

**Gas Well Funds Management Audit
October 2016**

Lori Brooks, City Auditor
Lee Hagelstein, Internal Auditor



City Auditor's Office

October 14, 2016

Honorable Mayor and Members of the City Council:

The City Auditor's Office has completed the Gas Well Funds Management Audit. The purpose of the audit was to evaluate the efficiency and effectiveness of the management of gas well revenue.

Management's response to our audit finding and recommendation, as well as target implementation date and responsibility, is included following the report.

We would like to thank staff from the Community Development & Planning and Finance Departments for their full cooperation and assistance during the audit.

Lori Brooks

Lori Brooks, CPA, CIA, CGAP, CRMA
City Auditor

Attachment

c: Trey Yelverton, City Manager
Theron Bowman, Deputy City Manager
Jim Parajon, Deputy City Manager
Gilbert Perales, Deputy City Manager
John Dugan, Director of Community Development & Planning
Mike Finley, Finance Director/CFO

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Executive Summary

As part of the 2016 Annual Audit Plan, the City Auditor's Office has completed an audit of Gas Well Funds Management. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. The audit objective was to evaluate the efficiency and effectiveness of the management of gas well revenue.

The City Auditor's Office noted the following:

- Gas well royalty payments are closely monitored on a monthly basis to ensure the accuracy of the payments. If a discrepancy is identified by City staff, the operator is notified and payment to correct the error is received in a timely manner. As a result of this process, two additional payments (approximately \$1 million each), along with some other smaller underpayments, have now been collected from operators.
- Tests are performed to ensure: 1) the City is receiving payment for all gas wells in production; 2) appropriate collections are received for shut-in wells; 3) the correct price per MMBtu is paid by the operators; 4) operators are maintaining the required insurance; and 5) operators are reporting the correct production, via routine volume audits. If no production is reported, leases are reviewed to identify the expiration date.
- Processing of royalty payments appears to be adequately managed. Both Community Development & Planning (CD&P) and Finance Department staff members are involved in the various aspects of the process, including preparing allocation reports, preparing deposits, posting revenue to the financial accounting system, and reconciling the total monthly payments to the General Ledger and bank statements.
- Royalty revenue appears to be properly allocated to the various funds (i.e. General, Parks and Airport) based on original documentation, including the lease agreement and division orders.
- Gas well funds are primarily used for specific types of expenditures. Transfers from gas well funds to other funds may occur to compensate for revenue shortfalls or to cover some one-time costs. These transactions appear to be adequately documented and properly approved.

Opportunities for improvement include the following:

- Only limited written policies or procedures exist relating to the processes involved with gas well revenues and expenditures.

Details of audit findings, conclusions and recommendations are included in the following report.

Audit Scope and Methodology

The audit was conducted in accordance with generally accepted government auditing standards. The following methodology was used in completing the audit.

- Interviewed personnel responsible for gas well funds management
- Reviewed written policies and procedures
- Reviewed operational processes established for gas well revenue/expenditure activities
- Reviewed information within the Lawson financial accounting system
- Researched city ordinances and state regulations
- Verified the accuracy of revenue based on original documents (leases, division orders, etc.)
- Verified that operators are paying the correct price per MMBTU
- Verified that revenue is being allocated to the proper Funds (General, Parks or Airport)
- Reviewed expenditures/transfers related to gas well revenues

It should be noted that this audit is limited to the gas well revenue retained by the City of Arlington and not funds directed to the Arlington Tomorrow Foundation.

Scope Limitation

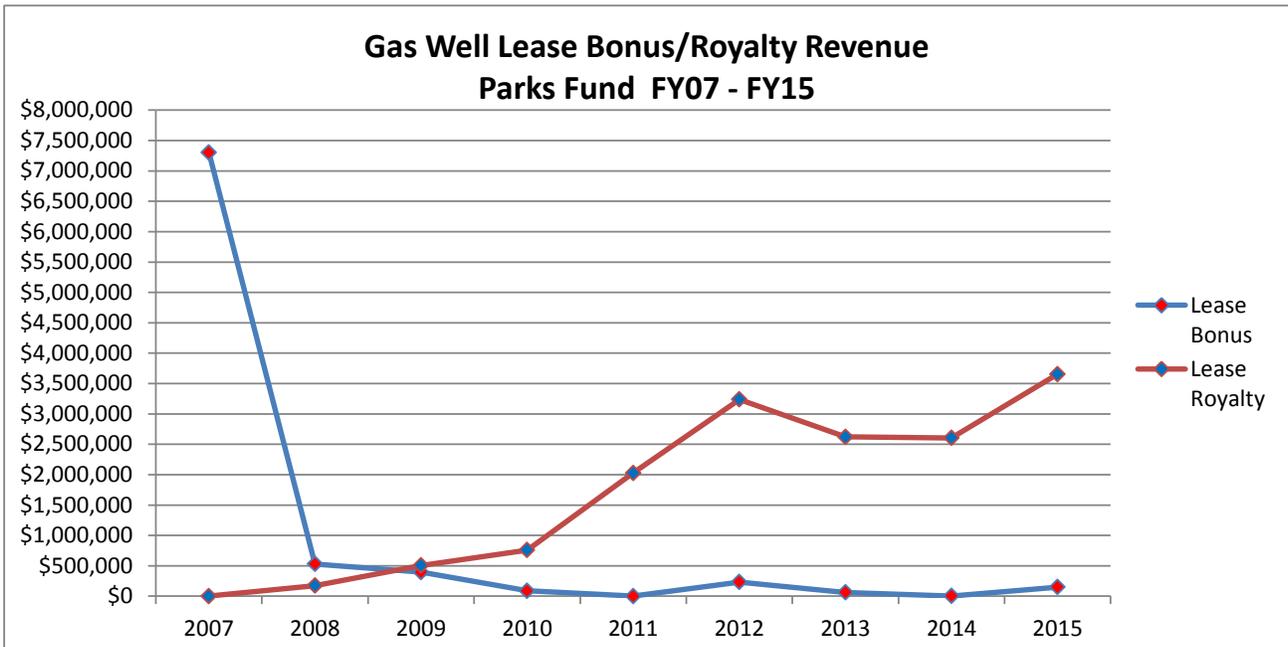
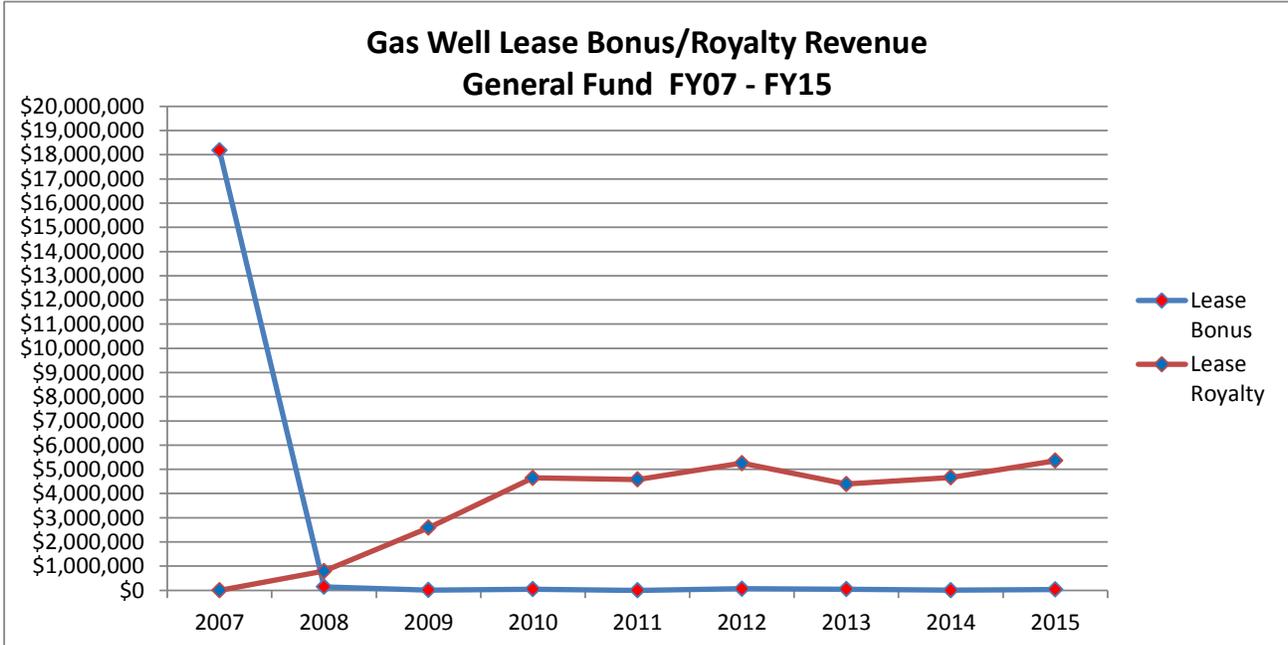
Initially, the scope of this audit was to review all revenue related to gas well operations. This included lease bonus and royalty payments, as well as gas drilling and production fees (permit application fees, inspection fees, administrative fees, etc.). However, due to the declaratory judgement action by the Texas Oil & Gas Association relating to the fees assessed through the Fire Prevention Code and the Gas Drilling and Production Ordinance, these related fees were not reviewed during this audit. Only revenue from lease bonus and royalty payments was reviewed.

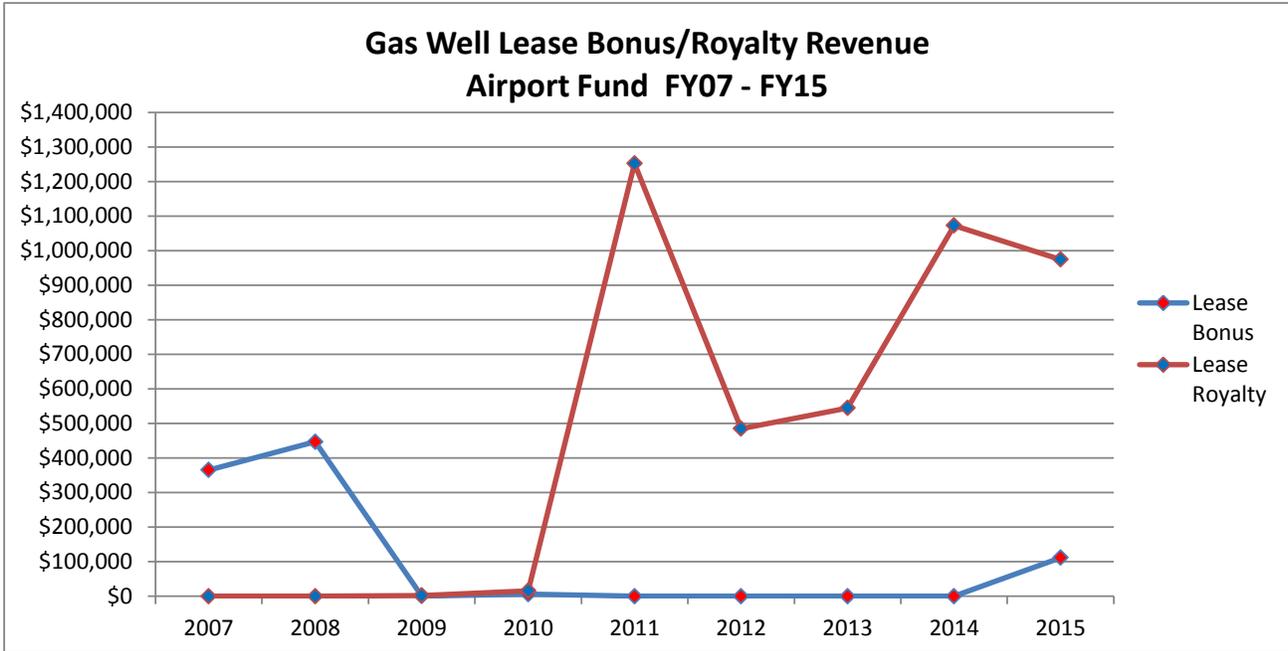
Background

The Barnett Shale field was discovered in 1981 with the first well being drilled near Newark, Texas in Wise County. However, it was not until later in the 1980's that the potential of the Barnett Shale was realized due to advances in horizontal drilling and well fracturing techniques. Significant drilling activity did not begin until the late 1990's when gas prices increased. Much of the Barnett Shale was located in highly populated urban areas including the Dallas-Fort Worth metropolitan area, and as a result, horizontal drilling became more common. Operators could drill horizontal wells underneath public land, such as parks, without disturbing the environment or the activities taking place on that land. As advancements were made in drilling technology, there was a significant increase in the number of operators and the number of wells within the Barnett Shale. By 2005, horizontal wells greatly outnumbered the vertical wells being drilled.

The City of Arlington did not experience the full effect of the Barnett Shale activity until 2007, as illustrated in the following charts. In 2007, the City received approximately \$26 million in lease bonus payments. However, once the leases were purchased, bonus money greatly decreased over the next eight years. In contrast, as operators began production of gas wells, the royalty revenue

increased from approximately \$971,000 in 2008 to approximately \$9,961,000 in 2015, with total royalty revenue of about \$52 million between 2007 and 2015.





Audit Results

Various activities related to gas well revenues were reviewed to obtain a general understanding of the processes and ensure the propriety of the activities. The areas reviewed are described in more detail below.

Revenue

A sample of various months of activity was judgmentally selected to track and review the royalty revenue received. The months selected for review were November 2014, March and August 2015, and January and March 2016. For each month selected, the royalty revenue from each operator was traced to a completed allocation report (separating the revenue by Fund) and then traced to the Lawson financial accounting system. No exceptions were noted during this testing.

In addition, the procedures for processing royalty payments were reviewed. Whether the payments were received by check (in CD&P or Finance) or by wire transfer (in Finance), Internal Audit noted the proper individuals were notified of the payment. The activities of receiving payments, preparing the allocation report, posting transactions to the accounting system, making the bank deposit and reconciling the bank statement were found to be adequately segregated and properly managed. Although the process was reviewed, tested and deemed to be appropriate, there are no written policies or procedures within CD&P providing guidance for the daily operations; therefore, a related audit finding is included within this report.

Expenditures/Transfers

General Gas Fund

The City of Arlington Approved Budget document states:

“Within this fund, a total of four accounting units are available from which expenditures may be authorized, including:

- 910102 – Neighborhood Grants, with an amount designated for expenditure*
- 910105 – Redevelopment Initiatives*
- 910106 – Land Banking, with an amount designated for expenditure*
- 910107 – Arlington Home Improvement Incentive Program.”*

910102 – Neighborhood Grants

This account was established for the purpose of neighborhood beautification. Any neighborhood having an employer identification number and a bank account in its name may apply for funding. The neighborhood is required to provide at least a 20% match of the City funding. There are no restrictions on the project scope, providing it beautifies the neighborhood. However, the maximum funding level ranges from \$3,000 to \$50,000 depending on the type of group applying for the funds. Those groups include: 1) any group - \$3,000; 2) a non-profit organization or group having a partner organization with non-profit designation acting as agent - \$15,000; and 3) group having an approved neighborhood plan, along with non-profit status or fiscal agent - \$50,000. No funds were used

from this account in FY15, and for FY16 a total of \$28,401 has been used (through June). As of June 30, 2016, a balance of \$289,743 was available for this program.

910105 – Redevelopment Initiatives

This accounting unit has not been used in many years. There are no funds set aside for this account.

910106 – Land Banking

This account was established for the purpose of purchasing of land within the City for future needs, possibly for economic development. If a tract of land becomes available in a prime location, at a favorable cost, and is well suited for the City's future plans, the land may be purchased and held for future development needs. During FY15, \$354,665 was expended from this account. Through June, there have been no expenditures during FY16. As of June 30, there was a balance of \$137,161 available for this program.

910107 – Arlington Home Improvement Incentive

The purpose of this account is to help homeowners make improvements to their existing home. Any zoned single-family residence is eligible for the program, providing the homeowner is not delinquent in paying taxes. Projects include home improvements, modifications or remodeling of single-family homes, with a minimum project cost of \$20,000. The project must be completed within 24 months of approval by CD&P, and the homeowner must consent to periodic inspections of the home. The desired result of this program is to increase property values within Arlington. The homeowner benefits from a one-time payment equal to ten (10) times the amount of the increase in the property tax assessed (maximum payment of \$5,000). During FY15, there was a total of \$4,305 paid to homeowners, and there have been no expenditures in FY16 through June. As of June 30, there was a balance of \$87,154 available for this program.

The budget document also states: *“Periodically, fiscal conditions may necessitate transfers from the General Gas Fund to the General Fund to offset revenue shortfalls or to cover one-time costs.”*

Parks Gas Fund

The Approved Budget document includes: *“Accounting unit 910201 is available to account for one-time expenditures from the fund, but resources may also be transferred to other funds to more appropriately track and account for expenditures.”*

According to Parks & Recreation personnel, the department stopped using the account mentioned above in 2013. As such, there were no expenditures in this account during FY15 or FY16. Since 2013, expenditures have been identified and approved through the annual budget process. Therefore, all Park Land Gas expenditures are reviewed and approved by the City Manager's Office and the City Council. Funds are then transferred into a non-arbitrage account where they are then distributed to the various projects.

The budget document also states: *“Periodically, fiscal conditions may necessitate transfers from the Parks Gas Fund to other funds to cover specific one-time costs.”*

Airport Gas Fund

The Approved Budget document includes: *“Accounting unit 910301 is available to account for one-time expenditures from the fund, but resources may also be transferred to other funds to more appropriately track and account for expenditures.”*

According to Airport personnel, this account is used primarily for the purchase of equipment and for infrastructure maintenance projects. However, during FY15 and FY16, there were no expenditures in this account. All projects are submitted and approved through the annual budget process; therefore, they are reviewed and approved by the City Manager's Office and the City Council.

The budget document also states: *“Periodically, fiscal conditions may necessitate transfers from the Airport Gas Fund to other funds to cover specific one-time costs.”*

During this review, expenditures and transfers from the General Gas Fund, Parks Gas Fund and Airport Gas Fund were reviewed and appeared to be appropriate, were properly approved and were adequately documented. As stated under the “Revenue” section of this report, although expenditures and transfers appear to be appropriate, there are very limited written policies and procedures to guide in the daily operations relating to gas well funds.

Allocation Reports

Royalty payments are received and allocated to the appropriate Funds (General, Parks and Airport), monthly, based on the percentage of the leasehold acreage within that fund's property. During this audit, tests were performed to ensure allocations were accurate.

For this purpose, the month of March 2016 was judgmentally selected for review. Three operators (EnerVest, Chesapeake Exploration and XTO Energy) were chosen for testing. For these three operators, a total of six leases were included in the testing to ensure that allocations were accurate. The documentation needed to perform these tests included the following: 1) the original or amended Oil & Gas Lease; 2) the original or amended Division Order; 3) the monthly production download information; 4) the well location plat maps; and 5) the Division Order monthly report prepared by the Real Estate Representative in CD&P.

After review of the documents noted above for each of the leases selected, the allocations to specific Funds were recalculated and verified, with no exceptions noted. Therefore, it appears that gas well revenues are being correctly allocated to the various Funds.

Price per MMBtu

As the result of a lawsuit filed by the City of Arlington against Chesapeake Exploration LLC, stating that Chesapeake failed to honor lease commitments, the original lease agreement was amended. Within the lease amendment, it is stipulated that Chesapeake must pay the Lessor's royalty on gas based on the higher of either 1) the price that the Lessee actually receives for the sale of gas; or 2) the first of the month Index Price for Natural Gas Pipeline Co. of America – Texok Zone, as published in Pratt's Inside FERC's Natural Gas Market Report, minus \$0.30/MMBtu.

On a daily basis, CD&P personnel review the S&P Global Pratt's Inside FERC's Gas Market Report. The first of the month price is recorded. The daily price during the month is also recorded in order to calculate a monthly average price. The FERC's Gas Market first of the month price is used to ensure that Chesapeake is paying the proper price/MMBtu. Additionally, the calculated monthly average price is used to gauge the appropriateness of prices paid by all operators.

The months of October 2015 and February 2016 were selected for testing to ensure that the correct price/MMBtu was being paid by Chesapeake. Four leases were selected during these two months. For those leases, ten wells were selected, and the price per/MMBtu was recalculated. In each instance, it was determined that Chesapeake was paying the correct price/MMBtu as required.

Although this process was developed to ensure that Chesapeake is paying the correct price per MMBtu, the calculations are also used to test the reasonableness of the prices paid by the other operators. If a noted variance is material, the operator may be contacted to determine the reason for the price variance.

Detailed Audit Findings

1. Only limited written policies or procedures exist relating to the processes involved with gas well revenues and expenditures.

Written policies and procedures serve as necessary guidelines in the daily operations of a function. During this review, Internal Audit noted only limited policies or procedures exist for the daily activities relating to gas well funds management. The Finance Department has written procedures describing the process for depositing gas well revenue; however, there were no written policies or procedures related to how gas well funds could be expended. The CD&P Department has no written policies or procedures for the daily activities related to gas well funds management. Supplemental information in the City's Annual Adopted Budget document, as described in the "Expenditures/Transfers" section of the Audit Results above, generally states how gas well funds may be used. However, Internal Audit does not consider this document to be a substitute for detailed written departmental policies or procedures.

The written policies and procedures should, at a minimum, include guidance for the following:

- Processing lease bonus/royalty payments
- Performing monthly assurance testing (i.e. Price/MMBtu, Volume audits, Fund Allocations, etc.)
- Resolving discrepancies in payment amounts received
- Reconciling CD&P and Finance Department records
- Reviewing Leases and Division Orders
- Establishing a process for determining allowable expenditures and transfers, in concert with City needs and Council priorities

The lack of written policies and procedures in this area could lead to misappropriation of funds or unidentified loss of revenue. In addition, if current responsible staff leaves City employment, newly assigned employees will not have proper written guidance to ensure an appropriate continuity of operations.

Recommendation:

1. ***The City Auditor's Office recommends that the Director of Community Development & Planning and the Chief Financial Officer develop written policies and procedures concerning the daily activities related to gas well funds management.***

**CITY OF ARLINGTON
GAS WELL FUNDS MANAGEMENT
AUDIT RECOMMENDATIONS AND RESPONSE**

AUDIT RECOMMENDATION	CONCUR/DO NOT CONCUR	MANAGEMENT’S RESPONSE	RESPONSIBLE PARTY	DUE DATE
1. <i>The City Auditor’s Office recommends that the Director of Community Development & Planning and the Chief Financial Officer develop written policies and procedures concerning the daily activities related to gas well funds management.</i>	Concur	Policies and Procedures will be drafted for management approval by the end of the second quarter fiscal year 2017.	Stuart Young, Amy Trevino	March 30, 2017.