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January 24, 2023

OIL PIPELINE TARIFF FILING

Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

Re: ConocoPhillips Transportation Alaska, Inc. FERC No. 21.22.0

Dear Ms. Bose:

Enclosed for filing is FERC No. 21.22.0 of ConocoPhillips Transportation Alaska, Inc. ("CPTAI"), which is issued to comply with the orders issued by the Federal Energy Regulatory Commission ("Commission") in *Trans Alaska Pipeline System*, 113 FERC ¶ 61,062 (2005) (Opinion No. 481); 114 FERC ¶ 61,323 (2006) (Opinion No. 481-A); 115 FERC ¶ 61,287 (2006) (Opinion No. 481-B), and with the orders issued by the Regulatory Commission of Alaska ("RCA") in *In re Formal Complaint of Tesoro Alaska Petroleum Co.*, P-89-1(104) / P-89-2(98) / P-94-4(37) / P-96-6(24) / P-98-9(16) / P-99-12(19) (2005); P-89-1(109) / P-89-2(103) / P-94-4(42) / P-96-6(29) / P-98-9(21) / P-99-12(24) (2006); P-89-1(111) / P-89-2(105) / P-94-4(44) / P-96-6(31) / P-98-9(23)/P-99-12(26) (2006). The referenced orders established a quality bank methodology for the Trans Alaska Pipeline System ("TAPS"). FERC No. 21.22.0 is to be effective February 1, 2023.

One of the terms of the methodology approved by the Commission and the RCA is embodied in Item III.G.6 of the tariff. Item III.G.6 requires that adjustments to the reference prices for Light Distillate, Heavy Distillate and Resid in Attachment 2 to the tariff be revised each year in accordance with the changes to the Nelson-Farrar Cost Index (Operating Indexes Refinery), by multiplying the adjustments or costs for the previous year by the ratio of (1) the average of the monthly indexes for the most-recent 12 consecutive months to (2) the average of the monthly indexes for the previous 12 consecutive months. The enclosed tariff is filed in compliance with the foregoing orders of this Commission and the RCA and Item III.G.6 of the tariff. Attachment 2 to the tariff reflects revised adjustments to the reference prices for the Light Distillate, Heavy Distillate and Resid components for the year beginning February 1, 2023, calculated in accordance with the method prescribed in Item III.G.6. A table showing the calculations is attached to this letter as Exhibit A.



Likewise, in accordance with the foregoing orders, the Naphtha component on the West Coast is valued using a formula shown in Attachment 2, page 3, of the tariff. The coefficients in this formula are recomputed whenever circumstances require, but not less often than annually, using a regression analysis of prices for gasoline, jet fuel, and naphtha on the Gulf Coast. The result of the regression analysis used to derive the coefficients that will be effective as of February 1, 2023, along with the data for the period 2013-2022, is shown in Exhibit B attached to this letter. The description on page 3 of Attachment 2 to the tariff has been revised to state that the prices used in the regression analysis are for the 2013-2022 period.

Pursuant to Section 6(3) of the Interstate Commerce Act and 18 C.F.R. § 341.14, CPTAI requests special permission for the enclosed tariff to be effective on February 1, 2023, which is seven days' notice. As noted above, this tariff is being filed in compliance with the orders of this Commission and the RCA and Item III.G.6 of CPTAI's presently effective Quality Bank Methodology tariff. Moreover, the data necessary to calculate the revised adjustments is not available in time to make the required tariff filing more than 30 days prior to February 1, 2023. Because the Quality Bank adjustments are calculated on a monthly basis, it is important that the tariff revisions become effective on February 1, 2023.

Pursuant to 18 C.F.R. § 343.3 of the Commission's regulations, CPTAI hereby requests that any protest to its enclosed filing be telefaxed or emailed at the time it is filed to Daniel J. Poynor, at the following telefax number or email address: (202) 429-3902 or DPoynor@steptoe.com.

I hereby certify that on January 24, 2023, a copy of the enclosed tariff will be sent to each subscriber on the subscriber list of CPTAI by electronic service or other agreed-upon means of transmission.

Any questions regarding the accompanying tariff should be addressed to Barat LaPorte at (907) 265-6544.

Sincerely,

DocuSigned by: ermeior amero

Cameron Reitmeier CPTAI, Vice President

Enclosures

CONOCOPHILLIPS TRANSPORTATION ALASKA INC. (CPTAI)

LOCAL PIPELINE TARIFF

CONTAINING THE TAPS QUALITY BANK METHODOLOGY

GENERAL APPLICATION

This tariff shall apply only to those tariffs which specifically incorporate this tariff, and successive issues hereof, by reference.

NOTICES

This tariff is issued in part to comply with the orders issued by the Federal Energy Regulatory Commission in *Trans Alaska Pipeline System*, 113 FERC ¶ 61,062 (2005) (Opinion No. 481); 114 FERC ¶ 61,323 (2006) (Opinion No. 481-A); 115 FERC ¶ 61,287 (2006) (Opinion No. 481-B), and with the orders issued by the Regulatory Commission of Alaska ("RCA") in *In re Formal Complaint of Tesoro Alaska Petroleum Co.*, P-89-1(104)/P-89-2(98)/P-94-4(37)/P-96-6(24)/P-98-9(16)/P-99-12(19) (2005); P-89-1(109)/P-89-2(103)/P-94-4(42)/P-96-6(29)/P-98-9(21)/P-99-12(24) (2006); P-89-1(111)/P-89-2(105)/P-94-4(44)/P-96-6(31)/P-98-9 (23)/P-99-12(26) (2006).

For rules and regulations other than the TAPS Quality Bank Methodology tariff, see F.E.R.C. No. 20.2.0, and reissues thereof.

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

[N] <u>REQUEST FOR SPECIAL PERMISSION</u>

Issued on seven 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.

ISSUED: January 24, 2023

ISSUED BY Cameron Reitmeier, Vice President CONOCOPHILLIPS TRANSPORTATION ALASKA, INC. P.0. Box 100360 Anchorage, Alaska 99510-0360

EFFECTIVE: February 1, 2023

COMPILED BY Amy L. Hoff 1800 West Loop South Suite 1680 Houston, TX 77027 713.357.6229

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TAPS QUALITY BANK METHODOLOGY

I. GENERAL PROVISIONS

A. Definitions

"Barrel" – as used herein means forty-two (42) U.S. gallons at sixty degrees (60°) Fahrenheit and atmospheric pressure.

"Carrier" – as used herein means ConocoPhillips Transportation Alaska, Inc., ExxonMobil Pipeline Company, Harvest Alaska, LLC, the successor to any of them, and/or a pipeline company which may, by proper concurrence, be a party to a joint tariff incorporating this tariff by specific reference.

"Connection" – as used herein means a connection to TAPS (other than at Pump Station No. 1) for the purpose of receiving Petroleum into TAPS.

"Connection Base Petroleum" – as used herein means the Petroleum resulting from the commingling of (1) the Petroleum entering TAPS at a Connection and (2) the Petroleum in TAPS just upstream of the point of entry into TAPS at that Connection.

"Gravity" – as used herein means the gravity of Petroleum expressed in API degrees at sixty degrees (60°) Fahrenheit.

"Gravity Differential Value Per Barrel" – as used herein means the gravity differential value set forth in Section II, Item No. B(3)(iii), as established from time to time in accordance with Section III, Item E.

"LSR" – as used herein means Light Straight Run.

"Mid-Alaska" as used herein means Mid-Alaska Pipeline, LLC.

"Month or Monthly" – as used herein means a calendar month commencing at 0000 hours on the first day thereof and running until 2400 hours on the last day thereof according to Valdez, Alaska, local time.

"OPIS" – as used herein means Oil Price Information Service.

"Petroleum" – as used herein means unrefined liquid hydrocarbons including gas liquids.

"Platts" – as used herein refers to Platts Oilgram Price Report.

"PSVR" – as used herein means the Petro Star Valdez Refinery.

"Pump Station No. 1" – as used herein means the pump station facilities near Prudhoe Bay, Alaska where Petroleum is received into TAPS.

"Pump Station No. 1 Base Petroleum" – as used herein means the Petroleum stream resulting from deliveries into TAPS at Pump Station No. 1 by all Shippers.

"Quality Bank Administrator" – as used herein means the person appointed by the TAPS Carriers to administer the Quality Bank.

"Quality Bank Value" – as used herein means the value of each Petroleum stream as calculated in Section III.

"Shipper" – as used herein means a party who tenders Petroleum to Carrier for transportation and thereafter actually delivers Petroleum to Carrier for transportation.

"State" – as used herein means the State of Alaska.

"STUSCO" – as used herein means Shell Trading (US) Company.

"TAPS" – as used herein means the Trans Alaska Pipeline System.

"TBP" – as used herein means True Boiling Point.

"Valdez Terminal" – as used herein means the TAPS terminal located at Valdez, Alaska.

"Valdez Terminal Base Petroleum" – as used herein means the Petroleum delivered out of the Valdez Terminal.

"Volume" – as used herein means a quantity expressed in Barrels.

"Weighted Average" – as used herein means an average calculated on a Volume weighted basis.

B. Quality Bank Administrator

The TAPS Quality Bank shall be administered by the Quality Bank Administrator, who shall be appointed by the TAPS Carriers, and by those designated by the Quality Bank Administrator to assist the Administrator.

C. Information Furnished to the State of Alaska

The Quality Bank Administrator shall furnish to the State each month copies of the invoices for Quality Bank adjustments and supporting data sent to each shipper. Such information is furnished to the State based upon the State's representation that it will hold such information in confidence and that such information will be used only by officers or agents of the State in the exercise of the officers' or agents' powers.

D. Information Furnished to Carrier by Shipper

Carrier and its designee are authorized by Shipper to receive through measurement, connecting carriers or otherwise all information and data necessary to make the computations under Section II. Shipper will furnish Carrier or its designated Quality Bank Administrator, and consents to Carrier or its designated Quality Bank Administrator acquiring from other carriers or other persons, any additional information and data necessary to make the computations under Section II. Shipper also consents to Carrier or its agents disclosing to the designated Quality Bank Administrator all information and data necessary to make the computations under Section II. The name and address of Carrier's designated Quality Bank Administrator will be made available upon written request to Carrier.

II. QUALITY ADJUSTMENTS

A. Quality Adjustments

Shippers shall be debited and/or credited for all adjustments as provided for in this Section II with respect to all Petroleum shipped. The calculation of Shipper's debits and credits shall be made for each Month as required herein. The credit and debit balances for each accounting shall be adjusted among Shipper and all Shippers in TAPS by collecting funds from those Shippers (including Shipper, if applicable) having debit balances and by thereafter remitting funds collected to the Shippers (including Shipper, if applicable) having credit balances. In the event of delay in collection or inability to collect from one or more Shippers for any reason, only adjustment funds and applicable interest charges actually collected shall be distributed pro rata to Shippers having credit balances. A Monthly accounting shall be rendered to Shipper after the end of each Month.

B. Methodology

Shipper authorizes Carrier or its designee to compute adjustments among all Shippers in TAPS for quality differentials arising out of TAPS common stream operation. Shipper agrees to pay Carrier or its designee the adjustment due from Shipper determined in accordance with the procedures set out in this Section II.

The procedures for determining quality adjustments among all Shippers are specified in detail in the TAPS Quality Bank Methodology set forth in Section III.

As prescribed in detail in Section III, at the close of each Month, Carrier or its designated Quality Bank Administrator shall compute adjustments calculated as follows:

- 1. Pump Station No. 1 Adjustment An adjustment based on the difference between the Quality Bank Value of Pump Station No. 1 Base Petroleum during a Month and the Quality Bank Value of Petroleum received into TAPS at Pump Station No. 1 for a Shipper during the same Month shall be calculated as follows:
 - (i) the Quality Bank Value per Barrel of each stream received into TAPS at Pump Station No. 1 during the Month for a Shipper shall be determined by

summing the Quality Bank Values of each component of one Barrel of that stream as determined in accordance with the TAPS Quality Bank Methodology.

- (ii) the Quality Bank Value per Barrel of the Pump Station No. 1 Base Petroleum for the Month shall be determined by multiplying the Quality Bank Value per Barrel of each stream received into TAPS at Pump Station No. 1 during that Month by the number of Barrels of that stream received into TAPS at Pump Station No. 1 during that Month, summing the products so obtained and dividing the total by the number of Barrels of Petroleum received into TAPS at Pump Station No.1 during the Month.
- (iii) if the Quality Bank Value per Barrel of the Pump Station No. 1 Base Petroleum for any Month is greater than the Quality Bank Value per Barrel of a stream of Petroleum received into TAPS at Pump Station No. 1 during the same Month for a Shipper, such Shipper shall be debited an amount calculated by multiplying such difference by the number of Barrels of such Petroleum received into TAPS for such Shipper at Pump Station No. 1 during that Month.
- (iv) if the Quality Bank Value per Barrel of Pump Station No. 1 Base Petroleum for any Month is less than the Quality Bank Value per Barrel of a stream of Petroleum received into TAPS at Pump Station No. 1 during the same Month for a Shipper, such Shipper shall be credited an amount calculated by multiplying such difference by the number of Barrels of such Petroleum received into TAPS for such Shipper at Pump Station No. 1 during that Month.
- 2. Connection Adjustment An adjustment based on the difference between the Quality Bank Value of any Connection Base Petroleum during a Month and the Quality Bank Value of a Shipper's Petroleum commingled at that Connection during the same Month shall be calculated as follows:
 - the Quality Bank Value per Barrel of a Shipper's Petroleum commingled at a Connection during the Month shall be determined by summing the Quality Bank Values of each component of one Barrel of that Petroleum as determined in accordance with the TAPS Quality Bank Methodology.
 - (ii) the Quality Bank Value per Barrel of any Connection Base Petroleum for the Month shall be the Weighted Average Quality Bank Value of (1) the Petroleum entering TAPS at a Connection during the Month and (2) the Petroleum in TAPS just upstream of the point of entry into TAPS at that Connection during the Month.
 - (iii) if the Quality Bank Value per Barrel of any Connection Base Petroleum for any Month is greater than the Quality Bank Value per Barrel of a Shipper's Petroleum commingled at that Connection during the same Month, such Shipper shall be debited an amount calculated by multiplying such

difference by the number of Barrels of such Shipper's Petroleum commingled at that Connection during that Month.

- (iv) if the Quality Bank Value per Barrel of any Connection Base Petroleum for any Month is less than the Quality Bank Value per Barrel of Shipper's Petroleum commingled at that Connection during the same Month, such Shipper shall be credited an amount calculated by multiplying such difference by the number of Barrels of such Shipper's Petroleum commingled at that Connection during that Month.
- 3. Valdez Terminal Gravity Adjustment An adjustment based on the difference between the Weighted Average Gravity of the Valdez Terminal Base Petroleum and the Weighted Average Gravity of Petroleum received out of the Valdez Terminal by a Shipper shall be calculated as follows:
 - (i) if the Weighted Average Gravity of the Valdez Terminal Base Petroleum for any Month is greater than the Weighted Average Gravity of Petroleum received out of the Valdez Terminal during the same Month by a Shipper, such Shipper shall be credited an amount calculated by multiplying such difference by the Gravity Differential Value Per Barrel and multiplying that total by the number of Barrels of such Petroleum received out of the Valdez Terminal during that Month by such Shipper.
 - (ii) if the Weighted Average Gravity of the Valdez Terminal Base Petroleum for any Month is less than the Weighted Average Gravity of Petroleum received out of the Valdez Terminal during the same Month by a Shipper, such Shipper shall be debited an amount calculated by multiplying such difference by the Gravity Differential Value Per Barrel and multiplying that total by the number of Barrels of such Petroleum received out of the Valdez Terminal during that Month by such Shipper.
 - (iii) The Gravity Differential Value Per Barrel is established at **[U]** \$0.0288 for each one-tenth degree API Gravity (0.1° API).

C. Payment Provisions

In addition to the adjustments described in this Section II, Shipper agrees to pay Carrier or its designee a per Barrel charge to reimburse Carrier for the costs of administering the adjustments among Shippers under this Section II.

In the event any payment is made to Shipper hereunder and it is subsequently determined by any Federal or state court, administrative agency or other governmental entity having jurisdiction that no other Shipper was liable for the adjustment for which payment was made, Shipper receiving such payment shall upon receipt of an accounting from Carrier return the same to Carrier or its designee. Carrier shall promptly utilize same to reimburse all Shippers who made such payments. All payments due from Shipper under this Section II shall be made by Shipper within 20 days of receipt of each accounting and, for any delay in payment beyond such 20 day period, shall bear interest calculated at an annual rate equivalent to 125% of the prime rate of interest of Citibank N.A. of New York, New York, on ninety-day loans to substantial and responsible commercial borrowers as of the date of accounting, or the maximum rate allowed by law, whichever is less.

If Shipper fails to make payment due hereunder within thirty (30) days of issuance of each accounting, Carrier shall have the right to sell at public auction either directly or through an agent at any time after such thirty (30) day period any Petroleum of Shipper in its custody. Such auction may be held on any day, except a legal holiday, and not less than forty-eight (48) hours after publication of notice of such sale in a daily newspaper of general circulation published in the town, city or general area where the sale is to be held, stating the time and place of sale and the quantity and location of Petroleum to be sold. At said sale Carrier shall have the right to bid, and, if it is the highest bidder, to become the purchaser. From the proceeds of said sale, Carrier will deduct all payments due and expenses incident to said sale, and the balance of the proceeds of the sale remaining, if any, shall be held for whomsoever may be lawfully entitled thereto.

Adjustment payments and administrative costs in this Section II are not a part of Carrier's transportation tariff rates, and such shall not be an offset or other claim by Shipper against sums due Carrier for transportation or other charges, costs, or fees due or collected under Carrier's tariffs.

III. QUALITY BANK PROCEDURES

A. Overview

A distillation-based methodology shall be implemented at all TAPS Quality Banks (other than the TAPS Valdez Marine Terminal Quality Bank).

This methodology for calculation of the TAPS Quality Bank debits and credits is based on valuations of Petroleum components. This methodology shall apply to the specific Petroleum streams identified in Sections III.B, III.C. and III.D. and also shall be applied to any streams tendered to TAPS through a new connection. The Quality Bank value of each Petroleum stream shall be the volume-weighted sum of the Quality Bank values of its components. The characteristics and volumes of components for each separate Petroleum stream are based on assay information obtained using a defined set of testing procedures as set forth in Section III.F. Quality Bank credits and debits are determined by comparing the Quality Bank value of each Petroleum stream to the appropriate calculated TAPS "reference" stream Quality Bank value.

B. Quality Bank Streams at Pump Station No. 1 Quality Bank

1. The TAPS Pump Station No. 1 Quality Bank assesses the following four streams: (1) PBU IPA;¹ (2) Lisburne; (3) Kuparuk Pipeline; and (4) Northstar.

2. The Pump Station No. 1 Quality Bank reference stream is the blended common stream leaving Pump Station No. 1. The reference stream Quality Bank value is

¹ PBU IPA is the abbreviation for the Prudhoe Bay Unit Initial Participating Areas.

calculated using the volume weighted average of the four Quality Bank streams identified above plus any streams tendered to TAPS through a new Pump Station No. 1 connection.

C. Quality Bank Streams at Mid-Alaska Quality Bank

1. The Mid-Alaska Quality Bank streams are the Petro Star refinery return stream delivered to TAPS by the Mid-Alaska Pipeline and the passing TAPS common stream at the Mid-Alaska offtake point, both of which are measured at the Mid-Alaska connection.

2. The Mid-Alaska Quality Bank reference stream is the blended TAPS stream immediately downstream from the Mid-Alaska return stream connection. The reference stream Quality Bank value is calculated using the volume weighted average of the Mid-Alaska Quality Bank streams identified above.

D. Quality Bank Streams at Petro Star Valdez Refinery Connection Quality Bank

1. The TAPS PSVR Connection Quality Bank streams are the refinery return stream delivered to TAPS by Petro Star and the passing TAPS common stream at the PSVR offtake point.

2. The Petro Star Valdez Quality Bank reference stream is the blended TAPS stream immediately downstream from the Petro Star return stream connection. The reference stream Quality Bank value is calculated using the volume weighted average of the two PSVR Quality Bank streams identified above.

E. Methodology for Valdez Tanker Load Out Quality Bank

1. A gravity-based Quality Bank methodology shall be used to determine the TAPS Quality Bank adjustments for volumes loaded out of the TAPS Marine Terminal at Valdez, Alaska. A Gravity Differential Value Per Barrel shall be calculated as specified in Items E.2 through E.5 below.

2. The daily average six month gravity differentials posted for November 1 - April 30 and May 1 - October 31 for California and West Texas Sour crude oils, applicable to the range(s) of gravity which includes the average API gravity of the TAPS commingled stream at Valdez (sometimes referred to as "ANS"), shall be determined. The postings of the following company shall be used for West Texas Sour crude oils: STUSCO. The postings of the following companies shall be used for California crude oils: Chevron Crude Oil Marketing, Exxon Mobil Corporation, STUSCO and Union 76. In the event that any of the aforementioned companies is merged or acquired by other companies, sells assets or reorganizes, the postings of any successor companies shall be utilized. As long as at least two companies' gravity differentials are posted in each region (West Texas and California), the postings shall be averaged to determine the gravity differentials for that region.

3. The aforementioned six-month average gravity differentials for the specified companies in each region shall be used to derive a simple average West Texas Sour differential and a simple average California differential.

4. The average West Texas Sour differential and the average California differential shall then be weighted by the percentage of ANS which is distributed east of the Rockies (including Puerto Rico and the Virgin Islands) and to the West Coast (including Alaska and Hawaii), respectively, which percentages were last determined in 2011 by averaging the percentage distributed to each region as was last reported by the Maritime Administration of the United States Department of Transportation in September 2011 . Volumes exported from the United States shall be excluded from the calculation of the percentages distributed to each region. Percentages provided by the Maritime Administration of the United States Department of Transportation in September 2011 indicated that 100 percent of ANS was delivered to the West Coast, which is the percentage that will continue in effect until further notice.

5. In the event that ANS is transported by pipeline from the West Coast to destinations east of the Rockies, the weighting of the average differentials shall be adjusted to reflect the percentage of ANS actually distributed to such regions both by vessel and pipeline. If such data regarding the destination of ANS transported by pipeline are not publicly available, the Quality Bank Administrator shall use the percentage of ANS distributed to such regions last used, provided, however, that any shipper may protest such determination by filing a complaint with the Quality Bank Administrator and thereafter filing an appropriate pleading with the FERC and RCA if the complaint is not otherwise resolved.

6. The Gravity Differential Value Per Barrel shall be reviewed each November and May, and shall be adjusted to the nearest hundredth of a cent per one-tenth degree API gravity per barrel whenever the amount of any change in the quality adjustment derived above is at least five (5) percent greater or five (5) percent less than the adjustment then in effect. The effective dates of any such adjustments shall be the following January 1 and July 1 respectively.

7. The Gravity Differential Value Per Barrel in effect shall be applied to the difference in gravity (in API degrees @ 60° Fahrenheit) between the weighted average gravity of the Petroleum delivered out of the Terminal during a calendar month and the weighted average gravity of Petroleum received out of the Terminal by an individual shipper during such month.

F. Methodology For Pump Station No. 1, Mid-Alaska Connection and PSVR Connection

1. Assay Methodology -- Sampling Procedure

Except as specified below, and except for the reference streams, each of the Quality Bank streams listed above (for Pump Station No. 1, Mid-Alaska, and PSVR Quality Banks) will be sampled by the Quality Bank Administrator using continuous monthly composite samplers on a flow rate dependent basis, and assays of these continuously collected samples shall be performed monthly by the Quality Bank Administrator.

2. Assay Analysis Procedure

a. Except as specified in paragraph b. below, the assays will include a TBP distillation and, as applicable, gas chromatograph analysis of each Quality Bank stream. Specifically, the TBP procedure will employ ASTM 2892 up to 650°F and ASTM 5236 for the 650 to 1050+°F range for the Petroleum samples. The light ends (175°F minus) from the Petroleum streams will be subject to a gas chromatograph analysis to determine the volumes of

the propane ("C3"), Iso-butane ("iC4"), and normal butane ("nC4"), with the LSR (sometimes referred to as natural gasoline) volume determined by difference between the total of the three components and the measured 175°F minus volume.

b. The specific gravities of C3, iC4, nC4 will be derived from GPA Standard 2145.

The following volume and quality data will be determined for each

3. Assay Data

a.

stream.

Component	TBP Boiling Range °F	% Vol	Specific Gravity
Propane (C3)		Х	Х
I-Butane (iC4)		Х	Х
N-Butane (nC4)		Х	Х
LSR	C5-175	Х	Х
Naphtha	175-350	Х	Х
Light Distillate	350-450	Х	Х
Heavy Distillate	450-650	Х	Х
Gas Oil	650-1050	Х	Х
Resid	1050+	Х	Х
Full Petroleum Stream			Х

b. The total volume must add to 100% and the total component weighted mass must be checked against the mass of the full Petroleum stream. These weight balances must be the same within calculation and assay precision. If the assay fails this threshold test of validity, a second assay shall be performed on the sample. An example of assay data required is presented in Attachment 1. These data are the basis for all calculations in this Quality Bank methodology. The Quality Bank operates on a calendar month basis, with the continuous samples retrieved for analysis on the last day of each month.

c. The Quality Bank Administrator shall investigate the validity of a sample if each of the following two tests is met.

(i) If one or more of an individual stream's reported component percentages for a month varies by more than the ranges indicated in the following table as compared to the prior month's assay.

Variation in % of Stream *Relative to Prior Month*

Component

Propane	± 0.1
I-Butane	± 0.1
N-Butane	± 0.25
LSR	± 0.5
Naphtha	± 1.0
Light Distillate	± 1.0
Heavy Distillate	± 1.0
Gas Oil	± 1.5
Resid	± 1.0

As an example, if a Petroleum stream's heavy distillate volume percent is 23% for the prior month, a heavy distillate volume percent less than 22% or greater than 24% (exceeding the \pm 1% range) shall cause the Quality Bank Administrator to check the second test.

(ii) The second test is whether the volume change in the specific component has resulted in a significant change in the stream's relative value when compared to the prior month's relative value using the prior month's prices. If the change results in a price movement of more than $\pm 15\phi$ per barrel, then the sample's validity must be investigated.

(iii) The Quality Bank Administrator shall ascertain from the tendering shipper(s) possible causes for the change in the stream's assay. The Quality Bank Administrator may have a second assay performed for the sample in question. The Quality Bank Administrator may decide that the first assay is valid, that the second assay is valid, or that the sample is invalid.

(iv) Should the Quality Bank Administrator determine that a sample is invalid, the last assay results accepted and used in the Quality Bank for the stream will be used instead of the invalid sample in the Quality Bank calculation.

G. Component Unit Value Procedure

1. Component unit values for the U.S. Gulf Coast and U.S. West Coast will be weighted by the percentage of ANS which was distributed east of the Rockies (including Puerto Rico and the Virgin Islands) and to the West Coast (including Alaska and Hawaii), respectively, as was last determined using placement data reported by the Maritime Administration of the United States Department of Transportation in September 2011.

2. In the event that ANS is transported by pipeline from the West Coast to destinations east of the Rockies, the price weighting shall be adjusted to reflect the percentage of ANS actually distributed to each region both by vessel and pipeline. If such data regarding the destination of ANS transported by pipeline are not publicly available, the Quality Bank Administrator shall use the percentage of ANS distributed to such regions last used. Percentages provided by the Maritime Administration of the United States Department of Transportation for

the period from 1999 to 2011 indicated that 100 percent of ANS was delivered to the West Coast, which is the percentage that will continue in effect until further notice.

3. All the product prices used to calculate the unit values of the components other than the Gulf Coast and West Coast Resid components are taken from Platts and OPIS as set forth in Attachment 2. Prices will be collected for each day markets are open and published prices are available (each "quote day"). The calculated monthly average price will be the average of each quote day mid-point price for the month. These monthly average prices (adjusted as shown in Attachment 2) are used to calculate component unit values each month.

4. The unit value of the West Coast Naphtha component is calculated using the formula given in Attachment 2, page 3.

5. The unit values of the Resid component on the Gulf Coast and the West Coast are calculated using the formulas given in Attachment 2, pages 4 and 5 respectively. The prices for petroleum coke and natural gas are taken from Pace Petroleum Coke Quarterly and Natural Gas Week, respectively. The unit values of all other subcomponents are the same as those specified for that material in Attachment 2. The Quality Bank Administrator shall have the discretion to retest the API gravity, sulfur content and carbon residue of the Resid component of the common stream whenever he believes that there may be a change in the common stream that will significantly affect the Resid component unit values. If the Quality Bank Administrator elects to retest the Resid component of the common stream and is satisfied that the sample is properly taken and tested, the new values for API gravity, sulfur content and carbon residue content shall be used to calculate the multipliers (product yields) in the Resid formulas given in Attachment 2, pages 4 and 5. The calculation of the new multipliers will be done using the spreadsheet depicted in Attachment 2, page 6.

6. In January of each year the adjustments to the prices used to value Light Distillate and Heavy Distillate (shown on Attachment 2 page 2) as well as the Gulf Coast and West Coast coker costs (shown on Attachment 2, pages 4 and 5) shall be revised in accordance with the changes in the Nelson-Farrar Cost Index (Operating Indexes Refinery), by multiplying the adjustments or costs for the previous year by the ratio of (a) the average of the monthly indexes that are then available for the most recent 12 consecutive months to (b) the average of the monthly indexes for the previous (*i.e.*, one year earlier) 12 consecutive months.

7. a. In the event that one of the product prices listed in Attachment 2 is no longer quoted in one of the two markets (West Coast or Gulf Coast), the price quoted for the product in the remaining market shall be used to value the entire component.

b. If both of the product prices listed in Attachment 2 for a component are no longer quoted or if the specifications or other basis for the remaining quotation(s) is radically altered, the Quality Bank Administrator shall notify the FERC, the RCA and all shippers of this fact and propose an appropriate replacement product price, with explanation and justification. Comments may be filed with the FERC and RCA within thirty days of the filing by the Quality Bank Administrator. If the FERC and RCA take no action within sixty days of the filing, the replacement product price proposed by the Quality Bank Administrator will become effective as of the sixtieth day. For the period between the time that quotation of a product price is discontinued or the specifications or other basis for a quotation is radically altered and the time that the Commissions approve the use of a replacement product price, the Quality Bank Administrator shall use as the unit value of the component in question the unit value for the last month for which a product price was available for such component.

8. For any particular month of Quality Bank calculations, the pricing data for the month of shipment will be used (i.e., the prices are current with the volumes and assay data).

H. Quality Bank Stream Component Calculation Procedure

After all volume, quality, and pricing data are collected, the Quality Bank Administrator will establish quality differentials for each stream identified in Sections III.B., III.C., and III.D.

I. Quality Bank Calculations Procedure

The assay data and calculation procedures required by this Methodology are summarized in the Attachments. The Attachments are for reference purposes only and are not intended to predict the impact of this procedure on any specific Petroleum stream or any specific company. In the event of a conflict between the provisions of this Methodology as set forth above and the Attachments, the provisions of this Methodology shall control.

ATTACHMENT 1:	Yield Data for Example Streams
ATTACHMENT 2:	Component Unit Value Pricing Basis
ATTACHMENT 3:	Example Component Unit Values in \$/Bbl
ATTACHMENT 4:	Example Stream Values in \$/Bbl
ATTACHMENT 5:	Quality Bank Calculation Example

J. Unanticipated Implementation Issues

This Methodology is intended to contain a comprehensive treatment of the subject matter. However, unanticipated issues concerning implementation of this Methodology may arise. If so, the Quality Bank Administrator is authorized to resolve such issues in accordance with the best understanding of the intent of the FERC and RCA that the Quality Bank Administrator can derive from their orders regarding the Quality Bank methodology. The Quality Bank Administrator's resolution of any such issue shall be final unless and until changed prospectively by orders of the FERC and RCA.

Explanation of Symbols:

- [I] Increase
- [D] Decrease
- [U] Unchanged rate
- **[N]** New
- [W] Change in wording only

ATTACHMENT 1 YIELD DATA FOR EXAMPLE STREAMS

COMPONENT	DEFINITION BOILING RANGE (°F)	STREAM A	STREAM B	STREAM C
PROPANE (C3)		0.15	0.00	0.10
ISOBUTANE (IC4)		0.10	0.02	0.40
NORMAL BUTANE (nC4)		0.50	0.10	2.00
LSR	C5-175	4.50	3.50	6.00
NAPHTHA	175-350	13.50	11.00	5.50
LIGHT DISTILLATE	350-450	9.00	9.00	2.00
HEAVY DISTILLATE	450-650	21.00	22.00	16.00
GAS OIL	650-1050	31.25	30.38	41.00
RESID	1050+	20.00	24.00	27.00
TOTAL		100.00	100.00	100.00
EXAMPLE VOLUME, Thousands Barrels per Month		34,000	9,000	2,500

ATTACHMENT 2

COMPONENT UNIT VALUE PRICING BASIS EFFECTIVE [W] 2/1/2022 2/1/2023

PROPANE (C3)

United States Gulf Coast	United States West Coast
Platts' Enterprise Mt. Belvieu_spot quote for Propane.	OPIS's Los Angeles delivered spot quote for Propane.

ISOBUTANE (iC4)

United States Gulf Coast	United States West Coast
Platts' Enterprise Mt. Belvieu spot quote for Isobutane.	OPIS's Los Angeles delivered spot quote for Isobutane.

NORMAL BUTANE (nC4)

United States Gulf Coast	United States West Coast
Platts' Enterprise Mt. Belvieu spot quote for N-Butane.	OPIS's Los Angeles delivered spot quote for Normal Butane.

LIGHT STRAIGHT RUN (C5 – 175°F)

United States Gulf Coast	United States West Coast
Platts' Enterprise_Mt. Belvieu spot quote for Natural Gasoline.	OPIS's Bakersfield delivered spot quote for Natural Gasoline.

<u>NAPHTHA (175° – 350°F)</u>

United States Gulf Coast	United States West Coast
Platts' U.S. Gulf Coast spot quote for	See Attachment 2, page 3.
Waterborne Heavy Naphtha Barge.	

COMPONENT UNIT VALUE PRICING BASIS

LIGHT DISTILLATE (350° - 450°F)

United States Gulf Coast	United States West Coast
Platts' U.S. Gulf Coast spot quote for	Platts' U.S. West Coast spot quote for
Waterborne Jet Kerosene 54 less [I] <u>1.0367</u>	Waterborne Jet Fuel less [I] <u>1.0367</u> cents per
cents per gallon.	gallon.

HEAVY DISTILLATE (450° – 650°F)

United States Gulf Coast	United States West Coast
Platts' U.S. Gulf Coast spot quote for	Platts' U.S. West Coast spot quote for Los
Waterborne No. 2 less [I] <u>4.1462</u> cents per	Angeles Pipeline ULS (EPA) Diesel less
gallon.	[I] <u>13.4151</u> cents per gallon.

GAS OIL (650° – 1050°F)

United States Gulf Coast	United States West Coast
OPIS's U.S. Gulf Coast spot quote for barge High Sulfur VGO.	OPIS's U.S. West Coast (Los Angeles basis) spot quote for High Sulfur VGO.

RESID (1050°F and Over)

United States Gulf Coast	United States West Coast
See Attachment 2, page 4	See Attachment 2 mage 5
See Attachment 2, page 4.	See Attachment 2, page 5.

U.S. West Coast Naphtha Component Unit Value Pricing Basis

West Coast Naphtha Component Value, \$ per Barrel = [I] 0.746 x Gasoline Price + [D] 0.065 x Jet Fuel Price + [I] 4.920

Where:

Gasoline Price – Platts' West Coast Waterborne Unleaded 87, \$ per Barrel Jet Fuel Price – Platts' West Coast Waterborne Jet Fuel, \$ per Barrel The prices used are the monthly average of the daily high and low prices.

The three constants in the equation were derived from a dual variable regression analysis of Platts' Gulf Coast monthly average prices for waterborne Naphtha, unleaded 87 Gasoline, and Jet/Kero 54 over the 10-year period January, $[W] \frac{2012}{2013} \frac{2013}{2013}$ through December, $[W] \frac{2021}{2022}$. The Quality Bank Administrator will recompute the constants in the regression equation whenever circumstances require, but not less than once each year.

U.S. GULF COAST RESID COMPONENT UNIT VALUE PRICING BASIS

Resid Component Value, \$ per Barrel =

- (0.0348) x QB Propane Value, \$/Bbl.
- + (0.0040) x QB Isobutane Value, \$/Bbl.
- + (0.0264) x QB Normal Butane Value, \$/Bbl.
- + (0.0616) x QB LSR Value, \$/Bbl.
- + (0.1008) x QB Naphtha Value, /Bbl.
- + (0.2046) x QB Heavy Distillate Value, \$/Bbl.
- + (0.2929) x QB Gas Oil Value, \$/Bbl.
- $+ (0.0631) \text{ x Coke Price}(^{1}) 5.00
- + (0.2989) x Natural Gas Price(²)
- **[I]** $\underline{15.5624}$ (³)
- (1) Monthly price quoted in *Pace Petroleum Coke Quarterly* for Gulf Coast high sulfur petroleum coke, >50 HGI, mid point price, \$ per metric ton, converted to \$ per short ton.
- (2) Monthly Henry Hub natural gas spot price quote from *Natural Gas Week*, monthly weighted averages, \$ per MMBtu.
- (3) Gulf Coast coker and coker product treatment costs, including capital recovery, \$ per Barrel.

U.S. WEST COAST RESID COMPONENT UNIT VALUE PRICING BASIS

Resid Component Value, \$ per Barrel =

- (0.0348) x QB Propane Value, \$/Bbl.
- + (0.0040) x QB Isobutane Value, \$/Bbl.
- + (0.0264) x QB Normal Butane Value, \$/Bbl.
- + (0.0616) x QB LSR Value, \$/Bbl.
- + (0.1008) x QB Naphtha Value, /Bbl.
- +(0.2046) x QB Heavy Distillate Value, \$/Bbl.
- + (0.2929) x QB Gas Oil Value, \$/Bbl.
- $+ (0.0631) \text{ x Coke Price}(^{1}) \8.75
- + (0.2989)x Natural Gas Price(²)+ \$0.15
- $[\mathbf{I}] \underline{17.4139} (^3)$
- (1) Monthly price quoted in *Pace Petroleum Coke Quarterly* for West Coast low sulfur petroleum coke, >2% Sulfur, mid point price, \$ per metric ton, converted to \$ per short ton.
- (2) Monthly California natural gas spot price quote from *Natural Gas Week*, gas price trends, (south, delivered to pipeline), \$ per MMBtu.
- (3) West Coast coker and coker product treatment costs, including capital recovery, \$ per Barrel.

COKER PRODUCT YIELD MULTIPLIERS 68 DEGREE F C5 CUT POINT (1)

[U]—Unchanged Rate (Yield). All rates (yields) on this page are unchanged.

Product	<u>Base Yield</u> (per Bbl.) ¹	<u>Yield Impact</u> <u>per +1% MCR</u> <u>(per Bbl.)</u>	<u>Yield Impact</u> per +1 °API (per Bbl.)	<u>Yield Impact</u> <u>per +1% Sulfur</u> <u>(per Bbl.)</u>	<u>Revised</u> <u>Product Yield</u> <u>(per Bbl.)</u>
Propane	0.0348	0.0000	0.0000	0.0000	0.0348
Isobutane	0.0040	0.0000	0.0000	0.0000	0.0040
Normal Butane	0.0264	0.0000	0.0000	0.0000	0.0264
LSR	0.0609	0.0014	0.0008	-0.0003	0.0616
Naphtha	0.0996	0.0023	0.0013	-0.0005	0.1008
Heavy Distillate	0.2080	-0.0078	-0.0039	-0.0013	0.2046
Gas Oil	0.2989	-0.0134	-0.0067	-0.0019	0.2929
Coke	0.0618	0.0030	0.0015	-0.0003	0.0631
Fuel Gas	0.2989	0.0000	0.0000	0.0000	0.2989

	Caleb Brett 2001 Assay
23.00	23.1
5.50	6.2
2.50	2.47

¹ From EMT-197 revised to use 68° F cut point for C⁵+

ATTACHMENT 3 EXAMPLE COMPONENT UNIT VALUES IN \$/Bbl

COMPONENT NAME	WEST COAST (\$/Bbl)	GULF COAST (\$/Bbl)	WEIGHTED AVERAGE (\$/Bbl)
PROPANE (C ₃)	19.7925	15.0442	19.68
ISOBUTANE (iC ₄)	24.1238	18.4333	23.99
NORMAL BUTANE (nC4)	18.1125	18.4800	18.12
LSR (C ₅ - 175°F)	18.5850	19.5854	18.61
NAPHTHA (175°F - 350°F)	21.3383	21.3383	21.34
LIGHT DISTILLATE (350°F - 450°F)	25.9817	22.9396	25.91
HEAVY DISTILLATE (450°F - 650°F)	23.0000	22.1112	22.98
GAS OIL (650°F - 1050°F)	20.8133	21.8133	20.84
RESID (1050°F and over)	14.6349	15.0000	14.64
WEIGHTING FACTOR	97.71	2.29	

ATTACHMENT 4 EXAMPLE STREAM VALUES IN \$/Bbl

COMPONENT NAME	STREAM A	STREAM B	STREAM C
PROPANE (C ₃)	0.029520	0.000000	0.019680
ISOBUTANE (iC4)	0.023990	0.004798	0.095960
NORMAL BUTANE (nC4)	0.090600	0.018120	0.362400
LSR (C5 - 175°F)	0.837450	0.651350	1.116600
NAPHTHA (175°F - 350°F)	2.880900	2.347400	1.173700
LIGHT DISTILLATE (350°F - 450°F)	2.331900	2.331900	0.518200
HEAVY DISTILLATE (450°F - 650°F)	4.825800	5.055600	3.676800
GAS OIL (650°F - 1050°F)	6.512500	6.331192	8.544400
RESID (1050°F and over)	2.928000	3.513600	3.952800
TOTAL	20.460660	20.253960	19.460540

ATTACHMENT 5 QUALITY BANK CALCULATION EXAMPLE

QUALITY BANK REFERENCE STREAM VALUE CALCULATION

	VOLUME (MBPM)	VALUE (\$/Bbl)	TOTAL VALUE M\$/Month
STREAM A	34,000	20.460660	\$ 695.66
STREAM B	9,000	20.253960	\$182.29
STREAM C	2,500	19.460540	\$48.65
TOTAL	45,500	20.364823(1)	\$926.60
(Reference Stream)			
(1) Total Value Divided by Total Volume			

QUALITY BANK PAYMENT/RECEIPT CALULATIONS

	DIFFERENTIAL(²)	(MBPM)	PAYMENT OR RECEIPT (M\$/Month(³)
STREAM A	0.095837	34,000	\$3,258.47
STREAM B	(0.110863)	9,000	\$ (997.76)
STREAM C	(0.904283)	2,500	\$ (2,260.71)
(2) Stream value minus reference value			
(3) Differential times volume			

EXHIBIT A

Exhibit A Page 1 of 1

TAPS Quality Bank Index Ratio & Price Adjustments Effective: February, 2023

		Nelson-Farra	ar Index Ratio		
	Index Ratio	= 849.5	/ 743.0 =	1.1434227646	
Index Date	Issue Date	Index	Index Date	Issue Date	Index
Sep 2020	12/11/2020	706.5	Sep 2021	12/10/2021	821.4
Oct 2020	03/08/2021	700.2	Oct 2021	01/10/2022	837.5
Nov 2020	03/08/2021	705.9	Nov 2021	04/05/2022	848.0
Dec 2020	03/08/2021	710.3	Dec 2021	04/05/2022	833.8
Jan 2021	04/14/2021	712.2	Jan 2022	05/20/2022	825.0
Feb 2021	05/10/2021	747.6	Feb 2022	05/20/2022	851.0
Mar 2021	06/14/2021	776.3	Mar 2022	06/20/2022	825.6
Apr 2021	07/09/2021	753.4	Apr 2022	06/20/2022	844.1
May 2021	08/19/2021	755.4	May 2022	07/12/2022	884.6
Jun 2021	09/17/2021	767.1	Jun 2022	09/02/2022	883.8
Jul 2021	10/08/2021	783.7	Jul 2022	10/14/2022	857.4
Aug 2021	11/05/2021	797.0	Aug 2022	11/18/2022	882.1
	Average	743.0	-	Average	849.5

Reference Price Adjustments

(This year's Price Adjustments) = (Last year's Price Adjustments) x (Index Ratio)

	Gulf Coast			West	t Coast
	(¢/Gal)	(\$/BBL)		(¢/Gal)	(\$/BBL)
Light Distillate					
2022	-0.9067	-0.3808	2022	-0.9067	-0.3808
2023	-1.0367	-0.4354	2023	-1.0367	-0.4354
Heavy Distillate					
2022	-3.6261	-1.5230	2022	-11.7324	-4.9276
2023	-4.1462	-1.7414	2023	-13.4151	-5.6343
Resid					
2022	N/A	-13.6104	2022	N/A	-15.2296
2023	N/A	-15.5624	2023	N/A	-17.4139

EXHIBIT B

<u>GC Naphtha, Gasoline, Jet Fuel Monthly Averages</u> 2013-2022

	X1	X2	Y
	GC Gasoline	GC Jet Fuel	GC Naphtha
		Gulf Coast	
	(\$/bbl)	(\$/bbl)	(\$/bbl)
Jan-13	115.4084	130.7314	116.6511
Feb-13	126.7725	135.6485	130.9550
Mar-13	124.8692	124.8862	122.4579
Apr-13	118.5238	118.0641	101.6516
May-13	119.0372	114.9651	100.5104
Jun-13	116.3740	116.8077	97.2401
Jul-13	124.7450	122.1534	110.0678
Aug-13	123.6325	126.7554	110.2404
Sep-13	110.9315	123.3065	108.7796
Oct-13	106.2768	121.8027	106.7972
Nov-13	104.3578	118.8441	105.0960
Dec-13	107.8698	124.5906	113.6158
Jan-14	108.7140	122.6048	111.6130
Feb-14	114.0349	125.2707	110.2228
Mar-14	115.7054	121.8592	111.2354
Apr-14	122.7586	121.8298	112.3046
May-14	120.7710	120.9320	112.9495
Jun-14	125.9424	121.6602	116.3704
Jul-14	119.9610	119.1737	111.7309
Aug-14	116.4634	120.2044	106.8374
Sep-14	111.1492	115.2680	102.7072
Oct-14	93.3459	104.0462	85.8670
Nov-14	84.3934	97.7858	78.0584
Dec-14	61.5176	76.1194	56.7026
Jan-15	54.7178	63.8553	56.0786
Feb-15	68.1656	73.6649	66.9056
Mar-15	71.0953	69.1423	66.6290
Apr-15	78.3730	72.3340	67.7380
May-15	83.3690	78.4409	73.9547
Jun-15	87.2298	73.5332	74.4017
Jul-15	83.3442	65.6208	59.4901
Aug-15	68.7016	59.0546	51.0866
Sep-15	57.6182	59.1398	53.1632
Oct-15	55.0017	59.2778	53.5603
Nov-15	52.7615	56.6655	53.2025
Dec-15	50.6636	46.4591	47.7475

GC Naphtha, Gasoline, Jet Fuel Monthly Averages
<u>2013-2022</u>

	X1	X1 X2		
	GC Gasoline GC Jet Fuel		GC Naphtha	
		Gulf Coast		
	(\$/bbl)	(\$/bbl)	(\$/bbl)	
Jan-16 43.9327		39.7470	40.1250	
Feb-16 40.8851		41.4737	36.7414	
Mar-16	52.2274	45.6475	47.1076	
Apr-16	57.5694	48.3840	47.0244	
May-16	61.7238	55.1676	52.3298	
Jun-16	63.4276	58.8832	50.7942	
Jul-16	57.3229	53.5416	48.1343	
Aug-16	60.3949	55.5762	49.4539	
Sep-16	59.3320	56.2086	49.3120	
Oct-16	63.1896	61.4184	54.0486	
Nov-16	55.8312	56.8399	50.5911	
Dec-16	66.6972	63.6322	58.9582	
Jan-17	67.0732	64.5343	60.5046	
Feb-17	66.0129	66.4557	61.8295	
Mar-17	64.8615	61.6187	56.0640	
Apr-17	68.8804	64.0493	56.4473	
May-17	64.7650	59.7608	53.7275	
Jun-17	61.6243	55.1897	49.7297	
Jul-17	65.4165	60.9309	53.4344	
Aug-17	69.8265	67.3406	57.4766	
Sep-17	73.2990	74.0634	62.6846	
Oct-17	70.1390	70.2177	63.6777	
Nov-17	74.4003	74.6953	67.4125	
Dec-17	72.4487	77.2168	67.9232	
Jan-18	78.8448	82.9372	72.9988	
Feb-18	75.9818	78.6826	68.9335	
Mar-18	77.7806	78.4732	67.9046	
Apr-18	83.5980	85.4698	73.5740	
May-18	88.8619	91.2236	80.9487	
Jun-18	84.9018	88.4314	77.7878	
Jul-18	86.5522	88.8738	81.6312	
Aug-18	85.9501	89.6284	80.3787	
Sep-18	86.1882	92.5534	80.3524	
Oct-18	83.6560	95.2169	80.2430	
Nov-18	66.0280	82.7759	62.1325	
Dec-18	58.3161	72.5888	55.0086	

<u>GC Naphtha, Gasoline, Jet Fuel Monthly Averages</u> <u>2013-2022</u>

	X1 X2 Y			
	GC Gasoline GC Jet Fuel		GC Naphtha	
		Gulf Coast	-	
	(\$/bbl)	(\$/bbl)	(\$/bbl)	
Jan-19 58.4308		76.1066	56.2218	
Feb-19	64.8261	80.4917	62.1790	
Mar-19	77.3810	80.8028	69.5110	
Apr-19	84.5202	83.7084	69.2952	
May-19	79.6467	83.6974	65.0517	
Jun-19	72.4769	77.0274	55.9604	
Jul-19	78.1220	81.4370	61.5220	
Aug-19	70.0577	76.4356	55.5009	
Sep-19	70.8013	79.5644	56.0908	
Oct-19	69.1614	78.6746	57.6680	
Nov-19	69.5040	77.2166	60.6398	
Dec-19	69.8204	80.1746	62.8904	
Jan-20	67.7450	74.8388	59.6300	
Feb-20	64.4205	64.3984	54.1692	
Mar-20	35.9644	39.8903	26.4476	
Apr-20	24.1136	25.5916	19.1886	
May-20	35.9682	31.5987	31.6737	
Jun-20	47.0467	42.1825	42.7321	
Jul-20	49.3485	46.2892	44.2607	
Aug-20	51.4326	47.4636	44.7776	
Sep-20	49.9608	43.1480	42.6758	
Oct-20	48.6391	44.8304	43.0502	
Nov-20	48.2142	48.1236	43.4782	
Dec-20	55.3818	56.1332	50.5565	
Jan-21	63.8524	60.0702	59.2324	
Feb-21	72.9885	68.1085	66.7106	
Mar-21	82.7648	70.2297	68.9824	
Apr-21	83.3184	70.2782	65.9384	
May-21	86.4557	74.0405	68.1280	
Jun-21	89.9483	78.5581	72.8620	
Jul-21	93.4536	79.8688	76.9596	
Aug-21	92.2482	77.0809	74.5109	
Sep-21	92.4952	84.6670	77.7062	
Oct-21	102.0986	96.8580	87.8546	
Nov-21	96.3755	93.0720	85.5637	
Dec-21	89.8086	88.2540	77.9576	

	X1	X2	Y
	GC Gasoline	GC Jet Fuel	GC Naphtha
		Gulf Coast	
	(\$/bbl)	(\$/bbl)	(\$/bbl)
Jan-22	101.5526	102.7196	87.5729
Feb-22	113.1621	113.0828	98.1748
Mar-22	135.1164	146.0293	114.8441
Apr-22	134.3422	163.8424	104.6524
May-22	158.2826	165.4348	103.9756
Jun-22	170.4998	174.9298	114.1688
Jul-22	136.2287	148.9364	97.0952
Aug-22	118.3642	141.8362	90.5575
Sep-22	108.6522	137.0232	76.7688
Oct-22	120.2458	149.7032	83.8688
Nov-22	106.5802	134.0850	78.7395
Dec-22	93.5322	123.6308	71.0130

<u>GC Naphtha, Gasoline, Jet Fuel Monthly Averages</u> 2013-2022

Quality Bank

WC Naphtha

2013-2022 Regression

SUMMARY OUTPUT

Regression Statistics					
Multiple R	0.939068458				
R Square	0.881849568				
Adjusted R Square	0.879829903				
Standard Error	8.279200854				
Observations	120				

ANOVA

	df	SS	MS	F	Significance F
Regression	2	59857.95734	29928.97867	436.6314954	5.46344E-55
Residual	117	8019.784513	68.54516678		
Total	119	67877.74186			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	<i>Upper 95.0%</i>
Intercept	4.919576514	2.476008651	1.98689795	0.049270536	0.015971126	9.823181902	0.015971126	9.823181902
X Variable 1	0.746052746	0.096481272	7.732617199	4.05103E-12	0.554976642	0.93712885	0.554976642	0.93712885
X Variable 2	0.065311332	0.083487799	0.782285955	0.43562691	-0.100031878	0.230654543	-0.100031878	0.230654543

		Р Ш a X
Effective Februar	y 1, 2023	Exhibit Page 5
Gasoline, K ₁	0.746	5 t of B
Jet Fuel, K ₂	0.065	១ ថ្មី ស ប
Intercept, K ₃	4.920	