# Washington County Appraisal District

# Oil and Gas Reserves
# 2023-24 Appraisal Procedures and Reappraisal Plan

## September 22, 2022

*by*

*Thomas Y. Pickett & Company, Inc.*

# APPRAISAL PROCEDURES & REAPPRAISAL PLAN

# OIL AND GAS RESERVES

## Executive Summary

- Thomas Y. Pickett & Co., Inc. ("Thomas Y. Pickett" or "Pickett") annually reappraises all producing mineral leases within the CAD's boundaries using a Discounted Cash Flow ("DCF") methodology;
- Thomas Y. Pickett uses the Comptroller's Manual for Discounting Oil and Gas Income pursuant to Tax Code Section 23.175;
- Thomas Y. Pickett determines oil and gas prices in accordance with Tax Code Section 23.175;
- Thomas Y. Pickett's written procedures for identifying new properties are included herein.

## Overview

Oil and gas reserves consists of interests in subsurface mineral rights. Thomas Y. Pickett & Co. is contracted to reappraise this type of property annually for the appraisal district. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
B. both the seller and the purchaser know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use; and
C. both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The appraisal results will be used as the tax base upon which a property tax will be levied. Each mineral interest is listed on the appraisal roll separately from other interests in the mineral in place in conformance with the Texas Property Tax Code Sec. 25.12. A listing of the oil and gas properties appraised by Pickett for the appraisal district shall be made available at the appraisal

district office. Subsurface mineral rights are not susceptible to physical inspection. This condition creates the need to invoke the Departure Provision as required by the Standards Rule 6-7 (f) comment of the Uniform Standards of Professional Practice. However, the inability to physically examine the property does not affect the appraisal process or the quality of the results. The appraisal district is aware of this limiting condition and agrees that it is appropriate.

Documents relevant to an understanding of these appraisals include the confidential rendition, if any, filed with the appraisal district by the owner or agent of the property; the Texas Comptroller's Manual for Discounting Oil and Gas Income; other reports described in the Texas Property Tax Code; and other confidential data supplied by the owner or agent; the General Appraisal Manual adopted by the Texas Comptroller of Public Accounts; Property Assessment Valuation published by the International Association of Assessing Officers and adopted by the Texas Comptroller of Public Accounts and the Texas Property Tax Code.

Pickett's oil and gas appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Oil and gas appraisal staff stays abreast of current trends affecting oil and gas properties through review of published materials, attendance at conferences, course work and continuing education. All oil and gas appraisers are registered with the Texas Department of Licensing and Regulation, (formerly, the Texas Board of Tax Professional Examiners).

Assumptions and Limiting Conditions

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not required to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.

6. All information in the appraisal documents have been obtained by members of Thomas Y. Pickett's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes.

**Property Discover and Data Collection Process**

Mineral properties are identified and appraised based on their Railroad Commission Identification Number (RRCID). Upon completion of a new well, a Completion Report must be submitted to the Railroad Commission (RRC). The RRC then issues a RRCID. Production from that property is reported by RRCID. Periodically, wells are completed and start producing prior to being issued a RRCID. The production from these wells still must be reported to the RRC and are usually reported by Drilling Permit Number (DP). Since mineral properties are appraised using a Discounted Cash Flow analysis, production data is required to do the analysis. The RRC is the primary source of that data.

Procedure:

1. At the beginning of the year, the RRC database is searched for new wells that started producing prior to January 1 of the appraisal year. These wells are identified by RRCID or Drilling Permit (DP) number and added to the mineral appraisal database for the county. A well is considered to have value as of January 1 if it has reported production prior to that date, has filed a completion report showing completion prior to that date, or was perforated into a producing formation which showed the presence of oil or gas prior to January 1.

2. Completion reports and plats are retrieved from the RRC to identify the location of the producing wells. These locations are cross-referenced with jurisdictional maps to establish situs.

3. Division of Interest (DOI) statements are requested from the operator of the well to establish working and royalty interests.

4. Additional reviews of the RRC database are done periodically during the year to identify any wells that may have been added to the RRC database after the first of the year, but

were completed prior to January 1 of the appraisal year. New producing wells identified after the appraisal period are supplemented, going back up to five years.

Other appraisal data on the subject properties are collected from required regulatory reports from the Texas Railroad Commission and the Texas Comptroller of Public Accounts and by the property owner. Submitted data may be on a rendition form or in other modes that require confidentiality. Subject property data are verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports and through analysis of comparable properties, if any. Due to the unique nature of many oil and gas properties there is no standard data collection form or manual.

## Valuation Approach and Analysis

The three generally accepted approaches used in determining the Market Value of assets are the cost, income, and market approaches. The following is a brief description of the three general approaches to value.

**Cost Approach**
The cost approach considers the replacement cost of an asset as an indicator of value. The cost approach is based on the assumption that a prudent investor would pay no more for an asset than the amount for which he could replace or recreate the asset. The cost approach is sometimes performed by estimating the replacement cost of an asset functionally similar to the subject. Often, historical cost data can be used to indicate the current cost of reproduction or replacement. Adjustments are made for physical deterioration and the functional and economic obsolescence of the appraised asset.

**Income Approach**
The income approach measures the present worth of anticipated future net cash flows generated by the subject assets. The net cash flows are forecast for an appropriate period, or capitalized in the case of a single period model, and then discounted to present value using an appropriate discount rate.

**Market Approach**
The market approach is performed by observing the price at assets comparable to the subject asset are bought and sold. Adjustments are made to the data to account for capacity differences and other relevant differences between the subject asset and the comparable assets.

Depending on the facts and circumstances of a particular appraisal, applying the three approaches independently of one another can yield conclusions that are substantially different. As the appraisal is performed, the strengths of the individual approaches are considered and the influence of each approach in the appraisal process is weighed according to its likely accuracy.

All oil and gas interest values are arrived at through an appraisal of the whole property. Each fractional interest is then assigned a value on the basis of its relative share of expenses, income and the value of the operating equipment. Multiple producing zones in the same well may be treated as separate properties.

Oil and gas properties are principally appraised through the income approach to value. Specifically, the discounted cash flow (DCF) technique is used almost exclusively. The almost exclusive reliance on income approach methods, adjusted for risk and market conditions, is typical of the oil and gas industry in dealings between buyers and sellers as well as in single-property appraisals. A mineral property's intrinsic value is derived from its ability to generate income by producing oil and/or gas reserves.

Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected revenue stream to reflect the individual characteristics of the subject property. The DCF model is also calibrated through the use of lease operating expenses that reflect the individual characteristics of the subject property.

A jurisdictional exception to the DCF model, as this process is described in the Statement on Appraisal Standards No. 2 of the Uniform Standards of Professional Appraisal Practice, must be taken. Section 23.175 (a) of the Texas Property Tax Code specifies that the price of oil and gas used for the first year of the DCF analysis must be the monthly average price of the oil and gas received from the interest for the preceding year multiplied by a price adjustment factor as promulgated by the Texas Property Tax Code. Furthermore, the prices used for succeeding years are based upon escalation factors also stipulated by the Texas Property Tax Code.

Highest and best use analysis of the oil and gas reserves is based on the likelihood of the continued use of the reserves in their current use. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

## Review and Testing

Review of appraisals is performed through a comparison of income indicators and compliance with Section 23.175 of the Texas Property Tax Code. A review of property values with respect to year-to-year changes and with respect to industry-accepted income indicators is conducted annually. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process.

Appraisal-to-sales ratios are the preferred method for measuring performance, however sales are very infrequent and often the sales conditions are not made public for the sales that do occur. Furthermore, market transactions normally occur for multiple sites and include real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Finally, Pickett's mineral appraisal methods and procedures are subject to review by the Property Tax Assistance Division of the Texas Comptroller's office. The Comptroller's review, as well as comparisons with single-property appraisals, indicates the validity of the models and the calibration techniques employed.

Thomas Y. Pickett & Company, Inc.

**Reappraisal Timeline 2023**

| | 2022 | | | 2023 | | | | | | | | | | | | 2024 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Event** | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** |
| New Mineral Lease Discovery | | | | | | | | | | | | | | | | | | | | | |
| Schedule ARB Date, Establish Deadlines for 25.19 Data | | | | | | | | | | | | | | | | | | | | | |
| Mineral Property Appraisals | | | | | | | | | | | | | | | | | | | | | |
| Mineral Appraisals Released to TYP Website | | | | | | | | <-- *Mineral Appraisals Released for Operator Review prior to Notice* | | | | | | | | | | | | | |
| Informal Meetings with Owners and Agents | | | | | | | | | | | | | | | | | | | | | |
| Estimates of Certified Value to CAD | | | | | | | | | | | | | | | | | | | | | |
| Delivery of 25.19 Notices | | | | | | | | | <-- *Date as required to meet agreed ARB date* | | | | | | | | | | | | |
| Appraisal Review Board Hearings | | | | | | | | | | | | | | | | | | | | | |
| Certified Values to CAD/Data to Software Vendor | | | | *July 21st or as specified by Chief Appraiser -->* | | | | | | | | | | | | | | | | | |
| Address 25.25 Correction Protests/Supplements as Necessary | | | | | | | | | | | | | | | | | | | | | |
| Submit Data for Property Value Study | | | | | | | | | | | | | | | | | | | | | |
| Review Category G Ratios/Informal Hearing if Necessary | | | | | | | | | | | | | | | | | | | | | |
| File Formal PVS Protests as Necessary | | | | | | | | | | | | | | | | | | | | | |

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|---|---|
| CAD and Joint TYP/CAD Tasks | |
| TYP Mineral Department Tasks | |
| Milestones and Deadlines | |

# Washington County Appraisal District

# Industrial Property
# 2023-24 Appraisal Procedures and Reappraisal Plan

## September 22, 2022

*by*

*Thomas Y. Pickett & Company, Inc.*

# SUMMARY REVALUATION PROGRAM REPORT

# INDUSTRIAL PROPERTY

## Overview

Industrial property consists of processing facilities and related personal property. Thomas Y. Pickett & Co., Inc. ("Thomas Y. Pickett" or "Pickett") is contracted to reappraise this type of property annually for the appraisal district. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
B. both the seller and the purchaser know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use; and
C. both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code.

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to the Standards Rule 6-5 (c) Comment of the Uniform Standards of Professional Appraisal Practice. A listing of the industrial properties appraised by Pickett for the appraisal district is available at the appraisal district office. Industrial properties are re-appraised annually. Properties are inspected annually where necessary and at least bi-annually.

Documents relevant to an understanding of these appraisals include the confidential rendition, if any, filed with the appraisal district by the owner or agent of the property; other reports described in the Texas Property Tax Code; asset lists and other confidential data supplied by the owner or agent; the General Appraisal Manual adopted by the Texas Comptroller of Public Accounts; Property Assessment Valuation published by the International Association of Assessing Officers and adopted by the Texas Comptroller of Public Accounts; and Engineering Valuation and Depreciation by Marston, Winfrey and Hempstead; and the Texas Property Tax Code.

Pickett's industrial appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Industrial appraisal staff stays abreast of current trends affecting industrial properties through review of published materials, attendance at conferences, course work and continuing education. All industrial appraisers are registered with the Texas Department of Licensing and Regulation, (formerly, the Texas Board of Tax Professional Examiners)

## Assumptions and Limiting Conditions

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not required to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents have been obtained by members of Thomas Y. Pickett's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes.
8. The appraisers have inspected as far as possible, by observation, the improvements being appraised; however, it is not possible to personally observe conditions beneath the soil or hidden structural components within the improvements. Therefore, no representations are made as to these matters unless specifically considered in an individual appraisal.

## Discovery Process and Procedures

Data is collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes that require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports and through analysis of comparable properties, if any. Due to the unique nature of many industrial properties there is no standard data collection form or manual.

## Valuation Approach and Analysis

The three generally accepted approaches used in determining the Market Value of assets are the cost, income, and market approaches. The following is a brief description of the three general approaches to value.

### Cost Approach

The cost approach considers the replacement cost of an asset as an indicator of value. The cost approach is based on the assumption that a prudent investor would pay no more for an asset than the amount for which he could replace or recreate the asset. The cost approach is sometimes performed by estimating the replacement cost of an asset functionally similar to the subject. Often, historical cost data can be used to indicate the current cost of reproduction or replacement. Adjustments are made for physical deterioration and the functional and economic obsolescence of the appraised asset.

### Income Approach

The income approach measures the present worth of anticipated future net cash flows generated by the subject assets. The net cash flows are forecast for an appropriate period, or capitalized in the case of a single period model, and then discounted to present value using an appropriate discount rate.

### Market Approach

The market approach is performed by observing the price at assets comparable to the subject asset are bought and sold. Adjustments are made to the data to account for capacity differences and other relevant differences between the subject asset and the comparable assets.

Depending on the facts and circumstances of a particular appraisal, applying the three approaches independently of one another can yield conclusions that are substantially different. As the appraisal is performed, the strengths of the individual approaches are considered and the influence of each approach in the appraisal process is weighed according to its likely accuracy.

Industrial properties are generally appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information and comparable properties. Reproduction costs are based on actual investment in the subject or comparable properties adjusted for typical changes in cost over time. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence and the experience of knowledgeable appraisers. Adjustments for functional and economic obsolescence may be made if utilization and income data for the subject property justify such. Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital costs for the industry of the subject property. A market data model based on typical selling prices per unit of capacity is also used when appropriate market sales information is available.

Because cost information is the most readily available type of data, the cost approach model is almost always considered and used. If sufficient data is available, either or both of the other two models are considered and may be used. The market data and income approach models must be reduced by the value of the land in order to arrive at a value of improvements and personal property.

Model calibration in the cost approach involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the market data approach involves adjusting sales prices of comparable properties to reflect the individual characteristics of the subject property.

In reconciling multiple model results for a property, the appraiser considers the model results that best address the individual characteristics of the subject property while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Land valuation for industrial properties is the responsibility of appraisal district staff as is the highest and best use analysis of the site. Sites are analyzed for highest and best use as though they were vacant. Highest and best use analysis of the improvements is based on the likelihood of the continued use of the improvements in their current and/or intended use. An appraiser's

identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

## Review and Testing

Field review of appraisals is performed through the regular inspection of subject properties. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process. A statistical review of property value changes is also conducted.

Appraisal-to-sales ratios are the preferred method for measuring performance, however sales are very infrequent. Furthermore, market transactions normally occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Finally, Pickett's industrial appraisal methods and procedures are subject to review by the Property Tax Assistance Division of the Texas Comptroller's office. The Comptroller's review, as well as comparisons with single-property appraisals, indicates the validity of the models and the calibration techniques employed.

# Washington County Appraisal District

# Utilities Property
# 2023-24 Appraisal Procedures and Reappraisal Plan

## September 22, 2022

*by*

*Thomas Y. Pickett & Company, Inc.*

## APPRAISAL PROCEDURES AND REAPPRAISAL PLAN

## UTILITY, RAILROAD AND PIPELINE PROPERTIES

### Overview

Utility, railroad, and pipeline properties consists of operating property, excluding land, owned by utility, railroad and pipeline companies and related personal property and improvements. Thomas Y. Pickett & Co., Inc. ("Thomas Y. Pickett" or "Pickett") is contracted to reappraise this type of property annually for the appraisal district. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
B. both the seller and the purchaser know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use; and
C. both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The effective date of the appraisals is January 1 of the year for which this report is submitted.

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to the Standards Rule 6-5 (c) Comment of the Uniform Standards of Professional Appraisal Practice 2004. A listing of the utility, railroad and pipeline properties appraised by Pickett for the appraisal district is available at the appraisal district office. All properties are reappraised annually. Such utility, railroad and pipeline properties that are susceptible to inspection (e.g. compressor stations, pump stations, buildings and power plants) are normally re-inspected at least every three years.

Pickett's utility, railroad and pipeline appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. The appraisal staff stays abreast of current trends affecting utility, railroad and pipeline properties through review of published materials, attendance at conferences, course work and continuing education. All appraisers are registered with the Texas Department of Licensing and Regulation, (formerly, the Texas Board of Tax Professional Examiners).

Assumptions and Limiting Conditions

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not required to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents have been obtained by members of Thomas Y. Pickett's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes.
8. The appraisers have inspected as far as possible, by observation, the improvements being appraised; however, it is not possible to personally observe conditions beneath the soil or hidden structural components within the improvements. Therefore, no representations are made as to these matters unless specifically considered in an individual appraisal.

## Discovery Procedures and Data Collection

Data is collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes that require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports and through analysis of comparable properties. Due to the varied nature of utility, railroad and pipeline properties there is no standard data collection form or manual.

## Valuation Approach and Analysis

The three generally accepted approaches used in determining the Market Value of assets are the cost, income, and market approaches. The following is a brief description of the three general approaches to value.

### Cost Approach

The cost approach considers the replacement cost of an asset as an indicator of value. The cost approach is based on the assumption that a prudent investor would pay no more for an asset than the amount for which he could replace or recreate the asset. The cost approach is sometimes performed by estimating the replacement cost of an asset functionally similar to the subject. Often, historical cost data can be used to indicate the current cost of reproduction or replacement. Adjustments are made for physical deterioration and the functional and economic obsolescence of the appraised asset.

### Income Approach

The income approach measures the present worth of anticipated future net cash flows generated by the subject assets. The net cash flows are forecast for an appropriate period, or capitalized in the case of a single period model, and then discounted to present value using an appropriate discount rate.

### Market Approach

The market approach is performed by observing the price at assets comparable to the subject asset are bought and sold. Adjustments are made to the data to account for capacity differences and other relevant differences between the subject asset and the comparable assets.

Depending on the facts and circumstances of a particular appraisal, applying the three approaches independently of one another can yield conclusions that are substantially different. As the appraisal is performed, the strengths of the individual approaches are considered and the influence of each approach in the appraisal process is weighed according to its likely accuracy.

For all pipelines a value is calculated using a Replacement Cost New Less Depreciation (RCNLD) model. This involves first calculating the cost of building a new pipeline of equal utility using current prices. The Replacement Cost New (RCN) is a function of location, length, diameter and composition. Depreciation is then subtracted from RCN to produce the final value estimate. Depreciation is defined as the loss of value resulting from any cause. The three common forms of depreciation are physical, functional and economic. Physical depreciation is accounted for on the basis of the age of the subject pipeline. Functional and economic obsolescence (depreciation) can be estimated through the use of survivor curves or other normative techniques. Specific calculations to estimate abnormal functional and/or economic obsolescence can be made on the basis of the typical utilization of the subject pipeline.

After deductions from RCN have been made for all three forms of depreciation, the remainder is the RCNLD or cost approach model indicator of value.

In addition to the RCNLD indicator, a unit value model may also be used for those pipelines for which appropriate income statements and balance sheets are also available. Generally, this model is used for those pipelines that by regulation are considered to be common carriers. The unit value model must be calculated for the entire pipeline system.

The unit value model typically involves an income approach to value and a rate base cost approach. The income approach is based on a projection of expected future typical net operating income (NOI). The projected NOI is discounted to a present worth using a current cost of capital that is both typical of the industry and reflective of the risks inherent in the subject property. The unit value model cost approach is typically an estimation of the current rate base of the subject pipeline (total investment less book depreciation allowed under the current form of regulation). An additional calculation is made to detect and estimate economic obsolescence. Any economic obsolescence is deducted from the rate base cost less book depreciation to achieve a final cost indicator. The unit value model may also include a stock and debt approach in lieu of a market data approach. The stock and debt approach involves finding the total value of the owner's liabilities (equity and debt) and assuming that they are equal to the value of the assets. The two (or three, if the stock and debt approach is included) unit value indicators are then reconciled into a final unit appraisal model indicator of value. The unit value must then be reconciled with the RCNLD model indicator of value for the entire pipeline system being appraised. The final correlated value of the system can then be allocated among the various components of the system to determine the tax roll value for each pipeline segment.

Utility and railroad properties are appraised in a manner similar to pipeline except the RCNLD model is not used. For all three types of property (utility, railroad and pipeline) the appraiser must first form an opinion of highest and best use. If the highest and best use of the operating property is the current use under current regulation, the unit value model is considered highly appropriate. If the highest and best use is something different, then the RCNLD model may be more appropriate.

Compressor stations, pump stations, improvements and related facilities are appraised using a replacement cost new less depreciation model.

Model calibration in the RCNLD model involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Model calibration in the unit value cost

approach involves the selection of the appropriate items to include in the rate base calculation and selection of the best measure of obsolescence, if any. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the stock and debt approach involves allocating sales prices of debt and equity to reflect the contribution to value of the operating property of the subject property.

In reconciling multiple model results for a property, the appraiser considers the model results that best address the individual characteristics of the subject property while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Land valuation for utility and pipeline properties is the responsibility of appraisal district staff as is the highest and best use analysis of the site. Sites are analyzed for highest and best use as though they were vacant. Highest and best use analysis of the improvements is based on the likelihood of the continued use of the improvements in their current and/or intended use. Railroad corridor land is included in the appraisal of the operating property. The highest and best use of railroad corridor land is presumed to be as operating property. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

The rate-base cost approach, stock and debt approach and income approach models must be reduced by the value of the land in order to arrive at a value of improvements, personal property and other operating property.

## Review and Testing

Field review of appraisals is performed through the regular inspection of subject properties. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process. A statistical review of property value changes is also conducted.

Appraisal-to-sales ratios are the preferred method for measuring performance, however sales are very infrequent. Furthermore, market transactions normally occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Appraisal results are tested annually by the Property Tax Assistance Division of the Texas Comptroller's office. The Comptroller's review, as well as comparisons with single-property appraisals, indicates the validity of the models and the calibration techniques employed.

# Appendix A

# Resumes

*Thomas Y. Pickett & Company, Inc.*

**STEPHEN B. CAMPBELL**
**President**

## EXPERIENCE

| | |
|---|---|
| Thomas. Y. Pickett & Company, Inc. | 19 Years |
| Business valuation and consulting | 7 Years |
| Schlumberger Well Services<br>Field Engineer | 2 Years |

## QUALIFICATIONS

Mr. Campbell performs mineral appraisals in Texas and complex industrial property appraisals in Texas and other states. Mr. Campbell has extensive domestic and international energy industry experience including previous valuation assignments of producing properties, upstream, mid-stream processing and transportation, downstream, oil field service businesses, and petrochemical and refining. He has significant experience in the valuation of tangible assets. He has been involved in numerous assignments for property tax, income tax, litigation, financial reporting, and lending purposes. Mr. Campbell has also completed many engagements involving capitalization rate studies and the valuation of intangible assets. Mr. Campbell manages the Minerals Department in Dallas and directs all company operations.

## EDUCATION/LICENSE

Master of Business Administration – University of North Texas – Denton, Texas

B.S. in Mechanical Engineering – Baylor University – Waco, Texas

Registered Professional Appraiser– State of Texas #68355

## PROFESSIONAL ASSOCIATION

Texas Department of Licensing & Regulation-Property Tax Professional

**MICHAEL B. PARKS**

**Vice President - Director**
**Mineral Appraiser**

**EXPERIENCE**

| | |
|---|---|
| Thomas Y. Pickett & Company, Inc. | 14 Years |
| JPMorgan Chase Bank | 2 Years |
| Greene & Associates, Inc. | 6 Years |

**QUALIFICATIONS**

Mr. Parks performs appraisals of mineral properties in Texas. He currently works five counties in Texas alone and assists with multiple other counties. He handles all aspects of the appraisal process including new well discovery, appraisal of all leases, working with operators to obtain accurate data to assist the appraisal process, handling protests, defending values at the appraisal review board hearings and certifying the values. He has extensive experience managing private mineral interests. Mr. Parks is active in the operations of Thomas Y. Pickett and is Manager of the Dallas office.

## EDUCATION/LICENSE

Bachelor of Science - University of North Texas – Denton, TX

Registered Professional Appraiser – State of Texas #72761

Certified Mineral Manager

## PROFESSIONAL ASSOCIATION

Texas Department of Licensing & Regulation-Property Tax Professional

National Association of Royalty Owners

National Association of Lease and Title Analysts

American Association of Professional Landmen

**ROBERT T. (BOB) LEHN**
**Vice President**

**Experience**

| | |
|---|---|
| Thomas. Y. Pickett & Company, Inc. (Dallas) | 30 Years |
| Purvin & Gertz, Inc. (Dallas & London)<br>Associate | 1 Year |
| Hadson Gas Systems, Inc. (Houston, Dallas & London)<br>Manager – Projects & Facilities (Dallas)<br>Director – Gas Supply & Transportation (London) | 4 Years |
| Muse, Stancil & Company (Dallas)<br>Consultant | 2 Years |
| Amoco Production Company (USA)<br>(Chicago, Corpus Christi, Houston)<br>Staff Plant Engineer | 8 Years |

**Qualifications**

Mr. Lehn performs industrial valuations of railroad, pipeline, gas gathering and processing facilities and of many other complex manufacturing sites in various states. He is experienced in domestic and in international energy project management. This experience included performing economic evaluations with consideration to environmental and regulatory issues. Reports to senior management of operating companies and to governmental agencies were made. Prior to T.Y. Pickett, as a consultant, he performed fair market valuations and physical asset appraisals of large gas plants and pipelines as well as other facilities. Mr. Lehn continues appraising these facilities, along with others, including paint pigment, explosives and agrichemical (fertilizer, pesticides, ethanol) and petrochemical plants. Mr. Lehn's previous and current refinery appraisal assignments include sites in the following states: Kansas, Mississippi, North Dakota, Oklahoma, Texas and Wyoming. Expert testimony has been provided on several refineries and on other special purpose properties to Boards of Equalization, to Appraisal Review Boards, or to Courts and to State Tax Commissions in Texas, Oklahoma, North Dakota, Kansas, Louisiana, Wyoming, Mississippi and in Florida. He has spoken at the Annual IAAO Conferences, at the IAAO Legal Seminars and at regional and at various State and County Assessors' functions and at other venues.

**Education/Licenses**

Master of Chemical Engineering – Rice University – Houston, Texas
B.A. in Chemical Engineering – Rice University – Houston, Texas
Professional Engineer – State of Texas – License #73203
Registered Professional Appraiser – State of Texas – License #67474

**Professional Associations**

American Institute of Chemical Engineers
American Chemical Society
Texas Association of Appraisal Districts
Texas Association of Assessing Officers
International Association of Assessing Officers (IAAO)
-- Associate Member, Ethics Committee (2010-2012)

**EDWARD DONALD OWENS**

**Vice President**
Senior Appraiser

## EXPERIENCE

| | |
|---|---|
| Thomas Y. Pickett & Company, Inc. | 33 Years |
| Fina Oil & Chemical | 2 Years |
| Pritchard & Abbott | 11 Years |

## QUALIFICATIONS

Mr. Owens has forty-two years (42) experience in appraising mineral, industrial, commercial, and personal properties. He also values, for Pickett clients, all fiber optic cables in Texas. He has served as contract supervisor for various appraisal districts in South Central and West Central Texas. He is a former tax agent with a major oil firm and is now responsible for his assigned oil-related properties in Texas, Wyoming, Colorado and New Mexico. He inspects and appraises gas plants, railroad loading facilities and SWD (taxable) facilities in North Dakota.

## EDUCATION

Bachelor of Science – Business Administration – Southwestern University – Salt Lake City, Utah

Associate in Applied Science – Property Tax Appraisal – Tarrant County Junior College, Fort Worth, Texas

Associate in Applied Science – Mid-Management – Tarrant County Junior College, Fort Worth, Texas

Registered Professional Appraiser – State of Texas #00896

## PROFESSIONAL ASSOCIATION

Texas Department of Licensing & Regulation-Property Tax Professional

# Appendix B

# Industrial Utility Accounts

*Thomas Y. Pickett & Company, Inc.*

5M & S LLC
AGNL FOAM L.P.
AIRGAS USA LLC-CENTRAL DIV
AMERICAN KINETICS INC
AMERICAN TOWER LP
AMG TECHNOLOGY INVESTMENT
AMP TEXAS PIPELINE
APEX
APEX
ARCHROCK SERVICES LP
ASPEN MIDSTREAM, LLC
AT&T CAPITAL SERVICES INC
AT&T COMMUNICATIONS
AT&T MOBILITY LLC
AT&T SERVICES INC
AT&T WAYPORT
BELLVILLE HOLDINGS BUILDINGS
BENCOR LLC
BLACK DIAMOND OILFIELD
BLUE BELL CREAMERIES
BLUE BELL CREAMERIES
BLUE BELL CREAMERIES ABATED
BLUEBONNET ELEC CO-OP
BNSF RAILWAY COMPANY
BOLD PRODUCTION SERVICES
BRAZOS VALLEY BREWING CO
BRENHAM BARTONS
BRENHAM READY MIX
BRENHAM WHSL GROC CO BUILDINGS
BRENHAM WHSL GROC-VEHICLES
BROCKTON INC
CALVERT GERALD S
CATO JAMES
CATO JAMES BUILDINGS
CELLCO PARTNERSHIP
CENTURYLINK COMM LLC
CHAPARRAL PIPELINE CO LLC
CHAPPELL HILL SAUSAGE
CITIZENS STATE BANK
COLFAX BREWING LLC
CORBAN COMMUNICATION INC
CRAWFORD HUGHES OPERATING
D BAR B SAUSAGE & MEAT LLC
DCP INTRASTATE NETWORK LLC (PIPE)
DCP INTRASTATE NETWORK LLC (PP)

DEL SOL FOOD CO INC
DEL SOL FOOD CO INC BUILDINGS
DOUBLE R BRAND PROPERTIES
DR METALS
ENERGY TRANSFER FUEL LP
ENERGY TRANSFER PARTNERS, LLC
ENTERGY TEXAS INC
ETC TEXAS PIPELINE LTD (PIPE)
ETC TEXAS PIPELINE LTD (PP)
ETC TEXAS PROCESSING LTD
EVANS CABINET & DOOR CO
FAYETTE ELEC COOP
FIBERLIGHT LLC
FRONTIER COMMUNICATIONS
GEOSOUTHERN (GUS)
GEOSOUTHERN ENERGY CORPORATION
GOTTPAV LLC
GROCERY SUPPLY COMPANY
GTP TOWERS I LLC
H & H MACHINE SERVICE
HARMONI TOWERS LLC
HDL RESEARCH LAB INC
HELMERICH & PAYNE PAYNE INTERNATIONAL DRILLING
HI-LINE IND II INC
HI-LINE IND II INC (BLDGS ONLY)
HOUSTON UNLIMITED
HRD AERO SYSTEMS LLC
HSC PIPELINE PARTNERSHIP LLC
HYPERION ENERGY LP
HYPERION OIL & GAS LLC
HYPERION RESOURCES INC
INDUSTRY TELEPHONE CO
INNOCOR FOAM BUILDINGS
KM TREATING LP
LAUREN CONCRETE
LAUREN CONCRETE INC
LCRA TRANSMISSION SRV CORP
LEDBETTER BRICK & STONE
LONGWOOD ELASTOMERS INC
LONGWOOD ELASTOMERS INC BUILDINGS
MAGNOLIA OIL & GAS OPERATING LLC
MCI COMMUNICATION SERVICES LLC
MCI METRO ACCESS TRANMISSION SERVICES CORP.
MIC GROUP LLC (EAST ABATED (#44-#45)

MIC GROUP LLC (WEST)
MIC GROUP LLC (WEST) BUILDINGS
MIC LLC (EAST)
MIC LLC (EAST) BUILDINGS
MIC LLC (HANDLEY) BUILDINGS
MOUNT VERNON MILLS INC
OASIS PIPELINE CO TEXAS LP (PIPE)
OASIS PIPELINE CO TEXAS LP (PP)
PARAGON TECHNOLOGY COALFOX BREWING
PARKER GAS
PASON SYSTEMS USA CORP
PATTERSON-UTI DRILLING COMPANY
PETROLEUM MATERIALS
PI COMPONENTS CORP
PI COMPONENTS CORP BUILDINGS
PORSCHE LEASING LTD
PRECISION POLYMER ENGINEERING
PROGAS SERVICES LLC
QUEST SPECIALTY CORP
R. R. DONNELLEY
R. R. DONNELLEY BUILDINGS
REM CHEMICALS INC
REM RESEARCH INC
RPH INVESTMENTS
SEALY TEXAS MGMT INC
SEALY TEXAS MGMT INC BLDGS
SEALY TEXAS MGMT INC BUILDINGS
SEMINOLE PIPELINE COMPANY P/L
SEMINOLE PIPELINE COMPANY PP
SKELLY-BELVIEU PIPEPLINE COMPANY, L.L.C.
SOUTHWESTERN BELL TELEPHONE CO
SPARTAN ENERGY PARTNERS LP
SPOK INC
SPRINT DBA T-MOBILE
STAN PAC
STAN PAC ABATED
SUDDENLINK COMMUNICATIONS
T-MOBILE
TAKE 3 TRAILERS
TEXAS HERITAGE BUILDINGS
TEXAS HERITAGE INVESTMENTS LTD
TILLMAN INFRASTRUCTURE, LLC
TORRES LEGACY
TRANSTEX TREATING LLC
TRU-VISION PLASTICS, INC

UNIFIED COMMUNICATIONS
UNITED TELEPHONE OF TEXAS
VALMONT/ALS
VALMONT/ALS BUILDINGS
WESTERN OILFIELDS SUPPLY CO
WHITETHORN PIPELINE LLC
WINK TO WEBSTER PIPELINE LLC