

## 4. **OPERATING CONTROLS**

### 4.1 **Custody Transfer**

Custody Transfer, the transfer of product from or to a Shipper, normally occurs at point of measurement, e.g. through meters, or in the following manner:

Receipts - Custody of product is assumed by West Shore at the primary valve or valves within West Shore's receipt location.

Deliveries - Custody of product is transferred to the terminal owner at the terminal manifold within West Shore's delivery terminal.

### 4.2 **Transmix, Product Contamination, Downgrades, and Buffers**

In order to protect product integrity upon receipt and delivery, it often becomes necessary for West Shore to “cut” or separate the interface that is generated between batches of dissimilar products (e.g., gasoline and distillates). This material, which varies in volume and content depending upon the two products involved and their routing through the pipeline system, is commonly referred to as “transmix.”

In all cases, transmix remains the financial responsibility of the Shipper. At some destinations, the Shipper must arrange for the availability of transmix storage facilities.

#### *West Shore Facilities--General*

In general, West Shore will act as the agent for transmix handling, transportation, and sale at facilities where transmix storage is available. Settlement will be made with shippers based on West Shore's settlement price and product loss allocation policies found in Section 5 (Accounting Procedures).

Transmix associated with other operating incidents deemed to be caused upstream of West Shore facilities, such as product contamination from manifolds, leaking valves, or piping, may be invoiced directly to the shipper or may be invoiced to the origin supplier who will then pass these costs on to the appropriate party or parties associated with the shipment depending on the circumstances of the incident. A representative of the West Shore Measurement and Quality Control Group will make determinations concerning the billing of operating incidents.

#### *Transmix or Product Downgrades Resulting from Operational Incidents*

Transmix or product downgrades resulting from product contamination resulting from a West Shore caused operating incident is the responsibility of West Shore. As part of the West Shore Incident Prevention Program, the West Shore Measurement and Quality Control Group will perform root cause analysis to determine the cause of the product contamination, recommend operating changes to prevent future incidents, facilitate the handling of the contaminated

product with the involved shippers and tankers, and assign responsibility for the downgrade costs. The results of the root cause analysis and recommendations will be available to shippers associated with the batch.

### Buffer

In the movement of Intermediate Petroleum Products (See Section 6.2) and other quality sensitive products, West Shore reserves the right to require the Shipper to provide buffer material of suitable kind and quantity as a means to protect the integrity of the batch. West Shore's Transportation Department will advise the Shipper of this requirement as it applies to specific movements.

## **4.3 Measurement**

Metering and Tank Gauging are the methods utilized to determine the quantity of product received or delivered during custody transfer.

### Metering

Custody transfer generally occurs by metering the product as it passes through West Shore's owned and operated facilities at origin and destination. West Shore commonly utilizes turbine (inference type) meters. These meters are mechanical devices subject to varying operating conditions; consequently the measurement data which they provide must be regularly checked or "proven." West Shore "proves" each of its custody meters at least once a month. In addition, a meter will be proven upon Shipper's request. West Shore will furnish to the Shipper a copy of the prover report and encourages the Shipper to be present at any requested or routine proving.

### Measurement Tickets

A measurement ticket is the written acknowledgement and record that a receipt or delivery of material (custody transfer) has taken place. It also serves as an agreement between the authorized representatives of the parties in the transaction and determines quantities used for billing purposes.

West Shore has an automated ticketing system throughout its entire operation. All meter measurements are entered into computerized equipment that generates, on location, a properly adjusted measurement ticket (see Examples 4-A and 4-B). This ticket format is identical for receipt and delivery measurements.

### Measurement Calculations

All measured quantities for custody transfer, inventory accounting and billing purposes are adjusted from gross (observed) volume to net (temperature adjusted) volume at 60°F in accordance with relevant API MPMS Chapters. This adjustment calculation, which utilizes temperature, pressure and meter correction factors, is recorded on the ticket.

## **Example 4-A** **METER TICKET**

### **Meter Ticket Information**

**Carrier: Buckeye Pipe Line Company**

P.O Box 368                                  Emmaus PA                                  18049-0368

Ticket #: BPL-CL-0028                                  Ticket Type: M  
 Batch #: BPL-BPL-075-403-M                                  Receipt/Delivery: Delivery

Net Bbls: **435 Bbls**

Product Code: 075      Product Desc: MIDWEST GENERATED TRMX  
 Ticket Location: CL                                  Description: CLERMONT  
 Exact Ticket: BPL-CL-0028

Ticket Date: 10/10/2002 15:23  
 Start Date: 10/10/2002 14:47  
 Stop Date: 10/10/2002 15:15

**Shipper: Buckeye Pipe Line Company**

Supplier: UNASSIGNED  
 Consignee: UNASSIGNED  
 Tanker: Buckeye Terminals, LLC

OBS Gravity: 39.8	Avg Temp: 65	Temp Correct: 0.9976
OBS Temp:	Avg Pressure: 26	Pres Correct: 1.0001
Cor Gravity:	Avg Flow Rate: 934	Composite Fact: 0.9259

Meter #	Barrels	Prover RPT	Meter Factor
11	470		0.928

Water Bbls: 0 Bbls  
 Gross Bbls: 470 Bbls

\* Denotes change

**Example 4-B**  
**MEMO TICKET**

**Memo Ticket Information**

**Carrier: Buckeye Pipe Line Company**

P.O Box 368                                  Emmaus PA                                  18049-0368

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Ticket #:	BPL-TO-0173	Ticket Type:	O
Batch #:	BPL-BPL-112-998-N	Receipt/Delivery:	Receipt
Ticket Location:	TO	Description:	Toledo Terminal
Net Bbls:	<b>420 Bbls</b>		
Comment:	...CS RECEIPT...REC L/F FROM BEYE..INTO TK 3514..CALIB GS-19		
Product Code:	112	Product Desc:	CONV 87
Ticket Date:	10/14/2002 10:50		
Start Date:	10/14/2002 0:00		
Stop Date:	10/14/2002 0:00		

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**Shipper: Buckeye Pipe Line Company**

Supplier: UNASSIGNED  
Consignee: UNASSIGNED  
Tanker: Buckeye Pipe Line Company

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*\* Denotes change*

