2012 P & P sessions

Hydroprocessing

Oil to Oil Time Savings for a successful Hydrocracker/ULSD

Hydrotreater Turnaround

Objectives & Scope Definitions Catalyst Change Shutdown Considerations Start-up Considerations

Strategies for Leveraging Low Cost Hydrogen

Low-capital expense options (near-term)
Technology-based options for large capital projects (mid-long term)

FCC

FCC Catalyst Loading

FCC Process Step Testing

Step tests for reactor level, feed nozzle steam and reactor stripping steam for optimized yields.

FCC Regenerator Tuning for NOX

Crude/Vacuum Distillation & Coking

Coking 101

Crude unit overhead water wash

Process KPI for crude unit integrity

Shale Oil Processing

Market Drivers and O/L

Plant Modification Implications

Production Technique and Additives used Impacting Refinery

Observed Refinery Impacts

<u>Gasoline</u>

HF Handling

Tight Oil/Condensates

Tier 3 Gasoline

MSS Permitting or Benchmarking Alky and/or Reformer Units

Plant Services

Risk Based Inspection (in relation to process operating reliability)

Water treating chemistry (either waste water or utility water)

Amine treating in refinery process