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REPORT TO
THE CONGRESS OF THE UNITED STATES

CERTAIN DEFICIENCIES IN FINANCIAL MANAGEMENT
OF OIL AND GAS ACTIVITIES

GEOLOGICAL SURVEY
DEPARTMENT OF THE INTERIOR



BY
THE COMPTROLLER GENERAL
OF THE UNITED STATES

AUGUST 1964

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-118678

AUG 20 1964

To the Speaker of the House of Representatives
and the President pro tempore of the Senate

Our review disclosed that, contrary to existing statute and administrative rulings, the Geological Survey and the Bureau of Land Management, Department of the Interior, have changed certain noncompetitive leases from a required minimum royalty payment status to a lesser rental payment status when the leases became nonproductive. Under departmental instructions the Survey transferred lease accounts to the Bureau of Land Management for administration when the leases became nonproductive. The Department advised us, in essence, that action would be initiated to make the Survey solely responsible for all leases continuing in a minimum royalty status when the leases become nonproductive. This action will provide for the administration of the collection of minimum royalty in the future. Because of the split responsibility which existed for administration of such leases, we are recommending that the Secretary of the Interior require the Directors, Geological Survey and Bureau of Land Management, to make a coordinated review of a representative number of noncompetitive lease accounts which were in a minimum royalty status and which became nonproductive and were transferred by the Survey to the Bureau of Land Management to determine that minimum royalties properly due the Government have been collected. If the circumstances warrant, the review should be expanded to include a comprehensive examination of all leases in this category.

We are reporting also on the results of a follow-up review of a number of matters contained in our prior report of December 31, 1959, (B-118678) on "Review of Supervision of Oil and Gas Operations and Production on Government and Indian Lands by Geological Survey." In the prior report we commented on a number of serious deficiencies in the Survey's billing, collecting, and control over royalties due the Government. We commented also on certain basic weaknesses in financial management resulting from (1) the Survey's use of an operating division instead of its Administrative Division to perform royalty accounting functions, (2) the Survey's failure to maintain a formal up-to-date royalty accounting manual, and (3) the royalty accounting activities not being subject to effective internal audit.

B-118678

Our current review of the findings contained in our prior report disclosed a continuation of certain of the deficiencies. However, the Department subsequently advised us that corrective action had been taken or that serious consideration was being given to our recommendations.

Copies of this report are being sent to the President of the United States; the Secretary of the Interior; and the Director, Geological Survey.

A handwritten signature in black ink, appearing to read "Roger Campbell". The signature is written in a cursive style with a large initial "R".

Comptroller General
of the United States

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REPORT ON
CERTAIN DEFICIENCIES IN FINANCIAL MANAGEMENT
OF OIL AND GAS ACTIVITIES
GEOLOGICAL SURVEY
DEPARTMENT OF THE INTERIOR

INTRODUCTION

The General Accounting Office has made a review of the Geological Survey's financial management of commercial oil and gas activities on certain leased Government and Indian lands. The review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67). The scope of our review is summarized on page 20 of this report.

Our report directs attention to certain deficiencies in the Survey's royalty accounting activities, the existence of which indicated that adequate action had not been taken to correct basic weaknesses in financial management which we brought to the attention of the Department and the Geological Survey in our prior audit report (B-118678), December 31, 1959.¹ Our report also points out that billings and collections were not made in certain cases for minimum royalties due the Government.

The Department, by letter dated November 1963, advised us that corrective action had been taken or would be considered on these matters. Further details are included in appropriate sections of this report.

¹Report to the Congress, dated December 31, 1959, on "Review of Supervision of Oil and Gas Operations and Production on Government and Indian Lands by Geological Survey, Department of the Interior" (B-118678).

The principal management officials of the Department of the Interior and the Geological Survey responsible for the activities discussed in this report are listed in the appendix.

STATUS OF PRIOR RECOMMENDATIONS

The principal findings and recommendations included in our prior report of December 1959 on "Review of Supervision of Oil and Gas Operations and Production on Government and Indian Lands by Geological Survey" and our follow-up review are summarized below.

DEFICIENCIES IN ACCOUNTING FOR ROYALTIES

In our prior report we commented on a number of serious deficiencies that existed in the Survey's royalty accounting activities. We reported that (1) the billing and collection of royalties due the Government were delayed at times for prolonged periods, (2) large, unexplained differences existed between the Survey's detailed royalty receivable records and (a) the related control records it maintained and (b) the related control accounts maintained by the Bureau of Land Management (BLM), and (3) the usefulness and accuracy of the Survey's royalty receivable records were further decreased because of inadequate procedures used in accounting for collection of unbilled royalties and for prepayment of certain rentals.

We recommended that, to correct these deficiencies in royalty accounting, the Director, Geological Survey, (1) provide for prompt billing and collection of all unpaid charges, (2) require that royalty accounts receivable records be periodically reconciled and differences be resolved, and (3) revise the royalty billing procedures and have the status of all credit balances reviewed and appropriately classified.

Our follow-up review of these findings and recommendations disclosed the following status:

1. In the Northwestern Region, 82 accounts, each with balances in excess of \$1,000, had been delinquent from 6 months to 9 years. At May 15, 1961, the total delinquencies exceeded \$500,000. Our

examination of 16 accounts showed that they had not been reviewed periodically to determine the reasons for the delinquent status, nor had collection or other corrective action been initiated.

In commenting on this matter, the Department advised us that as of June 17, 1963, 67 accounts in the amount of \$368,774 had been adjusted, either by payment or by transfer of amounts from accounts inadvertently posted from inaccurate schedules of payment submitted by oil companies, lessees, or purchasers of the lease product; five accounts covering \$85,965 had been appealed to the Director; eight accounts in the amount of \$29,528 had been reconciled and payments had been requested; and reconciliation was in progress on the remaining two accounts covering \$32,963.

Although action has been taken to clear up these accounts, we believe that past operations which allowed accounts to be delinquent, in dispute, or inaccurately posted for periods ranging up to 9 years indicate the need for improvement in the Survey's accounting practices for Government royalties.

2. With regard to the need for periodically reconciling royalty accounts receivable records, we noted that as of June 30, 1961, the Survey's monthly control register and the related subsidiary royalty accounts receivable were in balance and were being reconciled with the BLM control accounts.

3. At June 30, 1961, the large backlog of unprocessed accounts receivable collections and the manner in which the Survey accounted for royalty collections had caused a credit balance of about \$47 million to accumulate in the unapplied accounts receivable general ledger account and the related subsidiary ledgers maintained by the Bureau of Land Management and the Survey. A major part of the \$47 million represented amounts collected but not audited or

recorded by the regional offices as accounts receivable or as income or otherwise appropriately classified. Subsequent to our review, the Survey informed us that this unapplied balance had been reduced. In addition, the Survey has developed a system for royalty accounting using electronic data processing (EDP) which it believes will provide for prompt posting and billing of royalty charges and for the post audit of royalty accounts. These procedures were not in effect at the time of our field reviews and we have not had the opportunity to evaluate their direct application.

At June 30, 1962, the records showed that the unapplied credit balances had been reduced to about \$19.5 million. We noted, however, that in the Gulf Coast Region about \$10 million of unapplied collections had not been appropriately reclassified as liability or suspense items. In addition, no action had been taken to reclassify the numerous credit balances in individual accounts receivable totaling about \$240,900. This amount represents the difference between the amount of advance rentals paid by the lessees and the amount determined to be due by the Survey.

The Department has advised us that the balance in the unapplied accounts receivable collections account was reduced to \$16.6 million as of May 31, 1963, and about \$10 million will be removed to the proper control accounts after an analysis presently in progress is completed. The Department has stated also that the balance will be further reduced and possibly eliminated after the transition to electronic data processing has been completed.

With respect to the numerous credit balances in individual accounts receivable totaling about \$240,900, the Department has advised us that \$180,800 of this amount will be reclassified after a review has been completed in the Survey's New Orleans office; that

\$3,900 of the remaining \$60,100 has been refunded; and that the balance will also be refunded when acceptable evidence of duel payment is received.

WEAKNESSES IN FINANCIAL MANAGEMENT

In our prior report we commented on the need to correct certain basic weaknesses in financial management resulting from the manner in which the Survey's responsibilities in this area had been delegated and were being carried out. We reported that (1) the Survey's royalty accounting policies and procedures were established and were being carried out by the Conservation Division--one of its operating divisions--instead of by the Administrative Division which performs the Survey's accounting functions, (2) the Survey did not maintain a formal up-to-date royalty accounting manual, and (3) the royalty accounting activities were not subject to effective internal audit.

We recommended that, to correct these weaknesses, the Director, Geological Survey (1) transfer technical responsibility over royalty accounting functions to the Administrative Division, (2) issue and maintain currently a royalty accounting manual, and (3) expand the scope of internal auditing to include adequate coverage of the royalty accounting activities.

1. Our current review disclosed that no action had been taken to transfer technical responsibility over royalty accounting functions from the Conservation Division to the Administrative Division.

In commenting on our prior report, the Department stated that any organizational separation would be impractical and administratively unsound because of the interwoven relationship and dependence of royalty accounting on the Conservation Division's engineering and technical supervision and vice versa. We agreed with the Department that the royalty accounting and engineering functions are interdependent and that close contact between petroleum

accountants and engineers is desirable. However, we believed that royalty accounting policies and procedures should be under the technical supervision of the Branch of Budget and Finance, Administrative Division, which is charged with the Survey's overall accounting responsibility and which maintains the Survey's general ledger and related financial control over assets, expenditures, liabilities, and fiscal matters generally.

In its latest comments, the Department advised us that the matter relating to the transfer of technical responsibility over royalty accounting to the Administrative Division is under serious consideration and that a decision would be made early in November 1963. As of April 24, 1964, no decision had been made; however, a Department representative advised us that a review of the royalty accounting activities of the Conservation Division was being planned and that based on the results of the review a decision would be reached.

2. With regard to issuing and maintaining a current royalty accounting manual, the Chief Accountant, Conservation Division, informed us in January 1963 that certain sections of the manual were in draft form and that it would take about 3 or 4 years to complete the manual. We remain of the opinion that, as a matter of sound management policy, the responsibility for promulgating a royalty accounting manual should rest in the Administrative Division and not in the Conservation Division which is an operating division. We believe that the need for standardized royalty accounting procedures warrants special attention and that an up-to-date procedures manual is necessary in guiding individuals responsible for carrying out day-to-day accounting activities and in providing for the uniform and systematic accomplishment of accounting operations.

The Department advised us also that, since January 1963, 104 pages of the manual had been issued, that 28 pages were in draft form, and that the Department had concluded that the completion of the manual would require the full-time services of an individual having a background covering the entire range of royalty accounting problems and procedures.

3. With regard to internal auditing, the Director, Geological Survey, established an internal audit staff in February 1961 but, at the time of our review, no audit work had been performed in the Branch of Oil and Gas Operations.

The Department advised us that no audit work had been performed in the Branch of Oil and Gas Operations because the internal audit staff had been occupied primarily with a review and audit of royalty accounting practices of the Branch of Mining Operations. The Department stated further that the audit of oil and gas royalty accounting functions would be deferred until the staff had concluded its present assignment.

The Branch of Mining Operations and the Branch of Oil and Gas Operations are part of the Survey's Conservation Division. These branches collect and account annually for about \$8 million and \$147 million in royalties, respectively.

Upon inquiry, we were advised that in June 1962 and in March 1963 scheduled audits of the Branch of Oil and Gas Operations were deferred or canceled to carry out audit work in the Branch of mining operations. We noted also that during the period February 1961 through November 1963 the internal audit staff issued 16 audit reports on Survey activities other than royalty accounting.

We are not questioning the need for internal audits of the activities selected; however, as pointed out in our prior report,

most of the deficiencies noted in oil and gas activities were examples of deficiencies that should be disclosed by an adequate internal audit. At the time of our current review, we noted that adequate corrective action had not been taken on certain weaknesses brought to the attention of officials of the Survey and of the Department in prior audit reports. We believe that an effective internal audit would substantially aid in the management of oil and gas royalty operations. In view of the significant amount of oil and gas royalties collected annually, it seems that an internal audit of oil and gas royalty operations should be given a higher priority.

OTHER DEFICIENCIES

In our prior report we recommended that the Director, Geological Survey, issue and maintain currently a manual of operating instructions. In May 1961 a manual of operating instructions was issued to each regional office.

BACKGROUND INFORMATION

GENERAL

The Geological Survey was created in the Department of the Interior by the act of March 3, 1879 (43 U.S.C. 31). The Survey conducts scientific and technical surveys, investigations, and research concerning primarily (1) the determination and appraisal of the Nation's mineral and water resources, (2) the delineation of the physical features of the United States, its territories and possessions, and (3) the supervision of mining and mineral leasing on Federal and Indian lands.

At October 1, 1963, the Survey's organization consisted of six divisions, four of which do scientific and technical work, and the Administrative and Publications Divisions. The technical activities of the Survey involving geological investigations and mapping, topographic mapping, water resources investigations, classification of Federal lands, and supervision of oil and gas leasing on Federal and Indian lands are performed by the Geologic, Topographic, Water Resources, and Conservation Divisions, respectively, which are headquartered in Washington, D.C.

CONSERVATION DIVISION

The Conservation Division is divided into four branches, each of which are responsible for a special type of activity on a nationwide basis. The operations of each branch are under the overall supervision of a branch chief who reports to the Chief, Conservation Division. The operations of the branches are decentralized into regional offices, each of which is under the direction of a regional supervisor who reports to a branch chief.

The Branch of Oil and Gas Operations, Conservation Division, supervises operations and activities for the prospecting, development, and production of oil and gas from leases on Federal, Indian,

and certain naval petroleum reserve lands. This Branch is responsible for the collection of and accounting for oil and gas royalties earned by the Government. The accounting for royalties is done on a decentralized basis.

In performing its supervisory functions, the Branch cooperates closely with the Government agencies having administrative jurisdiction over the leased lands. The principal agencies the Branch deals with are the Bureau of Land Management, Department of the Interior, in connection with leases on public domain lands, acquired lands, and outer Continental Shelf lands; the Bureau of Indian Affairs, Department of the Interior, in connection with certain Indian lands; the Department of the Navy in connection with Naval Petroleum Reserve No. 2 located near Taft, California; and the Departments of the Army and the Air Force in connection with certain military reservations.

The Branch's functions include generally (1) the approval of development plans of lessees or their operators, (2) the review of oil and gas production, including the methods used by lessees and operators to drill, plug, and abandon wells, and (3) the collection of and accounting for oil and gas royalties earned. Royalties due the Government are based on varying percentages of the value of production. The most common royalty rates are 12-1/2 and 16-2/3 percent. The Survey generally discharges the responsibilities relating to the collection of royalties by checking the mathematical accuracy of the reports submitted by the lessees or operators of the lease and by verifying lessees' reports with reports submitted by purchasers of the products which were removed under the lease. The Survey, however, has not devised procedures for independently verifying the quantity and quality of the products, as

reported by the lessees, but relies upon the divergence of interest generally present in the operation of a lease to assure accuracy in production reports.

Revenues including bonuses, rentals, and royalties from oil and gas leases on public lands, except revenues from public lands in Alaska, are distributed in the ratio of 52.5 percent to the reclamation fund, 37.5 percent to the States where the oil or gas was produced, and the remaining 10 percent to the Treasury of the United States as miscellaneous receipts. The reclamation fund is used by the Bureau of Reclamation, Department of the Interior, in the examination and survey for and the construction and maintenance of water resources development projects in the 17 Western States. Expenditures can only be made, however, from the fund under appropriations made annually by the Congress. The States are required to use their portion of the funds for the construction and maintenance of public roads or for the support of public schools or other public educational institutions, as the legislatures of the States may direct. Revenues from public lands in Alaska are distributed in the ratio of 90 percent to the State and 10 percent to the United States Treasury.

CURRENT FINDING AND RECOMMENDATION

UNAUTHORIZED REDUCTIONS IN MINIMUM ROYALTIES DUE THE GOVERNMENT

Contrary to existing statute and administrative rulings, the Survey's Southwestern Regional Office and the New Mexico State Office of the Bureau of Land Management have changed certain leases from a minimum royalty status of \$1 an acre to a rental status of 50 cents an acre when the leases became nonproductive. As a result, royalties properly due the Government have been reduced 50 percent. Since our review involved only one Survey and one Bureau of Land Management location, other instances could exist where royalties properly due the Government have been lost because leases in a minimum royalty status were converted to a rental status, contrary to existing statute and administrative rulings.

Under the Mineral Leasing Act of February 25, 1920, as amended, (30 U.S.C. 226), if the lands for leasing are not within any known geological structure of a producing oil or gas field, the person first making application is qualified to obtain a lease covering such land without competitive bidding for the purpose of developing and producing oil and gas deposits. Such leases are conditioned upon payment of an advance rental of 50 cents per acre for each year of the lease. Since 1946, however, the act provides that a minimum royalty of \$1 per acre in lieu of rental be payable at the expiration of each lease year beginning on or after a discovery of oil or gas in paying quantities on the lands leased.

Under Departmental Order 2505, dated December 30, 1948, the Survey transfers lease accounts to the Bureau of Land Management when the leases become nonproducing. The Bureau of Land Management then becomes responsible for reviewing and collecting amounts due from lessees on nonproducing leases.

We reviewed 12 leases which were transferred from the Survey's Southwestern Regional Office to the Bureau of Land Management's New Mexico State Office. Four were noncompetitive leases on which the rental rate was 50 cents an acre and the minimum royalty rate was \$1 an acre. On these leases, rent of 50 cents an acre had been collected even though the Survey advised BLM that the leases had been in a minimum royalty status of \$1 an acre. The remaining eight leases were competitively awarded or had been terminated when they became nonproductive.

The four cases on noncompetitive leases were brought to the attention of the State Director, Bureau of Land Management, New Mexico. By letter dated June 5, 1962, the State Director advised us that demands for payment from the lessees had been made and that \$3,320 had been collected on two of the leases. He advised further that two lessees who were billed a total of \$13,730 had filed notices of appeals with the Director, Bureau of Land Management. One appeal in the amount of \$6,580 was denied by BLM in September 1962; in October 1962 the lessee appealed the BLM decision to the Secretary of the Interior; as of June 1964 no decision had been rendered. The other appeal in the amount of \$7,150 was allowed because BLM decided that the lands which gave the original lease its minimum royalty status were excluded by BLM from the lease extension applied for by the lessee. Consequently, BLM ruled that the extended lease contained only the underdeveloped lands and was subject only to rental charges of 50 cents an acre.

The New Mexico Bureau of Land Management regional officials informed us that it has been their practice to bill and collect advance rentals rather than the minimum royalty on all lease accounts transferred to them by the Survey. Since this practice could be followed by other BLM offices, and the fact that the minimum

royalty provision has been in the act since 1946, we believe that other instances could exist where leases in a minimum royalty status have been returned to a rental status contrary to existing statute (30 U.S.C. 226) and administrative rulings with resulting loss of royalties properly due the Government.

In commenting on our proposal that the Secretary of the Interior require the Directors, Geological Survey and Bureau of Land Management, to review all noncompetitive leases to determine that proper amounts of royalties have been and are being collected in accordance with existing statute (30 U.S.C. 226) and administrative rulings, the Department stated that:

"A review of the records at all accounting offices has not disclosed any leases other than those mentioned in the report where there has been a failure to collect proper royalty payments in cases where the minimum royalty status of a lease was involved."

The Department further advised that:

"Instructions have been issued to preclude the improper reduction of such leases from a minimum royalty payment of \$1.00 per acre ***. Action will be initiated to modify Departmental Order No. 2505 so that no lease accounts would be transferred to the Bureau of Land Management where the leases were to continue in a minimum royalty status."

The Department's comments imply that all noncompetitive leases were reviewed and that the instructions issued would preclude the improper reduction of such leases from a minimum royalty payment of \$1 an acre. However, we found that neither the Survey nor BLM could document that a review of all noncompetitive lease accounts was made. The Survey advised us that the Regional Oil and Gas Supervisors were orally instructed to review accounting advices transferring lease accounts to BLM to determine that the transferring document showed the royalty status of the lease account. BLM

advised us that in the course of its internal audits no additional cases of failure in collecting proper royalty had been noted.

The instructions referred to by the Department were issued by the Geological Survey in May 1962. These instructions are concerned with administrative and accounting procedures for handling minimum royalty and rental obligations on producing leases which are segregated by partial assignments and would have no effect on the cases discussed in this report where nonproducing leases were converted to a rental status.

With regard to Departmental Order No. 2505, we believe that the modification as suggested by the Department should provide for more effective handling of these accounts. As of April 20, 1964, however, the Departmental Order had not been revised.

In our review at the Survey's Southwestern Regional Office, we also noted that the Survey had changed a lease which was considered a nonparticipating lease within a unit agreement, from a minimum royalty status of \$1 an acre to a rental status of 50 cents an acre when direct production ceased from a well on the lease. We discussed this case with Survey regional officials who agreed that minimum royalty should have been collected and instituted corrective action and collected the difference between rental of 50 cents an acre and minimum royalty of \$1 an acre, or a total of \$1,280, for the period 1957 through 1960.

However, in commenting on this matter, the Administrative Assistant Secretary advised us that the Department believes the rental charge was correct and that the additional \$1,280 which was collected should be refunded. As a basis for this belief the Department cited 30 U.S.C. 226e which provides in part that the minimum royalty under any lease that has become subject to any cooperative or unit plan of development or operation, or other plan that

contains a general provision for allocation of oil or gas, shall be payable only with respect to the lands subject to such lease to which oil or gas shall be allocated under such plan.

The Chief Counsel, Bureau of Land Management, and the Solicitor, Department of the Interior, have on separate occasions (August 1952 and June 1957, respectively), ruled that the minimum royalty provisions of the act become effective after production in paying quantities is obtained and that the minimum royalty provisions remain in effect so long as the lease subsists regardless of whether it is thereafter possible to continue production. In light of these rulings, we believe that, before a refund of the collection is made to the lessee as suggested by the Department, the Solicitor be requested to formally rule on whether, when direct production ceases, a lease can be converted from a minimum royalty to a rental status because the lease does not participate in the allocation of production from other leases committed to a unit agreement.

We noted also one case where the Survey transferred a lease to BLM but failed to notify BLM that minimum royalty of \$320 should be collected for the lease year ended January 31, 1958. Regional officials instituted corrective action and recovered the \$320 due the Government.

We believe that the findings discussed in this report on minimum royalties indicate a need for a coordinated review of noncompetitive lease accounts by the Survey and BLM to determine that all royalties due the Government have been collected. Since the minimum royalty provision has been in the act since 1946 and our review was only made at one location, other instances could exist where leases in a minimum royalty status have been returned to a rental status.

Recommendation to the Secretary
of the Interior

In view of the split responsibility for administration of lease accounts under Departmental Order No. 2505, we recommend that the Secretary of the Interior require the Directors, Geological Survey and Bureau of Land Management, to make a coordinated review of a representative number of noncompetitive leases which were in a minimum royalty status and which became nonproductive and were transferred by the Survey to the Bureau of Land Management to determine that minimum royalties properly due the Government have been collected. If the circumstances warrant, the review should be expanded to include a comprehensive examination of all leases in this category.

SCOPE OF REVIEW

Our review of the Geological Survey's supervision over commercial oil and gas operations and production on certain leased Government and Indian lands included a review of:

1. Basic laws and regulations pertaining to the production and sale of oil and gas taken from leased Government and Indian lands.
2. Survey's policies and procedures for supervision of commercial oil and gas operations and production on leased lands.
3. The respective responsibilities of the Survey and certain other Government agencies having administrative jurisdiction over lands leased for oil and gas exploration and production.

We reviewed the royalty accounting procedures and practices and made selected tests of specific transactions.

Our review was made at the Survey's central office, at six regional offices, and at selected District Offices and field installations of the Bureau of Indian Affairs and the Bureau of Land Management.

APPENDIX

PRINCIPAL MANAGEMENT OFFICIALS
OF
THE DEPARTMENT OF THE INTERIOR
AND THE GEOLOGICAL SURVEY
RESPONSIBLE FOR THE ACTIVITIES
DISCUSSED IN THIS REPORT

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
<u>DEPARTMENT OF THE INTERIOR</u>		
SECRETARY OF THE INTERIOR:		
Stewart L. Udall	Jan. 1961	Present
Fred A. Seaton	June 1956	Jan. 1961
UNDER SECRETARY OF THE INTERIOR:		
James K. Carr	Jan. 1961	July 1964
Elmer F. Bennett	Sept. 1958	Jan. 1961
ASSISTANT SECRETARY OF THE INTERIOR (MIN- ERAL RESOURCES):		
John M. Kelly	Mar. 1961	Present
Royce A. Hardy	Oct. 1957	Jan. 1961
ADMINISTRATIVE ASSISTANT SECRETARY OF THE INTERIOR:		
D. Otis Beasley	Sept. 1952	Present
<u>GEOLOGICAL SURVEY</u>		
DIRECTOR:		
Thomas B. Nolan	Jan. 1956	Present
CHIEF, CONSERVATION DIVISION:		
Harold J. Duncan	Apr. 1944	Present

APPENDIX

PRINCIPAL MANAGEMENT OFFICIALS
OF
THE DEPARTMENT OF THE INTERIOR
AND THE GEOLOGICAL SURVEY
RESPONSIBLE FOR THE ACTIVITIES
DISCUSSED IN THIS REPORT (continued)

Tenure of office
From To

GEOLOGICAL SURVEY (continued)

CHIEF, BRANCH OF OIL AND GAS OPERATION:

Johnson B. Mitchell

Feb. 1957 Present