

**DEPARTMENT OF ENERGY
STRATEGIC PETROLEUM RESERVE (SPR)
OIL EXCHANGE AGREEMENT
25PO0001**

This Exchange Agreement, entered into this 3 day of JULY, between the UNITED STATES OF AMERICA, acting by and through the Department of Energy, hereinafter referred to as the "GOVERNMENT" or "DOE" and **ExxonMobil (XOM)**, hereinafter referred to as the "Contractor."

WITNESSETH:

1. AUTHORITY – That the Secretary of Energy, under the authority of the Department of Energy Organization Act (42 U.S.C. 7101 *et seq.*) and sections 159 and 160 of the Energy Policy and Conservation Act (42 U.S.C. 6239, 6240), having determined that the exchanging of crude oil will be advantageous to the Government and in the public interest, hereby enters into this agreement with the Contractor for the exchange of crude oil from the SPR.
2. CUSTODY TRANSFER –

Delivery of oil from SPR

Contractor will agree to terms of **Attachment E** in order to take delivery of SPR crude oil. At delivery, the estimated vapor pressure will be **less than 9.0psia D6377 VPCR4.0** or as measured by SPR using TVP95 the estimate is **17.92psia**. The estimated Gas Oil Ratio (GOR) will range from **0.6 – 2.75** scf/bbl at 100°F. The estimated delivery temperature of sour crude from Bayou Choctaw will be approximately **94°F**.

Bayou Choctaw to Bourre Pipeline (Placid)

Custody transfer quantity and quality measurements will be the DOE Bayou Choctaw (BC) meters and in-line sampler. Secondary quantity will be based on destination meter, if verifiable. Secondary quality will be based on grab samples taken at the DOE Bayou Choctaw site. The API Gravity, Sediment and Water, and Sulfur content will be performed by the DOE M&O contracted third party inspector. Contractor shall have the right to have a representative present to witness all sampling, measurements and testing analysis. The DOE M&O contracted third party inspection company will witness all measurement and testing and perform analysis as necessary.

The Government will deliver up to **1,000,000** barrels (plus/minus 10%) of BC sour with an estimated API of **30.0°** and an estimated sulfur of **1.70%** from the Government's **Bayou Choctaw** site to the contractor.

Return of oil to SPR

SJ Redstick Pipeline to Bayou Choctaw

Custody transfer quantity and quality measurements for the return of oil to the SPR shall be based on the Bayou Choctaw site meters and sampler for the return deliveries from the SJ Redstick pipeline. Secondary measurement for quantity will be the DOE St. James facility meter and quality will be manual grab samples taken at the Bayou Choctaw site. The API Gravity, Sediment and Water, and Sulfur content will be performed by the DOE M&O contracted third party inspector. Contractor shall have the right to have a representative present to witness all sampling, measurements and testing analysis. The DOE M&O contracted third party inspection company will witness all measurement and testing and perform analysis as necessary.

All costs associated with the transportation of the exchange oil transferred from and to the SPR will be absorbed by the Contractor, to include but not be limited to, tariffs, marine shipment, pipeline shipment, U.S. Customs duties, harbor and environmental fees (including Texas Coastal protection fees), demurrage, terminalling, and tankage charges.

Return of oil to the SPR must be U.S. produced crude and adhere to the quality specifications parameters found in Attachment A-2.

Crude oil to be returned (Return Oil) to the SPR will need to be reviewed and approved by SPR Quality Group before acceptance. Since quality differential calculations (see section 17) will be indexed off of the weighted average of crude oil delivered to the Contractor, SPR does not expect receipt of Attachment A-2 until all cargoes have been received by the Contractor. Submission of Attachment A-2 shall occur no later than 90 days before the return period commences. Contractor will provide SPR with details of return crude via the Quality Statement found at Attachment A-2, including Certificates of Analysis which support test result data to be filled out, to SPR Quality Group for review and acceptance. If the return oil is approved, the Contractor will need to provide a comprehensive assay ([see example here](#)) no later than 60 days prior to the beginning of the delivery cycle/period. Crudes which consist of blended market crude streams will require tank blend schedules provided to SPR Quality Group 60 days prior to the beginning of the delivery cycle/period. The SPR seeks to store U.S. produced crude oil with the widest range of application in the domestic market. To preserve SPR cavern homogeneity and maintain overall integrity of its respective crude streams, only crude oils of similar composition are commingled in storage. *Please note that if a blended crude is to be submitted for consideration, then all component streams offered for blend must not exceed 45° API gravity or fall below 27.0° API gravity to be considered suitable for injection into SPR caverns. Any component(s) exceeding these thresholds will be cause for bid rejection.* Due to natural geothermic heating, crude oils that demonstrate high bubble point pressures (BPP) and high gas-oil ratios (GOR) produce increased vapor pressure at standard cavern storage temperatures. High BPP-GOR oils have the potential to impact the existing SPR oil inventory, increasing levels of light end gases (C₁-C₃) and greatly restricting immediate deliverability which is the critical mission of the SPR. Light ends may not be immediately observed through analysis at ambient temperatures, but are entrained in certain crude types and released during underground storage. Lighter ends, Methane, Ethane and Propane are the single largest contributor to vapor pressure increase. Crude oils displaying

C₁-C₃ volume percent outside of the required specifications and determined by the allowed methods listed in Attachment A-2, will be considered outside of the SPR's acceptance criteria and deemed incompatible with existing SPR stocks. Blending heavier crudes with light end crudes may cause separation of the blend at higher temperature, thus rendering the stream undeliverable. SPR reserves the right to reject any crude oil in order to ensure the quality of the crude oil received, stored, and maintained within the SPR.

3. **TERM** – The Government will commence delivery as soon as possible with an objective to be completed by **July 31, 2025**. Contractor shall return all exchange oil plus premium barrels to the **Bayou Choctaw** SPR site(s) during the month of **April 2026**. Contractor's oil return schedules must be approved by the Government prior to delivery. Also, see Provision 18 for additional scheduling requirements.
4. **PAYMENT AND PERFORMANCE GUARANTEE** – Within three (3) business days after receipt of award, the Contractor must provide to the Contracting Officer an acceptable "Irrevocable Standby Letter of Credit" established in favor of the United States Department of Energy to the Contracting Officer in the amount of **\$67,000,000** with an expiration date of **June 30, 2026**. The letter must contain the substantive provisions set out in Attachment B, and be issued by a depository institution located in and authorized to do business in any state of the United States or the District of Columbia, and authorized to issue letters of credit by the banking laws of the United States or any state of the United States or the District of Columbia. The depository institution must be an account holder with the Federal Reserve Banking system with permission to send Fedwires and must have Fedwire eligibility Funds status of either Eligible or Eligible-Settlement-only. The issuing bank must provide documentation indicating that the person(s) signing the letter of credit is authorized to do so, in the form of corporate minutes, the Authorized Signature List, or the General Resolution of Signature Authority. All wire deposit and letter of credit costs will be borne by the purchaser.

The letter of credit must be an "Irrevocable Standby Letter of Credit" and **MUST NOT VARY IN SUBSTANCE** from the sample in Attachment B. If the letter of credit contains any provisions at variance with Attachment B or fails to include any provisions contained in Attachment B, nonconforming provisions must be deleted and missing substantive provisions must be added or the letter of credit will not be accepted.

The blanks in Attachment B shall be filled in by the issuing bank, except those in the drawing statements. The drawing statements are in bold print with double underlines for the blanks. The double underlined blanks will be filled in only at the time of a drawing against the letter of credit.

The original of the letter of credit must be sent to the attention of:

U.S. Department of Energy
Strategic Petroleum Reserve
Financial Operations and Reporting
CR-4653
900 Commerce Road East
New Orleans, LA 70123-3406

Failure to provide the letter of credit shall constitute grounds for termination of the contract for default.

5. **PAYMENT** – Contractor agrees to a fixed **8.23%** premium return of **U.S. produced sour** crude oil in addition to actual crude oil received from the SPR. The premium percentage will be applied to the barrels actually delivered to the contractor (*for example if the SPR delivers 1.0MMB NSV barrels, the premium would be $1.0MMB \times 0.0823 = 1,082,300$ or 82,300 premium barrels*) but in no case will the premium owed be less than **37,035** bbls. Minimum premium barrels are calculated using 50% of the up to contracted volume.

All **U.S. produced sour** crude oil returned to the SPR must meet the specifications in Attachment A and A-2. The Contractor should make every effort practical to return 100% of the oil quantity delivered however must return at least 90% of the actual crude oil volume received plus the calculated premium to the designated SPR site.

6. **GOVERNMENT NON-LIABILITY/ CONTRACTOR LIABILITY** – Contractor covenants that it will defend, indemnify and save and hold harmless the Government, its officers, agents, and employees for and from any and all liability or claims for damages to property or injuries to or death of persons which may arise from or be incident to the use of the exchange oil, or for damages to the property or injuries to the person of Contractor (if an individual), or damages to the property or injuries to or death of the person of Contractor's officers, agents, servants, employees, or others who may be on said premises at their invitation or the invitation of any one of them, arising from exchange activities.

Contractor further covenants that any property of the Government lost, damaged or destroyed incident to Contractor's use of the exchange oil shall be promptly replaced by Contractor to the satisfaction of the Contracting Officer, or in lieu of such replacement Contractor shall, if so required by the said officer, pay to the Government money in an amount sufficient to compensate for the loss sustained by the Government by reason loss, damage or destruction of the property.

7. **NOTICES** – No notice, order, direction, determination, requirement, consent, or approval under this Exchange Agreement shall be of any effect unless in writing. All notices required under this Exchange Agreement shall be addressed to Contractor, or to the Contracting Officer, as may be appropriate.
8. **COMMUNICATIONS** – Notices and other communications provided for herein shall be in writing and shall be delivered or mailed as follows:

Delivery and or Return
Bradley.Bauer@spr.doe.gov
Lyle.Johnson@spr.doe.gov

Quality (pre delivery)
Adam.Morgan@spr.doe.gov

Quantity/Quality (post delivery)
Ned.Scheppegrell@spr.doe.gov

Please include **FFPOCOL@spr.doe.gov** on all communications.

9. EXAMINATION OF RECORDS BY THE GOVERNMENT – Contractor agrees that the Government or any of its duly authorized representatives shall, until the expiration of three years after final payment under this agreement, have access to and the right to examine any books, documents, paper, and records of the Contractor involving transactions related to this agreement or compliance with any clauses thereunder.
10. CHANGES – The Contracting Officer may, at any time, without notice to the Letter of Credit guarantee(s), by written order designated or indicated to be a change order, or verbal direction followed by written order, make changes within the terms and conditions of the contract, including but not limited to the following changes-
 - a. In the volume to be delivered to the Contractor or returned to the SPR.
 - b. To the delivery period for issuance of SPR crude oil or for return of barrels back to the SPR.
 - c. In the type of crude oil to be returned to the SPR.
 - d. To delivery mode of crude oil coming out of the SPR or return oil.
 - e. In the delivery point(s) of return oil to the SPR.

Any other written or oral order (which, as used in this paragraph, includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this provision; Provided, that the Contractor gives the Contracting Officer written notice stating –

- a. The date, circumstances, and source of the order, and
- b. That the Contractor regards the order as a change order.

If any change under this provision causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the performance under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing.

The contractor must assert its right to an adjustment under this provision within 30 calendar days after notification of the change.

11. NATIONAL AND OPERATIONAL EMERGENCIES – Return oil deliveries to the DOE may be rescheduled or redirected upon the determination of a national or DOE operational emergency. A negotiated adjustment to the contract will be made as a result of this direction. However, should the parties fail to reach a settlement, the Government shall establish an equitable adjustment subject to the Provision entitled "Disputes."

12. DEFAULT –

a. The Government may, by written notice of default to the Customer, terminate this contract in whole or in part if the Contractor fails to -

- (1) Receive SPR crude oil within the time specified in this contract or any extension;
- (2) Make progress in scheduling of contracted deliveries, so as to endanger performance of this contract; or
- (3) Perform any of the other provisions of this contract.

b. The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

13. TERMINATION FOR THE CONVENIENCE OF THE GOVERNMENT – The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the Government shall be liable only for reasonable, customary and applicable costs incurred by the Customer before the effective date of termination, but shall not be liable for consequential damages or the contractor's lost profits.

14. EXCUSABLE DELAYS

a. In the event either party should be prevented from performing under this contract by reason of any unforeseeable cause beyond its control and without its fault or negligence, including, but not restricted to, acts of God or of the public enemy, sovereign acts of the United States, acts of a foreign Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather, performance under the contract shall be suspended in whole or in part until such cause ceases to exist and thereafter the time for fulfillment of the contract shall be extended by the length of time during which such cause prevented performance under the contract.

b. In order for this provision to become operative, the party to the contract affected by the excusable delay condition shall furnish the other party with written notice of the nature and extent of the excusable delay condition promptly after the commencement thereof, but in any event prior to shipment of the crude oil from the location from which it is to be shipped. Written notice shall be furnished within ten (10) calendar days to the other party when the excusable delay condition ceases to exist.

15. FORCE MAJEURE – Force Majeure means, 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, disruption or mechanical breakdown of production or transportation facilities, or delays of pipeline carrier

in receiving and delivering crude oil tendered. Any such failures to perform shall be remedied with all reasonable dispatch.

As employed herein, the term "party", as it relates to the Contractor, shall not include affiliated business concerns or individuals if, directly or indirectly, (1) either one controls or can control the other, or (2) a third party controls or can control both.

16. DISPUTES –

- a. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. Section 601 et seq.). If a dispute arises relating to the contract, the Customer may submit a claim to the Contracting Officer, who shall issue a written decision on the dispute in the manner specified in 48 CFR 1-33.211.
- b. "Claim" means:
 - (1) A written request submitted to the Contracting Officer;
 - (2) For payment of money, adjustment of contract terms, or other relief;
 - (3) Which is in dispute or remains unresolved after a reasonable time for its review and disposition by the Government; and
 - (4) For which a Contracting Officer's decision is demanded.
- c. In the case of dispute requests or amendments to such requests for payment exceeding \$100,000, the Customer shall certify at the time of submission as a claim, as follows:

I certify that the claim is made in good faith, that the supporting data are current, accurate and complete to the best of my knowledge and belief and that the amount requested accurately reflects the contract adjustment for which the Customer believes the Government is liable.

Customer's Name _____
Signature _____
Title _____

- d. The Government shall pay to the Customer interest on the amount found due to the Customer on claims submitted under this provision at the rate established by the Department of the Treasury from the date the amount is due until the Government makes payment. The Contract Disputes Act of 1978, as amended, and the Prompt Payment Act adopt the interest rate established by the Secretary of the Treasury under the Renegotiation Act as the basis for computing interest on money owed by the Government. This rate is published semi-annually in the Federal Register.
- e. The Customer shall pay to the Government interest on the amount found due to the Government and unpaid on claims submitted under this provision at the rate specified in Paragraph d. above from the date the amount is due until the Customer makes payment.

- f. The decision of the Contracting Officer shall be final and conclusive and shall not be subject to review by any forum, tribunal, or Government agency unless an appeal or action is commenced within the times specified by the Contract Disputes Act of 1978, as amended.
- g. The Customer shall comply with any decision of the Contracting Officer and at the direction of the Contracting Officer shall proceed diligently with performance of this contract pending final resolution of any request for relief, claim, appeal, or action related to this contract.

17. **OIL QUALITY DIFFERENTIAL**— The Contractor shall be responsible for variations in U.S. produced crude oil quality exceeding the limits set forth below upon the return of the U.S. produced crude oil to the Government. The reference basis shall be the weighted average applicable sweet or sour results of the laboratory tests conducted by the Government for API gravity and Sulfur weight percent taken when custody originally passed to the Contractor. Please note, the DOE will not be liable for any quality differential for U.S. produced sour Return Oil delivered to the SPR.

- a. Quality differentials will be calculated by utilizing the Quality tables in Attachment F. The allowable variations from the common quality for crude oil deliveries are defined as:

<u>QUALITY</u>	<u>Allowable Quality Variations</u>	
	<u>DOE CRUDE OIL (CATEGORY)</u>	
	<u>SWEET</u>	<u>SOUR</u>
Gravity - API°	-0.5	-0.5
Sulfur - Wt%	+0.10	+0.10

- b. API Gravity between 40.0 and 45.0: No quality differential shall be accessed.
- c. API Gravity between 35.0 and 40.0: Adjustment for U.S. produced Sweet/Sour crude oil is 2¢ per barrel for each degree (1.0°) increase/decrease in (API) Gravity, or part thereof, by which the allowable variation set forth above is exceeded. Specifically, computed API Gravity excess variances for each cargo, reported in API Gravity 0.1° increments, shall be rounded up to the next whole 1.0° API.
- d. API Gravity below 35.0: Adjustment for U.S. produced Sweet/Sour crude oil is 1.5¢ per barrel for each tenth of a degree (0.1°) increase/decrease in (API) Gravity, or part thereof, by which the allowable variation set forth above is exceeded.
- e. Total Sulfur: 1.0¢ per barrel for each 1/100th percent (0.01%) increase/decrease in total sulfur by which the allowable variations set forth above are exceed.
- f. If U.S. produced crude oil delivered to the DOE falls below the minimum SPR specification for API Gravity, or above the maximum DOE specification for sulfur, as

defined in Attachment A-2, a quality differential adjustment shall be applied without a variance allowance on that portion exceeding the specification limit.

There is a limit of 0.1% freewater on delivery to the SPR as measured either by contractor's shore tank or on the vessel prior to discharge into tanks designated for DOE receipts. The inspector's gauges, witnessed by the DOE representative, either on the vessel at the dock facility or terminal shore tank, will be the method used to determine the final freewater barrel amount. This clause is effective in conjunction with the Water and Sediment [Vol.%] maximum limit of 1.0% as stated in Attachment A; e.g., a 500,000 barrel oil delivery to the SPR is limited to 1.0% S&W (5,000 barrels), of which a maximum of 0.1% (500 barrels) can be freewater. Contractor is responsible for all costs associated with removal of excess freewater. Exceeding the freewater limitations specified herein will result in the cargo being rejected.

18. SCHEDULING OF OIL MOVEMENTS – Contractor shall schedule all oil deliveries through the appropriate commercial pipeline and marine terminal facilities, ensuring that it has coordinated the deliveries with the SPR.

For marine deliveries, the Contractor shall provide a working schedule to the DOE not later than the fifteenth day of the month prior to the month in which deliveries will be made. This working schedule will contain total monthly volumes and the approximate delivery dates and quantities for each month of delivery. No later than seven business days prior to each delivery, the Contractor shall provide vessel name, vessel quality data, the expected date of arrival, the volume to be delivered, vessel agents and any other pertinent information that may be needed. The SPR will provide a Nomination-Confirmation Form (Attachment G). The Contractor shall complete the yellow highlighted areas and return the form in the time frame defined above.

The Contractor, or its designated agent, shall provide pre-arrival notices 72 hours, 48 hours and 24 hours prior to discharge to both the DOE and the discharge terminal.

For pipeline deliveries, the Contractor shall make necessary arrangements with the commercial pipelines connected to the DOE or its interconnecting pipelines. Nomination information regarding these deliveries shall be provided to the DOE not later than five calendar days prior to the month in which deliveries will be made.

The DOE and Contractor will coordinate to ensure cargo sizes do not materially impede operations. Due to the emergency nature of this agreement, cargo sizes can/will vary based on operations constraints amongst all relevant stakeholders. This will apply to cargoes leaving the SPR to satisfy the emergency request.

For Return Oil, a minimum cargo size of 250MB will be required.

Note: It is the responsibility of the offerors to confirm these specifications prior to nominations to insure most current information.

19. H₂S The quality characteristics of the crude oil stream offered in the exchange are those cited in the Strategic Petroleum Reserve Crude Oil Assays.

This crude oil quality data is a weighted average composition of the specific caverns that comprise the streams offered in the exchange. Although a specific crude oil benchmark is referenced; SPR inventory contains a blend of domestic and global crude with segregation by Sweet and Sour storage caverns. The SPR has observed H₂S concentration (which is found naturally in crude oil) greater than 10 ppm in liquid in some crude batches. Measurements of H₂S in vapor space can be orders of magnitude higher than in liquid and difficult to measure due to factors in handling, weather, etc. OSHA provides guidelines on appropriate safety precautions and equipment if crude is handled openly, spilled, or released to the atmosphere. Offerors are encouraged to review the SPR Crude Oil Assay Manual, Crude Oil Safety Data Sheet, and the Strategic Petroleum Reserve Crude Oil Assays for more detailed oil stream composition and specifics so that conditions (such as the presence of H₂S) are expected and communicated downstream.

Note: Each SPR stream will be a blended average using several caverns. As a result, actual representative samples are not available prior to deliveries. Please refer to Crude Oil Assays which provides a weighted average composite profile of the stream. SPR can/will provide assays for individual caverns upon request. In cases where the assay has not been updated where new inventory has been added, SPR can provide under best efforts assay data for customer use.

20. DELIVERY AND RECEIPT DOCUMENTATION – All quantity and quality determinations shall be documented on the Material Inspection and Receiving Report (DD Form 250). See Attachment C-1 for copy of this form. The DD Form 250 shall be signed by the Customer's agent to acknowledge delivery and receipt of the quantity and quality of crude oil indicated. Copies of the completed DD Form 250, with applicable supporting documentation (i.e., metering or tank gauging tickets and appropriate calculation worksheets), shall be furnished to the Customer and/or the Customer's authorized representative after completion of delivery or receipts. Also, marine Bills of Lading or Pipeline Statements identifying crude type shipped shall be provided by the contractor.

For SPR oil deliveries to customer's tankers (vessels), SPR deliveries shall be documented on a Tanker/Barge Material Inspection and Receiving Report (DD Form 250-1). See Attachment C-2 for copy of this form.

The Customer shall provide written confirmation to the SPR, no later than seven calendar days prior to the scheduled date of each delivery under the contract, the name(s) of the authorized agent(s) given signature authority to sign/endorse the delivery documentation on the Customer's behalf. Any changes to this listing of names shall be provided to the SPR in writing no later than 72 hours before the first delivery to which such change applies. In the event that an independent surveyor (separate from the authorized signatory agent) is appointed by the Customer to witness the delivery operation (gauging, sampling, testing, etc.), written notification shall be provided to SPR, no later than 72 hours prior to the scheduled date of each applicable cargo delivery to or from the SPR.

Absence of the provision of the name(s) of bona fide agent(s) and the signature of such agent on the delivery documentation constitutes acceptance of the delivery quantity and quality as determined by the Government and/or its agents

21. RECONCILIATION – Within 30 days after completion of the final scheduled delivery of exchange oil under the contract, any imbalances that may exist in the crude oil volumes agreed upon in the contract will be reconciled in the following manner:


If DOE receives an amount of exchange oil that exceeds the contracted return oil delivery volume, the Government will attempt to reconcile the imbalance through cash payments or other alternate means, as available. If reconciliation is by cash payment, the Contractor shall invoice the DOE based on the cost value of the exchange oil on the date of the last delivery as annotated on the DD250.

If the Contractor delivers a total volume of return oil which is less than the contracted quantity, the DOE will invoice the Contractor for the undelivered amount based on the cost value of the exchange oil on the date of the last delivery as annotated on the DD250. If no payment is received by the due date specified on the invoice, the applicable amount owed will be drawn against the Contractor's Payment and Performance Letter of Credit as described in Provision 4 of this contract.

Note: The cost value is derived from the data published in the Argus Americas Crude Oil Price Report. If no published prices are available, a mutually agreed upon price will be negotiated. Should the parties fail to reach a negotiated price, the Government shall determine a fair and reasonable price.

Contractor

The United States of America

By: 
Name: KRIS HESTER
Title: SENIOR TRADER

By: _____
Name: Kelly M. Gele'
Title: Contracting Officer

ATTACHMENT A

STRATEGIC PETROLEUM RESERVE CRUDE OIL SPECIFICATIONS ^a (SPRO MAY 2020) ^{§1}

CHARACTERISTIC	SOUR	SWEET	PRIMARY ASTM TEST METHOD ^b
API Gravity [°API]	30-45	30-45	D1298 or D5002
Total Sulfur [Mass %], max.	1.99	0.50	D4294
Pour Point [°C], max.	10	10	D97
Salt Content [Mass %], max.	0.050	0.050	D6470
Viscosity			
[cSt @ 15.6°C], max.	32	32	D445
[cSt @ 37.8°C], max.	13	13	
Vapor Pressure			
[VPCR4 (100°F) psia (kPa)] ^e , max.	9(62.1)	9(62.1)	D6377
Total Acid Number [mg KOH/g], max.	1.00	1.00	D664
Water and Sediment [Vol. %], max.	1.0	1.0	473 and D4006, or D4928
Yields [Vol. %]			D2892 and D5236 ^c
Naphtha [28-191°C]	24-30	21-42	
Distillate [191-327°C]	17-31	19-45	
Gas Oil [327-566°C]	26-38	20-42	
Residuum [>566°C]	10-19	14 max.	
Light Ends [Liquid Vol. %] ^d , max			
Methane (C ₁)	0.01	0.01	IP344 or ITM 6008
Ethane (C ₂)	0.1	0.1	
Propane (C ₃)	1.0	1.0	

^{§1} This revision includes a limitation on light ends content (see Footnote ^d)

- ^a Commonly traded crude petroleum suitable for normal U.S. Gulf Coast refinery processing and free of foreign contaminants or chemicals.
- ^b Alternate methods may be used if approved by the contracting officer.
- ^c D 7169 data may be provided in requesting conditional acceptance of a crude oil. Distillation data according to D 2892 and D 5236 will still be necessary for final qualification of a crude oil's acceptance.
- ^d Light ends content specifications are interim and will be superseded if and when industry standards for light ends evaluation are implemented.
- ^e Vapor pressure changed to better reflect current domestic crude standards.

- NOTE 1:** The Strategic Petroleum Reserve reserves the right to refuse to accept any crude oil which meets these specifications but is deemed to be incompatible with existing stocks, or which has the potential for adversely affecting handling.
- NOTE 2:** The acceptability of any crude oil depends upon any assay typical of current production quality of the stream. Assays typical of current production quality are mandatory for any crude oil not received by the SPR within the last three years. Any crude oil offered to the Strategic Petroleum Reserve that meets these specifications may be subject to additional testing for acceptance.
- NOTE 3:** All crude oil shipments received by the SPR are tested to ensure they meet specifications. Crude streams found consistently not meeting required specifications will be removed from the list of acceptable crude oils.
- NOTE 4:** All Crude Oil shipments received by the SPR pursuant to this solicitation must be sourced from U.S. production.
- NOTE 5:** If a blended crude is to be submitted for consideration, then all component streams offered for blend must not exceed 45° API gravity or fall below 27.0° API gravity to be considered suitable for injection into SPR caverns.

ATTACHMENT A-2

MUST BE FILLED OUT IN ITS ENTIRETY

Sour Statement of Quality Data Product Specifications

Company:						
Date:						
Crude Stream (define any acronyms):						
Crude Components(define acronyms):						
Product Parameter	Test Method	Unit(s)	Specification Min	Specification Max	Result	Method
API Gravity	D287, D1298 or D5002	[°API]	28.5	35		
Total Sulfur	D4294, D2622	[Mass %]	0.51	2.50		
Pour Point	D97	[°C]		-12		
Salt Content	D6470 or D3230	[mg/kg %]		500		
Viscosity @ 15.6°C	D445, D7042	[cSt]		32.0		
Viscosity @ 37.8°C	D445, D7042	[cSt]		13.0		
Vapor Pressure [VPCR4 (100°F)]	D6377	psia (kPa)		9.0(62.1)		
Vapor Pressure [VPCR 0.2 (100°F)] @900 sec.	D6377	psia (kPa)		Report		
Total Acid Number	D664, D8045	[mg KOH/g]		1.00		
Water	D4928 or D4006	[Vol. %]		Report		
Sediment	D473, D4807	[Mass. %]		Report		
Water/Sediment Combined Value		[Vol. %]		1.0		
Asphaltenes	D6560, IP143	[Mass%]		6.0%		
Stability	D4740	ASTM Ref.		2		
Hydrogen Sulfide	UOP163	mg/kg		Report		
Mercaptan	UOP163	mg/kg		Report		
Yields [Vol. %]						
Naphtha [28-191°C]	D7169, D7900	[Vol. %]	-	30		
Distillate [191-327°C]	D7169, D7900	[Vol. %]	17	31		
Gas Oil [327-566°C]	D7169, D7900	[Vol. %]	26	38		
Residuum [>566°C]	D7169, D7900	[Vol. %]	-	19		
Light Ends [Liquid Vol. %]						
Methane (C ₁)	D7900 or ITM6008	[Liquid Vol.%]		0.01		
Ethane (C ₂)	D7900 or ITM6008	[Liquid Vol.%]		0.10		
Propane (C ₃)	D7900 or ITM6008	[Liquid Vol.%]		1.0		
Normal Butane (NC ₄)	D7900 or ITM6008	[Liquid Vol.%]		3.0		
Isobutane (iC ₄)	D7900 or ITM6008	[Liquid Vol.%]		4.0		
Distillation						
IBP - 25°C	D7169 or D7900	Wt.%		3.0%		
IBP - 79°C	D7169 or D7900	Wt.%		10.0%		
Contaminants						
Organic Chlorides	D4929 B or C	mg/kg		1		
Vanadium	D5708 (B), D5863, D8252	mg/kg		75		
Nickel	D5708 (B), D5863, D8252	mg/kg		25		
Iron	D5708 (B), D5863, D8252	mg/kg		10		
Methanol	D7059	mg/kg		30		
Total Nitrogen	D4629/D5762	Wt. %		Report		
Basic Nitrogen	UOP269	Wt. %		Report		

ATTACHMENT A-2

Commonly traded crude petroleum suitable for normal U.S. Gulf Coast refinery processing and free of foreign contaminants or chemicals.

Alternate methods may only be used if approved by the contracting officer.

D7169 and D7900 data may be provided in requesting conditional acceptance of a Crude Oil. Distillation data according to D2892 and D5236 will still be necessary for final qualification of a Crude Oil's acceptance.

Light ends content specifications are interim and will be superseded if and when industry standards for light ends evaluation are implemented.

Vapor pressure changed to better reflect current domestic crude standards

- NOTE 1: The Strategic Petroleum Reserve reserves the right to refuse to accept any Crude Oil which meets these specifications but is deemed to be incompatible with existing stocks, or which has the potential for adversely affecting handling. In the event the Strategic Petroleum Reserve refuses acceptance it may also exercise its rights under FAR 52.212-4.
- NOTE 2: The acceptability of any Crude Oil depends upon any assay, or certificates of analysis for each blend component, typical of current production quality of the stream. Any Crude Oil offered to the Strategic Petroleum Reserve that meets these specifications may be subject to additional testing for acceptance.
- NOTE 3: All Crude Oil shipments received by the SPR are tested to ensure they meet specifications.
- NOTE 4: All Crude Oil shipments received by the SPR pursuant to this solicitation must be sourced from U.S. production.
- NOTE 5: If a blended crude is to be submitted for consideration, then all component streams offered for blend must not exceed 45° API gravity or fall below 27.0° API gravity to be considered suitable for injection into SPR caverns.

ATTACHMENT B

SAMPLE - OFFER GUARANTEE STANDBY LETTER OF CREDIT

**BANK LETTERHEAD
IRREVOCABLE STANDBY LETTER OF CREDIT**

Date: _____

To: U.S. Department of Energy
Strategic Petroleum Reserve
900 Commerce Road East
New Orleans, LA 70123
Attn: (CO Name)

AMOUNT OF LETTER OF CREDIT: U.S. \$ _____ (_____)

CONTRACTOR: _____

CONTRACT NO: 25PO0001 _____

OFFER NO: _____

LETTER OF CREDIT NO: _____

EXPIRATION DATE: June 30, 2026

AMERICAN BANKERS ASSOCIATION (ABA) NO: _____

We hereby establish in the U.S. Department of Energy's favor our irrevocable standby Letter of Credit effective immediately for the account of our customer's above contract with the U.S. Department of Energy for the exchange of Strategic Petroleum Reserve petroleum.

This letter of credit is available by your draft/s at sight, drawn on us and accompanied by a manually signed statement that the signer is an authorized representative of the Department of Energy, and one or more of the following statements:

- a. "THIS DRAWING OF U.S. \$ _____ (_____) AGAINST YOUR LETTER OF CREDIT NUMBERED _____ DATED _____, IS DUE THE U.S. GOVERNMENT BECAUSE (CONTRACTOR'S NAME) HAS FAILED TO RECEIVE THE SPR CRUDE OIL IN ACCORDANCE WITH THE TERMS OF CONTRACT NO. _____, INCLUDING ANY AMENDMENTS THERETO."

- b. "THIS DRAWING OF U.S. \$ _____ (_____) AGAINST YOUR LETTER OF CREDIT NUMBERED _____ DATED _____, IS DUE THE U.S. GOVERNMENT BECAUSE (CONTRACTOR'S NAME) HAS FAILED TO DELIVER RETURN EXCHANGE OIL IN ACCORDANCE WITH THE TERMS OF CONTRACT NO. _____, INCLUDING ANY AMENDMENTS THERETO."

- c. "THIS DRAWING OF U.S. \$ _____ (_____) AGAINST YOUR LETTER OF CREDIT NUMBERED _____ DATED _____, IS DUE THE U.S. GOVERNMENT BECAUSE (CONTRACTOR'S NAME) HAS

FAILED TO MAKE FINAL RECONCILIATION PAYMENT IN ACCORDANCE WITH THE TERMS OF CONTRACT NO. _____, INCLUDING ANY AMENDMENTS THERETO."

Drafts must be presented for payment on or before the expiration date of this Letter of Credit at our bank. The Government may make multiple drafts against this Letter of Credit.

Upon receipt of the U.S. Department of Energy's demand by hand, mail express delivery, or other means, at our office located at _____, we will honor the demand and make payment, by 3 p.m. Eastern Time of the third business day following receipt of the demand by wire transfer of funds as a deposit to the account of the U.S. Treasury over the Fedwire Funds Service. The information to be included in each transfer will be as provided in the above referenced contract.

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision, International Chamber of Commerce Publication no. 600) and except as may be inconsistent therewith, to the Uniform Commercial Code in effect on the date of issuance of this Letter of Credit in the state in which the issuer's head office within the United States is located.

We hereby agree with you that all drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored upon presentation and delivery of the above documents for payment at our bank on or before the expiration date.

In the event of a bankruptcy filing by the applicant prior to the expiration date of this letter of credit, the expiration date of this letter of credit will automatically be extended by one hundred twenty (120) calendar days from the expiration date.

Address all communications regarding this Letter of Credit to (name and phone number).

Very truly yours,

(Authorized Signature)

(Typed Name and Title)

ATTACHMENT C-1 DD FORM 250

MATERIAL INSPECTION AND RECEIVING REPORT DD Form 250, AUG 2000

MATERIAL INSPECTION AND RECEIVING REPORT						FORM APPROVED OMB No. 0704-0248	
The public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, (0704-0248), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0248), Arlington, DC 20503. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.							
PLEASE DO NOT RETURN YOUR COMPLETED FORM TO EITHER OF THESE ADDRESSES. SEND THIS FORM IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE DFARS, APPENDIX F-401.							
1. PROCUREMENT INSTRUMENT IDENTIFICATION (CONTRACT) NO.		(ORDER) NO.		6. INVOICE NO./DATE		7. PAGE OF	
DOE OWNED CRUDE OIL						1 1	
2. SHIPMENT NO.		3. DATE SHIPPED		4. B/L		5. DISCOUNT TERMS	
				TCN			
9. PRIME CONTRACTOR CODE			10. ADMINISTERED BY CODE				
Fluor Federal Petroleum Operations 850 S. Clearview Pkwy. New Orleans, LA 70123			DEPARTMENT OF ENERGY STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE				
11 SHIPPED FROM (if other than 9) CODE FOB:			12. PAYMENT WILL BE MADE BY CODE				
13. SHIPPED TO CODE			14. MARKED FOR CODE				
15 ITEM NO.	16. STOCK/PART NO. (Indicate number of shipping containers - type of container - container number.)	DESCRIPTION		17. QUANTITY SHIP/REC'D *	18. UNIT	19. UNIT PRICE	20. AMOUNT
-	Gross			NET @ 60° F.	BARRELS		
21. CONTRACT QUALITY ASSURANCE a. ORIGIN <input type="checkbox"/> CQA <input type="checkbox"/> ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or in supporting documents.				b. DESTINATION <input type="checkbox"/> CQA <input type="checkbox"/> ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents.		22. RECEIVER'S USE Quantities shown in column 17 were received in apparent good condition except as noted.	
DATE SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE		DATE SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE		DATE RECEIVED SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE			
TYPED NAME: TITLE: MAILING ADDRESS:		TYPED NAME: TITLE: MAILING ADDRESS:		TYPED NAME: TITLE: MAILING ADDRESS:			
COMMERCIAL TELEPHONE NUMBER:		COMMERCIAL TELEPHONE NUMBER:		COMMERCIAL TELEPHONE NUMBER:			
*If quantity received by the Government is the same as quantity shipped, indicate by (x) mark; if different, enter actual quantity received below quantity shipped and encircle.							
23. CONTRACTOR USE ONLY:							

ATTACHMENT C-2

DD FORM 250-1

TANK/BARGE MATERIAL INSPECTION AND RECEIVING REPORT				FORM APPROVED OMB No. 0704-0248 Expires Dec 31, 1999	
Public reporting burden for this collection of information is estimated to average 35 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0248), Washington, DC 20503.					
PLEASE DO NOT RETURN YOUR COMPLETED FORM TO EITHER OF THESE ADDRESSES. SEND THIS FORM IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE DFARS, APPENDIX F-401.					
1. TANKER BARGE <input type="checkbox"/> LOADING REPORT <input checked="" type="checkbox"/> DISCHARGE REPORT		2. INSPECTION OFFICE		3. REPORT NUMBER	
4. AGENCY PLACING ORDER ON SHIPPER, CITY, STATE AND/OR LOCAL ADDRESS (Loading)			5. DEPARTMENT		6. PRIME CONTRACT OR P.O. NUMBER
7. NAME OF PRIME CONTRACTOR, CITY, STATE AND/OR LOCAL ADDRESS (Loading)				8. STORAGE CONTRACT	
9. TERMINAL OR REFINERY SHIPPED FROM, CITY, STATE AND/OR LOCAL ADDRESS (Loading)				10. ORDER NUMBER OR SUPPLIER	
11. SHIPPED TO (Receiving, Activity, City, State and/or Local Address)				12. B/L NUMBER	
				13. REGN. OR REQUEST NO.	14. CARGO NUMBER
15. VESSEL		16. DRAFT ARRIVAL FORE AFT		17. DRAFT SAILING FORE AFT	
18. PREVIOUS TWO CARGOES FIRST LAST		19. PRIOR INSPECTION			
20. CONDITION OF SHORE PIPELINE		21. APPROPRIATION (Loading)		22. CONTRACT ITEM NO. N/A	
23. PRODUCT		24. SPECIFICATIONS N/A			
25. STATEMENT OF QUANTITY		LOADED	DISCHARGED	LOSS/GAIN	PER CENT
BARRELS (42 Gals/Net) NSV					
GALLONS (Net)					
TONS (Long) Barrels GSV					
26. TEST RESULTS		STATEMENT OF QUALITY		THIRD PARTY INSPECTOR	
		VESSEL COMPOSITE		VESSEL COMPOSITE	
API GRAVITY					
BS&W					
S&W					
SULFUR (WT%)					
RVP					
VISC @ 60 DEG. F (CST)					
VISC @ 100 DEG. F. (CST)					
SALT					
POUR					
TAN					
27. TIME STATEMENT		DATE	TIME	28. REMARKS (Note in detail cause of delays such as repairs, breakdowns, slow operations, stoppage, etc.)	
NOTICE OF READINESS TO LOAD DISCHARGE					
VESSEL ARRIVED IN ROADS					
MOORED ALONGSIDE					
STARTED BALLAST DISCHARGE					
FINISHED BALLAST DISCHARGE					
INSPECTED AND READY TO LOAD DISCHARGE					
CARGO HOSES CONNECTED					
COMMENCED LOADING DISCHARGE					
STOPPED LOADING DISCHARGING					
RESUMED LOADING DISCHARGING					
FINISHED LOADING DISCHARGING					
CARGO HOSES REMOVED					
VESSEL RELEASED BY INSPECTOR					
COMMENCED BUNKERING					
FINISHED BUNKERING					
VESSEL LEFT BIRTH (Actual/Estimated)				29. COMPANY OR RECEIVING TERMINAL (Signature)	
30. I CERTIFY THAT THE CARGO WAS INSPECTED, ACCEPTED AND LOADED/DISCHARGED AS INDICATED HEREON. (Date) _____ (Signature of Authorized Government Representative)			31. I HEREBY CERTIFY THAT THIS TIME STATEMENT IS CORRECT. _____ (Master or Agent)		

ATTACHMENT D
RESERVED

ATTACHMENT E

The SPR stores oil in caverns leached in domal salt at depths of typically 2000 to 4000 ft. As a result of geologic conditions, a gradual heating of stored oil produces an increase in the vapor pressure of SPR stocks which can result in unacceptable safety and environmental risks when delivering to customers. In an effort to address these potential risks the DOE developed and implemented controls to mitigate the hazards associated with delivering hot/gassy crude oils to customers. The following guidance was developed and implemented in SPR Project performance criteria documents which provide direction for the physical design, operation, and maintenance of SPR facilities:

1. **The maximum allowable volume of gasses evolving from the crude oil at atmospheric pressure shall not be greater than 0.6 standard cubic feet per barrel (Gas-Oil-Ratio; GOR) at the SPR property line or any on-site crude oil storage tanks open to the atmosphere, at temperature.**
2. **Scavenging shall be used to limit the evolution of H₂S to within state and federal regulatory limits for all streams with a GOR>0 at the SPR property line or any on-site storage tanks open to the atmosphere.**

Until recently the SPR has refrained from delivering crude oil to customers in hot summer months to avoid the high cost of chemical injection. While the SPR has experience with chemical injection, we have had limited experience with the impact of higher concentrations of H₂S scavenger injected at the volumes required during the hottest summer month conditions.

Based on the concerns reported by customers, high amines are apparently a by-product of the higher volumes of scavenger required to control the release of H₂S to the atmosphere under these hotter conditions. DOE is willing to work toward a solution to the issue of both high amines and high GOR. While DOE will grant the request for Exxon to receive crude oil from our Bayou Choctaw site with a lower or no chemical treatment of H₂S with Scavenger, we believe it is our responsibility to inform you of the potentially hazardous conditions. Please be aware that this list may not be exhaustive. In the event Exxon agrees to accept the oil they accept all known and unknown hazards associated with that decision.

The specific concerns are possible known hazardous and technical data relative to receipt of crude oil not treated with published scavenger dosage from the Bayou Choctaw include, but are not limited to:

- Crude oil Vapor pressure above atmospheric pressure can cause volatiles to be released in receipt tankage at higher receipt temperatures. This could result in tank roof emissions from tank seals and vents. This situation could create a potential for personnel or offsite H₂S exposures and environmental/permit liability at delivery terminal. Vapor pressure of the crude expected to be delivered from SPR would be greater than our standard delivery criteria of 14.7.
- The GOR level is expected to be greater than 0.6. A GOR level above 0.6% can be expected to release Benzene in concentrations between 0.95 – 1.1lb/hr. Based on TVP-95 results, 485/lbs per hour for anticipated gas.

ATTACHMENT E

- Crude oil leaving the SPR could be as high as 100° F with an estimated H2S vapor concentration of 4,800ppmv. The data comes from the TVP-95 samples. During the TVP-95 testing, the oil is actually flashed and during the GOR runs allows the vapor to flow out of the system, much like in a tank system. The volume weighted crude oil blend of the delivery cavern, BC101, generates the 4,800ppmv. The SPR understands these temperatures are different when it reaches the tankage at Anchorage tank farm.
- H2S in Oil by UOP163 is industry standard for reporting, however it is recognized as being highly variable. In experience at SPR it is apparent the UOP163 results are consistently low vs what we observe with our internal pressurized sample unit TVP95. The TVP95 H2S unit analytical results for H2S content are consistent H2S scavenger injection requirements. Based upon the posted SPR Quality Assay BC sour stream UOP163 is reported in the cuts ranging from 2-15ppmwt with a cumulative weighted average of ~3ppmwt, where the TVP95 reports from ~30-100 ppmwt respectively. The samples for UOP163 are unpressurized samples and the analysis is done unpressurized so loss of lights including H2S and potential reactions of H2S while in sample containers may contribute to lower readings. In the TVP95 flash gas analysis, we are observing H2S in vapor for GOR runs @100°F of 5,860 ppmv, to 18,630 ppmv.

DOE also requests the following data to enhance our understanding and support further analysis by the SPR. These are not a requirement for delivery but would assist the SPR's future operations:

- Delivery tank oil inlet temperature;
- Overall Tank bulk oil temperature from start to finish;
- Any signs of vapor escape or oil shown on roof;
- RVP tank data and relevant tank volumes on the open and close,
- Final crude oil pressure measurement point prior to entry to tank. data and any peak values noted; and
- Report ambient temperature, wind speed, wind direction data and any peak values noted.

ATTACHMENT E

RELEASE AND WAIVER OF LIABILITY

This Release and Waiver of Liability (the 'Release') executed on this 3 day of JULY
Exxon Mobil (the 'Receiver') and the Department of Energy (the 'Seller').

The Receiver understands taking possession of oil not treated with H2S scavenger (the "Oil") at the originally published dosage from the Strategic Petroleum Reserve involves certain hazards that may result in legal liabilities, bodily injury, and property loss or damage.

The Receiver hereby agrees to those hazards and consents to take possession of the Oil under the following terms:

Acknowledgement and Assumption of Risk. Receiver acknowledges that taking possession of the Oil may cause injuries, death, property damage or harm to third parties. Receiver expressly accepts and incurs all risks of such injuries, damages, or harm which arises during or that results from taking possession of the Oil.

Waiver and Release. Receiver waives, releases and forever discharges all claims, demands, or causes of actions, against the Seller and its affiliates and their respective officers, directors, employees, agents, contractors, and subcontractors (the "Seller Parties) for any injuries, damages, or losses of any kind, whether known or unknown, which arise during or result from taking possession of the Oil.

Indemnification and Hold Harmless. Receiver agrees to indemnify, defend, reimburse, and hold harmless the Seller Parties from any and all claims, demands, causes of action, proceedings, damages, liabilities, fines, losses, penalties, costs or expenses (including but not limited to litigation expenses and attorney's fees) incurred by the Seller Parties as a result of any claims, demands, causes of actions, proceedings, or lawsuits brought against the Seller Parties to recover any losses, liabilities, costs, damages, or expenses which arise during or result from the Receivers possession of the Oil.

EXXONMOBIL

SIGNATURE: 

PRINTED
NAME: KRIS HESTER

TITLE: SENIOR TRADER

ATTACHMENT F Quality Adjustment Tables

TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR DIFFERENCE IN GRAVITY OF CRUDE PETROLEUM							
API GRAVITY	DIFF. PER BBL	API GRAVITY	DIFF. PER BBL	API GRAVITY	DIFF. PER BBL	API GRAVITY	DIFF. PER BBL
10.0	1.250	16.0	2.150	22.0	3.050	28.0	3.950
10.1	1.265	16.1	2.165	22.1	3.065	28.1	3.965
10.2	1.280	16.2	2.180	22.2	3.080	28.2	3.980
10.3	1.295	16.3	2.195	22.3	3.095	28.3	3.995
10.4	1.310	16.4	2.210	22.4	3.110	28.4	4.010
10.5	1.325	16.5	2.225	22.5	3.125	28.5	4.025
10.6	1.340	16.6	2.240	22.6	3.140	28.6	4.040
10.7	1.355	16.7	2.255	22.7	3.155	28.7	4.055
10.8	1.370	16.8	2.270	22.8	3.170	28.8	4.070
10.9	1.385	16.9	2.285	22.9	3.185	28.9	4.085
11.0	1.400	17.0	2.300	23.0	3.200	29.0	4.100
11.1	1.415	17.1	2.315	23.1	3.215	29.1	4.115
11.2	1.430	17.2	2.330	23.2	3.230	29.2	4.130
11.3	1.445	17.3	2.345	23.3	3.245	29.3	4.145
11.4	1.460	17.4	2.360	23.4	3.260	29.4	4.160
11.5	1.475	17.5	2.375	23.5	3.275	29.5	4.175
11.6	1.490	17.6	2.390	23.6	3.290	29.6	4.190
11.7	1.505	17.7	2.405	23.7	3.305	29.7	4.205
11.8	1.520	17.8	2.420	23.8	3.320	29.8	4.220
11.9	1.535	17.9	2.435	23.9	3.335	29.9	4.235
12.0	1.550	18.0	2.450	24.0	3.350	30.0	4.250
12.1	1.565	18.1	2.465	24.1	3.365	30.1	4.265
12.2	1.580	18.2	2.480	24.2	3.380	30.2	4.280
12.3	1.595	18.3	2.495	24.3	3.395	30.3	4.295
12.4	1.610	18.4	2.510	24.4	3.410	30.4	4.310
12.5	1.625	18.5	2.525	24.5	3.425	30.5	4.325
12.6	1.640	18.6	2.540	24.6	3.440	30.6	4.340
12.7	1.655	18.7	2.555	24.7	3.455	30.7	4.355
12.8	1.670	18.8	2.570	24.8	3.470	30.8	4.370
12.9	1.685	18.9	2.585	24.9	3.485	30.9	4.385
13.0	1.700	19.0	2.600	25.0	3.500	31.0	4.400
13.1	1.715	19.1	2.615	25.1	3.515	31.1	4.415
13.2	1.730	19.2	2.630	25.2	3.530	31.2	4.430
13.3	1.745	19.3	2.645	25.3	3.545	31.3	4.445
13.4	1.760	19.4	2.660	25.4	3.560	31.4	4.460
13.5	1.775	19.5	2.675	25.5	3.575	31.5	4.475
13.6	1.790	19.6	2.690	25.6	3.590	31.6	4.490
13.7	1.805	19.7	2.705	25.7	3.605	31.7	4.505
13.8	1.820	19.8	2.720	25.8	3.620	31.8	4.520
13.9	1.835	19.9	2.735	25.9	3.635	31.9	4.535
14.0	1.850	20.0	2.750	26.0	3.650	32.0	4.550
14.1	1.865	20.1	2.765	26.1	3.665	32.1	4.565
14.2	1.880	20.2	2.780	26.2	3.680	32.2	4.580
14.3	1.895	20.3	2.795	26.3	3.695	32.3	4.595
14.4	1.910	20.4	2.810	26.4	3.710	32.4	4.610
14.5	1.925	20.5	2.825	26.5	3.725	32.5	4.625
14.6	1.940	20.6	2.840	26.6	3.740	32.6	4.640
14.7	1.955	20.7	2.855	26.7	3.755	32.7	4.655
14.8	1.970	20.8	2.870	26.8	3.770	32.8	4.670
14.9	1.985	20.9	2.885	26.9	3.785	32.9	4.685
15.0	2.000	21.0	2.900	27.0	3.800	33.0	4.700
15.1	2.015	21.1	2.915	27.1	3.815	33.1	4.715
15.2	2.030	21.2	2.930	27.2	3.830	33.2	4.730
15.3	2.045	21.3	2.945	27.3	3.845	33.3	4.745
15.4	2.060	21.4	2.960	27.4	3.860	33.4	4.760
15.5	2.075	21.5	2.975	27.5	3.875	33.5	4.775
15.6	2.090	21.6	2.990	27.6	3.890	33.6	4.790
15.7	2.105	21.7	3.005	27.7	3.905	33.7	4.805
15.8	2.120	21.8	3.020	27.8	3.920	33.8	4.820
15.9	2.135	21.9	3.035	27.9	3.935	33.9	4.835

TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR
DIFFERENCE IN GRAVITY OF CRUDE PETROLEUM

API GRAVITY	DIFF. PER BBL	API GRAVITY	DIFF. PER BBL	API GRAVITY	DIFF. PER BBL	API GRAVITY	DIFF. PER BBL
34.0	4.850	40.0	5.100	46.0	4.950	52.0	4.050
34.1	4.865	40.1	5.100	46.1	4.935	52.1	4.035
34.2	4.880	40.2	5.100	46.2	4.920	52.2	4.020
34.3	4.895	40.3	5.100	46.3	4.905	52.3	4.005
34.4	4.910	40.4	5.100	46.4	4.890	52.4	3.990
34.5	4.925	40.5	5.100	46.5	4.875	52.5	3.975
34.6	4.940	40.6	5.100	46.6	4.860	52.6	3.960
34.7	4.955	40.7	5.100	46.7	4.845	52.7	3.945
34.8	4.970	40.8	5.100	46.8	4.830	52.8	3.930
34.9	4.985	40.9	5.100	46.9	4.815	52.9	3.915
35.0	5.000	41.0	5.100	47.0	4.800	53.0	3.900
35.1	5.000	41.1	5.100	47.1	4.785	53.1	3.885
35.2	5.000	41.2	5.100	47.2	4.770	53.2	3.870
35.3	5.000	41.3	5.100	47.3	4.755	53.3	3.855
35.4	5.000	41.4	5.100	47.4	4.740	53.4	3.840
35.5	5.000	41.5	5.100	47.5	4.725	53.5	3.825
35.6	5.000	41.6	5.100	47.6	4.710	53.6	3.810
35.7	5.000	41.7	5.100	47.7	4.695	53.7	3.795
35.8	5.000	41.8	5.100	47.8	4.680	53.8	3.780
35.9	5.000	41.9	5.100	47.9	4.665	53.9	3.765
36.0	5.020	42.0	5.100	48.0	4.650	54.0	3.750
36.1	5.020	42.1	5.100	48.1	4.635	54.1	3.735
36.2	5.020	42.2	5.100	48.2	4.620	54.2	3.720
36.3	5.020	42.3	5.100	48.3	4.605	54.3	3.705
36.4	5.020	42.4	5.100	48.4	4.590	54.4	3.690
36.5	5.020	42.5	5.100	48.5	4.575	54.5	3.675
36.6	5.020	42.6	5.100	48.6	4.560	54.6	3.660
36.7	5.020	42.7	5.100	48.7	4.545	54.7	3.645
36.8	5.020	42.8	5.100	48.8	4.530	54.8	3.630
36.9	5.020	42.9	5.100	48.9	4.515	54.9	3.615
37.0	5.040	43.0	5.100	49.0	4.500	55.0	3.600
37.1	5.040	43.1	5.100	49.1	4.485		
37.2	5.040	43.2	5.100	49.2	4.470		
37.3	5.040	43.3	5.100	49.3	4.455		
37.4	5.040	43.4	5.100	49.4	4.440		
37.5	5.040	43.5	5.100	49.5	4.425		
37.6	5.040	43.6	5.100	49.6	4.410		
37.7	5.040	43.7	5.100	49.7	4.395		
37.8	5.040	43.8	5.100	49.8	4.380		
37.9	5.040	43.9	5.100	49.9	4.365		
38.0	5.060	44.0	5.100	50.0	4.350		
38.1	5.060	44.1	5.100	50.1	4.335		
38.2	5.060	44.2	5.100	50.2	4.320		
38.3	5.060	44.3	5.100	50.3	4.305		
38.4	5.060	44.4	5.100	50.4	4.290		
38.5	5.060	44.5	5.100	50.5	4.275		
38.6	5.060	44.6	5.100	50.6	4.260		
38.7	5.060	44.7	5.100	50.7	4.245		
38.8	5.060	44.8	5.100	50.8	4.230		
38.9	5.060	44.9	5.100	50.9	4.215		
39.0	5.080	45.0	5.100	51.0	4.200		
39.1	5.080	45.1	5.085	51.1	4.185		
39.2	5.080	45.2	5.070	51.2	4.170		
39.3	5.080	45.3	5.055	51.3	4.155		
39.4	5.080	45.4	5.040	51.4	4.140		
39.5	5.080	45.5	5.025	51.5	4.125		
39.6	5.080	45.6	5.010	51.6	4.110		
39.7	5.080	45.7	4.995	51.7	4.095		
39.8	5.080	45.8	4.980	51.8	4.080		
39.9	5.080	45.9	4.965	51.9	4.065		

For API GRAVITY values above 55.0° API the differential continues to decline 0.015/bbl. per 0.1° API GRAVITY.

TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR
DIFFERENCE IN SULFUR CONTENT FOR CRUDE PETROLEUM

PERCENT SULFUR	DIFF. PER BBL	PERCENT SULFUR	DIFF. PER BBL	PERCENT SULFUR	DIFF. PER BBL	PERCENT SULFUR	DIFF. PER BBL	PERCENT SULFUR	DIFF. PER BBL
0.00	1.000	0.60	1.600	1.20	2.200	1.80	2.800	2.40	3.400
0.01	1.010	0.61	1.610	1.21	2.210	1.81	2.810	2.41	3.410
0.02	1.020	0.62	1.620	1.22	2.220	1.82	2.820	2.42	3.420
0.03	1.030	0.63	1.630	1.23	2.230	1.83	2.830	2.43	3.430
0.04	1.040	0.64	1.640	1.24	2.240	1.84	2.840	2.44	3.440
0.05	1.050	0.65	1.650	1.25	2.250	1.85	2.850	2.45	3.450
0.06	1.060	0.66	1.660	1.26	2.260	1.86	2.860	2.46	3.460
0.07	1.070	0.67	1.670	1.27	2.270	1.87	2.870	2.47	3.470
0.08	1.080	0.68	1.680	1.28	2.280	1.88	2.880	2.48	3.480
0.09	1.090	0.69	1.690	1.29	2.290	1.89	2.890	2.49	3.490
0.10	1.100	0.70	1.700	1.30	2.300	1.90	2.900	2.50	3.500
0.11	1.110	0.71	1.710	1.31	2.310	1.91	2.910	2.51	3.510
0.12	1.120	0.72	1.720	1.32	2.320	1.92	2.920	2.52	3.520
0.13	1.130	0.73	1.730	1.33	2.330	1.93	2.930	2.53	3.530
0.14	1.140	0.74	1.740	1.34	2.340	1.94	2.940	2.54	3.540
0.15	1.150	0.75	1.750	1.35	2.350	1.95	2.950	2.55	3.550
0.16	1.160	0.76	1.760	1.36	2.360	1.96	2.960	2.56	3.560
0.17	1.170	0.77	1.770	1.37	2.370	1.97	2.970	2.57	3.570
0.18	1.180	0.78	1.780	1.38	2.380	1.98	2.980	2.58	3.580
0.19	1.190	0.79	1.790	1.39	2.390	1.99	2.990	2.59	3.590
0.20	1.200	0.80	1.800	1.40	2.400	2.00	3.000	2.60	3.600
0.21	1.210	0.81	1.810	1.41	2.410	2.01	3.010	2.61	3.610
0.22	1.220	0.82	1.820	1.42	2.420	2.02	3.020	2.62	3.620
0.23	1.230	0.83	1.830	1.43	2.430	2.03	3.030	2.63	3.630
0.24	1.240	0.84	1.840	1.44	2.440	2.04	3.040	2.64	3.640
0.25	1.250	0.85	1.850	1.45	2.450	2.05	3.050	2.65	3.650
0.26	1.260	0.86	1.860	1.46	2.460	2.06	3.060	2.66	3.660
0.27	1.270	0.87	1.870	1.47	2.470	2.07	3.070	2.67	3.670
0.28	1.280	0.88	1.880	1.48	2.480	2.08	3.080	2.68	3.680
0.29	1.290	0.89	1.890	1.49	2.490	2.09	3.090	2.69	3.690
0.30	1.300	0.90	1.900	1.50	2.500	2.10	3.100	2.70	3.700
0.31	1.310	0.91	1.910	1.51	2.510	2.11	3.110	2.71	3.710
0.32	1.320	0.92	1.920	1.52	2.520	2.12	3.120	2.72	3.720
0.33	1.330	0.93	1.930	1.53	2.530	2.13	3.130	2.73	3.730
0.34	1.340	0.94	1.940	1.54	2.540	2.14	3.140	2.74	3.740
0.35	1.350	0.95	1.950	1.55	2.550	2.15	3.150	2.75	3.750
0.36	1.360	0.96	1.960	1.56	2.560	2.16	3.160	2.76	3.760
0.37	1.370	0.97	1.970	1.57	2.570	2.17	3.170	2.77	3.770
0.38	1.380	0.98	1.980	1.58	2.580	2.18	3.180	2.78	3.780
0.39	1.390	0.99	1.990	1.59	2.590	2.19	3.190	2.79	3.790
0.40	1.400	1.00	2.000	1.60	2.600	2.20	3.200	2.80	3.800
0.41	1.410	1.01	2.010	1.61	2.610	2.21	3.210	2.81	3.810
0.42	1.420	1.02	2.020	1.62	2.620	2.22	3.220	2.82	3.820
0.43	1.430	1.03	2.030	1.63	2.630	2.23	3.230	2.83	3.830
0.44	1.440	1.04	2.040	1.64	2.640	2.24	3.240	2.84	3.840
0.45	1.450	1.05	2.050	1.65	2.650	2.25	3.250	2.85	3.850
0.46	1.460	1.06	2.060	1.66	2.660	2.26	3.260	2.86	3.860
0.47	1.470	1.07	2.070	1.67	2.670	2.27	3.270	2.87	3.870
0.48	1.480	1.08	2.080	1.68	2.680	2.28	3.280	2.88	3.880
0.49	1.490	1.09	2.090	1.69	2.690	2.29	3.290	2.89	3.890
0.50	1.500	1.10	2.100	1.70	2.700	2.30	3.300	2.90	3.900
0.51	1.510	1.11	2.110	1.71	2.710	2.31	3.310	2.91	3.910
0.52	1.520	1.12	2.120	1.72	2.720	2.32	3.320	2.92	3.920
0.53	1.530	1.13	2.130	1.73	2.730	2.33	3.330	2.93	3.930
0.54	1.540	1.14	2.140	1.74	2.740	2.34	3.340	2.94	3.940
0.55	1.550	1.15	2.150	1.75	2.750	2.35	3.350	2.95	3.950
0.56	1.560	1.16	2.160	1.76	2.760	2.36	3.360	2.96	3.960
0.57	1.570	1.17	2.170	1.77	2.770	2.37	3.370	2.97	3.970
0.58	1.580	1.18	2.180	1.78	2.780	2.38	3.380	2.98	3.980
0.59	1.590	1.19	2.190	1.79	2.790	2.39	3.390	2.99	3.990

TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR
DIFFERENCE IN SULFUR CONTENT FOR CRUDE PETROLEUM

PERCENT SULFUR	DIFF. PER BBL	PERCENT SULFUR	DIFF. PER BBL
3.00	4.000	3.60	4.600
3.01	4.010	3.61	4.610
3.02	4.020	3.62	4.620
3.03	4.030	3.63	4.630
3.04	4.040	3.64	4.640
3.05	4.050	3.65	4.650
3.06	4.060	3.66	4.660
3.07	4.070	3.67	4.670
3.08	4.080	3.68	4.680
3.09	4.090	3.69	4.690
3.10	4.100	3.70	4.700
3.11	4.110	3.71	4.710
3.12	4.120	3.72	4.720
3.13	4.130	3.73	4.730
3.14	4.140	3.74	4.740
3.15	4.150	3.75	4.750
3.16	4.160	3.76	4.760
3.17	4.170	3.77	4.770
3.18	4.180	3.78	4.780
3.19	4.190	3.79	4.790
3.20	4.200	3.80	4.800
3.21	4.210	3.81	4.810
3.22	4.220	3.82	4.820
3.23	4.230	3.83	4.830
3.24	4.240	3.84	4.840
3.25	4.250	3.85	4.850
3.26	4.260	3.86	4.860
3.27	4.270	3.87	4.870
3.28	4.280	3.88	4.880
3.29	4.290	3.89	4.890
3.30	4.300	3.90	4.900
3.31	4.310	3.91	4.910
3.32	4.320	3.92	4.920
3.33	4.330	3.93	4.930
3.34	4.340	3.94	4.940
3.35	4.350	3.95	4.950
3.36	4.360	3.96	4.960
3.37	4.370	3.97	4.970
3.38	4.380	3.98	4.980
3.39	4.390	3.99	4.990
3.40	4.400	4.00	5.000
3.41	4.410		
3.42	4.420		
3.43	4.430		
3.44	4.440		
3.45	4.450		
3.46	4.460		
3.47	4.470		
3.48	4.480		
3.49	4.490		
3.50	4.500		
3.51	4.510		
3.52	4.520		
3.53	4.530		
3.54	4.540		
3.55	4.550		
3.56	4.560		
3.57	4.570		
3.58	4.580		
3.59	4.590		

For Sulfur Values
above 4.00% the
differential continues
to increase 0.01/BBL
per 0.01 Percent
Sulfur

ATTACHMENT G Nomination Form

STRATEGIC PETROLEUM RESERVE

NOMINATION - CONFIRMATION

SPR Operations Fluor Federal Petroleum Operations New Orleans, Louisiana FFPOCOL@SPR.DOE.GOV	<u>Scheduler</u> Bradley Bauer (504) 453-8289 Lyle Johnson (504) 315-8431 <u>Quantity and Quality</u> Ned Scheppegrell (504) 722-6146
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****The following information must be provided by the Contractor****

Submission Date: [Click here to enter a date.](#) Submission Type: Original Nomination

Contract No.: Enter Contract Number
 Contractor: Enter Contractor Name
 Address: Enter Address
 City, State, Zip

Contractor Contact Information

Primary Contact: Primary Contact Name	Alternate: Alternate Contact Name
Office: Office Phone	Office: Office Phone
Cell: Cell Phone	Cell: Cell Phone
Email: Email Address	Email: Email Address

CODR/DD250 Contractor Signatory Designee*: Signatory Designee Name

Designee can be contractor office personnel, 3rd party inspection company, or chosen loss control representative.

Office: Office Phone
 Cell: Cell Phone
 Email: Email Address

Note: If multiple designees are to be used, please input "See Attached" and provide list to FFPOCOL@spr.doe.gov with nomination.

†Third Party Inspection Company Information

Company: 3rd Party Inspection Company

Contact: 3rd Party Contact Name

Contact Ned Scheppegrell for any questions on SPR 3rd party inspection and testing. (See Note at bottom of page)

Nomination Information and Delivery Window (additional lines on following page)

Delivery Window	Pipeline/Vessel	Volume (MB)	SPR Site	Destination
Dates	Choose an item.	Volume	Site	
Dates	Choose an item.	Volume	Site	
Dates	Choose an item.	Volume	Site	
Dates	Choose an item.	Volume	Site	
Total Volume:		Total Volume		

The Following information to be provided by SPR Operations Personnel

Terminal Information

Terminal: TBD
 Contact:
 Contact:
 Contact:

Custody Transfer Point

TBD
Quality Point
 TBD
Quantity Point
 TBD

DOE needs to pre-test each cargo prior to receipt, please contact Ned Scheppegrell 504-722-6146 Ned.Scheppegrell@spr.doe.gov and or Adam Morgan 504-360-4968 Adam.Morgan@spr.doe.gov