PROCESSING OPERATION

Vasco Road Landfill S-15 Wood Waste Processing Operation

Month	Monthly Throughput (tons)	12-Month Consecutive Total (tons)
August-18*	0.0	1,402.2
September-18*	0.0	1,187.7
October-18*	0.0	941.3
November-18*	0.0	594.5
December-18*	0.0	350.2
January-19*	0.0	0.0
February-19*	0.0	0.0
March-19*	0.0	0.0
April-19*	0.0	0.0
May-19*	0.0	0.0
June-19*	0.0	0.0
July-19*	0.0	0.0

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations.

Combined Title V Semi-Annual and Partial 8-34 Annual Report

Vasco Road Landfill

August 1, 2019 through January 31, 2020

FEBRUARY 28, 2020 REVISED AUGUST 28, 2020

PRESENTED TO

Republic Services 4001 N. Vasco Road Livermore, CA 94551

SUBMITTED BY

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REPORT CERTIFICATION

The material and data in this report were prepared under the supervision and direction of the undersigned.

Anne Liu

8/28/2020

Anne Ett Environmental Scientist Date

Meghah Caesar Project Manager

8/28/2020

Date

2.16 COMPLIANCE WITH PERMIT TO OPERATE CONDITION NUMBER 25515 FOR S-14 GREEN WASTE PROCESSING OPERATION

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road, therefore the tonnages for S-14 have been revised to accurately reflect site operations. The amount of green waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Revised monthly and consecutive 12-month amounts of green waste processed for the reporting period of August 1, 2019 through January 31, 2020 are included in Appendix P.

2.17 COMPLIANCE WITH PTO CONDITION NUMBER 25516 FOR S-15 WOOD WASTE PROCESSING OPERATION

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period. Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations. The amount of wood waste processed did not exceed the permitted limit during any consecutive 12-month period during this reporting period. Revised monthly and consecutive 12-month amounts of wood waste processed for the reporting period of August 1, 2019 through January 31, 2020 are included in Appendix Q.

2.18 REPORTABLE EVENTS DURING THE REPORTING PERIOD

On October 28, 2019, Tetra Tech submitted a Reportable Compliance Activity (RCA) form to the BAAQMD regarding a site wide power outage that occurred on October 26, 2019 at approximately 21:09 due to high winds that caused damage to the power lines. Pacific Gas and Electric (PG&E) crews were dispatched to the site on October 28, 2019 to repair the damaged power lines. On October 28, 2019 at approximately 16:47, power was restored to the facility and operations and maintenance (O&M) personnel restarted the A-4 Flare. On October 30, 2019, Tetra Tech and Vasco Road personnel met with Mr. Peter Nelson regarding RCA ID #07P72 and #07P96. On November 25, 2019, a Combined 30-Day Breakdown Follow-Up Letter and Title V Report was submitted to the BAAQMD.

APPENDIX P

REVISED S-14 GREEN WASTE PROCESSING OPERATION

Vasco Road Landfill S-14 Green Waste Processing Operation

Month	Monthly Throughput (tons)	12-Month Consecutive Total (tons)
February-19*	0.0	0.0
March-19*	0.0	0.0
April-19*	0.0	0.0
May-19*	0.0	0.0
June-19*	0.0	0.0
July-19*	0.0	0.0
August-19*	0.0	0.0
September-19*	0.0	0.0
October-19*	0.0	0.0
November-19*	0.0	0.0
December-19*	0.0	0.0
January-20*	0.0	0.0

Pursuant to PTO Condition Number 25515, Part 1, the amount of green waste processed shall not exceed more than 16,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, green waste is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Green waste is not currently being processed on-site at Vasco Road, therefore the tonnages for S-14 have been revised to accurately reflect site operations.

APPENDIX Q

REVISED S-15 WOOD WASTE PROCESSING OPERATION

Vasco Road Landfill S-15 Wood Waste Processing Operation

Month	Monthly Throughput (tons)	12-Month Consecutive Total (tons)
February-19*	0.0	0.0
March-19*	0.0	0.0
April-19*	0.0	0.0
May-19*	0.0	0.0
June-19*	0.0	0.0
July-19*	0.0	0.0
August-19*	0.0	0.0
September-19*	0.0	0.0
October-19*	0.0	0.0
November-19*	0.0	0.0
December-19*	0.0	0.0
January-20*	0.0	0.0

Pursuant to PTO Condition Number 25516, Part 1, the amount of wood waste processed shall not exceed 5,000 tons in any consecutive 12-month period.

*Per correspondence received from Vasco Road personnel on August 28, 2020, hogged wood is received at the site, sorted, and temporarily stored in a stockpile until shipped offsite for further processing by a third party. Hogged wood is not currently being processed on-site at Vasco Road, therefore the tonnages for S-15 have been revised to accurately reflect site operations.