```
            Fired Heater Summary

Equip. No.                    1
      Name
Temperature Out   F       400.0000
Heat Absorbed              48.4796
  (MMBtu/hr)
Fuel Usage(SCF)         71821.5875
```
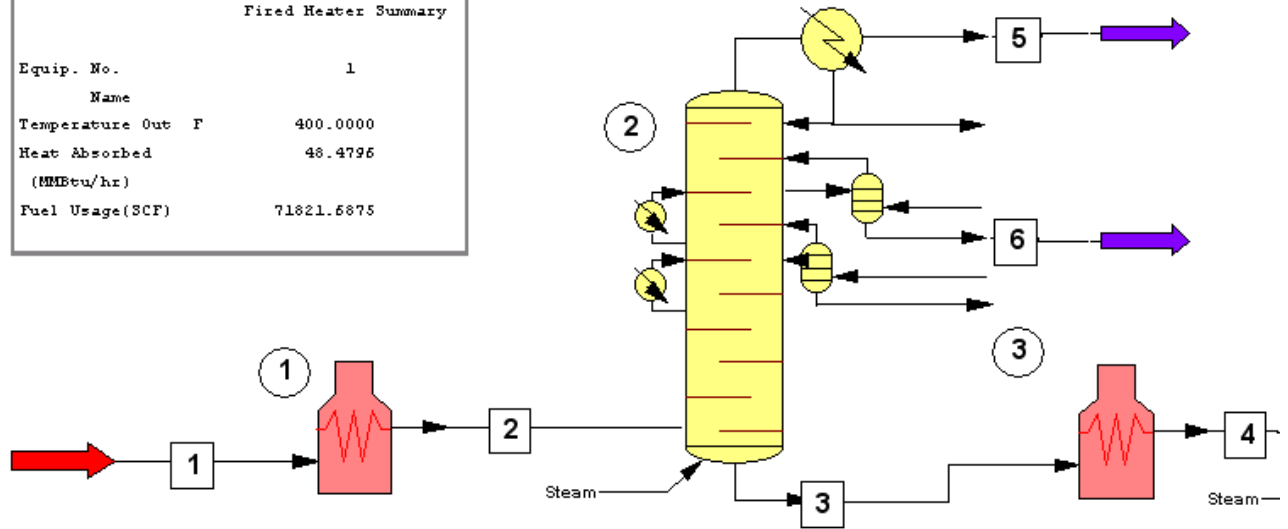
Stream No.	1	5	6	7	8	9	10
Name							
- - Overall - -							
Molar flow lbmol/hr	1791.6	346.3	544.7	186.5	276.0	203.3	249.0
Mass flow lb/hr	310252.0	26876.7	61857.9	21922.5	47425.1	49269.9	103143.5
Temp F	150.0	100.0	278.2	100.0	394.1	515.7	614.5
Pres psia	58.0	48.0	54.1	20.0	23.9	24.4	25.0
Vapor mole fraction	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Degree API	34.9	84.8	49.4	47.7	33.1	26.3	15.3
Average mol wt	173.2	77.6	113.6	117.6	171.9	242.3	414.3
Actual dens lb/ft3	50.4	39.4	41.7	48.1	44.4	44.4	47.6
Actual vol ft3/hr	6154.2	681.7	1482.0	456.0	1067.4	1109.7	2166.0
Std liq ft3/hr	5848.9	658.6	1268.1	445.0	884.4	880.8	1716.1

Databoxes and graphics can be placed directly on flowsheet, forming together Main Process Flow Diagram. Individual Process Flow Diagrams can be also created and edited.

Oil Refining and Petrochemicals

Atmospheric Distillation of Crude Oil
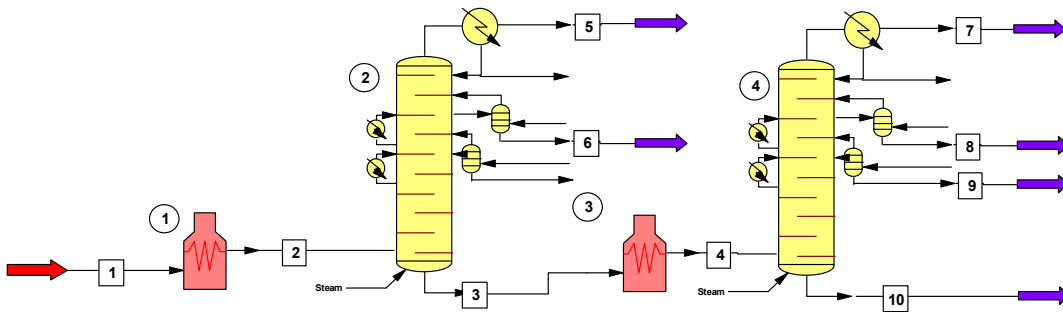
DESCRIPTION:

Crude oil is heated in process furnace to 400 F. Then, it enters the tower T-1001 near to the tower bottom. The tower is equipped with 12 stages, a condenser, one side stripper for naphtha, one side heat exchanger, and one pumparound. The bottoms of the tower are heated to 600 F in the second furnace, and sent to the tower T-1002. The latter is equipped with 15 stages, a condenser, two side strippers (for kerosene and diesel oil), one side heat exchanger, and one pumparound.

The bottoms of both towers as well as all strippers are fed with live steam.
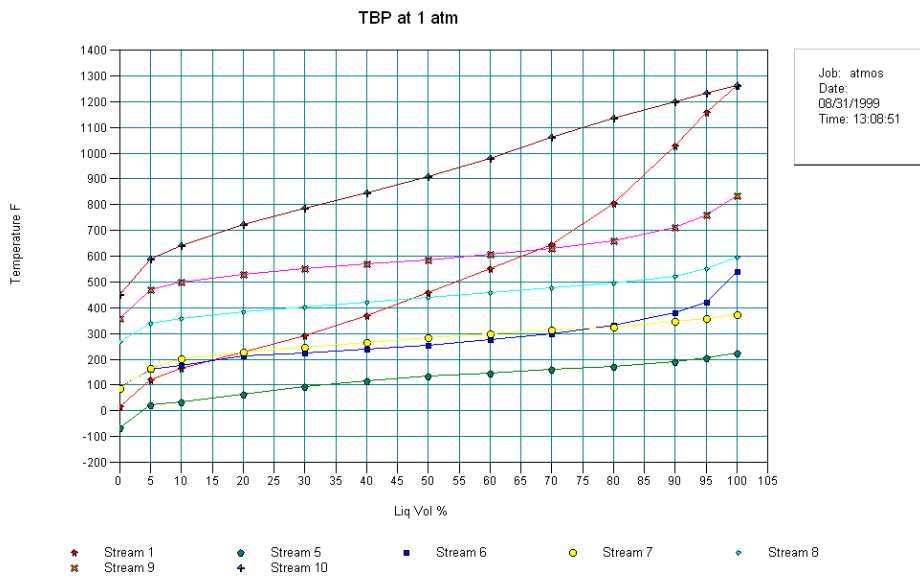
This example explains usage of the Tower Plus distillation model and the way of performing crude oil characterization.