

**ROYALTY OWNERS ACCESS ON P&A WEBSITE
FREQUENTLY ASKED QUESTIONS (FAQs) REGARDING OIL AND GAS MINERAL INTERESTS**

1. *What is a Notice of Appraised Value?*

A Notice of Appraised Value is a legal document that is mailed annually to property owners by Texas Appraisal Districts, usually in April or May, that informs property owners about their proposed values for the current tax year; i.e., it puts owners “on notice” so that they can have sufficient time to respond if needed. Per Texas Constitution Article VIII, Section 21(c), notice must be given of the reasonable estimate of the taxes that will be imposed on a taxpayer’s property by each taxing entity involved.

The Notice of Appraised Value also provides a comparison to last year’s value for each property, any exemptions that apply, and a brief explanation about protest and Appraisal Review Board (ARB) procedures. More detailed information about a Notice of Appraised Value can be found in Property Tax Code, Section 25.19 of the Texas Property Tax Code (see <<LINK>>).

The Notice of Appraised Value is NOT a tax statement, even though it may have an estimate of taxes printed on it. Property owners should NOT pay any taxes from a Notice of Appraised Value. Instead, actual tax payments should be made only from a tax statement or other confirmation of taxes owed. Tax statements are mailed later in the year, typically after October 1.

2. *What is the property being appraised?*

For royalty owners, the property being appraised is your interest in land or minerals. An interest in land or minerals is one of the six items of taxable “real” property (as opposed to “personal” property) listed in the Texas Property Tax Code, Section 1.04(2)(F) (see <<LINK>>).

Valuations of land or buildings or other types of real or personal property are performed separately by Texas Appraisal Districts. Each one of these types of property is separately listed on a Notice of Appraised Value which is mailed to the owner of that property in April or May.

An easy way for the royalty owner to know that a property value on a Notice represents an interest (and not the surface acreage, for example) is if a fractional decimal interest ownership figure in a lease name is shown in the description of the property (for example, a 0.012500 royalty interest, or RI, in the Greenfield Lease). The description will also likely include the lease’s operator name, as well as the legal description (abstract, survey, etc.) associated with the lease’s surface acreage. Any acreage shown in the description represents the entire lease boundaries, not any particular taxpayer’s land.

Virtually all mineral interests are “undivided” across the lease whereas the fractional interest ownership applies to all the oil and gas production from that lease, not just the wells or partial land acres owned by the mineral interest owner that was incorporated into the total lease boundaries.

3. *How do you know I own this property?*

Records from oil and gas companies, such as the operator of your lease, are the primary provider of the ownership records that Pritchard & Abbott, Inc. (P&A), relies upon to determine who owns what fractional interest in each lease. P&A requests this information from operators and pipeline companies annually. The most reliable party that can provide this information is naturally the one who is making payment to the royalty owners. This information is not always 100% accurate or up-to-date, but it’s the best starting point available.

During the course of each tax year, taxpayers themselves are also a good source of ownership information, particularly when interests are sold, assigned, transferred, or inherited or passed on within families. Deeds and other conveyances that are filed at the County Clerk’s office are often good

documents for us to review; however, we prefer to work with ownership records directly from the party who's actually making disbursement of royalty payments (such as the operator or pipeline purchaser of record) so as to avoid taxpayer disputes about ownership as much as possible.

Pritchard & Abbott, Inc., is not responsible for directing royalty payments to the correct parties; that is a shared legal responsibility of royalty owners and the appropriate payors themselves. Pritchard & Abbott, Inc., is not a party in any way to those private transactions and does not have any specialized knowledge in this field. We highly recommend that royalty owners consult with their attorneys if they require legal assistance in this regard.

Because P&A is very concerned with the privacy rights of taxpayers, we promise strict confidentiality of any lease ownership records we obtain from third-party providers. Any type of pay lists, division orders, or other ownership information arranged by lease are also afforded strict confidentiality protection at the appraisal district office, per Attorney General Open Records Decision No. ORD-387 (see <<LINK>>) and the Texas Property Tax Code, Section 22.27(a) (see <<LINK>>). P&A is committed to ensuring this confidentiality is rigorously maintained, particularly with regards to the expanding availability of appraisal district data via internet websites.

4. Why is my property being appraised?

For ad valorem tax purposes in Texas, all property is taxable unless specifically exempted by law. Per Texas Constitution Article VIII, Section 1(a), all property must be taxed equally and uniformly. Any exemptions must be authorized [Texas Constitution Article VIII, Section 1(b)].

A mineral interest is one of the six items of taxable "real" property (as opposed to "personal" property) listed in the Texas Property Tax Code, Section 1.04(2)(F) (see <<LINK>>). A mineral interest can be, and often is, owned separately from the surface acreage with which it's associated and from which it was originally derived as part of fee simple title. Mineral interests are often fractionated (split) many times through generations of family ownership, transfer, assignment, etc. All fractional interest owner taxpayers are notified separately of their proposed value by the Appraisal District, and each owner has their own legal rights, remedies, and responsibilities regarding the property taxes associated with their particular interest.

Ad valorem taxes, also called property taxes, are local taxes that provide the largest source of money that local governments use to pay for schools, streets, roads, police, fire protection and many other services. As Oliver Wendell Holmes, Jr., said, "Taxes are the price we pay for civilization." State law establishes the process followed by local officials in determining the value for property, ensuring that values are equal and uniform, setting tax rates, and collecting taxes.

5. Is my mineral interest taxable if my well or lease didn't exist before January 1 of this tax year?

Technically speaking, the answer is yes because the interest existed before January 1 and it's not specifically exempt from taxation. Remember, the taxable property is the interest and not the well or lease itself. The Texas Property Tax Code does not say that a mineral interest is taxable only if there is income being generated by the interest.

Practically speaking, however, the value of the interest may be zero (in the eyes of the appraisal district) if no income is being generated and no income could be reasonably forecasted to materialize in the near future. Typically the appraisal district (or a valuation consulting firm acting on the appraisal district's behalf) will not attempt to place a value on a mineral interest if a well associated with that lease has not been completed before January 1. The hurdle to prove up any value above zero is too high for the appraisal district. The risk that a well may never be completed -- and therefore no income would ever exist -- is very high. Risk assignment is an important consideration in the valuation process, particularly when the most appropriate approach for valuing the property is the income approach whereas estimation of future events that may or may not happen comes

prominently into play.

6. *Why is January 1 so important?*

In Texas, all property is locally appraised “as of” January 1 of each tax year for property tax purposes, per Texas Property Tax Code, Section 23.01(a) (see <<LINK>>). This local property tax is also called an “ad valorem” tax, which is a Latin phrase meaning “according to value.”

The value of a property at any point in time is an estimate of the price for which it would sell on January 1 under an “arms length” agreement between a willing buyer and willing seller, with each party under no compulsion to buy or sell, the property having been exposed to the free market for a reasonable time, and with each party knowing all the uses and purposes of the property. This is known as “fair market value” and is statutorily defined in the Property Tax Code, Section 1.04(7) (see <<LINK>>).

Value changes over time. What may have been worth a million dollars yesterday could be worth nothing today, and vice-versa. While this is an extreme example, the point is that January 1 has been legally chosen to be the specific point in time that value is measured and determined for property tax purposes. Events that occur after this date rarely impact the current January 1 value that appraisal districts are legally required to place on the tax rolls. This practice may seem harsh to many property owners, but it’s the law and the only fair and practical way for appraisal districts to go about their business. It’s also the best way to mimic an actual transaction in the marketplace, which is essentially what appraisers are trying to do. A buyer of a property, for example, rarely has the opportunity to go back to the seller and demand some of their purchase price back in the event things don’t work out the way they intended when they originally bought the property. Similarly, a seller typically has no right to demand more money or other compensation from the buyer long after the sale has closed. An estimate of value is always specific to a single point in time, and January 1 is that point in time for property tax purposes.

The market value of a mineral interest is best determined by first forecasting a potential revenue stream to the owner of that property beginning January 1. This is true whether you’re an actual buyer or seller in the marketplace, or if you’re an appraiser working in the property tax business. Unexpected significant changes in forecasted production or price after January 1, positive or negative, will most often not be taken into account until determining fair market value for January 1 of the following year. Often by Appraisal Review Board time (May 1 to July 20), an owner will report his lease is suddenly experiencing problems either of a reservoir or mechanical nature, and will want a reduction in his current tax year valuation. Unfortunately, a reduction is not warranted for two reasons:

- a. Frequently the problem is only temporary, and the current tax year valuation and the long term production projections contained therein are valid. It is generally not good appraisal policy to place too much emphasis on just a single month’s production performance (even if the anomaly happens immediately prior to January 1, in which case the law allows us to review several months performance past January 1).
- b. By the very nature of working in the tax profession, mineral appraisers tend to hear from only those owners whose properties are experiencing problems, and not from those whose leases are doing better than projected. After all, who is going to volunteer that their tax burden might be too conservative? By treating all information that is only obtainable after January 1 as inadmissible, taxpayers as well as taxing units are assured of being treated fairly and equitably while allowing the appraisal work to be completed in a timely manner.

Because the calculation of fair market value for mineral interests involves long-term projections of future revenue, it should be expected that revisions to these forecasts will be made each January 1 the property still exists. This does not mean the previous year’s valuation was wrong, only that it was

based on all conditions known or reasonably forecasted at that time (January 1 of the previous year).

7. *Why am I just now receiving a Notice of Appraised Value for a property that began producing several years ago?*

Simply put, we didn't know your mineral interest existed. However, that does not grant an exemption of property taxes for the years the property existed. Please see Texas Property Tax Code, Section 25.21 (see <<<LINK>>>).

Discovery of taxable property is the first step of an appraisal assignment. Our goal is to always discover the newly taxable property every tax year. For mineral interests, the primary discovery tool for an appraiser is Texas Railroad Commission (RRC) permitting and production records. Unfortunately, the Railroad Commission's permitting process and production database records have been overwhelmed in recent years due to an extreme rise in drilling activity that unexpectedly materialized in a very short time period. The Railroad Commission has been slow to assign a RRC identification number to wells and leases; therefore, the appraisal district often finds out about a new well or lease only after it has been producing for many months or even years.

It is not practical or cost-effective for an appraisal district to discover newly taxable mineral interests from constant searching or monitoring of deeds being filed with the county clerk's office. The vast majority of these legal instruments speak to existing property, not newly created mineral interests.

Within certain limits, once a property has been discovered through Railroad Commission records to have existed in a taxable fashion for a previous tax year, it is mandatory for an appraisal district to "supplement" any previous tax years' records for any property that should have been on those past years' rolls but, for one reason or another, was omitted. Please see Texas Property Tax Code, Section 25.21 (see <<<LINK>>>).

Mineral interests are often "monetized" several months after the associated wells have been completed; i.e., the production, and therefore the income, does not materialize immediately after well completion. In fact, the well may have been completed in the prior calendar year but is still not producing by the current January 1. This does not mean the value of the underlying mineral interests are zero as of January 1; however, the value is certainly less than if the well was already producing and generating an income stream to the owners. This situation happens quite frequently with gas wells drilled in the Barnett Shale, for example, where the gathering pipeline is built only after several wells are completed in a localized area. In this case it is within the appraiser's discretion to analyze the projected cashflow in the appraisal and make appropriate adjustments (deductions) for periods of time where it is reasonably certain that income will not be generated to the owners. This adjustment (deduction) to value may reflect several months of projected delayed income, or perhaps even up to a full year in extreme circumstances.

8. *Do I need to tell you if I have moved?*

Yes, please let us know the address where you'd like to receive the Notice of Appraised Value which is mailed about May 1 and the tax statements which are mailed about October 1. The appraisal district is required to send correspondence, including the annual Notice of Appraised Value, to the last known address they have on record for the property owner (or the property owner's agent, if applicable), per Texas Property Tax Code, Section 1.07(b) (see <<<LINK>>>).

In addition, a Notice of Appraised Value is presumed to be delivered when the appraisal district deposits it in the mail, per Texas Property Tax Code, Section 1.07(c) (see <<<LINK>>>). Therefore, failure to receive the Notice because you moved to a different address and didn't tell the appraisal district is not typically accepted by the Appraisal Review Board or the courts as a valid reason for not properly filing a protest within the prescribed deadline or paying your taxes on time.

9. *Do I need to tell you if I have sold this property recently?*

Yes, please let us know who you sold the property to, including the new owner's current mailing address – even if you've filed this information with the County Clerk as part of the deed transfer process. As a practical matter appraisal districts are not legally obligated and do not necessarily scour the deed records on any regular basis for evidence of property ownership changes relating to mineral interests.

More importantly, the parties involved in the transaction should let the operator of the lease or the oil and gas gatherer pipelines know (or whoever is making disbursement of monies to the royalty interest owners). In some cases the appraisal district may require that a change of ownership be first reflected in the official payor records of the pipeline or operator before this change of ownership will be made in the appraisal district's records, so as to avoid taxpayer disputes about ownership as much as possible.

10. *Do I still owe the current year property taxes if I sold my interest this year?*

Legally speaking, the owner of real property on January 1 is responsible for that year's property taxes. However, most transactions of real property include provisions at the time of closing for prorating the current year's property taxes (either a known or estimated amount) based on the amount of time in that year each party (buyer and seller) owned the property. For example, if a property is sold on April 1, then the seller would make an allowance to the buyer of one-fourth (3 months out of 12) of the property taxes for that year. To be more precise with this proration, the current year taxes between buyer and seller will probably be based on days of ownership in the year, not months.

The Notice of Appraised Value and the tax statements for the year in which the property was sold can be sent to either the buyer or seller, depending on each appraisal district's policy. Some appraisal districts prefer to keep all name and addresses for any particular tax year corresponding to the actual legal owner of record of the property on January 1. Other appraisal districts are more than happy to have their assessment roll records reflect whichever party (buyer or seller) wishes to ultimately pay the taxes for that year to the collecting entity.

The buyer of real property, which includes mineral interests, has a legal right to protest a proposed value for that tax year to the Appraisal Review Board just like the seller, provided all appropriate deadlines are met.

11. *What documents do I need to send the appraisal district to correct their ownership records?*

This varies by appraisal district, so the best course of action is probably to just ask the appraisal district exactly what documents they would prefer to see that officially support and document the requested change. Some appraisal districts will be fine with fewer documents, while others will require greater levels of proof.

12. *Do I need to contact the operator of the well or lease if I sell my property?*

Either the buyer or seller (or both) of a mineral interest should contact the operator of the lease or the oil and gas gatherer pipelines (whoever is making disbursement of monies to the royalty interest owners). This advice is especially true for buyers who most likely wish to start receiving the income (if any) being generated by the sale of oil or gas from the lease. In some cases the appraisal district may require that a change of ownership be first reflected in the official payor records of the pipeline or operator before this change of ownership will be made in the appraisal district's records, so as to avoid taxpayer disputes about ownership as much as possible.

13. How can I find out who the operator of my well or lease is?

There are several ways you can find out or know who the operator of your lease is. Perhaps the most direct way is that the operator name is usually one of the items prominently displayed on the royalty checks you receive. In fact, the checks may actually be coming from the operator itself.

Another way is look at the description given on a Notice of Appraised Value sent by the appraisal district. This description typically shows the operator name as well as the lease name and a legal description of the location of the lease (which by the way does not correspond to any land you may own which would be a totally separate appraisal and assessment for ad valorem tax purposes). This description information also shows the fractional interest that you own in the lease, typically in decimal form (such as 0.000125 RI, or royalty interest). This kind of lease and ownership identification information is also typically repeated on any tax statements you receive later in the year.

14. How can I find out who is supposed to be paying me for the oil and gas produced from my property?

Typically the party responsible for disbursement of monies to the royalty owners will be either the operator of the lease or a pipeline gatherer or purchaser. While the Texas Railroad Commission (RRC) is not charged with monitoring payments to royalty owners (because that's a legal matter per lease agreement between private parties), their records do reflect the current operator and oil and gas pipeline gatherers for each producing lease. The RRC's website (www.rrc.state.tx.us) is an excellent resource for finding this information as well as every operator and pipeline's mailing address and phone number.

15. Can I find out how much production this well or lease is making (barrels of oil, mcf of gas)?

The Texas Railroad Commission (RRC) maintains voluminous records regarding the reported production and disposition for all oil and gas produced from wells in the State. Additionally, the Commission also maintains records regarding the permitting of wells. If you have internet access you can obtain all reported production information from January 1993 to present and any online permitting records at the Commission's website (their home page is www.rrc.state.tx.us)

There is no charge for access to these records. If you require production records from earlier than January 1993, or if you require historical permitting records filed for a well that are not available on-line, you will need to contact the Commission's Central Records department at (512) 463-6882. For a small charge you may obtain copies of any records maintained in the Central records department.

To obtain production information on-line, you will need the RRC Identification Number for the well, a five digit number for oil wells or a six digit number for gas wells. This identification number is required to be posted at the entrance to the property where the well is located. It is also required to be clearly stated on the payment stubs that royalty owners receive from either the operator or the pipeline gatherer/purchaser. This identification information may not be the same identification number used on any payment stub or other documentation received by a royalty interest owner.

If you do not have the RRC well identification information, you may require further assistance to identify the wells to access the information available through the Commission's on-line database system. To access production information, start at the home page, go to the Data & Statistics/Online Research (Queries) and click on production data query (the "PDQ" link) to get access to the Commission's on-line database for these records.

16. How can I find out the Railroad Commission Identification Number (RRC#) for my well/lease?

The Railroad Commission's official identification, or lease, number (also seen as "RRC#" on many documents) is a five digit number for oil leases (which may have one or more wells) or a six digit

number for individual gas wells. This identification number is required to be posted at the entrance to the property where the well is located. It should also be shown on the pay stubs of the checks you receive from the operator or pipeline gatherer (whoever is making the payment).

The RRC# may be different than other identification numbers used by the operator or pipeline gatherer/purchaser. It may also be different than an identification number used by the appraisal district.

For Pritchard & Abbott, Inc., clients, the appraisal districts records do reflect the RRC# that corresponds to each appraisal of an oil or gas mineral interest, along with the RRC District for which this RRC# is aligned. To look up production records on the RRC's website, you basically need three pieces of related identification information: the RRC District, whether the lease is oil or gas, and the RRC#. You can find all three of these pieces of information on our discounted cashflow appraisals of your property (see <<<LINK>>>).

17. How was my property value determined?

Pritchard & Abbott, Inc., (P&A) uses the Income Approach, specifically discounted cashflow methodology, to determine the fair market value (FMV) of mineral interests. The Income Approach utilizes the Principle of Anticipation to arrive at FMV. This approach has been developed to a high degree of sophistication for evaluation and investment procedures with all classes of properties. In general it is any method which estimates the future net revenue (FNR) from a property, and then converts this FNR to present worth.

These methods seek the amount an investor would be willing to pay (i.e., the purchase price in an actual transaction) for the right to receive all future income the property is expected to generate. FMV does not exactly equal the projected future net income; instead, the buyer will always take into account the risk that this future income might not materialize, plus all the available alternative uses to which he could put this purchase price. In other words, a potential buyer may walk away from buying a mineral interest if he thinks his money could be better spent on something else.

This method of appraising mineral interests enjoys the benefits of not only being the most accurate but also the most efficient for ad valorem tax purposes once all the appropriate data has been accumulated. However, it is only as accurate as the engineering estimates of future production, price, and expenses of operation. The fact that most mineral properties are not actually for sale, or even being considered for sale, by the current owner does not matter to the appraisal district. The relevant fact is that every property CAN be sold, and therefore the law requires the appraisal district to appraise the property for its most probable selling price as of January 1 taking into account both the buyer's and seller's perspective.

For each lease, future net revenue of working interest (WI) owners and royalty interest (RI) owners is estimated for the lease's remaining economic life as of January 1 of the current tax year. Remaining economic life is unknown until the appraisal calculates it depending upon the relationship of income to expenses. WI owners pay the lease operating expenses in exchange for the majority (typically 70-100%) of the gross revenue from a lease's oil and gas sales. RI owners receive the remaining percentage of the gross income but without any operating expense to bear. In this fashion, one consolidated WI value and one consolidated RI value is calculated for each lease. If the total WI or total RI for the lease is shared by more than one owner (which is the most common case for a lease's royalty interest), an individual's value is calculated by multiplying the total WI or RI value by the proportional fraction of the total WI or RI that the individual owns.

The projection of future net revenue for each lease depends on three parameters:

1. Future Oil and Gas Production. Producing rates for future years are determined primarily by analyzing historical production with decline curves (plots of production rate versus time).

Comparison with similar wells in the same field or producing zone can also give a reliable indication of future performance of the lease in question. Oil and gas industry engineers and other tax representatives often work with P&A appraisers before agreeing on the appropriate future production profile for each lease.

2. Future Oil and Gas Prices. Since tax year 1994, appraisals of oil and gas interests for ad valorem tax purposes have been required by law to use a forward-looking price scenario as laid out in Property Tax Code Section 23.175 (see <<LINK>>). This particular law has been refined and amended several times over its history. Despite the various revisions in this law, a constant element has been that the previous year's average price for the property is the most appropriate starting point for determination of fair market value as of January 1.

For uniformity purposes P&A calculates a "reference" previous year average WTI (West Texas Intermediate) price through analysis of previous year posted bulletin prices from major and regional purchasers of oil. Adjustments are then provided for gravity and quality of oil (crude type). Many different crude oil types are found in Texas, such as West Texas Sour which historically has sold for several dollars less per barrel than WTI. Bonus payments above the posted price are included where applicable.

Natural gas is sold on a more contractual basis to a single purchaser specific to an individual well and cannot be stored on the lease like oil which can wait for a competitive market price between several potential purchasers. Therefore we reference Texas Comptroller revenue and price data by well (RRC#) that producers and purchasers must file with the state for severance tax purposes. Reasonable deductions are provided in our appraisals, where applicable, for charges related to transportation, processing, marketing, etc.

3. Future Operating Expenses. These are derived from studying detailed reports from operators and other working interest owners that list actual costs being incurred. For those leases where actual expenses are not provided, reasonable averages are used as developed through the years based on depth of well, type of well, and producing area or reservoir. Capital (non-recurring) expenses, such as a workover to repair a tubing leak, are not allowed as typical direct operating costs except when necessary for the production to continue at its projected decline rate. Royalty interest owners do not pay any portion of the operating expenses, therefore their income can never go negative. However, the value of a royalty interest is heavily dependent upon how long a lease remains profitable to the working interest owners to operate.

For working and royalty interest owners, future production rates are multiplied by corresponding future net (after tax) prices to calculate future gross revenues. Operating expenses are then subtracted from the working interest owners' future gross revenues to arrive at their future net revenues. For royalty owners, gross revenue equals net revenue because they do not bear any operating expense burden. When lease operating expenses are projected to become greater than the working interest owners' gross income, the lease's economic limit is reached and projections of future revenue stop at that point for all owners. The total projected production to this calculated economic limit becomes the lease's estimated reserves as of January 1. THE ESTIMATED LIFE AND RESERVES OF EACH LEASE CAN, AND MOST OFTEN DO, CHANGE WITH THE FOLLOWING YEAR'S JANUARY 1 APPRAISAL AS NEW PRICE, PRODUCTION, AND EXPENSE FORECASTS ARE MADE EACH TAX YEAR.

The total projection of future net revenue is not FMV - yet. This future net revenue must first be reduced, or discounted, for two reasons. The first reason is to account for the time cost of money. A sum of money to be received in the future is not as valuable as that same sum of money available to earn interest right now. The second reason future revenue is discounted is to account for various forms of risk. There always exists the possibility that these future revenues will not materialize as projected. For example, a well's production can suddenly turn to water, or the price might collapse; either event can result in the lease being uneconomic to operate. P&A assigns different risk levels to different leases depending upon many variables such as depth of well, number of wells on the lease,

amount of water production, comparability to similar wells, etc. The total of each owner's discounted future net revenue becomes Fair Market Value, the taxable value.

18. Wouldn't it be easier to just use last year's income as the taxable value?

Of course it would be easy to reference last year's income by itself as the value for property tax purposes, but it wouldn't be right or legal (i.e., constitutional) to do so. The value of a property at any point in time is an estimate of the price for which it would sell on January 1 under an "arms length" agreement between a willing buyer and willing seller, with each party under no compulsion to buy or sell, the property having been exposed to the free market for a reasonable time, and with each party knowing all the uses and purposes of the property. This is known as "fair market value" and is statutorily defined in the Property Tax Code, Section 1.04(7) (see <<LINK>>).

In Texas, all property is locally appraised "as of" January 1 of each tax year for property tax purposes, per Texas Property Tax Code, Section 23.01(a) (see <<LINK>>). This local property tax is also called an "ad valorem" tax, which is a Latin phrase meaning "according to value." Ad valorem does not mean "according to last year's income."

When appraising an income producing property, such as a mineral interest, last year's income can indeed be informative to the appraiser. However, it may not be all that meaningful relative to all potential future income that is always the basis of value at any point in time to either a buyer or seller of that property. For example, a well may have produced only a short time the previous year (say, they may be new or maybe had temporary mechanical problems). This situation will naturally generate less income for that year than a buyer or seller would consider "normal" for future operations. On the flip side of that coin, a well could have been plugged and abandoned on December 31, immediately prior to January 1 of current tax year. For property tax purposes, the appraisal district will most likely assign a fair market value of zero for the well's associated mineral interests, even though the prior year income may have been substantial.

Using last year's income as the value for property tax purposes would essentially be transforming a property tax into an income tax. There is no personal income tax in Texas, at least not at the current time. The Texas legislature would have to create a statutory scheme for an income tax only after it was approved by the voters in a constitutional election.

19. What does "fair market value" mean?

There are many definitions of the word "value" along with the many variations of this word (fair value, market value, cash value, salvage value, liquidation value, residual value, street value, full value, face value, book value, etc.). A classical definition of "fair market value" is: "...the amount a willing buyer will pay a willing seller with the property or interest exposed to market for a reasonable period, neither the buyer nor the seller under any compulsion to buy or sell, both being competent and having reasonable knowledge of the facts." Per the Texas Property Tax Code, Section 1.04(7) (see <<<LINK>>>), fair market value is defined as "...the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

1. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
2. 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
3. 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."

This is the legal definition that appraisal districts are required to use in their appraisals of property for

ad valorem tax purposes in Texas. Per Texas Property Tax Code, Section 23.01(b) (see <<<LINK>>>), the market value of property shall be determined by the application of generally accepted appraisal methods and techniques. If the appraisal district determines the appraised value of a property using mass appraisal standards, the mass appraisal standards must comply with the Uniform Standards of Professional Appraisal Practice (USPAP). The same or similar appraisal methods and techniques shall be used in appraising the same or similar kinds of property. However, each property shall be appraised based upon the individual characteristics that affect the property's market value, and all available evidence that is specific to the value of the property shall be taken into account in determining the property's market value.

20. What does "ad valorem" mean?

The term "ad valorem" is a Latin phrase that means "according to value." An ad valorem tax is the same thing as a property tax; the two terms are used interchangeably. Property taxes are based on the value of the property as of a specific point in time, typically January 1 of the current year. Property taxes are a local tax that provides the largest source of revenue that local governments use to pay for schools, streets, roads, police, fire protection and many other local services. As Oliver Wendell Holmes, Jr., said, "Taxes are the price we pay for civilization."

The specific amount of taxes to be paid in any particular tax year are determined by each local taxing entity (say, a school district) through their budget adoption process. The appraisal district does not set the tax rate or the entity's budget! In Texas the tax rate is typically stated in terms of a certain amount of tax per every \$100 of value. For example, if a property value is \$50,000 as certified by the appraisal district, and the local governmental entity adopts a tax rate of \$0.55 (fifty-five cents) for every \$100 of value, then the tax amount due is \$275.00 (\$50,000 divided by 100, then multiplied by 0.55).

21. What does "USPAP" mean?

The acronym "USPAP" stands for Uniform Standards of Professional Appraisal Practice as promulgated by The Appraisal Foundation, a not-for-profit organization dedicated to the advancement of professional valuation established by the appraisal profession in the United States in 1987. The Appraisal Foundation is authorized by Congress as the source of appraisal standards and appraiser qualifications. The Appraisal Standards Board (ASB) of The Appraisal Foundation develops, interprets, and amends USPAP on behalf of appraisers and users of appraisal services. State and federal authorities enforce the content of USPAP.

Since its inception, The Appraisal Foundation has worked to foster professionalism in appraising by:

1. establishing, improving, and promoting the Uniform Standards of Professional Appraisal Practice (USPAP);
2. establishing educational experience and examination qualification criteria for the licensing, certification and recertification of real property appraisers;
3. establishing educational and experience qualification criteria for other valuation disciplines;
4. disseminating information on USPAP and the Appraiser Qualification Criteria to the appraisal profession, state and federal government agencies, users of appraisal services, related industries and industry groups, and the general public and;
5. sponsoring appropriate activities relating to standards, qualifications and issues of importance to appraisers and users of appraisal services.

Pritchard & Abbott, Inc., (P&A), a privately held company engaged primarily, but not wholly, in the ad valorem tax valuation industry endorses Uniform Standards of Professional Appraisal Practice (USPAP) as the basis for the production of sound appraisals. Insofar as the statutory requirement to appraise groups (or a "universe") of real and personal property within an established period of time using standardized procedures--and subjecting the resulting appraisals to statistical measures--is the

definition of mass appraisal, P&A subscribes to USPAP Standard 6 (Mass Appraisal, Development and Reporting) whenever applicable in the development and defense of values. When circumstances clearly dictate the use of single property appraisal procedures, P&A adheres to the spirit and intent of the remaining USPAP Standards within all appropriate, practical, and/or contractual limitations or specifications.

The majority of property types that P&A typically appraises for ad valorem tax purposes are categorized as unique, complex, and or "special purpose" properties (mineral interests, industrial, utility, and related personal property). These categories of properties do not normally provide sufficient market data of reliable quality and/or quantity to support the rigorous use of all USPAP-prescribed mass appraisal mandates (Standard 6), particularly with regards to some, but not all, of the model calibration and statistical performance testing confines. However, P&A does employ elements of mass appraisal techniques with regards to the definition and identification of property characteristics and model specification and application.

Please reference www.appraisalfoundation.org for further information about USPAP. In addition, the appraisal district has a report from Pritchard & Abbott, Inc., that details how our appraisals follow USPAP to the fullest extent possible. This report is open for inspection by all taxpayers upon request.

22. Why did my property value change from last year?

In Texas, all property is locally appraised "as of" January 1 each tax year for property tax purposes, per Texas Property Tax Code, Section 23.01(a) (see <<LINK>>). Value changes over time, which necessitates a periodic reappraisal. The valuation of mineral interests is more volatile than real estate because the value at any point in time is heavily dependent on the income potential of the interest. This potential is in constant flux with the underlying uncertainty of future oil and gas production coupled with the fluctuating oil and gas prices to be received. What may have been worth a million dollars on January 1 of the previous calendar year could be worth nothing by the current year January 1, and vice-versa.

Because the calculation of fair market value of mineral interests involves long-term projections of future revenue, it should be expected that revisions to these forecasts will be made each January 1 the property still exists. This does not mean the previous year's valuation was wrong, only that it was based on all conditions known at that time (January 1 of the previous year).

THE ESTIMATED LIFE AND RESERVES OF EACH LEASE CAN, AND MOST OFTEN DO, CHANGE WITH THE FOLLOWING YEAR'S JANUARY 1 APPRAISAL AS NEW PRODUCTION, PRICE, AND EXPENSE FORECASTS ARE MADE EACH TAX YEAR.

23. Why did my property value increase from last year?

In ad valorem taxation, the fair market value of a property is determined as of January 1 of each year. For mineral interests, the value is determined by use of the Income Approach. This method estimates future net (after-tax) revenue to be received by the owners of the mineral interests, discounted to present worth to account for the time cost of money and also for the risk inherent in oil and gas operations.

This calculation of future net revenue involves engineering-oriented projections of the main parameters of the cashflow appraisal: future production, prices, and expenses. Working interest owners pay for all costs of operating the lease(s). Royalty owners bear no expense other than severance and ad valorem taxes on their gross income. All these projections are reviewed annually as data through January 1 of the current tax year becomes available. An appraiser has the fiduciary responsibility to update and/or change any parameter from the previous tax year's appraisal.

THE ESTIMATED LIFE AND RESERVES OF EACH LEASE CAN, AND MOST OFTEN DO, CHANGE WITH THE

FOLLOWING YEAR'S JANUARY 1 APPRAISAL AS NEW PRODUCTION, PRICE, AND EXPENSE FORECASTS ARE MADE EACH TAX YEAR.

Possible reasons why a mineral interest value can increase from the previous year are listed below:

1. The oil and/or gas price projection is higher than for January 1 of the previous tax year, resulting in higher net revenue projections than in previous appraisals.
2. The projection of future production decline has been updated to a less conservative direction; for example, from 25% to 15% annual decline. This change was warranted because production has not declined as much as was projected in our previous appraisal.
3. The expense to operate the well(s) has been adjusted downwards based on documentation from the operator or comparison to similar wells in the area. This has resulted in a longer economic life than that projected with last year's appraisal.
4. Your decimal interest ownership has been increased based on a new division order received from the operator or pipeline purchaser.
5. A new well was completed during the previous year, or an existing well underwent remedial repair which resulted in a higher beginning production rate in this year's appraisal. This increased production should also result in more revenue for the current tax year.
6. Less risk (discount) has been attributed to the lease's production than in last year's appraisal.

Because the calculation of fair market value of mineral interests involves long-term projections of future revenue, it should be expected that revisions to these forecasts will be made each January 1 the property still exists. This does not mean the previous year's valuation was wrong, only that it was based on all conditions known at that time (January 1 of the previous year).

If you have any questions, please contact the respective appraiser in one of our district offices for copies of the discounted cashflow appraisals that pertain to your particular mineral interest(s).

24. How can my property value be more than last year's income?

A mineral interest typically produces income payable to the owner of the interest for many years. If a well or lease is still producing as of January 1, the market value of this interest will always reflect the future income potential, and not just the income received in the prior year or any one-year period. In most cases this income potential reflects a forecast for the producing life of the well or lease to last several more years as of January 1, perhaps even twenty (20) or more. But for marginal or high-cost wells, sometimes the production (and the associated income) is forecasted to last only one more year or less.

A "payout" is one indicator, or test of reasonableness, of a proposed value. The theory of a payout is that at any point in time a willing purchaser will offer a willing seller several times last year's income, in exchange for the right to receive all future income. Properties with very long projected economic lives can be expected to command larger payouts: say, five (5) to seven (7) years or longer. Conversely, marginal properties or those experiencing substantial production decline will have much smaller payouts, perhaps even less than one year. A typical payout for mineral interests falls in the three (3) to five (5) year range, assuming stable production and price levels (and that's a huge assumption in recent times).

Payouts can also be described in monthly terms. In that case, the formula above would use a typical recent monthly income instead of any year's income. Solicitations to buy mineral interests are often made on this basis – for example, 36 months of last month's income would be the offered purchase

price or proposed value (last month's income multiplied by 36).

Values for mineral interests (or any income producing property) for any particular tax year are all about the future as of January 1 of that tax year, because that is the way buyers and sellers of these properties view them (as investment properties). Each new tax year brings a completely new "vision" of what the future holds. This doesn't make the previous values wrong; it only shows that the outlook can change over time, sometimes dramatically, either up or down. We appraise mineral interests each year to the best of our ability, with the latest information available and with the price forecast provided to us by Texas Property Tax Code Section 23.175 (see <<LINK>>).

25. What does "payout" mean?

A "payout" is one indicator, or test of reasonableness, of a proposed value. The theory of a payout is that at any point in time a willing purchaser will offer a willing seller several times last year's income, in exchange for the right to receive all future income. Properties with very long projected economic lives can be expected to command larger payouts on the open market: say, five (5) to seven (7) years. Conversely, marginal properties or those experiencing substantial production decline will have much smaller payouts, perhaps even less than one year. A typical payout for mineral interests falls in the three (3) to five (5) year range, although this can certainly vary from property to property.

Payouts can also be described in monthly terms. In that case, the formula above would use a typical recent monthly income instead of any year's income. Solicitations to buy mineral interests are often made on this basis - for example, 36 months of last month's income would be the offered purchase price or proposed value (last month's income multiplied by 36). Unsolicited offers are typically overly conservative so as to guarantee the buyer a more than reasonable profit. As such, they do not represent fair market value. Conversely, actual arms-length sales are usually representative of fair market value.

Although we recognize that many offers are made to royalty interest owners on the basis of a stated payout (say, 36 to 60 times last month's income), we cannot assign "blanket" values on this basis alone. This would be like assuming every house is worth \$100 per square foot, which is obviously not the case even for houses in the same neighborhood because of specific construction techniques and maintenance history. Some houses are worth more than \$100 per square foot, some less. In the same vein, every lease is different in its production and expense characteristics, even in the same producing field or reservoir, so that a "standard" payout does not exist. The discounted cashflow methodology we use to determine values for individual mineral interests inherently recognizes these types of differences between properties, both positive and negative, so that every taxpayer can be assured we are determining fair market value taking into account each property's unique characteristics as mandated by Property Tax Code, Section 23.01(b) (see <<LINK>>).

26. What does "economic limit" mean?

The economic limit of a well or lease is related to the lease's profitability to the working interest owners (usually the lease operator). The working interest owners pay for the day-to-day operating costs of the well or lease. Royalty interest owners don't typically pay for any costs of operation, although they may incur monthly charges for gas processing, treating, marketing, etc., per contractual lease terms. As long as the working interest owners' revenue exceeds their expense, it's likely they will continue to operate the lease whereas revenues will flow to all the various owners. However, if expenses start to continually exceed the working interest owners' revenue, the lease is at its "economic limit" whereas it cannot be operated profitably any longer. A discounted cashflow appraisal will recognize and actually forecast this particular condition in some future year because the appraisal typically calls for production to decline and expenses to escalate over time. The appraisal's projections of income for all the various owners stop when the economic limit is reached in the year-by-year calculations.

Different leases have different economic limits due to the property's individual producing and expense characteristics. Simply put, some leases are more profitable than others and will last longer into the future as of January 1. The discounted cashflow methodology we use to determine values for individual mineral interests inherently recognizes these types of differences between properties, both positive and negative, so that every taxpayer can be assured we are determining fair market value taking into account each property's unique characteristics as mandated by Property Tax Code, Section 23.01(b) (see <<LINK>>).

27. How much longer is my lease going to produce?

Obviously nobody knows with certainty what's going to happen in the future. And that's probably doubly true when the subject of speculation is related to the volatile oil and gas business. However, mineral interests are an income producing property that requires an income approach be used to estimate fair market value as of January 1.

The income approach demands an educated guess from appraisers as to what the future income will be from ownership of the property (i.e., the mineral interest). The appraisal district's discounted cashflow appraisal shows how many years the appraisal district forecasts the net income after expenses to be positive for the working interest owners (typically the operator). This future time period of projected profitability, also called the economic limit, is the appraisal district's best educated guess as to how much longer the lease is going to produce as of January 1.

28. How can you forecast what's going to happen in the future on my property?

Obviously nobody knows with certainty what's going to happen in the future. And that's probably doubly true when the subject of speculation is related to the volatile oil and gas business. However, mineral interests are an income producing property that requires an income approach be used to estimate fair market value as of January 1.

The income approach demands an educated guess from appraisers as to what the future income will be from ownership of the property (i.e., the mineral interest). This forecasting of future events is essentially what buyers and sellers of this type of property are doing in actual ownership transactions between parties. Naturally buyers are prone to making more conservative guesses than sellers. But for actual transactions to take place, buyers and sellers must eventually effectively agree on what the future holds.

In the actual marketplace, this potential future income performance is the basis of fair market value at any point in time. Accordingly, an appraisal district's valuation model for ad valorem (property) tax purposes explicitly considers the income that will be generated by the mineral interest going forward as of January 1. Past income (prior to January 1) is good to know, but it's not what buyers of mineral interests are most concerned about.

Likewise, past income is not the appraisal district's main concern either in their appraisal work. Fortunately, a tried-and-true methodology exists for making reasonable estimates of fair market value using projections of future income. This methodology is called discounted cashflow (a technique of the income approach to value); however, it is only as accurate as the underlying forecasts of future production, future price, and future expenses of operation. Appraisal districts make every effort to be fair and balanced between buyers' and sellers' perspectives (willing buyer, willing seller, under arm's length negotiation) when making these forecasts.

29. What is a "decline curve?"

Decline curve analysis is a graphical procedure used for analyzing production rates for their existing trends. This analysis is then used for forecasting future performance of oil and gas wells. A curve fit of past production performance is done using certain standard curves. In typical practice the historical

flow rate, – say, every month’s production for several years as reported to the Texas Railroad Commission by the operator – is plotted against time. This curve fit is then extrapolated to predict potential future performance (for an example, please see <<LINK>>).

This potential future performance is the basis of fair market value at any point in time. Accordingly, an appraisal district’s valuation model for ad valorem (property) tax purposes explicitly considers the income that will be generated by the mineral interest going forward as of January 1. Past income (prior to January 1) is interesting and often informative to note, but it is not what buyers of mineral interests are most concerned about. An ad valorem tax is based on the value of the property as of January 1. Although the income approach is the preferred technique for appraising an income producing property, an ad valorem tax is most definitely not an income tax.

Decline curve analysis is a basic tool for estimating recoverable reserves, the amount of remaining hydrocarbons that can (or should) still be produced as of a certain point in time (January 1 for ad valorem tax purposes). Conventional or basic decline curve analysis is best used only when the production history is long enough that a trend can be identified.

Decline curve analysis has been around for many decades and therefore has an extensive body of related science and literature. This subject is one of many that are studied and practiced by petroleum engineers. Though very technical in nature, modern software such as Landmark’s ARIES (see <<LINK>>) has made it possible for non-engineers, with the proper training, to become quite proficient in traditional basic decline curve analysis. For a more detailed explanation of traditional decline curve analysis, please see <<LINK>>.

Decline curve analysis is based on empirical observations of production decline. Three types of decline curves have been identified: exponential, hyperbolic, and harmonic. Exponential decline rates exhibit a constant rate of production loss over time: say, 10% decline in average daily production rate every year. In contrast, hyperbolic decline rates exhibit a decreasing rate of loss of production over time; say, 50% decline for the first year of production, 30% decline for the second year, 20% decline for the third year, and so on. It is often characterized by a nearly “flattening” of the decline rate later in the life of the well or lease, although at a relatively small production rate. Harmonic decline rates are a specialized form of hyperbolic rates whereas the change in production rate from steeply declining to flatter decline is fairly rapid.

It is implicitly assumed, when using decline curve analysis, the factors causing the historical decline continue unchanged during the forecast period. These factors include both reservoir conditions and operating conditions.

Good engineering practice demands that, whenever possible, decline curve analysis should be reconciled with other indicators of reserves, such as volumetric calculations, material balance, and recovery factors. However, this type of specialized reservoir knowledge is proprietary to the operator of the lease and therefore is not typically available for the appraisal district’s analysis which is most often limited to traditional decline curve analysis techniques. Appraisal districts welcome any and all information that can help the accuracy of its forecasted production rates and corresponding estimates of fair market value.

30. Do you get information from the operator when appraising my property? How does this affect me?

Yes, the operator (or the operator’s agent) often provides information about the lease to us. They are usually the most direct and accurate source of appropriate operating expense level for our discounted cashflow appraisals. While operators are not explicitly or legally representing you in your ad valorem tax matters with the appraisal district, the information they provide does affect common elements of the appraisal applicable to all owners under the lease. These common elements are production forecast, price forecast, economic limit (how much longer the lease is projected to remain profitable),

and risk profile.

31. What price for oil and/or gas did you use in the appraisal of my property?

Since tax year 1994, appraisals of oil and gas interests for ad valorem tax purposes have been required by law to use a forward-looking price scenario as laid out in Property Tax Code Section 23.175 (see <<LINK>>). This particular law has been refined and amended several times over its history. Despite the various revisions in this law, a constant element has been that the previous year's average price for the property is the most appropriate starting point for determination of a reasonable fair market value as of January 1.

For uniformity purposes P&A calculates a "reference" previous year average WTI (West Texas Intermediate) price through analysis of previous year posted bulletin prices from major and regional purchasers of oil. Adjustments are then provided for gravity and quality of oil (crude type). Many different crude oil types are found in Texas, such as West Texas Sour which historically has sold for several dollars less per barrel than WTI. Bonus payments above the posted price are included where applicable.

Natural gas is sold on a more contractual basis to a single purchaser specific to an individual well and cannot be stored on the lease like oil which can wait for a competitive market price between several potential purchasers. Therefore we reference Texas Comptroller revenue and price data by well (RRC#) that producers and purchasers must file with the state for severance tax purposes to ascertain the existence and level of production costs that are being passed on to the owners under a gas well lease.

32. Does my property value take into account the taxes I pay?

Yes, our discounted cashflow appraisals do make an allowance (i.e., a deduction of value) for the local ad valorem tax burden that every oil and gas mineral interest owner in Texas must incur by law. Currently our appraisals allow a 5.0% burden that is mathematically deducted from the projected gross revenue stream. It is not possible or practicable to program an exact rate corresponding to each specific property because tax rates are not set by the local taxing entities until after each entity's total tax base has been established when all values are certified in late July. Plus, these adopted tax rates tend to change every year as the entity's tax base and budget needs fluctuate.

Our appraisals also account for the state severance tax burden being incurred by the owners. These rates are statutory at 4.6% of oil gross wellhead revenue and 7.5% of natural gas wellhead revenue. Currently the state of Texas offers various severance tax incentives for oil and gas operators that lower the severance tax burden to all owners under affected properties. When an incentive tax rate is known to be in place for any particular property, our appraisals correspondingly capture the incremental market value inherent in these lowered severance tax burdens.

33. Does my value take into account the marketing, treating, and other production costs that are being deducted from my income?

Yes, reasonable deductions are provided in our appraisals, where applicable, for charges related to transportation, processing, marketing, etc. Natural gas is sold on a more contractual basis to a single purchaser specific to an individual well and cannot be stored on the lease like oil which can wait for a competitive market price between several potential purchasers. Therefore we reference Texas Comptroller revenue and price data by well (RRC#) that producers and purchasers must file with the state for severance tax purposes to ascertain the existence and level of production costs that are being passed on to the owners under a gas well lease.

34. What discount rate is appropriate for conversion of projected future revenue to current fair market value?

The future net revenue projected in a discounted cashflow appraisal must be reduced, or discounted, to arrive at a reasonable conclusion of fair market value. This process of discounting is done for two essential reasons.

The first reason is to account for the time cost of money. A sum of money to be received in the future is not as valuable as that same sum of money available to earn interest right now. Therefore, the process of discounting can be thought of as the reverse of compounding (earning interest on your investment).

The second reason future revenue is discounted is to account for various forms of risk. There always exists the possibility that these future revenues will not materialize as projected. For example, a well's production can suddenly turn to water, or the price might collapse; either event can result in the lease quickly becoming uneconomic to operate. While it's obvious that lease economics is quite important to the working interest owners (because they're the ones who sustain all the costs of operation), the value of a royalty interest is directly tied to whether the working interest owners are making any money or not. If the lease is not profitable for the working interest owners, the future life of the well or lease is very much in question at that point whereas any future net income to all the owners cannot be reliably projected to continue.

Many types of risk exist in the oil and gas business, from both a systemic or global nature and specific to particular oil and gas wells and leases. P&A assigns different risk levels to different leases depending upon many variables such as depth of well, number of wells on the lease, amount of water production, comparability to similar wells, etc. These factors roughly correspond with the discounting manual published by the Property Tax Assistance Division in accordance with Property Tax Code Section 23.175 (see <<LINK>>).

The bottom line is that a higher discount rate is appropriate for use in a discounted cashflow appraisal when the cost of money has increased and/or when the risk profile is heightened. Correspondingly, a lower discount rate is appropriate for use in a discounted cashflow appraisal when the cost of money has declined and/or when the risk profile is minimized.

35. What happens if the appraisal's income projections don't come true?

The appraisal district's valuation is always representative of January 1 of the current tax year. As such, these valuations are done "from scratch" every tax year whereas the income projections will be adjusted at that time to reflect the current market conditions (new price environment, etc.).

There is no legal authority or mechanism in place for either refunds or supplemental valuations if the income has not materialized as projected in last year's appraisal. That is the nature of a valuation which is in essence an opinion which can change over time. This mirrors the real world where buyers and sellers do not typically have the right to go back after a purchase/sale of a property and demand additional compensation from the other party if the basis of the purchase/sale price in hindsight doesn't appear to have worked out as intended.

When using the income approach to value, appraisers make every effort to correctly and accurately project reasonable future net incomes attributable to ownership of an income-producing property. That said, nobody can predict exactly what the future holds. Appraisers monitor market conditions to the best of their ability in order to analyze buyers' and sellers' perspectives as of January 1 of the current tax year. But the fact is that sometimes actual income, at least in a short-term sense, might turn out to be quite different than what was projected, either higher or lower. This fact does not

invalidate the appraiser's opinion and valuation at the time it was made.

36. What should I do if I'm not receiving any income from this property?

If you are an actual and provable mineral interest owner under a producing well or lease, you should contact the operator and/or the pipeline purchaser/gatherer to inquire about the payments you should be receiving but are not for some reason (they don't have the current mailing address, or they're not aware of a sale of the interest to a new owner, etc.). Those parties will be able to help you with this problem. The appraisal district is not responsible for making sure payments are being made to mineral interest owners.

Typically the party responsible for disbursement of monies to the royalty owners will be either the operator of the lease or a pipeline gatherer or purchaser. While the Texas Railroad Commission (RRC) is not charged with monitoring payments to royalty owners (because that's a legal matter per lease agreement between private parties), their records do reflect the current operator and oil and gas pipeline gatherers for each producing lease. The RRC's website (www.rrc.state.tx.us) is an excellent resource for finding this information as well as every operator and pipeline's mailing address and phone number.

The Notice of Appraised Value sent to you by the appraisal district also shows the operator name for each mineral interest listed on the Notice. The operator name can be found on the description of the property. This description typically shows the operator name as well as the lease name and a legal description of the location of the lease (which by the way does not correspond to any land you may own which would be a totally separate appraisal and assessment for ad valorem tax purposes). This description information also shows the fractional interest that you own in the lease, typically in decimal form (such as 0.000125 RI, or royalty interest). This kind of lease and ownership identification information is also typically repeated on any tax statements you receive later in the year.

37. My income is really going down, shouldn't the market value of my property go down as much?

While mineral interests are appraised with an income approach to value, the relevant income to an appraiser is future income as of January 1, not past income. This mirrors the considerations in a potential seller's or buyer's mind. Plus, it should be stressed that an ad valorem tax is not an income tax. For example, if a well or lease is plugged and abandoned on December 31, the value of an associated mineral interest will likely be zero as of the next day (January 1) instead of being based on last year's income which may have been substantial.

In theory, the value of an income producing property will tend to follow the direction of the most recent trend of income actually being generated by the property. However, the value at any point in time will rarely go up or down in the exact same proportion as the income. Value does not typically change as much or as rapidly as income does. This is particularly true when income can be reasonably projected to occur for a long time into the future.

This calculation of future net revenue involves engineering-oriented projections of the main parameters of the cashflow appraisal: future production, prices, and expenses. Working interest owners pay for all costs of operating the lease(s). Royalty owners bear no expense other than severance and ad valorem taxes on their gross income. All these projections are reviewed annually as data through January 1 of the current tax year becomes available.

An appraiser has the fiduciary responsibility to update and/or change any parameter from the previous tax year's appraisal, even if that means the value will change in a way the royalty owner does not immediately understand when just comparing last year's tax roll value to this year's proposed value for the same property.

38. What is an Appraisal Review Board (ARB), and how does it operate?

The ARB is an impartial panel of fellow citizens authorized to resolve disputes between you and the appraisal district. You may present objections about your property value, exemptions and special appraisal in a hearing to an Appraisal Review Board (ARB). After listening to you and to the chief appraiser, the ARB will make a determination regarding your property value. The ARB's decisions are binding only for the years in question.

Usually, the appraisal district's board of directors appoints ARB members. These members must be residents of the appraisal district for at least two years to serve. Current officers and employees of the appraisal district, taxing units and the Comptroller's office may not serve. In counties with populations of more than 100,000, former directors, officers and employees of the appraisal district cannot serve on an ARB. Other specific Tax Code restrictions apply.

ARB members also must comply with special state laws on conflict of interest and must complete training courses and receive certificates of course completion from the Comptroller's office.

As with appraisal district board meetings, ARB hearings are open to the public. The ARB must develop hearing procedures and must post these procedures in a prominent place in the room in which hearings are held. The chief appraiser must publicize annually the right to and methods for protests before the ARB, in a manner designed to effectively notify all appraisal district residents.

The ARB generally begins hearing protests from property owners after May 1 and must complete most of the hearings by July 20. This deadline may be extended to a later date in some larger counties. When the ARB finishes its work, the appraisal district gives each taxing unit a list of taxable property, called a certified appraisal roll.

You should not contact ARB members outside the hearing. ARB members are prohibited from communicating with you or other persons about a property under protest outside of the hearing. Each board member must sign an affidavit stating that he or she has not discussed your case with anyone. An ARB member who discusses your case outside the hearing must remove himself or herself from your hearing. A member who communicates on specific evidence, argument, facts or the merits of a protest with the chief appraiser or appraisal district staff outside the hearing commits a Class A misdemeanor.

The ARB must listen to you and the chief appraiser before making a decision; it is not a case of you against the chief appraiser and the ARB. All testimony at an ARB hearing must be given under oath.

In most cases, the chief appraiser has the burden of proving your property's value by a preponderance of the evidence presented at the ARB hearing. If the chief appraiser fails to meet this burden of proof, the ARB must decide in your favor.

The ARB has no control over the appraisal district's operations or budget, tax rates, inflation or local politics; addressing these topics in your presentation wastes time and will not help your case. Focus on the details of your property appraisal or other protested concern.

39. Should I protest my proposed property value to the Appraisal Review Board?

The appraisal review board (ARB) can hear protests on any action taken by the appraisal district or chief appraiser that adversely affects you as a property owner. If you believe the appraisal district or chief appraiser has taken an action that adversely affects you as a property owner, you should file a protest. Otherwise, there is no need to file a protest.

The first decision you should make is whether the cost of preparing a protest is worthwhile; compare your cost of protesting against your potential tax savings. Preparing a protest may not be worth your time and expense if it results in only a small tax savings.

Protesting involves both process and content. You should observe certain etiquette before the ARB. And if you hope to get a positive decision, you should present sufficient evidence to the ARB.

Some of the more common protests from mineral interest owners include:

- a) the proposed value of your property is excessive;
- b) your property was valued unequally compared with other similar property in the appraisal district;
- c) the appraisal records show an incorrect owner for your property;
- d) your property was incorrectly included on the appraisal records;
- e) your property is being taxed by the wrong taxing units;
- f) the chief appraiser or appraisal review board failed to send you a notice that the law requires them to send; or
- g) any other action that the appraisal district, chief appraiser or appraisal review board took that applies to and adversely affects you.

The mere act of the appraisal district or chief appraiser legally appraising a property for ad valorem tax purposes should not be considered an adverse action towards a property owner that triggers an automatic protest. If you disagree with the appraisal district's value or any action the appraisal district took concerning your property, you may file a protest with the appraisal review board (ARB). In most cases, you have until May 31 or 30 days from the date the appraisal district notice is delivered – whichever date is later.

Most appraisal district offices will meet with you informally to review your protest to try to resolve any problems.

After filing your protest, you will receive written notice of the date, time, and place for a formal hearing with the appraisal review board. At the formal hearing, the ARB listens to both the taxpayer and the chief appraiser. The ARB's decisions are binding only for the tax year in question.

40. Who can represent me in a protest? Do I need representation?

You may represent yourself in any property tax matter, or appoint an agent to handle specific duties. Most royalty owners do not choose to be represented by agents or attorneys in appraisal review board (ARB) protest hearings as these hearings are designed to be as informal as possible. While the law requires the hearings to be as informal as possible, the ARB must follow written procedures. Property owners are entitled to expect that the hearings will be conducted as described in the procedures.

Except in limited circumstances, to appoint an agent you must provide that person with written authorization to represent you. You must use the Appointment of Agent for Property Taxes form available from the appraisal district or the Comptroller's office. You must sign the authorization; the agent may not sign the form appointing him or herself. The form is not binding on the appraisal district until you file it.

The Appointment of Agent for Property Taxes form asks you to cite a date upon which your authorization for this person will end. If you do not provide an ending date, the agent will continue to represent you until you file a statement ending the appointment or appoint a new agent to act in the same capacity for the same property.

If you have not designated an agent to represent you before the appraisal review board, you are entitled to one postponement without showing cause. The chairman of the appraisal review board may grant additional postponements if you can show good cause. Good cause is defined as a reason that includes an error or mistake that was not intentional or was not the result of conscious indifference and will not cause undue delay or injury to the person authorized to extend the deadline or grant a rescheduling. The chief appraiser can also agree to give you a postponement. You must appear at a hearing - in person, by affidavit or through an agent - or you may lose your right to appeal to an arbitrator, the State Office of Administrative Hearings (SOAH) or the courts.

You also may write a letter containing all the required information and send it to the appraisal district.

41. What evidence should I use in my protest? How should I present my evidence?

In most cases, the chief appraiser has the burden of proving your property's value by a preponderance of the evidence presented at the appraisal review board hearing. If the chief appraiser fails to meet this burden of proof, the appraisal review board must decide in your favor.

For protests concerning excessive value of oil and gas mineral interests, the best and most direct evidence a royalty owner can provide is their oil and gas income history for the last several years. Copies of check stubs from the operator or pipeline gatherer/purchaser are excellent supporting documentation. While past income is not always indicative of future potential income, the level and trend of recent income being received by the royalty owner will be very helpful to resolving the protest.

A royalty owner should realize that a proposed value equal to several years of oil and gas income is quite typical (see more detailed answer to FAQ No. 24 above: ***"How can my property value be more than last year's income?"***). A common term used to describe this relationship between income and value is "payout." A payout is one indicator, or test of reasonableness, of a proposed value. The theory of a payout is that at any point in time a willing purchaser will offer a willing seller several times last year's income, in exchange for the right to receive all future income. Properties with very long projected economic lives can be expected to command larger payouts on the open market: say, five (5) to seven (7) years or longer. Conversely, marginal properties or those experiencing substantial production decline will have much smaller payouts, perhaps even less than one year. A typical payout for mineral interests falls in the three (3) to five (5) year range, although this can certainly vary from property to property (see more detailed answer to FAQ No. 25 above: ***"What does "payout" mean?"***).

The law provides another tool for the owner of a property under protest with a market or appraised value of \$1 million or less. If a property owner submits to the appraisal district a properly conducted, recently completed and certified appraisal of property value made by a licensed appraiser at least 14 days before the hearing, the appraisal district has the burden of establishing the value of the property by clear and convincing evidence. If the appraisal district fails to do so, the ARB is required to rule in favor of the property owner. To be valid, the property owner's appraisal must meet specific statutory requirements.

As far as presentation, property owners should follow some basic common sense rules, such as: Be on time and prepared for your hearing. Stick to the facts of your presentation. Present your evidence in a simple, courteous, and well-organized fashion. By following these basic rules, a property owner greatly increases their chance of getting a positive ARB determination.

Common courtesy dictates that you should be on time for an appointment. Appraisal review boards

often have hundreds or thousands of protests to hear. They have to be fair to everyone and strive to provide every protester an appropriate amount of time to make a presentation. To hear every protest, the appraisal review board may place a time limit on your hearing.

The appraisal review board has no control over the appraisal district's operations or budget, tax rates, inflation or local politics; addressing these topics in your presentation wastes time and will not help your case. Focus on the details of your property appraisal or other protested concern.

You should stress key facts related to your protest. Write them down in logical order and give copies to each appraisal review board member. You are required to give a copy of your evidence to the appraisal district staff at or before the hearing. You may even choose to practice your presentation beforehand to improve your delivery, although this certainly is not a requirement for an ARB determination in your favor.

42. Can I get a copy of the appraisals of my property?

Yes, a property owner is entitled to see the appraisal district's appraisal of his property, including whatever information the appraisal district might provide to an appraisal review board (ARB) in a protest hearing.

If you file a protest on your property, the appraisal review board (ARB) will notify you at least 15 days in advance of the date, time and place of your hearing. Please keep in mind that the ARB must send you a notice 15 days in advance, but you will probably have less than 15 days by the time you receive it. You should try to discuss your protest issue with the appraisal district before your hearing. You may be able to work out a satisfactory solution without appearing before the appraisal review board.

At least 14 days before your protest hearing, the appraisal district will mail you:

- a) a copy of the Comptroller's Property Taxpayer Remedies pamphlet;
- b) a copy of the appraisal review board procedures;
- c) a statement affirming that you may inspect and obtain a copy of the data, schedules, formulas and any other information the chief appraiser plans to introduce at your hearing; and
- d) notice of your right to postpone the hearing.

This material is usually mailed with the 15-day notice of hearing. By law the property owner has the option when filing their Notice of Protest to choose not to receive this material from the appraisal district.

43. Can I speak with an appraiser without filing a protest or going to a formal Appraisal Review Board (ARB) hearing?

Yes, most appraisal districts will informally meet with you prior to an ARB hearing to discuss your protest and try to resolve your concerns. Plus, most appraisal districts are more than happy to work with taxpayers without a protest even being filed. Check with your appraisal district to inquire about their procedures in this regard.

44. Does my value ever get reviewed by any entity besides the Appraisal District?

Yes, but only indirectly and much later in the year after the appraisal district has certified their final values. The Property Tax Assistance Division (PTAD) of the Texas Comptroller's office researches and publishes a biennial property value study (PVS) of all independent school districts and central appraisal districts. The PVS determines the value on which Texas school districts receive funding from the state and is very important to maintaining an equitable school finance system.

As part of this study, PTAD staff selects samples of property in various categories (such as oil and gas

properties) and performs their own analysis of what market value should be (or should have been) for the current tax year. This sample of properties is limited and might or might not include your specific property. The results of the PVS are released in the early part of the next calendar year and very much influence how an appraisal district goes about its appraisal practices for the ensuing tax years.

In essence, the results of the PTAD's study serve as a "grade" on the appraisal district's performance for the tax year studied. School funding penalties potentially arise if the appraisal district's values are consistently found to be either higher or lower than a range ("confidence interval") the Comptroller's office sets as the correct fair market value.

The PVS also studies the variance of values within a property category as determined by the appraisal district. A "coefficient of dispersion" is produced for each category studied. Appraisal districts must also pass muster with the Comptroller's office on this measured variance, as uniformity of appraisal is one of the two main constitutional mandates of a proper ad valorem tax system (the other mandate being that all appraisals should derive fair market value).

The PTAD provides information on property tax issues. By state law, however, neither PTAD nor the Comptroller's office have any direct jurisdiction in county appraisal districts or review boards and can only act in an advisory role in local matters.

45. Why do I have multiple assessments for a property?

Sometimes appraisal district records – including those for royalty interests – must be split into several parcels to accommodate internal programming needs. One common example is when a property splits between or overlays several taxing entities of the same type, say two school districts, whereas the appraisal district can only assign one school district to a parcel. In this case the appraisal district will split the single parcel into two parcels and allocate the appropriate portion of total property value between the two parcels. This allocation will typically be based on a prorata share of acres encompassed by the lease or drilling unit located in each taxing entity.

The taxpayer should note the appraisal district has not produced duplicate or multiple appraisals of the same property. Every effort is made to make to include this allocation of value into the description of the parcel on any Notice or tax statement sent to the taxpayer. It is anticipated this problem will eventually be resolved as computer programs are updated and improved over time.

46. Why am I being taxed by a school where I do not live?

Ad valorem taxes are assessed where the property is located (where it gains tax "situs"), not where the property owner lives or where the property owner sends their children to school. Royalty interests – i.e., the subject property – are typically "undivided" across a rather large amount of lease acreage which can extend into taxing entities far away from the owner's physical address.

For royalty owners, the property being appraised is your interest in land or minerals. An interest in land or minerals is one of the six items of taxable "real" property (as opposed to "personal" property) listed in the Texas Property Tax Code, Section 1.04(2)(F) (see <<LINK>>). Virtually all mineral interests are "undivided" across the lease whereas the fractional interest ownership applies to all the oil and gas production from that lease, not just the wells or partial land acres owned by the mineral interest owner that was incorporated into the total lease boundaries. Allocation of value between taxing entities will typically be based on a prorata share of acres encompassed by the lease or drilling unit located in each taxing entity.

Valuations of land or buildings or other types of real or personal property are performed separately by Texas Appraisal Districts. Each one of these types of property is separately listed on a Notice of Appraised Value which is mailed to the owner of that property in April or May.

47. Why did I not receive the same exemptions that I received on my house and land?

The Property Tax Code does not currently allow for exemptions on oil and gas mineral interest values. The only exception to this is a veteran's disability exemption which can be applied at the property owner's choosing to any single property, real or personal, owned by the veteran on January 1 per Texas Property Tax Code, Section 11.22 (see <<LINK>>). An interest in land or minerals is one of the six items of taxable "real" property (as opposed to "personal" property) listed in the Texas Property Tax Code, Section 1.04(2)(F) (see <<LINK>>).

48. Why is my neighbor's royalty interest value less than mine?

The particular royalty interest decimal amount owned by each party in a lease or drilling unit was determined by a simple calculation that first compares acres owned by that party to total acres of the lease or drilling unit and then applies that result to the total royalty interest decimal amount owned collectively by all royalty interest owners under that lease or drilling unit.

If you and your neighbor are royalty owners under the same lease or drilling unit, your proposed values will differ only per the amount of acres that each of you contributed to the total acres of the lease or drilling unit. However, it is possible that your neighbor does not own all the mineral rights under their acreage, or these rights have been subsequently legally split or otherwise assigned to other parties such as spouses, children, other family members, or any other party so designated. Any of these conditions will result in your neighbor's royalty interest decimal amount being less than yours.

The appraisal district does not actually appraise each royalty owner's interest separately from the others in a common lease or drilling unit. Their appraisal is for the full royalty interest decimal amount collectively owned by all the royalty owners. This total royalty value for the lease or drilling unit is then allocated to the individual royalty interest owners prorata to each royalty owner's specific decimal interest. So in effect the appraisal district is merely splitting the pie into the separately owned pieces. The size of the pieces in this case are totally dependent on the decimal interest owned by each party.

49. What if I did not receive a Notice of Appraised Value?

Failure to send a required notice is one of the issues that a property owner can protest to the appraisal review board (ARB) on a Notice of Protest. A Notice of Appraised Value is a legal document that is mailed annually to property owners by Texas Appraisal Districts, usually in April or May, that informs property owners about their proposed values for the current tax year; i.e., it puts owners "on notice" so that they can have sufficient time to respond if needed. Per Texas Constitution Article VIII, Section 21(c), notice must be given of the reasonable estimate of the taxes that will be imposed on a taxpayer's property by each taxing entity involved.

The main reason that royalty owners may not receive a Notice of Appraised Value in the normal time of the tax calendar (say, in April or May) is that the appraisal district does not know you own a mineral interest in a particular lease or drilling unit. This is quite common on new leases where the division of interests have yet not been provided to the appraisal district by the operator or pipeline gatherer/purchaser. The appraisal district often knows the lease or drilling unit exists because of Texas Railroad Commission production records, but they may not know exactly who owns the interests associated with that lease or drilling unit. Once that information is known, however, the appraisal district is required to send each property owner a Notice of Appraised Value for the allocated portion of the proposed total appraisal value for that lease or drilling unit.

Another reason the appraisal district often fails to send a notice to the correct party is because the appraisal district does not know that a mineral interest has been sold or transferred. Because Texas is a non-disclosure state, these types of private transactions are not freely available to the public. The

appraisal district's notice that is sent to the last known owner and address of record is often not forwarded to the new owner. Therefore it's always a good idea to let the appraisal district know if you've bought or sold a property so that proper ownership can be timely recorded for ad valorem tax purposes (see answer to FAQ No. 9 above: ***"Do I need to tell you if I have sold this property recently?"***).

Often the appraisal district timely sends a notice as required by law, yet the property owner does not receive it because they have moved to a different address, sometimes without giving the post office proper forwarding instructions. A Notice of Appraised Value is typically presumed by the courts to have been legally and correctly sent to the property owner if the appraisal district uses the last known mailing address in its files (see answer to FAQ No. 8 above: ***"Do I need to tell you if I have moved?"***).

Each person who owns taxable property on January 1 is legally responsible for all taxes due on the property for that tax year. A person who owned property on January 1 can be sued for delinquent taxes even the property has been sold or transferred since then. A taxing entity can eventually even auction a property for which a delinquent tax exists and use the proceeds to pay the tax. Tax delinquencies can also cause problems with selling a property because of the tax lien that automatically attaches to every property as of January 1. A buyer cannot obtain full title to a property as long as a tax lien remains on the property. For all these reasons, it is highly recommended that a property owner let the appraisal district know as soon as possible when a Notice of Appraised Value has not been received for a property they owned on January 1.

A property owner has no legal right to withhold taxes or put taxes in escrow to protest government spending or for any other reason. A property owner can, however, make a payment under protest, indicating so on the check or in a transmittal letter.

50. Do unsolicited offers for my mineral interest represent fair market value?

Appraisal districts are legally obligated to appraise all taxable property at fair market value in a uniform manner, unless otherwise specified by law. **Unsolicited offers are not a generally accepted appraisal approach to value.**

There are only three general approaches to value: the income approach, the cost approach, and the market (comparable sales) approach. We use the income approach to appraise mineral interests, mostly due to the fact that mineral interests are income producing property, but also because of the inapplicability or unsurmountable hurdles to using either the cost approach or market approach. For more detail, please see FAQ No. 17 above: ***"How was my property value determined?"***

Unsolicited offers to buy a property are known to undershoot actual market value of a property, primarily to guarantee the buyer a profit should the property owner actually end up selling for the offered purchase price.

First of all, if the offer was truly unsolicited, the property was probably not on the market and therefore most likely there was not a willing seller anywhere in the picture. Fair market value must be representative of a figure that both a willing buyer and willing seller would find acceptable.

An offer to buy, in and of itself, is rarely representative of fair market value. Anyone can make an offer at any time for any property at a price so low as to guarantee no sale. If a sale cannot even be contemplated to occur at the offering price, the offer can hardly be described as meeting the statutory or even a common sense definition of fair market value.

Unsolicited offers are often mass-produced and bulk-mailed to hundreds, if not thousands, of royalty owners on a constant basis by large firms seeking to add income-producing properties to their portfolio of investments. These offers seem to become more widespread when energy prices are abnormally low but predicted to rise fairly significantly in the near future. The companies mailing

these offers hope to “cash in” with just a very small percentage of replies from people willing to take an immediate lump-sum amount for their mineral interest rather than wait for uncertain production royalties over time. Unfortunately, however, these offers are usually based on a previous price or production environment lower than what the future likely holds.

The value of a property at any point in time is an estimate of the price for which it would sell on January 1 under an “arms length” agreement between a willing buyer and willing seller, with each party under no compulsion to buy or sell, the property having been exposed to the free market for a reasonable time, and with each party knowing all the uses and purposes of the property. This is known as “fair market value” and is statutorily defined in the Property Tax Code, Section 1.04(7) (see <<LINK>>).

51. How can I sell my property?

A mineral interest can be sold on the free market like any other property. There are many buyers available for this specific type of property, some more knowledgeable than others. For conflict of interest reasons we cannot recommend any particular buyer for your property. However, we do suggest that you look to industry trade groups or other energy-related entities such as National Association of Royalty Owners (NARO) that will know the ins and outs of the oil and gas business. It would also be a good idea to obtain legal help from an attorney who specializes or has experience in this area.

Willing buyers will analyze the interest for its income potential as of the acquisition date – with exactly the same type of issues and characteristics appraisal districts analyze when determining fair market value as of January 1 each tax year (projected future production, price, expense, and risk profile). Buyers are inherently conservative in their projections, and you as a seller should naturally be more optimistic. Between these two perspectives lies the value at which the transaction will take place between a willing buyer and willing seller, at which time fair market value will be directly demonstrated and achieved.