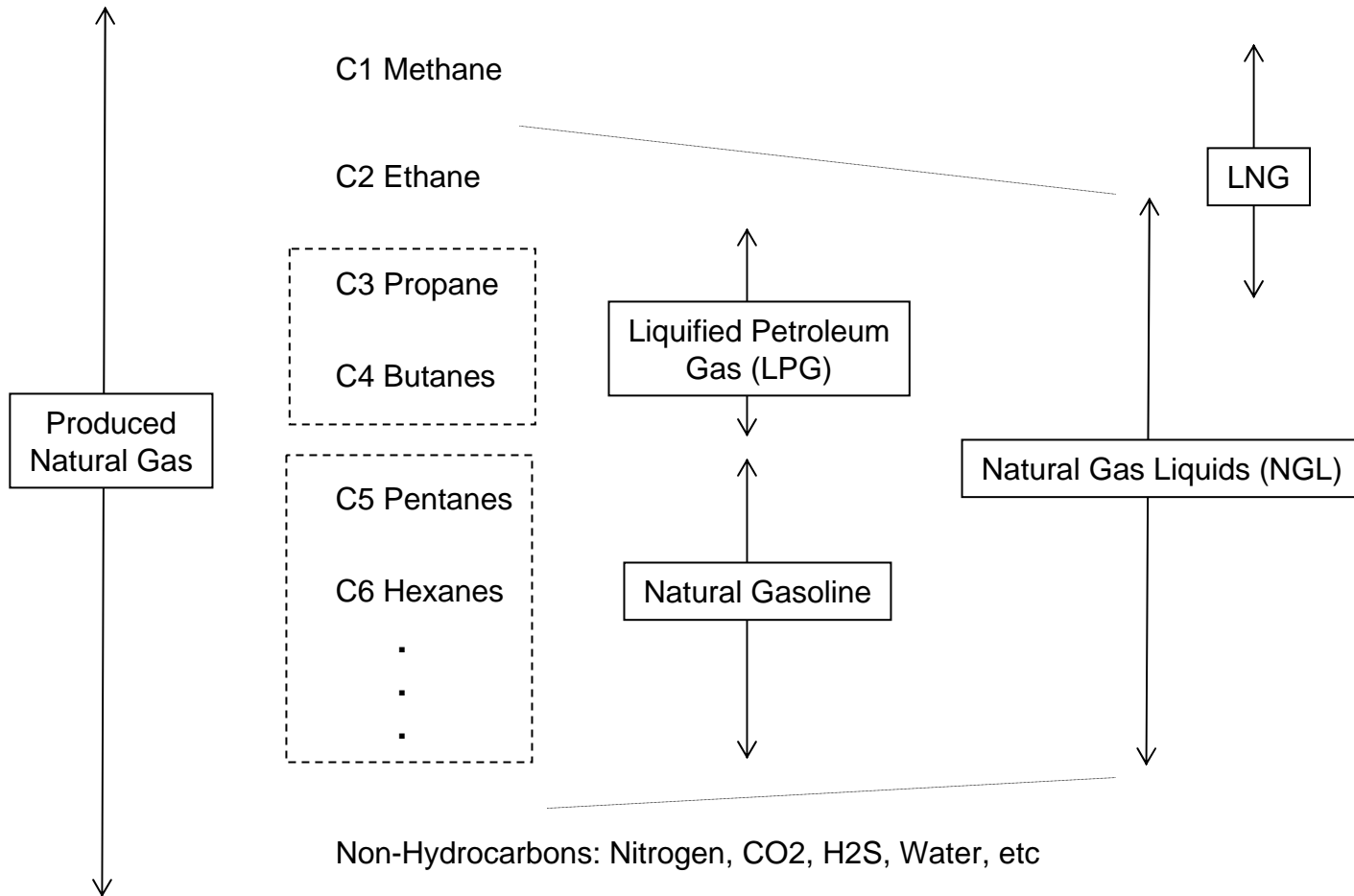


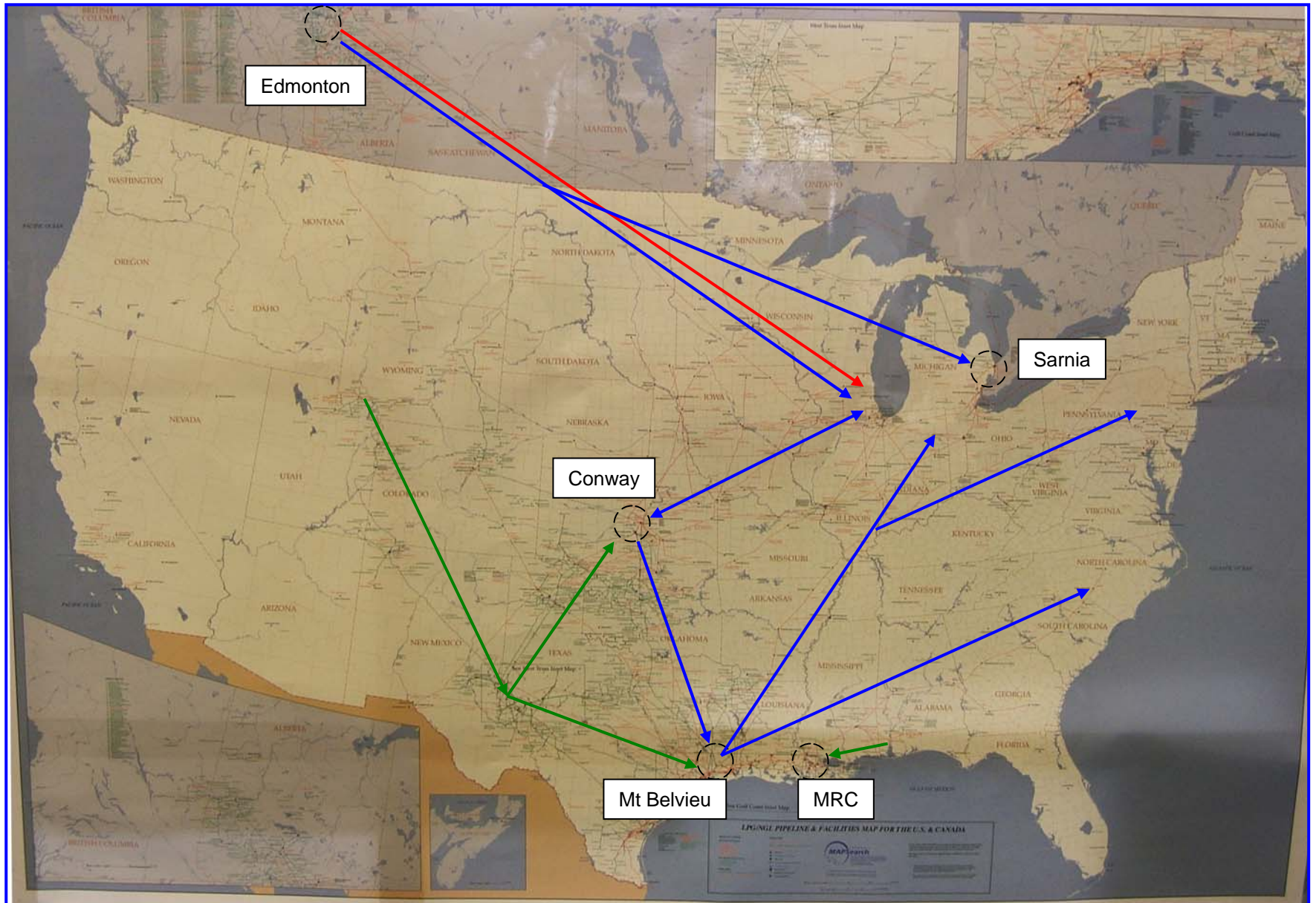
Technical Stakeholders Meeting

August 9, 2005



Product	Primary Uses	Transport Methods
Ethane	Petchem feedstock	Pipeline
Propane	Petchem feedstock, heating, vehicle fuel	Pipeline, truck, rail, barge, ship
Butanes	Petchem feedstock, gasoline blending	Pipeline, truck, rail, barge, ship
Nat. Gasoline	Gasoline blending	Pipeline, barge

Natural Gas Liquids Movement



US Gas Liquids

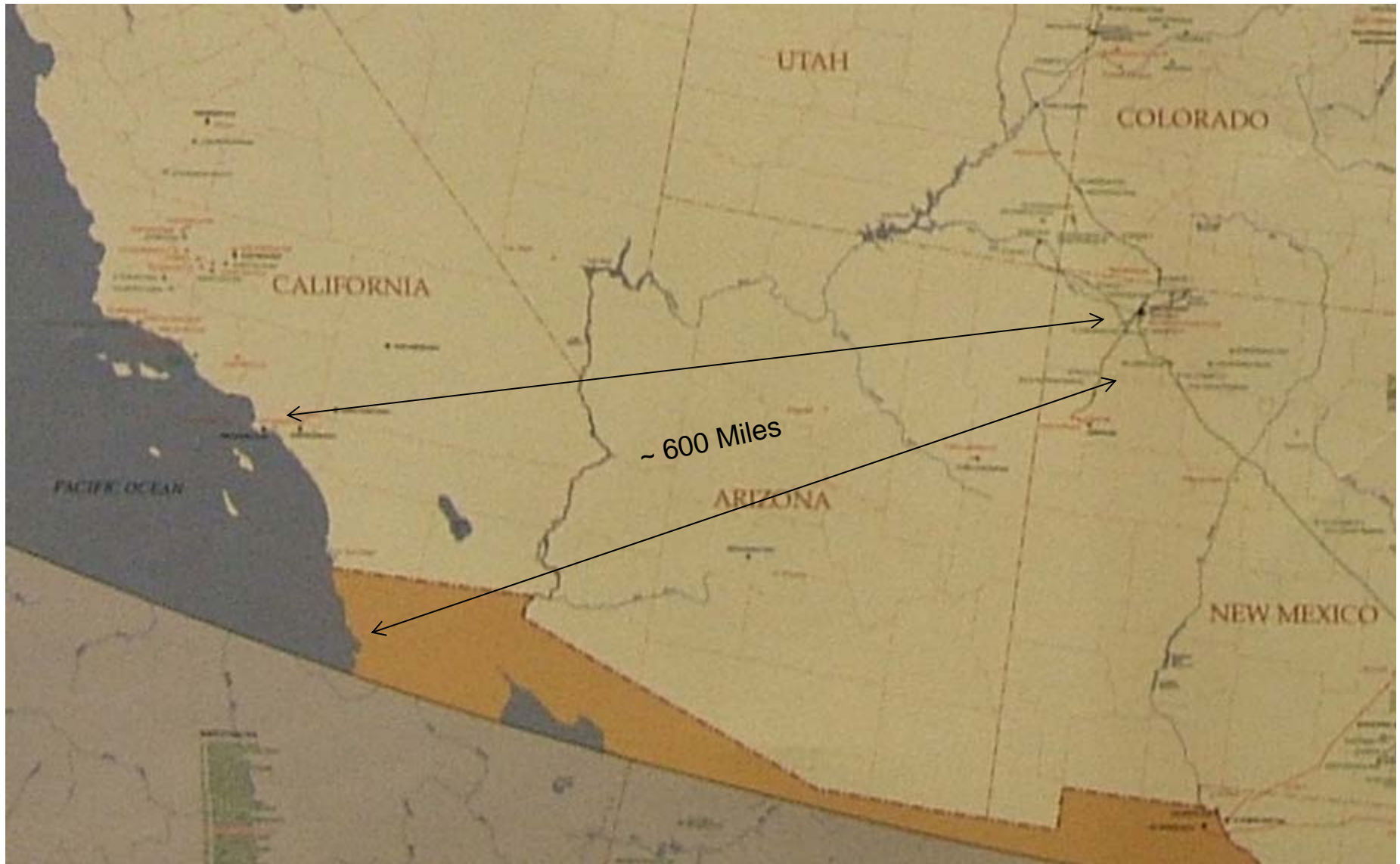
Supplies

- Current NGL supply from gas processing plants is 1.8 MMB/D
 - 38% Ethane, 29% Propane, 18% Butanes, 15% Pentanes+
 - 78% of supply generated in PADD's III & IV and delivered to Gulf Coast
 - California produces 26 KB/D of NGL with essentially no ethane
- Refineries provide additional 0.6 MMB/D of gas liquid supplies
 - Additional source of LPG's in California

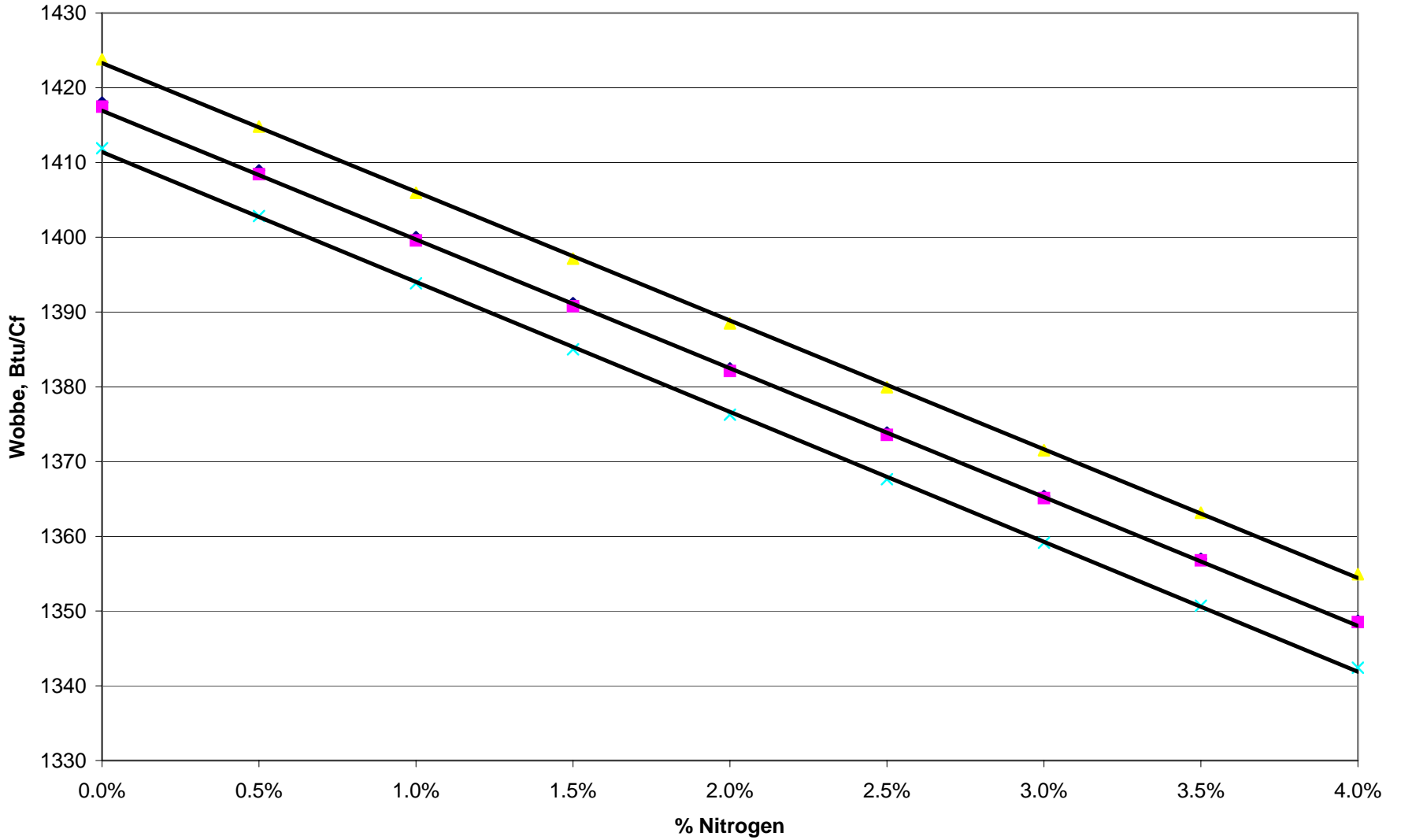
Consumption

- US consumes 1.8 MMB/D of gas liquids excluding pentanes+
 - 72% of the consumption occurs in the two Gulf Coast states of Texas & Louisiana; primarily utilized as feedstock for the petrochemical industry
 - Much of remainder supplied to the Mid West region
- California gas liquids consumption is ~ 30 KB/D
 - Primarily industrial usage

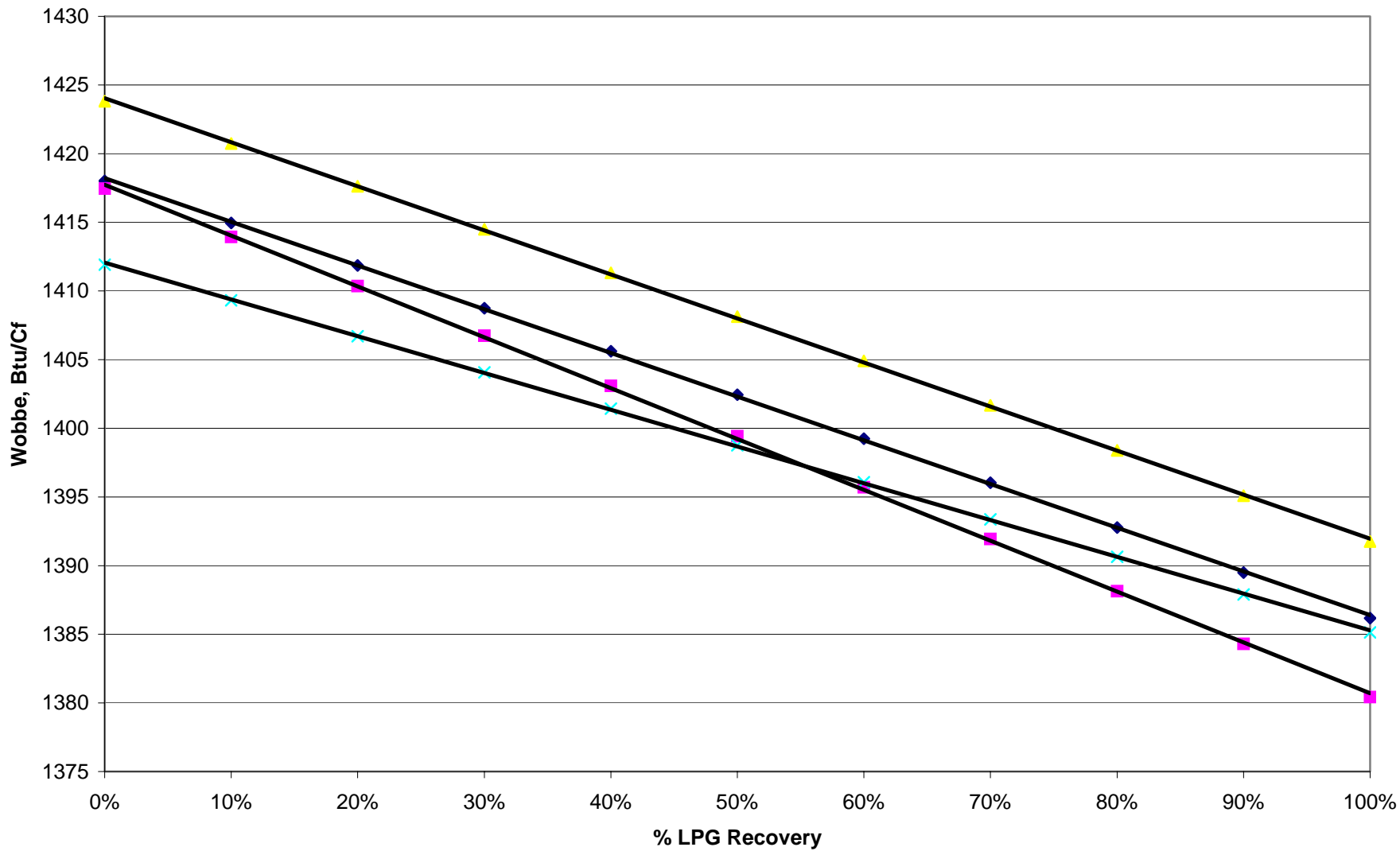
Distance to Ethane Outlet



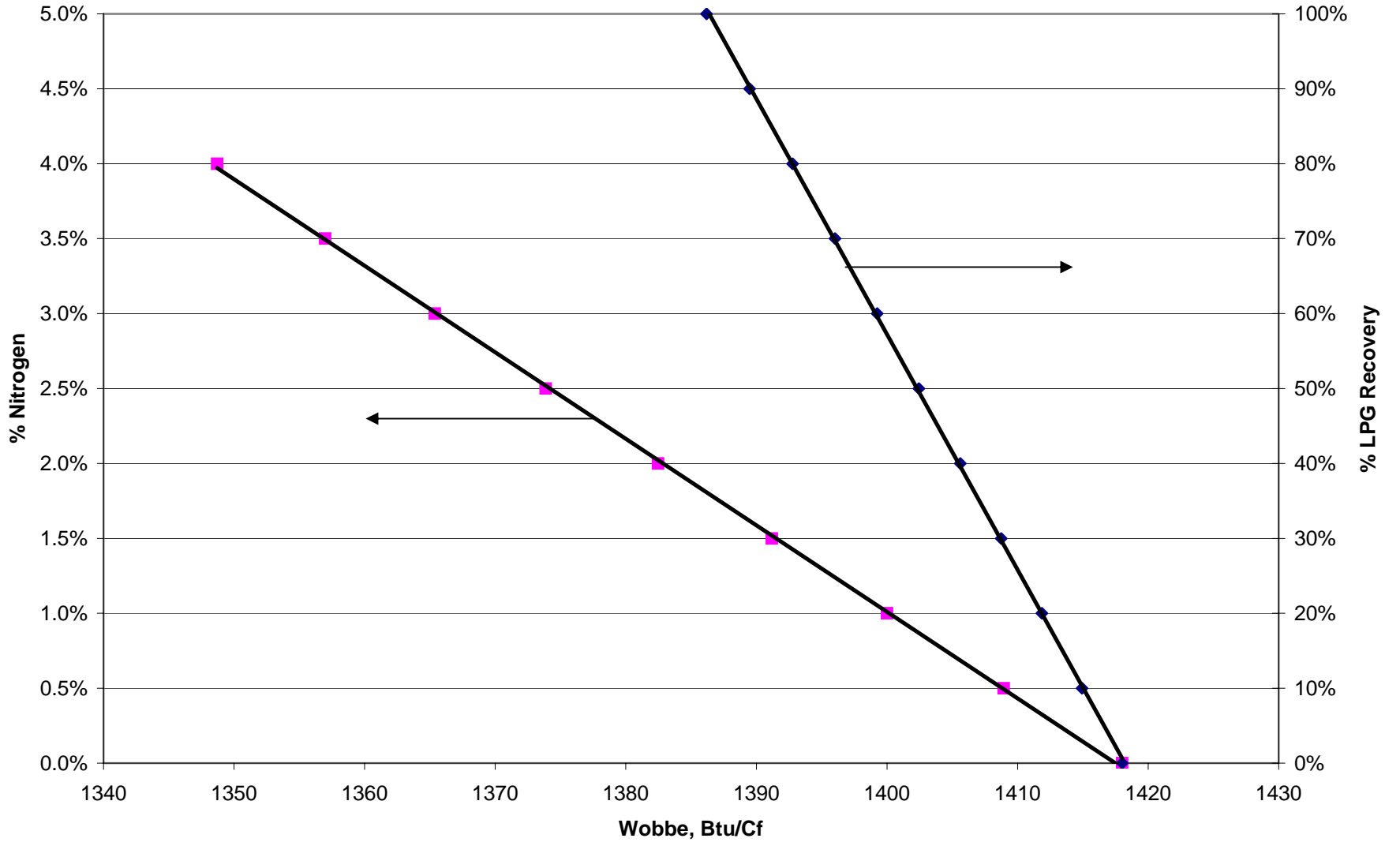
LNG Conditioning - Nitrogen Injection



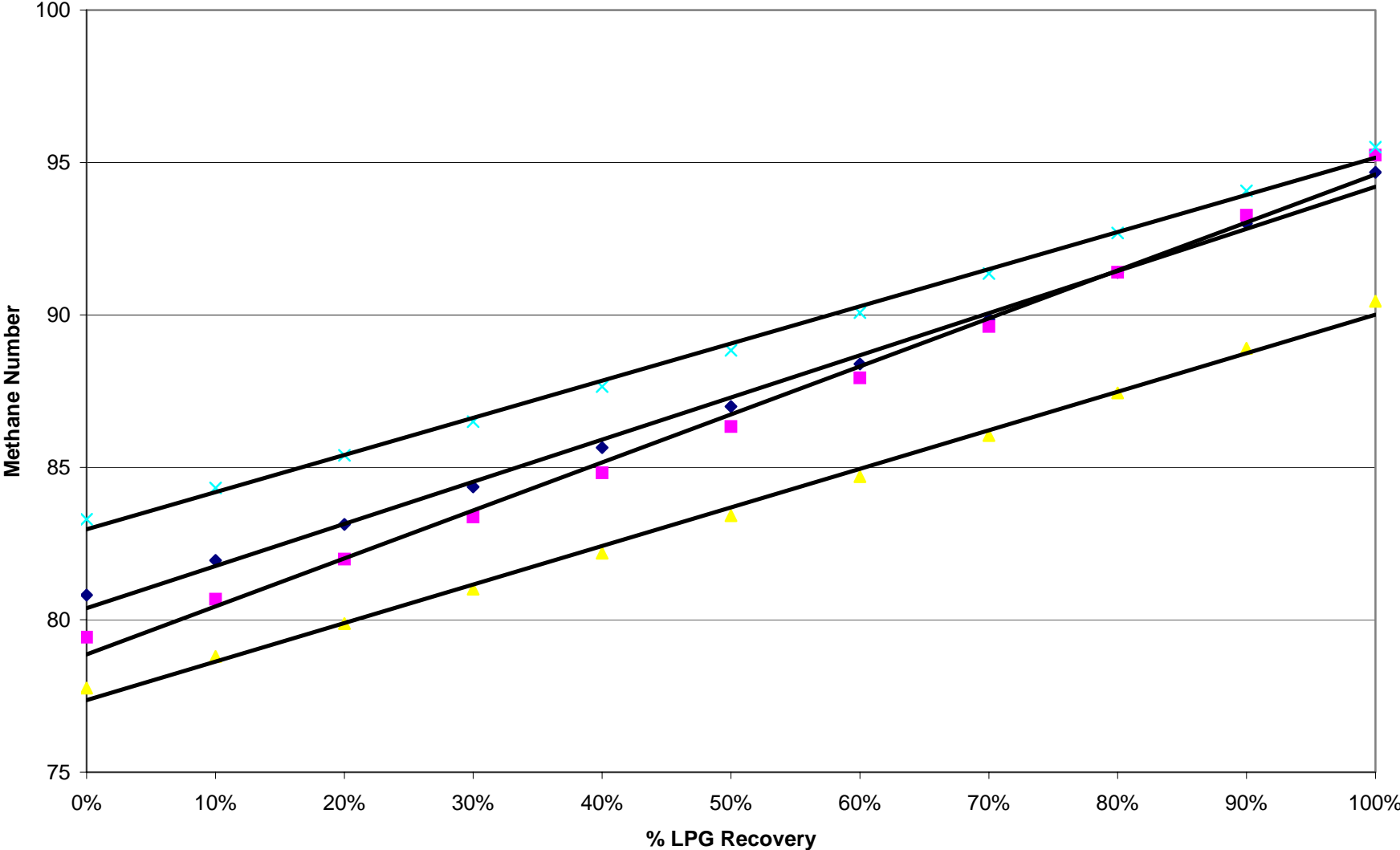
LNG Conditioning - LPG Recovery



LNG Conditioning



LNG Conditioning - LPG Recovery



Generic LPG Extraction

Assumptions

- 1 Bcfd LNG terminal with typical Pacific Basin composition
- Full propane+ removal
- Generate specification propane and butane LPG products

Typical Costs

- Base liquids extraction equipment: \$60 - \$70 MM capital
- With liquids fractionation and storage: \$80 - \$90 MM capital
- Incremental fuel usage of ~ 1%
- Additional manpower and power consumption

Possible Issues

- Additional capital for liquids transportation infrastructure: pipelines, dock space, loading arms, etc associated with LPG shipping or pipelines
 - LPG trucking is not feasible; would require > 100 trucks per day
- Increased terminal outages due to more complex operation
- Community concerns related to LPG handling and storage