510-430-8509
www.wm.com

February 13, 2019

Ventura County Air Pollution Control District
669 County Square Drive
Second Floor
Ventura, California 93003
(805) 645-1494

SUBJECT: SEMI-ANNUAL TITLE V/NSPS REPORT, SEMI-ANNUAL SSM PLAN REPORT, AND ANNUAL TITLE V COMPLIANCE CERTIFICATION, SIMI VALLEY LANDFILL AND RECYCLING CENTER, SIMI VALLEY, CALIFORNIA

To Whom It May Concern:

Waste Management hereby provides the Ventura County Air Pollution Control District (VCAPCD) with one copy of the Annual Title V Compliance Certification Report, the Semi-Annual New Source Performance Standards (NSPS) Report/Title V Report and the Semi-Annual Startup, Shutdown, and Malfunction (SSM) Plan Report for the Simi Valley Landfill and Recycling Center in Simi Valley, California. Copies of these documents have also been sent to the Air Division at the U.S. Environmental Protection Agency (USEPA) Region IX.

The semi-annual Title V/NSPS and SSM reports were developed for the reporting period from July 1, 2018 through December 31, 2018. The annual Title V compliance certification was developed for the reporting period from January 1, 2018 through December 31, 2018. The reports satisfy the requirements under the site's Title V permit, the VCAPCD Rule 74.17.1, the NSPS for municipal solid waste landfills (40 Code of Federal Regulations [CFR] Part 60, Subpart WWW), and the National Emission Standard for Hazardous Air Pollutants (NESHAPs) for municipal solid waste landfills (40 CFR Part 63, Subpart AAAA).

The SSM Plan Report satisfies the requirements under the Maximum Achievable Control Technology (MACT) rule for semi-annual reporting of SSM plan implementation including 40 CFR 63.10(d)(s).

If you have any questions or need any additional information, please contact the undersigned at (510) 613-2165, or Mr. Kristopher Gondrez at (805) 579-7479.

Sincerely,

Collin Pavelchik
EP Air Quality Specialist
Waste Management

Enclosures:

NSPS/Title V Semi-Annual Report; SSM Semi-Annual Report; Title V Annual Compliance Certification

cc: Administrator of Air Division; USEPA Region IX (w/enclosures)
Christian Colline; Waste Management (w/enclosures)
Kristopher Gondrez; Waste Management (w/enclosures)
Jayna Morgan; Waste Management (w/enclosures)
Scott Tignac; Waste Management (w/enclosures)
Matthew Darr; Waste Management (w/enclosures)

Ventura County
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ANNUAL COMPLIANCE CERTIFICATION
SIGNATURE COVER FORM

A copy of each Annual Compliance Certification shall be submitted to EPA, Region 9, at the following address:

Mr. Gerardo Rios, Chief
Permits Office (AIR-3)
Office of Air Division
EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Confidentiality

All information in a Part 70 permit compliance certification is public information. The Part 70 permit is also public information.

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this compliance certification are true, accurate, and complete.

Signature and Title of Responsible Official:	Date: 2/11/2019
Title: District Manager	

Time Period Covered by Compliance Certification

01/01/2018 (MM/DD/YY) to 12/31/2018 (MM/DD/YY)

Ventura County Air Pollution Control District

ANNUAL COMPLIANCE CERTIFICATION
PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: 74.6	D. Frequency of monitoring:
B. Description: Cold cleaner - Free board ratio compliance	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The landfill used a remote reservoir cold cleaner (RRCC)and was exempt from the annual measurement and verification requirements as specified in Condition 8 of Attachment 74.6. The RRCC onsite complies with the drain hole and free board height requirements as specified in Rule 74.6.C.1. The site replaced the RRCC with a new cold cleaner that utilizes a low reactive organic compounds (ROC) content solvent with a ROC content of 25 grams per liter or less during 2004. The new cold cleaner is exempt from the new Rule 74.6.E.1, effective on 7/1/04.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 74.9N7	D. Frequency of monitoring: Emergency
B. Description: The engine shall only be operated during an emergency or during maintenance operation of not more than 50 hours per calendar year.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable Emergency Standby Generator Use Log provided in Appendix A.
C. Method of monitoring: The site is in compliance with the applicable requirement listed above, upon reviewing of the emergency engine hours of operation log (Date, time, duration, and reason for emergency operation). The engine was operated for a total of 20 hours and 42 minutes during the reporting period.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: ATCM Engine N2	D. Frequency of monitoring:
B. Description: The District is required to implement and enforce the state Airborne Toxic Control Measure for stationary compression Ignition Engines that apply to in-use emergency standby stationary diesel-fueled IC engines according to Section 93115, Title 17.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable Emergency Standby Generator Use Log provided in Appendix A.
C. Method of monitoring: The site is in compliance with the applicable requirement listed above which states the emergency engine shall only be operated during maintenance and testing of not more than 20 hours per calendar year. Upon reviewing of the emergency engine hours of operation log (date, time, duration, and reason for emergency operation), the engine only operated for maintenance and testing for 2.0 hrs during the reporting year.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: 74.17.1	D. Frequency of monitoring: Continuously
B. Description: Operate the landfill gas (LFG) collection and control system (GCCS) in accordance with the requirements of Rule 74.17.1 and the compliance provisions in 40 CFR 60.755.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The site is operating the landfill gas collection system such that gas is collected from each area, cell or group of cells and is routing all collected gas to an active collection system. The site's flare is operated in accordance with the requirements of Rule 74.17.1.B.3.b based on the source test conducted on April 18, 2017 for flare No. 3.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 40CFR63AAAA	D. Frequency of monitoring:
B. Description: The subpart requires all applicable landfills to meet the requirements of 40 CFR Part 60, Subpart Cc or WWW and to meet the startup, shutdown and malfunction (SSM) requirements of the general provisions of Part 63.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The site is in compliance with the applicable requirement of 40 CFR Part 60, subpart WWW. The site has a written startup, shutdown and malfunction plan according to the provisions in 40 CFR 63.6(e)(3).	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC1-Condition No. 1	D. Frequency of monitoring: Monthly
B. Description: Recordkeeping on monthly records of LFG throughput and consumption to the control devices.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable Throughput summary provided in Appendix A.
C. Method of monitoring: The site is in compliance with the applicable requirement by keeping monthly records of LFG throughput and consumption to the control devices on file.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: PO01395PC1-Condition No. 2	D. Frequency of monitoring: Continuously
B. Description: Annual amount of LFG combusted in the flare shall not exceed 1,445,400 MMBtu/yr.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable. Throughput summary provided in Appendix A.
C. Method of monitoring: The site is in compliance with the applicable requirement listed above, per review of the monthly LFG throughput summary records to the control devices. The records are kept on file and will be made available upon request.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC1-Condition No. 3	D. Frequency of monitoring:
B. Description: The flare shall be equipped with a totalizing fuel meter.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The flare is equipped with the required meter components and is in compliance with the requirements listed above.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC1-Condition No. 4	D. Frequency of monitoring: Monthly
B. Description: Recordkeeping on monthly records of solvent purchase and usage. (District enforceable only)	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The condition is District enforceable only and needs not to be certified via the Title V annual compliance certification. However, the landfill keeps associated records on file as specified in the permit condition.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: PO01395PC2-Cond No. 1,2,3	D. Frequency of monitoring: Biennial
B. Description: John Zink flare BACT limits: 1. Temperature 2. Source test (NOx, CO, ROC and NMOC) every two years 3. Testing of SOx every two years	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: Attached
C. Method of monitoring: 1. Source test from April 18 , 2017 resulted in a TNMOC/ROC emission rate of 0.955 ppm, a NOx emission rate of 0.0226 lb/MMBtu, a CO emission rate of 0.0286 lb/MMBtu, and a sulfur emission rate of 37.5 ppm. Therefore, the flare meets the emission limits as specified in the permit conditions. 2. The flare will be automatically shutdown when the temperature falls below the minimum temperature as required under the permit. Flare temperatures are monitored via a continuous recorder.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: CARB CH4 from MSW	D. Frequency of monitoring: Quarterly.
B. Description: CARB AB32 LMR Regulations	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The site is in compliance with the applicable requirement by submitting the annual CARB AB32 LMR reports on March 15 of every year which contains the necessary information. Note: The district issued an NOV for a non-quarterly/non-routine SEM inspection on March 29, 2018.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): I H. *Excursions, exceedances, or other non-compliance? (Y or N): Y *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC2-Condition No. 4&5	D. Frequency of monitoring:
B. Description: Flare sulfur compounds (SO2) emission requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: Monthly summary provided in Appendix A.
C. Method of monitoring: The site is in compliance with the applicable requirement listed above, per District analysis of Rule 54 compliance based on EPA SO2 emission factor.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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A. Attachment # or Permit Condition #:	D. Frequency of monitoring:
B. Description:	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring:	F. Currently in Compliance? (Y or N): _____ G. Compliance Status? (C or I): _____ H. *Excursions, exceedances, or other non-compliance? (Y or N): _____ *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC2-Condition No. 6	D. Frequency of monitoring:
B. Description: Flare equipment requirements for the John Zink flare. Source test every four years on the emission of sulfur compounds.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The flare is equipped with the required components and is in compliance with the applicable requirements. The site is also in compliance with the applicable requirement listed above, per the source test conducted in April 2015 for the flare.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC2-Condition No. 7	D. Frequency of monitoring: At least every four years
B. Description: Flare particulate matter (PM) emission requirement. Condensate knockout/filter vessel requirement for the John Zink flare.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable Attached.
C. Method of monitoring: The site is in compliance with the applicable requirement listed above, per District analysis of Rule 57.1 compliance based on EPA PM emission factor; and per the flare being equipped with the required components.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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A. Attachment # or Permit Condition #:	D. Frequency of monitoring:
B. Description:	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring:	F. Currently in Compliance? (Y or N): _____ G. Compliance Status? (C or I): _____ H. *Excursions, exceedances, or other non-compliance? (Y or N): _____ *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 40CFR63 IIIIN1 (Emergency Engine)	D. Frequency of monitoring:
B. Description: Annual compliance certification	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The site is in compliance with the applicable requirement by submitting this compliance certification	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC2-Condition No. 8	D. Frequency of monitoring: Annual
B. Description: Annual function-check requirement for GCCS.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: Attached
C. Method of monitoring: Annual function-check on the flare and collection system components as required under the condition are performed annually. Associated records are kept on file. The site is in compliance with the applicable requirement listed above. The records are kept on file and will be made available upon request. A copy of the latest is also attached.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: PO01395PC2-Condition No. 9&10	D. Frequency of monitoring:
B. Description: Condensate Injection Rate	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable Monthly summary provided in Appendix A.
C. Method of monitoring: The site is in compliance with the applicable requirement listed above.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC2-Condition No. 11	D. Frequency of monitoring:
B. Description: Piping system must be connected to the Landfill Gas Collection System and the collected gas must be commingled with the gas prior to being metered and incinerated.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The site is in compliance with the applicable requirement listed above.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC2-Condition No. 12	D. Frequency of monitoring:
B. Description: Vacuum gauges must be maintained in accordance with manufacturers recommendations.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The site is in compliance with the applicable requirements listed above.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: PO1395PC2 - Condition No. 13	D. Frequency of monitoring: Annual
B. Description: Annual function check requirement for condensate system.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable: Attached
C. Method of monitoring: Annual function-check on the flare and collection system components as required under the condition are performed annually. Associated records are kept on file. The site is in compliance with the applicable requirement listed above. A copy of the latest is attached.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO01395PC2-Condition No.14	D. Frequency of monitoring:
B. Description: Gas well location requirements.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The landfill acknowledged and is in compliance with the applicable requirements as specified in condition No. 14.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: PO1395PC2-Condition Nos. 15&16	D. Frequency of monitoring:
B. Description: Risk assessment requirements based on Rule 51.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The site is in compliance and the source tests do not indicate concentrations which would exceed any risk-based requirements.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #:	D. Frequency of monitoring:
B. Description:	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring:	F. Currently in Compliance? (Y or N): _____ G. Compliance Status? (C or I): _____ H. *Excursions, exceedances, or other non-compliance? (Y or N): _____ *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 50	D. Frequency of monitoring: Annual
B. Description: Opacity requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable Opacity survey is provided in the Appendices.
C. Method of monitoring: The site is in compliance with the applicable requirement listed above. Annual survey on emission units was conducted on 2/27/17, 4/4/17, 9/27/17 and 12/6/17 and no visible emissions of concern were identified during the survey. The results of the survey is included in Appendix A.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 54.B.1	D. Frequency of monitoring:
B. Description: Sulfur compounds emission requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The site is in compliance with the applicable requirement listed above, per compliance with the fuel sulfur content limits of Rule 64.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: 54.B.2	D. Frequency of monitoring:
B. Description: Sulfur dioxide concentration requirement at or beyond property line.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The landfill acknowledged the applicable requirement listed above and will perform associated testing upon District's request. Based on current information, the landfill believes it is in compliance with this limit.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 57.1	D. Frequency of monitoring:
B. Description: Particulate matter emissions from fuel burning equipments.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable Opacity survey is provided in Appendix A
C. Method of monitoring: The site is in compliance with the applicable requirement listed above, per District analysis of Rule 57.B compliance based on EPA PM emission factor.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 64.B.1	D. Frequency of monitoring:
B. Description: Sulfur content of gaseous fuel requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The landfill is in compliance with the applicable limit, per review of the sulfur content of LFG analysis results performed during the flare source test.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: 64.B.2	D. Frequency of monitoring:
B. Description: Sulfur content of liquid fuel requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable Shipping records are attached in Appendix A.
C. Method of monitoring: The landfill uses CARB certified diesel fuel on the emergency IC engine and is exempt from the certification and testing requirement as specified in Attachment 64.B.2. The fuel is purchased from the local distributor for Shell Oil. Shipping records on each fuel load showing a distillate certification certifying use in California under "CARB Diesel Regulations" are kept on file at the site.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 74.6	D. Frequency of monitoring:
B. Description: Solvent information for surface cleaning and degreasing.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The site is exempt from the solvent requirement and cleaning devices and methods requirements as specified in Rule 74.6.B.1 and B.2, per compliance with the requirements of Rule 74.6.1. The site acknowledged the applicable requirements specified in Rule 74.6.B.3 and B.4 and is in compliance with those practices.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 74.11.1	D. Frequency of monitoring:
B. Description: Large water heater and small boiler requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The landfill does not have any regulated large water heaters or small boilers installed onsite prior to the end of the reporting period. The requirements of this permit condition did not apply.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: 74.22	D. Frequency of monitoring:
B. Description: Natural gas-fired fan-type central furnaces requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: The landfill does not have any regulated furnaces installed onsite prior to the end of the reporting period. The requirements of this permit condition did not apply.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 74.1	D. Frequency of monitoring:
B. Description: Abrasive blasting requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: There were no abrasive blasting activities performed on the landfill during the reporting period. The requirements of this permit condition did not apply.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 74.2	D. Frequency of monitoring:
B. Description: Architectural coating requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: There were no regulated activities performed on the landfill during the reporting period. The requirements of this permit condition did not apply.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

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Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: 74.4.D	D. Frequency of monitoring:
B. Description: Cutback asphalt - road oils requirement.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: There were no regulated activities performed on the landfill during the reporting period. The requirements of this permit condition did not apply.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 74.28	D. Frequency of monitoring:
B. Description: Asphalt roofing operations.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: There were no regulated activities performed on the landfill during the reporting period. The requirements of this permit condition did not apply.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #: 74.29	D. Frequency of monitoring:
B. Description: Soil decontamination operations.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: There were no regulated activities performed on the landfill during the reporting period. The requirements of this permit condition did not apply.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

Ventura County
Air Pollution
Control District

ANNUAL COMPLIANCE CERTIFICATION
PERMIT ATTACHMENT FORM

Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #: 40CFR.61.M	D. Frequency of monitoring:
B. Description: Asbestos demolition or renovation activities.	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring: There were no regulated activities performed on the landfill during the reporting period. The requirements of this permit condition did not apply.	F. Currently in Compliance? (Y or N): Y G. Compliance Status? (C or I): C H. *Excursions, exceedances, or other non-compliance? (Y or N): N *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #:	D. Frequency of monitoring:
B. Description:	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring:	F. Currently in Compliance? (Y or N): _____ G. Compliance Status? (C or I): _____ H. *Excursions, exceedances, or other non-compliance? (Y or N): _____ *If yes, attach Deviation Summary Form

A. Attachment # or Permit Condition #:	D. Frequency of monitoring:
B. Description:	E. Source test reference method, if applicable. Attach Source Test Summary Form, if applicable
C. Method of monitoring:	F. Currently in Compliance? (Y or N): _____ G. Compliance Status? (C or I): _____ H. *Excursions, exceedances, or other non-compliance? (Y or N): _____ *If yes, attach Deviation Summary Form

Ventura County
Air Pollution
Control District

ANNUAL COMPLIANCE CERTIFICATION

SOURCE TEST SUMMARY FORM

Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Emission Unit Description: John Zink BACT limits: 1. Source test (NOx, ROC, CO and NMOC) every two years 2. Testing of Sulfur Oxides (SOx) every two years			B. Pollutant: NOx, CO, ROC, NMOC, Sulfur,
C. Measured Emission Rate: NOx 0.0226 lb/mmbtu, CO 0.0206 lb/mmbtu TRS 37.5 ppm, NMOC/ROC 0.955 ppm	D. Limited Emission Rate: NOx 0.025 lb/mmbtu, CO 0.20 lb/mmbtu, TRS 60 ppm, NMOC/ROC 20 ppm	E. Specific Source Test or Monitoring Record Citation: PO1395PC2 - Condition Nos. 3, 6, &15	F. Test Date: April 18, 2017

A. Emission Unit Description:			B. Pollutant:
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:

A. Emission Unit Description:			B. Pollutant:
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:

A. Emission Unit Description:			B. Pollutant:
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:

A. Emission Unit Description:			B. Pollutant:
C. Measured Emission Rate:	D. Limited Emission Rate:	E. Specific Source Test or Monitoring Record Citation:	F. Test Date:

Ventura County
Air Pollution
Control District

ANNUAL COMPLIANCE CERTIFICATION
DEVIATION SUMMARY FORM

Period Covered by Compliance Certification: 01 / 01 / 18 (MM/DD/YY) to 12 / 31 / 18 (MM/DD/YY)

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time Begin: 3/29/18 End: 3/29/18 When Discovered: Date & Time 3/29/18 - from NOV, issued 3/29/18
CARB CH4 from MSW	CARB AB32 LMR Regulations	
D. Parameters monitored:	**E. Limit:**	**F. Actual:**
Landfill Surface Emissions	500 ppmv	2 leaks: 1.0k & 18.0k ppmv
G. Probable Cause of Deviation: District Inspection on 3/29/18, NOV issued on 3/29/18 Well surface perforations, wind, moisture and cover integrity.	**H. Corrective actions taken:** Compacted and watered the existing soil, added new soil, sealed well casings with a membrane. Also tightened the gasket on the blower.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time Begin: End: When Discovered: Date & Time
D. Parameters monitored:	**E. Limit:**	**F. Actual:**
G. Probable Cause of Deviation:	**H. Corrective actions taken:**	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time Begin: End: When Discovered: Date & Time
D. Parameters monitored:	**E. Limit:**	**F. Actual:**
G. Probable Cause of Deviation:	**H. Corrective actions taken:**	

APPENDIX A

Simi Valley Landfill and Recycling Center
2018 MMBTU Throughput

2018

Equipment	January	February	March	April	May	June	July	August	September	October	November	December	Total LFG Throughput (MMBTU/Year)	APCD Permit Limit
Flare 3	89,485.21	77,169.83	97,099.11	94,038.12	91,667.35	96,056.69	95,435.17	91,454.06	89,276.68	86,587.64	81,640.43	96,289.99	1,086,200.3	1,445,400
Total MMBTU	89,485.21	77,169.83	97,099.11	94,038.12	91,667.35	96,056.69	95,435.17	91,454.06	89,276.68	86,587.64	81,640.43	96,289.99	1,086,200.3	1,445,400

SVLRC

Landfill Gas Colorimetric H2S Readings

January - December 2018

Device Name	Date Time	H2S (Hydrogen Sulphide)(ppm)
SIMIFLR3	1/16/2018 9:49	50
SIMIFLR3	2/6/2018 8:37	40
SIMIFLR3	3/16/2018 12:32	40
SIMIFLR3	3/20/2018 8:21	40
SIMIFLR3	4/6/2018 6:24	40
SIMIFLR3	4/13/2018 7:56	40
SIMIFLR3	4/20/2018 13:55	40
SIMIFLR3	4/25/2018 7:59	40
SIMIFLR3	5/15/2018 17:45	30
SIMIFLR3	6/7/2018 12:30	40
SIMIFLR3	7/6/2018 14:48	40
SIMIFLR3	7/13/2018 15:48	40
SIMIFLR3	7/19/2018 15:22	55
SIMIFLR3	7/26/2018 11:44	55
SIMIFLR3	8/2/2018 11:24	50
SIMIFLR3	9/14/2018 13:34	50
SIMIFLR3	10/5/2018 9:00	30
SIMIFLR3	10/10/2018 14:57	30
SIMIFLR3	10/17/2018 8:15	30
SIMIFLR3	10/24/2018 9:29	30
SIMIFLR3	11/8/2018 8:40	30
SIMIFLR3	12/12/2018 14:31	40

WASTE MANAGEMENT

SIMI VALLEY LANDFILL ANNUAL EMISSION CERTIFICATION - VCAPCD Rule 50:

Q-1 Inspection	Date:	10-Feb-18		
Emission Unit	Inspector:	Nicholas Thingili		
Flare Station(FLR3):	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?		x		
Emergency Generator:	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?		x		
Deutz Engines:	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?			x	Decommisioned
Observations/Comments:				

Q-2 Inspection	Date:	31-May-18		
Emission Unit	Inspector:	Nicholas Thingili		
Flare Station(FLR3):	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?		x		
Emergency Generator:	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?		x		
Deutz Engines:	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?			x	Decommisioned
Observations/Comments:				

Q-3 Inspection	Date:	17-Sep-18		
Emission Unit	Inspector:	Nicholas Thingili		
Flare Station(FLR3):	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?		x		
Emergency Generator:	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?		x		
Deutz Engines:	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?			x	Decommisione
Observations/Comments:				

Q-4 Inspection	Date:	8-Nov-18		
Emission Unit	Inspector:	Nicholas Thingili		
Flare Station(FLR3):	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?		x		
Emergency Generator:	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?		x		
Deutz Engines:	**Yes**	**No**	**N/A**	**Comments**
1.Any visible emissions at time of observation?			x	Decommisioned
Observations/Comments:				

Simi Valley Landfill and Recycling Center

Flare Condensate Injection

January - December 2018*

Month	Condensate Injected (gallons)
January	0
February	0
March	0
April	0
May	0
June	0
July	0
August	0
September	0
October	0
November	0
December	0
Yearly Total:	**0**

*The flare condensate injector was not operated in 2018

EMERGENCY STANDY GENERATOR USE LOG
SIMI VALLEY LANDFILL AND RECYCLING CENTER

YEAR(S) 2018

MFR:	CATERPILLAR
MODEL:	XQ200
SERIAL:	CAT00C71CMRP00467
LOCATION:	Behind EMD Office Building

DATE	TIME	START METER	END METER	REASON FOR USE: M = MAINTENANCE O = POWER OUTAGE	DURATION IN HOURS	SIGNATURE
1/18/18	13:30	904	905	M	1	
2/10/18				O	8	
4/21/18	08:00	913	917	O	4hrs 2min	
6/18/18	14:00	917	918	M	1	
9/17/18	12:27			O	2	
11/8/18	12:48			O	5hrs. 42mins	

9605.50

18358CB4

115183

1553 S Bluff Rd,
Montebello CA 90640

TRANSPORT
LOGISTICS, CORP.

Office: (562) 861-3100
Fax: (562) 861-3110
Dispatch: (323) 855-7059
gngtransport@verizon.net

DATE 12-27-18 SPLITKNCK.

FROM: CHEVRON M/ MAXUM	DELIVER TO: WASTE M
ADDRESS: 19501 S. SNTAFE	ADDRESS: 2801 MADERA RD.
CITY AND STATE: MONTEBELLO CA / RANCHO DOMINGUEZ CA	CITY AND STATE: SIMI VALLEY, CA

Release No.	Order No.	Contract Name	Trip No.	B/L Number	Truck No.	Trailer No.
8241C19	830106	MFO	1	759039	1	10

PRODUCT	DESCRIPTION	GROSS QTY.	NET QTY.	TEMP.	GRAVITY	OFFICE USE ONLY
REGULAR UNLEADED 87	GASOLINE, 3, UN 1203, II					
MID GRADE UNLEADED 89	GASOLINE, 3, UN 1203, II				✓	
PREMIUM UNLEADED 91	GASOLINE, 3, UN 1203, II					
DIESEL FUEL B99 -	CLEAR DIESEL FUEL, 3, UN 1993, III	-375	375	60		
RED CARB -	RED DIESEL FUEL, 3 UN 1993, III	-7130	7104	67.79	36.48	
JET A	FUEL, AVIATION, TURBINE ENGINE, 3, UN 1863, III				✓	
AVGAS	GASOLINE, 3, UN 1203, II					

LOAD

ARRIVE 4:00 AM/PM START 4:05 AM/PM FINISH 4:15 AM/PM

OUR TRUCK PUMP YES ☐ NO ☒ DRIVER SIGN X Jose Gardinez

EXPLAIN ALL TIME OVER 1 HOUR

UNLOAD

ARRIVE 6:15 AM/PM START 6:20 AM/PM FINISH 6:50 AM/PM

OUR TRUCK PUMP YES ☐ NO ☒ DRIVER SIGN X Jose Gardinez

EXPLAIN ALL TIME OVER 1 HOUR

LOAD

ARRIVE 4:40 AM/PM START 4:45 AM/PM FINISH 4:55 AM/PM

OUR TRUCK PUMP YES ☐ NO ☒ DRIVER SIGN X Jose Gardinez

EXPLAIN ALL TIME OVER 1 HOUR

UNLOAD

ARRIVE AM/PM START AM/PM FINISH AM/PM

OUR TRUCK PUMP YES ☐ NO ☐ DRIVER SIGN X

EXPLAIN ALL TIME OVER 1 HOUR

VEEDER ROOT READING			VEEDER ROOT READING		
PRODUCT	BEFORE	AFTER	PRODUCT	BEFORE	AFTER

TANK STICK READING			TANK STICK READING		
PRODUCT	BEFORE	AFTER	PRODUCT	BEFORE	AFTER
RED DSL	29	74			

NOTE: Customer will sign prior to unloading into tank truck or unmarked tank: I authorize driver to unload product into tank and accept responsibility for product contamination. Receipt for above product and verification of unloading time is hereby acknowledged.

CUSTOMER SIGNATURE: _____

EMERGENCY RESPONSE
(800) 633-8253

09/25
1800 > RED DSL.
375-B99-44.
2400

S" ?EVERSE SIDE FOR EMERGENCY RESPONSE INFOR" "ION
In C of Product Emergency, Spill, Leak, Fire, Exposure, or ident,
CALL CHEMTREC, Day or Night, in the US at (800) 424-9300 or International at (703) 527-3887.
Reference CHEMTREC Contract CCN222996

SHIPPER'S PERMANENT ADDRESS
CHEVRON PRODUCTS CO.
6001 BOLLINGER CANYON RD.
SAN RAMON, CA 94583
FEIN:25-0527925

SHIP TO: MANSFIELD OIL CO
FOB: MONTEBELLO TERMINAL
MONTEBELLO, CA 90640
FEIN:58-1091383

DELIVERY RECEIPT
DOCUMENT NO:759039:0
DELIVERY DATE:27-Dec-2018 04:07:30
ACCOUNT NO:8241019

DLVRED FROM MONTEBELLO-1001654
FOB ORIGIN FREIGHT COLLECT
GGRN BULK TRANSPORT FEIN

VIA G&G Transport

30430198 C-1001654-000000-122718-1001654-

Product Description	Gross Qty.	Net Qty.
TOTAL GALLONS 7130	NO OF CARGO TANKS: 1	
UN1202, GAS OIL, COMBUSTIBLE LIQUID, III NON-BULK PACKAGES ARE NOT REGULATED BY US DOT	7130 GALLONS	
CAL ULS S R6-20 B0-5	7130	7104

GROSS LOADED AT 67.79 DEGREES F, NET COMPUTED AT 60 DEGREES F, 36.48 API GRAVITY
15 PPM SULFUR (MAXIMUM) DYED ULTRA-LOW SULFUR DIESEL FUEL #2. FOR USE IN ALL NONROAD DIESEL ENGINES. NOT FOR USE IN HIGHWAY VEHICLES OR ENGINES EXCEPT FOR TAX-EXEMPT USE IN ACCORDANCE WITH SECTION 4082 OF THE INTERNAL REVENUE CODE. CALIFORNIA DIESEL FUEL. MAXIMUM 15 PPM SULFUR. DYED DIESEL FUEL. NONTAXABLE USE ONLY. PENALTY FOR TAXABLE USE. DIESEL FUEL MAY CONTAIN UP TO 5% BIODIESEL. DIESEL FUEL DELIVERED NOT INTENDED FOR MARINE USE. THIS VOLUME OF NEAT OR BLENDED RENEWABLE DIESEL IS DESIGNATED AND INTENDED FOR USE AS TRANSPORTATION FUEL, HEATING OIL OR JET FUEL IN THE 48 U.S. CONTIGUOUS STATES AND HAWAII. ANY PERSON EXPORTING THIS FUEL IS SUBJECT TO THE REQUIREMENTS OF 40 CFR 80.1430. THIS DIESEL FUEL CONTAINS 6-20% RENEWABLE (BIOMASS-BASED) DIESEL. NO RIN IS ASSIGNED TO THIS RENEWABLE FUEL.

"Straight Bill of Lading - Short Form - Original - Not Negotiable - Carrier Must Submit Original Bill of Lading with Freight Bill. (*Applies only when designated as "Bill of Lading" above).
Carrier: **Received,** subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, and all conditions herein contained, including conditions on back hereof, this is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. **Consignor: CHEVRON PRODUCTS COMPANY**
Carrier has loaded and accepted the above-named materials and certifies the cargo tank is a proper container for the transportation of this commodity under applicable Department of Transportation regulations.

(Signature of Carrier)_____ **Delivered By: (Full Signature)** _____

Received By (Signature)_____ **Date:** _____

maxum PETROLEUM

Delivery Ticket

FOR CHEMICAL EMERGENCY
SPILL, LEAK, FIRE EXPOSURE OR ACCIDENT
CALL CHEMTREC DAY OR NIGHT
(800) 424-9300

RAL PETROLEUM CORPORATION
MAXUM PETROLEUM COMPANY
PO BOX 31001-1235
PASADENA, CA 91110-1235

Customer Service: (800) 659-5823
Fax: (209) 556-5005
Credit Inquiries: (310) 356-2400

Order Number: 2693445
Date: 12/27/2018
Salesperson:
Customer Number: 18358CB4

Sold To:
REG MARKETING & LOGISTICS
ATTN: ACCOUNTS PAYABLE
416 S BELL AVENUE
AMES, IA 50010

Ship To:
REG MRKTG & LOGISTICS WILL CALL
19501 S. SANTA FE AVE
RANCHO DOMINGUEZ, CA 90221

Confirm To:
PHILIP JACOBY

Ship From: Maxum Petroleum **Tank 18**
Whse: 810

Customer P.O.	Ship VIA	F.O.B.	Terms
18358CB4			NET 20 DAYS UPON SHIP DAY

HM	Item Number	Order	Unit	Pkg Desc	Delivered	Price	Amount
	CONSIGNED REG BIODIESEL 99.9%	375 GROSS			375 NET		
	NA 1993 DIESEL FUEL 3 PG111						
	2004 EMERGENCY RESONSE GUIDE 128						
			B001	BULK GALS	Whse: 810		

Time: 0500
CARRIER: G & G
SHIP To: VARIOUS, CA
TEMPERATURE (°F): 60°

Tank#: 18

CORRECTION FACTOR: 1.0000

ARRIVED LOAD POINT	AM/PM	DATE	COMPLETE LOADING	AM/PM	DATE	TIME SPENT LOADING	TRUCK#	BL#
4:46	PM		4:50	PM			1	

END TANK	GAS	DIESEL	OTHER	WATER DETECTED YES NO	TEMPERATURE	GRAVITY	D.O.T. HAZARDOUS MATERIALS PLACARDS PROVIDED BY SHIPPER: CARRIER:
BEGIN				DRUM DEPOSIT	DRUM CREDIT	OUR PUMP YES NO	This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

RECEIVED BY	DATE	LOAD DELIVERED BY	DATE
Jose Gadinez		Carlos A.	12/27/18

Biodiesel Certificate of Analysis

FM.LAB.001a Biodiesel Certificate of Analysis-REG 20151130

BQ-9000 Producer

Lot Number:	710-90001-181203-T3	Product Type:	REG-9000/1
Inlet Seal Number:	1406549	OS:	E

ASTM D6751 Analysis of REG-9000® Biodiesel

Property		Value	ASTM D6751 Limit	REG-9000® Limit	Units	Test Method (current revision)
Cloud point:		0.4 (33)	Report	Report	°C (°F)	D7397
Free Glycerin:		0.008	0.020, max	0.014	% mass	D6584
Total Glycerin:		0.048	0.240, max	0.16	% mass	D6584
Monoglycerides[1]:		0.146	N/A	0.40, max	% mass	D6584
Diglycerides[1]:		0.006	N/A	0.20, max	% mass	D6584
Triglycerides[1]:		0.000	N/A	0.20, max	% mass	D6584
Water & Sediment:		0.000	0.050, max	0.01	% volume	D2709
Acid Number:		0.23	0.50, max	0.40	mg KOH/g	D664
Visual Inspection[1]:		1 @ 73.7°F	N/A	1	Haze rating	D4176, Procedure 2
Relative Density at 60°F[1]:		0.8825	N/A	0.87 – 0.89	N/A	D1298
Oxidation Stability (110 °C):		12.7	3, min	6.0	hrs	*EN 15751*
Flash point (closed cup):		180.0	93, min	93	°C	D93
Alcohol Control	Option 1: Methanol	N/A	0.2, max	0.2	% mass	*EN 14110*
	Option 2: Flashpoint	180	130, min	130	°C	D93
Moisture[1]:		0.025	N/A	0.040, max	% mass	E203
Cold Soak Filtration:		91	360	200	seconds	D7501
Sulfur:		2.3	15	15	ppm (mg/kg)	D7039
Sodium & Potassium Combined:		0.4 *	5, max	1.5	ppm (mg/kg)	*EN 14538*
Calcium & Magnesium Combined:		0.0 *	5, max	1.5	ppm (mg/kg)	*EN 14538*
Total Contamination[1]:		8.1 *	N/A	15,max	mg/L	D7321
Ester Content[1]:		97.3 *	N/A	97, min	% mass	*EN 14103*
Phosphorus:		0.0000 *	0.001, max	0.001	% mass	D4951
Carbon Residue:		0.000 *	0.050, max	0.050	% mass	D4530
Sulfated Ash:		0.005 *	0.020, max	0.020	% mass	D874
Kinematic Viscosity at 40 °C:		4.098 *	1.9-6.0	3.8 – 5.0	$mm^2/sec.$	D445
Copper Corrosion (3 hrs at 50 °C):		1a *	No. 3, max	No. 1a	N/A	D130
Distillation at 90% Recovered:		351 *	360, max	360	°C	D1160
Cetane Number:		49.0 *	47, min	47	N/A	D613

[1] These tests are not ASTM D6751 specification requirements.

* This value is the most recently acquired result for this product from this plant. This test is performed periodically.

Prepared by: Kim Williams Quality Control/ Lab Coordinator/ REG Albert Lea,LLC 12/04/2018

Name Title Location Date

Please contact Inside Sales at Renewable Energy Group, Inc. at (888)734-8686 with any questions or comments about this product.

WM SIMI LANDFILL

DEC 27, 2018 6:26 AM

SYSTEM STATUS REPORT

ALL FUNCTIONS NORMAL

INVENTORY REPORT

T 2:DIESEL
VOLUME = 3280 GALS
ULLAGE = 11866 GALS
90% ULLAGE= 10351 GALS
TC VOLUME = 3260 GALS
HEIGHT = 29.98 INCHES
WATER VOL = 0 GALS
WATER = 0.00 INCHES
TEMP = 73.2 DEG F

* * * * * END * * * * *

WM SIMI LANDFILL

DEC 27, 2018 6:52 AM

SYSTEM STATUS REPORT

ALL FUNCTIONS NORMAL

INVENTORY REPORT

T 2:DIESEL
VOLUME = 10769 GALS
ULLAGE = 4377 GALS
90% ULLAGE= 2862 GALS
TC VOLUME = 10732 GALS
HEIGHT = 74.56 INCHES
WATER VOL = 0 GALS
WATER = 0.00 INCHES
TEMP = 67.6 DEG F

* * * * * END * * * * *

ANNUAL GAS FLOW METER CALIBRATION
SIMI VALLEY LANDFILL & RECYCLING CENTER

Date: 12DEC2018 Start Time: _____

Stop Time: _____

Per Condition 8 of PTO No. 01395, Specific instrumentation used for the control and recording of gas flow and the exhaust temperature of the flare system shall be calibrated annually to demonstrate that the individual devices continue to meet the manufacturer's accuracy specifications. In addition, all safety equipment that protects the landfill gas collection system, condensate system, and flare including the flame detector, high temperature shutdown, landfill gas blower control, and air damper shall be calibrated or function-checked annually to demonstrate that the individual devices continue to meet the manufacturer's accuracy specifications or continue to operate as required. These checks shall be performed in accordance with manufacturer's specifications or, if non-specified, in accordance with acceptable industrial practices. All records of third party calibrations of the gas flow and stack temperature recording devices shall be kept in three-ring binders identifying the contracting company, technician's name and title, date of calibration and a list of calibration techniques. Comments such as, "acceptable as tested", "adjusted", ,repaired", or "replaced", shall be noted on the calibration report. All automatic shutdown and safety equipment for the landfill gas collection system, condensate system, and flare may be function-tested by the permittee or their representatives as long as the employee's name, date of test, and comments are recorded in the landfill gas flare operations log book. All other associated gauges, thermometers, and meters not required to ensure operational compliance with this Permit to Operate or VCAPCD Rules and Regulations need not be annually inspected or calibrated. (Rule 26 and Rule 74.17.1)

ZERO FLOW CALIBRATION TEST

Model No.: Kurz 454 FTB-WGF Serial No.: FD35798A

			PASS	FAIL	N/A
Factory Zero Flow Power Rp (PRP): 1.5585	Calibration Check PRP: 1.5762		X		
Kurz Recommends that the Calibration Check shall be±2% of the factory settings:	*1.5897*	*to* *1.5273*			

GAS COMPOSITION CHECK

Gas	Current Gas Concentration (%)	Gas Composition Range Low (&)	*High (%)*	Meter Composition Settings Existing (%)	*Adjusted (%)*	PASS	FAIL	N/A
Methane (CH4)	48	*0*	0					✓
Carbon Monoxide (CO2)	39.2	*0*	0					✓
Nitrogen (N2)	12.7	*0*	0					✓
Hydrogen (H2)	0	*0*	0					✓

Gas concentrations recommended to be within±10% of meter settings.

FIELD CALIBRATION CORRECTION FACTOR (FCCF)

			PASS	FAIL	N/A
Recommended FCCC Setting: 0.85	Meter FCCF Setting: 0.85		X		

REFERENCE TEMPERATURE

			PASS	FAIL	N/A
Recommended Temp Setting (°F): 60	Meter Temp Setting (°F): 60		X		

WET GAS FLOW (WGF) VAPOR CORRECTION FACTOR

			PASS	FAIL	N/A
Recommended WGF Setting ENABLED	Meter WGF Setting: Enabled		X		
Recommended WGF Factor Process TMAX = °F	Meter WGF Factor: Pmax = 100° F		X		

LFG PIPE SIZE VERIFICATION

			PASS	FAIL	N/A
Stainless Steel 16" Sch 10S: 15.624	Meter Pipe Size Setting: 15.624		X		

ADDITIONAL COMMENTS

H2 is minimal and assumed to be 0%; therefore, balance gas is assumed to be N2.

Name Nicholas Thygesen Title Gas Tech II

Signature _____ Date 12Dec2018

ANNUAL FLARE SYSTEM TESTING
SIMI VALLEY LANDFILL & RECYCLING CENTER

Date: 12DEC18

		Pass	Fail	N/A
Lamp Test				
a.	Depress the "Lamp Test" button.	NCT		
b.	All panel lights illuminate.	NCT		
Emergency Stop				
a.	During normal operations, depress the "Flare Stop" push button.	NCT		
b.	System operation discontinues immediately.	NCT		
c.	Release the "Flare Stop" push button.	NCT		
d.	Depress the "Reset" button.	NCT		
Pilot Flame Failure and Shutdown				
a.	Depress the "Stop" button.	NCT		
b.	Close the pilot gas hand valve, HV-304.	NCT		
c.	Depress the "Reset" button.	NCT		
d.	Depress the "Start" button.	NCT		
e.	The purge cycle begins and upon completion, the ignition sequence automatically begins.	NCT		
f.	The pilot gas solenoid, SV-303, opens and the ignition transformer, IT-1, remains energized for ten seconds.	NCT		
g.	The pilot thermocouple, TE-307, is unable to detect flame.	NCT		
h.	The pilot gas solenoid, SV-303, closes and the purge cycle and ignition sequence are attempted again automatically.	NCT		
i.	After the third unsuccessful attempt to detect pilot flame, the "Flare Shutdown" light illuminates and system operation discontinues.	NCT		
j.	The post purge cycle begins and continues for one minute.	NCT		
k.	Depress the "Reset" button.	NCT		
l.	The "Flare Shutdown" light diminishes.	NCT		
m.	Open the pilot gas hand valve, HV-304.	NCT		
Flare High Temperature Shutdown				
a.	Depress the "Stop" button.	NCT		
b.	Place the "Panel Power" switch in the OFF position.	NCT		
c.	Inside the Flare Control Panel, PN-101, adjust the dial on the flare high temperature switch, TSH-201, to approximately 200 °F.	NCT		
d.	Place the "Panel Power" switch in the ON position.	NCT		
e.	Depress the "Reset" button.	NCT		
f.	Depress the "Start" button.	NCT		
g.	Allow the purge cycle to complete and the pilot to ignite.	NCT		
h.	After the automatic block valve, SOV-12, opens and gas blower operation begins, monitor the value appearing on the temperature control module, TIC-202.	NCT		
i.	Upon exceeding the setpoint value on the flare high temperature switch, TSH-201, the "Flare Shutdown" light illuminates and system operation discontinues.	NCT		
j.	The post purge cycle begins and continues for one minute.	NCT		
k.	Depress the "Reset" button.	NCT		
l.	The "Flare Shutdown" light diminishes.	NCT		
m.	Place the "Panel Power" switch in the OFF position.	NCT		
n.	Inside the Flare Control Panel, PN-101, return the dial on the flare high temperature switch, TSH-201 to 2000 °F.	NCT		
Automatic Block Valve Failure				
a.	Depress the "Stop" button.	NCT		
b.	Disconnect the compressed air or nitrogen source from the automatic block valve solenoid, SV-102.	NCT		
c.	Depress the "Reset" button.	NCT		
d.	Depress the "Start" button.	NCT		
e.	Allow the purge cycle to complete and the pilot to ignite.	NCT		
f.	The automatic block valve, SOV-102, is unable to open.	NCT		
g.	After thirty seconds, the automatic block valve open limit switch, ZSO-102, is not achieved.	NCT		
h.	The "Flare Shutdown" light illuminates and system operation discontinues.	NCT		
i.	The post purge cycle begins and continues for one minute.	NCT		
j.	Depress the "Reset" pushbutton.	NCT		
k.	The "Flare Shutdown" light diminishes.	NCT		
l.	Connect the compressed air or nitrogen source to the automatic block valve solenoid, SV-102.	NCT		

Additional Comments

Flare running light replaced

Name Nicholas Thingle Title GAS TECH II

Signature [signature] Date 12DEC18

ANNUAL CONDENSATE SYSTEM FUNCTION TEST
SIMI VALLEY LANDFILL & RECYCLING CENTER

Date: 12Dec2018

Start Time: _____

Stop Time: _____

Per Condition 8 of Authority to Construct No. 01395-280, the condensate system shall be calibrated or function-checked annually to demonstrate that the individual devices continue to meet the manufacturer's specifications or continue to operate as required. This check shall be performed in accordance with manufacturer's specifications, or if none specified, in accordance with acceptable industrial practices. All automatic shutdown and safety equipment for the condensate system shall be function tested by the permittee or their representative. A log shall be kept of the condensate system function tests.

NORMAL OPERATING SETPOINTS

Flare Low Temperature	_____	T-100 Low Tank Level	2.0	T-102 Low Tank Level	2.0
CIS Low Flow Setpoint	.5	T-100 High Tank Level	13.0	T-102 High Tank Level	12.0
CIS High Flow Setpoint	3.0	T-100 High-High Tank Level	14.7	T-102 High-High Tank Level	14.7
T-400 Low Tank Level	1.0	T-101 Low Tank Level	2.0	P-101 On Point	1.8
T-400 High Tank Level	9.8	T-101 High Tank Level	13.0	P-101 Off Point	1.5
T-400 High-High Tank Level	10.0	T-101 High-High Tank Level	14.7		

CONDENSATE INJECTION SYSTEM FUNCTION TEST

	PASS	FAIL	N/A
1. **LOW TEMPERATURE PERMISSIVE** - Increase Flare Low Temp Shutdown above the Flare Normal Operating temp. CIS shall stop injecting. No alarm will engage unless the flare also shuts down. Return to normal operating setpoint.	☐	☐	☒
2. **LOW CONDENSATE FLOW ALARM** - Increase Low flow setpoint above the CIS normal operating flow. CIS shall shutdown within 60 seconds and General Alarm on Autodialer shall be activated. Return setpoint to normal operating setpoint.	☐	☐	☒
3. **HIGH CONDENSATE FLOW ALARM** - Decrease High flow setpoint below the CIS normal operating flow. CIS shall shutdown within 60 seconds and General Alarm on Autodialer shall be activated. Return setpoint to normal operating setpoint.	☐	☐	☒
4. **T-400 LOW TANK LEVEL ALARM** - Increase low tank level setpoint above the current tank level. CIS shall shutdown within 60 seconds and General Alarm on Autodialer shall be activated. Return setpoint to normal operating setpoint.	☐	☐	☒
5. **T-400 HIGH TANK LEVEL ALARM** - Decrease high tank level setpoint below the current tank level. CIS shall remain operational and amber beacon on T-400 shall engage. Return setpoint to normal operating setpoint.	☐	☐	☒
6. **T-400 HIGH-HIGH TANK LEVEL ALARM** - Decrease high-high tank level setpoint below the current tank level. CIS shall shutdown and red beacon on T-400 shall engage. Electric inlet valve to T-400 shall close and PLC will remove permissive to lower tank farm transfer pump. General Alarm on Autodialer shall be activated. Return setpoint to normal operating setpoint.	☐	☐	☒
7. PUMP 401 FAILURE - While CIS is operational, put P-401 into "OFF" position at P-401 pump electrical disconnect panel. General Alarm on Autodialer shall be activated. Return pump to "AUTO" position.	☐	☐	☒
8. **FLOW METER CALIBRATION** - flow meter shall be calibrated at least annually per manufacturers recommendations. Enter date of last annual calibration here.	06Nov2018		

CONDENSATE TANK FARM SYSTEM FUNCTION TEST

	PASS	FAIL	N/A
1. **T-100 LOW TANK LEVEL ALARM** - Make T-100 controlling tank. Increase low tank level setpoint above the current tank level. Beacon on control panel shall engage and alarm will display. Return setpoint to normal operating setpoint.	☒	☐	☐
2. **T-100 HIGH TANK LEVEL ALARM** - Make T-100 controlling tank. Decrease high tank level setpoint below the current tank level. Actuator valve shall remain open beacon on control panel shall engage. Return setpoint to normal operating setpoint.	☒	☐	☐
3. T-100 HIGH-HIGH TANK LEVEL ALARM - Make T-100 the controlling tank. Decrease high-high tank level setpoint below the current tank level. Actuator valve shall close and beacon on control panel shall engage. Return setpoint to normal operating setpoint.	☒	☐	☐
4. **T-101 LOW TANK LEVEL ALARM** - Make T-101 controlling tank. Increase low tank level setpoint above the current tank level. Beacon on control panel shall engage and alarm will display. Return setpoint to normal operating setpoint.	☒	☐	☐

on control panel shall engage and alarm will display. Return setpoint to normal operating setpoint.

5. **T-101 HIGH TANK LEVEL ALARM** - Make T-101 controlling tank. Decrease high tank level setpoint below the current tank level. Actuator valve shall remain open beacon on control panel shall engage. Return setpoint to normal operating setpoint.	☒	☐	☐
6. T-101 HIGH-HIGH TANK LEVEL ALARM - Make T-101 the controlling tank. Decrease high-high tank level setpoint below the current tank level. Actuator valve shall close and beacon on control panel shall engage. Return setpoint to normal operating setpoint.	☒	☐	☐
7. **T-102 LOW TANK LEVEL ALARM** - Make T-102 controlling tank. Increase low tank level setpoint above the current tank level. Beacon shall activate and alarm will show. Return setpoint to normal operating setpoint.	☒	☐	☐
8. **T-102 HIGH TANK LEVEL ALARM** - Make T-102 controlling tank. Decrease high tank level setpoint below the current tank level. Actuator valve shall remain open beacon on control panel shall engage. Return setpoint to normal operating setpoint.	☒	☐	☐
9. T-102 HIGH-HIGH TANK LEVEL ALARM - Make T-102 the controlling tank. Decrease high-high tank level setpoint below the current tank level. Actuator valve shall close and beacon on control panel shall engage. Return setpoint to normal operating setpoint.	☒	☐	☐
10. **PUMP 101 On Point** - Change the Pump on set point to above current water level in T-400 tank. Pump will turn on and transfer liquid to the tank. Return setpoint to normal operating set point.	☐	☐	☒
11. **PUMP 101 Off Point** - Change the Pump off set point to below current water level in T-400 tank. Pump will turn off and transfer liquid to the tank will stop. Return setpoint to normal operating set point.	☐	☐	☒

12. **FLOW METER CALIBRATION** - flow meter shall be calibrated at least annually per manufacturers recommendations. Enter date of last annual calibration here. 06NOV2018

Additional Comments

Condensate injection system disconnected For installation of New injection system

Name Nicholas Thingili Title Gas Tech II

Signature [signature] Date 12Dec2018

Semi-Annual Title V Report and New Source Performance Standards (NSPS) Report (July through December 2018)

Simi Valley Landfill and Recycling Center
Simi Valley, California

For Submittal to:

Ventura County Air Pollution Control District
669 County Square Drive
Ventura, California 93003
(805) 645-1400

Presented by:

Simi Valley Landfill and Recycling Center
2801 Madera Road
Simi Valley, California 93065

February 2019

This Semi-Annual Title V and New Source Performance Standard (NSPS) Semi-Annual Report for the reporting period of July 1 through December 31, 2018, was developed to comply with Ventura County Air Pollution Control District (VCAPCD) and NSPS requirements for the Simi Valley Landfill, California. The document is dated February 2019 and was prepared and reviewed by the following:

Collin Pavelchik
EP Air Quality Specialist
Waste Management

SEMI-ANNUAL TITLE V REPORT OF REQUIRED MONITORING

A copy of the Title V Semi-Annual Report of Required Monitoring shall be submitted to VCAPCD at the following address:

Dan Searcy
Ventura County Air Pollution Control District
669 County Square Drive
Second Floor
Ventura CA 93003

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this compliance certification are true, accurate, and complete.

Signature and Title of Responsible Official:	
Title: District Manager	Date: 2-11-19

Time Period Covered by the Semi-Annual Report of Required Monitoring:
07/01/2018 to 12/31/2018

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1.0 INTRODUCTION

This semi-annual Title V and New Source Performance Standards (NSPS) Report for the Simi Valley Landfill and Recycling Center (SVLRC) is being submitted by Waste Management (WM) to the Ventura County Air Pollution Control District (VCAPCD) in compliance with the following:

- VCAPCD Rule 74.17.1 (Municipal Solid Waste Landfills)
- Sections within 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW ("NSPS"), including 40 CFR 60.757(f), which describe the items to be submitted in a semi-annual report for landfills seeking to comply with NSPS using an active collection system
- In compliance with 40 CFR 63, Subpart AAAA (National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Landfills), the NSPS annual report is submitted semi-annually
- To fulfill the semi-annual reporting requirement under the facility's Title V permit (No. 01395)
- VCAPCD letter dated September 30, 2004 that states that the Title V and NSPS semi-annual reports may and should be combined into one document

The semi-annual report includes the following information, as required by VCAPCD Rule 74.17.1 and 40 CFR 60.757(f), for the reporting period:

- Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d).
- Description and duration of all periods when the gas stream is diverted from the control device.
- Description and duration of all periods when the control device was not operating for more than 1 hour.
- All periods when the collection system was not operating in excess of 5 days.
- The location of each of the 500 parts per million by volume (ppmv) methane exceedances, and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- The date of installation and the location of each well or collection system expansion added to the existing system pursuant to 40 CFR 60.755 paragraphs (a)(3), (b), and (c)(4).

2.0 BACKGROUND INFORMATION

2.1 OWNER AND OPERATOR INFORMATION

SVLRC is owned and operated by WM. The facility is a municipal solid waste (MSW) disposal site located in Simi Valley, California at the following address: Simi Valley Landfill and Recycling Center, 2801 Madera Road, Simi Valley, California 93065.

SVLRC is located in Sections 5 and 6 of Township 2N, and Sections 35 and 36 of Township 3N, Range 18W, San Bernardino Base and Meridian. The landfill has been in operation since 1970. Between 1989 and 1990, a landfill gas (LFG) collection and control system (GCCS) and McGill Environmental System LFG flare were installed at the site. The objective of the collection system at that time was to control the migration of combustible gases to off-site soils (California Code of Regulations Title 27).

On January 18, 2011, an ATC Number 01395-270 was issued for a new 165 Million British Thermal Unit (MMBTU/hr) John Zink LFG flare which was installed to replace the two existing landfill gas flares (McGill Flare and 75 MMBTU/hr John Zink Flare). The new flare has been in full operation since April 18, 2011 as a replacement for the original two flares, which are no longer in operation and have been removed from the site. A Title V permit including the new John Zink flare was issued on January 7, 2013 and renewed on February 5, 2018.

2.2 DESCRIPTION OF LANDFILL GAS COLLECTION AND CONTROL SYSTEM

The LFG collection and control system (GCCS) installed at the SVLRC is shown in the site plan provided in Appendix A, and consists of the following components:

- Vertical extraction wells and horizontal trench collectors.
- A system of lateral piping which connects the vertical wells and trench collectors to a main header system.
- A main collection header, which transports LFG to the blower/flare station.
- A 165 MMBtu/HR John Zink LFG flare.
- A condensate collection system.

The purpose of the GCCS is to minimize potential environmental impacts associated with LFG, including the following:

- LFG emissions at the landfill surface.
- LFG emissions out of the flare stack.
- LFG migration through the vadose zone.

The GCCS removes LFG under a vacuum from the landfill mass. The system collects and controls migrating surface and subsurface gases from the disposal area.

3.0 MONITORING AND RECORDS REQUIRED UNDER NSPS

The following information required to be submitted in the NSPS semi-annual report as referenced in Section 1 is organized in Section 3 as follows:

- Continuously Monitored Parameters
    - Wellhead Monitoring Data
    - Flare Station Monitoring Data
    - Power Plant Monitoring Data
    - Description and Duration of Periods when Gas was diverted from the Control System
    - Minimum Flare Temperature
    - Control System Downtime
    - Collection System Downtime
    - Quarterly Screenings per the Engines Operator Inspection Plan
    - Complete Summary of Maintenance for the Engines
- Surface Emissions Monitoring Data
    - Quarterly Monitoring
    - Monitoring Around Structures
- Cover Integrity Monitoring
- Gas Collection System Installations and Upgrades
- Performance Testing
    - Source Test Results (when applicable)
- Title V Compliance

3.1 CONTINUOUSLY MONITORED PARAMETERS

Applicable parameters continuously monitored under 40 CFR 60.756(a), (b), (c), and (d), include the following which should be monitored:

- Pressure applied to the extraction wells via the gas collection header should be monitored on a monthly basis. A vacuum must be maintained at each wellhead to be in compliance with 40 CFR 60.753 (b).

- Nitrogen or oxygen content of LFG at the wellheads should be monitored on a monthly basis. Nitrogen must be less than 20% or oxygen less than 5% to be in compliance with 40 CFR 60.753 (c).

- Temperature of the LFG at the wellheads should be monitored on a monthly basis. Temperature must be maintained below 55 degrees C (131 degrees F) to be in compliance with 40 CFR 60.753 (c).

- A temperature monitoring device with a continuous recorder shall be installed at the flare station. The temperature monitoring data are used to demonstrate when the flare is on or off-line and that the flare is meeting minimum temperature requirement. The flare monitoring device must be operating continuously to be in compliance with 40 CFR 60.756 (b) or (c).

- A gas flow rate measuring device, which records flow at least once every 15 minutes, must be installed at the flare station, including engines. The flow rate monitoring data are used to determine the amount of time the LFG collection and control systems are on-line. The flare and engine monitoring device must be operating continuously to be in compliance with 40 CFR 60.756 (b) or (c) and to show that the flare and/or engine is on-line at any time that the collection system is operating (in compliance with 40 CFR 60.753 (e) and (f)).

3.1.1 Wellhead Monitoring Data

Wellhead monitoring data from the monthly monitoring events during the reporting period included wellhead vacuum, oxygen content of LFG at the wellheads, and the temperature of LFG at the wellheads. All well monitoring data during the reporting period is presented in Appendix B, and provide the following information regarding compliance with 40 CFR 60.753:

- During the reporting period, all operational extraction wells were operated with negative static pressure at all wellheads during the reporting period, with the exception of twenty-four (24) monitoring events. Per 40 CFR 60.755(a)(3), corrective action (through valve adjustments) was taken, and all twenty-four (24) events were corrected and re-monitored within fifteen days. Dates and duration when the wells exhibited positive pressure can be found in Appendix B.

- During the reporting period, all of the operational extraction wells had oxygen contents of less than 5%, with the exception of seven (7) events. Per 40 CFR 60.755(a), corrective action (through valve adjustments) and re-monitoring was taken, and six (6) of the seven (7) events were corrected within 15 days (wells 1405A, 1788S, 1805S, 035, 821 and 1222). Well 021 triggered repairs, new parts and adjustments to the wellfield under the NSPS 120-day timeframe. It was re-monitored multiple times within 104 days, cleared its exceedance and therefore achieved compliance with the 120-day timeframe for repair or replacement under the NSPS. Dates and duration when oxygen at the wellheads were above 5% can be found in Appendix B.

- During the reporting period, all operational extraction wells operated with LFG temperatures less than 55 degrees C (131 degrees °F), with the exception of sixty-one (61) events. Per 40 CFR 60.755(a), corrective action (through valve adjustments) and re-monitoring was taken, and thirty-one (31) of the sixty-one (61) events were corrected within 15 days. The remaining thirty (30) triggered repairs, new parts and adjustments to the wellfield under the NSPS 120-day timeframe for repair or replacement. Twenty-six (26) of these wells were re-monitored multiple times within 90 days, cleared their exceedances, and therefore achieved compliance with the 120-day timeframe for repair or replacement under the NSPS. In addition, wells 1788S, 1789S, 1792S and 1791 achieved compliance with NSPS through establishing a Higher Operating Value (HOV) that was fulfilled for 140 degrees F (along with carbon monoxide readings recorded). Dates and duration when temperatures at the wellhead(s) were greater than or equal to 131 degrees °F can be found in Appendix B.

WM requested to increase the operating temperature up to 155 degrees F for future HOV demonstrations in a May 2012 GCCS Design Plan submittal, and is currently operating under that condition. Per the Title V/Part 70 Permit, all wells operating with a HOV currently have documentation recorded onsite showing "supporting data that the elevated parameters do not cause fire or significantly inhibit anaerobic decomposition by killing methanogens".

Please note that wellhead readings for wells that were off-line due to maintenance, active filling or on-site construction activities, taken offline for well Startup, Shutdown, and Malfunction (SSM) events, and/or shut-off to control increased well temperature to prevent a subsurface fire are exempt under 40 CFR 60.753(b), and were excluded from the above review.

3.1.2 Flare Station Monitoring Data

A temperature monitoring device with a continuous recorder and a LFG flow rate monitoring device which records flows at least every 15 minutes is installed at the flare station. The monitoring records are summarized and kept on file at the landfill. During the reporting period, the gas collection system was operated in compliance with the requirement to operate the system such that all collected gases are vented to a control system (40 CFR 60.753 (e)), and the requirement to operate the control or treatment system at all times when the collected gas is routed to the system (40 CFR 60.753 (f)). The flare station is equipped with an automatic shutdown and alarm system, which shuts down the blowers and closes a valve on the main header pipe whenever the flare shuts down. This ensures that no collected LFG is vented to the atmosphere untreated.

3.1.3 Description and Duration of Periods when Gas was Diverted from Control System

As noted above, collected LFG was at no time diverted from the flare because the blowers automatically shut down whenever the flare shuts down. Thus, collected LFG was at no time diverted from the control device during the reporting period.

3.1.4 Minimum Flare Temperature

Per 40 CFR 60.758(c)(1)(i), the minimum temperature for Flare No. 3 was determined by the average process temperature recorded during the source test performed on April 18, 2017 (the summarized results are provided in Appendix D of the January-June 2017 NSPS report). The results were 1,598°F minus 50°F (1,548°F). Also, in accordance with the VCAPCD ATC No. 01395-270 Condition 5(b) and the Title V/Part 70 Permit, the 165 MMBTU/hr Flare No. 3 shall be operated with a >0.6 second retention time at >1,400 degrees Fahrenheit (Rule 26.21 – BACT). During the period reporting period, Flare No. 3 did not operate below 1,400 °F. In addition, the average temperature for the flare did not drop below the established minimum NSPS temperature or the permitted minimum temperatures of 1,400 °F and 1,548 °F for 3-hour periods except during periods of SSM, which are not counted in the 3-hour block averages per NSPS/NESHAP criteria.

There were no events during the reporting period when invalid data were collected or where loss of data occurred, which were not otherwise covered by SSM events.

3.1.5 Flare System Downtime

Blower/flare station shutdowns (for more than one hour) occurred at thirty-five (35) times during the reporting period. During these periods of control devices shutdown, the collected LFG was never transmitted to the flare and emitted without treatment. A log of individual flare station shutdowns exceeding 1 hour in duration is included in Appendix D.

3.1.6 Collection System Downtime

At no time in the reporting period was the collection system shut down for more than 5 consecutive days.

3.2 SURFACE EMISSION MONITORING DATA

Landfill surface emissions monitoring ("instantaneous surface sweeps"/SEM) were performed on a quarterly basis during the reporting period to measure concentrations of total organic compounds (TOC) as methane. The monitoring dates, survey pathways, and results are documented in the landfill's quarterly reports detailing when the monitoring activities took place. In addition, surface emission monitoring around structures which includes around the casings of LFG extraction wells are conducted on a quarterly basis. The results of the monitoring are summarized below. Please see Appendix E for a copy of the 3rd and 4th quarter SEM reports.

Quarter/ Date of Monitoring	Number of Grid Exceedances >500 ppmv	Date of 10-Day Re-Monitoring Event	Number of Grid Exceedances >500 ppmv (10 days)	Date of 2nd 10-day Re-Monitoring Event	Date of 30-day Re-Monitoring Event	Number of Grid Exceedances >500 ppmv (30 days)
3rd Qtr/ August 22, 2018	11	August 30, 2018	0	NA	September 20, 2018	0
4th Qtr/ November 28; December 14, 2018	9;1	November 28 & December 10, 2018*; December 21, 2018	0	NA	December 27, 2018; January 11, 2019	0

*Note: The re-monitoring was conducted on this day due to previous high measurable wind.

3.3 COVER INTEGRITY MONITORING

Per 40 CFR 60.755(c)(5), the site must implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. WM monitors for cover integrity monthly and reports to the site operations personnel of any areas of concern. The site operations personnel then make any necessary repairs. The following is a list of dates when monthly cover integrity monitoring and subsequent improvements/repairs took place (please see Appendix C for a complete copy of the field cover integrity inspection logs):

- July 31, 2018
- August 18, 2018
- September 4 & 24, 2018
- October 29, 2018
- November 30, 2018
- December 26, 2018

3.4 GAS COLLECTION SYSTEM INSTALLATIONS AND UPGRADES

The following collection system changes occurred during the reporting period:

Date	Installations, Upgrades, Decommissions, Etc.
July 1, 2018 – December 31, 2018	Twenty-one (21) new extraction wells were installed and brought online on November 14 & 15, 2018 (1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821); and two (2) wells were decommissioned on October 3 & 8, 2018 (21 and 1221). The latest map of the current GCCS system is included in Appendix A, dated April 11, 2018.

4.0 PERFORMANCE TEST

The facility is required to perform a source test on flare No. 3 once every two years as required by Rule 74.17.1, Condition No. 6 of the Authority to Construct (ATC), acting under the Temporary Permit to Operate (TPTO]) issued by the VCAPCD on February 14, 2011, and the Title V/Part 70 Permit. Flare No. 3's latest compliance test was performed on April 18, 2017 (a summary of the test results is attached in Appendix D of the January-June 2017 NSPS report).

Performance test summary information on the Total Non Methane Organic Compounds (TNMOC)/Reactive Organic Compounds (ROC), Nitrogen Oxides (NOx), Methane Destruction Efficiency, Total Reduced Sulfur (TRS) compounds, and Carbon Monoxide (CO) emissions for Flare No. 3 is provided below.

Test Date	Parameter	Flare No. 3	Emission Limit
Flare No. 3 4/18/17	NOx Emission Rate (lb/MMBtu)	0.0226	0.025 lb/MMBtu
	CO Emission Rate (lb/MMBtu)	0.0206	0.20 lb/MMBtu
	TNMOC/ROC Emission Rate (ppm, as hexane @ 3% O_2)	0.955	20/12 ppm
	Methane Destruction Efficiency (%)	99.99	99%
	TRS Emission Rate (ppm)	37.5	60 ppm

5.0 TITLE V COMPLIANCE

During the reporting period, the site performed all required monitoring and maintained the appropriate records.

TABLE 1. ESTIMATED LFG FLOWS AND TIME ON-LINE

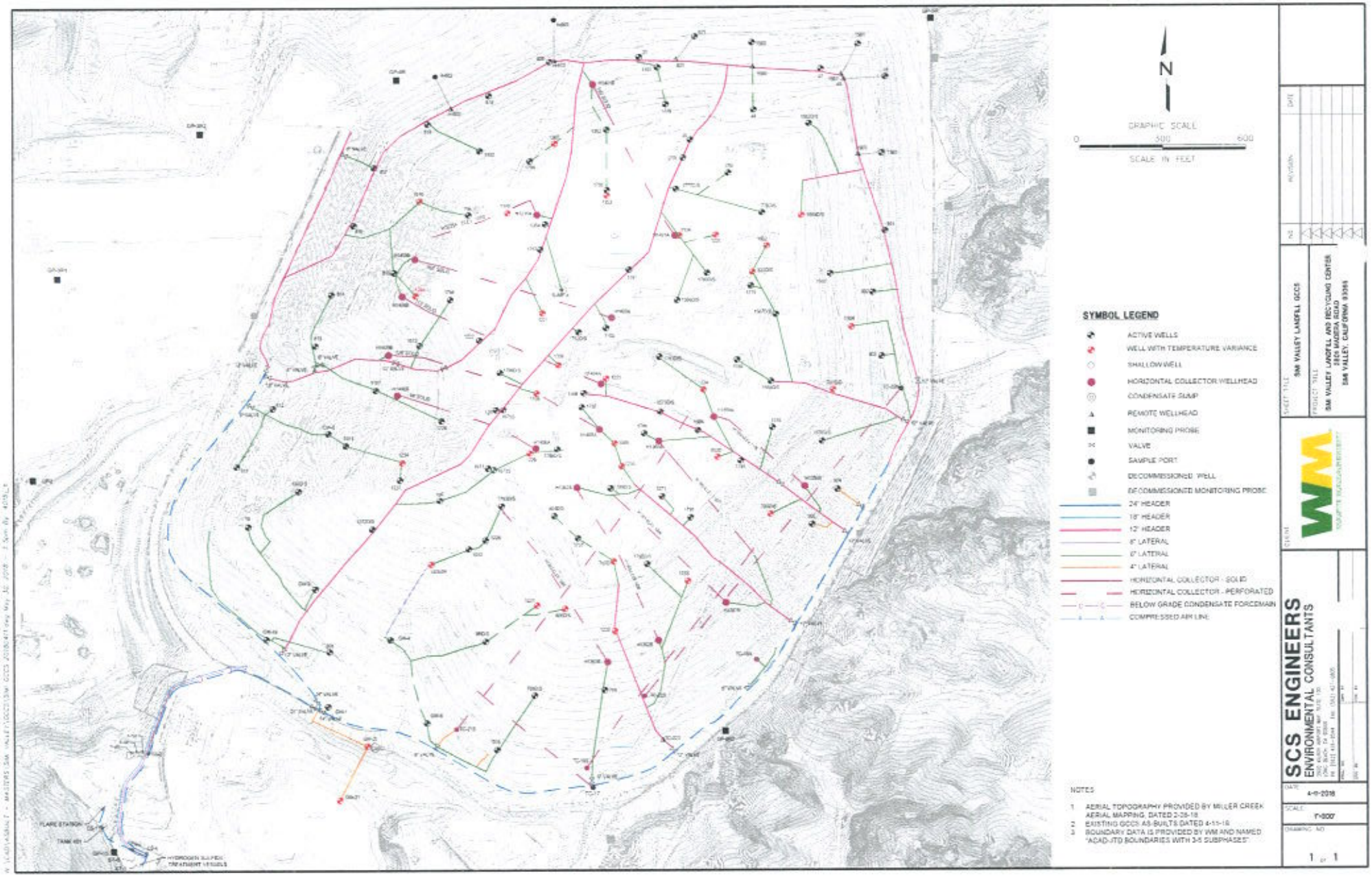
Flare Station
July 1, 2018 to December 31, 2018

Month	Flare	No. of Hrs. On-line	% of Time On-line	Average % Methane	Calculated Average Flow Rate When On-line (scfm)
July	No. 3	716.6	96.3	48.7	4340
August	No. 3	722.5	97.1	49.2	4116
September	No. 3	700.7	97.3	48.9	4179
October	No. 3	714.0	96.0	48.2	3979
November	No. 3	703.0	97.6	47.2	3959
December	No. 3	723.27	97.2	48.7	4381

APPENDICES

APPENDIX A

Landfill Site Plan



SHEET TITLE
SIMI VALLEY LANDFILL GCCS

PROJECT TITLE
SIMI VALLEY LANDFILL AND RECYCLING CENTER
2800 MADERA ROAD
SIMI VALLEY, CALIFORNIA 93065

REVISION | DATE

CLIENT
WM
WASTE MANAGEMENT

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS

DATE
4-11-2018

SCALE
1"=500'

DRAWING NO.
1 OF 1

APPENDIX B

Wellhead Monitoring Data

SVLRC Well Data
July-December 2018

Device Name	Date Time	CH4 (Methane)(%)	CO2 (Carbon Dioxide)(%)	O2 (Oxygen)(%)	Balance Gas(%)	Initial Differential Pressure("H2O)	Adjusted Differential Pressure("H2O)	Initial Temperature(oF)	Adjusted Temperature(oF)
SIH1235A	7/20/2018 15:20	54.5	42.7	0	2.8	0.43	0.41	119	119
SIH1235A	8/29/2018 11:55	57.3	42.4	0.2	0.1	0.05	0.69	122	123
SIH1235A	9/6/2018 8:38	55.3	44.6	0	0.1	0.64	1.03	122	123
SIH1235A	10/9/2018 8:47	55.9	44	0	0.1	0.51	0.52	120	121
SIH1235A	11/15/2018 13:37	54.5	43	0	2.5	0.87	0.62	120	120
SIH1235A	12/11/2018 7:10	55.5	44.4	0	0.1	0.41	0.38	122	123
SIH1359A	7/17/2018 9:35	52.3	45.2	0	2.5	0.34	0.35	127	128
SIH1359A	8/1/2018 8:47	50.7	44.3	0	5	0.47	0.52	131	132
SIH1359A	8/16/2018 15:07	51.2	44.5	0.2	4.1	0.8	0.83	133	133
SIH1359A	8/20/2018 13:38	50.7	45.5	0	3.8	0.98	1.15	134	134
SIH1359A	8/20/2018 16:45								
SIH1359A	9/4/2018 10:07	45.6	41.9	0	12.5	1.43	1.38	133	133
SIH1359A	9/18/2018 12:18	44.2	40.8	0	15	1.52	1.6	130	130
SIH1359A	10/3/2018 13:32	46.3	40.9	0	12.8	1.14	1.03	130	131
SIH1359A	10/15/2018 14:32	47.7	41.2	0	11.1	1.32	1.14	130	131
SIH1359A	10/24/2018 12:26	44.3	39.9	0.5	15.3	1.23	0.6	130	130
SIH1359A	10/24/2018 16:34								
SIH1359A	11/13/2018 14:03	46.3	41.1	0	12.6	1.3	0.93	129	128
SIH1359A	12/5/2018 13:42	49.5	42.3	0	8.2	1.33	1.17	134	135
SIH1359A	12/19/2018 15:02	48.6	41.1	0.1	10.2	0.45	0.51	132	132
SIH1359A	12/19/2018 15:02								
SIH1359B	7/24/2018 9:24	30.9	32.8	0.9	35.4	0.16	1.23	129	129
SIH1359B	8/15/2018 8:49	31.5	32.3	0.2	36	0.74	0.3	126	126
SIH1359B	9/7/2018 8:49	27.2	31.5	0.3	41	3.1	0.05	122	120
SIH1359B	10/9/2018 12:46	28.3	31.6	0.1	40	0.08	0.13	115	100
SIH1359B	11/27/2018 14:51	32.7	33.1	0.2	34	0.76	0.84	112	107
SIH1359B	12/13/2018 7:32	34.1	33.2	0.5	32.2	14.34	14.84	113	114
SIH1360A	7/17/2018 10:26	54.2	45.7	0	0.1	0.07	0.12	105	108
SIH1360A	8/3/2018 12:55	44.4	43.8	0.5	11.3	0.13	0.12	121	121
SIH1360A	8/28/2018 9:03	43.1	40.1	0.8	16	0.31	0.1	123	121
SIH1360A	9/4/2018 10:23	49.4	44.7	0.8	5.1	0.01	0.07	95	90
SIH1360A	10/9/2018 7:57	48.4	45.1	0.9	5.6	0.03	0.02	74	76
SIH1360A	10/23/2018 9:18	47.6	44.3	1.3	6.8	0.03	0.02	98	98
SIH1360A	11/20/2018 18:11	46.8	43.7	0.7	8.8	0.3	0.08	114	114
SIH1360A	12/5/2018 14:09	45.2	41.7	1.7	11.4	0.12	0.09	108	109
SIH1361B	7/24/2018 9:42	44	44.4	0	11.6	0.04	0.02	131	131
SIH1361B	8/15/2018 9:20	45.9	43.3	0.1	10.7	0.07	0.08	127	128
SIH1361B	9/7/2018 9:20	47.4	43.8	0	8.8	1.36	1.36	131	132
SIH1361B	10/9/2018 13:07	47.2	44.1	0	8.7	1.28	1.37	133	133
SIH1361B	11/12/2018 12:16	46	43.9	0	10.1	1.08	1.02	130	131
SIH1361B	12/13/2018 7:44	45.8	42.8	0	11.4	1.23	0.66	135	135
SIH1362A	7/17/2018 11:13	49.6	42.7	1	6.7	0.04	0.25	113	117
SIH1362A	7/30/2018 12:51	47.8	44.5	0	7.7	0.28	0.21	122	122
SIH1362A	8/3/2018 13:18	45.5	45.3	0	9.2	0.26	0.19	123	124
SIH1362A	8/28/2018 8:32	47.5	44.5	0.1	7.9	0.18	0.5	124	125
SIH1362A	9/4/2018 13:16	49.4	43.2	0	7.4	0.4	0.58	127	128
SIH1362A	10/3/2018 7:44	45.3	44.4	0	10.3	0.33	0.22	125	125
SIH1362A	10/23/2018 9:50	44	42.7	0	13.3	2.49	0.55	124	122
SIH1362A	11/14/2018 13:48	44.5	41.6	0.3	13.6	1.18	0.9	115	114
SIH1362A	12/5/2018 15:05	52	45.1	0.4	2.5	0.63	0.93	103	107
SIH1362B	7/24/2018 9:52	49	44.8	0	6.2	0.19	0.14	133	133
SIH1362B	8/15/2018 10:11	49.6	45.1	0	5.3	0.51	0.26	130	131
SIH1362B	9/7/2018 9:25	51.6	45.1	0	3.3	0.15	0.37	130	131

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SIH1362B	10/12/2018 7:31	50.1	45.6	0	4.3	0.35	0.43	131	132
SIH1362B	11/12/2018 12:57	45.8	44.4	0	9.8	0.41	0.59	131	131
SIH1362B	12/13/2018 7:51	46.7	42.6	0.1	10.6	0.57	0.22	135	134
SIH1363B	7/25/2018 14:36	43.1	40.6	0	16.3	0.58	0.37	134	134
SIH1363B	8/15/2018 10:33	47.5	40.8	0.1	11.6	0.61	0.77	132	133
SIH1363B	9/7/2018 9:39	48.6	44	0	7.4	0.49	0.56	133	134
SIH1363B	10/12/2018 8:06	48.2	43.7	0	8.1	0.57	0.21	134	134
SIH1363B	11/12/2018 13:13	47	43.2	0	9.8	0.42	0.44	132	133
SIH1363B	12/13/2018 7:56	48.3	43.1	0	8.6	0.4	0.38	137	138
SIH1401A	7/20/2018 14:24	58	41.2	0	0.8	0.36	0.32	118	118
SIH1401A	7/21/2018 13:46	55.6	44.3	0	0.1	1.34	1.3	124	125
SIH1401A	8/1/2018 10:04	56.8	42.9	0	0.3	0.43	0.4	119	120
SIH1401A	9/6/2018 7:46	56.4	43.5	0	0.1	0.64	0.53	121	122
SIH1401A	10/15/2018 14:51	56	43.9	0	0.1	0.53	0.55	120	120
SIH1401A	11/16/2018 18:07	56.9	43	0	0.1	0.36	0.37	118	118
SIH1401A	12/10/2018 11:44	56.3	40.3	0.8	2.6	0.64	0.54	122	122
SIH1401B	7/26/2018 11:11	56.2	43.6	0	0.2	0.74	0.79	125	125
SIH1401B	8/16/2018 15:50	55.1	44.8	0	0.1	1.15	0.65	127	127
SIH1401B	9/7/2018 14:12	55.7	44.2	0	0.1	0.98	1.04	125	125
SIH1401B	10/17/2018 10:40	55.5	44.4	0	0.1	0.6	0.74	125	125
SIH1401B	11/15/2018 14:24	56.2	43.3	0	0.5	0.4	0.46	123	123
SIH1401B	12/13/2018 10:04	55.4	44.5	0	0.1	0.19	0.18	125	126
SIH1403A	7/20/2018 14:39	55.7	43.3	0	1	0.42	0.55	118	118
SIH1403A	8/1/2018 10:44	54.6	43.2	0	2.2	0.69	0.68	119	120
SIH1403A	9/6/2018 8:00	56.2	43.6	0	0.2	0.63	0.49	121	122
SIH1403A	10/9/2018 9:41	54.7	45.2	0	0.1	0.67	0.61	120	120
SIH1403A	11/27/2018 13:33	55.6	44.3	0	0.1	0.37	0.35	118	118
SIH1403A	12/10/2018 11:54	50.4	39.4	2.1	8.1	0.71	0.74	119	119
SIH1403B	7/25/2018 15:51	54.8	44.1	0	1.1	0.26	0.27	122	123
SIH1403B	8/17/2018 8:20	56.6	43.3	0	0.1	0.76	0.72	120	121
SIH1403B	9/7/2018 12:53	56.4	43.5	0	0.1	0.67	0.05	113	114
SIH1403B	10/12/2018 9:11	55.1	44.8	0	0.1	0.82	0.62	122	123
SIH1403B	11/12/2018 15:11	54.5	45.3	0.1	0.1	0.55	0.49	121	122
SIH1403B	12/13/2018 9:11	54.6	45.3	0	0.1	0.93	0.97	127	128
SIH1404A	7/17/2018 9:57	54.4	45.5	0	0.1	0.75	0.67	119	119
SIH1404A	8/3/2018 12:27	52.7	44.8	0	2.5	0.2	0.08	121	121
SIH1404A	9/4/2018 10:35	50.4	43.9	0	5.7	0.14	0.13	121	122
SIH1404A	9/7/2018 12:59	54.5	45.4	0	0.1	0.62	0.58	118	119
SIH1404A	10/3/2018 13:12	55.1	44.1	0	0.8	0.05	0.07	120	120
SIH1404A	10/23/2018 10:26	54	45.9	0	0.1	10.32	9.91	119	118
SIH1404A	11/14/2018 13:29	54.4	43.7	0	1.9	9.57	8.29	114	115
SIH1404A	12/5/2018 14:19	52.9	47	0	0.1	7.95	6.88	118	119
SIH1404B	7/25/2018 15:55	53.6	45	0	1.4	0.52	0.51	122	123
SIH1404B	8/17/2018 8:15	55.5	44.4	0	0.1	0.36	0.49	119	119
SIH1404B	9/12/2018 8:59	55	44.8	0.1	0.1	0.27	0.32	119	120
SIH1404B	10/12/2018 9:08	54.3	45.6	0	0.1	0.69	0.56	119	119
SIH1404B	11/12/2018 15:08	53.5	46.4	0	0.1	0.63	0.54	119	120
SIH1404B	12/13/2018 9:05	54.2	45.7	0	0.1	0.43	0.47	122	124
SIH1405A	7/17/2018 10:11	53.1	46.8	0	0.1	0.05	0.07	120	120
SIH1405A	8/3/2018 13:08	50.6	46.8	0	2.6	0.04	0.07	123	124
SIH1405A	9/4/2018 10:50	49.2	45.6	0	5.2	0.05	0.08	126	126
SIH1405A	9/4/2018 14:26	55.5	44.4	0	0.1	1.6	1.31	122	123
SIH1405A	10/9/2018 8:14	50.4	44.5	0	5.1	0.11	0.12	123	123
SIH1405A	10/23/2018 9:30	49.4	45.7	0	4.9	0.19	0.17	123	123
SIH1405A	11/14/2018 13:42	10	15.5	8.2	66.3	27.96	0.33	106	106

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SIH1405A	11/16/2018 18:24	12.3	18.2	4.9	64.6	0.34	0.08	105	103
SIH1405A	12/5/2018 14:29	26.3	26	4.8	42.9	0.04	0.03	66	66
SIH1405B	7/26/2018 10:59	50.9	44.5	0	4.6	1.16	1.12	129	129
SIH1405B	8/17/2018 9:57	50.3	43.3	0	6.4	1.5	1.22	131	131
SIH1405B	8/21/2018 9:02	51.3	44	0	4.7	1.63	1.64	130	130
SIH1405B	8/21/2018 11:31								
SIH1405B	9/12/2018 8:45	50.3	44.3	0	5.4	0.92	1.53	126	127
SIH1405B	10/12/2018 13:29	49.6	43.3	0	7.1	1.25	1.26	128	128
SIH1405B	11/20/2018 19:26	35.6	33.9	2.5	28	2.09	0.18	125	124
SIH1405B	12/11/2018 9:56	47.9	41.7	1.1	9.3	0.19	0.17	125	126
SIH1406A	7/17/2018 11:24	38.6	37.7	0.1	23.6	1.89	1.16	99	102
SIH1406A	7/30/2018 12:33	33.1	36.5	0	30.4	2.5	2.98	112	110
SIH1406A	8/1/2018 11:26	30.6	36.7	0	32.7	2.65	0.73	115	116
SIH1406A	8/28/2018 7:55	48.4	35	1	15.6	4.49	4.54	85	90
SIH1406A	9/4/2018 13:27	38	37.8	0.1	24.1	3.73	0.54	113	102
SIH1406A	10/3/2018 7:59	39.2	35.1	2.9	22.8	0.04	0.05	70	69
SIH1406A	11/14/2018 14:45	43.2	35.7	3.6	17.5	4.62	4.71	94	94
SIH1406A	12/5/2018 14:44	54.4	45.5	0	0.1	3.48	4.49	102	103
SIH1406B	9/19/2018 9:02	52.1	47.8	0	0.1	0.65	3.27	117	121
SIH1406B	10/12/2018 13:25	51.7	47.4	0	0.9	1.69	3.22	133	134
SIH1406B	10/17/2018 11:09	50.9	46.2	0	2.9	3.48	4.01	134	134
SIH1406B	10/24/2018 13:59	46.2	44.7	0	9.1	1.41	0.26	133	133
SIH1406B	10/24/2018 16:35								
SIH1406B	11/20/2018 19:17	52.3	47.5	0	0.2	0.19	0.51	121	123
SIH1406B	12/11/2018 9:52	52	47.9	0	0.1	0.73	1.09	131	133
SIH1406B	12/18/2018 10:08								
SIH1406B	12/18/2018 10:08	55.2	44.7	0	0.1	1.25	3.62	133	134
SIM1562D	7/21/2018 14:41	48.7	40.1	0	11.2	4.51	4.49	119	120
SIM1562D	8/9/2018 8:02	52	40.7	0	7.3	1.43	0.91	121	122
SIM1562D	9/4/2018 8:26	49.3	40.9	0	9.8	5.49	5.85	123	123
SIM1562D	9/4/2018 9:33	48.4	39.7	0	11.9	4.55	4.27	119	120
SIM1562D	10/11/2018 8:40	51	41.1	0	7.9	4.76	4.76	108	109
SIM1562D	11/16/2018 17:39	49.2	40.2	0	10.6	4.17	4.16	120	120
SIM1562D	12/10/2018 8:34	52.6	40.8	0	6.6	3.84	3.89	125	125
SIM1562S	7/21/2018 14:43	47	38.7	0	14.3	3.22	3.24	121	121
SIM1562S	8/9/2018 8:00	51.9	41.1	0.1	6.9	0.6	0.83	122	122
SIM1562S	9/4/2018 8:28	47.4	40.3	0	12.3	3.66	3.67	123	124
SIM1562S	9/4/2018 9:35	47	38.2	0	14.8	4.01	4.03	120	121
SIM1562S	10/11/2018 8:42	49.2	40.5	0	10.3	3.88	3.77	122	122
SIM1562S	11/16/2018 17:43	47.2	39.1	0	13.7	3.22	3.26	120	120
SIM1562S	12/10/2018 8:36	48.9	40.1	0	11	3.65	3.36	125	126
SIM1564D	7/20/2018 12:47	58.2	41.5	0.2	0.1	0.09	0.05	123	123
SIM1564D	7/21/2018 14:35	45.9	42.3	0	11.8	1.34	1.38	118	119
SIM1564D	8/9/2018 8:05	52	44	0	4	0.27	0.2	118	118
SIM1564D	9/4/2018 8:32	46.7	41.8	0	11.5	0.66	0.56	119	119
SIM1564D	9/4/2018 9:55	42.8	38.5	0	18.7	0.6	0.59	118	118
SIM1564D	10/9/2018 13:17	50.4	41.2	0.2	8.2	0.67	0.74	116	119
SIM1564D	11/19/2018 18:27	50.4	44.3	0	5.3	0.86	0.91	122	123
SIM1564D	12/10/2018 8:51	47.9	41.6	0	10.5	1.6	1.62	118	118
SIM1564S	7/20/2018 12:51	55.3	43.6	0.1	1	2.22	2.11	130	131
SIM1564S	7/21/2018 14:37	56.3	43.6	0	0.1	3.2	3.3	123	123
SIM1564S	8/9/2018 8:07	55.6	44.3	0	0.1	0.7	1.03	124	125
SIM1564S	9/4/2018 8:35	57.2	42.2	0.1	0.5	2.81	2.75	126	126
SIM1564S	9/4/2018 9:58	56	43.6	0	0.4	2.18	2.45	123	123
SIM1564S	10/9/2018 13:19	55.3	44.6	0	0.1	2.18	2.27	124	124

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SIM1564S	11/19/2018 18:29	55.3	44.4	0	0.3	2.01	2.09	123	123
SIM1564S	12/10/2018 8:54	54.6	45.3	0	0.1	2.4	2.49	127	127
SIM1566D	7/23/2018 13:30	56.4	43.4	0.1	0.1	0.62	0.69	125	125
SIM1566D	8/1/2018 10:19	55.7	43.8	0	0.5	0.1	0.1	124	125
SIM1566D	9/4/2018 7:35	54.7	45.2	0	0.1	1.38	1.85	133	133
SIM1566D	9/18/2018 11:05	54.4	45.5	0	0.1	2.27	1	132	133
SIM1566D	10/11/2018 7:48	55.2	44.6	0.1	0.1	4.96	4.87	131	132
SIM1566D	10/24/2018 16:33								
SIM1566D	11/14/2018 17:08	56.4	42.9	0.2	0.5	0.02	0.03	126	126
SIM1566D	12/10/2018 11:22	55.1	44.8	0	0.1	2.62	2.65	135	135
SIM1566D	12/17/2018 8:56	55.6	44.3	0	0.1	3.81	3.88	133	133
SIM1566D	12/18/2018 8:01	56.4	43.4	0.1	0.1	3.75	3.71	133	133
SIM1566D	12/18/2018 8:01								
SIM1566S	7/23/2018 13:33	55.3	44.6	0	0.1	2.4	2.53	132	132
SIM1566S	7/27/2018 12:37								
SIM1566S	7/27/2018 12:37	54.3	45.6	0	0.1	2.12	2.17	131	131
SIM1566S	8/1/2018 10:21	54.7	43.4	0.1	1.8	2.16	2.22	131	132
SIM1566S	8/16/2018 15:18	54.3	45.5	0	0.2	1.86	1.76	131	132
SIM1566S	8/20/2018 13:45	52.6	44.5	0	2.9	1.99	2.22	134	135
SIM1566S	8/20/2018 16:45								
SIM1566S	9/4/2018 7:31	57	42.7	0.1	0.2	0.32	0.12	127	128
SIM1566S	10/11/2018 7:51	55.4	44.5	0	0.1	0.12	0.21	128	128
SIM1566S	11/14/2018 17:06	56.2	43.6	0	0.2	3.17	3.04	131	131
SIM1566S	11/29/2018 17:47	53	38.5	0.4	8.1	0.6	0.62	129	128
SIM1566S	12/10/2018 11:24	55.8	44.1	0	0.1	0.15	0.16	129	130
SIM1567D	7/20/2018 13:16	44.4	40.5	0.5	14.6	0.1	0.05	127	127
SIM1567D	8/17/2018 9:05	44.6	41.4	0.4	13.6	0.07	0.04	132	132
SIM1567D	8/20/2018 10:38	33.6	36.2	0.6	29.6	0.14	0.07	125	121
SIM1567D	8/29/2018 13:24	49.3	42.7	0.2	7.8	0.54	0.52	134	134
SIM1567D	9/4/2018 9:10	47.2	42.5	0.1	10.2	0.16	0.16	132	132
SIM1567D	9/18/2018 11:12	44.7	41.7	0.2	13.4	0.13	0.12	128	127
SIM1567D	10/8/2018 13:31	42.6	38.8	1	17.6	3.25	1.68	118	117
SIM1567D	11/15/2018 18:21	39.9	36.6	2.4	21.1	0.09	0.09	89	90
SIM1567D	12/10/2018 7:29	45.5	39.6	0.3	14.6	0.7	0.66	78	78
SIM1567S	7/20/2018 13:19	53.8	44.5	0	1.7	0.15	0.12	126	127
SIM1567S	8/17/2018 9:08	54.5	44.6	0	0.9	0.05	0.1	132	132
SIM1567S	8/29/2018 13:27	54.2	45	0.1	0.7	0.03	0.63	124	131
SIM1567S	9/4/2018 9:12	53.6	46.3	0	0.1	0.28	0.68	131	132
SIM1567S	9/18/2018 11:15	52	47.9	0	0.1	0.51	0.56	130	130
SIM1567S	10/8/2018 13:34	53.2	46.7	0	0.1	0.64	0.86	131	132
SIM1567S	10/15/2018 14:44	54	45.8	0	0.2	0.76	0.89	131	131
SIM1567S	10/24/2018 12:44	53.1	45.9	0.1	0.9	0.62	0.74	131	131
SIM1567S	10/24/2018 16:33								
SIM1567S	11/15/2018 18:23	52.1	44.5	0	3.4	0.71	0.72	129	129
SIM1567S	12/17/2018 14:47	53.5	46.4	0	0.1	0.67	0.62	131	132
SIM1567S	12/21/2018 12:19	52.8	45.6	0	1.6	0.44	0.21	126	127
SIM1568D	7/20/2018 13:02	50.5	44.7	0.1	4.7	0.07	0.06	126	126
SIM1568D	8/1/2018 9:15	50.5	46	0	3.5	0.19	0.13	130	130
SIM1568D	9/4/2018 9:23	53	46.9	0	0.1	0.25	0.27	133	133
SIM1568D	9/18/2018 12:10	52.9	46.9	0	0.2	0.11	0.21	131	130
SIM1568D	10/3/2018 13:37	53.9	46	0	0.1	0.05	0.08	131	131
SIM1568D	10/15/2018 14:40	53.2	46.1	0.1	0.6	0.36	0.36	133	134
SIM1568D	10/23/2018 9:05	52.9	47	0	0.1	1.5	1.49	131	132
SIM1568D	10/24/2018 12:37	53.5	45.7	0.4	0.4	0.6	1.04	130	130
SIM1568D	10/24/2018 13:02	54.7	45.2	0	0.1	2.99	3.07	132	132

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SIM1568D	10/24/2018 16:34								
SIM1568D	11/15/2018 18:08	53.8	45	0.1	1.1	0.89	0.87	128	129
SIM1568D	12/5/2018 17:34	54.2	45.6	0.1	0.1	0.64	0.87	130	130
SIM1568D	12/10/2018 7:18	54.3	45.5	0	0.2	0.63	0.84	130	131
SIM1568D	12/20/2018 13:36	51.8	43.7	0.6	3.9	1.47	1.51	133	134
SIM1568D	12/20/2018 13:36								
SIM1568S	7/20/2018 13:05	44.5	40.5	0.1	14.9	0.16	0.15	123	123
SIM1568S	8/1/2018 9:17	46.1	41.4	0	12.5	0.2	0.3	125	125
SIM1568S	8/28/2018 9:32	55.6	44.3	0	0.1	2.09	3.73	121	123
SIM1568S	9/4/2018 9:26	52.5	43.8	0	3.7	3.48	7.16	123	124
SIM1568S	10/3/2018 13:39	49.7	42.3	0	8	5.59	5.77	125	125
SIM1568S	11/15/2018 18:11	54.1	43.1	0	2.8	0.23	0.25	124	124
SIM1568S	12/10/2018 7:21	56.1	43.8	0	0.1	0.59	0.73	127	128
SIM1570D	7/26/2018 8:48	56	43.7	0.2	0.1	0.05	0.04	97	84
SIM1570D	8/9/2018 8:29	55.2	44.7	0	0.1	0.02	0.03	97	87
SIM1570D	9/4/2018 10:46	56	43.9	0	0.1	0.04	0.12	95	90
SIM1570D	10/9/2018 14:00	52.6	38.1	1.5	7.8	0.06	0.07	91	91
SIM1570D	11/19/2018 18:43	51.9	42.2	1.2	4.7	0.11	0.14	80	81
SIM1570D	12/11/2018 8:33	51.8	40.6	2.3	5.3	0.14	0.12	69	66
SIM1570S	7/26/2018 8:51	41.8	39.3	0	18.9	1.34	0.94	131	132
SIM1570S	7/27/2018 12:55								
SIM1570S	7/27/2018 12:55	42.1	39.4	0	18.5	1.04	0.22	131	131
SIM1570S	8/9/2018 8:34	46.1	40.5	0	13.4	0.71	0.1	130	129
SIM1570S	9/4/2018 10:51	54	44.4	0	1.6	0.94	3.76	116	121
SIM1570S	10/9/2018 14:02	54.9	44.4	0	0.7	3.79	5.99	127	128
SIM1570S	11/19/2018 18:44	52.7	44.5	0	2.8	7.12	7.31	126	126
SIM1570S	12/11/2018 8:35	54.3	45	0	0.7	7.94	14.28	131	132
SIM1570S	12/18/2018 9:25								
SIM1570S	12/18/2018 9:25	54	40	0.3	5.7	13.38	24.74	131	131
SIM1572D	7/26/2018 10:27	47.4	38.7	0	13.9	0.36	0.56	114	114
SIM1572D	8/9/2018 9:10	46.3	37.5	0	16.2	0.8	0.74	115	115
SIM1572D	8/14/2018 12:32	46.4	38.5	0	15.1	0.56	0.59	114	115
SIM1572D	9/4/2018 13:19	45.3	37.8	0	16.9	0.53	0.55	113	113
SIM1572D	10/12/2018 13:04	45.3	38	0	16.7	0.6	0.51	114	114
SIM1572D	11/20/2018 19:00	44.1	37.9	0	18	1.06	0.36	112	112
SIM1572D	12/11/2018 9:30	45.6	38.6	0	15.8	0.16	0.04	113	113
SIM1572S	7/26/2018 10:31	40.8	37.9	0	21.3	1.63	0.34	126	126
SIM1572S	8/9/2018 9:15	42.4	36.1	0	21.5	0.5	0.6	125	125
SIM1572S	8/14/2018 12:34	43.7	37.8	0	18.5	0.39	0.37	123	123
SIM1572S	9/4/2018 13:23	56.6	42.2	0	1.2	0.75	1.6	91	93
SIM1572S	10/12/2018 13:06	46.9	39.8	0	13.3	0.88	0.95	114	114
SIM1572S	11/20/2018 19:02	44.7	39.6	0	15.7	1.11	0.18	107	107
SIM1572S	12/11/2018 9:32	55.2	43.1	0	1.7	0.08	0.57	76	73
SIM1573D	7/17/2018 9:50	53.7	41.9	0.3	4.1	0.23	0.26	123	123
SIM1573D	8/3/2018 12:35	52.5	41.1	0.4	6	0.11	0.11	124	125
SIM1573D	9/4/2018 10:30	50.3	39	1	9.7	0.1	0.27	127	127
SIM1573D	10/9/2018 8:01	51.2	38.8	1.1	8.9	0.14	0.33	123	123
SIM1573D	10/23/2018 9:13	50.9	39.1	1	9	0.77	0.9	123	124
SIM1573D	11/13/2018 14:25	50.2	38.3	1.1	10.4	0.99	1.13	118	118
SIM1573D	12/5/2018 14:02	55.8	40.8	0.3	3.1	1	1.07	120	121
SIM1573S	7/17/2018 9:53	54.2	45.7	0	0.1	1.76	2.03	124	125
SIM1573S	8/3/2018 12:38	51.4	46.3	0	2.3	2.55	2.37	127	127
SIM1573S	9/4/2018 10:32	52	45.4	0	2.6	2.33	2.27	129	130
SIM1573S	10/9/2018 8:03	52.9	46.1	0	1	2.17	2.18	128	128
SIM1573S	11/13/2018 14:29	52.5	44.8	0	2.7	2.14	2.12	127	127

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SIM1573S	12/5/2018 14:04	55.6	44.3	0	0.1	1.94	1.95	132	132
SIM1573S	12/19/2018 14:49	52.1	46	0	1.9	1.67	1.46	130	130
SIM1673S	7/17/2018 11:31	37.6	38.3	0	24.1	0.01	0.01	119	119
SIM1673S	7/30/2018 12:14	32.1	35.6	0	32.3	0.03	0.01	119	119
SIM1673S	8/1/2018 11:31	29.8	34.5	0	35.7	0.02	0.02	120	120
SIM1673S	8/28/2018 7:59	45.2	40	0	14.8	0.71	0.67	88	88
SIM1673S	9/4/2018 13:35	46.3	41.5	0	12.2	0.04	0.05	92	93
SIM1673S	10/3/2018 8:07	51.6	44.6	0	3.8	4	3.99	92	94
SIM1673S	11/14/2018 14:35	52.3	44.8	0	2.9	0.92	2.23	90	93
SIM1673S	12/5/2018 14:50	52.6	47.3	0	0.1	0.02	0.58	87	81
SIM1675S	7/17/2018 11:37	43	41	0	16	0.79	0.69	125	125
SIM1675S	8/1/2018 11:20	38.8	40.3	0	20.9	0.43	0.16	125	125
SIM1675S	8/27/2018 13:12	48.4	43.2	0	8.4	9.68	1.51	122	122
SIM1675S	9/4/2018 13:41	55.2	44.7	0	0.1	0.08	2.51	98	103
SIM1675S	10/2/2018 8:40	53.8	44.7	0.7	0.8	0.02	0.03	80	81
SIM1777D	7/20/2018 14:14	57.7	41.7	0	0.6	1.53	1.57	118	118
SIM1777D	8/1/2018 9:57	56.8	42.5	0	0.7	1.82	1.92	120	120
SIM1777D	9/6/2018 7:33	57.4	42.5	0	0.1	2.19	2.44	122	122
SIM1777D	10/15/2018 14:54	57.1	42.8	0	0.1	1.8	1.8	123	123
SIM1777D	11/16/2018 18:02	57.2	42.2	0	0.6	0.85	0.74	118	119
SIM1777D	12/13/2018 11:08	58.2	41.7	0	0.1	0.64	0.72	122	123
SIM1777S	7/20/2018 14:17	56.2	42.6	0.1	1.1	2.96	2.85	119	119
SIM1777S	8/1/2018 10:00	55	44.2	0	0.8	3.05	3.19	121	121
SIM1777S	9/6/2018 7:37	55	44.9	0	0.1	1.6	2	123	124
SIM1777S	10/15/2018 14:56	57.5	42.4	0	0.1	1.56	1.6	120	121
SIM1777S	11/16/2018 18:04	55.7	42.8	0	1.5	1.32	1.27	120	121
SIM1777S	12/13/2018 11:10	56.4	43.5	0	0.1	1.27	1.24	125	126
SIM1778D	7/20/2018 13:54	54.1	43.7	0.2	2	1.93	1.81	124	124
SIM1778D	8/3/2018 11:58	54.7	44.9	0.2	0.2	1.39	1.22	127	127
SIM1778D	9/4/2018 8:40	54.5	45.4	0	0.1	1.15	1.12	129	129
SIM1778D	10/11/2018 8:32	54.1	45.8	0	0.1	1.72	1.69	99	100
SIM1778D	11/16/2018 17:28	53.8	44.6	0	1.6	1.34	1.31	125	125
SIM1778D	12/13/2018 10:56	55.3	44.6	0	0.1	0.56	0.52	130	131
SIM1778D	12/17/2018 8:29	53.8	41.9	0	4.3	0.38	0.38	129	130
SIM1778D	12/18/2018 12:52	53	42.6	0	4.4	1.29	2.17	129	129
SIM1778S	7/20/2018 13:58	56	42.4	0.1	1.5	0.89	0.75	126	127
SIM1778S	8/3/2018 12:00	56	43.7	0.2	0.1	0.77	0.81	129	129
SIM1778S	9/4/2018 8:43	55.5	44.4	0	0.1	0.92	1.01	131	131
SIM1778S	9/18/2018 10:48	56.2	43.7	0	0.1	1.04	1.69	130	129
SIM1778S	10/11/2018 8:36	56.1	43.8	0	0.1	1.01	1.07	106	106
SIM1778S	11/16/2018 17:31	55.9	42.5	0.1	1.5	0.75	0.93	126	126
SIM1778S	12/13/2018 10:58	56.9	42.7	0.2	0.2	0.31	0.28	128	128
SIM1780D	7/20/2018 13:37	57.7	40.9	0.1	1.3	1.49	1.55	121	122
SIM1780D	8/1/2018 10:14	54.6	45	0	0.4	3.36	3.23	124	124
SIM1780D	9/4/2018 7:39	54.4	45.5	0	0.1	3.29	3.29	126	127
SIM1780D	10/11/2018 7:54	54.7	45.2	0	0.1	2.25	2.25	125	125
SIM1780D	11/14/2018 17:13	56.4	43.5	0	0.1	1.73	1.67	123	124
SIM1780D	12/10/2018 11:27	55.5	44.4	0	0.1	1.54	1.56	127	127
SIM1780S	7/20/2018 13:40	55.2	43.2	0.1	1.5	3.33	3.24	122	122
SIM1780S	8/1/2018 10:16	45.8	35.3	2.8	16.1	2.46	2.42	120	120
SIM1780S	9/4/2018 7:42	57.8	42.1	0	0.1	1.56	1.49	125	126
SIM1780S	10/11/2018 8:10	56.7	43.2	0	0.1	1.51	1.25	124	124
SIM1780S	11/14/2018 17:16	58	41.9	0	0.1	0.68	0.7	122	122
SIM1780S	12/10/2018 11:29	56.7	43.2	0	0.1	0.73	0.72	125	126
SIM1782D	7/20/2018 14:49	54.7	43.5	0	1.8	0.14	0.15	115	116

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SIM1782D	8/1/2018 10:51	54.7	43.2	0	2.1	0.02	0.02	116	116
SIM1782D	9/4/2018 14:13	52.8	40.6	1.1	5.5	0.32	0.12	116	113
SIM1782D	10/2/2018 8:17	56	43.2	0.4	0.4	0.14	0.41	113	111
SIM1782S	7/20/2018 14:57	56	42.9	0	1.1	0.38	0.38	124	125
SIM1782S	8/1/2018 10:53	54.6	43.8	0	1.6	0.4	0.37	126	127
SIM1782S	9/4/2018 14:20	55.2	44.7	0	0.1	1.19	1.29	129	129
SIM1782S	10/2/2018 8:19	55	44.9	0	0.1	0.16	0.22	125	125
SIM1783D	7/17/2018 9:25	56.2	43.7	0	0.1	0.46	0.39	129	130
SIM1783D	7/30/2018 9:32	56	43.9	0	0.1	0.24	0.68	130	130
SIM1783D	8/1/2018 8:36	56.8	42.9	0.1	0.2	0.16	0.27	130	130
SIM1783D	9/4/2018 9:56	56	43.9	0	0.1	0.87	0.96	131	130
SIM1783D	10/3/2018 13:21	56.2	43.7	0	0.1	0.23	0.25	129	130
SIM1783D	10/23/2018 8:19	55.2	44.6	0.1	0.1	0.55	0.54	129	130
SIM1783D	11/13/2018 13:51	56.1	43.5	0.3	0.1	0.63	0.61	128	129
SIM1783D	12/5/2018 13:32	56.2	43.7	0	0.1	0.06	0.13	131	132
SIM1783D	12/21/2018 10:34	56.6	43.2	0.1	0.1	0.44	0.67	127	128
SIM1783S	7/17/2018 9:28	47.3	40.8	0	11.9	1.96	1.91	119	119
SIM1783S	7/30/2018 9:28	45.3	39.9	0	14.8	3.51	4.39	120	120
SIM1783S	8/1/2018 8:40	43.9	39.5	0	16.6	1.8	1.78	120	120
SIM1783S	9/4/2018 10:00	43.3	39.6	0	17.1	1.32	0.54	121	122
SIM1783S	10/3/2018 13:25	47.8	40.7	0	11.5	2	1.9	120	121
SIM1783S	11/13/2018 13:54	45.1	39.3	0	15.6	0.97	0.83	120	120
SIM1783S	12/5/2018 13:35	52.3	41.7	0	6	1.2	1.1	124	125
SIM1788D	7/17/2018 11:17	53.8	46.1	0	0.1	1.85	1.7	136	136
SIM1788D	7/30/2018 12:45	55.1	44.8	0	0.1	1.85	2.85	135	134
SIM1788D	8/17/2018 8:44	53.2	46.7	0	0.1	2.43	2.05	139	139
SIM1788D	9/4/2018 13:20	55.8	44.1	0	0.1	1.61	1.31	138	139
SIM1788D	10/3/2018 7:48	53.3	46.6	0	0.1	1.47	1.54	136	136
SIM1788D	11/14/2018 14:49	48.3	41.7	2.1	7.9	1.06	1.05	134	135
SIM1788D	12/5/2018 14:37	52.9	47	0	0.1	1.55	1.65	139	139
SIM1788S	7/17/2018 11:20	49.9	45.6	0	4.5	1.46	2.03	133	133
SIM1788S	7/23/2018 8:54								
SIM1788S	7/23/2018 12:20	48.6	44.9	0	6.5	1.81	1.8	133	133
SIM1788S	7/30/2018 12:39	48.7	44.1	0	7.2	1.87	1.89	133	132
SIM1788S	8/13/2018 17:17								
SIM1788S	8/16/2018 15:13	46.1	44.2	0.2	9.5	2.13	1.36	135	135
SIM1788S	9/4/2018 13:23	49.3	44	0	6.7	1.51	1.9	136	136
SIM1788S	10/3/2018 7:50	48.9	44.4	0	6.7	1.46	1.69	133	134
SIM1788S	11/14/2018 14:52	34.7	31.2	5.6	28.5	1.9	0.01	132	126
SIM1788S	11/29/2018 17:58	51.5	48.2	0.1	0.2	0.01	0.01	129	128
SIM1788S	12/5/2018 14:41	52.7	47.2	0	0.1	0.01	0.05	131	135
SIM1789D	7/17/2018 10:34	54.3	45.6	0	0.1	0.3	0.39	136	135
SIM1789D	8/3/2018 13:22	52.3	46.4	0	1.3	0.03	0.02	132	131
SIM1789D	9/4/2018 12:41	54.5	43.8	0.6	1.1	0.46	0.34	133	134
SIM1789D	10/3/2018 7:38	53.1	46.7	0	0.2	0.1	0.11	135	135
SIM1789D	10/23/2018 9:43	51.5	45.7	0.6	2.2	0.76	0.73	130	131
SIM1789D	11/14/2018 13:52	53.6	46.2	0	0.2	0.7	0.54	126	128
SIM1789D	12/5/2018 15:12	52.8	47.1	0	0.1	0.75	0.94	122	122
SIM1789S	7/17/2018 10:37	52.9	46.3	0	0.8	1.34	2.61	134	135
SIM1789S	7/23/2018 12:36	48.4	47.4	0	4.2	2.47	2.44	134	135
SIM1789S	7/25/2018 8:55								
SIM1789S	8/3/2018 13:25	46.2	47	0	6.8	2.89	0.69	134	134
SIM1789S	8/20/2018 11:20	50	47.5	0	2.5	0.83	1.04	137	137
SIM1789S	8/20/2018 16:46								
SIM1789S	8/22/2018 18:31								

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SIM1789S	9/4/2018 12:43	50	46.4	0	3.6	1.1	2.08	137	137
SIM1789S	10/3/2018 7:40	49.6	46.2	0	4.2	1.41	1.6	135	135
SIM1789S	11/14/2018 13:55	48.8	45.3	0	5.9	1.95	2.15	133	133
SIM1789S	12/5/2018 15:14	52.2	47.3	0	0.5	1.83	2.64	138	139
SIM1792D	7/17/2018 10:50	43.9	55.8	0	0.3	0.04	0.02	99	101
SIM1792D	7/30/2018 9:48	43.3	56.6	0	0.1	0.04	0.03	112	113
SIM1792D	8/3/2018 13:40	46.3	53.6	0	0.1	0.01	0	128	123
SIM1792D	8/28/2018 8:37	43.4	56.5	0	0.1	0.08	0.08	89	93
SIM1792D	8/28/2018 8:52	43.4	56.5	0	0.1	0.08	0	89	78
SIM1792D	9/4/2018 12:57	46.7	53.2	0	0.1	0.04	0.04	124	113
SIM1792D	10/3/2018 7:13	45.6	53.5	0.4	0.5	0.01	0.01	100	92
SIM1792D	11/14/2018 14:09	46.3	50.6	0.5	2.6	0.02	0.02	117	118
SIM1792D	12/5/2018 15:25	44.5	48.8	1.5	5.2	0.03	0.02	104	104
SIM1792S	7/17/2018 10:52	46.2	44.2	0	9.6	1.88	1.84	133	133
SIM1792S	7/23/2018 12:53	45.8	43	0	11.2	1.78	1.85	133	133
SIM1792S	7/25/2018 8:56								
SIM1792S	7/30/2018 9:39	46.2	43.1	0	10.7	2.22	2.24	133	134
SIM1792S	8/3/2018 13:42	45.4	43.2	0	11.4	2.03	1.63	134	134
SIM1792S	8/21/2018 8:22	47.8	43	0	9.2	2.08	2.07	135	136
SIM1792S	8/21/2018 11:30								
SIM1792S	8/22/2018 18:32								
SIM1792S	9/4/2018 13:00	46.9	43.3	0	9.8	1.67	1.02	136	137
SIM1792S	10/3/2018 7:17	49.3	43.8	0	6.9	1	1.4	133	133
SIM1792S	11/14/2018 14:12	48.3	43.3	0	8.4	0.44	0.88	131	132
SIM1792S	12/5/2018 15:28	49.7	44.5	0	5.8	1.29	1.47	137	138
SIM1793D	7/25/2018 11:21	58.2	41.7	0	0.1	1.75	1.7	124	124
SIM1793D	8/1/2018 11:37	57	41.2	0	1.8	2.24	2.27	124	124
SIM1793D	9/4/2018 7:45	58.2	41.7	0	0.1	1.86	1.7	123	124
SIM1793D	10/5/2018 10:45	57.6	42.2	0	0.2	1.94	2.1	124	124
SIM1793D	11/19/2018 17:35	58.4	41.3	0.1	0.2	2.67	2.65	122	123
SIM1793D	12/11/2018 7:28	56.9	43	0	0.1	2.11	2.17	128	128
SIM1793S	7/25/2018 11:24	41.1	39.8	0	19.1	0.45	0.22	129	129
SIM1793S	8/1/2018 11:40	44.1	40.9	0	15	0.05	0.02	129	129
SIM1793S	8/29/2018 12:34	54.1	45.8	0	0.1	0.21	1.91	116	124
SIM1793S	9/4/2018 7:48	53.5	43.8	0	2.7	1.37	2.74	128	129
SIM1793S	10/5/2018 10:48	47.7	42.4	0	9.9	2.63	2.59	129	130
SIM1793S	11/19/2018 17:37	47.5	42.7	0	9.8	1.98	2.08	127	128
SIM1793S	12/11/2018 7:30	48.3	43.6	0	8.1	2.36	2.46	133	133
SIM1793S	12/18/2018 8:49	47	41.6	0	11.4	2.7	2	131	131
SIM1793S	12/18/2018 8:49								
SIM1799D	7/17/2018 11:51	52.8	45.9	0.3	1	0.08	0.02	122	122
SIM1799D	8/1/2018 11:11	50.1	45.2	0.2	4.5	0.08	0.08	122	122
SIM1799D	9/4/2018 13:58	49.9	44	0.7	5.4	0.43	0.29	119	118
SIM1799D	10/2/2018 8:33	48.7	44.2	1.3	5.8	0.17	0.25	114	116
SIM1799D	12/17/2018 15:38	55.1	44.8	0	0.1	0.05	0.05	117	118
SIM1799S	7/17/2018 11:53	48.1	43.8	0	8.1	7.08	7.67	118	118
SIM1799S	8/1/2018 11:13	45.1	42.5	0	12.4	8.81	7.02	118	120
SIM1799S	9/4/2018 14:00	50.6	44	0	5.4	7.58	8.45	120	121
SIM1799S	10/2/2018 8:35	49.1	43.9	0	7	7.2	6.75	119	120
SIM1799S	12/17/2018 15:41	54.3	45.6	0	0.1	0.13	0.56	122	124
SIM1805D	10/11/2018 10:09	57.2	42.5	0.1	0.2			69	69
SIM1805D	10/15/2018 14:06	55.8	43.8	0.2	0.2	0.29	0.54	130	130
SIM1805D	11/14/2018 17:00	57.8	41.6	0.2	0.4	0.75	0.81	130	130
SIM1805D	12/10/2018 11:15	57.8	41.9	0.1	0.2	0.8	0.98	134	134
SIM1805D	12/14/2018 8:25	56	43.9	0	0.1	0.72	1.12	135	136

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SIM1805D	12/18/2018 8:27								
SIM1805D	12/18/2018 8:27	56.3	43.5	0	0.2	1.21	1.36	133	134
SIM1805S	10/11/2018 10:15	0.2	0.7	20.3	78.8	0	0	80	81
SIM1805S	10/11/2018 10:18	55.9	43.6	0.4	0.1	0.63	0.59	95	94
SIM1805S	11/14/2018 17:02	57.1	42.8	0	0.1	2.23	5.57	122	122
SIM1805S	12/10/2018 11:18	56	43.9	0	0.1	1.13	2.25	127	129
SIM1805S	12/14/2018 8:27	55.3	44.6	0	0.1	1.42	3.1	128	130
SIMH0017	7/12/2018 9:31	33.8	30.7	0	35.5	15.19	3.02	93	95
SIMH0017	8/16/2018 16:46	38.1	34.5	0	27.4	4.35	0.11	94	95
SIMH0017	9/14/2018 9:21	39.3	31.4	1.3	28	0.2	0.21	93	93
SIMH0017	10/8/2018 12:17	44.8	33.5	1.4	20.3	0.1	0.1	91	91
SIMH0017	11/20/2018 20:06	46.8	34.9	1.7	16.6	0.05	0.05	71	71
SIMH0017	12/12/2018 13:16	52.5	37.9	0	9.6	0.07	2.59	81	81
SIMH016N	7/12/2018 9:46	58.3	41.6	0	0.1	0.04	0.06	89	88
SIMH016N	8/16/2018 16:37	59.8	39.7	0	0.5	0.05	0.04	93	93
SIMH016N	9/14/2018 9:07	60.2	39.4	0.3	0.1	0.06	0.06	88	89
SIMH016N	10/8/2018 12:00	59.5	39.5	0.2	0.8	0.13	0.14	87	87
SIMH016N	11/20/2018 20:00	60.1	39.8	0	0.1	2.5	2.56	79	80
SIMH016N	12/17/2018 15:51	57.7	42.2	0	0.1	3.51	2.67	76	76
SIMH018S	7/12/2018 9:36	52.8	41.5	0	5.7	2.27	2.26	115	115
SIMH018S	8/27/2018 12:37	53.3	46.5	0.1	0.1	17.66	16.78	133	133
SIMH018S	8/27/2018 12:38	53.1	46.5	0.3	0.1	13.33	12.6	129	127
SIMH018S	9/14/2018 9:19	45.4	40.2	0	14.4	8.55	4.86	117	117
SIMH018S	10/8/2018 12:19	50	40.4	0	9.6	4.42	4.71	117	117
SIMH018S	11/20/2018 20:09	49.1	39	0.9	11	4.49	4.45	116	116
SIMH018S	12/12/2018 13:10	54.1	41	0	4.9	4.28	7.53	119	119
SIMH021S	7/12/2018 7:58	49.4	39.1	0	11.5	4.65	3.66	119	119
SIMH021S	8/15/2018 9:57	49.2	39.2	0	11.6	5.93	6.15	124	124
SIMH021S	9/17/2018 9:57	48.7	38.8	0	12.5	5.89	6.01	121	121
SIMH021S	10/17/2018 9:40	49.5	38.7	0	11.8	5.04	4.54	120	120
SIMH021S	11/16/2018 13:10	49.7	38.7	0.1	11.5	5.22	5.21	120	121
SIMH021S	12/12/2018 12:40	50.9	39.4	0	9.7	5.79	6.12	121	121
SIMH022N	7/25/2018 16:15	42.2	37.5	0	20.3	1.81	1.24	118	119
SIMH022N	8/16/2018 16:33	45.9	39.6	0	14.5	1.1	0.85	120	120
SIMH022N	9/12/2018 7:46	50.6	38.7	0.3	10.4	1.57	2.46	118	118
SIMH022N	10/17/2018 10:10	46	38.9	0	15.1	2.69	2.25	120	120
SIMH022N	11/20/2018 19:56	47.7	40.3	0	12	2.1	2.18	118	118
SIMH022N	12/17/2018 15:47	46.2	41.3	0	12.5	1.86	1.34	120	121
SIMH022S	7/12/2018 9:41	51.5	46	0.3	2.2	0.72	1.28	90	90
SIMH022S	8/16/2018 16:42	33.1	42.1	4.7	20.1	0.15	0.03	107	107
SIMH022S	8/27/2018 12:44	42.1	50.4	1.5	6	0.03	0.02	98	98
SIMH022S	9/14/2018 9:12	40.5	48.9	2.3	8.3	0.01	0.02	81	81
SIMH022S	10/17/2018 10:05	46.4	53.4	0.1	0.1	3.46	3.68	79	80
SIMH022S	11/27/2018 15:11	35.8	44.7	3.4	16.1	0.37	0.13	84	84
SIMH022S	12/17/2018 15:56	49.8	46.1	0.9	3.2	2.26	2.28	68	68
SIMI0901	7/25/2018 16:09	47.1	38.2	0	14.7	3.66	3.84	111	112
SIMI0901	8/17/2018 9:06	47.7	37.8	0	14.5	4.17	4.7	111	111
SIMI0901	9/7/2018 8:24	48.7	39	0	12.3	5.2	5.44	112	112
SIMI0901	10/17/2018 10:16	46.6	37.8	0	15.6	4.83	4.81	112	112
SIMI0901	11/23/2018 14:38	43.7	37.1	0	19.2	4.09	4.53	111	111
SIMI0901	12/17/2018 14:32	46.7	37.1	0	16.2	4.28	3.61	112	112
SIMI0902	7/24/2018 7:26	42.6	36.7	0	20.7	0.27	0.21	114	114
SIMI0902	8/15/2018 8:15	45	36.3	0.4	18.3	0.33	0.31	112	112
SIMI0902	9/7/2018 8:31	57.3	42.5	0	0.2	0.23	0.58	88	96
SIMI0902	10/9/2018 12:18	54.5	41.2	0	4.3	0.32	0.85	111	112

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SIMI0902	11/12/2018 11:25	49.4	39.4	0	11.2	0.54	0.52	110	110
SIMI0902	12/13/2018 7:15	48.4	38.2	0	13.4	0.61	0.63	111	112
SIMI0903	7/24/2018 9:04	47.2	38.8	0	14	1.42	1.51	111	111
SIMI0903	8/15/2018 8:22	47.7	38.3	0.2	13.8	1.27	1.45	109	109
SIMI0903	9/7/2018 8:34	48.7	38.8	0	12.5	1.37	1.78	109	109
SIMI0903	10/9/2018 12:27	46.8	38	0	15.2	1.56	1.5	109	109
SIMI0903	11/12/2018 11:43	47.3	38.7	0	14	1.43	1.39	108	108
SIMI0903	12/13/2018 7:17	47.2	38	0	14.8	1.58	1.59	110	110
SIMI0904	7/24/2018 9:15	40.7	36.5	0	22.8	1.7	1.34	129	129
SIMI0904	8/15/2018 8:39	43.3	37.8	0.1	18.8	1.4	0.9	126	126
SIMI0904	9/7/2018 8:39	48.1	39.5	0	12.4	0.99	1.43	125	126
SIMI0904	10/9/2018 12:34	42	37	0	21	1.4	0.66	126	126
SIMI0904	11/12/2018 11:46	49.6	40.1	0	10.3	0.52	0.65	123	123
SIMI0904	12/13/2018 7:36	50.3	40.1	0	9.6	0.61	0.95	127	128
SIMI0905	7/24/2018 9:33	43.7	37.4	0	18.9	2.29	1.53	123	124
SIMI0905	8/15/2018 9:03	44.2	37.5	0.2	18.1	1.77	1.21	121	121
SIMI0905	9/7/2018 8:43	47.4	39.4	0	13.2	1.44	1.97	121	122
SIMI0905	10/9/2018 12:59	41.9	35.7	0.1	22.3	1.95	1.1	122	122
SIMI0905	11/12/2018 11:59	52.3	41.2	0	6.5	0.93	1.32	120	121
SIMI0905	12/13/2018 7:39	51.6	40.4	0	8	1.25	2.09	124	125
SIMLR00A	9/17/2018 9:31	15	9.9	15	60.1	14.51	6.35	96	98
SIMLR00A	10/9/2018 8:34	20.3	16	12.5	51.2	4.82	4.95	99	99
SIMLR00A	11/15/2018 13:43	15.8	12	14.1	58.1	4.64	0.99	95	96
SIMLR00A	12/11/2018 7:02	49.4	36.2	3.3	11.1	0.5	0.62	100	101
SIMLR00D	9/17/2018 10:34	59.9	40	0	0.1	0.21	1.86	95	90
SIMLR00D	10/9/2018 11:34	3.7	3.5	18	74.8	6.61	3.02	84	85
SIMLR00D	11/16/2018 12:41	0.3	2.6	18.5	78.6	2.47	0.57	74	75
SIMLR00D	12/12/2018 13:01	0.3	0.3	20.3	79.1	0.13	0.1	89	90
SIMLR0AR	11/15/2018 13:46	7.6	5	17.8	69.6	0.05	0.04	78	79
SIMLR0AR	11/16/2018 14:47	18.4	13	13.9	54.7	0.09	0.12	79	80
SIMLR0AR	12/10/2018 12:04	11.6	9.1	19.8	59.5	0.37	0.42	79	78
SIMLR602	9/17/2018 15:04	58.4	41.5	0	0.1	1.05	2.5	90	89
SIMLR602	10/9/2018 11:24	48.5	37.4	0	14.1	3.05	4.71	86	85
SIMLR602	11/16/2018 12:32	39.4	33.9	0.3	26.4	4.05	2.91	63	64
SIMLR602	12/12/2018 12:19	57.9	40	0.2	1.9	2.46	5.12	72	72
SIMLR603	9/17/2018 15:06	58.5	41.4	0	0.1	0.64	2.51	87	84
SIMLR603	10/9/2018 11:27	52.1	37.5	1.1	9.3	5.59	6.98	87	87
SIMLR603	11/16/2018 12:34	48.2	35.6	1.8	14.4	8.53	8.56	57	57
SIMLR603	12/12/2018 12:22	57	39.8	0.3	2.9	7.59	8.75	78	78
SIMW0001	7/12/2018 7:48	44.7	33.6	0	21.7	2.04	1.86	82	82
SIMW0001	8/15/2018 9:33	39.2	33.4	0	27.4	0.48	0.5	91	91
SIMW0001	9/17/2018 10:22	35.5	30.5	0.4	33.6	1.26	0.43	90	89
SIMW0001	10/17/2018 9:31	58.8	35.3	0	5.9	0.16	0.17	84	83
SIMW0001	11/16/2018 13:04	61.4	38.4	0	0.2	1.71	5.57	86	85
SIMW0001	12/12/2018 12:34	41.9	34.8	0	23.3	4.91	0.55	81	81
SIMW0002	7/12/2018 8:54	54	35.2	0	10.8	3.45	4.5	94	94
SIMW0002	8/15/2018 10:33	50.1	36.9	0.1	12.9	5.46	7.25	95	95
SIMW0002	8/27/2018 11:58	51.6	36.9	0	11.5	0.12	0.51	96	96
SIMW0002	9/12/2018 9:41	49.2	36.7	0	14.1	0.62	0.47	95	96
SIMW0002	10/8/2018 12:47	49	37.1	0	13.9	0.51	0.55	95	95
SIMW0002	11/16/2018 14:19	48.7	36.5	0	14.8	0.7	0.89	94	94
SIMW0002	12/17/2018 15:22	46.8	36.1	0	17.1	0.94	0.47	93	93
SIMW0003	7/26/2018 10:50	52.8	39.7	0	7.5	0.63	1.21	105	105
SIMW0003	8/17/2018 8:03	52	37.8	0	10.2	0.81	0.88	103	103
SIMW0003	9/12/2018 9:15	57.5	41	0	1.5	0.18	1	102	104

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SIMW0003	10/12/2018 8:42	54.1	40.2	0	5.7	0.28	1.15	101	102
SIMW0003	11/12/2018 14:44	47.6	39.7	0	12.7	0.76	0.74	99	100
SIMW0003	12/13/2018 8:44	46.3	37.9	0.2	15.6	1.08	0.18	98	97
SIMW0004	7/12/2018 9:06	51.8	37.1	0	11.1	0.99	2.07	96	96
SIMW0004	8/15/2018 10:38	44.5	35.7	0	19.8	2.2	0.95	99	99
SIMW0004	9/12/2018 9:35	49.9	35.2	0	14.9	0.63	0.81	96	97
SIMW0004	10/8/2018 12:41	50.4	37	0	12.6	0.68	1.13	97	97
SIMW0004	11/16/2018 14:24	51	37.2	0	11.8	0.97	1.57	95	95
SIMW0004	12/17/2018 15:18	47	37.1	0	15.9	1.52	1.13	94	94
SIMW0006	7/12/2018 8:04	47.4	36	0	16.6	0.65	0.86	90	91
SIMW0006	8/15/2018 9:53	47.6	36	0	16.4	0.8	0.69	95	95
SIMW0006	9/17/2018 10:06	48.6	36.1	0	15.3	0.91	1.03	94	94
SIMW0006	10/17/2018 9:36	50.6	36.6	0	12.8	0.91	1.44	92	93
SIMW0006	11/16/2018 13:14	52.1	37.3	0	10.6	1.16	1.78	93	93
SIMW0006	12/12/2018 12:43	51.4	37.2	0	11.4	1.74	2.81	92	92
SIMW0018	7/12/2018 8:50	41.9	36	0	22.1	3.62	2.19	88	88
SIMW0018	8/15/2018 10:25	40.2	34.9	0.2	24.7	2.27	0.14	93	93
SIMW0018	8/27/2018 12:03	59.2	38.6	0	2.2	5.58	4.11	85	91
SIMW0018	9/12/2018 9:52	43.9	36.4	0	19.7	3.87	0.42	91	91
SIMW0018	10/8/2018 13:05	50.6	38.7	0	10.7	3.95	3.73	90	91
SIMW0018	11/16/2018 14:08	41.9	35.4	0.2	22.5	4.18	1.22	90	90
SIMW0018	12/17/2018 15:26	50	37.9	0	12.1	0.99	2.06	78	79
SIMW0019	7/12/2018 7:43	48.8	34.5	0.2	16.5	0.38	0.62	81	81
SIMW0019	8/15/2018 9:28	48.5	36.2	0	15.3	0.91	0.81	87	87
SIMW0019	9/17/2018 10:26	49.4	35.8	0	14.8	0.8	1.14	85	86
SIMW0019	10/17/2018 9:26	48.3	36.7	0	15	1.13	1.07	77	78
SIMW0019	11/16/2018 12:48	48.7	36.6	0.2	14.5	0.87	1.14	83	84
SIMW0019	12/5/2018 11:58	48.9	36.3	0.1	14.7	1.4	1.37	78	77
SIMW0019	12/12/2018 12:28	46.3	36.7	0	17	1.4	0.98	82	82
SIMW0020	7/12/2018 8:08	52.7	37.5	0	9.8	7.03	9.8	83	83
SIMW0020	8/15/2018 9:39	51.3	37.5	0	11.2	11.72	17.46	85	85
SIMW0020	8/27/2018 12:28	50.1	37.3	0	12.6	0.24	0.55	85	85
SIMW0020	9/17/2018 10:11	42.5	34.4	0	23.1	0.39	0.19	86	87
SIMW0020	10/8/2018 11:27	47.4	36	0	16.6	4.94	4.5	85	85
SIMW0020	11/16/2018 13:20	52.9	36.9	0	10.2	4.72	5.74	85	85
SIMW0020	12/12/2018 12:50	51.1	36.2	0	12.7	5.93	11.53	84	84
SIMW0021	7/6/2018 13:02	28.2	21.1	8.7	42	0.15	0.36	118	115
SIMW0021	7/12/2018 8:15	0.9	10.5	17.9	70.7	0.09	0.05	77	77
SIMW0021	7/27/2018 13:42	26	20.4	9.1	44.5	0.56	0.55	99	98
SIMW0021	8/15/2018 9:48	24.3	14	11.2	50.5	0.13	0.26	84	84
SIMW0021	9/17/2018 10:16	0.4	1	18.8	79.8	0.02	0.01	86	86
SIMW0021	10/8/2018 11:34	0	0.7	18.8	80.5	0	0	84	85
SIMW0031	7/21/2018 14:02	51.8	39.6	0	8.6	5.06	5.17	100	100
SIMW0031	8/16/2018 15:58	52.7	40.5	0.1	6.7	5.5	4.84	102	102
SIMW0031	9/7/2018 14:07	51.7	38.8	0	9.5	7.05	7.41	105	105
SIMW0031	10/11/2018 9:30	52.8	38.9	0	8.3	0.5	0.33	102	102
SIMW0031	11/23/2018 13:02	51.8	38.1	0.1	10	0.48	0.46	101	101
SIMW0031	12/13/2018 10:08	55.5	41.4	0	3.1	0.28	0.44	102	102
SIMW0035	7/20/2018 14:07	58.7	41.1	0.1	0.1	0.08	1.61	92	94
SIMW0035	7/23/2018 13:41	43.9	32	4.2	19.9	2.38	1	101	102
SIMW0035	8/1/2018 9:49	46.4	36	2.5	15.1	0.16	0.2	102	102
SIMW0035	9/6/2018 7:26	58.7	40.9	0.2	0.2	1.1	3.92	75	75
SIMW0035	10/11/2018 8:57	57.1	42.8	0	0.1	0.33	0.33	74	76
SIMW0035	10/23/2018 10:06	57.4	42.5	0	0.1	0.06	0.74	83	87
SIMW0035	11/16/2018 17:53	54.4	41.3	0.1	4.2	0.71	1.78	91	93

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SIMW0035	12/10/2018 12:22	56.5	41.1	0.6	1.8	0.14	2.03	83	86
SIMW0045	7/21/2018 14:26	57.5	40.7	0	1.8	1.6	1.8	93	103
SIMW0045	8/16/2018 16:23	57.4	42.5	0	0.1	3.8	7.66	99	100
SIMW0045	8/29/2018 12:12	57.9	42	0	0.1	0.19	0.86	107	108
SIMW0045	9/4/2018 8:06	57.9	41.3	0	0.8	1.04	1.6	85	85
SIMW0045	10/9/2018 12:10	58.3	41.5	0.1	0.1	1.34	2.37	104	105
SIMW0045	11/23/2018 14:20	54.2	40.6	0	5.2	1.93	2.55	103	104
SIMW0045	12/17/2018 14:19	40.7	30.7	0	28.6	2.04	1.39	91	91
SIMW0047	7/21/2018 14:22	57	42.9	0	0.1	1.66	3.67	110	111
SIMW0047	8/16/2018 16:20	57	42.9	0	0.1	2.37	5.92	104	105
SIMW0047	8/29/2018 12:07	48.6	37.4	2.3	11.7	5.04	7.07	106	106
SIMW0047	9/4/2018 8:03	49.3	39.6	2.2	8.9	5.75	5.89	106	107
SIMW0047	12/11/2018 14:39	58.2	41.7	0	0.1	-0.1	4.34	74	100
SIMW0047	12/14/2018 12:10	50.8	37.1	0.9	11.2	2.72	2.76	110	110
SIMW0048	7/21/2018 14:47	57.8	42.1	0	0.1	0.34	0.39	114	114
SIMW0048	8/17/2018 10:20	57.2	42.7	0	0.1	0.12	0.29	113	113
SIMW0048	9/4/2018 7:57	57.6	42.3	0	0.1	0.58	1.24	116	116
SIMW0048	10/11/2018 8:46	56.8	43.1	0	0.1	0.86	0.83	113	114
SIMW0048	11/16/2018 17:49	57.2	41	0	1.8	0.69	0.21	113	114
SIMW0048	12/13/2018 10:45	57.7	42.2	0	0.1	0.56	0.6	117	117
SIMW007R	7/26/2018 10:12	51.7	40.1	0	8.2	0.08	0.47	122	123
SIMW007R	8/9/2018 9:23	49.5	38	0	12.5	0.68	0.62	118	118
SIMW007R	9/12/2018 8:25	49.8	40.4	0	9.8	0.43	0.65	123	124
SIMW007R	10/12/2018 12:55	48.8	39.6	0	11.6	0.67	0.52	123	123
SIMW007R	11/20/2018 18:53	48.7	40	0	11.3	0.94	0.95	121	122
SIMW007R	12/11/2018 9:21	50	39.8	0.1	10.1	0.81	1.05	125	126
SIMW010R	7/25/2018 13:58	54.1	42.5	0	3.4	0.69	0.66	119	119
SIMW010R	8/17/2018 10:03	54.1	42.3	0	3.6	0.87	0.88	121	122
SIMW010R	9/4/2018 8:01	54.6	42.3	0	3.1	1.53	1.61	118	118
SIMW010R	10/12/2018 11:42	54.5	43.3	0	2.2	0.92	1.08	119	120
SIMW010R	11/19/2018 17:42	53.9	42.5	0	3.6	0.98	0.97	118	118
SIMW010R	12/11/2018 7:43	55.3	43.9	0	0.8	0.9	0.96	121	121
SIMW012R	7/17/2018 11:40	24.5	31.7	0	43.8	0.05	0.07	115	116
SIMW012R	8/1/2018 11:16	19.7	29.8	0	50.5	0.02	0.01	115	115
SIMW012R	8/27/2018 13:08	51.7	44	0.8	3.5	0.3	0.91	84	94
SIMW012R	9/4/2018 13:45	48.5	40.7	0	10.8	1.91	2.57	108	109
SIMW012R	10/2/2018 8:38	47.9	41.2	0	10.9	2.25	2.78	104	105
SIMW012R	12/17/2018 13:11	56	43.8	0	0.2	13.05	13.78	98	96
SIMW037R	7/20/2018 14:03	56.7	41.8	0.1	1.4	0.5	0.48	97	97
SIMW037R	8/1/2018 9:45	56	42.7	0	1.3	0.1	0.09	101	101
SIMW037R	9/4/2018 7:53	56.6	43.3	0	0.1	0.26	0.17	94	94
SIMW037R	10/11/2018 8:52	56.8	43.1	0	0.1	0.73	0.62	92	92
SIMW037R	11/20/2018 19:46	57.1	42.6	0.1	0.2	0.79	0.56	89	89
SIMW037R	12/13/2018 11:03	58.2	41.4	0.3	0.1	0.07	0.11	85	85
SIMW0708	7/24/2018 10:02	43.4	37.1	0	19.5	0.8	0.65	121	122
SIMW0708	8/15/2018 10:26	44	36.9	0.2	18.9	1.07	0.75	119	119
SIMW0708	9/7/2018 9:44	43	39.5	0	17.5	0.85	0.42	119	120
SIMW0708	10/12/2018 8:01	48.8	38.9	0	12.3	28.89	28.88	118	118
SIMW0708	11/12/2018 13:10	53	39.8	0	7.2	29.53	28.57	117	118
SIMW0708	12/13/2018 7:59	54.6	40.2	0	5.2	28.19	30.27	120	121
SIMW0808	7/12/2018 8:21	49.3	34.4	0	16.3	0.73	4	83	83
SIMW0808	8/15/2018 10:04	26.3	30	0	43.7	0.02	0.02	91	87
SIMW0808	9/12/2018 10:16	55.4	35.8	0.8	8	0.05	0.2	82	83
SIMW0808	10/17/2018 9:16	38.3	33.3	0	28.4	0.07	0.08	83	83
SIMW0808	11/16/2018 13:32	53.3	36.6	0	10.1	4.79	4.82	86	88

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SIMW0808	12/17/2018 15:30	33.8	32.3	0	33.9	5.7	0.51	84	84
SIMW0811	7/12/2018 8:31	41.5	34.4	0	24.1	2.42	2.06	96	96
SIMW0811	8/15/2018 10:15	40.1	35.2	0	24.7	2.41	0.39	98	100
SIMW0811	9/12/2018 10:10	43	36	0	21	31.51	3.06	95	97
SIMW0811	10/17/2018 9:09	47.1	37.1	0	15.8	30.91	31.47	94	95
SIMW0811	11/16/2018 13:56	42.5	35	0.1	22.4	31.4	4.71	95	97
SIMW0811	12/13/2018 8:30	58.1	39	0	2.9	3.49	5.59	90	90
SIMW0812	7/12/2018 8:27	54.1	38.1	0	7.8	1.3	2.07	107	108
SIMW0812	8/15/2018 10:11	45	37	0	18	2.47	2.03	108	108
SIMW0812	9/12/2018 10:04	48.5	37.1	0	14.4	1.44	1.46	107	107
SIMW0812	10/17/2018 8:58	50.7	38	0	11.3	0.69	0.82	108	108
SIMW0812	11/16/2018 13:51	45.2	37	0	17.8	0.81	0.42	108	108
SIMW0812	11/23/2018 13:09	29.6	28.1	4.8	37.5	0.82	0.25	102	102
SIMW0812	12/13/2018 8:25	54.7	39.3	0	6	0.45	0.79	107	108
SIMW0813	7/24/2018 12:36	57.2	42.7	0	0.1	1.68	3.1	113	113
SIMW0813	8/16/2018 11:43	57	42.5	0	0.5	3.19	3.46	111	111
SIMW0813	9/7/2018 12:08	57.9	42	0	0.1	3.38	7.82	111	111
SIMW0813	10/12/2018 8:59	48.4	38.4	0	13.2	0.65	0.69	111	111
SIMW0813	11/12/2018 14:53	44.7	38.1	0	17.2	0.78	0.77	111	111
SIMW0813	12/13/2018 8:52	49	38.7	0	12.3	0.69	0.87	112	113
SIMW0814	7/25/2018 15:59	51.6	41.5	0	6.9	3.77	3.66	108	108
SIMW0814	8/17/2018 8:12	52.1	39.6	0	8.3	4.24	4.19	108	108
SIMW0814	9/7/2018 12:18	53.3	40.7	0	6	3.68	3.75	108	108
SIMW0814	10/12/2018 9:04	51.9	39.5	0	8.6	3.97	3.35	108	108
SIMW0814	11/12/2018 15:03	51.6	40.7	0	7.7	3.16	4.12	108	108
SIMW0814	12/13/2018 9:00	52.5	39.9	0	7.6	3.86	3.77	110	110
SIMW0815	7/25/2018 13:22	57.6	42.3	0	0.1	0.02	0.16	99	99
SIMW0815	8/17/2018 9:49	57	42.9	0	0.1	0.26	0.15	87	90
SIMW0815	9/6/2018 12:20	57.9	41.6	0.4	0.1	0.17	0.07	89	90
SIMW0815	10/12/2018 11:47	57.4	42.5	0	0.1	0.16	0.07	90	90
SIMW0815	11/27/2018 13:59	57.7	42.2	0	0.1	0.08	0.22	83	82
SIMW0815	12/17/2018 13:44	58.6	39.6	0.8	1	0.87	0.62	70	70
SIMW0816	7/25/2018 15:48	42.7	37.1	0	20.2	7.13	5.65	111	111
SIMW0816	8/17/2018 8:22	42.4	36	0	21.6	6.78	6.5	111	111
SIMW0816	9/7/2018 12:47	47.6	38.8	0	13.6	3.09	3.1	112	112
SIMW0816	10/12/2018 9:14	44.9	37.3	0	17.8	4.92	4.17	112	112
SIMW0816	11/12/2018 15:14	46.2	38.7	0	15.1	4.15	4.78	111	112
SIMW0816	12/13/2018 9:15	47	38.9	0	14.1	4.03	4.1	114	115
SIMW0817	7/25/2018 15:41	42	36.6	0	21.4	6	4.19	119	119
SIMW0817	8/17/2018 8:28	42.4	36.2	0	21.4	5.1	3.75	119	119
SIMW0817	9/7/2018 13:08	47.3	38	0	14.7	2.15	3.33	120	121
SIMW0817	10/12/2018 9:29	41.4	36.1	0	22.5	4.28	3.09	121	121
SIMW0817	11/12/2018 15:38	43.3	37.7	0	19	2.77	3.54	120	120
SIMW0817	12/13/2018 9:41	44.1	37.1	0.2	18.6	3.82	3.08	124	125
SIMW0818	7/25/2018 15:31	46.8	38.5	0	14.7	31.84	32.02	116	116
SIMW0818	8/17/2018 8:35	49.3	38.3	0	12.4	1.54	1.74	115	113
SIMW0818	9/7/2018 13:16	54.2	40.8	0	5	26.46	32.04	115	116
SIMW0818	10/12/2018 9:40	51.3	40.5	0	8.2	0.51	0.5	118	119
SIMW0818	11/12/2018 15:46	56.8	42.1	0	1.1	0.48	0.68	117	117
SIMW0818	12/13/2018 9:48	57.2	42.7	0	0.1	0.06	0.18	121	121
SIMW0819	7/25/2018 15:24	39.1	34.8	0	26.1	0.27	0	119	119
SIMW0819	8/17/2018 8:38	50.1	38	0	11.9	0.03	0.02	118	118
SIMW0819	9/7/2018 13:21	51.7	40.3	0	8	0.04	0.22	118	119
SIMW0819	10/12/2018 9:43	45.9	37.4	0	16.7	0.04	0.07	119	119
SIMW0819	11/21/2018 14:40	48.9	39.1	0	12	4.58	4.45	117	118

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SIMW0819	12/13/2018 9:52	51.7	39.3	0.4	8.6	4.18	5.56	120	121
SIMW0820	7/21/2018 13:55	34.1	33.4	0	32.5	1.08	0.08	114	114
SIMW0820	8/17/2018 8:42	48.7	36.9	0	14.4	0.12	0.12	113	113
SIMW0820	9/7/2018 13:25	51.6	39.3	0	9.1	0.2	0.52	113	114
SIMW0820	10/12/2018 9:56	42.9	36.9	0	20.2	0.44	0.48	114	114
SIMW0820	11/21/2018 14:48	49.4	38.6	0	12	16.15	16.31	110	111
SIMW0820	12/13/2018 9:57	53	39.8	0	7.2	14.44	21.71	112	112
SIMW0821	7/21/2018 14:13	58	41.7	0.1	0.2	0.18	0.22	109	111
SIMW0821	8/27/2018 14:48	56.4	40.1	0.7	2.8	0.09	0.12	97	98
SIMW0821	9/7/2018 14:00	28.2	20.7	10	41.1	0.03	0.04	98	98
SIMW0821	9/12/2018 7:27	0.4	1.2	20.3	78.1	0.03	0.01	59	59
SIMW0821	9/19/2018 10:16	56.3	40.1	0.7	2.9	0.29	0.39	96	97
SIMW0821	10/11/2018 9:22	32.8	30.5	3.7	33	0.24	0.62	100	100
SIMW0821	11/27/2018 14:40	35	28.4	4.7	31.9	0.08	0.09	103	101
SIMW0821	12/17/2018 14:08	47.6	31.5	4.2	16.7	0.05	0.01	70	70
SIMW09RD	7/25/2018 14:46	46.1	38.4	0	15.5	0.12	0.13	126	127
SIMW09RD	8/16/2018 11:12	45.8	39.1	0.1	15	0.25	0.07	126	126
SIMW09RD	9/7/2018 10:16	43.5	39.1	0	17.4	5.56	1.86	127	127
SIMW09RD	10/12/2018 8:24	50	40.8	0	9.2	1.66	2.93	126	126
SIMW09RD	11/12/2018 14:06	47.9	41.1	0	11	2.83	2.79	125	126
SIMW09RD	12/13/2018 8:12	49	40	0.4	10.6	2.98	2.93	129	130
SIMW1002	7/20/2018 13:49	37.6	34.6	4.4	23.4	0.02	0.02	80	80
SIMW1002	8/1/2018 9:38	40.3	35.8	3.8	20.1	0.03	0.01	89	87
SIMW1002	8/29/2018 13:17	47.4	38.3	1	13.3	0.1	0.09	82	82
SIMW1002	9/4/2018 8:46	51.8	42.9	0.7	4.6	0.16	0.1	68	67
SIMW1002	10/11/2018 8:26	55.1	44.8	0	0.1	0.31	0.35	86	83
SIMW1002	11/16/2018 17:24	55	43.3	0.1	1.6	0.8	1.13	97	98
SIMW1002	12/10/2018 7:47	56.1	43.8	0	0.1	1.05	0.67	85	84
SIMW1005	7/17/2018 10:17	57.7	42.2	0	0.1	0.2	0.25	116	116
SIMW1005	8/3/2018 13:04	55	42.2	0	2.8	0.22	0.36	118	118
SIMW1005	9/4/2018 10:54	54.1	40.8	0	5.1	0.26	0.34	120	120
SIMW1005	10/9/2018 8:10	54.4	41.2	0	4.4	0.3	0.51	118	119
SIMW1005	11/14/2018 13:45	50.5	39.3	0	10.2	0.29	0.53	119	119
SIMW1005	12/5/2018 14:33	54.6	41.1	0	4.3	0.64	0.66	121	121
SIMW1007	7/21/2018 13:33	56.8	43.1	0	0.1	3.62	3.32	124	124
SIMW1007	8/16/2018 15:44	55.7	44.2	0	0.1	3.23	3.18	126	127
SIMW1007	9/7/2018 13:47	57.4	42.5	0	0.1	3.85	3.86	124	124
SIMW1007	10/11/2018 9:11	56.2	43.7	0	0.1	3.19	3.24	125	125
SIMW1007	11/15/2018 14:16	57.2	42.7	0	0.1	2.43	2.41	123	124
SIMW1008	7/17/2018 10:03	56.2	43.7	0	0.1	0.16	0.3	115	114
SIMW1008	8/3/2018 12:23	56.9	42.5	0	0.6	0.11	0.04	114	115
SIMW1008	9/4/2018 10:43	56.2	43.2	0	0.6	0.25	0.12	117	117
SIMW1008	10/3/2018 13:08	58	41.8	0.1	0.1	0.12	0.09	115	115
SIMW1008	10/23/2018 9:22	55.9	44	0	0.1	2.18	2.07	115	116
SIMW1008	11/14/2018 13:34	56.7	43.2	0	0.1	2.07	2.18	114	114
SIMW1008	12/5/2018 14:23	56	43.9	0	0.1	2.58	2.15	116	116
SIMW1009	7/20/2018 15:23	53.3	41.7	0	5	0.21	0.26	116	117
SIMW1009	8/29/2018 11:59	56.6	43.3	0	0.1	0.19	0.16	119	120
SIMW1009	9/6/2018 8:35	54.3	45.6	0	0.1	0.33	0.6	106	107
SIMW1009	10/9/2018 8:51	54.3	45.6	0	0.1	0.13	0.13	108	108
SIMW1009	11/15/2018 13:25	55	44.1	0	0.9	0.14	0.15	98	99
SIMW1009	12/11/2018 7:14	54.4	45.3	0.2	0.1	0.13	0.12	82	83
SIMW1010	7/25/2018 13:35	39.3	34.7	2.4	23.6	0.43	0.08	109	110
SIMW1010	8/17/2018 9:43	40.9	35.7	1.9	21.5	0.44	0.17	111	112
SIMW1010	8/29/2018 13:07	38.1	32.7	2.9	26.3	0.33	0.04	112	110

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SIMW1010	9/12/2018 8:03	42.2	37.1	1.7	19	0.25	0.18	109	107
SIMW1010	10/12/2018 11:59	51.4	41.5	0	7.1	8.19	14.12	108	108
SIMW1010	11/27/2018 14:20	48.8	40.3	0.1	10.8	5.38	5.84	107	108
SIMW1010	12/17/2018 13:53	49.2	41	0.1	9.7	4.49	6.89	103	100
SIMW1011	7/17/2018 11:33	56.3	41.9	0	1.8	1.6	1.64	118	119
SIMW1011	7/30/2018 12:19	57.3	40.9	0	1.8	1.71	1.46	122	123
SIMW1011	8/1/2018 11:34	54.5	41.2	0	4.3	1.8	1.8	122	123
SIMW1011	9/4/2018 13:38	56.1	42.6	0	1.3	1.98	2.15	120	120
SIMW1011	10/3/2018 8:04	57.3	42.2	0	0.5	2.04	2.02	118	118
SIMW1011	11/14/2018 14:38	54.9	43.1	0	2	2.11	2.08	117	117
SIMW1011	12/5/2018 14:53	56.6	43.3	0	0.1	2.68	2.56	120	120
SIMW1011	12/13/2018 8:41	48.1	39.1	0	12.8	1.85	1.87	108	108
SIMW1012	7/26/2018 10:17	55.4	41.5	0	3.1	0.47	0.49	119	119
SIMW1012	8/9/2018 9:32	56.8	41.1	0	2.1	0.4	0.43	119	120
SIMW1012	8/17/2018 10:05	56.5	41.1	0	2.4	0.96	0.62	118	119
SIMW1012	9/4/2018 13:08	57.2	40.1	0	2.7	0.53	0.59	118	118
SIMW1012	10/12/2018 12:46	57.4	41	0	1.6	0.42	0.65	119	119
SIMW1012	11/20/2018 18:50	57.8	41.7	0	0.5	0.53	0.54	117	117
SIMW1012	12/11/2018 9:18	57.6	42.3	0	0.1	0.76	0.73	120	121
SIMW1013	7/25/2018 13:09	44.6	38.3	0.3	16.8	0.09	0.09	115	115
SIMW1013	8/17/2018 9:54	40.4	38.2	0	21.4	0.18	0.04	118	118
SIMW1013	8/29/2018 12:50	54	42.5	0.1	3.4	2.25	6.01	111	116
SIMW1013	9/4/2018 8:11	46.8	40.7	0	12.5	5.44	4.87	112	112
SIMW1013	10/5/2018 11:11	47.7	41.6	0	10.7	4.94	4.81	113	114
SIMW1013	11/23/2018 17:06	49	41.6	0	9.4	5.1	4.3	112	113
SIMW1013	12/11/2018 8:07	54.1	45.8	0	0.1	7.24	11.62	111	113
SIMW1014	7/26/2018 10:45	51.5	39.6	0	8.9	0.65	0.87	106	109
SIMW1014	8/17/2018 8:05	51.7	37.9	0	10.4	0.96	0.94	106	107
SIMW1014	9/12/2018 9:19	51.9	39.2	0.2	8.7	1.08	1.9	107	107
SIMW1014	10/12/2018 13:12	50.4	39.6	0	10	1.72	2.38	108	109
SIMW1014	11/20/2018 19:09	47.8	39.2	0	13	2.1	2.04	105	105
SIMW1014	12/17/2018 14:55	48.5	39.1	0	12.4	1.83	1.87	107	107
SIMW1015	7/12/2018 9:21	38.4	32.2	0	29.4	0.02	0.01	107	108
SIMW1015	8/17/2018 8:10	39.1	34.5	0.1	26.3	0.02	0	110	109
SIMW1015	9/17/2018 9:50	46	36.2	0.1	17.7	6.14	6.07	109	109
SIMW1015	10/17/2018 9:53	46.2	36.3	0	17.5	5.83	5.96	107	108
SIMW1015	11/27/2018 15:05	42.1	35	0	22.9	5.81	5.79	107	107
SIMW1015	12/17/2018 15:13	46.4	35.3	0	18.3	5.54	5.54	104	105
SIMW103S	7/20/2018 13:10	43.4	35.9	3.7	17	0.13	0.07	86	85
SIMW103S	8/1/2018 8:53	54	43.7	0.5	1.8	0.11	0.09	91	90
SIMW103S	9/4/2018 9:35	56.3	43.5	0	0.2	0.1	0.1	85	89
SIMW103S	10/3/2018 13:42	56.6	42.6	0	0.8	0.05	0.04	92	92
SIMW103S	10/23/2018 9:00	54.6	45.3	0	0.1	0.65	0.63	85	81
SIMW103S	11/15/2018 18:03	56.4	42.7	0.2	0.7	0.65	0.52	89	90
SIMW103S	12/5/2018 13:45	55.4	44.5	0	0.1	0.52	0.6	79	80
SIMW1101	7/21/2018 14:07	43.7	36.1	0	20.2	0.07	0.04	112	111
SIMW1101	8/16/2018 16:02	50.1	39.7	0	10.2	0.05	0.15	113	114
SIMW1101	9/7/2018 14:04	42.8	36.5	0	20.7	0.44	0.16	113	113
SIMW1101	10/11/2018 9:26	41.6	36	0	22.4	16.2	4.95	110	110
SIMW1101	11/23/2018 13:05	46.8	37.4	0	15.8	4.19	4.25	107	107
SIMW1101	12/13/2018 10:11	54.7	38.8	0	6.5	3.83	6.15	105	107
SIMW1102	7/25/2018 13:43	53.2	41.8	0	5	0.01	0.03	127	127
SIMW1102	8/17/2018 9:36	53.1	42.1	0	4.8	0.06	0.04	129	130
SIMW1102	9/12/2018 8:09	53.6	42.5	0.1	3.8	0.06	0.05	127	126
SIMW1102	10/12/2018 12:11	54.2	41	0.2	4.6	0.07	0.09	127	126

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SIMW1102	11/27/2018 14:30	54.2	42.2	0.1	3.5	0.12	0.06	125	126
SIMW1102	12/17/2018 13:58	54.1	42.3	0	3.6	0.09	0.1	128	128
SIMW1104	7/20/2018 14:21	55.3	43.7	0	1	0.12	0.07	96	96
SIMW1104	8/1/2018 10:08	54.5	45.4	0	0.1	0.28	0.24	102	102
SIMW1104	9/6/2018 7:42	54.1	45.8	0	0.1	0.56	0.47	101	102
SIMW1104	10/15/2018 14:48	55	44.9	0	0.1	0.67	0.68	110	111
SIMW1104	11/16/2018 18:10	53.6	44	0.1	2.3	0.52	0.56	93	94
SIMW1104	12/10/2018 11:41	52.7	41.6	1.1	4.6	0.69	0.66	90	91
SIMW1105	7/20/2018 14:44	55.5	43.3	0	1.2	1.04	1	120	121
SIMW1105	8/1/2018 10:48	55.2	44.5	0	0.3	0.47	0.47	122	123
SIMW1105	9/4/2018 14:23	55.7	44.2	0	0.1	0.52	0.44	124	124
SIMW1105	10/9/2018 9:44	55	44.9	0	0.1	1.63	1.15	122	123
SIMW1105	11/27/2018 13:42	55.1	44.8	0	0.1	0.75	0.74	121	122
SIMW1105	12/10/2018 11:57	50.6	39.9	2	7.5	1.18	1.19	125	125
SIMW1106	7/23/2018 12:08	48	45	0	7	0.07	0.07	119	119
SIMW1106	8/1/2018 11:23	45.9	43.8	0	10.3	0.13	0.09	116	116
SIMW1106	8/28/2018 8:04	51.8	47.4	0	0.8	0.18	0.84	113	114
SIMW1106	9/4/2018 14:04	50.9	45.4	0	3.7	0.37	0.73	116	117
SIMW1106	10/2/2018 8:29	49.5	44.7	0	5.8	0.41	0.34	35	110
SIMW1107	9/19/2018 9:07	58.4	41.5	0	0.1	0.62	0.91	102	108
SIMW1107	10/17/2018 11:06	50.4	40.5	0	9.1	0.33	0.51	122	123
SIMW1107	11/20/2018 19:21	46.5	39.4	0	14.1	0.49	0.22	123	124
SIMW1107	12/11/2018 10:00	51	40.8	0	8.2	0.6	0.61	127	128
SIMW1107	12/13/2018 10:33	57	42.7	0.1	0.2	2.25	2.25	127	128
SIMW116R	7/25/2018 10:44	49.8	41.1	0	9.1	2.87	3.37	130	131
SIMW116R	8/9/2018 8:06	47.8	39.1	0.4	12.7	4.27	4.23	131	132
SIMW116R	9/4/2018 10:40	50.9	38.7	0.3	10.1	4.32	4.4	128	128
SIMW116R	10/9/2018 13:35	49.3	41	0	9.7	3.86	4.27	130	130
SIMW116R	11/19/2018 18:37	47.9	41	0	11.1	4.13	4.21	128	128
SIMW116R	12/10/2018 9:02	49.1	40.4	0	10.5	4.58	4.58	133	134
SIMW1219	7/20/2018 14:11	57	42.1	0	0.9	1.5	1.56	114	115
SIMW1219	8/1/2018 9:52	56.4	43	0	0.6	1.42	1.5	116	116
SIMW1219	9/6/2018 7:30	56.5	43.4	0	0.1	1.08	1.13	118	118
SIMW1219	10/15/2018 14:59	57.6	42.2	0.1	0.1	0.68	0.66	119	120
SIMW1219	11/16/2018 17:57	56.4	42.8	0	0.8	0.86	0.76	117	118
SIMW1219	12/10/2018 12:28	51.5	38.1	2.1	8.3	0.9	0.89	122	122
SIMW1220	7/20/2018 13:43	56.3	42.1	0	1.6	1	1	121	121
SIMW1220	8/1/2018 9:41	55.8	43.6	0	0.6	1.22	1.19	122	123
SIMW1220	9/4/2018 7:47	56.6	43.3	0	0.1	1.1	1.02	125	126
SIMW1220	10/11/2018 8:14	56.5	43.4	0	0.1	0.69	0.71	123	124
SIMW1220	11/14/2018 14:41	50.6	41.8	0.7	6.9	0.43	0.47	129	129
SIMW1220	12/10/2018 11:33	56.2	43.7	0	0.1	0.73	0.63	126	127
SIMW1221	7/20/2018 15:07	56.6	43.1	0	0.3	0.05	0.06	107	107
SIMW1221	8/1/2018 11:02	55.5	44.1	0	0.4	0.05	0.03	109	109
SIMW1221	9/6/2018 8:05	55.5	44.4	0	0.1	0.19	0.37	107	107
SIMW1221	10/3/2018 8:30	54.7	44.8	0.3	0.2	0.17	0.26	111	111
SIMW1222	7/17/2018 11:47	16.2	20.3	17.8	45.7	1.87	0.04	127	122
SIMW1222	7/23/2018 11:58	53.9	45.9	0.1	0.1	2.85	5.06	131	132
SIMW1222	7/27/2018 12:21	52.2	45.7	0.1	2	3.68	3.65	127	128
SIMW1222	8/1/2018 11:06	48	43.9	0.1	8	3.58	3.68	127	127
SIMW1222	9/4/2018 13:52	53.1	41.6	0.5	4.8	3.25	4.38	130	130
SIMW1222	10/9/2018 8:26	53.8	45.8	0.2	0.2	2.82	3.11	127	128
SIMW1222	11/15/2018 13:10	53.6	44.7	0.1	1.6	2.77	2.99	126	126
SIMW1224	7/17/2018 9:32	49.5	44.1	0	6.4	0.3	0.08	127	128
SIMW1224	7/30/2018 9:20	49.8	44.1	0	6.1	0.45	0.07	131	131

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SIMW1224	8/1/2018 8:43	48.9	43.4	0	7.7	0.43	0.43	131	131
SIMW1224	9/4/2018 10:03	52.4	43.1	0	4.5	0.88	0.5	133	133
SIMW1224	10/3/2018 13:28	51.6	43.2	0	5.2	0.19	0.2	128	129
SIMW1224	10/23/2018 8:25	53.1	46.1	0	0.8	5.89	5.87	130	130
SIMW1224	11/13/2018 13:58	50	43.8	0.4	5.8	5.42	5.01	127	124
SIMW1224	12/5/2018 13:38	52.1	44.4	0.4	3.1	4.68	5.22	131	132
SIMW1225	7/17/2018 9:59	55.2	44.7	0	0.1	1.85	1.94	122	122
SIMW1225	8/3/2018 12:30	53.7	46.2	0	0.1	2.48	2.44	123	123
SIMW1225	9/4/2018 10:39	54.7	44.6	0	0.7	1.59	1.63	123	124
SIMW1225	10/3/2018 13:15	55.1	44.8	0	0.1	2.05	2.14	121	122
SIMW1225	11/14/2018 13:31	54.5	45	0	0.5	0.77	0.76	118	119
SIMW1225	12/5/2018 14:15	53.6	46.2	0	0.2	0.85	0.84	121	122
SIMW1226	9/18/2018 14:07	50.4	49.5	0	0.1	0.12	0.1	124	127
SIMW1226	10/5/2018 11:06	51.3	48.6	0	0.1	0.06	0.26	135	136
SIMW1226	11/19/2018 17:55	50.8	48.2	0	1	0.24	0.21	133	134
SIMW1226	12/11/2018 7:53	52.2	47.7	0	0.1	0.11	0.1	137	139
SIMW1227	7/25/2018 14:03	49.3	41.2	0	9.5	0.78	0.77	129	129
SIMW1227	8/17/2018 10:09	47.4	40.3	0.6	11.7	1.35	1.84	131	132
SIMW1227	8/21/2018 8:39	49.5	41.1	0.3	9.1	1.02	1	132	132
SIMW1227	8/21/2018 11:31								
SIMW1227	9/4/2018 14:04	49.2	40.3	0	10.5	1.02	0.95	128	128
SIMW1227	10/5/2018 11:21	49.5	41.3	0	9.2	0.94	1.1	129	130
SIMW1227	11/19/2018 17:46	46.1	39.4	1.2	13.3	1.1	0.86	127	127
SIMW1227	12/11/2018 7:47	49.4	41.8	0.3	8.5	0.86	0.9	133	133
SIMW1227	12/18/2018 9:06	46.3	37.4	1.7	14.6	0.98	0.75	130	129
SIMW1228	7/6/2018 9:37	43.1	38.8	0.1	18	3.34	2.08	129	130
SIMW1228	8/17/2018 10:00	49.7	40.1	0	10.2	0.91	0.86	130	129
SIMW1228	9/4/2018 13:11	51	41.8	0	7.2	1.12	1.38	129	130
SIMW1228	10/12/2018 12:49	50.7	42.2	0	7.1	1.06	1.07	131	132
SIMW1228	10/17/2018 10:54	50.6	41.7	0	7.7	1.36	1.76	132	132
SIMW1228	10/24/2018 13:23	48.1	42.4	0	9.5	1.46	1.51	132	132
SIMW1228	10/24/2018 16:35								
SIMW1228	11/20/2018 18:47	48.7	41.8	0	9.5	1.26	1.38	129	130
SIMW1228	12/11/2018 9:14	49.6	42.3	0	8.1	1.5	1.65	135	136
SIMW1228	12/21/2018 9:00								
SIMW1228	12/21/2018 12:00	47.7	41.1	0	11.2	1.46	1.35	134	134
SIMW1229	7/17/2018 11:27	52.1	45.4	0.3	2.2	0.14	0.14	130	130
SIMW1229	7/30/2018 12:26	52.4	45.6	0.3	1.7	0.44	0.52	130	130
SIMW1229	8/1/2018 11:28	50.8	45.7	0.2	3.3	0.49	0.43	130	130
SIMW1229	9/4/2018 13:30	53.4	45.8	0.2	0.6	0.92	1.2	133	133
SIMW1229	10/3/2018 8:01	52.2	46.2	0.3	1.3	0.59	0.54	130	130
SIMW1229	11/20/2018 19:34	52.3	46.8	0.2	0.7	0.51	0.47	128	129
SIMW1229	12/5/2018 14:46	53.7	45.7	0.4	0.2	0.52	0.45	133	134
SIMW1230	7/17/2018 10:31	56.8	43.1	0	0.1	0.12	0.18	99	109
SIMW1230	8/17/2018 8:40	30.4	30	3	36.6	0	0.01	96	95
SIMW1230	8/28/2018 8:55	40	36.9	0.4	22.7	7.21	0.74	97	90
SIMW1230	9/4/2018 12:47	35.3	32.6	2.4	29.7	0.04	0.04	96	94
SIMW1230	10/3/2018 7:35	47.8	39.5	0.4	12.3	0.35	0.34	67	70
SIMW1230	10/23/2018 9:40	22.2	24.3	4.9	48.6	0.04	0.01	106	90
SIMW1230	11/14/2018 13:58	9.1	19.2	3.1	68.6	0	0	85	79
SIMW1230	11/16/2018 18:28	39.2	32.3	0.2	28.3	0.18	0.03	87	85
SIMW1230	12/5/2018 15:08	47	36.1	2	14.9	0.2	0.41	63	62
SIMW1231	7/26/2018 9:55	42.7	39.6	0	17.7	0.46	0.38	133	133
SIMW1231	8/14/2018 12:14	44.7	40	0	15.3	0.7	0.56	133	133
SIMW1231	9/4/2018 12:59	44.4	39.1	0	16.5	1.08	0.59	131	131

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SIMW1231	10/12/2018 12:37	46	40.6	0	13.4	0.33	0.31	133	133
SIMW1231	11/20/2018 18:42	45.4	40.1	0	14.5	0.4	0.28	131	131
SIMW1231	12/11/2018 9:09	52.5	43.3	0	4.2	0.19	0.35	136	137
SIMW1232	7/26/2018 9:47	50.3	45.5	0	4.2	0.33	0.31	138	139
SIMW1232	8/9/2018 8:53	50.5	43.8	0	5.7	0.4	0.37	140	140
SIMW1232	8/14/2018 11:47	51.3	44.7	0	4	0.51	0.77	139	139
SIMW1232	9/4/2018 12:41	50.1	44.6	0	5.3	0.6	0.72	137	137
SIMW1232	10/12/2018 10:34	51	45	0	4	0.54	0.44	139	139
SIMW1232	11/20/2018 18:31	51	44.3	0	4.7	0.61	0.63	136	137
SIMW1232	12/11/2018 9:05	52	46.5	0	1.5	0.66	0.67	143	144
SIMW1233	7/26/2018 9:23	43.6	41.7	0	14.7	2.12	1.82	137	137
SIMW1233	8/9/2018 8:56	44	41.4	0	14.6	2.97	0.31	137	137
SIMW1233	8/14/2018 11:38	45.7	41.7	0.1	12.5	0.17	0.29	137	138
SIMW1233	9/4/2018 12:31	52.8	47.1	0	0.1	0.23	0.53	111	117
SIMW1233	10/12/2018 10:29	53.2	45.8	0	1	0.31	0.31	136	137
SIMW1233	11/20/2018 18:23	53.8	46.1	0	0.1	0.33	0.4	134	135
SIMW1233	12/11/2018 8:58	52.9	46.9	0	0.2	0.42	0.74	140	141
SIMW1233	12/18/2018 9:49								
SIMW1233	12/18/2018 9:49	52.5	44.7	0.4	2.4	0.86	1.39	139	140
SIMW1233	12/21/2018 11:35	53.3	46.6	0	0.1	1.77	2.4	137	138
SIMW1234	7/25/2018 14:06	53.2	41.5	0	5.3	1.69	1.7	118	119
SIMW1234	8/17/2018 10:12	53.2	40.3	0	6.5	2.1	2.15	117	119
SIMW1234	9/4/2018 14:07	52.8	40.8	0	6.4	2.17	2.19	114	115
SIMW1234	10/5/2018 11:24	52.7	41	0	6.3	2.1	2.16	116	116
SIMW1234	11/19/2018 17:49	50.9	41.2	0	7.9	1.94	2.02	114	114
SIMW1234	12/11/2018 7:49	51.7	41.4	0.3	6.6	2.04	1.99	117	117
SIMW1352	7/21/2018 13:37	56	43.6	0	0.4	0.14	0.14	119	120
SIMW1352	8/17/2018 9:31	56.2	43.7	0	0.1	0.22	0.28	123	123
SIMW1352	9/7/2018 13:50	57.3	42.5	0	0.2	0.67	0.53	122	122
SIMW1352	10/11/2018 9:14	56	43.9	0	0.1	0.32	0.27	120	121
SIMW1352	10/23/2018 10:14	57.9	41.4	0	0.7	0.75	0.77	118	118
SIMW1352	11/15/2018 14:20	56.7	43.1	0	0.2	0.72	0.74	117	118
SIMW1352	12/13/2018 10:36	56.4	42.8	0	0.8	0.51	0.5	119	119
SIMW1353	7/20/2018 15:28	54.7	44.9	0	0.4	0.3	0.12	128	128
SIMW1353	8/17/2018 9:16	54.4	43.2	0	2.4	0.42	0.43	134	134
SIMW1353	8/20/2018 10:19	52.8	47	0.1	0.1	0.22	0.15	134	134
SIMW1353	8/20/2018 16:44								
SIMW1353	9/12/2018 7:15	54.4	44.6	0.2	0.8	0.06	0.2	131	131
SIMW1353	9/19/2018 9:42	54	44.9	0	1.1	0.17	0.13	132	132
SIMW1353	10/9/2018 9:29	54.3	45.5	0.1	0.1	0.03	0.03	132	132
SIMW1353	10/24/2018 13:11	53	45.6	0	1.4	0.05	0.06	132	132
SIMW1353	10/24/2018 16:32								
SIMW1353	11/15/2018 14:02	53.8	44.8	0	1.4	0.03	0.07	130	130
SIMW1353	12/10/2018 12:12	51.6	42.7	1.3	4.4	0.29	0.26	134	134
SIMW1353	12/17/2018 8:12	54.1	45.8	0	0.1	0.17	0.14	132	132
SIMW1353	12/18/2018 12:34	55.4	44.1	0	0.5	0.13	0.14	131	132
SIMW1353	12/18/2018 14:26								
SIMW1354	7/20/2018 15:16	51.9	42.1	0.1	5.9	0.35	0.31	120	120
SIMW1354	8/17/2018 9:25	55.2	44.7	0	0.1	0.79	0.84	123	123
SIMW1354	9/6/2018 8:42	52.5	43.7	0	3.8	0.62	0.32	120	122
SIMW1354	10/9/2018 8:44	53.6	43.5	0.1	2.8	0.53	0.55	122	122
SIMW1354	11/15/2018 13:57	46.6	39.5	1.4	12.5	0.29	0.29	124	124
SIMW1354	12/11/2018 7:08	51	41.8	1.1	6.1	0.44	0.35	130	130
SIMW1355	7/25/2018 13:18	48	38.4	0	13.6	0.56	0.58	121	122
SIMW1355	8/16/2018 15:38	55.3	44.6	0	0.1	0.34	0.63	122	122

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SIMW1355	9/6/2018 8:24	46.4	38.6	0	15	0.89	0.8	57	57
SIMW1355	10/12/2018 11:53	44.8	37.9	0	17.3	0.82	0.75	123	124
SIMW1355	11/27/2018 14:04	44.8	37.7	0	17.5	0.52	0.72	122	123
SIMW1355	12/17/2018 13:41	57.8	37.2	0.1	4.9	0.3	0.25	124	125
SIMW1356	7/20/2018 15:01	51.2	42.3	0	6.5	0.03	0.04	115	115
SIMW1356	8/1/2018 10:57	45.6	41.3	0	13.1	0.05	0.05	117	117
SIMW1356	8/28/2018 8:08	53.4	46.5	0	0.1	0.22	1.19	95	99
SIMW1356	9/4/2018 14:08	54.8	41.7	0.2	3.3	0.23	0.46	117	118
SIMW1356	10/2/2018 8:23	53.4	44	0	2.6	0.51	0.65	114	114
SIMW1561	12/11/2018 14:35	59.3	40.6	0	0.1	-0.08	4.85	73	94
SIMW1561	12/13/2018 14:30	57.6	42	0	0.4	6.82	7.13	101	102
SIMW1561	12/14/2018 12:14	50.4	41.3	0	8.3	6.92	7.09	102	102
SIMW1563	7/21/2018 14:30	52.4	40.1	0	7.5	2.44	5.15	108	108
SIMW1563	7/30/2018 7:32	46.8	38.6	0	14.6	5.05	4.48	105	105
SIMW1563	8/16/2018 16:28	49.7	40.2	0	10.1	4.57	6.79	108	108
SIMW1563	8/29/2018 13:35	44.6	37.7	0	17.7	0.9	0.51	111	111
SIMW1563	9/4/2018 8:10	47	38.2	0	14.8	0.56	1.29	97	97
SIMW1563	10/17/2018 10:24	43.3	35.9	0	20.8	1.07	0.72	106	106
SIMW1563	11/23/2018 14:32	44.3	37.2	0	18.5	0.76	0.73	102	102
SIMW1563	12/17/2018 14:26	45.4	38.3	0	16.3	0.58	0.54	95	95
SIMW1565	7/25/2018 10:37	41.7	37.5	1.5	19.3	0.48	0.1	128	128
SIMW1565	8/17/2018 10:17	42	36.9	1.2	19.9	0.03	0.11	126	126
SIMW1565	9/4/2018 10:30	56.1	43.4	0	0.5	0.98	1.6	98	116
SIMW1565	10/9/2018 13:23	48.9	41.5	0.2	9.4	1.31	1.39	128	129
SIMW1565	11/19/2018 18:33	51.1	43.1	0.1	5.7	1.28	1.55	127	128
SIMW1565	12/10/2018 8:58	46.5	39.9	0.9	12.7	2.14	1.47	130	131
SIMW1565	12/20/2018 14:01	49.1	38.8	0.5	11.6	0.93	0.92	130	130
SIMW1569	7/17/2018 9:47	51.7	43.7	0	4.6	0.07	0.27	127	127
SIMW1569	8/3/2018 12:41	46	42.9	0	11.1	0.19	0.25	128	129
SIMW1569	8/28/2018 9:12	52.5	47.4	0	0.1	1.02	1.63	117	124
SIMW1569	9/4/2018 10:18	52.3	44	0	3.7	1.18	2.54	132	133
SIMW1569	9/18/2018 12:23	49.6	43.9	0	6.5	2.53	2.54	129	129
SIMW1569	10/3/2018 13:55	50.7	44.1	0	5.2	3.29	4.06	127	128
SIMW1569	11/13/2018 14:16	47.5	41.8	0	10.7	5.33	5.37	127	127
SIMW1569	12/5/2018 13:59	50.6	43.6	0	5.8	5.66	6.66	132	132
SIMW1569	12/19/2018 14:57	46	40.3	0.2	13.5	5.78	3.56	130	128
SIMW1571	7/17/2018 10:41	51.4	43.6	0	5	3.01	5.04	128	128
SIMW1571	8/3/2018 13:31	47.2	42.7	0	10.1	4.68	5.38	127	128
SIMW1571	9/4/2018 12:50	48.5	42.6	0	8.9	4.51	5.65	130	130
SIMW1571	10/9/2018 7:48	48.5	42.8	0.1	8.6	4.55	4.62	128	128
SIMW1571	11/14/2018 14:02	48.5	42.2	0	9.3	4.26	4.32	127	127
SIMW1571	12/5/2018 15:34	50.8	43.6	0	5.6	5.41	5.52	132	132
SIMW1571	12/19/2018 15:24	46.8	40.1	0.1	13	4.99	3.94	130	128
SIMW1776	7/21/2018 13:41	54.9	42.6	0	2.5	3.25	3.25	116	117
SIMW1776	8/16/2018 16:13	56.1	42.2	0.3	1.4	4.04	4.01	117	118
SIMW1776	9/7/2018 13:54	55.9	42.5	0	1.6	3.74	3.76	117	117
SIMW1776	10/11/2018 9:18	56.7	43.2	0	0.1	2.99	3.03	118	118
SIMW1776	11/20/2018 19:50	56.4	42.1	0	1.5	2.69	2.66	116	116
SIMW1776	12/13/2018 10:41	58	41.9	0	0.1	2.3	2.27	119	120
SIMW1779	7/20/2018 13:25	54.5	42.7	0	2.8	4.38	5.62	126	127
SIMW1779	8/1/2018 9:30	52.7	43.1	0	4.2	5.7	6.33	128	128
SIMW1779	9/4/2018 9:02	57.5	42	0	0.5	6.26	6.17	131	132
SIMW1779	9/18/2018 11:01	51.8	43.2	0.4	4.6	6.11	5.82	129	129
SIMW1779	10/8/2018 13:39	54.6	45.3	0	0.1	5.8	6.38	129	129
SIMW1779	11/16/2018 17:14	53.8	44	0.2	2	5.03	4.99	127	127

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SIMW1779	12/10/2018 7:35	54.5	45.4	0	0.1	4.73	4.76	133	134
SIMW1779	12/20/2018 14:07								
SIMW1779	12/20/2018 14:07	52.9	43.6	0	3.5	2.69	2.82	131	132
SIMW1781	7/20/2018 14:33	55.6	43.5	0	0.9	0.89	1.45	121	120
SIMW1781	8/1/2018 10:39	54.8	44.2	0	1	1.12	1.58	123	122
SIMW1781	9/4/2018 14:30	55.6	44.3	0	0.1	1.43	1.53	126	126
SIMW1781	10/9/2018 9:37	54.7	45.2	0	0.1	1.64	1.19	124	125
SIMW1781	11/16/2018 18:14	54.8	44.6	0	0.6	0.94	0.95	122	122
SIMW1781	12/10/2018 11:49	55.3	43.5	0.5	0.7	0.63	0.81	126	126
SIMW1784	7/5/2018 13:26								
SIMW1784	7/20/2018 12:56	41.7	39.8	0.1	18.4	3.67	3.4	131	131
SIMW1784	12/17/2018 14:43	54.6	44.3	0	1.1	1.96	2.57	136	137
SIMW1785	7/17/2018 9:39	42.5	38.7	0	18.8	0.18	0.18	123	124
SIMW1785	8/17/2018 8:50	52.8	43.6	0	3.6	5.79	10.3	114	114
SIMW1785	8/28/2018 9:20	55.4	44.5	0	0.1	0.18	1.17	107	102
SIMW1785	9/4/2018 10:11	36	35	0.6	28.4	1.01	0.26	129	129
SIMW1785	10/3/2018 13:47	49.9	42.2	0	7.9	19.89	19.19	113	114
SIMW1785	11/20/2018 18:06	50	41.2	0.1	8.7	19.68	19.64	118	118
SIMW1785	12/17/2018 14:38	46.9	40.1	0	13	22.16	22.61	118	107
SIMW1786	7/17/2018 10:21	54.9	45	0	0.1	0.38	0.88	123	124
SIMW1786	8/3/2018 12:59	48.3	45.3	0	6.4	0.43	0.5	124	124
SIMW1786	9/4/2018 10:26	47.6	43.2	0	9.2	0.69	0.69	127	127
SIMW1786	10/9/2018 8:06	48.6	44	0.1	7.3	0.5	0.52	124	125
SIMW1786	11/14/2018 13:25	46.5	40.3	0.1	13.1	0.01	0.01	104	106
SIMW1786	12/5/2018 14:12	53.4	46.5	0	0.1	0.01	0.56	96	121
SIMW1787	7/17/2018 10:07	53	45.2	0	1.8	0.32	0.53	127	126
SIMW1787	8/3/2018 13:12	48.8	45.4	0	5.8	0.44	0.72	129	129
SIMW1787	9/4/2018 10:46	47.4	43.9	0	8.7	0.7	0.69	132	132
SIMW1787	9/18/2018 12:29	46.3	43.8	0	9.9	0.77	0.81	129	130
SIMW1787	10/9/2018 8:17	50.8	44.6	0	4.6	0.71	1.06	130	131
SIMW1787	10/15/2018 14:15	54.7	44.3	0.3	0.7	0.73	0.81	129	129
SIMW1787	11/14/2018 13:37	53.2	44.7	0	2.1	0.99	1.81	129	130
SIMW1787	12/5/2018 14:25	54	45.7	0.1	0.2	2.16	3.19	133	133
SIMW1787	12/19/2018 14:26								
SIMW1787	12/19/2018 14:26	54	44.5	0.1	1.4	2.79	4.89	131	130
SIMW1790	7/17/2018 10:45	48.2	41.8	0	10	0.8	1.06	123	123
SIMW1790	8/3/2018 13:35	43	40.4	0	16.6	1.11	0.61	122	123
SIMW1790	9/4/2018 12:53	46.8	40.7	0	12.5	0.56	0.63	124	125
SIMW1790	10/9/2018 7:35	45.4	40.2	0.4	14	0.61	0.42	124	124
SIMW1790	10/23/2018 10:00	46.9	41	0	12.1	2.36	2.41	124	124
SIMW1790	11/14/2018 14:05	48.4	40.8	0.1	10.7	1.68	1.78	122	122
SIMW1790	12/5/2018 15:31	51.3	42.4	0	6.3	1.73	3.21	124	125
SIMW1791	7/17/2018 11:02	39	38.9	1.1	21	0.97	0.24	130	129
SIMW1791	7/30/2018 10:05	45.5	43.1	0.3	11.1	0.03	0.24	132	132
SIMW1791	8/3/2018 13:48	46.1	43.6	0	10.3	0.38	0.14	133	133
SIMW1791	8/13/2018 14:47	45.1	42.1	1.2	11.6	0.03	0.01	128	128
SIMW1791	8/28/2018 8:28	51.8	45.4	0.1	2.7	0.03	0.55	132	138
SIMW1791	9/4/2018 13:07	48.5	45.8	0	5.7	0.29	0.25	137	137
SIMW1791	9/18/2018 12:38	46.5	45.1	0	8.4	0.21	0.2	133	133
SIMW1791	10/3/2018 7:23	45.6	43.5	0.4	10.5	0.21	0.16	134	135
SIMW1791	10/24/2018 10:47	46.7	44.3	0.4	8.6	0.19	0.11	135	136
SIMW1791	10/24/2018 16:34								
SIMW1791	11/14/2018 14:22	50.7	45.7	0	3.6	0.25	0.57	132	134
SIMW1791	12/5/2018 15:18	47.1	44.7	0	8.2	0.57	0.44	138	139
SIMW1791	12/21/2018 7:51								

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SIMW1791	12/21/2018 10:51	47.5	44.2	0	8.3	0.46	0.14	137	137
SIMW1791	12/21/2018 16:11								
SIMW1794	7/21/2018 13:27	54.5	43.3	0	2.2	1.58	1.59	125	126
SIMW1794	8/16/2018 15:32	54.5	42.2	0	3.3	2.02	0.78	127	128
SIMW1794	9/7/2018 13:41	54.5	42.9	0	2.6	0.67	0.81	126	126
SIMW1794	10/11/2018 9:07	55.2	44.7	0	0.1	1.27	1.28	126	126
SIMW1794	11/15/2018 14:12	54.7	43.2	0	2.1	0.99	0.99	125	126
SIMW1794	12/13/2018 10:31	56.1	43.7	0.1	0.1	0.72	0.77	130	131
SIMW1794	12/17/2018 8:03	56.8	42.1	0	1.1	0.74	0.78	128	128
SIMW1795	7/20/2018 15:31	47.7	39.6	0	12.7	5.12	4.47	114	114
SIMW1795	8/17/2018 9:14	47.7	40.3	0	12	5.96	6.03	120	120
SIMW1795	8/28/2018 7:45	49.5	35.7	0.8	14	5.1	6.1	122	122
SIMW1795	9/12/2018 7:18	47.3	39.6	0	13.1	5.06	5.07	122	122
SIMW1795	10/9/2018 9:31	48.6	39.8	0	11.6	4.39	4.43	125	125
SIMW1795	11/15/2018 14:04	46.2	38.4	0	15.4	4.02	3.9	126	126
SIMW1795	12/10/2018 12:14	50.7	38.8	0.8	9.7	3.52	4.73	129	130
SIMW1796	7/21/2018 12:14	45.3	40.7	0	14	3.97	4.07	121	121
SIMW1796	8/16/2018 15:28	45.7	41.4	0	12.9	3.71	4	122	123
SIMW1796	9/6/2018 8:30	43.9	39.9	0	16.2	3.77	3.23	77	82
SIMW1796	10/9/2018 8:55	45.7	40.7	0	13.6	2.98	3.01	122	122
SIMW1796	11/15/2018 13:20	45.9	39.6	0	14.5	2.59	2.44	121	121
SIMW1796	12/11/2018 7:17	49.4	42.2	0	8.4	2.56	2.47	125	125
SIMW1797	7/20/2018 15:11	56.8	42.2	0	1	3.79	3.84	118	119
SIMW1797	8/17/2018 9:22	55.3	44.6	0	0.1	4.63	4.69	122	122
SIMW1797	9/6/2018 12:01	56.2	43.6	0	0.2	3.16	3.24	120	121
SIMW1797	10/9/2018 8:39	55.7	44.1	0	0.2	3.81	3.96	121	122
SIMW1797	11/15/2018 13:54	56.3	43.6	0	0.1	3.05	2.85	121	121
SIMW1797	12/11/2018 6:59	55.7	44.1	0	0.2	2.02	2.02	125	125
SIMW1798	7/21/2018 13:19	49.4	39.5	0.1	11	2.51	2.52	117	117
SIMW1798	8/16/2018 15:23	46	41.7	0	12.3	2.16	2.21	116	116
SIMW1798	9/6/2018 8:13	46	40.3	0	13.7	2.22	2.83	86	77
SIMW1798	10/9/2018 8:58	47.9	40.8	0	11.3	2.22	2.29	117	118
SIMW1798	11/15/2018 13:14	47.4	39.9	0	12.7	2.41	2.36	117	117
SIMW1801	10/8/2018 13:59	55.7	44.2	0	0.1	-0.01	4.83	83	121
SIMW1801	10/9/2018 8:30	55.4	44.5	0	0.1	6.08	21.98	121	120
SIMW1801	11/15/2018 13:05	55.8	41.3	0.2	2.7	2.46	4.99	118	118
SIMW1802	10/17/2018 13:51	56.1	43.6	0.1	0.2	-0.01	3.58	85	114
SIMW1802	11/16/2018 17:35	55.8	43.6	0	0.6	5.15	12.15	120	121
SIMW1802	12/13/2018 10:48	55.9	44	0	0.1	2.71	5.95	125	126
SIMW1802	12/14/2018 8:07	56.2	43.7	0	0.1	5.82	13.75	127	127
SIMW1803	10/11/2018 9:02	55.6	44.3	0	0.1	0.25	2.17	73	109
SIMW1803	11/15/2018 14:08	56.9	42.8	0	0.3	1.35	4.94	120	120
SIMW1803	12/10/2018 12:18	55.9	42.3	0.6	1.2	0.6	2.48	121	122
SIMW1803	12/14/2018 8:01	57	42.8	0	0.2	1.84	3.04	121	121
SIMW1804	10/19/2018 14:06	56.9	42.8	0.1	0.2	-0.01	8.36	94	105
SIMW1804	11/14/2018 17:21	57.1	41.7	0	1.2	5.84	9.44	113	114
SIMW1804	12/10/2018 11:36	56.3	43.6	0	0.1	2.48	5	118	119
SIMW1804	12/14/2018 8:15	55.7	44.2	0	0.1	4.01	6.79	120	121
SIMW1806	10/17/2018 11:12	57.3	42.6	0	0.1	0	0.61	98	102
SIMW1806	11/20/2018 19:13	52.9	43.3	0	3.8	0.99	3.69	124	126
SIMW1806	12/11/2018 9:48	46.1	40.5	0	13.4	3.26	0.97	131	131
SIMW1806	12/18/2018 10:05	52	37.8	0	10.2	1.05	1.91	128	128
SIMW1807	10/17/2018 13:58	55.4	44.4	0	0.2	-0.02	9.54	89	125
SIMW1807	11/15/2018 13:50	56.9	42.9	0.1	0.1	7.21	11.76	122	122
SIMW1807	12/10/2018 12:08	54.4	40.7	1.2	3.7	7.57	11.52	119	120

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SIMW1807	12/14/2018 7:55	57.9	41.9	0.1	0.1	2.66	2.75	122	122
SIMW1808	10/8/2018 11:23	57.4	41.4	0	1.2	-0.05	0.78	88	94
SIMW1808	11/16/2018 13:23	27.3	29.5	0	43.2	0.69	0.03	94	96
SIMW1808	12/12/2018 12:48	49.9	37.3	0	12.8	0	0.04	84	85
SIMW1809	11/14/2018 12:07	55.9	44	0	0.1	-0.01	16.17	78	118
SIMW1809	11/27/2018 12:46	52.8	45.4	0	1.8	2.84	3.65	120	120
SIMW1809	12/5/2018 13:00	51.4	45.5	0	3.1	3.71	4.75	123	124
SIMW1809	12/13/2018 13:46	47.1	42.3	0.4	10.2	4.37	4.01	123	123
SIMW1809	12/14/2018 13:01	46.6	43.7	0	9.7	3.4	2.48	122	122
SIMW1810	11/14/2018 12:14	55.7	44.2	0	0.1	-0.03	17.58	71	118
SIMW1810	11/27/2018 13:04	51.8	43	0.3	4.9	3.48	4.39	124	124
SIMW1810	12/5/2018 12:56	50.8	42.9	0.8	5.5	4.09	4.81	128	128
SIMW1810	12/13/2018 13:58	48.5	42	0.5	9	5.97	6	127	127
SIMW1810	12/14/2018 13:07	46.4	42.6	0.6	10.4	5.29	4.45	126	126
SIMW1811	11/14/2018 12:24	55.8	44	0	0.2	-0.02	14.65	75	111
SIMW1811	11/27/2018 12:42	55.7	44.2	0	0.1	4.23	4.2	113	114
SIMW1811	12/5/2018 12:47	55.2	44.7	0	0.1	3.96	4.78	116	117
SIMW1811	12/13/2018 14:10	55.7	44.2	0	0.1	3.34	5.04	117	117
SIMW1811	12/14/2018 13:26	54	44.1	0	1.9	5.02	9.7	116	116
SIMW1812	11/14/2018 12:28	56.2	43.6	0	0.2	-0.01	1.09	74	99
SIMW1812	11/27/2018 12:38	55.2	44.7	0	0.1	0.27	3.04	111	112
SIMW1812	12/5/2018 12:39	46.7	38.8	3	11.5	2.74	1.95	112	113
SIMW1812	12/13/2018 14:13	56.3	43.4	0.1	0.2	6.45	12.39	115	115
SIMW1812	12/14/2018 13:20	54.5	45.4	0	0.1	11.9	12.45	115	115
SIMW1813	11/14/2018 11:58	56.1	43.6	0.1	0.2	0	4.57	71	113
SIMW1813	11/27/2018 12:24	55.2	44.6	0	0.2	0.69	3.04	120	121
SIMW1813	12/13/2018 14:20	53.4	44	0	2.6	1.48	3.72	126	127
SIMW1813	12/14/2018 12:42	48.6	42.7	0.8	7.9	3.52	3.3	125	125
SIMW1814	12/11/2018 14:26	56.9	42.8	0.1	0.2	-0.06	5	75	79
SIMW1814	12/13/2018 14:23	51.7	40.9	0.8	6.6	3.55	5.71	99	99
SIMW1814	12/14/2018 12:45	47	40.7	1.1	11.2	5.22	4.46	98	98
SIMW1815	12/11/2018 14:45	55.4	44.5	0	0.1	-0.03	4.68	82	112
SIMW1815	12/13/2018 14:35	46.1	40.1	0	13.8	2.67	1.05	113	114
SIMW1815	12/14/2018 12:57	45.6	40.9	0	13.5	1.21	0.77	112	112
SIMW1817	11/14/2018 11:53	57.7	42.1	0.1	0.1	-0.02	4.94	68	99
SIMW1817	11/27/2018 12:12	56.5	43.3	0	0.2	0.65	2.85	111	111
SIMW1817	12/13/2018 14:27	55.3	44.4	0.2	0.1	2.03	4.49	118	118
SIMW1817	12/14/2018 12:37	55.1	44.7	0	0.2	4.29	8.97	118	118
SIMW1818	11/14/2018 12:10	55.3	44.5	0.1	0.1	-0.01	13.53	79	70
SIMW1818	11/27/2018 12:58	55.6	43.1	0	1.3	2.21	2.84	100	100
SIMW1818	12/13/2018 13:55	50.4	41.3	0	8.3	4.5	5.79	102	102
SIMW1818	12/14/2018 13:04	47.3	42.9	0	9.8	5.56	4.37	103	103
SIMW1819	11/14/2018 12:18	55.2	44.5	0.2	0.1	-0.02	16.37	77	74
SIMW1819	11/27/2018 13:07	54.2	44	0	1.8	3.23	4.17	98	99
SIMW1819	12/5/2018 12:50	53.3	43.8	0.2	2.7	3.93	4.99	86	86
SIMW1819	12/13/2018 14:02	51.3	42.8	0.3	5.6	6.11	8.52	102	103
SIMW1819	12/14/2018 13:13	49.3	43.2	0.3	7.2	8.67	9.16	104	105
SIMW1820	11/14/2018 12:21	55.2	44.7	0	0.1	-0.02	6.14	72	73
SIMW1820	11/27/2018 13:10	51.9	42	0.1	6	1	2.93	100	101
SIMW1820	12/5/2018 12:53	47.3	40.1	1.1	11.5	2.96	1.9	77	77
SIMW1820	12/13/2018 14:05	46.4	39.4	1.7	12.5	2.92	1.83	88	88
SIMW1820	12/14/2018 13:16	45.1	39.6	1.5	13.8	1.75	0.92	89	88
SIMW1821	11/14/2018 12:33	55.1	44.8	0	0.1	0.08	2.1	70	70
SIMW1821	11/27/2018 12:35	55.7	44.2	0	0.1	0.47	2.82	83	85
SIMW1821	12/5/2018 12:42	55.3	44.6	0	0.1	2.26	5	88	89

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SIMW1821	12/13/2018 14:16	54.6	43.7	0	1.7	3.03	4.23	99	100
SIMW1821	12/14/2018 13:23	52.7	44.5	0	2.8	4.06	4.12	102	102
SIMW701D	7/25/2018 11:09	54.7	45.2	0	0.1	0.06	0.07	115	116
SIMW701D	8/9/2018 8:21	45.9	40.3	0.2	13.6	0.01	0.02	117	116
SIMW701D	8/17/2018 10:12	53.7	43	0	3.3	0.02	0.05	112	110
SIMW701D	9/4/2018 9:12	54.1	43.8	0	2.1	0.01	0.01	99	98
SIMW701D	10/9/2018 13:53	53.7	43.6	0.4	2.3	0.17	0.17	116	115
SIMW701D	10/23/2018 12:36	37.4	34.6	2.5	25.5	1.97	0.51	113	122
SIMW701D	11/12/2018 17:40	47.6	41.8	0.1	10.5	0.03	0.03	106	107
SIMW701D	12/11/2018 8:23	51.2	43.4	0.6	4.8	0.15	0.43	89	93
SIMW701S	7/25/2018 11:13	52.9	45.6	0	1.5	0.15	0.15	132	133
SIMW701S	8/27/2018 15:07	54.9	44.7	0.1	0.3	0.29	0.2	136	137
SIMW701S	9/4/2018 9:15	54.8	44.4	0	0.8	0.26	0.16	132	132
SIMW701S	10/9/2018 13:56	54.6	43.8	0	1.6	0.8	0.78	132	133
SIMW701S	11/12/2018 17:42	54.1	44.5	0	1.4	0.9	0.4	127	127
SIMW701S	12/11/2018 8:25	55.6	44.2	0	0.2	0.68	0.74	135	136
SIMW703D	7/26/2018 8:56	48.7	41.5	0.3	9.5	0.02	0.06	123	125
SIMW703D	8/9/2018 8:33	48.6	40.2	0.3	10.9	0.07	0.07	124	124
SIMW703D	9/4/2018 10:56	55.2	44.5	0	0.3	0.01	0.02	101	103
SIMW703D	10/9/2018 14:09	53.5	44.6	0	1.9	0.02	0.24	111	115
SIMW703D	10/23/2018 14:08	39	36.5	1.6	22.9	2.44	0.22	125	123
SIMW703D	11/19/2018 18:49	54	45.8	0	0.2	0.01	0.07	90	99
SIMW703D	12/11/2018 8:51	54.5	45.4	0	0.1	0.01	0.06	84	89
SIMW703S	7/26/2018 9:00	43.5	40.6	0	15.9	1.13	1.11	135	135
SIMW703S	8/9/2018 8:37	45.2	38.7	0	16.1	1.24	1.22	136	136
SIMW703S	9/4/2018 10:59	46.6	37.9	0	15.5	1.47	1.53	133	133
SIMW703S	10/9/2018 14:12	43.8	40.3	0	15.9	1.12	0.5	134	135
SIMW703S	11/19/2018 18:51	50.5	44.3	0	5.2	0.87	1.13	132	133
SIMW703S	12/11/2018 8:54	51.8	44	0	4.2	0.58	0.73	139	139
SIMW707D	7/17/2018 10:56	54.4	45.5	0	0.1	0.02	0.04	111	110
SIMW707D	7/30/2018 9:57	54.5	45.2	0	0.3	0.06	0.11	113	113
SIMW707D	8/3/2018 13:44	54.2	45.6	0	0.2	0.02	0.03	112	113
SIMW707D	9/4/2018 13:03	55.4	44.5	0	0.1	0.08	0.11	114	114
SIMW707D	10/3/2018 7:20	55.3	44.5	0	0.2	0.15	0.06	107	108
SIMW707D	10/23/2018 9:55	54.5	45.4	0	0.1	2.75	2.62	111	108
SIMW707D	11/14/2018 14:15	55.4	44.5	0	0.1	1.95	1.91	107	107
SIMW707D	12/5/2018 15:22	54.8	45.1	0	0.1	2.02	2.13	105	106
SIMW709D	7/24/2018 10:12	44.7	37.1	0	18.2	1.01	0.75	121	122
SIMW709D	8/15/2018 10:53	49.5	30.3	0.7	19.5	1.35	1.1	118	118
SIMW709D	9/7/2018 10:07	46.1	37.6	0	16.3	1.38	1.16	119	118
SIMW709D	10/12/2018 8:10	47.7	37.6	0	14.7	1.2	0.96	117	117
SIMW709D	11/12/2018 13:17	49	37.8	0	13.2	1.21	0.65	115	116
SIMW709D	12/13/2018 8:06	50.8	38.1	0	11.1	1.29	1.58	117	118
SIMW709S	7/24/2018 10:18	49	39.7	0	11.3	2.69	2.15	132	132
SIMW709S	7/27/2018 13:08								
SIMW709S	7/27/2018 13:08	49.7	40.6	0	9.7	2.02	2.54	130	130
SIMW709S	8/15/2018 10:55	49.4	38.9	0.2	11.5	2.24	2.78	129	129
SIMW709S	9/7/2018 10:09	47.1	38.1	0	14.8	5.26	5.17	128	129
SIMW709S	10/12/2018 8:13	47.5	39	0	13.5	4.71	4.17	130	130
SIMW709S	11/12/2018 13:19	48.5	39.3	0	12.2	4.51	4.71	128	129
SIMW709S	12/13/2018 8:08	50.2	38.4	0	11.4	3.59	3.91	133	133
SIMW709S	12/18/2018 12:16								
SIMW709S	12/18/2018 12:16	48.7	35.7	0.6	15	4.58	4.4	130	131
SIMW802D	7/17/2018 9:44	52.6	45.6	0	1.8	0.03	0.06	99	102
SIMW802D	8/3/2018 12:51	47.2	44.1	0.1	8.6	0.03	0.01	105	106

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SIMW802D	8/28/2018 9:17	53.5	46.4	0	0.1	0.03	0.56	87	101
SIMW802D	9/4/2018 10:14	39.3	35	3.4	22.3	0.24	0.1	122	122
SIMW802D	10/3/2018 13:51	52	46.1	0	1.9	0.14	0.52	94	96
SIMW802D	11/13/2018 14:12	46.7	42.1	1.7	9.5	0.26	0.24	89	89
SIMW802D	12/5/2018 13:55	50.3	44.8	0.2	4.7	0.69	0.72	106	99
SIMW804D	7/17/2018 11:06	48.4	42.5	0	9.1	0.39	0.21	120	121
SIMW804D	7/30/2018 10:11	46	41.3	0	12.7	0.23	0.16	121	121
SIMW804D	8/3/2018 13:52	46.5	42.8	0	10.7	0.11	0.06	121	121
SIMW804D	8/28/2018 8:20	55.8	44.1	0	0.1	0.16	0.55	79	98
SIMW804D	9/4/2018 13:10	48	44.1	0	7.9	0.18	0.37	120	120
SIMW804D	10/3/2018 7:27	47.1	42.3	0	10.6	0.19	0.03	117	117
SIMW804D	11/14/2018 14:27	48.1	42.2	0	9.7	0.14	0.1	113	114
SIMW804D	12/5/2018 14:57	52.3	44.2	0	3.5	0.23	0.25	116	117
SIMW804S	7/17/2018 11:09	37.3	36.7	0	26	0.01	0.02	112	112
SIMW804S	7/30/2018 10:17	34.2	36	0	29.8	0.02	0.02	114	114
SIMW804S	8/3/2018 13:54	35.7	37.2	0	27.1	0.02	0	111	112
SIMW804S	8/28/2018 8:22	52.7	47	0.1	0.2	0.37	1.79	81	79
SIMW804S	9/4/2018 13:13	40.3	38.9	0	20.8	1.18	0.24	111	111
SIMW804S	10/3/2018 7:30	38.6	37.5	0	23.9	0.93	0.05	93	89
SIMW804S	11/14/2018 14:31	42.4	38.2	0	19.4	0.08	0.51	90	87
SIMW804S	12/5/2018 15:00	49.4	40.8	0	9.8	0.62	0.89	76	77
SIMW805D	7/27/2018 11:47	42	38.3	0.1	19.6	0.16	0.08	117	116
SIMW805D	8/14/2018 12:08	45.1	39	0	15.9	0.15	0.15	116	116
SIMW805D	9/4/2018 12:51	41.7	37.2	0	21.1	3.4	3.17	113	113
SIMW805D	10/12/2018 12:30	47	40	0	13	3.35	2.31	112	112
SIMW805D	11/20/2018 18:39	45.9	40.7	0	13.4	3.14	1.5	108	108
SIMW805D	12/17/2018 13:23	49.8	38.4	0.5	11.3	1.42	2.3	89	86
SIMW805S	7/27/2018 11:43	48.5	41.5	0.3	9.7	0.03	0.09	106	106
SIMW805S	8/14/2018 12:11	41.4	37.8	0.5	20.3	0.2	0.21	112	112
SIMW805S	9/4/2018 12:56	29.4	26.8	2.7	41.1	0.57	0.74	115	112
SIMW805S	10/12/2018 12:34	52.8	43.5	0	3.7	0.43	0.46	93	91
SIMW805S	11/20/2018 18:36	51.7	43.2	0	5.1	0.01	0.22	83	82
SIMW805S	12/17/2018 13:26	55.5	42.8	0	1.7	3.26	5.09	74	76
SIMW810D	7/24/2018 12:21	51.1	37.3	0	11.6	3.45	3.14	97	98
SIMW810D	8/17/2018 7:52	52.9	37.9	0	9.2	4.46	4.32	91	89
SIMW810D	9/12/2018 9:23	48.9	38	0	13.1	4.63	4.79	94	94
SIMW810D	10/12/2018 8:36	51.4	39	0	9.6	4.76	4.91	91	91
SIMW810D	11/12/2018 14:15	49.1	38.8	0	12.1	5.2	5.16	86	87
SIMW810D	12/13/2018 8:35	52.9	39	0	8.1	5.01	9.19	86	87
SIMW810S	7/24/2018 12:26	43	35.8	0	21.2	0.04	0.04	101	100
SIMW810S	8/17/2018 7:56	42	35.4	0	22.6	0.13	0.12	88	89
SIMW810S	8/27/2018 12:19	41.2	35.8	0	23	0.55	0.53	99	100
SIMW810S	9/12/2018 9:27	39.6	35.8	0	24.6	0.53	0.06	98	98
SIMW810S	10/12/2018 8:38	39.9	35.9	0	24.2	0.29	0.27	89	89
SIMW810S	11/12/2018 14:18	36.9	35.8	0	27.3	0.33	0.28	85	84
SIMW810S	12/13/2018 8:37	36.9	35.6	0	27.5	0.27	0.04	80	81
SIMW822D	7/20/2018 13:28	54.3	43	0	2.7	0.34	0.33	114	114
SIMW822D	8/1/2018 9:23	52.8	44.1	0	3.1	0.26	0.24	115	116
SIMW822D	9/4/2018 8:50	52	42.9	0	5.1	0.31	0.31	118	118
SIMW822D	10/8/2018 13:43	53.9	44	0	2.1	0.31	0.27	117	117
SIMW822D	11/16/2018 17:17	51.9	42.4	0.1	5.6	0.16	0.12	116	117
SIMW822D	11/20/2018 19:39	54.5	44.1	0	1.4	0.13	0.12	117	117
SIMW822D	12/10/2018 7:39	55.1	43.4	0	1.5	0.11	0.13	121	121
SIMW822S	7/20/2018 13:33	53.2	43	0	3.8	0.03	0.21	101	101
SIMW822S	8/1/2018 9:27	48	42.6	0	9.4	0.51	0.6	105	105

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SIMW822S	9/4/2018 8:57	38.5	36.5	0	25	0.31	0.01	108	108
SIMW822S	10/8/2018 13:48	47.4	41.6	0	11	11.41	4.7	108	108
SIMW822S	11/20/2018 19:42	53	43.3	0.3	3.4	1.22	1.19	80	82
SIMW822S	12/10/2018 7:43	50.2	40.8	1.3	7.7	4.93	4.97	89	90
SIMWO9RS	7/24/2018 12:09	54.5	38.7	0	6.8	2.19	2.16	119	120
SIMWO9RS	7/25/2018 14:48	52.7	38.5	0	8.8	1.87	1.86	118	118
SIMWO9RS	8/16/2018 11:15	52.8	38.8	0	8.4	2.4	2.07	117	117
SIMWO9RS	9/7/2018 10:18	53.1	39.5	0	7.4	1.92	2.01	117	117
SIMWO9RS	10/12/2018 8:26	55.2	39.8	0	5	2.02	1.79	116	116
SIMWO9RS	11/12/2018 14:09	56.2	39.9	0	3.9	1.01	1.45	114	115
SIMWO9RS	12/13/2018 8:15	57.2	40.1	0	2.7	1.17	1.07	117	118

APPENDIX C

Site Surface/Cover Inspection Integrity Logs

Monthly Cover Integrity Inspection Form

Facility	SVRC				
Date	07/31/18	Received	Manager		Date
Technician	D. Colgar	Repairs Complete	Manager		Date

Cell/Pad	Map Marker A		Cell/Pad	Map Marker B	
Description of finding and corrective action: Surface cracking in area around Sump A			Description of finding and corrective action: Errosion around bench roads		
Date	Identified	Repaired	Date	Identified	Repaired
Cell/Pad	Map Marker C		Cell/Pad		
Description of finding and corrective action: Errosion around bench roads			Description of finding and corrective action:		
Date	Identified	Repaired	Date	Identified	Repaired
Cell/Pad			Cell/Pad		
Description of finding and corrective action:			Description of finding and corrective action:		
Date	Identified	Repaired	Date	Identified	Repaired
Cell/Pad			Cell/Pad		
Description of finding and corrective action:			Description of finding and corrective action:		
Date	Identified	Repaired	Date	Identified	Repaired
Cell/Pad			Cell/Pad		
Description of finding and corrective action:			Description of finding and corrective action:		
Date	Identified	Repaired	Date	Identified	Repaired
Cell/Pad			Cell/Pad		
Description of finding and corrective action:			Description of finding and corrective action:		
Date	Identified	Repaired	Date	Identified	Repaired
Cell/Pad			Cell/Pad		
Description of finding and corrective action:			Description of finding and corrective action:		
Date	Identified	Repaired	Date	Identified	Repaired

SVLRC Cover Integrity Report

Month: August	Technician: D. Colyar	Manager:	Date:
Location: Map Marker A		Location: Map Marker B	
Description and corrective action: Heavy cracking in area around Sump A. Resolved by adding dirt + water		Description and corrective action: Bench road erosion. No action taken	
Identified: 07 / 18	Reapired: 08/18 by NT	Identified: 07 / 18	Repaired: N/A

Location: Map Marker C		Location: Map Marker D	
Description and corrective action: Bench road erosion. No action taken		Description and corrective action: Heavy surface cracking. Resolved by adding dirt + water	
Identified: 07 / 18	Repaired: N/A	Identified: 08/18	Repaired: 08/18 by NT

Location: GW-37R		Location: 1401A / 1104	
Description and corrective action: Surface cracking w/ measurable emissions. Resolved w/ fresh dirt and probe install		Description and corrective action: Surface cracking w/ measurable emissions. Resolved w/ fresh dirt + probe install	
Identified: 08/18	Repaired: 08/18 by NT	Identified: 08/18	Repaired: 08/18 by NT

Location: GW-1220		Location: GW-1780 D/S	
Description and corrective action: Surface cracking w/ measurable emissions. Resolved w/ fresh dirt + probe install		Description and corrective action: Surface cracking w/ measurable emissions. Resolved w/ fresh dirt + probe install	
Identified: 08/18	Repaired: 08/18 by NT	Identified: 08/18	Repaired: 08/18 by NT

Location:		Location:	
Description and corrective action:		Description and corrective action:	
Identified:	Repaired:	Identified:	Repaired:

Location:		Location:	
Description and corrective action:		Description and corrective action:	
Identified:	Repaired:	Identified:	Repaired:

SVLRC Cover Integrity Report

Month: September	Technician: D. Colyar	Manager:	Date:
Location: Map Marker A		Location: Map Marker B	
Description and corrective action: Bench road errosion No action taken.		Description and corrective action: Bench road erosion No action taken.	
Identified: 07/18	Reapired: N/A	Identified: 07/18	Repaired: N/A

Location: Cell 2-1 (Norten Face)		Location: Cell 2-1 (Western Face)	
Description and corrective action: Measurable background and surface emissions		Description and corrective action: Measurable background and surface emissions	
Identified: 09/24/18	Repaired: N/A (Initial)	Identified: 09/24/18	Repaired: N/A (Initial)

Location: GW-1009		Location: GW-1235A	
Description and corrective action: Mini-probe added to control emissions		Description and corrective action: Mini probe added to control emissions	
Identified: 09/04/18	Repaired: 09/11/18	Identified: 09/04/18	Repaired: 09/11/18

Location: GW-1002		Location: GW-822 D/S	
Description and corrective action: Mini-probe added to control emissions		Description and corrective action: Mini-probe added to control emissions	
Identified: 09/04/18	Repaired: 09/14/18	Identified: 09/04/18	Repaired: 09/14/18

Location: GW-1779		Location: GW-1566 D/S	
Description and corrective action: Mini-probe repaired		Description and corrective action: Strong odor and measurable emissions No action taken	
Identified: 09/04/18	Repaired: 09/14/18	Identified: 09/04/18	Repaired: N/A (Initial)

Location:		Location:	
Description and corrective action:		Description and corrective action:	
Identified:	Repaired:	Identified:	Repaired:

SVLRC Cover Integrity Report

Month: October	Technician: D. Colyar	Manager:	Date: 10/29/18
Location: Map Marker A		Location: Map Marker B	
Description and corrective action: Dirt added to the area		Description and corrective action: Dirt added to the area	
Identified: 07/18	Reapired: 10/18	Identified: 07/18	Repaired: 10/18

Location: Cell 2-1		Location: GW-1354	
Description and corrective action: Measurable background and surface emissions. GCCS expansion in progress.		Description and corrective action: Mini-probe added for emissions control local to the well casing.	
Identified: 09/18	Repaired: In Progress	Identified: 10/18	Repaired: 10/18

Location: GW-1783 D/S		Location: GW-1404A	
Description and corrective action: Mini-probe added for emissions control local to the well casing.		Description and corrective action: Mini-probe added for emissions control local to the well casing.	
Identified: 10/18	Repaired: 10/18	Identified: 10/18	Repaired: 10/18

Location: GW-1224		Location: GW-1568 D/S	
Description and corrective action: Mini-probe added for emissions control local to the well casing.		Description and corrective action: Mini-probe added for emissions control local to the well casing.	
Identified: 10/18	Repaired: 10/18	Identified: 10/18	Repaired: 10/18

Location: GW-1405A		Location:	
Description and corrective action: Mini-probe added for emissions control local to the well casing.		Description and corrective action:	
Identified: 10/18	Repaired: 10/18	Identified:	Repaired:

Location:		Location:	
Description and corrective action:		Description and corrective action:	
Identified:	Repaired:	Identified:	Repaired:

SVLRC Cover Integrity Report

Month: November	Technician: D. Colyar	Manager: M. Darr	Date: 11/30/18
Location: Map Marker A		Location: Map Marker B	
Description and corrective action: Bench errosion observed. Operations is working to re-grade the benches and add dirt to relevant areas. Progress temporarily halted due to rain.		Description and corrective action: Bench errosion observed. Operations is working to re-grade the benches and add dirt to relevant areas. Progress temporarily halted due to rain.	
Identified: 07/18	Repaired: In Progress	Identified: 07/18	Repaired: In Progress

Location: Map Marker C		Location: Map Marker D	
Description and corrective action: Surface cracking observed. Operations is working to re-grade the benches and add dirt to relevant areas. Progress temporarily halted due to rain.		Description and corrective action: Exposed temporary cover observed. Autoshredder is exposed under 6" vacuum line, flanked by dirt and greenwaste.	
Identified: 11/18	Repaired: Initial	Identified: 11/18	Repaired: In Progress

Location: Cell 2-1		Location: GW 1801-1808	
Description and corrective action: Expanded GCCS with 12 new collection wells with BECS. Tuning and well upgrades to resolve odor in progress.		Description and corrective action: New wells and BECS added to combat ongoing odor issues and to replace poor-performing wells.	
Identified: 09/18	Repaired: In Progress	Identified: 10/18	Repaired: 10/18

Location: GW-21		Location: GW-1221	
Description and corrective action: Well taken offline due to poor performance. Replaced with GW-1808.		Description and corrective action: Well taken offline due to poor performance. Replaced with GW-1801	
Identified: 10/18	Repaired: 10/18	Identified: 10/18	Repaired: 10/18

Location:		Location:	
Description and corrective action:		Description and corrective action:	
Identified:	Repaired:	Identified:	Repaired:

Location:		Location:	
Description and corrective action:		Description and corrective action:	
Identified:	Repaired:	Identified:	Repaired:

SVLRC Cover Integrity Report

Month: December	Technician: D. Colyar	Manager: M. Darr	Date: 12/26/2018
Location: Map Marker A		Location: Map Marker B	
Description and corrective action: Bench errosion observed. Operations added dirt and finished re-grading the area early in the month.		Description and corrective action: Bench errosion observed. Operations added dirt and finished re-grading the area early in the month.	
Identified: 07/18	Repaired: 12/18	Identified: 07/18	Repaired: 12/18

Location: Map Marker C		Location: Map Marker D	
Description and corrective action: Surface cracking observed. Operations added dirt and re-graded the area early in the month.		Description and corrective action: Exposed temporary cover observed. Autoshredder is exposed under 6" vacuum line, flanked by dirt and greenwaste. Will need to remove the lateral to allow for operations to finish the cover.	
Identified: 11/18	Repaired: 12/18	Identified: 11/18	Repaired: In Progress

Location: Map Marker E		Location: GW-1105	
Description and corrective action: Surface cracking observed with measurable emissions of 500ppm or greater. Resolved with additional dirt.		Description and corrective action: Surface hit of 500ppm or greater. Resolved with additional dirt.	
Identified: 12/18	Repaired: 12/18	Identified: 12/18	Repaired: 12/18

Location: Various		Location: Cell 2-1	
Description and corrective action: Added dirt to numerous wells that were showing surface cracking around the well casing. See wells 1009, 1235A, 1354, 1797, 1785, 1353, 37R, 1778D/S, 1780D/S, 1779, 1567D/S		Description and corrective action: Expanded GCCS with 12 new collection wells with BECS. Surface emissions resolved with tuning.	
Identified: 12/18	Repaired: 12/18	Identified: 09/18	Repaired: 12/18

Location:		Location:	
Description and corrective action:		Description and corrective action:	
Identified:	Repaired:	Identified:	Repaired:

Location:		Location:	
Description and corrective action:		Description and corrective action:	
Identified:	Repaired:	Identified:	Repaired:

APPENDIX D

Flare Shutdowns Greater Than One Hour

SIMI VALLEY LANDFILL
FLARE NO. 3 DOWNTIME LOG
July-December 2018

Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
1	x Shutdown Event x Startup Event x Malfunction Event	Flare	7/11/18 1:04 7/11/18 8:48	7/11/18 1:06 7/11/18 8:52	0.03 0.07	7.73	Compressor Failure	Nick T., Dustin C. & Collin P
2	x Shutdown Event x Startup Event Malfunction Event	Flare	7/13/18 7:22 7/13/18 12:22	7/13/18 7:24 7/13/18 12:26	0.03 0.07	5.00	Flare Cleaning	Nick T., Dustin C. & Collin P
3	x Shutdown Event x Startup Event Malfunction Event	Flare	7/16/18 7:22 7/16/18 12:03	7/16/18 7:24 7/16/18 12:07	0.03 0.07	4.68	Blower Repairs	Nick T., Dustin C. & Collin P
4	x Shutdown Event x Startup Event Malfunction Event	Flare	7/18/18 7:16 7/18/18 9:54	7/18/18 7:18 7/18/18 9:58	0.03 0.07	2.63	Blower Repairs	Nick T., Dustin C. & Collin P
5	x Shutdown Event x Startup Event x Malfunction Event	Flare	7/29/18 5:21 7/29/18 11:00	7/29/18 5:23 7/29/18 11:04	0.03 0.07	5.65	Compressor failure	Nick T., Dustin C. & Collin P
6	x Shutdown Event x Startup Event Malfunction Event	Flare	8/3/18 7:07 8/3/18 9:13	8/3/18 7:09 8/3/18 9:17	0.03 0.07	2.10	Flare Burner Cleaning	Nick T., Dustin C. & Collin P
7	x Shutdown Event x Startup Event Malfunction Event	Flare	8/5/18 7:26 8/5/18 15:58	8/5/18 7:28 8/5/18 16:02	0.03 0.07	8.53	Flare shutdown due to removal of Southern California Edison equipment	Nick T., Dustin C. & Collin P
8	x Shutdown Event x Startup Event Malfunction Event	Flare	8/8/18 7:10 8/8/18 9:23	8/8/18 7:12 8/8/18 9:27	0.03 0.07	2.22	Blower Repairs	Nick T., Dustin C. & Collin P
9	x Shutdown Event x Startup Event Malfunction Event	Flare	8/9/18 11:27 8/9/18 14:41	8/9/18 11:29 8/9/18 14:45	0.03 0.07	3.23	Installing New Compressor	Nick T., Dustin C. & Collin P

SIMI VALLEY LANDFILL
FLARE NO. 3 DOWNTIME LOG
July-December 2018

Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
10	x Shutdown Event x Startup Event Malfunction Event	Flare	8/26/18 9:21 8/26/18 12:40	8/26/18 9:23 8/26/18 12:44	0.03 0.07	3.32	SoCal Edison scheduled shutdown	Nick T., Dustin C. & Collin P
11	x Shutdown Event x Startup Event Malfunction Event	Flare	8/30/18 7:43 8/30/18 9:42	8/30/18 7:45 8/30/18 9:46	0.03 0.07	1.98	Sump Maintanence	Nick T., Dustin C. & Collin P
12	x Shutdown Event x Startup Event Malfunction Event	Flare	9/9/18 10:00 9/9/18 12:21	9/9/18 10:02 9/9/18 12:25	0.03 0.07	2.35	Flare shutdown due to scheduled power outage by EMS	Nick T., Dustin C. & Collin P
13	X Shutdown Event X Startup Event Malfunction Event	Flare	9/12/18 13:24 9/12/18 16:56	9/12/18 16:56 9/12/18 17:00	3.53 0.07	3.53	Air Dryer Install	Nick T., Dustin C. & Collin P
14	X Shutdown Event X Startup Event Malfunction Event	Flare	9/14/18 9:23 9/14/18 12:24	9/14/18 12:24 9/14/18 12:28	3.02 0.07	3.02	Innosepra Flare Tie-in	Nick T., Dustin C. & Collin P
15	x Shutdown Event x Startup Event x Malfunction Event	Flare	9/17/18 12:27 9/17/18 14:15	9/17/18 14:15 9/17/18 14:19	1.80 0.07	1.80	Power Surge	Nick T., Dustin C. & Collin P
16	X Shutdown Event X Startup Event Malfunction Event	Flare	9/21/18 6:52 9/21/18 10:50	9/21/18 10:50 9/21/18 10:54	3.97 0.07	3.97	Flare Clean	Nick T., Dustin C. & Collin P
17	X Shutdown Event X Startup Event X Malfunction Event	Flare	9/30/18 3:30 9/30/18 7:34	9/30/18 7:34 9/30/18 7:38	4.07 0.07	4.07	BL-104 Failure	Nick T., Dustin C. & Collin P
18	X Shutdown Event X Startup Event Malfunction Event	Flare	10/2/18 8:55 10/2/18 13:23	10/2/18 13:23 10/2/18 13:27	4.47 0.07	4.47	Flare Clean	Nick T., Dustin C. & Collin P
19	X Shutdown Event X Startup Event X Malfunction Event	Flare	10/10/18 6:42 10/10/18 9:54	10/10/18 9:54 10/10/18 9:58	3.20 0.07	3.20	CS-04 Failure	Nick T., Dustin C. & Collin P

SIMI VALLEY LANDFILL
FLARE NO. 3 DOWNTIME LOG
July-December 2018

Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
20	X Shutdown Event X Startup Event X Malfunction Event	Flare	10/15/18 7:10	10/15/18 12:37	5.45	5.45	CS-04 Failure	Nick T., Dustin C. & Collin P
			10/15/18 12:37	10/15/18 12:41	0.07			
21	X Shutdown Event X Startup Event X Malfunction Event	Flare	10/18/18 6:37	10/18/18 8:23	1.77	1.60	CS-04 Failure	Nick T., Dustin C. & Collin P
			10/18/18 8:13	10/18/18 8:17	0.07			
22	X Shutdown Event X Startup Event X Malfunction Event	Flare	10/19/18 6:30	10/19/18 10:48	4.30	4.30	CS-04 Failure/Flare Clean	Nick T., Dustin C. & Collin P
			10/19/18 10:48	10/19/18 10:52	0.07			
23	x Shutdown Event x Startup Event Malfunction Event	Flare	10/25/18 6:37	10/25/18 6:39	0.03	1.87	Flare and sump cleaning	Nick T., Dustin C. & Collin P
			10/25/18 8:29	10/25/18 8:33	0.07			
24	x Shutdown Event x Startup Event Malfunction Event	Flare	10/28/18 21:03	10/28/18 21:05	0.03	7.83	Edison cut power for line maintenance	Nick T., Dustin C. & Collin P
			10/29/18 4:53	10/29/18 4:57	0.07			
25	x Shutdown Event x Startup Event x Malfunction Event	Flare	11/3/18 11:52	11/3/18 11:54	0.03	2.33	Condensate sump failure	Nick T., Dustin C. & Collin P
			11/3/18 14:12	11/3/18 14:16	0.07			
26	X Shutdown Event X Startup Event X Malfunction Event	Flare	11/8/18 12:48	11/8/18 12:50	0.03	3.23	Power Outage	Nick T., Dustin C. & Collin P
			11/8/18 16:02	11/8/18 16:06	0.07			
27	X Shutdown Event X Startup Event X Malfunction Event	Flare	11/8/18 16:45	11/8/18 16:47	0.03	1.77	Power Surge	Nick T., Dustin C. & Collin P
			11/8/18 18:31	11/8/18 18:35	0.07			
28	X Shutdown Event X Startup Event X Malfunction Event	Flare	11/11/18 16:56	11/11/18 16:58	0.03	2.62	CS-04 Failure	Nick T., Dustin C. & Collin P
			11/11/18 19:33	11/11/18 19:37	0.07			
29	X Shutdown Event X Startup Event Malfunction Event	Flare	11/19/18 8:09	11/19/18 8:11	0.03	1.78	CS-04 Cleaning	Nick T., Dustin C. & Collin P
			11/19/18 9:56	11/19/18 10:00	0.07			

SIMI VALLEY LANDFILL
FLARE NO. 3 DOWNTIME LOG
July-December 2018

Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
30	X Shutdown Event X Startup Event X Malfunction Event	Flare	11/26/18 5:20 11/26/18 9:10	11/26/18 5:22 11/26/18 9:14	0.03 0.07	3.83	CS-04 Failure	Nick T., Dustin C. & Collin P
31	x Shutdown Event x Startup Event Malfunction Event	Flare	11/30/18 6:43 11/30/18 8:07	11/30/18 6:45 11/30/18 8:11	0.03 0.07	1.40	Flare Cleaning	Nick T., Dustin C. & Collin P
32	x Shutdown Event x Startup Event Malfunction Event	Flare	12/4/18 6:49 12/4/18 13:31	12/4/18 6:51 12/4/18 13:35	0.03 0.07	6.70	Enviroserv sump clean	Nick T., Dustin C. & Collin P
33	x Shutdown Event x Startup Event Malfunction Event	Flare	12/7/18 7:05 12/7/18 15:00	12/7/18 7:07 12/7/18 15:04	0.03 0.07	7.92	Flare Cleaning	Nick T., Dustin C. & Collin P
34	x Shutdown Event x Startup Event x Malfunction Event	Flare	12/12/18 6:50 12/12/18 10:03	12/12/18 6:52 12/12/18 10:07	0.03 0.07	3.22	Flame Failure	Nick T., Dustin C. & Collin P
35	x Shutdown Event x Startup Event Malfunction Event	Flare	12/27/18 8:12 12/27/18 10:12	12/27/18 8:14 12/27/18 10:16	0.03 0.07	2.00	Condensate Injection Install	Nick T., Dustin C. & Collin P

APPENDIX E

Surface Emissions Monitoring Reports

WASTE MANAGEMENT

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

October 30, 2018

Mr. Scott Tignac
2801 Madera Road
Simi Valley, California 93065

Third Quarter 2018 Surface Emissions and Component Leak Monitoring Report for the Simi Valley Landfill and Recycling Center

Dear Mr. Tignac:

This monitoring report for the **"Simi Valley Landfill and Recycling Center (SVLRC)"** contains the results of the Third Quarter 2018 Integrated and Instantaneous Surface Emissions Monitoring (SEM) and Component Leak Monitoring. Initial surface emissions monitoring was performed by Roberts Environmental Services, LLC. (RES). Re-monitoring of site-wide surface emissions and component leak monitoring was also conducted by RES personnel.

APPLICABLE REQUIREMENTS

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

Surface Emission Monitoring (SEM)

- California Code of Regulations (CCR) Title 17, Subchapter 10, Article 4, Subarticle 6, §95460 to §95476, known as the Assembly Bill 32 (AB32) landfill methane rule (LMR).
- New Source Performance Standard (NSPS), Title 40 of the Code of Federal Regulations (CFR) §60.755 (c) and (d), 40 CFR 60, Appendix A Method 21, promulgated by the United States Environmental Protection Agency (USEPA).
- Ventura County Air Pollution Control District (VCAPCD) Rule 74.17.1 (Municipal Solid Waste Landfills)

Component Leak

- California Code of Regulations (CCR) Title 17, Subchapter 10, Article 4, Subarticle 6, §95460 to §95476, known as the Assembly Bill 32 (AB32) landfill methane rule (LMR).

SVLRC Plan and Alternative Compliance Measures

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

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

PROCEDURES

General

The surface of the SVLRC disposal area has been divided into ninety-six (96), (approximately) 50,000 square foot monitoring grids. The entire landfill surface is monitored with the exception of active portions of the Landfill, slope areas, and as requested in the approved ACO, areas containing only asbestos-containing waste, inert waste and/or non-decomposable waste which are excluded for safety as allowed by CCR Title 17 §95466.

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

Instantaneous Surface Emissions Monitoring

The Instantaneous SEM was conducted using a Toxic Vapor Analyzer (TVA) 1000 flame ionization detector (FID), which was calibrated to 500 parts per million by volume (ppmv) methane, which meets or exceeds all guidelines set forth in the CCR Title 17 §95471(a). The FID was calibrated prior to use in accordance with the United States Environmental Protection Agency (USEPA) Method 21 requirements. The Instantaneous SEM procedures followed the requirements of 40 CFR 60.755 (c) and (d), CCR Title 17 §95471(c)(2), and VCAPCD Rule 74.1.7.

RES personnel walked the surface of the landfill on a grid-by-grid basis with the wand tip held at 3 inches from the landfill surface. While sampling the grid, the technicians also checked any surface impoundments (wells or otherwise) for leaks. Technicians also checked any surface cracks, seeps, or other areas that show evidence of surface emissions (odors or distressed vegetation). Active and sloped areas excluded for safety were documented on field data sheets and maps.

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

- Re-monitoring shall be conducted within 10 days of the initial exceedance.
    - If the re-monitoring event shows the exceedance is corrected, the location shall be re-monitored within 1 month of the initial exceedance.
    - If the 1-month re-monitoring event shows the location is still corrected, all re-monitoring requirements have been completed.
- If either the first 10-day or 1-month re-monitoring events show a second exceedance, additional corrective actions shall be completed and a second re-monitoring event shall be conducted within 10 days of the second exceedance.
- If the second 10-day re-monitoring event shows the second exceedance is corrected, the location shall be re-monitored within 1 month of the initial exceedance. If the 1-month re-monitoring event shows the area is still corrected, monitoring requirements have been completed.
- If any location shows three exceedances, an additional well shall be installed within 120 days of the initial exceedance.

Integrated Surface Emissions Monitoring

The Integrated surface monitoring was conducted using a TVA 1000 calibrated to 25 ppmv for the integrated monitoring, which meets or exceeds all guidelines set forth in the CCR Title 17 §95471(a). The field technician traversed the grid walking path over a continuous 25-minute period using the TVA 1000 held at 3 inches above the landfill surface. The Integrated monitoring procedures followed the requirements of CCR Title 17 §95471(c)(2).

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

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

- If either the first 10-day re-monitoring event shows a second grid exceedance, additional corrective actions shall be completed and a second re-monitoring event shall be conducted within 10 days of the second exceedance.

- If the second 10-day re-monitoring event shows the second exceedance is corrected, all re-monitoring requirements have been completed.

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

Component Leak Monitoring Procedures

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

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

THIRD QUARTER SEM AND COMPONENT LEAK RESULTS

The following is a summary of the SEM and Component leak monitoring results completed during the Third Quarter 2018.

Instantaneous Surface Emission Monitoring Results

The Instantaneous surface monitoring was performed on August 22, 2018 in accordance with the NSPS, Rule 74.1.17, CCR Title 17 §95469 and ACO. Results and data from the monitoring are presented in Attachment A.

Initial Monitoring Event Exceedances of 500 ppmv

There were eleven (11) exceedances of 500 ppmv as methane detected during the initial monitoring event conducted on August 22, 2018. RES personnel remediated the locations, and the following re-monitoring was conducted as described below.

First Ten-Day Re-Monitoring Results

RES personnel performed the first ten-day re-monitoring event on August 30, 2018. No exceedances were observed during the first ten-day re-monitoring event.

Thirty-Day Re-Monitoring Results

RES personnel performed the thirty-day monitoring event on September 20, 2018. No exceedances were observed during the 30-day re-monitoring event.

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

There were zero (0) readings between 200 ppmv and 499 ppmv, measured as methane detected during the initial monitoring event on August 22, 2018. Pursuant to CCR Title 17 §95471(c), instantaneous surface emissions exceeding 200 ppmv but below 500 ppmv are required to be recorded.

Integrated Surface Emissions Monitoring Results

The Integrated surface sampling (ISS) was performed on August 23, 2018 in accordance with the ACO, requirements outlined in CCR Title 17 §95469, and VCAPCD Rule 74.1.17. See Attachment B for details.

Initial Monitoring Event Exceedances of 25 ppmv

There were two (2) grids with an exceedance above 25 ppmv as methane detected during the initial monitoring events conducted on August 23, 2018.

Ten-Day Re-Monitoring Results

RES personnel performed the ten-day re-monitoring event on August 30, 2018. No exceedances were observed during the ten-day re-monitoring event.

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

Component Leak Monitoring Results

Component leak monitoring was conducted per the applicable requirements on August 23, 2018. There was zero (0) locations with a component leak detection of greater than 500 ppmv. See Attachment C for details.

WEATHER CONDITIONS

Wind Speed Conductions during the Surface Emission Monitoring Events

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

Precipitation Requirements

Per the SVLRC's ACO, the initial monitoring event was carefully scheduled so that it could be conducted in compliance with the precipitation requirements (no measurable precipitation within 24 hours). Re-monitoring events are required to adhere to strict timelines. Any conflicts with precipitation requirements are discussed in the results section of this document.

EQUIPMENT CALIBRATION

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

All analyzers were calibrated prior to use with required response time and precision related instrument checks. Calibration records include the following: One time response time test record; One time response factor determination for methane; Calibration Precision test records (test to be performed every 3 months); and Daily Instrument Calibration and Background test records for

each gas meter that was used during the quarterly monitoring event. The calibration log records are included in Attachment E.

All monitoring was completed in accordance with the applicable regulatory requirements or approved alternatives. If you have any questions regarding this report, please do not hesitate to contact the undersigned at (510) 613-2165.

Thank you,
Waste Management

Collin Pavelchik
Environmental Protection Air Quality Specialist

Attachment A – Instantaneous Surface Emission Monitoring Event Records

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

Attachment B – Integrated Surface Emission Monitoring Event Records

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

Attachment C – Component Leak Monitoring Event Records

- Component Leak Exceedances and Monitoring Logs

Attachment D – Weather Station Data

- Strip Chart Data and Legend

Attachment E – Calibration Records

- Instrument and Gas Calibration Records

Attachment A

Instantaneous Surface Emission Monitoring Event Records

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Michael O'Brien, Jim Redden, Shawn Hershey, Mike Meyer, Jim KlineSmith

Cal. Gas Exp. Date: 6/4/19

Date: 8 22 18 Instrument Used: TVA1000 Grid Spacing: 25FT

Temperature: 73° Precip: 0 Upwind BG: 1 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
1	MO	0800	0815	6	4	5	4	
2	SH	0800	0815	8	4	5	4	
3	Tk	0800	0815	4	4	5	4	
4	JR	0800	0815	4	4	5	4	
5	mm	0800	0815	5	4	5	4	
6	MO	0815	0830	6	4	5	4	
7	SH	0815	0830	5	4	5	4	
8	Tk	0815	0830	10	4	5	4	
9	JR	0815	0830	9,000	4	5	4	SURFACE
10	mm	0815	0830	36	4	5	4	
13	MO	0830	0845	42	3	4	4	
14	SH	0830	0845	16	3	4	4	
15	Tk	0830	0845	15	3	4	4	
16	JR	0830	0845	15	3	4	4	
17	mm	0830	0845	38	3	4	4	
18	MO	0845	0900	54	4	6	4	
19	SH	0845	0900	7	4	6	4	
20	Tk	0845	0900	24	4	6	4	
21	JR	0845	0900	17	4	6	4	
22	mm	0815	0900	8	4	6	4	
23	MO	0900	0915	23	4	6	4	
24	SH	0900	0915	30	4	6	4	
25	Tk	0900	0915	66	4	6	4	
26	JR	0900	0915	35	4	6	4	
27	mm	0900	0915	84	4	6	4	
28	MO	0915	0930	47	4	6	4	
29	SH	0915	0930	54	4	6	4	
30	Tk	0915	0930	60	4	6	4	
31	JR	0915	0930	10,000	4	6	4	unmarked/well, SURFACE
32	mm	0915	0930	81	4	6	4	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Michael Orue | Jim Redden
Shawn Hershey | Mike Meyer
Jim Kline Smith

Cal. Gas Exp. Date: 6-4-19

Date: 8-22-18 Instrument Used: TVA1000 Grid Spacing: 25ft

Temperature: 75° Precip: 0 Upwind BG: 1 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
33	MO	0930	0945	700	3	4	7	Well 1220, Surface
34	SH	0930	0945	818	3	4	7	Well 1778S, [illegible]
35	TK	0930	0945	34	3	4	7	
36	JR	0930	0945	34	3	4	7	
37	MM	0930	0945	40	3	4	7	
38	MO	0945	1000	55	4	6	8	
39	SH	0945	1000	5	4	6	8	
40	TK	0945	1000	6	4	6	8	
41	JR	0945	1000	5	4	6	8	
42	MM	0945	1000	5	4	6	8	
43	MO	1000	1015	6	4	5	9	
44	SH	1000	1015	5	4	5	9	
45	TK	1000	1015	32	4	5	9	
46	JR	1000	1015	36	4	5	9	
47	MM	1000	1015	49	4	5	9	
48	MO	1015	1030	9,000	4	6	9	Surface
49	SH	1015	1030	52	4	6	9	
50	TK	1015	1030	19	4	6	9	
51	JR	1015	1030	6	4	6	9	
52	MM	1015	1030	5	4	6	9	
53	MO	1030	1045	3	4	8	8	
54	SH	1030	1045	4	4	8	8	
55	TK	1030	1045	14	4	8	8	
56	JR	1030	1045	25	4	8	8	
57	MM	1030	1045	6	4	8	8	
58	MO	1045	1100	5	4	8	8	
59	SH	1045	1100	5	4	8	8	
60	TK	1045	1100	3	4	8	8	
61	JR	1045	1100	6	4	8	8	
62	MM	1045	1100	12	4	8	8	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Michael OR?? | Jim Reddin
Shawn Horsley | Mike Mayer
Tim Kline Smith | Cal. Gas Exp. Date: 6/4/19

Date: 8-22-18 Instrument Used: TVA1000 Grid Spacing: 25FT

Temperature: 83° Precip: 0 Upwind BG: 1 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	REMARKS
63	MO	1200	1215	6	4	10	9	
64	SH	1200	1215	3	4	10	9	
65	TK	1200	1215	2	4	10	9	
66	JR	1200	1215	4	4	10	9	
67	MM	1200	1215	3	4	10	9	
68	MO	1215	1230	4	4	10	9	
69	SH	1215	1230	6	4	10	9	
70	TK	1215	1230	6	4	10	9	
71	JR	1215	1230	4	4	10	9	
72	MM	1215	1230	2	4	10	9	
73	MO	1230	1245	8	4	10	9	
74	SH	1230	1245	6	4	10	9	
75	TK	1230	1245	5	4	10	9	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Michael ORR _____ _____ _____

_____ _____ _____

_____ _____ Cal. Gas Exp. Date: _____

Date: 8-22-18 Instrument Used: _____ Grid Spacing: _____

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

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
11								ASPHALT SHEKAK
12								↓
76								Active TRASH
77								
78								
79								
80								
81								
82								
83								
84								
85								
86								
87								
88								
89								
90								
91								
92								
93								
94								
95								
96								

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 1

Waste Management Instantaneous Landfill Surface Emissions Monitoring Exceedance and Monitoring Logs

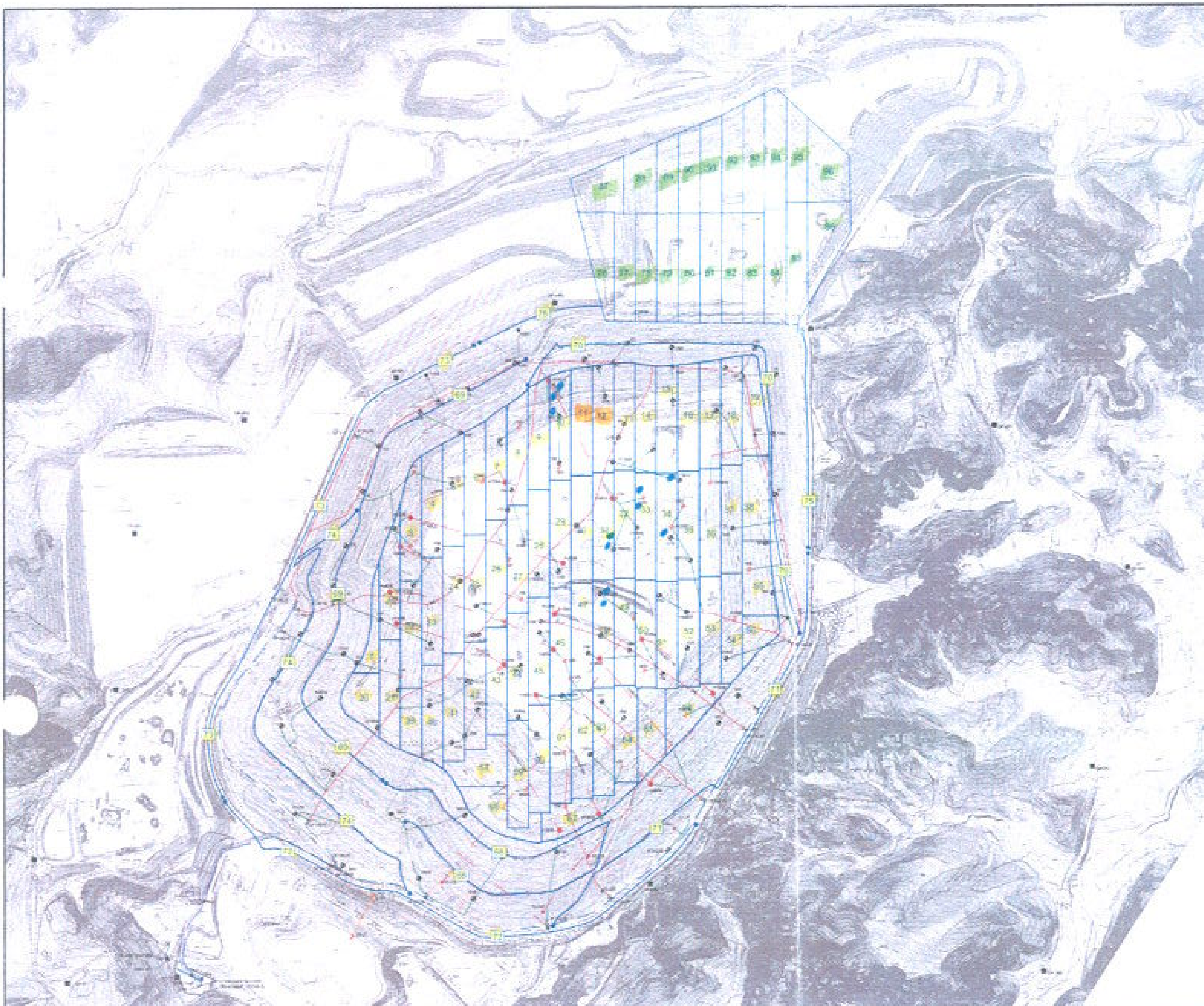
Quarter: 3rd

Initial Monitoring Performed By: Michael Ortiz

Follow-up Monitoring Performed By: ED STEVENS

Landfill Name: Simi Valley

Initial Monitoring Event				Corrective Action within 5 Days		1st 10-Day Follow-Up			1st 30-Day Follow-Up			Comments
Grid #	Flag #	Monitoring Date	Field Reading	Repair Date	Action taken to repair Exceedance	Monitoring Date	No Exceed. <500 ppm	Exceed. >500 ppm	Monitoring Date	No Exceed. <500 ppm	Exceed. >500 ppm	
34	Y1	8-22-18	670		DIRT / WATER ADDED & SURFACE EXTRACTION PUMPS (13 ECs)	8-30-18	408		9-20-18	452		unmarked well
34	Y2		818				327			408		well 17785
31	Y21		10,000				436			312		unmarked well
31	Y22		700				68.18			84		SURFACE
10	Y23		9,000				414			438		SURFACE
10	Y24		1,400				160			216		SURFACE
10	Y25		3,000				176			108		SURFACE
48	Y26		600				197			894		SURFACE
48	Y27		9,000				303			209		SURFACE
33	Y81		500				49.23			78		SURFACE
33	Y82		700				394			321		well 1220



GRAPHIC SCALE

0 450 900

SCALE IN FEET

N

SYMBOL LEGEND

- ACTIVE WELLS
- WELL WITH TEMPERATURE VARIANCE
- SHALLOW WELL
- HORIZONTAL COLLECTOR WELLHEAD
- CONDENSATE SUMP
- REMOTE WELLHEAD
- MONITORING PROBE
- VALVE
- SAMPLE PORT
- DECOMMISSIONED WELL
- DECOMMISSIONED MONITORING PROBE
- 24" HEADER
- 18" HEADER
- 12" HEADER
- 8" LATERAL
- 6" LATERAL
- 4" LATERAL
- HORIZONTAL COLLECTOR - SOLID
- HORIZONTAL COLLECTOR - PERFORATED
- BELOW GRADE CONDENSATE FORCEMAIN
- COMPRESSED AIR LINE

3rd QTR
2018
TVA

- GRIDS Sampled
- AREA Exceeding 500ppm
- Asphalt Stock pile
- Pilot TRAin

NOTES

1. AERIAL TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING DATED 2-28-18
2. EXISTING GCCS AS-BUILTS DATED 4-11-18
3. BOUNDARY DATA IS PROVIDED BY WM AND NAMED "ACAD JTD BOUNDARIES WITH 3.5 SUBPHASES"

NO.	REVISION	DATE

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS

CLIENT: WM

SHEET TITLE: SIMI VALLEY LANDFILL SEM MAP

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

DATE: 4-11-2018

SCALE: 1"=450'

DRAWING NO.: 1 of 1

Attachment B

Integrated Surface Emission Monitoring Event Records

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Michael oRuA   Jim Redden
Shawn Hershey   Mike meyer
TimKthe Smith

Cal. Gas Exp. Date: 4/17/19

Date: 8-22-18 Instrument Used: ISS1-5 Grid Spacing: 25ft

Temperature: 82° Precip: 0 Upwind BG: 1 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
1	MO	1245	1310	3	333	4	8	11	
2	SH	1245	1310	5	↓	4	8	11	
3	TK	1245	1310	5	↓	4	8	11	
4	JR	1245	1310	5	↓	4	8	11	
5	mm	1245	1310	3	↓	4	8	11	
6	MO	1310	1335	4	↓	4	10	10	
7	SH	1310	1335	5	↓	4	10	10	
8	TK	1310	1335	6	↓	4	10	10	
9	JR	1310	1335	5	↓	4	10	10	
10	mM	1310	1335	6	↓	4	10	10	

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 1

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Michael O'Dell, Jim Redden, Shawn Hershey, Mike Meyer, Tim Kline-Smith

Cal. Gas Exp. Date: 4/17/19

Date: 8-23-18 Instrument Used: TVA 1000 Grid Spacing: 25 FT

Temperature: 73° Precip: 0 Upwind BG: 1 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
13	MO	0800	0825	8	333	4	5	12	
14	SH	0800	0825	6		4	5	12	
15	TK	0800	0825	5		4	5	12	
16	JR	0800	0825	8		4	5	12	
17	MM	0800	0825	10		4	5	12	
18	MO	0825	0850	6		4	5	12	
19	SH	0825	0850	8		4	5	12	
20	TK	0825	0850	5		4	5	12	
21	JR	0825	0850	8		4	5	12	
22	MM	0825	0850	6		4	5	12	
23	MO	0850	0915	5		4	5	10	
24	SH	0850	0915	3		4	5	10	
25	TK	0850	0915	6		4	5	10	
26	JR	0850	0915	4		4	5	10	
27	MM	0850	0915	12		4	5	10	
28	MO	0915	0940	10		4	5	11	
29	SH	0915	0940	12		4	5	11	
30	TK	0915	0940	15		4	5	11	
31	JR	0915	0940	15		4	5	11	
32	MM	0915	0940	18		4	5	11	
33	MO	0940	1005	28		3	4	12	Exceedance
34	SH	0940	1005	30		3	4	12	Exceedance
35	TK	0940	1005	23		3	4	12	
36	JR	0940	1005	18		3	4	12	
37	MM	0940	1005	6		3	4	12	
38	MO	1005	1030	5		4	5	12	
39	SH	1005	1030	3		4	5	12	
40	TK	1005	1030	6		4	5	12	
41	JR	1005	1030	5		4	5	12	
42	MM	1005	1030	13		4	5	12	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Michael Orue; Jim Redden; Shaun Hershey; Mike Meyer; Tim Kleinsmith

Cal. Gas Exp. Date: 4/17/19

Date: 8-23-18 Instrument Used: ISSI-5 Grid Spacing: 25ft

Temperature: 81° Precip: 0 Upwind BG: 1 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	REMARKS
43	MO	1030	1055	6	333	4	5	12	
45	SH	1030	1055	5		4	5	12	
46	TK	1030	1055	3		4	5	12	
47	JR	1030	1055	2		4	5	12	
48	MM	1030	1055	4		4	5	12	
49	MO	1155	1220	5		4	6	11	
50	SH	1155	1220	5		4	6	11	
51	TK	1155	1220	5		4	6	11	
52	JR	1155	1220	3		4	6	11	
53	MM	1155	1220	12		4	6	11	
54	MO	1220	1245	4		4	10	12	
55	SH	1220	1245	5		4	10	12	
56	TK	1220	1245	6		4	10	12	
57	JR	1220	1245	5		4	10	12	
58	MM	1220	1245	8		4	10	12	
59	MO	1245	1310	6		4	10	11	
60	SH	1245	1310	5		4	10	11	
61	TK	1245	1310	3		4	10	11	
62	JR	1245	1310	6		4	10	11	
63	MM	1245	1310	5		4	10	11	
64	MO	1310	1335	8		4	9	11	
65	SH	1310	1335	8		4	9	11	
66	TK	1310	1335	5		4	9	11	
67	JR	1310	1335	6		4	9	11	
68	MM	1310	1335	5		4	9	11	
69	MO	1335	1400	3		4	10	11	
70	SH	1335	1400	6		4	10	11	
71	TK	1335	1400	5		4	10	11	
72	JR	1335	1400	3		4	10	11	
73	MM	1335	1400	8		4	10	11	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Michael Ofer / Jim Redden / Shawn Horshey / Mike Meyer / Tim Kelmosulter

Cal. Gas Exp. Date: 4/17/19

Date: 8-23-18 Instrument Used: ISS 1-5 Grid Spacing: 25 FT

Temperature: 89° Precip: 0 Upwind BG: 1 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	REMARKS
74	MO	1400	1425	6	333	4	13	11	
75	SH	1400	1425	5	↓	4	13	4	
44	TK	1400	1425	7	↓	4	13	11	

Attach Calibration Sheet
Attach site map showing grid ID

Page 3 of 3

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Mulvaney _____ _____ _____

_____ _____ _____

_____ _____ Cal. Gas Exp. Date: _____

Date: 8-23-18 Instrument Used: I Grid Spacing: _____

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

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
11									Asphalt Stockpile
12									↓
76									Active TRASH
77									
78									
79									
80									
81									
82									
83									
84									
85									
86									
87									
88									
89									
90									
91									
92									
93									
94									
95									
96									↓

Attach Calibration Sheet
Attach site map showing grid ID

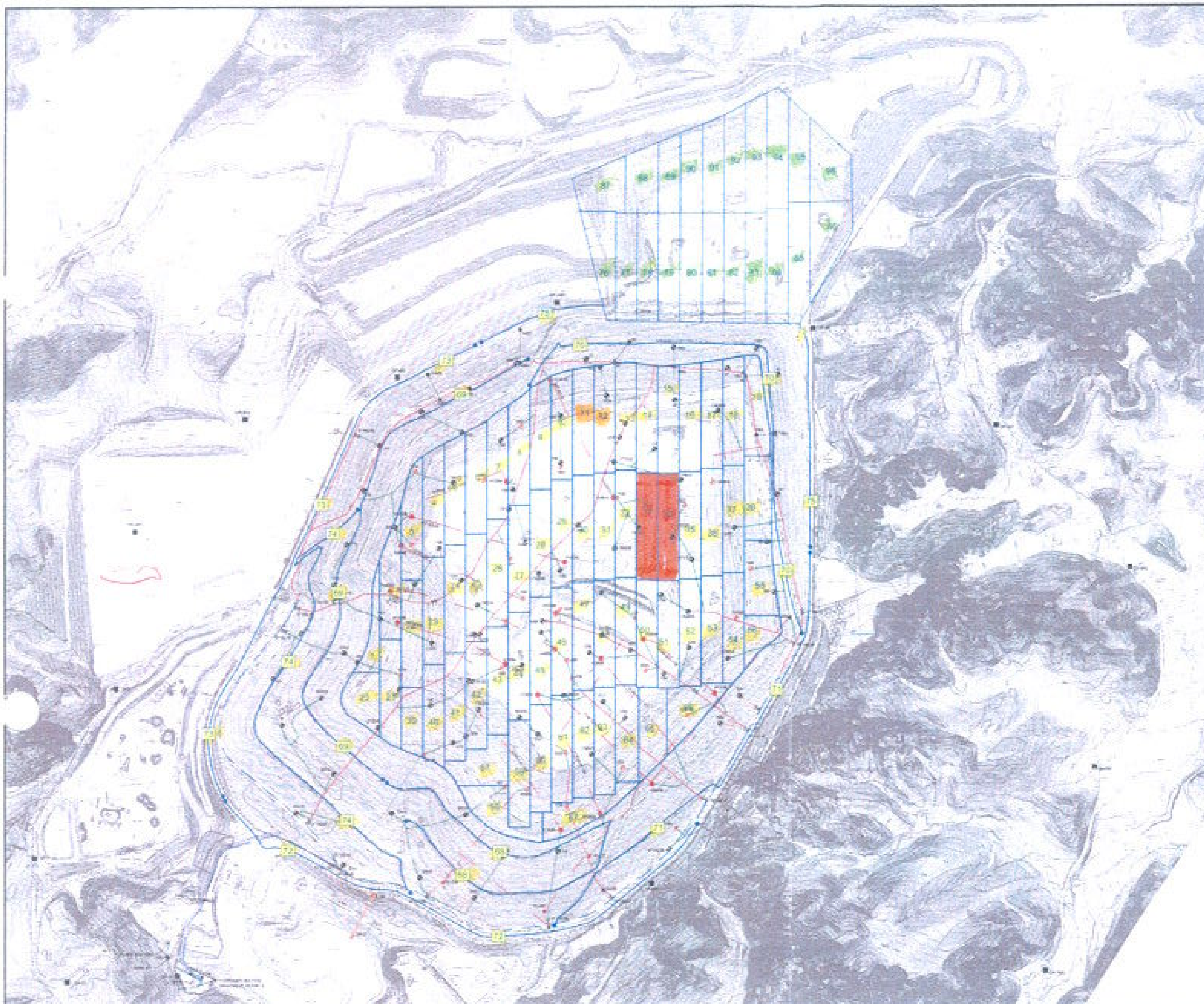
Page 1 of 1

Integrated Surface Sampling
10 Day Exceedances and Monitoring Log

Site: Simi Valley

Page | of | Pages

Quarter / Year:	3rd / 2018	3RD QTR 2018							
Technician:	Michael Ortiz	ED STEVENS							
Instrument:	TVA1000	TVA 1000							
Calibration Standard:	25PPM	25PPM							
Initial Monitoring Event			**First Re-Monitoring Event – 10 Days**				**Second Re-Monitoring Event – 10 Days**			
Grid Number	Field Reading (ppm)	Date Monitored	Remedial Work	Date Monitored	No Excd. <25 ppm	Excd. >25 ppm	Remedial Work	Date Monitored	No Excd. <25 ppm	Excd. >25 ppm
33	28	8/23/18	DIRT/WATER	8-30-18	21					
34	30	↓	ADDED 6	8-30-18	23					
			SURFACE EXPANSION							
			MONES (BECS							



N

GRAPHIC SCALE

0 450 900

SCALE IN FEET

SYMBOL LEGEND

- ACTIVE WELLS
- WELL WITH TEMPERATURE VARIANCE
- SHALLOW WELL
- HORIZONTAL COLLECTOR WELLHEAD
- CONDENSATE SUMP
- REMOTE WELLHEAD
- MONITORING PROBE
- VALVE
- SAMPLE PORT
- DECOMMISSIONED WELL
- DECOMMISSIONED MONITORING PROBE
- 24" HEADER
- 18" HEADER
- 12" HEADER
- 8" LATERAL
- 6" LATERAL
- 4" LATERAL
- HORIZONTAL COLLECTOR - SOLID
- HORIZONTAL COLLECTOR - PERFORATED
- BELOW GRADE CONDENSATE FORCEMAIN
- COMPRESSED AIR LINE

3rd QTR
2018
Integrated

- GRIDS Sampled
- AREA Exceeding 25 ppm
- asphalt Stockpile
- Active TRASH

NOTES:

1. AERIAL TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING, DATED 2-28-18
2. EXISTING GCCS AS-BUILTS DATED 4-11-18
3. BOUNDARY DATA IS PROVIDED BY WM AND NAMED "ACAD JTD BOUNDARIES WITH 3-5 SUBPHASES"

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS

CLIENT: WM

SHEET TITLE: SIMI VALLEY LANDFILL ISEM MAP

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

NO.	REVISION	DATE

DATE: 4-11-2018

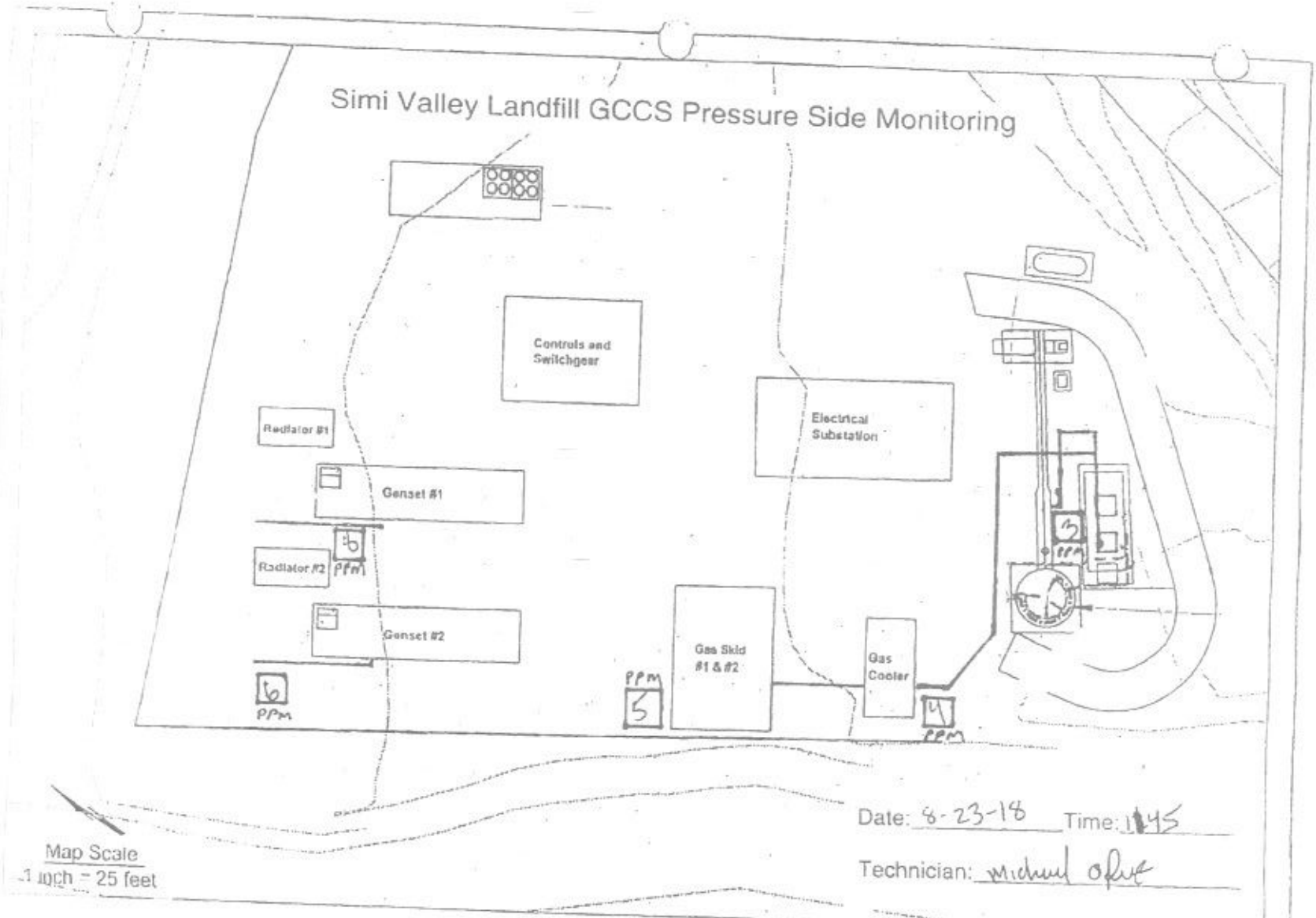
SCALE: 1"=450'

DRAWING NO.: 1 of 1

Attachment C

Component Leak Monitoring Event Records

Simi Valley Landfill GCCS Pressure Side Monitoring



Map Scale
1 inch = 25 feet

Date: 8-23-18 Time: 1145

Technician: michael ofre

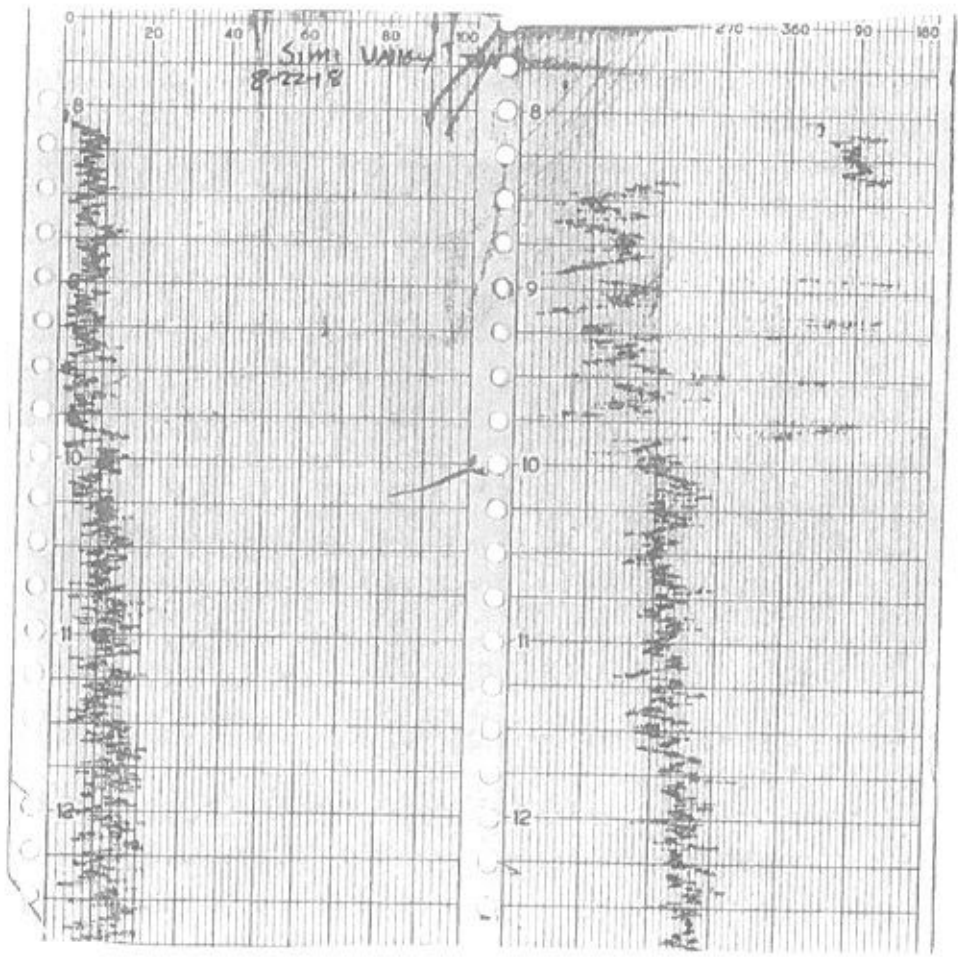
Source: Waste Management of California

Note: Monitor all flanges and above ground connections. Write the highest reading in the box labeled ppm. Draw a circle around the location of the leak.

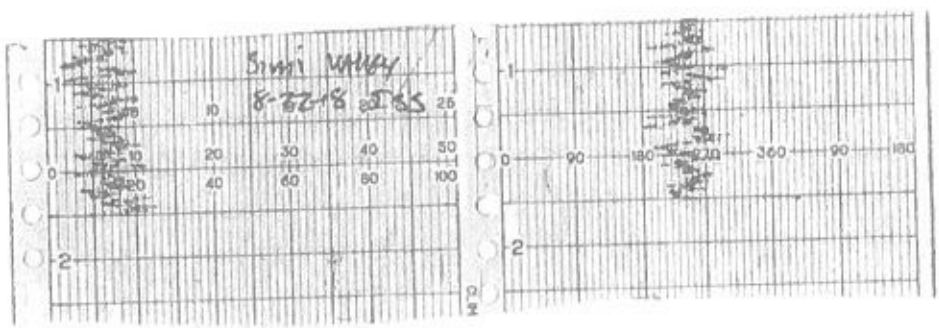
Attachment D

Weather Station Data

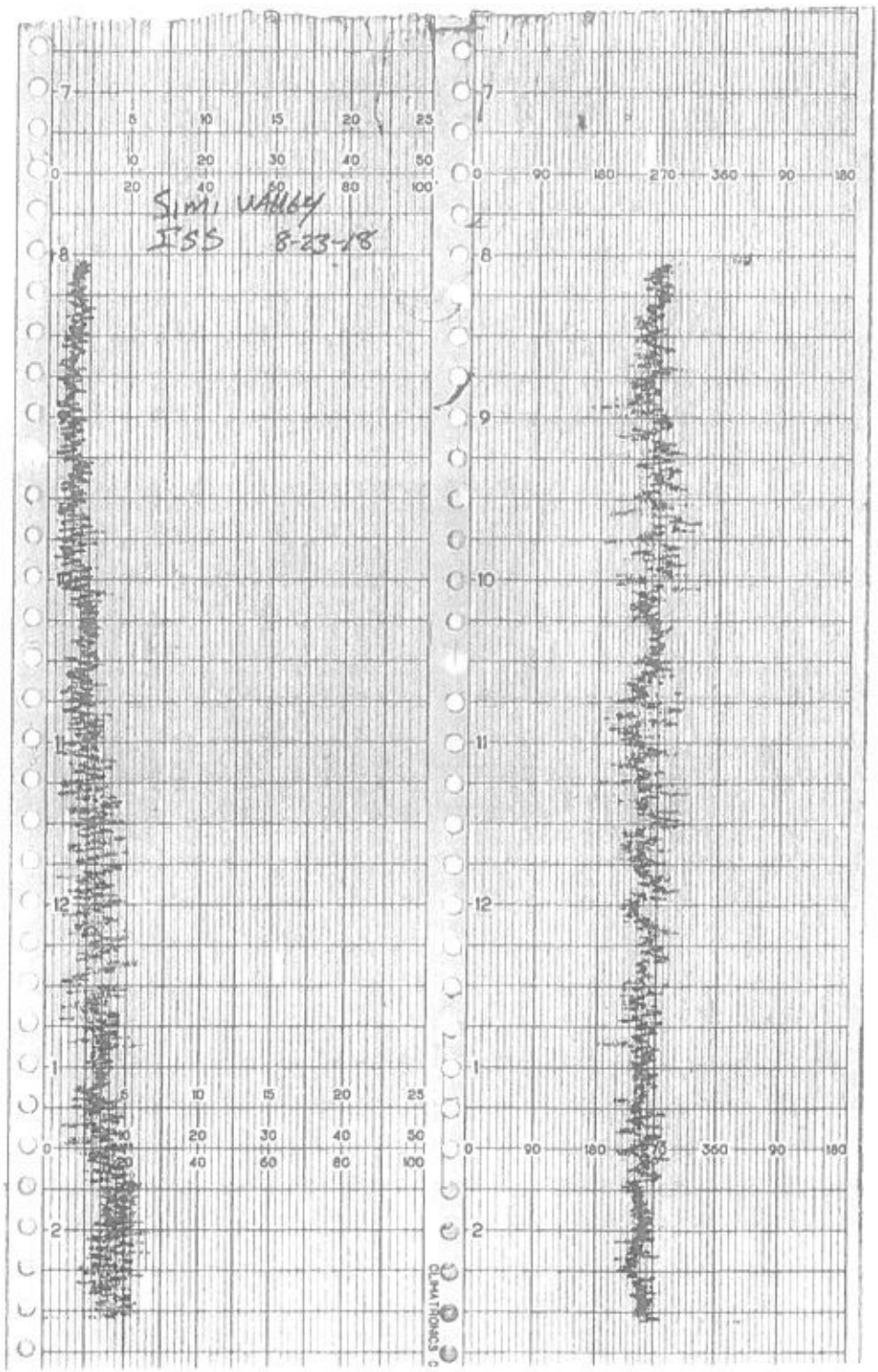
WIND SPEED & DIRECTION CHART ROLL



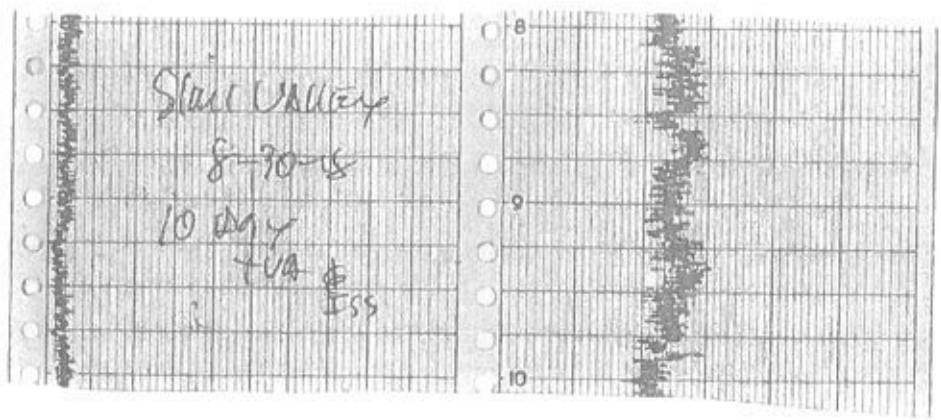
WIND SPEED & DIRECTION CHART ROLL



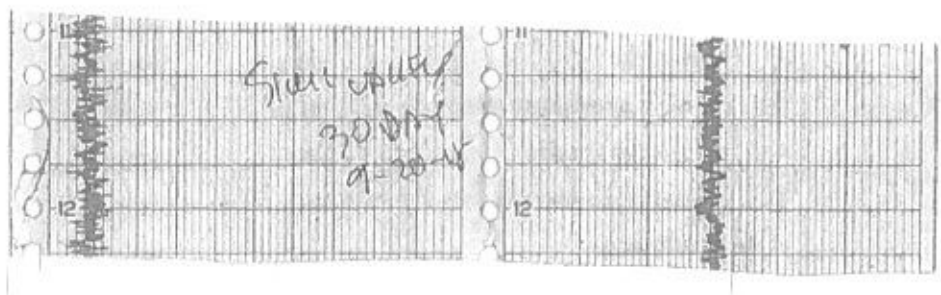
WIND SPEED & DIRECTION CHART ROLL



WIND SPEED & DIRECTION CHART ROLL



WIND SPEED & DIRECTION CHART ROLL



RES
Environmental Inc.

16-POINT WIND DIRECTION INDEX

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

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

Attachment E

Calibration Records

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 1 SERIAL #: 16320532

MONITORING DATE: 8-22-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 507 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	507 ppm	450 ppm	18
#2	585 ppm	450 ppm	15
#3	507 ppm	450 ppm	18
Calculate Response Time (1+2+3) / 3			17 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.93 ppm	507 ppm	7
#2	0.74 ppm	505 ppm	5
#3	0.79 ppm	507 ppm	7
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			0.79% #DIV/0! Must be less than 10%

Performed By: Michael Ofuo Date/Time: 8-22-18/0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 1 SERIAL #: 1632083Z

MONITORING DATE: 8 22-18 TIME: 1245

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 24.7 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 1.6 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	24.7 ppm	22.5 ppm	8
#2	24.3 ppm	22.5 ppm	9
#3	24.8 ppm	22.5 ppm	9
Calculate Response Time (1+2+3) / 3			8.6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.99 ppm	24.7 ppm	0.3
#2	0.91 ppm	24.3 ppm	0.7
#3	0.84 ppm	24.8 ppm	0.2
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/25 X 100/1			0.62% #DIV/0! Must be less than 10%

Performed By: Michael Ofsa Date/Time: 8-22-18/1245

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 2 SERIAL #: 7784545

MONITORING DATE: 8-22-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 510 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 3.8 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	510 ppm	450 ppm	15
#2	512 ppm	450 ppm	13
#3	508 ppm	450 ppm	14
Calculate Response Time (1+2+3) / 3			14 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.83 ppm	510 ppm	10
#2	0.85 ppm	512 ppm	12
#3	0.74 ppm	508 ppm	8
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1 / 500 X 100 / 1			0.5% #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 8-22-18/0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 3 SERIAL #: 1586588Y

MONITORING DATE: 8-22-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 503 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2.1 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	503 ppm	450 ppm	17
#2	497 ppm	450 ppm	13
#3	499 ppm	450 ppm	14
Calculate Response Time (1+2+3)/3			13.3 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.71 ppm	503 ppm	3
#2	0.63 ppm	497 ppm	3
#3	0.63 ppm	499 ppm	1
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			0.13% #DIV/0! Must be less than 10%

Performed By: Tim Kline Smith Date/Time: 8-22-18 / 0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 4 SERIAL #: 1631983O

MONITORING DATE: 8-22-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 510 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 1.8 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	510 ppm	459 ppm	10
#2	508 ppm	457 ppm	8
#3	508 ppm	457 ppm	8
Calculate Response Time (1+2+3) / 3			8.6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.63 ppm	510 ppm	10
#2	0.82 ppm	508 ppm	8
#3	0.79 ppm	508 ppm	8
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			0.58% #DIV/0! Must be less than 10%

Performed By: Jim Redden Date/Time: 8 22 18/0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 5 SERIAL #: 4919480

MONITORING DATE: 8-22-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 512 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2.6 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	512 ppm	450 ppm	13
#2	506 ppm	450 ppm	12
#3	508 ppm	450 ppm	14
Calculate Response Time (1+2+3) / 3			13 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.81 ppm	512 ppm	12
#2	0.62 ppm	506 ppm	6
#3	0.71 ppm	508 ppm	8
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			0.58% #DIV/0! Must be less than 10%

Performed By: Mike Mayer Date/Time: 8/22/18 / 0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 1 SERIAL #: 1632083B2

MONITORING DATE: 8-23-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 24.3 ppm
3. Adjust meter settings to read 25 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2.3 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	24.3 ppm	22.5 ppm	7
#2	24.1 ppm	22.5 ppm	9
#3	24.4 ppm	22.5 ppm	6
Calculate Response Time (1+2+3) / 3			7.3 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.78 ppm	24.3 ppm	0.7
#2	0.63 ppm	24.1 ppm	0.9
#3	0.60 ppm	24.4 ppm	0.6
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/25 X 100/1			0.34% #DIV/0! Must be less than 10%

Performed By: Michael Ortiz Date/Time: 8-23-18/0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 2 SERIAL #: 7784545

MONITORING DATE: 8-23-18 TIME: 1145

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 505 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 3.1 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	505 ppm	450 ppm	15
#2	501 ppm	450 ppm	11
#3	503 ppm	450 ppm	13
Calculate Response Time (1+2+3) / 3			13 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.39 ppm	505 ppm	5
#2	0.45 ppm	501 ppm	1
#3	0.45 ppm	503 ppm	3
Calculate Precision	[STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1		1.6% #DIV/0! Must be less than 10%

Performed By: Michael Ortiz Date/Time: 8-23-18

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 1 SERIAL #: 7705062

MONITORING DATE: 8-30-18 TIME: 0800

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	2 ppm	1 ppm

Background Value = 1 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	25 ppm	22.5 ppm	7
#2	25 ppm	22.5 ppm	7
#3	25 ppm	22.5 ppm	7
Calculate Response Time (1+2+3)/3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0 ppm	25 ppm	7
#2	0 ppm	25 ppm	7
#3	0 ppm	25 ppm	7
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/25 X 100/1			1.40% #DIV/0! Must be less than 10%

Performed By: ED STEVENS Date/Time: 8-30-18/0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: S. M. VALLEY INSTRUMENT MAKE: THERMO

MODEL: TVA1000 EQUIPMENT #: 1 SERIAL #: 7705062

MONITORING DATE: 8-30-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 498 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 1.6 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	498 ppm	450 ppm	8
#2	501 ppm	450 ppm	9
#3	499 ppm	450 ppm	8
Calculate Response Time (1+2+3) / 3			8.3 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	498 ppm	0.53 ppm	2
#2	501 ppm	0.76 ppm	1
#3	499 ppm	0.74 ppm	1
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			3.8 #DIV/0! Must be less than 10%

Performed By: ED STEVENS Date/Time: 8-30-18/0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: THERMO

MODEL: TVA1000 EQUIPMENT #: 30 SERIAL #: 1719541/6

MONITORING DATE: 9-20-18 TIME: 1100

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 506 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2.1 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	506 ppm	450 ppm	9
#2	506 ppm	450 ppm	10
#3	505 ppm	450 ppm	10
Calculate Response Time (1+2+3)/3			9.6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.9 ppm	506 ppm	6
#2	0.8 ppm	506 ppm	6
#3	0.8 ppm	505 ppm	5
Calculate Precision	[STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1		0.86% #DIV/0! Must be less than 10%

Performed By: Michael Rios Date/Time: 9-20-18/1100

RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #1

SERIAL NUMBER: 1632083 2

TECHNICIAN: [signature] DATE: 7-1-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	499	+/- 125
10000	10000	10,191	+/- 2500
< 1	ZERO GAS	0.51	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50	/	+/- 12.5
100	100	/	+/- 25
500	500	/	+/- 125
< 1	ZERO GAS	/	< 3

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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #2

SERIAL NUMBER: 7789545

TECHNICIAN: [signature] DATE: 7-1-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	99	+/- 25
500	500	494	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.58	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #3

SERIAL NUMBER: 15865884

TECHNICIAN: JM DATE: 7-1-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.048	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #4

SERIAL NUMBER: 16319830

TECHNICIAN: [signature] DATE: 7-1-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	501	+/- 125
10000	10000	10,003	+/- 2500
< 1	ZERO GAS	0.065	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #5

SERIAL NUMBER: 4919480

TECHNICIAN: [signature] DATE: 7-1-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,222	+/- 2500
< 1	ZERO GAS	0.061	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #30

SERIAL NUMBER: 12195416

TECHNICIAN: [signature] DATE: 7-1-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	99	+/- 25
500	500	499	+/- 125
10000	10000	10,100	+/- 2500
< 1	ZERO GAS	0.041	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: [illegible]

Date: 8-3-18 **Time:** 0630

Model # VIA 1000B

Serial # #1 163208 32

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	1.9 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	7-1-18	Time required to attain 90% of Cal Gas ppm: 1. 6 / 2. 7 / 3. 7
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 6.6
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: MM / MM

Date: 8-3-18 Time: 0645

Model # TVA 1000B

Serial # #2 7784545

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.3 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	7-1-18	Time required to attain 90% of Cal Gas ppm: 1. 7 / 2. 6 / 3. 4 / Average 6.3
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JH MH

Date: 8-3-18 Time: 0700

Model # TVA 1000B

Serial # #3 1586588Y

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.1 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	7-1-18	Time required to attain 90% of Cal Gas ppm: 1. 6 2. 7 3. 7
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 6.6
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: [illegible]

Date: 8-3-18 **Time:** 0715

Model # TVA 1000B

Serial # #4 163198330

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	1.9 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	7-1-18	Time required to attain 90% of Cal Gas ppm: 1. 7 / 2. 6 / 3. 6 / Average 6.3
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH_4 gas

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: MM CM

Date: 8-3-18 Time: 0730

Model # TVA 1000B

Serial # #5 491948C

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.3 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100
Leak test	Pass / Fail / (NA)	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	7-1-18	Time required to attain 90% of Cal Gas ppm: 1. 9 / 2. 7 / 3. 8
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average 8.0
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: MH CM

Date: 9-7-18 Time: 1015

Model # TVA 1000B

Serial # #30 1019546

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.6 ppm	Calibration Gas (ppm): 500 | Actual (ppm): 500 | % Accuracy: 100
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	7-1-18	Time required to attain 90% of Cal Gas ppm 1. 9 2. 7 3. 8
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average 8.0 Equal to or less than 30 seconds? (Y) N Instrument calibrated to CH4 gas.

Comments: _____

P.O. Box 748 • Colton, California 92324 •
(909) 422-1001 Toll Free (888) 325-1098 Fax (909) 422-0707 www.resenvironmental.com

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

Lot # 17-6070

Mfg. Date: 10/11/2017

Parent Cylinder ID Number: 001783

Method of Preparation:
Gravimetric/Pressure Transfilled

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

Analysis By: Tony Janquart
Quality Assurance Manager
800-552-5003
Certificate Date: 10/11/2017


EnviroSupply & Service INC
Concentration (Mole%)
Accuracy
(CH4) - 500 ppm
- Balance
+/- 2%
3.6ft³ @ 70°F and 1,000 PSIG
Exp Date
9/8/2019
103 L
1791 Kaiser Avenue, Irvine, CA 92614
757-0353 or (800) 201-8150 Fax (949) 757-0363
Ch4 500 ppm/ Air
103 L
Lot# 17 – 6070
Certificate of Analysis
--scan with smart device--
DOT-39 NRC 1100/1505M-1102

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

Lot # 17-5924

Mfg. Date: 5/11/2017

Parent Cylinder ID Number: 001783

Method of Preparation:
Gravimetric/Pressure Transfilled

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

Analysis By: Tony Janquart
Quality Assurance Manager
800-552-5003
Certificate Date: 5/11/2017


Concentration (Mole%)
Accuracy
(CH4) - 500 ppm
. Balance
+/- 2%
Exp Date
4/11/2019
3.6ft³ @ 70°F and 1,000 PSIG
103 L
1791 Kaiser Avenue, Irvine, CA 92614
757-0353 or (800) 201-8150 Fax (949) 757-0363
Ch4 500 ppm/ Air
103 L
Lot# 17-5924
Certificate of Analysis
DOT-39 NRC 1100/1505M-1102
TC-39M NRC 76/104
CAUTION

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

Lot # 18-6386

Mfg. Date: 6/4/2018

Parent Cylinder ID Number: 001763

Method of Preparation:
Gravimetric/Pressure Transfilled

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

Analysis By: Tony Janquart
Quality Assurance Manager
800-552-5003
Certificate Date: 6/4/2018


Concentration (Mole%)
Accuracy
(CH4) . 500 ppm
. Balance
+/- 2%
Exp Date
12/14/2019
1.6ft³ @ 70°F and 1,000 PSIG
103 L
Kaiser Avenue, Irvine, CA 92614
757-4353 or (800) 201-8150 Fax (949) 757-0363
Ch4 500 ppm/ Air
103 L
Lot# 18-
Certificate of Analysis

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

Lot # 17-6074

Mfg. Date: 10/16/2017

Parent Cylinder ID Number: 17161

Method of Preparation:
Gravimetric/Pressure Transfilled

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

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


Concentration (Mole%) Accuracy
(CH4) - 25 ppm +/- 5%
Balance
Exp Date
4/17/2019
3.6ft³ @ 70°F and 1,000 PSIG
103 L
1791 Kaiser Avenue, Irvine, CA 92614
757-0353 or (800) 201-8150 Fax (949) 757-0363
Ch4 25 ppm/Air
103 L
Lot# 17 – 6074
Certificate of Analysis

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687

800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

Lot # 17-6022

Mfg. Date: 9/1/2017

Parent Cylinder ID Number: 02268, NY02189

Method of Preparation:
Gravimetric

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

Analysis By: Tony Janquart
Quality Assurance Manager
800-552-5003
Certificate Date: 9/1/2017


Concentration (Mole%) Accuracy
- 20.9% Oxygen
- Bal. Nitrogen
3.6ft³ @ 70°F and 1,000 PSIG
Exp Date
6/4/2019
103 L
Kaiser Avenue, Irvine, CA 92614
(800) 201-8150 Fax (949) 757-0363
Air Zero
(20.9% O2/N2)
103 L
Lot# 17 – 6022
Certificate of Analysis

WASTE MANAGEMENT

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

January 30, 2019

Mr. Scott Tignac
2801 Madera Road
Simi Valley, California 93065

Fourth Quarter 2018 Surface Emissions and Component Leak Monitoring Report for the Simi Valley Landfill and Recycling Center

Dear Mr. Tignac:

This monitoring report for the **"Simi Valley Landfill and Recycling Center (SVLRC)"** contains the results of the Fourth Quarter 2018 Integrated and Instantaneous Surface Emissions Monitoring (SEM) and Component Leak Monitoring. Initial surface emissions monitoring was performed by Roberts Environmental Services, LLC. (RES). Re-monitoring of site-wide surface emissions and component leak monitoring was also conducted by RES personnel.

APPLICABLE REQUIREMENTS

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

Surface Emission Monitoring (SEM)

- California Code of Regulations (CCR) Title 17, Subchapter 10, Article 4, Subarticle 6, §95460 to §95476, known as the Assembly Bill 32 (AB32) landfill methane rule (LMR).
- New Source Performance Standard (NSPS), Title 40 of the Code of Federal Regulations (CFR) §60.755 (c) and (d), 40 CFR 60, Appendix A Method 21, promulgated by the United States Environmental Protection Agency (USEPA).
- Ventura County Air Pollution Control District (VCAPCD) Rule 74.17.1 (Municipal Solid Waste Landfills)

Component Leak

- California Code of Regulations (CCR) Title 17, Subchapter 10, Article 4, Subarticle 6, §95460 to §95476, known as the Assembly Bill 32 (AB32) landfill methane rule (LMR).

SVLRC Plan and Alternative Compliance Measures

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

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

PROCEDURES

General

The surface of the SVLRC disposal area has been divided into ninety-six (96), (approximately) 50,000 square foot monitoring grids. The entire landfill surface is monitored with the exception of active portions of the Landfill, slope areas, and as requested in the approved ACO, areas containing only asbestos-containing waste, inert waste and/or non-decomposable waste which are excluded for safety as allowed by CCR Title 17 §95466.

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

Instantaneous Surface Emissions Monitoring

The Instantaneous SEM was conducted using a Toxic Vapor Analyzer (TVA) 1000 flame ionization detector (FID), which was calibrated to 500 parts per million by volume (ppmv) methane, which meets or exceeds all guidelines set forth in the CCR Title 17 §95471(a). The FID was calibrated prior to use in accordance with the United States Environmental Protection Agency (USEPA) Method 21 requirements. The Instantaneous SEM procedures followed the requirements of 40 CFR 60.755 (c) and (d), CCR Title 17 §95471(c)(2), and VCAPCD Rule 74.1.7.

RES personnel walked the surface of the landfill on a grid-by-grid basis with the wand tip held at 3 inches from the landfill surface. While sampling the grid, the technicians also checked any surface impoundments (wells or otherwise) for leaks. Technicians also checked any surface cracks, seeps, or other areas that show evidence of surface emissions (odors or distressed vegetation). Active and sloped areas excluded for safety were documented on field data sheets and maps.

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

- Re-monitoring shall be conducted within 10 days of the initial exceedance.
    - If the re-monitoring event shows the exceedance is corrected, the location shall be re-monitored within 1 month of the initial exceedance.
    - If the 1-month re-monitoring event shows the location is still corrected, all re-monitoring requirements have been completed.
- If either the first 10-day or 1-month re-monitoring events show a second exceedance, additional corrective actions shall be completed and a second re-monitoring event shall be conducted within 10 days of the second exceedance.
- If the second 10-day re-monitoring event shows the second exceedance is corrected, the location shall be re-monitored within 1 month of the initial exceedance. If the 1-month re-monitoring event shows the area is still corrected, monitoring requirements have been completed.
- If any location shows three exceedances, an additional well shall be installed within 120 days of the initial exceedance.

Integrated Surface Emissions Monitoring

The Integrated surface monitoring was conducted using a TVA 1000 calibrated to 25 ppmv for the integrated monitoring, which meets or exceeds all guidelines set forth in the CCR Title 17 §95471(a). The field technician traversed the grid walking path over a continuous 25-minute period using the TVA 1000 held at 3 inches above the landfill surface. The Integrated monitoring procedures followed the requirements of CCR Title 17 §95471(c)(2).

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

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

- If either the first 10-day re-monitoring event shows a second grid exceedance, additional corrective actions shall be completed and a second re-monitoring event shall be conducted within 10 days of the second exceedance.

- If the second 10-day re-monitoring event shows the second exceedance is corrected, all re-monitoring requirements have been completed.

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

Component Leak Monitoring Procedures

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

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

FOURTH QUARTER SEM AND COMPONENT LEAK RESULTS

The following is a summary of the SEM and Component leak monitoring results completed during the Fourth Quarter 2018.

Instantaneous Surface Emission Monitoring Results

The Instantaneous surface monitoring was performed on November 28 and December 14, 2018, in accordance with the NSPS, Rule 74.1.17, CCR Title 17 §95469 and ACO. Results and data from the monitoring are presented in Attachment A.

Initial Monitoring Event Exceedances of 500 ppmv

There were nine (9) exceedances of 500 ppmv as methane detected during the initial monitoring event conducted on November 28, 2018, and there was one (1) exceedance detected during the initial monitoring event conducted on December 14, 2018. RES personnel remediated the locations, and the following re-monitoring was conducted as described below.

First Ten-Day Re-Monitoring Results

RES personnel performed the first ten-day re-monitoring event on November 28 & December 10, 2018 (it was conducted on this day due to previous measurable high winds) for the November 28, 2018 exceedances; and on December 21, 2018 for the December 14, 2018 exceedance. No exceedances were observed during both first ten-day re-monitoring events.

Thirty-Day Re-Monitoring Results

RES personnel performed the thirty-day monitoring event on December 27, 2018 for the November 28, 2018 exceedances; and on January 11, 2019 for the December 14, 2018 exceedances. No exceedances were observed during both 30-day re-monitoring events.

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

There were zero (0) readings between 200 ppmv and 499 ppmv, measured as methane detected during the initial monitoring events on November 28 and December 14, 2018. Pursuant to CCR Title 17 §95471(c), instantaneous surface emissions exceeding 200 ppmv but below 500 ppmv are required to be recorded.

Integrated Surface Emissions Monitoring Results

The Integrated surface sampling (ISS) was performed on December 14, 2018 in accordance with the ACO, requirements outlined in CCR Title 17 §95469, and VCAPCD Rule 74.1.17. See Attachment B for details.

Initial Monitoring Event Exceedances of 25 ppmv

There was one (1) grid with an exceedance above 25 ppmv as methane detected during the initial monitoring events conducted on December 14, 2018.

Ten-Day Re-Monitoring Results

RES personnel performed the ten-day re-monitoring event on December 21, 2018. No exceedances were observed during the ten-day re-monitoring event.

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

Component Leak Monitoring Results

Component leak monitoring was conducted per the applicable requirements on November 29, 2018. There was zero (0) locations with a component leak detection of greater than 500 ppmv. See Attachment C for details.

WEATHER CONDITIONS

Wind Speed Conductions during the Surface Emission Monitoring Events

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

Precipitation Requirements

Per the SVLRC's ACO, the initial monitoring event was carefully scheduled so that it could be conducted in compliance with the precipitation requirements (no measurable precipitation within 24 hours). Re-monitoring events are required to adhere to strict timelines. Any conflicts with precipitation requirements are discussed in the results section of this document.

EQUIPMENT CALIBRATION

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

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

All monitoring was completed in accordance with the applicable regulatory requirements or approved alternatives. If you have any questions regarding this report, please do not hesitate to contact the undersigned at (510) 613-2165.

Thank you,
Waste Management

Collin Pavelchik
Environmental Protection Air Quality Specialist

Attachment A – Instantaneous Surface Emission Monitoring Event Records

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

Attachment B – Integrated Surface Emission Monitoring Event Records

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

Attachment C – Component Leak Monitoring Event Records

- Component Leak Exceedances and Monitoring Logs

Attachment D – Weather Station Data

- Strip Chart Data and Legend

Attachment E – Calibration Records

- Instrument and Gas Calibration Records

Attachment A

Instantaneous Surface Emission Monitoring Event Records

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: michael ORtz, Mike Moyer, Shawn Hershey, Jim Redden

Cal. Gas Exp. Date: 6/4/19

Date: 11-28-18 Instrument Used: TVA1000 Grid Spacing: 25ft

Temperature: 64° Precip: 0 Upwind BG: 2 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	REMARKS
1	MO	0800	0815	6	3	4	9	
2	SH	0800	0815	10	3	4	9	
3	JR	0800	0815	29	3	4	9	
4	MM	0800	0815	46	3	4	9	
5	MO	0815	0830	38	2	4	8	
6	SH	0815	0830	52	2	4	8	
7	JR	0815	0830	59	2	4	8	
8	MM	0815	0830	41	2	4	8	
9	MO	0830	0845	65	3	4	8	
10	SH	0830	0845	102	3	4	8	
11	JR	0830	0845	60	3	4	8	
12	MM	0830	0845	42	3	4	8	
13	MO	0845	0900	57	3	4	9	
14	SH	0845	0900	1000	3	4	9	unmarked well, surface
15	JR	0845	0900	850	3	4	9	Surface
16	MM	0845	0900	29	3	4	9	
17	MO	0900	0915	32	3	5	9	
18	SH	0900	0915	32	3	5	9	
19	JR	0900	0915	10	3	5	9	
20	MM	0900	0915	4	3	5	9	
21	MO	0915	0930	6	3	4	9	
22	SH	0915	0930	5	3	4	9	
23	JR	0915	0930	5	3	4	9	
29	MM	0915	0930	138	3	4	9	
30	MO	0930	0945	95	3	5	9	
31	SH	0930	0945	670	3	5	9	Well 1104
32	JR	0930	0945	600	3	5	9	unmarked well
33	MM	0930	0945	158	3	5	9	
34	MO	0945	1000	5,600	4	6	9	Surface
35	SH	0945	1000	77	4	6	9	

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 3

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Michael OROZ, Mike Meyer, Shawn Hershey, Jim Redden

Cal. Gas Exp. Date: 6/4/19

Date: 11-28-18 Instrument Used: TVA1000 Grid Spacing: 25FT

Temperature: 69° Precip: 0 Upwind BG: 2 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
36	JR	0945	1000	10	4	6	9	
37	MM	0945	1000	8	4	6	9	
38	MO	1000	1015	6	5	6	9	
39	SH	1000	1015	4	3	6	9	
40	JR	1000	1015	3	3	6	9	
41	MM	1000	1015	4	3	6	9	
42	MO	1015	1030	6	4	6	9	
43	SH	1015	1030	10	4	6	9	
44	JR	1015	1030	18	4	6	9	
45	MM	1015	1030	24	4	6	9	
46	MO	1030	1045	39	4	6	9	
47	SH	1030	1045	54	4	6	9	
48	JR	1030	1045	59	4	6	9	
49	MM	1030	1045	500	4	6	9	Surface
50	MO	1045	1100	700	4	6	9	Surface
51	SH	1045	1100	108	4	6	9	
52	JR	1045	1100	31	4	6	9	
53	MM	1045	1100	22	4	6	9	
54	MO	1200	1215	6	4	11	12	
55	SH	1200	1215	3	4	11	12	
56	JR	1200	1215	4	4	11	12	
57	MM	1200	1215	6	4	11	12	
58	MO	1215	1230	5	4	10	13	
59	SH	1215	1230	3	4	10	13	
60	JR	1215	1230	6	4	10	13	
61	MM	1215	1230	4	4	10	13	
62	MO	1230	1245	4	5	12	14	
63	SH	1230	1245	3	5	12	14	
64	JR	1230	1245	6	5	12	14	
65	MM	1230	1245	5	5	12	14	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: michael ORUE, Mike Meyer, Shawn Hershey, Jim Redden

Cal. Gas Exp. Date: 6/4/19

Date: 11-28-18 Instrument Used: TVA1000 Grid Spacing: 25ft

Temperature: 73° Precip: 0 Upwind BG: 2 Downwind BG: 3

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
66	MO	1245	1300	5	5	12	14	
67	SH	1245	1300	3	5	12	14	
68	JR	1245	1300	2	5	12	14	
69	MM	1245	1300	4	5	12	14	
70	MO	1300	1315	2	5	11	13	
71	SH	1300	1315	2	5	11	13	
72	JR	1300	1315	4	5	11	13	
73	MM	1300	1315	3	5	11	13	
74	MO	1315	1330	6	5	12	13	
75	SH	1315	1330	5	5	12	13	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: Michael ORE _____ _____ _____

_____ _____ _____

_____ _____ Cal. Gas Exp. Date: _____

Date: 11-28-18 Instrument Used: _____ Grid Spacing: _____

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

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
24								NONE TRASH
25								
26								
27								
28								

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 1

SIMI VALLEY LANDFILL
INSTANTANEOUS LANDFILL SURFACE MONITORING

Personnel: T Lewis, J. Morris, M Andelin, O. Peralta, A. Mcbride

Cal. Gas Exp. Date: 4-9-19

Date: 12 14 18 Instrument Used: TVA 1000 Grid Spacing: _____

Temperature: 52° Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	WIND INFORMATION			REMARKS
					AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
76	TL	0745	0800	4	1	2	S	
77	JM	0745	0800	6	1	2	S	
78	MA	0745	0800	7	1	2	S	
79	OP	0745	0800	8.6	1	2	S	Exceedance
80	AM	0745	0800	8	1	2	S	
81	TL	0800	0815	4	2	3	S	
82	JM	0800	0815	5	2	3	S	
83	MA	0800	0815	4	2	3	S	
84	OP	0800	0815	6	2	3	S	
85	AM	0800	0815	7	2	3	S	
86	TL	0815	0830	6	4	6	6	
87	JM	0815	0830	6	4	6	6	
88	MA	0815	0830	4	4	6	6	
89	OP	0815	0830	5	4	6	6	
90	AM	0815	0830	8	4	6	6	
91	TL	0830	0845	7	4	6	7	
92	JM	0830	0845	4	4	6	7	
93	MA	0830	0845	11	4	6	7	
94	OP	0830	0845	6	4	6	7	
95	AM	0830	0845	4	4	6	7	
96	TL	0845	0900	5	4	8	7	

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 1

Waste Management Instantaneous Landfill Surface Emissions Monitoring
Exceedance and Monitoring Logs

Quarter: 4TH

Initial Monitoring Performed By: MICHAEL ORUE

Follow-up Monitoring Performed By: SIMI VALLEY LANDFILL

Landfill Name: SIMI VALLEY

Initial Monitoring Event				Corrective Action within 5 Days		1st 10-Day Follow-Up			1st 30-Day Follow-Up			Comments
Grid #	Flag #	Monitoring Date	Field Reading	Repair Date	Action taken to repair Exceedance	Monitoring Date	No Exceed. <500 ppm	Exceed. >500 ppm	Monitoring Date	No Exceed. <500 ppm	Exceed. >500 ppm	
49	Y1	11-28-18	500			12-10-18	32		12-27-18	15.02		SURFACE
31	Y2	↓	670	11-28-18	TUNED SYSTEM	11-28-18	5		↓	11.5		WELL 1104
15	Y3		850			12-10-18	29			305.		SURFACE
32	Y20		600	11-28-18	TUNED SYSTEM	11-28-18	11			104.		UNMANNED WELL
50	Y21		700			12-10-18	211			13.		SURFACE
14	Y22		1,000			12-10-18	120			380.		WELL UNMANNED
14	Y23		1,000			12-10-18	90			30.		SURFACE
34	B31		224			12-10-18	39			105.		SURFACE
34	Y32	↓	5600			12-10-18	306		↓	83.42		SURFACE

PUSHED OFF TO THE 10TH
DUE TO HIGH WINDS
12-10-18 REMONITORED

Waste Management Instantaneous Landfill Surface Emissions Monitoring
Exceedance and Monitoring Logs

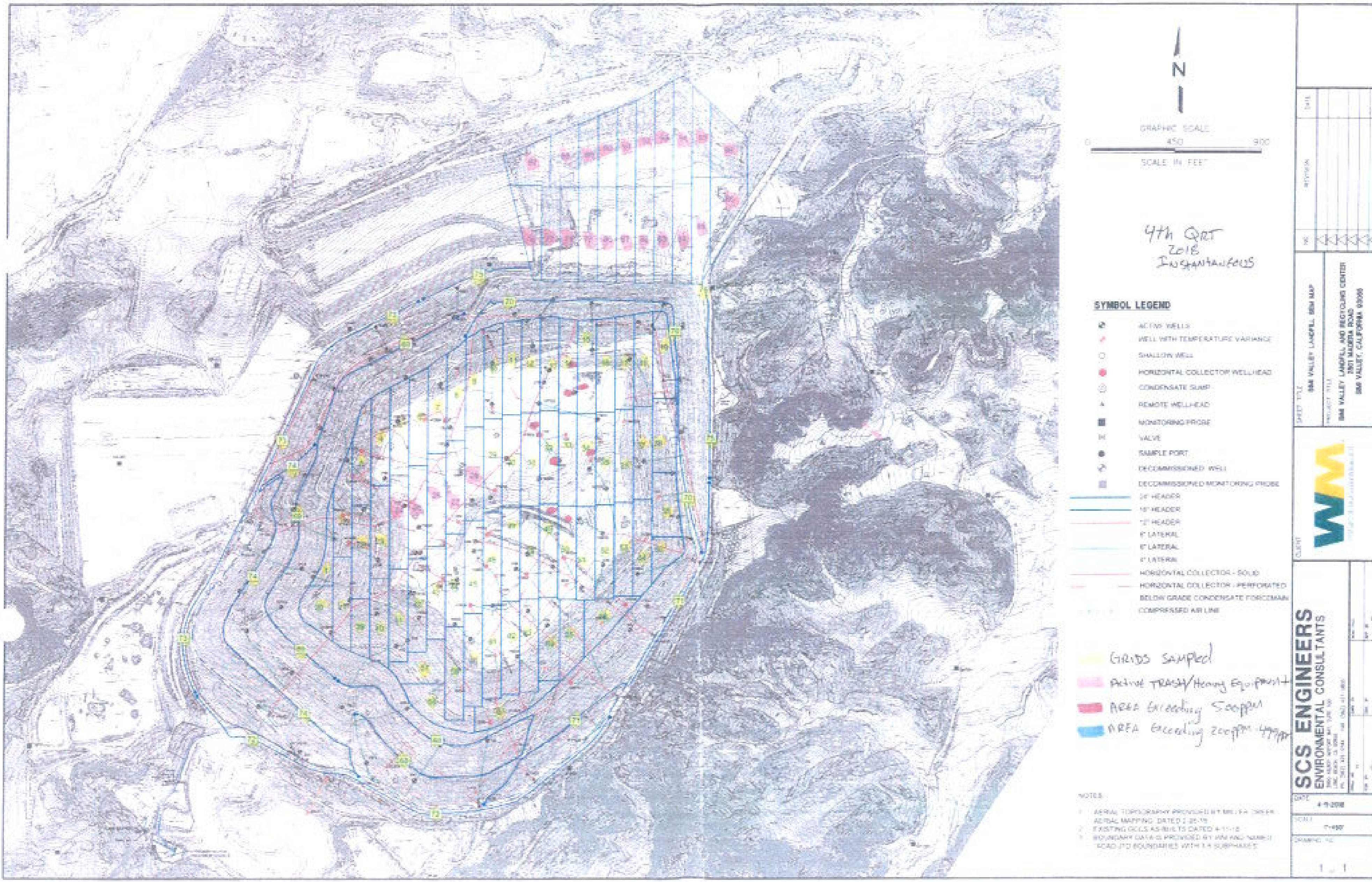
Quarter: 4th / 2018

Initial Monitoring Performed By: Tony Lewis

Follow-up Monitoring Performed By: Daniela Gadelha

Landfill Name: Simi Valley

Initial Monitoring Event				Corrective Action within 5 Days		1st 10-Day Follow-Up			1st 30-Day Follow-Up			Comments
Grid #	Flag #	Monitoring Date	Field Reading	Repair Date	Action taken to repair Exceedance	Monitoring Date	No Exceed. <500 ppm	Exceed. >500 ppm	Monitoring Date	No Exceed. <500 ppm	Exceed. >500 ppm	
79	41	12-14-18	800			12-21-18	114		1/11/2019	300.		surface


N
GRAPHIC SCALE
0
450
900
SCALE IN FEET
4th QRT
2018
INSTANTANEOUS
SYMBOL LEGEND
ACTIVE WELLS
WELL WITH TEMPERATURE VARIANCE
SHALLOW WELL
HORIZONTAL COLLECTOR WELLHEAD
CONDENSATE SUMP
REMOTE WELLHEAD
MONITORING PROBE
VALVE
SAMPLE PORT
DECOMMISSIONED WELL
DECOMMISSIONED MONITORING PROBE
24" HEADER
18" HEADER
12" HEADER
8" LATERAL
6" LATERAL
4" LATERAL
HORIZONTAL COLLECTOR - SOLID
HORIZONTAL COLLECTOR - PERFORATED
BELOW GRADE CONDENSATE FORCEMAIN
COMPRESSED AIR LINE
GRIDS SAMPLED
Active TRASH/Heavy Equipment
AREA Exceeding 500ppm
AREA Exceeding 200ppm-499ppm
NOTES:
2. EXISTING GCCS AS-BUILTS DATED 4-11-18
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
CLIENT
SHEET TITLE
SIMI VALLEY LANDFILL SEM MAP
PROJECT TITLE
SIMI VALLEY LANDFILL AND RECYCLING CENTER
2801 MADERA ROAD
SIMI VALLEY, CALIFORNIA 93065
REVISION
DATE
4-9-2018
SCALE
DRAWING NO.
1 of 1

Attachment B

Integrated Surface Emission Monitoring Event Records

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Jamain Anderson, Ricky Ramirez
Shawn Hershey
Bryant Anderson
Cal. Gas Exp. Date: 11-11-19

Date: 12-14-18 Instrument Used: 1551-4 Grid Spacing: 25'

Temperature: 60 Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
1	JA	0745	0810	5	333	2	3	S	
2	SH	0745	0810	8		2	3	S	
3	RR	0745	0810	6		2	3	S	
4	DW	0745	0810	3		2	3	S	
5	JA	0810	0835	7		2	3	S	
6	SH	0810	0835	6		2	3	S	
7	RR	0810	0835	7		2	3	S	
8	DW	0810	0835	6		2	3	S	
9	JA	0835	0900	7		4	5	S	
10	SH	0835	0900	4		4	5	S	
11	RR	0835	0900	8		4	5	S	
12	DW	0835	0900	7		4	5	S	
13	JA	0900	0925	6		4	6	S	
14	SH	0900	0925	7		4	6	S	
15	RR	0900	0925	10		4	6	S	
16	DW	0900	0925	12		4	6	S	
17	JA	0925	0950	8		4	6	S	
18	SH	0925	0950	9		4	6	S	
19	RR	0925	0950	6		4	6	S	
20	DW	0925	0950	6		4	6	S	
21	JA	0950	1015	13		4	6	S	
22	SH	0950	1015	15		4	6	S	
23	RR	0950	1015	9		4	6	S	
24	DW	0950	1015	6		4	6	S	
25	JA	1015	1045	8		5	8	S	
26	SH	1015	1045	22		5	8	S	
27	RR	1015	1045	19		5	8	S	
28	DW	1015	1045	65		5	8	S	EXCEEDANCE
29	JA	1045	1110	24		5	10	S	
30	SH	1045	1110	17		5	10	S	

Attach Calibration Sheet
Attach site map showing grid ID

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Jamison anderson H   Hank Hellhey H   AARON McBride
Dwight anderson H   Mike anderson Tony Lewis   Omar peralta
Ricky Ramirez H   Jeffrey Morris   Cal. Gas Exp. Date: 11-11-19

Date: 12-14-18   Instrument Used: ISS 1-4   Grid Spacing: 25'

Temperature: 60   Precip: 0   Upwind BG: 1   Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION AVG SPEED	MAX SPEED	DIRECTION 16 POINT	REMARKS
31	RR	1045	1110	8	333	5	10	3	
32	DW	1045	1110	12		5	10	3	
33	JA	1110	1135	14		6	10	3	
34	SH	1110	1135	15		6	10	3	
35	RR	1110	1135	13		6	10	3	
36	DW	1110	1135	5		6	10	3	
37	JA	1135	1200	8		6	10	3	
38	SH	1135	1200	6		6	10	3	
39	RR	1135	1200	4		6	10	3	
40	DW	1135	1200	7		6	10	3	
41	JA	1200	1225	3		7	10	3	
42	SH	1200	1225	2		7	10	3	
43	RR	1200	1225	7		7	10	3	
44	DW	1200	1225	5		7	10	3	
45	TL	1200	1225	6		7	10	3	
46	JM	1200	1225	4		7	10	3	
47	OP	1200	1225	7		7	10	3	
48	AM	1200	1225	10		7	10	3	
49	MA	1200	1225	14		7	10	3	
50	JA	1225	1250	13		7	10	3	
51	SH	1225	1250	5		7	10	3	
52	RR	1225	1250	9		7	10	3	
53	DW	1225	1250	12		7	10	3	
54	TL	1225	1250	15		7	10	3	
55	JM	1225	1250	16		7	10	3	
56	OP	1225	1250	13		7	10	3	
57	AM	1225	1250	8		7	10	3	
58	MA	1225	1250	5		7	10	3	
59	JM	1250	1315	4		8	10	2	
60	SH	1250	1315	4		8	10	2	

Attach Calibration Sheet
Attach site map showing grid ID

Page 2 of 3.

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: Jamain Anderson — Jeffrey Morris — Mike Anderson — Omar Peralta
Ricky Ramirez — Dwight Anderson — Tony Lewis
Shawn Hershey — Arron mc bride — Cal. Gas Exp. Date: 11-11-19

Date: 12-14-18 Instrument Used: TSS 1-9 Grid Spacing: 25'

Temperature: 60 Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
68	TL	1250	1315	5	333	8	10	2	

Attach Calibration Sheet
Attach site map showing grid ID

Page 3 of 3

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: T Lewis, O Peralta, J. Morris, A Michaelis, M. Anderson

Cal. Gas Exp. Date: 4-4-16

Date: 12-14-16 Instrument Used: TVA 15515 Grid Spacing: 25

Temperature: 60 Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION			REMARKS
						AVG SPEED	MAX. SPEED	DIRECTION 16 POINT	
96	TL	0905	0930	5	333	4	6	J	
95	JM	0905	0930	4		4	6	J	
94	MA	0905	0905	2		4	6	J	
93	OP	0905	0905	5		4	6	J	
92	AM	0905	0905	4		4	6	J	
91	TL	0930	0955	3		4	6	J	
90	JM	0930	0955	4		4	6	J	
89	MA	0930	0955	1		4	6	J	
88	OP	0930	0955	4		4	6	J	
87	AM	0930	0955	2		4	6	J	
86	TL	0955	1020	6		4	6	J	
85	JM	0955	1020	3		4	6	J	
84	MA	0955	1020	4		4	6	J	
83	OP	0955	1020	5		4	6	J	
82	AM	0955	1020	6		4	6	J	
81	TL	1020	1045	5		5	8	J	
80	JM	1020	1045	4		5	8	J	
79	MA	1020	1045	9		5	8	J	
78	OP	1020	1045	7		5	8	J	
77	AM	1020	1020	6		5	8	J	
76	TL	1045	1110	6		5	10	J	
61	JM	1045	1110	4		5	10	J	
62	MA	1045	1110	5		5	10	J	
63	OP	1045	1110	2		5	10	J	
64	AM	1045	1110	4		5	10	J	
65	TL	1110	1135	7		6	10	J	
66	JM	1110	1135	6		6	10	J	
67	MA	1110	1135	5		6	10	J	
69	OP	1110	1135	3		6	10	J	
70	AM	1110	1135	4		6	10	J	

Attach Calibration Sheet
Attach site map showing grid ID

Page 1 of 2

SIMI VALLEY LANDFILL
INTEGRATED LANDFILL SURFACE MONITORING

Personnel: T. Lewis | O. Peralta |
J. Morris | A. Mcbride |
M. Anderson | | Cal. Gas Exp. Date: 4-4-16

Date: 12-14-15 Instrument Used: 155 1-5 Grid Spacing: 25

Temperature: 60 Precip: 0 Upwind BG: 1 Downwind BG: 2

GRID ID	STAFF INITIALS	START TIME	STOP TIME	TOC PPM	ROTO-MTR, CC/MIN	WIND INFORMATION AVG SPEED	MAX SPEED	DIRECTION 16 POINT	REMARKS
71	TL	1135	1200	2	337	6	10	3	
72	JM	1135	1200	3	↓	6	10	3	
73	MA	1135	1200	4	↓	6	10	3	
74	OP	1135	1200	3	↓	6	10	3	
75	AM	1135	1200	3	↓	6	10	3	

Attach Calibration Sheet
Attach site map showing grid ID

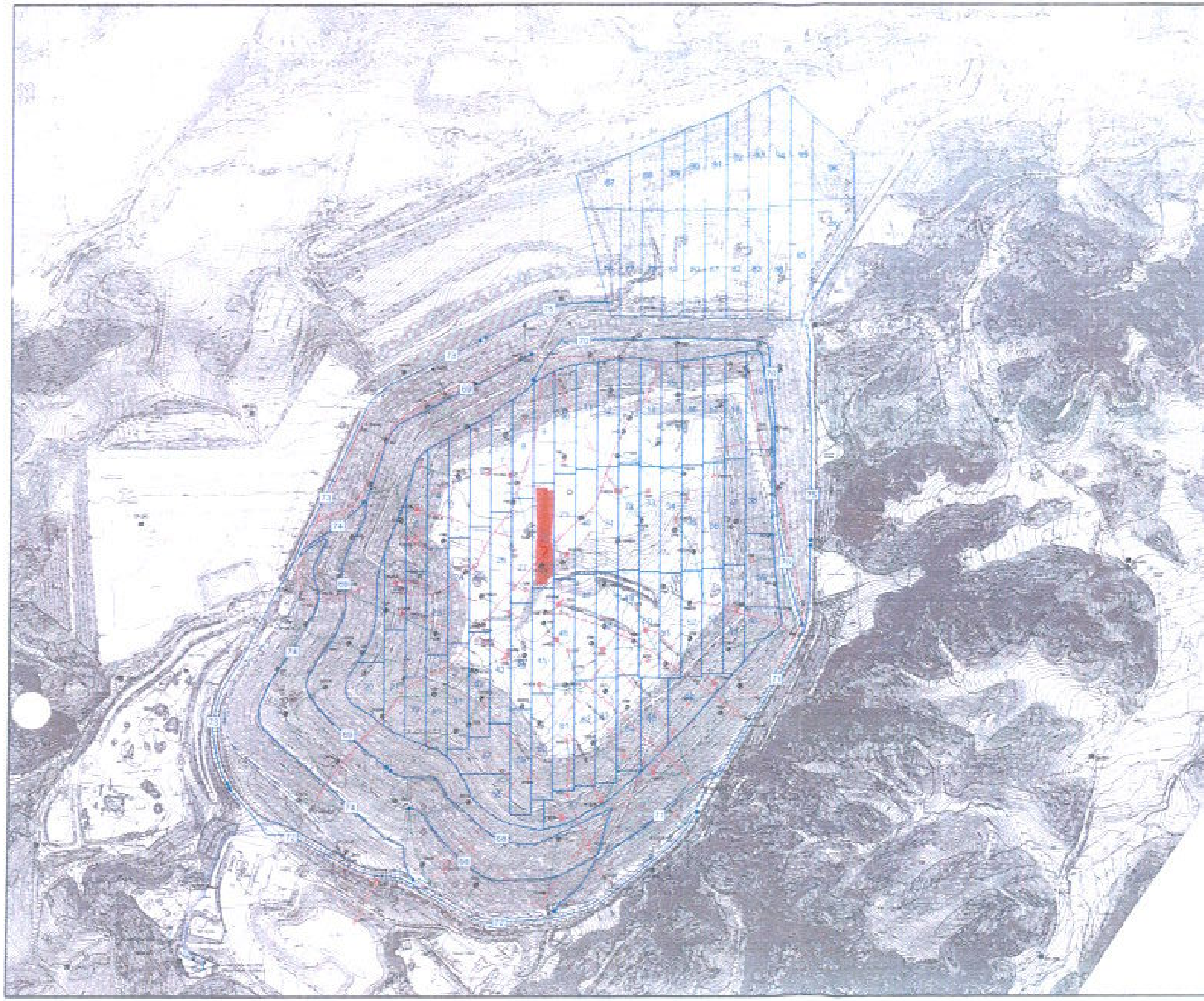
Page 2 of 2

Integrated Surface Sampling
10 Day Exceedances and Monitoring Log

Site: SIMI VALLEY

Quarter / Year:	4TH QTR 2018	4TH QTR 2015
Technician:	JAMAR ANDERSON	Jamal Anderson
Instrument:	ISS Pack	ISS Pack
Calibration Standard:	25 ppm	25 ppm

Initial Monitoring Event			First Re-Monitoring Event – 10 Days				Second Re-Monitoring Event – 10 Days			
Grid Number	Field Reading (ppm)	Date Monitored	Remedial Work	Date Monitored	No Excd. <25 ppm	Excd. >25 ppm	Remedial Work	Date Monitored	No Excd. <25 ppm	Excd. >25 ppm
28	65	12-14-18		12-21-18	10.27					



GRAPHIC SCALE

0 450 900

SCALE IN FEET

SYMBOL LEGEND

- ACTIVE WELLS
- WELL WITH TEMPERATURE VARIANCE
- SHALLOW WELL
- HORIZONTAL COLLECTOR WELLHEAD
- CONDENSATE SUMP
- REMOTE WELLHEAD
- MONITORING PROBE
- VALVE
- SAMPLE PORT
- DECOMMISSIONED WELL
- DECOMMISSIONED MONITORING PROBE
- 24" HEADER
- 18" HEADER
- 12" HEADER
- 6" LATERAL
- 8" LATERAL
- 4" LATERAL
- HORIZONTAL COLLECTOR - SOLID
- HORIZONTAL COLLECTOR - PERFORATED
- BELOW GRADE CONDENSATE FORCEMAIN
- COMPRESSED AIR LINE

ISS GRIDS OVER 25 PPM

NOTES

1. AERIAL TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING DATED 2-28-18
2. EXISTING GCCS AS-BUILTS DATED 4-11-18
3. BOUNDARY DATA IS PROVIDED BY WM AND NAMED "ACAD-JTD BOUNDARIES WITH 3-5 SUBPHASES"

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3900 KILROY AIRPORT WAY, SUITE 100
LONG BEACH, CA 90806
PH. (562) 426-9544 FAX (562) 427-0805

DATE 4-11-2018

SCALE 1"=450'

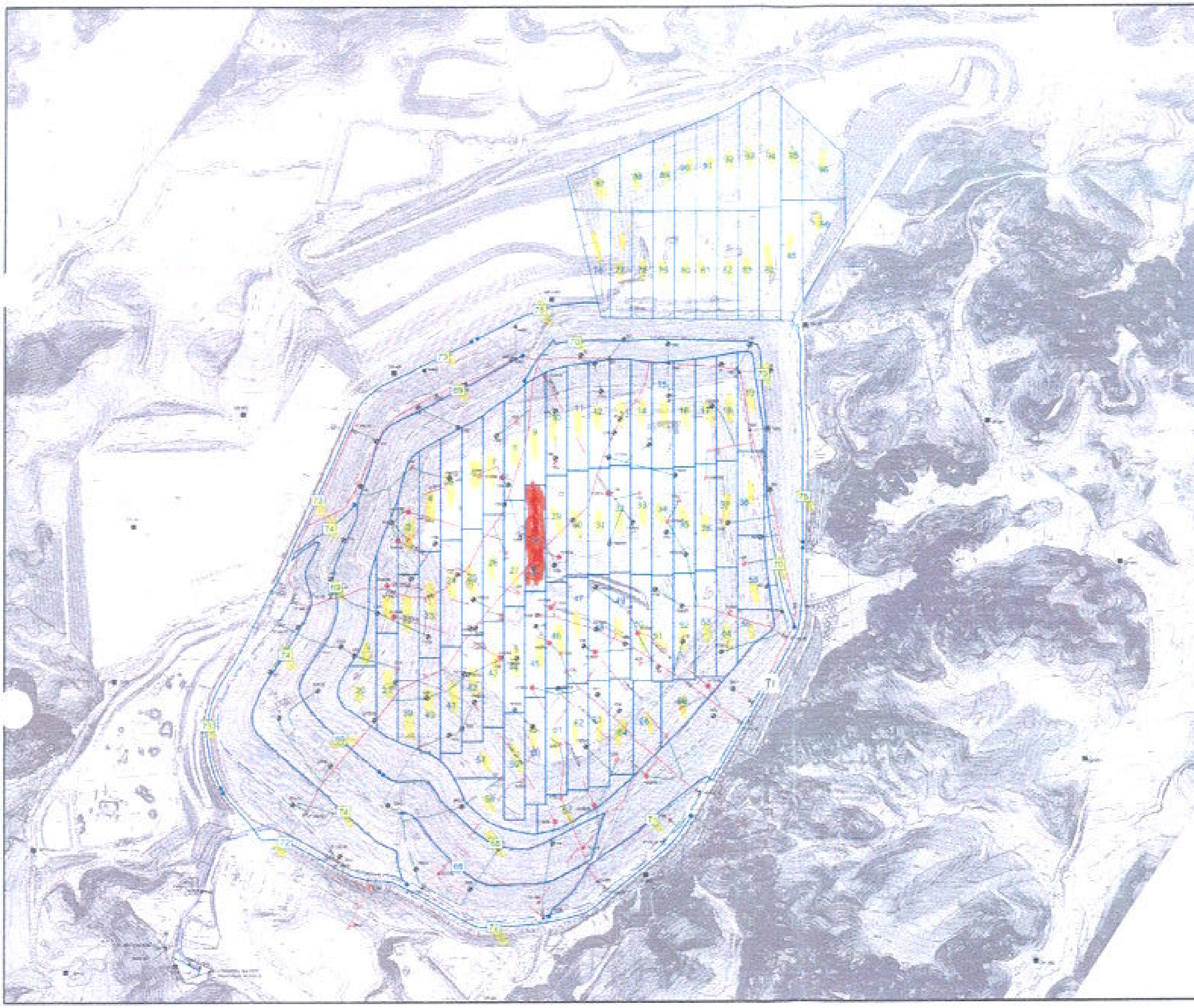
DRAWING NO. 1 of 1

CLIENT: WM

SHEET TITLE: SIMI VALLEY LANDFILL SEM MAP

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

NO.	REVISION	DATE



N

GRAPHIC SCALE

0 450 900

SCALE IN FEET

SYMBOL LEGEND

- ACTIVE WELLS
- WELL WITH TEMPERATURE VARIANCE
- SHALLOW WELL
- HORIZONTAL COLLECTOR WELLHEAD
- CONDENSATE SUMP
- REMOTE WELLHEAD
- MONITORING PROBE
- VALVE
- SAMPLE PORT
- DECOMMISSIONED WELL
- DECOMMISSIONED MONITORING PROBE
- 24" HEADER
- 18" HEADER
- 12" HEADER
- 8" LATERAL
- 6" LATERAL
- 4" LATERAL
- HORIZONTAL COLLECTOR - SOLID
- HORIZONTAL COLLECTOR - PERFORATED
- BELOW GRADE CONDENSATE FORCEMAIN
- COMPRESSED AIR LINE

NOTES

1. AERIAL TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING DATED 2-26-18.
2. EXISTING GCCS AS-BUILTS DATED 4-11-18
3. BOUNDARY DATA IS PROVIDED BY WM AND NAMED ACAD-JTD BOUNDARIES WITH 3-5 SUBPHASES

NO.	REVISION	DATE

SHEET TITLE: SIMI VALLEY LANDFILL SEM MAP

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

CLIENT: WM

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS

DATE: 4-11-2018

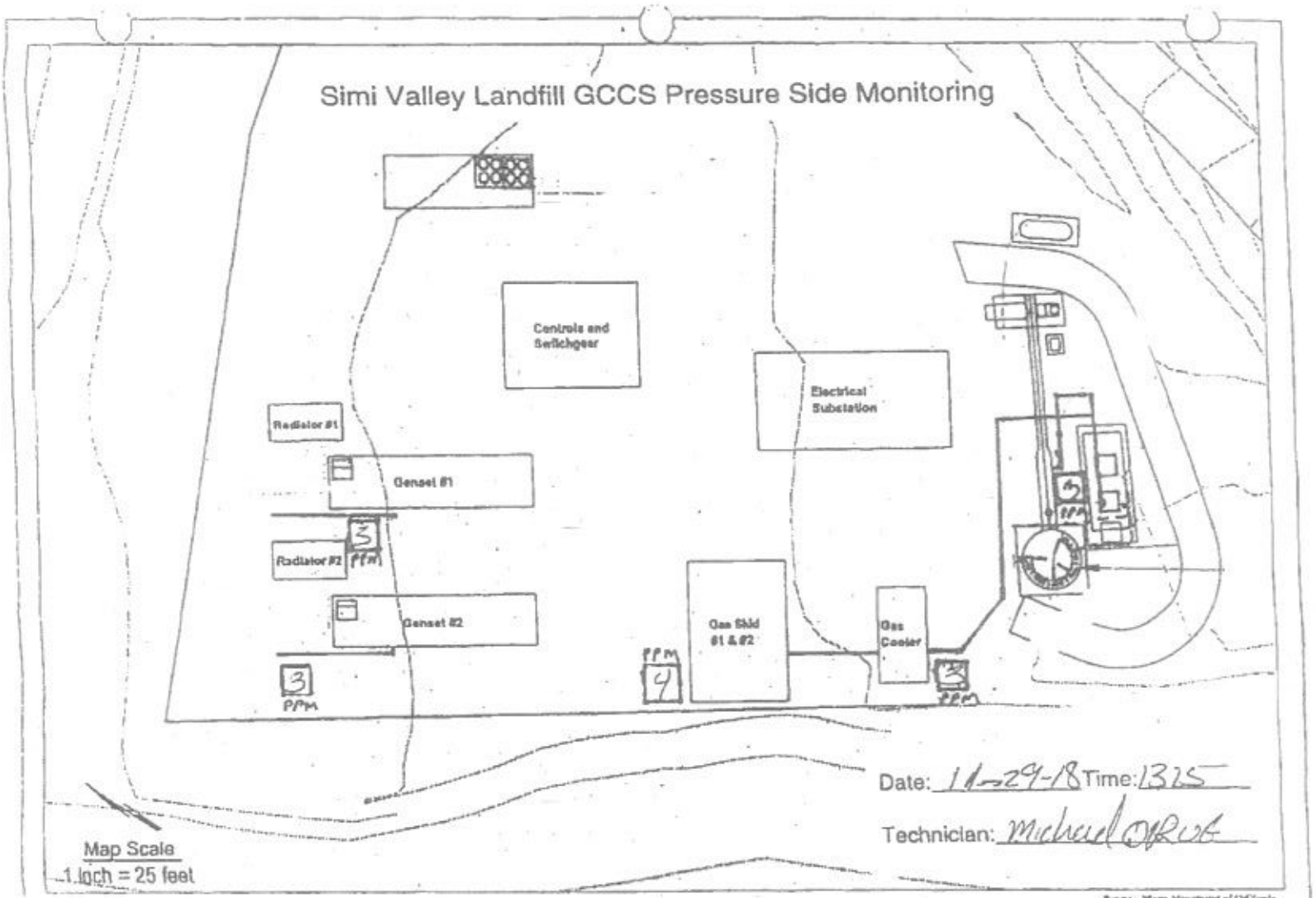
SCALE: 1"=450'

DRAWING NO. 1 of 1

Attachment C

Component Leak Monitoring Event Records

Simi Valley Landfill GCCS Pressure Side Monitoring

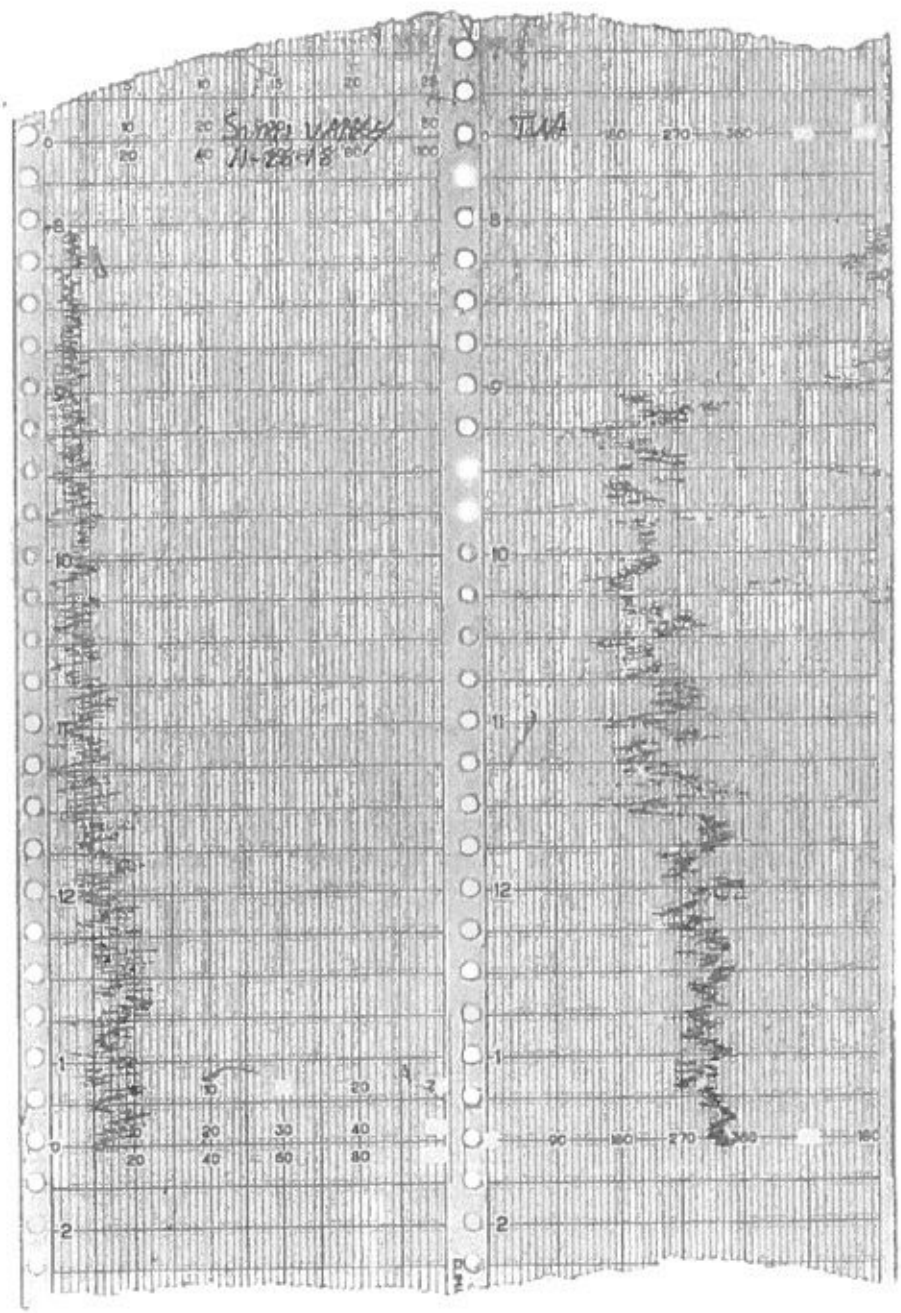


Note: Monitor all flanges and above ground connections. Write the highest reading in the box labeled ppm. Draw a circle around the location of the leak.

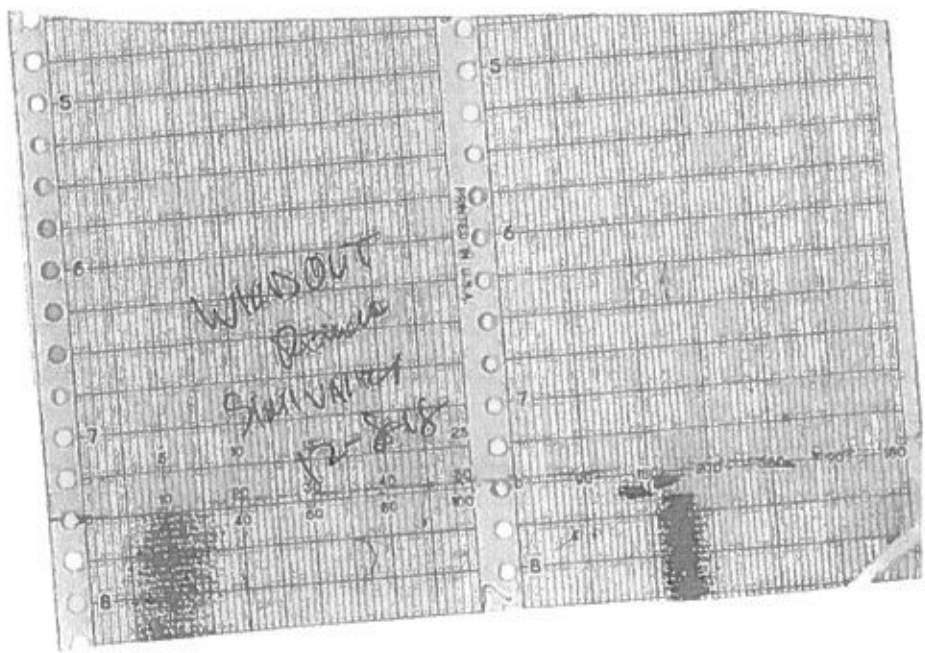
Attachment D

Weather Station Data

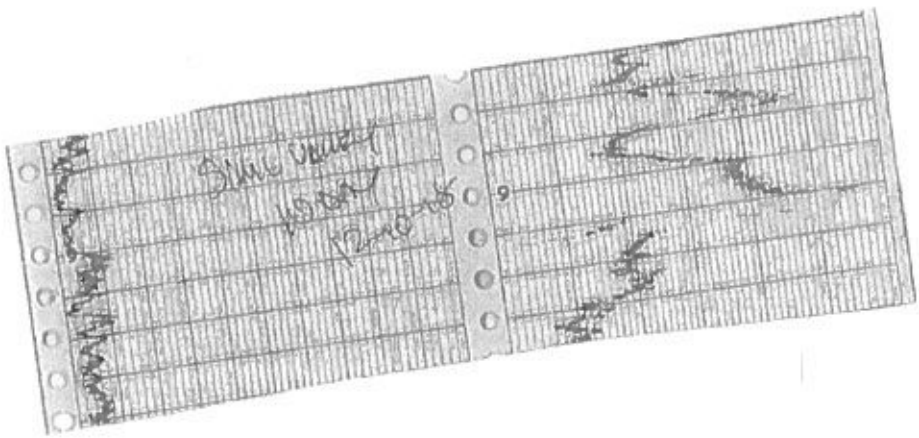
WIND SPEED & DIRECTION CHART ROLL



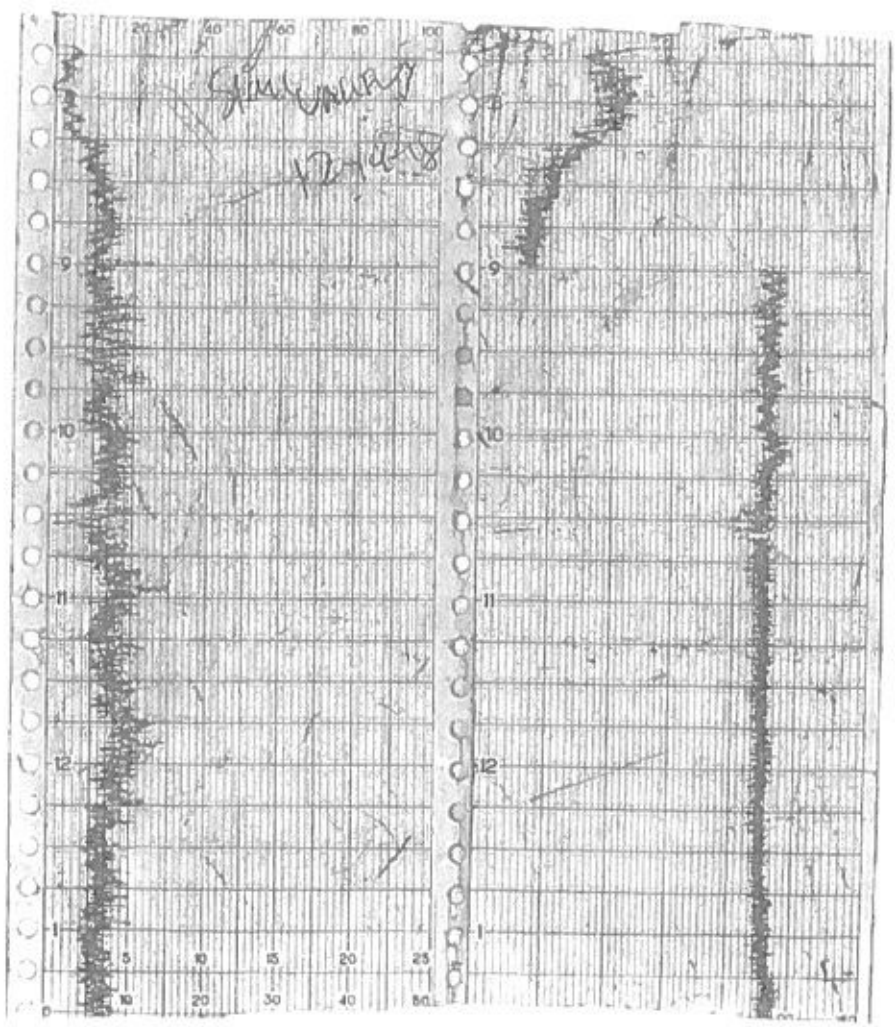
WIND SPEED & DIRECTION CHART ROLL



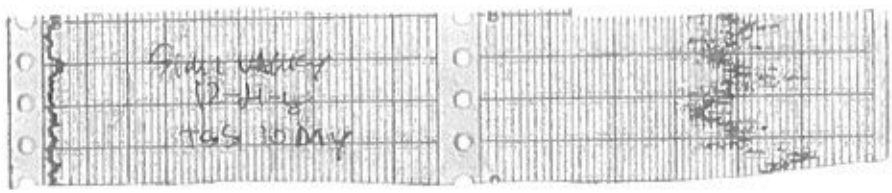
WIND SPEED & DIRECTION CHART ROLL



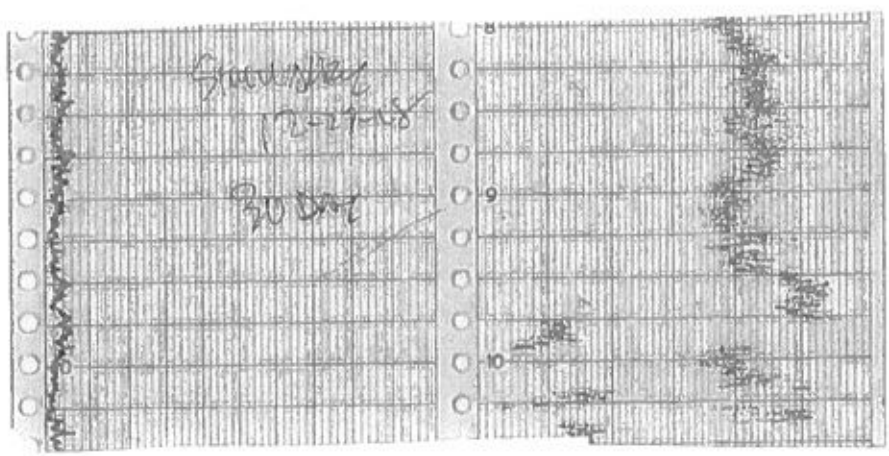
WIND SPEED & DIRECTION CHART ROLL



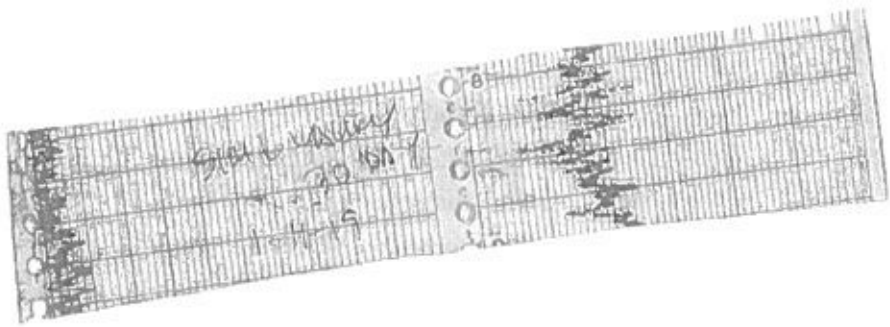
WIND SPEED & DIRECTION CHART ROLL



WIND SPEED & DIRECTION CHART ROLL



WIND SPEED & DIRECTION CHART ROLL



RES
Environmental Inc.

16-POINT WIND DIRECTION INDEX

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

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

Attachment E

Calibration Records

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: THERMO

MODEL: TVA 1000 EQUIPMENT #: 1 SERIAL #: 163208332

MONITORING DATE: 11-28-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 503 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2,8 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	503 ppm	450 ppm	12
#2	505 ppm	450 ppm	14
#3	505 ppm	450 ppm	14
Calculate Response Time (1+2+3) / 3			13,3 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0,83 ppm	503 ppm	3
#2	0,62 ppm	505 ppm	5
#3	0,69 ppm	505 ppm	5
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1,1% #DIV/0! Must be less than 10%

Performed By Michael ORut Date/Time 11-28-18/0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 2 SERIAL #: 7784545

MONITORING DATE: 11-28-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 505 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2.9 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	505 ppm	450 ppm	12
#2	504 ppm	450 ppm	12
#3	505 ppm	450 ppm	13
Calculate Response Time (1+2+3) / 3			12.3 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.93 ppm	505 ppm	5
#2	0.82 ppm	504 ppm	4
#3	0.87 ppm	505 ppm	5
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1.0% #DIV/0! Must be less than 10%

Performed By: Shawn Hershey Date/Time: 11-28-18/0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 3 SERIAL #: 1586584

MONITORING DATE: 11-28-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 502 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 1.8 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	502 ppm	450 ppm	13
#2	502 ppm	450 ppm	14
#3	503 ppm	450 ppm	14
Calculate Response Time (1+2+3) / 3			13.6 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.73 ppm	502 ppm	2
#2	0.68 ppm	502 ppm	2
#3	0.65 ppm	503 ppm	3
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			2.1% #DIV/0! Must be less than 10%

Performed By: Jim Redden Date/Time: 11-28-18/0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA1000 EQUIPMENT #: 4 SERIAL #: 1631983C

MONITORING DATE: 11-28-18 TIME: 0800

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 498 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 3,1 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	498 ppm	450 ppm	14
#2	501 ppm	450 ppm	13
#3	501 ppm	450 ppm	13
Calculate Response Time (1+2+3)/3			13,3 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0,62 ppm	498 ppm	2
#2	0,58 ppm	501 ppm	1
#3	0,53 ppm	501 ppm	1
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1,6% #DIV/0! Must be less than 10%

Performed By: Michael Meyer Date/Time: 11-28-18 / 0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Sun Valley INSTRUMENT MAKE: THERMO

MODEL: TVA 1000 EQUIPMENT #: 10 SERIAL #: 1016146223

MONITORING DATE: 12-8-18 TIME: 0800

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1.5 ppm	2.1 ppm	1.8 ppm

Background Value = 1.8 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	501 ppm	451 ppm	5
#2	498 ppm	448 ppm	5
#3	500 ppm	450 ppm	5
Calculate Response Time (1+2+3) / 3			5 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.28 ppm	501 ppm	1
#2	0.20 ppm	498 ppm	2
#3	0.18 ppm	500 ppm	0
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			0.20 #DIV/0! Must be less than 10%

Performed By: Leighanne Date/Time: 12-8-18 - 0800

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TE 1000 XP EQUIPMENT #: #1 SERIAL #: 1632053 2

MONITORING DATE: 12-10-18 TIME: 0830

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2 ppm	3 ppm	2.5 ppm

Background Value = 2.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	501 ppm	450 ppm	6
#2	502 ppm	450 ppm	7
#3	500 ppm	450 ppm	6
Calculate Response Time (1+2+3) / 3			6.3 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.69 ppm	501 ppm	1
#2	0.71 ppm	502 ppm	2
#3	0.70 ppm	500 ppm	0
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			0.2 #DIV/0! Must be less than 10%

Performed By: Tamara Madison Date/Time: 12-10-18

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: THERMO

MODEL: TVA 1000 EQUIPMENT #: 2 # SERIAL #: 1031445325

MONITORING DATE: 12-14-18 TIME: 0745

Calibration Procedure:

1. Allow instrument to zero itself while introducing air.
2. Introduce calibration gas into the probe. Stabilized reading = 505 ppm
3. Adjust meter settings to read 500 ppm.

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 1 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	500 ppm	450 ppm	7
#2	500 ppm	450 ppm	7
#3	500 ppm	450 ppm	7
Calculate Response Time (1+2+3) / 3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0 ppm	500 ppm	7
#2	0 ppm	500 ppm	7
#3	0 ppm	500 ppm	7
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1400 #DIV/0! Must be less than 10%

Performed By: Tomas Cecil Date/Time: 12-14-18 0745

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL TVA1000 EQUIPMENT #: 14 SERIAL #: 1036346771

MONITORING DATE: 12-14-18 TIME: 0745

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	500 ppm	450 ppm	7
#2	500 ppm	450 ppm	7
#3	500 ppm	450 ppm	7
Calculate Response Time (1+2+3) / 3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0 ppm	500 ppm	7
#2	0 ppm	500 ppm	7
#3	0 ppm	500 ppm	7
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1.40% #DIV/0! Must be less than 10%

Performed By: Tony Lewis Date/Time: 12-14-18 0745

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: THERMO

MODEL: TVA1000 EQUIPMENT #: 174 SERIAL #: _____

MONITORING DATE: 12-14-18 TIME: 0740

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	2 ppm	2 ppm

Background Value = 1.7 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	26 ppm	23.5 ppm	11
#2	25 ppm	23.5 ppm	9
#3	28 ppm	23.5 ppm	10
Calculate Response Time (1+2+3) / 3			10 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	1.36 ppm	26 ppm	24.64
#2	2.74 ppm	25 ppm	22.26
#3	1.78 ppm	28 ppm	26.22
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/25 X 100/1			2.92 % #DIV/0! Must be less than 10%

Performed By: _____ Date/Time: 12-14-18 / 0745

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TSI 1 5 EQUIPMENT #: 21 SERIAL #: 1034145158

MONITORING DATE 12 14 18 TIME: 0745

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	25 ppm	22.5 ppm	7
#2	25 ppm	22.5 ppm	7
#3	25 ppm	22.5 ppm	7
Calculate Response Time (1+2+3)/3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0 ppm	25 ppm	7
#2	0 ppm	25 ppm	7
#3	0 ppm	25 ppm	7
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/25 X 100/1			1.40 #DIV/0! Must be less than 10%

Performed By: Tony Lewis Date/Time: 12-14-18 0745

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 21 SERIAL #: 1034345558O

MONITORING DATE: 12/14/2018 TIME: 07:45

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 1 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	500 ppm	450 ppm	7
#2	500 ppm	450 ppm	7
#3	500 ppm	450 ppm	7
Calculate Response Time (1+2+3) / 3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0 ppm	500 ppm	7
#2	0 ppm	500 ppm	7
#3	0 ppm	500 ppm	7
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1.40 % #DIV/0! Must be less than 10%

Performed By Tony Lewis Date/Time 07:45 12-14-18

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA EQUIPMENT #: 23 SERIAL #: 1030945322

MONITORING DATE: 12/14/10 TIME: 0745

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 1 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	500 ppm	450 ppm	7
#2	500 ppm	450 ppm	7
#3	500 ppm	450 ppm	7
Calculate Response Time (1+2+3) / 3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	6 ppm	510 ppm	7
#2	4 ppm	500 ppm	7
#3	4 ppm	500 ppm	7
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1.40 #DIV/0! Must be less than 10%

Performed By: Tony Lee Date/Time: 12-14-10 0745

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: Thermo

MODEL: TVA 1000 EQUIPMENT #: 25 SERIAL #: 1027445141

MONITORING DATE: 12-14-18 TIME: 0745

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 1 ppm

INSTRUMENT RESPONSE TIME RECORD

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

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0 ppm	500 ppm	0
#2	0 ppm	500 ppm	0
#3	0 ppm	500 ppm	0
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			0 #DIV/0! Must be less than 10%

Performed By: Tom Lee Date/Time 12/14/18 0745

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: THelmo

MODEL: TVA 1000 EQUIPMENT #: TVA 27 SERIAL #: 1035047725

MONITORING DATE: 12-14-18 TIME: 0830

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = _____ ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	500 ppm	450 ppm	7
#2	500 ppm	450 ppm	7
#3	500 ppm	450 ppm	7
Calculate Response Time (1+2+3) / 3			#DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0 ppm	500 ppm	7
#2	0 ppm	500 ppm	7
#3	0 ppm	500 ppm	7
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1.4046 #DIV/0! Must be less than 10%

Performed By _____ Date/Time: 12-21-18 / 0800

RES Environmental Inc

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: SIMI VALLEY INSTRUMENT MAKE: THERMO

MODEL: TVA 1000 EQUIPMENT #: TVA1000 #28 SERIAL #:

MONITORING DATE: 12-14-18 TIME: 0845

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	3 ppm	2 ppm

Background Value = 2 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	25 ppm	450 ppm	7
#2	25 ppm	450 ppm	7
#3	25 ppm	450 ppm	7
Calculate Response Time (1+2+3) / 3			7 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0 ppm	25 ppm	7
#2	0 ppm	25 ppm	7
#3	0 ppm	25 ppm	7
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1			1.40 % #DIV/0! Must be less than 10%

Performed By: Jessica Anderson Date/Time: 12-14-18-0845

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INTEGRATED

LANDFILL NAME: Sunnyvalley INSTRUMENT MAKE: Thermo

MODEL: 1002B EQUIPMENT #: #1 SERIAL #: 1632083J

MONITORING DATE: 12-21-18 TIME: 0800

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
1 ppm	2 ppm	1.5 ppm

Background Value = 1.5 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	25 ppm	22.50 ppm	6
#2	26 ppm	22.50 ppm	6
#3	25 ppm	22.50 ppm	6
Calculate Response Time (1+2+3) / 3			6.0 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 25 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.69 ppm	25 ppm	0
#2	0.58 ppm	26 ppm	2
#3	0.41 ppm	25 ppm	0
Calculate Precision [STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/25 X 100/1			2.6 #DIV/0! Must be less than 10%

Performed By: Tamara Anderson Date/Time: 12-21-18

RES Environmental Inc.

CALIBRATION PROCEDURE AND BACKGROUND REPORT – INSTANTANEOUS

LANDFILL NAME: Simi Valley INSTRUMENT MAKE: HHGmw

MODEL: 1000 B EQUIPMENT #: #1 SERIAL #: 1632083 2

MONITORING DATE: 12-27-18 TIME: 0815

Calibration Procedure:

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

Background Determination Procedure

Upwind Background Reading: (Highest in 30 seconds)	Downwind Background Reading: (Highest in 30 seconds)	Background Value: (Upwind + Downwind) / 2
2 ppm	2 ppm	2.0 ppm

Background Value = 2.0 ppm

INSTRUMENT RESPONSE TIME RECORD

Measurement #	Stabilized Reading Using Calibration Gas	90% of the Stabilized Reading	Time to Reach 90% of Stabilized Reading after switching from Zero Air to Calibration Gas
#1	500 ppm	450 ppm	6
#2	501 ppm	450 ppm	6
#3	500 ppm	450 ppm	6
Calculate Response Time (1+2+3) / 3			6.0 #DIV/0! Must be less than 30 seconds

CALIBRATION PRECISION RECORD

Calibration Gas Standard = 500 ppm

Measurement #	Meter Reading for Zero Air (A)	Meter Reading for Calibration Gas (B)	Calculate Precision [STD – (B)]
#1	0.69 ppm	500 ppm	0
#2	0.68 ppm	501 ppm	1
#3	0.71 ppm	500 ppm	0
Calculate Precision	[STD-B1] + [STD-B2] + [STD-B3] / 3 X 1/500 X 100/1		.06 #DIV/0! Must be less than 10%

Performed By: JAMAAL ADDISON Date/Time: 12-27-18

RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #1

SERIAL NUMBER: 16320832

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	99	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.69	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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

P.O. Box 748 • Colton, California 92324
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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #2

SERIAL NUMBER: 7784545

TECHNICIAN: [signature] DATE: 10-5-12

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.58	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES UNIT #3

SERIAL NUMBER: 15865884

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	499	+/- 125
10000	10000	10,101	+/- 2500
< 1	ZERO GAS	0.59	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #4

SERIAL NUMBER: 16319830

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	101	+/- 25
500	500	500	+/- 125
10000	10000	10,019	+/- 2500
< 1	ZERO GAS	0.69	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #5

SERIAL NUMBER: 4919480

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.74	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit # 6

SERIAL NUMBER: 0720723626

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.64	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #7

SERIAL NUMBER: 0720723627

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	102	+/- 25
500	500	500	+/- 125
10000	10000	10,166	+/- 2500
< 1	ZERO GAS	0,54	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #8

SERIAL NUMBER: 0532113800

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.71	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #9

SERIAL NUMBER: 0532113801

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	99	+/- 25
500	500	494	+/- 125
10000	10000	10,099	+/- 2500
< 1	ZERO GAS	0.62	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #10

SERIAL NUMBER: 1036346773

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.59	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #11

SERIAL NUMBER: 1036346774

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.57	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #12

SERIAL NUMBER: 1036246741

TECHNICIAN: MM DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	499	+/- 125
10000	10000	10,001	+/- 2500
< 1	ZERO GAS	0.73	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #13

SERIAL NUMBER: 1102746775

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.55	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Vault #14

SERIAL NUMBER: 103634671

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.59	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #15

SERIAL NUMBER: 1036346772

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.69	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #16

SERIAL NUMBER: 1102746716

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.65	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit #29

SERIAL NUMBER: 1031445324

TECHNICIAN: [signature] DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

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

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES Unit # 30

SERIAL NUMBER: 171954b

TECHNICIAN: JM/M DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,001	+/- 2500
< 1	ZERO GAS	0,65	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

TVA1000B CALIBRATION VERIFICATION

CUSTOMER: RES unit #31

SERIAL NUMBER: 4917163

TECHNICIAN: JM M DATE: 10-5-18

GAS CALIBRATION CHECK (PERFORMED AT ROOM TEMPERATURE)

FID			
METHANE GAS NOMINAL (ppm)	CALIBRATION GAS (ppm)	TVA READING (ppm)	TOLERANCE (ppm)
100	100	100	+/- 25
500	500	500	+/- 125
10000	10000	10,000	+/- 2500
< 1	ZERO GAS	0.63	< 3
PID			
ISOBUTYLENE GAS NOMINAL (ppm)	CALIBRATION GAS.(ppm)	TVA READING (ppm)	TOLERANCE (ppm)
50	50		+/- 12.5
100	100		+/- 25
500	500		+/- 125
< 1	ZERO GAS		< 3

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM / M

Date: 12-1-18 Time: 0600

Model # TVA-1000B

Serial # #1 163208 32

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	(Pass) / Fail	CALIBRATION CHECK		
Reading following ignition	2.5 ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	(Pass) / Fail / NA	500	500	100%
Clean system check (check valve chatter)	(Pass) / Fail / NA	RESPONSE TIME		
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	Calibration Gas, ppm	500	
Date of last factory calibration	10-5-18	90% of Calibration Gas, ppm	450	
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	7	
		2.	7	
		3.	6	
		Average	6.6	
		Equal to or less than 30 seconds?	(Y)	N
		Instrument calibrated to	CH4 gas	

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 12-1-18 Time: 0615

Model # VA 1000 B

Serial # #2 7784545

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	3.0 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 7; 2. 7; 3. 6; Average 6.6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 12-1-18 Time: 0630

Model # TVA 1000B

Serial # #3 15865884

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	1.6 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 7 / 2. 8 / 3. 8
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 7.6
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM CM

Date: 12-1-16 Time: 0645

Model # TVA 1000B

Serial # #4 163198730

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	1.9 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-16	Time required to attain 90% of Cal Gas ppm: 1. 9 2. 8 3. 7
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 8.0
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 12-1-18 Time: 0900

Model # TVA 1000B

Serial # #5 419480

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.2 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 7 — 2. 6 — 3. 6 — Average 6.3
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM CM

Date: 12-1-18 Time: 0715

Model # TVA-1000B

Serial # #6 0720723626

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.2 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 6 / 2. 7 / 3. 7 / Average 6.6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH_4 gas.

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM JM

Date: 12-1-18 Time: 0730

Model # TVA 1000B

Serial # #7 0720723627

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	(Pass) / Fail	CALIBRATION CHECK		
Reading following ignition	1.6 ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	(Pass) / Fail / NA	500	500	100%
Clean system check (check valve chatter)	(Pass) / Fail / NA	RESPONSE TIME		
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	Calibration Gas, ppm	500	
Date of last factory calibration	10-5-18	90% of Calibration Gas, ppm	450	
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	7	
		2.	7	
		3.	7	
		Average	7.0	
		Equal to or less than 30 seconds?	(Y)	N
		Instrument calibrated to CH4 gas.		

Comments: _____

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(909) 422-1001 Toll Free (888) 425-1098 Fax (909) 422-0707 www.resenvironmental.com

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 12-1-18 Time: 0745

Model # TVA 1000 B

Serial # #8 0532113800

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.1 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 6 2. 6 3. 7
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 6.3
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH_4 gas.

Comments: _____

465

RES
Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site:

Purpose:

Operator: [signature]

Date: 12-1-18 Time: 0800

Model # TVA 1000B
Serial # #9 0532113801

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK — Calibration Gas (ppm): 500; Actual (ppm): 500; % Accuracy: 100%
Reading following ignition	2.4 ppm	RESPONSE TIME
Leak test	(Pass) / Fail / NA	Calibration Gas, ppm: 500
Clean system check (check valve chatter)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	Time required to attain 90% of Cal Gas ppm: 1. 7 2. 6 3. 7
Date of last factory calibration	10-5-18	Average: 6.6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N Instrument calibrated to CH4 gas.

Comments:

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 12-1-18 Time: 0815

Model # TVA-1000 B

Serial # #10 1036346773

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.3 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 400 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 1 2. 1 3. 1
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average 1.0
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 12-1-18 Time: 0830

Model # VOA 1000 B

Serial # #11 1036346774

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION		
Battery test	(Pass) / Fail	CALIBRATION CHECK		
Reading following ignition	1.9 ppm	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
Leak test	(Pass) / Fail / NA	500	500	100%
Clean system check (check valve chatter)	(Pass) / Fail / NA	RESPONSE TIME		
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	Calibration Gas, ppm	500	
Date of last factory calibration	10-5-18	90% of Calibration Gas, ppm	450	
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Time required to attain 90% of Cal Gas ppm		
		1.	8	
		2.	6	
		3.	6	
		Average	6.6	
		Equal to or less than 30 seconds?	(Y)	N
		Instrument calibrated to	CH_4 gas.	

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM CM

Date: 12-1-18 Time: 0845

Model # TVA1000B

Serial # #12 1036246241

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	1.3 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm
Factory calibration record w/instrument within 3 months	(Pass) / Fail	1. 9 2. 6 3. 8 Average 7.6 Equal to or less than 30 seconds? (Y) N Instrument calibrated to CH4 gas.

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM JM

Date: 12-1-18 Time: 0900

Model # TVA 1000 B

Serial # #13 1102746775

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.1 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 9 2. 9 3. 9
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 8.3
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH_4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JHH CHH

Date: 12-1-18 Time: 0915

Model # TVA 1000B

Serial # #14 1036346771

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.6 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 7 / 2. 6 / 3. 6 / Average 6.3
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM JM

Date: 12-1-18 Time: 0930

Model # TVA 1020 B

Serial # #15 | 1036346772

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	1.4 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 7 2. 9 3. 9
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 8.3
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas

Comments: _____

465

RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: _____

Date: 12-1-18 Time: 0945

Model # TVA 1000 B

Serial # #16 1102746776

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.3 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 6 2. 6 3. 6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 6.0
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

465

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: ______

Purpose: ______

Operator: JMA / MM

Date: 12-1-18 Time: 1000

Model # TVA 1000B

Serial # #29 1031445324

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	Pass / Fail (Pass circled)	CALIBRATION CHECK Calibration Gas (ppm): 500 · Actual (ppm): 500 · % Accuracy: 100%
Reading following ignition	2.9 ppm	
Leak test	Pass / Fail / NA (Pass circled)	RESPONSE TIME
Clean system check (check valve chatter)	Pass / Fail / NA (Pass circled)	Calibration Gas, ppm: 500 90% of Calibration Gas, ppm: 450
H_2 supply pressure gauge (acceptable range 9.5 - 12)	Pass / Fail / NA (Pass circled)	Time required to attain 90% of Cal Gas ppm 1. 7 2. 7 3. 9
Date of last factory calibration	10-5-18	Average: 7.6
Factory calibration record w/instrument within 3 months	Pass / Fail (Pass circled)	Equal to or less than 30 seconds? Y (circled) N Instrument calibrated to CH_4 gas.

Comments: ______

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM CM

Date: 12-1-18 Time: 1015

Model # YGA 1000 B

Serial # #30 1719 5416

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.1 ppm	Calibration Gas (ppm): 500 — Actual (ppm): 500 — % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 7 2. 7 3. 7
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 7.0
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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RES Environmental Inc.

SURFACE EMISSION MONITORING INSTRUMENT
CALIBRATION LOG

Site: _____

Purpose: _____

Operator: JM / JM

Date: 12-1-18 Time: 1030

Model # TVA-1000B

Serial # #31 4917163

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery test	(Pass) / Fail	CALIBRATION CHECK
Reading following ignition	2.1 ppm	Calibration Gas (ppm): 500 / Actual (ppm): 500 / % Accuracy: 100%
Leak test	(Pass) / Fail / NA	RESPONSE TIME
Clean system check (check valve chatter)	(Pass) / Fail / NA	Calibration Gas, ppm: 500
H_2 supply pressure gauge (acceptable range 9.5 - 12)	(Pass) / Fail / NA	90% of Calibration Gas, ppm: 450
Date of last factory calibration	10-5-18	Time required to attain 90% of Cal Gas ppm: 1. 6 2. 6 3. 6
Factory calibration record w/instrument within 3 months	(Pass) / Fail	Average: 6
		Equal to or less than 30 seconds? (Y) N
		Instrument calibrated to CH4 gas.

Comments: _____

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INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687
800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

Lot # 17-6022

Mfg. Date: 9/1/2017
Parent Cylinder ID Number: 02268, NY02189

Method of Preparation:
Gravimetric

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

Analysis By: Tony Janquart
Quality Assurance Manager
800-552-5003
Certificate Date: 9/1/2017


Concentration (Mole%) Accuracy
- 20.9% Oxygen
- Bal. Nitrogen
@ 70°F and 1,000 PSIG
103 L
Kaiser Avenue, Irvine, CA 92614
(800) 201-8150 Fax (949) 757-0363
Air Zero
(20.9% O2/N2)
103 L
Lot# 17 – 6022

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687
800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

Lot # 17-6074

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

Method of Preparation:
Gravimetric/Pressure Transfilled

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

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


Service
Concentration (Mole%)
Accuracy
25 ppm
Balance
+/- 5%
70°F and 1,000 PSIG
103 L
Avenue, Irvine, CA 92614
(800) 201-8150 Fax (949)
04 25 ppm/Air
103 L
Lot# 17-6074
NRC 1100/1505M-1102
NRC 76/104
AUTION

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687
800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

Lot # 18-6386

Mfg. Date: 6/4/2018
Parent Cylinder ID Number: 001763

Method of Preparation:
Gravimetric/Pressure Transfilled

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

Analysis By: Tony Janquart
Quality Assurance Manager
800-552-5003
Certificate Date: 6/4/2018


Concentration (Mole%) Accuracy
(CH4) 500 ppm
Balance
+/- 2%
3.6ft³ @ 70°F and 1,000 PSIG
103 L
Kaiser Avenue Irvine, CA 92614
(949) 201-8150 Fax (949) 757-0363
CH4 500 ppm/ Air
103 L
Lot# 18-6386
Certificate of Analysis
DOT-39 NRC 1100/1505M-110
TC-39M NRC 76/104
CAUTION

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687
800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

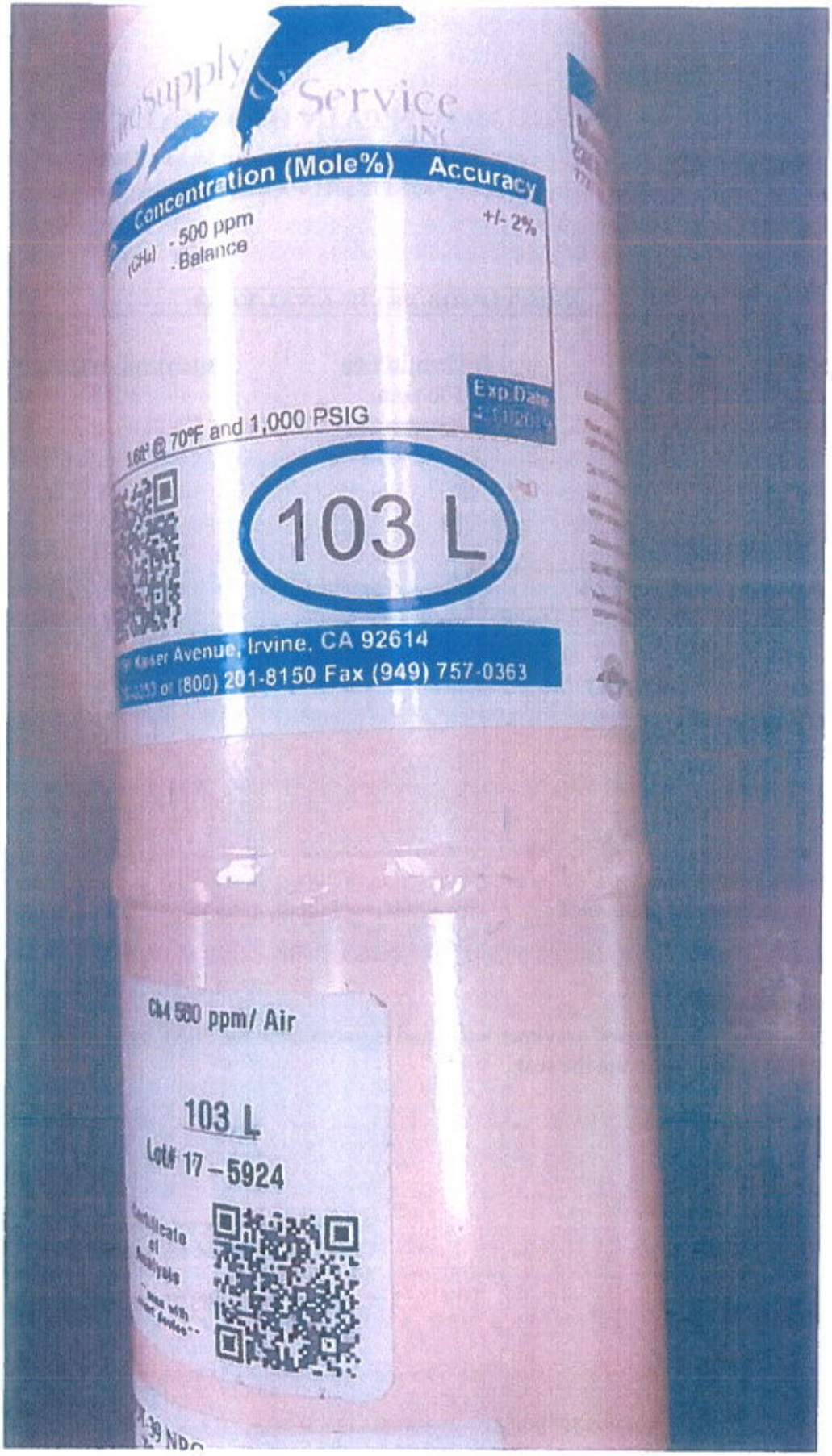
Lot # 17-5924

Mfg. Date: 5/11/2017
Parent Cylinder ID Number: 001783

Method of Preparation:
Gravimetric/Pressure Transfilled

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

Analysis By: Tony Janquart
Quality Assurance Manager
800-552-5003
Certificate Date: 5/11/2017


Concentration (Mole%) Accuracy
- 500 ppm
Balance
+/- 2%
Exp Date
@ 70°F and 1,000 PSIG
103 L
Kaiser Avenue, Irvine, CA 92614
(800) 201-8150 Fax (949) 757-0363
CH4 500 ppm/ Air
103 L
Lot# 17-5924

INTERMOUNTAIN SPECIALTY GASES

520 N. Kings Road • Nampa • Idaho • 83687
800-552-5003 • www.isgases.com

CERTIFICATE OF ANALYSIS

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

Lot # 17-6070

Mfg. Date: 10/11/2017
Parent Cylinder ID Number: 001783

Method of Preparation:
Gravimetric/Pressure Transfilled

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

Analysis By: Tony Janquart
Quality Assurance Manager
800-552-5003
Certificate Date: 10/11/2017


Supply & Service
INC
Concentration (Mole%) Accuracy
+/- 2%
500 ppm
Balance
Exp Date
9/8/2016
@ 70°F and 1,000 PSIG
103 L
Irvine, CA 92614
(800) 201-8150 Fax (949) 757-0363
CH4 500 ppm/ Air
103 L
Lot# 17-6070
Certificate of Analysis
NRC 1100/1505M-1102

Startup, Shutdown, and Malfunction (SSM) Plan
Semi-Annual Report
(July through December 2018)

Simi Valley Landfill and Recycling Center
Simi Valley, California

For Submittal to:

Ventura County Air Pollution Control District
669 County Square Drive
Ventura, California 93003
(805) 645-1400

Presented by:

Simi Valley Landfill and Recycling Center
2801 Madera Road
Simi Valley, California 93065

February 2019

This semi-annual startup, shutdown, and malfunction (SSM) plan report was prepared in order to comply with the requirements set forth in Simi Valley Landfill and Recycling Center's (SVLRC's) SSM plan and in accordance with 40 Code of Federal Regulations (CFR) 63.6(d)(5)(i) requirements. Unless otherwise noted in this report, all actions taken during the reporting period were consistent with the SVLRC's SSM Plan. This report contains information regarding the number, duration, and description of each SSM event. A copy of the SSM Plan and all revisions/addenda are kept on file at the facility for at least five (5) years and are available to appropriate regulatory agency personnel for inspection.

Report Preparer:

Name & Title: Collin Pavelchik, EP Air Quality Specialist

Signature: Collin Pavelchik Date: 2/11/19

I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE INFORMATION PROVIDED IN THIS REPORT IS COMPLETE AND ACCURATE.

Landfill Responsible Official:

Name & Title: Scott Tignac, District Manager

Signature: Date: 2-11-19

Table of Contents

Appendices

1.0 INTRODUCTION

Simi Valley Landfill and Recycling Center (SVLRC) is subject to 40 Code of Federal Regulation (CFR) Part 63, Subpart AAAA, the National Emission Standard for Hazardous Air Pollutants (NESHAPs) for Municipal Solid Waste Landfills. In accordance with NESHAPs requirements, a startup, shutdown, and malfunction (SSM) plan (SSM Plan) was prepared for SVLRC. This SSM Plan documents the procedures for operating and maintaining the affected elements of the landfill gas (LFG) collection and control system (GCCS) during startup, shutdown, and malfunction.

In addition to the requirement to prepare an SSM Plan, 40 CFR §63.10(d)(5)(i) contains provisions requiring periodic SSM Reports. At a minimum, these reports must be prepared on a semi-annual basis and must be delivered or postmarked by the 30th day following the end of the calendar reporting period (or other period specified by the regulatory agency or permit). This SSM Report covers the period between July 1, 2018 and December 31, 2018. Per confirmation with Ventura County Air Pollution Control District, this SSM Report may be submitted with the semi-annual Title V and New Source Performance Standards (NSPS) Report to allow synchronization of submittal dates. Therefore, this report is due February 15, 2019.

This SSM Report has been organized into four sections: two for startup, shutdown, and malfunction reporting, one for SSM Plan departure forms, and one for SSM Plan revisions.

2.0 STARTUP/SHUTDOWN REPORTING REQUIREMENTS

During the reporting period, all startups and shutdowns were consistent with the provisions set forth in SVLRC's SSM Plan. The SSM Plan contains startup and shutdown report spreadsheets/forms that are filled out under certain conditions even when the startup and shutdown provisions are in accordance with the SSM Plan. Startup and shutdowns are generally "planned" events associated with system repair, maintenance, testing and upgrade, and are generally not related to a malfunction of the GCCS. In each case, the SSM Plan was successfully implemented for the flares, the wells, the various GCCS components, and the landfill gas-to-energy (LFGTE) facility. SSM reporting forms/spreadsheets are kept on site and are available for review upon request. Generally speaking, each startup followed a previous shutdown.

The startup and shutdown report spreadsheets from this reporting period are included in **Appendix A** (flare, wells, flare system devices) of this SSM Report, including specific information regarding each event. All forms have been updated to a printable electronic format to improve ease of completion and accuracy, and still contain all necessary regulatory information.

Planned shutdowns/startups of the **Flare System** occurred on the following dates:

Startup/Shutdown Event		**Duration (Hours)**	**Cause/Reason for Startup/Shutdown**
Start	**End**		
The **twenty-eight (28)** startup/shutdowns of the flare system are listed in the SSM spreadsheet in Appendix A.			

There were no startup/shutdowns of the **Flare System Monitoring/Recording Devices** during the reporting period.

Planned shutdowns/startups of the **GCCS Wells** occurred on the following dates:

Date of Shutdown Event	**Date of Startup Event**	**Downtime Duration (Hours)**	**Well ID**	**Cause/Reason for Startup/Shutdown**
The **thirty-five (35)** well startup/shutdowns are listed in the SSM spreadsheet in Appendix A.				

3.0 MALFUNCTION REPORTING REQUIREMENTS

During the reporting period, all malfunctions were consistent with the provisions set forth in SVLRC's SSM Plan. The SSM Plan contains malfunction report spreadsheets/forms that are filled out under certain conditions even when the actions taken during the malfunction are in accordance with the SSM Plan. In each case, the SSM Plan was successfully implemented. SSM reporting spreadsheets/forms are kept on site and are available for review upon request.

The events were resolved by shutdown and startup procedures. The malfunction report spreadsheets from this reporting period are included in **Appendix A** (flare, wells, flare system devices) of this SSM Report, including specific information regarding each event. All forms have been updated to a printable electronic format to improve ease of completion and accuracy, and still contain all necessary regulatory information.

Malfunctions of the **Flare System** occurred on the following dates:

Malfunction Event		**Duration (Hours)**	**Reason for Malfunction**
Start	**End**		
The sixteen (16) malfunctions of the flare system are listed in the SSM spreadsheet in Appendix A.			

There were no malfunctions of the **Flare System Recording/Monitoring Devices** during the reporting period.

There were no malfunctions of the **GCCS** collection system components (includes **wells**) during the reporting period.

4.0 STARTUP, SHUTDOWN, AND MALFUNCTION PLAN REVISIONS

No revisions were made to the SSM Plan during this reporting period. As previously mentioned a copy of the SSM Plan and all revisions/addenda are kept on file at the facility for at least five (5) years and are available to appropriate regulatory agency personnel for inspection.

Per 40 CFR §63.6(e)(3)(viii) requirements, if SVLRC's SSM Plan fails to address or inadequately addresses an event that meets the definition of a startup, shutdown, or malfunction, the SSM Plan shall be revised within 45 days after the event to include procedures for operating and maintaining the appropriate equipment during a similar malfunction event and the revised SSM Plan will be included in this semi-annual report. Additionally, if any revisions are made to the SSM Plan that alter the scope of SSM activities at SVLRC or otherwise modify the applicability of any emission limit, work practice requirement, or other requirement in 40 CFR §63, the revised SSM Plan is not effective until written notice is provided to the permitting authority describing the SSM Plan revision. In these cases, a copy of the written notification will be included in this semi-annual report along with a copy of the revised SSM Plan.

There were no events occurred during the reporting period that were not adequately addressed by the SSM Plan. In each case, the SSM Plan was successfully implemented. As such, no departure forms are contained within Appendix B. In addition, the SSM Plan was not revised, or required to be revised during the reporting period, so no information is provided in Appendix C.

APPENDIX A

FLARE & WELL
STARTUP/SHUTDOWN &
MALFUNCTION REPORT SPREADSHEETS

SIMI VALLEY LANDFILL
FLARE NO. 3 DOWNTIME LOG
July-December 2018

Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
1	x Shutdown Event x Startup Event x Malfunction Event	Flare	7/11/18 1:04 7/11/18 8:48	7/11/18 1:06 7/11/18 8:52	0.03 0.07	7.73	Compressor Failure	Nick T., Dustin C. & Collin P
2	x Shutdown Event x Startup Event Malfunction Event	Flare	7/13/18 7:22 7/13/18 12:22	7/13/18 7:24 7/13/18 12:26	0.03 0.07	5.00	Flare Cleaning	Nick T., Dustin C. & Collin P
3	x Shutdown Event x Startup Event Malfunction Event	Flare	7/16/18 7:22 7/16/18 12:03	7/16/18 7:24 7/16/18 12:07	0.03 0.07	4.68	Blower Repairs	Nick T., Dustin C. & Collin P
4	x Shutdown Event x Startup Event Malfunction Event	Flare	7/17/18 6:51 7/17/18 7:19	7/17/18 6:53 7/17/18 7:23	0.03 0.07	0.47	PLC maintenance	Nick T., Dustin C. & Collin P
5	x Shutdown Event x Startup Event Malfunction Event	Flare	7/17/18 15:15 7/17/18 15:33	7/17/18 15:17 7/17/18 15:37	0.03 0.07	0.30	PLC maintenance	Nick T., Dustin C. & Collin P
6	x Shutdown Event x Startup Event Malfunction Event	Flare	7/18/18 7:16 7/18/18 9:54	7/18/18 7:18 7/18/18 9:58	0.03 0.07	2.63	Blower Repairs	Nick T., Dustin C. & Collin P
7	x Shutdown Event x Startup Event x Malfunction Event	Flare	7/29/18 5:21 7/29/18 11:00	7/29/18 5:23 7/29/18 11:04	0.03 0.07	5.65	Compressor failure	Nick T., Dustin C. & Collin P
8	x Shutdown Event x Startup Event Malfunction Event	Flare	8/3/18 7:07 8/3/18 9:13	8/3/18 7:09 8/3/18 9:17	0.03 0.07	2.10	Flare Burner Cleaning	Nick T., Dustin C. & Collin P
9	x Shutdown Event x Startup Event Malfunction Event	Flare	8/5/18 7:26 8/5/18 15:58	8/5/18 7:28 8/5/18 16:02	0.03 0.07	8.53	Flare shutdown due to removal of Southern California Edison equipment	Nick T., Dustin C. & Collin P
10	x Shutdown Event x Startup Event Malfunction Event	Flare	8/8/18 7:10 8/8/18 9:23	8/8/18 7:12 8/8/18 9:27	0.03 0.07	2.22	Blower Repairs	Nick T., Dustin C. & Collin P

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Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
11	x Shutdown Event x Startup Event Malfunction Event	Flare	8/9/18 11:27 8/9/18 14:41	8/9/18 11:29 8/9/18 14:45	0.03 0.07	3.23	Installing New Compressor	Nick T., Dustin C. & Collin P
12	x Shutdown Event x Startup Event Malfunction Event	Flare	8/26/18 9:21 8/26/18 12:40	8/26/18 9:23 8/26/18 12:44	0.03 0.07	3.32	SoCal Edison scheduled shutdown	Nick T., Dustin C. & Collin P
13	x Shutdown Event x Startup Event Malfunction Event	Flare	8/30/18 7:43 8/30/18 9:42	8/30/18 7:45 8/30/18 9:46	0.03 0.07	1.98	Sump Maintanence	Nick T., Dustin C. & Collin P
14	x Shutdown Event x Startup Event Malfunction Event	Flare	9/9/18 10:00 9/9/18 12:21	9/9/18 10:02 9/9/18 12:25	0.03 0.07	2.35	Flare shutdown due to scheduled power outage by EMS	Nick T., Dustin C. & Collin P
15	X Shutdown Event X Startup Event Malfunction Event	Flare	9/12/18 13:24 9/12/18 16:56	9/12/18 16:56 9/12/18 17:00	3.53 0.07	3.53	Air Dryer Install	Nick T., Dustin C. & Collin P
16	X Shutdown Event X Startup Event Malfunction Event	Flare	9/14/18 9:23 9/14/18 12:24	9/14/18 12:24 9/14/18 12:28	3.02 0.07	3.02	Innosepra Flare Tie-in	Nick T., Dustin C. & Collin P
17	x Shutdown Event x Startup Event x Malfunction Event	Flare	9/17/18 12:27 9/17/18 14:15	9/17/18 14:15 9/17/18 14:19	1.80 0.07	1.80	Power Surge	Nick T., Dustin C. & Collin P
18	X Shutdown Event X Startup Event Malfunction Event	Flare	9/21/18 6:52 9/21/18 10:50	9/21/18 10:50 9/21/18 10:54	3.97 0.07	3.97	Flare Clean	Nick T., Dustin C. & Collin P
19	X Shutdown Event X Startup Event Malfunction Event	Flare	9/27/18 7:14 9/27/18 7:39	9/27/18 7:39 9/27/18 7:43	0.42 0.07	0.42	BL-104 Inspection	Nick T., Dustin C. & Collin P
20	X Shutdown Event X Startup Event X Malfunction Event	Flare	9/30/18 3:30 9/30/18 7:34	9/30/18 7:34 9/30/18 7:38	4.07 0.07	4.07	BL-104 Failure	Nick T., Dustin C. & Collin P

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Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
21	X Shutdown Event X Startup Event Malfunction Event	Flare	10/1/18 7:32	10/1/18 7:54	0.37	0.37	Flare Clean initiated, delayed until following day	Nick T., Dustin C. & Collin P
			10/1/18 7:54	10/1/18 7:58	0.07			
22	X Shutdown Event X Startup Event Malfunction Event	Flare	10/2/18 8:55	10/2/18 13:23	4.47	4.47	Flare Clean	Nick T., Dustin C. & Collin P
			10/2/18 13:23	10/2/18 13:27	0.07			
23	X Shutdown Event X Startup Event X Malfunction Event	Flare	10/10/18 6:42	10/10/18 9:54	3.20	3.20	CS-04 Failure	Nick T., Dustin C. & Collin P
			10/10/18 9:54	10/10/18 9:58	0.07			
24	X Shutdown Event X Startup Event X Malfunction Event	Flare	10/15/18 7:10	10/15/18 12:37	5.45	5.45	CS-04 Failure	Nick T., Dustin C. & Collin P
			10/15/18 12:37	10/15/18 12:41	0.07			
25	X Shutdown Event X Startup Event X Malfunction Event	Flare	10/18/18 6:37	10/18/18 8:23	1.77	1.60	CS-04 Failure	Nick T., Dustin C. & Collin P
			10/18/18 8:13	10/18/18 8:17	0.07			
26	X Shutdown Event X Startup Event X Malfunction Event	Flare	10/19/18 6:30	10/19/18 10:48	4.30	4.30	CS-04 Failure/Flare Clean	Nick T., Dustin C. & Collin P
			10/19/18 10:48	10/19/18 10:52	0.07			
27	x Shutdown Event x Startup Event Malfunction Event	Flare	10/25/18 6:37	10/25/18 6:39	0.03	1.87	Flare and sump cleaning	Nick T., Dustin C. & Collin P
			10/25/18 8:29	10/25/18 8:33	0.07			
28	x Shutdown Event x Startup Event Malfunction Event	Flare	10/27/18 10:28	10/27/18 10:30	0.03	0.83	Shutdown for LFG leak repair	Nick T., Dustin C. & Collin P
			10/27/18 11:18	10/27/18 11:22	0.07			
29	x Shutdown Event x Startup Event Malfunction Event	Flare	10/28/18 21:03	10/28/18 21:05	0.03	7.83	Edison cut power for line maintenance	Nick T., Dustin C. & Collin P
			10/29/18 4:53	10/29/18 4:57	0.07			
30	x Shutdown Event x Startup Event x Malfunction Event	Flare	11/3/18 11:52	11/3/18 11:54	0.03	2.33	Condensate sump failure	Nick T., Dustin C. & Collin P
			11/3/18 14:12	11/3/18 14:16	0.07			

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Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
31	X Shutdown Event X Startup Event X Malfunction Event	Flare	11/8/18 12:48 11/8/18 16:02	11/8/18 12:50 11/8/18 16:06	0.03 0.07	3.23	Power Outage	Nick T., Dustin C. & Collin P
32	X Shutdown Event X Startup Event X Malfunction Event	Flare	11/8/18 16:45 11/8/18 18:31	11/8/18 16:47 11/8/18 18:35	0.03 0.07	1.77	Power Surge	Nick T., Dustin C. & Collin P
33	X Shutdown Event X Startup Event X Malfunction Event	Flare	11/11/18 16:56 11/11/18 19:33	11/11/18 16:58 11/11/18 19:37	0.03 0.07	2.62	CS-04 Failure	Nick T., Dustin C. & Collin P
34	X Shutdown Event X Startup Event Malfunction Event	Flare	11/19/18 8:09 11/19/18 9:56	11/19/18 8:11 11/19/18 10:00	0.03 0.07	1.78	CS-04 Cleaning	Nick T., Dustin C. & Collin P
35	X Shutdown Event X Startup Event Malfunction Event	Flare	11/23/18 13:56 11/23/18 14:31	11/23/18 13:58 11/23/18 14:35	0.03 0.07	0.58	CS-04 Cleaning	Nick T., Dustin C. & Collin P
36	X Shutdown Event X Startup Event X Malfunction Event	Flare	11/26/18 5:20 11/26/18 9:10	11/26/18 5:22 11/26/18 9:14	0.03 0.07	3.83	CS-04 Failure	Nick T., Dustin C. & Collin P
37	x Shutdown Event x Startup Event Malfunction Event	Flare	11/30/18 6:43 11/30/18 8:07	11/30/18 6:45 11/30/18 8:11	0.03 0.07	1.40	Flare Cleaning	Nick T., Dustin C. & Collin P
38	x Shutdown Event x Startup Event x Malfunction Event	Flare	11/30/18 13:18 11/30/18 13:44	11/30/18 13:20 11/30/18 13:48	0.03 0.07	0.43	Power Failure	Nick T., Dustin C. & Collin P
39	x Shutdown Event x Startup Event Malfunction Event	Flare	12/3/18 13:40 12/3/18 14:18	12/3/18 13:42 12/3/18 14:22	0.03 0.07	0.63	Burner Cleaning	Nick T., Dustin C. & Collin P
40	x Shutdown Event x Startup Event Malfunction Event	Flare	12/4/18 6:49 12/4/18 13:31	12/4/18 6:51 12/4/18 13:35	0.03 0.07	6.70	Enviroserv sump clean	Nick T., Dustin C. & Collin P

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Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
41	x Shutdown Event x Startup Event Malfunction Event	Flare	12/7/18 7:05	12/7/18 7:07	0.03	7.92	Flare Cleaning	Nick T., Dustin C. & Collin P
			12/7/18 15:00	12/7/18 15:04	0.07			
42	x Shutdown Event x Startup Event x Malfunction Event	Flare	12/12/18 6:50	12/12/18 6:52	0.03	3.22	Flame Failure	Nick T., Dustin C. & Collin P
			12/12/18 10:03	12/12/18 10:07	0.07			
43	x Shutdown Event x Startup Event x Malfunction Event	Flare	12/14/18 8:31	12/14/18 8:33	0.03	0.30	Power Failure	Nick T., Dustin C. & Collin P
			12/14/18 8:49	12/14/18 8:53	0.07			
44	x Shutdown Event x Startup Event Malfunction Event	Flare	12/27/18 8:12	12/27/18 8:14	0.03	2.00	Condensate Injection Install	Nick T., Dustin C. & Collin P
			12/27/18 10:12	12/27/18 10:16	0.07			

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Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
1	x Shutdown Event Startup Event Malfunction Event	GW-21	10/8/18 8:30 1/0/00 0:02	10/8/18 8:32 1/0/00 0:02	0.03 0.03	N/A	Decomissioned for new wells	Nick T., Dustin C. & Collin P.
2	x Shutdown Event Startup Event Malfunction Event	1560	6/12/18 8:30 1/0/00 0:02	6/12/18 8:32 1/0/00 0:02	0.03 0.03	Pending	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
3	x Shutdown Event x Startup Event Malfunction Event	1561	6/12/18 9:45 12/11/18 14:35	6/12/18 9:47 12/11/18 14:37	0.03 0.03	4,372.83	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
4	x Shutdown Event x Startup Event Malfunction Event	1784	7/20/18 9:15 12/17/18 14:43	7/20/18 9:17 12/17/18 14:45	0.03 0.03	3,605.47	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
5	X Shutdown Event Startup Event Malfunction Event	1675S	10/2/18 13:30 1/0/00 0:02	10/2/18 13:32 1/0/00 0:02	0.03 0.03	Pending	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
6	X Shutdown Event Startup Event Malfunction Event	1782D	10/2/18 13:30 1/0/00 0:02	10/2/18 13:32 1/0/00 0:02	0.03 0.03	Pending	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
7	X Shutdown Event Startup Event Malfunction Event	1782S	10/2/18 13:30 1/0/00 0:02	10/2/18 13:32 1/0/00 0:02	0.03 0.03	Pending	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
8	X Shutdown Event x Startup Event Malfunction Event	1799D	10/2/18 13:30 12/17/18 15:35	10/2/18 13:32 12/17/18 15:37	0.03 0.03	1,826.08	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
9	X Shutdown Event x Startup Event Malfunction Event	1799S	10/2/18 13:30 12/17/18 13:45	10/2/18 13:32 12/17/18 13:47	0.03 0.03	1,824.25	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
10	X Shutdown Event x Startup Event Malfunction Event	12R	10/2/18 13:30 12/17/18 8:38	10/2/18 13:32 12/17/18 8:40	0.03 0.03	1,819.13	Disconnected for filling operations	Nick T., Dustin C. & Collin P.

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Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
11	[X] Shutdown Event [ ] Startup Event [ ] Malfunction Event	1356	10/2/18 13:30	10/2/18 13:32	0.03	Pending	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
				1/0/00 0:02	0.03			
12	[X] Shutdown Event [ ] Startup Event [ ] Malfunction Event	1221	10/3/18 9:00	10/3/18 9:02	0.03	N/A	Decomissioned for new wells	Nick T., Dustin C. & Collin P.
				1/0/00 0:02	0.03			
13	[X] Shutdown Event [ ] Startup Event [ ] Malfunction Event	1106	10/2/18 13:30	10/2/18 13:32	0.03	Pending	Disconnected for filling operations	Nick T., Dustin C. & Collin P.
				1/0/00 0:02	0.03			
14	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1801	N/A	N/A	N/A	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
			10/8/18 13:59	10/8/18 14:01	0.03			
15	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1802	N/A	N/A	N/A	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
			10/17/18 13:51	10/17/18 13:53	0.03			
16	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1803	N/A	N/A	N/A	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
			10/11/18 9:02	10/11/18 9:04	0.03			
17	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1804	N/A	N/A	N/A	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
			10/19/18 14:04	10/19/18 14:06	0.03			
18	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1805 D/S	N/A	N/A	N/A	N/A	New vertical wells brought online	Nick T., Dustin C. & Collin P.
			10/11/18 10:09	10/11/18 10:11	0.03			
19	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1806	N/A	N/A	N/A	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
			10/17/18 11:12	10/17/18 11:14	0.03			
20	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1807	N/A	N/A	N/A	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
			10/17/18 13:58	10/17/18 14:00	0.03			

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Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
21	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1808	N/A 10/8/18 11:23	N/A 10/8/18 11:25	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
22	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1809	N/A 11/14/18 12:07	N/A 11/14/18 12:09	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
23	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1810	N/A 11/14/18 12:14	N/A 11/14/18 12:16	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
24	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1811	N/A 11/14/18 12:24	N/A 11/14/18 12:26	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
25	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1812	N/A 11/14/18 12:28	N/A 11/14/18 12:30	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
26	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1813	N/A 11/14/18 11:58	N/A 11/14/18 12:00	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
27	[ ] Shutdown Event [x] Startup Event [ ] Malfunction Event	1814	N/A 11/14/18 12:35	N/A 11/14/18 12:37	N/A N/A	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
28	[ ] Shutdown Event [x] Startup Event [ ] Malfunction Event	1815	N/A 11/14/18 13:15	N/A 11/14/18 13:17	N/A N/A	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
29	[x] Shutdown Event [x] Startup Event [ ] Malfunction Event	1816	N/A 11/15/18 13:15	N/A 11/15/18 13:17	N/A N/A	Pending	New well; Offline for filling operations	Nick T., Dustin C. & Collin P.
30	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1817	N/A 11/14/18 11:53	N/A 11/14/18 11:55	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.

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Event No.	(CHECK) (APPLICABLE EVENT)	DEVICE	(1) START OF EVENT DATE AND TIME	(2) END OF EVENT DATE AND TIME	(3) DURATION OF EVENT (HRS)	Total Downtime (HRS)	(4) CAUSE OR REASON	Completed by
31	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1818	N/A 11/14/18 12:10	N/A 11/14/18 12:12	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
32	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1819	N/A 11/14/18 12:18	N/A 11/14/18 12:20	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
33	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1820	N/A 11/14/18 12:21	N/A 11/14/18 12:23	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
34	[ ] Shutdown Event [X] Startup Event [ ] Malfunction Event	1821	N/A 11/14/18 12:33	N/A 11/14/18 12:35	N/A 0.03	N/A	New vertical well brought online	Nick T., Dustin C. & Collin P.
35	[x] Shutdown Event [x] Startup Event [ ] Malfunction Event	47	9/22/18 9:30 12/11/18 14:39	9/22/18 9:32 12/11/18 14:41	0.03 0.03	1,925.15	Disconnected for filling operations	Nick T., Dustin C. & Collin P.

APPENDIX B

SSM PLAN DEPARTURE REPORT FORMS

(No departures or deviations from SSM Plan occurred during reporting period)

APPENDIX C

REVISED SSM PLAN

(No revisions to SSM Plan were made or required to be made during the reporting period)