March 2026

Oil and Gas Methane Emissions in Appalachia:

The Polluters Revealed by One Year of Satellite Data

EARTHWORKS GAS LEAKS

The fossil fuel industry claims that gas produced in the Appalachian Basin has the lowest methane-emissions intensity of any oil and gas producing region in the United States. The value of making such a claim is both economic and reputational, especially as governments and private market actors increasingly prioritize reducing methane pollution – a greenhouse gas ~80 times more powerful at climate warming than carbon dioxide over a 20-year span. The credibility of industry claims, however, is challenged by an independent academic analysis that finds that the methane loss rate for gas produced from the Basin is several times higher than reported. Still, major producers from the region have repeated these assertions, with some executives even going further, stating, "... we are the biggest solution to lowering the biggest source of emissions on the planet."

With ground, aerial, and even space-based pollution observation data becoming more readily available, the world is entering a new era. Numerous methane plumes, otherwise invisible to the human eye, are now being documented over the operations of leading gas producers as well as the "midstream" facilities they rely on to transport their product to market. As methane pollution becomes easier to track, preferred industry talking points on the scale of the problem and the sector's ability to voluntarily address it are once again being challenged.

Following the one-year anniversary of Carbon Mapper data based on observations from Planet Lab's Tanager-1 satellite, researchers from Earthworks and Gas Leaks Project decided to examine the discrepancy between industry self-reporting and real-world emissions as measured by this emerging technology. In an effort to ground-truth the industry claims mentioned above, the investigation focused on the Appalachian Basin and found over 90 cases of excess methane pollution spanning November 1, 2024, through November 1, 2025. The researchers also identified the companies likely responsible for excess emissions for more than half of the recorded methane plumes.

This analysis shows that super-emitter methane release incidents, if not quickly identified and mitigated, could result in substantial additional emissions beyond companies' publicly reported inventories and undercut industry claims about efforts to mitigate climate and health harm.

Method and Findings

Data was collected between November 1, 2024, and the start of November 2025 across the gas-producing swath of Pennsylvania, northern West Virginia, and eastern Ohio. During this time period, Carbon Mapper's data portal identified 96 methane plumes from 70 sources attributed to the oil and gas sector.[1] This analysis examined the locations of those plumes relative to publicly available records of oil and gas facilities. In total, the team was able to identify likely sources by company for 57 (59%) of these plumes.[2] A vast majority of the documented plumes, about 90%, fit the EPA's definition of a super-emitter event.[3]

Of the 70 oil and gas methane plume sources, 16 (23%) were detected polluting on multiple days. The monitoring of individual oil and gas sites, at least from Carbon Mapper and other publicly available data aggregated into its portal, remains infrequent. For instance, Planet's Tanager-1 satellite scans a width of about 18 kilometers (~11 miles) with every pass through orbit around Earth, while publicly accessible flyover data also remains limited to periodic aerial campaigns. As a result, only 15 of these 70 (21%) sources were observed on at least four different days over the past year. Twelve (17%) sources were observed on only one day for the entire year. However, nearly 30% (20 sources) appeared to be polluting every day they were observed over the year (see Figure 1).

Topping the list is the gas-producer EQT Corporation, which had 16 observed methane plumes appearing adjacent to its facilities over these twelve months, followed by Expand Energy with 11 plumes. [**The full list of plumes and related details are provided in the Appendix.**]

Figure 1. Total Days Plume Locations Were Observed

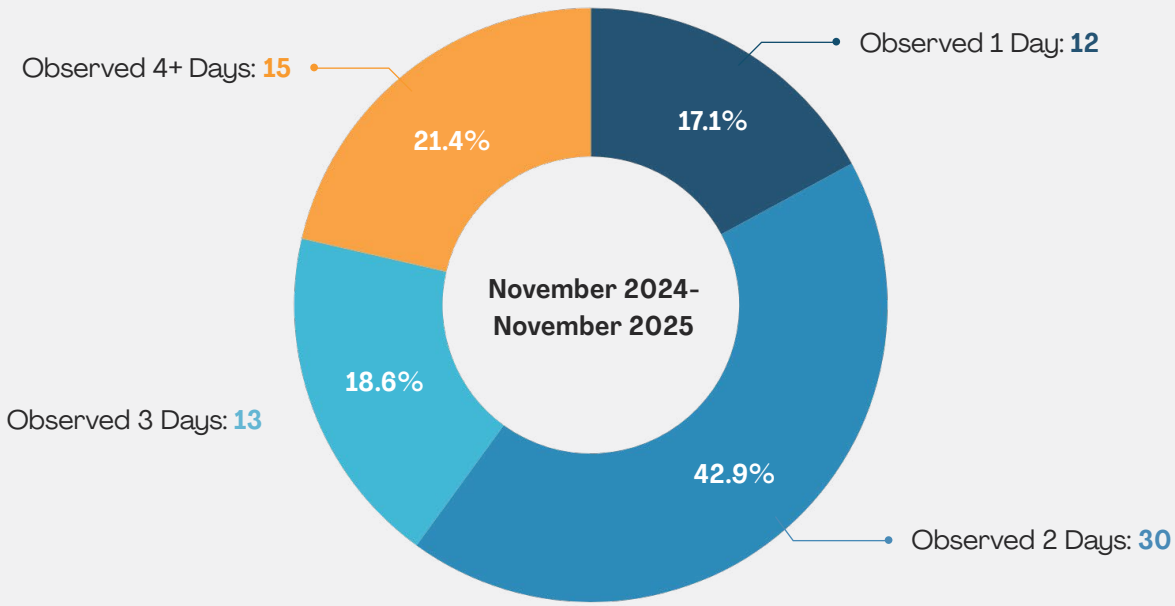


Figure 2. Map with Number of Carbon Mapper Plumes by Company

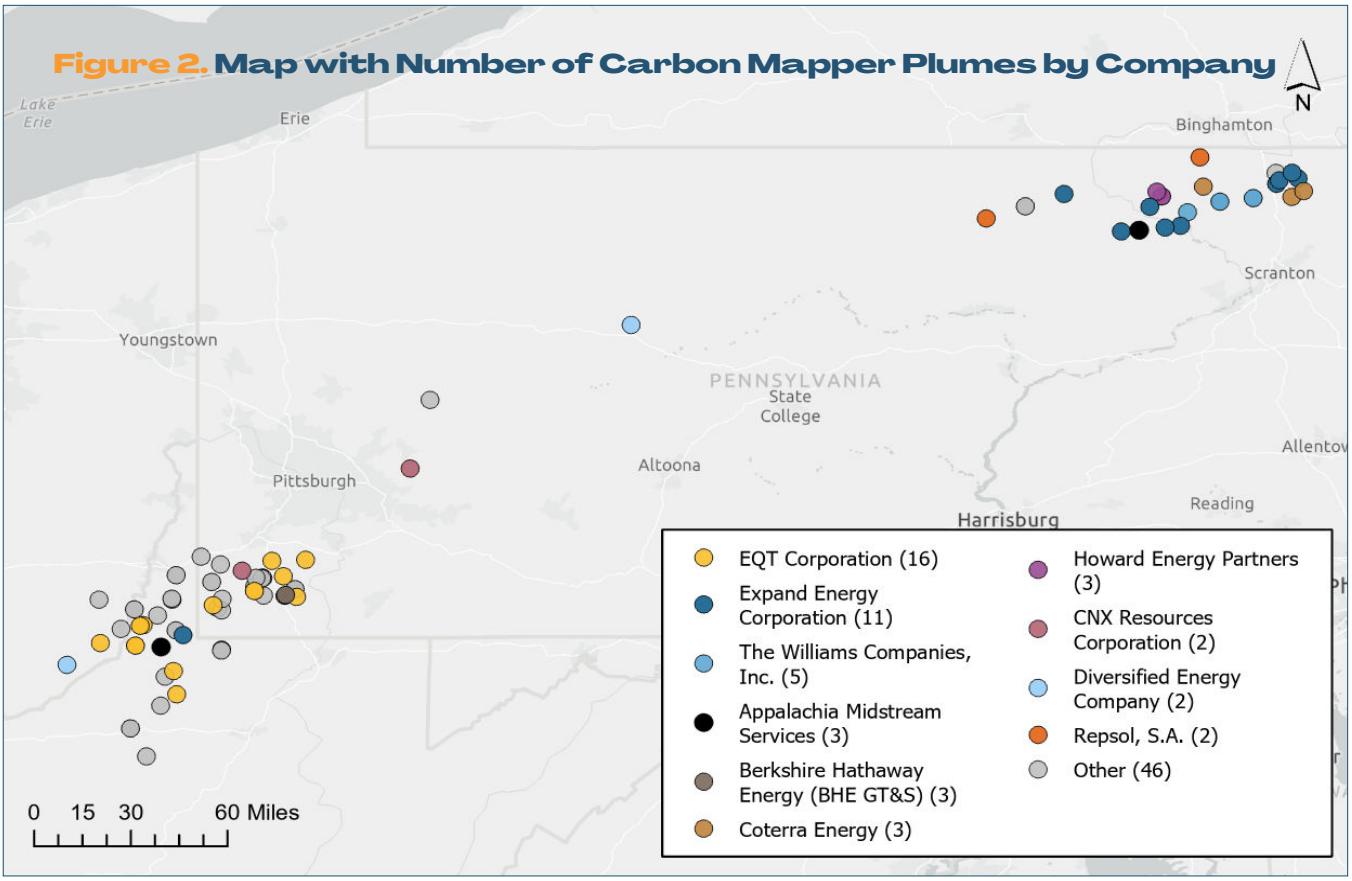
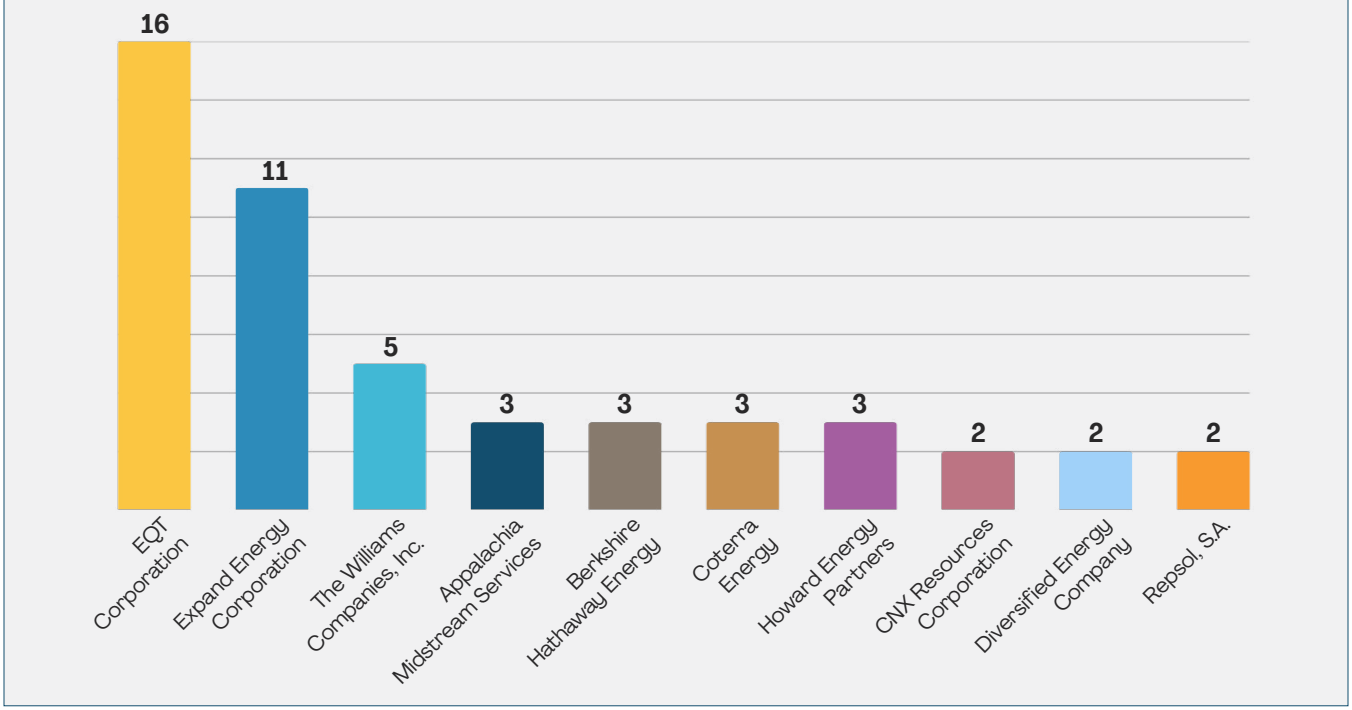


Figure 3. Count of Methane Plumes by Parent Company



Comparing the Significance of Super-Emitters to Reported Emissions

Historically, oil and gas companies have publicly reported their air emissions annually, using criteria specified by the Environmental Protection Agency (EPA). EPA's methodology for the oil and gas industry, referred to as the Greenhouse Gas Reporting Program's Subpart W, provides equipment emissions factors that companies use to self-report company-wide emissions estimates.

For years, EPA's reporting program has been criticized for underestimating real-world emissions, such as not having a process for including super-emitter events. Experts from the energy consulting firm Rystad Energy recently reiterated this fact, writing:

> *"A lot of large leak events are also not found in most exploration and production [E&P] company reporting, which needs to be addressed."*

While EPA finally sought to address some of the concerns by finalizing updated reporting rules in May 2024, the agency under the Trump administration is seeking to end the entire Greenhouse Gas Reporting Program – a move that has generated considerable opposition from the oil and gas industry, which relies on the reporting to demonstrate its environmental performance to both domestic and international shareholders and the public.

Many of these methane plumes reveal extremely large pollution events, but their total duration is unknown. Satellite or flyover observation data effectively captures a single moment in time. It allows entities like Carbon Mapper to quantify emissions rates, but until a satellite or airplane makes another pass or a site inspection is performed, it is impossible to know when a particular methane emissions event started and how long it continued – e.g., an hour, a day, or even longer than a week.

EQT as a Case Study

In the case of America's second-largest gas producer, EQT Corporation, the company has used the results of its greenhouse gas reporting, combined with carbon offsets, as the basis for prominently claiming that "EQT Has Achieved Net Zero" emissions. Yet, our examination of the Carbon Mapper data revealed at least 16 super-emitter events close to EQT facilities over the past year (twelve near the company's well sites and another four appearing next to facilities operated under its Equitrans pipeline subsidiary).

To provide just one comparison of the potential significance of these events, if just those eleven[4] quantified plumes captured at EQT well sites emitted at the average rate estimated by Carbon Mapper for 48 hours, that alone would represent an additional 2.7% of the company's reported emissions for all of 2024.[5]

Large methane release events can result from a wide variety of causes, such as equipment failures, intentional venting, and flare malfunctions. While some events may be relatively short-lived, others have been known to persist for weeks or even longer.

Of the plumes observed over the past year in parts of Appalachia, Tanager detected a large plume in West Virginia on March 2, 2025. When the site was next observed again, one week later, a massive plume of methane remained visible from the same location. The site was observed again months later, on July 12, 2025, and methane pollution continued. This analysis aligned the geocoordinates of these plumes and saw that they overlap with EQT's Erlewine well pad.

According to recent reporting from the Financial Times, a spokesperson for the company confirmed it experienced operational issues at the site in March, while stating it did not detect any anomalies or maintenance events on July 12th. The AVIRIS-3 instrument that observed methane directly over this same location in July is the most advanced imaging system developed and operated by NASA's Jet Propulsion Laboratory and has undergone robust calibration and validation to ensure data accuracy.

Are these companies already using and responding to satellite data to mitigate pollution events?

Possibly yes, though when and where, and by which companies, is not publicly accessible information. In some instances, Carbon Mapper may notify operators of large methane events they observe to inform potential fixes. There are also various for-profit companies, like GHGSat, Insight M, and Kayrros, that offer oil and gas companies satellite or other aerial monitoring and alerting services. It is unclear how widely utilized these products are across the industry.

But one thing known is that the vast majority of companies are not responding even when notified of events. According to a recent report from the U.N.'s International Methane Emissions Observatory, 88% of the agency's alerts notifying oil and gas companies about methane super-emitter events are getting ignored.

Not just climate wrecking: potential health-damaging pollutants

Methane emissions from oil and gas facilities are a key source of climate pollution. However, recent research has shown that hazardous air pollutants are also often co-emitted with emissions, like benzene, which has been linked to a range of detrimental health effects, such as cardiovascular disease, diabetes, lung cancer, and leukemia.

Scientists from PSE Healthy Energy have used Carbon Mapper measurements from actual methane emissions events alongside their comprehensive gas composition database to model the concentrations of hazardous air pollutants co-emitted during particular oil and gas super-emitter events. Their work illustrates incidents where concentrations may have put public health at risk through exposure to air pollution concentrations exceeding government health or safety benchmarks.

Of the 96 Appalachian oil and gas plumes examined in this report, 28 have been investigated and included in PSE's Methane Risk Map. Their modeling research finds that, across all 28 of these events, a total population between 1,249 and 5,788 people may have been at risk of unsafe benzene exposure.

Figure 4. Methane Risk Map Visualization for an Emissions Event on July 12, 2025

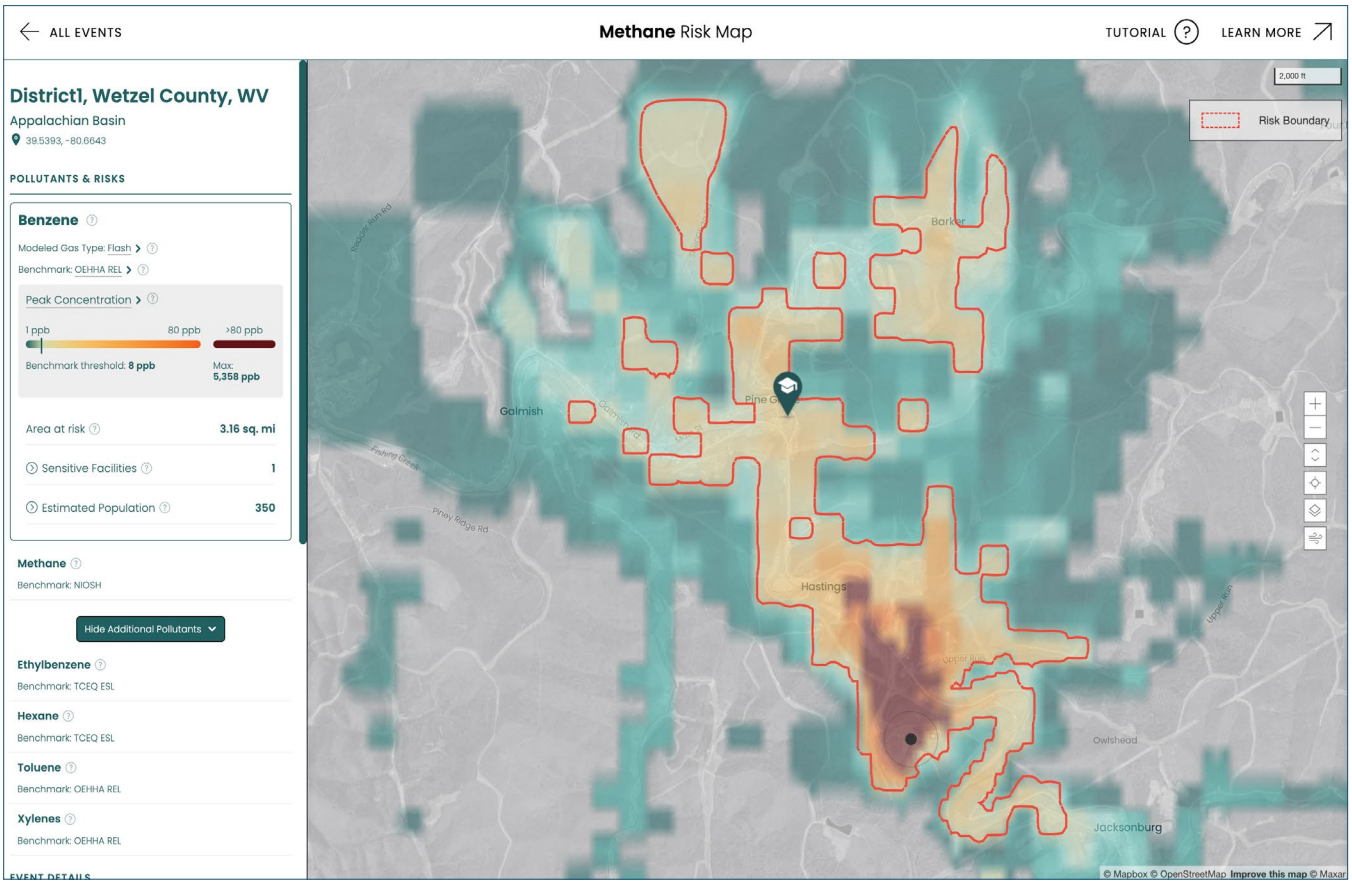


Figure 4 illustrates just one of these events, where PSE's data shows how a methane plume on July 12, 2025, observed venting gas at an estimated rate of 384 kilograms per hour, may have exposed an area just over 3 square miles with an estimated population of 350 people to unsafe levels of air pollution. Included inside this zone was a high school in Pine City, West Virginia, that is less than 2 miles from the source of the incident. According to our research, this plume was spotted near a gas facility operated by Eureka Midstream Holdings.

Conclusion and Recommendations

Even somewhat limited satellite and aerial coverage of the Appalachian Basin in 2025 revealed nearly 100 super-emitting incidents. Many of these appear near the operations of companies that claim to produce gas with very low emissions intensity, and, even in the dataset considered here, there are examples of methane super-emitter events that may have persisted for weeks to months. Therefore, claims regarding methane emissions by industry and companies operating in the Appalachian Basin should not be accepted without further investigation or without noted exceptions.

Our recommendations on improving data accuracy and methane mitigation measures include:

- **Oil and gas companies must employ proven routine monitoring and mitigation strategies for methane emissions.** Satellite and aerial observation data are increasingly available; there is no excuse for oil and gas companies to continue to ignore it. Routine monitoring and rapid mitigation of emissions incidents are a public health imperative for communities living near oil and gas infrastructure. Watchdog organizations like ours will continue to monitor publicly accessible data, and shareholders should demand that industry best practices, which also serve to mitigate risk, are implemented and reflected in company policies and reporting.

- **EPA's Greenhouse Gas Reporting Program must be preserved – and improved.** It is critical in order to regain public trust that the federal government abandons its misguided attempt to end this public data reporting program. Without an independent third-party setting the criteria, reviewing, and verifying this data, the company self-reporting risks losing its remaining credibility.

- **Oil and gas companies must accurately incorporate large-scale incidents and quantifications of emissions into publicly available inventories.** EPA provided an initial pathway for companies to include super-emitter incidents in their annual emissions inventory reporting. Moving forward, company inventories omitting those quantifications should be considered misleading to the public as well as company shareholders.

- **State regulators and policymakers in oil and gas-producing regions should communicate to the public how they are integrating space and/or aerial monitoring to improve their rules and enforcement activities.** The emergence of satellite imaging provides states with new options to help reduce emissions through establishing their own super-emitter monitoring and notification programs. The EPA established a federal Super Emitter Program to promptly notify companies and the public when large release incidents were identified near a company's assets. EPA under the current administration has delayed the program at least until 2027, but states need not, and should not, wait for the federal government to implement their own large-emission monitoring and notification programs. States should provide clear data on when observed large-release emissions events fall within, or exceed, a facility's permitted air emissions thresholds. Communities living near industrial facilities deserve clear information on the air they are breathing, especially in instances where concentrations of otherwise invisible air pollution are putting public health at risk.

Endnotes

1. Carbon Mapper's portal aggregates data collected by the Tanager satellite as well as other publicly accessible sources, such as NASA's EMIT sensor, airborne sources such as NASA AVIRIS-NG, and the Global Airborne Observatory at Arizona State University. Of the 96 Appalachian oil and gas plumes observed between November 1, 2024 and November 1, 2025 that were examined in this report, 32 were observed by the Tanager-1 satellite, 62 were observed by the NASA Jet Propulsion Laboratory's Airborne Visible InfraRed Imaging Spectrometer (AVIRIS-3), and 2 were observed by NASA's Earth Surface Mineral Dust Source Investigation instrument on the International Space Station (ISS-EMI).

2. The remaining 41% of plumes where this analysis was unable to identify a likely source were due to a combination of: 1) a plume existing near multiple potential source facilities; 2) plumes where no nearby oil and gas facility was readily identifiable, or; 3) plumes adjacent to infrastructure where asset owner information was not readily, publicly available.

3. The Environmental Protection Agency has referred to super-emitters as methane release events with an emission rate of 100 kilograms per hour of methane or greater. Only three of the 96 plumes analyzed in this report fall below that threshold, while nine of the documented plumes did not have estimated emissions rates available at the time this report was published.

4. An emissions rate has not yet been provided for one of these twelve observed plumes, and therefore that incident has not been included in this example.

5. This estimate was calculated as follows: 48 [hours] * (660 + 735 + 343 + 2,300 + 2,200 + 1,300 + 1,100 + 629 + 2,400 + 708 + 1,000 = 13,375) [plume emissions rate kg/hr] * 28 [100-year Global Warming Potential value for methane as used by EPA in its Subpart W reporting requirements] / 1,000 [conversion from kg to MT] = 17,976 /661,557 [EQT's 2024 reported Scope 1 GHG emissions MT CO2e, including emissions from Tug and Alta acquisitions and excluding Equitrans] = 2.7%. This estimate assumes constant emissions rates over 48 hours, as well as source persistence of 100%.

Appendix:
Appalachian Basin Plume Records

November 2024 - November 2025

Parent Company										Company Facility Data			Potential Health Risks
	Plume event link from Carbon Mapper	Date Acquired	Emissions rate (kg CH4/hr)	Instrument	State	Latitude	Longitude	Days Observed (Nov. 2024 - Oct. 2025)	Days Detected (Nov. 2024 - Oct. 2025)	Operator	Facility Name	Location link	Methane Risk Map event report
Antero Midstream Corporation	Link	Jul 12, 2025	213+/-25	AVIRIS-3	WV	39.404338	-80.684392	2	1	ANTERO MIDSTREAM LLC	CANTON NORTH COMPRESSOR STATION	Link	
Antero Resources Corporation	Link	Mar 09, 2025	1.3K+/-0.2K	Tanager	WV	39.168530	-80.747947	2	1	ANTERO RESOURCES CORPORATION	MORRIS, I.L. - OXFD13 WELL PAD	Link	
Appalachia Midstream Services	Link	Jul 12, 2025	[Not yet quantified]	AVIRIS-3	WV	39.676912	-80.682149	2	1	APPALACHIA MIDSTREAM SERVICES	BLAKE RIDGE COMP FACILITY	Permit (Lat/Long: 39.676780,	
	Link	Jul 11, 2025	247+/-97	AVIRIS-3	PA	41.614199	-76.293402	4	2	APPALACHIA MIDSTREAM SERVICES	WILMOT COMPRESSOR STATION	Link	Link
	Link	Jul 15, 2025	[Not yet quantified]	AVIRIS-3									
Berkshire Hathaway Energy (BHE GT&S)	Link	Jul 12, 2025	2.0K+/-0.1K	AVIRIS-3	PA	39.918917	-80.123677	2	2	DOMINION TRANSMISSION INC.	CRAYNE STATION	Link	
	Link	Aug 03, 2025	1.2K+/-0.3K	AVIRIS-3									
	Link	Aug 03, 2025	2.5K+/-0.2K	AVIRIS-3									
Blue Racer Midstream	Link	Aug 03, 2025	307+/-61	AVIRIS-3	WV	39.761025	-80.861934	2	1	BLUE RACER MIDSTREAM, LLC	NATRIUM EXTRACTION AND FRACTIONATION PLANT	Link	
CNX Resources Corporation	Link	Aug 03, 2025	822+/-252	Tanager	PA	40.031608	-80.318866	4	1	CNX GAS CO LLC	CONSOL NV57CHS WELL PAD	Link	Link
	Link	Mar 21, 2025	2.1K+/-0.3K	Tanager	PA	40.506478	-79.564696	1	1	CNX MIDSTREAM OPR CO LLC	MAMONT COMPRESSOR STATION	Link	Link

Coterra Energy	Link	Apr 09, 2025	1.6K+/-0.1K	Tanager	PA	41.769169	-75.608337	4	1	COTERRA ENERGY INC	BOLCATO G WELL PAD	Link	Link
	Link	Jul 16, 2025	1.3K+/-0.1K	AVIRIS-3	PA	41.817003	-76.005616	2	1	COTERRA ENERGY INC	REYNOLDS R WELL PAD	Link	
	Link	Oct 27, 2025	227+/-115	Tanager	PA	41.79629	-75.55507	2	1	COTERRA ENERGY INC	LERNER G 4	Link	
Diversified Energy Company	Link	Mar 12, 2025	1.6K+/-0.3K	Tanager	PA	41.173966	-78.573094	3	1	DIVERSIFIED PROD LLC	TURKEY 590983 WELL PAD	Link	Link
	Link	Jul 23, 2025	881+/-344	AVIRIS-3	OH	39.59405	-81.10457	2	1	DIVERSIFIED PRODUCTION LLC	POOL 3 UH	Link	
DT Midstream	Link	Oct 27, 2025	693+/-210	Tanager	PA	41.88047	-75.67934	5	1	Susquehanna Gathering Company	Susquehanna Gathering Company CDP 2	Link	
EQT Corporation	Link	Aug 03, 2025	660+/-272	Tanager	PA	40.005751	-80.133651	4	1	EQT PROD CO	GREGOR WELL PAD	Link	
	Link	Jul 12, 2025	735+/-64	AVIRIS-3	WV	39.457213	-80.612164	2	1	EQT PRODUCTION COMPANY	TRANS ENERGY INC. - ANDERSON 5H	Link	
	Link	Jul 12, 2025	343+/-30	AVIRIS-3	WV	39.565059	-80.626373	2	1	EQT PRODUCTION COMPANY	SCYOC, SHARON ANN - 513976 - D. H. COX	Link	Link
	Link	Jul 12, 2025	2.3K+/-0.1K	AVIRIS-3	WV	39.778394	-80.762719	3	1	EQT PRODUCTION COMPANY	DONNA VIVIAN YOHO (TOD) GARY LANCE YOHO - OLD CROW S-16HM	Link	
	Link	Jun 22, 2025	2.2K+/-0.3K	Tanager	WV	39.775844	-80.776060	3	2	EQT PRODUCTION COMPANY	CNX LAND RESOURCES INC. - BRYAN N WELL PAD	Link	Link
	Link	Aug 3, 2025	1.3K+/-0.2K	AVIRIS-3									
	Link	Mar 02, 2025	1.1K+/-0.5K	Tanager	WV	39.683303	-80.797195	4	3	EQT PRODUCTION COMPANY	ERLEWINE, RICHARD - ERLEWINE 6H WELL PAD	Link	Link
	Link	Mar 09, 2025	629+/-193	Tanager									Link
	Link	Jul 12, 2025	[Not yet quantified]	AVIRIS-3									
	Link	Nov 8, 2024	2.4K+/-0.4K	Tanager	PA	40.0774	-80.1849	3	1	RICE DRILLING	CAPTAIN PLANET WELL PAD	Link	Link
	Link	Jul 23, 2025	708+/-118	AVIRIS-3	OH	39.69541	-80.95472	2	1	RICE DRILLING D LLC	COLLECTORS TRIANGLE S U1H	Link	Link
	Link	Oct 10, 2025	1.0K+/-0.1K	Tanager	PA	40.08217	-80.03402	2	1	RICE DRILLING B LLC	WIGGIN OUT 6H	Link	
	Link	May 26, 2025	6.1K+/-3.2K	ISS-EMI	PA	39.910092	-80.074080	3	1	EQUITRANS L.P.	JEFFERSON COMPRESSOR STATION	Link	
	Link	May 26, 2025	[Not yet quantified]	ISS-EMI	PA	39.937468	-80.263548	2	2	EQUITRANS MIDSTREAM LLC	CALLISTO COMP STATION	Link	
	Link	Aug 03, 2025	307+/-64	AVIRIS-3									
	Link	Aug 03, 2025	760+/-282	Tanager	PA	39.871084	-80.448747	4	1	EQUITRANS MIDSTREAM LLC	SNAPPING TURTLE COMP STATION	Link	
Eureka Midstream Holdings	Link	Jul 12, 2025	384+/-53	AVIRIS-3	WV	39.539292	-80.664265	2	1	EUREKA MIDSTREAM LLC	CARBIDE STATION	Permit (Lat/Long: 39.539560,	Link

Expand Energy Corporation	Link	Jul 28, 2025	308+/-34	AVIRIS-3	PA	41.634825	-76.107555	2	1	CHESAPEAKE APPALACHIA LLC	BOYANOWSKI WELL PAD	Link	Link
	Link	Apr 23, 2025	585+/-258	Tanager	PA	41.626769	-76.177115	7	1	CHESAPEAKE APPALACHIA LLC	TIFFANY 3H WELL PAD	Link	Link
	Link	Aug 02, 2025	770+/-88	AVIRIS-3	PA	41.723205	-76.245569	2	1	CHESAPEAKE APPALACHIA LLC	CERCA 123HC WELL PAD	Link	Link
	Link	May 16, 2025	1.7K+/-0.5K	Tanager	PA	41.608652	-76.373706	5	1	CHESAPEAKE APPALACHIA LLC	CRAWFORD 124HC WELL PAD	Link	Link
	Link	Jul 15, 2025	126+/-27	AVIRIS-3	PA	41.782828	-76.630342	2	1	CHESAPEAKE APPALACHIA LLC	SGL 289B 2H WELL PAD	Link	Link
	Link	Mar 09, 2025	1.4K+/-0.2K	Tanager	WV	39.732476	-80.583588	4	1	SWN PRODUCTION COMPANY, LLC	YOCUM MSH WELL PAD	Link	Link
	Link	Aug 18, 2025	438+/-187	Tanager	PA	41.83015	-75.67673	5	2	SWN PROD CO LLC	WARNER 1H	Link	
	Link	Oct 27, 2025	412+/-159	Tanager									
	Link	Oct 27, 2025	486+/-193	Tanager	PA	41.84613	-75.66454	5	1	SWN PROD CO LLC	SWEENEY 1H	Link	
	Link	Oct 27, 2025	589+/-236	Tanager	PA	41.85466	-75.58052	4	1	SWN PROD CO LLC	LEONARD 3H	Link	
	Link	Oct 27, 2025	490+/-192	Tanager	PA	41.8818	-75.60734	1	1	SWN PROD CO LLC	DROPP 6H	Link	
EXCO Resources, Inc.	Link	Mar 21, 2025	1.2K+/-0.3K	Tanager	PA	40.825479	-79.475313	2	1	EXCO RESOURCES PA LLC	SCHRECENGOST PAD 8 WELL PAD	Link	Link
Howard Energy Partners	Link	Aug 02, 2025	414+/-41	AVIRIS-3	PA	41.771752	-76.192367	1	1	HEP Pennsylvania Gathering	WHITE CPF-1	Link	Link
	Link		131+/-20	AVIRIS-3									Link
	Link	Jul 11, 2025	[Not yet quantified]	AVIRIS-3	PA	41.793339	-76.214068	2	1	HEP Pennsylvania Gathering	GREENZWEIG #1 COMPRESSOR STATION	Link	
Laurel Mountain Midstream, LLC	Link	Jul 12, 2025	505+/-46	AVIRIS-3	PA	39.916134	-80.222122	1	1	LAUREL MTN MIDSTREAM OPR LLC	CANTARAL COMPRESSOR STATION	Link	
Repsol, S.A.	Link	Apr 23, 2025	510+/-119	Tanager	PA	41.953094	-76.020554	3	1	REPSOL OIL & GAS USA LLC	TRAVER 07 081 07 E 7H WELL PAD (TANK)	Link	Link
	Link	Jul 11, 2025	430+/-119	AVIRIS-3	PA	41.66901	-76.9795	2	1	Repsol Oil & Gas USA	DCNR 010 COMPRESSOR STATION	Link	Link
The Williams Companies, Inc.	Link	Jul 15, 2025	36+/-13	AVIRIS-3	PA	41.697777	-76.076469	3	1	WILLIAMS LLC	RATTLESNAKE HILL COMPRESSOR STATION	Link	
	Link	Jul 28, 2025	[Not yet quantified]	AVIRIS-3	PA	41.76363	-75.78174	3	2	Williams	Potter Compressor Station	Link	
	Link	Oct 27, 2025	1.7K+/-0.4K	Tanager									
	Link	Jul 28, 2025	[Not yet quantified]	AVIRIS-3	PA	41.74707	-75.93116	3	2	WILLIAMS FIELD SVC CO LLC	Church Compressor Station	Link	
	Link	Jul 15, 2025	165+/-60	AVIRIS-3									

Unknown	Link	Feb 23, 2025	1.7K+/-0.2K	Tanager	WV	39.754403	-80.615306	4	2					
	Link	Mar 09, 2025	883+/-153	Tanager										
	Link	Jul 11, 2025	570+/-172	AVIRIS-3	PA	41.725489	-76.804100	3	2					Link
	Link	Jul 15, 2025	[Not yet quantified]	AVIRIS-3										
	Link	Aug 03, 2025	265+/-31	AVIRIS-3	PA	39.999995	-80.227265	1	1					
	Link	Jul 12, 2025	354+/-25	AVIRIS-3	WV	39.665013	-80.410703	2	1					
	Link	Aug 03, 2025	1.3K+/-0.4K	Tanager	PA	40.060798	-80.415702	3	1					
	Link	Jul 12, 2025	[Not yet quantified]	AVIRIS-3	WV	39.298377	-80.819759	4	4					
	Link	Jul 23, 2025	1.0K+/-0.3K	AVIRIS-3										
	Link	Jul 24, 2025	1.6K+/-0.3K	AVIRIS-3										
	Link	Aug 03, 2025	1.5K+/-0.1K	AVIRIS-3										
	Link	Nov 08, 2024	1.8K+/-0.2K	Tanager	PA	39.99751	-80.22529	1	1					
	Link	Jul 12, 2025	155+/-13	AVIRIS-3	WV	39.660459	-80.411403	2	1					
	Link	Jul 12, 2025	206+/-18	AVIRIS-3	PA	39.857696	-80.427951	1	1					
	Link	Jul 23, 2025	1.1K+/-0.1K	AVIRIS-3	WV	40.010950	-80.614708	2	2					
	Link	Aug 03, 2025	1.1K+/-0.1K	AVIRIS-3										
	Link	Jul 12, 2025	217+/-20	AVIRIS-3	PA	39.915507	-80.126648	2	2					
	Link	Aug 03, 2025	464+/-111	AVIRIS-3										
	Link	Aug 03, 2025	886+/-92	AVIRIS-3										
	Link	Aug 03, 2025	290+/-28	AVIRIS-3	WV	39.85186	-80.8021	2	2					Link
	Link	Aug 03, 2025	341+/-31	AVIRIS-3										Link
	Link	Jul 23, 2025	113+/-26	AVIRIS-3										
	Link	Jul 23, 2025	198+/-38	AVIRIS-3										Link
	Link	Aug 03, 2025	427+/-147	Tanager	PA	39.95813	-80.26284	3	1					
	Link	Aug 03, 2025	1.2K+/-0.3K	Tanager	PA	39.99595	-80.23064	3	1					
	Link	Aug 03, 2025	1.1K+/-0.1K	AVIRIS-3	PA	39.94586	-80.081	2	2					
	Link	Aug 03, 2025	700+/-188	AVIRIS-3										
	Link	Jul 12, 2025	292+/-35	AVIRIS-3										
	Link	Jul 12, 2025	162+/-19	AVIRIS-3										
	Link	Jul 23, 2025	81+/-15	AVIRIS-3	WV	39.8969	-80.63308	1	1					
	Link	Jul 23, 2025	137+/-20	AVIRIS-3	WV	39.90179	-80.63434	1	1					

Unknown	Link	Jul 23, 2025	49+/-5	AVIRIS-3	WV	39.82365	-80.6982	1	1				
	Link	Jul 23, 2025	566+/-147	AVIRIS-3	PA	40.09707	-80.50265	2	1				
	Link	Jul 12, 2025	272+/-38	AVIRIS-3	PA	39.84719	-80.41052	1	1				
	Link	Jul 12, 2025	662+/-58	AVIRIS-3	PA	39.99856	-80.25654	2	1				Link
	Link	Oct 26, 2025	325+/-114	Tanager	OH	39.89717	-80.96067	1	1				
	Link	Aug 03, 2025	619+/-77	AVIRIS-3	PA	39.97921	-80.45522	2	2				
	Link	Jul 24, 2025	238+/-26	AVIRIS-3									
	Link	Jul 12, 2025	212+/-15	AVIRIS-3	PA	39.90075	-80.40809	2	1				

EARTHWORKS GAS LEAKS

This report was researched and written by Geoff Bromaghim of the Gas Leaks Project and Ekaterina Larina, Josh Eisenfeld, and Dakota Raynes of Earthworks. It was edited by Javi Garcia of Gas Leaks and Justin Wasser of Earthworks.

Co-published by Earthworks and Gas Leaks Project

BIG GAS POLLUTERS

BigGasPolluters.org is a product of a coalition including Earthworks and Gas Leaks Project. It was launched to provide credible, evidence-based information on the claims and actions of the fossil fuel industry. The campaign includes a database documenting reported methane emissions, commitments made to reduce methane, evidence of leakage events from Earthworks, and more information about the 100 largest oil and gas companies in the US. Our goal is simple: we want a world with as little pollution from oil and gas as possible.

March 2026