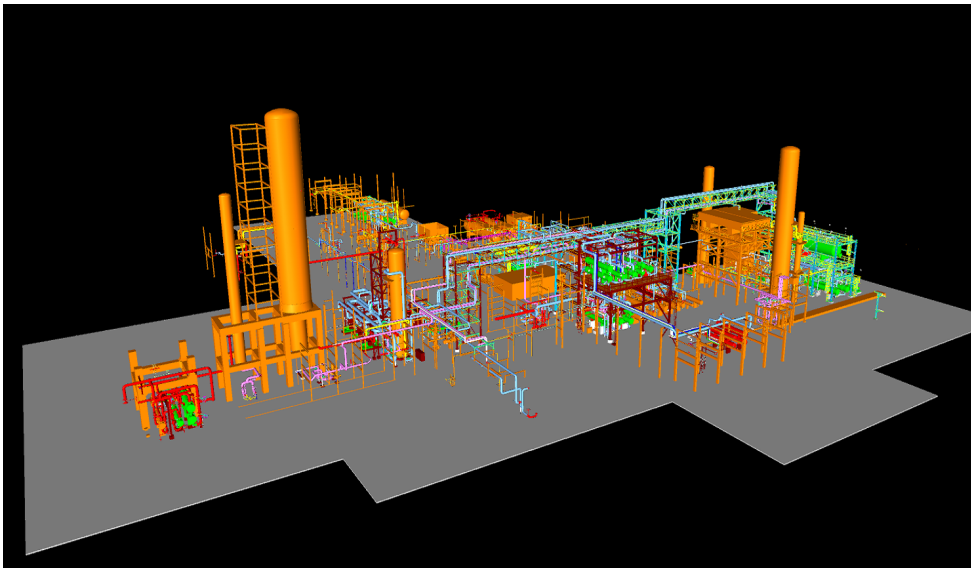
REFINERY EXPANSION

TEXAS



LOCATION:
Texas

Primoris Design & Construction performed the process design and detail engineering to expand the refinery capacity from 162,000 to 187,000 BPSD. Scope included the revamp of two crude/vacuum units. The No. 1 crude unit charge rate was increased by 10,000 BPD, and the No. 2 crude unit charge rate was increased by 15,000 BPD. The crude unit revamp also included a new preflash tower, new charge pumps, and a completely redesigned preheat train utilizing helical-baffled exchangers. An additional 6,000 BPD capacity was added to the Naphtha Hydrotreaters (NHT). Modifications to the NHTs included replacement of the stripper feed pumps and HDS pumps, a fourth shell added in series to the feed effluent and trays in the feed stripper. The reactor had scale baskets and additional catalyst to maintain an adequate space velocity. An additional air cooler bay was added in parallel to the effluent air cooler. New internals were added to the separator to prevent carryover. The desulfurizer trays in the upper section were replaced with high-capacity trays and the lower section trays were removed and replaced with an additional 5 trays. A new overhead air cooler was added to the desulfurizer overhead.

PsC
Primoris