

**EPA Laredo Air Sampling for Ethylene Oxide (September 9, 2023 - January 7, 2024)**

**Concentration, parts per billion volume (ppbv)**

<b>Sample Date and Time</b>	<b>Laredo M1</b>	<b>Laredo M4</b>	<b>Laredo M3</b>	<b>Laredo M5</b>	<b>Laredo M2*</b>
9/9/2023 23:59	0.078	0.0983	1.73	NSC	0.398
9/12/2023 23:59	Invalid	0.122	0.704	NSC	0.198
9/15/2023 23:59	Invalid	0.207	NSC	7.78	0.231
9/17/2023 23:59	0.194	0.268	NSC	Invalid	0.401
9/22/2023 10:00	0.177	0.251	NSC	6.48	0.52
9/24/2023 23:59	0.911	0.107	NSC	5.7	0.425
9/27/2023 23:59	0.0741	0.145	1.01	NSC	0.388
9/30/2023 23:59	0.0671	0.179	0.575	NSC	0.206
10/3/2023 23:59	0.0495	0.148	0.727	NSC	0.147
10/6/2023 23:59	1.49	0.138	0.15	NSC	0.479
10/9/2023 23:59	0.16	0.0919	0.739	Invalid	NSC
10/12/2023 23:59	0.0998	0.0995	1.56	5.61	NSC
10/15/2023 23:59	0.0838	0.0722	0.05	0.855	NSC
10/18/2023 23:59	0.0466	0.0727	1.56	0.889	NSC
10/21/2023 23:59	0.0722	0.156	1.3	4.12	NSC
10/24/2023 23:59	0.0673	0.0759	1.6	4.68	NSC
10/27/2023 23:59	0.0541	0.117	1.74	7.46	NSC
10/30/2023 23:59	0.0453	0.0507	0.0918	Invalid	NSC
11/2/2023 23:59	0.205	0.124	0.586	5.04	NSC
11/5/2023 23:59	5.14	0.156	2.62	Invalid	NSC
11/8/2023 23:59	0.0617	0.145	2.05	7.7	NSC
11/11/2023 23:59	0.062	0.0574	0.0546	0.115	NSC
11/14/2023 23:59	0.0414	0.338	0.106	0.0737	NSC
11/17/2023 23:59	0.0466	0.579	0.769	2.03	NSC
11/20/2023 23:59	0.0433	0.0821	0.341	0.907	NSC
11/23/2023 23:59	0.089	0.0832	0.188	2.52	NSC
11/26/2023 23:59	0.25	0.0797	0.0528	0.314	NSC
11/29/2023 23:59	0.0624	0.138	1.63	1.51	NSC
12/2/2023 23:59	0.0907	0.0745	0.225	1.48	NSC
12/5/2023 23:59	0.0517	0.171	0.831	4.63	NSC
12/8/2023 23:59	0.0375	0.0537	1.42	4.42	NSC
12/11/2023 23:59	0.0725	0.0617	1.59	5.65	NSC
12/14/2023 23:59	Invalid	0.103	0.22	1.57	NSC
12/17/2023 23:59	0.0448	0.141	0.952	2.94	NSC
12/20/2023 23:59	0.036	0.113	1.2	6.51	NSC
12/22/2023 23:59	0.0477	0.22	1.28	6.33	NSC
12/26/2023 23:59	0.0781	0.0876	0.575	2.79	NSC
12/29/2023 23:59	0.0535	0.11	0.32	2.5	NSC
1/4/2024 23:59	0.035	5.01	0.886	3.34	NSC
1/7/2024 23:59	Invalid	Invalid	Invalid	Invalid	NSC

\* The M2 canister was moved to M5 after the 10/6/2023 sampling event

Invalid sample means the data was invalid due to incorrect canister pressure after sampling.

NSC means no sample collected.

Method Detection Limit = 0.0353 ppbv

Method detection limit," or "MDL," means the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank (clean canister) results. Near this concentration we have less confidence that the result is accurate.

EPA Laredo Air Sampling for Ethylene Oxide (September 9, 2023 - January 4, 2024)

Date	Average Wind Speed (miles per hour)	Average Wind Direction* (degrees)	Comment
9/9/2023	4.5	139	wind from the southeast
9/12/2023	4.8	109	wind from the east southeast
9/15/2023	5.6	123	wind from the southeast
9/17/2023	2.1	69	from the east northeast
9/21/2023			10am to 10am to match community collocated sample, wind from the SE
-9/22/2023	4.9	128	wind from the southeast
9/24/2023	4.8	140	wind from the southeast
9/27/2023	2.6	129	wind from the southeast
9/30/2023	4.0	109	wind from the east southeast
10/3/2023	4.4	121	wind from the southeast
10/6/2023	2.0	6	wind from the north
10/9/2023	2.6	158	wind from the south southeast
10/12/2023	4.4	138	wind from the southeast
10/15/2023	1.6	34	wind from the northeast
10/18/2023	3.8	148	wind from the southeast
10/21/2023	2.4	132	wind from the southeast
10/24/2023	8.5	140	wind from the southeast
10/27/2023	5.5	135	wind from the southeast
10/30/2023	8.3	333	wind from the north northwest
11/2/2023	2.0	136	wind from the southeast
11/5/2023	2.7	140	wind from the southeast
11/8/2023	3.9	141	wind from the southeast
11/11/2023	0.9	342	wind from the north northwest
11/14/2023	2.6	322	wind from the northwest
11/17/2023	1.1	159	wind from the south southeast
11/20/2023	4.3	353	wind from the north
11/23/2023	1.8	147	wind from the southeast
11/26/2023	2.6	6	wind from the north
11/29/2023	0.3	315	wind from the northwest
12/2/2023	1.7	327	wind from the northwest
12/5/2023	0.5	133	wind from the southeast
12/8/2023	2.1	144	wind from the southeast
12/11/2023	2.7	138	wind from the southeast
12/14/2023	3.6	83	wind from the east
12/17/2023	0.3	184	wind from the south
12/20/2023	2.6	140	wind from the southeast
12/22/2023	0.6	128	wind from the southeast
12/26/2023	1.2	143	wind from the southeast
12/29/2023	2.1	6	wind from the north
1/4/2024	3.2	127	wind from the southeast

\* The average wind direction is the average direction **from** **which** the wind is blowing at our M1 meteorological station over the 24-hour monitoring period. (See diagram below.)

