Formal Reports

- Scarborough C. and Penfold B. (2023) Sixty-Third Quarterly Report of Ambient Air Quality Monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School. Quarterly report prepared for Planning Department, City of Los Angeles, and the Los Angeles County Department of Regional Planning, Los Angeles, CA, by Sonoma Technology, Petaluma, CA, STI-8043, December.
- Scarborough C.R., Schill S., and Moffet R. (2023) Chevron El Segundo Q2 Report: April June 2023. Quarterly report prepared for Chevron Products Company, El Segundo, CA by Sonoma Technology, Petaluma, CA, STI-7975, August 21.
- Scarborough C. and Penfold B. (2023) Sixty-Second Quarterly Report of Ambient Air Quality Monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School. Quarterly report prepared for Planning Department, City of Los Angeles, and the Los Angeles County Department of Regional Planning, Los Angeles, CA by Sonoma Technology, Petaluma, CA, STI-7966, August 17.
- Scarborough C., Penfold B., Hafner H., and Smith K. (2023) Fifteenth annual report of ambient air quality monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School: a fifteen–year summary, November 22, 2007–November 21, 2022. Annual report prepared for Planning Department, City of Los Angeles, Los Angeles, CA, by Sonoma Technology, Petaluma, CA, STI-915026-7929, June 30.
- Scarborough C. and Penfold B. (2023) Sixty-First Quarterly Report of Ambient Air Quality Monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School Quarterly report for Planning Department, City of Los Angeles, and the Los Angeles County Department of Regional Planning, Los Angeles, CA, by Sonoma Technology, Petaluma, CA, STI-7901, April.
- Scarborough C.R. and Schill S.R. (2023) Chevron El Segundo Q1 Report: January-March 2022. Quarterly report prepared for Chevron Products Company, El Segundo, CA by Sonoma Technology, Petaluma, CA, STI-922004-7917, May 25.
- Scarborough C.R. and Schill S.R. (2023) Chevron El Segundo Q4 Report: October-December 2022.

 Quarterly report prepared for Chevron Products Company, El Segundo, CA by Sonoma Technology, Petaluma, CA, STI-922004-7867, February 21.
- Marrero J., Schill S.R., and Scarborough C. (2022) Tesoro Refining & Marketing Company, LLC (a subsidiary of Marathon Petroleum Corporation) rule 1180 fenceline monitoring Q2 report: April 2022–June 2022. Quarterly report prepared for Tesoro Refining and Marketing Company, LLC, Carson, CA, by Sonoma Technology, Petaluma, CA, August 29.
- Scarborough C. and Penfold B. (2023) Sixtieth quarterly report of ambient air quality monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School Quarterly report prepared for the Planning Department at the City of Los Angeles, Los Angeles, CA by Sonoma Technology, Petaluma, CA, STI-922030-7845, January 13.
- Marrero J.E., Schill S.R., Scarborough C., and Coughlin J. (2022) Tesoro Refining & Marketing Company, LLC (a subsidiary of Marathon Petroleum Corporation) rule 1180 fenceline monitoring Q3 report: July 2022–September 2022. Quarterly report prepared for Tesoro Refining & Marketing Company LLC, Martinez, CA by Sonoma Technology, Petaluma, CA, STI-922018-7817, November 21.

- Scarborough C.R. and Schill S.R. (2022) Chevron Richmond Q3 Report: July-September 2022 Quarterly report prepared for Chevron Products Company, Richmond, CA by Sonoma Technology, Petaluma, CA, STI-922004-7816, November.
- Scarborough C.R. and Schill S.R. (2022) Chevron El Segundo Q3 Report: July-September 2022. Quarterly report prepared for Chevron Products Company, El Segundo, CA by Sonoma Technology, Petaluma, CA, STI-922004-7818, November.
- Scarborough C.R. and Schill S.R. (2022) Chevron Richmond Q2 Report: April-June 2022. Quarterly report Prepared for Chevron Products Company, Richmond, CA by Sonoma Technology, Petaluma, CA, STI-922011-77282, August.
- Scarborough C.R. and Schill S.R. (2022) Chevron El Segundo Q2 Report: April-June 2022 Quarterly report prepared for Chevron Products Company, El Segundo, CA, by Sonoma Technology, Petaluma, CA, STI-922004-7775, August 26.
- Scarborough C., Wang N., Penfold B., Hafner H., and Smith K. (2022) Fourteenth annual report of ambient air quality monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School: a fourteen–year summary, November 22, 2007–November 21, 2021. Annual report prepared for Planning Department, City of Los Angeles, Los Angeles, CA, by Sonoma Technology, Petaluma, CA, STI-915026-7760, July 30.
- Marrero J.E., Schill S.R., and Scarborough C. (2022) Tesoro Refining & Marketing Company, LLC (A Subsidiary of Marathon Petroleum Corporation) Rule 1180 Fenceline Monitoring Q1 Report: January 2022–March 2022. Quarterly report Prepared for Tesoro Refining & Marketing Company LLC, Carson, CA, by Sonoma Technology, Petaluma, CA, STI-921021-7728, May 24.
- Scarborough C.R. and Schill S.R. (2022) Chevron El Segundo Q1 Report: January-March 2022 Quarterly report prepared for Chevron Products Company, El Segundo, CA, by Sonoma Technology, Petaluma, CA, STI-922004-7724, May 18.
- Scarborough C., Wang N., and Penfold B. (2022) Fifty-sixth quarterly report of ambient air quality monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School Quarterly report prepared for Planning Department, Los Angeles, CA by Sonoma Technology, Petaluma, CA, STI-915026-7652, January.
- Scarborough C., Wang N., and Penfold B. (2022) Fifty-fifth quarterly report of ambient air quality monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School. Quarterly report prepared for Planning Department, Los Angeles, CA by Sonoma Technology, Petaluma, CA, STI-915026-7651, January.
- Brown S., McClure C., Gostic C., Miller D., Pavlovic N., Scarborough C., and Wang N. (2021) Exceptional event demonstration for ozone exceedances in Clark County, Nevada: August 7, 2020. Final Report prepared for the Clark County Department of Environment and Sustainability, Las Vegas, NV, by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, September.
- Gostic C., Scarborough C., Pavlovic N., McClure C., Miller D., and Wang N. (2021) Exceptional event demonstration for ozone exceedances in Clark County, Nevada: August 3, 2020. Final report prepared for the Clark County Department of Environment and Sustainability, Las Vegas, NV, by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, September.

- Gostic C., Scarborough C., Pavlovic N., McClure C., and Miller D. (2021) Exceptional event demonstration for ozone exceedances in Clark County, Nevada: September 2, 2020. Final report prepared for Clark County Department of Environment and Sustainability Division of Air Quality, Las Vegas, NV by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, September.
- Gostic C., Scarborough C., Pavlovic N., McClure C., and Miller D. (2021) Exceptional event demonstration for ozone exceedances in Clark County, Nevada: September 26, 2020. Final report prepared for Clark County Department of Environment and Sustainability Division of Air Quality, Las Vegas, NV by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, September.
- Gostic C., Scarborough C., Pavlovic N., McClure C., and Miller D. (2021) Exceptional event demonstration for ozone exceedances in Clark County, Nevada: August 18-21, 2020. Final report prepared for Clark County Department of Environment and Sustainability Division of Air Quality, Las Vegas, NV by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, September.
- Scarborough C., Wang N., and Penfold B. (2021) Fifty-Fourth quarterly report of ambient air quality monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School Quarterly report prepared for Planning Department, City of Los Angeles and Los Angeles County Dept. of Regional Planning, Los Angeles, CA by Sonoma Technology, Inc., Petaluma, CA, STI-915026-7570, August.
- Brown S., McClure C., Gostic C., Kramer S., Miller D., Scarborough C., and Wang N. (2021) Exceptional Event Demonstration for Ozone Exceedances in Clark County, Nevada May 9, 2020. Final report prepared for the Clark County Department of Environment and Sustainability, Las Vegas, NV, by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, July.
- Gostic C., Scarborough C., McClure C., Miller D., Wang N., Kramer S., and Brown S. (2021) Exceptional event demonstration for ozone exceedances in Clark County, Nevada May 28, 2020. Final report prepared for Clark County Department of Environment & Sustainability Division of Air Quality, Las Vegas, NV by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, June.
- Gostic C., Scarborough C., McClure C., Miller D., Wang N., Kramer S., and Brown S. (2021) Exceptional event demonstration for ozone exceedances in Clark County, Nevada May 6, 2020. Final report prepared for the Clark County Department of Environment and Sustainability, Las Vegas, NV by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, June.
- Gostic C., Scarborough C., McClure C., Miller D., Pavlovic N., and Brown S. (2021) Exceptional event demonstration for ozone exceedances in Clark County, Nevada June 22, 2020. Final report prepared for the Clark County Department of Environment and Sustainability, Las Vegas, NV by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, doi: STI-920053-7477, June.
- Gostic C., Scarborough C., Pavlovic N., McClure C., Miller D., Ryder O., and Wang N. (2021) Exceptional event demonstration for ozone exceedances in Clark County, Nevada: June 26, 2020. Draft report prepared for the Clark County Department of Environment and Sustainability, Las Vegas, NV, by Sonoma Technology, Inc., Petaluma, CA, STI-920053-7477, June.
- Scarborough C., Wang N., Penfold B., Hafner H., and Smith K. (2021) Thirteenth annual report of ambient air quality monitoring at Sunshine Canyon Landfill and Van Gogh Elementary School: a thirteen-year summary November 22, 2007–November 21, 2020. Annual report prepared for Planning Department,

City of Los Angeles and Los Angeles County Department of Regional Planning, Los Angeles, California by Sonoma Technology, Inc., Petaluma, CA, STI-915026-7564-FR.

Meeting Presentations, Webinars, and Conference Proceedings

- Coughlin J.G., Pavlovic N.R., Chang S.Y., Craig K.J., Scarborough C.R., Clark C.M., Herrick J.D., Harofteh A.Z., Kumar N., and Driscoll C.T. (2023) Developing background condition nitrogen critical loads and ozone critical levels for U.S. tree species using North American background levels. Poster presented at the *National Atmospheric Deposition Program Conference, Madison, Wisconsin, October 23-26*, by Sonoma Technology, Petaluma, CA. STI-8012.
- Coughlin J., Chang S.Y., Pavlovic N.R., Huang J., Craig K.J., Scarborough C., and Driscoll C.T. (2023) Spatially varying nitrogen critical loads and the influences of mediating factors. Presentation given at the *NADP Spring Meeting*, *Madison*, *WI*, *May 1-5*, by Sonoma Technology, Petaluma, CA. STI-7898.
- Chang S.Y., Pavlovic N.R., Coughlin J., Huang J., Craig K.J., Scarborough C., Horn K., Driscoll C.T., and Herrick J. (2022) Empirical critical levels of ozone for U.S. tree species and their uncertainties with machine learning. Presentation given at the *National Atmospheric Deposition Program 2022 Science Symposium, Knoxville, TN, November 17*, by Sonoma Technology, Petaluma, CA, the Freedom Consulting Group, Columbia, MD, and the Syracuse University Department of Civil and Environmental Engineering, Syracuse, NY. STI-7769.
- Pavlovic N.R., Coughlin J.G., Chang S., Huang J., Craig K.J., Scarborough C., Horn K., and Driscoll C.T. (2022)

 Mapping variability of nitrogen critical loads using machine learning. Poster presented at the *2022*National Atmospheric Deposition Program Conference, Knoxville, TN, November 14-18, by Sonoma

 Technology, Petaluma, CA, the Freedom Consulting Group, Columbia, MD, and the Syracuse University Department of Civil and Environmental Engineering, Syracuse, NY. STI-7770.
- Scarborough C., Gostic C., McClure C., and Wang N. (2022) Exploring near-road data with the near-road dashboard. Presentation given at the *National Ambient Air Monitoring Conference, Pittsburgh, PA, August 25*, by Sonoma Technology, Petaluma, CA. STI-920354-7701.
- Wang N., Gostic C., McClure C., Scarborough C., and Brown S. (2022) PAMS Dashboard: an R Shiny webapp for PAMS data visualization. Presentation given at the *2022 National Ambient Air Monitoring Conference, Pittsburgh, PA, August 22*, by Sonoma Technology, Petaluma, CA. STI-7705.
- Scarborough C. (2021) 2020 Marin County Community Wildfire Protection Plan. Presented at the 9th International Fire Ecology and Management Congress, Virtual, December 3, by Sonoma Technology, Inc., Petaluma, CA. STI-600600-7638.