

### 3. **QUALITY ASSURANCE PROGRAM**

West Shore Pipe Line Company utilizes a comprehensive Quality Assurance Program. The purpose of the Quality Assurance Program is to assure that petroleum products are moved through these pipelines with care and control, minimizing changes in the properties of the batches.

#### **Product Receipt**

West Shore's specifications and requirements for refined product receipts are summarized as follows:

**\*Note:** Different criteria and specifications may apply to **Crude Petroleum** Transport.

- 1) Refined Petroleum Products shall have an A.P.I. gravity at 60 Degrees Fahrenheit of not less than 25 Degrees and not more than 80 Degrees; have a viscosity not more than 4.3 centistokes at 100 Degrees Fahrenheit; have a vapor pressure not more than 15 P.S.I. Reid; and have a color not darker than No. 3 A.S.T.M. In addition, gasolines shall not have a Reid vapor pressure, oxygen content or benzene content in excess of the "applicable standard" as determined by the United States Environmental Protection Agency or any more stringent state requirement from time to time in effect.

This specification includes the products of petroleum commonly known as gasoline, kerosene, aviation turbine fuel, fuel oil distillate and diesel fuel.

- 2) For gasoline tendered for transportation, Shipper must inform Carrier of the percentage by volume and kind of any blending components used which are not pure hydrocarbons. The use of methanol and ethanol as blending components is prohibited.
- 3) Carrier shall have no obligation to accept Commodities for transportation if such Commodities contain water or other impurities.
- 4) West Shore will not accept incoming product with a temperature exceeding 100°F.
- 5) All Suppliers delivering product into West Shore's system which has been treated with a Pipeline Drag Reducing Agent (DRA) must specify type and total accumulated polymer concentration prior to delivery. West Shore has established 7.5 ppm total polymer as the upper acceptable limit on receipts.
- 6) Refiners that supply product to West Shore through "in-line blending" must:
  - Supply an approximate gravity for the product
  - Certify that product will meet West Shore's listed quality specifications (as described in Section 6.3)
  - Provide for remediation of any product batches which fail to meet West Shore's listed quality specifications (as described in Section 6.3)

### 3.1 SEGREGATED RECEIPT QUALITY ASSURANCE

Product will not be accepted for shipment unless key properties are faxed to our origin location at least two hours prior to lifting. This ensures that the required testing has occurred and provides critical, observable data about the batch. West Shore will closely monitor the batch. Any significant deviation observed versus the reported data will cause immediate investigation. This ensures that the batch is being properly handled by the supply facility and West Shore receipt point.

Specifically, the program includes the following components:

- 1) Prior to pumping, the supply facility must identify the tank or tanks from which the batch is to be supplied, must indicate West Shore's batch number, and must provide specific test results for each tank comprising the batch. This information is provided on pre-shipment forms or a Certificate of Analysis (CofA).

<i>Gasoline</i>	<i>Reformulated Gasoline/RBOB</i>	<i>Diesel / Heating Oil / Kerosene</i>	<i>Jet Fuel</i>	<i>LPGs</i>
API Gravity @ 60° F	API Gravity @ 60 deg F	API Gravity @ 60 deg F	Visual Appearance in White Bucket	Specific Gravity
RVP	RVP	Flash Point	API Gravity @ 60 deg F	Volatility
Octane (R+M/2)	Octane (R+M/2)	Sulfur Content	Flash Point (Tag)	Oil Stain
Color and Appearance	Oxygen Content, wt. %	Cetane Index (diesel)	Water Separation (MSEP)	Residue
Sulfur, wt. %	Aromatics Content, vol. %	Saybolt Color (kerosene)	Filter Membrane	Propane Content
DRA, ppm total polymer	E200, vol. %	ASTM Color (diesel)	Aqua-Glo	Butane Content
MTBE, vol. %	E300, vol. %	Red Dye Content (heating oil)	Sulfur	
	Olefins, vol. %	Lubricity Improver Type and ppm (diesel and heating oil)		
	Sulfur, wt. %	Wear Scar (HFRR) (diesel and heating oil)		
	VOC Reduction, %	DRA, ppm total polymer		
	Benzene Content, vol. %			
	Color and Appearance			
	DRA, ppm total polymer			

- 2) West Shore will maintain records for each batch noting the above information and will monitor gravity during all receipts. If during a receipt, the API gravity varies from the reported value by more than two degrees, shifts inexplicably by more than two degrees, or if the appearance, or other key properties are different than expected, the receipt will be shut down and investigated.

- 3) All supply facilities must have equipment in place whereby they can provide gravity and appearance of the stream as it is pumping. They will be expected to provide this information as needed, for example, if West Shore's observation deviates from the reported pre-shipment data.

***Shippers and Suppliers are responsible for alerting West Shore prior to nomination and shipment of a segregated batch of product properties that could potentially cause health or safety issues during pipeline transportation or potentially contaminate other products in the system (for example, high corrosivity, presence of hydrogen sulfide, high particulate content or high haze/water content).***

## **3.2 QUALITY CONTROL DURING TRANSPORTATION**

Our Quality Assurance Program monitors every batch as it moves through our pipeline systems. The key components of our quality oversight are:

- 1) STREAM OBSERVATION**  
Each batch is monitored at every pipeline origin, breakout, and delivery point. Either continuous instrumentation or hourly manual checks observe, record, and communicate API gravity and temperature.
- 2) SAMPLING**  
Samples are taken at each origin and breakout facility that is not remotely operated. Samples are retained until the batches have reached their delivery point and for approximately two weeks thereafter.
- 3) TESTING**  
Selected batches are chosen and samples are tested for key properties. Should any test detect product that is not approved by West Shore, the receipt will be immediately terminated. It is the Shipper's responsibility to make the necessary arrangements to dispose of all unacceptable product that has entered the West Shore System.

## **3.3 SPECIAL PROGRAMS**

- 1) CRUDE PETROLEUM**
  - a) No Crude Petroleum will be accepted for transportation except good merchantable crude which has an API gravity of not less than twenty degrees (20 deg); a vapor pressure of not more than fifteen (15) pounds absolute at one hundred degrees (100 deg) Fahrenheit; basic sediment, water and other impurities of not more than one percent (1%) above a point four (4) inches below the pipe connection with the tank, tank truck, or vessel; pour point of not more than forty degrees (40 deg) Fahrenheit; sulfur by weight of not more than one and one half (1.5) percent; viscosity of not more than sixty (60) seconds Sayboldt Universal at one hundred degrees (100 deg) Fahrenheit; temperature of not more than one hundred twenty degrees (120 deg) Fahrenheit; and compatibility with Crude Petroleum transported as follows: Where shipper elects to deliver Crude Petroleum to the Carrier at point of origin through automatic custody transfer facilities (in lieu of tankage), the automatic measuring and sampling facilities and the design, construction, and calibration of such facilities must be approved by the Carrier and any appropriate regulatory body. In the event of an automatic custody transfer, the Shipper shall also furnish pumping services as necessary to insure sufficient pressure to allow accurate measurement and metering for Crude Petroleum being delivered. Carrier may require Shipper to furnish laboratory reports of tests of Crude Petroleum tendered certifying that these specifications are met. Crude Petroleum, which does not meet these specifications, will be accepted for transportation only in accordance with Item 6.d.
  - b) No Crude Petroleum will be accepted for transportation unless it is readily susceptible of transportation through Carrier's existing facilities and will not materially affect the quality of other Crude Petroleum regularly transported, when commingled or intermixed with such other Crude Petroleum.

c) No Crude Petroleum will be accepted for transportation except on condition that Carrier shall not be liable to Shipper or Consignee for any change, including changes in gravity or quality, which may occur from commingling or intermixing such Crude Petroleum with other Crude Petroleum in transit. Carrier shall not be obligated to deliver to Consignee the identical Crude Petroleum accepted from Shipper but will deliver to Consignee a grade of Crude Petroleum as nearly like the grade Crude Petroleum received from Shipper as Carrier is regularly transporting as a common stream to the intended destination of the shipment.

d) Crude Petroleum which does not meet the requirements of Item 1.a-1.c. will be accepted for transportation only if Carrier has available facilities to transport such Crude Petroleum as a Segregated Batch, and if such Crude Petroleum is readily susceptible of transportation through Carrier's existing facilities without material disadvantage to other Shippers and/or the Carrier and if such Crude Petroleum is made available at a single origin point in a quantity which equals or exceeds ten thousand (10,000) barrels. Carrier shall not be liable for any change, including changes in gravity or quality, of any such Crude Petroleum accepted for transportation. Carrier will impose an additional charge as provided in Item 1.f for viscous crude but such Crude Petroleum will not be accepted for transportation if its viscosity exceeds 400 SSU at 100 degrees Fahrenheit without prior written approval by Carrier. Shipper may be required to furnish suitable buffers to accompany a Segregated Batch of Crude Petroleum.

e) Indirect Products will be accepted and transported as a mixture with Crude Petroleum, provided the vapor pressure of the resulting mixture does not exceed that permitted by Item 1.a.; and

Indirect Products will be accepted and transported when and where Carrier has available facilities with which to mix such Indirect Products with Crude Petroleum at or prior to the arrival of such Indirect Products at a working tank which is vented to the atmosphere; and

Indirect Products will be accepted and transported when and where Carrier has such Crude Petroleum in its custody consigned to the same Consignee and destination as the Indirect Products, with which the Indirect Products can be mixed; and

Direct and Indirect Products will be measured and tested separately for determining volumes accepted by Carrier, such measurements to be made in accordance with the "Gauging, Metering, Testing and Deductions" provision of the applicable Rules and Regulations tariffs;

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Mixtures will be accepted, transported and delivered as Crude Petroleum only. Nothing in this rule is to be construed to waive the provisions of Item 1.a.-1.d. of this tariff or to require Carrier to receive, transport, and deliver unmixed Indirect Products.

f) Reconsignment may be made without charge if requested in writing by the Shipper or Consignee prior to delivery at original destination, subject to the rates, rules and regulations applicable from point of origin to point of final destination,

provided the then current pipeline operations of the Carrier will permit such reconsignment.

**2) PIPELINE DRAG REDUCING AGENT (DRA)**

West Shore has used DRA for several years on certain line segments and has found the product to be very effective in providing increased pipeline capacity during periods of heavy demand. West Shore will use DRA as needed on all shipments except aviation products (1-K Kerosene, Aviation Kerosene and Military Jet Fuel) without prior notification to shippers. West Shore will limit the concentration of DRA to 15 ppm of polymer. All connecting carriers delivering product into West Shore's system which has been treated with a Pipeline Drag Reducing Agent (DRA) must specify type and total accumulated polymer concentration prior to delivery.

All Suppliers delivering product into West Shore's system which has been treated with a Pipeline Drag Reducing Agent (DRA) must specify type and total accumulated polymer concentration prior to delivery. West Shore has established 7.5 ppm total polymer as the upper acceptable limit on receipts.

Product received from connecting carriers may contain DRA injected in the form of a slurry (Conoco Liquid Power, Baker FLO XL).

**3) DETERGENT ADDITIVES**

West Shore prohibits the use of Port Fuel Injector (PFI) and Intake Valve Detergents in all grades of gasoline. Under the EPA Detergent Additive Regulations, gasoline moved on West Shore Pipe Line systems is classified as "Base Gasoline - Not for Sale to the Ultimate Consumer."

**4) MMT (Methyl-cyclopentadienylmanganese tricarbonyl)**

West Shore prohibits the use of MMT octane enhancing additives in all grades of gasoline. MMT is permitted in 2xx series segregated conventional gasoline up to the EPA maximum limit of 8.3 mg Mn/liter.

**5) DCPD (Dicyclopentadiene)**

Due to shipper concerns about gasoline performance, odor, stability, and health effects, any gasoline containing more than 0.50 wt.% of DCPD will not be accepted for shipment.

**6) STATIC DISSIPATOR ADDITIVE (SDA) OR CONDUCTIVITY IMPROVER**

The use of static dissipator additive in shipments is prohibited to prevent possible contamination of aviation fuel shipments.

Use of static dissipator additive or conductivity improver in segregated shipments must be reported to scheduling prior to shipment. In certain situations, an unadditized buffer may be required to protect aviation fuel.

**7) LUBRICITY IMPROVER**

The use of lubricity improver in fungible and segregated shipments is prohibited.