



Spill Stories

a guided introduction to oil and gas spills from U.S. pipelines

Welcome to Spill Stories - a creative response to oil and gas spills from the United States' vast network of pipelines. As a collaboration between the [Climate Alliance Mapping Project \(CAMP\)](#) and students and professors from the University of Arizona's [Creative Writing program](#), Spill Stories brings oil and gas pipeline spill data to life through creative writing. The Spill Stories project webpage is [here](#).

Follow these steps for a guided introduction to oil and gas pipeline spills in the United States. Links (in blue) will open a website.

1. [Scroll through this introduction to Spill Stories \[10min\]](#). This will give you some background about the project, an introduction to CAMP, and some basic information about the data you'll be working with.
2. [View the CAMP USA map \[5min\]](#). While Spill Stories focuses on oil and gas spill data, notice that CAMP includes this data alongside other layers related to the theme of climate justice. Find the circular icon at the bottom that represents oil and gas spills, and use these buttons to turn a few layers on and off. Click on a feature on the map and read its pop-up.
3. [Open the Basic Oil & Gas Pipeline Spill Viewer created for this project \[30min\]](#).
Follow these steps to get acquainted with the viewer and data.
 - a. Click all the buttons you can find to see what they do. Notice that, among other things, you can turn layers on/off, change the basemap, and print your current view. Click the HOME icon to return to the default zoom.
 - b. With the map in its default zoom, take a moment to look at all the data together. What do you notice? How does this representation of spills compare to what you expected? Are there more spills of a particular color (type)? Are spills evenly distributed? Where are there higher concentrations of spills? Why might that be? Set a 5-minute timer and write down any impressions or questions that come to you.
 - c. Use the SEARCH BOX to search for somewhere you care about (maybe your hometown, or somewhere you've visited). After you've found the place, click on a nearby spill (you may have to zoom out). Read the pop-up and see what you learn. Zoom out a little and notice if there are other spills nearby.
*****One important note here. Spills from BEFORE 2010 are likely NOT in their exact location. PHMSA did not always record exact coordinates for data before 2010, so most earlier spills are randomly placed within the county that they took place. To know if a spill is marked in its exact location, scroll***

to the bottom of the pop-up and look for the attribute "Spill shown in exact location" ("Yes" or "No").

- d. Use the SEARCH BOX again, but this time click on the DOWN-ARROW just left of the text box. Notice that it's set to "ESRI World Geocoder," which allows you to search for places like a city or town that would be listed on a normal map. By changing this to one of the spill data layers, you can search the spill data. The search will only query spills in the current map view, so zoom back to the default. Now search "Oil Spills" for "dog" and *before* you hit ENTER a list of spills containing the word "dog" will drop down below the search box. Click on the second result titled "FINA PIPE LINE CO" and read about a 1996 oil spill in Texas that was identified after a resident called the refinery to report that his dog came home covered in oil. Searching for places or within data layers is one creative way to explore the spill data.
4. **Explore other representations of oil and gas spills [later].** CAMP created some other maps that show the same oil and gas spill data in different ways. No need to open these now, just know they are there for you when you're ready.
 - a. **Map #1 - Basic Oil & Gas Spill Viewer.** Emphasizes **total cost (current USD)** and spills resulting in a **fatality or injury**. Also shows oil and gas pipelines.
 - b. **Map #2 - Emphasizes type of oil/gas spilled and amount released.** Only includes spills since 2010.
 - c. **Map #3 - Emphasizes injuries and fatalities.**
 - d. **Map #4 - Emphasizes spill date and total cost.**
 - e. **Map #5 - Emphasizes concentration of spills using a heat map.**
5. **Finally, open this spreadsheet containing all the data [5min].** You only have viewing permission for the Google Sheet, but you can always download the file and explore the data however you want. Click on the "Oil Spills" sheet (at the bottom) and sort the data by DATE ("Sort Sheet Z->A). The most recent recorded spill should now be at the top. Copy the Report ID value (one of the farthest columns to the right), go back to the [Basic Oil & Gas Spill Viewer](#), and search the "Oil Spill" layer for that ID number. You should be taken to a December 12, 2017 spill in Georgia that cost \$8,437. Noting the Report ID and using the SEARCH BOX is an easy way to keep track of spills and find them later.

You're done!

Thanks for taking this time to learn about oil and gas pipeline spills in the United States. We hope you learned something interesting and feel inspired to write about this topic. Please contact Remy Franklin (CAMP Project Coordinator) at climatealliancemap@gmail.com with any questions. Remy is happy to meet in person to show you the data or discuss ideas.