Crude Oil Quality Group
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Houston

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What are Petroleum Products Surveys (PPS)?

• PPS are low-cost reports containing compilations of physical properties of fuels marketed in the U.S.

• Examples (published annually):
  – Motor Gasolines (summer, winter)
  – Aviation Turbine Fuels
  – Heating Oils
  – Diesel Fuel Oils
How are PPS Generated?

- Fuel samples collected
- Properties analyzed & submitted by members
- Data compiled & sanitized by TRW
- PPS Reviewed by TF
- PPS Published by TRW
Who Uses PPS Reports?

- Refiners
- Engine Manufacturers (auto, truck, bus, marine, aviation, rail, industrial)
- Fuel marketers and brokers
- Home heating equipment design
- Industrial heaters and utilities
- Consultants
- Military
- Statistical trends (forecasting, litigation, etc.)
- Regulatory reporting (i.e., emission inventories)
Interest to COQG?

• General Interest
  – Someone in your company may be looking for this information

• Survey Model
  – Would Petroleum Surveys for Crude Oils be of interest to COQG?
Available Data: Type

• Motor Gasolines
  – gravity, saturates, olefins, aromatics, benzene, sulfur, solvent washed gum, octane numbers, vapor pressure, distillation, ethers, alcohols

• Heating Oils
  – gravity, flash point, viscosity, cloud point, pour point, sulfur, aniline point, carbon residue, corrosion, ash, water & sediment, water by distillation, sediment by extraction, distillation
Data Table Slide
Available Data: Historical

- Motor Gasolines, 1918 – present
- Aviation Fuels, 1947 – present
- Diesel Fuels, 1950 – present
- Heating Oils, 1955 – present

Reports in hard copy, data by district
Data in electronic format, data by city & month, as available
Available Data: How Much?

Numbers of Fuel Samples

• Motor Gasoline (summer 2001): 786
• Motor Gasoline (winter 2001-2002): 732
• Aviation Fuels (2001): 40
• Diesel Fuels (2001): 60
• Heating Oils (2001): 71
Example – Emissions Inventory

• Texas Commission on Environmental Quality
  – Uses sulfur, RVP, oxygenates (also sometimes cetane index, aromatics) to calculate sulfur emissions for the state of Texas. Results reported to EPA, maintained in Emissions Inventory; calculated for gasoline, aviation, and diesel fuels.
US REFINERY CRUDE GRAVITY SLIGHTLY DECLINING

- PADD 4
- PADD 2
- PADD 3
- PADD 1
- Total US trend
- PADD 5

Weight, °API


24 26 28 30 32 34 36 38
Average Sulfur in Gasoline
How to Obtain PPS Reports

• TRW, Inc.
  P.O. Box 2543
  Bartlesville, OK 74005
  Attn: Cheryl Dickson
  (918-338-4419; Cheryl.Dickson@trw.com)

• American Petroleum Institute (API) Publications
  Refining: Petroleum Products & Petroleum Product Surveys

• Petroleum Products Survey Participating Member
  (one copy per member)