

**COLLECTION AND DISPOSITION
OF FEDERAL OIL AND GAS
ROYALTIES TAKEN IN-KIND**

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND
MINERAL RESOURCES

OF THE

COMMITTEE ON RESOURCES
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upon a fair market value of the production. I believe that demagoging the industry as "cheats" is unproductive. Yes, large sums have been proffered by companies in settlements of lawsuits and a recent judgment in an Alabama court levied a huge award against one major oil company. But a jury in California a few years ago rebuffed claims that this same company had cheated on its state lease obligations.

One point should be obvious - had the Federal lessees paid these disputed royalties in-kind, the U.S. taxpayer would have been the immediate beneficiary because there would have been no delay in collecting the proper value. My position continues to be that each and every lessee is obliged to pay every penny of royalty owed in-cash or in-kind. No more and no less.

Within this context let us now turn to the issue of whether R-I-K can provide a benefit to our less fortunate citizens on a cold winter's night, or a hot summer's day.

Mrs. CUBIN. Since the Ranking Member is not here, I would be happy to recognize Mr. Inslee, if he would like to make an opening statement.

Mr. INSLEE. I will defer, Madam Chair. Thank you very much.

Mrs. CUBIN. I would like to introduce the first panel of witnesses and welcome them and thank them very much for being here with us today. Mr. M. Brian McMahan, McMahan and Spiegel; Mr. L. Poe Leggette, Fulbright and Jaworski, on behalf of API, IPAA, IPAMS, EPC, and USOGA.

The Chair now recognizes Mr. McMahan. I would like to remind you that your verbal testimony is limited to 5 minutes, but your entire testimony will be put in the record, and point the timing lights out to you.

STATEMENT OF M. BRIAN McMAHON, McMAHON AND SPIEGEL

Mr. McMAHON. Thank you, Madam Chairman. I would like to thank you for inviting me to appear today to this hearing, and I would like to thank specifically Carolyn Maloney, Representative from New York, who personally invited me to talk at this hearing Friday afternoon.

In May 1998, I appeared before—

Mrs. CUBIN. Well, that was quick work and good work to get here.

Mr. McMAHON. I got little sleep. In May 1998, I appeared before this Subcommittee to support MMS's efforts to adopt new valuation regulations for Federal royalty oil. At that time, we discussed the use of RIK sales. These are important issues for California. We have a large amount of Federal oil production in California and California's share of royalties goes directly to support its educational system.

California is concerned that the recent Wyoming RIK experience not be misinterpreted and used to justify unwise or costly RIK policies. As we pointed out in 1998, California has decades of experience in conducting RIK sales. We made the following points then in 1998 and we make them today.

First, Long Beach and California have been conducting royalty in-kind sales since the early 1970's.

Second, RIK sales achieve prices consistently higher than posted prices for California crudes.

Third, major oil companies, with rare exceptions, will not bid on RIK sales. The reason is that if they bid higher than their posted prices, they would undermine their posted prices. They use posted

prices as the basis of their royalty obligations for non-Federal oil and for many of their purchases of crude oil from producers and non-working interest owners.

Fourth, although RIK sales prices are consistently above posted prices, they are consistently below fair market value. We noted then and note now that the price of Alaska North Slope crude oil, ANS crude oil, sold in Long Beach is consistently above the royalty in-kind's prices that we receive in California. Attached to my written testimony, you will see a bar chart which compares posted prices, RIK sales in California, and ANS prices as quoted in Long Beach.

For these reasons, we supported MMS's efforts to base Federal royalties on readily available and competitive market prices, such as the spot price of ANS on the West Coast and the reported spot market prices for West Texas sour crude and West Texas intermediate crude.

The observations we made before the Committee 3 years ago about Long Beach's and California's RIK sales are still true today. Major oil companies, with rare exception, still do not bid on RIK sales, but when we do get RIK sales, non-majors bid on RIK sales and their prices are higher than postings.

One preliminary observation: MMS published their new regulations on April 15 of last year and they were to go into effect June 1 of the year 2000. MMS, as far as I know, has no reliable data on the prices they have received under the new regulations. I am not faulting MMS for doing this, but when they did their study of the Wyoming RIK sales, they did not compare the prices received under those sales with the prices they are to receive under the new regulations. There is no reason to ignore the impact of the new regulations, even though we still do not have any results yet. Much less is there any reason to abandon the new regulations in favor of an all-out RIK program on the basis of this pilot study.

Let me look now to the Wyoming study itself. As shown in the report that I have prepared and attached to my testimony, its striking feature is that it is consistent with California and Long Beach's experience. First, only 15 companies ever bothered to submit comments. Only one of those, Exxon, was a major oil company. Only seven companies were winning bidders and none of them was a major oil company. Most of them were marketers or brokers, not refiners, which suggests that these firms would be reselling the oil to refiners at even higher prices.

Second, as in the California experience, the accepted bids were higher than the prices posted by the major oil companies.

And third, as discussed below, the RIK sales prices were lower than market prices. We are going to use Canadian crude oil prices to measure the effectiveness of the RIK sales in Wyoming.

Fourth, the sales constituted 1.6 million barrels over an 18-month period, and that represents less than 1 percent of the total crude production of the Rocky Mountain area.

I guess I am out of time already?

Mrs. CUBIN. You are out of time, if you could just sum it up.

Mr. MCMAHON. Okay. What we did, in brief, Madam Chairman, was we compared Canadian crude prices, we adjusted for transportation to Wyoming, and as three charts show that are attached in

a study we commissioned on the RIK sales in Wyoming, they show that in all cases, the prices that—we will call this market prices for Canadian crude—are higher than the RIK sales prices.

That does not mean that we believe that MMS did not conduct the sales correctly. We approve of the way MMS conducted the RIK sales. But what this shows is that unless major oil companies are willing to participate in RIK sales, that is, bid on oil and bid prices higher than their postings, you are going to continuously find, even in the future, that the prices received in RIK sales are less than true market prices. That is why we recommend that the MMS new regulations, which do depend on market prices, are continually used in the future.

I think at some appropriate time, when MMS gets more data on the new regulations and how the costs of the new regulations compare with the RIK sales and the prices received under the new regulations, then I think we are in a more appropriate position to be determining the effectiveness of the RIK program. Thank you very much.

Mrs. CUBIN. Thank you, Mr. McMahon.

[The prepared statement of Mr. McMahon follows:]

**Statement of M. Brian McMahon, for the City of Long Beach as
Trustee for the State of California**

Madam Chairman and members of the Subcommittee:

Thank you for your invitation to appear today to testify in this hearing on the collection and disposition of Federal oil and gas royalties taken in kind.

Introduction

In May 1998, I appeared before this Subcommittee to support MMS's effort to adopt new valuation regulations for Federal royalty oil. At that time, we discussed the use of royalty-in-kind (RIK) sales. These are important issues for California. We have a large amount of Federal oil production in California, and California's share of royalties goes directly to support its educational system. California is concerned that the recent Wyoming RIK experience not be misinterpreted and used to justify unwise and costly RIK policies.

As we pointed out in 1998, California has decades of experience in conducting RIK sales. The points we made then are still valid today:

- Long Beach and California have been conducting royalty-in-kind sales since the early 1970's.
- RIK sales achieve prices consistently higher than posted prices.
- Major oil companies, with rare exceptions, will not bid on RIK sales. The reason is that if they bid prices higher than posted prices, they would undermine their posted prices. They use posted prices as the basis for their royalty (non-Federal) obligations, and for many of their purchases of crude oil from producers and non-working interest owners.
- Although RIK sales prices are consistently above posted prices, they are consistently below fair market values. We noted that Alaska North Slope (ANS) crude prices in Long Beach are consistently above the RIK prices in sales by Long Beach and California, as shown by the attached bar chart.

For these reasons, we supported MMS's efforts to base Federal royalties on readily available and competitive market prices, such as the spot price of ANS on the West Coast and the reported spot market prices for West Texas sour crude and West Texas Intermediate crude.

The observations we made before this subcommittee three years ago about Long Beach and California's RIK sales are still true today: major oil companies still do not bid and RIK sales prices continue to be higher than posted prices, but lower than market values.

One final preliminary observation must be made: MMS published the new pricing regulations on March 15, 2000 to go into effect on June 1, 2000. Thus, MMS does not yet have any reliable data concerning the amount of royalties collected under the new regulations. MMS has not been able to compare the prices received in RIK sales of Wyoming crude oil with the prices they receive under the new regulations.

Nonetheless, that is no reason to ignore the impact of these regulations in evaluating a pilot RIK program. Much less is there any reason to abandon the new regulations in favor of an all out RIK program on the basis of a very small pilot study.

The MMS Wyoming Study

This brings us to the Wyoming study itself. As shown by the attached report, its most striking feature is that it is consistent with Long Beach's and California's experiences in RIK sales. First, as to participants, only 15 companies ever bothered to submit comments on the proposed program and only one, Exxon, was a major oil company. Only seven companies were winning bidders. None of the winning bidders was a major oil company. Most winning bidders were marketers or brokers, not refiners, which suggests that these firms could resell the oil to refiners at even higher prices.

Second, as in the California experience, the accepted bids were higher than the prices posted by the major companies.

Third, as discussed below, the RIK sales prices were lower than market prices.

Fourth, these sales of 1.6 million barrels over an 18 month period represent less than 1% of the total crude oil production in the Rocky Mountain area.

Canadian Crude Oils are a proper Benchmark to Evaluate the RIK Prices

Contrary to MMS claims, Canadian crude prices are the appropriate standards for evaluating the Wyoming RIK program. The Rocky Mountain area is a crude deficit area, i.e., it produces less crude oil than it refines. Canadian crude oils are the marginal supply for refineries in the Rocky Mountain area. Canadian crude oils are refined in Colorado, Wyoming, Montana and Utah and constitute about one third of the crude oil refined in the Rocky Mountain states. Canadian crude oil is an appropriate pricing benchmark for the Rocky Mountain area.

The RIK Prices are below Market Value

We compared spot prices for both sweet and sour Canadian crude oils that are shipped into the United States with the three Wyoming RIK crude types. The RIK prices for Wyoming sweet crude were compared with the spot price of Edmonton Par crude (a sweet crude) after adjustment for transportation into Wyoming. See Figure 1 of the study by our consultant, which shows that the spot prices of Edmonton Par crude were significantly higher than the RIK prices for the relevant time period. The difference was \$2 to \$3 per barrel. Put another way, the RIK prices were \$2 to \$3 per barrel below market value.

The RIK prices for Wyoming General Sour crude were compared with the spot prices for Canadian Bow River Crude oil (a sour crude oil). (See Figure 2). In the early months of the pilot program, the Canadian Bow River spot price exceeded the RIK price for Wyoming General sour crude by as much as \$4.50 a barrel, although in the last five months of the program, the prices fell much closer in line.

We also compared the RIK prices for Wyoming Asphaltic crude with the spot prices for Canadian Bow River crude (see Figure 3). The RIK price was considerably below the Canadian crude price during the first pilot sale and then was not as much below the Canadian crude price in the other two pilot sales. RIK prices for Asphaltic crude reached near parity with the spot prices of Canadian Bow River crude oil in the second half of the third sale.

The fact that Canadian crude oils were generally priced above the RIK pilot prices is evidence that the RIK sales prices usually did not equate to market value.

MMS was wrong to reject Canadian Crude Oils as Benchmarks

MMS alluded to three reasons why Canadian crude oils should not be used as a benchmark for the RIK sales prices. First, not all Wyoming crude oils compete with Canadian crude oil at Billings (Montana). Second, Canadian crude production is less mature than Wyoming crude production. Third, Canadian crude is transported to both Midwest refineries and Rocky Mountain refineries. None of these is a valid reason to reject Canadian crude oils as benchmarks for RIK sales of Wyoming crude oils. None of these considerations is sufficient to reject Canadian crude as a benchmark with which to compare the Wyoming RIK prices.

First, whether Canadian crude oils compete with Wyoming crude oils at Billings is irrelevant. They do compete with Wyoming crude oils generally in the Rocky Mountain area. Second the fact that Canadian crude oil production is less "mature" than Wyoming crude oil production is similarly irrelevant. Presumably, MMS means that crude oil is cheaper to produce in less mature areas than in mature areas. Although that fact may be important to the profits of crude oil producers in both areas, that is no reason why it should have anything to do with how much refiners should be willing to pay for crude oils. Therefore, the maturity of crude oil producing areas does not affect the market values of crude oils.

Finally, both Canadian crude oils and Rocky Mountain crude oils are refined in both the Rocky Mountain area and the Midwest. These crudes compete with one another in both areas.

Other alleged Benefits of RIK Sales

MMS admits that, because it is still developing its processes for managing RIK, it is unable to document cost savings at this time. Just as the costs of the RIK program are uncertain so are the costs of using the new MMS valuation regulations. In analyzing the possible benefits of the RIK program, MMS has compared the RIK prices with posted prices and not with the prices established by the new valuation regulations. The proper comparison is with the prices established by the new valuation regulations. So, too, in documenting any cost savings achieved by RIK sales, the cost of the RIK program should be compared to the cost of implementing the new valuation regulations. Those regulations, like the RIK program, are designed to reduce the costs of auditing.

In short, because the costs of auditing under the new MMS valuation regulations are uncertain at this time, no legitimate estimate of any cost savings using RIK sales can be made at this time.

Congress should not take money from the states

The probable losses from the Wyoming pilot underscore that Interior needs to experiment and evaluate the pros and cons of an RIK program further before Congress begins legislating. The need for legislation is, indeed, doubtful. The right to take in kind exists under current law. The respective obligations of the lessee and lessor are set out in the lease and in long held interpretations of leases. Neither the government nor industry has demonstrated a need for an additional authority to operate an RIK program. Moreover, other than speculation, no evidence has been offered that the additional authority requested will result in enhancing, rather than decreasing, royalty revenues to the public beneficiaries. It is noteworthy that the former Chairman of this Committee exempted his own State of Alaska from the RIK legislation then under consideration.

Under current law, states receive a percentage of the United States' "royalty interest." A royalty interest is a cost free interest. It is unlike, for example, a working interest, under which the owner of that interest shares in the costs of exploring, developing and operating the lease. The cost of those obligations that a lessee is required to perform are not deductible from a royalty interest.

The oil industry, however, seeks to allow Interior to use royalty revenues to pay for performing certain services—services that are not deductible from the United States' interest when royalties are paid in value.

Clearly, industry is supporting this added authority as an adjunct to its claims that Federal lessees are not required to pay for these types of costs. Their assertion of a need for Interior to have funds to pay "downstream" costs is but a euphemism for post-production and marketing costs. Their claims for deducting those costs from royalties, however, were rejected repeatedly during the lengthy rulemaking leading to the 1988 regulations, and during the more recent rulemaking on the new oil rules. Interestingly, industry prohibits deducting those same type of costs when it is the royalty owner.

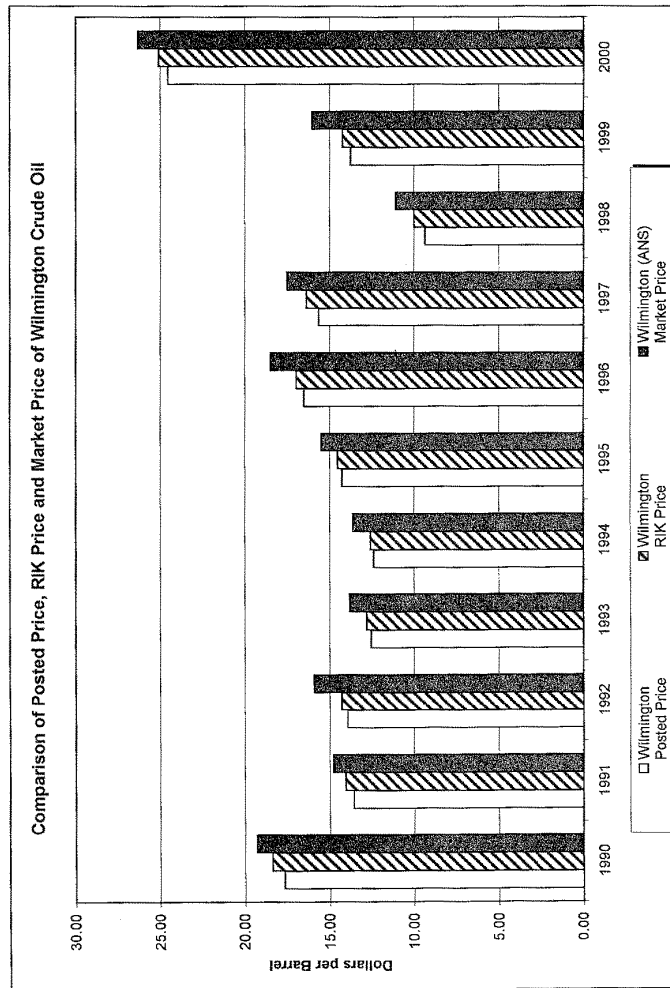
The oil industry advocates allowing Interior to use royalty revenues to pay for such matters as the hiring of independent brokers or marketers to sell production taken in kind. Let's be honest: if the government feels that it is inadequate to the task of marketing—that privatization will be of assistance—it should continue to take royalty in value. Taking royalty in value is the essence of "privatization". Moreover, such "privatization" can only reduce the "royalty interests" of states like Wyoming and California by forcing them to assume costs that currently do not reduce their royalty revenues.

Last year, Congress finally passed legislation to end the Net Receipts Sharing program, under which the costs of Interior's administration of the mineral leasing laws were deducted from the states' share of royalties. As the Chair will surely recall, the Net Receipts Sharing program resulted in substantial disputes between the states and Interior because the Federal Government could not justify and account for its costs. Indeed, Wyoming was at the forefront of the Net Receipts sharing battle. The authority that industry seeks for Interior is simply Net Receipts Sharing in a different form.

If Congress wants the government to be in the oil business, it should appropriate the money to do so through the annual appropriations process, where its performance can be evaluated and budgeted on a yearly basis. What it should not do, however, is transform the very nature of the public's royalty interest into a working interest through the guise of making the in-kind program "permanent." If Congress

wants Interior to stand in the shoes of a lessee, without the express consent of the royalty beneficiaries, the Federal Government should assume those costs that lessees assume today, leaving the states' and the public's cost free royalty interest intact.

I will be happy to answer any questions the Committee may have.



Sources: Texaco and Equiva Posted Price Bulletins, Platts, Price of RIK Sales by City of Long Beach and State of California Market value based on ANS spot price in Long Beach adjusted for gravity using the CA posted price gravity differential.

MEMORANDUM

April 24, 2001

TO: Report to the City of Long Beach, Trustee for State of California

FROM: Innovation & Information Consultants, Inc.

SUBJ: MMS Report in RIK Pilot Program in Wyoming

At your request we have reviewed the draft MMS report, "Wyoming Oil Royalty in Kind Pilot" to determine whether the claims made by MMS that this program has been highly successful are warranted and whether it could be used as a justification for extending an RIK program to California.

Based on our review of the report and certain other data, we have come to the following conclusions:

- The RIK sales appear to have generated bids and prices that were above posted prices and may have in fact reflected prices consistent with those reported for royalty and severance tax purposes. Nevertheless, these royalty and tax values were computed under the old royalty rule that MMS itself has recognized did not necessarily lead to market value, and thus one cannot conclude based on this evidence that the RIK sales prices equate to market value.
- The evidence indicates that these RIK sales did not result in the realization of market value. Of critical importance is the fact that the criteria applied by MMS in this study did NOT stipulate that RIK sales prices result in market value, but only result in prices as high or higher than royalty in value prices. A more appropriate criterion would be to evaluate the RIK prices against a measure of market value as we do in this memo.
- Much of the analysis contained in the MMS report has not been validated, however, MMS appears to be using the results of this study to expand the program in Wyoming and perhaps elsewhere. Further data and study are required, but at this point we do not see this study or the results of the RIK pilot as justification for expansion of the program to other areas in the country.

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Summary of the MMS Report

MMS has evaluated the first three sets of sales from the Wyoming RIK pilot program covering the period October 1998 through March 2000. Each sale covered six months and included various leases in Wyoming that produce one of three types of crude oil: Sweet, Sour or Asphaltic Sour. Total volumes sold in each sale ranged from 2,516 barrels per day (B/D) in the first sale to 3,425 B/D in the second sale and 3,249 B/D in the third sale. A maximum of seven companies bid on these sales and four were winning bidders. Not all leases offered were sold, although by the third sale, trucked properties were removed from consideration, and 100 percent of the leases offered for sale received bids considered high enough to permit a sale.

MMS observes in its report that this time frame was one of extreme crude oil price volatility with general (WTI) crude oil prices ranging from \$11 to \$31 per barrel. MMS claims this volatility affects producers' decisions to explore and expand (or cut back) on production, but it is not clear how it would affect the prices received in an RIK program vs. a value-based program.

MMS applies three criteria to its evaluation of the pilot program and based on these criteria concludes that the program has been a success. The three criteria are:

1. Simplicity, accuracy, certainty for lessees and government;
2. Revenue neutral or better for government; and
3. Reduced administrative burden for lessees and government.

MMS states that RIK has "reduced the period of value uncertainty . . . from years to months, royalty receipts exceeded comparable in value royalties by approximately \$810,000, and RIK streamlined processes . . . established a foundation for administrative savings." (p. 2)

We do not necessarily agree with the benchmarks used to evaluate these criteria, particularly with respect to the second criteria relating to value. The appropriate criteria should be whether the RIK program produces prices that reflect market value, not how it compares to existing prices. Existing prices, i.e., in-value may also not reflect market value¹ and so the conclusion that the RIK prices exceeded the in-value prices by \$810,000 (which is less than \$.50 per barrel) is not necessarily a very compelling justification for the program. Also MMS notes that some of these properties were subject to reduced royalties (stripper, heavy oil), and therefore comparison to existing royalty values may be misleading.²

¹ This was prior to the implementation of the new royalty rule and thus it is highly likely that royalty in-value did not equate to market value.

² It is likely that in-value royalty or severance tax prices were tied to Wyoming postings which do not reflect market value, and the mere fact that the RIK prices exceeded these prices only validates the conclusion that postings do not reflect market value, not that RIK prices achieved market value.

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Another relevant point raised in the MMS report is the fact that there were a relatively limited number of bidders for this crude oil. The maximum number of bidders was seven for the first and third sale, and six for the second sale, and we do not know whether all seven bid on each type of crude oil. Although either 4 or 5 companies did submit winning bids, this may be insufficient to generate prices reflective of market value. Recall the sell-offs for Long Beach's oil that attracted a similar number of bidders, but typically no majors. Much the same can be said for these sales. Not a single integrated major was a winning bidder, and those that did submit winning bids were primarily traders and brokers, i.e., companies that would resell the oil at a profit.

With regard to the other two criteria, we agree that an RIK program will likely establish values sooner in time, although under the new royalty rules that may not always be the case. However, if the RIK values are no higher than what is established under an in-value program, then what is the difference in knowing sooner what the value is? Finally, MMS presents a series of calculations intended to show that the RIK pilot will likely reduce MMS' administrative costs as well as lessees' costs. These calculations, however, acknowledge that they are preliminary and cannot be fully verified until a permanent RIK program is established. We see that as an inadequate basis for then proposing a permanent program. Nevertheless, there do appear to be some administrative savings involved.

Analysis of Values Received in RIK Pilot Sales

The MMS RIK report does not provide the actual average sales prices received for each type of Wyoming crude oil, but rather only presents a series of graphs from which one may estimate the sales prices. We have attempted to make such an inference, but we can only be confident that the actual prices received are accurate to within plus or minus \$0.50 per barrel. Nevertheless, we have made some additional comparisons with the RIK prices to determine their reasonableness. We obviously would like the actual data on sales prices, as well as the data on in-value prices and the basis for the severance tax payments. These data have been requested, but we are unsure when or if we will receive such data.

It is important to put these sales into perspective. Total volume sold was 1.6 million barrels over an 18-month period, or about 3,000 barrels per day. Total Rocky Mountain production was about 525,000 barrels per day in 1999, so that these sales represented less than 1 percent of daily production in the area.

MMS notes that this was a period of extreme price volatility and that the Rocky Mountain area is a complex market area. We agree with both of these facts, but that does not mean that analysis of the prices received cannot be performed. MMS examines and discounts comparisons of RIK prices with prices for Wyoming Sweet spot, WTI, WTS and Canadian crude oils. We compared the Wyoming Sweet spot price, adjusted for transportation and gravity, with the RIK sweet prices and found that the prices were generally were in line with one another. MMS discounts the relevance of the Wyoming Sweet spot price indicating that the market was thin and these spot prices were not

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necessarily reliable market values. No spot sour prices are quoted for Rocky Mountain crude oils so we then looked to the other crude oil that competes in this market area.

MMS claims Canadian crude oils are not appropriate benchmarks even though (unlike WTI or WTS) Canadian crude competes directly with Wyoming and Rocky Mountain crude oils. MMS states that not all Wyoming crude competes with Canadian crude at Billings, Canadian crude is less "mature" and considerable Canadian crude also flows to the Midwest. Based on these assertions, MMS discounts any price comparisons between Canadian crudes and the RIK prices, stating that "Canadian benchmarks are not a reliable price for purposes of comparison with the values received under the RIK pilot" (p. 12). We believe that MMS's logic is faulty.

The Rocky Mountain area is a crude deficit area and operates in a manner similar to the West Coast. Canadian crude oil is the marginal supply for refineries in the Rocky Mountain area and represents about 33 percent of the crude oil refined in PAD IV during 1999 and 2000.³ Canadian crude oil functions in a similar manner to ANS on the West Coast. It serves the Rocky Mountain market as the marginal supply (as ANS has served the West Coast market), and as with ANS, also serves other markets including the Midwest (as ANS served the Gulf market). In addition, ANS was a less "mature" production reservoir than California crude, just as MMS claims is the case for Canadian crude compared to Wyoming crude. Therefore, Canadian crude should establish the pricing benchmark in the Rocky Mountain area just as ANS has for years on the West Coast.

A comparison of Canadian crude oil prices with RIK prices reveals a very different story than what the MMS would believe. Spot prices for both sweet and sour Canadian crude oils shipped into the U.S. were compared with the three Wyoming RIK streams. Figure 1 compares the estimated RIK prices for Wyoming Sweet with the Edmonton Par crude (sweet) adjusted for transportation into Wyoming. This figure clearly shows that the Canadian crude price was significantly higher than the RIK prices throughout the relevant time frame when sweet crude oils were sold under the RIK pilot. The differences were on the order of \$2-3 per barrel.

Figure 2 presents a similar comparison between the average RIK price for Wyoming General Sour and the spot price for Canadian Bow River (sour) adjusted for gravity and transportation. In the early months of the pilot, the Canadian crude price exceeded the RIK pilot by as much as \$4.50 per barrel, although over the last five months of the pilot program, the prices fell much closer into line. A similar trend is seen for Wyoming Asphaltic crude in Figure 3, which shows the RIK price was considerably below the Canadian price during the first pilot sale, and then lagged below the Canadian price by considerably less in the other two pilot sales, reaching near parity in the second half of the last sale.

³ Canadian crude was refined in all Rocky Mountain states including Utah which is logistically the farthest point away from Canada. It was also refined in refineries in Colorado, Wyoming, and Montana. Further, some Wyoming and Montana crude oils do move east to the Midwest and compete there with Canadian crudes in that market as well.

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These price comparisons certainly call into question whether MMS received market value for its RIK pilot sales, even if the prices were equal to or greater than postings or in-value prices. We certainly would expect the prices to exceed postings, particularly the companies' postings used by MMS which were typically lower tier posters. Nevertheless, there is a real question as to whether the RIK pilot sales achieved prices that equated to market value. The Canadian crude spot prices provide the best measure of market value during this time frame as Canadian crude was the marginal supply and competed directly with Wyoming and other Rocky Mountain crude oils for refiners' demand in that area. The fact that Canadian crude oils were generally priced above the RIK pilot prices is evidence that the RIK sales prices did not equate to market value.

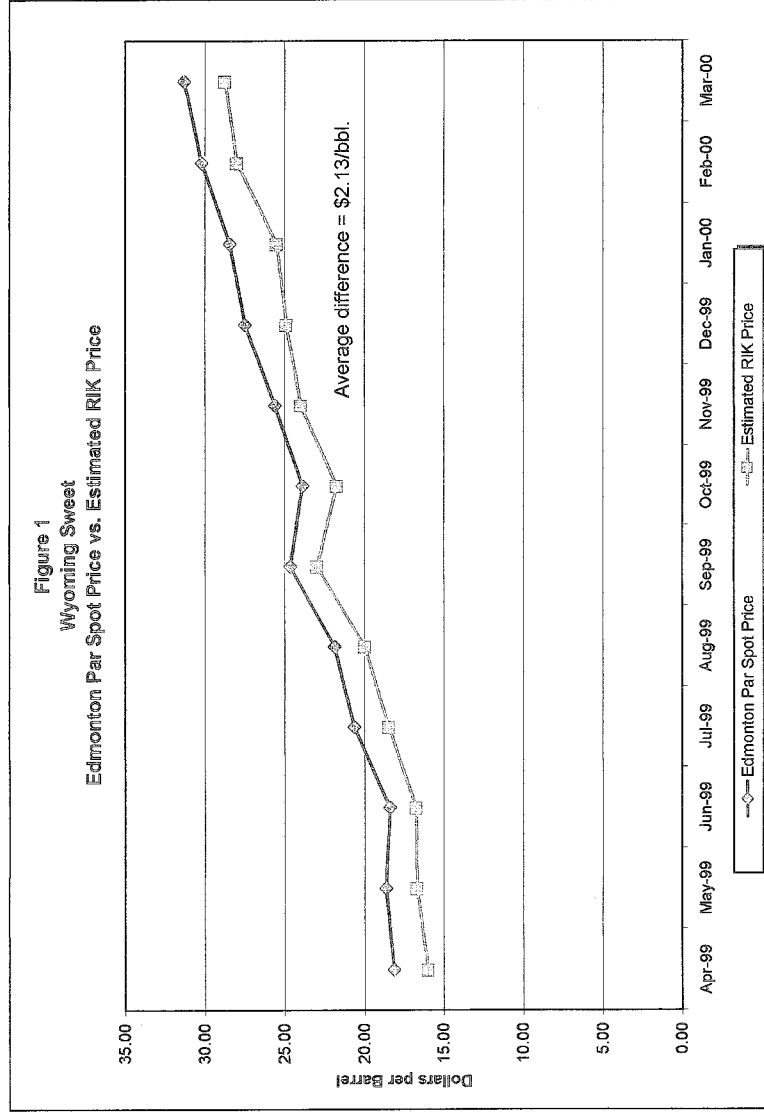
Other Alleged Benefits of the RIK Program

MMS claims that there were other benefits from the RIK program, including early payment (5 days), cost of administration, and cost of compliance. We have not evaluated the administrative or compliance cost aspects, although we suspect the administrative costs are not much different from an in-value program. The calculations made by MMS, however, are preliminary and cannot be fully verified until a permanent RIK program is established. We see that as an inadequate basis for proposing a permanent program.

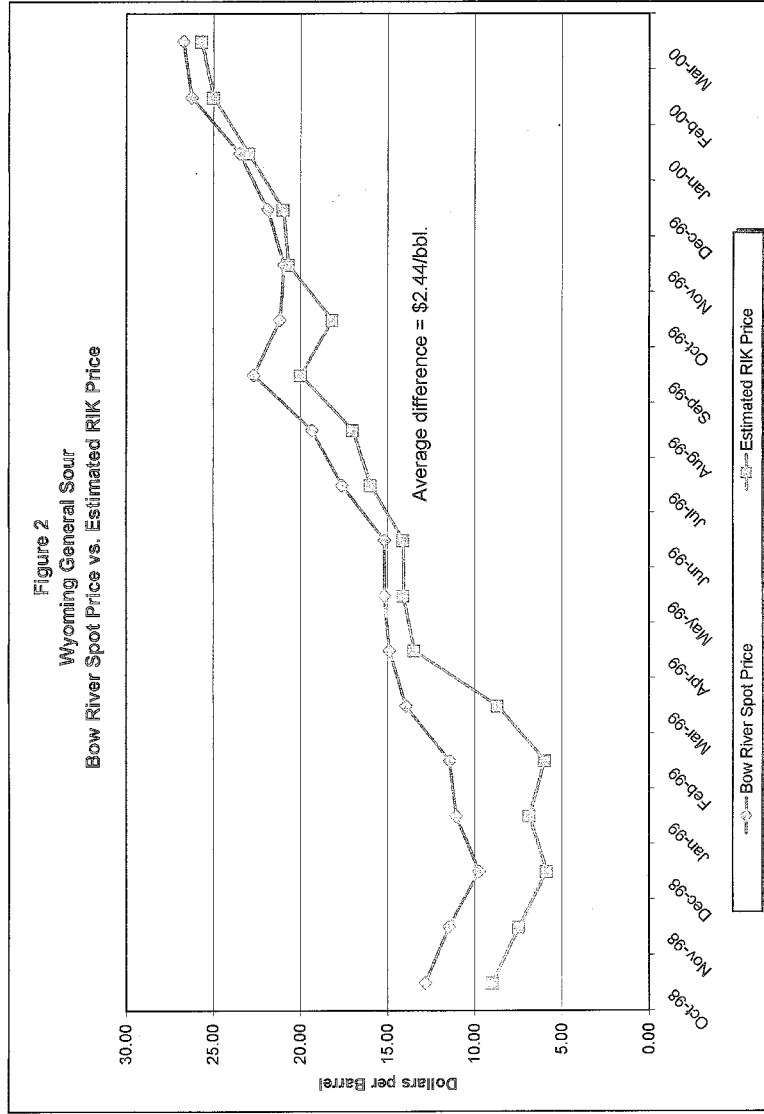
Although the RIK program may involve lower compliance (audit) costs, that does not mean the program might not be "gamed" by its participants, particularly given the limited number of bidders. Indeed, the ability to monitor and audit RIK sales is more limited than under an in-value royalty program that over the long run may be harmful to the government's interests in monitoring industry trends. Again the experience of Long Beach with its successful annual audits under the Contractor's Agreement helped develop the detailed knowledge required to understand the widespread nature of underpayments in California.

The early payment "benefit" amounts to a penny per barrel and need not be unique to the RIK program. If MMS desired earlier payment of in-value royalties, it could simply mandate such, and therefore we see no real added value here.

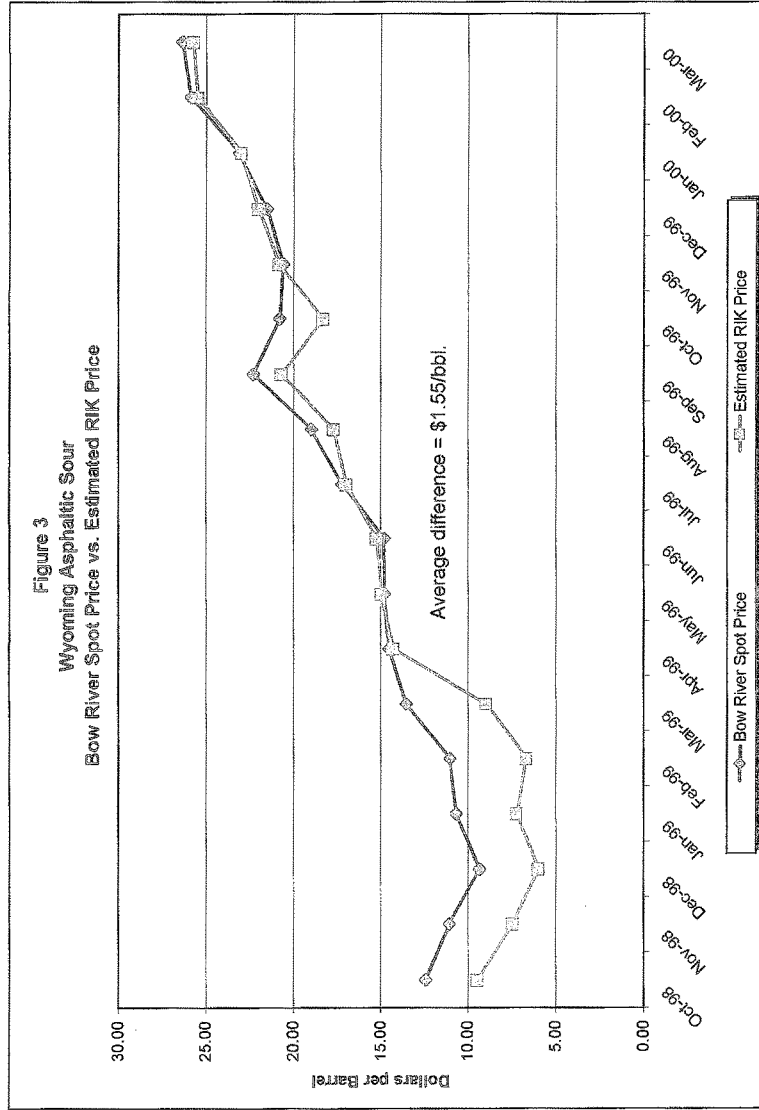
We believe that it is too soon to use the results of the Wyoming RIK pilot as a basis for more widespread application of an RIK program, particularly as it might be applied in California. MMS has broadened the RIK program in Wyoming so that it now involves upwards of 7,000 B/D of production. Further analysis of the results of these sales (April 2000-September 2001) is necessary before proceeding with the expansion of this program to other areas.



Sources: Platt's, MMS Wyoming Oil Royalty in Kind Pilot, Express Pipeline tariffs, interprovincial Pipeline tariffs Par crude adjusted to 40 degrees and \$1.45 for transportation from Edmonton to Guernsey



Source: Platt's, MMS Wyoming Oil Royalty in Kind Pilot, Express Pipeline tariffs and Interprovincial Pipeline tariffs
Bow River adjusted to 23.7 degrees and \$1.47 for transportation from Hardisty to Guernsey



Sources: Platt's, MMS Wyoming Oil Royalty in Kind Pilot, Express Pipeline tariffs and Interprovincial Pipeline tariffs
 Bow River spot price adjusted to 20.3 degrees and \$1.60 transportation from Hardisty to Guemsey