

Mobile Monitoring Team Monitoring Data Summary Goldsmith, Texas – June 20 – 23, 2022

The Texas Commission on Environmental Quality (TCEQ) Mobile Monitoring Team (MMT) conducted ambient air monitoring in Goldsmith, Texas to support a Region 7 investigation of potential hydrogen sulfide (H₂S) emission sources. Elevated H₂S concentrations, including H₂S levels above the regulatory limit of 80 parts per billion by volume (ppbv) based on 30-minute net averages (30 Texas Administrative Code, Part 1, Chapter 112, Subchapter B, Rule §112.31), have been measured at the Goldsmith Street Continuous Air Monitoring Station (CAMS) 1093.

Stationary and mobile survey ambient monitoring was conducted from June 20 – 23, 2022 in Goldsmith and the surrounding area near Goldsmith Gas Plant (RN100222330), James Lake Gas Plant (RN107088759), and various tank batteries and pumpjacks that densely populate the area. The monitoring strategy described in the PB2206 Sample Plan was used to map out the monitoring routes followed during this effort. All monitoring was conducted during the evening and overnight hours when the highest concentrations of H₂S and lowest wind speeds were historically observed. During this monitoring trip, winds were light and variable, averaging approximately 10 miles per hour during all monitoring.

Data were collected by one Strategic Mobile Air Reconnaissance Technology – Rapid Assessment (SMART-RA) van (Van #9427). Within Van #9427, volatile organic compound (VOC) and sulfur dioxide (SO₂) data were collected by a Duvas DV3000 Ultraviolet Spectrometer Continuous Analyzer (Duvas), and H₂S data were collected by a Picarro G2204 Cavity Ring-Down Spectrometer (CRDS). The VOC compounds included benzene, toluene, styrene, and 1,3-butadiene.

H₂S was the focus of this project, and the main VOC of interest was benzene. Analyte concentrations will be reported in units of ppbv.

Stationary Monitoring and Mobile Surveys

Three monitoring periods were carried out during this trip, Monitoring Period 1 (evening of June 20 to the morning of June 21, 2022), Monitoring Period 2 (evening of June 21 to the morning of June 22, 2022), and Monitoring Period 3 (evening of June 22 to the morning of June 23, 2022). VOC and SO₂ data were not collected during Monitoring Period 1 but were collected during Monitoring Periods 2 and 3. H₂S data were collected during all three Monitoring Periods. Data were collected during 7 stationary monitoring events and 16 surveys.

Maximum instantaneous values observed during mobile surveys were used to determine where stationary monitoring would be conducted. Stationary monitoring was used to establish 30-minute average concentrations for H₂S to compare to the H₂S regulatory limit of 80 ppbv. Both stationary monitoring and mobile surveys were conducted downwind of potential emission sources according to the PB2206 Sample Plan.

Attachment A includes maps from stationary monitoring locations with average H₂S concentrations above 80 ppbv and surveys where the highest H₂S concentrations were detected during the monitoring trip. Stationary monitoring locations are presented in Figures 1, 2, and 6 and use H₂S pollution roses to display wind direction and the relative H₂S concentrations associated with each wind direction. Mobile surveys of note are presented in Figures 3, 4, 5, and 7, and display concentrations and associated wind direction for that mapping event. H₂S is the only compound mapped within this report. The one-second Duvas and Picarro G2204 data tables are not included in this report but are available upon request. Global positioning system (GPS) coordinates, maximum and minimum wind speed, average wind direction, and minimum and maximum instantaneous and average concentrations for H₂S and VOCs are included in Attachments B and C.

During this project, benzene was not detected above the action level of 120 ppbv noted in the Region 7 Permian Basin Survey Project Sample Plan (see Attachments B and C for data summaries).

Monitoring Period 1 – Evening of June 20, 2022, to Morning of June 21, 2022

During Monitoring Period 1, winds were predominantly southerly (southwest, south, and southeast), but shifted northerly during one survey and one stationary monitoring event (see Attachments B and C for data summaries). The maximum 30-minute average downwind H₂S concentration from Monitoring Period 1 was 96.0 ppbv, measured during the stationary monitoring event from 0047 – 0128 on June 21, 2022 (ST01-220621, see Attachment A, Figure 1 for the pollution rose and Attachment C for the data summary).

Surveys conducted during Monitoring Period 1 did not detect any H₂S concentrations of note.

Monitoring Period 2 – Evening of June 21, 2022, to Morning of June 22, 2022

During Monitoring Period 2, winds were southerly, predominantly southeast, light, and variable. The maximum 30-minute average downwind H₂S concentration from Monitoring Period 2 was 129.3 ppbv, measured during the stationary monitoring event from 2231 – 2344 (ST03-220621, see Attachment A, Figure 2 for the pollution rose and Attachment C for the monitoring data).

Surveys conducted during Monitoring Period 2 measured maximum instantaneous H₂S concentrations of 167.4 ppbv between 0015 – 0104 (Attachment A, Figures 3a and 3b, MA01-220622), 226.3 ppbv between 0247 – 0254 (Attachment A, Figure 4a and 4b, MA03-220622), and 410.0 ppbv between 0317 – 0352 (Attachment A, Figure 5a and 5b, MA04-220622). The data summary for these surveys can be found in Attachment B.

Monitoring Period 3 – Evening of June 22, 2022, to Morning of June 23, 2022

During Monitoring Period 3, winds were light and variable; primarily from the south/southeast. The maximum 30-minute average downwind H₂S concentration from Monitoring Period 3 was 110.1 ppbv, measured during the stationary monitoring event from 2114 – 2232 on 6/22/22 (ST03-220622, see Attachment A, Figure 6 for the pollution rose and Attachment C for the monitoring data.).

Surveys during Monitoring Period 3 measured a maximum instantaneous H₂S concentration of 230.8 ppbv (Attachment A, Figure 7, MA05-220622). Data for this survey can be found in Attachment B.

MMT Capabilities and Quality Control

Van #9427 is equipped with a Picarro G2204 CRDS, used to measure H₂S concentrations. The Picarro was calibrated prior to this monitoring trip and quality control (QC) checks were performed before and after the trip, as well as every 24 hours during the trip. All QC levels passed accuracy, precision, and baseline data quality objectives (DQOs). Van #9427 is also equipped with a Duvas used to measure target compound concentrations during mobile surveys. The Duvas monitors 14 different compounds; five of those compounds are analyzed semi-quantitatively (benzene, toluene, sulfur dioxide, 1,3-butadiene, and styrene), the remaining nine compounds (ammonia, nitric oxide, nitrogen dioxide, formaldehyde, ethylbenzene, m-xylene, o-xylene, p-xylene, and ozone) are analyzed qualitatively as calibrations have not been performed for these compounds at TCEQ. Of the 14 compounds detected by the Duvas, benzene was the compound of interest during this project. Duvas QC checks were performed before and after the trip, as well as every 24 hours during the trip. Benzene passed all DQOs. All QC levels passed accuracy, precision, and baseline DQOs with the following exceptions.

- The toluene equipment blank failed on June 22, 2022, with a 5-min average concentration of 18 ppbv, above the limit of detection (LOD) of 9.0 ppbv. All instantaneous toluene concentrations associated with Van #9427 collected during the monitoring event are qualified with “B” and may be biased +/- 18 ppbv.
- SO₂ failed all accuracy checks on June 21, 22, and 23, 2022 by as much as 30% lower than the standard concentration, outside the MMT DQO of 25% variance. All instantaneous SO₂ concentrations associated with Van #9427 collected during the monitoring event are qualified with “A” and may be biased low.

Attachment A



Figure 1: Van #9427 ST01-220621 stationary monitoring location and pollution rose for maximum 30-minute average downwind H₂S concentration of 96.0 ppbv north of James Lake Gas plant on State Highway 158 in Goldsmith, Texas. This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.



Figure 2: Van #9427 ST03-220621 stationary monitoring location and pollution rose for maximum 30-minute average downwind H₂S concentration of 129.3 ppbv on West Scharbauer Street just north of Goldsmith Gas Plant in Goldsmith, Texas. This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.

Attachment A

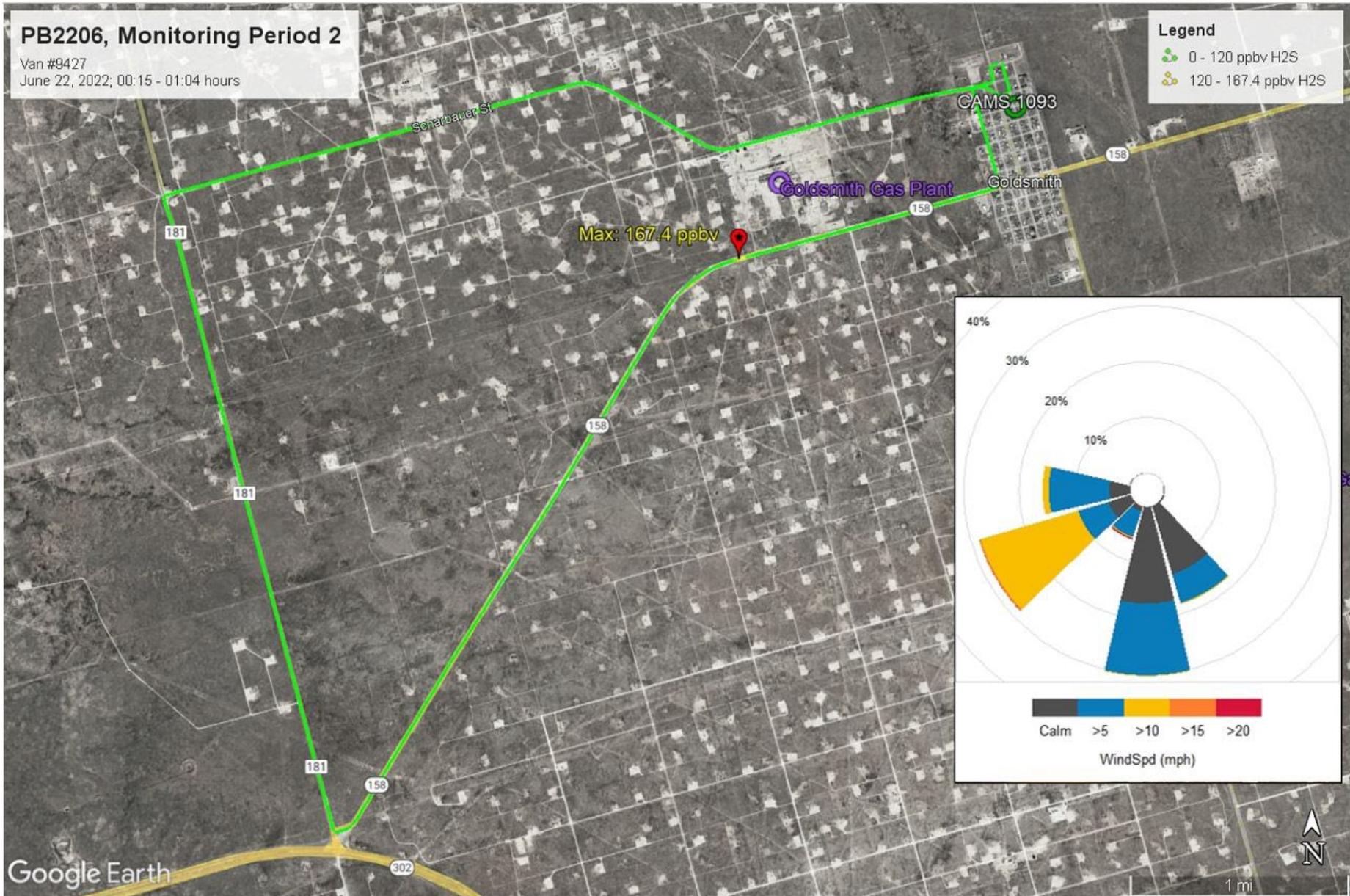


Figure 3a: Van #9427 MA01-220622 survey with maximum instantaneous downwind H₂S concentration of 167.4 ppbv on Texas Highway 158 just south of Goldsmith Gas Plant in Goldsmith, Texas. This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.

Attachment A

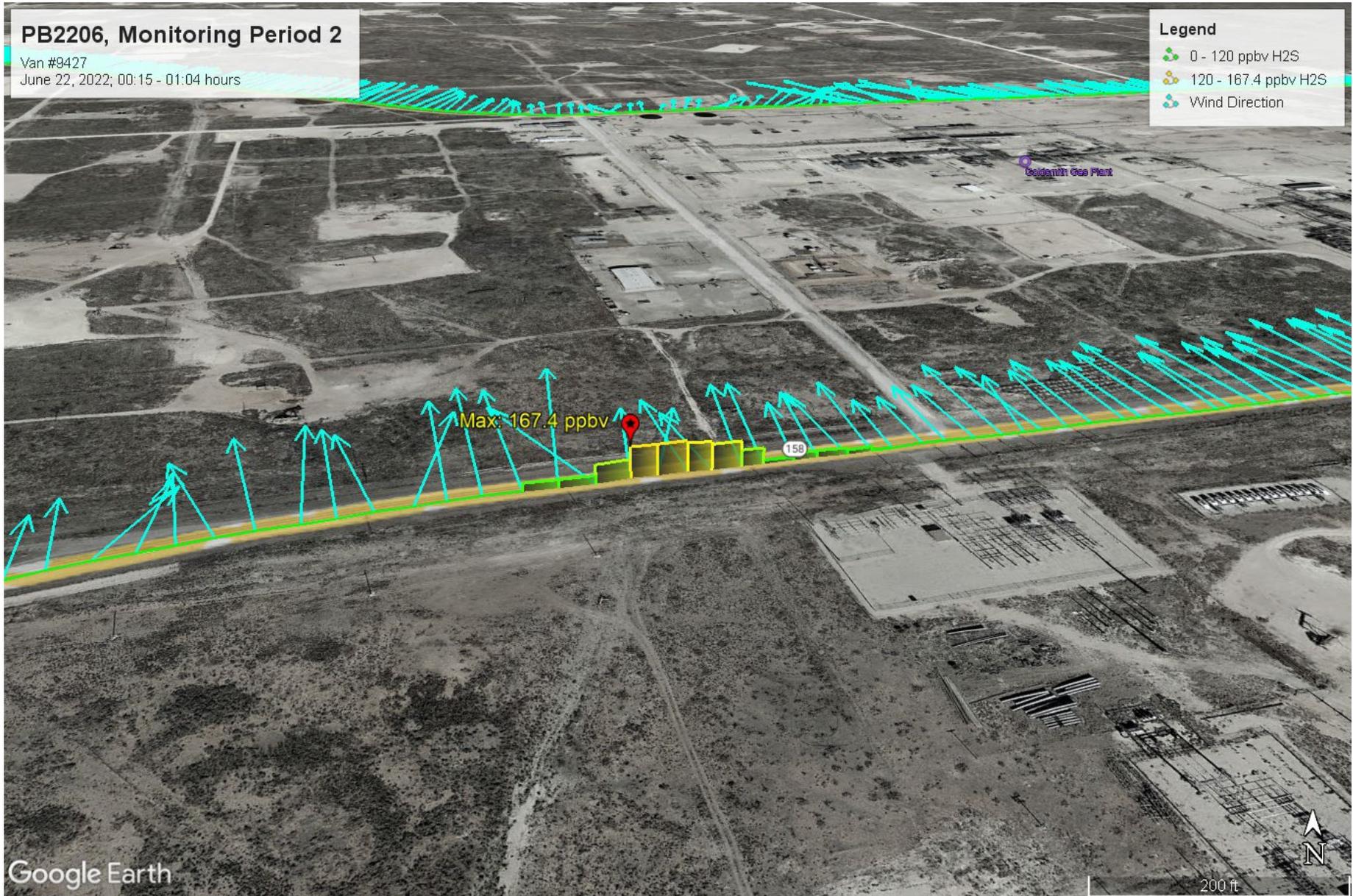


Figure 3b: Van #9427 MA01-220622 survey with maximum instantaneous downwind H₂S concentration of 167.4 ppbv on Texas Highway 158 just south of Goldsmith Gas Plant in Goldsmith, Texas. Includes closer perspective on the maximum concentration monitored. This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.

Attachment A



Figure 4a: Van #9427 MA03-220622 survey with maximum instantaneous downwind H₂S concentration of 226.3 ppbv on Texas Highway 158 just east of Goldsmith, Texas. This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.

Attachment A

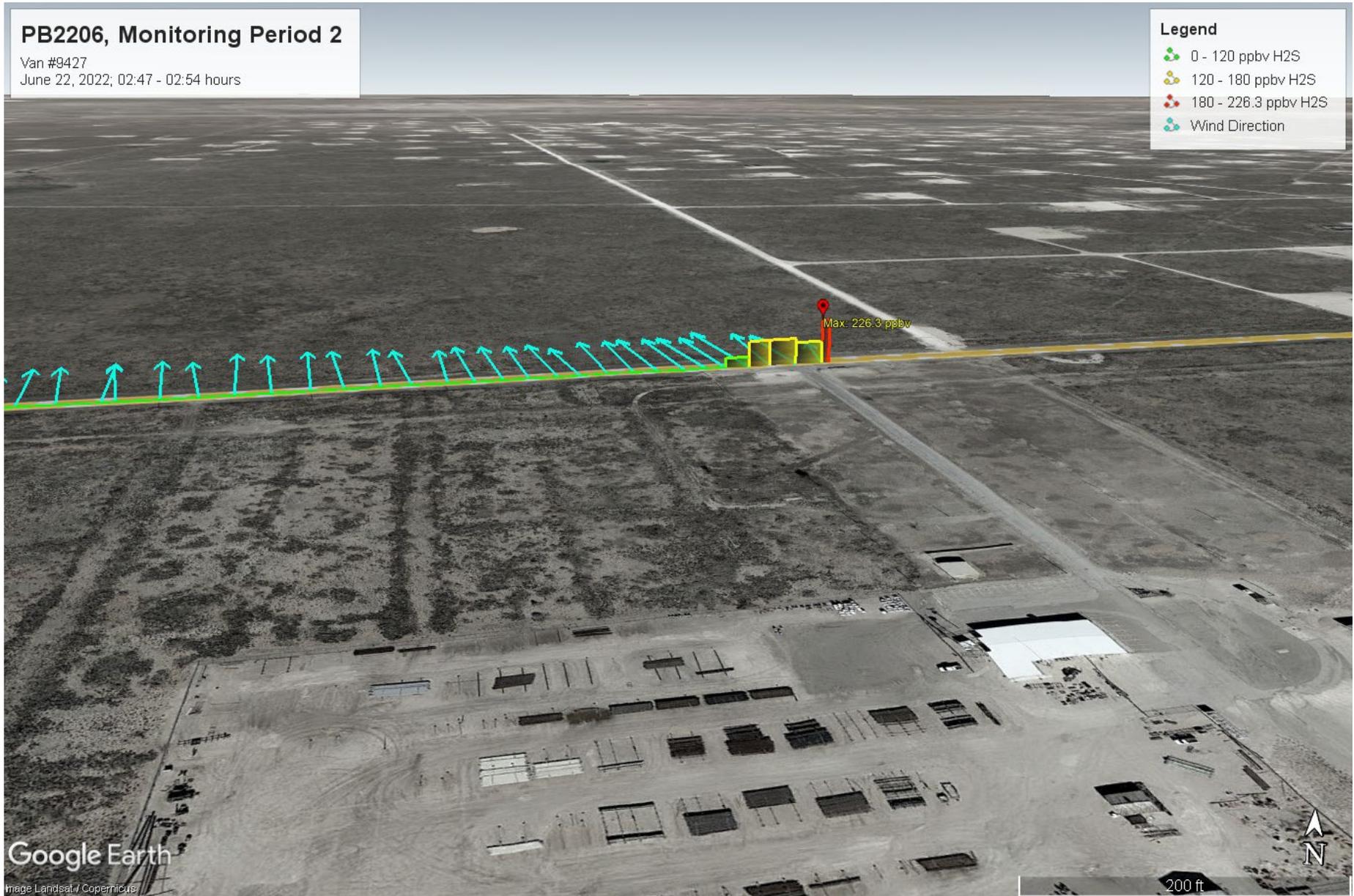


Figure 4b: Van #9427 MA03-220622 survey with maximum instantaneous downwind H₂S concentration of 226.3 ppbv on Texas Highway 158 just east of Goldsmith, Texas. Includes closer perspective on the maximum concentration monitored. This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.

Attachment A



Figure 5a: Van #9427 MA04-220622 survey with maximum instantaneous downwind H₂S concentration of 410.0 ppbv on Texas Highway 158 just east of Goldsmith, Texas. This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.

Attachment A



Figure 5b: Van #9427 MA04-220622 survey with closer perspective on 2 maximum instantaneous downwind H₂S concentrations of 410.0 ppbv and 291.5 ppbv on Texas Highway 158 just east of Goldsmith, Texas. This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.

Attachment A



Figure 6: Van #9427 ST03-220622 stationary monitoring location and pollution rose for maximum 30-minute average downwind H₂S concentration of 110.1 ppbv on Texas Highway 158 east of Goldsmith, TX. This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.

Attachment A

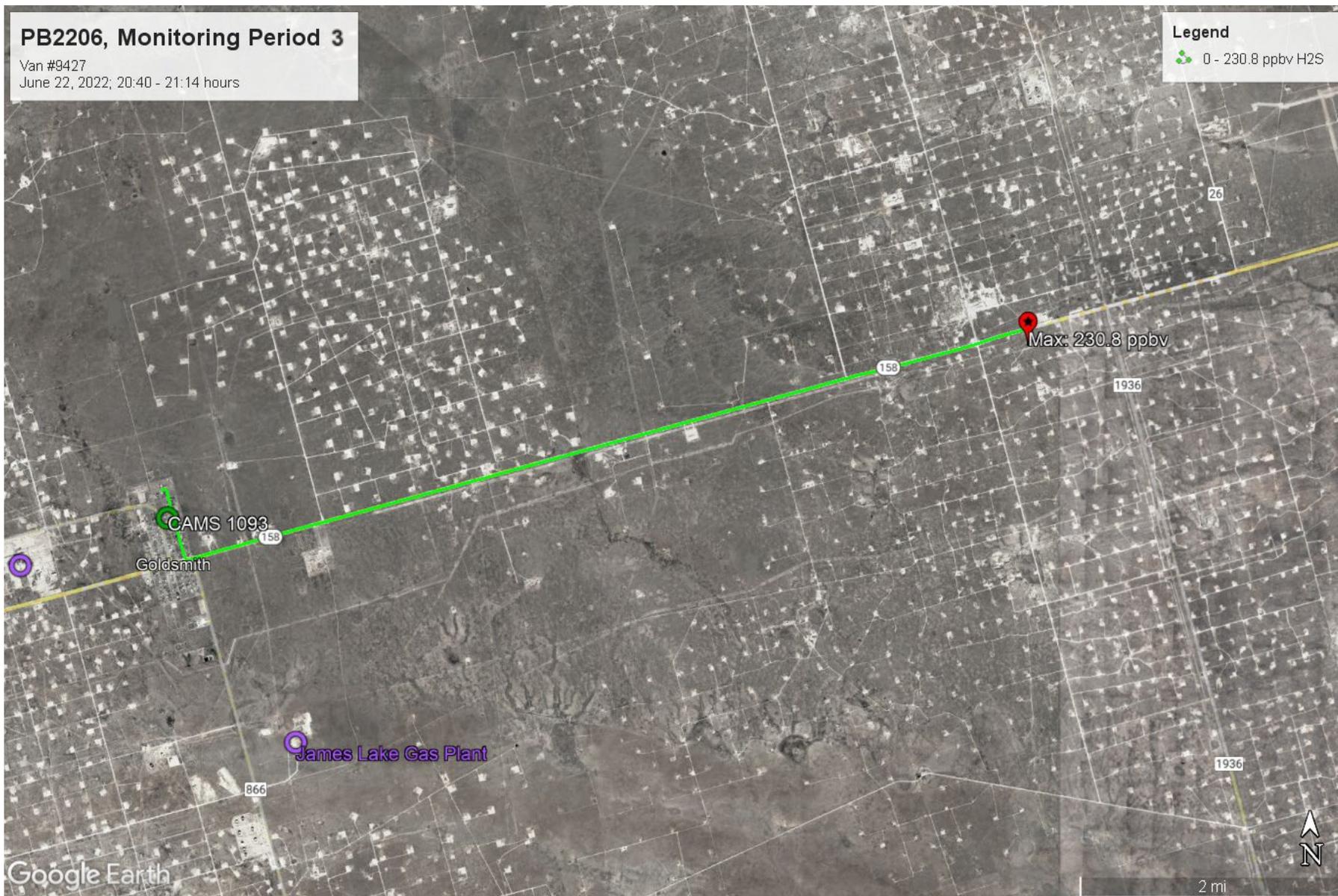


Figure 7: Van #9427 MA05-220622 survey with maximum instantaneous downwind H₂S concentration of 230.8 ppbv on Texas Highway 158 east of Goldsmith, TX . This map was generated by the Monitoring Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Monitoring Division at 512-239-1716.

Mobile Survey Data Summary

Monitoring Period 1, June 20 - 21, 2022

6/20/2022

Van #9427 MA01-220620 Survey - Goldsmith, TX									
Route Time	2123 - 2159								
Route Start	Goldsmith Park (31.988794, -102.616768)								
Route Stop	Alma and 158 (31.981176, -102.612616)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.3	207	-1.0	NA	NA	NA	NA	NA	NA
Max Values	19.4		46.2	NA	NA	NA	NA	NA	NA

NA - Not applicable, VOC data was not collected in Van #9427 during Monitoring Period 1.

Van #9427 MA02-220620 Survey - Goldsmith, TX									
Route Time	2259 - 2319								
Route Start	Goldsmith Park (31.988794, -102.616768)								
Route Stop	south of Goldsmith Gas Plant (31.976218, -102.634696)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.0	312	3.0	NA	NA	NA	NA	NA	NA
Max Values	21.3		27.9	NA	NA	NA	NA	NA	NA

NA - Not applicable, VOC data was not collected in Van #9427 during Monitoring Period 1.

Van #9427 MA03-220620 Survey - Goldsmith, TX									
Route Time	2356 - 0008								
Route Start	south of Goldsmith Gas Plant (31.976218, -102.634696)								
Route Stop	north of Goldsmith Gas Plant (31.983366, -102.640952)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.0	251	3.6	NA	NA	NA	NA	NA	NA
Max Values	10.6		24.7	NA	NA	NA	NA	NA	NA

NA - Not applicable, VOC data was not collected in Van #9427 during Monitoring Period 1.

6/21/2022

Van #9427 MA01-220621 Survey - Goldsmith, TX									
Route Time	0017 - 0031								
Route Start	Alma and 158 (31.981176, -102.612616)								
Route Stop	south on 866 (31.940226, -102.59956)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.5	251	5.8	NA	NA	NA	NA	NA	NA
Max Values	13.1		28.1	NA	NA	NA	NA	NA	NA

NA - Not applicable, VOC data was not collected in Van #9427 during Monitoring Period 1.

Mobile Survey Data Summary

Monitoring Period 1, June 20 - 21, 2022

6/21/2022

Van #9427 MA02-220621 Survey - Goldsmith, TX									
Route Time	0035 - 0046								
Route Start	south on 866 (31.940226, -102.59956)								
Route Stop	158 at Alma/866 (31.982092, -102.609776)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.4	222	5.7	NA	NA	NA	NA	NA	NA
Max Values	18.7		59.8	NA	NA	NA	NA	NA	NA

NA - Not applicable, VOC data was not collected in Van #9427 during Monitoring Period 1.

Mobile Survey Data Summary

Monitoring Period 2, June 21 - 22, 2022

6/21/2022

Van #9427 MA03-220621 Survey - Goldsmith, TX									
Route Time	2052 - 2119								
Route Start	Goldsmith Park (31.988778, -102.616848)								
Route Stop	Tank Battery (31.996838, -102.642536)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3-butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.3	124	-7.9	0.0	0.0	0.0	10.8	NA	0.0
Max Values	8.9		46.6	4.3	0.0	15.4	34.3	NA	2.1

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

Van #9427 MA04-220621 Survey - Goldsmith, TX									
Route Time	2213 - 2224								
Route Start	Northeast corner of Goldsmith Gas Plant (31.984644, -102.63136)								
Route Stop	Tank Battery (31.98361, -102.644976)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3-butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.4	143	2.4	0.0	0.0	0.0	15.4	NA	0.0
Max Values	10.6		96.7	0.0	3.6	29.8	42.0	NA	1.7

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

6/22/2022

Van #9427 MA01-220622 Survey - Goldsmith, TX									
Route Time	0015 - 0104								
Route Start	Goldsmith Park (31.988708, -102.617184)								
Route Stop	Gold smith Park (31.988708, -102.617184)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3-butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.4	209	-3.1	0.0	0.0	0.0	13.3	NA	0.0
Max Values	22.4		167.4	0.0	1.8	24.3	44.0	NA	1.1

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

Van #9427 MA02-220622 Survey - Goldsmith, TX									
Route Time	0219 - 0237								
Route Start	CR-158 and CR-866 (31.981266, -102.61292)								
Route Stop	South on CR-866 (31.925098, -102.594656)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3-butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	2.3	235	0.4	0.0	0.0	0.0	14.9	NA	0.0
Max Values	15.8		21.5	0.0	2.1	7.7	32.4	NA	2.1

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

CR - county road

Mobile Survey Data Summary

Monitoring Period 2, June 21 - 22, 2022

6/22/2022

Van #9427 MA03-220622 Survey - Goldsmith, TX									
Route Time	0247 - 0254								
Route Start	CR-158 and CR-866 (31.981258, -102.612576)								
Route Stop	CR-866 and XTO Energy (31.985058, -102.596856)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3-butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.6	161	-1.7	0.0	0.0	0.0	13.3	NA	0.0
Max Values	7.8		226.3	0.0	3.2	21.6	30.6	NA	4.1

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

CR - county road

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

Van #9427 MA04-220622 Survey - Goldsmith, TX									
Route Time	0317 - 0352								
Route Start	CR-158 and XTO Energy (31.98499, -102.597168)								
Route Stop	FM-1936 and Y T Ranch Rd (31.952198, -102.478432)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3-butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.7	190	-1.8	0.0	0.0	0.0	15.1	NA	0.0
Max Values	13.6		410.0	0.0	2.0	8.1	40.2	NA	3.3

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

CR - county road

FM- farm to market

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

Mobile Survey Data Summary

Monitoring Period 3, June 22 - 23, 2022

6/22/2022

Van #9427 MA05-220622 Survey - Goldsmith, TX									
Route Time	2040 - 2114								
Route Start	Goldsmith Park (31.98881, -102.616696)								
Route Stop	CR-158 (32.006138, -102.506376)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	1.8	162	-4.6	0.0	0.0	0.0	13.5	NA	0.0
Max Values	18.8		230.8	0.0	0.0	0.0	19.4	NA	0.0

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

CR - county road

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

Van #9427 MA06-220622 Survey - Goldsmith, TX									
Route Time	2303 - 2316								
Route Start	CR-866 across from Aries Pods, north of James Lake Gas Plant (31.97457, -102.610584)								
Route Stop	entrance to James Lake Gas Plant (31.95994, -102.599464)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.3	210	-3.0	0.0	0.0	0.0	21.0	NA	0.0
Max Values	13.8		22.0	0.0	0.3	1.0	23.6	NA	0.0

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

CR - county road

Van #9427 MA07-220622 Survey - Goldsmith, TX - OMIT									
Route Time	NA								
Route Start	NA								
Route Stop	NA								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	NA	NA	NA	NA	NA	NA	NA	NA	NA
Max Values	NA		NA	NA	NA	NA	NA	NA	NA

NA - Not applicable; OMIT this survey

Van #9427 MA08-220622 Survey - Goldsmith, TX									
Route Time	2344 - 2350								
Route Start	CR-866 across from James Lake Plant entrance (31.956442, -102.60472)								
Route Stop	CR-866 south of Phillips 66 Tank Farm (31.947566, -102601888)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	1.9	239	1.7	0.0	0.0	0.0	12.8	NA	0.0
Max Values	10.1		22.5	0.0	0.6	3.6	27.0	NA	0.5

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

CR - county road

Mobile Survey Data Summary

Monitoring Period 3, June 22 - 23, 2022

6/23/2022

Van #9427 MA01-220623 Survey - Goldsmith, TX									
Route Time	0001 - 0009								
Route Start	Odessa Street X West Scharbauer Road (31.986946, -102.619184)								
Route Stop	Scharbauer Road northwest of Goldsmith Gas Plant (31.982874, -102.639272)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	1.1	168	4.8	0.0	0.0	0.0	0.0	NA	0.0
Max Values	16.2		100.4	0.0	0.5	13.5	44.5	NA	1.2

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

Van #9427 MA02-220623 Survey - Goldsmith, TX									
Route Time	0015 - 0026								
Route Start	Odessa Street X and CR-158 (31.980432, -102.617024)								
Route Stop	CR-158 southwest of Goldsmith Gas Plant (31.975176, -102.639144)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.8	169	3.9	0.0	0.0	0.0	12.2	NA	0.0
Max Values	6.9		52.8	0.0	1.2	4.8	29.6	NA	1.8

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

CR - county road

Stationary Data Summary

Monitoring Period 1, June 20 - 21, 2022

6/20/2022

Van #9427 ST01-220620 Stationary Monitoring Location - Goldsmith, TX									
Route Time	2320 - 2352								
Monitoring Location	south of Goldsmith Gas Plant (31.976218,-102.634696)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.1	17	5.2	NA	NA	NA	NA	NA	NA
Max Values	9.9		90.0	NA	NA	NA	NA	NA	NA
Max Avg*			26.4						

* The maximum average value for hydrogen sulfide is a 30-minute average.

NA - not applicable; volatile organic compound data not collected during this monitoring period.

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

6/21/2022

Van #9427 ST01-220621 Stationary Monitoring Location - Goldsmith, TX									
Route Time	0047 - 0128								
Monitoring Location	North of James Lake Flare on SH 158 and Alma Street/CR-866 (31.981678,-102.611832)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.1	185	31.1	NA	NA	NA	NA	NA	NA
Max Values	9.3		182.5	NA	NA	NA	NA	NA	NA
Max Avg*			96.0						

* The maximum average value for hydrogen sulfide is a 30-minute average.

NA - not applicable; volatile organic compound data not collected during this monitoring period.

SH - state highway

CR - county road

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

Stationary Data Summary Monitoring Period 2, June 21 - 22, 2022

6/21/2022

Van #9427 ST02-220621 Stationary Monitoring Location - Goldsmith, TX									
Route Time	2119 - 2152								
Monitoring Location	Tank Battery (31.996838,-102.642536)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.3	100	7.3	0.0	0.0	0.0	10.3	NA	0.0
Max Values	4.4		64.2	0.0	2.9	16.5	37.0	NA	0.0
Max Avg*			32.2						

* Maximum average values are 1-hour averages. The maximum average value for hydrogen sulfide is a 30-minute average.

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

Van #9427 ST03-220621 Stationary Monitoring Location - Goldsmith, TX									
Route Time	2231 - 2344								
Monitoring Location	Next to Sentinel Transportation NW of Goldsmith Gas Plant (31.982308,-102.640984)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.0	176	-0.1	0.0	0.0	1.4	9.1	NA	0.0
Max Values	5.1		234.7	0.0	9.7	101.5	50.3	NA	10.8
Max Avg*			129.3	0.0	1.8	32.9	27.1	NA	1.7

* Maximum average values are 1-hour averages. The maximum average value for hydrogen sulfide is a 30-minute average.

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

NW - northwest

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

6/22/2022

Van #9427 ST01-220622 Stationary Monitoring Location - Goldsmith, TX									
Route Time	0125 - 0202								
Monitoring Location	On SH 158 SW of Goldsmith Plant (31.97347,-102.642304)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	2.7	170	12.5	0.0	0.1	0.0	13.3	NA	0.0
Max Values	11.7		121.4	0.0	2.0	6.7	36.5	NA	2.5
Max Avg*			55.8						

* Maximum average values are 1-hour averages. The maximum average value for hydrogen sulfide is a 30-minute average.

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

SW - southwest

SH - state highway

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

Van #9427 ST02-220622 Stationary Monitoring Location - Goldsmith, TX									
Route Time	0255 - 0316								
Monitoring Location	SH 158 in front of XTO Energy (31.98499,-102.597168)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide ^B (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	1.3	142	2.6	0.0	0.0	0.0	16.0	NA	0.0
Max Values	5.0		81.4	0.0	2.2	12.3	34.3	NA	2.6
Max Avg*									

* Maximum average values are 1-hour averages. The maximum average value for hydrogen sulfide is a 30-minute average.

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

SH - state highway

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.

Stationary Data Summary

Monitoring Period 3, June 22 - 23, 2022

6/22/2022

Van #9427 ST03-220622 Stationary Monitoring Location - Goldsmith, TX									
Route Time	2114 - 2232								
Monitoring Location	SH 158 (32.006138,-102.506376)								
Parameters	WindSpeed (mph)	Average WindDir (degrees)	Hydrogen sulfide (ppbv)	Sulfur Dioxide ^A (ppbv)	1,3 - butadiene (ppbv)	Benzene (ppbv)	Toluene ^B (ppbv)	Ethylbenzene + Xylenes (ppbv)	Styrene (ppbv)
Min Values	0.3	172	-1.2	0.0	0.0	0.0	14.1	NA	0.0
Max Values	12.3		280.2	0.0	1.0	8.3	21.5	NA	1.8
Max Avg*			110.1	0.0	0.3	3.9	18.2	NA	0.4

* Maximum average values are 1-hour averages. The maximum average value for hydrogen sulfide is a 30-minute average.

A - Accuracy checks failed. All instantaneous concentrations may be biased low.

B - Not all associated blank data met the bias specifications. Data may be biased by (±) 18 ppbv.

NA - Not applicable; qualitative, no quality control (QC).

SH - state highway

Yellow shading indicates the value is above the regulatory limit of 80 ppbv.