

# Emerging Technology Ejector Vapor Recovery Units



**Murphy Exploration and Production,  
Gulf Coast Environmental Affairs Group,  
American Petroleum Institute and  
EPA's Natural Gas STAR Program**

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# Vapor Recovery Units

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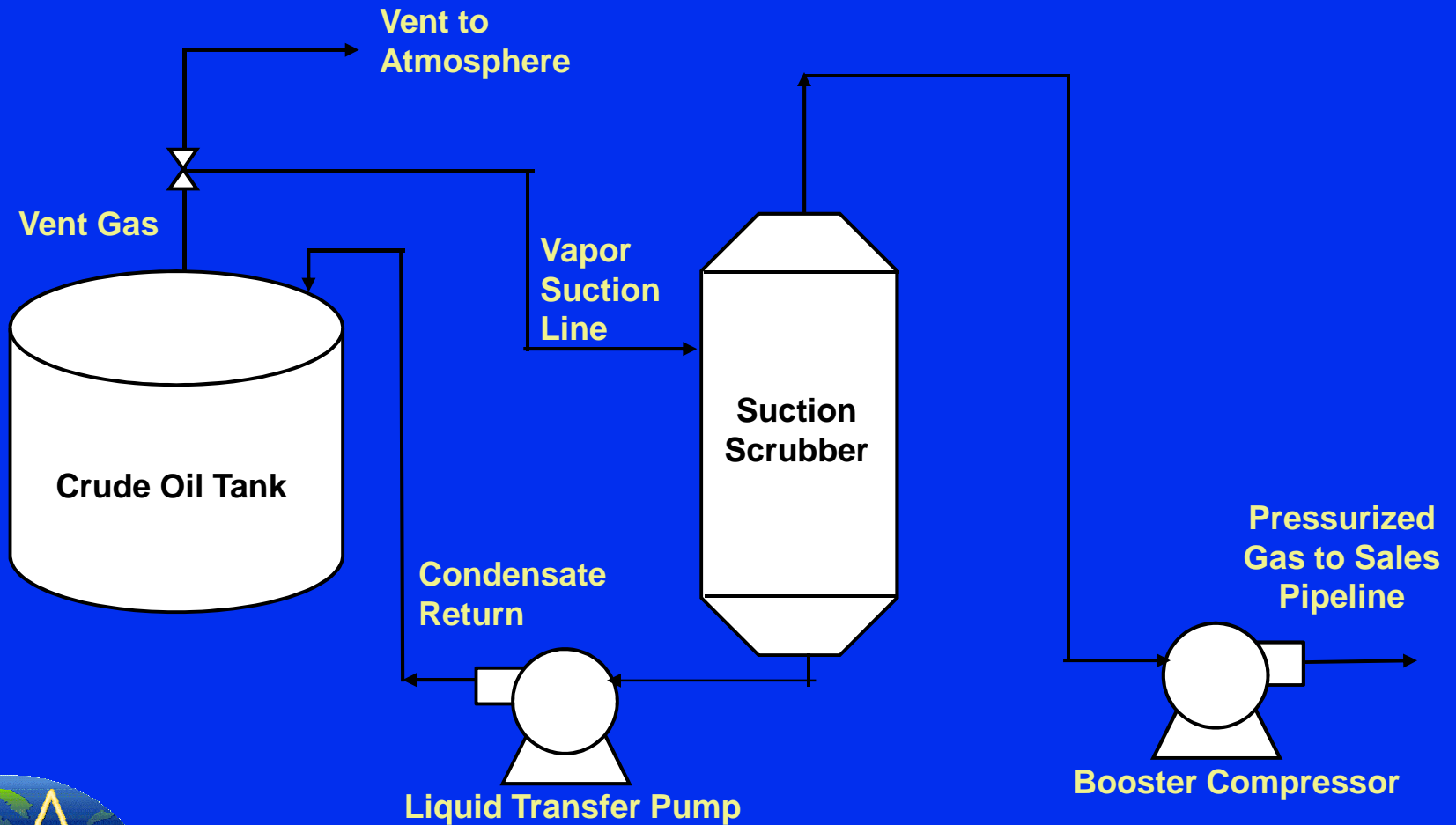
- Conventional Vapor Recovery Unit
- Venturi Jet Ejector
- Vapor Recovery with Ejector
- Trade Offs
- Benefits of Vapor Recovery Units



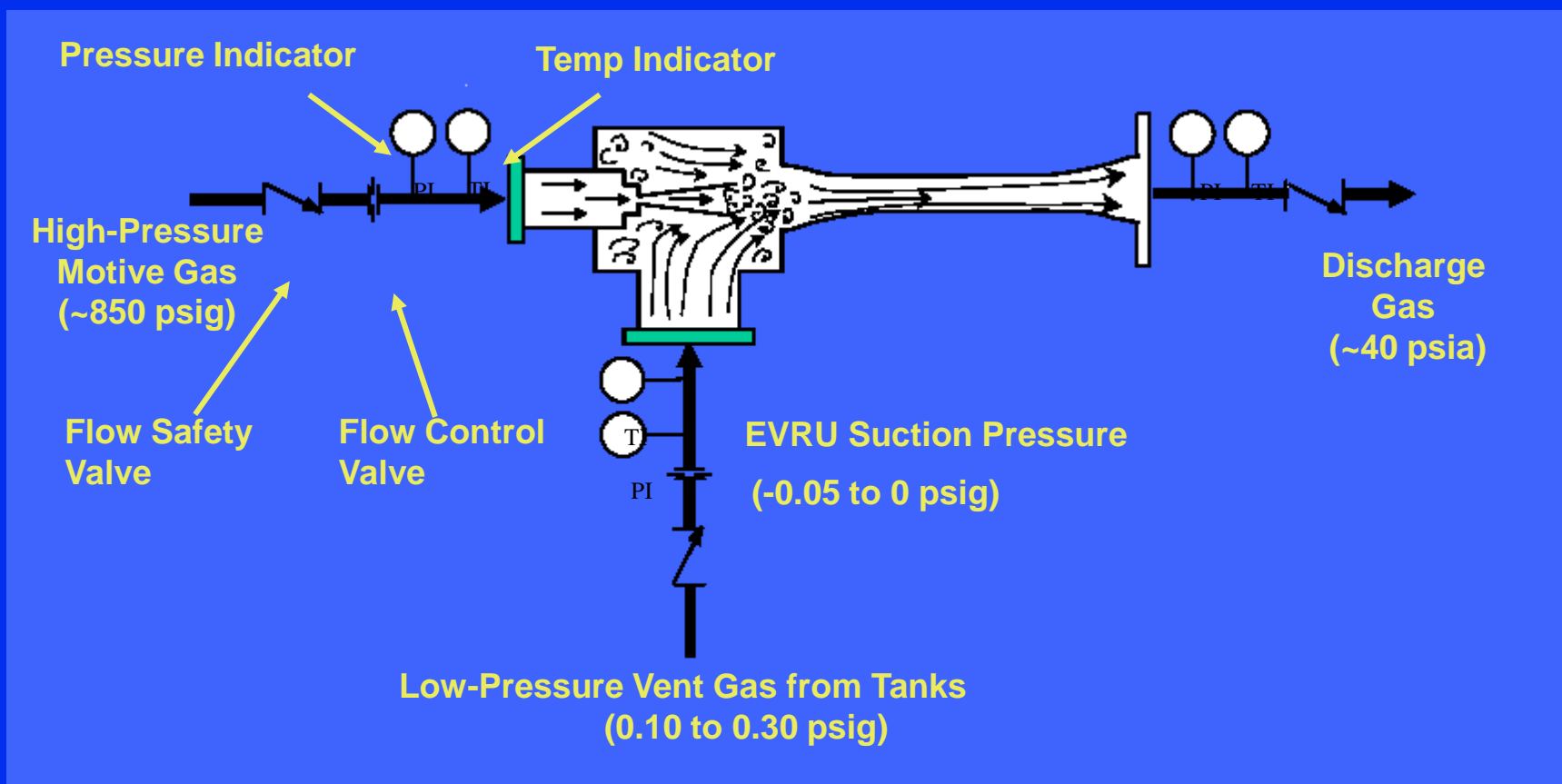
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# Conventional Vapor Recovery Unit

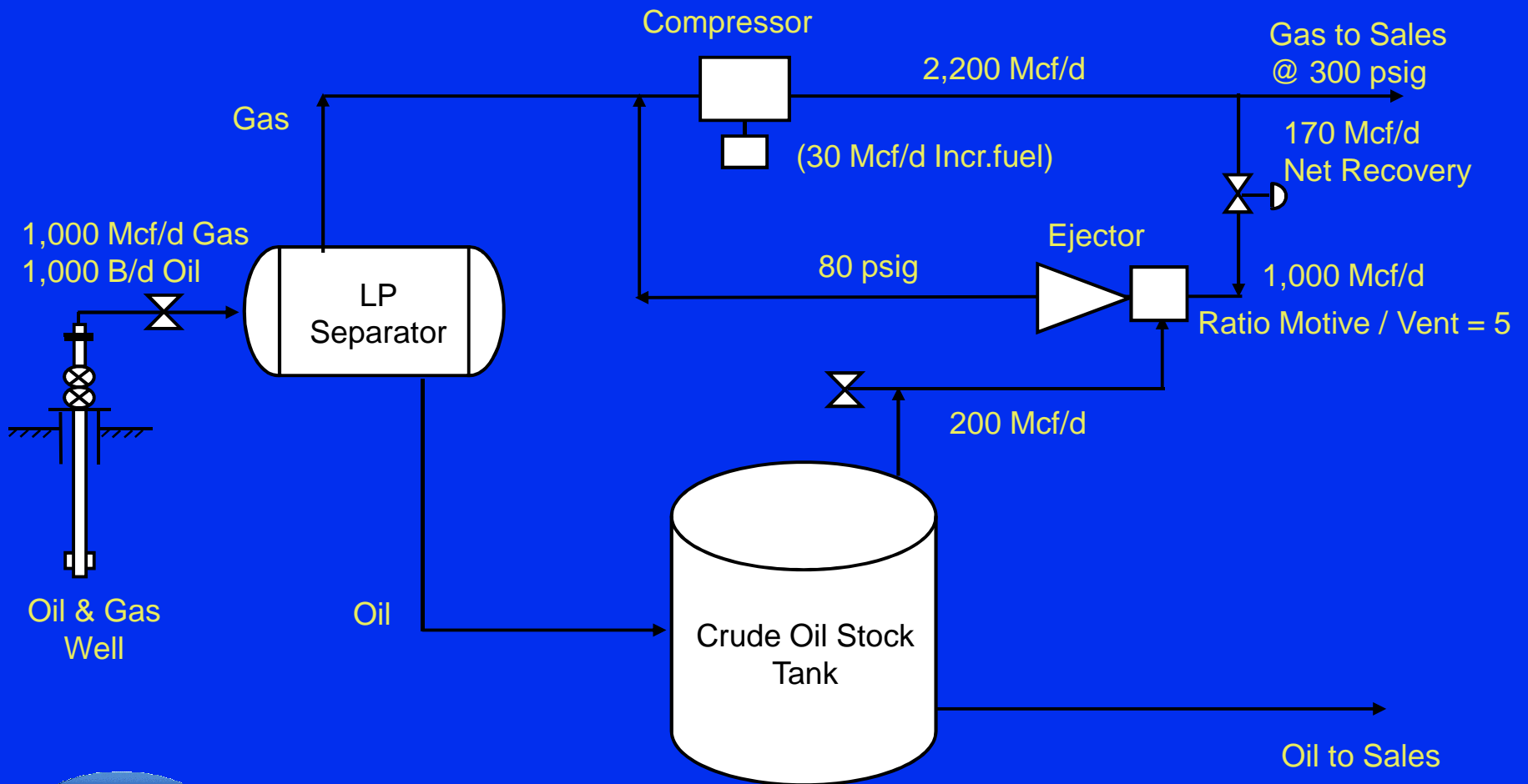


# Venturi Jet Ejector



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# Vapor Recovery with Ejector



# Trade Offs

	Conventional VRU	Ejector
Electricity	\$3,000/year	—
Fuel	—	\$60/year
Spare Compressor HP	—	500
Maintenance	High	Low
Capital Cost per recovered Mcf/year	\$0.70	\$0.03
Payback	< 4 months	< 1 month



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# Benefits of Vapor Recovery Units

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- ❑ Capture up to 95 percent of hydrocarbon vapors that accumulate in tanks
- ❑ Recovered vapors often have higher Btu content than pipeline quality natural gas
- ❑ Recovered vapors can be more valuable than methane alone



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