

HOW IT WORKS:

Product Batching

Colonial Pipeline transports multiple of grades of gasoline, as well as diesel, kerosene, jet fuel, home heating oil and U.S. military fuels through its 5,500-mile network every day.

The majority of products that Colonial transports are fungible, meaning they are commingled with like products within the pipeline. Others are segregated batches that are not commingled with other products.

The complex specifications inherent in delivering this broad range of refined petroleum products through the same pipelines are managed through a highly efficient practice known as "batching."

On any given day in the batching process, Colonial might transport diesel for several hours, and then switch to jet fuel, before transporting diesel fuel again and later sending a batch of home heating oil, all in the same pipeline from different injection locations.

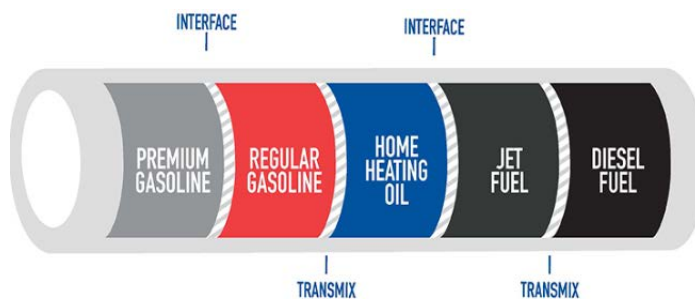
The process of tracking the different batches throughout transport is done by the scheduling group. Once a product has been scheduled and transported, a ticket is generated that shows the following information:

- The product owner
- Type of product transported
- Total amount of product sent through the line
- Transportation origination and destination points

The product volume is measured at the origination point in the pipeline and again upon delivery of each batch to accurately document the amount of product that flowed from point-A to point-B. What is delivered for the shipper may not necessarily be the exact fuel shipped, but it will meet the same specifications for the product and will come from that product's fungible stream.

Because a variety of refined products move through the same pipelines, some mixing occurs where the trailing end of a batch of one product meets the leading edge of the next. If the two products are similar, such as different grades of gasoline, the relatively small amount of higher end product can be safely delivered into the lower grade product without issue.

When consecutive products are batched in the pipeline with differing qualities, they create a mixture known as "transmix". Transmix is disposed of from end point locations in multiple ways, often times being trucked out to be re-refined.



The many different types of fuel marketed to consumers, whether it is a national brand, or any of hundreds of regional chains, take on their specific brand qualities after the batches are delivered. Each shipper injects special additives into the fuels sold under their individual brands to make their products unique.

Batching fuels is much more efficient than reducing flow volume or temporarily shutting down a pipeline segment to create separation among different products. Colonial's pipelines operate most efficiently when there is a steady, uninterrupted stream of product moving from one point to the next. Proper batching minimizes downgrades and transmix generation.

