

Using Babel Street Solutions to Investigate Fentanyl Traffickers

Opioids remain the leading cause of drug overdoses in the U.S., accounting for two-thirds of fatalities.¹ Among this class of drugs, fentanyl is now the leading cause of death for Americans aged 18–49.² The Sinaloa and Jalisco cartels of Mexico are responsible for the majority of fentanyl and methamphetamine entering the U.S.³

Disrupting the flow of fentanyl requires locating, investigating, and dismantling the networks involved with its manufacture, shipment, and distribution at the local, national, and international levels.

Open-source intelligence (OSINT) tools are an important resource for the law enforcement organizations dedicated to uncovering and halting fentanyl trafficking. Babel Street provides a suite of OSINT solutions designed to search and analyze unstructured data and social networks to yield investigative insights.

Understanding the fentanyl supply chain

Fentanyl is a synthetic opioid, manufactured from a number of precursor chemicals that are generally sourced from China. It must be packaged as pills or powder and then smuggled into the U.S. into the hands of criminal gangs and drug dealers for distribution. Due to its lethality, fentanyl is often diluted (“cut”) with other chemical compounds and drugs, such as heroin. As a final step, the profits obtained from the sales must be laundered into cash, cryptocurrency, or goods that make their way back down the supply chain to the cartels.

Undertaking an investigation with Babel Street tools

Law enforcement officials at all levels handle different aspects of the fentanyl supply chain. An analyst seeking to stem the flow of precursor chemicals would look for different indicators than an investigator trying to arrest dealers at a local level, or a forensic accountant following the money.

This use of Babel Street solutions illustrates how an investigator can search for entities that are advertising and selling fentanyl precursors.

Structure a search for precursor chemical names

The search string contains the names of three chemical precursors and their associated Chemical Abstract Services (CAS) numbers. To reduce noise, the search is also leveraging proximity search to identify the CAS numbers, and the various ways those numbers may be listed online. The search sources can also be selected.

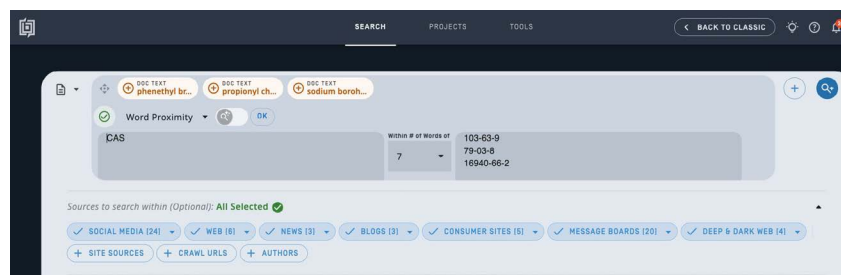


Figure 1: An Insights search string focusing on chemical names and their proximity to CAS numbers

Examine search results for identifiers of individuals and entities

This social media post contains contact information for a seller of propionyl chloride and other chemicals. Babel Street Insights returned identifiers including an email address, social media handle, and an online messaging platform number.

These identifiers can be probed more deeply in People Search, Business Search, or an additional Document Search to connect them with individuals or organizations and build a more complete profile of subjects for further investigation.

See hashtags and other relevant search terms

Search results often contain popular hashtags on the topic. An investigation can be expanded by including hashtags in the search string.

#propionylchloride #chemical #liquid #chemicalbull #rawmaterials

Figure 3: A listing of hashtags for further investigation

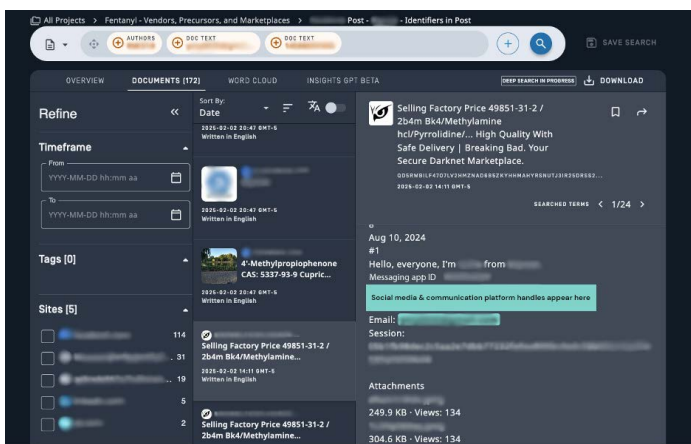


Figure 4: A dark web search yields more information about the vendor

their location through a proxy network. By operating within a virtual environment, Secure Access also thoroughly protects local machines and organizational networks from malware or hacking.

Endnotes

¹National Center for Drug Abuse Statistics, "Drug Overdose Death Rates," retrieved 01/22/2025, <https://drugabusestatistics.org/drug-overdose-deaths/>

²U.S. Drug Enforcement Agency, "Chapitos' Charged in Department's Latest Actions to Disrupt Flow of Illegal Fentanyl and Other Dangerous Drugs," 04/14/2023, <https://www.justice.gov/opa/pr/justice-department-announces-charges-against-sinaloa-cartel-s-global-operation>

³U.S. Drug Enforcement Agency, "DEA Operation Last Mile Tracks Down Sinaloa and Jalisco Cartel Associates Operating within the United States," 05/05/2023, <https://www.dea.gov/press-releases/2023/05/05/dea-operation-last-mile-tracks-down-sinaloa-and-jalisco-cartel-associates>

Babel Street is the trusted technology partner for the world's most advanced identity intelligence and risk operations. The Babel Street Insights platform delivers advanced AI and data analytics solutions to close the Risk-Confidence Gap.

Babel Street provides unmatched, analysis-ready data regardless of language, proactive risk identification, 360-degree insights, high-speed automation, and seamless integration into existing systems. We empower government and commercial organizations to transform high-stakes identity and risk operations into a strategic advantage.

Learn more at babelstreet.com.

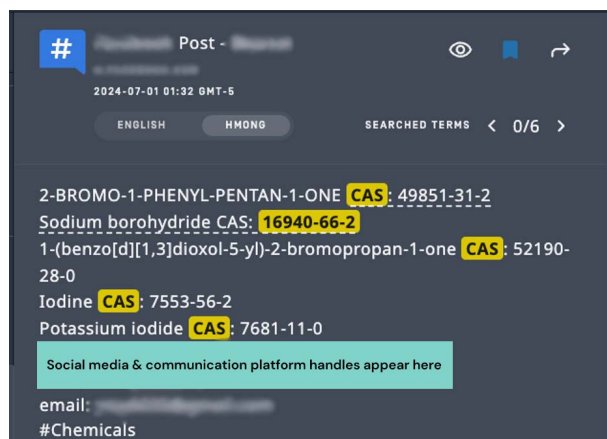


Figure 2: A document search yields a post containing several identifiers for a precursor vendor

Utilize deep search

A search of the dark web using the identifiers found in Figure 2 reveals even more information about this particular seller, including a name and an online messaging app ID. The deep web page also mentions the same company found in the above social media post. Every bit of additional data helps build a fuller picture and/or connections of precursor suppliers.

Safely visit supplier websites

Using Babel Street Secure Access, a managed attribution platform, investigators can safely visit the websites of precursor suppliers in complete anonymity. Secure Access allows investigators to manage their online persona(s) and disguise