



UNIVERSITY of  
DENVER

DANIELS COLLEGE OF BUSINESS  
Franklin L. Burns School of Real  
Estate & Construction Management

# ENERGY LAND MANAGEMENT (ELM) COMBINED COURSE DESCRIPTIONS

## ENERGY LAND MANAGEMENT CERTIFICATE

### ENERGY LAND MANAGEMENT

This course presents a broad overview of the most needed information related to petroleum land management with significant time focused on the role land personnel in the development of oil and gas plays, the oil and gas lease, oil and gas contracts and understanding critical petroleum land title issues and solutions. Specific topics include types of land ownership, severance of minerals, land descriptions, determination of mineral ownership, including undivided interests, the rule of capture and the role of the recording system. Students will understand how leases are acquired and how to evaluate lease provisions. We will briefly review pooling and unitization and the role of state and federal regulatory agencies. Students will understand how to calculate royalties, overriding royalties, working interests and net revenue interests and the importance of lease administration. We will review the "due diligence" process used when buying and selling mineral interests and critical title curative problems, title opinions, and the use of affidavits, curative conveyances and stipulations in order to "cure" title problems. Finally, key oil and gas contracts are reviewed including the fundamentals and critical specific details concerning leases, farmouts, support agreements and joint operating agreements. Internet tools and ethics in the oil and gas industry are also discussed. Cases and practical exercises are included.

The course covers topics that include real property and oil and gas law including key issues related to acquiring and properly protecting oil and gas interests. Also included are economic and financial decision-making and the role of taxation in such decisions. The role of leases, contracts and land titles will be discussed in depth including joint operating agreements (the AAPL Model Form). and farmout agreements. Internet tools and ethics in the oil and gas industry are also discussed. Cases and practical exercises are included.

### OIL AND GAS LAW FOR THE PETROLEUM INDUSTRY

This course provides a tremendous amount of information in only two days. It is perfect for anyone seeking to understand how oil and gas law drives the oil and gas industry and the activities of oil and gas participants including lenders, investors, lessors, working interest owners, government regulators, attorneys, landmen and others. To compete, and excel, in this industry, one simply must understand the property interests that are commonly created in oil and gas and the land from which they are produced. This course provides that, and more. The course begins with a review of the nature of the landowner's interest in oil and gas, the nature and characteristics of mineral interests, the rights and duties between surface and mineral owners, the creation and duration of mineral leases, and different kinds of royalty and mineral interests. Students will learn the law governing oil and gas ownership, development, marketing, and transfer. The oil and gas industry uses a number of unique contractual arrangements to explore for, develop, produce, and market oil and gas and this course includes not only a good overview of key clauses of the oil and gas lease and conveyancing, but also examines the law governing farmout agreements, agreements for the sale and exchange of producing properties, operating agreements, drilling contracts, production sales contracts, the law governing oil and gas development on federal public lands, pooling agreements and unitization agreements. (State oil and gas conservation issues are better understood by understanding some of the history of the oil and gas industry including the evolution of the "rule of capture" and "doctrine of correlative rights" and how this led to regulation of drilling and production and the importance of understanding spacing rules and pooling and unitization). Finally, sometime is devoted to environmental laws that apply to the exploration, development, and production of oil and gas.

### CRITICAL TITLE ISSUES FOR PETROLEUM LAND MANAGEMENT

This class covers crucial information for the land professional dealing with critical title issues and conveyances that impact how oil and gas interests are calculated and maintained. Numerous title problems will be reviewed including acreage discrepancies, "after acquired title," "after discovered" or omitted property, the Duhig Rule, execution defects, mechanics' and materialmen's liens, the rule related to interest conveyed vs., land described; descent & distribution; homestead, life tenancy issues and term mineral conveyances. We briefly present key aspects regarding curative methods and the role of different types of title opinions.

## **UNDERSTANDING AND NEGOTIATING THE OIL & GAS LEASE**

This course provides a solid understanding of the more common provisions and the legal significance of an oil and gas lease. Students will better understand Termination vs. Savings clauses and will be able to evaluate alternative wording and the implications of striking or modifying the following:

- (1) the granting clause, which outlines the purpose of the lease and the substances that can be explored and produced;
- (2) limits and rights regarding surface operations;
- (3) the duration of the lease;
- (4) extension of the primary and secondary terms of the lease;
- (5) the royalty clause, which allocates to the landowner a certain portion of the substances produced;
- (6) surface damages;
- (7) "pooling," i.e., consolidating the leased premises with adjoining leased tracts;
- (8) the assignment clause, which permits both the lessor and the lessee the unrestricted privilege of assigning their rights under the lease and limitations;
- (9) the warranty clause, which binds the landowner to defend interest in, or title to, the leased premises;
- (10) the lessee's right to free water, oil, and gas;
- (11) the force majeure clause, which protects the oil companies from liability and loss of the lease whenever causes beyond their control suspend operations; and
- (12) Other clauses the landowner may demand.

Additionally, students will come to better understand the following special problems: 1. Surface owner agreements 2. Why lessors sometimes insist on multiple wells or limit wells? 3. What is production in paying quantities? 4. What are the implied covenants to avoid drainage, of further development, to market and of the prudent operator? 5. What are "Mineral Rights?" 6. Who Owns the Mineral Rights for a Parcel of Land? 7. Who Can Develop the Minerals in a Parcel? 8. Can Severed Mineral Rights be Retained Indefinitely? 9. Can Minerals be produced without the Agreement of a Mineral Owner? 10. Understanding "Held by Production" (HBP). 11. A checklist for negotiating the oil and gas lease from, 12 Addendums to oil and gas leases, 13. Rights of co-tenants, 14. Impact of undivided interests and 14. Who must sign the lease and why?

## **OIL AND GAS CONTRACTS AND THEIR EFFECTIVE USE**

This course assumes some knowledge of mineral conveyancing and addresses, in more depth, the Farmout Agreement and Joint Operating Agreement with a review of numerous other contracts and a brief summary of the required elements found in an enforceable contract and defenses to a breach of contract case. We will look at special issues such as what to do about gas balancing problems, the use of area of mutual interests "AMIs," problems such as costs of completing and reworking wells, dealing with non or underperforming operators and how to remove them, earning conditions, interests assigned and reserved, tax considerations, committing leases to Farmout Agreements, dealing with minimum depth in Farmout Agreements, cost overruns in jointly drilled wells, critical issues for Joint Operating Agreements including understanding the AAPL model form, interests of the various parties, proper conduct of operations and what to do about defaulting parties. We will also look at some of the more challenging and critical issues regarding the oil and gas lease.

## **CURING OIL AND GAS LEASE AND PETROLEUM LAND TITLE DEFECTS**

This course presents that most important function known as curing land titles. The purpose of a title opinion, whether it is for lease acquisition, drilling, division order, security, or production purchase purposes, will control the format of the opinion, the information reported in the opinion, and what title defects lead to title requirements. To get it right, one needs to know exactly what a title opinion is and how and why we have a need to "cure." In this course we will review and discuss key ideas concerning the drilling title opinion, the supplemental title opinion, the division order title opinion, types of curative instruments including lease amendments, designation or change in depository, amendment of description, extension of primary term, amendment of lease, affidavits including various types such as affidavit of identity, affidavit of heirship and marriage history, affidavit of use and possession, affidavit of adverse possession, affidavit of non-production, affidavit of production, and corroborating affidavit. We will review other curative instruments such as ratification and/or consent to pool, release of oil and gas lease, release of deed of trust or lien, subordination of lien, tax certificates, statement of tenant, quitclaim deed, stipulation of interest, certified or exemplified copies, e.g. power of attorney or divorce decree, and the role of other documents in the curative process.

## **CALCULATING OIL AND GAS INTERESTS**

This course is intended to equip Land Professionals with critical skills for calculating Working Interests, Net Revenue Interests and other interests found in leases, assignments, operating agreements and associated documents. This course will begin with simple examples and progress towards complex examples, teaching the fundamental calculations for Royalties, ORRIs, Net Revenue Interests and Working Interests. After attending this workshop, students will better understand the fundamental progressions and calculations of WI & NRI as an un-leased mineral interest becomes leased and progresses to become part of a producing tract, oil unit, gas unit, and field-wide unit. Students will learn the consequences of changing WI & NRI for Leases, Assignments, Unitizations, Farmout BPO/APO scenarios and JOA Non-Consent Penalties. Students will better understand the role of convertible and terminating interests, e.g. when a Farmor's ORRI is converted to a partial WI at "payout" and the impact on the NRI for Farmor and Farmee or when a non-operator goes "non-consent" when they have signed a JOA and do not approve an AFE and enter the "penalty phase."

## **FARMOUTS: CRITICAL CONCEPTS AND PRACTICES**

This course provides an overview of the widely used "Farmout" Agreement beginning with its history and how it is typically defined and distinguished from other relationships. Requirements for validity are reviewed and a review of how particular Farmout agreements and terms have been used and misused is considered. Specific included topics and issues include checkerboard arrangements-divided interests, undivided interests, Farmouts combined with other agreements, Farmouts involving limitations as to depth or formation, assignments, drilling requirements, simple Farmouts subject to "back-in" provisions, and whether Farmouts create a "carried interest." Costs recoverable by the Farmee are discussed such as blowout expenses, interest on expenditures for mineral exploration and litigation expenses. We consider Farmor's retained interests and the extents of interests conveyed and discuss Farmouts as creating various interests or relationships. Also included are Farmouts and gas balancing agreements, overriding royalty payments, triggering a working interest option, preferential purchase rights, and effect of hold harmless clauses, performance, breach and damages when things go wrong. Students will negotiate various farmout agreements involving various deal terms.

## **DUE DILIGENCE IN THE ACQUISITION AND DIVESTITURE OF OIL AND GAS PROPERTIES**

In this course, students learn why and how to do a due diligence examination. "Due diligence" is a term that comes from provisions in the typical purchase and sale agreement that deal with the buyer's examination of the property and the seller's records. Such clauses typically provide that the buyer will have both the access and right to examine the property and pertinent files, books and records of the seller. The buyer is charged with knowledge of all defects or deficiencies he could have discovered through the exercise of due diligence in his examination of the property, the official title records and the files, books and records of the seller. Any objections to title or the physical condition of the properties not presented to the seller by a given date will be deemed to have been waived and the buyer will literally have to accept the property in an "as is, where is" condition.

"Due diligence" really means the buyer's examination of these records. The land professional has traditionally performed tasks that could be broadly described as the acquisition, development and management of individual properties. Land professionals are typically involved in matters such as title work, lease purchasing, negotiation and preparation of contracts such as operating agreements, farmout agreements, surface damage agreements, lease administration and other things that are involved in the drilling and management of wells. Inside examination covers examination of the seller's files, books and records. Outside examination covers the physical examination of the property, the environmental examination and the examination of official title records. Both the inside and outside examination are reviewed and tips are presented for coordinating the entire due diligence search in a cost effective and timely manner.

The course will be useful not only to land professionals but also to management and administrative personnel, lease record analysts, division order analysts, attorneys, paralegals and other persons who, regardless of their job titles, have been called upon to participate in the land and title aspects of acquisition and divestment.

## **UNDERSTANDING JOINT OPERATING AGREEMENTS**

This course focuses on what may be the most common agreement for upstream oil and gas operations, the Joint Operating Agreement. We will look at the history of the AAPL model form operating agreement and some its weaknesses and some means of avoiding problems with its use. We will discuss who is the operator, basics of joint operations, duties of the operator, relationship and duties to non-operators, joint operations under pooling and unitization, property provisions, e.g. preferential purchase rights, general joint operations provisions, liabilities of the parties, cost overruns, COPAS overhead litigation, loss of lease rights, failure to reassign subleased interests, recent appellate decisions, non-consent issues, insurance and other risk management issues, tax planning for joint operations, joint operations not covered by the typical agreement, marketing production, enforcing the agreement, removing the operator, exhibits to the agreement, accounting procedures and audits. For some issues we will examine how those who are using, or may be using, either the 1956, 1977, 1982 or 1989 model 610 forms can face significantly different results, depending on the problem at hand. Selected special issues will also be included.

## **UNDERSTANDING AND SETTLING SURFACE DAMAGE CLAIMS**

This course will cover important areas of the law related to surface damages such as the fact that as the law exists today, the owner of a mineral lease, rather than the surface estate owner, possesses the dominant estate. This dominance allows the mineral lessee to use as much of the surface owner's land as is reasonably necessary for the production of any minerals, including oil and gas. During the course of exploration and production, the surface owner's land, water, crops, or livestock are often damaged. *Students will learn* that how it is that the right of the mineral owner to enter the land and do what is necessary to capture the minerals has been recognized for many years. Over the years, courts have struggled to determine what duties, if any, the mineral owner owed to the landowner when the surface was used for the exploration of oil and gas. *Students learn* how the law concerning the mineral owner's rights to the surface emerged unyieldingly in favor of the mineral estate; progressed to recognition of surface owners' interests; and has presently evolved into varying attempts to balance the rights of the two conflicting estates. Through a review of real life examples and cases, *students will learn* that the ultimate conflict to be resolved in most surface damage litigation is whether the mineral estate owner's use of the surface is reasonable. The question of reasonable use is answered on a case-by-case basis by employing such concepts as 'due regard to the rights of the surface owner,' 'accommodations of rights,' and 'alternative methods of production;' however, these concepts are utilized without regularity or clear definition. As a result, there is too much uncertainty concerning likely outcomes if litigation occurs. Settlement of surface damages is a much more desirable outcome and this course deals with the goal of effective and efficient settlement, but uses cases and a workshop approach to understand what can happen if settlement is not reached and litigation results. Students will consider surface damages statutes and negotiate surface damage cases and surface use agreements.



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## ADVANCED ENERGY LAND MANAGEMENT CERTIFICATE (AdvELM) CLASS DESCRIPTIONS

### **ADVANCED CONTRACTS: AMIs AND FARMOUT AGREEMENTS**

This class provides detailed coverage of the Area of Mutual Interest (AMI) agreement including how and why it is used. Topics covered include: What is the purpose of and what advantage is to be gained from being a party to an AMI?, What is the size of the AMI and how is it Described?, *Does the description of the lands burdened satisfy the statute of frauds?*, What is the Term of the Area of Mutual Interest; Can the Area of Mutual Interest be terminated?, What Persons are Bound by and Entitled to Rights under the Area of Mutual Interest?, What are the Notice and Exercise Procedures under the Area of Mutual Interest Agreement?, What is the result if a party acquires a property or properties that cover lands both inside and outside the boundary of an Area of Mutual Interest?, Are There any Restrictions on the Rights of a Party to Dispose of all or any Part of Its Interest in the Area of Mutual Interest Lands or Interests? What Does the Area of Mutual Interest Agreement Provide for If There is a Disagreement Concerning the Construction, Application or Breach of the Area of Mutual Interest Agreement? Selected, more challenging topics dealing with Farmouts and their relationship to the AMI are included.

### **ADVANCED ISSUES / SURFACE USE, DAMAGES & USE AGREEMENTS FOR PRIVATE LAND**

This class focuses on surface use issues relevant to private lands insofar as the issues should be considered when entering into surface use agreements and leases. Relationships are impacted by the drilling of horizontal laterals for many geological formations. The impact of horizontal drilling on surface damages and use issues is included. The question of reasonable use is answered on a case-by-case basis by employing such concepts as “due regard to the rights of the surface owner,” “accommodations of rights,” and “alternative methods of production;” however, these concepts are utilized without regularity or clear definition. Increasingly, a separate comprehensive legal document is necessary to address complex circumstances or conflicting surface uses. Modifications to the lease addressing surface use are becoming more common as are surface use agreements with the surface owner or user. Particular attention is paid to state statutes dealing with surface use and damages and how these statutes are changing the expectations and obligations of the parties. Participants will examine various surface use agreements and lease modifications related to surface use in the context of surface use statutes and related cases.

### **ADVANCED DUE DILIGENCE**

This class provides perspective on due diligence from the lender and investor perspective. We contrast more challenging issues facing merger and acquisitions for the oil business along with deal alternatives. We also consider, for the purposes of asset acquisitions, more challenging issues related to titles, leases and contracts. For example, when reviewing Farmouts and Joint Operating Agreements. Pugh, "Mother Hubbard," continuous drilling clauses, no-surface use, and other challenging issues related to leasing are what really are defects and how can they be valued, corrected or accepted through the use of deal terms. An important consideration is keeping leases alive in an age of horizontal drilling. We address how to do that and what to look for in the due diligence engagement and also what to do about more complex title issues and more challenging issues relating to Farmouts and modifications to leases and JOAs for horizontal drilling. The focus is on negotiating and drafting the Purchase and Sale Agreement and closing the deal when more challenging problems are involved.

**ADVANCED CONCEPTS IN MINERAL TITLE CONVEYANCING & CURATIVE** This class is excellent for students who want to better understand more complex issues related to mineral title conveyancing, curative requirements and methods. Students will better understand more complicated concepts in using and interpreting title opinions and engaging in title curative and due diligence. Students will be able to demonstrate competencies related to understanding and applying the following concepts: Typical Fee Title Defects, Related Requirements, and Curative Measures such as: Patent Reservations Which Do Not Appear in the County Records, Execution of Instruments by individuals, corporations, Joint Ventures, General and Limited Partnerships, Attorneys-in-Fact, Trade Names, and Public Entities. They will better understand more challenging Curative Measures or Validating Acts, Defective Acknowledgments, Un-administered Estates, Tax Sales and Foreclosures, Attempted Testamentary Disposition, Expired Oil and Gas Leases, Mortgages Superior to Oil and Gas Lease, the importance of Possession. Alternatives to Preferred Curative Measures and practical means of determining business risk and making decisions regarding whether to waive title requirements. The “double fraction problem,” “doctrine of “after acquired title” and exceptions to the “Duhig Rule” are examples of more challenging title issues included.

### **ADVANCED CONCEPTS FOR STRUCTURING EXPLORATION DEALS**

The objective is to assess the various contracts used in making exploration deals and present the tax and financial advantages and pitfalls of alternative deals. We will evaluate deal alternatives using techniques such as net present value, internal rate of return, payback, discounted payback, ROI, profitability index, MIRR, and expected value analysis of the more difficult aspects of contracts with special emphasis on tax and economic implications of alternative deals. Included are more complex issues related to the use of tax as a key determinant in enhancing and closing the deal. We cover tax partnerships, the “Pool of Capital” doctrine, lease acquisition costs and depletion, equipment costs and investment tax credit, intangible drilling and development/completion costs, tangible completion expenses, depletion and depletion allowance, the impact of percentage depletion and delay rental capitalization rates and the alternative minimum tax. Particular attention is paid to the interrelationships of the Participation Agreement, or Joint Venture Agreement, and other agreements such as AMIs, Farmouts and JOAs as well as “carried interests.”

### **ADVANCED CONTRACTS: SPECIAL ISSUES FOR PARTICIPATION AND OPERATING AGREEMENTS**

This class covers Participation Agreements and how they can be more effective for more extensive operations. Avoiding problems associated with overlapping AMIs and JOAs and effective decision making regarding such issues as the size and choice of the prospect area, whether to use one or more JOAs, the size and duration of the Participation Agreement, Notices, Choosing or not choosing to participate and other more challenging issues are addressed. We also focus on how joint operating agreements and other contracts govern operations after the first producing test well is completed. Consideration is given to what is not covered by the JOA, e.g. limitations on well proposals, dispute resolution, standards of contact for the operator, fiduciary status, notice regarding delay rentals, shut-in payments and minimum royalties, agency, independent contractor and acting in good faith issues, non-consent provisions, non-payment issues, the effect of lease provisions, surface use issues, farmouts, and changes in unit size. Also included is coverage of more common JOA modifications including those necessary for horizontal drilling.

### **ADVANCED ISSUES RELATED TO WATER WITH OIL & GAS DEVELOPMENT**

Water is so important to the development of oil and gas and students must understand future scenarios for the water law systems concerning acquiring water for the oil & gas plays. The growing concerns about the water resource arise from three rapid developments related to oil and gas: (1) tight shale gas production; (2) coal bed methane (CMB) production; and (3) corn-based ethanol production. These three developments are important because they involve an immense amount of water at a time when the interest in conserving water is growing substantially. Because various chemicals may be mixed with the water to create fracturing fluid, increased fracturing also raises concerns about migration of the fluid during fracturing and the disposal of the waste water after fracturing. Students will understand practical solutions to these issues and various ways to address limitations on water use, including restrictions on use, alternative sources, disposal of water and the role of such matters in negotiating leases and surface use agreements and damages.

## **ADVANCED CONCEPTS IN TAXATION & ENERGY FINANCE**

Because of the divergence of interests between oil and gas producers and financing institutions and the limited capital available in the market today, more creativity and flexibility are valued. Traditional lending may not be available and resorting to other methods may be the key to survival and growth. In this class students will examine the process of “going public” and all that requires compared with Regulation D securities offerings, volumetric production payments, net profits interests, and equity kickers, royalty trusts, attracting tax-exempt investors and the growing use of Islamic finance as we compare some of these less traditional financing methods with more traditional energy lending. More advanced oil and gas tax issues and sources of exotic financing choices are included.

## **ADVANCED REGULATORY AND POOLING & UNITIZATION ISSUES**

Regulatory matters are key concerns and the law can vary from state to state. In this class, we cover various federal and state regulatory requirements and learn more about the role of the various regulatory commissions. Special emphasis is placed on pooling and unitization and how some of the historical approaches have changed due to the increased use of horizontal drilling. Forced vs. Voluntary Pooling is evaluated along with the duty to pool in good faith. Students will understand the impact of both pooling and unitization on important lease clauses and the calculation of burdens.

## **ADVANCED STRUCTURING OF TRANSACTIONS TO MINIMIZE ENVIRONMENTAL LIABILITY**

Environmental issues are a very important concern in oil and gas development and a critical component for due diligence work. This class covers environmental laws that rely upon liability instead of regulation to achieve environmental goals and create the risk of financial loss. For example, CERCLA attempts to mitigate environmental problems by imposing liability on certain groups to “fix” an environmental problem and this can be a technically challenging and economically devastating proposition. Those who are unfortunate enough to achieve the status of “owner” or “operator” of a contaminated property can become liable for its cleanup even though that party did not cause or contribute to the problem. The situation is aggravated by the imposition of liability based upon status instead of fault, contribution, or causation. Possible solutions to such issues are explored including various risk management solutions, including the use of indemnification, hold harmless provisions, insurance and bonds.



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# ENERGY FINANCE & MANAGEMENT (EF&M) CERTIFICATE

## **FINANCING OIL AND GAS DEALS**

This course is perfect for anyone wanting to better understand economic and financial decision making in the oil business and the language of finance and accounting professionals. The course will be useful to land personnel, attorneys, investors, investment advisors, chief financial officers, controllers, treasurers, financial analysts, asset team leaders, those moving from technical functional roles to general roles, and any personnel responsible for or affected by the financial health of the company as determined by financial decisions of the company. The combination of oil and gas price declines, beginning in July of 2008, and the general unavailability of credit has caused oil and gas producers to have a difficult time finding sources of capital for their ongoing business needs. Although oil is back up to over \$90 per barrel, the oil and gas industry is still needful of large amounts of capital that are required to operate an oil and gas company. Those who invest grow weary of sometimes long delays between the date of investment and any returns. When marginal tax brackets were higher and the tax code more friendly to tax shelter investors, life was easier for such companies. Commercial banks that were, until recently, structuring loans where they would give value to a company's probable and possible reserves, are starting to back away from making loans to any oil and gas company other than those with the highest credit ratings. Given this lack of liquidity, lenders and investors are looking for higher returns on their investments while, at the same time, limiting their exposure to the risk of the bankruptcy or insolvency of the oil and gas producers in which they are investing. This course helps answer questions as to how oil and gas producers can attract additional sources of capital in order to drill wells and develop properties that they may have acquired when commodity prices were significantly higher. Because of this divergence of interests between oil and gas producers and financing institutions and the limited capital available in the market today, more creativity and flexibility are valued. Structures foreign to the conventional borrowing base revolving credit facility or similar lending vehicles may not be available and resorting to other methods may be the key to survival and growth. In this class students will examine Regulation D securities offerings, volumetric production payments, net profits interests, equity kicker financings, royalty trusts, attracting tax-exempt investors and the growing use of Islamic finance along with a combination of lecture and workshop methods as we compare some of these less traditional financing methods with more traditional energy lending. In each category of financing possibilities we will review risk allocation and mitigation, tax treatment and the impact of bankruptcy or termination of the underlying relationship, e.g. the impact of lease termination on overriding royalties, production payments and net profits interests. This course is taught with a combination of lecture and workshop methods.

## **DELAY RENTALS, SHUT IN ROYALTIES AND LEASE ADMINISTRATION**

This course is an in-depth study of shut-in royalties, delay rentals, and related aspects of lease administration. We take a practical approach to both basic and advanced problems arising from the shut-in royalty and drilling-delay rental clauses. Emphasis is on problem solving, with a special session on current problems.

Content includes: Fundamentals of the shut-in royalty clause, including when payments are due, effect of improper payment and practical exercises; Basic principles of delay rentals including a discussion of the interpretations of this clause, "unless" and "or" clauses, how to satisfy the drilling delay rental clause and practical exercises; How to handle special problems of delay rental administration including the effect of transfers on the lease, unit operations and pooling and Pugh provisions, federal, state and Indian leases, and practical exercises; Excuses for improper payment and escape clauses including waiver and estoppel, savings clauses and practical exercises; Managing the rental section including organizing lease records, documenting rental payments, relationship of the lease administrator with landmen and attorneys and practical exercises; Organizing for special lease payment problems including change of ownership and after-acquired title, shut-in royalties, advance minimum royalties and practical exercises.



Content includes:

- Fundamentals of the shut-in royalty clause including when payments are due, effect of improper payment and practical exercises.
- Basic principles of delay rentals including a discussion of the interpretations of this clause, "unless" and "or" clauses, how to satisfy the drilling delay rental clause and practical exercises.
- How to handle special problems of delay rental administration including the effect of transfers on the lease, unit operations and pooling and Pugh provisions; federal, state and Indian leases and practical exercises.
- Excuses for improper payment and escape clauses including waiver and estoppel, savings clauses and practical exercises.
- Managing the rental section including organizing lease records, documenting rental payments, and relationship of the lease administrator with landmen and attorneys and practical exercises.
- Organizing for special lease payment problems including change of ownership and after-acquired title, shut-in royalties, advance minimum royalties and practical exercises

## **ECONOMIC AND FINANCIAL METHODS AND SUCCESSFUL USE OF HEDGING IN THE OIL PATCH**

This course provides an introduction to the fundamental principles of investment strategies and financing in competitive domestic and global energy finance markets. We will discuss the basics of energy lending and such sources of funds as production payments and net profits interests. In order to facilitate such understanding, part of the course will include critical finance concepts needed to better understand energy finance as a whole. As such, we begin with Fundamentals of the time value of money. Students will be able to define, explain and/or calculate net present value, rate of return, and opportunity of cost capital. They will gain an understanding of the nature of financial decision-making; including how to turn accounting profit (net income) into cash flow. Students will have an overview of maximizing shareholders wealth. Then, we cover Interest rates & compounding. Students will learn the distinction between compound interest and simple interest as well as the nominal interest rate and the real interest rate. In addition, students will understand the relationships between the various interest rates and how they affect financial decision making. The basic principles of share valuation and the use of discounted-cash-flow models to estimate expected rates of return will also be addressed. Next, we cover Asset Valuations and Asset Valuation Models. Students will learn how to apply these theories in financial decision making. Next, we will cover Cash Flow Analysis & Capital Budgeting Criteria. Students will learn how energy companies will develop plans and budgets for capital investments and how to make project "go/no-go" decisions. This includes understanding NPV, IRR, Modified IRR, PI ratio. Also addressed are normal cash flows versus non-normal cash-flows and their significance in decision-making. Students will learn what key indicators a financial manager needs to look for in relation to capital structure. Through this discussion students will understand the significance of weighted-averages as well as the price of debt and equity. Derivatives and Hedging is our next topic. Students will receive learn about derivatives forwards, futures, options and swaps. They will understand the basics of each as well as the relationship as a risk management tool. Students will acquire understanding of the role of finance techniques and practices in the context of regulatory and policy regimes, competitive markets and long term demands for a wide range of energy systems.

While this class is focused on the field of energy finance, students do not need to be, nor will they be specialists in financing methods when the class is over. They will, however, be exposed to the fundamentals of energy finance and the application of decision analysis by energy companies and specialists in the field. This will provide a broader understanding of the issues facing the energy industry and individual companies.

## **OIL AND GAS TAX**

This course packs a tremendous amount of usable information into one day. Aimed mainly at understanding the incentives that attract oil and gas investors, we consider key issues such as: Defining Intangible Drilling and Development Costs and how to deduct them, The Election to Deduct IDCs, The Section 59(e) Election to Capitalize IDCs, Prepaid IDCs, Intangible Completion Costs, The Economic Interest Concept, Cost Depletion (Basis for depletion, *Adjusted basis*, Total Recoverable Units, Figuring the Cost Depletion Deduction). Percentage Depletion in General and Figuring the Percentage Depletion Deduction, Limitations of Section 613A on Independent Producers and Transferees who cannot claim percentage depletion), Depreciation of Oil and Gas Lease and Well Equipment, MACRS for Lease and Well Equipment, Sales of Oil and Gas Property and Sec. 1254 Recapture, Carved Out and Retained Production Payments, Like Kind Exchanges of Oil and Gas Properties, Tax Credits, Lease Operating Expenses, Avoiding the Alternative Minimum Tax. The elective safe harbor for owners of oil and gas property, Independent Producers and Royalty Owners, Partnerships and S Corporations, the Federal income tax treatment of an oil and gas partnership using subchapter K of the IRC. A combination of lecture and workshop methods will be used. This course is ideal for landmen, land techs, oil and gas industry personnel, accountants and investment advisors who want to learn more about the impact of oil and gas tax law on investing in oil and on raising money for oil and gas development

## **ROYALTIES AND DIVISION ORDERS**

This course is designed for oil and gas personnel who are responsible for the preparation of division orders or who must understand and apply royalty clauses and division orders. We present background information to develop and understanding as to the reasons that underlie the preparation and maintenance of division orders, followed by instruction with practical exercises in the preparation of division orders and description of the proper management of producing properties with emphasis on the practical problems encountered.

Content includes:

- Definition of terms including payments made under oil and gas leases, interests created by landowners, interests created by lessees, transactions commonly used in development and terms used to describe size of interests.
- The royalty clause including common provisions and variations, payment of royalty and the effect of pooling and unitization.
- The division orders including nature and effect and common provisions.
- The transfer order including effect of ownership changes and the effect of status changes.
- Preparation of division orders including identifying and describing lands and leases, determining the various interests involved and calculating interests.
- Maintaining the division order.
- Typical problems with solutions.
- Practical exercises in division order preparation.
- Management of producing properties including identification, date of first sales, title opinions, marketing arrangements, information flow and questions and answers.

## **STRUCTURING EXPLORATION DEALS**

This course details aspects of contracts with special emphasis on tax and economic implications of alternative deals. The objective of this class is to provide some review of the various contracts used in making exploration deals and present the tax and financial advantages and pitfalls of alternative deals. This course should be of particular benefit to landmen, lawyers, geologists, geophysicists, engineers, bankers, accountants and managers at all levels.

The course will cover basic principles of contract preparation and negotiation including the impact of current industry conditions, basic principles of contract law and principles common to all oil and gas contracts. It will also cover available deal alternatives including: Support agreements, Farmout/Farming agreements, Wellbore depth earned, Seismic options, Area of Mutual Interests "AMIs", Carried interests, Drilling Contracts, Day work Contract, Footage Contract, Turnkey Contract, Net profits interests, Joint operating agreements, Exploration agreements, Use of production payments, Disposing of oil and gas properties, Effective use of Confidentiality Agreements, Effective use of Letters of Intent, Assignments, The Joint Venture Agreement and the Preferential Right to Purchase.

Also, the course will cover the basic concepts of oil and gas taxation including oil and gas tax overview, tax partnerships, Pool of Capital concept, lease acquisition costs and depletion, equipment costs and investment tax credit, intangible drilling and development/completion costs, tangible completion expenses, depletion and depletion allowance, the impact of percentage depletion and delay rental capitalization rates and alternative minimum tax. The practical application of evaluating deal alternatives using techniques such as net present value, internal rate of return, payback, discounted payback, ROI, profitability index, MIRR and expected value will be discuss in class and through workshop application. Students are requested to bring a pocket calculator for workshop calculation.



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# LEASES, TITLES & CONTRACTS (LTC) CLASS DESCRIPTIONS

## **THE OIL & GAS LEASE: STANDARD SAVINGS, TERMINATION AND ADMINISTRATIVE CLAUSES**

The oil and gas lease includes termination clauses such as the “unless” delay rental and the shut in royalty clauses and the habendum clause requiring that the well be spudded by the end of the primary term unless the lease can be saved from termination through continuous operations, the dry hole clause, application of the force majeure clause, etc. The proportionate reduction and pooling clause also can be viewed as savings clauses as they typically allow for smaller payments to the mineral owner without the risk of termination. We examine all of these clauses and consider the impact of, non-payment of delay rentals and royalties, the non-apportionment rule, entirety provisions, transfers and other actions by lessees, the effect of assignment and surrender provisions and the meaning of “producing in paying quantities and the impact of express or statutory requirements to do more. We also examine various defenses to lease termination including notice before forfeiture provisions, waiver and estoppel, production prevented by lessor’s misconduct, suspended operations during lease challenges, acceptance of free gas by lessor, adverse possession and force majeure. We also examine the special and advantages and disadvantages of owning federal leases with regard to savings and termination clauses.

## **MODIFICATIONS TO THE OIL & GAS LEASE IMPACTING KEEPING THE LEASE ALIVE AND ASSIGNMENTS OF INTERESTS**

Modifications to oil and gas leases are growing more common and the growing use of Horizontal Drilling has created new challenges along with new modifications. Even if a lease is held by production, there may be express lease provisions, or statutory requirements which can cause the lease to be lost or other remedies applied. We examine express covenants to develop the leasehold after production has been obtained and the implied covenant to develop as it applies to undeveloped deeper formations. Other unconventional lease clauses examined include anti top lease language (right of first refusal), notice of default and grace periods, retained acreage clauses, anti-dilution clauses, judicial-ascertainment clauses, Pugh clauses and cross conveyance of interests along with due diligence issues raised when acquiring acreage by earning in a Farmout or by purchasing via assignments including limitations on use and surface restrictions, well commitments, continuous drilling clauses, royalty provisions, consents to assign, express damages provisions, free use of gas, options to extend, pooling and unitization clauses and anti-assignment clauses.

## **TITLE ISSUES AND DIVISION ORDER TITLE OPINIONS, CALCULATIONS AND DIVISION ORDERS**

The purpose for title examination varies, but once the well is producing, the parties have entered the production and distribution phase; the Division Order Title Opinion and Division Orders must be prepared properly and the various interests calculated. This class covers details concerning initiating both as well as key considerations to get it right. Errors must be avoided, when possible, and the process of identifying uncured title or contractual problems must be understood. Operators and purchasers of production rely on these documents of ownership of the rights in the minerals produced from a property for purposes of distribution of proceeds. It reflects lessors’ royalties, working interests, overriding royalties, production payments, net profits interests, and other lease burdens. The Division Order Title Opinion usually reflects the interest of each owner in terms of “net revenue,” using a base of 1.0 to represent the whole. The corporate landman or counsel uses the Division Order Title Opinion to prepare the division orders which are circulated to the owners of mineral or leasehold interests reflected in the title opinion preliminary to and as authority for disbursement of proceeds of production. We examine the methods and procedures used to identify ownership interests and establish title requirements including reliance on voluntary curative documents, statutory curative statutes and quiet title actions. We also examine options for dealing with post-production deaths, gifts, conveyances and other matters as well as how pay decks are adjusted via the use of division orders and transfer letters.

## **JOINT OPERATING AGREEMENTS AND THEIR SUCCESSFUL USE AFTER THE PRODUCING TEST WELL**

Once the test well is capable of producing in paying quantities, at least the first unit may be held by production for many years. Now that all the excitement of the exploration is over, the parties must work together to keep the leases alive and hopefully continue to develop within the limitations of the contract area. In this class, we consider issues that if better understood will lead to wiser choices regarding choice and removal of operators and expectation regarding important matters for both operators and non-operators. This includes operating agreement and detailed provisions concerning the drilling of a test well, title issues, the drilling of additional wells, subsequent operations, AFEs and Non-Consent Penalties, sharing of expenses and accounting methods, authority of the operator, restrictions upon the operator and the relationship between operator and non-operators. We also examine topics not included in the non-modified JOA including the following issues: Agency, Independent Contractor and Acting in Good Faith, Fiduciary Status, Standard of Conduct, Exculpatory Clauses, AMLs and the impact on Acquisition, Maintenance or Transfer of Interests, Dispute Resolution, Limitation on Well Proposals, Notice Regarding Delay Rentals, Shut-In Payments and Minimum Royalties and Pipelines and /or Gathering Lines.

## **JOINT OPERATING AGREEMENTS: IMPACT OF LEASE TERMS, FARMOUTS, MARKETING AGREEMENTS, GAS BALANCING AGREEMENTS AND SPECIAL TITLE AND UNIT SIZE ISSUES**

The terms of leases to which a JOA is subject are controlling as between lessor and lessees and cannot be modified without the joinder of all parties to the relevant leases. Unless lessees are parties to a JOA, which seldom happens, the JOA will not alter the duties owed to lessees under applicable leases. Due diligence is required to understand the impact of express agreements on otherwise applicable implied duties. Lease terms with significant economic effects will be discussed including restrictions on the right to pool, drilling commitments and Termination for Breach vs. Right to Cure. Farmouts will be discussed in relation to whether a farmout triggers the preferential rights to purchase provision in 1989 JOA Article VIII.F. Marketing agreements and Gas Balancing Agreements are included as they relate to JOAs. Special topics include: change in unit size, title examination, curative responsibilities and how loss or failure of title is handled depending on the cause.

# THE BUSINESS OF OIL & GAS (BOG) CLASS DESCRIPTIONS

## **CERTIFICATE OVERVIEW:**

The purpose of this certificate is to introduce students to the business aspects of energy land management enhanced with a better understanding of technical disciplines including oil & gas law. Geology, petroleum engineering, petroleum economics, energy finance and oil & gas accounting. Students will understand how the rule of capture and the doctrine of correlative rights have impacted the growth of state regulatory commissions and the law of pooling and unitization. They will understand the law of conveyancing, important technological advances such as hydraulic fracturing (“fracking”), the oil & gas lease and important oil & gas contracts including joint operating agreements and farmout agreements. Financial and accounting concepts such as IRR, NPV and PI will be reviewed along with pricing forecasts, decline curves, and important aspects of oil & gas tax so that effective financial results can be better predicted, negotiated and structured. As a result, students will be able to more effectively make decisions in the energy land management process and to properly interface with management, lenders and investors.

## **OVERVIEW OF THE ENERGY BUSINESS INCLUDING HISTORY, PRESENT AND FUTURE**

This course presents a broad overview of the energy business including the early history, current key issues and future projections. It includes the time before the oil industry began and how oil & gas was made. Historical developments are included such as the drilling of the Drake 101 in Titusville, Pennsylvania in 1859, the rise of Standard Oil and John D. Rockefeller, the Phillips brothers and many others from the early days of the oil business. Modern important personalities including Aubrey McClendon, Tom Ward and Harold Hamm are considered along with the impact of key constraints such as the inability to export oil & natural gas, the anti-fracking movement, the impact of OPEC and concerns regarding peak oil.

We will cover how fortunes were made and lost as well as how the changing law of oil & gas developed alongside the developing disciplines of geology, petroleum engineering, geophysics, petroleum economics, oil & gas accounting and energy finance. Each of those disciplines will be reviewed and summarized on an understandable and practical level. Students will make choices regarding data from each discipline as they get familiar with the terminology of the oil & gas business and prepare to drill their first well.

## **REGULATORY COMMISSIONS, NEW LEGAL, REGULATORY AND ENVIRONMENTAL CONCERNS**

This course explains the continuing development of the industry including the rule of capture and how the growth of regulation led to the creation of the doctrine of correlative rights. The historical role of the regulatory commissions and the present and likely future of such organizations is presented along with the critical development of the law of pooling and unitization and a growing concern for environmental matters at both the state and federal levels. This includes the limitations on flaring, venting, set-backs, allowables, water use, air quality, zoning, land use and other key issues. Students will consider when it makes sense to force pool, increase lease benefits, allow mineral owners to participate as lands are developed. As well as the procedures used when applying for drilling permits, the impact of unit size and the role of increased density and various exceptions to typical procedures, e.g. the impact of anti-dilution, retained acreage and Pugh clauses in the oil & gas lease.

## **CONVEYANCING, LEASING, CONTRACTING AND DECISION MAKING IN LAND MANAGEMENT**

In this class we will cover key ideas concerning the law of conveyancing, the evolution of the modern oil & gas lease and critical contracts widely used in oil & gas upstream development. Including assignments, joint operating agreements, AMIs and Farmouts. Students will learn when a firm should seek to monetize leases, farm them out or drill. How operators should be chosen, limited, empowered and removed are examples of issues included. Students will play the role of an oil company land division while they make choices regarding the handling of key issues as they seek to develop prospects including key options related to the geological formations, type of shale play, pricing, competition, regulations, tax and economic consequences. Students will make choices as wells are planned and drilled.

## **RAISING /SPENDING MONEY: LENDERS, INVESTORS AND OTHER DECISION MAKERS**

This course includes the financial and accounting concepts and methods that help oil & gas companies attract investors and lenders using pricing forecasts, reserve analysis, decline curves and key financial ratios unique to the oil business resulting in better cost effective debt and equity financing. Also included is the role of capital budgeting and the use of financial metrics such as IRR, MIRR, PI and NPV along with critical oil & gas tax matters such as cost and percentage depletion, depreciation, intangible drilling, completion costs and various tax credits. Students will engage in predicting, negotiating and structuring effective financial results as they develop financial and economic analysis for their own oil & gas firm as might be presented to management, lenders and investors.



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## FROM PROSPECT TO PIPELINE TO MARKET (PTPM) CLASS DESCRIPTIONS

### **ORIGINS OF OIL & GAS, OIL AND NATURAL GAS OVERVIEW AND PETROLEUM INDUSTRY STRUCTURE**

In this course we review of the origins of the raw material comprising the foundation of the industry's value chain. In the case of petroleum, the origins of crude oil and natural gas can be traced back millions of millions of years, to the seabed of ancient oceans. We examine information about the composition of oil and natural gas, the location of major oil & gas resources around the world, and current patterns of, as well as future projections for, oil & gas production and use. We will also discuss information on the technical assessment of potential hydrocarbon-bearing formations, the legal and contractual aspects of obtaining the right to explore for, and develop, such formations, and the economic and risk-assessment methods used by the petroleum industry to guide decision-making. Students will develop understanding and competencies concerning types of oil & gas companies, the role of OPEC and current and future world refining capacity. This class is presented with a combination of video, lectures and a workshop format.

### **SEARCHING FOR & EVALUATING OIL & GAS, DRILLING & COMPLETION (ONSHORE)**

This course covers the key vocabulary and methods regarding obtaining rights to explore for and produce oil & gas and key contracts and methods for effective onshore exploratory drilling. Following the exploratory drilling and formation evaluation efforts and assuming a positive result from assessment of risks and potential rewards—the E&P company then begins an expensive campaign of development drilling. The objective is to drill down to those formations that show promise and to put into place the equipment and systems needed to produce oil & gas safely as well as cost-effectively. Critical topics are reviewed including horizontal drilling, fracking, seismic, well completion and effective ways to maximize profits and minimize costs. Students will learn the vocabulary and concepts and be able to demonstrate needed competencies through workshop exercises. Lectures and videos will also be used.

### **MANAGING OIL & GAS PRODUCTION AND TRANSPORTING OIL AND NATURAL GAS**

Once drilling has been completed, a major business objective for the exploration and development firm is to effectively manage production to achieve cost-effective, safe, and environmentally sensitive extraction of crude oil and natural gas from sub-surface reservoirs. This course focuses on actions that optimize production from oil & gas wells, including maintenance, repair, and improved recovery programs that help achieve this goal while extending the productive life of wells. Students will examine the initial processing of oil & gas and how both oil & gas are moved to buyers and users including various transportation methods including trucking, rail and pipelines. Also included is a review of where the industry is on the current and future export of both oil and natural gas. Students will learn the vocabulary and concepts and be able to demonstrate needed competencies through workshop exercises. Lectures and videos will also be used.

### **OPERATIONS IN THE MIDSTREAM AND DOWNSTREAM SECTORS, PRICING, TRADING AND MARKETS**

This course focuses on the business aspects of industry operations including the structure of the industry, focusing on the kinds of companies and organizations involved in producing and refining crude oil and natural gas. We examine the basic market and trading mechanisms, practices used to bring oil and natural gas to consumers and some of the major challenges that the industry may face in coming decades. Students will develop competencies regarding how buyers, sellers, brokers, traders, shippers, and other parties seek to discover and act on information about the supply/demand and prices of a wide range of energy commodities—crude oil and raw natural gas, as well as products ranging from jet fuel and industrial lubricants to gasoline, LNG, butane, and petrochemicals. Students will become familiar with important concepts including natural gas pricing and trading, hubs, LNG trading, gas-to-liquids technology, products derived from natural gas, oil trading including physical versus paper trading, pricing, with a historical perspective, oil pricing today, and gasoline distribution and marketing. Students will learn the vocabulary and concepts and be able to demonstrate needed competencies through workshop exercises. Lectures and videos will also be used.



# MINERAL, ROYALTY & SURFACE OWNERS (MRSO) CLASS DESCRIPTIONS

## **OVERVIEW OF THE ENERGY INDUSTRY / OIL & GAS LAW FOR ROYALTY OWNERS**

In this class, we consider the history of the oil and gas business and key aspects of oil and gas law and regulatory issues impacting the industry and those who own the minerals and surface. To be most effective, you, and those who advise you, must understand where the industry has been and where it is heading and this involves understanding various regulatory bodies that have great power over such matters as pooling and unitization, zoning, right of ways, pipeline and trucking issues, eminent domain, condemnation proceedings and taxes. You must understand the role of documents of title and recording systems, the types of mineral interests, the Rule of Capture and the Doctrine of Correlative Rights. We will also discuss mineral conveyances, types of title, title issues and why it makes sense to keep good records. What it means to claim there is dominance of the mineral estate over the surface estate is critical to understanding surface use and damages. We will discuss the basic tenants of energy law, conveyance of minerals, types of mineral interests, title issues, and the importance of a good filing and records system.

## **LEASING & SURFACE USE AGREEMENTS**

Mineral owners, and their advisors, are typically at a disadvantage when negotiating a lease. In this class, we discuss savings, termination and administrative clauses in the lease and provide examples of how lease clauses matter and how they can be interpreted and negotiated. We deal with executive rights, who can sign a lease, powers of attorney, the rights of minors, implied covenants of the lease, the role of pooling and unitization and "forced pooling." We will also discuss modifications to the lease and the use of surface use agreements and concepts like "reasonable and necessary" and "reasonable accommodation" as we learn about limitations on surface use and damages. Students will negotiate leases and surface use agreements and settle damage claims.

## **UNDERSTANDING ROYALTY CALCULATIONS AND DIVISION AND TRANSFER ORDERS**

In this class, we cover the critical royalty clause and its various alternative wording and meaning. We also cover the Shut-In Royalty and Delay Rental clauses and cover all of the formulas for working interest, overriding royalty interest and royalty interest calculations. We discuss the reasons and formulas for calculating net mineral acres, net leasehold acres derived from net mineral acres, gross WI and net revenue interest for participants in a well, and the impact of the Proportionate Reduction clause and the Pooling clause. We also discuss how to read and interpret Division Orders and Transfer Orders/Letters and what to do if you, or your advisors, suspect something is wrong. We will review production reports and various other reports filed by the oil companies and how they can be accessed and used by mineral owners. We also discuss the role of online sources of information including the role of the state conservation commissions. Students should bring a simple calculator to class along with copies of Division Orders and check stubs.

## **TAXATION & ESTATE PLANNING / ROLE OF MINERAL INTERESTS IN FINANCIAL PLANNING**

Mineral owners, and their advisors, need to plan effectively for wealth management and wealth transfer success. Knowledge of various options can be important for not only succession planning but also for pre and post marital planning. Additionally, we discuss how to effectively use all possible income tax planning strategies to minimize unnecessary state and federal income taxes. In this class we discuss the role of record keeping and the role of property, estate and gift taxes. Estate planning includes engaging in the kind of planning necessary to protect your mineral interests and make sure they pass to your heirs and devisees in the most effective way. If such planning is not performed, inheritance taxes can destroy the value of your estate. We evaluate the use of gifts and conveyances, including the creation of life estates, term deeds, various kinds of trusts, investing in working interests and the use of LLCs and other vehicles used to reduce risk and tax exposure.

## ADVANCED MINERAL, ROYALTY & SURFACE OWNER (AdvMRSO) CLASS DESCRIPTIONS

### **OVERVIEW**

This DU certificate is excellent for students who have already completed the first MRSO certificate or for those who already have appropriate experience in managing their own assets or those of others. It contains more advanced coverage of some of the same issues covered in the first MRSO certificate along with more challenging material much needed by larger land and mineral/royalty and/or working interest owners. Investment advisors, financial planners, estate planners, attorneys, CPAs, certified mineral managers, lenders, investors, trust officers and trustees for larger family trusts and those holding executive rights have all benefitted from this program and it is highly recommended by such professionals.

### **CLASS DESCRIPTIONS**

#### **CHOICES OTHER THAN LEASING, NEGOTIATING AND MODIFYING THE OIL AND GAS LEASE/ADDENDUMS**

Choices available other than leasing include being forced pooled, participating, and being “carried.” The economic impact on mineral values, lease bonus and royalty and when it makes sense to choose to be pooled, participate or lease. JOAs, the importance of the operator, operator issues, AFEs, non-consent penalties and key working interest issues will be reviewed. We examine why different shale plays lead to different expectations for offset wells, allowables, spacing of units and why unit size and shape matter. The importance of horizontal wells and fracking and a comparison to conventional vertical wells, depth severance, horizontal and vertical Pugh clauses, continuous drilling, retained acreage and anti-dilution clauses will be included along with extensive coverage of lease addendums as well as lease modifications. Students will negotiate more complicated leases and addendums and will gain valuable insights into key negotiation techniques.

#### **THE IMPACT OF POST-PRODUCTION COSTS, AFFILIATES AND GROSS PROCEEDS CLAUSES**

We cover the royalty clause and alternative wording and meaning and the use of a gross proceeds clause, limitations on the use of affiliates and current and recent litigation for royalty clause violations. We will review production reports and various other reports filed by the oil companies and how they can be accessed and used by mineral owners. We also discuss how to read and interpret Division Orders and Transfer Orders/Letters and what to do if you, or your advisors, suspect something is wrong. Production data and various statements will need to be reviewed with understanding and effective means of communicating with company personnel will be needed. In this class students will come to understand alternatives for collecting and managing such information including methods for handling post production costs, types of taxes withheld and effective approaches to raising issues about the use of affiliates. Students will better understand the issues surrounding pipelines, truck routes, gathering systems and the impact of condemnation proceedings, eminent domain, right of way agreements and easements.

#### **POST LEASING ADMINISTRATION OF MINERAL ASSETS**

Once a lease is negotiated and signed there will be ongoing issues including the receipt of bonus payments as drafts or checks, delay rentals, royalty payments, shut-in royalty and possibly surface damages. We will also examine volatile oil and gas prices and how to handle lease extensions, options to lease, selling royalty interests, knowing when a lease has terminated, getting a lease released, dealing with top leases, defective division orders and when not to sign. Having funds put “in suspense,” interest on funds and the meaning of escheat are also examined. Effective systems for saving data for state and federal income taxes, advalorem taxes and property taxes, best practices for reviewing statements and verifying only correct charges are deducted, understanding what you own, setting up key files and effective dealing with energy companies and landmen will all be presented with useful examples and tips.





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# STAND ALONE CLASSES

## WEEKEND ONE

### CLASS DESCRIPTIONS

#### **FUNDAMENTALS OF ONSHORE FEDERAL LEASING**

Because of the tremendous extent of federal land ownership in the western U.S., oil & gas exploration and production activities on the public domain requires individuals that seek to conduct oil & gas operations be properly equipped to navigate the federal oil & gas leasing system. Students will develop a basic understanding of the federal oil & gas leasing system, regularly encountered issues involving federal oil & gas leases, and practical “nuts and bolts” solutions to avoiding or resolving those issues. Specific topics include: Basic Oil & Gas Leasing Legislation, Federal Oil & Gas Royalty Management, Lessee and Transferee Qualifications, Assignments and Transfers of Interest, Options and Rights to Acquire, Unitization and Communitization Exploration, Drilling, Producing, and Operating Regulations and Procedures, Surface Management Requirements, Emerging Environmental Issues, Limitations on Lessee’s Right to Develop, Extension, Suspension, Renewal, and Termination of Leases. Students will learn the vocabulary and concepts and be able to demonstrate needed competencies through workshop exercises. Lectures and videos will also be used.

#### **COPAS AND OIL & GAS ACCOUNTING**

Because of the unique nature of oil & gas operations, accounting methods used by oil & gas exploration and production companies are different from the methods used in other industries and these will be briefly reviewed. A JOA, if used, will define the relative duties and obligations of the operator and the non-operators in connection with the unit. The exhibit addressing the accounting procedure is typically attached as Exhibit “C,” and a common form for this exhibit is one of the Council of Petroleum Accountants Societies, Inc. (COPAS) Model Form Accounting Procedures (COPAS Accounting Procedures). Students will come to understand how to properly understand the JOA and Exhibit C and how despite good drafting and careful interpretation there can still be uncertainties regarding the operators accounting responsibilities. Students will examine common areas that often are the subject of dispute and how best to resolve such problem areas including: Accounting Duties as Described by the JOA, Accounting Duties as Described by the COPAS 2005 Accounting Procedure, Direct Charges, Overhead, Pricing of Joint Account Material Purchases, Transfers, and Dispositions, Inventories and Accounting Duties as Described by Pooling Statutes. Students will learn the vocabulary and concepts and be able to demonstrate needed competencies through workshop exercises. Lectures and videos will also be used.

#### **EFFECTIVE NEGOTIATIONS OF OIL & GAS CONTRACTS**

Mastering the art of negotiation is about understanding how to lead or navigate the negotiation process, uncover positions, know your priorities and use communication techniques that allow you to influence the negotiation. Negotiation is an everyday event and a critical business skill. Through practical exercises, students will learn how to recognize and capitalize on communication preferences and negotiation styles, and how to use practical tools that will help prepare for negotiations. Part of negotiating effectively is about recognizing your own style and triggers, and working to develop a level of awareness that will increase your confidence and focus. This course offers a unique opportunity to develop and practice your skills in a relaxed, supportive and confidential setting and students will better understand and be able to demonstrate key questioning and listening techniques, know when they are being “played” by the opposition, how to determine key motivators for the other side, how to best prepare for negotiations and how to know when an alternative style and approach should be used. Students will negotiate an oil & gas lease, a farmout agreement, surface damages and parts of a joint operating agreement as they grow in confidence and skill. Students will learn the vocabulary and concepts and be able to demonstrate needed competencies through workshop exercises. Lectures and videos will also be used.



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# STAND ALONE CLASSES WEEKEND TWO CLASS DESCRIPTIONS

## **ACQUISITION & DIVESTITURE OF PETROLEUM PROPERTY**

Many mistakes made in the buying and selling of petroleum properties can be very expensive. Trial and error is not the way to learn. Students will learn what buyers and sellers need to know to understand the entire process related to the acquisition and divestiture of individual producing or discovered non-producing assets. Important topics include: motivated vs. non-motivated sellers, seller evaluations, marketing options, the divestment process, the acquisition process, unique lifecycle risks and valuation methodologies. Also included are determining the price, like-kind exchanges, new field discoveries, constructing the offers, preferential rights, bonding protection, negotiating the contract, due diligence, industry activity and company mergers. Due diligence tips, the impact of lower oil and gas prices, troubled operators, financial statement analysis, banker and investor attitudes and the growing number of bankruptcy filings are included. Case histories and lectures will be used.

## **BANKRUPTCY ISSUES FOR TROUBLED OIL VENTURES AND MINERAL OWNERS**

Oil prices are recovering too late to save many drillers drowning in debt. Both SandRidge Energy and Linn Energy recently filed for Chapter 11 with billions in debt. There have already been at least 29 U.S. oil and gas bankruptcies this year alone. The default rate among exploration and production junk bonds has soared to a record 27% over the past 12 months. SandRidge stock was trading at \$80 per share back in 2008, but recently it was worth just two cents. In this new and timely course students will examine the impact of potential and already filed bankruptcy cases and learn about effective methods for dealing with troubled oil ventures. They will learn about successful strategies for operators, non-operators, and service companies. Special attention will be paid to the concerns of mineral and royalty interests as they are often creditors too. Related topics covered include: notices, the right to reject certain contracts and leases, royalty creditors' secured status and relevant differences in state laws. Unique E&P Issues occurring when first filing the case include: financing an entity during the case, mineral lien claimants, royalty and other payments, critical vendors and suppliers. Issues unique to oil and gas bankruptcies to be covered include: title issues, lien avoidance, whether or not an oil and gas lease is subject to §365 and treatment of JOAs and farmouts. Selected issues Related to §363 sales include: sale of a co-owners' interest, data rooms and confidentiality agreements. Lectures and cases will be used.

## **INTRODUCTION TO OIL COMPANY FINANCIAL ANALYSIS**

Oil and gas companies often have volatile stock prices and challenging amounts of debt, especially in the economic downturns that seem to come along all too often. This class was created for non-financial shareholders, managers, lenders, financial advisors and oil company employees interested in the forces that influence stock values. The bottom line in any company is expressed in the language of finance. Students will examine financial concepts in a non-technical, practical way so that non-financial professionals and others may understand and appreciate this aspect of the business. Students will learn about the following topics: factors impacting oil and gas prices; fundamentals of valuation (including asset vs. income-based techniques; accounting value vs. economic value; future and present value theory; internal rate of return and other methods), accounting systems for oil and gas (including reserve recognition accounting, cost depletion and percentage depletion), financial statement analysis (including common and industry specific energy ratios), valuation of common stock (including guidelines for estimating value, IRS and SEC guidelines) as well as competitive comparisons, segment valuation including proved reserves, acreage, transportation, pipelines, tankers, refineries, industry structure, financial analysis and evaluation of refineries, value of reserves-in-the-ground, corporate restructuring, legal and tax concerns for mergers and valuation of bonds and preferred stock.

### **NON-TECHNICAL OVERVIEW OF PETROLEUM GEOLOGY, EXPLORATION, DRILLING & PRODUCTION**

This class is designed for those who do not have formal training in geology, geophysics, engineering or production techniques who would like to acquire an enormous amount of useful information on the upstream petroleum industry. Every oil and gas investor, mineral/royalty owner, banker, financial advisor and oil company employee, has a need to know this material as it will greatly enhance negotiating and effective decision making. Knowledge gained should enhance the value of oil and gas properties including mineral, royalty and working interest ownership and proper stewardship of such interests. Students will learn about the following topics through lectures, pictures, videos and cases: the nature of oil and gas, identification of common rocks and minerals, geological time, deformation of sedimentary rocks, ocean environment and plate tectonics, sedimentary rock distribution, mapping, source rocks, generation, migration and accumulation of petroleum, reservoir rocks, petroleum traps, petroleum exploration (geological, geochemical and geophysical), drilling preliminaries, drilling a well (the mechanics, problems and techniques), testing a well, completing a well, surface treatment and storage, workovers, reservoir mechanics, petroleum production, reserves, improved oil recovery and unconventional oil and gas.

### **INTRODUCTION TO THE GLOBAL OIL & GAS BUSINESS AND PETROLEUM ECONOMICS**

In this course, students will examine the extraordinary changes in how the industry engages in its four primary sectors of activity; finding and producing crude oil, transportation, refining, and marketing. They will better understand the future of the oil and gas industry which includes an ever increasing use of alternative energy sources worldwide. Land personnel, attorneys, investors, lenders, financial advisors, management and anyone wanting to better understand the energy business, will find this to be an invaluable course. In addition to a summary of how the industry has developed and a look at likely future changes, students will learn more about the following topics and be able to use these concepts and methods for enhanced understanding and decision making: the supply, demand and pricing of oil and gas, energy commodity markets, the new industry structure, energy security, organizing principals of the oil and alternative energy industries, international petroleum economics, capital budgeting techniques and investment selection decision making. Students will learn the economic factors that directly affect petroleum production from its initial geological perception to its eventual sale to the refiner or the crude oil trader. The effects of economic factors are all discussed including risk and uncertainty, management decisions, financing and the importance of debt/equity and other ratios, finding costs, depreciation, inflation and taxation. Students will understand important contractual relationships.

### **UNDERSTANDING AND NEGOTIATING WIND-POWER PROPERTY AGREEMENTS & THE WIND LEASE**

Wind is a clean, affordable, and renewable energy resource which plays a significant and growing role in the U.S. energy markets. According to the Wind Energy Foundation, wind is currently the fastest growing source of electricity production globally. Since windmills must be spaced out to maximize their efficiency, much of the underlying land can still be used for its original purposes, such as agriculture and livestock production. A decade after surpassing solar production, U.S. wind generation is ten times greater than solar generation, according to the EIA. State and federal tax credits and other incentives for renewable energy helped drive financial resources to support and grow the wind energy industry in the United States. The majority of our nation's wind turbines are found in the Midwest and Western states. Wind farms generally require three acres of land per turbine and a location that can be dedicated to the long-term development of tens to hundreds of turbines. Students will understand key concepts about wind energy and learn critical skills for negotiating wind-power property agreements and will be able to effectively represent both land owners and wind energy companies in negotiating wind-power property agreements, including options to lease. Many types of easements such as access, construction, transmission, wind non-obstruction, overhang or encroachment and noise are included. The lease and key covenants are featured. Lessors will learn key questions to ask before signing a wind lease, how to evaluate the wind-power developer and how a wind turbine could affect farming operations. Lessees will learn effective responses to lessor concerns. Other topics students will learn include: how turbines work, choosing wind sites, deal terms including best practices and policies, understanding horizontal and vertical severance lease clauses, surface use and damages, how the wind lease differs from the oil & gas lease (and how they impact each other), government issues and how to resolve common landowner and wind developer concerns.