Attachment C

Letter to OMB from
American Petroleum Institute,
dated April 9, 1997.

American Petroleum Institute
1220 L Street, Northwest
Washington, D.C. 20005
202-682-8240

G. William Frick
Vice President and
General Counsel

April 9, 1997

Office of Management and Budget
Information and Regulatory Affairs
725 17th Street, NW
washington, DC 20503

Attn: Mr. David Rostker
Desk Officer for the Department of the Interior

MMS Notice of Proposed Rulemaking on Establishing Oil Value for Royalty Due on Federal Leases and on Sale of Federal Royalty Oil, 62 FR 3742(January 24, 1997)

Dear Mr. Rostker:

On March 25, 1997, several petroleum industry trade associations filed with you a joint letter (copy attached) addressing, among other things, the Paperwork Reduction Act implications of the Minerals Management Service's January 24, 1997, rulemaking proposal. API has carefully reviewed that letter and strongly endorses it. API plans to reiterate this endorsement in detailed and more comprehensive rulemaking comments which, under the MMS' present schedule, must be filed by April 28, 1997.

Sincerely,

G. William Frick

G. William Frick

Attachment

An equal opportunity employer

Attachment D

Freedom of Information Act request filed by API et al., dated, February 28, 1997.

DOMESTIC PETROLEUM COUNCIL

INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

INDEPENDENT PETROLEUM ASSOCIATION OF MOUNTAIN STATES

AMERICAN PETROLEUM INSTITUTE

MID-CONTINENT OIL AND GAS ASSOCIATION

ROCKY MOUNTAIN OIL AND GAS ASSOCIATION

February 28, 1997

Certified Mail, Return Receipt Requested

FOIA Coordinator
Minerals Management Service
U.S. Department of the Interior
Mail Stop 2053, Atrium Building
Herndon, VA 22070
Attn: Carole de Witt

FOIA Coordinator
Office of the Secretary
U.S. Department of the Interior
1849 "C" Street, N.W.
Mail Stop 1414, MIB
Washington, D.C. 20240
Attn: Sue Ellen Sloca

FOIA Coordinator
Royalty Management Program
Minerals Management Service
U.S. Department of the Interior
P.O. Box 25165
Denver Federal Center, Building 85
Mail Stop 3062
Denver, CO 80225
Attn: Greg Kann

FOIA Coordinator
Office of Inspector General
U.S. Department of the Interior
1849 "C" Street, N.W.
Mail Stop 5341, MIB
Washington, D.C. 20240
Attn: Jacquline Marini

Re: Freedom of Information (FOIA) Request relating to the Department of Interior, Minerals Management Service Notice of Proposed Rulemaking on Establishing Oil Value for Royalty Due on Federal Leases and on Sale to Federal Royalty Oil (62 F.R. 3742) published January 24, 1997

Dear Madames and Sir:

Pursuant to the Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, and the Department's regulations, 43 C.F.R. Part 2, we hereby request a copy of the documents identified below. The scope of this request is intended to include documents located at all DOI offices, including all DOI regional, district and local offices. For purposes of this request, the term "document" also includes, but is not limited to, any writing, report, letter, manual, note, electronic data, memorandum, guide, guidance, instruction, text, correspondence, communication, computer data, drawings, graphs, charts, photographs and other data compilations from which information can be obtained.

The term "document" also includes, but is not limited to, the following:

(1) The identified document and all drafts of the document;

(2) The so-called "surname copy" of the document, which reflects which officials subordinate to the signer cleared the document for his or her signature;

(3) Briefing papers and notes (including electronic notes) of any meetings regarding the substance of the document;

(4) Memoranda, including legal memoranda. prepared on the issues discussed in the document; and

(5) Other documents received from or sent to (1) local, city, state, tribal or other federal governmental agencies (2) the DOI Office of the Inspector General and (3) Members or Committees of Congress.

We request the above information for the following documents and materials:

1. The MMS Notice of Proposed Rulemaking on Establishing Oil Value for Royalty Due on Federal Leases and on Sale of Federal Royalty Oil (hereinafter "MMS Notice" published January 24, 1997 (62 F.R. 3742) states:

> *"MMS used various sources of information to develop the proposed rule. In addition to comments received on the Advance Notice of Proposed rulemaking, MMS attended a number of presentations by: crude oil brokers and refiners, commercial oil price reporting services, companies that market oil directly, and private consultants knowledgeable in crude oil marketing."*

As used above, please provide all materials, information, documents and communications reviewed, generated by or obtained from all "sources used," including but not limited to:

A. presentations by crude oil brokers;

B. presentations by crude oil refiners;

C. presentations by commercial oil price reporting services;

D. presentations by companies that market oil directly; and

E. presentations by private consultants knowledgeable in crude oil marketing.

2. The MMS News Release (hereinafter "MMS News Release") (copy attached) dated January 10, 1997 states:

"The MMS used various sources of information to develop the proposed rule. In addition to comments received on the Advance Notice of Proposed Rulemaking, MMS consulted with States, crude oil brokers and refiners, commercial oil price reporting services, companies that market oil directly, and private consultants knowledgeable in crude oil marketing. MMS also solicited comments from the Departments of Energy and Commerce."

As used above, please provide copies of all presentation materials, information, documents generated by or obtained from and communications with:

A. States;
B. crude oil brokers;
C. crude oil refiners;
D. commercial oil price reporting services;
E. companies that market oil directly;
F. private consultants knowledgeable in crude oil marketing;
G. the Departments of Energy; and
H. the Department of Commerce.

3. The MMS News Release states:

"The intent of the proposed rule is to reduce reliance on posted prices for royalty valuation, reflect true market value, provide certainty to all involved, and provide maximum flexibility to adapt to changing market conditions. We believe that the proposal achieves this," said the MMS Director Cynthia Quarterman.

Please provide all materials, information and documents which identify, describe or relate to "true market value" as used in the above statement. Please provide all documents related to any analysis MMS has performed regarding "true market value" for the sale or purchase of crude oil.

4. The MMS News Release as used in the above statement states:

> ***"The proposed regulation retains the concept that for arm's-length sales, gross proceeds generally will be the royalty value, but its application will be limited. 'Because of the frequency of oil exchange agreements, reciprocal deals between crude oil buyers and sellers, and other factors where the real consideration for the transaction could be hidden, arm's-length contract prices will be used as royalty value only by producers who do not also purchase crude oil,' explained Quarterman."***

The MMS "Questions and Answers California Crude Oil Underpayments and Proposed Oil Valuation Regulations" dated January 30, 1997 (hereinafter "MMS Questions and Answers" (copy attached) states:

> ***"Q) 'How would the new Federal oil valuation rule be different from the current one?'***
>
> ***A) The proposed rule would still rely on arm's-length proceeds, but on a limited basis. Because of the frequency of oil exchange agreements, reciprocal deals between crude oil buyers and sellers, and other factors where the real consideration for the transaction could be hidden, arm's-length contract prices would be used as royalty value only by producers who do not also purchase crude oil. Where a company's affiliate takes the production and sells it at arm's length, value would be the affiliate's proceeds or, optionally, NYMEX or spot prices adjusted for location and quality differences. For all other non-arm's-length transactions or where no sales occur, the value would be determined by index prices--either NYMEX or spot prices--adjusted for location and quality differences."***

Please provide all materials, information and documents which identify, describe or relate to "real consideration" as used in the above statements. Please provide all documents

related to any analysis MMS has performed regarding "real consideration" for the sale or purchase of crude oil.

5. The MMS Questions and Answers states:

> "Q) *'What process did you use to develop the proposed rule?'*
>
> A) *The comments it received led MMS to put together a regulatory writing team composed of MMS staff and representatives of States, Indians, and the Western States Land Commissioners. During its deliberations the team relied not only on its combined internal expertise but also presentations by: crude oil brokers and refiners, commercial oil price reporting services, companies that market oil directly, and private consultants knowledgeable in crude oil marketing. MMS' deliberations were aided greatly by a wide range of expert advice.* "

As used above, please provide all presentations, materials, information, documents and communications generated by or obtained from any expert and all other persons consulted, including but not limited to:

A. crude oil traders;
B. crude oil refiners;
C. commercial oil price reporting services;
D. companies that market oil directly;
E. private consultants knowledgeable in crude oil marketing; and
F. MMS internal experts.

6. If different from (1)-(5) above, please provide all presentations, materials, information, documents, communications, data, studies and analysis which address or relate in any way to the MMS Notice on crude oil valuation (1/24/97 NOPR) or crude oil valuation for royalty purposes.

7. Please provide a copy of all materials, information and documents sent to or received by the Office of the Secretary, the Office of the Assistant Secretary for Land and Minerals, the DOI Office of Inspector General, or other federal or state agencies, including but not limited to, the Federal Energy Regulatory Commission, the Department of Energy, the Department of Commerce, the Office of Management and Budget, the State of California, the City of Long

Beach or any State which address or relate to the MMS Notice dated January 24, 1997 or crude oil valuation for royalty purposes.

8. Please provide all materials, information and documents obtained by, generated by or reviewed by MMS relating to the NYMEX or ANS "spot" prices.

9. Please provide all materials, information and documents on crude oil tariffs established by the Federal Energy Regulatory Commission (FERC) or on the costs of transporting crude oil.

10. With respect to the MMS proposal for valuating crude oil as stated in the MMS Notice, please provide all materials, information and documents which address or relate to:

    A. the Paperwork Reduction Act;

    B. the Regulatory Flexibility Act;

    C. the Unfunded Mandates Reform Act of 1995;

    D. applicable Executive Orders (and in particular Executive Order 128666);

    E. the Small Business Regulatory Enforcement Fairness Act of 1996; and

    F. the reinventing government initiatives within the DOI and MMS, including REGO 1 and REGO 2.

11. Please provide all materials, information and documents which support the following MMS assumptions contained in the MMS Notice:

    A. Decreased reliance on posted prices will better reflect the market value for crude oil (62 F.R. 3742);

    B. Reliance on NYMEX prices better reflects the market value for crude oil (62 F.R. 3745);

    C. NYMEX pricing can be applied in virtually all oil markets (62 F.R. 3745);

D. NYMEX reflects the price of a wet barrel of crude oil at the wellhead rather than being reflective of paper transaction (62 F.R. 3745);

E. Exchange agreements are not arms-length transactions (62 F.R. 3742) and as such do not reflect appropriate value (62 F.R. 3742);

F. Sales to affiliated refiners are not arms-length transactions (62 F.R. 3742);

G. Location/quality differentials can best be determined by calculating differences between crude oil prices at market centers and index pricing points (62 F.R. 3745);

H. Data collected post sale can better reflect the price than free (uncontrolled) marketplace (62 F.R. 3744);

I. Oil sales contracts do not reflect the total consideration between a seller and buyer (62 F.R. 3743);

J. Most federal oil is disposed of under exchange agreements or sales to affiliated refiners (62 F.R. 3742);

K. Exchange agreements and sales to affiliated refiners breach duty of lessee to market for benefit of lessor (62 F.R. 3743);

L. Multiple transactions with the same party are not arms-length transactions (62 F.R. 3743);

M. Producers have less incentive to capture full value if they *may*, in reciprocal dealings, be able to buy oil at less than market value (62 F.R. 3743);

N. Oil sold pursuant to crude calls is "suspect" since favorable crude price may be a condition of and reflected in sale of underlying property (62 F.R. 3744);

O. There is mounting evidence that posted prices frequently do not reflect value in today's marketplace (62 F.R. 3744);

P. Lessees will choose method to their advantage on lease-by-lease basis unless prohibited (62 F.R. 3744);

Q. Today's oil market is driven largely by the NYMEX (62 F.R. 3746);

R. Local market indicators may be considered (62 F.R. 3746);

S. The MMS method proposed is widely applicable and flexible enough to apply nationwide (62 F.R. 3746); and

T. Use of a FERC or a state-approved tariff is inferior to the use of actual costs of transportation (62 F.R. 3746).

12. Please provide all materials, information and documents which refute or do not support the assumptions identified in paragraph 11 above.

13. Please provide all materials, information and documents sent to or received by the DOI Office of Inspector General with address as relate to the MMS Notice or crude oil valuation for royalty purposes.

14. Please separately identify and provide a copy of each and every document which is currently contained in or is a part of the administrative record for the rulemaking proposed by the MMS Advance Notice (60 F.R. 6510) (12/20/95) and the MMS Notice.

15. Please provide a copy of all correspondence, materials information, documents and communications provided to or received by any Member or Committee of Congress regarding the MMS Notice.

16. Please provide all requests from MMS and replies to MMS regarding the proposed regulation.

17. Please provide all documents prepared to respond, or provide information for response, to Congressional requests for information regarding the MMS Notice and rulemaking on crude oil valuation.

We are willing to pay all reasonable reproduction and search fees provided by regulation. Should you determine that any of the requested information is exempt from disclosure, please delete such allegedly exempt portions and identify in your response the nature of the deleted information and the reason for the deletion. This consent is intended to facilitate your prompt response and in no way waives our entitlement to complete documents. In the event that we are denied any document or any portion of any requested document, please identify each document with particularity and specify the statutory basis for the denial of each document or portion withheld and the names and titles of the persons responsible for the denial.

We ask that your response be directed to the undersigned in care of Patricia Dunmire Bragg, 100 West Fifth Street, Suite 200, Tulsa, Oklahoma 74103-4240 (918) 699-2920, fax (918) 699-2929. We look forward to hearing from you within ten (10) working days pursuant to Section (a)(6)(A)(i) of the Act. It is important that the documents requested be timely provided as it is essential to review the requested information prior to responding to the MMS Notice and proposed rulemaking on which comments are currently due April 28, 1997. Non-receipt of the requested documents will prejudice the requesters ability to comment on the MMS Notice.

Thank you for your prompt attention to this matter.

DOMESTIC PETROLEUM COUNCIL

INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

INDEPENDENT PETROLEUM ASSOCIATION OF MOUNTAIN STATES

AMERICAN PETROLEUM INSTITUTE

MID-CONTINENT OIL AND GAS ASSOCIATION

ROCKY MOUNTAIN OIL AND GAS ASSOCIATION

Enclosures:
MMS Press Release (dated January 10, 1997)
MMS Questions & Answers (dated January 30, 1997)

MMS

U.S. Department of the Interior
Minerals Management Service
Office of Communications

NEWS RELEASE

FOR RELEASE: January 10, 1997

CONTACT: Tom DeRocco
(202) 208-3985

MMS PUBLISHES NOTICE OF PROPOSED RULEMAKING FOR FEDERAL OIL VALUATION

The U.S. Department of the Interior's Minerals Management Service (MMS) has sent to the *Federal Register*, proposed amendments to regulations governing the royalty valuation of crude oil produced from federal leases. The Notice of Proposed Rulemaking is expected to be published in the *Federal Register* by mid-January.

In December 1995, MMS published an Advance Notice of Proposed Rulemaking asking for comments on whether the current oil valuation regulations reflect the actual value of the oil. MMS also asked for suggestions on better ways to value oil for royalty calculation purposes.

The MMS used various sources of information to develop the proposed rule. In addition to comments received on the Advance Notice of Proposed Rulemaking, MMS consulted with States, crude oil brokers and refiners, commercial oil price reporting services, companies that market oil directly, and private consultants knowledgeable in crude oil marketing. MMS also solicited comments from the Departments of Energy and Commerce.

"The intent of the proposed rule is to reduce reliance on posted prices for royalty valuation, reflect true market value, provide certainty to all involved, and provide maximum flexibility to adapt to changing market conditions. We believe that the proposal achieves this," said MMS Director Cynthia Quarterman.

The proposed regulation retains the concept that for arm's-length sales, gross proceeds generally will be the royalty value, but its application will be limited. "Because of the frequency of oil exchange agreements, reciprocal deals between crude oil buyers and sellers, and other factors where the real consideration for the transaction could be hidden, arm's-length contract prices will be used as royalty value only by producers who do not also purchase crude oil," explained Quarterman.

(more)

MMS expects a large portion of federal oil production to be valued as if not sold under an arm's-length contract because most federal oil is disposed of under exchange agreements or sales to affiliated refiners. In those instances the rule proposes that value be based on either 1) affiliated arm's-length resale prices or 2) the monthly average of the New York Mercantile Exchange (NYMEX) prices, or for production in California and Alaska on Alaska North Slope (ANS) prices, with appropriate adjustments for location and or quality differentials.

The proposal does not apply to Indian leases. A separate regulation was developed simultaneously to apply in those cases. However, a number of tribes requested MMS to briefly delay the proposed rulemaking to allow for further consultations.

The rule will be open for public comment for 60 days. It will also be available on the Internet at **www.mms.rmp.gov**.

The MMS is the federal agency that manages the Nation's natural gas, oil and other mineral resources on the OCS and collects, accounts for and disburses about $4 billion yearly in revenues from offshore federal mineral leases and from onshore mineral leases on federal and Indian lands.

-MMS-

MMS's Website Address: http://www.mms.gov
MMS's 24-Hour Fax-on-Demand Service: (202) 219-1703

January 30, 1997

QUESTIONS & ANSWERS
CALIFORNIA CRUDE OIL UNDERPAYMENTS
AND
PROPOSED OIL VALUATION REGULATIONS

Q) How did this California pricing project get started?

A) It started with the City of Long Beach litigation that was initiated in 1975 and settled in 1991. After a review of this settlement, Assistant Secretary for Land and Minerals Management Bob Armstrong commissioned an interagency task force to study the situation. Members of the task force included the Department of Interior, Department of Commerce, Department of Energy and the Department of Justice, with assistance from the State of California..

Q) Why did you start your collection efforts with January 1980?

A) Crude oil was under price controls until the deregulation of heavy crude oil (i.e., oil with an API gravity of 16 degrees or less) in December 1979. A significant portion of crude oil produced in California is heavy crude. With the lifting of Federal price controls, companies once again had flexibility in pricing their crude oil and could obtain prices other than the maximums specified by the Government. Also, by far the largest potential collections, including interest, are in the 1980-85 period. This approach was also suggested by members of the interagency task force.

Q) How many companies are being audited and how were they selected?

A) We looked at federal sales and royalty history over a 13-year period for crude oil and determined that 20 companies produced over 97% of the crude oil from federal properties on- and offshore California. Thus, these 20 companies were selected for audit.

Q) If you are auditing 20 companies, why were bills sent to only 10?

A) Bills have been sent to 10 integrated companies for the period 10/1/83-2/29/88, and to 9 of these same companies for the period 1/1/80-9/30/83. Additional royalties due from those companies after 2/29/88 and from the non-integrated companies will be determined by the review of documents at the companies. These reviews are currently underway.

Q) Why have two sets of bills been sent out?

A) Computerized sales and royalty data was readily available for the period October 1983 through February 1988 after the Minerals Management Service was created. Therefore, the first set of bills sent covered this period. The records for the earlier period of January 1980 through September 1983 were not computerized and took much longer to obtain.

Q) Were bills sent to all integrated companies?

A) No. Two companies, Chevron and Exxon, have settlement agreements that preclude billing prior to October 1, 1989 without a finding of fraud, collusion, or improper conduct. One of the 20 companies, Pennzoil, did not have any federal properties in California during the period of January 1, 1980 through February 29, 1988.

Q) How were underpayments determined for the integrated companies for the periods covered by the bills (January 1, 1980 - February 29, 1988)?

A) Alaska North Slope (ANS) prices were compared to applicable posted prices used by the integrated companies as their basis for royalty payments. Where ANS prices exceeded posted prices a premium was calculated based on the differences. The royalty underpayments were calculated by multiplying those premiums times the royalty volumes reported by the companies.

Q) Why were ANS prices used?

A) The task force determined that the ANS price has been used by companies in California to determine the profitability of transactions; ANS crude oil is the primary substitute for California oil; and, 30% to 45% of the crude oil refined in California was ANS. The regulations for that period of time gave the Secretary broad authority to determine the method of pricing crude oil. This situation prevailed through February 29, 1988, when the federal crude oil valuation regulations changed.

Q) What about the remaining 7 non-integrated companies before 1988?

A) Bills will be sent to the remaining 7 companies after the reviews of documents at those companies have been completed.

Q) How much have you billed so far?

A) Bills sent out to date total $385.4 million.

Q: If you were to collect the full $440 million, how much would the state of California receive?

A: About $80 million. This estimate is based on the ratios for offshore and onshore production used by the inter-agency team in developing their high estimate of $856 million. It includes approximately $9 million for leases in the so called "8(g)" zone.

Q) How much have you collected?

A) To date nothing. The companies have yet to exhaust the administrative remedies available to them. When these remedies are exhausted, the courts may be involved in resolving these issues.

Q) How long will it take to complete the California project?

A) The MMS implementation plan requires all bills to be sent out no later than 12 months after the documents that are necessary to determine the underpayments have been received from the companies. Several companies have been less than co-operative in providing documentation, and eight subpoenas have been issued.

Q) What about crude prices in the rest of the country?

A) The MMS has an initiative under way to review the records of 125 additional companies doing business in all parts of the country, to determine if significant royalty underpayment exists.

Q) Why 125 companies?

A) These 125 companies account for over 85 percent of the 1991-1995 oil revenue from federal and Indian leases. For several months, MMS has held open past audit periods at the major companies from 1989 forward. Plans call for auditing current periods first, and if indications of earlier violations are identified, we may go back to earlier periods (pre-1990).

Q) Why do the existing rules need to be changed?

A) The current Federal and Indian oil valuation rules may not always result in market value being used as royalty value. For example, the existing rules rely fairly heavily on posted prices--the prices published by oil refiners. MMS believes that posted prices may now represent the beginning point for price negotiation or something similar, but no longer generally represent market value.

Q) What process did you use to develop the proposed rule?

A) MMS first published an advance notice of proposed rulemaking to get feedback on whether the rule should be changed, especially its reliance on posted prices. The comments it received led MMS to put together a regulatory writing team composed of MMS staff and representatives of States, Indians, and the Western States Land Commissioners. Industry was not represented on the team because their comments on the advance notice indicated they didn't want to participate until their related litigation elsewhere is resolved. During its deliberations the team relied not only on its combined internal expertise but also presentations by: crude oil brokers and refiners, commercial oil price reporting services, companies that market oil directly, and private consultants knowledgeable in crude oil marketing. MMS' deliberations were aided greatly by a wide range of expert advice.

Q) How would the new Federal oil valuation rule be different from the current one?

A) Royalty valuation under the existing rules relies on the proceeds received by the lessee in its arm's-length transactions. If the lessee disposes of its oil under a non-arm's-length contract or doesn't sell it at all--such as when it refines the oil itself--a series of benchmarks apply. These benchmarks rely on posted prices and arm's-length contract prices in the area.

The proposed rule would still rely on arm's-length proceeds, but on a limited basis. Because of the frequency of oil exchange agreements, reciprocal deals between crude oil buyers and sellers, and other factors where the real consideration for the transaction could be hidden, arm's-length contract prices would be used as royalty value only by producers who do not also purchase crude oil. Where a company's affiliate takes the production and sells it at arm's length, value would be the affiliate's proceeds or, optionally, NYMEX or spot prices adjusted for location and quality differences. For all other non-arm's-length transactions or where no sales occur, the value would be determined by index prices--either NYMEX or spot prices--adjusted for location and quality differences.

Q) What is the difference between arm's-length and non-arm's-length contracts?

A) For a transaction to be at arm's length, it must be between independent, nonaffiliated parties with opposing economic interests in the contract. If these conditions don't exist, then the contract is non-arm's-length. In the proposed rule, arm's-length contract prices would be used as royalty value only by producers who do not also purchase crude oil. In addition, certain transactions such as exchange agreements would always be valued as if not at arm's length because of their reciprocal nature. (That is, as long as the two parties receive the proper <u>relative</u> value, they may have little incentive to assure that the <u>absolute</u> contract price reflects market value.)

Q) How are you determining the difference between integrated and non-integrated companies?

A) We have defined an integrated company as one that has U.S. refining capability. An integrated company will not normally sell its crude oil production. It will therefore not have gross proceeds on which to base royalty payments. A non-integrated company is one that does not have U.S. refining capability; thus, will sell its crude oil to outsiders.

Q) What is the NYMEX price?

A) NYMEX stands for the New York Mercantile Exchange. The proposed index price for leases other than in California or Alaska is the NYMEX futures price at Cushing, Oklahoma, for oil deliveries in the following month. MMS searched for indicators to best reflect current market prices and settled on NYMEX for several reasons. It represents the price for a widely traded domestic crude oil (West Texas Intermediate at Cushing Oklahoma). It is the most widely accepted benchmark of crude oil worldwide. Because of the sheer volume of oil futures contracts traded on NYMEX and the low possibility that any one party could unduly influence prices, the NYMEX futures prices generally are considered the best single indicator of oil market value. Also, NYMEX prices were regarded by many of the experts MMS consulted to be the best available measure of oil value. The most difficult problem, as will be discussed in more detail below, would be to make appropriate location and quality adjustments when comparing the NYMEX crude with the crude produced.

Q) What are spot prices?

A) Spot prices are published by trade publications; they represent surveys of market prices for particular types of crude oil produced in specific areas. For California and Alaska, published spot prices for Alaska North Slope crude oil, rather than NYMEX prices, would be the index value. This is due to the difficulties in adjusting prices in those locales for locational differences compared to Cushing, Oklahoma.

Q) How would lessees make location and quality adjustments from the index values?

A) Where lessees report value based on their arm's-length proceeds, they would be able to deduct their actual costs to transport production to the point of sale. Location and quality adjustments against index prices are composed of three segments:

(1) A location and/or quality differential between the index pricing point (for example, West Texas Intermediate at Cushing, Oklahoma) and the appropriate market center (for example, Light Louisiana Sweet at St. James, Louisiana).

(2) A location and /or quality differential between the market center and major aggregation points based on a rate either published by MMS or a rate contained in the lessee's arm's-length exchange agreement.

(3) Actual transportation costs from the aggregation point to the lease. Lessees with ownership in pipelines would no longer have the ability to utilize FERC tariffs in lieu of computing actual costs.

Q) How can NYMEX be used to value oil in more remote production areas such as Wyoming?

A) Some production from more remote areas will not physically reach a market center. For example, a Wyoming Sour crude producer might transport its oil directly to a refinery in Salt Lake City without accessing any defined aggregation points or market centers. In this case West Texas Sour crude at Midland, Texas, might represent the crude oil/market center combination nearest to the oil produced. The market center-index pricing point location/quality differential would then be the difference in the spot price between West Texas Intermediate at Cushing, Oklahoma, and West Texas Sour at Midland, Texas as published in an MMS-approved publication. In addition to that adjustment, the producer would be entitled to an allowance for the actual transportation costs from the lease in Wyoming to Salt Lake City. MMS believes this method is the best way to calculate the differences in value between the lease and the index pricing point due to location, quality, and transportation when the production is not actually moved to a market center.

Q) What other major provisions are included in the proposed rule?

A) The proposed rule contains two other significant provisions: (1) valuation of oil taken in kind by the Government would be tied to NYMEX and spot prices as discussed earlier, and (2) lessees would no longer be permitted to use their FERC tariffs as a transportation allowance in moving their own oil--they would have to do actual cost calculations.

Q) Is Indian oil valuation tied to the Federal rules?

A) No. At the request of several tribes, MMS will develop a separate Indian rule after consultation with them. A three-day meeting is scheduled in mid-February to get feedback from Indians on drafting the separate rule. The proposed Indian rule would differ from its Federal counterpart to better accommodate the different terms of Indian leases--principally the provisions requiring value on the "highest price paid for a part or majority of like-quality crude" in the field or area.

Q) When do you expect to publish a final Federal rule?

A) MMS doesn't have a definite projected date for publishing the Federal rule in final form. The comment period is scheduled for 60 days, and follow-up activity depends on the extent of comments received and modifications needed. However, we should be able to publish a final rule by the end of the year.

Q) Will the new rules mean more royalty collections, and if so, how much?

A) We believe the proposed Federal rule would result in increased royalty collections--perhaps on the order of $50-100 million per year.

Q) What has been industry's reaction?

A) They have been noncommittal to date. Industry chose not to participate in any negotiated rulemaking on this issue because of their involvement in private litigation involving crude oil valuation. We expect to receive numerous comments from them on the proposed rule.

Attachment E

Memorandum from Jerry D. Hill,
Associate Director for Royalty Management,
to Director, Minerals Management Service,
dated February 12, 1987.

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
ROYALTY MANAGEMENT PROGRAM
P.O. BOX 25165
DENVER, COLORADO 80225

IN REPLY REFER TO:
MMS-RVS-EVB:86-1088
Mail Stop 653

FEB 12 1987

Memorandum

To: Director, Minerals Management Service

From: Associate Director for Royalty Management

Subject: Review of Analysis Titled "Crude Oil Royalty Valuation Monitoring System," by Bob Berman, Policy, Budget, and Administration

By memorandum of November 21, 1986, the Deputy Assistant Secretary, Policy, Budget, and Administration (PBA), suggested to you that further study be done of market-based approaches to royalty valuation under non-arm's-length conditions. He included an analysis dated November 28, 1986, by PBA's Bob Berman, who suggests the application of oil futures or spot prices as an alternative valuation methodology. Our comments on this analysis have been requested.

It is obvious that considerable thought and effort have gone into Mr. Berman's analysis. However, the inescapable conclusion is that, for purposes of oil royalty valuation, the application of futures and/or spot prices would be either contrary to existing law, lease terms, and regulations, or too impractical and nonspecific to administer. Listed below are our specific comments:

-- The Mineral Leasing Act of 1920 (Section 17(b) and (c)) states that royalty shall be based on the amount or value of production removed or sold from the lease. The Outer Continental Shelf Lands Act of 1953 (Section 6(a)(8)) states that royalty is due on the amount or value of production saved, removed, or sold. There can be little doubt that the value of production removed or sold was intended to be the current value, for which a futures price would be inapplicable.

-- Similarly, the various Federal and Indian leases require royalty on the amount or value of production removed or sold. Once again, futures prices would not, except coincidentally, reflect values of production sold currently.

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-- The existing regulations dealing with oil valuation, both onshore and offshore, address value of production, at the time of production or sale, for computing royalty. The regulations at 30 CFR 206.103 (onshore) state that, in the absence of good reason to the contrary, value based on the highest price paid or offered at the time of production for the major portion of like-quality products from the same field or area will be considered reasonable value. Similarly, the regulations at 30 CFR 206.150 (offshore) state that "Under no circumstances shall the value of production be less than the gross proceeds accruing to the lessee. . . ."

These regulations require leasehold oil production to be valued as of the time of production and/or sale. Hence, any attempt to apply a futures price for royalty value purposes would necessarily incorporate the market's assessment of the level of oil prices at some future date. Obviously the futures prices would not necessarily be reflective of current market price levels as required by regulation.

Though it may be suggested that current regulations could be changed to effect changes to royalty provisions of future leases, it is important to note that such rulemaking would need to conform with existing statutes. As previously mentioned, existing statutes indicate a royalty based on current value. Consequently, a change in statutory, as well as regulatory, language may be necessary to issue new leases with royalty provisions tied to futures values.

-- Application of spot prices in valuing non-arm's-length disposals of lease production would not be specific. Spot prices are available only for a limited number of "benchmark" domestic crudes delivered at specific points; e.g., West Texas Intermediate at Cushing, Oklahoma. It is not clear how spot prices would be adjusted for differences in quality or necessary transportation between that of the "benchmark" crude and that of the crude to be valued. An adjustment for differences in API gravity alone, for example, while a reasonable price adjustment mechanism for oil produced in the same field or area, does not necessarily reflect true value differences when comparing crudes from distant areas. The price differences in crude oil nationwide depend upon a host of factors not limited solely to gravity and transportation adjustments. Factors important to the establishment of value of a particular crude include the need for and availability of crude oil supply, the cost of transportation to the refinery, the chemical composition and refining characteristics of the crude oil, the cost to refine the particular crude, the mix of refined products derivable from the crude and their values, prices currently paid or offered for the same or comparable crudes, and other economic criteria. Posted prices, which exist in all the important producing areas, reflect all these considerations; "benchmark" spot prices, on the other hand, cannot relate these factors specifically to each producing area. The same is true for futures prices, which also relate to a few "benchmark" crudes only.

-- Mr. Berman's analysis speaks to "market-based" alternate valuation procedures; i.e., futures and/or spot prices. The implication that posted prices are not market prices is, of course, true to the extent that postings are offers to buy and do not always reflect prices actually paid. Postings are, however, driven by the market, are sensitive to market changes, and are adjusted as market conditions require. While posted prices may, on occasion, vary slightly from actual market prices, they are undoubtedly market based. The MMS would be hard pressed to defend a position that futures prices are better, more accurate, and more current measures of royalty value for current production than are concurrent posted prices.

-- Posted prices are widely available. They exist for nearly all fields and areas for which royalty valuation is necessary. Further, since a field posting relates to oil with the same general quality characteristics, quality-based price adjustments are simple and accurate. The same cannot be said for application of spot or futures prices for royalty valuation purposes.

-- A real inconsistency would develop if prices received under arm's-length conditions were accepted for royalty valuation purposes while futures prices were applied to non-arm's-length transactions. Two entirely different valuation standards would exist. (We agree that non-arm's-length transactions should receive a higher monitoring priority, and generally be investigated more thoroughly than arm's-length transactions. However, the standards to which each type of transaction is held should be as similar as possible.) If arm's-length prices are acceptable for royalty valuation purposes, a reasonable proxy for current non-arm's-length prices is not a futures price, but, rather, an assessment of what is currently being obtained under arm's-length conditions.

In summary, even though Mr. Berman's analysis is a scholarly study which provides insight into the workings of the oil futures market, we must disagree with the application of oil futures or spot prices as a basis for royalty valuation in non-arm's-length situations. We have ignored the fact that the study covered a relatively short period of time (15 months) during which extreme pricing volatility took place, and we have not discussed other, more minor disagreements we have with the study. More important is the basic conclusion that, even if the study results do indicate that oil futures prices "lead" posted prices, this has no bearing on our valuation responsibilities. For royalty valuation purposes, we must apply market value existing at the time of production or sale. Whether postings are considered to lag futures prices or not, postings represent current offers to purchase oil and are adjusted as necessary to conform to market conditions. Further, oil futures and spot prices are available on such a limited basis as to make price adjustments for quality and/or transportation extremely difficult, if not meaningless.

It has been our policy in non-arm's-length situations to verify that the posting or other price to be applied for royalty purposes is consistent with prevailing arm's-length prices. This policy is, we feel, rightly extended in the proposed oil royalty valuation regulations. The continued acceptance of arm's-length postings or contract prices is seen as the most equitable, most practical, and most easily administered method of royalty valuation available. The widespread existence and acceptance of posted prices make them much more applicable to specific cases than oil futures or spot prices, both in terms of timing and necessary adjustments.

Jerry D. Hill

Attachment F

Excerpts of Testimony of Professor Kalt
January 16-17, 1997
Testimony in Engwall v. Amerada Hess et al., CV-95-32, Fifth Judicial District, County of Chaves, New Mexico.

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THE COURT: Good morning. Be seated, please.

MR. ZOTT: Good morning, Your Honor.

THE COURT: Good morning.

Are you ready to proceed?

MR. ZOTT: Yes, Your Honor.

I was wondering if it would be possible if Professor Kalt sat up there instead? Would that be all right with you?

THE COURT: That's fine.

MR. ZOTT: Defense recalls Professor Kalt.

THE COURT: Yes.

MR. ZOTT: Your Honor, before I begin, I just wanted to return to what we discussed yesterday at the end, and just make very clear for the record, if I wasn't clear, that, first, this – what we're trying to offer here, we believe, goes to the essence of the class certification issues, and I think that will become clear as we proceed; and the second point is that we're not trying to offer this database or this testimony to prove that any plaintiff has not or has been underpaid. We're not offering it on that point.

We're only offering it to show the Court – and to demonstrate the kind of proof that will be

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necessary and appropriate to resolve these underpayment claims.

So, in that sense, the database is not offered for the merits, but simply to show the kind of proof and the type of that would be necessary, which we believe is the critical issue for the Court.

With that, I'd like to go out of order. We were going to start with the conclusions, and I want to go right to the database, because it seemed that Your Honor had some questions about that, and it seems to me that the place to begin is simply to have Professor Kalt address that.

THE COURT: That's correct.

JOSEPH P. KALT

after having been previously duly sworn under oath, was questioned and testified further as follows:

DIRECT EXAMINATION (CONTINUED)

BY MR. ZOTT:

Q. Professor Kalt, you recall yesterday that we had a considerable discussion about what has colloquially become known has the transactions database?

A. Yes.

Q. First of all, sir, can you tell the Court what is this transactions database?

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A. Sure.

If I could put up one of my boards?

Q. Sure.

A. Let's start with what the transactions database is, Your Honor.

The transactions database is a database that has been collected from company course-of-business records covering outright arm's-length purchases and sales in the field by some of the defendants and some nondefendant oil companies.

It covers data – crude oil transactions – these are not royalty payment transactions, these are the crude oil purchase and sale transactions going on in the market places in New Mexico, Oklahoma and Texas, as I'll talk about later.

This field coverage reflects both the joint defense effort that's underway, but also the attempt to understand how the marketplace operated across the oil patch, and I felt that it was appropriate to collect data, since the basic economics don't respect the political divisions of the states, with respect to the issues that I was concerned about – that is, understanding how the lease level purchases and sales operated.

The transactions database has more than

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700,000 – actually, right now, it's at about 886,000 recordings of monthly transactions, and most of the data covers from 1992 to '96.

Some of the companies, because of their computer systems, have stored the data in a way that allows them to go back a little bit earlier, to 1990.

Then, as I indicated, the data that's been collected are transactions as recorded and accounted for in the course-of-business accounting records of the various companies.

Q. Okay. Let me ask you – we'll get into some of these details a little more, but can you tell the Court what kind of data is in the database?

A. Sure. In the transactions database are data that has been collected off the computer systems of the companies. They reflect the company name from whom the data was gathered, the year and month of the transaction, and for some of the companies, we can get who was the party on the other side of the transaction, whether it was a purchase transaction. You can get the seller sometimes from the company data, and if it's a sale, you can get the buyer.

We get the oil field name. We get the crude type – WTI, WTS, et cetera. We get the sweet/sour designations, gravity. We get the price paid, which,

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of course, in some sense is the ultimate focus here. We get the price paid and/or we get the pricing formula.

The companies are recording their terms of the contract, and often these contracts will be written that the form of the crude will be priced at Phillips' posting minus a nickel or plus 15 cents, something like that, and so there is – sometimes the price has a record to understand the formula basis.

Sometimes there will be recorded by the company the posted crude name – that is, the Four Corners sweet, something like that.

There will also be an indication – if the pricing formula is based off somebody's posting, then there will be an indication of whose posting was used. So if Amoco does a transaction, but the contract with the buyer or the seller is quoted using Koch's posting, then that would be indicated as the posted price company.

There is an indication – many contracts are written in the form of deemed gravity, where the parties agreed that we will treat this as a 40-degree crude or a 38-degree crude.

There is also designation from the contracts recorded in the company's course-of-business records

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as to the timing method. They vary somewhat, but the two basic ways we find the companies writing the contracts that they negotiate is either what is known as an EDQ basis – equal daily quantity basis, where they treat the crude, no matter when they actually picked it up, as coming out – spread out over the month evenly, equal daily quantity.

Alternatively, sometimes there will be date-of-run contracts, where the date of the transaction is recorded as the date at which it's run, or picked up, and then the price is applied on the date of run.

Also, in some cases, the companies will provide, accompanying the contract and the pricing formula, any deductions or bonuses.

There will also be, in some of the contracts, gravity scaling factors – two cents a degree, if it goes from 39 to 38, or something like that.

Then there is a designation if the – as to who might have picked up a transportation cost from the lease to some delivery point, like a pipeline inlet.

So this is the data that we have collected from the companies' records and sits in the

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transactions database.

The way to think about this data is, as you look at it on the computer screen, if you will, it's a set of columns listing these variables, collected by month for a set – for a set of companies. The data has been collected out of the companies' course-of-business records.

Essentially, the way to picture the way the data collection was done, mechanically, is the companies have their computerized accounting systems, electronic file drawers, recording lots of information – what they've paid, all of this kind of information, plus additional information.

I and my staff worked with the companies to go through those file drawers and empty them of the data that we wanted through direct electronic transfer to us.

For example, I sat down with – Koch was one of the data – one of the companies we got data from. They showed me a printout of everything in the file drawer – that is, all the records that are being kept on these purchase and sale transactions, and then I sat there and said, "Well, we don't want that" – maybe it was some useless piece of information, the office or the name of the person who entered the data,

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struck at the lease in these transactions.
The range -- if you go across, this ranges from -- in any month from a low of a dollar to a high of $4.97.
Q. That's in any one month?
A. Right toward the end of the period here in '96, the data are peaking out, and you get a smaller range, but, in general, there is a -- the ranges are from a dollar to $4 each month in the valuation of crude oil in Vacuum in these outright transactions.
THE COURT: This is all one type of oil?
THE WITNESS: Well --
THE COURT: Is this sweet or sour?
THE WITNESS: This -- I'll show you a graph in a moment where we will show you just sweet. This is the first look where we've gone and just looked at the transactions.
THE COURT: This is sweet and sour?
THE WITNESS: This is sweet with some sour in there, too.
Q. (BY MR. ZOTT) Is there a larger map?
A. There is also some gravity range that we'll show you in a minute.
Q. We heard Mr. Johnson testify that there is relatively limited gravity ranges in particular fields

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in New Mexico.
Do you have any general sense of the range of gravity and sulfur content in this field?
A. I think this field is a relatively narrow range. I think it spans in the mid-30's, and I'd have to check that, but it's relatively narrow.
Q. Okay.
THE COURT: These Scurlock transactions are where Scurlock bought from their own interest?
THE WITNESS: This would be -- yes, they are a producer. They would be buying.
THE COURT: And they are running the risk of a market --
THE WITNESS: That's correct.
THE COURT: But there is no matching contract on the other end?
THE WITNESS: There is no buy-sell transaction. They may have lined up customers --
THE COURT: Oh, sure.
THE WITNESS: -- but there is no buy-sell transaction on the other end.
Q. (BY MR. ZOTT) Now, have you ever actually investigated any of these dots?
A. Yes. They are hard to see.
Q. I understand you didn't do them all, but

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have you got any of them?
A. Yes. I just wanted to illustrate the nature of the supply and demand forces at work here.
Let me go to June of 1996 and just illustrate the principle. I went in and I asked the question -- let's just -- in this case, I took some Phillips' transactions in a given month and was trying to inquire, was I picking up idiosyncratic whatever, or what were the reasons for these prices spanning -- it's actually a range between Phillips at the top and Phillips at the bottom of about 55 cents a barrel, I believe.
It turns out that -- let me focus first on -- well, on both transactions. Both transactions are occurring -- I have what I think is quite proprietary information here, and I don't -- I know you all have been discussing that.
Q. Well, I know it's proprietary, but I think we've heard the fights on that before. Unless if somebody -- one of my colleagues wants to pull me aside, I think we can move on.
MR. COPELAND: Please move on.
A. Both of these transactions are occurring in the Oblo formation, they are both sweet crudes of the same gravity, of the same formation, struck in the

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same month.
The upper dot is struck with -- between Phillips, on a purchase from Southwest Royalties, Incorporated, which is a company of a 160 people, formed specifically for the purpose of buying into and producing oil, a publicly held company, and its price here is about eight or nine cents.
Q. I think you said the upper dot. Did you mean the upper dot?
A. Lower dot. I'm sorry, lower dot.
Q. You said upper dot.
A. Lower X, actually.
Q. Okay.
A. The price turns out to be -- when you go in to look at it in fine detail, it is eight or nine cents below Koch's posting in that field. It's on the order of, I think, a well with about five to seven barrels a day coming out of it, owned by or operated by this Southwest Royalties, Incorporated, that's operating it.
The upper X that's in this mix here that I'm talking about is a transaction in which Phillips is paying at about 45 cents above Koch's posting at Vacuum -- in the same formation, same Oblo formation, crude sweet, same gravity, paying about 45 cents above

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Royalties type of property or a Penroc property.

Q. Okay. Let's turn to Tab 3-2 and start with your first subcategory, and that is the inability of the plaintiffs' valuation methods to capture field-level supply and demand factors.

A. Sure. In addition to what I just said, Your Honor, what I've done on Tab 3-2 is take the plaintiffs' screening methodology and apply it to the data for Vacuum.

This screening methodology begins with a P plus trade center price at Cushing, and then –

Q. Whose screening methodology is this?

A. This is applied by – I've used all the data from Mr. Johnson's reports.

Q. Okay.

A. And it's basically P plus, minus the transaction adjustment, which I believe is 55 cents in the screening methodology.

I've used this to show – then I've graphed on the graph the results of the screening methodology as the zero line and shown the deviations in Vacuum and the actual level of prices as the individual dots on the graph.

Q. Okay.

A. Okay.

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Q. So the zero line would be the net-back value under this screening study that Mr. Johnson performed?

A. That's correct.

Q. Okay. And then the dots are the same basic dots we saw before?

A. But now adjusted to be different from the screening methodology.

Q. What does this tell you?

A. As you can see in this methodology, this kind of methodology, which is akin, for example, to what I understand would be applied to internal transfers, it just doesn't pick up the variation in the field-level value.

Also, really going to some extent to my second conclusion about the wrong level of commerce, you tend to produce a line which is higher – but not always - which is higher than the general preponderance of the actual transactions occurring here; and for the reasons that I've argued before with respect to the marketing value added by the – that's seen in the behavior of the unintegrated marketers, I think the reason this line is turning out higher than the preponderance of the dots – that is, the preponderance of where the market speaks – is because it has not accurately netted out the marketing value

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added under the net-back methodology that their screening method applies.

Q. This is the dot that you're talking about?

A. Yes.

Q. Now, I would predict that Mr. Johnson would say, "Well, wait a minute now, even you admit, Professor, that I can adjust for gravity and I can adjust for sulfur and I can adjust for timing, and you're just using my screening number, but I can make a lot more adjustments and make it a lot more accurate."

Would that solve the problem?

A. No. As we saw in the Tab 2-10, there remains, at least in Vacuum, roughly 40 cents to a dollar variation in the value of crude oil as revealed by outright arm's-length comparable transactions reflective of the particular supply and demand valuation of that properties and that transactions attributes, and this kind of methodology would not pick up that variation.

I think it would lead to the same kinds of issues that you and I talked about a minute ago, some parties may have Beverly Hills, even after that method, and other parties may not.

Q. Now, to give it some context, that 40 cents

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to a dollar, in the context of this dispute between the parties, is that a significant number?

A. Well, yes, it is.

Q. We're skipping ahead, right?

A. Yes, you are.

Q. Let me skip ahead and then we'll come back. Why don't we –

A. Just –

Q. Why don't you give me generally –

A. If you look at the screening methodologies, Your Honor, they tend to produce – in legal terms, I think it was the damages – the underpayment number on the order of a dollar to two dollars a barrel, and you're seeing variation here of – some of the screenings produced like 75 cents a barrel, and even after adjusting for sulfur, gravity and timing, we still see 40 cents to a dollar variation reflective of, if you will, the not marketwide effects, like gravity and sulfur, but the highly specific effects in particular leases.

Q. Now, let's talk briefly about the wrong level of commerce. We've talked about that a lot.

I'd like to turn you to Tab 3-3. I'll put it up for you real quick here.

A. Okay.

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A. Sure. This has been read into the record. I think, basically, his conclusion that the spread – the one-dollar spread in my picture there as compensation for this function, is, in fact, the result of incontrovertible economic reasoning about what these kinds of functions are and what the existence and survival of the independent sector of the market tells us.

Q. Okay.

A. They are at a different level of commerce than the lease.

Q. Now, I guess we're down to arbitrary selection of trade center values.

Now, you've told us a lot about the variations at the lease-level side. What can you tell us about the variations on the downstream pricing that the plaintiffs are using for their net-back methodologies?

A. Well –

Q. And we're at Tab 3-5.

A. Sure. Tab 3-5 – what I've shown the Court here is just a graph of the differences between the NYMEX price – NYMEX futures price and the P plus price.

Q. Why did you pick those two prices?

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A. Well, these are the two primary trade center values that the plaintiffs and their experts have talked about using to value crude oil received, say, on a net-back – received back on the back end of a buy-sell, for example.

What I graphed visually, so you can get it square, is the NYMEX – make sure I get it right, the minus P plus – the P plus is the zero line, and what I've graphed, then, is NYMEX minus, so when you see the line up above zero, the NYMEX is above the P plus.

Q. So what does this tell you?

A. And then the vertical access is showing you the range.

Q. What does this tell you? In other words, you're taking the NYMEX futures price and comparing it to the P plus price.

A. Sure.

Q. And what do we see? You tell me.

A. The reason I prepared this is it really goes to my points three and four on Tab 3-1, this point about the noncomparable supply and demand factors and the arbitrary selection of trade center values.

First, within a theory of what an economist would think of arbitrage economics, where the supply

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and demand factors are common across markets, except for transportation cost differences, one would expect these two prices to, in fact, not differ.

The fact that they do differ tells you – and they are quite – in common sense – quite efficient markets, they move very rapidly and are relatively well-organized – indeed, the NYMEX is well organized – and that variance is telling you even those two markets at the trade center is revealing different supply and demand factors at work.

Those supply and demand factors at work in the trade center involve the demands of parties who are not at the lease, including the parties who are there purely to trade risk, and that's part of what I meant by noncomparable supply and demand.

Secondly, in the fourth bullet up there, this leads within that framework of the plaintiffs to an arbitrary selection as to trade center value, for example, for valuing internally transferred crude, if that's the proposed methodology, because presumably the parties trading P plus and NYMEX, and both doing business as well as they can, and the importance of it is that there is so much variation, that depending on whether you picked the NYMEX or the P plus, you know, you use that as a damage calculation, and then that

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methodology, because it's at the wrong level of commerce with incomparable supply and demand factors relative to the lease on a – it swings enough, depending on what you pick, you could find gross underpayment or gross overpayment.

Q. Now, the plaintiffs actually prepared some charts they may show you on cross which indicate over the long haul that these differences between these trade centers, like the NYMEX and the futures and the P plus – if you take a five-year span, the differences are not that significant.

Would you agree with that over that long haul?

A. I would not at all be surprised, over the long haul, that these two might be quite close together.

Q. Let me just hand you – from the plaintiffs' report, I'll hand you Exhibit GG. Now, this is an exhibit from Mr. Johnson's – we know of his reports showing – comparing P plus to the NYMEX average monthly prices, and then you'll see the yearly figures there.

A. Yes.

Q. Okay. Now, even for a whole year, what does this tell you, if you take these prices and compare