

8 August 2019

IMO 2020: Focus on Yombo Crude

A west African crude oil stream that will gain importance in the post-IMO-2020 world is Congolese Yombo crude. Sometimes considered a high-quality fuel oil, it is in fact a heavy low-sulphur crude oil stream that typically flows to Asia, including the Singapore-Malaysia fuel oil blending and storage hubs. This insight note takes a look at the recent movements of this relatively niche crude grade, following on our previous analysis of Chad's Doba stream.

Yombo crude from Congo (Brazzaville), has a low total recovery from a refinery standpoint (50-55%), but it has characteristics that have historically lent itself well to fuel oil blending for utility sector outlets in Asia – and going forward for 0.5% bunkers.

Specifications

Relative to many crudes, Yombo is high density at around 16.5 API (.955d) and very high in viscosity at around 650cst. Sulphur is typically 0.35% by weight. These three specifications lend the stream well to be blended to the 0.5% bunker fuel specifications. High density/low viscosity slurries can trim the viscosity to under 380cst whilst maintaining the 11.3 API minimum on the density.

Unlike Doba, Yombo also has a flash point of 65 degrees Celsius which is naturally within the specifications for bunkers. Finally, it has a very low pour point of - 12 degrees Celsius – plenty of room below the 30c maximum constraint for bunkers. This means it can be blended with high pour fuel streams.

Yombo loadings

Yombo crude loaded from the Conkouati FPSO and more recently, La Noumbi FPSO, operated by Perenco. It lies 23 miles northwest of Pointe Noire where volume is (slowly) accumulated.



Quarterly Yombo crude exports

Vortexa data shows the stream typically loads out in 400,000- 600,000 bl parcels, roughly every other month. Accordingly, it mostly loads out on Aframax freight. Our data shows year-to-date exports to be under 10,000 b/d, much less prevalent in comparison to Chad's Doba stream of 120,000 b/d. But the hydrocarbon has its own important characteristics.

Prior Cargoes to Japan and India

The latest observed export of a Yombo cargo was on 24 July aboard the Aframax *Garibaldi Spirit*, which is on its way to Singapore and expected to arrive around 20 August.

The previous load, in June, was aboard *Maersk Pearl*. The Aframax tanker loaded around 350,000 bl of Yombo crude and in mid-May lightered off to the *Crystal Star* – one of the permanent floating VLCCs in Malaysian waters close to Singapore. Thereafter, the handysize *MS Sophie* was observed loading from the VLCC, and taking some volume to Tokuyama, Japan. It's likely this was for the Japanese utility market.

Though a poorer quality refinery feedstock compared to many lighter crudes, Yombo crude has notable 'cold' properties. The low pour, cetane and sulphur suit it to diesel production. And the high aniline point makes it a good feed for jet fuel production.



Top destinations for Yombo crude since 2016

IMO 2020 Prospects

Going forward, the 0.5% bunker pool will no doubt compete keenly against the utility and refining markets for the Yombo stream.

Though it is a relatively small stream, it will be sought after by <u>physical VLSFO traders</u> as they seek to blend competitive alternatives to 0.5% distillate bunkers. With the latest departure also heading to Singapore, it looks like the stream is already heading to a key demand center in anticipation of the new 0.5% bunker demand kicking in.