

The Acquisition & Divestiture of **PETROLEUM PROPERTY**

SECOND EDITION



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with Gene Wiggins

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INTRODUCTION

THE A&D BUSINESS

Being involved in a successful acquisition is an exciting experience, similar to making a significant exploration discovery. An acquisition can result in a range of outcomes, from transforming a small company to a much larger entity, or simply helping to meet a short-term goal. Either outcome can be rewarding to the project team following a period of good technical, financial, and commercial analysis. More than one attempt at making an acquisition may be necessary, so each success needs to be celebrated.

Nearly every company has a dedicated professional or a talented team that screens deal flow on a regular basis. The market intelligence gained by these reviews, combined with regular contact with industry dealmakers and evaluation of acquisition and divestment (A&D) reports, is necessary to identify opportunities that are a good match to company strategy. When an attractive offering is spotted, prompt action in providing an indication of interest is important. Assuming the preliminary review and response is favorable, the project team is assembled to begin the evaluations.

Every company has its own acquisition evaluation process. Although the processes may differ, success is likely if evaluation and negotiation lead to a signed purchase and sale agreement that results in terms and conditions that meet acquisition objectives and protect the company.

three sizes of companies in the domestic marketplace. Since that time, there have been many mergers of companies, and many start-ups have entered the industry. Foreign companies also now have large stakes in the U.S. market. There are no size limitations at this time as to the participation of companies who are engaged in U.S. transactions.

Past the mid-1990s, majors sell to larger independents, who sell to smaller independents

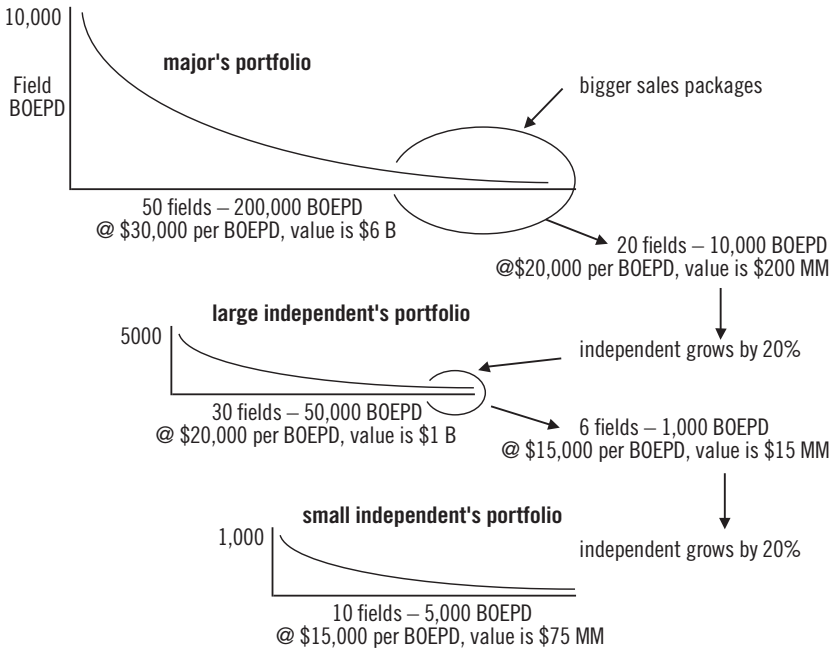


Fig. 1-3. Current portfolio management

The major integrated oil companies that once owned most of the fields in the United States have divested the majority of those portfolios. The majors own a mere fraction of the domestic properties that were their core producers in 1990. Each company has used a number of processes for their sales programs. The approaches to sell vary and are based on staffing requirements, sale objectives, and field characteristics, including size, value, geography, and the associated abandonment or environmental liabilities.

Independents have purchased the majority of the divested properties. These buyers created value by engaging in well work that has

partner goes through the review process, situations can cause the lender to withdraw the financing for the transaction. The reserve report must support the purported reserve volume, and the cash flow analysis must show a high likelihood that the funds will be repaid per the terms of the loan. Other associated factors such as the operator reliability, marketability of the production, the buyer's financial status, reserves concentration, and the price forecasts that were built into the economic model must also satisfy the lender's criteria. When an offer is made contingent on buyer financing, if the financing cannot be obtained the seller will return the deposit, if one was made, to the buyer.

The investment program that is contemplated to create value from the asset may require more capital than the organic cash flow from the property itself, creating another tier of investment that the buyer may require from outside sources. This becomes evident to the lender during the analysis, such that the lender knows additional funds will be necessary to generate the projected cash flow.

Lack of information

Property owners may have made private transactions that impair the assets; this information is not always divulged to buyers at the time the property is marketed. For instance, deep drilling rights, exploration potential, or overriding royalty interests may have been carved out of the lease ownership to facilitate activity on the property in which the owner did not participate. These actions dilute the revenue interest, value, and overall attractiveness of a property. Deals of this nature are rarely noted in the public domain and are discovered only when the company shares this information during the due diligence process.

The production performance of an asset may be worse than what was presented. The lack of important data may be due to the time lag in production reporting or the lack of reservoir pressures or field data being available. In other cases, a key well or facility may have a recent mechanical problem that is not repairable that was not initially disclosed, but was discovered during due diligence. The buyer can reduce his offer to reflect the impact of the new information or may disengage from the deal entirely.

exceptional for most producers to sell. Reserve replacement is an issue that would not be overlooked.

Another key consideration with the divestment of a producing asset is the impact on the remaining properties in the portfolio. If other fields were operated in conjunction with the field that is the subject of the offer, the loss of operating synergy would likely cause the lifting costs of the other fields to rise. This would reduce the profit margin of the offset production that is retained to a level that may not be acceptable.

A frequent disincentive to review an offer for a large field, particularly one with upside potential, is the commitment of resources required to perform an appropriate analysis. The technical staff is generally working ongoing projects, and the time is not always available to engage in a field study that supports a sale evaluation. A different problem occurs when management does want such an offer to be reviewed in detail but only commits to a partial or hurried evaluation effort. This normally results in a flawed analysis in which the evaluation has limited value and could be misleading.

Compounding the difficulty of the decision to sell is the potential for product price appreciation. As shown in figure 3–2, a price increase creates a disproportionately large gain in profit margin, and a seller is generally not willing to give up this option value without some premium in the sales price. This is true particularly when the oil price has been steady or rising in the months preceding the sale. The illustration shows that if the oil price is \$50 per barrel and the price increases to \$65 per barrel, the price increase of 30% creates an increase in profit of 45%. This is a margin improvement that a seller would want to protect if possible.

Another disincentive to selling producing property is the federal tax that is assessed on capital gains. Typically, the sales price will exceed the tax basis (capital expenditures that have not been written off as tax deductions) that remains on the property. The capital gain creates a tax cost that the seller must pay under normal circumstances. Thus, the seller wants a price that exceeds the value of the asset plus the transaction's tax cost to break even on an after-tax basis. If the seller has a low tax basis on the property and wants the buyer to pay for the tax cost in addition to paying a premium for the reserves value of the property, it is

Production multiples that were received from May 2000 to February 2004 for working interest and royalty interest properties are shown in figure 3–7. The royalty interests obtained a significant premium over the working interests, capturing over double the value per barrel produced. The working interest multiple increased from \$10,000 to \$30,000/BOEPD, and the royalty interest multiple increased from \$25,000 to \$75,000/BOEPD during the period.

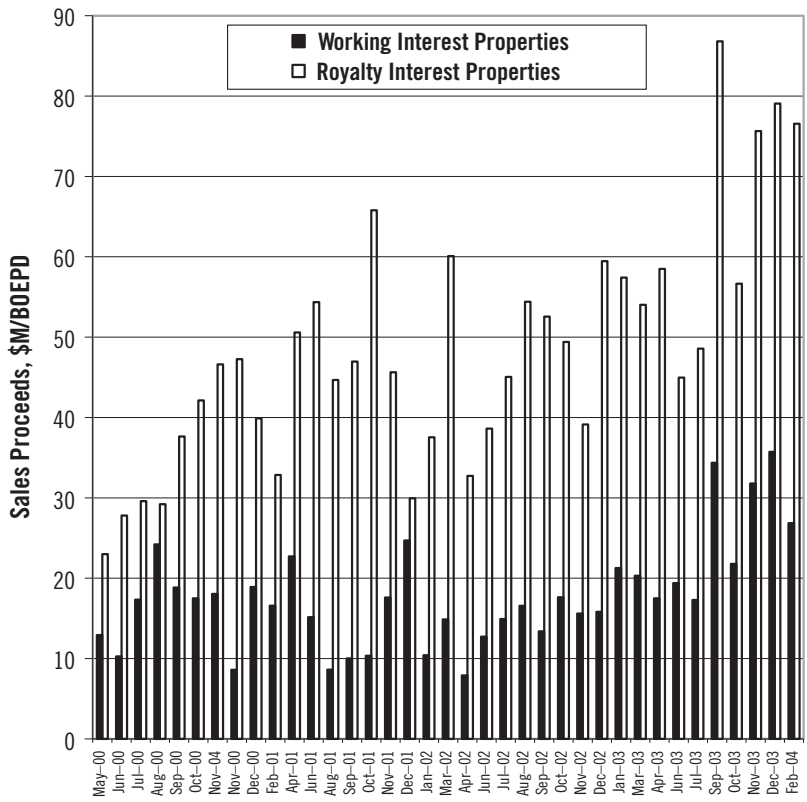


Fig. 3–7. Auction sales proceeds—comparison of working and royalty interests. (Reprinted with permission, Kenneth R. Olive, Jr., Presentation at the Hart’s A&D Workshop, Dallas, September 2014.)

This escalation in value may appear to be unreasonable, but there is a strong correlation between the oil price and the production market multiple taken from auction statistics, as shown in figure 3–8. The correlation is stronger than what is shown when the oil price is compared to

into divestiture candidate status. Common reasons for revitalization include the following:

- The acceptance of new technology can be applied to reduce costs or increase recovery.
- New seismic data has better quality than the seismic on which the discovery was based, leading to a drilling program to exploit prospective areas that were not identified earlier.
- Well production data indicates that additional wells or remedial activity can increase or accelerate recovery.
- Reservoir performance indicates that pressure maintenance is needed to maximize oil recovery, and a secondary recovery program is initiated.

Revitalization efforts are frequently very profitable because the infrastructure to support the new production is in place. Many companies that are proactive acquirers will look for fields that have not been revitalized, because fields in this stage of their life cycle have consistently been fertile ground for finding quality locations. The potential downside of these drilling locations is that the reserves target per well is not as large as the volume per well in the original development, simply because the largest and most prolific reservoirs were developed first. During a period where product prices are climbing and new seismic data continues to identify undrilled traps, a field can experience several revitalization programs, each prolonging the field life and pushing the inevitable abandonment program cost farther into the future.

SUNSET

The fields in the *sunset* stage of their life cycle are nearing abandonment and have a low chance of regaining profitability. The fields may have just a few producing wells and bear a huge risk if one of the key remaining wells ceases producing, because it is usually not profitable to rework it to re-establish production. The producing facilities in a sunset-era field were likely sized to process a much higher fluid

equipment and are not capitalized for income tax purposes (example: labor costs of installing surface equipment). As with operating costs, investments are generally escalated to reflect inflation.

■ Other costs

Other costs to consider in an economic evaluation of an oil and gas property are exploration costs as well as abandonment costs. Exploration costs occur when acquiring a prospective oil and gas property and conducting exploration activity on the property. Exploration costs include geological and geophysical costs; legal costs; assessment costs; mineral rights; acquisition costs; lease bonuses; and capitalized intangible drilling and development costs (IDCs) not represented by physical property.

Abandonment costs are related to abandoning wells and surface facilities and restoring surface conditions once a producing property has reached its economic limit and/or when the property is surrendered back to the landowner. A component that can help offset abandonment costs is the salvage value of equipment after a property has reached the end of its useful life. It is often assumed for onshore properties that the salvage value of equipment will offset all or most of the abandonment costs associated with a property. This may be the case for an onshore property; however, salvage value for offshore properties often covers only a small fraction of offshore abandonment costs due to the significant expense of platform removal.

AFTER-TAX ECONOMICS

Most oil and gas property evaluations for U.S. properties are prepared on a BTAX basis, whereas after-tax (ATAX) evaluations for international properties are often the norm. Federal tax treatment for U.S. and international oil and gas properties is beyond the scope of this book; however, it's important to keep in mind the importance of taxes in the evaluation of oil and gas properties. Stated simply, federal income taxes are obtained by multiplying taxable income after all deductions by the corporate tax rate. Taxable income is determined by deducting certain expenses including depreciation expense, depletion expense, intangible

cash flows are sensitive to large capital expenditures, particularly in the early time portion of the cash flow projection. A significant over- or underestimation of an investment can have a significant impact on the cumulative discounted cash flow.)

2. Failure to account for any fixed charges per well per month as set out in the operating agreement in the estimate of monthly operating costs.
3. Treatment of operating costs on a per unit of production basis (dollars per BO or Mcf of gas) as opposed to a total cost basis (dollars per month). (Note: The application of unit costs during a curtailment period or after a significant decline in production can result in an understatement of actual costs.)
4. Failure to recognize for a given producing property that operating costs and investments for a small independent may run less than for a large integrated company.
5. Failure to identify and sort out nonrecurring or infrequently occurring costs such as platform painting, tubing replacement, road maintenance, and workover costs.
6. Failure to question whether costs identified by an operator or client as nonrecurring are in fact nonrecurring.
7. Failure to separate fixed costs from variable costs, particularly in an offshore environment.
8. Failure to understand if overhead is included in cost data and what overhead it represents.
9. Failure to account for abandonment costs and any environmental cleanup costs.
10. Failure to account for the future costs associated with compressor or pump installation.
11. Failure to account for only relevant costs and revenues in an economic limit analysis. (Note: For example, if a pumper continues to be retained in an area of production whether or not a specific well under study is abandoned, then the portion

DECISION TO BUY

CONSTRUCTING THE OFFER

Although the industry has informally standardized the content of an offer letter to include a property description, the offer amount, any exclusions, the due diligence process, and timelines for deal execution, there are variations to the template that are necessary because no two deals are the same. Several of the nuances that are commonly addressed in an offer letter are discussed here.

Options

Although the most critical component of the offer to purchase is the cash amount, a number of other factors do influence the appeal of the proposal to the seller. In addition to the purchase price, there are other incentives that can be offered to encourage the seller to part with the property. Each will carve away some of the buyer's profit potential, but done fairly it can result in a win-win situation. Some examples of what can be offered are as follows:

- Product price protection in the event that prices rise above a predetermined ceiling
- An overriding royalty interest on successful exploration activity
- Participation in exploration activity with a working interest