

WHAT'S THAT THING?

NATURAL GAS PROCESSING PLANT

Presented to:

**Air & Waste Management Fall
Conference 2014 – YP Track**

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“WHAT’S THAT THING?”

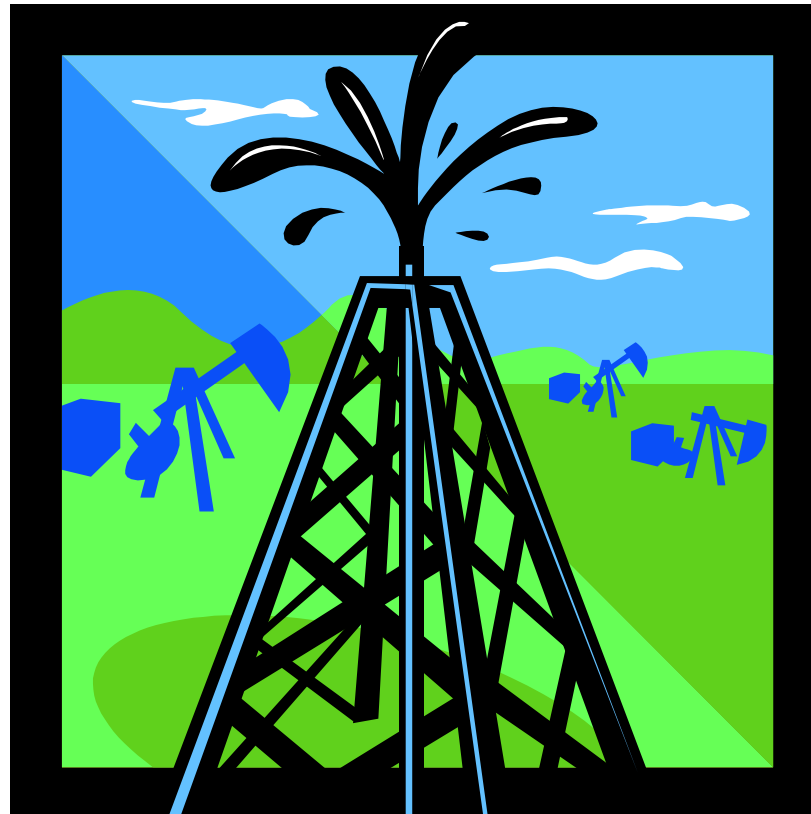
NATURAL GAS PROCESSING PLANT



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HISTORY OF OIL AND GAS PRODUCTION

“Uncle Billy” strikes oil!



ONE B IN BARREL?

Barrel



Barrels (bbls)



WHY?

SPINDLE TOP

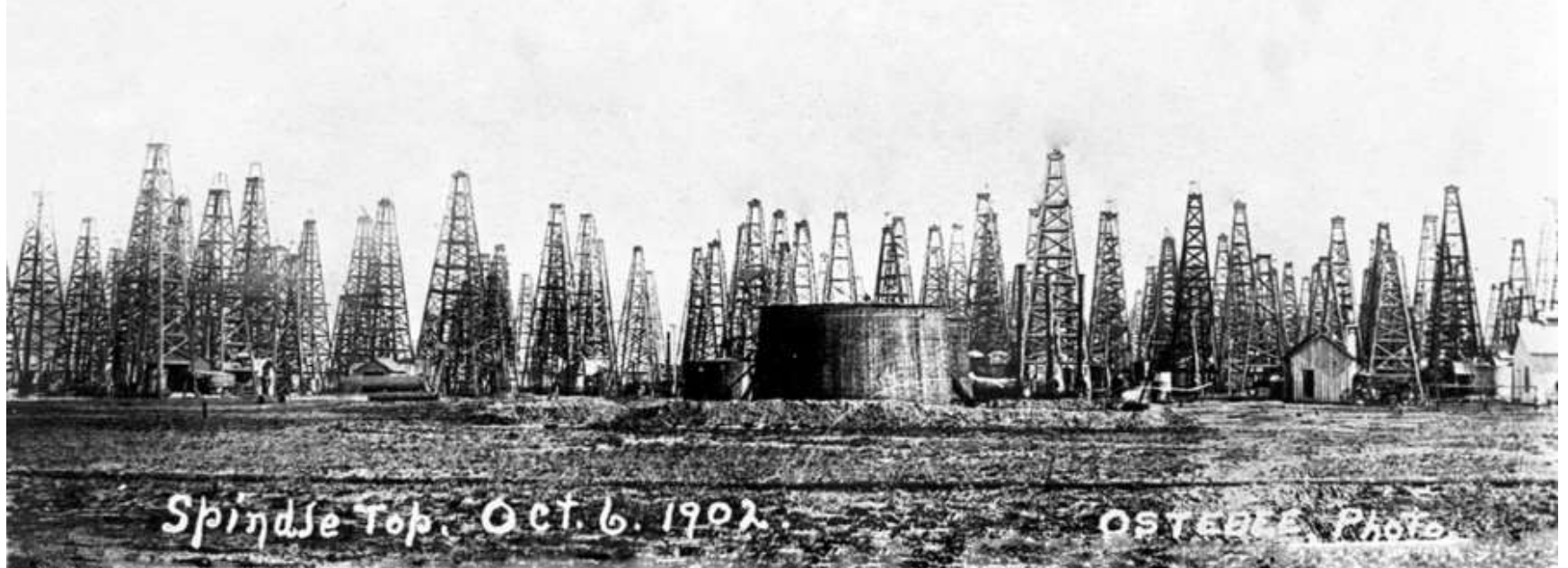
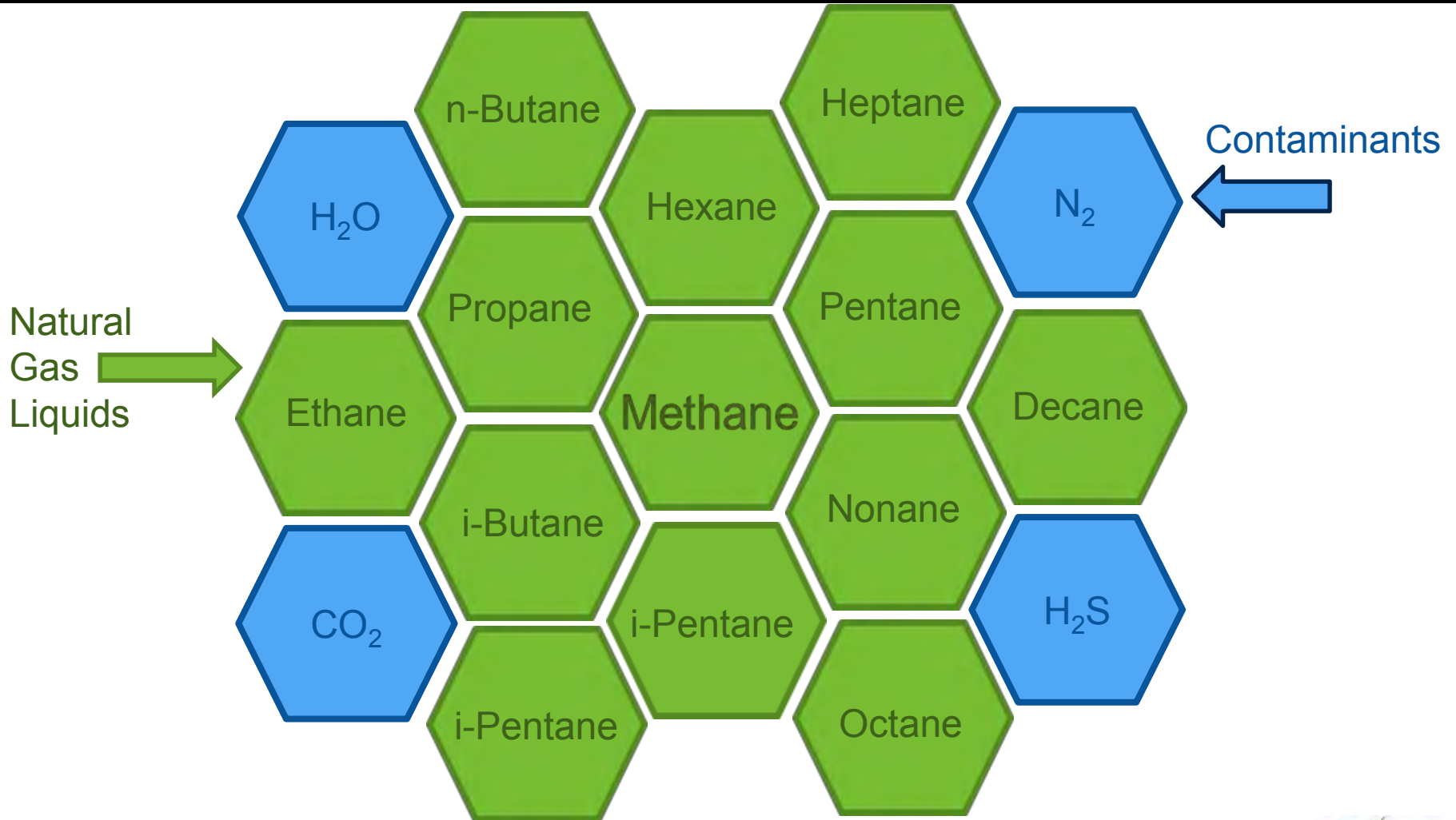


Photo is courtesy of the Spindletop Museum -- taken October 1902

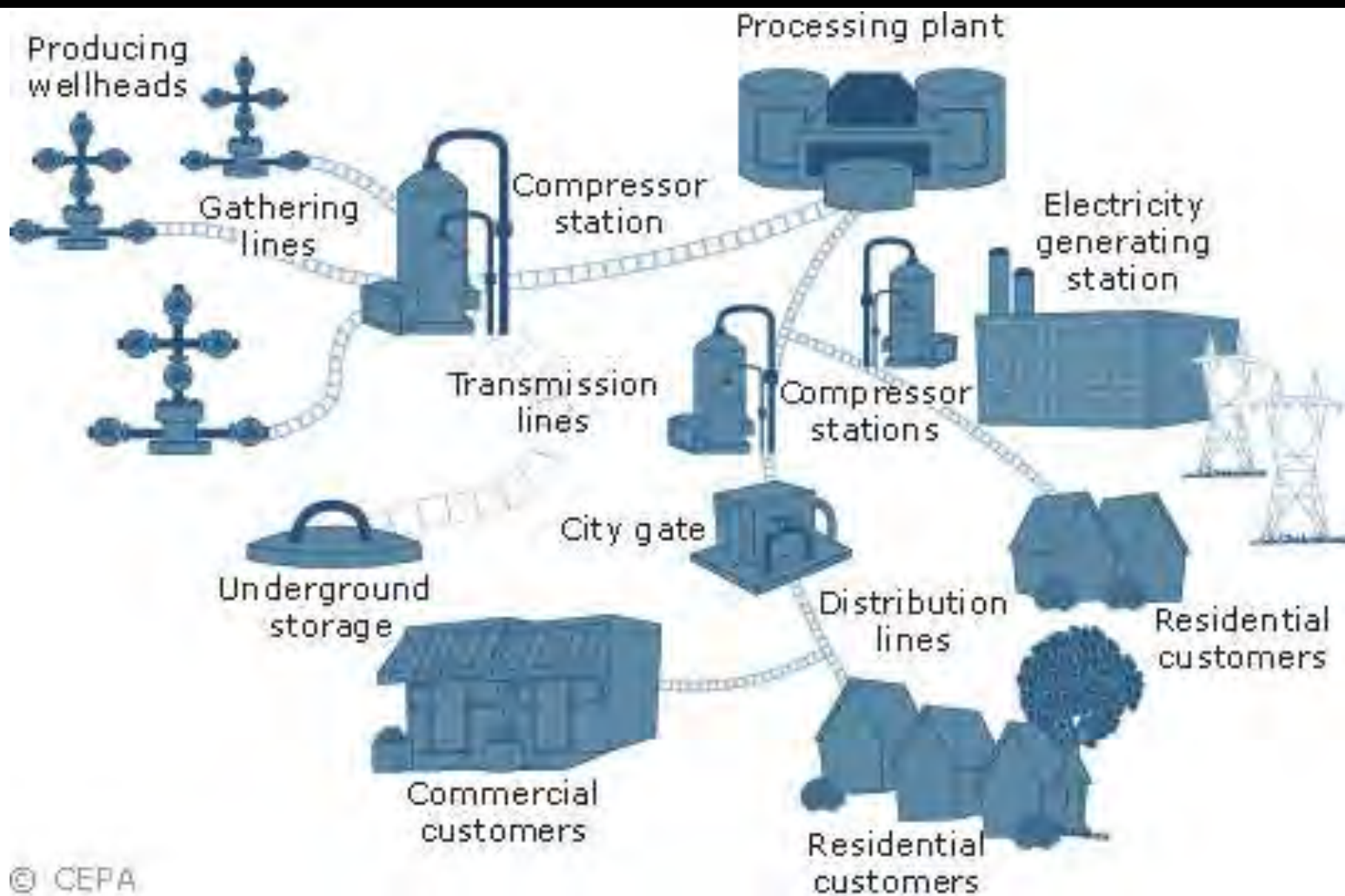
NOW WHAT?



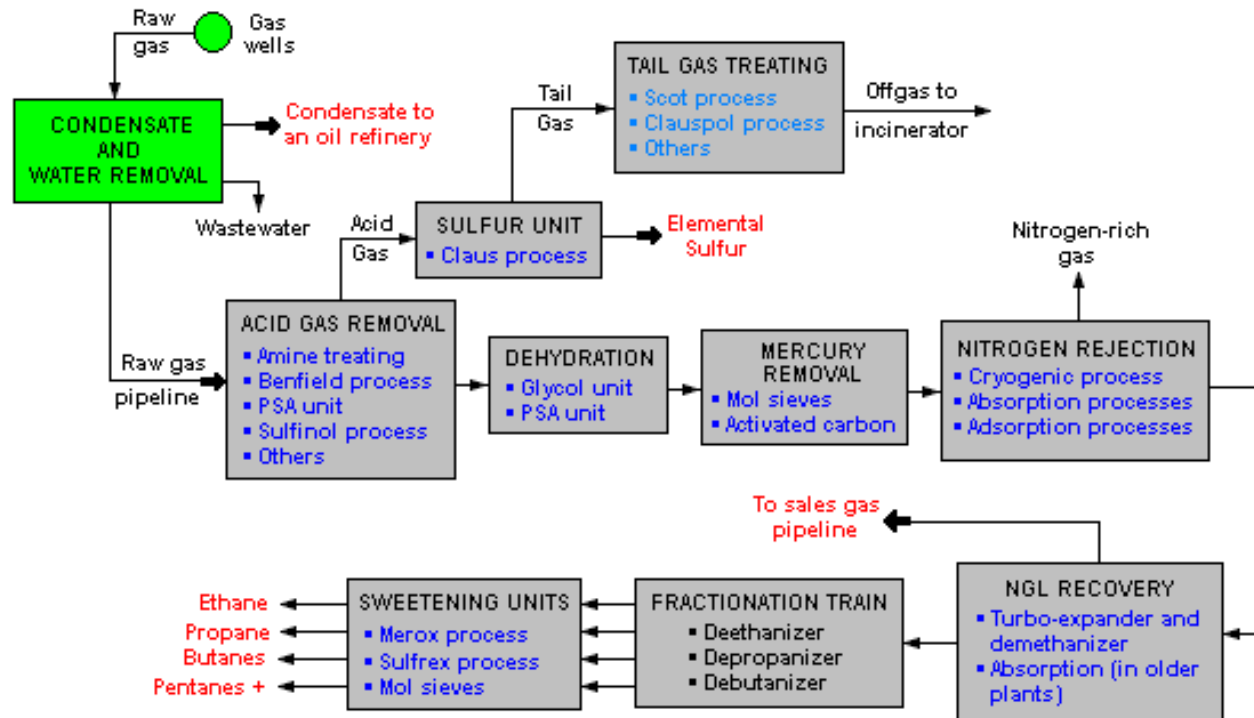
COMPONENTS OF NATURAL GAS



FROM WELLHEAD TO END USER



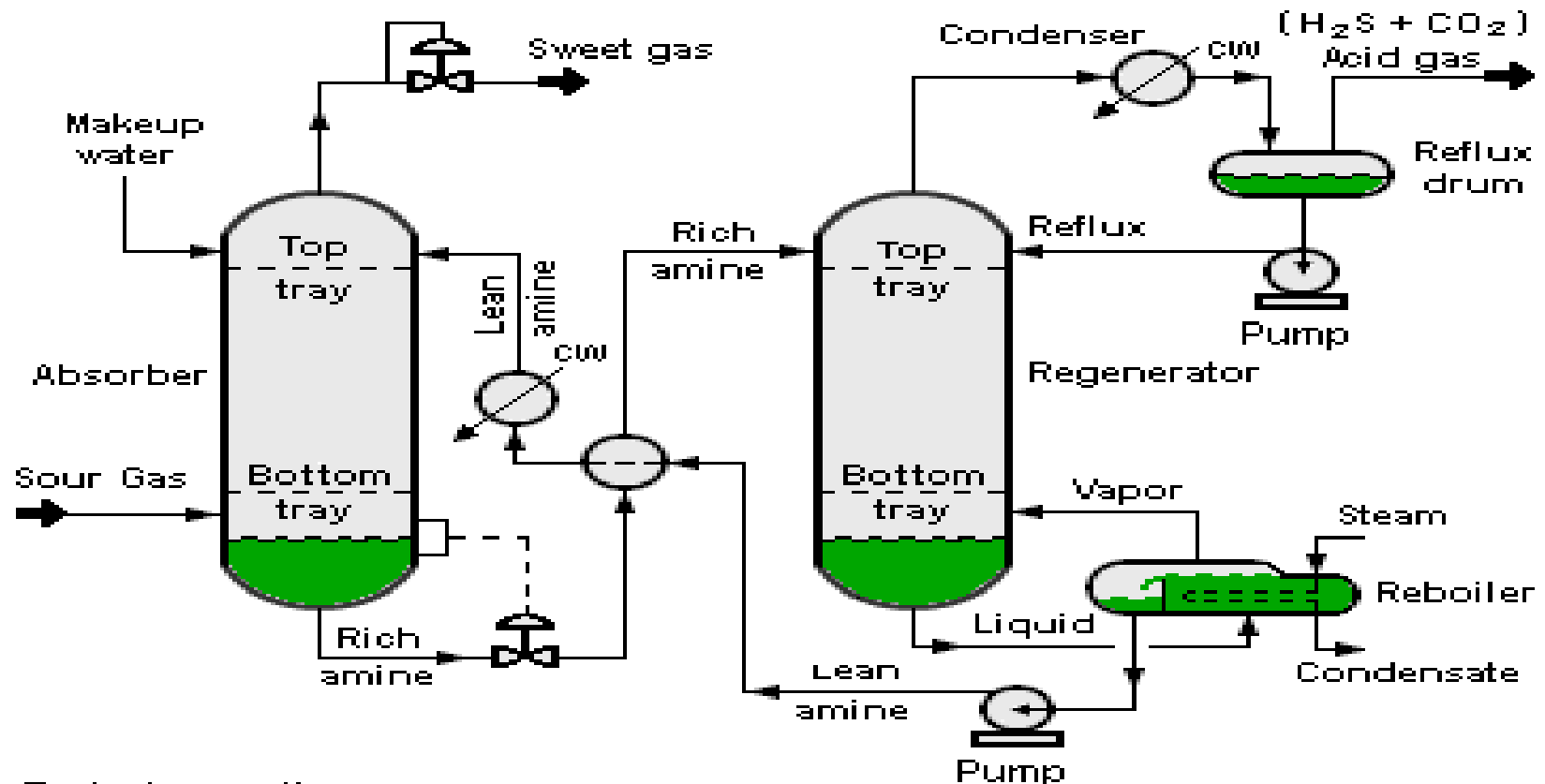
STEPS OF PROCESSING NATURAL GAS



LEGEND:

- Located at gas wells
- Located in gas processing plant
- Red Indicates final sales products
- Blue Indicates optional unit processes available
- Condensate is also called natural gasoline or casinghead gasoline
- Pentanes + are pentanes plus heavier hydrocarbons and also called natural gasoline
- Acid gases are hydrogen sulfide and carbon dioxide
- Sweetening processes remove mercaptans from the NGL products
- PSA is Pressure Swing Adsorption
- NGL is Natural Gas Liquids

AMINE TREATING



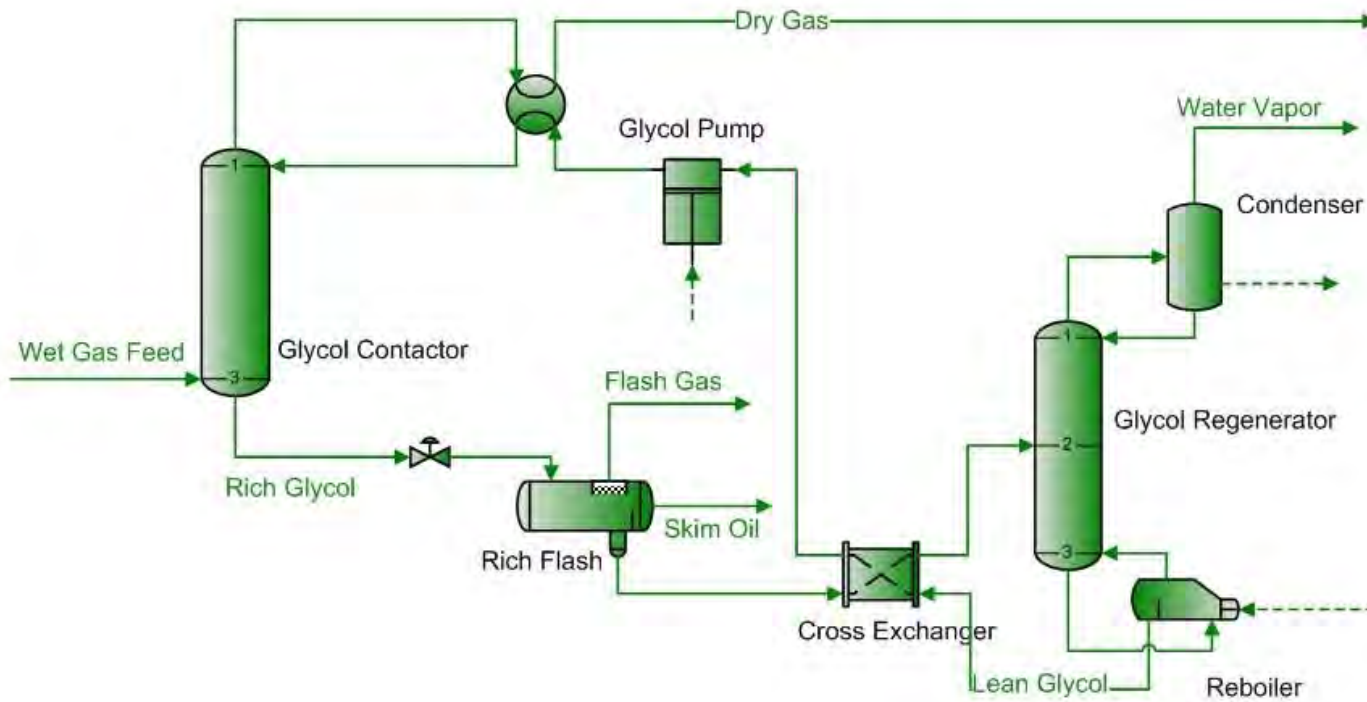
Typical operating ranges

Absorber : 35 to 50 °C and 5 to 205 atm of absolute pressure

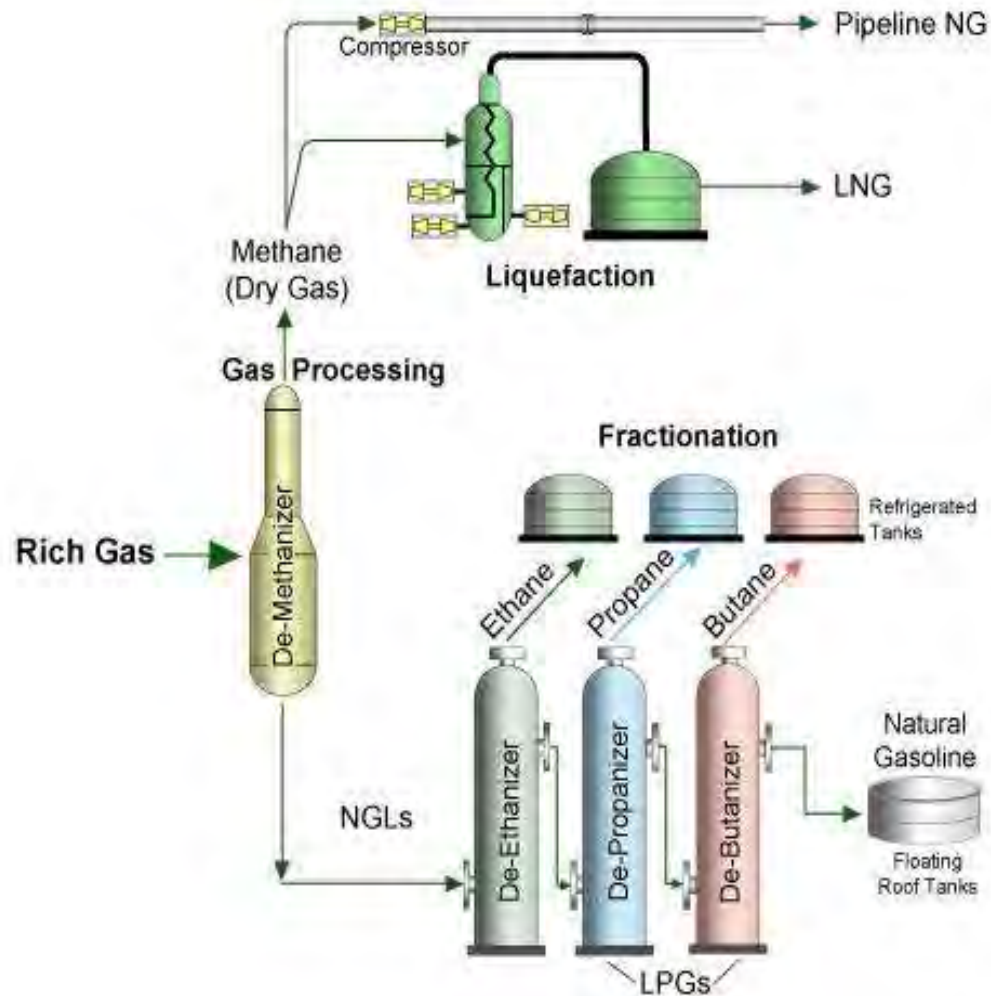
Regenerator : 115 to 126 °C and 1.4 to 1.7 atm of absolute pressure
at tower bottom

GLYCOL DEHYDRATION

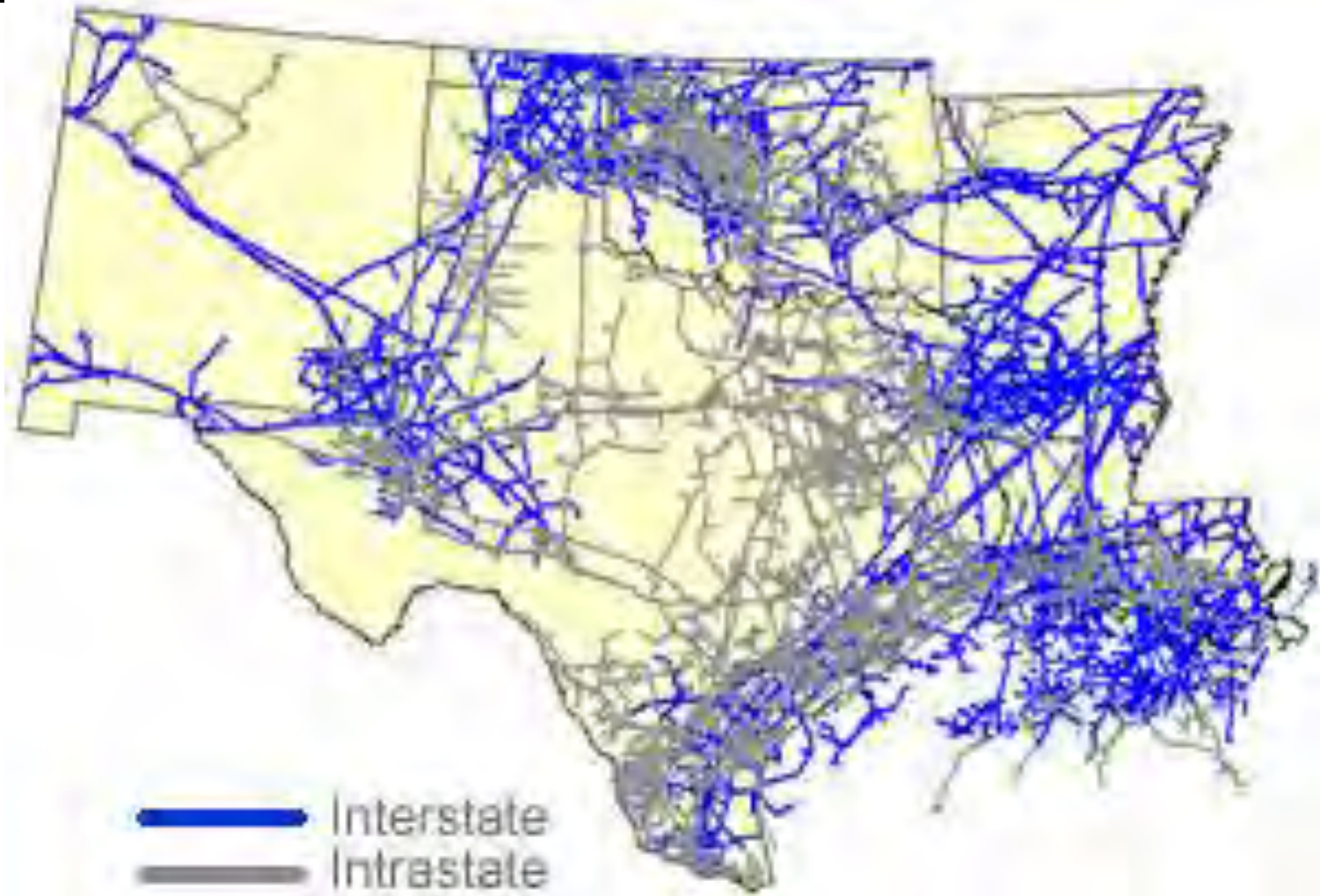
Glycol Dehydration Unit



FRACTIONATION



DISTRIBUTION



QUESTIONS?

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