TABLE OF EXHIBITS

EXHIBIT ONE

Wellhead Price vs. NYMEX Price
West Delta Area- Gulf of Mexico
Basin Exploration, Inc. Example

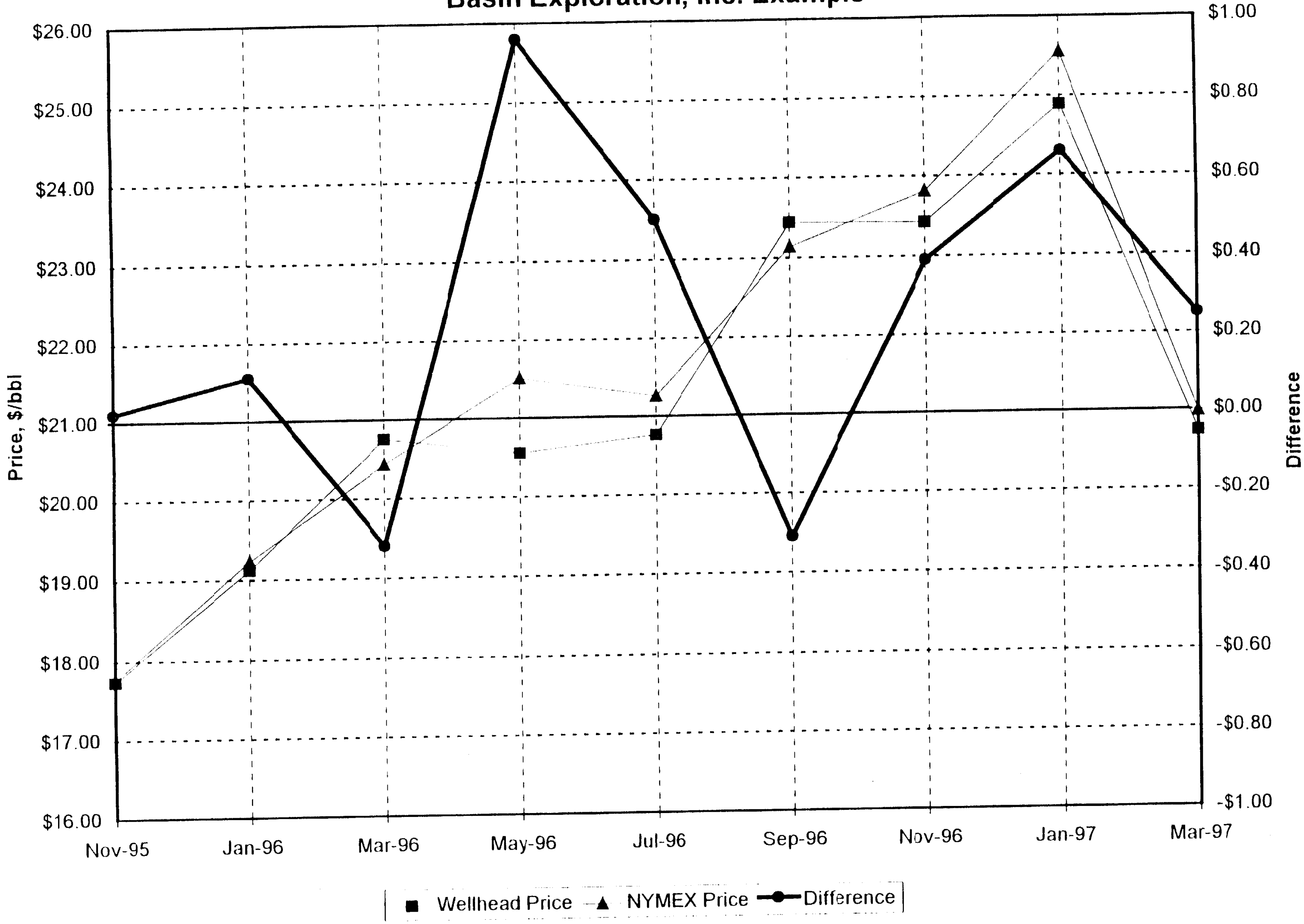

EXHIBIT TWO

Written Statement by
Larry Nichols
President and Chief Executive Officer
Devon Energy Corporation
representing
Independent Petroleum Association of America (IPAA)
Domestic Petroleum Council (DPC)
California Independent Petroleum Association (CIPA)
Colorado Oil and Gas Association (COGA)
Independent Petroleum Association of Mountain States (IPAMS)
Independent Petroleum Association of New Mexico (IPANM)
Louisiana Independent Oil and Gas Association (LIOGA)
National Ocean Industries Association (NOIA)
New Mexico Oil and Gas Association (NMOGA)
Oklahoma Independent Petroleum Association (OIPA)
Petroleum Association of Wyoming (PAW)
Rocky Mountain Oil and Gas Association (RMOGA)
before the
Committee on Resources
Subcommittee on Energy and Mineral Resources
U.S. House of Representatives
July 31, 1997

Dear Madam Chairwoman and Members of the Committee:

I am Larry Nichols, president and CEO of Devon Energy Corporation ("Devon"), an independent producer who has federal onshore production. I am here today on behalf of Devon and CIPA, COGA, DPC, IPAA, IPAMS, IPANM, LIOGA, NOIA, NMOGA, OIPA, PAW and RMOGA.

Madam Chairwoman, members of the Committee, we always appreciate the opportunity to work with you in the pursuit of a more simple, certain and efficient program for collecting revenues due the Treasury and states from federal oil and gas production. During the 104th Congress, I testified before this Committee to encourage the Minerals Management Service (MMS), states and industry to seriously examine royalty in-kind as a possible alternative to the increasingly complex and contentious requirements for paying royalties on gas production. At the close of the 104th Congress, much progress was made in advancing royalty in-kind. We were encouraged by the report language contained in MMS' 1997 appropriation requiring them to pursue additional oil and gas pilots for royalty in-kind.

During the past year, the need to explore for alternatives to re-engineer the royalty collection system has dramatically increased. Through proposed rulemakings for both oil and gas, the MMS plans to add more and more complexity and uncertainty to the royalty collection system. Quite frankly, we are headed the wrong direction. These rulemakings would have the federal government chase its molecules to remote markets far removed from the lease and "net back" using complex and other undefined and arbitrary formulas to the wellhead in an attempt to estimate value at the lease.

Such a system will be costly for the taxpayers and encourage disputes over what costs can be deducted to estimate a wellhead value. For over 25,000 leases spread throughout the western United States and the Gulf of Mexico, it is not a simple task for the federal government to netback from burner tips and gas pumps to the wellhead, especially during this era of deregulation. This type of net backing scheme will only result in winners and losers at the wellhead, including the federal government.

If a producer decides to sell its production at the wellhead and not participate in the downstream market, then the value received at the wellhead is appropriate for royalty payments, not theoretical netbacks. Deciding to participate in markets beyond the lease presents a new area of risks, costs, and rewards--significantly different from those undertaken to produce the oil. Yet, MMS is proposing rules which expect producers to undertake those risks by entering into a midstream market at no cost or risk to the government. In addition to being intrusive into private business practices, this approach disregards lease terms which require royalties to be paid on the value of production removed or sold from the lease, not on the value of natural gas marketed in New York City or oil marketed in Cushing, Oklahoma, at no cost to the government.

If MMS wants to derive value from downstream markets, they have the means readily at hand -- royalty-in-kind. All of the agency's concerns and perceived problems over how to value royalty could be addressed by a royalty in-kind program. The MMS seems to concur based on the many public statements it has made since 1994. Again and again, MMS has stated that royalty in-kind "will simplify government procedures, streamline reporting practices, eliminate duplication and waste, and provide better services at reduced cost to taxpayers and other customers." Further, the MMS has claimed that royalty in-kind could remove them from "the complex practice of determining the appropriate value of production and eliminate disputes."

We couldn't agree more that an appropriately designed royalty in-kind program may result in these benefits, recognizing that the analysis may be different for oil than for gas. One of MMS' very own consultants for royalty valuation matters has stated, "The only way to be absolutely certain that a fair market value is received for royalty oil is to take the oil in kind for sale."(See attachment). The consultant could not have said it better. Royalty in-kind accurately measures value by capturing all value resulting from a transaction between a willing buyer and a willing seller at or near the lease. By taking in kind, MMS should gain benefits. It will bring to an end its valuation controversies with lessees. The MMS will have the opportunity to earn higher rewards than the market holds for successful risktaking.

You are probably wondering why even a small independent who always sells at the wellhead and currently is allowed to pay royalties on gross proceeds is in support of a royalty in-kind program. Why would this type of producer be willing to deliver a royalty fraction of its production to the government? With each change to the valuation regulations, the MMS continues to encroach on the principle on which independents conduct their businesses: that production is best valued by sales at the lease, not by downstream transactions. For example, the current proposal for valuing oil royalties emphasizes downstream prices over prices a producer receives at the wellhead. With each rulemaking change, MMS discriminates against companies by desiring all producers to undertake downstream risks, free of cost to the lessor, and in essence punishes independents by regulating an expanded duty to market. The only way a producer can be certain that MMS will never mandate marketing for wellhead producers or require payment of phantom income is to have MMS or the states take the entire federal royalty stream in-kind.

We strongly support MMS' current initiative to study the option of marketing its own royalty oil and/or gas. In response to the FY 1997 appropriations report language, the MMS held a series of workshops across the country to discuss the feasibility of moving ahead with a royalty in-kind re-engineering project. During these workshops, I believe MMS heard a consistent message from the oil and gas industry--yes, we are interested in determining the feasibility of designing a royalty in-kind program which will result in a more a simple and certain royalty collection system.

We acknowledge that there are a number of design issues, depending on whether the royalty stream is oil or gas, that need to be resolved before the government moves forward with a royalty in-kind program. If all parties can agree to the mission and principles of a successful royalty in-kind program, timely resolution of design issues is likely. During MMS' royalty workshops held this spring, we agreed to outline for MMS and states the goals, principles and design elements of a successful royalty in-kind program. To initiate this process, representatives from a number of oil and gas associations from across the country have formed a royalty in-kind workgroup (workgroup). After a number of meetings, I am glad to report to the Committee that the workgroup has developed a mission statement and principles for designing a successful royalty in-kind program:

A Royalty In-kind Mission Statement

To design a federal royalty in-kind program that will eliminate valuation uncertainty and that will be attractive to federal, state, and private sector stakeholders while recognizing the differences between oil and gas production.

Description of Royalty In-Kind Principles

1. Reduce administrative and compliance burdens while providing the opportunity for federal and state governments to maximize their revenues.

The MMS and states. The MMS and states should have the ability to optimize value by aggregating volumes, determining the most favorable sales location, arranging transportation, and negotiating the terms and conditions of the sale. The potential for increased revenues will require the MMS to manage risks and costs associated with marketing royalty oil and gas.

Producers. Federal lessees should not realize an increase in administrative costs or experience operational burdens, but have certainty through elimination of disputes associated with royalty valuation. Similar benefits will also accrue to the government. An effective royalty in-kind program should not impose upon lessees any costs or obligations beyond the lessee's obligation to deliver at or near the lease. Reporting should be related to volumes produced and delivered, not sales prices or other related valuation information.

Marketers. Marketers should be provided a business opportunity which has an acceptable risk/revenue ratio thereby enticing participation by the most professional and successful marketers in the business.

2. Require transactions at or near the lease that fulfill the lease obligations.

The royalty in-kind production must be delivered at or near the lease. The government must give sufficient notice and take for a certain minimum period of time. Once delivered at a royalty in-kind delivery point at or near the lease, the lessee's royalty obligation must be completely satisfied. A lessee has no duty to market or transport the government's oil or gas past this point. All risks and costs incurred downstream of the royalty in-kind delivery point should be borne by the lessor or its purchaser, in the hope of realizing maximum revenue from reselling the production downstream.

The purchaser who takes delivery at the royalty in-kind delivery point is actually taking from the government and performing under a separate contract. The lessee and the government's purchaser have no contractual relationship with each other. An effective royalty in-kind program should not hold the lessee liable for the purchaser's failure to perform under the royalty in-kind contract, nor should it hold the purchaser liable for the lessee's failure to perform under the lease contract.

3. Provide that when the government takes in-kind it must take all royalty production for a time certain.

If the government takes its royalty in-kind, it must give sufficient notice, and, for a time certain, take the full royalty fraction tendered by the lessee(s) from a given property. The government has no right under the lease to defer its take obligation or leave its production in the ground. The government has no right under the lease to defer any production from either new or existing leases. Otherwise, lessees will be unfairly burdened by having additional marketing and operational problems with which to contend.

4. Require use of private marketing expertise to streamline government operations.

The government's oil or gas should be marketed through a competitive, privatized system in order to maximize benefit and streamline government operations.

5. Provide the states with the opportunity to be involved in designing and implementing the program.

At couple of states - Wyoming and Texas - have been actively promoting royalty in-kind concepts. In addition to being actively involved in the design of a government royalty in-kind program, the states need to be given the opportunity to participate in the marketing of federal royalty stream taken in-kind. While states should be given latitude in marketing federal royalty oil, any program for state marketing should follow these six royalty in-kind principles.

6. Make royalties taken in-kind broadly available for public purchase.

The purchase of hydrocarbons subject to this royalty in-kind program should be made available on an open competition basis to a broad-based public market. This should include providing the opportunity to market to a broad group of interested and qualified marketers.

The workgroup is now compiling a list of design issues. A sampling of design issues include handling new production when it comes on line, transportation arrangements for the government (or its marketers) for privately owned lines, balancing, processing, equity production, producer obligations for transportation, liabilities of the marketer, an open and fair competitive system for in-kind volumes, and notification and other administrative burdens. Design issues should not discourage us from continuing to explore royalty in-kind.

To determine if a successful royalty in-kind program is feasible, the workgroup will attempt to resolve these issues. As conclusions are drawn, we will meet with marketers, states, and MMS to ensure our conclusions accommodate their needs. After attempting to reach agreement with all affected parties, we will provide a full report of this process to the Committee. We hope to be able to submit this report to the Committee within 90 days.

State and foreign governments appear to have successful in-kind program. Their experiences can guide us in designing a successful royalty in-kind program. As compared to these other models, it does appear that MMS could achieve dramatic administrative cost savings over its current system of royalty in value. For example, the Province of Alberta, Canada, currently employees only 33 people to run a royalty in kind program which sells 146,000 barrels of oil per day. The MMS employs hundreds more employees for an equivalent amount of production. In fact, the MMS continues to receive appropriations for more and more auditors year after year. The agency and states could dramatically reduce costs -- if the program is properly designed -- and, by assuming certain costs and risks, potentially increase royalty income.

Again, the MMS consultant agrees: "There would be some overhead costs associated with marketing the oil, however, the cost savings in auditing and compliance, coupled with higher value, could prove to be quite advantageous to a state agency." However, MMS seems hesitant to accept even their own consultant's advise and counsel because they believe their 1996 gas royalty in-kind experiment lost revenue. We believe it is not appropriate for MMS to draw this conclusion because the gas experiment had a number of design flaws which prevented MMS from obtaining additional revenues.

There are a number of ways in which the pilot could have been improved to achieve higher bids. The agency made some mistakes, such as taking gas during mid-winter, not providing sufficient notice and information to bidders, preparing incomplete bid packages (including errant index points, no transportation information, no quality information), not aggregating volumes in a meaningful way (thereby preventing the warranting of minimum volumes), and not examining closer the cost to move through privately owned lines. These mistakes, combined with the fact that MMS chose not to assume any costs or risks associated with the downstream market, produced bids that were lower than might have otherwise been obtained. The truth is that no third party non-producer marketers successfully bid on the gas taken in-kind during the experiment.

The manner in which MMS quantified the alleged "loss" is flawed as well. In simple terms, the MMS believed it was obliged to try and approximate the exact price producers would have been paid for gas the government chose to take in-kind. First of all, there is something inherently wrong with this type of analysis. When it sells royalty in-kind, the prices MMS receives under the given conditions of the sale, such as point of sale, quality of the production, length of the contract's duration, and so forth, are the fair market values for that production . If the government believes it needs to compare expected royalty payments to in-kind proceeds for regulatory scoring purposes, the approach MMS took is suspect. The MMS tried to approximate what royalty payments would have been for in-kind volumes by projecting forward from royalty payments made during the previous year. Market conditions are not static. Market conditions last year or market conditions for production from other leases in the Gulf of Mexico, do not have a direct correlation to market conditions being experienced by MMS for its in-kind volumes, or for other volumes being produced from that same well.

Before "scoring" of the impacts of a royalty in-kind program is pursued, we suggest that economic experts be consulted to reach agreement on the appropriate measures. For more detailed comments regarding revenue neutrality, please refer to the testimony being presented by Mr. Fred Hagemeyer with Marathon Oil Company.

Before MMS moves forward with a royalty in-kind program, we need to build a royalty program that adheres to the six principles discussed above, corrects the flaws of the gas experiment and accommodates all design issues. Furthermore, we need to determine if there are legislative and regulatory barriers which will prohibit successful implementation of a well designed royalty in-kind program. As a starting point for legislative changes, we need to reexamine the legislative language for royalty in-kind that was agreed to during the 104th Congress as part of the Federal Oil and Gas Royalty Fairness and Simplification Act of 1996 (Act). As you will recall, even though this language had the support of MMS and industry, it was eliminated from the Act on the Senate-side due to procedural rules related to budget bills. After a successful royalty in-kind program has been built, we will then be better able to determine if the type of legislative language contained in the Act is appropriate.

In conclusion, I ask for the Committee's support to have states, MMS, and industry to timely complete a comprehensive report of what must occur operationally and legislatively for a royalty program to be successful. A poorly designed in-kind program or test of a program, will result in a royalty in-kind being shelved prematurely.

For all who support reinventing government, there is no better project than in-kind. Together we can determine whether in today's oil and gas environment, we can create a royalty in-kind program that will ensure the government and states are receiving their full value for production from federal lands while at the same time reducing costs for all affected parties.

EXHIBIT THREE

ENCLOSURE 1

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
ROYALTY MANAGEMENT PROGRAM
P.O. BOX 25165
DENVER, COLORADO 80225
Mail Stop 3520

IN REPLY REFER TO:

MMS-RVS-OG:89-0747

OCT 09 1991

CERTIFIED MAIL--
RETURN RECEIPT REQUESTED

Mr. Richard Hopkins
State Controller's Office
P.O. Box 942850
Sacramento, California 94250-5874

Dear Mr. Hopkins:

By letter dated July 14, 1989, to the Minerals Management Service's Office of State and Tribal Program Support, you requested a determination of whether ARCO Oil and Gas Company (ARCO) qualified as a principal purchaser in the Midway-Sunset Field, California. Your request was subsequently referred to this office for response.

Based on your comments in a letter dated November 27, 1990, our analysis of additional information gathered in your office on February 5, 1991, and several meetings held with Mr. Bob Fees of the California State Controller's Office and personnel of this office, we have concluded that ARCO was a principal purchaser of crude oil from the Midway-Sunset Field during the period 1983-85. Enclosed please find our "Findings and Conclusions" explaining our conclusion.

If you have any questions regarding this matter, please contact Ms. Theresa W. Bayani at (303) 231-3395.

Sincerely,

Milton K. Dial

Milton K. Dial
Chief, Royalty Valuation and
Standards Division

Enclosure

Enclosure

ROYALTY MANAGEMENT PROGRAM
ROYALTY VALUATION AND STANDARDS DIVISION

Findings and Conclusions

on

A Determination of Whether ARCO Oil and Gas Company Qualified as a "Principal Purchaser" of Crude Oil in the Midway-Sunset Field, California

BACKGROUND

By letter dated July 14, 1989, to the Minerals Management Service's (MMS) Office of State and Tribal Program Support, the California State Controller's Office (State) requested a determination of whether ARCO Oil and Gas Company (ARCO) qualified as a principal purchaser in the Midway-Sunset Field, California. This request was subsequently referred to the Royalty Valuation and Standards Division (RVSD) for response.

The State has questioned several valuation decisions regarding principal purchasers of oil from various fields located in California, particularly those decisions determining that ARCO was not a principal purchaser of crude oil in the Midway-Sunset Field, California. During the performance of audits under the authority delegated pursuant to the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA), the State examined the quantities of crude oil purchased by each buyer in the Midway-Sunset Field for the period 1983-85 to determine the principal purchasers.

The State determined that during the period 1983-85 ARCO purchased approximately 11 percent of the crude oil sold from the Midway-Sunset Field under arm's-length conditions and that approximately 9 million barrels of oil were sold from the field under contracts that referenced ARCO's posted prices. Thus, the State concluded that ARCO should be considered a "principal purchaser" of crude oil in the Midway-Sunset Field and requested confirmation from RVSD.

For the periods prior to December 1, 1987, royalty-in-kind (RIK) oil from Federal onshore leases was valued under 30 CFR § 208(f) (1986). The value for RIK oil is defined in subparagraph (1) as "the highest price per barrel regularly posted, published, or generally paid, or offered by any principal purchaser in the field where produced. . . ." "Principal purchaser," however, is not defined. Therefore, RVSD prepared a draft issue paper (May 22, 1990) for the State's review in which "principal purchaser" was defined as a company that regularly purchases crude oil under arm's-length conditions. The procedure for determining a principal purchaser was based on the percentages of the total crude oil available for sale under arm's-length conditions bought by each purchaser. The RVSD concluded that:

--The percentage of crude oil purchased by a company under arm's-length conditions must not be too small compared to the other percentages of crude oil purchased by other companies in a given field.[1]

--ARCO was not a principal purchaser of crude oil from the Midway-Sunset Field because RVSD was unable to confirm from available data that ARCO purchased more than 100 barrels per day of oil under arm's-length conditions.[2]

The RVSD's determination was based on its interpretation of two Energy Board of Contract Appeals (EBCA) decisions: the Powerine Oil Company, EBCA No. 17-3-80 (Powerine I), dated October 20, 1981; and Powerine EBCA No. 321-5-87 (Powerine II), dated February 4, 1987.

In its response of November 27, 1990, the State disagreed with RVSD's methodology and concluded that:

1) The RVSD's procedure of determining principal purchasers in a given field is contrary to the decision in Powerine I; and

2) ARCO should be considered a principal purchaser during the period 1983-85 because ARCO purchased 4,000 barrels per day of oil from the Midway-Sunset Field under arm's-length conditions and because 42 percent of all the Midway-Sunset Field crude oil was sold under contracts that referenced ARCO's prices, suggesting that ARCO was influencing the prevailing market price in a competitive manner.

To continue the dialogue, RVSD met with the State on February 5, 1991, and agreed to review the information developed by the State and reevaluate the definition of the term "principal purchaser" as it was used in a draft issue paper dated May 22, 1990, in relation to the Midway-Sunset Field.

FINDINGS

Powerine I Decision

° In Powerine I, Powerine Oil Company claimed that it was overcharged by the Department of Energy (DOE) for its purchases of crude oil from the Navy

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[1] The RVSD historically determined the principal purchaser of oil from given fields on a case-by-case basis. Prior to December 1, 1987, principal purchaser determination was based on the percentage of the total crude oil available for sale under arm's-length conditions in the respective fields that each purchaser bought.

[2] ... project MMS-RVS-EVB:87-0450 (May 21, 1987), RVSD was only able to ...mine that ARCO purc...ed 100 barrels per day of oil from the ...-Sunset Field un... ...m's-length conditions during the period ...ry 1984 through ... 1986. Therefore, RVSD concluded that ARCO ... ...ipal purchaser ... ...de oil during this period.

Petroleum Reserve in Kern County, California, during the period February 1978 through January 1979.[3] The dispute centered on a pricing provision in a contract which required the sale of oil by the Government to be at the "highest price per barrel of all prices which are regularly posted or published by the principal purchasers. . . ." At the time the contract was entered into, several purchasers, including ARCO, were posting prices in the fields located in Kern County, California.

- The Board of Contract Appeals (Board) defined "purchaser" as one engaged in arm's-length transactions, not solely intracompany transfers. The Board determined that Powerine's definition of "principal purchaser"--one that would purchase a substantial amount of crude oil, more than the average purchaser would acquire, and do so from the total output of the four fields specified in the contract--was unreasonable. The Board did not define principal purchaser. However, it did determine that ARCO was not a purchaser within the meaning of the contract because ARCO's purchases were primarily intracompany transfers. The Board also determined that ARCO's postings could not be used to reflect the prevailing local market price for setting the crude oil price.

- The Board determined further that to implement Powerine's interpretation of "substantial amount of crude oil," one must first create an ancillary information system to provide substantial monthly data on the identity of each purchaser, the amounts of the crude purchased by each, the identity of the fields from which the purchases were made, and the type and quality of oil purchased. In view of the reluctance of private commercial entities to reveal such business data, the Board determined that this type of information would be difficult to obtain.

- The Board also found Powerine's definition unreasonable because if those companies purchasing substantial volumes--more than the average purchaser--could set the prices of the oil, then competition would be effectively limited to the large producers. The Board reasoned that small businesses which would otherwise qualify as responsible high bidders would be screened out in favor of a few major purchasers. The Board concluded that this would deprive the Government of receiving the highest price obtainable through a competition involving the greatest possible number of bidders.

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[3]By action of the Energy Reorganization Act ... 1977, jurisdiction over Navy Petroleum Reserves was ...nsferred to the ... y of Energy.

Powerine II Decision

° In the Powerine II decision, nine appellants, including Powerine Oil Company, filed 15 separate appeals claiming that they were overcharged $16,195,988 by DOE for their purchases of crude oil.[4] All 15 appeals were consolidated into one proceeding, identified as "Powerine II."

° In summarizing Powerine I, the Board determined that ARCO was not a principal purchaser because the word "purchaser" contemplated an arm's-length transaction, not an intracompany transfer. The Board concluded that ARCO's third party purchases were too small in number to qualify it as a principal purchaser. In Powerine I, the Board does not specifically state that ARCO's third party purchases were too small in number. However, in Powerine II, the Board suggests that ARCO may have made arm's-length purchases but not enough to qualify as a principal purchaser. The Board determined that the appellants were aware that ARCO's posted prices were being used but they did not file their appeals until 21 to 51 months after final payment. Therefore, the Board denied the appeal and concluded that the appellants waived their rights to assert that the Government overcharged them under previously unexpressed interpretation of the contracts.

State Study

° In challenging RVSD's principal purchaser determination, the State cited Powerine I as specifically disapproving the methodology used by RVSD because of the difficulty of obtaining the information. Accordingly, the State argued that RVSD should not adopt such a methodology.

° In determining whether a company qualifies as a principal purchaser, the State cited Powerine I as requiring a review of the purchaser's activity to determine if that activity constitutes an offer to buy oil from the market or if it influences the prevailing market price in a competitive manner. The State contends that Powerine I rejected sole reliance on the quantity of oil that a company purchases and instead concluded that one must determine whether a particular purchaser exhibited an intent to compete in the market and whether a purchaser's posted prices were accepted as competitive prices by the market as a whole.

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[4] The appeals involve four contract terms: February 1, 1978, through January 31, 1979; November 1, 1978, through January 31, 1979; February 1, 1979, through January 31, 1980; and February 1, 1980, through November 30, 1980.

- The State found that Shell Oil Company (Shell), Tosco Oil Company, Koch Industries, Inc., and Independent Oil Producers Association (IOPA) referenced ARCO's prices in their arm's-length contracts. The State argued that these companies would not reference ARCO's prices unless they were related to the prevailing market price in the field. The State argued further that RVSD did not give the same weight to the transactions referencing ARCO's prices as it did to ARCO's actual purchases of oil.

- The State also found that Shell purchased 9,713,033 barrels of oil in 1985 under non-arm's-length conditions (intracompany transfers). The price of the oil for Shell's intracompany transfers was based on either the highest price posted by either ARCO, Union Oil Company (Union), Mobil Oil Company (Mobil), and Chevron Corporation (Chevron), or an average of all these posted prices. Because Shell used ARCO's posted prices for its intracompany transfers, the State concluded that Shell's non-arm's-length purchases also should be included in the calculation of the total purchases of crude oil involving contracts that referenced ARCO's posted prices.[5] However, RVSD had determined that Shell's first sale of oil to its affiliate was a non-arm's-length transaction, regardless of whether ARCO's prices were referenced in its contract.[6]

- The State also determined that ARCO's purchases during the period 1983-85--4,000 barrels per day or 11 percent of the arm's-length purchases in the field--were the largest single arm's-length transactions in the field. The State verified from its audit findings that ARCO purchased the crude oil under arm's-length conditions from Tenneco Oil Company's (Tenneco) Oxford and Wilbert properties during the period 1983-85 (table 1). The price of the crude oil sold under the ARCO-Tenneco contract was based on the highest price posted by either ARCO, Union, Mobil, or Chevron. The State determined that Tenneco received ARCO's posted prices during the period November 1983 through June 1985.

- In summary, the State argued that RVSD should consider the State's audit findings (study of July 14, 1989), which showed that 42 percent of all the crude oil sold in the Midway-Sunset Field was sold under contracts that referenced ARCO's prices, and thereby suggests that ARCO did indeed influence the prevailing market price in a competitive manner.

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[5]The State included ARCO and Shell's non-arm's-length purchases in the calculation of the total purchases involving contracts that referenced ARCO's posted prices.

[6]The RVSD obtained the information regarding Shell's production from a study performed by IOPA.

° In RVSD's draft issue paper (May 22, 1990), Mobil was identified as purchasing 29 percent of the crude oil sold under arm's-length conditions from the Midway-Sunset Field in 1985, Union 23 percent, and Chevron 26 percent.[7] Based on information from Mobil and a study performed by IOPA, RVSD believed that Santa Fe Energy Products Company's (Santa Fe) first sale of oil from the Midway-Sunset Field was to Mobil under arm's-length conditions.[8] However, the State determined that Santa Fe sold its production to its affiliate, Santa Fe Energy Company, under the terms of a non-arm's-length contract dated November 1, 1981. Evidence to substantiate the State's finding could significantly effect the percentages of the total crude oil available for sale under arm's-length conditions and thus impact the determination of principal purchaser for the Midway-Sunset Field. Therefore, in light of these findings, the State concluded that Mobil's purchases of oil from Santa Fe should not be included in the total of arm's-length purchases from the Midway-Sunset Field.

RVSD Analysis

° Powerine I defined "purchaser" as one engaged in arm's-length transactions, not solely intracompany transfers. Therefore, RVSD interpreted Powerine I to mean that a "purchaser" should be identified only on the basis of arm's-length transactions in a given field.

° The RVSD agrees with the State that the policy of determining a principal purchaser based only on the purchases of substantial amounts of crude oil in a given field, or even based on percentages of crude oil purchased by a company under arm's-length conditions, is contrary to Powerine I because the Board specifically determined that this definition was unreasonable due to the difficulty of obtaining data.

° The RVSD's reinterpretation of Powerine I and II is that principal purchaser should be based on a determination of whether or not a purchaser influenced the market in a competitive manner and was recognized by other companies in a given field as a true market value indicator.

° Based on data gathered by the State, RVSD confirmed that ARCO purchased approximately 11 percent of the crude oil sold under arm's-length conditions from the Midway-Sunset Field during the period 1983-85. The RVSD also

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7/ In its draft issue paper, RVSD also determined that Mobil, Union, and Chevron were the principal purchasers for the Midway-Sunset Field in 1985.

8/ Santa Fe's oil production was approximately 15 percent of the total production from the Midway-Sunset Field in 1985.

confirmed from the State's data that Santa Fe purchased oil from its affiliate rather than selling the oil directly to Mobil.[9] Thus, Santa Fe's crude oil transactions in the Midway-Sunset Field are indeed non-arm's-length.

- The RVSD verified that the State included ARCO and Shell's non-arm's-length purchases of crude oil in the calculation of the total purchases involving contracts that referenced ARCO's posted prices (table 2). When ARCO's and Shell's intracompany purchases are excluded from the total purchases involving contracts that referenced ARCO's prices, 20 percent of the arm's-length purchases in the Midway-Sunset Field involved contracts referencing ARCO's posted prices (table 3).

CONCLUSIONS

- From RVSD's re-interpretation of the Powerine I and II decisions and analysis of the State's study, RVSD concludes that the following should be used to define principal purchasers of oil:

  1) a principal purchaser must purchase crude oil from a given field under arm's-length conditions;

  2) a principal purchaser should influence the market in a competitive manner. This may be demonstrated by the amount of oil purchased under arm's-length conditions and/or the recognition by other companies in a given field; i.e., other companies reference the purchaser's posted price in their arm's-length contracts; and

  3) oil purchased under arm's-length contracts by a company as a percentage of the total available for purchase under arm's-length contracts may be utilized in No. 2 above, but shall not be solely definitive.

- The RVSD concludes that ARCO is a principal purchaser of crude oil for the Midway-Sunset Field during the period 1983-85 because ARCO purchased crude oil under arm's-length conditions and because approximately 20 percent of the total arm's-length purchases from the Midway-Sunset Field during this period involved contracts that referenced ARCO's posted prices, suggesting that ARCO influenced the market and that its posted price was recognized by others as a true market value indicator.

9/ "Crude Oil Purchase Contract" dated [illegible]ber 1, 1981, between Santa Fe (Seller) and its affiliate, Santa Fe [illegible] Company (Buyer).

Table 1.--Volumes of crude oil purchased under arm's-length and non-arm's-length contracts from the Midway-Sunset Field, California, in 1985. Data obtained from the California State Controller's Office

Producer	Arm's-length (bbls)	Non-arm's-length (bbls)
ARCO Oil and Gas Company		1,787,896
Berry Interests	1,835,232	
Chevron Corporation		6,889,952
Mobil Oil Company		2,863,313
Phillips Oil Company	839,277	
Santa Fe Energy Company		8,844,431
Shell Oil Company		9,713,043
Sun Exploration	6,630,099	
Tenneco Oil Company	2,529,657	
Texaco Inc.		4,761,778
Union Oil Company		4,202,747
Whittier Corporation	2,239,824	
Others	1,909,161	
Totals	15,983,250 bbls	39,063,160 bbls
Total oil produced	55,046,410 bbls	

Table 2.--Distribution of crude oil purchases in 1985 involving contracts referencing ARCO Oil and Gas Company's (ARCO) posted prices for the Midway-Sunset Field, California. Data obtained from the California State Controller's Office

Producer	Buyer	State analysis (bbls)	Minerals Management Service (MMS) analysis (bbls)
Alford & Elliot	ARCO	25,544	25,544
ARCO	ARCO	1,787,896	-0-[1]
H. H. Bell	IOPA[2]	13,353	13,353
Howard Caywood	Tosco	2,180	2,180
Foust-Britton	IOPA	8,916	8,916
Phillips Oil Company	Tosco	812,091	812,091
Pyramid Oil Company	Tosco	16,145	16,145
Shell Oil Company	Shell	7,714,003	-0-[3]
Tenneco Oil Company			
Property name:			
Oxford and Wilbert	ARCO	1,740,034	1,740,034
Metson	Koch	379,452	379,452
Victory Oil Company	IOPA	28,550	28,550
Western Continental	Koch	42,499	42,499
Totals		12,570,663 bbls	3,068,764 bbls

[1]The MMS excluded ARCO's intracompany transfers from the total purchases of crude oil involving contracts which reference ARCO's posted prices.

[2]In California (including the Midway-Sunset Field), smaller producers are members and shareholders of the Independent Oil Producers Association (IOPA). The IOPA sells the production on behalf of smaller producers.

[3]The MMS excluded Shell Oil Company's intracompany transfers from the total purchases of crude oil involving contracts which reference ARCO's posted prices.

Table 3.--Determination of percentage of arm's-length purchases referencing ARCO Oil and Gas Company's (ARCO) posted prices in the Midway-Sunset Field, California, in 1985. Data obtained from the California State Controller's Office and from tables 1 and 2

1.	Total crude oil produced from the Midway-Sunset Field	55,046,410 bbls
2.	Total arm's-length purchases in the Midway-Sunset Field	15,983,250 bbls
3.	ARCO's arm's-length purchases	1,765,578 bbls
4.	ARCO's non-arm's-length purchases	1,787,896 bbls
5.	Shell Oil Company's non-arm's-length purchases	7,714,003 bbls
6.	Total arm's-length purchases involving contracts which reference ARCO's posted prices	3,068,764 bbls[1]
7.	Ratio of ARCO's arm's-length purchases to the total arm's-length purchases in the Midway-Sunset Field (3 ÷ 2)	11 percent
8.	Ratio of the total arm's-length purchases involving contracts that reference ARCO's posted prices to the total arm's-length purchases in the Midway-Sunset Field (6 ÷ 2)	20 percent

[1]Obtained from table 2, the Minerals Management Service analysis.

EXHIBIT FOUR

Oil Valuation Benchmark System

IPAA and DPC have proposed that the Minerals Management Service ("MMS") adopt a set of benchmarks which would be used for valuing royalties on non-arm's-length transactions. To make the benchmark system simpler for MMS and lessees to administer, lessees would assume much of the burden of gathering the information needed to determine benchmark values for each field or area. Lessees would be required to keep all records used to determine the proper application of the benchmarks to their transactions to facilitate review by MMS's auditors.

The proposed benchmarks have as their premise that arm's-length transactions in the field or area are the best indicator of fair market value at the lease. Valuation should be based on comparable sales or purchases. Comparability refers to the time the contract was signed, the duration of the contract, the quality of the oil, the location of the leases from which the oil is produced, and the point in the stream of commerce at which the sale occurred. To use obvious examples, sales of Alaska North Slope crude oil or of Louisiana Light Sweet crude oil in the spot market in market centers such as Los Angeles and St. James, Louisiana, are not comparable to sales of Wyoming Sour or San Joaquin Valley Heavy crude oil at the leases where produced under one-year sales contracts.

Each month, a lessee would review its sales or other transactions to determine whether each met the criteria for treatment as arm's-length transactions. Those that do would be governed by the gross proceeds rule, and the lessee's royalty obligation would be satisfied by paying MMS the royalty percentage of its total proceeds from the sale of the oil. Those that do not would be governed by the benchmarks. If a lessee is unable to use any of the benchmarks concerning sales in the lease market, it would use an acceptable netback methodology employing price information from the nearest market center or aggregation point. The netback methodology would be used as a last resort.

A clear understanding of key terms is essential to successful implementation of a benchmark system. The terms "field," "area," "arm's-length contract," and "like-quality" are used in these comments in accordance with MMS's existing definitions in 30 C.F.R. § 206.101.

We understand MMS's view that if an arm's-length contract (or group of contracts) is to be used to value a non-arm's-length transaction, the arm's-length contract (or contracts collectively) must involve "significant quantities" of oil. Reasonable people can disagree over whether the term "significant quantities" should be given a "bright-line" definition or whether its meaning necessarily depends on the context of the transaction to which it is applied. Ultimately, though, the "significant quantities" test is one way of asking whether the given contract reasonably reflects the value the marketplace is putting on that oil. DPC and IPAA recommend that MMS adopt a bright-line test on this issue. An arm's-length contract (or contracts) would involve a "significant quantity" of oil if it (or they collectively) involves at least 10% of the lessee's working interest share of production in the field or area in the given production month.[1]

The first benchmark used by the lessee would be its outright sales of like-quality crude in the field or area. The lessee could bid out a significant quantity of crude oil for sale under its system. Structurally, IPAA and DPC recommend that MMS establish a grid to divide the United States into market areas. These areas would be based on producing basins and pipelines systems, similar to those area determined for natural gas during the negotiated rulemaking process. For example, the State of Wyoming could be divided into three areas: the Powder River Basin, the Bighorn Basin, and the Southwest Basin. Depending on how the lessee offered its oil to third parties, a price or range of prices for crude oil with similar sulfur content and API gravity would be established within each area. If a single price resulted from the bid process, that price would be used for royalty purposes. If a range of prices resulted, the volume-weighted average of the range would be used to value the lessee's crude oil for royalty purposes.

The second benchmark would be a lessee's or its affiliate's arm's-length purchases from producers at the lease in the field or area. If the lessee did not have any arm's-length sales, it could use arm's-length purchases of like-quality crude in the field or area for valuation purposes in the same manner as arm's-length sales were used under the first benchmark.

The third benchmark would be outright sales at arm's length by third parties. Information about another party's arm's-length sales is sometimes available to a lessee

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[1] In our view, 10 percent is higher than needed to reflect a significant quantity. As shown in Exhibit 3, MMS valued oil from the Midway-Sunset field in California based on only 3% of the oil in the field being sold at arm's-length. And MMS has proposed to treat the NYMEX price as the national starting point for royalty value even though only about 1% of the oil traded is actually delivered. But we offer the higher percentage partly to give MMS greater comfort that the contract reflects a market value and partly because the definition is tied to the lessee's working interest share of production, not to total production from the field. The latter feature is necessary to allow the lessee to apply the benchmark contemporaneously. Most lessees will not have field-wide data at the time they must make their royalty payment for the production month.

through operating agreements or other sources.

If a lessee did not have any arm's-length sales or purchases and had no knowledge of relevant third-party sales, the fourth benchmark would call for value based on prices published by MMS. These prices would be the prices MMS obtained for its crude oil taken in-kind. If MMS had not taken any of its crude in-kind in the field or area, the lessee would base its royalty payments on the fifth benchmark: a netback methodology as discussed earlier and in our prior comments.

DPC and IPAA also propose modifying Form MMS-2014 to collect additional information from lessees on a monthly basis. Specifically, each line of Form MMS-2014 would indicate whether the transaction was arm's-length or not, the quality of crude (such as sweet or sour), and the pricing basis (posting, posting plus, benchmark, index). This information will be essential for MMS to verify via audit the arm's-length transactions used by the lessee in determining the benchmark price in a field or area. Also, MMS would be able to monitor the prices it received on a monthly basis and compare a lessee's benchmark prices to its arm's-length transaction prices and other companies arm's-length and benchmark prices using the information reported on Form MMS-2014. These changes are simple and inexpensive, in contrast to the proposed new Form MMS-4415.

It is our understanding MMS is considering moving from payor-based audits to field/area audits. A benchmark system and field/area audits would complement each other, and, along with additional information reported on Form MMS-2014, would ease the administrative burden faced by MMS and allow it to monitor pricing on a timely basis.

dc5287

EXHIBIT FIVE

C. 8ECC018
1 29 86

ail Stop 653

MMS-RVS-EVB:86-0549

AUG 4 1986

CONTAINS COMPANY PROPRIETARY
INFORMATION FOR RELEASE ONLY TO
PETRO-LEWIS CORPORATION

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Brad A. Barnds, Landman
Petro-Lewis Corporation
5500 Ming Avenue, Suite 300
Bakersfield, California 93309

Dear Mr. Barnds:

We have received your letter dated June 2, 1986, requesting permission to change the procedure for valuing crude oil produced from leases OCS-P 0300 and 0301, Beta Field, offshore California. The current valuation procedure requires reporting the highest price posted for East Wilmington Field crude oil among Chevron U.S.A. Inc., Mobil Oil Corporation, Union Oil Company of California, and Atlantic Richfield Company, adjusted for gravity at 4 cents per 0.1 degree API and sulfur at 5 cents per 0.1 percent above 1.5 percent.

Petro-Lewis Corporation (Petro-Lewis) proposes to value its share of Beta Field production based upon the terms of its sales contract of May 23, 1986, with Shell Oil Company (Shell). This contract, effective June 1, 1986, specifies that the price will be subject to agreement by the two parties each month. The sales price for June 1986 was specified to be a flat $8.30 per barrel.

By letter dated October 6, 1982, we notified you that Minerals Management Service's (MMS) policy requiring royalty value to be the highest price paid in the area for similar products can be overridden as the basis for valuation if there are compelling reasons to do so. That letter further specified that our approval of your sales contract price was conditioned upon your showing continued effort to obtain the best price possible. Your current request includes evidence that you have contacted 12 potential purchasers, none of which expressed any interest in purchasing this oil.

It is MMS's policy to accept arm's-length sales prices as representative of fair market value for royalty purposes, subject to future audit. This includes arm's-length sales contracts which have provisions for monthly renegotiations of the sales price.

For purposes of reporting royalty on Form MMS-2014, Petro-Lewis should report the sales price actually received from Shell each month. Regarding your concerns about the timeliness of any continued valuation requests, MMS's policy does not require further notification until the terms of the subject contract are either revoked or renegotiated (the monthly price agreement procedure in your contract with Shell is not considered to be a contract renegotiation). As noted in our earlier letter, adequate documentation demonstrating your continuing efforts to obtain the best price available must be retained by Petro-Lewis at its offices in order to justify each month's contract price during any future audit.

You have the right to appeal this decision. Please refer to the enclosure titled "Royalty Adjustments and Appeals Procedure."

A copy of our detailed "Summary of Findings and Conclusions" is enclosed.

If you have any further questions, please call us at (303) 231-3161.

Sincerely,

ORIG. SGD. W. H. FELDMILLER

William H. Feldmiller
Chief, Royalty Valuation and Standards Division

2 Enclosures

bcc: Wiechman
Hubbard
Chief, FAD w/f&c's
Chief, RCD w/f&c's
Regional Manager, Pacific OCS w/ f&c's
Norman Hess w/f&c's
E:86-0549:7/29/86
RM Chron/D.C.
RM Chron/Lakewood
RVS Chron
EVB Chron
D. Wiechman:jel:NBI:86-0549

Research/review data	4	hrs.
Prepare draft #1	4	hrs.
Type draft #1	1	hrs.
Review draft #1		hrs.
Prepare draft #2	1	hrs.
Type draft #2	1/2	hrs.
Review draft #2	1/2	hrs.
Prepare draft #3	1	hrs.
Type draft #3	1/3	hrs.
Review draft #3	1/2	hrs.
Prepare draft #4	1	hrs.
Type draft #4	1/2	hrs.
Review draft #4	1/2	hrs.
Prepare draft #5	2	hrs.
Type draft #5	1/2	hrs.
Review draft #5	1	hrs.
Prepare draft #6	1	hrs.
Type draft #6	1/2	hrs.
Review draft #6		hrs.
Type and Prepare Final	1	hrs.
Review Final		hrs.

CONTAINS COMPANY PROPRIETARY
INFORMATION FOR RELEASE ONLY TO
PETRO-LEWIS CORPORATION

ROYALTY MANAGEMENT PROGRAM
ROYALTY VALUATION AND STANDARDS DIVISION

Summary of Findings and Conclusions
Petro-Lewis Corporation Valuation Proposal for Beta Field,
Offshore California

Issue

Petro-Lewis Corporation (Petro-Lewis) is seeking the revocation of the valuation order from the United States Geological Survey (USGS) Pacific Outer Continental Shelf (OCS) Regional Office regarding the Beta Field, leases OCS-P 0300 and 0301, offshore California. Petro-Lewis is requesting permission to value its portion of production on the basis of the actual price received from its purchaser pursuant to an arm's-length sales contract.

Background

- By memorandum dated August 27, 1981, the Pacific OCS Regional Office of the USGS ordered the interest owners in the Beta Field to value their production based upon the highest posted price for East Wilmington Field crude oil among Chevron U.S.A. Inc. (Chevron), Mobil Oil Corporation (Mobil), Union Oil Company of California (Union), and Atlantic Richfield Company (ARCO), adjusted for gravity at 4 cents per 0.1 degree API and sulfur at 5 cents per 0.1 percent above 1.5 percent.
- By letter dated June 10, 1982, Petro-Lewis requested permission to be exempt from the above-mentioned valuation order and to value its interest in the Beta Field based upon the contract sales price actually received from its purchaser, Champlin Petroleum Corporation (Champlin).
- By letter dated October 6, 1982, Minerals Management Service (MMS) accepted Petro-Lewis' proposal to value its Beta Field production on the basis of the sales price established by the sales contract with Champlin. However, this procedure was approved only for the period June 1, 1982, through June 1, 1983.
- Effective August 1, 1982, Petro-Lewis began selling its share of the Beta Field production to Shell Oil Company (Shell) based upon the highest of four posted prices for Wilmington Field crude, with the price adjusted as appropriate for Beta Field sulfur content and API gravity.

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- By letter dated November 16, 1982, MMS modified its October 5, 1982, decision; the valuation procedure was made effective only through July 31, 1982, instead of June 1, 1983.

- By letter dated January 4, 1983, MMS approved Petro-Lewis' request to value this production based upon the highest posting for East Wilmington Field crude oil among ARCO, Chevron, Mobil, and Union adjusted for sulfur at 5 cents per 0.1 percent above 1.5 percent and for API gravity.

Findings

- By letter dated June 2, 1986, Petro-Lewis notified MMS that its purchaser, Shell, had canceled the August 1, 1982, sales contract governing the sale of Petro-Lewis' 17 percent interest in the Beta Field. This contract had a price provision based upon the USGS valuation order. Petro-Lewis is requesting that MMS accept the sales price specified in the new sales contract with Shell, dated May 23, 1986, as the basis for valuation of its share of Beta Field production. This contract provides that, effective June 1, 1986, the sales price will be a flat figure with no quality adjustments. It also provides that the price will be agreed to every month, with the June 1986 price set at $8.30 per barrel. Petro-Lewis is also seeking guidance regarding the month-to-month nature of the contract sales price; i.e., whether MMS approval would be required each time a price readjustment is made.

- Petro-Lewis' request includes a summary of potential purchasers contacted regarding the possible sale of the lease production. Of the 12 parties contacted by Petro-Lewis, none expressed any interest in purchasing this oil.

- A review of published prices for comparable crude oil found that of the companies posting in the Wilmington Field during June 1986, Texaco Inc. was posting at $11.05, while Union and Mobil were posting at $10.45 (ARCO is no longer posting for this field). Another data point is Chevron's posting for the Beta Field, which was $7.50 per barrel during June 1986. (It should be noted that MMS has not accepted Chevron's Beta Field posting as a basis for royalty payments since the posting is non-arm's-length and Chevron has not demonstrated comparability to other area arm's-length postings.)

- The new sales contract between Petro-Lewis and Shell provides that the delivery point will be at Shell's facilities at Long Beach, where the title will transfer to the purchaser. Therefore, the lessee, Petro-Lewis, is responsible for moving the oil to shore, and, according to MMS guidelines, would be eligible for a transportation allowance. Petro-Lewis indicated in a telephone conversation with our staff that it intends to apply for a transportation allowance at a subsequent date.

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- It is MMS's policy to accept approved valuation procedures until they are either revoked or revised. It is also MMS's policy to accept arm's-length sales contracts as representative of fair market value for royalty purposes, subject to future audit.

Conclusions

- Petro-Lewis' valuation proposal is based upon an arm's-length sales contract, and Petro-Lewis has documented its efforts to obtain a higher price. Therefore, despite the existence of higher published postings for the Wilmington Field, the valuation proposal should be accepted, subject to audit, for royalty purposes, effective June 1, 1986.

- Petro-Lewis should be notified to report, on the Form MMS-2014, the sales price actually received each month pursuant to its contract with Shell. However, under no circumstances will MMS accept less than gross proceeds accruing to the lessee.

- Petro-Lewis should be notified that a valuation procedure approval is not required when the price is readjusted on a monthly basis under the terms of the existing sales contract. However, Petro-Lewis should maintain adequate documentation at its office to support an audit finding that diligent efforts have been made to receive the best possible price.