

ARROWHEAD SOUTH TEXAS PIPELINE, LLC

LOCAL TARIFF

Containing

RULES AND REGULATIONS

APPLYING ON THE TRANSPORTATION OF

CRUDE PETROLEUM

(as defined herein)

BY PIPELINE

Rules and regulations published herein apply only under tariffs making specific reference by number to this tariff; such reference will include supplements hereto and reissues hereof. Specific rules and regulations published in individual tariffs will take precedence over the rules and regulations published herein.

Filed under the authority of 18 C.F.R. § 342.2(b) (Establishing Initial Rates).

REQUEST FOR SPECIAL PERMISSION

Issued on less than 4 days' notice under authority of 18 C.F.R. § 341.14 . This tariff publication is conditionally accepted subject to refund pending a 30 day review period.

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The provisions published herein will, if effective, not result in an effect on the quality of the human environment.

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**SECTION I
RULES AND REGULATIONS**

ITEM 5 – DEFINITIONS

“API” means American Petroleum Institute.

“Available Capacity” means the total capacity of the System, or a particular segment thereof, available to transport Crude Petroleum in a Proration Month, as determined by Carrier in its sole discretion.

“Barrel” means forty-two (42) United States gallons at sixty degrees (60°) Fahrenheit and zero P.S.I.G.

“Base Period” means the previous 12-calendar month period beginning 13-calendar months prior to the Proration Month.

“Batched” or “Batched Shipments” means a quantity of Crude Petroleum of like characteristics delivered by Shipper for transportation by Carrier as an identifiable unit.

“Carrier” means Arrowhead South Texas Pipeline, LLC.

“Connecting Pipeline” as used herein, means a pipeline constructed and operated by a party or parties other than Carrier from which Crude Petroleum is received into Carrier’s pipeline on the basis of measurements made at the point where it enters said Connecting Pipeline rather than at the point where it enters Carrier’s pipeline.

“Consignee” means a party, including a Connecting Pipeline system, to whom Shipper has ordered the delivery of Crude Petroleum.

“Crude Petroleum” as used herein, means the direct product of oil or gas wells that meets Carrier’s product Quality Specifications set forth in Item 20.

“Delivery Point” means those point(s) of delivery on Carrier’s System.

“Fungible Batch” shall mean a Batch of Crude Petroleum meeting Carrier’s quality specifications set forth in Item 20, that Carrier may commingle with other Batches of Crude Petroleum meeting the same specifications pursuant to Item 20.

“Governmental Authority” means (i) the United States of America, (ii) any state, county, parish, municipality or other governmental subdivision within the United States of America, and (iii) any court or any governmental department, commission, board, bureau, agency or other instrumentality of the United States of America or of any state, county, or municipality having applicable jurisdiction.

“Intrastate Joint Tariff” means the Arrowhead Eagle Ford Pipeline, LLC and Arrowhead Gathering Company, LLC Texas Joint Tariff , Texas R.R.C. No. 2.22, and supplements thereto and reissues thereof.

“Joint Tariff Common Stream” means the common stream as defined in the Intrastate Joint Tariff thereof, that includes all Crude Petroleum delivered to and moved through the Joint Tariff System that is commingled or intermixed with Crude Petroleum received into the Shared System.

“Joint Tariff System” means pipeline facilities consisting of Arrowhead Eagle Ford Pipeline, LLC and Arrowhead Gathering Company, LLC that are governed by the Intrastate Joint Tariff.

“Law” shall mean all applicable local, state and federal constitutions, laws (including common law), treaties, statutes, orders, decrees, rules, regulations, codes, and ordinances issued by any Governmental Authority, and including judicial or administrative orders, consents, decrees, and judgments, and determinations by, or interpretations of any of the foregoing by any Governmental Authority having jurisdiction over the matter in question.

“New Shipper” means any Shipper who does not qualify as a Regular Shipper. Once a Shipper is assigned New Shipper status, such Shipper must remain a New Shipper for a period of 12 consecutive calendar months before it will become eligible to qualify for Regular Shipper status.

“New Shipper Capacity” means ten percent (10%) of the total available capacity of Carrier’s system (or portion thereof, as applicable) for the Proration Month.

“Nomination” means any offer by a Shipper to Carrier of a stated quantity of Crude Petroleum for transportation from a specified Receipt Point or Points to a specified Delivery Point or Points in accordance with this tariff.

“Person” shall mean any individual, corporation, partnership, joint venture, association, joint stock company, or limited liability company.

“Proration Month” means the month for which capacity on Carrier’s System is subject to prorationing under Item 65 of this tariff.

“Quality Specifications” shall have the meaning set forth in Item 20 of this tariff.

“Receipt Point” means the point or points where Crude Petroleum is received into Carrier’s System.

“Regular Shipper” means a Shipper that has shipped Crude Petroleum on Carrier’s system during each month of the Base Period.

“Shared Common Stream” means the sum of all Crude Petroleum received into the System, the common stream of a Shared System Carrier, and/or the Joint Tariff Common Stream, at receipt points on the Shared System upstream of the Three Rivers Measurement Station.

“Shared Gravity Bank” means the gravity bank in Item 115 of this tariff that is operated by the Shared System Carriers for the benefit of all shippers Tendering Crude Petroleum into the Shared Common Stream.

“Shared System” means (i) the Joint Tariff System upstream of the Three Rivers Measurement Station, (ii) the System upstream of the Three Rivers Measurement Station, and (iii) the Three Rivers System.

“Shared System Carriers” means Carrier and Arrowhead Gathering Company, LLC. The Shared System Carriers will administer the Shared Gravity Bank described in Item 115.

“Shipper” means a party who contracts with Carrier for the gathering or transportation of Crude Petroleum under this tariff.

“Specified Grade” means Crude Petroleum meeting certain specifications designated by Carrier for such grade of Crude Petroleum.

“System” means Carrier’s pipeline system and all related facilities to which the rules and regulations stated herein apply.

“Three Rivers Measurement Station” means the metering, gravity measurement and other equipment located at the Three Rivers Valero Refinery and the Gardendale Pipeline Three Rivers Station, which is the last delivery point on the Three Rivers System.

“Three Rivers System” means the Three Rivers Pipeline Crude Oil System, operated by Arrowhead Gathering Company, LLC pursuant to Arrowhead Gathering Company, LLC’s Texas R.R.C. No. 8.0., and supplements thereto and reissues thereof.

“Tender,” “Tenders,” or “Tendered” shall mean the presentation by a Shipper to Carrier of a stated quantity of Crude Petroleum for transportation from a specified Receipt Point to a specified Delivery Point in accordance with this tariff.

ITEM 10 – COMMODITY

Carrier is engaged in the transportation of Crude Petroleum, as that term is defined herein, and will not accept any other commodity for transportation hereunder, except as specifically stated herein.

ITEM 15 – STORAGE

Carrier shall accept Crude Petroleum only when Shipper has provided the necessary equipment and facilities for receipt of Crude Petroleum into Carrier’s System and delivery of Crude Petroleum from Carrier’s System at pressures and pumping rates required by Carrier. The cost of such facilities shall be provided at the sole cost of Shipper seeking access to Carrier’s System. Carrier may require evidence showing that the necessary facilities are available for delivering shipments onto Carrier’s System at the Receipt Point(s) and receiving shipments from Carrier’s System at the Delivery Point(s) before any obligation to furnish transportation service shall arise.

ITEM 20 – SPECIFICATIONS AND RESTRICTIONS

- A. The specifications set forth in this Item 20 are the required specifications for all Crude Petroleum delivered to Carrier’s System.
- B. Shipper shall deliver Crude Petroleum shipments to Carrier’s System that meet the following specifications:

Quality Specifications		ASTM Testing Method
API Gravity, API	74.9 or less	ASTM D 1298
Sulfur Content, Weight %	0.42 or less	ASTM D 5504
H ₂ S, ppm in vapor	10 PPM or less	ASTM D 5705, as modified for crude petroleum
Max Reid Vapor Pressure, psi	10.0	ASTM D 6377
Max True Vapor Pressure, psi	11.0	ASTM D 2879
Basic sediment, water, and other impurities	1% or less	ASTM D 4007

Shipper shall also ensure that Crude Petroleum delivered to Carrier’s System (i) is properly settled; (ii) is not contaminated by the existence of or excess amounts of impure substances, including but not limited to, chlorinated or oxygenated hydrocarbons, arsenic, lead, or other metals; (iii) has a temperature not in excess of one hundred and twenty degrees (120°) Fahrenheit; (iv) has a gravity, viscosity, pour point, and other characteristics are such that it will be readily susceptible to transportation through Carrier’s System; (v) has a true vapor pressure that will not result in Carrier’s noncompliance with Federal, State, or local requirements regarding hydrocarbon emissions; (vi) will not materially affect the quality of other shipments on the System or cause disadvantage to other Shippers or Carrier; and (vii) will not, in Carrier’s sole judgment, expose Carrier’s employees and/or its representatives or the System to an undue risk of harm or property damage. In addition, Carrier reserves the right to reject (any and all of, but not limited to) shipments of Crude Petroleum where Shipper or Consignee has failed to comply with applicable Laws, rules, and regulations made by government authorities regulating shipment of Crude Petroleum. If Crude Petroleum is accepted from tankage, settled bottoms in such tanks must not be above a point six inches (6") below the bottom of the pipeline connection with the tank from which it enters Carrier’s facilities and such Crude Petroleum must not contain basic sediment, water or other impurities in excess of one percent (1%) average in suspension above the pipeline connection.

The requirements set forth in this Item 20(B) are collectively referred to herein as the “**Quality Specifications.**”

- C. If, upon investigation, Carrier determines that a Shipper has delivered to Carrier’s facilities Crude Petroleum that does not comply with the Quality Specifications, Carrier may (i) require that Shipper transport such Crude Petroleum as a segregated Batch, separate and apart from the common stream then being transported by Carrier, in accordance with terms and conditions to be agreed upon by Carrier and Shipper; (ii) accept such delivery if Carrier determines that the quality of the Crude Petroleum, when

commingled as a Fungible Batch, will nonetheless meet the Quality Specifications; (iii) exclude such Crude Petroleum and any future deliveries of Crude Petroleum from Shipper until such time as Shipper returns the quality of its Crude Petroleum to a level satisfactory to Carrier in accordance with this tariff; and/or (iv) dispose of any Crude Petroleum delivered into its System that does not meet the Quality Specifications. Disposal thereof, if necessary, may be made in any reasonable commercial manner, and any liability associated with the contamination or disposal of any Crude Petroleum shall be borne by Shipper introducing the contaminated Crude Petroleum into Carrier's system. Such Shipper's liability in such an event includes, but is not limited to, claims from other Shippers, carriers, or users of the contaminated Crude Petroleum and the costs of any regulatory or judicial proceeding. Upon determination that Shipper's Crude Petroleum does not conform to the Quality Specifications, Carrier shall notify Shipper of such non-conformance to the Quality Specifications, including a reasonable description of such non-conformance.

- D. Where Crude Petroleum is delivered to pipeline through automatic custody transfer measurement facilities, Carrier may require use of a monitor which rejects Crude Petroleum containing in excess of one percent (1%) basic sediment and water.
- E. In addition to having the other rights set forth in this Item 20, if Crude Petroleum received by Carrier does not meet the Quality Specifications and Carrier has not approved the transportation of such Crude Petroleum in advance, Carrier reserves the right to charge Shipper (i) the actual costs and expenses incurred by Carrier to treat, handle, or otherwise dispose of all such contaminated Crude Petroleum, and (ii) a one-hundred (100) cents per Barrel charge for the volume of contaminated Crude Petroleum transported by Carrier ("**Off-Spec Penalty**"). The Off-Spec Penalty is a penalty intended to discourage deliveries of Crude Petroleum to Carrier's System that violate Carrier's Quality Specifications. In addition, if a Shipper tenders Crude Petroleum with an API gravity in excess of 75.0, Carrier reserves the right to assess a 20% deduction on such volumes.
- F. Carrier may refuse to accept for transportation or require Batched movement of any material tendered for transportation that is not Crude Petroleum and that does not otherwise meet the Quality Specifications or which in Carrier's opinion differs materially in character from Crude Petroleum being transported by Carrier. Batched transportation shall be under Item 100 and upon such terms and conditions as set forth herein.
- G. Shipper shall be liable for any contamination or damage to other Crude Petroleum in Carrier's custody and/or to Carrier's System and other facilities directly caused by failure of the Crude Petroleum tendered to meet the Quality Specifications.
- H. Carrier will from time to time give notice to Shippers establishing categories of Crude Petroleum and Specified Grade(s) therein that it will regularly transport as a common stream between each Receipt Point and each Delivery Point. For the avoidance of doubt, if a Specified Grade has crude quality specifications more restrictive than those generally applicable to Crude Petroleum in this Item 20, Carrier shall apply the more restrictive crude quality specifications for the Specified Grade to Barrels in the common stream for

such Specified Grade, as well as the other crude quality specifications generally applicable to Crude Petroleum in this Item 20. Shipper shall, at the request of Carrier, make such Specified Grade(s) available in such quantities and at such times as may be necessary to permit such common stream movements. Carrier may from time to time, after reasonable notice to Shippers who have shipped a category of Crude Petroleum or a Specified Grade therein in the prior three months, cease to transport such category of Crude Petroleum or Specified Grade as a common stream or change the specifications of a particular category of Crude Petroleum or a Specified Grade transported as a common stream. In addition, the specifications for any Specified Grades are, without limitation, subject to modification from time to time in the event upstream connecting carriers modify their specifications for similar grades of Crude Petroleum.

- I. At the request of a Shipper, and subject to other provisions of this tariff, Carrier may agree to accept for shipment other categories of Crude Petroleum or Specified Grades to be transported as a common stream pursuant to a rates tariff, subject to the operating conditions of the facilities. Such request must specify (i) a vapor pressure using ASTM D6377 methodology and/or an API (American Petroleum Institute) gravity range; and (ii) a sulfur content weight % limitation. Crude Petroleum Tendered for transportation which differs in grade and general characteristics from that usually transported by Carrier will, at Carrier's option, be transported only under terms agreed upon, in writing, by Shipper and Carrier.

ITEM 25 – DEMURRAGE

- A. In the event Carrier has accepted Crude Petroleum for transportation in reliance upon Shipper's representations as to acceptance at the Delivery Point, and there is failure to promptly accept such Crude Petroleum as scheduled at Delivery Point, then and in such event Carrier shall have the right to divert, reassign, or make whatever arrangements for disposition of the Crude Petroleum it deems appropriate to clear its pipeline facilities.
- B. If Shipper cannot accept the scheduled delivery and Shipper makes timely arrangements for delivery at another local or more distant delivery point, Carrier will permit such diversion or reassignment consistent with the provisions of Item 25 of this tariff. Carrier will consider all such diversion or reassignment arrangements to be timely if notice of these alternate arrangements is received by Carrier in sufficient time to avoid shutting down operation of the affected pipeline segment or facilities. If suitable diversion or reassignment arrangements are made by Shipper but Carrier is not notified in time sufficient to avoid a shutdown of the affected pipeline segment or facilities, then an assessment of two thousand five hundred dollars (\$2,500.00) for each hour of lost operation or fraction thereof will be made on Shipper.
- C. If Shipper fails to make suitable arrangements for diversion or reassignment of the Crude Petroleum, and Carrier does not have available intermediate or local storage facilities that will permit Carrier to promptly divert the Crude Petroleum, Carrier will seek the most expeditious means to divert or dispose of the Crude Petroleum. Such disposition includes the right to sell the Crude Petroleum at private or public sale. Carrier may be a purchaser at such public sale. From the proceeds of any such sale, Carrier may

pay itself all transportation and other charges and expenses in caring for and maintaining the Crude Petroleum and the costs of sale, and the balance shall be held for whomsoever may be lawfully entitled thereto.

- D. In the event that physical limitations or any other factors prevent Carrier from arranging for the prompt disposal of the Crude Petroleum and Carrier is forced to shut down operation of the pipeline facilities, Shipper will be assessed penalties and fees as follows:
- i. Shipper will be responsible for the prompt payment of any and all claims that may be brought against Carrier from other Shippers or affected Parties as a result of the extended interruption of scheduled pipeline service.
 - ii. Shipper will also be responsible for the prompt payment of any and all costs incurred by the pipeline to provide alternative service to its other Shippers whose Crude Petroleum are blocked in the pipeline facilities by the shutdown. Such costs may include expenses for trucking said products and any related charges for loading and/or unloading the Crude Petroleum.
 - iii. Shipper will be assessed fees of two thousand five hundred dollars (\$2,500.00) for each hour of lost operation or fraction thereof to compensate Carrier for revenues lost during the time the pipeline facilities were forced to shut down.

ITEM 30 – NOMINATIONS AND MINIMUM VOLUME

- A. The minimum size of any Tender of a particular type of Crude Petroleum that will be accepted at a Receipt Point by Carrier from one Shipper shall be 2,000 Barrels, provided that Carrier may accept Tenders of less than 2,000 Barrels if operationally possible and acceptance may be done so in a non-discriminatory manner. Carrier may, at its sole discretion and in a non-discriminatory manner, revise the minimum Tender size set forth in this Item 30 when necessary to maintain efficient operation of its System. Carrier will not be obligated to make any single delivery that is less than the current minimum Tender size unless Carrier's operations dictate otherwise. The term "single delivery" in this Item 30 means a delivery of Crude Petroleum, in one continuous operation to one Shipper or Consignee into a single facility, furnished by such Shipper or Consignee, to which Carrier is connected.
- B. Crude Petroleum for shipment through lines of Carrier will be received only on properly executed Nominations from Shipper showing the point at which the Crude Petroleum is to be received, point of delivery, Consignee and amount of Crude Petroleum transported. Carrier may refuse to accept Crude Petroleum for transportation if Shipper has not furnished documentation demonstrating that it has made provision for prompt receipt thereof at the Nominated Delivery Point.
- C. Before Carrier will accept a Nomination from a New Shipper, such Shipper must (i) comply with the requirements of Carrier regarding creditworthiness and financial assurances, including those set forth in this tariff, (ii) demonstrate to Carrier the adequacy

of such Shipper's facilities, and (iii) provide any information reasonably requested by Carrier.

- D. Any Shipper desiring to Nominate Crude Petroleum for transportation shall make a Nomination to Carrier in writing on or before the twentieth (20th) day of the month preceding the month during which the transportation under the Nomination is to begin; except that, if Transportation Space is available for current movement, Carrier may, at Carrier's discretion, accept changes to a Nomination from Shipper for transportation of Crude Petroleum submitted after the twentieth (20th) day of the month preceding the month during which the transportation under the Nomination is to begin. Carrier shall also accept changes to a Nomination during the shipping month, subject to capacity limitations.
- E. Carrier may refuse to accept Crude Petroleum for transportation if Shipper is not in compliance with other provisions of this tariff or where Shipper has failed to comply with all applicable Law regulating shipments of Crude Petroleum.

ITEM 35 – MEASUREMENTS AND ADJUSTMENTS

- A. All Crude Petroleum transported by Carrier shall be measured at the applicable Receipt Point and Delivery Point, and may also be measured at any other time deemed appropriate by Carrier, with such measurement made in accordance with applicable A.P.I. Manual of Petroleum Measurement Standards. All measurements and tests shall be performed by Carrier or Carrier's designee, but Shipper or its representative may be present to witness such measurements and tests.
- B. Crude Petroleum received from Shipper and Crude Petroleum delivered to Shipper shall, in each instance, be evidenced by tickets, showing opening and closing meter readings or tank gauges, as applicable, temperature, pressure, and any other data essential to the determination of quantity. All tickets shall be deemed final and accepted by Shipper unless disputed in writing within 90 days of the corresponding invoice date. In the event that a designee of Carrier (which may include Shipper) performs the tests and measurements, all tickets that rely on such tests and measurements shall be deemed final and accepted by Carrier unless disputed in writing within 90 days of the corresponding invoice date.
- C. A representative of Carrier shall have the right to enter upon the premises where Shipper's Crude Petroleum is received or delivered and have access to any and all storage receptacles or meters for the purposes of measuring and testing and to make any examination, inspection, measurement or test required.
- D. In measuring the quantity of Crude Petroleum received and delivered, corrections shall be made from volumes at actual or observed temperature to volumes at 60 degrees Fahrenheit and for pressure to 14.696 psia. Quantities shall be corrected for this purpose by use of applicable API-ASTM volume correction factor tables.

- E. Carrier shall make a deduction of two-tenths of one percent (0.2%) to the total amount of Crude Petroleum received from a Shipper at a Receipt Point to cover evaporation, interface losses, and other normal losses experienced during transportation.
- F. The net quantity available for delivery from Carrier to Shipper at the Delivery Point shall be the amount of Shipper's Crude Petroleum received at the Receipt Point, less (i) any adjustment Carrier is required to make for temperature and any deduction that Carrier is required to make for basic sediment, water, and other impurities, (ii) the adjustment made under Paragraph E to account for losses experienced during transportation, (iii) any adjustment required under Item 55, and (iv) any other adjustments provided for in this tariff.

ITEM 40 – LIABILITY OF PARTIES

- A. As a condition to Carrier's acceptance of Crude Petroleum under this tariff, each Shipper agrees to defend, indemnify, and hold harmless Carrier against claims or actions for injury or death of any and all persons whomever and for damage to property of or any other loss sustained by Carrier, Shipper, Consignee and/or any third party resulting from or arising out of 1) any breach of or failure to adhere to any provision of this tariff by Shipper, Consignee, their agents, employees or representatives and 2) the negligent acts, or failures to act of Shipper or Consignee, their agents, employees or representatives in connection with delivery or receipt of Crude Petroleum.
- B. Carrier, while in possession of Crude Petroleum herein described, shall not be liable for any loss thereof; damage hereto; or delay caused by act of God, war, act of public enemy, quarantine, the authority of law, strikes, riots, civil disorder, requisition or necessity of the Government of the United States in time of war, default of Shipper, or from any cause not due to the negligence of Carrier.

ITEM 45 – PAYMENT OF TRANSPORTATION AND OTHER CHARGES

- A. Carrier will invoice Shipper for transportation rates, fees, and charges and all other amounts accruing on Crude Petroleum accepted in accordance with Carrier's then current invoicing and payment policies and procedures, and based upon the net amount deliverable to Shipper as determined under Item 35(F).
- B. Shipper shall pay the transportation and all other charges applicable to the shipment, and, if required pursuant to Item 45, shall prepay or guarantee the same before acceptance by Carrier, or pay the same before delivery.
- C. Carrier shall have a self-executing lien on all Crude Petroleum delivered to Carrier to secure the payment of all unpaid charges due by such Shipper and may withhold such Crude Petroleum from delivery until all of such unpaid charges shall have been paid. Such lien shall extend to all Crude Petroleum, including Shipper's Line Fill, in Carrier's possession beginning with Shipper's first receipt of transportation or other services from Carrier. Shipper agrees to execute such additional documents as may be reasonably necessary to perfect or evidence such lien. If a bill of lading is required under applicable Law for such a lien to arise, acceptance of the Nomination will be deemed to be the bill

of lading for all Crude Petroleum, including Shipper's line fill, subject to such Nomination. The lien provided herein shall be in addition to any lien or security interest provided by this tariff or applicable Law.

- D. If any charge remains unpaid after the due date specified in Carrier's invoice, then such amount shall bear interest from the day after the date of the invoice until paid, calculated at an annual rate equivalent to 125% of the prime rate of interest, as of the date of Carrier's invoice, charged by the Citibank N.A. of New York, New York, for ninety (90) day loans made to substantial and responsible commercial borrowers or the maximum rate allowed by Law, whichever is the lesser.
- E. In the event Shipper fails to pay any charges when due, Carrier shall have the right, until such payments, including interest thereon, are made in full, to: (i) refuse to provide Shipper access to Carrier's System or provide services pursuant to this tariff, (ii) offset the current and future amounts owed by Shipper against any amounts Carrier owes to Shipper, and (iii) exercise any other rights and remedies granted under this tariff or existing under applicable Law.
- F. If any charges owed to Carrier shall remain unpaid five (5) days after the due date specified in the invoice for such charges, or, in the absence of unpaid charges, when there shall be failure to take the Crude Petroleum at the destination point as provided in these rules and regulations, Carrier may, by an agent, sell said Crude Petroleum at public auction for cash on any day not a Sunday or legal holiday, and not less than forty-eight (48) hours after publication of notice, in a daily newspaper, of the time and place of such sale and the quantity of Crude Petroleum to be sold. Carrier may be a bidder and purchaser at such sale. Out of the proceeds of said sale Carrier may pay itself all transportation and any other lawful charges, expense of notice, advertisement, sale, and other necessary expense, and of caring for and maintaining the Crude Petroleum, and the net balance shall be held without interest for whomsoever may be lawfully entitled thereto; if the proceeds of said sale do not cover all expenses incurred by Carrier, Shipper and/or Consignee are liable to Carrier for any deficiency.

ITEM 50 – CHARGE FOR SPILL COMPENSATION

In addition to the transportation charges and all other charges accruing on Crude Petroleum accepted for transportation, a per barrel charge will be assessed and collected in the amount of any tax, fee, or other charge levied against Carrier in connection with such a commodity, pursuant to any change in application of existing Federal, State or local act or regulations or the implementation of any new Federal, State or local act or regulation which levies a tax, fee or other charge on the receipt, delivery, transfer or transportation of such commodities within their jurisdiction for the purpose of creating a fund for the prevention, containment, cleanup and/or removal of spills and/or the reimbursement of persons sustaining loss therefrom. If such a tax, fee, or other charge is levied against Carrier, Carrier shall file to place into effect a per barrel rate to recover such tax, fee, or other charge. Carrier shall be under no obligation to contest or protest on behalf of Shipper or its Consignee the legality of such tax, fee, levy or other charges.

ITEM 55 – VOLUMETRIC ADJUSTMENT

All shipments of Crude Petroleum that meet the Quality Specifications but which have an API gravity of 62.0 degrees or above, as determined by either the composite average of the sample pot or on an individual truckload basis as determined by its truck ticket (as determined in Carrier's sole discretion), shall be subject to a deduction to cover the shrinkage resulting from the mixture thereof, in Carrier's facilities. Such deduction shall be determined in accordance with the following table:

<u>API GRAVITY, Degrees</u>	<u>%VOLUME DEDUCTION</u>
62.0 through 74.9	1%

The deduction set forth in this Item 55 shall be in addition to the deductions made pursuant to Item 35.

ITEM 60 – CLAIMS FOR LOSS OR DAMAGE

As a condition precedent to recovery by Shipper for loss, damage, or delay in receipt or delivery of Shipper's Crude Petroleum for which Carrier may be responsible, Shipper's claims for loss or damage must be made in writing to Carrier within nine (9) months after delivery of the affected Crude Petroleum, or in case of a failure to make delivery of Shipper's Crude Petroleum, then within nine (9) months after a reasonable time for delivery has elapsed. Suits for loss or damage shall be instituted before a court of competent jurisdiction not later than two (2) years and one (1) day from the day when notice in writing is given by Carrier to Shipper that Carrier has disallowed the claim or any part or parts thereof specified in the notice. Where claims for loss or damage are not filed or suits are not instituted thereon in accordance with the foregoing provisions, such claims will not be paid and Carrier will not be liable.

ITEM 65 – PRORATIONING OF CAPACITY

- A. **When capacity will be prorated.** When Carrier receives more Nominations in a month for transportation of Crude Petroleum on a line segment of the System than Carrier is able to transport, Carrier shall allocate the Available Capacity of the line segment under the provisions of this Item 65.
- B. **Division of capacity between Shipper classes.** Available capacity for a Proration Month shall be divided among Regular Shippers as a class and New Shippers as a class.
- C. **Availability of capacity to New Shippers.** Carrier shall allocate the New Shipper Capacity among all New Shippers who have submitted a proper Nomination for the Proration Month. Each such New Shipper shall be allocated a volume of the New Shipper Capacity for the Proration Month that is equal to:
 - i. its Nomination, if the total volume Nominated by all New Shippers for the Proration Month is less than or equal to ten percent (10%) of the total available capacity of Carrier's system (or portion thereof, as applicable) for the month; provided, however, that no New Shipper shall be allocated more than 2.50 percent

of the available system capacity (or portion thereof, as applicable) for a Proration Month; or

- ii. its pro rata share, in accordance with its Nomination, of ten percent (10%) of the New Shipper Capacity, if the total volume Nominated by all New Shippers is greater than 10 percent (10%) of the available capacity of Carrier's system (or portion thereof, as applicable); provided, however, that no New Shipper shall be allocated more than 2.50 percent of the available system capacity (or portion thereof, as applicable) for a Proration Month.

D. Availability of capacity to Regular Shippers. After the allocation of the New Shipper Capacity to New Shippers, Carrier shall allocate the remaining available system capacity among all Regular Shippers who have properly submitted a Nomination for the Proration Month. Each such Regular Shipper shall be allocated a volume of capacity each Proration Month that is equal to the lesser of (i) its Nomination for the Proration Month, or (ii) a fraction of the capacity available to Regular Shippers during the Proration Month, where the numerator of such fraction shall equal the total shipments by the Regular Shipper on Carrier's system during the Base Period, and the denominator of which shall equal the total shipments by all Regular Shippers on Carrier's system during the Base Period.

E. Remaining Capacity. Any remaining capacity that is not allocated through the application of Paragraphs C and D shall be allocated first among all Regular Shippers having unmet Nominations on a pro rata basis, according to the level of each Regular Shipper's initial capacity allocation, and then to New Shippers having unmet Nominations on a pro rata basis, according to the level of the initial capacity allocation

F. Basis for allocation; notification. During periods when Carrier applies the provisions of this Item 65:

- i. The capacity allocated to a Shipper will be provided as a daily or monthly value, at Carrier's discretion, and will be calculated for the Proration Month; and
- ii. Carrier will use its reasonable efforts to notify each Shipper of its allocation not later than three (3) days prior to the first (1st) day of the Proration Month.

G. Failure to use allocated capacity.

- i. If a Shipper does not use the capacity allocated to it under this Item 65 at the times and in the amounts designated by Carrier, Carrier shall have the right to use Shipper's unused capacity to fulfill the unmet Nominations of other Shippers.
- ii. If any Shipper does not use at least ninety percent (90%) of the capacity allocated to it under this Proration Policy in a Proration Month, such Shipper shall pay Carrier a per Barrel penalty equal to the then-current transportation rate on the System for each Barrel of capacity that Shipper was allocated but did not use in the Proration Month. Notwithstanding the foregoing, Carrier has the discretion to waive or modify application of this Paragraph G(ii) when Carrier determines that

Shipper's failure to use such allocated capacity was due to factors beyond Shipper's control

- H. **Transfers of Capacity and Shipment History.** A Shipper may not assign, convey, loan, transfer, or allow another Shipper to use in any manner (i) the capacity allocated to Shipper under this Item 65, or (ii) the shipment history accumulated by a Shipper, which is used by Carrier for purposes of administering this Item 65; provided, however, that a Shipper's allocation of capacity or shipment history may be transferred as an incident of the bona fide sale of Shipper's business or to a successor to Shipper's business by the operation of law, such as an executor or trustee in bankruptcy.
- I. **Use of Affiliates.** A Shipper may not use an affiliated shipper or any other cooperating entity to increase its allocation of capacity under this Item 65.

ITEM 70 – APPLICATION OF RATES AND CHARGES

Crude Petroleum accepted for mainline transportation shall be subject to the rates and charges in effect on the date of receipt of such Crude Petroleum by Carrier. Mainline transportation and all other lawful charges will be collected on the basis of net volume of Crude Petroleum delivered. All net volumes will be determined in the manner described in Item 35(F).

ITEM 75 – APPLICATION OF RATES FROM AND TO INTERMEDIATE POINTS

Carrier will receive Crude Petroleum for transportation only from and to established Receipt Points and Delivery Points. For Crude Petroleum accepted for transportation from any point on Carrier's lines not named in tariffs making reference hereto, which is intermediate to a point from which rates are published in said tariffs, through such unnamed point, the rate published therein from the next more distant point specified in the tariff will apply from such unnamed point. For Crude Petroleum accepted for transportation to any point not named in tariffs making reference hereto, which is intermediate to a point which rates are published in said tariffs, through such unnamed point, the rate published therein to the next more distant point specified in the tariff will apply.

ITEM 80 – CONNECTING CARRIERS

When both receipts from, and deliveries to, a Connecting Pipeline of substantially the same grade of Crude Petroleum are scheduled at the same interconnection, Carrier reserves the right, with cooperation of the Connecting Pipeline, to offset like volumes of such Crude Petroleum in order to avoid the unnecessary use of energy which would be required to physically pump the offsetting volumes. When this right is exercised, Carrier will make the further deliveries for Shipper involved from its System.

ITEM 85 – LIABILITY OF CARRIER

- A. Custody of Crude Petroleum shall begin when the Crude Petroleum enters the System and shall cease when it passes from the System.

- B. Carrier, while in possession of Crude Petroleum herein described, shall not be liable for, and Shipper hereby waives any claims against Carrier for, any loss damage, or delay, because of an act of God, the public enemy, quarantine, the authority of law, strikes, riots, or the acts of Shipper or Consignee, or from any other cause not due to the gross negligence or willful misconduct of Carrier. Carrier shall not be liable for, and Shipper hereby waives any claims against Carrier for, any loss or damage to Crude Petroleum prior to delivery of Crude Petroleum to Carrier at the Receipt Points and after delivery of Crude Petroleum to Shipper at the Delivery Points.
- C. In case of loss or damage of any Crude Petroleum from any such causes, other than the gross negligence or willful misconduct of Carrier, after it has been received for transportation at the Receipt Point and before the same has been delivered to Shipper at the Delivery Points, such losses shall be charged proportionately to each Shipper in the ratio that its Crude Petroleum, or portion thereof, received and undelivered at the time the loss or damage occurs, bears to the total of all Crude Petroleum, or portions thereof, then in the custody of Carrier for shipment via the lines or other facilities in which the loss or damage occurs. Carrier will be obligated to deliver only that portion of such Crude Petroleum remaining after deducting Shipper's proportion of such loss determined as aforesaid. In the aforementioned instance, transportation charges will be assessed only on the quantity delivered to Shipper.
- D. Carrier will not be liable for discoloration, contamination, or deterioration of the Crude Petroleum transported hereunder unless and to the extent such discoloration, contamination, or deterioration of Crude Petroleum transported results from the gross negligence of Carrier.
- E. Notwithstanding anything to the contrary in this tariff and except in instances of Carrier's gross negligence or willful misconduct, in no event shall Carrier be liable or responsible to any Shippers, its affiliates, successors in interest, beneficiaries or assignees, for any consequential, incidental, indirect, special or punitive damages, or for loss of profits or revenues, that arise in relation to the transportation of Crude Petroleum under this tariff, regardless of whether such claim arises under or results from tort or strict liability.

ITEM 90 – STORAGE OF CRUDE PETROLEUM IN TRANSIT

- A. Carrier will only provide working tankage that is incidental and necessary to the transportation of Crude Petroleum, but does not provide or offer storage service. Shipper or Consignee may, by request on the original Tender or shipping order, or by order for diversion or reconsignment enroute, have Crude Petroleum Tendered for shipment stored in tanks furnished by Shipper or Consignee at points on the lines of Carrier, when intermediate to the designation shown on the Tender of shipments, subject to the conditions provided in this Item 90.
- B. All lawful transportation charges from point of origin to the storage point published in tariffs lawfully on file with the Federal Energy Regulatory Commission shall be paid upon delivery of Crude Petroleum into the tanks at storage point or may be required in advance of such transportation at the option of Carrier and pursuant to Item 45.

ITEM 95 – PIPEAGE OR OTHER CONTRACTS

Separate pipeage and other contracts in association with pipeline connections or other facilities ancillary to Carrier's System and in accordance with this tariff shall be required of any Shipper before any duty of transportation by Carrier shall arise. A pipeage contract may include additional charges for reimbursement for facilities necessary to receive or deliver Shipper's shipments.

ITEM 100 – INVENTORY REQUIREMENTS

Carrier will require each Shipper to supply a pro rata share of Crude Petroleum necessary for pipeline fill and working stock (which includes tank bottoms) for efficient operation of the System prior to delivery. Crude Petroleum provided by a Shipper for this purpose may be withdrawn from the System only after shipments have ceased and if written notice to discontinue shipments in the System is received on or before the 20th day of the preceding calendar month. Such withdrawal shall be made by Carrier over a reasonable period, not to exceed 3 months after such notice to discontinue shipments is received.

ITEM 105 – FINANCIAL ASSURANCES

- A. If (i) a prospective or existing Shipper's credit rating is below investment grade as rated by Moody's, S&P, or Fitch, (ii) a Shipper fails to pay Carrier's invoiced amounts when due, and such failure continues for a period of five (5) Business Days after Notice of such failure is provided by Carrier, or (iii) Carrier otherwise has reasonable grounds for insecurity regarding a Shipper's performance of any obligation under this tariff (whether or not then due) by a Shipper or prospective shipper (including, without limitation, the occurrence of a material change in the creditworthiness of Shipper), then Carrier may, by Notice to the Shipper or prospective shipper, singularly or in combination with any other rights it may have, demand, and Shipper or prospective shipper shall provide, Financial Assurances. Financial Assurances means (i) advance payment in cash by Shipper for one (1) Month of obligations due under the tariff, or (ii) delivery of an Acceptable Letter of Credit in an amount equal to not less than two (2) Months of obligations due under the tariff.
- B. If an existing Shipper or prospective Shipper fails to provide Financial Assurances within ten (10) days of Shipper's receipt of Carrier's written request for such assurances, Carrier shall not be obligated to accept Crude Petroleum, or a Nomination, for transportation until such requirement is fully met.

ITEM 110 – TITLE

By nominating Crude Petroleum, the Shipper represents and warrants to Carrier that the Shipper owns or controls all of the Crude Petroleum delivered under the tariff.

ITEM 115 – IDENTITY OF CRUDE OIL

Any Crude Petroleum that is transported pursuant to this tariff will be transported by Carrier in pipeline facilities that are shared with other carriers. As a result, the Crude Petroleum will be

moved in a commingled stream that is referred to in this tariff as the “Shared Common Stream.” To address certain differences in gravity within the Crude Petroleum transported on the Shared Common Stream, Carrier, all carriers who provide transportation services using the same facilities as Carrier, and all carriers who provide joint tariff services with Carrier have established a Shared Gravity Bank to calculate, collect and remit monetary adjustments among all Shippers Tendering to the Shared Common Stream. Each Shipper will be required, as a condition to shipping on the Shared System, to deliver all Crude Petroleum into the Shared Common Stream and participate in the Shared Gravity Bank, which will be administered by Shared System Carriers on a monthly basis in accordance with the following provisions.

A. Shared Gravity Bank. The purpose of the Shared Gravity Bank is to mitigate, to the fullest extent possible, damage or improvement to Shippers whose Crude Petroleum is commingled in the Shared Common Stream. Differences in gravity of all of the Shippers' Crude Petroleum streams that are mixed within the Shared Common Stream either increase or decrease the quality of the Shared Common Stream, and deliveries of Crude Petroleum may have gravities that differ from the gravity of the Shared Common Stream. Pursuant to the Shared Gravity Bank, Shared System Carriers will either charge a Shipper or pay a Shipper depending upon the relationship between the gravity of the Shared Common Stream and the weighted average gravity of a Shipper's deliveries of Crude Petroleum into the Shared Common Stream and the weighted average gravity of such Shipper's receipts of Crude Petroleum from the Shared Common Stream. The amounts payable by all Shippers to Shared System Carriers pursuant to the Shared Gravity Bank will equal the amounts owed by Shared System Carriers to all Shippers pursuant to the Shared Gravity Bank. The operation of the Shared Gravity Bank requires Shared System Carriers to share information in order to calculate the weighted average gravity value for each month as required by the Receipt Bank (below), and to calculate the weighted average gravity value of Crude Petroleum for each month as required by the Delivery Bank (below); therefore, as a condition of shipment of Crude Petroleum in the Shared Common Stream, each Shipper agrees to waive any rights to confidentiality related to the information that must be shared between the Shared System Carriers to calculate the weighted average gravity values for the Receipt Bank and the Delivery Bank for each month, solely for this purpose. All Shippers Tendering into the Shared Common Stream on Carrier's System will be bound by the Shared Gravity Bank under the provisions of this Item 115, and all shippers Tendering into the Shared Common Stream on other carriers shall be bound by the Shared Gravity Bank under the applicable rules and regulations specified in the individual tariffs of those carriers. Each Shipper, by its Tender of Crude Petroleum into the Shared Common Stream, accepts and agrees to all of the terms, conditions and consequences contained in this Item 115. Each of the Shared System Carriers shall ensure that this Shared Gravity Bank is applied to their respective systems upstream of the Three Rivers Measurement Station. For purposes of the Shared Gravity Bank, measurements made for the Joint Tariff System shall be made at the Three Rivers Measurement Station.

B. Receipt Bank.

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- i. If the weighted average gravity value of Crude Petroleum delivered by any Shipper into the Shared Common Stream differs from the weighted average gravity value of the Shared Common Stream for such month, then such Shipper will be debited or credited by an amount determined from the following formula:

$$SA_R = SQ_R * (GV_{CSR} - SGV_R)$$

where:

$SA_R =$	Shipper adjustment (expressed in dollars) with respect to Crude Petroleum received from the Shipper; positive amounts will be debited and negative amounts will be credited.
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$SQ_R =$	Quantity of Crude Petroleum delivered by the Shipper into the Shared Common Stream during that month (expressed in barrels).
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$GV_{CSR} =$	The Gravity Value per barrel of all Crude Petroleum delivered into the Shared Common Stream (expressed in dollars per barrel), which is equal to the weighted average of the Gravity Values of all Shippers in the Shared Common Stream.
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$SGV_R =$	The Gravity Value per barrel of the Crude Petroleum delivered by the Shipper into the Shared Common Stream (expressed in dollars per barrel), as determined from <u>Schedule 1</u> .
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- ii. The sum of debits and credits to all Shippers under this Paragraph B for all Crude Petroleum received by Shared System Carriers into the Shared Common Stream is zero.

C. Delivery Bank.

- i. If the weighted average gravity value of Crude Petroleum delivered to any Shipper from the Shared Common Stream differs from the weighted average gravity value of the Shared Common Stream for such month, then such Shipper will be debited or credited by an amount determined from the following formula:

$SA_D =$	$SQ_D * (GV_{CSD} - SGV_D)$
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where:

$SA_D =$	Shipper adjustment (expressed in dollars) with respect to Crude Petroleum delivered to the Shipper; positive amounts will be credited and negative amounts will be debited.
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where:

SQ_D	=	Quantity of Crude Petroleum delivered to the Shipper from the Shared Common Stream during that month (expressed in barrels).
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GV_{GSD}	=	The Gravity Value per barrel of Crude Petroleum in the Shared Common Stream delivered from the Shared Common Stream (expressed in dollars per barrel), which is equal to the weighted average of the Gravity Values of Crude Petroleum delivered to all Shippers from the Shared Common Stream.
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SGV_D	=	The Gravity Value per barrel of the Crude Petroleum delivered from the Shared Common Stream to the Shipper (expressed in dollars per barrel), as determined from <u>Schedule 2</u> .
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- ii. The sum of debits and credits to all Shippers under this Paragraph C for all Crude Petroleum delivered out of the Shared Common Stream by Shared System Carriers is zero.

D. Sample calculations. Sample calculations are attached hereto as Schedule 3.

E. Determination by Shared System Carriers. At the end of each month, the quantity of Crude Petroleum in the Shared Common Stream received from and delivered to each Shipper and the related Gravities will be determined and recorded by Shared System Carriers at points where Shared System Carriers customarily record Gravities and quantities received into and delivered from the System. Shared System Carriers also will determine each month the weighted average Gravity value of all Crude Petroleum received (Receipt Bank) into the Shared Common Stream and the weighted average Gravity value of all Crude Petroleum delivered (Delivery Bank) out of the Common Stream. If either, (i) more than once during any twelve month period, Shared System Carriers determine that a Shipper's monthly deliveries into the Shared Common Stream exceed a weighted average API Gravity of 49.5 degrees and the gravity of the Shared Common Stream exceeds a weighted average API Gravity of 49.5 degrees or (ii) at the end of any month, Shared System Carriers determine that a Shipper's deliveries into the Shared Common Stream during such month exceed a weighted average API Gravity of 50.0 degrees and the gravity of the Shared Common Stream exceeds a weighted average API Gravity of 50.0 degrees, then such Shipper shall be precluded from shipping Crude Petroleum in the Shared Common Stream during the calendar month following such determination; provided, however that such Shipper shall be allowed to resume shipping Crude Petroleum in accordance with this tariff on the first day of the next calendar month.

- F. Statement. Within 30 days following the end of each month, Carrier shall send to each Shipper a statement setting forth the debits and/or credits allocated to such Shipper for such month.
- G. Payments.
- i. With respect to each Shipper in the Shared Common Stream, if the sum of the credits allocated to such Shipper exceeds the sum of the debits allocated to such Shipper, such Shipper shall pay to Shared System Carriers an amount equal to such excess no later than the 15th day after its receipt of a Shared System Carrier's statement. If the sum of the debits allocated to such Shipper exceeds the sum of the credits allocated to such Shipper, Shared System Carriers shall pay to such Shipper an amount equal to such excess no later than 30 days following the delivery of a Shared System Carrier's statement.
 - ii. Notwithstanding paragraph G(i), if any Shipper in the Shared Common Streams fails to make a payment required to be made by it hereunder, any amounts payable to Shippers under this paragraph G will be reduced by such Shipper's proportionate share of such underpayments in that month based upon the ratio that the amount owed to such Shipper under this paragraph G in that month bears to the amounts owed to all Shippers under this paragraph G in that month, provided however, that if the underpayment is eventually cured by the non-paying Shipper, then each other Shipper shall receive the full payment it was entitled to prior to the underpayment.
 - iii. Shippers shall have the right to enforce this Item 115 against, and seek payment under this Item 115 from, any non-paying shipper in the Shared Common Stream either at the Commission or in any other appropriate venue. Additionally, the Shared System Carriers shall refuse to transport Crude Petroleum for such non-paying shipper on the System, the Joint Tariff System, or their individual systems, respectively until full payment is made, and any such Shipper's inability to ship under hereunder shall not relieve such Shipper of, or modify or affect, any volume commitment or deficiency payment obligation such Shipper has to one of the Shared System Carriers. As soon as the non-paying Shipper is delinquent in making payments to a Carrier under this Item 115, to the extent permitted under applicable Law, Shared System Carriers shall cooperate with any other Shippers in the Shared Common Stream in recovering amounts owed by such non-paying Shipper.
- H. Liability. Shared System Carriers will take commercially reasonable actions to collect any amounts owed to Shared System Carriers by any Shipper in the Shared Common Stream under this Item 115, but Shared System Carriers will have no liability to any Shipper for any amounts owed to such Shipper by a non-paying Shipper under this Item 115. Any non-paying Shipper in the Shared Common Stream shall be liable to all other Shippers in the Shared Common Stream under this Item 115 for such Shipper's non-payment.

- I. Administration. Shared System Carriers shall work together as necessary to, and shall, administer the Shared Gravity Bank, and shall perform the clearinghouse business of calculating and effecting adjustments among all Shippers in the Shared Common Stream delivering Crude Petroleum into the Shared Common Stream for differences in API gravity of Crude Petroleum received from all Shippers in the Shared Common Stream. Shared System Carriers shall receive and track all monies received from Shippers in the Shared Common Stream pursuant to the Shared Gravity Bank for the benefit of all Shippers in the Shared Common Stream.
- J. Adjustments. During November of each calendar year (and more often if the Shared System Carriers deem appropriate), Shared System Carriers shall review the formulae set forth in Items 20(B) and 20(C) and the Gravity adjustments in Schedules 1 and 2. in light of current market conditions and may amend such formulae and Gravity adjustments by notifying all Shippers in the Shared Common Stream of such amendment. The amended formulae will become effective beginning the following January 1 and will remain effective until again modified in accordance with this Item 115(J). If any Shipper does not agree with any the amendments of such formulae and Gravity adjustments, such Shipper may protest or challenge such amendment either at the Commission or in any other appropriate venue.
- K. Gravity. Shared System Carriers will be responsible, at their sole cost and expense, for determining and/or securing data on all Gravities and Volumes of Crude Petroleum delivered into and out of the Shared Common Stream. The Gravity will be determined by ASTM 6822-02 (Standard Test Method for Density, Relative Density, API Gravity of Crude Petroleum and Liquid Petroleum Products by Thermo-hydrometer Method).
- L. Audit. Any individual Shipper on the Shared Common Stream will at any time during normal business hours and upon reasonable notice have access to the books, accounts and records of Shared System Carriers for the purpose of verifying that Shared System Carriers are administering the Shared Gravity Bank in accordance with the terms of this Item 115. Each Shipper will bear the cost of any audit requested by it.

Schedule 1

Table of Receipt Bank
Gravity Values

TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR
DIFFERENCE IN GRAVITY OF CRUDE PETROLEUM DELIVERED FROM SHIPPERS INTO SYSTEM

API Gravity	Diff \$ per BBL	API Gravity	Diff \$ per BBL	API Gravity	Diff \$ per BBL
49.0 or less	0.00	52.7	6.70	56.4	10.40
49.1	1.10	52.8	6.80	56.5	10.50
49.2	1.20	52.9	6.90	56.6	10.60
49.3	1.30	53.0	7.00	56.7	10.70
49.4	1.40	53.1	7.10	56.8	10.80
49.5	1.50	53.2	7.20	56.9	10.90
49.6	1.60	53.3	7.30	57.0	11.00
49.7	1.70	53.4	7.40	57.1	11.10
49.8	1.80	53.5	7.50	57.2	11.20
49.9	1.90	53.6	7.60	57.3	11.30
50.0	4.00	53.7	7.70	57.4	11.40
50.1	4.10	53.8	7.80	57.5	11.50
50.2	4.20	53.9	7.90	57.6	11.60
50.3	4.30	54.0	8.00	57.7	11.70
50.4	4.40	54.1	8.10	57.8	11.80
50.5	4.50	54.2	8.20	57.9	11.90
50.6	4.60	54.3	8.30	58.0	12.00
50.7	4.70	54.4	8.40	58.1	12.10
50.8	4.80	54.5	8.50	58.2	12.20
50.9	4.90	54.6	8.60	58.3	12.30
51.0	5.00	54.7	8.70	58.4	12.40
51.1	5.10	54.8	8.80	58.5	12.50
51.2	5.20	54.9	8.90	58.6	12.60
51.3	5.30	55.0	9.00	58.7	12.70
51.4	5.40	55.1	9.10	58.8	12.80
51.5	5.50	55.2	9.20	58.9	12.90
51.6	5.60	55.3	9.30	59.0	13.00
51.7	5.70	55.4	9.40	59.1	13.10
51.8	5.80	55.5	9.50	59.2	13.20
51.9	5.90	55.6	9.60	59.3	13.30
52.0	6.00	55.7	9.70	59.4	13.40
52.1	6.10	55.8	9.80	59.5	13.50
52.2	6.20	55.9	9.90	59.6	13.60
52.3	6.30	56.0	10.00	59.7	13.70
52.4	6.40	56.1	10.10	59.8	13.80
52.5	6.50	56.2	10.20	59.9	13.90
52.6	6.60	56.3	10.30	60.0	14.00

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Schedule 2					
Table of Delivery Bank Gravity Values					
TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR					
DIFFERENCE IN GRAVITY OF CRUDE PETROLEUM DELIVERED FROM SYSTEM TO SHIPPERS					
API Gravity	Diff \$ per BBL	API Gravity	Diff \$ per BBL	API Gravity	Diff \$ per BBL
Less than 40.0	0.00	43.6	1.08	47.3	2.19
40.0	0.00	43.7	1.11	47.4	2.22
40.1	0.03	43.8	1.14	47.5	2.25
40.2	0.06	43.9	1.17	47.6	2.28
40.3	0.09	44.0	1.20	47.7	2.31
40.4	0.12	44.1	1.23	47.8	2.34
40.5	0.15	44.2	1.26	47.9	2.37
40.6	0.18	44.3	1.29	48.0	2.40
40.7	0.21	44.4	1.32	48.1	2.43
40.8	0.24	44.5	1.35	48.2	2.46
40.9	0.27	44.6	1.38	48.3	2.49
41.0	0.30	44.7	1.41	48.4	2.52
41.1	0.33	44.8	1.44	48.5	2.55
41.2	0.36	44.9	1.47	48.6	2.58
41.3	0.39	45.0	1.50	48.7	2.61
41.4	0.42	45.1	1.53	48.8	2.64
41.5	0.45	45.2	1.56	48.9	2.67
41.6	0.48	45.3	1.59	49.0	2.70
41.7	0.51	45.4	1.62	49.1	2.73
41.8	0.54	45.5	1.65	49.2	2.76
41.9	0.57	45.6	1.68	49.3	2.79
42.0	0.60	45.7	1.71	49.4	2.82
42.1	0.63	45.8	1.74	49.5	2.85
42.2	0.66	45.9	1.77	49.6	2.88
42.3	0.69	46.0	1.80	49.7	2.91
42.4	0.72	46.1	1.83	49.8	2.94
42.5	0.75	46.2	1.86	49.9	2.97
42.6	0.78	46.3	1.89		
42.7	0.81	46.4	1.92		
42.8	0.84	46.5	1.95		
42.9	0.87	46.6	1.98		
43.0	0.90	46.7	2.01		
43.1	0.93	46.8	2.04		
43.2	0.96	46.9	2.07		
43.3	0.99	47.0	2.10		
43.4	1.02	47.1	2.13		
43.5	1.05	47.2	2.16		

Schedule 3

SAMPLE CALCULATION OF RECEIPT GRAVITY BANK

Shipper	Volume of Crude Petroleum received by Shipper	API Gravity	Weighted Average API Gravity	Gravity Value Per Barrel (\$/BBL)
Shipper A (Receipt Point a)	10000	48		
Shipper A (Receipt Point b)	20000	42		
Shipper A (Receipt Point c)	<u>30000</u>	44		
Total Shipper A	<u>60000</u>		44	0
Shipper B (Receipt Point x)	35000	48		
Shipper B (Receipt Point y)	5000	57		
Shipper B (Receipt Point z)	<u>0</u>	0		
Total Shipper B	<u>40000</u>		49.125	1.1
Shared Common Stream	<u>100000</u>			
Shared Common Stream Gravity Value (GV _{CSR})				0.44
Shipper A Calculation				
	$SA_R = SQ_R \times (GV_{CSR} - SGV_R)$			
	$SA_R = 60,000 \text{ bbls.} \times (0.44 - 0)$			
	$SA_R = \$26,400$	(Shipper A receives \$26,400)		
Shipper B Calculation				
	$SA_R = SQ_R \times (GV_{CSR} - SGV_R)$			
	$SA_R = 40,000 \text{ bbls.} \times (0.44 - 1.1)$			
	$SA_R = (\$26,400)$	(Shipper B pays \$26,400)		

Schedule 3

SAMPLE CALCULATION OF DELIVERY GRAVITY BANK

Shipper	Volume of Crude Petroleum delivered to Shipper	API Gravity	Weighted Average API Gravity	Gravity Value Per Barrel (\$/BBL)
Shipper A (Three Rivers Refinery)	60000	48		
Shipper A (Joint tariff into Gardendale)	0			
Total Shipper A	60000		46.2	1.86
Shipper B (Three Rivers Refinery)	0			
Shipper B (Joint tariff into Gardendale)	40000	57		
Total Shipper B	40000		46.3	1.89
Shared Common Stream	100000			
Shared Common Stream Gravity Value (GV_{CSD})				1.872
<u>Shipper A Calculation</u>				
	$SA_D = SQ_D \times (GV_{CSD} \times SGV_D)$			
	$SA_D = 60,000$ bbls. $\times (1.872 - 1.86)$			
	$SA_D = \$720$	(Shipper A pays \$720)		
<u>Shipper B Calculation</u>				
	$SA_D = SQ_D \times (GV_{CSD} \times SGV_D)$			
	$SA_D = 40,000$ bbls. $\times (1.872 - 1.89)$			
	$SA_D = (\$720)$	(Shipper B receives \$720)		