

Crude Oil Quantity and Quality Determination

I. General

All measurement & sampling equipment, procedures, calculations, and practices (whether performed by IIC or by terminal personnel) shall be performed in conformance with the most current International measurement, sampling and analysis standards (API Manual of Petroleum Measurement Standards (MPMS), Energy Institute Hydrocarbon Management (EI HM), ISO, NIST and ASTM). Volume and density measurements shall be adjusted from observed conditions to standard or base conditions (i.e. 60 degrees Fahrenheit or 15.0 or 20.0 degrees Celsius and a pressure of one standard atmosphere of 14.696 PSIA etc.) in accordance with the latest revision of API MPMS Chapter 11 (e.g. Table 6A, 54A etc. whichever table is applicable).

Each commercial party shall have the right to witness the measurement processes, provided adequate notification is given to interested parties.

II. Quantity Determination for Marine, Pipeline, Truck or Rail Tank Car

- A.) The quantity and quality of Crude Oil received or delivered shall be determined by a mutually appointed Independent Inspection Company (IIC). Quantity as determined by the IIC shall be final and binding on all parties and shall be the basis for preparing relevant shipping documents and invoices save fraud and/or manifest error. If, for any reason an IIC is not in attendance or if terminal operating procedures prevail, then quantity as determined by terminal personnel shall be final and binding on all parties and shall be the basis for preparing relevant shipping documents and invoices save fraud and/or manifest error.
- B.) All measurements shall be determined by one of the following methods in descending order of preference;
 - 1.) Proven custody transfer Meters
 - 2.) Gauging of Static Tanks with the application of certified tank capacity (i.e. strapping) tables before and after cargo transfer. (See Notes 1&2 below)
 - 3.) Marine Vessel Measurements
 - i. Quantity shall be based on the volumes as determined from measurements of the vessel cargo tanks with the application of certified cargo tank capacity (i.e. strapping) tables before and after the transfer and adjusted for the vessel's Vessel Experience Factor (VEF) per API MPMS 17.9- EI HM 49.
 - ii. Delivered ex-ship Cargoes involving Lighterage or Ship-to-Ship Transfers (STS). In the event that a cargo is lightered from Seller's vessel; "Ship to be Lightered" (STBL), the quantity of

cargo delivered/received shall be determined from the IIC's gauging of the receiving vessel's; "Service Vessel" (SV) tanks and adjusted for the SV's VEF (as valid and verifiable per API MPMS 17.9- EI HM 49).

- 4.) Truck or Rail - Certified Weigh Scales
- 5.) Truck or Rail - Tank Car gauge with the application of certified truck or rail tank car capacity (i.e. strapping) tables before and after cargo transfer.
- 6.) Agreement between commercial parties. In the event of a failure in the above measurement points, the parties shall agree to negotiate in good faith and without prejudice, a new basis for custody transfer volumes.

Note 1: Consistent with API MPMS 3.1A, measurements taken through unslotted standpipes shall not be used for custody transfer purposes. All delivering/receiving shore tanks shall be static and shall have a liquid oil surface at the official point of calibration. All receiving shore tanks shall contain sufficient volumes of oil, prior to commencement of receiving operations, to minimize measurement inaccuracy due to tank bottom movement and/or deformation. Shore tank(s) liquid levels shall not be within their calibrated tank capacity tables floating roof's critical zone(s) either prior to commencement or completion of transfer operations and/or performance of shore tanks custody transfer measurements.

Note 2(Marine Transfers): A Shore Line Fullness Verification (SLFV) shall be performed prior to custody transfer of crude oil using any of the approved SLFV Methods in API MPMS Chapter 17.6.

III. Quality Determination & Sampling for Marine, Pipeline, Truck or Rail Tank Car

- A.) Quality analysis will be performed on representative samples obtained using one of the following methods in descending order of preference;

1.) In-line Sampler,

A representative sample of the crude oil delivered or received shall be obtained via flow-proportional in-line sampler that performs according to API MPMS 8.2 and/or corresponding ISO standard (ISO 3171).

2.) Manually Drawn Samples, or

Samples may be obtained via all-level(s) samples (running samples), upper-middle-lower level(s) samples or spot samples at agreed levels consistent with API MPMS 8.1 and/or corresponding ISO standard (ISO 3170).

- 3.) Agreement between commercial parties. In the event of a failure in the above sample points, the parties shall agree to negotiate in good faith and without prejudice, a new basis for quality determination.

IV. Lab Analyses for Sediment & Water (S&W)

*Volumetric deductions for S&W content shall be made by one of the methods described in API MPMS Chapter 10 in the following order of preference:

Characteristic	Primary	Secondary	Tertiary
Water	Karl Fisher (ASTM D4928)	Distillation (ASTM D4006)	Centrifuge (ASTM D4007 (Lab) or API MPMS Ch. 10.4 (Field))
Sediment	Membrane filtration (ASTM D4807)	Extraction (ASTM D473)	Centrifuge (ASTM D4007 (Lab) or API MPMS Ch. 10.4 (Field))

Full deduction for all free water and S&W content shall be made according to the ASTM and API MPMS published methods and standards.



**GENERAL PROVISIONS
DOMESTIC CRUDE OIL AGREEMENTS**

A. Measurement and Tests: All measurements hereunder shall be made from static tank gauges on 100 percent tank table basis or by positive displacement meters. All measurements and tests shall be made in accordance with the latest ASTM or ASME-API (Petroleum PD Meter Code) published methods then in effect, whichever apply. Volume and gravity shall be adjusted to 60 degrees Fahrenheit by the use of Table 6A and 5A of the Petroleum Measurement Tables ASTM Designation D1250 in their latest revision. The crude oil delivered hereunder shall be marketable and acceptable in the applicable common or segregated stream of the carriers involved but not to exceed 1% S&W. Full deduction for all free water and S&W content shall be made according to the API/ASTM Standard Method then in effect. Either party shall have the right to have a representative witness all gauges, tests and measurements. In the absence of the other party's representative, such gauges, tests and measurements shall be deemed to be correct.

B. Warranty: The Seller warrants good title to all crude oil delivered hereunder and warrants that such crude oil shall be free from all royalties, liens, encumbrances and all applicable foreign, federal, state and local taxes.

Seller further warrants that the crude oil delivered shall not be contaminated by chemicals foreign to virgin crude oil including, but not limited to chlorinated and/or oxygenated hydrocarbons and lead. Buyer shall have the right, without prejudice to any other remedy available to Buyer, to reject and return to Seller any quantities of crude oil which are found to be so contaminated, even after delivery to Buyer.

C. Rules and Regulations: The terms, provisions and activities undertaken pursuant to this Agreement shall be subject to all applicable laws, orders and regulations of all governmental authorities. If at any time a provision hereof violates any such applicable laws, orders or regulations, such provision shall be voided and the remainder of the Agreement shall continue in full force and effect unless terminated by either party upon giving written notice to the other party hereto. If applicable, the parties hereto agree to comply with all provisions (as amended) of the Equal Opportunity Clause prescribed in 41 C.F.R. 60-1.4, the Affirmative Action Clause for disabled veterans and veterans of the Vietnam Era prescribed in 41 C.F.R. 60-250.4, the Affirmative Action Clause for Handicapped Workers prescribed in 41 C.F.R. 60-741.4, 48 C.F.R. Chapter 1 Subpart 19.7 regarding Small Business and Small Disadvantaged Business Concerns, 48 C.F.R. Chapter 1 Subpart 20.3 regarding Utilization of Labor Surplus Area Concerns; Executive Order 12138 and regulations thereunder regarding subcontracts to women-owned business concerns, Affirmative Action Compliance Program (41 C.F.R. 60-1.40), annually file SF-100 Employer Information Report (41 C.F.R. 60-1.7), 41 C.F.R. 60-1.8 prohibiting segregated facilities, and the Fair Labor Standards Act of 1938 as amended, all of which are incorporated in this Agreement by reference.

D. Hazard Communication: Seller shall provide its Material Safety Data Sheet ("MSDS") to Buyer. Buyer acknowledges the hazards and risks in handling and using crude oil. Buyer shall read the MSDS and advise its employees, its affiliates, and third parties, who may purchase or come into contact with such crude oil, about the hazards of crude oil, as well as the precautionary procedures for handling said crude oil, which are set forth in such MSDS and any supplementary MSDS or written warning(s) which Seller may provide to Buyer from time to time.

E. Force Majeure. Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent such failure is occasioned by war, riots, insurrections, fire, explosions, sabotage, strikes, and other labor or industrial disturbances, acts of God or the elements, governmental laws, regulations, or requests, acts in furtherance of the International Energy Program, disruption or breakdown of production or transportation facilities, delays of pipeline carrier in receiving and delivering crude oil tendered, or by any other cause, whether similar or not, reasonably beyond the control of such party. Any such failures to perform shall be remedied with all reasonable dispatch, but neither party shall be required to supply substitute quantities from other sources of supply. Failure to perform due to events of Force Majeure shall not extend the term of this Agreement.

Notwithstanding the above, and in the event that the Agreement is an associated purchase/sale, or exchange of crude oil, the parties shall have the rights and obligations described below in the circumstances described below.

(1) If, because of Force Majeure, the party declaring Force Majeure (the "Declaring Party") is unable to deliver part or all of the quantity of crude oil which the Declaring Party is obligated to deliver under the Agreement or associated contract, the other party (the "Exchange Partner") shall have the right but not the obligation to reduce its deliveries of crude oil under the same Agreement or associated contract by an amount not to exceed the number of barrels of crude oil that the Declaring Party fails to deliver.

(2) If, because of Force Majeure, the Declaring Party is unable to take delivery of part or all of the quantity of crude oil to be delivered by the Exchange Partner under the Agreement or associated contract, the Exchange Partner shall have the right but not the obligation to reduce its receipts of crude oil under the same Agreement or associated contract by an amount not to exceed the number of barrels of crude oil that the Declaring Party fails to take delivery of.

F. Payment: Unless otherwise specified in the Special Provisions of this Agreement, Buyer agrees to make payment against Seller's invoice for the crude oil purchased hereunder to a bank designated by Seller in U.S. dollars by telegraphic transfer in immediately available funds. Unless otherwise specified in the Special Provisions of this Agreement, payment will be due on or before the 20th of the month following the month of delivery. If payment due date is on a Saturday or New York bank holiday other than Monday, payment shall be due on the preceding New York banking day. If payment due date is on a Sunday or a Monday New York bank holiday, payment shall be due on the succeeding New York banking day.

Payment shall be deemed to be made on the date good funds are credited to Seller's account at Seller's designated bank.

In the event that Buyer fails to make any payment when due, Seller shall have the right to charge interest on the amount of the overdue payment at a per annum rate which shall be two percentage points higher than the published prime lending rate of Morgan Guaranty Trust Company of New York on the date payment was due, but not to exceed the maximum rate permitted by law.

G. Financial Responsibility: Notwithstanding anything to the contrary in this Agreement, should Seller reasonably believe it necessary to assure payment, Seller may at any time require, by written notice to Buyer, advance cash payment or satisfactory security in the form of a Letter or Letters of Credit at Buyer's expense in a form and from a bank acceptable to Seller to cover any or all deliveries of crude oil. If Buyer does not provide the Letter of Credit on or before the date specified in Seller's notice under this section, Seller or Buyer may terminate this Agreement forthwith. However, if a Letter of Credit is required under the Special Provisions of this Agreement and Buyer does not provide same, then Seller only may terminate this Agreement forthwith. In no event shall Seller be obligated to schedule or complete delivery of the crude oil until said Letter of Credit is found acceptable to Seller. Each party may offset any payments or deliveries due to the other party under this or any other agreement between the parties.

If a party to this Agreement (the "Defaulting Party") should (1) become the subject of bankruptcy or other insolvency proceedings, or proceedings for the appointment of a receiver, trustee, or similar official, (2) become generally unable to pay its debts as they become due, or (3) make a general assignment for the benefit of creditors, the other party to this Agreement may withhold shipments without notice.

H. Liquidation:

(1) **Right to Liquidate.** At any time after the occurrence of one or more of the events described in the third paragraph of Section G, Financial Responsibility, the other party to the Agreement (the "Liquidating Party") shall have the right, at its sole discretion, to liquidate this Agreement by terminating this Agreement. Upon termination, the parties shall have no further rights or obligations with respect to this Agreement, except for the payment of the amount(s) (the "Settlement Amount" or "Settlement Amounts") determined as provided in Paragraph (3) of this section.

(2) **Multiple Deliveries.** If this Agreement provides for multiple deliveries of one or more types of crude oil in the same or different delivery months, or for the purchase or exchange of crude oil by the parties, all deliveries under this Agreement to the same party at the same delivery location during a particular delivery month shall be considered a single commodity transaction ("Commodity Transaction") for the purpose of determining the Settlement Amount(s). If the Liquidating Party elects to liquidate this Agreement, the Liquidating Party must terminate all Commodity Transactions under this Agreement.

(3) **Settlement Amount.** With respect to each terminated Commodity Transaction, the Settlement Amount shall be equal to the contract quantity of crude oil, multiplied by the difference between the contract price per barrel specified in this Agreement (the "Contract Price") and the market price per barrel of crude oil on the date the Liquidating Party terminates this Agreement (the "Market Price"). If the Market Price exceeds the Contract Price in a Commodity Transaction, the selling party shall pay the Settlement Amount to the buying party. If the Market Price is less than the Contract Price in a Commodity Transaction, the buying party shall pay the Settlement Amount to the selling party. If the Market Price is equal to the Contract Price in a Commodity Transaction, no Settlement Amount shall be due.

(4) **Termination Date.** For the purpose of determining the Settlement Amount, the date on which the Liquidating Party terminates this Agreement shall be deemed to be (a) the date on which the Liquidating Party sends written notice of termination to the Defaulting Party, if such notice of termination is sent by telex or facsimile transaction, or (b) the date on which the Defaulting Party receives written notice of termination from the Liquidating Party, if such notice of termination is given by United States mail or a private mail delivery service.

(5) **Market Price.** Unless otherwise provided in this Agreement, the Market Price of crude oil sold or exchanged under this Agreement shall be the price for crude oil for the delivery month specified in this Agreement and at the delivery location that corresponds to the delivery location specified in this Agreement, as reported in Platt's Oilgram Price Report ("Platt's") for the date on which the Liquidating Party terminates this Agreement. If Platt's reports a range of prices for crude oil on that date, the Market Price shall be the arithmetic average of the high and low prices reported by Platt's. If Platt's does not report prices for the crude oil being sold under this Agreement, the Liquidating Party shall determine the Market Price of such crude oil in a commercially reasonable manner, unless otherwise provided in this Agreement.

(6) **Payment of Settlement Amount.** Any Settlement Amount due upon termination of this Agreement shall be paid in immediately available funds within two business days after the Liquidating Party terminates this Agreement. However, if this Agreement provides for more than one Commodity Transaction, or if Settlement Amounts are due under other agreements terminated by the Liquidating Party, the Settlement Amounts due to each party for such Commodity Transactions and/or agreements shall be aggregated. The party owing the net amount after such aggregation shall pay such net amount to the other party in immediately available funds within two business days after the date on which the Liquidating Party terminates this Agreement.

(7) **Miscellaneous.** This section shall not limit the rights and remedies available to the Liquidating Party by law or under other provisions of this Agreement. The parties hereby acknowledge that this Agreement constitutes a forward contract for purposes of Section 556 of the U.S. Bankruptcy Code.

I. Equal Daily Deliveries. For pricing purposes only, unless otherwise specified in the Special Provisions, all crude oil delivered hereunder during any calendar month shall be considered to have been delivered in equal daily quantities during such month.

J. Exchange Balancing. If volumes are exchanged, each party shall be responsible for maintaining the exchange in balance on a month-to-month basis, as near as pipeline or other transportation conditions will permit. In all events upon termination of this Agreement and after all monetary obligations under this Agreement have been satisfied, any volume imbalance existing at the conclusion of this Agreement of less than 1,000 barrels will be declared in balance. Any volume imbalance of 1,000 barrels or more, limited to the total contract volume, will be settled by the underdelivering party making delivery of the total volume imbalance in accordance with the delivery provisions of this Agreement applicable to the underdelivering party, unless mutually agreed to the contrary. The request to schedule all volume imbalances must be confirmed in writing by one party or both parties. Volume imbalances confirmed by the 20th of the month shall be delivered during the calendar month after the volume imbalance is confirmed. Volume imbalances confirmed after the 20th of the month shall be delivered during the second month after the volume imbalance is confirmed.

- K. Delivery, Title, and Risk of Loss:** Delivery, title, and risk of loss of the crude oil delivered hereunder shall pass from Seller to Buyer as follows
For lease delivery locations, delivery of the crude oil to the Buyer shall be effected as the crude oil passes the last permanent delivery flange and/or meter connecting the Seller's lease/unit storage tanks or processing facilities to the Buyer's carrier. Title to and risk of loss of the crude oil shall pass from Seller to Buyer at the point of delivery.
For delivery locations other than lease/unit delivery locations, delivery of the crude oil to the Buyer shall be effected as the crude oil passes the last permanent delivery flange and/or meter connecting the delivery facility designated by the Seller to the Buyer's carrier. If delivery is by in-line transfer, delivery of the crude oil to the Buyer shall be effected at the particular pipeline facility designated in this Agreement. Title to and risk of loss of the crude oil shall pass from the Seller to the Buyer upon delivery.
- L. Term:** Unless otherwise specified in the Special Provisions, delivery months begin at 7:00 a.m. on the first day of the calendar month and end at 7:00 a.m. on the first day of the following calendar month.
- M. Governing Law:** This Agreement and any disputes arising hereunder shall be governed by the laws of the State of Texas.
- N. Necessary Documents:** Upon request, each party agrees to furnish all substantiating documents incident to the transaction, including a Delivery Ticket for each volume delivered and an invoice for any month in which the sums are due.
- O. Waiver:** No waiver by either party regarding the performance of the other party under any of the provisions of this Agreement shall be construed as a waiver of any subsequent performance under the same or any other provisions.
- P. Assignment:** Neither party shall assign this Agreement or any rights hereunder without the written consent of the other party unless such assignment is made to a person controlling, controlled by or under common control of assignor, in which event assignor shall remain responsible for nonperformance.
- Q. Entirety of Agreement:** The Special Provisions and these General Provisions contain the entire Agreement of the parties; there are no other promises, representations or warranties. Any modification of this Agreement shall be by written instrument. Any conflict between the Special Provisions and these General Provisions shall be resolved in favor of the Special Provisions. The section headings are for convenience only and shall not limit or change the subject matter of this Agreement.
- R. Definitions:** When used in this Agreement, the terms listed below have the following meanings:
"API" means the American Petroleum Institute
"ASME" means the American Society of Mechanical Engineers
"ASTM" means the American Society for Testing Materials
"Barrel" means 42 U.S. gallons of 231 cubic inches per gallon corrected to 60 degrees Fahrenheit.
"Carrier" means a pipeline, barge, truck, or other suitable transporter of crude oil.
"Crude Oil" means crude oil or condensate, as appropriate.
"Day," "month," and "year" mean, respectively, calendar day, calendar month, and calendar year, unless otherwise specified.
"Delivery Ticket" means a shipping/loading document or documents stating the type and quality of crude oil delivered, the volume delivered and method of measurement, the corrected specific gravity, temperature, and S&W content.
"Invoice" means a statement setting forth at least the following information. The date(s) of delivery under the transaction, the location(s) of delivery, the volume(s), price(s), the specific gravity and gravity adjustments to the price(s) (where applicable), and the term(s) of payment.
"S&W" means sediment and water.

Amendments to ConocoPhillips 1993 General Provisions for Domestic Crude Oil Agreements Effective August 1, 2009

E. Force Majeure. Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent such failure is occasioned by war, riots, insurrections, fire, explosions, sabotage, strikes, and other labor or industrial disturbances, acts of God or the elements, governmental laws, regulations, or requests, acts in furtherance of the International Energy Program, disruption or breakdown of production or transportation facilities, delays of pipeline carrier in receiving and delivering crude oil tendered, or by any other cause, whether similar or not, reasonably beyond the control of such party. Neither party shall be required to supply substitute quantities from other sources of supply. Failure to perform due to events of Force Majeure shall not extend the term of this Agreement, except the extent necessary to comply with the provisions of Section J ("Buy/Sell and Exchange Balancing"). The party affected by a force majeure situation (the "Affected Party") shall take commercially reasonable steps to ameliorate the cause of such force majeure event to enable it to resume performance during the term of this Agreement.

In addition to the above, and in the event substantially similar volumes are intended to be bought and sold or exchanged under this Agreement, the parties shall have the rights and obligations set forth in the circumstances described below.

(1) If, because of Force Majeure, the Affected Party is unable to deliver part or all of the quantity of crude oil which it is obligated to deliver under this Agreement, the other party shall have the right, but not the obligation, to reduce its deliveries of crude oil under this Agreement to match the volume actually delivered by the Affected Party.

(2) If, because of Force Majeure, the Affected Party is unable to take part or all of the quantity of crude oil which it is obligated to take under this Agreement, the other party shall have the right, but not the obligation, to reduce its receipts of crude oil under this Agreement to match the volume actually taken by the Affected Party.

J Buy/Sell and Exchange Balancing The terms of this Section J shall only apply to this Agreement if substantially similar volumes are intended to be bought and sold or exchanged under this Agreement.

(1) Each party shall be responsible for maintaining the volumes bought and sold or exchanged in balance on a month-to-month basis, as near as reasonably possible.

(2) If, for any reason (including events of force majeure), a party complies with the requirements of Section J(1) but fails to deliver or accept delivery of the contractually specified volume during any month (an "Imbalance Month"), then the party that delivered the lesser volume during the Imbalance Month (the "Underdelivering Party") shall deliver to the other party a volume of crude oil equal to the difference between (a) the volume delivered by the Underdelivering Party during the Imbalance Month, and (b) the volume delivered by the other party during the Imbalance Month (such difference being the "Imbalance Volume"). The Imbalance Volume shall be delivered as soon after the Imbalance Month as is reasonably practicable it being understood that the parties shall endeavor to cause the Imbalance Volumes confirmed by the 20th day of the Imbalance Month to be delivered during the immediately following calendar month, and the Imbalance Volumes confirmed after the 20th day of the Imbalance month to be delivered during the second calendar month after the Imbalance Month, except to the extent prevented by a new or continued event of force majeure.

(3) When a party fails to deliver or accept delivery of the contractually specified volume during an Imbalance Month due to an event of force majeure, if the Imbalance Volume has not been delivered before the end of the second calendar month after the Imbalance Month, and if no other resolution of the Imbalance Volumes has been agreed between the Parties, during the third month after the Imbalance Month, the Underdelivering Party shall deliver, and the other party shall take, an amount of crude oil equal to the Imbalance Volume, and such delivery shall be of the same type of crude oil, at the same location and (except as provided in Section J(4) below) at the same price as the crude oil received by the Underdelivering Party during the Imbalance Month.

(4) To the extent that an Imbalance Volume is delivered after the Imbalance Month, and except as provided in the Special Provisions of this Agreement: (1) if the price specified in this Agreement is a fixed price or a formula price based on the price of crude oil on a date or during a specified range of dates (e.g., "April 12, 2009," or "April 12-19, 2009"), the price of the Imbalance Volumes shall be equal to such price without regard to the month of actual delivery, and (2) if the price specified in this Agreement is a formula price based on the price of crude oil on a date or during a range of dates that is not tied to a specific date or range of dates (e.g., "bill of lading date," "month of delivery," "NYMEX trade month" or "calendar month average"), the price for the Imbalance Volumes will be calculated according to such formula for the actual month the Imbalance volume is delivered.

(5) The foregoing notwithstanding, the obligation of either party to deliver or take an Imbalance Volume less than 1000 barrels at the end of this Agreement shall be excused.