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Report to the Secretary of the Interior

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MINERAL REVENUES

Opportunities to Increase Onshore Oil and Gas Minimum Royalty Revenues

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Resources, Community, and
Economic Development Division

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June 24, 1986

The Honorable Donald P. Hodel
The Secretary of the Interior

Dear Mr. Secretary:

As you know, the Mineral Leasing Act of 1920 (30 U.S.C. 181 et seq.) as amended in 1946, provides that after discovery of oil or gas in paying quantities,[1] federal onshore oil and gas lessees must pay annually a minimum royalty of $1 per acre.

We reviewed the $1 per acre minimum royalty rate because our previous work on this issue indicated that the current rate may no longer be appropriate. Two findings emerged from our review: first, since the Department of the Interior has not ensured the collection of all minimum royalties, as much as $1.7 million may have been undercollected for fiscal year 1985; second, the $1 rate, legislatively established nearly 40 years ago as the lowest amount chargeable, has not kept pace with increased rental rates. These findings are summarized in this letter and discussed in more detail in appendices II and III.

Background

Interior's Bureau of Land Management (BLM) issues and administers oil and gas leases and maintains the official records on lease status and acreages subject to rents or royalties. The Minerals Management Service (MMS) ensures that lease revenues are collected and disbursed to recipients on time.

Once a lease is issued, exploration activities such as assessing oil and gas potential can begin. During this period, lease operators pay annual rent to the federal government. After discovery of oil or gas, however, rent payments cease and a monthly production royalty begins. If cumulative production royalties for the lease year total $1 per acre or more, the lessee pays a royalty based on a percentage of the value of production. In the event of less production, the law requires lessees to pay a minimum royalty of $1 per acre in lieu of rent. Interior's Solicitor's Office believes the rate can only be changed by legislation. However, we are not persuaded that Interior cannot increase the $1 rate without an act of the Congress.

[1] Paying quantities of oil and/or gas is defined as production of sufficient value to exceed direct operation costs and the costs of lease rentals or royalty payments of $1 per acre

Scope and Methodology

In conducting our review, we interviewed officials and examined lease files at Interior's headquarters in Washington, D.C.; MMS' Royalty Management Accounting Center in Lakewood, Colorado; and BLM's state offices in Colorado, New Mexico, and Wyoming. We limited our review of BLM lease files to these three state offices because they handled 73 percent of all royalty-paying leases during 1985.

Our calculation of estimated minimum royalty undercollections was based on our analysis of onshore oil and gas leases that are recorded in MMS' Minimum Royalty Schedule Data Listing (MRSDL) report which contains data on leases subject to a minimum royalty of $1 per acre. We determined royalty payments on a per-acre basis for all onshore leases (excluding Indian leases) in the MRSDL by dividing the amounts paid by the amount due (the minimum royalty acreage).

MMS Does Not Ensure That Minimum Royalties Are Paid

According to our analysis of MRSDL data, MMS collected approximately $862,000 in minimum royalties in fiscal year 1985, but should have collected as much as $1 7 million more The $1 7 million undercollection resulted from approximately 1.4 million acres for which no royalties were collected (at $1 per acre) and about 637,000 acres for which only about $335,000 was collected The Federal Oil and Gas Royalty Management Act of 1982 requires retroactive collection of underpaid minimum royalties as well as interest charges on late payments

MMS does not monitor royalty collections to identify potential minimum royalty underpayments. MMS, however, is currently analyzing costs and benefits of performing this monitoring through a pilot study of approximately 500 leases to determine the relative merits of implementing a rental and minimum royalty monitoring system. While the MRSDL report is not completely accurate (see discussion on MRSDL's accuracy in appendix I), we believe that MMS could use the existing MRSDL to identify potential undercollections and to notify lease payors of possible minimum royalties and interest charges due.

The Minimum Royalty Rate Should Be Increased

Although oil and gas rental rates have increased during the past 40 years, the minimum royalty rate has not. As a result, the current $1 per acre minimum royalty is often less than the prediscovery rental. Although Interior officials previously proposed increasing the minimum royalty rate by regulation, Interior's Solicitor's Office concluded that legislation was required. Currently, bills are being considered by the Congress which would increase the minimum royalty.

Minimum royalty and rent are similar in purpose. They both serve as a cost of holding a lease that is not producing oil and gas at a sufficient rate, as determined by Interior. Differentiation is made solely for accounting purposes.

Before 1946, rent was paid throughout the life of the lease and was credited against any production royalties for the year. Annual rental rates were set by statute in 1935 at "not less than" $0.25 per acre, and Interior used its flexibility to raise the rate by regulation. In 1946 a minimum royalty was established at $1 per acre. Therefore, in 1946, after discovery of oil or gas, the cost of holding a lease quadrupled from $0.25 per acre rent to the $1 per acre minimum royalty. Since then Interior has raised prediscovery rents to $1, $2, or $3 (beginning in 1987) per acre, depending on the type and status of the lease. Since Interior has retained the minimum royalty at $1, the quadrupling of revenue that occurred in 1946 no longer occurs after discovery. In fact, revenues can actually decrease when a lease with a $2 or $3 per acre prediscovery rental rate becomes subject to the lower $1 per acre minimum royalty rate.

Based on the above, we believe that the minimum royalty rate should be treated with the same flexibility as rents. Exactly what royalty rate should be established as the minimum depends upon the program objectives being sought by Interior. Therefore, Interior should exercise flexibility in setting minimum royalties, as it has for rents. Although Interior does not believe it has the authority to do so, legislation may be enacted which would give Interior such flexibility. Interior could then make new leases subject to adjustable minimum royalty rates. Although the Secretary can currently reduce royalties on a case-by-case basis, according to Interior's Solicitor's Office, he cannot now raise them above $1 If the leases provided for adjustable rates, they could be raised or lowered in order to meet Interior's program objectives.

Recommendations to the Secretary of the Interior

We recommend that the Secretary of the Interior require the Director of the Minerals Management Service to

- recover uncollected or undercollected minimum royalties and related interest, as required by statute, and
- monitor existing leases to ensure that minimum royalties are paid.

Until an automated computer monitoring system is developed, the Minerals Management Service should use the existing Minimum Royalty Schedule Data Listing report to carry out these actions.

Bills are currently being considered that contain a provision that would confirm the Secretary of the Interior's flexibility to adjust minimum royalty rates. While we do not believe legislation is necessary, we recognize that the Solicitor's Office holds a contrary position. Furthermore, we recognize that the current rate of $1 per acre has not changed for 40 years. Accordingly, if those bills are not enacted, and the Congress does not indicate a rejection of the provision in the bills addressing adjustable minimum royalty rates, we recommend that the Secretary

- develop and submit to the Congress a legislative package amending the Mineral Leasing Act of 1920 to specifically authorize the Secretary of the Interior to adjust the minimum royalty rate. In the event legislation passes authorizing Interior to do so, the minimum royalty rates for newly issued leases should be adjustable during the lease terms according to their current circumstances.

Agency Comments

On March 19, 1986, we asked Interior to comment on a draft of this report. Interior's response of April 14, 1986, acknowledged its responsibility to monitor and collect proper royalties.

Interior noted that it has a pilot project to estimate the significance of minimum royalty underpayments and has developed a system which is the potential long-term correction for this problem. If the pilot study indicates a serious problem, Interior said it would divert resources to expedite completion of an automated monitoring and billing system. If not, completion of such a system would be delayed, and Interior does not plan to correct the problems in the interim.

We encourage Interior's efforts to determine the significance of undercollections and to develop a long-term solution. However, we are concerned about Interior's approach for three reasons: (1) because Interior is not using a statistically valid sample, its estimate of the undercollections may not be reliable, (2) the pilot study has already missed several target dates, and (3) even if the pilot study indicates serious problems, undercollection will continue during the period that MMS conducts the pilot project and subsequent system implementation. Therefore, we reaffirm our recommendation that Interior take interim corrective actions using its MRSDL report In this regard, Interior

expressed concern about using this data base to identify potential underpayments and notify payors because errors in the data base could lead to incorrect billings which could lead to costly appeals. We have revised our report to urge Interior to notify apparent underpayors of amounts due. Upon receipt of such notification, lessees are expected to either send in payment or provide an explanation of why the amount in the notice is incorrect. MMS uses a similar process to send "courtesy notices" to payors reminding them that rental payments are due. We believe that such an approach is consistent with our recommendation for using the MRSDL as an interim measure for notifying payors of underpayments and should not create an undue burden.

Regarding our finding that the minimum royalty rate is too low, Interior expressed concern that we did not show that the current minimum royalty rate is inappropriate in light of current oil prices. We note, however, that when the minimum royalty rate was set at $1 per acre in 1946, oil sold for approximately $1.08 per barrel and rental rates were $0 25 per acre. Currently, oil prices of approximately $13 per barrel are much higher than those of 1946, and rental rates have increased to $1-$3 per acre. The minimum royalty rate has remained at the level set in 1946 and has not kept pace with the value of production royalties or increased rents. As such, it does not reflect the increased value of a lease after discovery of oil or gas. We, therefore, believe that the current minimum royalty rate is inappropriate. We acknowledge that higher minimum royalty rates could cause some lessees to relinquish their leases, especially during periods of low oil and gas prices. However, as we point out in appendix III, the Secretary of the Interior currently has the authority to waive, suspend, or reduce the minimum royalty on a case-by-case basis.

Interior supported a legislative remedy which would specifically authorize the Secretary to adjust minimum royalty rates. Interior, however, questioned the need for the Secretary to introduce a legislative package, since bills have been introduced in the Congress which would allow the Secretary to increase minimum royalty rates. We believe that Interior can adjust minimum royalty rates through its own regulatory process. However, because Interior believes that legislation is necessary, we do not object to this course of action, but if one of those bills is not enacted, Interior should act. We have modified our recommendation accordingly. In the meantime, we believe it would be worthwhile for the Secretary to notify the responsible congressional committees that it supports legislation which would allow the Secretary to adjust the minimum royalty rates.

As you know, 31 U.S.C. 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations not later than 60 days after the date of the report as well as to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We will be sending copies of this report to the House and Senate committees and subcommittees having oversight and appropriation responsibilities for onshore leasing and development; the Office of Management and Budget; and other interested parties.

Sincerely yours,

J. Dexter Peach
Director

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Abbreviations

AFS	Auditing and Financial System
BLM	Bureau of Land Management
FOGRMA	Federal Oil and Gas Royalty Management Act of 1982
GAO	General Accounting Office
MRSDL	Minimum Royalty Schedule Data Listing
MMS	Minerals Management Service

Background

Unless restricted by other uses, federal lands can be leased for oil and gas exploration and development. Interior's Bureau of Land Management (BLM) issues thousands of onshore oil and gas leases annually under authority of the Mineral Leasing Act of 1920.

Terms of Leases

These leases carry a fixed term—5 or 10 years—for exploration activities such as assessing the area's oil and gas potential and drilling. During the exploration period, an annual rental is paid to the federal government at the beginning of each lease year. Rental rates during exploration vary depending upon the type of lease.[1] For example, since 1982, noncompetitively issued leases carry a $1 per acre rental rate for the first 5 years and a $3 per acre rental rate for the second 5 years;[2] a competitively issued lease carries a $2 per acre rental rate. Lease status can also affect rental rates. For example, the $1 per acre rental rate on most noncompetitively issued leases would increase to $2 per acre if any portion of the lease acreage is determined to be in a known geologic structure.[3] After an oil or gas discovery, lease terms are extended indefinitely so long as the lease is "producing."

Minimum Royalty Requirement

Upon discovery of oil or gas, the annual rent requirement is replaced by a monthly production royalty based on a stipulated percentage of the value of production. If the cumulative production royalty paid during a lease year totals less than $1 per acre, the difference must be paid as a minimum royalty at the end of each lease year. Thus, all producing leases are subject to an annual minimum royalty of $1 per acre. For example, if a production royalty of $600 is paid on a 1,000-acre lease (equal to $0.60 per acre), a $400 minimum royalty must be paid by the end of the lease year so that the total royalty payments are at least $1 per acre. This minimum royalty must also be paid if a lease is capable of producing, but does not actually produce, during a lease year.

[1]Interior issues three types of onshore leases (1) competitive—lands within a productive area or known geologic structure are leased competitively under sealed bid, (2) over the counter—other lands not previously leased are leased noncompetitively "over the counter" to the first applicant submitting a nonrefundable $75 filing fee and first year's rental payment in advance to BLM, and (3) simultaneous—as leases outside a known geological structure expire, BLM offers them under the simultaneous, or "lottery," system, whereby applicants submit a nonreturnable $75 filng fee and the first year's rental payment in advance, and the lease is awarded to one randomly selected applicant.

[2]Because these rates only began in 1982, the earliest that the $3 rate could be in effect is 1987 and, therefore, at the time of this reivew, no lease had a $3 rate

[3]A "known geologic structure" is an accumulation of oil or gas, discovered by drilling, and determined to be productive, its limits include all lands which overlie the productive resource

Our analysis of Interior's Minimum Royalty Schedule Data Listing (MRSDL) for fiscal year 1985 indicated that approximately 16,400 leases should be paying a minimum or production royalty. We calculated that royalty collections from these leases included approximately $862,000 in minimum royalties[4] and generated about $645 million in production royalties.

The minimum royalty requirement was established by the Mineral Leasing Act of 1920, as amended in 1946 (30 U.S.C. 226(d)). Before 1946, rent was paid throughout the life of the lease and was credited against any production royalties for the year. Annual rental rates were set by statute in 1935 at "not less than $0.25 per acre," thereby giving Interior the flexibility to raise the rate by regulation, which it has done several times. However, the minimum royalty has remained the same since 1946, because, according to Interior's Solicitor's Office, the law specified the minimum royalty at $1 per acre, and it can be changed only by legislation.

The provision governing minimum royalties, 30 U.S.C. 226(d), states:

> "All leases issued under this section shall be conditioned upon payment by the lessee of a rental of not less than 50 cents per acre for each year of the lease .... A minimum royalty of $1 per acre in lieu of rental shall be payable ... after discovery of oil or gas in paying quantities on the lands leased."

As justification for its position that legislation is needed to raise the minimum royalty, the Solicitor's Office points to the fact that while prediscovery rentals may be "not less than" $0.50 per acre, allowing Interior to raise the rental rate through regulation, the language setting the minimum royalty does not contain the quoted phrase. However, the Congress made it clear in other subsections of 30 U.S.C. 226, which specify royalty rates, that the Secretary has the discretion to raise the rates. While the royalties of certain leases "shall not be less than 12-1/2 percent" (30 U.S.C. 226(b)(1)), other royalties are set at 12-1/2 percent and cannot be raised through regulation (30 U.S.C. 226(b)(2) and 30 U.S.C. 226(c)). Thus, according to the Solicitor's Office, by consistent use

[4]While we calculated that Interior collected about $862,000 in minimum royalties, an official in MMS' Fiscal Accounting Division told us that Interior collected minimum royalties of approximately $1 3 million. We did not attempt to reconcile the $1.3 million with the $862,000 in minimum royalty collections, because MMS included other minerals, such as phosphate and coal, in its estimate. In addition, the $1 3 million is based on the payor's (lessees or lease operators) categorization of payments made to Interior, and we found inconsistencies in the categorization For example, some payors reported minimum royalties in excess of $1 per acre, and others at less than $1 per acre, but both instances are probably production royalties

of the phrase "not less than," the Congress has made it clear that it wished to accord the Secretary the discretion to raise rates

This statutory construction, however, ignores the fact that the word "minimum" means "not less than " If the Secretary has the discretion to raise certain rental and royalty rates through regulation because of the presence of the phrase "not less than," in our opinion, he may raise the minimum royalty rate through regulation.

Interior's Solicitor's Office also describes "minimum royalty" as a term of art recognized by those in the oil and gas industry as meaning the "holding cost" of a lease after discovery. "Royalty" is generally understood to be a fee calculated based on production. Thus, to require, as the law does, that a "minimum royalty" be paid when no minerals are being produced, based solely on acreage, is a usage contrary to the general understanding of the term "royalty" and is, in that sense, a term of art The term "minimum royalty" is used in other contemporaneous laws in the same sense, lending some credence to this view. However, even assuming that "minimum royalty" is in some sense not a royalty at all, nothing in the law or legislative history supports the view that the Congress intended not only to depart from the accepted meaning of "royalty," but from that of "minimum" as well.

Other sections of the Mineral Leasing Act, enacted after the 1946 amendment and concerning the leasing of minerals other than oil and gas, use the term "minimum royalty" without specifying a dollar amount, as does the oil and gas provision. While this usage creates some problems of interpretation, Interior has, in fact, administratively increased the "minimum royalty" under these non-oil and gas provisions. We do not believe that the addition of the $1 amount compels the conclusion that the minimum cannot be raised administratively.

We are not persuaded that the words of 30 U.S.C. 226(d) must be given a meaning contrary to the plain meaning. Consequently, the minimum royalty of $1 per acre per year can be construed as a floor under which Interior cannot lower the rate except on a case-by-case basis. In our opinion, Interior could, through regulation, increase this royalty payment above the current $1 rate. Nevertheless, since the current rate has not been changed for 40 years, we understand Interior's interest in seeking legislation explicity authorizing the Secretary to raise it.

Interior's Lease Responsibilities

Interior's BLM and MMS are responsible for managing federal oil and gas leases. BLM issues and administers the leases and maintains the official lease records containing information such as lease status and acreage subject to rent or royalty. MMS is responsible for all functions related to royalty and mineral revenue management. The primary mission of MMS' Royalty Management Program is

"...ensuring that all revenues from Federal and Indian mineral leases are efficiently, effectively, and accurately collected, accounted for, verified, and disbursed to the appropriate recipients in a timely manner and in accordance with existing laws, regulations, lease terms, orders, and notices; and providing support for technical lease management functions."

To carry out its mission, MMS uses its computerized Auditing and Financial System (AFS) which includes most leases.[5] The two major functions of the AFS are to account for and collect all royalties due, and identify, through data provided by payors (lessees or lease operators), underreporting and nonreporting of royalties so that MMS can follow up with payors and collect monies due. Each payor submits a monthly report on the value of the oil or gas produced, along with payment for the calculated amount of production royalty due. By the end of each year, payors must make sure that production royalties paid total at least $1 per acre or submit the difference so that royalties paid amount to a minimum of $1 per acre.

Objectives, Scope, and Methodology

Our review objectives were to determine (1) whether all minimum royalties due the government are being collected and (2) if the current minimum royalty rate is still appropriate.

To determine if all minimum royalties due the government are being collected, we first obtained information about how royalty payments are recorded in the AFS. We then used the MRSDL report, part of the AFS, to determine minimum royalty collections and undercollections during fiscal years 1985 and 1984. The MRSDL shows for each lease the required minimum royalty due and the total royalty payments (both production and minimum royalties) received during a lease year.

We determined royalty collections on a per-acre basis for all onshore leases in the MRSDL (excluding Indian leases because that royalty money belongs to the Indians) by dividing the amounts paid (during the lease

[5]According to Interior, El Paso Natural Gas is payor for a few hundred leases not included in the AFS Onsite MMS auditors provide supervision and internal controls

year ending in fiscal year 1985) by the amounts due (the minimum royalty acreage). We then grouped all the leases into four categories: (1) those for which no payment was received, (2) those which paid less than $1 per acre, (3) those which paid exactly $1 per acre, and (4) those which paid more than $1 per acre. The first three categories represent minimum royalties paid or due. We considered all payments of less than $1 per acre to be undercollections.

To test the usefulness of the MRSDL for identifying minimum royalty undercollections, we verified the accuracy of the minimum royalty acreage (the amount due) by examining BLM lease files in three western states. To do this we traced the acreage on 28 leases we selected back to the original BLM lease document and/or other documents in the lease files. On these 28 leases, we also compared the minimum royalty amounts due with the amounts paid and found that 16 leases indicated a potential for underpayment because less than $1 per acre was collected.

To determine whether the current minimum royalty rate is appropriate, we examined the legislative history of the 1946 amendment to the Mineral Leasing Act of 1920. We obtained views from Interior officials and from the Rocky Mountain Oil and Gas Association whose members represent a cross-section of oil and gas producers from eight Rocky Mountain states. We also interviewed Interior officials to determine the relationship between rental and minimum royalty rates and the rationale behind various rental rate changes over the years.

To illustrate the potential additional revenue that could be generated by increasing the $1 per acre minimum royalty rate, we used data from the MRSDL report. We calculated cumulative minimum royalties that would be paid on these leases at potentially higher rates ranging from $2 to $8 per acre, but reduced cumulative minimum royalties by production royalty payments made during the past year at each respective level. The $2 rate was selected because it represented the current competitive lease rental rate; the $8 figure represented a quadrupling of the $2 rental rate and paralleled the quadrupling of the original minimum royalty rate ($1) relative to the 1946 rental ($0.25). We did not attempt to judge what an appropriate minimum royalty rate would be.

Our review covered the period from August 1985 to January 1986 and was performed in accordance with generally accepted government auditing standards.

MMS Does Not Ensure That All Minimum Royalties Are Paid

According to our analysis of MRSDL data, MMS collected approximately $862,000 in minimum royalties in fiscal year 1985, but should have collected as much as $1.7 million more. As shown in table II.1, the $1.7 million undercollection results from approximately 1.4 million acres (at $1 per acre) for which no royalties were collected and about 637,000 acres for which only about $335,000 was collected.

Table II.1: Fiscal Year 1985 Minimum Royalties

Dollars in thousands

Payment per acre	Number of leases	Amount[a] due	Amount paid	Undercollections
$0 00	2,141	$1,391	$ 0	$1,391
0 01-0 99	594	637	335	302
1 00	640	527	527	0
Total	**3,375**	**$2,555**	**$862**	**$1,693**

[a]Amount due is based on minimum royalty acreage at $1 per acre

To determine if undercollections occurred in previous years, we did a similar analysis of the MRSDL report for fiscal year 1984 for Colorado and New Mexico leases and found minimum royalty undercollections of approximately $900,000. We could not perform a similar analysis for other states because of incomplete AFS payment information.

The Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) requires retroactive collection of underpaid minimum royalties as well as interest charges on late payments. However, it may be difficult to collect prior late or underpayments because leases may have expired or terminated, or lessees may have sold their ownership interests to other parties.

Data Is Available to Identify Undercollections

According to an MMS official in the Fiscal Accounting Division, the MRSDL may not be sufficiently accurate to use for identifying undercollections and notifying payors. The official explained that errors in the amount of acreage subject to minimum royalties may exist for two reasons. First, MMS did not verify these amounts when the AFS data base was originally created in 1983 from the previous accounting system. Second, the number of acres subject to minimum royalty can change when leases terminate, expire, or are affected by changes in unit agreement participating areas.[6] BLM must notify MMS about these minimum royalty

[6]A "unit agreement" occurs when several tracts of land, often a combination of both federal and nonfederal, are explored and developed as one entity However, when a successful well is completed,

changes, but MMS has no certainty that all these notifications were made or properly recorded. Because of these possible errors, the MMS official claimed that for each lease where the MRSDL indicated a potential undercollection, the correct minimum royalty acreage must first be determined, requiring a time-consuming manual examination of BLM lease files.

Our analysis, however, proved that potential minimum royalty undercollections could be identified with the MRSDL. In comparing the MRSDL minimum royalty acreages (the amount due) with actual acreages, we found only 4 cases out of 28 that we examined in which the acreage differed between the MRSDL and the actual lease files We found actual undercollections in 12 of the 16 instances for which the MRSDL had indicated a potential undercollection of minimum royalty. Given this level of accuracy, we believe that MMS could use the existing MRSDL report as an interim measure to identify potential undercollections and to notify lease payors of possible minimum royalties and interest charges due.

Minimum Royalty Collections Can Be Monitored

MMS does not monitor royalty collections to identify potential minimum royalty underpayments According to MMS officials, since the AFS was implemented in 1983, MMS has not compared collections to amounts due because of inadequate computer capacity, limited software testing capability and staff resources, and higher royalty accounting priorities. Although additional computer capacity is being added, MMS does not plan to begin monitoring minimum royalty underpayments because of higher priority MMS revenue collection functions.

The Principal Staff Assistant to the Deputy Associate Director of the Royalty Management Program does not believe that a minimum royalty monitoring system will be implemented because it would probably require too many resources to be cost effective. MMS, however, is currently analyzing the costs and benefits of a monitoring system in a pilot study of potential rent and minimum royalty underpayments in approximately 500 leases to determine the relative merits of implementing a monitoring system.

Whether a monitoring system would prove uneconomical is questionable. We found that existing MRSDL data can be used to identify potential

state oil and gas commission officials consider part of the acreage surrounding the well to be participating in the production As a result, part of a lease may be subject to a royalty, while the remainder continues in a rental status, and this is continually subject to change as additional wells are completed

underpayments. In those instances, all that MMS would be required to do is notify the payor, placing the burden on the payor to submit the amount in arrears or submit evidence that the actual minimum royalty acreage (amount due) differs from MMS records. This notification process could help ensure proper collection of minimum royalties and could also be used by MMS to correct its current MRSDL data base.

The Minimum Royalty Rate Should Be Increased

The minimum royalty rate was established as a substitute for rent after oil or gas was discovered in order to simplify administrative and accounting procedures for both the federal government and lessees. A staff assistant to the Assistant Secretary for Land and Minerals Management views the minimum royalty as a holding cost, similar to rentals, and believes that the holding cost for lands capable of production should not be less than the prediscovery rental. Although rental rates have been increased during the past 40 years, the minimum royalty has not. As a result, the current $1 per acre minimum royalty is often less than the rental. Although Interior officials have previously attempted to increase the minimum royalty rate by regulation, Interior's Solicitor's Office concluded that legislation was required

The Minimum Royalty Rate Has Not Kept Pace With Rental Rates

Based on our review of the legislative history of the 1946 amendment to the Mineral Leasing Act of 1920, the minimum royalty was established to clarify the point at which payments become royalties and not rents. Both the federal government and the oil and gas industry sought this for administrative and accounting purposes. At a hearing on the bill, for example, the Rocky Mountain Oil and Gas Association testified that the change would

> "... correct the present situation, which has resulted in a lack of uniformity in crediting the rental to royalty causing confusion in bookkeeping, especially where the lease is being operated by someone other than the original lessee This is of especial benefit to the small, independent producer and the lessee who has disposed of the working interest in the lease "

According to the Senate report accompanying the 1946 amendment, the "minimum royalty of $1 per acre per annum after discovery is to be substituted for the existing advance rental, with no consequent loss of income." Because the $1 minimum royalty was merely substituted for the $1 rental after discovery, no consequent loss of income to the federal government resulted.

The hearings and reports accompanying the 1946 amendment were silent as to the reasons for setting the minimum royalty at a rate substantially higher than the prediscovery rental. However, the minimum royalty rate is currently either equal to or less than the rental rates.

In 1946 the cost of holding a lease quadrupled from a $0.25 per acre rent to the $1 minimum royalty after discovery. Now, prediscovery rents are either $1, $2, or $3 (beginning in 1987) per acre, depending on the type and status of the lease. Since the minimum royalty is still $1,

the quadrupling of revenue no longer occurs after discovery and, in fact, revenues can actually decrease when a lease with a $2 or $3 per acre prediscovery rental rate becomes subject to the lower $1 per acre minimum royalty rate.

Setting an Appropriate Minimum Royalty Rate Would Help Interior Achieve Policy Objectives

What minimum royalty rate would be appropriate depends on the intended purpose of the minimum royalty and the objectives being sought. For example, the royalty charged as a minimum could be used as a reversion to rental in lieu of production royalties with no consequent loss of income, or an incentive to encourage production.

Interior views both rentals and minimum royalties as holding costs representing payment for delaying exploration or production. According to a staff assistant to the Assistant Secretary for Land and Minerals Management, rentals are considered holding costs because they represent opportunities foregone: the lessee has not developed the resources whereas another lessee might have developed the resource sooner. Rentals are a mechanism, then, for charging the current lessee for delaying exploration and development. Similarly, Interior views the minimum royalty as a holding cost representing opportunities foregone as a result of delaying production once oil or gas has been discovered.

According to the staff assistant, if Interior had the authority to change the rate today, it would analyze the financial impacts of various rates in light of current policy objectives. For example, if Interior wanted to increase revenues or encourage production from nonproducing leases, it could raise the minimum royalty rate. The higher rate would affect more leases and acreage, resulting in higher lease holding costs and revenues. The higher rate would probably cause some lessees to begin production and others to relinquish their leases, which then could be reoffered competitively. Federal revenues would be increased by (1) the higher minimum royalties, (2) production royalties from leases which had not been producing, and (3) bids and increased rents on reissued leases in some instances.

In 1982, Interior proposed regulations to increase the minimum royalty rate to $2 per acre. However, this increase was not implemented because Interior's Solicitor's Office concluded that the minimum royalty could not be raised by regulation, but that legislation was required. Interior officials also believe that a higher minimum royalty could not be applied to existing leases. Currently, Interior has discussed with the Office of Management and Budget the required legislative changes to the Mineral

Leasing Act of 1920 which would allow the minimum royalty rate to be changed by regulation. In addition, the Congress is considering bills that would increase the minimum royalty rate for new leases.

We sought industry views on a higher minimum royalty rate The Rocky Mountain Oil and Gas Association polled selected members who, while agreeing with Interior that the minimum royalty is a holding cost, nonetheless opposed an increase at this time. The primary reason for opposing an increase was economics, not only the current conditions of the industry, but also economics of why a lease is not producing. In developing new policy objectives, the association said, Interior should consider the financial situation of the oil and gas industry, particularly of the smaller firms that have historically played a major role in exploring and developing federal lands. Also, Association officials believe that after oil or gas has been discovered, a lease may not be producing for reasons beyond the lessee's control. These reasons can include operating problems preventing oil or gas production, the normal delay associated with building and/or hooking up a pipeline to the well before it can produce, the lack of a market for the oil or gas and therefore no economic way to produce it, or instances where the well is extremely marginal. Association officials said that while proponents of a higher minimum royalty rate see it as an incentive to increase production, a higher rate would not accomplish that purpose in these circumstances. Interior has indicated that it agrees with the Association's views on this matter.

A higher minimum royalty rate would, however, generate greater revenue. Using MRSDL lease and acreage data, we calculated the potential increased revenue that would be generated if minimum royalties were set in the $2 to $8 range. The potential revenue gain, however, is currently limited because only newly issued leases would be subject to the increase in minimum royalties. The potential financial effect of a higher rate is illustrated in table III.1.

Table III.1: Hypothetical Additional Revenues Generated With Higher Minimum Royalty Rates

Minimum royalty rate	Number of leases subject to minimum royalty	Number of acres subject to minimum royalty	Cumulative revenue
2	3,908	2,991,139	$ 2,807,159
3	4,486	3,388,762	6,049,606
4	4,968	3,708,872	9,609,797
5	5,258	3,874,715	13,410,494
6	5,513	4,023,045	17,361,669
7	5,816	4,225,604	21,472,686
8	6,070	4,369,372	25,772,410

As the hypothetical minimum royalty rate increases, both the number of leases and the acreage subject to minimum royalty increase. For example, a 1,000-acre lease paying $1,500 in production royalties ($1 50 per acre) would not be subject to a $1 per acre minimum royalty payment, but would be subject to a minimum royalty rate of $2 an acre; the payor would therefore have to submit an additional $500 to satisfy the minimum royalty requirement.

In addition to possible positive benefits from raising the minimum royalty (increased revenues), there also exist possible negative effects. During a situation of low oil and gas prices, marginal leases may be relinquished because higher minimum royalties may make them uneconomic.

An Adjustable Minimum Royalty Rate on New Leases Could Support Interior's Policy Objectives

The ability to adjust a lease's minimum royalty rate would make all leases more responsive to changes in Interior's policy objectives. We believe it may be desirable that future leases contain a provision specifying that if the prevailing minimum royalty rate is increased, these leases become subject to the higher rate. Originally, the minimum royalty was set at $1 per acre and, according to Interior's Solicitor's Office, current legislation precludes adjusting the rate upward, although Interior currently has the authority to "waive, suspend, or reduce" minimum royalty rates case-by-case to support policy objectives, such as conserving natural resources or increasing production. Thus, under conditions, such as low oil and gas prices, Interior can reduce minimum royalty rates to keep low producing wells economic if this is the desired effect. The authority to raise or lower the rate could enhance Interior's ability to achieve policy objectives.

Advance Comments From the Department of the Interior

Note GAO comments supplementing those in the report text appear at the end of this appendix

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

APR 14 1986

Mr. J. Dexter Peach
Director, Resources, Community and
Economic Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Peach:

We have reviewed the General Accounting Office (GAO) draft audit report "Opportunities to Increase Minimum Royalty Revenues." Following our discussion of recommendations, we wish to comment on several specific statements in the report.

Recommendation:

See comment 1

"We recommend that the Secretary of the Interior require the Director of the Minerals Management Service to use the existing Minimum Royalty Schedule Data Listing Report, until an automated computer monitoring system is developed, to

--monitor existing leases to ensure that minimum royalties are paid and

--identify and recover minimum royalty undercollections and related interest."

The Minerals Management Service (MMS) acknowledges its responsibility to monitor the payment of royalties and to collect proper royalties. The MMS has implemented a pilot project to sample and analyze both minimum royalties and rental payments shown as underpaid. This study will look at both the payments made and the validity of the amounts shown as underpayments. Several ad hoc computer reports are being developed to compare payments received, Auditing and Financial System (AFS) minimum royalty and rent schedules, and the data base lease masters. We will analyze the results and perform additional research as necessary to determine the potential significance of the underpayments by May 30, 1986.

Additionally, MMS has developed a nonbillable exception processing module (lease schedule exceptions) which is the potential long term corrective action for this recommendation. This module has not yet been tested, and its full implementation could not occur for a number of months after AFS becomes operational on the mainframe computer.

If, as a result of MMS's pilot project, we determine that the nonpayment or underpayment of minimum royalties and rents is, in fact, a significant problem, Royalty Management will divert staff and contractor resources from other functions to:

2

1. modify, as necessary, the lease schedule exception software soon after the successful conversion of the AFS software to the mainframe computer;

2. verify and update as necessary the lease schedule data base for purposes of significantly reducing the number of spurious exceptions generated by the aforementioned lease schedule exception software; and

3. bill, collect and distribute the monies resulting from valid underpayments of minimum royalties and rents.

If the pilot project indicates that underpayments of rents and minimum royalties is not a significant problem, the implementation of modified software along with data base correction efforts may be delayed, but its implementation will be reevaluated periodically along with other competing priorities.

Recommendation

See comment 2

"We also recommend the Secretary of the Interior

--develop and submit to the Congress a legislative package amending the Mineral Leasing Act to enable minimum royalty rate adjustments through regulation and

--make newly issued leases subject to adjustable minimum royalty rates."

We concur that a legislative remedy to the current $1 per acre is appropriate. We believe that flexibility in setting the minimum royalty rate will allow Interior to be more responsive to meeting the goals of the Mineral Leasing Act of 1920. We are aware of a number of legislative drafts which are about to be introduced which address this issue and do not believe that it will be helpful for the Secretary to introduce yet another. Obviously, if Congress agrees to remove the current restriction on minimum royalties, new leases would be subject to the new provision.

Our comments on several specific statements in the report follow:

Page 2, line 2:

See comment 3

The Mineral Leasing Act is more correctly referred to as one of the following three titles: Mineral Leasing Act of 1920, Mineral Lands Leasing Act, or the Act of February 25, 1920.

Page 2, footnote 2:

See comment 3

The simultaneous oil and gas leasing program requires not only the submission of a nonrefundable fee of $75 but also the first year's rental in advance. Further, leases which are listed through this program but which receive no applications are subsequently available through the over-the-counter program.

3

Pages 4 and 5:

See comment 3

The report states that "a few hundred leases are still accounted for in the Royalty Accounting System, the predecessor of the AFS." The MMS no longer runs the Royalty Accounting System. El Paso Natural Gas is the payor for the leases referred to in the above quotation. Monthly reports from these leases are processed through a special program run on El Paso's computers, which generates the management and distribution reports required by MMS. Supervision and internal controls for this function are provided by MMS auditors working on-site at El Paso's offices.

Pages 7 and 8:

See comment 4

The report contends that as much as $1.7 million in additional minimum royalties should have been collected. We believe that the data is inadequate to make such a projection. As noted in the report, our concerns were previously expressed to the GAO. A more reliable estimate should be available by May 30, 1986, from MMS's pilot project to sample, research, and analyze rental and royalty payments which appear to be underpaid.

Pages 8 and 9:

See comment 4

The report asserts "MMS could use the existing MRSDL report to at least identify potential undercollections and to notify lease payors of possible minimum royalties and interest charges due."

The MMS continues to be concerned regarding the validity of the Minimum Royalty Schedule Data Listing (MRSDL) report for billing purposes. Even the GAO's small sample of 28 leases revealed acreage differences between the lease file and MRSDL report for four leases (14 percent of the sample). While we believe the sample is too small to make valid projections to the lease universe, it certainly demonstrates the validity of our concern about the inaccuracy of minimum royalty data underlying the report.

Of the 28 leases sampled, GAO reported that 14 had potential underpayments; however, the specific leases were not identified to MMS and thus we cannot comment on the accuracy of this conclusion.

Page 10, paragraph 1:

See comment 3

The automated computer program was not implemented because of limited testing capacity and staff resources, in addition to the stated reason of insufficient computer capacity.

Page 10, paragraph 2:

See comment 3

"Principle Staff Assistant to the Associate Deputy" should be "Principal Staff Assistant to the Deputy Associate Director."

4

Page 10, paragraph 3:

See comment 4

Both the GAO and MMS are aware that errors exist in the MRSDL data base. Accordingly, MMS is concerned that implementing the GAO conclusion that "all that MMS would be required to do is bill the payor, placing the burden on the payor . . ." may lead to numerous appeals. Since the average billing would be small (less than $1,000) and the appeals process is not cost free, MMS is not convinced that following this approach would be cost effective.

Page 12, two lines from bottom:

See comment 3

To date there have been no $3 per acre prediscovery rentals. This regulation only went into effect in January 1982 and as a result no leases will have to pay this rate until next January.

Page 13, last paragraph:

See comment 5

Please note that in addition to possible positive benefits from raising the minimum royalty, there also exist possible negative impacts. For example, economic production which is not now occurring may become uneconomic, especially at low prices, and consequently lost with little likelihood of re-leasing. For these conflicting reasons, as the Staff Assistant previously pointed out to GAO staff, a careful analysis would need to be undertaken to establish an appropriate level at which to set the minimum royalty rate.

Page 14, last paragraph:

See comment 3

Interior agrees with the views of the Rocky Mountain Oil and Gas Association expressed in this paragraph. This offers further support for the need for analysis prior to setting a minimum royalty rate.

Page 15, Table 2:

See comment 6

We believe the hypothetical results reported in Table 2 are misleading. No allowance has been made for the fact that marginal leases may be relinquished because higher minimum royalties may make them uneconomic. Note that at low prices of oil, $10-15 per barrel, the usual royalty due is also low, $1.25-$1.875 per barrel. Stripper well production on Federal lands averages about 3 barrels per day or about 1,000 barrels per year. Royalty due on these wells at low prices would be $1,250 to $1,875 per year. The average lease size is in the 1,000 acre range. Minimum royalties in the $2-8 range that you suggest would result in royalty payments of $2,000-$8,000 annually and may make many stripper operations uneconomic depending upon the number of such wells per lease. Consequently, the belief that more monies may be generated is predicated upon the assumption that leases subject to these higher minimum royalties have sufficient economic rent to be captured so that when the additional royalties are required, all such leases will remain in force. This assumption is suspect in light of current events.

5

Page 17, first full paragraph, third sentence:

See comment 7

In light of current oil prices, it is not clear that the current minimum royalty rate is inappropriate. As noted previously, we believe further analysis is needed to determine the appropriate minimum royalty rate. Nevertheless, as noted previously, we believe the Department should have the flexibility to set the minimum royalty rate at any time in light of its policy objectives and conditions in the oil industry.

Thank you for the opportunity to review this draft report.

Sincerely,

/s/ J. Steven Gr...

Assistant Secretary - Land and
Minerals Management

cc: Secy Surname
Secy Reading (2)
MMS General MS610
AS/LM (2)
Dir's Chron. MS610
Royalty Management
PR(IRD-Official File Copy)/MS622
AD/PR File Copy
Desk Files: ADPR
IRD Chron.
Miller

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The following are GAO's comments on the Department of the Interior's letter dated April 14, 1986.

GAO Comments

1. We encourage Interior's efforts to determine the significance of undercollections and to develop a long-term solution. However, we believe that our recommendation provides an appropriate interim approach. Officials at the MMS Royalty Accounting Center in Lakewood, Colorado, told us that MMS' current pilot project is directed more at analyzing rental underpayments than at minimum royalty underpayments. According to the Deputy Chief of the Lessee Contract Branch, the pilot project consists of an "arbitrary" judgmental sample of approximately 500 leases. This project is unlikely to provide a more valid estimate of minimum royalty undercollection than we provided in our report because a statistically projectable sample is not being used.

We have been provided several "completion dates" for the pilot project, all of which have been missed to date. Although the nonbillable exception processing module referred to by MMS may be a long-term solution to the underpayment problem, the system software has never been tested. We remain concerned that revenues will continue to be lost over the period MMS tests and decides whether to implement the module. We therefore reaffirm our recommendation that Interior take interim actions to ensure that minimum royalties are paid and undercollections and related interest recovered.

2. If one or another of the bills to which Interior refers is enacted, we agree that it would be unnecessary for Interior to submit proposed legislation regarding flexible minimum royalty rates. However, if one is not enacted and the Congress has not explicity rejected the provision in these bills regarding adjustable minimum royalties, Interior should submit such a proposal if it remains convinced that it cannot raise the minimum royalty through regulation. Meanwhile, Interior should notify the responsible congressional committees that it supports legislation which would allow the Secretary to adjust the minimum royalty rate. We continue to recommend that whenever such legislation is enacted, the Secretary make new leases subject to adjustable minimum royalty rates.

3. Clarifications or corrections have been made to the text of the report.

4. Our estimate of $1.7 million in minimum royalty undercollections was derived from an analysis of fiscal year 1985 royalty payments and minimum royalty acreages found in MMS' Minimum Royalty Schedule Data Listing. We determined royalty collections on a per-acre basis for all onshore leases in the MRSDL (excluding Indian leases) by dividing the amounts paid (during the lease year ending in fiscal year 1985) by the amounts due (the minimum royalty acreage). We then grouped the leases into four categories: (1) those for which no payment was received, (2) those which paid less than $1 per acre, (3) those which paid exactly $1 per acre, and (4) those which paid more than $1 per acre. The first three categories represent minimum royalties paid or due. To determine undercollections, we added the total amount due in the three categories and subtracted out the total royalties that were paid.

As we noted above, because MMS' pilot study is not using a statistical sample, we question whether MMS will arrive at an estimate more reliable than the estimate presented in our report. Further, at a January 8, 1986, meeting with MMS officials in Lakewood, Colorado, we were told that MMS had estimated that, based on a computer analysis, potential underpayments were more than $3 million. We therefore continue to support our estimate, based on the MRSDL report, that as much as $1.7 million more minimum royalties should have been collected.

Our report recommends that until MMS implements a long-term solution, such as nonbillable exception processing, MMS use the MRSDL as an interim measure to identify and notify lease payors of possible minimum royalty underpayments and to correct its data base. Although Interior expects that the average billing would be small (less than $1,000) and the appeals process costly, we note that it uses a similar process to notify lease payors of rentals due. Since MMS' current rents are $1 to $2 per acre—not much larger than minimum royalties—we believe that it could use a process similar to that used by the Bonus and Rental Accounting Support System to monitor rent collections and remind lessees that rent is due. In that system courtesy notices, not bills, are sent to lessees in advance of due dates. Lessees are expected to return a copy with payment or explanation of why a notice may be incorrect. Such a system would avoid the potentially costly appeals process and could be used as an interim measure until Interior can complete its pilot project and implement a permanent solution.

5. We agree that current low oil and gas prices affecting the industry could cause some onshore oil and gas leases to become uneconomic and acknowledge in our report that higher minimum royalty rates could

cause some lessees to relinquish their leases. However, as also pointed out in our report, the Secretary of the Interior currently has the authority to waive, suspend, or reduce the minimum royalty on a case-by-case basis.

6. Table III.1 uses a range of $2-$8 per acre to illustrate the revenue impacts of minimum royalty rate increases. We are aware that current oil prices are low, but Interior is not precluded from adjusting rates downward. Our report also notes that higher minimum royalty rates may cause some lessees to relinquish their leases and that at higher rates some leases would not be subject to minimum royalties.

In addition, the discussion of stripper wells in Interior's comments states that a stripper well operation may become uneconomic if the minimum royalty rate were increased on a single well on an average size 1,000 acre lease. According to information from the Interstate Oil Compact Commission and the National Stripper Well Association, in 1983, the latest year for which data are available, there was an average of 10 to 30 producing stripper wells per 1,000 acres. Although this includes federal, state, and private lands, petroleum engineers in several western BLM districts having large concentrations of stripper well production told us that on federally leased lands there are often even larger numbers of stripper wells per 1,000 acres. Using the low-end average of 10 stripper wells per 1,000 acres, production royalties due on these wells (using Interior's oil prices) would be $12,500 ($1.25 X 10 wells X 1,000 barrels per well annually). In this example, minimum royalties would not be due for any of the rates from $2-$8 cited in our hypothetical examples.

7. Although Interior contends that we have not shown that the current minimum royalty rate is inappropriate in light of current oil prices, we note that when the minimum royalty rate was set at $1 per acre in 1946, oil sold for approximately $1.08 per barrel. Current oil prices of approximately $13 per barrel are still much higher than in 1946 and rental rates have increased from $0.25 per acre to $1-$3 per acre. However, the minimum royalty rate has remained at the level set in 1946 and does not reflect the increased value of a lease after discovery of oil or gas. We therefore continue to believe that the current minimum royalty rate is inappropriate given the previous increases in oil and gas prices (and consequent increases in production royalties) and the increase in rent.

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