



# Canadian Petroleum Training Institute Ltd.

## EXAMPLE

### **COURSE OUTLINE** **REFINERY INSPECTION**

#### **Introduction**

- Piping
- Pumping
- Practical Considerations

#### **Corrosion and Integrity**

##### **Piping Systems**

- Ambient Effects
- Dynamic Effects
- Effects of Heat and Pressure
- Thermal Expansion
- Rating of Piping

#### **Painting, Insulation and Refractory Application and Selection**

##### **Stress and Flexibility**

- Heat Effect
- Insulation

#### **Piping Supports**

##### **Piping**

- Piping Materials and Connections
- Repair and Modification of Piping Systems
- Integrity Testing

## **Pumps**

- Centrifugal and Reciprocating Pumps
- Net Positive Suction Head
- Debottlenecking Centrifugal Pumps
- Pump Protection
- Driver Selection
- Valving Arrangement
- Control
- Compressors

## **Preventive and Predictive Maintenance**