ORIGINAL

In The Supreme Court of Ohio

HANS MICHAEL CORBAN, Petitioner, vs. CHESAPEAKE EXPLORATION, L.L.C., et al., Respondents.	)))))))))	Case No. 2014-0804 On Certified Questions of State Law from the United States District Court for the Southern District of Ohio Eastern Division S.D. Ohio Court Case No. 2:13-cv-00246

APPENDIX TO MERIT BRIEF OF RESPONDENTS CHESAPEAKE EXPLORATION, L.L.C., CHK UTICA, L.L.C., DALE PENNSYLVANIA ROYALTY, L.P., LARCHMONT RESOURCES, L.L.C., AND TOTAL E&P USA, INC.

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SUPREME COURT OF OHIO

EXHIBITS

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EXHIBIT 1

Mark D. Wagoner, Jr.
State Representative, 46th House District

HOUSE BILL 288
REPRESENTATIVE MARK WAGONER
SPONSOR TESTIMONY
BEFORE THE OHIO HOUSE PUBLIC UTILITIES COMMITTEE

Chairman Hagan and members of the House Public Utilities Committee, I thank you for the opportunity to present sponsor testimony on House Bill 288.

House Bill 288 seeks to update Ohio's mineral rights law. House Bill 288 contains two proposed amendments to Ohio's existing statutory scheme affecting energy production. The bill is designed, first, to address technical problems with Ohio's current Dormant Mineral Statute and, second, to resolve procedural problems with The Ohio Oil and Gas Commission. The General Assembly can take these two steps to help increase the availability of domestic energy supplies without adversely affecting the environment or state tax collections.

Turning first to the Dormant Mineral Statute, Ohio has had an active energy production industry since the mid 1800's. During this period, landowners in mineral producing areas have frequently severed the mineral rights in their land from the surface rights. Through the decades, ownership of the severed minerals has been transferred and factionalized through estates and business transfers. Today, those old severed mineral rights may be the key to new production sites, as advances in current technology and the high cost of energy make reworking old oil and gas fields possible.

The problem is that it may be difficult - if not impossible - to find the owners or in some cases the multiple partial interest owners of such old severed mineral rights. Twenty years ago, Ohio joined the majority of oil and gas producing states by passing a Dormant Mineral Statute that permitted the surface owner to reunite severed mineral rights with the surface estate if the mineral rights had been abandoned. Unfortunately, Ohio's Dormant Mineral Statute has seldom been used, in large measure because the statute did not clearly define when a mineral interest became abandoned and exactly how the process to reunite the mineral ownership with the surface ownership was to be accomplished.

House Bill 288 removes the ambiguity of the existing statute with a clear definition of when a mineral right is deemed abandoned. The mineral right will be deemed abandoned if there

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is both (1) no active use of the mineral rights and (2) a failure by the mineral right owner to file to preserve the inactive mineral right for future use for at least 20 years from the time a surface owner petitions to reunite the surface with the inactive mineral interest.

The first part of House Bill 288 is designed to fix perceived problems with the existing statutory provisions. The Bill will neither alter the balance between surface owner and mineral right owners, nor will the Bill change the environmental or conservation requirements to drill or produce in Ohio. Finally, the bill will not adversely affect tax revenues. In fact, if the bill has its intended results of bringing back old or marginal oil and gas fields to production, the bill should increase Ohio's collection of severance and ad valorem tax.

The second issue addressed in House Bill 288 deals with the administrative practices involved with the permitting and regulation of oil and gas wells in Ohio. Currently, an administrative appeal from a decision by the Chief of the Division of Mineral Resources Management in the Department of Natural Resources is to a body called the Ohio Oil and Gas Commission. The Commission has five (5) members and the current statute provides that no decision may be made without the concurrence of three members. The problem is that, in practice, it may be impossible to get three of the five Commissioners to even hear, much less decide, an appeal. Lack of a quorum can occur because of vacancies on the Commission, illness of a Commissioner or because a Commissioner has to recuse him or herself due to a conflict of interest. If a quorum of Commissioners cannot be assembled, or three votes secured, the appeal is stalled indefinitely.

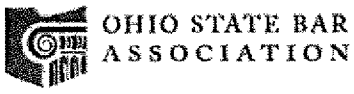
A similar problem exists within our Courts and is addressed by appointing visiting judges. H.B. 288 applies the same technique by permitting the Chair of the Oil and Gas Commission to appoint visiting Commissioners from the pool of members who make up the oil and gas Technical Advisory Council. The Technical Advisory Council member go through the same screening and appointment process as the Oil and Gas Commissioners and have oil and gas experience and technical skills. Thus, drawing temporary members for the Oil and Gas Commission from the Technical Advisory Council will vest the Commission with the same skill set as the Commission's regular members and will allow the Commission to proceed to decide appeals which are now stalled.

In closing, I hear concerns about the availability and cost price of energy. Given the Ohio's national preeminence in manufacturing and its four month heating season, it is not surprising that Ohio ranks within the top ten states for energy consumption. What is less well

known is that Ohio is also among the top ten states for natural gas and oil production. In fact, almost 15% of the natural gas burned in Ohio's homes and factories is produced locally. House Bill 288 is a small step towards improving local production by streamline existing program and regulations to make them more efficient. It is step worth taking.

The Ohio State Bar Association has played an integral role in drafting and reviewing this legislation and supports it. I ask for your support to pass this bill too. Chairman Hagan and members of the committee, I thank you for your time and I would be happy to answer your questions at this time.

EXHIBIT 2



Report of the Natural Resources Committee

To the Council of Delegates:

The Natural Resources Committee recommends to the Council of Delegates a proposal to amend Section 5301.56 of the Ohio Revised Code to clarify the procedure for unused mineral rights in real estate to "lapse" and vest in the owner of the surface estate.

Respectfully submitted,
M. Howard Petricoff, *Columbus*
Chair

Committee Comments:

For well over 100 years, there has been active mineral extraction (including coal, oil, gas, and other hard minerals) throughout much of Ohio. This activity has led to the frequent severance of mineral estates from the surface. Over the years, severed mineral interests have become fractionalized and abandoned as individual owners die and corporate owners go out of business, resulting in difficulties with title examination and the inability to develop the minerals.

In an attempt to address this situation, in 1989, the Ohio State Bar Association supported enactment of Ohio's "Mineral Lapse Statute" (ORC § 5301.56) which, in summary, provided that severed mineral rights will vest in the owner of the surface estate if there is no specified activity affecting the mineral rights for a span of 20 years. However, in the years since enactment of ORC § 5301.56, Courts and practitioners have experienced difficulty in interpreting this statute, which resulted in the Natural Resources Committee's preparation of this amendment.

The major changes addressed in the amendment are the following:

1) the original statute provided for the lapse to occur if no specified activities took place within "the preceding twenty years." Questions arose as to whether that language meant 20 years preceding enactment of the statute, 20 years preceding commencement on an action to obtain the minerals or any 20-year period in the chain of title. To clarify this, the amendment provides that the effective period is the 20 years immediately preceding the filing of a notice;

2) a definition of "minerals" and "mineral interest" are included in the amendment; and

3) a specific procedure for a landowner to follow to obtain the mineral interest is included in the amendment.

The Natural Resources Committee supports this amendment as a necessary clarification of the existing statute.

§ 5301.56 Mineral interests in realty.

(A) As used in this section:

(1) "Holder" means the record holder of a mineral interest, and any person who derives his rights from, or has a common source with, the record holder and whose claim does not indicate, expressly or by clear implication, that it is adverse to the interest of the record holder.

(2) "Drilling or mining permit" means a permit issued under chapter 1509., 1513., or 1514. of the Revised Code to the holder to drill an oil or gas well or to mine other minerals.

(3) "Mineral Interest" means a fee interest in an estate of one or more minerals, however created and regardless of form, whether absolute or fractional, divided or undivided.

(4) "Minerals" includes gas, oil, coal, coalbed methane gas, other gaseous, liquid, and solid hydrocarbons, sand, gravel, clay, shale, gypsum, halite, limestone, dolomite, sandstone, other stone, metalliferous or nonmetalliferous ore, other material or substance of commercial value excavated in a solid state from natural deposits on or in the earth, and any other substance defined as a mineral by the laws of this State. As used in this section, "minerals" does not include the space that may be created by the withdrawal of minerals.

(B)~~(1)~~ Any mineral interest held by any person, other than the owner of the surface of the lands subject to the interest, shall be deemed abandoned and vested in the owner of the surface estate after the procedures prescribed in division (E) of this section are followed, if none of the following applies:

(1~~a~~) The mineral interest is in coal, or in mining or other rights pertinent to or exercisable in connection with an interest in coal, as described in division (E) of section 5301.53 of the Revised Code; however, if a mineral interest includes both coal and other minerals, the non-coal mineral interests may be deemed abandoned and vested in the owner of the surface estate pursuant to this section;

(2~~b~~) The mineral interest is held by the United States, this state, or any political subdivision, body politic, or agency of the United States or this state, as described in division (G) of section 5301.53 of the Revised Code;

(3~~c~~) Within the ~~preceding~~ twenty years immediately preceding the date on which notice is served or published pursuant to division (E)(1) of this section, one or more of the following has occurred:

(a~~i~~) The mineral interest has been the subject of a title transaction that has been filed or recorded in the office of the county recorder of the county in which the lands are located;

(b~~ii~~) There has been actual production or withdrawal of minerals by the holder from the lands, from lands covered by a lease to which the mineral interest is subject, from a mine where a portion thereof is located beneath the lands, or, in the case of oil or gas, from lands pooled, unitized, or included in unit operations, under sections 1509.26 to 1509.28 of the Revised Code, in which the mineral interest is participating, provided that the instrument or order creating or providing for the pooling or unitization of oil or gas interests has been filed or recorded in the office of the county recorder of the county in which the lands that are subject to the pooling or unitization are located;

(c~~iii~~) The mineral interest has been used in underground gas storage operations by the holder;

(d~~iv~~) A drilling or mining permit has been issued to the holder, provided that an affidavit that states the name of the permit holder, the permit number, the type of permit, and a legal description of the lands affected by the permit has been filed or recorded, in accordance with section 5301.252 [5301.25.2] of the Revised Code, in the office of the county recorder of the county in which the lands are located;

(e~~v~~) A claim to preserve the mineral interest has been filed in accordance with division

(C) of this section;

(f~~vi~~) In the case of a separated mineral interest, a separately listed tax parcel number has been created for the mineral interest in the county auditor's tax list and the county treasurer's duplicate tax list in the county in which the lands are located.

~~(2) A mineral interest shall not be deemed abandoned under division (B)(1) of this section because none of the circumstances described in that division apply, until three years from the effective date of this section.~~

(C)(1) A claim to preserve a mineral interest from being deemed abandoned under division (B)~~(1)~~ of this section may be filed for record by its holder. Subject to division

(C)(3) of this section, the claim shall be filed and recorded in accordance with sections 317.18 to 317.201 [317.20.1] and 5301.52 of the Revised Code, and shall consist of a notice that does all of the following:

(a) States the nature of the mineral interest claimed and any recording information upon which the claim is based;

(b) Otherwise complies with section 5301.52 of the Revised Code;

(c) States that the holder does not intend to abandon, but instead to preserve, ~~his~~ the holder's rights in the mineral interest.

(2) A claim that complies with division (C)(1) of this section or, if applicable, divisions (C)(1) and (3) of this section preserves the rights of all holders of a mineral interest in the same lands.

(3) Any holder of an interest for use in underground gas storage operations may preserve the holder's interest, and those of any lessor of the interest, by a single claim, that defines the boundaries of the storage field or pool and its formations, without describing each separate interest claimed. The claim is prima-facie evidence of the use of each separate interest in underground gas storage operations.

(~~d~~D)(1) A mineral interest may be preserved indefinitely from being deemed abandoned under division (~~b~~B) of this section by the occurrence of any of the circumstances described in division (~~b~~B)(~~1~~)(~~c~~3) of this section, including, but not limited to, successive filings of claims to preserve mineral interests under division (~~c~~C) of this section.

(2) The filing of a claim to preserve a mineral interest under division (~~c~~C) of this section does not affect the right of a lessor of an oil or gas lease to obtain its forfeiture under Section 5301.332 [5301.33.2] of the Revised Code.

(E)(1) Before a mineral interest becomes vested in the owner of the surface estate under division (B) of this section, the owner of the surface estate must file for record with the recorder of the county or counties in which the real estate is located an affidavit of abandonment after serving notice by certified mail, return receipt requested, to the mineral interest holder or the holder's record successors or assigns, at the last known address of the holder or the holder's successors or assigns, or if service is not obtained by certified mail, by giving notice by publication at least once in a newspaper of general circulation in the county in which the land is located, of the owner of the surface estate's intent to declare the mineral interest abandoned. If service is obtained by certified mail, and if the mineral interest is held by more than one party, separate service shall be made upon each of the mineral interest holders.

(2)The notice or publication provided for under division (E)(1) of this section, shall be addressed to the holder, their record successors and assigns, and shall contain the name of the holder; a description of the land owned by the owner of the surface estate, which description shall contain a reference by volume and page to the record of the deed or other recorded instrument under which the owner of the surface estate claims title or otherwise satisfy the requirements of division (A)(3) of section 5301.52 of the Revised Code; a description of the mineral interest, which description shall include the volume and page of the recorded instrument upon which the Mineral Interest is based; a statement that none of the events described in division (B)(3) of this section have occurred within the twenty years immediately preceding the date on which the notice is served or published; and shall state the intention of the owner of the surface estate to file for record an affidavit of abandonment with the county recorder after thirty days and not more than sixty days from the date that notice is served or published.

(3)After thirty days and not more than sixty days from the date that the notice described in division (E)(2) of this section is served or published, the owner of the surface estate, or the owner of the surface estate's record successors or assigns, shall file with the county recorder an affidavit of abandonment setting forth that the owner of the surface estate, its successor or assign, is the owner of land subject to a severed mineral interest; the volume and page of the record upon which the mineral interest is based; that the mineral interest has been abandoned pursuant to division (B) of this section, reciting the facts constituting such abandonment; and that notice was served on the mineral interest holder or the holder's successors or assigns, or publication made and the manner and time thereof.

(a)If the holder, or the holder's successors or assigns, claims that the mineral interest has not been abandoned, the holder, or the holder's successors or assigns, shall, within sixty days from the date that the notice described in division (E)(2) of this section is served or published, notify the person who filed the affidavit of abandonment, and file for record a claim that complies with division (C)(1) of this section or file for record an affidavit that identifies which of the events described in division (B)(3) of this section have occurred within the twenty years immediately preceding the date on which notice is served or published pursuant to division (E)(1) of this section.

(b)If within sixty days from the date that the notice described in division (E)(2) of this section is served or published, the holder, or the holder's successors or assigns, does not file for record a claim that complies with division (C)(1) of this section or file for record an affidavit that identifies which of the events described in division (B)(3) of this section have occurred within the twenty years immediately preceding the date on which notice is served or published pursuant to division (E)(1) of this section, then at any time after the sixtieth day after the notice described in division (E)(2) of this section is served or published the owner of the surface estate shall cause the county recorder to note upon the margin of the record upon which the severed mineral interest is based the following: "This mineral interest abandoned pursuant to affidavit of abandonment recorded in vol. . . . . page. . . ." Thereafter the mineral interest will vest in the owner of the surface estate, its successors or assigns, and the record of the mineral interest shall not be notice to the public of the existence of the mineral interest or of any rights thereunder and the record shall not be received in evidence in any court of

the state on behalf of the holder or the holder's successors or assigns against the owner of the surface estate, its successors or assigns. The abandonment and vestment provided for under this section shall only be effective as to the property of the owner of the surface estate filing the affidavit.

(4)For recording the affidavit of abandonment and for noting such cancellation upon the margin of the record, the recorder shall charge the fees provided by section 317.32 of the Revised Code.

(5)In a county in which the county recorder has determined to use the microfilm process as provided by section 9.01 of the Revised Code, the recorder may, where applicable, require that the notation "This mineral interest abandoned pursuant to affidavit of abandonment recorded in vol. . . . . page. . . ." be entered on the affidavit, and that the affidavit be recorded in the record provided for by section 317.08 of the Revised Code. Thereafter, the mineral interest will vest in the owner of the surface estate, its successors or assigns, and the record of the mineral interest is not notice to the public of the existence of the mineral interest or of any rights thereunder and the record shall not be received in evidence in any court of the state on behalf of the holder or the holder's successors or assigns against the owner of the surface estate, its successors or assigns. The abandonment and vestment provided for under this section shall only be effective as to the property of the owner of the surface estate filing the affidavit. The recorder shall charge the fee for a recording under this section as provided by section 317.32 of the Revised Code for the recording of deeds.

Contact OSBA

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EXHIBIT 3

HB 521

2/23/88

SB 223 FLOOR SPEECH

pitching for Bob

Burch

Senate Bill 223 - also know as the Dormant Minerals Act - is legislaton needed as a supplement to the Ohio Marketable Title Act. In many instances, ownership of mineral rights have been separated from surface ownership. As time goes by the whereabouts of the people owning those interests is often lost and the mineral rights are left hanging with no one showing any interest in them.

A Dormant Minerals Act is in place in 16 states — California, Illinois, Indiana, Michigan, Minnesota, Nebraska, North Carolina, North Dakota, Oregon, Pennsylvania, South Dakota, Tennessee, Virginia, Washington and Wisconsin. The Dormant Minerals Act protects the mineral right owner by giving the owner 20 years to manifest an interest and to renew an interest in maintaining the mineral rights.

An owner can maintain his rights by:

1) transferring the interst to another party and recording the transaction,

2) leasing the mineral interests and recording the lease,

3) securing a drilling permit and recording the drilling permit,

4) maintaining production of minerals on the property,

5) using the mineral interests as a gas storage area, and

6) declaring his interest every 20 years if none of the other activities have taken place.

The bill would clear up many situations where tracing the mineral rights is impossible. The enactment of the legislation will encourage the development of minerals in

Ohio which have been previously ignored due to defects in title. The development of minerals would lead to severance tax revenues and enhance the economy of areas of the state which may have no other source of revenue production.

The proponents believe that companies engaged in the development of minerals as well as owners of property subject to title defects not cured by the Marketable Title Act would benefit from the enactment of the proposed dormant minerals statute.

Therefore, it would be easier to lease mineral rights where owners have left the scene and cannot be located. It would assist attorneys in searching titles and securing clear titles after a period of time. The bill would give at least three years for a mineral right owner to declare his interest in the event 20 years has passed since there was any active interest in the mineral right.

The bill is supported by the Ohio Farm Bureau and the Natural Resources Committee ~~and~~ of the Bar Association.

There is no known opposition.
The bill passed the Senate Judiciary Committee 7-0. & FULL Senate 32-0.

Bill as introduced identical to HB 521

Bruce Benedict &
Bob Fletcher are here
& may be able to
Answer questions you
MAY have.

EXHIBIT 4

FILED
COMMON PLEAS COURT
BELMONT CO., OHIO
2013 SEP 16 PM 1 42
CYNTHIA K. McGEE
CLERK OF COURT

IN THE COURT OF COMMON PLEAS BELMONT COUNTY, OHIO

BENJAMIN F. TAYLOR et al.,	:	
Plaintiffs,	:	Case No. 11 CV 472
vs.	:	ORDER
DONALD L. CROSBY, et al.,	:	
Defendants.	:	

This matter having come on before this Court upon Defendants Donald L. Crosby, Tammy Crosby, Richard Crosby and Janis Crosby's (Crosby's) Motion For Summary Judgment filed with this Court on November 27, 2012, Plaintiff's Cross Motion on December 28, 2012, Defendant PC Exploration and XTO Energy, Inc's (XTO's) Cross Motion For Summary Judgment and Memorandum Contra filed January 11, 2013 and Defendant Crosby's Memorandum In Opposition filed January 16, 2013. After having considered the same, this Court finds the following.

STATEMENT OF FACTS

Benjamin Belt (Belt) previously owned 108.708 acres in Richland Township, Belmont County, Ohio which is the subject of this action. In 1971, Belt transferred the property in question to Eli and Virginia Bell (collectively, the Bells). (the 1971 Transaction). Belt reserved "an undivided one half interest in and to all oil and gas in and underlying the" subject property. Mr. Belt leased the oil and gas to United Petroleum Corporation on July 10, 1975. On July 5, 1979, the Bells conveyed their entire interest to

Donald and Richard Crosby (who, together with their spouses, are the Crosby Defendants), subject to Belt's "undivided one half interest in and to all oil and gas in and underlying the" subject property. (the 1979 Transaction). From 1979 to the present, Donald and Richard Crosby have been the owners of the surface rights. Mr. Belt died on January 8, 1993. His estate was not probated until May, 2011 at which time Belt's interest in the parcel was transferred via probate.

On October 29, 2007, the Crosby Defendants leased the mineral rights in the subject property to Reserve Exploration Company (Reserve). Reserve assigned their interest in the lease to Petroleum Corporation on May 15, 2008.

SUMMARY JUDGMENT STANDARD

Ohio Rule of Civil Procedure Rule 56 provides that summary judgment is warranted when "it appears from the evidence or stipulation, and only from the evidence or stipulation, that reasonable minds can come to but one conclusion and that conclusion is adverse to the party against whom the motion for summary judgment is made, that party being entitled to have the evidence or stipulation construed most strongly in the party's favor." Ohio Rule of Civil Procedure 56(c).

Pursuant to Temple v. Wean United Inc., 50 Ohio St. 2d 317, 327, 364 N.E. 2d 267, 274 (1977) summary judgment is appropriate when the moving party demonstrates that (1) no genuine issues of material fact remain to be litigated; (2) the moving party is entitled to judgment as a matter of law; and (3) reasonable minds can come to but one conclusion that is adverse to the party against whom the motion is made.

PLAINTIFF'S CLAIMS

On October 19, 2011 the Plaintiff's herein filed the present action consisting of six claims.

Count One Declaratory Judgment to declare the lease between the Crosby Defendants and Reserve null and void.

Count Two Declaratory Judgment that Section 5301.56 (E) requires certified mail service to declare mineral rights abandoned.

Count Three Declaratory Judgment that Section 5301.56, the abandonment statute, is unconstitutional.

Count Four Slander of Title by recording documents in Belmont County and not affording the allegedly required notice provided in Section 5301.56.

Count Five Plaintiff's request an accounting of the "rentals and royalties paid" to the Crosby Defendants.

Count Six Injunctive Relief to preclude the implementation of the lease and removal of oil and gas.

DEFENDANT'S POSITION

The Defendants argue that the lease between Defendants Crosby and Reserve is a valid lease in that the Plaintiffs possess no interest in the oil and gas in question. For that reason it is the Defendant's position that the Plaintiffs have no claim for Slander of Title,

and accounting of the "rentals and royalties paid" nor Injunctive Relief.

The Defendants further argue that they have complied with the service requirements of ORC Section 5301.56(E) and that the abandonment statute is constitutional.

THE CONSTITUTIONALITY OF THE 1989 OHIO DORMANT MINERAL ACT

The Ohio Dormant Mineral Act was enacted in its original form on March 22, 1989. The act has been characterized as a "use it or lose it" statute. The Ohio Legislature attempted to balance the interests of property owners and the compelling public interest in drilling, producing and marketing the mineral interests of this state. Dormant and abandoned mineral interests were viewed as of no benefit to the state, while making use of the state's mineral resources was for the public good.

In order to negate the retroactive effect of the Act, the following language was inserted at 5301.56(B)(2).

(2) A mineral interest shall not be abandoned under division (B)(1) of this section.....until three years from the effective date of this section.

The oil and gas owners thereby were given 3 years to meet one of the "Savings Events" provisions. A similar statute was enacted in Indiana and provided for a two year grace period. This act was upheld by the United States Supreme Court in Texaco Inc. v. Short, 454 US 516 (1982). In Texaco, it was held that, "There was no constitutional right for a mineral interest owner to receive individual notice that his right will expire."

Based upon Texaco, this Court finds the 1989 Ohio Dormant Mineral Act to be

constitutional.

APPLICATION OF THE 1989 OHIO DORMANT MINERAL ACT

The Ohio Dormant Mineral Act has been characterized as a "use it or lose it" statute. In order to preserve one's interest in a severed mineral right one must meet the requirements of ORC 5301.56. In accordance with (B)(1) the mineral interest held by any person, other than the owner of the surface, shall be deemed abandoned and vested in the owner of the surface unless: the interest is in coal or the interest is held by the government. ORC 5301.56 also provides protection if within the preceding 20 years the mineral interest has been the subject of a title transaction, there has been actual production or withdrawal of the minerals , underground gas storage has taken place, a drilling or mining permit has been issued, a claim to preserve the interest has been filed or a separately listed tax parcel has been created for the mineral interest.

In the case at bar the only portion of ORC 5301.56 that is applicable herein deals with whether the property in question has been the subject of a title transaction. Applying the requirements of the 1989 Ohio Dormant Mineral Act, we must first look to the years 1992 back to 1969. The act provides for a 20 year look back period from March 22, 1989, but also allows for a three year grace period to March 22, 1992.

The Plaintiffs argue that the 1989 Act is a static 20 years plus the grace period. The Defendants take the position that the look back period is a rolling 20 years. The Plaintiffs rely on Riddell v. Layman. 94 CA 114, 5th District, Licking County (1995). Riddell was presented with the question of whether a 1965 deed recorded in 1973

qualified as a title transaction. A "rolling look back period" was not an issue.

ORC 5301.56 (D)(1) provides:

> A mineral interest may be preserved indefinitely from being deemed abandoned under division (B)(1) of this section by the occurrence of any of the circumstances described in division (B)(1)(C) of this section, including, but not limited to, successive filings of claims to preserve mineral interests under division (C) of this section.

A static 20 year look back period would have no need for a provision providing for indefinite preservation of mineral interests through successive filings of preservation claims. Based upon the same, this Court finds the 1989 Ohio Dormant Mineral Act to provide for a "rolling look back period."

TITLE TRANSACTIONS

In the case at bar, there are three transactions of worthy note. One is the 1971 Transaction wherein Benjamin Belt transferred the surface herein and reserved one half of the oil and gas. This transfer qualified as a Savings Event and protected the Belt mineral interest for 20 years and additionally under March 22, 1992 including the grace period.

A second transaction occurred in 1979 when the Bells conveyed their entire interest in the property in question to the Defendant Crosbys. The 1979 Transaction provided for the reservation of Belt's "undivided one half interest in and to all oil and gas in and underlying the" subject property. This Court does not find the oil and gas herein to be the subject of this title transaction as required by ORC 5301(B)(1)(C). The subject of

the transaction is that which is conveyed, being the surface and the unreserved one half oil and gas that was transferred. The crux of the Ohio Dormant Mineral Act is that it is a "use it or lose it" statute. To transfer the surface and one half the oil and gas was totally within the control of the Bells in 1979. Their transaction with the Defendant Crosbys could have been by quitclaim deed with no mention of the Belt reservation. The fact that it was mentioned does not make it the subject of the title transaction and in no way shows proof of Mr. Belt "using" the oil and gas in question. Be that as it may, the 1979 Transaction would have only protected the mineral interest until 1999 by use of the 20 year rolling look back application.

Mr. Belt's 1975 lease to United Petroleum qualifies as a title transaction and preserved the mineral interest for Mr. Belt until 1995.

Pursuant to the 1989 version of ORC 5301.56, as of 1995 the oil and gas interest held by Mr. Belt was deemed abandoned and vested in the owner of the surface. As to ORC 5301.56 effective June 30, 2006, any discussions regarding the same are moot in that any oil and gas interest of Mr. Belt and the Plaintiffs had been abandoned and vested in the Defendants prior to that date. See Wendt v. Dickerson, Tuscarawas County C.P. Case No. 2012 CV 020135, 2/21/2013, Walker v. Noon, Noble County C.P. Case No. 212-0098, March 20, 2013.

CONCLUSION

Wherefore, after having considered the Motions for Summary Judgment and after construing the evidence most strongly in favor of the nonmoving parties and having

determined that there is no genuine issue as to any material fact and further that reasonable minds can come to but one conclusion and further that there is no just reason for delay, this Court grants the Summary Judgment Motion of Defendants Crosby, Cross Motions of Defendant PC Exploration, Inc. and XTO Energy, Inc. and denies Plaintiff's Cross Motion For Summary Judgment. Plaintiff's Complaint is hereby dismissed. Costs to the Plaintiffs. This is a final appealable order. **IT IS SO ORDERED**.

Judge Linton D. Lewis, Jr.
Sitting by Assignment

WITHIN THREE (3) DAYS OF ENTERING THIS JUDGMENT UPON THE JOURNAL, THE CLERK SHALL SERVE NOTICE OF THIS JUDGMENT AND ITS DATE OF ENTRY UPON ALL PARTIES NOT IN DEFAULT FOR FAILURE TO APPEAR. SERVICE SHALL BE MADE IN A MANNER PRESCRIBED IN CIVIL RULE 5 (B) AND SHALL BE NOTED IN THE APPEARANCE DOCKET. CIVIL RULE 58.

EXHIBIT 5

Williams & Meyers, Manual of Oil and Gas Terms

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D Terms

8-D Manual of Oil and Gas Terms D

Scope

DA The daily Allowable (*q.v.*) established for a gas well. *See* Provisions Governing the Limitation and Allocation of Production of Gas, Saskatchewan MRO 119/*68 A 63, 5* Lewis and Thompson, *Canadian Oil and Gas* Div. D, Part X [5A] (1971).

DAC The Development Assistance Committee (*q.v.*).

Daily contract quantity (DCQ) The daily quantity of gas to be delivered or taken under a Gas purchase contract (*q.v.*).

HECI Exploration Co. v. Clajon Gas Co., 843 S.W.2d 622, 121 O.&G.R. 275 (Tex. Ct. App. 1992, writ denied) , concluded that (1) the gas purchase contract construed did not unambiguously limit the purchaser's take-or-pay obligations to the Railroad Commission's daily allowables for the gas wells involved; (2) the gas purchaser had not established as a matter of law that the daily contract quantity exceeded the amount of gas which the purchaser could take pursuant to the Common Purchaser Act and the Commission's ratable take requirements; (3) nothing in the record suggested that the purchaser paid for the minimum amount of gas it was obligated to take under the contract or that the purchaser took the minimum amount of gas it was required to take under its own interpretation of the contract; and (4) nothing in the contract required the seller to request payment for deficient takes within a specified time.

In *Gulf Oil Corp. v. Federal Power Comm'n, 563 F.2d 588, 59 O.&G.R. 191 (3d Cir. 1977) , cert. denied, 434 U.S. 1062 (1978) , reh'g denied, 435 U.S. 981 (1978) , cert. dismissed under Rule 60, 435 U.S. 911 (1978),* the court was called upon to construe a contract requiring the buyer to "purchase or pay for" a quantity of gas equal to 80 percent of the Daily Contract Quantity multiplied by the number of days in the year and entitling the buyer to purchase greater quantities of gas providing that the seller was not obligated to deliver in any day a quantity in excess of 125 percent of the Daily Contract Quantity.

The court concluded that the contract entitled the buyer to demand and required the seller to deliver 125 percent of the Daily Contract Quantity "every day" until the buyer demands less. For a subsequent appeal of this case, see *Gulf Oil Corp. v. Federal Energy Regulatory Comm'n, 706 F.2d 444 (3d Cir. 1983)*, *cert. denied, 464 U.S. 1038 (1984)*.

See also Superior Oil Co., F.P.C. Opinion No. 766 (June 10, 1976), 10 FPS 5-93 at 5-98.

Daily take The amount of gas required to be delivered and taken each day under the provisions of a Gas purchase contract (*q.v.*).

Daisy Bradford #3 The discovery well in the East Texas field. *See* East texas field.

Daisy chain A string of buyers and sellers of a single cargo of oil constructed as the cargo changes hands, sometimes several times a day and sometimes passing by the same company or buyer a number of times. These chains offer participants advantages of speculating and hedging. *Wall Street Journal,* Mar. 6, 1986, at 6.

See also the following:

Geltman, "Daisy Chains and Hybrids: Regulating Crude Oil Contracts in the Service Economy," *24 Tex. Int'l L.J. 399 (1989);*

Sas, "The Legal Aspects of the 15 Day Brent Market (Part I)," 5 *J. of Energy & Natural Resources Law* 109 (Part II), *id.* at 182 (1987).

See also Book-out; Circle-out; International Petroleum Exchange; Paper cargo; String; Wet cargo.

Damages *See* Liquidated damages clause; Location damages; Lost royalty rule; Punitive damages; Value of retained interest rule.

Damages exception clause A typical provision of crude oil sales agreements providing an exclusion of the buyer or seller for certain types of damages referred to as "indirect," "incidental," "consequential," or "special." For a discussion of such a clause in the context of a London arbitration, see B. Cova & N. Rawding, "Exceptions Clauses in Crude Oil Sale Agreements," [1995] 3 OGLTR 121.

Dansk Olie og Naturgas A/S (DONG A/S) The state oil company of Denmark. *See* Engel, "State-to-State Deals in the Crude Oil Trace--The Danish Experience," International Bar Ass'n, *Energy Law 1981* 17; Dragsted, "Recent Developments in Denmark," International Bar Ass'n Section on Energy and Natural Resources, *International Energy Law* (1984) (Topic 7); Ronne and Budtz, "The Legal Framework for Exploration for and Production of Oil and Natural Gas in Denmark," 3 *J. of Energy & Nat. Res. L.* 153 (1985).

Dansk Undergrunds Consortium (DUC) A group composed of several oil companies that is the sole

concessionaire of the Danish sector of the North Sea.

Darcy The unit of permeability; the rate of flow in milliliters per second of a fluid having a viscosity of one centipoise, through a cross section of one sq. cm. of the rock, under a pressure gradient of one atmosphere (760 mm. Hg) per centimeter, and conditions of viscous flow. A millidarcy is one one-thousandth (.001) darcy.

See also Permeability of rock.

D'Arcy Concession A 1901 concession for mineral development in Persia. *See* Shwadran, *The Middle East, Oil and the Great Powers* 14 (3d ed. revised and enlarged, 1973).

Darcy's law A statement of flow conditions. *See* Nelson and McNeil, "Oil Recovery by Thermal Methods," 17 *Interstate Oil Compact Bull.* 56 at 57 (Dec. 1958).

Dated Brent deal *Syn.:* Dated cargo deal (*q.v.*).

Dated cargo deal The sale or purchase of a specific cargo of crude, to be available within a specified date range at a price agreed at the time of contract. Sas, "The Legal Aspects of the 15 Day Brent Market (Part I)," 5 *J. of Energy & Natural Resources Law* 109, 110 (1987).

Syn.: Dated brent deal.

See also 15-day cargo deal.

Dawson Acts The Act of April 22, 1954 *(68 Stat. 57)* and the Act of July 11, 1956 *(70 Stat. 529),* providing for the transfer of certain mineral school lands to the states.

Day rate contract A contract for the drilling of an oil and gas well under which "the drilling contractor furnished the drilling crew and drilling equipment; he is paid an agreed sum of money for each day spent in drilling regardless of the number of days involved; all materials, services and supplies that are not agreed to be furnished by the contractor are furnished by the well owner." *Haas v. Gulf Coast Natural Gas Co., 484 S.W.2d 127, 131, 43 O.&G.R. 381, 389* (Tex. Civ. App.--Corpus Christi 1972, no writ) .

"Under the day work contract, an operator engages a contractor to drill a well at a specified location to a specified depth and agrees to pay the contractor at a specified rate per day. Accordingly, the operator and not the contractor, takes the risk of added expense because of delays and difficulties encountered in drilling. ..." *Ruby Drilling Co. v. Duncan Oil Co., 2002 WY 85, 47 P.3d 964, 154 O.&G.R. 460* , relying on 2 Eugene *Kuntz, A Treatise on the Law of Oil and Gas § 19A.5*(b), at 95 (1989). The *Ruby Drilling* decision also analyzes the factors that would transform a Footage contract (*q.v.*) into a Day rate or Day work contract.

In a day rate contract, the contractor furnishes equipment, labor, and performs services as for a specified

sum per day under the direction, supervision, and control of the operator or other party. In *CAZA Drilling (California), Inc. v. TEG Oil & Gas U.S.A., Inc., 142 Cal. App. 4th 453, 48 Cal. Rptr. 3d 271, 163 O.&G.R. 1052 (2006)* , the term "day-work basis" was defined to mean that "Contractor shall furnish equipment, labor, and perform services as herein provided, for a specified sum per day under the direction, supervision, and control of Operator (inclusive of any employee, agent, consultant, or subcontractor engaged by Operator to direct drilling operations)." The court contrasted the "day-work drilling" contract with "turnkey" contracts and "footage" contracts.

For a discussion of the circumstances under which a day rate rather than a footage rate is charged, see *Startex Drilling Co. v. Sohio Petroleum Co., 680 F.2d 412, 74 O.&G.R. 384 (5th Cir. 1982)* .

A Drilling contract (*q.v.*) may provide for payment on both a day rate and footage basis depending upon the depth, and may likewise provide an exculpatory clause for tortious injuries based on whether the drilling contractor is being paid on a day rate or footage basis. *Primrose Operating Co. v. Jones, 102 S.W.3d 188, 196, 159 O.&G.R. 563* (Tex. App.--Amarillo 2003, rev. denied) .

For a discussion of a modified International Association of Drilling Contractors Model Turnkey Contract with provisions for both a "turnkey amount" for drilling to a specified depth and a "daywork rate" for other specified work, see *Gary Drilling Co. v. Onesta Corp., 2003 Cal. App. Unpub. LEXIS 847* (Jan. 27, 2003) (not reported in Cal. Rptr. 2d).

See Helmerich & Payne International Drilling Co. v. BOPCO, LP, 357 S.W.3d 801 (Tex. App.--Eastland 2011) (parties used modiifed IADC Daywork Model Contract; dispute related to the commencement date of the contract, its term and the application of the early termination provision).

See also Drilling contract; Footage contract; Gulf coast clause; Term day-work contract; Turnkey contract.

Syn.: Day-work contract.

Day work In a Drilling contract (*q.v.*), one basis for determining the compensation of the independent drilling contractor. For example, a contract may provide a footage rate (see Footage contract) except when the well is coring and for Shut down time (*q.v.*) when operations have ceased at the operator's request. The day rate protects the drilling contractor against loss under the footage rate, when the well is not drilling at a normal rate because of special work requested by the operator.

Day-work contract *Syn.:* Day rate contract (*q.v.*).

DCC Designated Crown Corporation (*q.v.*).

DCQ Daily contract quantity (*q.v.*) of gas to be delivered or taken under a Gas purchase contract (*q.v.*).

DD&A Depletion, depreciation and amortization.

Deadman A timber or concrete block buried in the ground to which guy or stay wires are attached to secure derricks. *Denman v. Citgo Pipeline Co., 123 S.W.3d 728, 731, 159 O.&G.R. 509* (Tex. App.--Texarkana 2003) , citing *Grimes v. Goodman Drilling Co., 216 S.W. 202, 203* (Tex. Civ. App.--Ft. Worth 1919, writ dism'd) .

See also: *Cook v. Exxon Corp., 145 S.W.3d 776, 778 n.2, 167 O.&G.R. 27* (Tex. App.--Texarkana 2004) .

Dead oil Oil containing no dissolved gas.

Dead rent A term used in certain Concession (*q.v.*) agreements for a payment agreed to be made annually to the host country until the date of commencement of regular exports of the substances covered by the agreement. See *e.g.,* Article 10 of the Convention of 29 July 1938 between the Basrah Petroleum Company and the Government of Iraq [*Petroleum Legislation, Middle East: Basic Oil and Laws and Concession Contracts* (Vol. II, 1959)].

Dead well A well from which oil will not flow without a pump.

Deal *See* Barter deal; Cargo deal; Dated cargo deal; Dry deal; 15-day cargo deal; Industry deal; Oil man's deal; One-third for one-quarter deal; Paper deal; Processing deal; Third for a quarter deal.

Dealer day in court statute The term applied to franchising statutes enacted in a number of states affecting gasoline dealers. Such statutes require written disclosure to a dealer of the material terms of the franchise agreement and prohibit termination of or failure to renew the agreement unless justified by good cause. *See* Meriwether and Smith, *Gasoline Marketing Divestiture Statutes: A Preliminary Constitutional and Economic Assessment, 28 Vanderbilt L. Rev. 1277, 1279 (1975); Cal. Bus. & Prof. Code § 20999 et seq.* (1987); *Mass. Ann. Laws ch. 93E, §§ 1-8* (1975).

For a discussion of the Petroleum Marketing Practices Act of 1978 (establishing federal standards for termination and nonrenewal of franchise relationships in gasoline marketing), see Boyce, *State Gasoline Divorcement Statutes: Legal and Economic Implications, 28 Cath. U.L. Rev. 511, 551 (1979).*

Dear Reporter Letter (DRL) A generic letter sent out by the United States Department of Interior, Minerals Management Service (*q.v.*), setting out the requirements for calculating Federal and Indian royalty for Coalbed methane (*q.v.*) production. DRLs are not subject to immediate appeal since they do not constitute an order to have the lessee compute, report, or pay royalties. *Devon Energy, 171 IBLA 43 (2007)* .

See also Coalbed Methane; Minerals Management Service.

DEC A Drawing entry card (*q.v.*) submitted in a simultaneous oil and gas lease filing for a noncompetitive lease on federal land.

Decatherm A unit of heat in the metric system employed to measure the heating value of gas. This unit is equal to ten therms. *See* Therm.

One decatherm equals 1,000 cubic feet of gas with the standard heat content. *Transcontinental Gas Pipe Line Corp. v. Federal Energy Regulatory Comm'n, 998 F.2d 1313, 1316 n.1, 129 O.&G.R. 529 (5th Cir. 1993)* .

Deceptive Trade Practices-Consumer Protection Act (DTPA) A Texas statute, *Tex. Bus. & Com. Code Ann. §§ 17.41-17.63*, providing consumer remedies for unconscionable conduct and for breaches of express or implied warranties. *See* Dwyre, *Practical Applications and a Survey of Cases: The DTPA and Oil and Gas*, 18 Texas Tech L. Rev. 145 (1987).

High Plains Natural Gas Co. v. Warren Petroleum Co., 875 F.2d 284, 103 O.&G.R. 540 (10th Cir. 1989) , gave effect to the express terms of a contract authorizing a purchaser to reject gas not meeting quality specifications and terminate the contract, and further providing that these were the only penalties for a contract default; the contract validly limited remedies for breach of an implied warranty, and the buyer was not entitled to relief under the Deceptive Trade Practices Act.

Alvarado v. Bolton, 749 S.W.2d 47, 98 O.&G.R. 651 (Tex. 1988) , *on remand, 762 S.W.2d 215, 109 O.&G.R. 333* (Tex. App.--Houston [1st Dist.] 1988, writ denied) , held that the doctrine of merger is not available in a suit based on this Act.

Basic Energy Service, Inc. v. D-S-B Properties, Inc., 2011 Tex. App. LEXIS 4971 (Tex. App.--Tyler June 30, 2011), 2011 Tex. App. LEXIS 9286 (Tex. App.--Tyler Nov. 23, 2011) , *opinion withdrawn and appeal dismissed, 2012 Tex. App. LEXIS 3881* (Tex. App.--Tyler May 10, 2012) (royalty owner is not a consumer under DTPA and is not a third-party beneficiary of the drilling contract between the lessee and a contractor hired to repair an existing well);

Bomar Oil & Gas, Inc. v. Loyd, 2009 Tex. App. LEXIS 5505 (Tex. App.--Waco Jul. 15, 2009) , *modified on rehearing, 298 S.W.3d 832* (Tex. App.--Waco 2009, rev. denied) , held that an unleased cotenant who is entitled to an accounting from the operator is not a consumer entitled to the protections afforded by the DTPA.

C & C Partners v. Sun Exploration & Porduction Co., 783 S.W.2d 707, 111 O.&G.R. 308 (Tex. App.--Dallas 1988, error denied) , held that a nonoperating owner who had entered into an exploration agreement with an operator was not a "consumer" within the meaning of the DTPA. *In accord: Anderson v. Vinson Exploration, Inc., 832 S.W.2d 657, 122 O.&G.R. 94* (Tex. App.--El Paso 1992, error denied) ; *Hamilton v. Texas Oil & Gas Corp., 648 S.W.2d 316, 322, 76 O.&G.R. 300, 307* (Tex. App.--El Paso 1982) .

Declaration of interest A term defined in Louisiana Mineral Code § 210.2 as "a signed statement by a party claiming an interest in mineral production, including the authority to sell production belonging to others, containing the name, address, and taxpayer identification number, a description of the property from which the oil and condensate are produced, and a certification of the claimant's fractional or decimal interest in the production." La. R.S. 31:210.2B. The Act, 1992 La. Acts No 155, specifies remedies available to a claimant who notifies a third party purchaser of his declaration of interest if the

third party fails to pay in response to the notification.

Declaration Of Land Patent A document, often filed in property records or in court proceedings, that purports to provide evidence of "allodial" (non-feudal) ownership of property in the person filing the "declaration of land patent." Coupled with a copy of the original land patent from the United States (or other sovereign), the filers of such declarations assert that they have extinguished competing claims to ownership and security interests and/or have rendered their property exempt from state or local taxes. In *Hamilton v. Noble Energy, Inc., 220 P.3d 1010 (Colo. App. 2009)* , landowners, who also held a one-eighth mineral interest in the land, recorded a Declaration of Land Patent in the county records asserting that if the instrument was not challenged in a court within 60 days, then they had absolute title to the land. The land was subject to an oil and gas lease to Noble Energy, Inc. When the landowners brought an action against Noble claiming that the declaration entitled them to all future royalties under the lease, the court held that their declaration had no legal effect. Many other courts have ruled to the same effect, e.g. *Federal Land Bank of Jackson v. Kennedy, 662 F. Supp. 787 (N.D. Miss. 1987)* .

Declaration of Taking Act (DTA) A federal statute that provides for a quick-take condemnation procedure by either a federal governmental agency or a private entity holding an appropriate federal Certificate of public convenience and necessity (*q.v.*). *40 U.S.C. § 3114*. The DTA gives the condemning authority the right to take immediate possession of the premises. East Tennessee *Natural Gas Co. v. Sage, 361 F.3d 808, 822, 161 O.&G.R. 573 (4th Cir. 2004)* .

Even where there is no direct power to take immediate possession of the premises under the DTA, courts exercising their equitable powers may grant preliminary injunctions to avoid unneeded delay. East Tennessee *Natural Gas Co. v. Sage, 361 F.3d 808, 826 (4th Cir. 2004)* , *486 F.Supp.2d 741 (N.D. Ill. 2004)* , *aff'd, 525 F.3d 554 (7th Cir. 2008)* .

In *Mid-Atlantic Express, LLC v. Baltimore County, Maryland, 410 Fed. Appx. 653 (4th Cir. 2011)* , the court noted that while *Sage* allows for an immediate take order, the holder of the Certificate of public convenience and necessity *(q.v.)* must have the power of condemnation. If the power has been conditioned by the FERC *(q.v.)* and the condition has not been met, the district court may not exercise its equitable powers to authorize an immediate take.

Columbia Gas Transmission Corp. v. An Easement to Construct, Operate, and Maintain a 24-Inch Gas Transmission Pipeline ... , *2007 U.S. Dist. LEXIS 52674* (W.D. Va.) ;

Northwest Pipeline Corp. v. The 20' x 1430' Pipeline Right of Way ... , *197 F.Supp.2d 1241 (E.D. Wash. 2002)* ;

Kern River Gas Transmission Co. v. Clark County, Nevada, 757 F. Supp. 1110 (D. Nev. 1990) ; Tennessee *Gas Pipeline Co. v. Garrison, 2010 U.S. Dist. LEXIS 94422* (M.D. Pa. Sept. 10, 2010) ; East Tennessee Natural Gas, LLC v. 3. 62 Acres in *Tazewell County, 2006 U.S. Dist. LEXIS 31136* (W.D. Va. May 18, 2006) ; Guardian Pipeline, L.L.C. v. 950. 80 *Acres of Land, 210 F. Supp. 2d 976, 979 (N.D. Ill. 2002)* ; Northern Border Pipeline Co. v. 64. 111 *Acres of Land, 125 F. Supp. 2d 299, 301* (Declaration of Taking Act (DTA) 2000); Tennessee *Gas Pipeline Co. v. New England Power, Inc., 6 F. Supp. 2d 102 (D. Mass. 1998)* ; *but cf.* Northern Border Pipeline Co. v. 86. 72 *Acres of Land, 144 F.3d 469 (7th Cir. 1998)* .

Northern Border Pipeline Co. v. 127. 79 *Acres of Land, 520 F. Supp. 170 (D.N.D. 1981)* ;

There are several cases which disagree with the *Sage* holding that the federal courts have equitable power to grant injunctive relief giving pipelines the right of immediate take. *See* Northern Border Pipeline Co. v. 86. 72 *Acres of Land, 144 F.3d 469 (7th Cir. 1998)* ; Transwestern Pipeline Co., LLC v. 9.32 Acres, More or Less ... , *544 F.Supp.2d 939 (D. Ariz. 2008)* .

See also Condemnation; Eminent domain; Rule 71A.

Declared unit A unit formed by the lessee acting under the provisions of a lease pooling clause. In Louisiana the legal consequences of forming such a unit may be different from those following the formation of a Voluntary unit (*q.v.*) or Contractual unit (*q.v.*), *viz.*, one specifically created by joint agreement of the mineral lessee and the owners of all the other mineral or royalty interests affecting the land in question. *See Humble Oil & Refining Co. v. Jones, 157 So. 2d 110, 19 O.&G.R. 545 (La. Ct. App. 1963)* , *writ refused, 245 La. 568, 159 So. 2d 284, 19 O.&G.R. 559 (1964)* . A declared unit was deemed ineffective in *Mobil Oil Exploration and Producing Southeast, Inc. v. Latham Exploration Co., Inc., 31 So. 3d 1149* (La.App. 2 Cir. 2/3/10) , because the declaration was not recorded until after the end of the primary term. A second declared unit was effective when timely recorded despite a claim of an inadequate description of the tract pooled. *See § 669.11 supra.*

See also Unit agreement.

Decline analysis A method of estimating petroleum reserves by determining the natural production decline and extrapolating to predict future production. *See* Graham, "Fair Share or Fair Game?," 8 *Nat. Res. Law.* 61 at 64 (1975).

Decline rate The rates at which the flow of oil or gas from a field falls as production proceeds. P. Stevens, *Oil and Gas Dictionary* 49 (1988).

Declining balance method *See* Depreciation.

Decommissioning A term used to describe the plugging and abandonment procedure used mostly for offshore wells and platforms. The regulations dealing with Outer Continental Shelf Lands Act (*q.v.*) leases define decommissiong as:

(1) Ending oil, gas, or sulphur operations; and

(2) Returning the lease or pipeline right-of-way to a condition that meets the requirements of regulations of BSEE and other agencies that have jurisdiction over decommissioning activities

See Noble Energy, Inc. v. Salazar, 770 F. Supp. 2d 322 (D.D.C. 2011) (operator or former operator are individually responsible for decommissioning costs on OCS well or platform).

See also: Outer Continental Shelf Lands Act; plugging of well.

Decree *See* Alternative decree; Cancellation decree; Conditional decree of cancellation; Consent decree (or order); Partial cancellation; Pipeline consent decree of 1941.

Dedicated reserve contract A term employed in the Texas Dedicated Reserve Tax Act for "any written contract for a designated term specified therein which confers upon a dedicated reserve producer the right to take title to gas from particular lands, leases and reservoirs in this State, and imposes upon a severance producer the duty to supply all or a designated quantity or portion of gas produced by that severance producer (or by that severance producer in conjunction with others) to the dedicated reserve producer at a fixed or determinable price." The Act was held to be unconstitutional in *Calvert v. Panhandle Eastern Pipe Line Co., 371 S.W.2d 601, 19 O.&G.R. 742* (Tex. Civ. App.--Austin 1963, error ref'd n.r.e.) .

Dedicated reserve producer A term employed in the Texas Dedicated Reserve Tax Act for "any person holding a written contract for a designated term specified therein which confers upon such person the right to take title to gas from particular lands, leases and reservoirs in this State and imposes upon a severance producer the duty to supply all or a designated quantity or portion of gas produced by that severance producer (or by that severance producer in conjunction with other severance producers) to the dedicated reserve producer at a fixed or determinable price." The Act was held to be unconstitutional in *Calvert v. Panhandle E. Pipe Line Co., 371 S.W.2d 601, 19 O.&G.R. 742* (Tex. Civ. App.--Austin 1963, error ref'd n.r.e.) .

Dedication contract A gas purchase and sale contract under which the producer contracts to furnish the purchaser all the gas produced from specified reserves, thus "dedicating" those reserves to the customer. In *Louisiana Land & Exploration Co. v. Texaco, Inc., 478 So. 2d 926, 89 O.&G.R. 472 (La. Ct. App. 1985)* , a dedication contract was distinguished from a Warranty contract (*q.v.*), under which the producer is obligated to deliver to the purchaser certain quantities of gas, but the source of the gas is unspecified and the producer may fulfill his obligation from any source he chooses. The judgment in this case was reversed and remanded on other grounds, *491 So. 2d 363, 89 O.&G.R. 479 (La. 1986)* , *cert. denied, 483 U.S. 1009 (1987)* .

B & A Pipeline Co. v. Dorney, 904 F.2d 996, 112 O.&G.R. 103 (5th Cir. 1990) , concluded that "As a matter of law, when a gas well owner reserves the right to take the production of the well in kind, the production of that well is not dedicated" by a contract to which such owner was not a party. *See also Holloway v. Atlantic Richfield Co., 970 S.W.2d 641, 140 O.&G.R. 326* (Tex. App.--Tyler, 1998) , which follows *B & A Pipeline Co. v. Dorney*.

The definition in the Manual of Terms was cited in *Moncrief v. Williston Basin Interstate Pipeline Co., 174 F.3d 1150, 1170 (10th Cir. 1999)* , where the court distinguished between a dedication contract and a Warranty contract (*q.v.*).

Dedication of reserves The assurance of an adequate supply of natural gas to a pipeline company, usually accomplished by a Gas purchase contract (*q.v.*) between a natural gas producer and the pipe line company. A typical contract will provide that "seller hereby dedicates to the performance of this contract all gas located in, under, or hereafter produced from the units, leases, and lands described in Exhibit 'A' (hereafter referred to as dedicated reserves)." Such contracts normally run for a period of at least twenty years. Dedication of reserves is required by the Federal Power Commission and its successor, the Federal

Energy Regulatory Commission, acting under the Natural Gas Act, *52 Stat. 821, 15 U.S.C. § 717 et seq.* , which requires the issuance of a certificate of public convenience and necessity by the Commission as the prerequisite of constructing or operating an interstate gas pipe line. Issuance of the certificate depends upon a showing, *inter alia,* of an ability to provide adequate, continuous and reasonable service, which obviously includes an adequate gas supply. *See* Linz, "Federal Power Commission--It's Always in the Middle," 52 *Oil and Gas J.* 84 (1953); Wheat, "Administration of the Certificate Provisions of the Natural Gas Act," *14 Geo. Wash. L. Rev. 194 (1945);* Comment, *28 Ind. L.J. 587 (1953);* Treatise § 724.6.

The definition in this Manual was quoted in *Nordan-Lawton Oil & Gas Corp. of Texas v. Miller, 272 F. Supp. 125, 129 n. 12, 136 , 27 O.&G.R. 593, 596 n. 12, 606 (W.D. La. 1967) , aff'd, 403 F.2d 946 , 31 O.&G.R. 526 (5th Cir. 1968)* (citing this Manual).

Deed *See* Broad form deed; Correction deed; Fractional mineral or royalty deed; Mineral deed; Quitclaim; Royalty deed; Top deed.

Deemed interest An agreed rate of interest applicable to development costs incurred under a Service contract (*q.v.*) which the contractor is entitled to recover out of actual production, if any.

Deemed purchase formula A formula, sometimes utilized when one party to an operating agreement is unable to market its share of available or optimum production but the other or others can, under which the overlifter purchases the share of production not taken by the underlifter at a discount price. H.P. Williams, "Matters to be Taken Into Consideration in the Negotiation of Farmouts and Operating Agreements," 1 *Austl. Mining & Petroleum L.J.* 509, 520 (1978).

See also Balancing; Cancelled underage; Deferred production agreement; Gas bank agreement; Joint operating agreement; Lifting; Lifting tolerance; "Out of balance" production plan; Overlift; Split connection; Underage; Underlift; Underlift/overlift provision.

Deemed test provision A clause of a gas purchase and sale contract providing that "If during any day Seller cannot deliver a quantity of gas equal to the delivery capacity determined by the next preceding [deliverability] test, then such reduced quantity will be deemed a new [deliverability] test for the purpose of establishing Buyer's minimum purchase obligation." *Lone Star Gas Co. v. G.S.G. Royalty Corp., 757 S.W.2d 457* (Tex. Ct. App.--Dallas 1988, no writ) .

See also Deliverability test.

Deeper drilling exception An exception to the "vintaging" rules of the Federal Power Commission and its successor, the Federal Energy Regulatory Commission, providing that production from reservoirs penetrated for the first time through deeper drilling in an existing well was eligible for the same price rate as if the deeper drilling constituted the commencement of such well. *See Falcon Petroleum v. Federal Energy Regulatory Comm'n, 642 F.2d 780, 69 O.&G.R. 205* (5th Cir., Unit A, 1981) .

See also Price control of oil, gas and petroleum products.

Deep gas "Gas found at depths greater than the average for a particular area; for FERC purposes it is gas found at depths of more than 15,000 feet." American Gas Ass'n, *Glossary for the Gas Industry* (3d ed. 1981).

Deep gas theory The theory that "at least some of the world's natural gas may be migrating upward from decomposing sediments carried far beneath the surface by the collision of the earth's underground plates, which are best known for producing earthquakes."

"Over hundreds of millions of years, the oceanic plate has been drawn steadily deeper into the earth's mantle as the continental crust moves over it, leading scientists to speculate that this infinitesimally slow movement may have carried rich sediments from the ocean floor to extreme depths. Under the extraordinarily high pressures and temperatures far below the surface, the organic sediments would decompose into methane.

"Then, as the theory goes, the gas moves up until it reaches an impenetrable 'cap rock' and forms a reservoir. If true, many deep targets that have not been considered likely sources of gas may ultimately prove to be productive sources. 'If this ultra-deep gas exists, it could change current theories on the origins of natural gas, the locations where it can be found, and the size of world gas resources,' DOE said." CCH, *Energy Management* 4 (Issue No. 822, Oct. 11, 1988).

See Treatise § 102, note 1.

"Deep Horizons" legislation The colloquial name given House Bill No. 2208, *Kans. Stat. Ann. §§ 55-223 to 55-229* (1983), which recognized the implied Further exploration covenant (*q.v.*) and shifted the burden of proof in implied covenant cases to the lessee in specified circumstances. *See* the following papers:

Torline, "Developing the Unexplored Deep Horizon Act," *26 Washburn L.J. 471 (1987);*

Lungren, "Deep Horizons--Legislative Shifting of the Burden of Proof in Implied Covenant Cases," *24 Washburn L.J. 30 (1984).*

The Deep Horizons Act was applicable to the facts in *Lewis v. Kansas Production Co., Inc., 40 Kan. App. 2d 1123, 199 P.3d 180 (2009)* . The appeals court ruled that before the extreme remedy of forfeiture could be imposed under the facts, there should have been a demand for compliance.

Deep pool unit A unit established in Louisiana for a deep pool. In 1999, the Louisiana legislature authorized the compulsory unitization of deep pools, those in excess of fifteen thousand feet true vertical depth. *See La. Rev. Stat. § 30:5.1.* Such units may be established without the consent requirements which are applicable to other reservoir-wide units in Louisiana.

Deep Rights Act *Kan. Stat. Ann. §§ 55-223 to 55-229* (1983), which recognized the implied Further exploration covenant (*q.v.*) and shifted the burden of proof in implied covenant cases to the lessee in specified circumstances.

Syn.: "Deep Horizons" legislation. (*q.v.*)

Deep Seabed Mineral Resources Act Pub. L. No. 96-283 (1980), as amended, *30 U.S.C. § 1401 et seq.* The Act:

1. Disclaims extraterritorial sovereignty by the U.S. over deep seabeds. (Title I)

2. Requires licensing, in accordance with this Act, for exploration of or commercial recovery from deep seabeds. (Title II)

3. Directs the Secretary of the Interior to administer the Act and to enforce civil and criminal penalties which the Act establishes. (Title II)

4. Determines the effects of subsequent international agreements upon the licenses granted under the Act. (Title III)

5. Imposes a tax on hard mineral resources removed from the deep seabed. (Title IV)

6. Establishes a Deep Seabed Fund in the U.S. Treasury. (Title V)

See also Outer Continental Shelf (OCS).

Deep Water Royalty Relief Act of 1995 A statute designed to give royalty relief for two categories of production, that occurring prior to, and that occurring after, the date of enactment. Pub. L. No. 104-58, *109 Stat. 563, 565 (1995),* codified at *42 U.S.C. § 1337.*

Santa Fe Snyder Corp. v. Norton, 385 F.3d 884, 161 O.&G.R. 789 (5th Cir. 2004) invalidated Department of Interior rules interpreting the Act because the Act was unambiguous and the rules restricted the types of leases that were to be given relief.

Kerr-McGee Oil and Gas Corp v. U.S. Department of Interior, 554 F.3d 1082 (5th Cir. 2009) rejected the Department of the Interior's argument that royalty relief leases under the Deep Water Royalty Relief Act are subject to price threshold exceptions before the minimum amount of royalty free production is obtained, finding that the agency interpretation contradicted the plain, unambiguous language of the statute.

Deep well The term is defined by *W. Va. Code § 22-6-1(g)* (1995) as "any well other than a shallow well, drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group."

In *State of West Virginia ex rel. Blue Eagle Land, LLC v. West Virginia Oil & Gas Conservation Commission, 664 S.E.2d 683 (W. Va. 2008)* , the court refused to grant interlocutory relief to parties challenging the Commission's issuance of orders relating to a number of Marcellus Shale wells. The basis of the challenge was that the proposed wells were Shallow wells *(q.v.)* subject to the jurisdiction of the Shallow Well Gas Review Board.*(q.v.)*

See also Shallow well; Shallow Well Gas Review Board; Well.

Default clause (1) A clause found in some leases providing that in the event the lessee violates any of the terms or conditions of the lease and fails to remedy the violation within a stipulated number of days after written notice from the lessor, the lessor, at his option, may terminate the lease.

See also Cross default clause; Good faith clause; Judicial ascertainment clause; Notice and demand clause.

(2) A provision of a joint venture agreement requiring the transfer to Nondefaulters of the interest of a party who defaults by ceasing to carry on its business or becoming insolvent or having a receiver appointed for its assets. For a discussion of the validity of such a clause, see [1990] 7 *OGLTR* D-88.

See also Waite & Dawbom, "Contractual Forfeiture of Joint Interests: Are Such Clauses Enforceable?," [1990] 11 *OGLTR* 389; 9 *JENRL* 220 (1991) (discussing the narrow construction given a default clause in a joint venture operating agreement by New South Wales courts in Mosaic Oil NL v. Angari Pty Ltd., (1990) 29 N.S.W.L.R. 280, *aff'd* (Ct. App. 1990)).

See also Withering clauses.

Defeasible fee An estate in Fee simple determinable (*q.v.*), fee simple subject to an executory interest [see Executory interest], or a fee simple subject to a power of termination [see Power of termination]. *See Restatement of Property §§ 44*-58 (1936).

Defeasible-term interest A mineral, royalty or nonexecutive mineral interest for a fixed term of years and for an indefinite period of time thereafter, usually so long as oil or gas is produced. *See* Treatise § 331 at n.2, §§ 333-*336*.

See also Masterson clause; Term mineral or royalty interest.

Defensive clause The term utilized by Lowe, *Oil and Gas Law in a Nutshell* 227 (3d ed. 1993), to describe a variety of clauses (*e.g.*, dry hole clause, drilling operations clause, shut-in royalty clause, force majeure clause) sought by a lessee to protect his lease from termination as a result of strict construction policies applied by the courts to the oil and gas lease.

Deferred bonus Landowner's bonus (*q.v.*) paid in installments spread over a number of years, as distinguished from the usual mode of payment, which is in a lump sum on execution and delivery of the lease.

Kiewit Texas Mining Co. v. Inglish, 865 S.W.2d 240, 127 O.&G.R. 391 (Tex. App.--Waco 1993, error denied) , held that a bonus payable on twenty-fifth anniversary of a lease was not payable if the lease was terminated prior to that date.

The tax treatment of deferred bonus prior to the Tax Reduction Act of 1975 is discussed in Burke and Bowhay, *Income Taxation of Natural Resources* P 4.09 (1981), and *Miller's Oil and Gas Federal Income Taxation* § 18-12 (1980 edition).

Deferred bonus bidding A system of bidding for leases under which the operator pays the bonus in installments and retains the option to surrender the rights and discontinue the payments at any time.

"Advocates of this system claim that it encourages participation by smaller companies and reduces the necessity of discounting bids to take account of uncertainty. There is also a substantial incentive for rapid exploration, should this be a government objective. Nevertheless, there would appear to be formidible problems in the administration of such a system as it encourages overbidding and frequent surrender of rights without detailed evaluation of oil and gas reserves." Crommelin, "Offshore Oil and Gas Rights: A Comparative Study," 14 *Nat. Res. J.* 457, 494 (1974) .

See also Bid; Bonus; Lease bidding systems.

Deferred minimum annual royalty A Minimum royalty (*q.v.*), the liability for which is incurred each year, but payment is deferred until production is obtained or a date certain, whichever occurs earlier. As a condition to permitting the deferral of payment, the lessor usually obtains security, guarantees, assumptions of liability, or other assurances beyond the existence of the mineral that the deferred royalty will be paid. From an economic standpoint, this royalty is a hybrid of a production payment and a lease bonus.

"To a lessor, it has the advantage of guaranteeing a minimum return without regard to production. It should also encourage prompt development of a lease since a lessee will desire to avoid incurring subsequent minimum annual royalties on unproductive acreage. To an accrual basis lessee, it has greater tax advantages than a lease bonus because it is deductible in the year paid or incurred. Although it exposes the lessee to more economic risk, this risk can be reduced through proper planning." Martin, "Tax Advantages of a Deferred Annual Royalty Provision in Oil and Gas Leases," 30 *O.&G. Tax Q.* 241, 261 (1981).

Deferred net royalty A "deferred right of participation, limited to the terms of an existing lease, in the net proceeds from the sale of oil and/or gas produced from a specified tract of land or well after payment of a certain fixed preferred amount in dollars as set out in a 'Trust Agreement'; but such right of participation is subject to prior payment of (a) 'Landowner's Royalty' and 'Overriding Royalty' and (b) production equipment, acidization, operating cost, taxes, assessment and any other deductions authorized by the 'Trust Agreement' under which the right of such participation is created. After payment of said fixed preferred amount Deferred Net Royalties shall rank pari passu with 'Preferred Net Royalties' and 'Net Royalties' in the net proceeds from the sale of oil and/or gas." Saskatchewan Amended Regulations, Securities Act, O.C. 1704/52, July 14, 1952; *1 O.&G.R. 1541, 1549* .

See also Net royalty; Preferred net royalty, Royalty.

Deferred oil payment *See* Deferred production payment.

Deferred-payment open-end sale A sale of operating properties in which the grantor reserves a production payment which terminates when the production by the grantee equals a specified amount or when the reserves equal another specified amount, whichever occurs first. Under this plan, if the reserves

are accurately estimated, the sellers will continue to receive proceeds from the production payment until the buyer takes all the gas which was anticipated, but if the reserves prove smaller, the production payment will end. *See* Jewell, "Deferred-Payment Open-End Sales of Oil and Gas Interests to Obtain Capital Gains," 11 *Tulane Tax Inst.* 260, 280-81 (1962).

See also Oil payment.

Deferred production agreement An agreement entered into by owners entitled to take gas in kind whereby one such owner is permitted to take gas as produced and the other owner postpones his right to take such gas. Such agreement may be entered into where one owner has accepted a temporary certificate and another has elected to await the issuance of a permanent certificate from the Federal Power Commission or its successor, the Federal Energy Regulatory Commission. *See* Park, "Developments in Natural Gas Purchase Contracts," *22 Alta. L. Rev. 43 (1984);* Richardson, "Producer Contracts for Sale of Natural Gas in Interstate Commerce," 11 *Sw. Legal Fdn. Oil & Gas Inst.* 201 at 214 (1960); Interstate Oil Compact Commission, General Counsel Report No. 39, May 8, 1961; Jameson, "Significant Problems in the Production of Natural Gas," 4 *Sw. Legal Fdn. National Inst. for Petroleum Landmen* 201, 206 (1963).

Syn: Gas balancing agreement.

See also Balancing; Cancelled underage; Deemed purchase formula; Gas bank agreement; Lifting; Lifting tolerance; "Out of balance" production plan; Overlift; Split connection; Underage; Underlift; Underlift/overlift provision.

Deferred production payment A production payment which does not commence until after the operator has realized a specific sum from production from the lease or after a primary production payment. *See* Bergen, "Oil Payments and the Investor," 4 *Rocky Mt. Min. L. Inst.* 87, 97 (1958) (observing that the Bureau of Internal Revenue took the position that to the extent payment was received for deferral, such payment was taxable as ordinary income subject to depletion). *See* Treatise § 422.1.

Syn.: Secondary production payment.

See also Oil payment.

Deferred working interest The term applied to a share of the working interest in specified leases which does not vest until some future event, *e.g.,* payout of costs from production. *See Howell Petroleum Corp. v. Leben Oil Corp., 976 F.2d 614, 121 O.&G.R. 250 (10th Cir. 1992)* (farmor reserved an overriding royalty which would expire on payout and a deferred working interest that would vest on payout).

See also Convertible interest.

Deferred working interest farmout A form of transaction in which "the farmee agrees to pay a share (usually 100 percent) of the cost of a well or wells on the property which is disproportionately greater than the permanent share of the working interest he acquires in the transaction; however, the farmee is given the additional right to hold a similarly disproportionate share (usually 100 percent) of the operating

rights in the well or wells (and to receive the production income therefrom) until payout--defined as the time the farmee has recouped his costs. The farmor retains a deferred working interest which does not participate in production revenue until the farmee achieves payout, at which time the working interest share of the farmee automatically drops to his permanent interest. The farmee is entitled to deduct all IDC's which he pays, including that portion attributable to the farmor's deferred working interest. Upon reversion of the farmor's share of the working interest, the farmee must reclassify the portion of his undepreciated basis in tangible equipment attributable to the farmor's working interest as depletable leasehold cost. It does not appear that potential Section 1245 recapture attributable to the interest in the lease and well equipment, which reverts to the farmor, is triggered on the basis that either no disposition has occurred, or no realized gain has resulted from the transaction." Crichton, "Recapture of Intangibles Under Section 1254," 30 *Sw. Legal Fdn. Oil & Gas Inst.* 509, 538 (1979).

See also Farmout agreement.

Deficiency agreement *See* Throughput and deficiency agreement.

Deficiency volume The volume a purchaser is required to take or pay for under a Take-or-pay contract (*q.v.*) but does not take. Marseglia, *Take-or-Pay Litigation--The Producer Perspective: Part 1*, [1987/88] 4 *OGLTR* 93, 94.

Deficient well A well incapable of producing its allowable. *See Minor v. Pan American Petroleum Corp., 216 F. Supp. 86, 88 (W.D. La. 1962)* .

Definite escalation clause Any provision in an independent producer's contract for the sale of natural gas in interstate commerce for resale or the transportation of natural gas in interstate commerce which sets forth the price to be paid for natural gas delivered thereunder in terms of a specific price per unit, including, in addition to the initial price, any increases therein by specific amounts at definite future dates, or any provision which changes the specific price in order to reimburse the seller for all or any part of the changes in production, severance, or gathering taxes levied upon the seller. *See* Treatise § 726.

See also Escalator clause; Indefinite escalation clause.

Deflection *See* Angle of deflection.

DeGolyer, Everette Lee A leading figure in the American oil industry. In 1910 he discovered the Portero del Llano well in Mexico. Thereafter he was a leader in the introduction of geophysics into oil exploration, established a leading petroleum engineering consulting firm, DeGolyer and McNaughton, and performed a variety of public services. *See* D. Yergin, *The Prize* 391-393 (1991).

Degree day A measure of the coldness of the weather based on the extent to which the daily mean temperature falls below a reference temperature, usually 65 degreesF.

Dehydration Removal of water from fluid produced from oil wells. In discussing whether dehydration costs were chargeable against the royalty owner the Oklahoma Supreme Court in *TXO Production Corp. v. State ex rel. Commissioners of the Land Office, 903 P.2d 259, 262, 132 O.&G.R. 189 (Okla. 1994)* stated: "According to TXO's brief in chief, dehydration 'involves removal of moisture from gas before it enters the purchaser's pipeline.' Such a process is necessary to order to make the product marketable and involves costs incident to delivering the product into pipelines. As such costs of dehydration are not chargeable against Commissioners under *Wood v. TXO Production Corp., 854 P.2d 880 (Okla. 1992)]* ".

Dehydration plant A plant designed to remove basic sediment and water from the fluid produced from oil wells. Efficiency of such plants varies materially. In the more elaborate type of plant designed to serve a number of wells, the fluids produced from the wells are collected through the pipe lines from the various wells and run into large receiving tanks and there commingled. From these tanks it passes through entirely closed, large pipes, which are heated with steam, and then into entirely closed reservoirs, where it is further treated with chemicals. This treatment removes practically all water and other impurities, and the oil in good marketable condition is delivered into stock tanks or run into pipelines for further shipment. In this treatment substantially all gasoline vapor is saved as well as substantially all the oil in the B. S. (amounting to about 30%). See *Hamilton v. Empire Gas and Fuel Co., 117 Kan. 25, 230 P. 91 (1924)* .

See also Basic sediment; Glycol dehydrator; Heater-treater; Plant.

Dekatherm A thermal unit of energy equal to 1,000,000 British thermal units (Btu's), that is, the equivalent of 1,000 cubic feet of gas having a heating content of 1,000 Btu's per cubic foot.

See also Therm.

Delay rental A sum of money payable to the lessor by the lessee for the privilege of deferring the commencement of drilling operations or the commencement of production during the primary term of the lease.

Under the Unless lease (*q.v.*), nonpayment of delay rental on or before the due date (anniversary date) occasions automatic termination of the lease unless the lease is being held by production, by drilling operations, or by virtue of some special clause of the lease, *e.g.*, the shut-in gas well clause. Under the Or lease (*q.v.*), nonpayment of delay rental on the due date does not cause termination of the lease automatically, but the lessor may elect to sue to recover the delay rental or to have the lease forfeited.

The lessee under an Unless lease has made no promise to pay the rental, whereas the lessee under an Or lease has promised to pay the rental or to do something else, *e.g.*, pay rental or drill a well, pay rental or forfeit the lease. Under neither type of lease will payment of rental serve to keep the lease alive after the expiration of the primary term of the lease.

The term is defined in *Treasury Regulations § 1.612-3(c)(1) (1980)* as follows: "A delay rental is an amount paid for the privilege of deferring development of the property and which could have been avoided by abandonment of the lease, or by commencement of development operations, or by obtaining production."

Subsection (2) further provides that: "Since a delay rental is in the nature of rent it is ordinary income to the payee and not subject to depletion. The payor may at his election deduct such amount as an expense, or under section 266 and the regulations thereunder, charge it to depletable capital account."

The term "rental" is defined by Article 213 of the Louisiana Mineral Code [R.S. 31:213 (1975)] as meaning "money or other property given to maintain a mineral lease in the absence of drilling or mining operations or production of minerals. 'Rental' does not include payments classified by a lease as constructive production." As the Comment to this article indicates, this definition includes "so-called 'shut-in rentals' commonly found in many oil and gas lease forms as a means of maintaining leases when a well producing gas or gaseous substances in paying quantities is shut in. Payments of this type are to be distinguished from other payments deemed to be constructive production under certain lease forms. For example, another common type of lease form provides for the making of shut-in payments in the royalty clause of the lease and states that when such payments are made, it shall be considered that there is production under the habendum clause of the lease. Compensatory royalty payments may also be classified as constructive production for purposes of maintaining a lease."

See also the following:

Huggs, Inc. v. LPC Energy, Inc., 889 F.2d 649, 107 O.&G.R. 263 (5th Cir. 1989) (giving effect to exculpatory clauses in a letter agreement and in a joint operating agreement relating to the loss of a lease or an interest therein through mistake or oversight in nonpayment or erroneous payment of delay rental or shut-in gas royalty payment);

C.M.Thibodaux Co. v. United States, 723 F. Supp. 367, 106 O.&G.R. 193 (E.D. La. 1989) , *aff'd, 915 F.2d 992 (5th Cir. 1990)* , (discussed under the entry for Bonus (*q.v.*), concluding that a corporate landowner-executive which first transferred mineral royalties to shareholders and later transferred bonus and delay rentals to the shareholders, the corporation retaining the executive right, continued subject to federal income taxation on proceeds of lease bonuses and delay rentals but not on income derived from royalties; leases bonuses and delay rental rights "are not an economic interest in property for purposes of federal income tax law." *723 F. Supp. at 375* .).

The definition in this Manual was cited in the following cases:

Beverly Hills Oil Co. v. Beverly Hills Unified School District, 264 Cal. App. 2d 603, 608, 70 Cal. Rptr. 640, 643, 31 O.&G.R. 14, 19 (1968) ;

Whitehall Oil Co. v. Eckhart, 197 So. 2d 664, 667, 26 O.&G.R. 778, 783 (La. App. 1966) , *rev'd sub nom. Gardner v. Boagni, 252 La. 30, 209 So. 2d 11, 29 O.&G.R. 229 (1968)* .

See also Delay rental clause; 555 termination.

Delay rental clause The lease clause providing for the payment of delay rentals to keep a lease alive during the primary term despite failure to obtain production or to commence drilling operations. In an Unless lease (*q.v.*) a typical delay rental clause provides as follows:

"If no well be commenced on said land on or before one year from the date hereof, this lease shall terminate as to both parties, unless the lessee on or before that date shall pay or tender to the lessor or to the lessor's credit in the ..... Bank at ....., or its successors, which shall continue as the depository for rental regardless of changes in the ownership of said land, the sum of ..... Dollars,

($.....) which shall operate as a rental and cover the privilege of deferring the commencement of a well for twelve months from said date. In like manner and upon like payments or tenders the commencement of a well may be further deferred for like periods of the same number of months successively."

In an Or lease (*q.v.*) a typical delay rental clause provides as follows:

"Commencing with ....., if the Lessee has not theretofore commenced drilling operations on said land or terminated this lease as herein provided, the Lessee shall pay or tender to Lessor ..... in advance, as rental, the sum of ..... Dollars per acre per ..... for so much of said land as may then still be held under this lease, until drilling operations are commenced or this lease terminated as herein provided."

On the delay rental clause, see Treatise §§ 605-*607.8*.

Delay rental division order A document addressed to the owner of a lease giving instructions concerning the payment of delay rentals to persons having interests therein. *See* Treatise § 702.

See also Division order.

Delay rental title opinion A statement of opinion by an attorney as to the persons entitled to receive payment of delay rentals on leased land. *See Atlantic Refining Co. v. Shell Oil Co., 217 La. 576, 46 So. 2d 907 (1950)* .

See also Title Opinion.

Delineation well "A well that is drilled to determine the extent of a reservoir." U.S. Minerals Management Service, *Proposed Final Comprehensive Outer Continental Shelf (OCS) Natural Gas and Oil Resource Management Program 1992-1997*, Appendix 17 (1992).

Deliverability formula *See* Adjusted deliverability formula.

Deliverability standard pressure The standard used in calculating deliverability of gas wells. *See* "Annual Review of Significant Legislative, Judicial and Administrative Activities during 1976," 10 *Nat. Res. Law.* 3, 151 (1977).

Deliverability test A test to determine the Seller's delivery capacity under a gas purchase and sale contract. *See Lone Star Gas Co. v. G.S.G. Royalty Corp., 757 S.W.2d 457* (Tex. App.--Dallas 1988, no writ) .

See also Deemed test provision.

Delivery One of several requirements for an instrument creating or transferring a mineral, royalty or

leasehold interest. *See* Treatise § 220.

Purchase and sale contracts for oil and/or gas and the in-kind oil royalty clause customarily include express provisions relating to the place and conditions of delivery of the product bought, sold or being produced. *See* Treatise § 724.3.

See also Delivery in kind; Short delivery (0.5% allowance) issue.

Delivery in kind Delivery to the owner of an interest in production of the hydrocarbons which have been produced rather than accounting to such person for the value or price thereof. *See* Royalty in kind.

Delivery pressure The agreed pressure at which delivery of gas is to be made under a Gas purchase contract (*q.v.*).

Delivery ticket Any expense bill or written document covering oil or products delivered. Tex. Rev. Civ. Stat. Ann. Art. 6066a § 1(j) (1962).

Deltaic reservoir *See* Fluvial dominated deltaic reservoir.

Demand *See* Contract demand; Gas market demand rule; Market demand; Market demand prorationing; Maximum contract daily demand (mcdd); Notice and demand clause.

Demand billing The demand upon which billing to a customer is based, as specified in a rate schedule or contract. It may be based on the contract year, a contract minimum, or a previous minimum and, therefore, does not necessarily coincide with the actual measured demand of the billing period. American Gas Association Bureau of Statistics, *Glossary for the Gas Industry* 16.

Demand charge That portion of a rate for gas service which is based on the actual or estimated peak daily (monthly or hourly) usage of the customer. Compare Commodity charge. American Gas Association Bureau of Statistics, *Glossary for the Gas Industry* 16.

This definition in the Manual of Terms was cited in *Murphy Exploration & Production Co., 148 IBLA 266, 275* , GFS (O&G) 223 (1999), *rev'd on other grounds, 252 F.3d 473 , 150 O.&G.R. 1 , modified on reh'g, 270 F.3d 957 (D.C. Cir. 2001).* The Board found that the demand charge clause was not the same as a Take-or-pay clause (*q.v.*) so that royalties had to be paid on that portion of the price of natural gas attributable to the demand charge. One of the contracts reviewed listed the demand charge as equaling 20% of 107% of the contract price times 75% of the seller's dedication multiplied by the number of days in the applicable month.

A firm demand charge may be an upfront reservation fee to secure a guaranteed amount of continuously available pipeline capacity. The fee may or may not be refundable if the capacity is never used. *Independent Petroleum Association of America v. DeWitt, 279 F.3d 1036, 1041, 151 O.&G.R. 1 (D.C. Cir. 2002)* .

See also Atlantic seaboard classification method; Economy energy transaction; Modified fixed-variable (MFV) method; Rate tilting; Sea-board method; United method.

Demand clause *See* Notice and demand clause

Demand payment program *See* Production loan.

Demand rate The charge for gas which a distributor may demand under a gas sales contract to meet the requirements of the distributor's firm and space heating customers.

See also Commodity charge; Rate tilting.

Demonstrated reserves or resources A collective term for the sum of Measured and Indicated reserves or resources. 2 *OCS Oil and Gas--An Environmental Assessment,* A Report to the President by the Council on Environmental Quality (April 1974) at p. 11.

See also Indicated reserves or resources; Measured reserves or resources; Reserves.

Density logging *See* Gamma ray; Gamma Ray Logging.

Density of petroleum The specific gravity or weight of petroleum. Density or specific gravity is ordinarily expressed as the ratio between equal volumes of water and another substance, measured at a standard temperature and pressure. The weight of the water is assigned a value of 1. Since most petroleum has a lesser density than water, the specific gravity of petroleum is a fraction. For example, the specific gravity of octane is.7064. In the oil industry, however, the density of crude oil is normally expressed in API degrees. On this scale, the ratio is inverted, so that the greater the density of the petroleum, the lower the degree of API gravity. Most crude oil ranges in density between 27 degree to 35 degree API.

See also API Gravity; Baume system.

Density order An order by a regulatory commission regulating well locations. *See Railroad Comm'n v. DeBardeleben, 297 S.W.2d 203, 7 O.&G.R. 360* (Tex. Civ. App.--Austin 1956) , *aff'd, 157 Tex. 518, 305 S.W.2d 141, 8 O.&G.R. 466 (1957)* .

See also Increased density order; Increased density well.

Departmental lease A Non-competitive lease (*q.v.*) on federally-owned land. For federal income tax purposes, first-year rentals paid under such leases are deductible. *United States v. Dougan, 214 F.2d 511, 3 O.&G.R. 1597 (10th Cir. 1954)* ; *Commissioner v. Miller, 227 F.2d 326, 5 O.&G.R. 173 (9th Cir. 1955)* ; *Featherstone v. Commissioner, 22 T.C. 763, 3 O.&G.R. 1587 (1954)* , *acq. 1956 I.R.B. 23, 6*

O.&G.R. 271 (1956), withdrawing former non-acq.

Department of Energy The Department established by Pub. L. No. 95-91 (Aug. 4, 1977), *42 U.S.C. § 7101 et seq.* , as a consolidation of a number of Commissions and energy-related activities of the federal government.

See also Economic Regulatory Aadministration (ERA); Federal Energy Regulatory Commission (FERC).

Dependent resurvey A retracement and reestablishment of the lines of the original survey in their true original positions according to the best available evidence of the positions of the original corners. Manual of Instructions for the Survey of the Public Lands of the United States, § 6-4, at 145 (1973). Dependent resurveys of lands subject to communitization and unit agreements may have an impact on how production from areas subject to those agreements are allocated. *Burlington Resources Oil & Gas Co., 150 IBLA 178* , GFS (O&G) 34 (1999).

Depleted formation A petroleum reservoir from which all the recoverable oil and gas has been removed. It has become common practice in recent years for natural gas pipe line companies to store gas near the consumer market in depleted formations.

See also Formation; Gas storage, subsurface.

Depletion Several usages of the word should be distinguished:

(1) *Physical depletion* is the exhaustion of a mine or a petroleum reservoir by extracting the minerals.

(2) *Economic depletion* is the reduction in the value of a wasting asset by removing the minerals.

(3) *Depletion for tax purposes* is the removal *and sale* of minerals from a mineral deposit. The tax concept of depletion differs from the physical and economic concept in that the former depends on sale and the latter only on removal.

The Internal Revenue Code (1954), §§ 611-*613*A, authorizes a deduction from income for depletion in the case of oil and gas wells. The taxpayer is entitled to cost depletion or percentage depletion, whichever is higher. The availability of percentage depletion was greatly limited by the Tax Reduction Act of 1975. *See* Depletion, percentage.

The right to a depletion allowance for tax purposes depends on ownership of an economic interest in minerals in place. For many years ownership of the following interests entitled the taxpayer to a depletion allowance: mineral interest, working interest in a lease, royalty, overriding royalty, production payment, lease bonus (considered advance royalty), and net profits interest. *See Anderson v. Helvering, 310 U.S. 404 (1940)* , and the many cases cited therein. A Supreme Court decision held that the owner of beach land, who agreed to the use of his land as the site for a directional well bottomed under the sea on land owned by another, was entitled to a depletion allowance on the interest acquired in the production from the well. *Commissioner v. Southwest Exploration Co., 350 U.S. 308, 5 O.&G.R. 839 (1956)* .

For a history of tax depletion, see Goodman, "U.S. Petroleum Income Taxation 1890-1990," 39 *O.&G. Tax Q.* 277 (1990), *id.* at 510 (1991).

See also Depletion, cost; Earned depletion; First marketable product; Frontier exploration allowance; Proportionate profits method; Successor earned depletion; Supplementary depletion allowances.

Depletion, cost In federal income taxation, the method of figuring the depletion allowance in relation to the taxpayer's investment. *U.S. Treas. Reg. § 1.611-2(a)* (1980) provides a formula for the calculation, which may be expressed as follows:

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where ...

B = the adjusted basis of the property;

u = units of oil or gas remaining at the end of the tax year;

s = units of oil or gas sold in the tax year.

Depletion drive A drive mechanism for the production of oil which depends upon solution gas or dissolved gas.

See also Reservoir energy.

Depletion, economic The reduction in the value of a mineral deposit as the minerals are produced.

Depletion, percentage In federal income taxation, the method of figuring the depletion allowance on the basis of an arbitrary percentage of gross income from production. For many years the Internal Revenue Code, for oil and gas wells, allowed a deduction of 271/2% of gross income from production, excluding royalty payments, such figure not to exceed 50% of the taxable (net) income from the property, as computed without allowance for depletion. The Tax Reform Act of 1969 reduced the rate of percentage depletion for oil and gas wells from 271/2% to 22%. The Tax Reduction Act of 1975 further limited the availability of percentage depletion. *Internal Revenue Code § 613A. See* Burke and Russell, "The New Percentage Depletion Rules," 25 *O.&G. Tax Q.* 13 (1975).

Louisiana Land & Exploration Co. v. Comm'r, 90 T.C. 630, 100 O.&G.R. 610 (1988) , held that the limitation on the availability of percentage depletion for oil and gas wells contained in *Internal Revenue Code § 613A* was inapplicable to sulphur extracted from natural gas and sold as a by-product.

See also Advance royalty; Aggregation of properties; Bonus; Cut-off point; Depletion, restoration of; Economic interest for tax purposes; Iproexemption; Net income for depletion allowance: Non-operating mineral interest, for tax purposes; Operating mineral interest, for tax purposes; Operating unit, for tax purposes; Property unit, for tax purposes; Transfer rule.

Depletion, physical The exhaustion of supply of a wasting asset.

Depletion, restoration of In federal income taxation, the adding back to income of depletion allowance taken on minerals not produced. Where a lessee had paid a bonus or had made advance royalty payments not derived from production, and the lessor had taken depletion on such income in the year received, then upon abandonment or termination of the lease without production, the lessor was required to restore to income the deductions for depletion in the prior years and make such restoration in the year the lease terminated. U.S. *Treas. Reg. § 1.612-3(b)(2) (1980), Douglas v. Commissioner, 322 U.S. 275 (1944)* ; *Campbell v. Commissioner, 41 T.C. 91, 19 O.&G.R. 467 (1963)* .

Restoration was not required if there had been production or if the lessee retained part of the lease. *See Crabb v. Comm'r, 119 F.2d 772 (5th Cir. 1941)* ; *Houston Farms Dev. Co. v. Comm'r, 147 F.2d 493 (5th Cir. 1945)* .

See also Depletion, percentage.

Depletion type reservoir The term employed in *Sinclair Oil & Gas Co. v. Bishop, 1967 OK 167, 441 P.2d 436, 30 O.&G.R. 614 (Okla. 1967)* , to describe a Reservoir (*q.v.*) in which the necessary energy to produce oil from the reservoir is supplied by the gas pressure in a gas cap. Unless gas pressure is maintained in such a reservoir by repressuring or other operations, much of the oil in the reservoir will become nonrecoverable by reason of reduction of pressure incident to production, particularly where wells are permitted to produce with a high gas-oil ratio.

Depletory covenant A term employed by one writer to describe the asserted obligation of a lessee to refrain from, or to account for, drainage from beneath the lessor's land through wells drilled and operated by the lessee himself upon adjoining lands, either owned by the lessee, or leased by him from other landowners. The covenant is said to include protection against Fraudulent drainage (*q.v.*) and other depletory acts, *e.g.,* destroying a producing well either by pulling the casing or by plugging it, or driving oil from beneath lessor's land by converting an offset well into a repressuring well. Seed, "The Implied Covenant in Oil and Gas Leases to Refrain from Depletory Acts," *3 U.C.L.A. L. Rev. 508 (1956);* Treatise §§ 824-*824.3*.

See also Drainage.

Deposit An accumulation of oil, gas or other minerals capable of production.

Under the Mineral Leasing Act *(q.v.)* deposits of oil and gas may be leased. Gob hole vent *(q.v.)* gas released through the longwall coal mining process is not a deposit of oil and gas subject to the leasing requirements of the *Mineral Leasing Act. Vessels Coal Gas, Inc., 175 IBLA 8 (2008)* .

The *Vessels Coal Gas* holding relating to the conclusion that natural gas released during the coal mining process is not a deposit was approved of in *Wildearth Guardians v. United States Forest Service, 828 F. Supp. 2d 1223 (D. Colo. 2011)* . In *Wildearth Guardians*, plaintiffs were challenging an amendment to a mining plan that would allow the coal lessee to capture the CBM that was otherwise being released or flared into the atmosphere.

See also Commercial deposit.

Depository bank The bank to which payment of Delay rental (*q.v.*) may be made to the credit of the lessor or his successors in interest in accordance with the provisions of the Delay rental clause (*q.v.*) of the lease. When timely payment is made to the depository bank in accordance with the terms of this clause, the payment has the same effect as if made directly to the lessor or his successors in interest. *See* Treatise §§ 605.5, 606.5.

Depository receipt *See* Listed depository receipt.

Depreciation A charge reflecting the loss in useful value of physical equipment by reason of wear and tear.

For a discussion of the various methods of depreciation of oil and gas equipment and leasehold costs, see Fiske, *Federal Taxation of Oil and Gas Transactions,* ch. 5-6 (1983 Revision); Irving and Draper, *Accounting Practices in the Petroleum Industry* (1958).

For a discussion of methods of depreciation employed in calculating cost of service for rate purposes, see In the *Matter of Olin Gas Transmission Corp., 17 F.P.C. 685, 695 , 7 O.&G.R. 936 (1957)* .

See also Accelerated cost recovery system (ACRS); Capital allowances; Capital cost allowance.

Depropanizer A portion of a processing plant wherein the separation of propane from natural gas is accomplished.

Depth *See* Objective depth.

Depth bracket allowable In Louisiana, an Allowable (*q.v.*) based entirely on depth of a well. Since 1960 an acreage factor has also been utilized in the allocation formula for new pools. *See* McKie and McDonald, "Petroleum Conservation in Theory and Practice," 64 *Q. J. Econ.* 98 at 117 (1964); Smith, "Depth Bracket Allowable Determination and Proration of Oil Production in Louisiana," *24 La. L. Rev. 638 (1964).*

Depth-bracket method of proration A proration method whereunder all wells of a particular depth are permitted an established production. *See* Daggett, *Mineral Rights in Louisiana* 491 (rev. ed. 1949); Dutton, "Proration in Texas: Conservation or Confiscation?" *11 Sw. L.J. 186 (1957).*

Syn.: Depth bracket allowable; Yardstick allowable.

See also Allowable.

Deregulation redetermination escalator clause An Escalator clause (*q.v.*) tying a price renegotiation or an escalation in the contract price to the specific event of the deregulation of natural gas. *See McMoRan Oil & Gas Co. v. KN Energy, Inc., 942 F.2d 765, 119 O.&G.R. 391 (10th Cir. 1991)* , *cert. denied, 502 U.S. 1122 (1992)* (construing various terms of such a clause).

Dereliction The gradual receding of water along the bank of a river or stream, or other body of water, so that land above high-water mark is gained. *See also* Treatise § 224.9; Accretion; Alluvion; Erosion; Reliction.

Derrick A tapering tower, usually of open steel framework although formerly of wood, used in the drilling of oil and gas wells as support for the equipment lowered into the well. Both methods of drilling--cable tool and rotary--use derricks, but the latter are larger. Derricks may be as high as a twenty-story building.

As defined by the United States Department of Labor, Occupational Health and Safety Administration, a derrick is "a large load-bearing structure, usually of bolted construction. In drilling, the standard derrick has four legs standing at the corners of the substructure and reaching to the crown block. The substructure is an assembly of heavy beams used to elevate the derrick and provide space to install blowout preventers, casingheads, and so forth."; as cited in *Grey Wolf Drilling Co., L.P. v. Boutte, 154 S.W.3d 725, 730 n.3, 167 O.&G.R. 329* (Tex. App.--Houston [14th Dist.] 2003) , *review granted, judgment vacated and remanded by agreement, 2005 Tex. LEXIS 202* (Tex. Mar. 4, 2005) .

See also drilling rig; gin pole.

Description That part of a lease or other conveyance describing, tracing and delineating the specific tract of land in which the interest conveyed, leased, excepted or reserved exists.

Desertion of well "The removal of production equipment or the failure to produce oil or gas (other than a gas well shut in for lack of a market) for a period of one year is prima facie evidence of desertion of a well. Such well shall be plugged in accordance with the rules and regulations of the commission and the site restored." *North Dakota Administrative Code 43-02-03-55. See Amerada Hess Corp. v. Furlong Oil and Minerals Co., 348 N.W.2d 913, 81 O.&G.R. 545 (N.D. 1984)* .

See also Abandoned well; Orphan well.

Designated area In the United Kingdom this is a National Park, Area of Outstanding Natural Beauty, Site of Special Scientific Interest, National Nature Reserve, Conservation Area, or other area (presumably of similar kind) given protection for environmental reasons from mineral development. J. Salter, *U.K. Onshore Oil and Gas Law* 1-508 (1986).

Designated Crown Corporation (DCC) A corporation (such as Petro-Canada) to which the 25% Crown share out of all federal oil and gas lands may be disposed under the provisions of the 1978 amendments to the Canada Oil & Gas Act and the 1980 National Energy Program (NEP) (*q.v.*), providing for the Canadianization of petroleum exploration and production on federal lands. *See* Hunt,

"Private Sector Legal Problems Arising from Canadianization of Petroleum Activities," in *Resources, The Newsletter of the Canadian Institute of Resources Law* (No. 5, June 1983) at page 2.

Designated pool In Alberta, a pool described in an order of the Energy Resources Conservation Board by surface area vertically above the pool and named by geological formation, member or zone in which the pool occurs or by such other method of identification as the Board considers suitable. Alberta Oil and Gas Conservation Act, R.S.A. 1970, c. 267, § 33.

See also Pool.

Designated prospect A term employed in a limited partnership agreement with reference to acreage expected to be affected thereby.

See also Gross prospect acreage; Net prospect acreage; Prospect.

Designation-and-filing provision A provision found in some leases affecting sizable tracts requiring a lessee to file with the county clerk a written designation allocating portions of the leased premises to producing wells at the end of the primary term (or other designated time). *See* Treatise § 603.1 at n. 8.3. The lease may also include a Production-and-allotment provision (*q.v.*), calling for termination of the lease at the designated time except as to acreage allocated to a well for production purposes. *Parten v. Cannon, 829 S.W.2d 327, 127 O.&G.R. 315* (Tex. App.--Waco 1992, writ denied) , was concerned with the construction of a lease containing both such provisions. The designation-and-filing provision was construed as a covenant; the court found it unnecessary to determine whether the lessee breached the covenant since the lessor had abandoned a claim for damages. The production-and-allotment provision was construed as a condition; the opinion writer did not appear to understand the consequences of describing this provision as a condition rather than as a special limitation.

See Acreage retention clause.

Desk and Derrick Club An organization of women employed in the oil industry.

For a number of years the Association of Desk and Derrick Clubs has followed a policy of providing educational programs, study courses and field trips for its membership. A Program Committee, operating at national level, reviews and grades each program to insure compliance with the regulation that each club must maintain 80 percent educational programs.

De-spacing *Syn.:* for Down-spacing (*q.v.*).

Despacing order An order of a regulatory commission vacating a prior order establishing a drilling and spacing unit and establishing a different-sized drilling and spacing unit. *See Boyce v. Corporation Comm'n, 744 P.2d 985, 96 O.&G.R. 509* (Okla. Ct. App. 1987, *cert. denied*) (320-acre gas drilling and spacing unit vacated and 40-acre oil drilling and spacing unit established).

Eason Oil Co. v. Howard Engineering, Inc., 801 P.2d 710, 110 O.&G.R. 501 (Okla. 1990) , held that

after the drilling of a producing well on a "forced pooled" 640-acre unit, a downspacing or despacing order of the commission vacating the 640-acre spacing order and creating 160-acre spacing units did not alter the working interest regime in the initial producing well on the 640-acre unit; "once production was established from the designated common source of supply, the working interest in the producting well vested in proportion to participation under valid compulsory pooling orders."

See also Spacing extension order; Well spacing.

Destination and resale restrictions Provisions in an international exploration and development contract providing restrictions on the buyer. *See, e.g.,* the following portion of the Saudi Arabian-Aramco contract:

"Article 8: Buyer/user requirement and destination

"8.1 It is expressly understood that BUYER will process Crude Oil sold under this Contract in its own processing facilities or under processing arrangements with other refineries for BUYER's own account. BUYER undertakes that under no circumstances shall BUYER resell the said Crude Oil in its original form or blend it with any other crude oil or crude oil deliveries for purposes of resale. ... The following exceptions to the foregoing principles will be permitted:

"(1) BUYER may transfer Crude Oil sold under this Contract to Buyer Affiliates at cost;

"(2) Buyer may exchange Crude Oil sold under this Contract with Buyer Affiliates; and

"(3) provided Seller's written consent is first obtained (which consent will not unreasonably be withheld) BUYER may make Crude Oil exchanges with companies other than Buyer Affiliates. ... ([However,] if SELLER requests, BUYER shall provide documentation with regard to the terms of such exchanges.)

"8.2 BUYER shall comply with the Laws of Saudi Arabia concerning the country of destination of Crude Oil sold under the terms of this Contract.

"8.3 In the event of any breach by BUYER of paragraphs 1 and 2 of this Article, SELLER shall have the right to terminate this Contract at its sole discretion without any notice or responsibility for compensation or payment and/or any claim from Buyer." Danielsen, *The Evolution of OPEC* 260 (1982).

See also Concession.

Determinable fee *See* Fee simple determinable.

Det norske stats oljeselskap a.s. (STATOIL) The Norwegian state oil company. *See* Statoil.

Develop *Gorenflo v. Texaco, Inc., 566 F. Supp. 722, 727 (M.D. La. 1983)* , *aff'd, 735 F.2d 835, 81 O.&G.R. 284 (5th Cir. 1984)* , declared that "the word 'develop' as used in the oil and gas industry contemplates any step taken in the search for, capture, production and marketing of hydrocarbons. Thus, the word 'develop' as used in the industry clearly contemplates and includes exploration."

See also Adolph v. Stearns, 235 Kan. 622, 684 P.2d 372, 82 O.&G.R. 64 (1984) , construing the term "developed or operated" as employed in the habendum clause of a lease, citing this Manual.

Developed area or developed unit "[A] drainage unit having a well completed thereon capable of producing oil or gas in paying quantities." *Ariz. Rev. Stat. § 27-501(5)* (1995).

See also Drainage unit.

Development The drilling and bringing into production of wells in addition to the exploratory or discovery well on a lease. The drilling of development wells may be required by the express or implied covenants of a lease.

See also Cooperative development; Cooperative plan of development; Cost of development and operation; Initial development period; Joint development; Offshore oil and gas development; Reasonable development covenant.

Development and production permit A permit required by BOEMRE (*q.v.*) before an offshore federal oil and gas lessee may enter the development or production stage. 30 C.F.R. §§ 250.241-.250, .252-.267, .269-.286. This permit shares many of the same requirements as a Development operations coordination document (DOCD) (*q.v.*). *See Ensco Offshore Co. v. Salazar, 786 F.Supp.2d 1151, 1152-3 (E.D. La. 2011)* .

See also: Development operations coordination document (DOCD).

Development agreement An agreement between a host country and a developer (frequently a foreign company) for the exploration and development of mineral resources of the host country. *See* Maniruzzaman, *The New Generation of Energy and Natural resource Development Agreements: Some Reflections*, 11 JENRL 207 (1993).

See also Concession.

Development Assistance Committee (DAC) A committee of 17 nations established by the Organization for Economic Cooperation and Development (OECD) (*q.v.*) "to secure an expansion of the aggregate volume of resources made available to less-developed countries and to improve their effectiveness." *See* "The Economics of Energy and Natural Resource Pricing," A Compilation of Reports and Hearings of the Ad Hoc Committee on the Domestic and International Monetary Effect of Energy and Other Natural Resource Pricing, House Committee on Banking, Currency and Housing, 94th Cong., 1st Sess. (March 1975) at p. 463.

Development clause (1) The drilling and delay rental clause of a lease. (*See* Delay rental clause.)

(2) An express clause specifying the number of development wells to be drilled. *See* Treatise § 671.4.

Development contract A federal contract designed to promote timely and full operations in areas where special development incentive and acreage-relief treatment is required if reserves are to be developed. The contract frees the holder from application of the acreage limitation restrictions for a specified period of time, conditioned on meeting certain requirements as to minimum expenditures on geological or geophysical activities and test well drilling. *See* Abbott, "Federal Oil and Gas Leasing Laws: Full Symphony or Overture?" *1959 Sw. Legal Fdn. Nat'l Inst. for Petroleum Landmen* 81, 105 (1960).

The General Accounting Office has challenged the issuance by the Interior Department of development contracts for exploration of largely unleased federal lands, contending that the leases within the boundaries of specified contracts did not qualify for exception from the statutory acreage limitation. *See* CCH, *Energy Management* (Issue No 981, Oct. 29, 1991).

See also Acreage restrictions; Fee-per-barrel contract.

Development covenant *See* Further exploration covenant; Reasonable development covenant

Development license (DL) Under the December, 1984, United Kingdom regulations [The Petroleum (Production) (Landward Areas) Regulations (1984)], a Development license (DL) may be issued for a 20-year term (extendable at the Secretary of State's discretion) after a suitable development program has been submitted and long-term planning permission has been obtained. The Secretary of State has discretion to extend the DL if there is still production from the licensed area. *See* Case Digest and National News, [1984/85] 12 *OGLTR* D-130; J. Salter, *U.K. Onshore Oil and Gas Law* 1-132 (1986).

See also Appraisal license (AL); Exploration license (EXL).

Development of a lease This term is distinguished from the term Development well (*q.v.*) in Decision on Review in Michael Gold (On Reconsideration), GFS(O&G) 1991-SO 1 (Secretary of the Interior, June 25, 1991).

Development Operations Coordination Document (DOCD) A document required by BOEMRE (*q.v.*) before an offshore federal oil and gas lessee may enter the development or production stage. *30 C.F.R. § 250.201*, 250.241 to 250.273.

See Mobil Oil Exploration and Producing Southeast v. United States, 530 U.S. 604, 610, 150 O.&G.R. 98 (2000) ; *Defenders of Wildlife v. Bureau of Ocean Energy Management Regulation and Enforcement, 2011 U.S. Dist. LEXIS 58004* at *3-4 (n.2); *Ensco Offshore Co. v. Salazar, 786 F. Supp. 2d 1151 (E.D. La. 2011)* , *Anadarko Petroleum Corp., 181 IBLA 388* , GFS(OCS) 254 (2012).

See also Development and production plan (DPP).

Development well A well drilled to a known producing formation in a previously discovered field as distinguished from a wildcat, or exploratory, well and from an offset well. The legal duty to drill development wells sometimes is expressly set out in the lease, but more often depends on the implied covenant of reasonable development. Even development wells can be dry holes, where, for example, the

exact boundaries of a field have not been determined and the well penetrates below the oil-water contract line.

Decision on Review in Michael Gold (On Reconsideration), GFS(O&G) 1991-SO 1 (Secretary of the Interior, June 25, 1991), distinguished the terms "development well" and "development of the lease": "The terms have different meanings in oil and gas law. A 'development well' is 'any well drilled within the presently known or proved productive area of a pool (reservoir) as indicated by reasonable interpretation of subsurface data, with the objective of obtaining oil or gas from that pool.' *Southern Utah Wilderness Alliance, Inc., 108 IBLA 318, 324 n.4* (quoting [Treatise] § 847, at 381). On the other hand, 'development of a lease' is not necessarily synonymous with the drilling a 'development well,' as 'development of a lease' may include construction of pipelines."

The court of appeals opinion in *Sun Exploration & Production Co. v. Jackson, 715 S.W.2d 199, 107 O.&G.R. 358 (Tex. App. 1986) , motion for reh'g overruled, 729 S.W.2d 310, 107 O.&G.R. 372* (Tex. App.--Houston [1st Dist.] 1987) , distinguished exploratory development wells from exploratory wildcat wells and sustained in part a trial court decree unconditionally canceling a lease as to a portion of the leased acreage and conditionally canceling other portions of the lease for prolonged failure of the lessee to drill exploratory development wells. The court of appeals judgment was *rev'd and remanded, 31 Tex. S. Ct. J. 604 (1988), on reargument, 783 S.W.2d 202, 107 O.&G.R. 383 (Tex. 1989)* . The case is discussed in Treatise § 845.6 at note 41, and in *Discussion Notes, 107 O.&G.R. 397 (1991).*

For other discussions of the case, see the following:

Conine, *The Implied Covenant of Further Exploration: A Texas Update*, 4 *Tex. Oil & Gas L.J.* 9 (1989/90);

von Kreisler, *Imposing Implied Covenants in Oil and Gas Leases--Covenant of Further Exploration Tenuously Supported Under Texas Jurisprudence, 19 Tex. Tech L. Rev. 1231 (1988);*

Allison, *Explorvelopment: A Theoretical Hybrid Searching for Fertile Legal Soil in an Unfertile Economy*, 39 *Sw. Legal Fdn. Oil & Gas Inst.* 9-1 (1988).

See also Exploratory well; Field development well; Further exploration covenant.

Developmental IDCs As used in the provisions of the Omnibus Budget Reconciliation Act of 1990, relating to a special energy deduction for alternative minimum tax purposes [I.R.S. § 56(h)], this term means Intangible drilling and development costs (IDC) (*q.v.*) incurred in the drilling of a development well.

See Goodman, *Impact of the Omnibus Budget Reconciliation Act of 1990 on Investments in Domestic Petroleum Extraction*, 39 O.&G. Tax Q. 585, 587 (1991). Developmental program well

This term, as employed in a prospectus for a limited partnership drilling program, is defined as:

> "A well to be drilled (or a pre-existing well to be completed or recompleted or reworked) whose primary objective is a defined geological feature in a confined geographic area where prior drilling has established hydrocarbon production and where productive geologic reservoirs have been identified. A Developmental Program Well differs from and presents higher risks than a Development well because, among other

reasons, it may be drilled more than one location away from a well producing from the same reservoir or it may be drilled to a reservoir from which there has been no production."

See also Drilling fund.

Developmental unit A term employed by one writer to describe a unit "formed for the purpose of permitting rapid and systematic development of a field as an integral step leading to a program of conservation of unitized substances by means of regulation of production and injection of fluids into the producing reservoir." Roark, *Matters of Mutual Concern to the Lawyer and Engineer in the Unitization Agreement*, 7 Sw. Legal Fdn. Oil & Gas Inst. 275, 276 (1956).

See also Unit.

Deviated well A well that intentionally or accidentally departs from the vertical. For a discussion of Texas Railroad Commission Rules 11 and 37(m) governing deviated wells, see 2 E. Smith & J. Weaver, *Texas Law of Oil and Gas* § 9.8 (LexisNexis Matthew Bender).

Even in the absence of a specific clause in a drilling contract requiring the drilling of a non-deviated well, a court will imply such an obligation if the contract contains a general provision requiring the drilling contractor to engage in its operations in a good and workmanlike manner and to comply with all applicable state regulations. *Ruby Drilling Co. v. Duncan Oil Co., 2002 WY 85, 47 P.3d 964* .

Deviation A divergence or deflection from the vertical in the drilling of a well. The deviation may be intentional, as the result of Whipstocking (*q.v.*), or may be accidental as the result of the drilling bit coming in contact with a slanting, hard or tough stratum of rock which causes a deviation in the direction of the downward slope of the stratum.

See also Directional deviation; Random deviation; Rule 54; Totco test; Whipstock.

Deviational survey A survey of a well to determine whether a well bore deviates from the vertical and the extent of such deviation, if any. On the power of a court to order a deviational or directional survey, see *L & G Oil Co. v. Railroad Comm'n, 368 S.W.2d 187, 18 O.&G.R. 664 (Tex. 1963)* ; *Williams v. Continental Oil Co., 215 F.2d 4, 3 O.&G.R. 2080 (10th Cir. 1954)* , *cert. denied, 348 U.S. 928 (1955)* ; *Hastings Oil Co. v. Texas Co., 149 Tex. 416, 234 S.W.2d 389 (1950)* .

See also Acid bottle inclinometer; Acid dip survey; Directional survey; Rule 54; Straight hole survey.

Devonian shale Gas-bearing black or brown shale of the Devonian geologic age underlying large portions of the Appalachian Basin. It has been estimated that the reserves of gas in Devonian shales is about equal in size to the proved reserves of conventional natural gas. Landsberg, Chairman, *Energy: The Next Twenty Years* 241 (Report of a Study Group Sponsored by the Ford Foundation, 1979).

Devotional limitation doctrine The term occasionally applied to the rule laid down in *Texas Co. v. Davis, 113 Tex. 321, 254 S.W. 304 (1923)* , to the effect that there is an implied special limitation in certain leases that the premises will

be devoted to exploration, development and production. Upon failure so to devote the premises, the leasehold terminates by operation of this implied special limitation. Clearly the presence of a delay rental clause in the lease negates the existence of this implied special limitation while the rental clause is operative. However, the doctrine may have application when it is not. *See* Treatise §§ 604.3, 955.5.

See also Rogers v. Ricane Enterprises, Inc., 884 S.W.2d 763, 130 O.&G.R. 415 (Tex. 1994) , *rev'g 852 S.W.2d 751, 130 O.&G.R. 392* (Tex. App.--Amarillo 1993) , *on remand, 930 S.W.2d 157, 135 O.&G.R. 178* (Tex. App.--Amarillo 1996) (concluding that lease assignment had not terminated by application of this doctrine).

See also Limitation clause.

Diagonal offsetting The pattern of development employed on 20 acre or 80 acre spacing units where an Offset well (*q.v.*) on each unit must be diagonal with the well on the next unit.

For a discussion of the use of rectangular spacing units with diagonal well spacing when techniques of Horizontal Drilling (*q.v.*) are employed, see Wilson, "Bent Pegs and Round Holes: New Concerns for Oil and Gas Commissions," 18 *Resource Law Notes* 4 (Natural Resources Law Center, University of Colorado School of Law, Sept. 1989).

Diamond drill core bit A cylindrical shaped drilling tool, rounded at the bottom and having a hole in the center, used in Coring (*q.v.*). The rounded bottom has industrial diamond chips set in place to aid cutting out of the core. It is used for extremely hard formations or in a program of continuous coring.

Diamondoids A wax-like heavy hydrocarbon that may obstruct flowlines and production equipment. Diesel fuel may be injected into the gas stream as the well produces to facilitate flow.

Diesel oil A petroleum fraction composed primarily of aliphatic (linear or unbranched) hydrocarbons. Diesel oil is slightly heavier than kerosine and distills in the range 250 to 400 degrees C. It is used as a fuel in internal combustion engines in which ignition results from high temperatures produced by compression of air, and as a light fuel oil (No. 2 fuel oil). Hammond, Metz, and Maugh, *Energy and the Future* 159 (1973).

Differential A premium added to the price of oil by reason of certain advantages, *e.g.,* a low sulfur content.

See also Gravity differential; Libyan premium; Marker price; Oil purchase and sale contract; Sulfur differential; Transport cost differential.

Differential pressure The difference between the hydrostatic pressure in a borehole and that of the surrounding formation. *See J. C. Trahan Drilling Contractor, Inc. v. Cockrell, 255 So. 2d 599, 34 O.&G.R. 384 (La. Ct. App. 1969)* , *writ refused, 254 La. 922, 228 So. 2d 482 (1969)* . Normally the hydrostatic head rises as depth increases and differential pressure is kept slightly positive which tends to cause some fluid to be lost into the formation. If fluids are entering the formation, a negative differential (kick) is created which must be controlled.

See also Bottom hole differential pressure (BHDP).

Differential pressure flow meter *Woods Petroleum Corp. v. Delhi Gas Pipeline Corp., 54 Okla. B.J. 1075, 1076 (Okla. Ct. App. 1983), opinion vacated only with regard to attorney fee, 56 Okla. B.J. 48 (Okla. 1984),* described this as a metering device which: "works by placing a restriction of a certain known size, known as an orifice plate, in a line of a certain known size, known as the meter run, and measuring the difference in pressure on either side of the orifice plate. Due to the physical fact that for a certain volume of gas to move through such a restriction a certain percentage of the pressure of the gas is translated into velocity, it becomes possible to determine precisely the volume of gas moving through the meter by measuring this pressure drop across the orifice plate. The critical factors in determining the flow are the size of the opening in the orifice plate, the pressure on the system and the temperature of the gas."

See also Meter; Pressure.

Diligent and prudent operations covenant A synonym for the covenant described in this Treatise as the Reasonable care and due diligence covenant (*q.v.*). *See* Colosky, "The Implied Covenant for Diligent and Prudent Operations in an Environmental Era," 39 *Rocky Mt. Min. L. Inst.* ch. 15 (1993).

Diluent A fluid (*e.g.,* diesel oil) added to heavy oil to improve the transmissibility of the oil through a gathering or other pipeline. Many leases provide for the cost of the diluent, if any, to be shared proportionately by owners of operating and nonoperating interests in production.

"... a light petroleum liquid, used to facilitate the flow of heavy crude oil, which must be diluted in order to be transported through a pipeline." *Sierra Club v. Clinton, 689 F. Supp. 2d 1147 (D. Minn. 2010)* .

Diluent clause A lease clause authorizing the lessee to deduct from royalty a reasonable charge for the cost of any diluent used in connection with production.

Dip The incline or slope of a geological formation. Usually, sedimentary formations are not level; the rock plane slopes in some direction, as, for example south and southeast along the Gulf Coast of Texas. In any reservoir trap, petroleum is more likely to occur up dip than down dip, because petroleum rises.

Direct customer A term used to describe a purchaser of gas directly from a gas pipeline company. *State of Louisiana v. Federal Power Comm'n, 503 F.2d 844, 869 (5th Cir. 1974)* .

Directional deviation The intentional Deviation (*q.v.*) of a well from vertical in a predetermined compass direction. *Texas Railroad Commission, Special Order No. 54, 17 O.&G.R. 109 at 111 (1963)* ; *16 Tex. Admin. Code § 3.11.*

See also Random deviation.

Directional drilling (1) The drilling of a well that departs materially from the vertical. In the 1920's most directional drilling resulted from accident. At present, however, such drilling is usually done on purpose. Examples of such are: the drilling of a directional well to shut off a blowout; the drilling of a number of directional wells from one drilling platform erected on water; the drilling of a directional well to land, the surface of which cannot be used for a well location, as a railroad right of way. A common device employed in directional well drilling is a Whipstock (*q.v.*), a joint that translates motion into a different direction.

Texas Railroad Commission Rule 11 (*16 Tex. Admin. Code § 3.11*) requires that wells be drilled as nearly vertical as possible by normal, prudent, practical drilling operations. If the necessity for directionally deviating a well arises unexpectedly, after drilling has begun, the operator may continue drilling after notice to the Commission: "The operator proceeds with the drilling of a deviated well under such circumstances at his own risk, and should he fail to show good and sufficient cause for such deviation, no permit will be granted for the production of the well." *See Superior Oil Co. v. Railroad Comm'n, 546 S.W.2d 121, 56 O.&G.R. 617* (Tex. Civ. App.--Austin 1977, error ref'd n.r.e.) (sustaining the validity of a Commission order approving the bottom hole location of a deviated well and assigning a permanent allowable to the well).

For a discussion of the abuses of directional drilling, particularly in the East Texas field, see Prindle, *Petroleum Politics and the Texas Railroad Commission* 81 *et seq.* (1981).

M.J. Harvey, Jr., 109 IBLA 31 , GFS(O&G) 1989-75 (May 25, 1989), was concerned with the validity of BLM consent to the drilling of a directional well surfaced on tract *A*, drilled through tract *B*, and bottomed under tract *C*, over the objection of the oil and gas lessee of tract *B*. It was noted that the objecting party had offered no reason for concluding that his rights might be jeopardized, "and his concerns about drainage are wholly speculative at this time. Were such concerns more concrete, further consideration of BLM's actions would be appropriate." *See* 1 Treatise § 218.6 (1986).

Passburg Petroleums v. San Antonio Explorations Ltd., [1988] 2 W.W.R. 645 (Alta. Q.B. 1987), held that although defendants executed an AFE (*q.v.*) for the drilling of a well, they were not liable for additional costs of drilling a directional well as distinguished from a conventionally drilled well inasmuch as they were not informed by innuendo or otherwise of plaintiff's intention to drill directionally.

See also McKinnis, "Directional Drilling, Subsurface Trespass, and Conversion," 4 *J. of Mineral L. & Policy* 235 (1988-89).

The definition in this Manual was quoted in *Burk v. Nance Petroleum Corp., 10 F.3d 539, 541, 127 O.&G.R. 590 (8th Cir. 1993)* .

(2) This term has also been used by the Federal Power Commission to describe the ability of producers to direct their drilling activities toward either oil or gas. *See Permian Basin Area Rate Proceeding, 34 F.P.C. 159, 184 , 23 O.&G.R. 103, 122* (Opinion No. 468, Aug. 5, 1965), *remanded, Skelly Oil Co. v. Federal Power Comm'n, 375 F.2d 6, 26 O.&G.R. 237 (10th Cir. 1967) , aff'd in part and rev'd in part sub nom. In re Permian Basin Area Rate Cases, 390 U.S. 747, 28 O.&G.R. 689 (1968)* .

Directional drilling clause A lease clause providing that actual drilling from a surface location off the leasehold of a well to be completed or bottomed on the leased premises shall be considered as actual drilling under the lease terms. *See, e.g.,* State of Alaska Department of Natural Resources Lease Form No. DL-1 (revised Sept. 1974), P 40; Alaska Mineral Leasing Regulations, *11 AAC 83.145.*

Directional survey A well survey that measures the degree of departure of a hole from the vertical and the direction of departure. Thus, it may be determined whether a well trespasses on the land of another, for the bottom may be accurately determined. In several cases a plaintiff has secured a court order requiring the owner of a well to permit a directional survey to be made to determine if the well trespasses on the plaintiff's land. *Williams v. Continental Oil Co., 215 F.2d 4, 3 O.&G.R. 2080 (10th Cir. 1954) , cert. denied, 348 U.S. 928 (1955)* ; *Hastings Oil Co. v. Texas Co., 149 Tex. 416, 234 S.W.2d 389 (1950)* .

See Special Rule 54 of the Texas Railroad Commission, 17 O.&G.R. 109 (1963) , for regulations concerning the taking of directional surveys in Texas. *16 Tex. Admin. Code § 3.11.*

See also Deviational survey; Rule 54; Straight hole survey.

Directional well A well that departs from the vertical; "a directional well is one that deviates the wellbore--i.e., the drilled hole--along a planned path to a target located a preset lateral distance and direction from the vertical." *Mohican Oil & Gas, LLC v. Scorpion Exploration & Production, Inc., 337 S.W.3d 310, 313* (Tex. App.--Corpus Christi 2011) .

See Directional drilling; Whipstock.

Direct offsetting *See* Offset well

Direct producer sale A sale of natural gas by a producer to an end-user or distributor. *See* Means and Angyal, "The Regulation and Future Role of Direct Producer Sales," *5 Energy L.J. 1 (1984).*

See also Direct sale gas.

Direct purchase arrangement An arrangement between gas producers or their agents and end-users whereby end-users acquire gas from the producers or their agents and have the gas transported by a pipeline carrier. The gas so purchased will displace a corresponding volume of gas that the end-user would otherwise have purchased from a local distributor. TransCan PipeLines Ltd. v. Nat. Energy Bd., [1987] 2 W.W.R. 253 (Fed. Ct. of App. 1986).

See also Gas purchase contract.

Direct sale customer A gas customer who purchases gas primarily for his own needs as distinguished from a Resale customer (*q.v.*) who does not use gas for its own purposes but resells it. *Fort Pierce Utility Authority v. Federal Power Comm'n, 526 F.2d 993 at 995 (5th Cir. 1976)* .

See also Gas purchase contract.

Direct sale gas Gas purchased by natural gas end-users and local distribution companies at the wellhead. These purchases were "set up to avoid the end-users' and local distribution companies' total dependency on traditional interstate pipeline suppliers whom they had historically relied on for their natural gas needs." Airey and Teater, "Transportation of Direct Sale Natural Gas," 5 *Eastern Min. L. Inst.* 17-1, 17-2 (1984) (discussion of state and federal regulation of direct sale gas and the problems of obtaining carriage for such gas).

See also Wright and Sharpo, *Direct Gas Sales: Royalty Problems For The Producer*, 46 Okla. Rev. 235 (1993).

Direct sales arrangement *Syn.:* for Direct purchase arrangement (*q.v.*).

Direct sales contract The term applied to a contract by a producer of gas or by a pipeline with an end-user of gas

thereby bypassing a local distribution company (LDC).

Dirt *See* Pay dirt.

Dirt work A term sometimes applied to preliminary operations at a drill site, usually limited to road construction and site preparation and not including drilling operations. *William Perlman, 93 I.D. 159* (April 2, 1986) .

Dirty gas Gas that, when produced at the wellhead, is filled with dirt and debris, and thus may cause a hazardous condition to exist when the gas is being delivered directly to a residence pursuant to a Free gas clause (*q.v.*). *Weiss v. Thomas & Thomas Development Co., 79 Ohio St. 3d 274, 680 N.E.2d 1239 (1997)* .

Dirty oil Under a contract for the carriage of oil by sea this term is used for crude oil, diesel oil, fuel, and furnace oils and also for gas oil. *See* "The Tonnage Contract," [1982] 1 *OGLTR* 32.

Disclaimer by tenant (or surface owner) A statement by the person in possession or the owner of the surface to the effect that such person claims no interest in the minerals underlying the land. *See Rocky Mt. Min. Law Fdn. Landman's Legal Handbook* 142-143, 303-304 (3d ed. 1977).

Disconformity A type of Unconformity (*q.v.*) A disconformity occurs when an older sedimentary deposit has been folded, then eroded, and then a younger sediment laid down on top. The two sediments will then dip at different angles, hence the name disconformity or angular unconformity.

Discounted cash flow method A method of estimating unit cost for gas. *See* McLean, "How to Evaluate New Capital Investments," 36 *Harv. Bus. Rev.* 59 (Nov.-Dec. 1958).

For discussions of the employment of this method by the Federal Power Commission, see the following:

The Second National Natural Gas Rate Cases (American Public Gas Ass'n v. Federal Power Comm'n), *567 F.2d 1016, 59 O.&G.R. 351 (D.C. Cir. 1977)* , *cert. denied, 435 U.S. 907 (1978)* ;

Shell Oil Co. v. Federal Power Comm'n, 520 F.2d 1061 at 1079 (5th Cir. 1975) , *reh'g denied, 525 F.2d 1261 (5th Cir. 1976)* , *cert. denied, 426 U.S. 941 (1976)* .

See also Accounting methods.

Discounted MROV (DMROV) A calculation made by the Geological Survey in evaluating competitive lease bids on submerged lands of the Outer Continental Shelf designed to estimate the effect on the value of the tract to the government if the high bid was rejected and the tract was held to be reoffered at a future lease sale. Normally, the DRMOV will be less than the Mean of the range of values (MROV) (*q.v.*), since any delay in reoffering results in a loss of the use of receipts. However, in certain cases, the DMROV will exceed the MROV because of rising energy prices. "The DMROV is not considered in evaluating the high bid in these circumstances. ... However, a high bid above DMROV is almost always accepted." *Kerr-McGee Corp. v. Watt, 517 F. Supp. 1209, 1210, 71 O.&G.R. 494, 496*

(D.D.C. 1981) .

Discoveries "[P]roved reserves credited to new fields and new pools in old fields as the result of successful exploratory drilling and associated development drilling during the current year." American Petroleum Institute Division of Statistics, *Organization and Definitions for the Estimation of Reserves and Productive Capacity of Crude Oil* 15 (Technical Report No. 2, June 1970).

See also Reserves.

Discovery Drilling of a well to a formation capable of production of oil and/or gas.

Some cases have held that discovery alone is sufficient to keep a lease alive beyond the primary term, but the majority rule is that production is required for this purpose, absent some savings clause in the lease such as a Shut-in gas well clause, Drilling operations clause, or Continuous drilling operations clause (*q.v.*). *See* Cantwell, "Term Royalty," 6 *Sw. Legal Fdn. Oil & Gas Inst.* 339 at 351 *et seq.* (1956); Treatise § 604.1.

For purposes of extension of certain federal leases, "discovery" does not require the completion of a well capable of producing oil and gas in paying quantities. *Joseph I. O'Neill, Jr., 77 I.D. 181* , IBLA 70-39, GFS-BLA-CON-1970-12 (Oct. 9, 1970).

Discovery of oil or gas in paying quantities was distinguished from existence of a well physically capable of producing oil or gas in paying quantities by *Jim's Water Service, Inc., 114 IBLA 1* , GFS (O&G) 1990-21 (March 29, 1990) ("The statutory requirement of a discovery simply means to find oil or gas 'in sufficient quantities for profitable production.' ... In contrast, a well capable of production means a well which is actually physically capable of producing oil or gas in paying quantities at the particular time in question.")

Discovery is distinguished from "a well capable of producing oil or gas in paying quantities" by *Arlyne Lansdale, 16 IBLA 42* , GFS(O&G) 1974-47 (June 20, 1974). It was held in this case that although a well had been drilled into a formation capable of producing gas, the casing set and cemented, since the casing had not been perforated the well was not in a physical condition to produce and hence it was not a well capable of producing oil or gas in paying quantities within the meaning of that term in *30 U.S.C. § 226(f)*.

In *Gladys City Co. v. Amoco Production Co., 528 F. Supp. 624, 626, 73 O.&G.R. 88, 90 (E.D. Tex. 1981)* , the parties were in agreement that "discovery" of a "valuable mineral" as used in the instrument construed "means that a mineral covered by the grant in the lease is found in sufficient quantity, with a sufficient market, that it can be produced at a profit."

The discovery requirement under early mining laws and the Mineral Leasing Act of 1920 is discussed in *Tosco Corp. v. Hodel, 611 F. Supp. 1130, 1170 et seq.* (D. Colo. 1985), *motion for intervention and injunction denied on ground case was mooted by settlement, 804 F.2d 590 (10th Cir. 1986)* .

See also Mobil Oil Canada Ltd. v. Canada-Newfoundland Offshore Petroleum BGd., [1994] 1 S.C.R. 202, 111 D.L.R.4th 1 (1994) (discussing the requirements for and the administrative procedures to be followed in the issuance of a Significant Discovery Declaration (SDD) (*q.v.*), and holding that the "significant discovery" definition "intends to permit only one discovery per geologic feature."

See Significant discovery license.

Discovery bonus *See* Commercial discovery bonus.

Discovery lease selection The selection for lease which a permittee who has made a commercial discovery of oil or gas may make from the lands subject to a permit to explore. *See, e.g.*, Saskatchewan Petroleum and Natural Gas Regulations, 1969 (O.C. 8/69) § 22.

Discovery royalty A special lower royalty of five percent (rather than the usual 121/2%) payable under certain leases of the State of Alaska by the leaseholder who drilled and made the first discovery of oil and gas in commercial quantities in a geologic structure. AS 38.05.180(a). By legislative amendments in 1967 and 1969 the discovery royalty system was curtailed and finally abolished. *See Union Oil Co. of California v. State of Alaska, Department of Natural Resources, 526 P.2d 1357, 50 O.&G.R. 1 (Alaska 1974)* , *on second appeal, 574 P.2d 1266, 60 O.&G.R. 167 (Alaska 1978)* .

Although limited by statutory amendments, issues relating to the discovery royalty authorized by *Alaska Stat. § 38.05.180(a)* still arise because extant oil and gas leases contain clauses incorporating the discovery royalty concept. *ConocoPhillips Alaska, Inc. v. State, 109 P.3d 914 (Alaska 2005)* (upholding Department of Natural Resources' decision that production not entitled to the discovery royalty rate because it was not from a newly discovered geologic structure).

See also geologic structure.

Discovery well An exploratory well that encounters a new and previously untapped mineral deposit. A discovery well may open up a new field, or it may locate a new and previously unknown producing horizon in an old field.

A deep well expressly drilled for the purpose of locating a pool of oil or gas, as per West Virginia oil and gas conservation laws. *W. Va. Code. § 22C-9-7*. The West Virginia Office of Oil and Gas, however, refers to these types of wells as "test wells." State *ex rel. Lovejoy v. Callaghan, 213 W. Va 1, 576 S.E.2d 246 ns.2-6, 156 O.&G.R. 179 (2002)* .

See also consent and easement provision.

Discovery well allowable An additional Allowable (*q.v.*) granted to a discovery well. In Mississippi, for example, the owners and producers of a discovery well may certify to the oil and gas board an itemized list of the expenses incurred in the actual drilling of such well. Upon certification by the Oil and Gas Board of the amount of such costs, the discovery well is not subject to restrictions on production until the cost of drilling such well shall have been recovered in oil or gas from such discovery well. *Miss. Code 1972, § 53-1-17(3)(l)* (1995).

This allowable normally exceeds the average per well allowable for older reservoirs. It is not subject to shutdown days. *See* Dutton, "Proration in Texas: Conservation or Confiscation?," *11 Sw. L.J. 186, 189 (1957); 16 Tex. Admin. Code § 3.42*.

See also Zimmermann, *Conservation in the Production of Petroleum* 218 (1957).

Disparagement of title *See* Slander of title.

Displaced gas Transportation gas (*q.v.*) which has been displaced by the carrier in order to deliver Consumer gas (*q.v.*) and which is delivered at a later time when capacity becomes available.

Displacement A process in which, because of a pipeline's configuration, it is not clear whether gas moves forward or backward from the point of receipt. *Associated Gas Distributors v. Federal Energy Regulatory Comm'n, 899 F.2d 1250* at note 1 (D.C. Cir. 1990) .

See Transportation by displacement.

The term "transportation" is defined by the FERC (*q.v.*) to include "exchanges," "backhauling," and "displacement." *Natural Gas Clearinghouse v. FERC, 108 F.3d 397, 399, 136 O.&G.R. 660 (D.C. Cir. 1997)* .

Displacement method *See* Miscible displacement method.

Disposal well A well employed for the reinjection of salt water produced with oil into an underground formation. *See 16 Tex. Admin. Code § 3.9.*

See also Annular disposal; Brine disposal well; "Packerless" Salt water disposal well; Salt water disposal; Salt water disposal well.

Disqualified transferor For purposes of the Crude oil Windfall Profit Tax Act of 1980 (*q.v.*), this term means, with respect to any quarter, any person who: (1) had qualified production for such quarter which exceeded such person's independent producer amount for such quarter, or (2) was not an independent producer for such quarter. *Internal Revenue Code § 4992.*

Disrepute clause A clause said to be included in all Petromin contracts with foreign government oil purchasers which enables the Saudi government entity to terminate the contract if the Saudis conclude that the other government acts in a manner which brings discredit to the Saudi government. Conant, "Government-to-Government Agreements," *Energy Law 1981,* Seminar of the International Bar Association Committee on Energy and Natural Resources at p. 8 (1981).

See also Concession.

Dissolved gas drive The energy, derived from expansion of solution gas, used in the production of oil. *Syn.:* Solution-gas expansion. Gas escapes from solution within the oil upon reduction of pressure and drives the oil from the reservoir into the well. This form of drive is characterized by rapidly declining pressure and an increasing amount of gas necessary to produce a barrel of oil, with rapidly increasing gas-oil ratios.

See also Reservoir energy.

Distillate Liquid hydrocarbons, usually colorless and of high API gravity (above 60 degrees), recovered from wet gas by a separator that condenses the liquid out of the gas. This is the older name for the substance; generally at present the term Natural gasoline (*q.v.*) or Condensate (*q.v.*) is used.

Any product separated, or purified, or identified by distillation. *See Asiatic Petroleum Corp. v. United States, 183 F. Supp. 275, 12 O.&G.R. 841 (Customs Court 1959)* .

See also Middle distillates.

Distillate fuel oil A term subject to a variety of definitions. Sometimes the definition is based on the method of production (distillation), but other definitions are based on boiling range, viscosity, or use. *See* Residual fuel oil. Most commonly the term is used in connection with diesel oil and the light fuel oils used for residential heating. *See* Hammond, Metz, and Maugh, *Energy and the Future* 159 (1973). Distillates are classified in grades, called Number 1, 2, 3, 4, 5, and 6 fuels. The specific gravity of fuel oils range from O.92 to O.99.

As distinguished from residual fuel oils which are leftovers of refining processes, distillate fuel oils are products of distillation and are lighter. They are used for a variety of purposes, including diesel fuel and for space heating. Residual fuel oils are used under boilers in ships and in power plants. *See* Zimmermann, *Conservation in the Production of Petroleum* 85 (1957).

Distressed well *See* Hardship well.

Distribution *See* Local distribution company (ldc); Local distribution facility.

Distribution line A Pipeline (*q.v.*) other than a Gathering line (*q.v.*) or Transmission line (*q.v.*). *49 C.F.R. § 192.3 (1982). See Hamman v. Southwestern Gas Pipeline, Inc., 721 F.2d 140, 78 O.&G.R. 552 (5th Cir. 1983)* (concerned with classification of pipeline in order to determine whether it was subject to regulation under the Natural Gas Pipeline Safety Act (NGPSA) (*q.v.*).

Distribution system "... [T]he mains which are provided primarily for distributing gas within a distribution area, together with land, structures, valves, regulators, services and measuring devices, including the mains for transportation of gas from production plants or points of receipt located within such distribution area to other points therein. The distribution system owned by companies having no transmission facilities connected to such distribution system begins at the inlet side of the distribution system equipment which meters or regulates the entry of gas into the distribution system and ends with and includes property on the customer's premises. For companies which own both transmission and distribution facilities on a continuous line, the distribution system begins at the outlet side of the equipment which meters or regulates the entry of gas into the distribution system and ends with and includes property on the customer's premises. The distribution system does not include storage land, structures, or equipment." *18 C.F.R. Part 201*, Definitions 26(c) (1980).

See also Collecting system; Gathering system; System.

District expenses When a particular leasehold is included by the operator within a district in which many other wells are being operated, a proportionate part of the expenses of the district may be allocated to the particular leasehold, *e.g.*, on the basis of the relation of the number of wells on the particular leasehold to the number of wells in the district. *See Luling Oil & Gas Co. v. Humble Oil & Refining Co., 144 Tex. 475, 191 S.W.2d 716 (1946)* .

In *Mason v. Ladd Petroleum Corp., 630 P.2d 1283, 70 O.&G.R. 586 (Okla. 1981)* , after describing the work of a

district office and the nature of district expenses, the court concluded that district expenses should not be considered in determining whether production was in paying quantities: "The district office is the first level in defendant's chain of command. But while a district office may be convenient and even necessary as a pragmatic approach to making a corporate giant functional in the corporate administration of its lease operations, we deem the expense of such an office to be too indirectly and too remotely related to defendant's lifting or producing operations in connection with the Sherman No. 1 well to be included in determining whether the well operates at a profit." *630 P.2d at 1285, 70 O.&G.R. at 589* .

Ladd Petroleum Corp. v. Eagle Oil & Gas Co., 695 S.W.2d 99, 87 O.&G.R. 116 (Tex. App.-- Ft. Worth 1985, error ref'd n.r.e.) , concluded that district expenses and administrative overhead which would continue in effect even if the operation of a well were to cease should not be included as overhead in determining whether well was producing in paying quantities.

See also Administrative overhead.

Divestment In the petroleum and mining industries this term is applied to the process by which concessionaires relinquish their properties to host governments gradually over a period of years or at the end of the lease period. *See* Mikdashi, "Policy Issues in Primary Industries," 7 *Vanderbilt J. Transnational Law* 281 at 305 (1974).

See also Concession; Expropriation; Nationalization.

Divided interest farm-out A Farm-out agreement (*q.v.*) by which a farmee earns all of the farmor's interest in a specified lease or drill site tract, as distinguished from an undivided interest farm-out, which provides that the farmee shall earn an undivided portion of the farmor's interest in a tract. *See* Lowe, "Analyzing Oil and Gas Farmout Agreements," *41 Sw. L.J. 759, 794 (1987);* Fay, "Drafting Standard Form Farmout Agreements," *A.B.A. Natural Resources Law Section Monograph Series* No. 1 at 3 (1986).

Divided type of unit operating agreement A unit operating agreement whereunder the sharing of costs and benefits is dependent upon participating areas which may be established from time to time. The undivided type of unit operating agreement, on the other hand, provides for the sharing of costs and benefits in accordance with a formula agreed upon at the time the unit is formed, without regard to the location and size of any participating areas which may be established from time to time. *See Rocky Mt. Min. Law Fdn. Landman's Legal Handbook* 155 (3d ed. 1977).

See also Unit agreement.

Divisibility of covenants The doctrine which concerns the effect on covenants of an assignment, by lessor or lessee, of part of the tract subject to the lease. As regards partial assignments by the lessor, the question is whether one assignee can proceed to enforce the lease covenants without joinder of other owners of lessor interests. As regards partial assignments by the lessee, the question is whether the covenants relate to each subdivision of the leasehold in severalty or apply to the entire leasehold without regard to the partial assignment. *See* Divisible covenants.

Divisibility of lease *See* Pugh clause; Rule of indivisibility.

Divisibility provision *See* Separate ownership provision.

Divisible covenants Those duties imposed by an oil and gas lease that are apportioned to each individual subdivision of the leasehold after an assignment by the lessor or the lessee.

The typical oil and gas lease expressly makes the royalty clause divisible. As to the implied covenants relating to drilling, the cases are divided. Holding that these covenants are divisible upon partial assignment by the lessee are: *Cosden Oil Co. v. Scarborough, 55 F.2d 634 (5th Cir. 1932)* ; *Standard Oil Co. v. Geller, 183 Ark. 776, 38 S.W.2d 76 (1931)* . Holding that the implied drilling covenants are indivisible are: *Da Camera v. Binney, 146 S.W.2d 440 (Tex. Civ. App. 1941)* ; see *Amerada Petroleum Co. v. Sledge, 151 Okla. 160, 3 P.2d 167 (1931)* . *See* the argument for non-divisibility of these covenants in Brown, "Assignments of Interests in Oil and Gas Leases," 5 *Sw. Legal Fdn. Oil & Gas Inst.* 25, 43 (1954). *See also* Walker, "Nature of Property Interests Created by an Oil & Gas Lease in Texas," *11 Texas L. Rev. 399, 452 (1933);* Treatise §§ 409-*409.4.*

A different aspect of the subject is presented when the lessor assigns a portion of the leasehold, and thereafter some but not all owners of the lessor's interest bring suit for breach of covenant. The cases once again divide on the divisibility of the covenants. Holding that the covenants are divisible and hence the joinder of all owners in the action is unnecessary are: *Theissen v. Weber, 128 Kan. 556, 278 P. 770 (1929)* ; *Toklan Royalty Corp. v. Panhandle Eastern Pipe Line Co., 172 Kan. 305, 239 P.2d 927, 1 O.&G.R. 56 (1952)* ; *Compton v. Ficher-McCall, 298 Mich. 648, 299 N.W. 750 (1941). Contra: Callahan v. Martin, 3 Cal. 2d 110, 43 P.2d 788,* 101 A.L.R. 871 (1935) ; *Sun Oil Co. v. Oswell, 258 Ala. 326, 62 So. 2d 783, 2 O.&G.R. 145 (1953)* . It is not suggested that the joinder of parties question is always decided by reference to the divisibility, *vel non,* of the implied covenant in issue. *See Hunt v. McWilliams, 218 Ark. 922, 240 S.W.2d 865 (1950)* .

A somewhat related subject is the divisibility of lease clauses other than express or implied covenants. The typical lease expressly makes the rental clause divisible, upon assignment by either lessor or lessee. On the other hand, the habendum clause is usually treated as indivisible. After subdivision, production anywhere on the tract keeps the lease alive after the primary term as to assignees of both lessor and lessee. *Berry v. Tidewater Associated Oil Co., 188 F.2d 820 (5th Cir. 1951)* ; *Cosden Oil Co. v. Scarborough, 55 F.2d 634 (5th Cir. 1932)* ; *Gypsy Oil Co. v. Cover, 78 Okla. 158, 189 P. 540 (1920). Contra Roberson v. Pioneer Gas Co., 173 La. 313, 137 So. 46,* 82 A.L.R. 1264 (1931) ; *Noel Estate v. Murray, 223 La. 387, 65 So. 2d 886, 2 O.&G.R. 951 (1953)* .

For a good general discussion, see Merrill, "The Partial Assignee--Done in Oil," *20 Texas L. Rev. 298 (1942).*

Divisible lease covenants *See* Divisible covenants.

Divisible sharing arrangement A Sharing arrangement (*q.v.*) in which some consideration in addition to the development contribution [Excess cash (*q.v.*)] passes between the grantor and grantee. The name derives from the fact that the arrangement is not a simple sharing arrangement but is a mixed sharing arrangement, "divisible" in the sense that for tax purposes, part of the transaction may be treated as a simple sharing arrangement (with no realization of income) and part treated otherwise, depending upon its nature. *See* Burke and Bowhay, *Income Taxation of Natural Resources* PP 7.06, 7.14 (1980).

Division of interest form The term employed in *Hull v. Sun Refining & Marketing Co., 789 P.2d 1272, 109 O.&G.R. 49 (Okla. 1989)* , noted, *44 Okla. L. Rev. 571 (1991),* to describe a form submitted by a lessor in lieu of a "standard" division order submitted by a contracting purchaser of oil to the lessor for signature. The division of interest form omitted a number of the terms contained in the "standard" division order.

Division order A contract of sale to the purchaser of oil or gas. The order directs the purchaser to make payment for the value of the products taken in the proportions set out in the division order.

Even though the lessee by the terms of the lease has authority to dispose of any products produced, the purchaser usually requests the operator to furnish complete abstracts of title which the purchaser causes to be examined, after which a division order is prepared by the purchaser on the basis of the ownership shown in the title opinion prepared after examination of the abstracts. The purchaser usually requires that the division order be executed by the operator, the royalty owners and other persons having an interest in the production. Division orders typically authorize the payor to withhold payments, without interest, where there is a dispute regarding the ownership of the production. When the division order is executed and returned to the purchaser, payment is commenced for the products removed. The division order is typically terminable at the will of either party.

Louisiana Land & Exploration Co. v. Pennzoil Exploration & Production Co., 962 F. Supp. 908, 912 (E.D. La. 1997), observed that: "A division order is essentially a contract that confirms the division of interest among all parties who own production obtained from a well and establishes the proportions in which each party is entitled to share proceeds from a well." The court further observed that a division order is a contract, binding until revoked, but may not alter or amend the terms of the lease. *Id. at 915*, citing La. Rev. Stat. §§ 31.212.31(A)(2), *31:138.1(B)*. In a subsequent decision, the district court concluded the Louisiana division order statute would not be given retroactive effect. *Louisiana Land & Exploration Co. v. Pennzoil Exploration & Production Co., 982 F. Supp. 398 (E.D. La. 1997)*.

In re Unioil, Inc., 962 F.2d 988 at 995, 118 O.&G.R. 443 (10th Cir. 1992), quoted language from several sections of this Treatise in rejecting a claim of accord and satisfaction arising from signing and accepting subsequent benefits under a revised Division order.

Quoting the definition in this Manual of terms, *Akandas, Inc. v. Klippel, 250 Kan. 458, 827 P.2d 37, 118 O.&G.R. 12 (1992)*, concluded that the instrument construed was a unitization agreement rather than a division order, and hence unit production sufficed to preserve nonproducing leases included in the unit.

"By statute effective August 26, 1991, payors of production from properties in Texas may insist that payees execute a division order as a condition for payment, but the division order may not contain any terms beyond those specifically enumerated in the statute." Tilly, "Division Orders: Can't Live With 'Em, Can't Live Without 'Em," 43 *Sw. Legal Fdn. Oil & Gas Inst.* 8-1, 8-9 (1992).

As to the effect of a division order as a conveyance of interests in the producing property, see *Snider v. Snider, 208 Okla. 231, 255 P.2d 273, 2 O.&G.R. 711 (1953)*. Execution of a division order permits payment to be made by a purchaser in accordance with the terms thereof even though in conflict with the actual ownership of interests in production. *Chicago Corp. v. Wall, 293 S.W.2d 844, 6 O.&G.R. 703 (Tex. 1956)*. The execution of a division order by a nonleasing concurrent owner may operate as a ratification of a lease [*Texas & Pacific Coal & Oil Co. v. Kirtley, 288 S.W. 619* (Tex. Civ. App. 1926, error ref'd)], or alter the terms of a lease [*Simpson v. United Gas Pipe Line Co., 196 Miss. 356, 17 So. 2d 200 (1944)]*.

Hull v. Sun Refining and Marketing Co., 1989 OK 168, 789 P.2d 1272, 109 O.&G.R. 49, noted, *44 Okla. L. Rev. 571 (1991)*, was concerned with the question whether refusal of lessors to execute a division order tendered by the purchaser of oil from lessees justified suspension of royalty payments to lessors under the provisions of *52 O.S. Supp. 1985 § 540*. Lessors refused to sign division orders submitted by the purchaser and submitted instead a Division of Interest Form (*q.v.*) omitting a number of the provisions of the purchaser's "standard" division order. The court concluded that (1) a lessor's demonstration of marketable title was sufficient to maintain an action under the cited statute, (2) the agent-lessee could not bind the principal-lessor to a trade usage (that execution of a division order is a condition

precedent to payment for royalty proceeds) which by reason of the cited statute was no longer recognized and contrary to public policy. Three justices dissented on the ground that the majority opinion created a four year "window" (between the enactment of the cited statute and the enactment of an amendment thereto) during which the law was different from what it was before and what it will be after.

The definition of division order in this Manual was cited by *Kaufman v. Arnaudville Co., 186 So. 2d 337, 342, 25 O.&G.R. 290, 297 (La. Ct. App. 1966)* , *writ ref'd, 249 La. 575, 187 So. 2d 739, 25 O.&G.R. 299 (1966)* .

This definition of division order was cited in *Clough v. Williams Production RMT Co., 2007 Colo. App. LEXIS 182* (Colo. Ct. App. Feb. 8, 2007) .

See also the following:

Burney, *The Interaction of the Division Order and the Lease Royalty Clause, 28 St. Mary's L.J. 353 (1997);*

Smith, *The New Division Order: Legal and Practical Aspects*, 42 *Rocky Mt. Min. L. Inst.* 19-1 (1996);

Bondurant, *Royalty Owner Rights Under Division Orders, 25 Tulsa L.J. 571 (1990);*

Pierce, *Resolving Division Order Disputes: A Conceptual Approach*, 35 *Rocky Mt. Min. Law Inst.* 16-1 (1989);

Hollimon, *Division Orders-- A Primer*, 34 *Sw. Legal Fdn. Oil & Gas Inst.* 313 (1983);

Knowlton and Morrow, *Division Orders, Rocky Mt. Min. L. Fdn. Inst. on Oil and Gas Agreements* Paper 12 (1983);

Jacobson, *Division Orders are Unilaterally Revocable Agreements that Bind the Parties Until Properly Revoked: Exxon Corp. v. Middleton*, 13 *Texas Tech L. Rev.* 142 (1982);

Edwards, *A Suggested Analysis for Gas Division Orders, 17 Tulsa L.J. 534 (1982);*

Bounds, *Division Orders*, 5 *Sw. Legal Fdn. Oil & Gas Inst.* 91 (1954);

Ethridge, *Oil and Gas Division Orders, 19 Miss. L.J. 127 (1948);*

Treatise §§ 701-*715*.

See also Delay rental division order; One hundred percent gas division order; One hundred percent oil division order; Suspense account.

Division order title opinion *See* Title opinion.

DL Development license (DL) (*q.v.*).

DLR Abbreviation of *Dominion Law Reports,* a set of reports containing decisions of various Canadian courts.

DMROV Discounted MROV (*q.v.*).

DNA Worksheet A Bureau of Land Management (BLM) worksheet officially entitled "Interim Documentation of Land Use Conformance and NEPA Adequacy" used by the BLM in its NEPA review process. In *Wyoming Outdoor Council (On Reconsideration), 157 IBLA 259 (2002), 156 IBLA 347 (2002)* , the IBLA found that reliance on the DNA Worksheets to make a determination as to whether an environmental impact statement was required to be developed for a lease sale did not comply with the NEPA requirement of a "hard look" at the environmental consequences of the planned federal action. *Accord Wyoming Outdoor Council, 158 IBLA 155, 158 IBLA 384 (2003)* . The IBLA decision in *Wyoming Outdoor Council* was reversed in *Pennaco Energy, Inc. v. United States Department of Interior, 266 F. Supp. 2d 1323, 157 O.&G.R. 999 (D. Wyo. 2003)* , *rev'd on other grounds, 377 F.3d 1147, 161 O.&G.R. 417 (10th Cir. 2004)* .

The *Pennaco Energy* opinions finding that BLM is not required to prepare supplemental EISs relating to coalbed methane development are binding in other challenges to CBM leasing and development decisions. *Wyoming Outdoor Council, 172 IBLA 289, 2007 IBLA LEXIS 46 (IBLA 2007)* ; *Biodiversity Conservation Alliance, 171 IBLA 313, 319 (IBLA 2007)* ; *Biodiversity Conservation Alliance, 171 IBLA 218, 2007 IBLA LEXIS 15 (IBLA 2007)* .

In *Southern Utah Wilderness Alliance, 164 IBLA 118, 122, 2004 IBLA LEXIS 98* (Nov. 30, 2004) , the court found that the DNA worksheet is a "non-NEPA" procedure that cannot be used in the NEPA tiering process, but may be used to determine the sufficiency of previously issued NEPA documents. *See also Pennaco Energy, Inc. v. United States Department of the Interior, 377 F.3d 1147, 1162, 161 O.&G.R. 417 (10th Cir. 2004)* ; *Kern v. United States Bureau of Land Management, 284 F.3d 1062 (9th Cir. 2002)* .

Colorado Environmental Coalition, 171 IBLA 256, 2007 IBLA LEXIS 16 (DNAs may be used to assess the adequacy of previous environmental review documents prior to approving lands to be leased, but may not be used to supplement what is otherwise insufficient NEPA documentation);

See Southern Utah Wilderness Alliance, 177 IBLA 29, 34 (IBLA 2009) ; *Center for Native Ecosystems, 174 IBLA 361 (2008)* ; *Colorado Environmental Coalition, 171 IBLA 256, 263 (2007)* ; *Southern Utah Wilderness Alliance (SUWA), 166 IBLA 270 (2005)* .

The IBLA has further clarified the proper use of DNAs in the competitive oil and gas leasing situation. A DNA can be used to determine whether the inclusion of parcels in a particular lease sale conforms to existing land use plans and whether existing EISs or EAs are adequate to support the lease sale decision. *Wyoming Outdoor Council, 170 IBLA 130 (2006)* . They still cannot be used to supplement previous EAs or EISs, but can be used to point out to the BLM decision-maker the existing NEPA analysis. *Colorado Environmental Coalition, 171 IBLA 256 (2007)* ; *Center for Native Ecosystems, 170 IBLA 331 (2006)* ; *The Coalition of Concerned National Park Service Retirees, 169 IBLA 366 (2006)* ; *National Wildlife Federation Biodiversity Conservation Alliance Wyoming Outdoor Council Wyoming Wildlife Federation, 169 IBLA 146 (2006)* ; *Southern Utah Wilderness Alliance (SUWA), 166 IBLA 270 (2005)* .

See also Montana Wilderness Ass'n v. Fry, 310 F. Supp. 2d 1127, 1134 (D. Mont. 2004) .

See also Southern Utah Wilderness Alliance, IBLA 2001-310, 166 IBLA 270 , GFS (O&G) 20 (2005) (following *Pennaco Energy's* analysis on the use of DNAs).

See also Environmental impact statement; National Environmental Policy Act.

DOCD Development operations coordination document (*q.v.*).

See also development and production plan (DPP).

Doctrine *See* Abstention, doctrine of; Accomodation doctrine; Act of state doctrine; Ad coelum doctrine; After-acquired title doctrine; Chandeleur incentive doctrine; Commingling doctrine; Constructive production doctrine; Devotional limitation doctrine; Exclusive right doctrine; Filed rate doctrine; Merger doctrine; Negative community doctrine; Obligation well doctrine; Obstruction doctrine; Open mine doctrine; Pool-of-capital doctrine; "Presumed grant" doctrine; Presumed lost deed doctrine; Repudiation doctrine; Separate estate doctrine; Strip and gore doctrine; Turnkey well doctrine.

DOE The Department of Energy, established by Pub. L. No. 95-91 (Aug. 4, 1977), *42 U.S.C. § 7101 et seq.*

DOE Act The Department of Energy Organization Act, Pub. L. No. 95-91, *91 Stat. 565* (Aug. 4, 1977).

Doghouse The small shed near the derrick where the driller and tool dressers keep their clothes. *API Quarterly* 3 (Spring 1957).

See Champlin Petroleum Co. v. Heinz, 665 S.W.2d 544 (Tex. App.--Corpus Christi 1983, error ref'd n.r.e.) (holding that maintenance of a doghouse on a leasehold was not a sufficient basis for establishing venue under a statute referring to "a fixed and established place of business").

This term is also used in offshore drilling operations for a part of the deck which serves as an office and base of operations for the driller and for a compression or decompression chamber in a diving installation.

Syn.: Production shack (*q.v.*).

Dog's leg *See* Crooked well.

Dollar-for-dollar well cost adjustment *See* Unit well cost adjustment.

Domanial law system A term applied to the system under which ownership of mineral substances is vested in the sovereign, as distinguished from the so-called Accession system (*q.v.*) in the United States under which the landowner has certain ownership interests in minerals. Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* 24 (1986).

For a brief discussion of ownership of minerals under Islamic law and of United Nations Resolutions on the ownership concepts applicable to natural resources, see Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* 27-32 (1986).

Dome *See* Salt dome.

Dominant estate The term applied to the estate to which a servitude or easement is due, or for the benefit of which it

exists, or to the parcel of land benefitted by an easement or a servient estate. Oil and gas leases and mineral deeds generally contain express or implied rights of surface user; the lessee or mineral owner is viewed as owning the dominant estate and the lessor or surface owner is viewed as owning the Servient estate (*q.v.*). *See* Treatise §§ 218-*218.14*.

The Accommodation doctrine (*q.v.*) was applied in *Columbia Gas Transmission Corp. v. Limited Corp., 759 F. Supp. 343, 113 O.&G.R. 436 (E.D. Ky. 1990)* , *aff'd, 951 F.2d 110, 118 O.&G.R. 216 (6th Cir. 1991)* , in a case in which the coal estate was dominant and the oil and gas estate was servient.

Donation letter An agreement by which one person agrees to contribute money toward the drilling of a well by another. Such payment is usually conditioned on completion of the well by the latter party as a dry hole [a Dry hole donation letter (*q.v.*)] or to a specified depth [a Bottom hole donation letter (*q.v.*)]. The inducement for such contribution is often the desire of the payor to have a test well drilled in the vicinity of his leaseholds. The absence of an assignment of a property interest in a donation letter distinguishes it from a Purchase letter (*q.v.*). *See* Treatise §§ 431-*431.2*.

For other forms of letter agreements, see Letter.

DONG A/S Dansk Olie og Naturgas A/S (DONG A/S) (*q.v.*), the state oil company of Denmark.

Donkey head The term used to describe 15 to 20 foot head of a beam pump at the wellhead of a pumping well.

Syn.: Grasshopper; Nodding donkey.

See also Pumping jack.

Doodle bug A device alleged to be of value in the location of a site for an oil and gas well or a water well. The simplest form of doodle bug is a twig which, when held in the hands of an "expert" Dowser (*q.v.*) walking over the premises, is said to react in a certain way, *e.g.,* by bending downwards, when the "expert" comes to a favorable portion of the land for the drilling of a well. There are instances in which production has been obtained by drilling a well at the site indicated by the doodle bug but contemporary informed opinion attributes this to chance and places no value in doodle bugs, whether a simple twig or a more complex device. *See Frank v. United States, 220 F.2d 559, 4 O.&G.R. 1116 (10th Cir. 1955)* .

Rhabdomancy, the science of divination by rods or wands, has long had a substantial following and substantial success in discovering underground streams of water has been claimed by practitioners. It has been suggested that the history of success is based on discoveries in such areas as New England, where it is hard not to find water. Early in 1962 a design patent was granted for a divining rod to be employed as a prospecting tool for oil and gas to an inventor who claimed to have had success (not yet verified by drilling) in discovering petroleum deposits. *See The New York Times,* January 13, 1962.

This term is also employed in connection with seismograph operations.

Door mats Small tracts-- *e.g.,* 1/20 of an acre--just large enough to accommodate a derrick. At the time of the Spindletop development in 1901, many such small tracts were conveyed. *See* Norvell, "The Railroad Commission of

Texas: Its Origin and History," 68 *Southwestern Historical Q.* 464, 475 (1965).

Dormant *commerce clause* Syn. for Negative *commerce clause* (*q.v.*).

Dormant minerals act The term applied to a state statute designed to extinguish severed mineral and/or royalty interests when there has been no exploration, development, operations or act of recording for a substantial number of years. In *Texaco, Inc. v. Short, 454 U.S. 516, 72 O.&G.R. 217 (1982)* , the constitutionality of the Indiana act was upheld. This type of act is discussed by the author of the Indiana statute in Ronald Polston, "Mineral Ownership Theory; Doctrine in Disarray," *70 N.D. L. Rev. 541, 566 (1994).* Prior to Short a number of state supreme courts had invalidated on constitutional grounds, their states' dormant mineral acts. *See e.g., Wilson v. Bishop, 82 Ill.2d 364, 45 Ill.Dec. 171, 412 N.E.2d 522, 68 O.&G.R. 193 (1980)* ; *Wheelock v. Heath, 201 Neb. 835, 272 N.W.2d 768, 62 O.&G.R. 359 (1978)* ; *Chicago & N.W. Transp. Co. v. Pedersen, 80 Wis.2d 566, 259 N.W.2d 316, 59 O.&G.R. 570 (1977)* .

See generally Treatise § 215.

See also Lapse statute; Repose, rule of.

Double basing point structure *See* Basing point.

Double grant theory *Syn.:* Two grant theory.

Double suspension plug An oil tool used in the wellhead of an oil well to suspend the tubing. It consists of a doughnut shaped outer plug tapered on the outside to fit in the tubing head, and on the inside to seat the inner plug. The latter is a smaller tapered plug which is screwed to the top of the tubing and actually suspends the tubing in the well. *Basin Oil Co. v. Baash-Ross Tool Co., 125 Cal. App. 2d 578, 271 P.2d 122, 3 O.&G.R. 971 (1954)* . *See also* Plug.

Dower A common law marital interest of the wife in the realty owned by the husband which continues to be important in some states. *See* Treatise § 516.

Down-dip lease A lease on the lower part of a formation. *Amoco Production Co. v. Alexander, 622 S.W.2d 563, 566, 18 A.L.R.4th 1, 72 O.&G.R. 125, 127 (Tex. 1981)* .

See also Up-dip lease.

Down-dip well A well located low on the structure where the oil is furthest from the surface of the field. *Hunter v. Hussey, 90 So. 2d 429, 6 O.&G.R. 1172 (La. Ct. App. 1956)* .

Downhole commingling A term referring to the production of oil or gas from different strata through the same string of casing. *Railroad Commission v. Pend Oreille & Gas Co., 817 S.W.2d 36, 113 O.&G.R. 573 (Tex. 1991)* . Where a permit has been issued for downhole commingling of production from several different Reservoirs (*q.v.*) or Common sources of supply (*q.v.*), the Railroad Commission has the authority to regulate production from one or more wells that

tap into the different reservoirs. *Seagull Energy E & P, Inc. v. Railroad Commission, 99 S.W.3d 232, 242* (Tex. App.--Austin 2003) . Prior to 1981 amendments to the Natural Resources Code, the power of the Commission to deal with downhole commingling was uncertain at best. *Gage v. Railroad Commission, 582 S.W.2d 410, 63 O.&G.R. 218 (Tex. 1979)* ; *Railroad Commission v. Graford Oil Corp., 557 S.W.2d 946, 59 O.&G.R. 338 (Tex. 1977)* .

"Downhole commingling occurs when one or more otherwise separate strata or accumulations of hydrocarbons are simultaneously produced through the same string of pipe in the well bore." *Seagull Energy E&P, Inc. v. Railroad Comm'n, 226 S.W.3d 383, 384 n. 1 (Tex. 2007)* .

Down-hole steam generation A process of generation of steam for use in a heavy oil reservoir to reduce viscosity and increase recovery of the oil. Steam generation at the surface for this purpose has environmental problems and is effective only in relatively shallow horizons by reason of the decline in the temperature of the steam as it moves from the surface to the formation. Downhole steam generation may solve certain of the environmental problems and enable use of the technique in deeper horizons. *See* Department of Energy, *Energy Insider* (Vol. 4, No. 8, Apr. 14, 1980, p. 4).

See also Steam stimulation; Thermal method of oil recovery.

Down-hole storm choke A safety valve inside the tubing of flowing wells in the ocean which automatically shuts off production whenever there is an abnormal flow through the tubing. Thus if an accident were to open the production assembly by severing the wellhead connection, the storm choke automatically stops the flow of oil or gas within the system. *See* Choke.

Downsizing *Syn.:* for Down-spacing (*q.v.*). *See* Smith, "Introductory Remarks to the Texas International Law Journal's 1990 Symposium on International Energy Trade & Regulation," *25 Tex. Int'l L.J. 341, 344 (1990).*

Down-spacing A regulatory commission order providing for denser spacing by infill drilling. Anderson, "New Directions in Oil and Gas Conservation Law," *Institute on Oil and Gas Conservation Law and Practice* 14-1, 14-14 (Rocky Mt. Min. L. Fdn. 1985).

Pacific Enterprises Oil Co. v. Howell Petroleum Co., 614 So. 2d 409, 122 O.&G.R. 1 (Ala. 1993) , concluded that a compulsory pooling order downspacing a unit from 640 to 320 acres would affect royalty payment under an existing voluntary unit agreement and farmout agreement, but an order downspacing a 640-acre well Spacing unit (*q.v.*) would not have that effect unless the prior agreement made royalty computations dependent on spacing by the Oil and Gas Board. In the instant case the farmout agreement and the voluntary unit agreement were construed to make royalty computations dependent on an order downspacing a 640-acre well spacing unit.

Syn.: De-spacing.

Downstream This term is used in describing operations performed after those at a designated point of reference. It is often used to describe post-production processes which are deemed downstream operations. Where the refinery is used as a point of reference, for example, marketing may be described as a downstream operation and production as an upstream operation. On a gas pipeline, downstream denotes a location further removed from the source of supply.

See also Upstream.

Down-structure Below the high point of a Structure (*q.v.*); down-dip. Since oil and gas rise in any structural formation, the most favorable place for discovering them is on the high point of the formation. As movement is always from this high point, the chances of successful production diminish.

Down the hole Industry slang for the costs of drilling, testing, completing, and equipping a well for production or plugging and abandonment. Himebaugh, "An Overview of Oil and Gas Contracts in the Williston Basin," *59 N.D. L. Rev. 7, 24 (1983).*

Downtime The period of time a well is shut down for workover, maintenance or for other reasons. By reason of price control regulations authorizing a higher price for old oil produced from a stripper well (one averaging 10 barrels a day or less) than for other "old oil", the question whether downtime could be used in calculating a well's production average became of substantial importance inasmuch as exclusion of downtime could cause some wells to lose their status as stripper wells. *See* Interstate Oil Compact Commission, *Compact Comments* 5 (Sept. 1975).

Dowser The term applied to one who utilizes a Doodle bug (*q.v.*) to locate a site for an oil and gas well or a water well.

See also Rhabdomancy.

DPC The Dubai Petroleum Company. *See* Shwadran, *The Middle East, Oil and the Great Powers* 442 (3d ed. revised and enlarged, 1973).

DPP Development and production permit (*q.v.*)

Drag bit *See* Bit, drag.

Drag reducing agents (DRAs) Agents injected into oil and gas pipelines for the purpose of reducing friction. The active ingredients in DRAs are high molecular weight polymers.

See Conoco, Inc. v. Energy & Envtl. Int'l, L.C., 460 F.3d 1349, 1353 (Fed. Cir. 2006) (patent infringement action involving DRAs).

Drainage Migration of oil or gas in a reservoir due to a pressure reduction caused by production from wells bottomed in the reservoir. Local drainage is the movement of oil and gas toward the well bore of a producing well. Field drainage (*q.v.*) is a reservoir-wide migration. Under the Rule of capture (*q.v.*) there is no liability for producing oil or gas drained from beneath the land of another, absent negligence, waste or destruction of the product drained. *Elliff v. Texon Drilling Co., 146 Tex. 575, 210 S.W.2d 558, 4 A.L.R.2d 191 (1948)* .

Under the Offset well covenant (*q.v.*), a lessee may be liable for local drainage away from the leasehold or for Field drainage (*q.v.*) if he fails to drill offset wells to prevent the drainage.

See also Compensated drainage; Compensatory drainage; Controlled gravity drainage; Depletory covenant; Fraudulent drainage; Methane drainage license; Net drainage; Permitted drainage; Radial drainage; Uncompensated drainage.

Drainage agreement The term used in *30 U.S.C. § 226(j)* to describe an agreement negotiated by the Secretary when lands owned by the United States are being drained of oil or gas by wells drilled on adjacent lands whereby the United States, or the United States and its lessees, shall be compensated for such drainage. "If such agreement is entered into, the primary term shall be extended for the period during which such compensatory royalty is paid and for a period of one year from discontinuance of such payment and so long thereafter as oil or gas is produced in paying quantities."

Drainage clause A provision of a Gas purchase contract (*q.v.*) obligating the purchaser to use its best efforts to protect the seller from inequitable drainage. The contract construed in *Anadarko Petroleum Corp. v. Panhandle Eastern Corp., 521 A.2d 624, 92 O.&G.R. 251 (Del. Ch. 1987)*, provided as follows: "Buyer agrees to use its best efforts in cooperation with Seller to protect against inequitable drainage by the other producer or producers withdrawing gas from the same reservoir. Buyer shall be obligated to take such quantities necessary to protect Seller from inequitable drainage, to the extent that existing facilities can receive such quantities."

See also Rupe v. Triton Oil & Gas Corp., 806 F. Supp. 1495, 125 O.&G.R. 533 (D. Kan. 1992) (holding that drainage clause of gas purchase contract was inapplicable to seller's claim for breach of take-or-pay obligation of buyer under the contract).

See also Ratable taking.

Drainage covenant *See* Offset well covenant.

Drainage method of evaluation *See* Proven or semi-proven acreage ("Drainage") method of evaluation.

Drainage sale A term used to describe the leasing of land in danger of being drained by production on adjacent lands. *See* Crommelin, *Off-shore Oil and Gas Rights: A Comparative Study*, 14 *Nat. Res. J.* 457, 460 (1974).

Drainage tract *See* Non-leased drainage tract.

Drainage unit "[T]he maximum area in a pool which may be drained efficiently by one well so as to produce the reasonable maximum amount of recoverable oil or gas in the area." *Ariz.Rev.Stat. § 27-501(6)* (1976) (1979 Supp.).

This term is defined by Saskatchewan Petroleum and Natural Gas Regulations, 1969, O/C 8/69, § 3(h) as "the area allocated to a well for the purpose of drilling for and producing oil or gas and includes subsurface areas bounded by the vertical planes in which surface boundaries lie."

See also Drilling unit; Well spacing.

Drake well The 69-foot discovery well drilled by "Colonel" Edwin L. Drake in Titusville, Pa. in 1859. *See* D. Yergin, *The Prize* 26-28 (1991).

Drawbacks The term applied to payments made by railroads to Standard Oil Co. out of receipts from shippers competing with Standard for transportation of such shippers' oil. *See* D. Yergin, *The Prize* 39, 41, 44 (1991).

Drawdown plan *See* Strategic petroleum reserve.

Drawing entry card (DEC) A card filed for the drawing conducted of simultaneously filed oil and gas lease offers. *See* W. C. Yahmel, IBLA 78-203, GFS(O&G) 1978-68.

See also Federal lease; Leasing service company; Multiple filing; Noncompetitive lease; Put option; Simultaneous filings.

Drawing rights *See* Special drawing rights.

Draw works The collective name for the hoisting drum, shaft, clutches, and other operating machinery used in the drilling of a well. Draw works are situated at one side of the derrick floor, connected with a source of power, and embody a housing drum and powerful brakes to control the rotation of the drum under load. Draw works serve as a power-control center for the hoisting gear and usually for the rotary elements of the drill column.

See also Drilling rig.

Dressing of bit *See* Bit, dressing of.

Drill and earn agreement A term which has been applied to a Farm-out agreement (*q.v.*) under which a farmee receives a working interest only in the drill site when he completes a well; he is, however, then entitled to earn an interest in additional sites as he drills on them, usually within specified time intervals. Kuntz, Lowe, Anderson and Smith, *Cases on Oil and Gas* 641 (1986); Scott, "How to Prepare an Oil and Gas Farmout Agreement," *33 Baylor L. Rev. 63 (1981).*

See also Earned interest.

Drill collar A part of the hollow drill stem used to drill a well, located immediately above the bit. It is the means of attaching the drilling bit to the drill column.

Drill column The assemblage of cylindrical steel tubes connected, end to end, by collars or tool joints, which connect the rotary table at the top and the bit at the bottom of a well being drilled.

Driller The chief of the crew that drills an oil or gas well. Wells are usually drilled continuously on the three 8-hour shifts called tours (see Tour), and a driller is in charge of each crew and is responsible for carrying out the orders of the geologist, tool pusher or other person supervising the well.

See also Knowledge box.

Driller's log A record, kept by the driller, that is supposed to show the following: when the well was spudded in, the size of the hole, the drilling tools used, when and at what depth the different drilling tools were hooked on, the number of feet drilled each day, the point at which each string of casing is landed, and in the case of cable tool drilling, the character, color, and description of each rock stratum penetrated. In addition, any unusual event should be noted, such as twisting off in the hole, *etc.* In modern practice, data in the driller's log is supplemented by Electrical well logs (*q.v.*).

Drilling Act of boring a hole through which oil and/or gas may be produced if encountered in commercial quantities. Cable tool drilling (*q.v.*) and Rotary drilling (*q.v.*) are the common methods. The former operates on a percussion or pounding principle, and the formations in the bottom of the hole are pulverized. Rotary drilling, which is the common method today, involves the rotation of a bit in the hole, thereby cutting or boring through the various strata.

See also Actual drilling operations; Air drilling; Canadian pole system; Commencement of drilling; Completion of drilling; Continuous drilling; Directional drilling; Drilling operations; Horizontal drilling; Infill drilling; Turbodrilling; Turning to the right; Ultradeep drilling; Whipstock.

Drilling agreement An agreement by parties having interests in a well or wells to be drilled allocating costs and interests in production among the parties. The agreement may include a Well cost adjustment provision (*q.v.*), applicable on the basis of future events, *e.g.,* unitization.

Drilling and operating restrictions Governmental regulations or lease provisions which restrain or limit drilling and operating activities of a lessee. Depending on the situation at the time of the leasing transaction as to the existence of improvements on the leased premises or as to the utilization of the surface for agricultural or grazing purposes, a variety of restrictions on the lessee's activities may be imposed by a lease. The following are typical:

"When requested by lessor, lessee shall bury lessee's pipe lines below plow depth."

"No well shall be drilled nearer than 200 feet to the house or barn now on said premises without written consent of lessor."

"Lessee shall pay for damages caused by lessee's operations to growing drops on said land."

The lease may contain detailed provisions relating to such matters as maintenance of fences by the lessee or the restoration of the premises by the lessee upon the termination of the lease to the conditions prevailing before the commencement of operations.

Typical governmental regulations restrict the right to drill in urban areas.

See Treatise §§ *673-673.6.*

Drilling and rental clause The delay rental clause of an oil and gas lease.

See also Delay rental clause; Or clause; Unless clause.

Drilling bit *See* Bit, drilling

Drilling block An area upon which an exploratory well is proposed to be drilled. *See* Rocky Mountain Unit Operating Agreement Form 2 (Divided Interest) (1985 Rev.).

This term was defined by an early Oklahoma City zoning ordinance, allowing the drilling of only one well to a drilling block, as follows:

"[A] tract of land which has for its exterior boundary lines public streets, United States government lot lines, the channels of streams, the corporate limits of the city of Oklahoma City, Railway rights-of-ways or unplotted tracts of land, provided that in unplotted tracts the term 'block' shall mean one contiguous tract of not less than five (5) acres." *Phillips Petroleum Co. v. Davis, 194 Okla. 84, 95, 147 P.2d 135, 145 (1942)* .

The history of the Oklahoma Corporation Commission's regulation of drilling and spacing units is discussed in Dancy and Dancy, *Regulation of the Oil and Gas Industry by the Oklahoma Corporation Commission, 21 Tulsa L.J. 613 (1986).*

The term is sometimes described as "a subarea within the unit" upon which a well is drilled. This is likely to involve a federal unit. *Willard Pease Oil & Gas Co. v. Pioneer Oil & Gas Co., 899 P.2d 766, 768 (Utah 1995)* .

See also Block.

Drilling bond An indemnity bond for each well drilled, redrilled, or deepened, required to be filed in some states at the time of the filing of a notice of intention to drill, redrill or deepen. *See Calif. Pub. Res. Code § 3204* (1972) (1980 Supp.).

Drilling, cable tool *See* Cable tool drilling.

Drilling clause A term sometimes applied to the Delay rental clause (*q.v.*) or to the Drilling operations clause (*q.v.*) of a lease. *See, e.g., Gulf Oil Corp. v. Reid, 161 Tex. 51, 337 S.W.2d 267, 276, 12 O.&G.R. 1159, 1172 (1960)* , in which this term was used to describe a drilling operations clause. *See also* D. Pierce, *Kansas Oil and Gas Handbook* § 11.14 (1986).

Drilling clock The time limits typically contained in a Farmout agreement (*q.v.*) that require the farmee to drill or lose its rights to have acreage assigned to it. *Amoco Production Co. v. Hugoton Energy Corp., 11 F. Supp. 2d 1270, 1274, 139 O.&G.R. 483 (D. Kan. 1998)* .

Drilling contract An agreement to drill and complete a well, setting forth the obligations of each party, compensation, indemnification, method of drilling, depth to be drilled, etc.

A contract between a lessee (sometimes called "operator") and a drilling contractor for the drilling of a well. Generally

the contract will take one of four forms: (1) a footage contract "whereby the contractor is paid on a footage basis as work progresses, the price per foot sometimes changing as drilling progresses, with special provisions covering day work; (2) a turnkey contract, which is one whereby the contractor agrees to drill to a designated depth or formation for a fixed price; (3) a completion contract based on a footage and day work basis but postponing operator's liability until well completion; (4) a contract whereby in consideration for drilling, contractor is granted an interest in operator's leasehold estate." *Discussion Notes, 6 O.&G.R. 422 (1956)* . *See* Masterson, *The Legal Position of the Drilling Contractor*, 1 Sw. Legal Fdn. Oil & Gas Inst. 183 (1949).

Universal Drilling Co., LLC v. R & R Rig Service, LLC, 2012 WY 31, 271 P.3d 987 (subcontractor entitled to contract rates for time and materials contract in moving drilling rig; drilling contractor did not prove fraud by sub-contractor merely by showing incompetence in preparation of billing records);

Mohican Oil & Gas, LLC v. Scorpion Exploration & Production Co., 337 S.W.3d 310, 315 n.10 (Tex. App.--Corpus Christi 2011) (analyzes differences between turnkey and daywork contracts; awards damages to drilling contractor who was listed as the operator on the Railroad Commission P-5 form even though drilling contractor engaged in none of the usual activities of an operator);

In re Blast Energy Services, Inc., 396 B.R. 676, 168 O.&G.R. 3 (S.D. Tex. 2008) (analyzes impact of bankruptcy filing on assignee of two IADC Form *(q.v.)* drilling contracts).

Grynberg v. Grey Wolf Drilling Co., L.P., 296 S.W.3d 132 (Tex. App.--Houston [14th Dist.] 2009) (payment provisions of drilling contract do not create 15-day statute of limitations for operator to challenge invoice from drilling contractor; neither party entitled to summary judgment due to contested issues of fact on compliance with contract terms and on the application of the accord and satisfaction doctrine).

Labrador Oil Co. v. Norton Drilling Co., 1 S.W.3d 795, 143 O.&G.R. 308 (Tex. App.--Amarillo 1999, no writ) , disallowed a claim by the well operator for a set-off against damages for the replacement value of drill pipe when the contract placed the risk of loss regarding the drill pipe on the operator.

Calvert Western Exploration Co. v. Diamond Shamrock, 234 Kan. 699, 675 P.2d 871, 79 O.&G.R. 522 (1984) , concluded, for purposes of application of the mechanics' lien law, that the agreement construed was a drilling contract rather than a lease of personal property (the drilling rig) by reason of the variety of personnel, equipment, and services required to be provided with the rig.

For a discussion of the application of the third-party beneficiary doctrine to provisions of a drilling contract, see *Cornwell v. Jespersen, 238 Kan. 110, 708 P.2d 515, 87 O.&G.R. 40 (1985)* ;

Mobil Exploration & Producing U.S., Inc. v. Certain Underwriters, La. App. 2001-2219, 837 So. 2d 11, 159 O.&G.R. 271 (La. Ct. App. 2002) , writ denied.

Dews v. Halliburton Industries, Inc., 288 Ark. 532, 708 S.W.2d 67, 89 O.&G.R. 455 (1986) , sustained the recovery under a quasi-contract theory for services and materials contributed to the drilling of a well.

For a discussion of typical provisions of drilling contracts and problems in negotiation and construction, see the following:

Don Hanvey Oil Trust, Inc. v. Unit Texas Drilling, LLC, 2011 U.S. Dist. LEXIS 15264 (S.D. Tex. Feb. 16, 2011) , *aff'd sub nom. In re Reichmann Petroleum Corp., 453 Fed. Appx. 466 (5th Cir. 2011)* (claims by lessee that sub-contracting drilling company was negligent in drilling a well were contract claims that were covered by a settlement agreement between the drilling company and the trustee in bankruptcy for the contract operator who hired the sub-contractor);

Helmerich & Payne International Drilling Co., v. Swift Energy Co., 180 S.W.3d 635, 163 O.&G.R. 402 (Tex. App.--Houston [14th Dist.] 2005) (analyzes the exculpatory, insurance and indemnity clauses of a drilling contract relating to the contractor's liability to the operator for spill clean-up costs);

Cleere Drilling Co. v. Dominion Exploration & Production, Inc., 351 F.3d 642, 158 O.&G.R. 933 (5th Cir. 2003) (analyzes exculpatory clause in drilling contract and finds that it supersedes other provisions of the contract due to the use of the language "notwithstanding anything to the contrary contained herein ...");

Ruby Drilling Co. v. Duncan Oil Co., 2002 WY 85, 47 P. 3d 964, 154 O.&G.R. 460 (analyzes the differences between a Footage contract (*q.v.*) and Day-work contract (*q.v.*), the express or implied obligation of the driller to drill a vertical well, and the damages recoverable against the driller for not conducting its operations in a workmanlike manner);

R & B Falcon Corp. v. American Exploration Co., 154 F. Supp. 2d 969 (S.D. Tex. 2001) (Analyzes the application of a force majeure clause to an unknown event causing an offshore drilling rig to be damaged. While the drilling contract called for the operator to pay the day work rate in the event of a force majeure, the drilling contractor did not satisfy its burden of proof to show that such an event occurred. What is a force majeure event is primarily determined by the express language used in the contract, not by common law rules, which only apply to fill in the gaps of the written agreement.);

Wil-Roye Investment Co. II v. Alleder, Inc., 2001 WL 903179 (Tex. App.--El Paso, no writ) (unpublished opinion) (analyzes the issue of driller negligence in the restoration of lost circulation in a well, as well as the definition of special and consequential damages which were specifically excluded from any recovery for breach of the terms of the drilling contract);

Anderson, *The Anatomy of An Oil and Gas Drilling Contract, 25 Tulsa L.J. 359 (1990)* (a detailed discussion of contract negotiation, various types of contracts and their contents, problems that may occur in the contract, and the drilling process; sample forms are included);

Calkins, *The Oil Well Drilling Contract: Its Significant Provisions and Problems*, Rocky Mt. Min. L. Inst. on Oil and Gas Agreements Paper 3 (1983);

Calkins, *The Drilling Contract-- Legal and Practical Considerations*, 21 Rocky Mt. Min. L. Inst. 285 (1976);

Ottinger, *Drilling Contracts*, 38 L.S.U. Min. L. Inst. 99 (1991);

Shelton, *The Drilling Contract*, in Slovenko (ed.) Oil and Gas Operations: Legal Considerations in the Tidelands and on Land 113 (1963).

See also Completion contract; Construction contract; Day rate contract; Day work; Due diligence clause; Evergreen clause; Exculpatory clause; Footage contract; Gulf Coast clause; Iadcform; Independent drilling contractor; Knock-for-knock indemnity clause; Shut-down time; Sole risk clause; Specialty contract; Stand-by rig time; Take-over provision; Turnkey contract.

Drilling contractor *See* Iadcform; Independent drilling contractor.

Drilling costs The role of drilling costs in the determination of whether production is in paying quantities for purposes of a lease habendum clause and for purposes of drilling obligations is discussed in Treatise §§ 604.5-*604.6(h)*.

The allocation of expenses between an operator and nonoperating owners is discussed in Treatise §§ 645-*646.3*. The tax treatment of drilling costs is discussed in the entry for Intangible drilling and development costs (IDC).

Drilling covenant *See* Express covenant; Implied covenants.

Drilling fluids Special chemical fluids, usually called Mud (*q.v.*), introduced into the hole to lubricate the action of a rotary bit, to remove the cuttings and to prevent blow-outs. Drilling fluid circulates continuously down the drillpipe, into the hole and upwards between the drill pipe and the walls of the hole to a surface pit, where it is purified and begins the cycle again.

"A drilling fluid or mud is a specifically designed fluid that is circulated through a wellbore as the wellbore is being drilled to facilitate the drilling operation. ... These drilling fluids commonly consist of a base and various additives. The base consists of water, oil, or both. Invert emulsion-based drilling fluids are mixtures of oil and water, where water is added to an oil-base along with thinners, emulsifiers, and other agents and additives--such as organophilic clays and lignites--for control of suspension, weight, fluid loss, density, and rheology." *Halliburton Energy Servs., Inc. v. MI, LLC, 456 F. Supp. 2d 811, 813 (E.D. Tex. 2006)* .

Drilling fund The generic term employed to describe a variety of organizations established to attract venture capital to oil and gas exploration and development. Typically the fund is established as a joint venture or limited partnership with minimum investments of $5,000 or $10,000. The fund is designed to give a high-bracket taxpayer investor the benefit of expensing intangibles and percentage depletion. *See* Treatise §§ 503.3, 530.

For discussions of the organization and regulation of drilling funds and their tax consequences, see the following:

Wright, *Oil & Gas Drilling Programs: Preparing the Documentation* (1985);

Baggett, Dole and Short, *Coopers & Lybrand Anatomy of a Drilling Fund* (1980);

Practicing Law Institute, *Oil and Gas Financings: Current Practice and Anticipated Developments* (1983);

"Petroleum Law Supplement: Drilling Funds and Other Oil and Gas Industry Matters," *16 Alberta L. Rev. 127 (1978);*

Close, "Drilling Funds: The 1977 Perspective," 28 *Sw. Legal Fdn. Oil & Gas Inst.* 421 (1977);

Welter, "Tax Structuring the Drilling Deal," 19 *Rocky Mt. Min. L. Inst.* 81 (1974);

Record, "Recent Developments in Exploration Financing," 24 *Sw. Legal Fdn. Oil & Gas Inst.* 111 (1973);

Cossey, "Financing Oil and Gas Exploration--Past, Present, and Future," 24 *Sw. Legal Fdn. Oil & Gas Inst.* 135 (1973);

Mosburg, "Regulation of Tax Shelter Investments," *25 Okla. L. Rev. 207 (1972);*

Rathwell, "Problems Related to the Registration in Western Canada of Foreign Limited Partnerships and the Ownership by Such Partnerships of Interests in Oil and Gas Leases," *10 Alberta L. Rev. 477 (1972).*

For a detailed discussion of several varieties of drilling funds, see *Brountas v. Commissioner, 73 T.C. 491 (1979), 74 T.C. 1062, 67 O.&G.R. 477 (1980) , vacated and remanded, 692 F.2d 152, 75 O.&G.R. 193 (1st Cir. 1982) , cert.*

denied, 462 U.S. 1106 (1983) .

For a description of a number of the features of a program to raise capital for a secondary recovery operation, see *Moore v. Tristar Oil and Gas Corp., 528 F. Supp. 296 (S.D.N.Y. 1981)* . As indicated in the opinion, *528 F. Supp. at 305* , there appear to be no standard fees for services provided by underwriters and other parties to transactions of this kind.

For discussion of a drilling fund program designed to enable an investor to deduct twice the amount invested from his federal income tax return in the first year of investment, thus recovering his investment in the first year by tax savings if he is in a 50 percent or higher tax bracket, see *Sharp v. Coopers & Lybrand, 649 F.2d 175, 71 O.&G.R. 555* (3d Cir. 1981, reh'g denied) , *cert. denied, 455 U.S. 938 (1982)* .

Molchan v. Omega Oil & Gas Ltd., 7 D.L.R.4th 216, [1984] 3 W.W.R. 246 (Alta. Q.B. 1984), was concerned with a conveyance by the general partner and 59 of 60 limited partners in an exploration fund of lands held by the partnership. The court held the transfer of the land made it impossible for the partnership to carry on its ordinary business, and was, therefore in breach of the Partnership Act. Consequently the purchaser held the land in trust for the limited partnership, and the non-consenting limited partner was entitled to an accounting. Appeal was allowed in this case, 21 D.L.R.4th 253, [1986] 1 W.W.R. 398 (Alta. Ct. App. 1985), the court concluding that the possibility of conflicts of interest was known and understood from the beginning, and the general partner was not liable to the plaintiff in the absence of proof of bad faith. Appeal was dismissed, [1988] 1 S.C.R. 348, [1988] 3 W.W.R. 1, 47 D.L.R. 4th 481 (1988).

See also Cash surrender value provision; Completion partnership; Completion program; Coowners' group; Developmental program well; Drilling partnership; End-user program; Equity kicker; Exploratory drilling program; Flip-flop provision; Functional allocation sharing arrangement; Income program; Lease acquisition fund; Leveraged drilling fund; Limited partnership; Listed depository receipt; Money management fund; Option to participate; Pay-as-you-go basis; Per well charge; PLATO; Pogoplan; Pool-of-capital doctrine; Prepaid IDC; Private placement drilling fund; Production fund; Program management fee; Public drilling fund; Roll-up provision; 66.3 company; Third-for-a-quarter deal.

Drilling log *See* Drillers log.

Drilling mud *See* Mud.

Drilling operations Any work or actual operations undertaken or commenced in good faith for the purpose of carrying out any of the rights, privileges or duties of the lessee under a lease, followed diligently and in due course by the construction of a derrick and other necessary structures for the drilling of an oil or gas well, and by the actual operation of drilling in the ground. Under various lease clauses (*e.g.*, the delay rental, the drilling operations clause), the question may arise whether drilling operations have commenced or whether such operations have been prosecuted with reasonable diligence, or whether such operations have ceased for a given period of time. *See* Ariz. R.S. § 27-551; *Rogers v. Osborn, 152 Tex. 540, 261 S.W.2d 311, 2 O.&G.R. 304 (1953)* .

In *Anderson v. Hess Corp., 733 F. Supp. 2d 1100 (D. N.D. 2010)* , *aff'd, 649 F.3d 891 (8th Cir. 2011)* , the court quoted this defintion from this Manual of Terms to find as a matter of law that leases were maintained beyond the primary term by the activities performed by the lessee. The plaintiffs contended that the phrase "drilling or reworking operations" in the habendum clause and the Pugh clause required "drilling" to maintain the lease beyond the primary term. The lessee asserted that the lease should be read as "drilling operations or reworking operations," and that "drilling operations" includes work preparatory to drilling. The court agreed with the lessee, ruling:

> The use of the term "operations" after the phrase "drilling or re-working operations" indicates that "drilling" and "re-working" are adjectives that modify the noun "operations." The Plaintiffs do not cite any case law interpreting the phrase "drilling or reworking operations" so as to exclude "drilling operations." The Court finds the phrase "drilling or re-working operations" is not ambiguous and includes both "drilling operations" and "re-working operations."

Looking to the ruling in *Murphy v. Amoco Production Co., 590 F. Supp. 455, 458, 83 O.&G.R. 108 (D.N.D. 1984)* , the court said: "Drilling operations commence when (1) work is done preparatory to drilling, (2) the driller has the capability to do the actual drilling, and (3) there is a good faith intent to complete the well. It is not necessary that the drill bit actually penetrate the ground." (Internal citations omitted.) Among the operations prior to the end of the primary term in Anderson v. Hess Corp. cited by the court as maintaining the leases: the lessee had surveyed and staked a well, obtained a permit to drill from the Oil and Gas Division of the North Dakota Industrial Commission, leveled and lazered the pad, dug the drilling pit and lined it with gravel and clay, widened the access road to the well, drilled the rat hole for the main conductor pipe, moved equipment to the location, and drilled the mouse hole.

In *Reid v. Gulf Oil Corp., 323 S.W.2d 107, 10 O.&G.R. 830* (Tex. Civ. App.--Beaumont 1959) , *aff'd, Gulf Oil Corp. v. Reid, 161 Tex. 51, 337 S.W.2d 267, 12 O.&G.R. 1159 (1960)* , the court discussed the meaning of the term "drilling operations" as used in a lease clause:

"It may be--though there is no affirmative evidence to that effect--that drilling operations are not normally thought of, either inside or outside the oil and gas industry, as embracing the installation of marketing facilities, but we are nonetheless of the opinion that, as used in the lease, the term 'drilling operations' was intended to embrace all of the physical and mechanical aspects of bringing about the production of oil or gas in paying quantities. A pipe line was as essential to production in the circumstances as was the casing that was placed in the well itself. ... We are therefore impelled to the conclusion that the term 'drilling operations' was intended to have the broad meaning we have indicated, because the parties are presumed to have known, and to have executed the lease knowing that the reasonable-time doctrine would not be available to bridge a gap between the capping stage and the production stage in a well's program. ... It would be idle to argue that the term was intended to embrace nothing more than the mere cutting of hole; and once past that point, there would seem to be no justification for excluding from its meaning any intervening step necessary to ultimate production." *10 O.&G.R. at 838-839* .

Sheffield v. Exxon Corp., 424 So. 2d 1297, 76 O.&G.R. 419 (Ala. 1983) , in analyzing the meaning of this term, declared: "The key element is whether the operation is associated or connected with the *physical* site of the well or unit. ... Mere negotiations for purchases or subcontracts do not contribute to the *physical* efforts necessary to make a well capable of production."

Sheffield's guidelines as to the meaning of "drilling" were examined in *Exxon Mobil Corp. v. Alabama Dept. of Conservation and Natural Resources, 2007 Ala. LEXIS 232* (Ala. Nov. 1, 2007) . At issue was the lower lease royalty rate for certain wells prior to "payout" of "the direct expenses incurred in actually drilling wells." The clause expressly excluded the "cost of pipelines and treatment facilities" as recoverable expense items. The court ruled that the lessee could not treat as recoverable expenses its costs for corrosion-resistant flowlines, which carry the acidic wet wellstream from off-platform well templates to the production platforms and the offshore platforms themselves. These were not within the definition of "drilling."

For a liberal construction of the term "drilling operations," see 21st *Century Investment Co. v. Pine, 1986 OK CIV APP 27, 734 P.2d 834, 92 O.&G.R. 597* , *cert. denied.*

Bargsley v. Pryor Petroleum Corp., 196 S.W.3d 823 (Tex. App.--Eastland 2006) defines "drilling operations" more stringently than the term "operations" so that activities such as Long-stroking (*q.v.*), keeping the electricity on, replacing

a tank, installing, checking and repairing flow lines do not, as a matter of law, constitute drilling operations.

See also Actual drilling operations; Commencement of drilling; Drilling; Reworking operations.

Drilling operations clause A savings clause which operates to keep the lease alive after the expiration of the primary term despite the failure to obtain production by that time if drilling operations are then being pursued. There is limited authority that without such a clause, a lease may be kept alive by drilling operations begun before the expiration of the primary term and pursued with reasonable diligence thereafter until production is obtained [*Simons v. McDaniel, 154 Okla. 168, 7 P.2d 419 (1932)]* , but by the weight of authority, if there is no production at the expiration of the primary term the lease then terminates even though drilling operations then being pursued result in production shortly after the expiration of the primary term.

A common drilling operations clause provides: "It is expressly agreed that if lessee shall commence drilling operations at any time, while this lease is in force, this lease shall remain in force and its terms shall continue so long as such operations are prosecuted."

In *Tate v. Stanolind Oil & Gas Co., 172 Kan. 351, 240 P.2d 465, 1 O.&G.R. 341 (1952)* , the drilling operations clause provided: "If the lessee shall commence to drill a well within the term of this lease or any extension thereof, the lessee shall have the right to drill such well to completion with reasonable diligence and dispatch, and if oil or gas, or either of them, be found in paying quantities, this lease shall continue and be in force with the like effect as if well had been completed within the term of years herein first mentioned."

Steinkuehler v. Hawkins Oil & Gas, Inc., 728 P.2d 520, 91 O.&G.R. 104 (Okla. App. 1986) , held that there was a continuous drilling operation of a single well when, after the initial borehole had been damaged beyond reclamation, the rig was skidded followed by a second penetration of the surface and drilling the well to completion.

In *Bargsley v. Pryor Petroleum Corp., 196 S.W.3d 823, 826* (Tex. App.--Eastland 2006) , the court applied the following clause: "If, at the expiration of the primary term of this lease, oil or gas is not being produced on the leased premises, but lessee is then engaged in drilling for oil or gas, then this lease shall continue in force so long as drilling operations are being continuously prosecuted ... ." Laying a pipeline, doing electrical work, maintaining the electricity, checking and repairing flow lines and replacing a tank do not, as a matter of law, satisfy the requirements of the above drilling operations clause.

In some instances a drilling operations clause has been denominated a Continuous drilling operations clause (*q.v.*). *See, e.g., Sword v. Rains, 575 F.2d 810, 61 O.&G.R. 339 (10th Cir. 1978)* . This regrettable practice fails to recognize two important distinctions:

(1) When a lease includes a drilling operations clause and a well being drilled at the expiration of the primary term fails to attain commercial production, the lease terminates upon the completion of said well, even though another well, commenced after the expiration of the primary term but before the completion of the well being drilled at the expiration of the primary term, does attain commercial production. *Skelly Oil Co. v. Wickham, 202 F.2d 442, 2 O.&G.R. 559 (10th Cir. 1953)* ; *Stanolind Oil & Gas Co. v. Newman Bros. Drilling Co., 157 Tex. 489, 305 S.W.2d 169, 7 O.&G.R. 1496 (1957)* .

(2) When a lease includes a continuous drilling operations clause, even though the well being drilled at the expiration of the primary term fails to gain paying production, a well commenced subsequent to the expiration of the primary term and completed as a paying well will suffice to preserve the lease into the secondary term so long as there has not been a cessation of drilling operations for a period longer than that specified by the clause. *See* Treatise §§ 617-*617.9*.

See also Thirty day-sixty day clause.

Drilling partnership A partnership designed to enable investors to use tax write-offs for oil drilling that continued to be allowed to investors after the Tax Reform Act of 1986. Investors become general partners during the first year of a project, thus gaining exemption from the anti-tax-shelter provisions of the law. As general partners they become subject to unlimited liability for the actions of the partnership, but the partnership buys insurance to protect the general partners during the drilling year. After the first year, when most of the write-offs occur, the investor can switch to a limited partnership with reduced liability. *Wall Street Journal,* Oct. 22, 1987, at 20, col. 2.

See also Drilling fund; Limited partnership; Partnership.

Drilling party (1) As defined in a Rocky Mountain unit operating agreement, a party obligated to contribute to the costs incurred in drilling, deepening or plugging back a well in accordance with the agreement, *See* Rocky Mountain Unit Operating Agreement Form 1 (Undivided Interest) May, 1954, Section 1.10, Treatise § 920.3.

(2) The party to a unit agreement who conducts or is responsible for drilling operations. *See* Upchurch, "Formation of the Exploration and Development Unit," *1959 Sw. Legal Fdn. Nat'l Inst. for Petroleum Landmen* 1, 21 (1960).

See also Unit agreement.

Drilling permit In those states that regulate Well spacing (*q.v.*), the authorization from the regulatory agency to drill a well.

Litigation over the issuance of drilling permits has been especially profuse in Texas. *See* the following:

Murphy (ed.), *Conservation of Oil and Gas --A Legal History, 1948* (1949);

Hardwicke, "Oil Well Spacing Regulations and Protection of Property Rights in Texas," *31 Texas L. Rev. 99 (1952);*

Hyder, "Some Difficulties in the Application of Exceptions to the Spacing Rule in Texas," *27 Texas L. Rev. 481 (1949);*

Walker, "The Problem of the Small Tract under Spacing Regulations," *Texas L. Rev.* 157 (Bar Ass'n No., Oct. 1938);

Meyers, " 'Common Ownership and Control' in Spacing Cases," *31 Texas L. Rev. 19 (1952).*

See also Target formation; Well permit.

Drilling program *Syn.:* for Drilling fund (*q.v.*).

Drilling report A document or telephone report required by a drilling contract summarizing the current status of a well, including the current depth of the hole and the formations penetrated. *See* Anderson, "The Anatomy of an Oil and Gas Drilling Contract," *25 Tulsa L.J. 359, 415 (1990).*

Drilling reservation "[T]he right, license, privilege and authority to explore the lands therein described for oil and

gas, but not to remove, produce or recover such oil and gas, except such production as is necessary to establish that the well is or is not a producer in commercial quantities, until a lease pursuant to these regulations has been applied for and approved." Saskatchewan Petroleum and Natural Gas Regulations, 1969, O.C. 8/69, § 30.

See also Checkerboard leasing; Corridor acreage; Crown reserve; Crown reserve drilling reservation.

Drilling rig The structures and equipment used in drilling an oil or gas well. This includes the derrick, the engine, the engine house, plus other equipment, the nature of which depends upon whether the rig is cable tool or rotary.

Principal additional items in a cable tool drilling rig are: bull wheel, walking beam, temper screw, drilling tine, calf wheel, casing line, band wheel, bailing line, headache post, and lazy bench.

Principal additional items in a rotary rig are: traveling block, hook and swivel, mud hose, kelly, rotary table, pipe rack, pumps, and hoisting works.

Bishop v. Mitchell Group, Inc., 163 Ill. App. 3d 275, 114 Ill. Dec. 814, 516 N.E.2d 969 (1987) , held that an oil drilling rig was not a "structure" as that term was used in the Illinois Structural Work Act.

The application of ad valorem property tax to drilling rigs can cause problems because under many state taxation scheme, the situs of the property on January 1 of each year determines the taxing entity that may assess the property. In *Patterson-UTI Drilling Co. L.P., LLLP v. Webb County Appraisal District, 182 S.W.3d 14* (Tex. App.--San Antonio 2005) , the court held that two drilling rigs that were physically located in Webb County could not be taxed by Webb County because they were only there temporarily under *Texas Tax Code 21.01*. The County where the owner is located has the power to assess ad valorem taxes on those mobile drilling rigs. *In accord Aransas County Appraisal Dist. v. Patterson-UTI Drilling (South) LP, LLLP, 2005 Tex. App. LEXIS 7033* (Tex. App.--Corpus Christi Aug. 26, 2005, no writ) .

See also Cable tool drilling; Draw works; Jack-up rig; Lazy bench; Marine riser; Mobile rig; Rig; Rotary drilling; Semi-submersible rig; Skidding the rig; Turbodrilling.

Drilling, rotary *See* Rotary drilling

Drilling spacing unit The area specified by applicable regulations or orders for the drilling of a well.

In Alberta the normal drilling spacing unit for an oil well is one quarter section with a target area within the quarter section and having sides 660 feet from the sides of the drilling spacing unit and parallel to them; where the drilling spacing unit for an oil well is one legal subdivision (1/16 of a section), it shall have a target area within the legal subdivision and having sides 330 feet from the sides of the drilling spacing unit and parallel to them; the normal drilling spacing unit for a gas well is one section with a target area within the section and having sides 1320 feet from the sides of the drilling spacing unit and parallel to them. Alberta Oil and Gas Conservation Regulations (Alta. Reg. 151/71) § 4-020. After notice and public hearing the Energy Resources Conservation Board may prescribe special drilling spacing units which may differ from normal drilling spacing units in size, shape or target area. *Id.,* § 4-030.

See also Drilling unit; Spacing unit; Standup drilling unit (Standup spacing); Target area; Well spacing.

Drilling title opinion *See* Title opinion.

Drilling tools The equipment used in the boring of the hole, in drilling a well. *See* Bit; Bailer; Drill stem; Fishing tools.

Drilling to the sale Under certain circumstances the driller of a well in Saskatchewan is required by regulations to file with the Department of Mineral Resources all pertinent information obtained from the well and within 30 days of "rig release" all information about the well is available to the general public. "[I]f a land owner or lessee wishes to acquire land near to his present holding and wishes to assess that other parcel which is going to come on to the market on a certain day, he would locate his evaluation well as close as possible to that parcel and drill as close to the sale as possible, so that probably a few hours before the sale time he would have the best information available to use in determining his bid for the parcel being sold. This 'drilling to the sale' is a practice followed because the security screen about a well can be broken in a short space of time." Guyer Oil Company, Ltd. v. Fulton and Gladstone Petroleum Ltd., [1973] 1 W.W.R. 97 at 100 (Saskatchewan Q.B. 1972), *appeal dismissed,* [1976] 5 W.W.R. 356 (Saskatchewan Ct. of App. 1976), *appeal dismissed,* [1977] 2 S.C.R. 791, [1977] 4 W.W.R. 112 (Sup. Ct. of Canada 1977).

Drilling unit The area prescribed by applicable well spacing regulations for the granting of a permit by the regulatory agency for the drilling of a well; the area assigned in the granting of a well permit.

The customary method of regulating drilling is to establish the area which one well can efficiently drain and to prohibit drilling on small tracts. The size of the prescribed drilling unit may vary from 10 acres in oil fields to 640 acres in gas fields. However, twenty- to forty-acre spacing is typical in oil fields. (Another way of stating a spacing formula is by distances to property lines and to other wells. For example, Rule 37 (*q.v.*)--the statewide spacing rule in Texas--for many years provided that no well should be drilled closer than 933 feet to another well in the same producing horizon nor closer than 330 feet to a property line. This resulted in 20-acre spacing.) For a discussion of the operation of Rule 37 in Texas, see Meyers, " 'Common Ownership and Control' in Spacing Cases," *31 Tex. L. Rev. 19 (1952).*

In arriving at the proper size of drilling units, of first importance, of course, should be reservoir conditions. The permeability of the reservoir rock and the viscosity of the oil will have an important bearing on how large an area one well will drain. But considerations beyond the purely technical are influential and sometimes decisive of the spacing pattern. Operators usually favor wide spacing in order to minimize development costs. Landowners can be counted on to seek close spacing for a quick return. Since regulation is ordinarily entrusted to elected officials, the spacing order that emerges is a compromise between the two groups. The spacing pattern may not be uniform all over a state but may vary in the several fields on the basis of the time of application of the rule to the field, local geological conditions and other factors.

"The terms 'spacing unit' or 'drilling unit' are used in the oil and gas industry to describe the area which an administrative agency has determined one well can efficiently drain." *Union Pacific Resources Co. v. Texaco, Inc., 882 P.2d 212, 221 (Wyo. 1994)* (citing this Treatise).

The history of the Oklahoma Corporation Commission's regulation of drilling and spacing units is discussed in Dancy and Dancy, "Regulation of the Oil and Gas Industry by the Oklahoma Corporation Commission," *21 Tulsa L.J. 613 (1986).*

Manufacturers National Bank of Detroit v. Director of the Department of Natural Resources, 420 Mich. 128, 362 N.W.2d 572, 84 O.&G.R. 103 (1984) , held that the creation of a drilling unit by the Director of the Department of Natural Resources in his capacity of Supervisor of Wells did not amount to the pooling of the legal interests of those whose lands were within the unit.

Turley v. Flag-Redfern Oil Co., 1989 OK 144, 782 P.2d 130, 105 O.&G.R. 553 , held that a surface owner not owning mineral interests was not a competent party to prosecute an appeal from a Commission order vacating a 640-acre spacing order and establishing 80-acre drilling and spacing units; the rights of surface owner are protected by the Surface Damages Act.

Yates Energy Corp. v. Enerquest Oil & Gas, L.L.C., 2005 Tex. App. LEXIS 5046 (Tex. App.--Corpus Christi June 30, 2005) (unpublished opinion) dealt with the following definition of a drilling unit contained in a joint operating agreement (*q.v.*): "the area fixed for the drilling of one well by order or rule of any state or federal body having authority." The issue was whether the abandonment of the unit well by the unit operator led to a termination of the operator's unit in the entire 631 acres covered by the JOA or only the 320 acres that the operator asserted was the appropriate drilling unit size under the Railroad Commission's spacing rules.

Bennion v. Graham Resources, Inc., 849 P.2d 569, 122 O.&G.R. 597 (Utah 1993) , held that a nonconsenting interest owner, *i.e.*, an owner "who refuses to agree to bear his proportionate share of the costs of the drilling and operation of the well in a drilling unit," had no enforceable right to require an accounting and payment of a share of oil and gas production proceeds in the absence of a pooling arrangement, voluntary or involuntary.

The distinction to be drawn between a drilling or spacing unit and a proration unit is noted in *Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582, 50 O.&G.R. 488 (1975)* .

See also Drilling spacing unit; Pooling by a drilling and spacing unit; Spacing unit; Standup drilling unit (Standup spacing); Target area; Well spacing.

Drill or drop provision A provision of a partnership agreement that upon discovery of oil or gas in commercial quantities, partners may choose to invest additional cash in the ratio of their partnership interests for completion and production. Any partner choosing not to contribute capital for such additional costs would drop its interest in income from the particular well and would not share in revenue from that well or the "block" surrounding the well site. *Allison v. United States, 701 F.2d 933, 76 O.&G.R. 379 (Fed. Cir. 1983)* .

See also Project financing.

Drill or forfeit lease A type of Or lease (*q.v.*). The lease contains the usual primary term and thereafter clauses but provides that the lessee covenants to drill a well within a stated term or forfeit the lease. *See* Treatise § 605.1.

Drill or pay lease A type of Or lease (*q.v.*). The lease contains the usual primary term and thereafter clauses but provides that the lessee covenants to drill a well within a stated term or pay delay rentals. Although drilling or paying rentals may occasionally be the only alternatives available to the lessee, usually the lease gives him a third alternative of surrendering the lease, *e.g.*:

"Lessee agrees to commence operations on said premises on or before ....., or thereafter pay to Lessor ..... dollars per acre per ..... until a well is drilled, or the property hereby granted is conveyed to the first party."

Upon failure of the lessee to commence drilling a well or surrender, the lessor has a cause of action to recover rentals. *Cohn v. Clark, 48 Okla. 500, 150 P. 467 (1915)* . In some early cases it was contended that the presence of the surrender alternative rendered the obligations of the lessee illusory and therefore there was a failure of consideration for the grant

by the lessor. Inasmuch as the typical leases required the execution of the surrender in a specified manner and required the payment of $1 to the lessor, the courts concluded that the obligations of the lessee were not illusory and that there was no failure of consideration. *See* Treatise § 605.1.

Drill pipe In rotary drilling, the heavy seamless tubing used to rotate the bit and circulate the drilling mud. Individual pipe lengths are normally 30 feet and are coupled together with tool joints.

Drill ship A self-propelled, self-contained vessel equipped with a derrick amidships for drilling wells in deep water. It may have a ship hull, a catamaran hull, or a trimaran hull. U.S. Minerals Management Service, *Proposed Final Comprehensive Outer Continental Shelf (OCS) Natural Gas and Oil Resource Management Program 1992-1997,* Appendix 17 (1992).

A self-propelled vessel used for drilling offshore wells. *See* Kash, *et al., Energy Under the Oceans* 37 (1973).

See also Mobile rig.

Drill site arrangement An arrangement wherein a lessee assigns his entire interest in a drill site, reserving an overriding royalty or net profits interest in the drill site, and also assigns a fractional interest in the balance of the lease. The overriding royalty or net profits interest reserved by the assignor may or may not contain a Conversion clause (*q.v.*). *See* Appleman, "Use of the Partnership as an Instrumentality in Oil Operations," 14 *N.Y.U. Inst. on Federal Taxation* 519 at 528 (1956).

For discussions of the tax consequences of a drill site arrangement and the effect of *Revenue Ruling 77-176,* see the following:

Chapoton, "Income Tax on Transactions Commonly Handled by Natural Resource Practitioners," 27 *O.&G. Tax Q.* 209, 223 (1978);

Gregg, "Oil and Gas Farmouts--Implications of *Revenue Ruling 77-176,*" 29 *Sw. Legal Fdn. Oil & Gas Inst.* 601 (1978).

See also Farmout agreement.

Drill site assignment An assignment covering specified acreage designated as the drill site of a well, as distinguished from a Borehole assignment (*q.v.*), which covers only the area drained by the borehole drilled.

"Generally, the drill site includes the acreage dedicated to the drilling or spacing unit that is approved by the state agency with jurisdiction. When there is no state designated drilling or spacing unit, the parties may describe a drill site assignment as a square or a circle around the top of the borehole." *See* Lowe, "Analyzing Oil and Gas Farmout Agreements," *41 Sw. L.J. 759, 823 (1987).*

See also Terrell, "Limited Assignments--Who Gets What?," 35 *Rocky Mt. Min. Law Inst.* 17-1 (1989).

Drill site royalty A Royalty (*q.v.*) paid for the privilege of locating a well on one tract of land and using it to produce oil from another tract. *See* Stucky, "Current Developments and Views Concerning Rights and Status of Landowner-Lessors," 21 *Sw. Legal Fdn. Oil & Gas Inst.* 83, 88 (1970).

Drill site title opinion A Title opinion (*q.v.*) relating to the site of a proposed well drilled on a unit embracing two or more separate tracts of land. *See Canik v. Texas International Petroleum Corp., 308 So. 2d 543, 52 O.&G.R. 363 (La. App. 1975) , writ denied, 310 So. 2d 850 (La. 1975) .*

Drill stem The assembly of kelly, drill pipe, tools, collars and drilling bit which is suspended from a swivel in the derrick and rotated by the rotary table in Rotary drilling (*q.v.*).

Drill stem test A method of determining the presence of oil or gas in a formation. When the depth to be tested has been reached in a well being drilled, a special tool is lowered into the hole and placed next to the wall. The drilling mud is removed from this vicinity and the contents of the formation allowed to flow into the tool, while an instrument measures the pressure. The tool is then removed from the hole and the contents examined.

"Drill stem testing entails perforating natural gas bearing formations at different depths in the well to determine at what depth or depths the well should be completed." *Houston Exploration Co. v. Halliburton Energy Services, Inc., 269 F.3d 528 (5th Cir. 2001) .*

See also Pulling wet; Reverse circulation.

Drill string A "string" or column of drill pipe.

In some instances the entire assembly consisting of kelly, drill pipe, tools, collars and drilling bit which is suspended from a swivel in the derrick, and rotated by the rotary table is described as a drill string, but more properly that assembly is described as a drill stem.

"Drill to earn" farmout A Farmout agreement (*q.v.*) under which the rights of the farmee are earned regardless of whether the test well is a producer or dry hole. *See* Schaefer, "The Ins and Outs of Farmouts: A Practical Guide for the Landman and the Lawyer," 32 *Rocky Mt. Min. L. Inst.* 18-1, 18-21 (1986).

See also "Produce to earn" farmout.

Drip condensate That portion of a gas stream that becomes a liquid during the transmission of the gas from a lease to a processing plant. *53 Fed. Reg. at 1235* (Jan. 15, 1988).

Drip gasoline Natural gasoline (*q.v.*) recovered at the surface as the result of the separation (or dripping out) of certain of the liquid hydrocarbons which were dissolved in gas in the formation under high pressure but which come out of solution on the reduction of pressure at the surface.

Drip pot An installation between the wellhead of a well and the gas meter designed to collect small amounts of water and substances referred to as drips, condensate or natural gas liquids which are components of the produced natural gas stream but which, because of their molecular structure, tend to separate from the stream as liquids. The drips consist of heavier hydrocarbon molecules which take a liquid form when subject to a mechanical separation process or to

reduction in temperature or pressure. *Sowell v. Natural Gas Pipeline Co. of America, 604 F. Supp. 371 at 373, 84 O.&G.R. 407, 409 (N.D. Tex. 1985)*, *aff'd, 789 F.2d 1151, 91 O.&G.R. 606*, *reh'g denied, 793 F.2d 1287 (5th Cir. 1986)*.

Drips *See* Gas condensate.

Drive *See* Combination drive; Depletion drive; Dissolved gas drive; Gas cap drive; Gas expansion reservoir; Gravitational force; Lpggas drive; Reservoir energy; Solution gas field; Water drive.

DRL *See* Dear Reporter Letter.

Drop down limited partnership A Master limited partnership (*q.v.*) "formed by a sponsor generally in response to takeover attempts or to showcase the value of assets which have been spun off into an MLP. Typically, the units in the MLP are distributed to shareholders of the corporation as a dividend or in complete or partial liquidation of the corporation. Additional interests in a drop down MLP may be sold to the public, creating an additional source of debt-free capital." Romanov and Irish, "An Overview of Sources of Capital and Structuring Instruments in Oil and Gas," 34 *Rocky Mt. Min. L. Inst.* 13-1, 13-11 (1988).

Syn.: for Roll down limited partnership (*q.v.*).

Drowning Infiltration of water at the well bore into a formation formerly productive of oil so that the well produces only water.

Dry cargo *Syn.:* for Paper cargo (*q.v.*).

Dry circle A Book-out (*q.v.*) before nomination of a vessel.

Dry deal "A 'dry' or 'paper' deal refers to the purchase or sale of a claim on a cargo of Brent in some future month." *Transnor (Bermuda) Ltd. v. BP North American Petroleum, 738 F. Supp. 1472, 1490 (S.D.N.Y. 1990)*.

See also Paper deal; Transnor case.

Dry gas Natural gas which does not contain dissolved liquid hydrocarbons.

Minor variations in statutory and case definitions of the term may be found. *See* Huie, Walker & Woodward, *Cases and Materials on Oil and Gas* 621 n. 30 (1960). The authors point out that under a statutory definition of dry gas as "any natural gas produced from a stratum that does not produce crude oil," the antithetical term, Wet gas (*q.v.*), would be synonymous with casinghead gas. They observe further: "A similar but not always identical meaning is ascribed when 'dry gas' is defined as gas from a gas well, while 'wet gas' is gas produced from an oil well. [Citations omitted.] The term 'dry gas' is also frequently employed to mean a gas which contains no appreciable quantities of dissolved liquid hydrocarbons while 'wet gas' does contain such liquids in solution in quantities of commercial importance. [Citations

omitted.] There is a similar although again not an identical use of the term 'dry gas' to mean gas from which liquid hydrocarbons have been removed by processing."

In Chevron U.S.A., Inc. v. State of New Mexico Department of Taxation & Revenue, 2006-*NMCA-50, 139 N.M. 498, 134 P.3d 785, 788* , the court cited the Manual of Terms when it described dry gas as the gas stream that comes out of a Processing plant (*q.v.*) which removes the Natural gas liquids (NGL's) (*q.v.*).

Dry gas well A well producing gas only and no oil. *Lynch v. State Board of Equalization, 164 Cal. App. 3d 94, 210 Cal. Rptr. 335 (1985)* .

Dry hole A completed well which is not productive of oil and/or gas (or which is not productive of oil and/or gas in paying quantities).

To qualify as a dry hole, a well must have been completed [see Completed well]; there is some controversy over the question of whether a well which produces a limited amount of oil or gas but not in paying quantities is a dry hole. In *Murphy v. Garfield Oil Co., 1923 OK 551, 98 Okla. 273, 225 P. 676* , it is suggested that a well producing oil or gas, although not in paying quantities, cannot be regarded as a dry hole. In *Cox v. Miller, 184 S.W.2d 323* (Tex. Civ. App.--Eastland 1944, error ref'd) , the court declared that "The terms 'dry hole' and a well 'producing gas in paying quantities' are not necessarily the converse of the other."

Whether or not a well is a dry hole is important in a number of contexts including (1) construction and application of a Dry hole clause (*q.v.*), and (2) determining liability under a Dry hole agreement (*q.v.*). *See Berryman v. Sinclair Prairie Oil Co., 164 F.2d 734 (10th Cir. 1947)* ; *Rogers v. Osborn, 152 Tex. 540, 261 S.W.2d 311, 2 O.&G.R. 304, 1439 (1953)* ; *Superior Oil Co. v. Stanolind Oil & Gas Co., 150 Tex. 317, 240 S.W.2d 281 (1951)* ; Treatise § 614.1.

A dry hole is generally not viewed as a "gas well" or as an "oil well" as those terms are customarily used in contracts unless required by express wording of the contract or necessary implication. *See Nafco Oil & Gas, Inc. v. Tartan Resources Corp., 522 S.W.2d 703, 52 O.&G.R. 273* (Tex. Civ. App.--Corpus Christi 1975, error ref'd n.r.e.) .

In *Sunac Petroleum Corp. v. Parkes, 416 S.W.2d 798, 26 O.&G.R. 689 (Tex. 1967)* , the court concluded that a well drilled on a unit pooled for gas and completed as an oil well was *not* to be viewed as a "dry hole" for purposes of a dry hole clause of a lease of land included in the gas unit. The case is discussed in the Treatise § 614.1. note 5.

L & B Oil Co. v. Federal Energy Regulatory Commission, 665 F.2d 758, 73 O.&G.R. 399 (5th Cir., Unit A, 1982) , cited this Treatise in holding that under the facts of the instant case, a dry hole was not a well.

See also Lerblance v. Continental Oil Co., 437 F. Supp. 223, 229, 59 O.&G.R. 50, 61 (E.D. Okla. 1976) , emphasizing that to qualify as a dry hole, a well must have been *completed.*

See also Muklak Dry Hole.

Dry hole agreement An agreement similar to a Bottom hole letter (*q.v.*) except that it creates an obligation to be performed upon the drilling of a dry hole whereas the latter creates an obligation to be performed upon the drilling of a well to a specified depth, whether or not the well is dry. The agreement, usually evidenced by a letter signed by both parties thereto, is in one of two forms:

(1) Dry Hole Donation Letter, in which a person owning land or leases in the vicinity agrees to pay the driller an agreed

sum of money if the driller will complete a well to a designated depth and if the well so drilled is a dry hole; usually the obligor will be entitled to receive certain information concerning the well drilled (*e.g.*, the well log and electrical log);

(2) Dry Hole Purchase Letter, in which the driller agrees to sell and transfer designated leases or portions thereof, the other party agreeing to make a stipulated payment upon the completion of a well by the first party as a dry hole. *See* Brown, "Assignments of Interests in Oil and Gas Leases," 5 *Sw. Legal Fdn. Oil & Gas Inst.* 25, 81 (1954).

Dry hole agreements are utilized to finance the drilling of a well in unproven territory. An operator may use such agreements as collateral in borrowing money for drilling expenses. If the well is completed as a producer, no obligation to pay arises under the agreements, but the loan to the driller will be repaid from the proceeds of production. The signatories of the agreement in the form of a Dry Hole Donation Letter obtain for their contingent liability the drilling of a well in the community which may serve to prove their land. They may also be entitled to copies of the well log and electrical log which may provide geological information valuable to them in the determination of whether (or where) to drill on their own land. Signatories of the agreement in the form of a Dry Hole Purchase Letter are entitled to a conveyance of an interest in the leases owned by the driller in exchange for their contingent liability in the event the well drilled is a dry hole.

For a case involving use of such agreements in financing drilling, see *First National Bank of Post v. Republic Supply Co., 166 S.W.2d 373* (Tex. Civ. App.--Eastland 1942, error ref'd w.o.m.) . *See* Treatise §§ 431-*431.2*.

For other forms of letter agreements, see Letter.

Dry hole clause A lease clause specifying the means by which a lessee may keep a lease alive after the drilling of a dry hole. A typical clause provides: "Should the first well drilled on the above described land be a dry hole, then, and in that event, if a second well is not commenced on said land within twelve months from the expiration of the last rental period for which rental has been paid, this lease shall terminate as to both parties, unless the lessee on or before the expiration of said twelve months shall resume the payment of rentals in the same amount and in the same manner as hereinbefore provided." *Superior Oil Co. v. Stanolind Oil & Gas Co., 150 Tex. 317, 240 S.W.2d 281 (1951)* .

A clause in this form will not suffice to keep a lease alive after the expiration of the primary term; for this purpose a Continuous drilling operations clause (*q.v.*) is requisite.

Another form of the dry hole clause combines the dry hole feature with a provision concerning cessation of production as follows:

"If prior to discovery of oil or gas on said land Lessee should drill a dry hole or holes thereon, or if after discovery of oil or gas the production thereof should cease from any cause, this lease shall not terminate if lessee commences additional drilling or reworking operations within sixty (60) days thereafter or (if it be within the primary term) commences or resumes the payment or tender of rentals on or before the rental paying date next ensuing after the expiration of three months from date of completion of dry hole, or cessation of production. If at the expiration of the primary term oil, gas or other mineral is not being produced on said land but lessee is then engaged in drilling or reworking operations thereon, this lease shall remain in force so long as operations are prosecuted with no cessation of more than thirty (30) consecutive days, and if they result in production of oil, gas or other mineral so long thereafter as oil, gas or other mineral is produced from said land." *Rogers v. Osborn, 152 Tex. 540, 261 S.W.2d 311, 2 O.&G.R. 304, 1439 (1953)* ; *Stanolind Oil & Gas Co. v. Newman Bros. Drilling Co., 157 Tex. 489, 305 S.W.2d 169, 7 O.&G.R. 1496 (1957)* .

For the protection of the lessee, a properly drafted dry hole clause will be sufficiently explicit to prevent a construction which might cause a change in the anniversary date of rental payments and to insure that the lessee will have ample time after the completion of a dry hole to resume payment of rentals. *See* Walker, *Defects and Ambiguities in Oil and*

Gas Leases, 28 Tex. L. Rev. 895, 903 (1950); Treatise §§ 612-*614.5.*

See also Thirty day-sixty day clause.

Dry hole contribution Money or property given to an oil operator in accordance with the terms of a Dry hole agreement (*q.v.*) in payment for drilling of a well on property in which the contributor has no direct interest, but payable only in the event that the well is a dry hole. The contribution is made only where the well is drilled to a specified depth and is a dry hole.

Dry hole contribution agreement *See* Dry hole agreement.

Dry hole donation letter *See* Dry hole agreement.

Dry hole letter *See* Dry hole agreement.

Dry hole money Sum to be paid in accordance with the terms of a Dry hole agreement (*q.v.*) in the event a well to be drilled is a dry hole. *See Kaye v. Smitherman, 225 F.2d 583, 5 O.&G.R. 691 (10th Cir. 1955)* .

Dry hole plug A plug inserted in a well completed as a dry hole to close off formations penetrated by the well. *See* Plug.

Dry hole purchase letter *See* Dry hole agreement.

Dry low NOx turbine A type of electric turbine fueled by natural gas that is especially sensitive to changes in gas quality. *Florida Gas Transmission Corp. v. Federal Energy Regulatory Commission, 604 F.3d 636, 643-44 (D.C. Cir. 2010)* .

Dry oil As distinguished from wet oil, dry oil is oil containing less than a stated amount (*e.g.*, 3%) of Basic sediment (*q.v.*) and water. *See Alamitos Land Co. v. Shell Oil Co., 3 Cal. 2d 396, 44 P.2d 573 (1935)* .

Dry rule A rule of the Federal Energy Regulatory Commission requiring that the Btu content of a gas stream be determined for purposes of wellhead pricing under the Natural Gas Policy Act (NGPA). This rule, in contrast to the Wet rule (*q.v.*), measured the Btu content of gas at the conditions under which natural gas was actually delivered for first sales and thus, in most cases, indicated a lower water vapor content than was assumed under the wet rule. *See Interstate Natural Gas Ass'n of America v. Federal Energy Regulatory Comm'n, 716 F.2d 1, 4, 81 O.&G.R. 631, 634 (D.C. Cir. 1983)* , *cert. denied, 465 U.S. 1108 (1984)* .

Dry tree A Christmas tree (*q.v.*) installed above water as distinguished from a Wet tree which is one installed on a wellhead at the seabed and exposed to the water.

Dry well A well completed as a dry hole; a well not capable of production in commercial quantities.

DSP Deliverability standard pressure (*q.v.*).

DST Drill stem test (*q.v.*).

DSU Drilling spacing unit (*q.v.*).

Dth Decatherm (*q.v.*).

DTPA The Texas Deceptive Trade Practices-Consumer Protection Act (DTPA) (*q.v.*).

Dual accounting The royalty calculation methodology used for the valuation of wet gas production from Indian leases, originally promulgated in 1977. Notice to Lessees and Operators of Indian Oil and Gas Leases (NTL-1A), *42 Fed. Reg. 18135* (Apr. 5, 1977) . The methodology involves the comparison of the value of unprocessed or Wet gas (*q.v.*) with the combined values of processed gas plus natural gas liquid products, less a manufacturing allowance. As a general rule, royalty is owed on the higher of the two values. *Jicarilla Apache Tribe v. Supron Energy Co., 728 F.2d 1555, 80 O.&G.R. 350 (10th Cir. 1984)* , *dissent adopted on reh'g en banc, 782 F.2d 855, 88 O.&G.R. 519* (10th Cir.) , *modified, 793 F.2d 1171, 88 O.&G.R. 531* (10th Cir.) , *cert. denied, 479 U.S. 970 (1986)* ; *Amoco Production Co., 143 IBLA 45 (1998)* .

Even though NTL-1A was repealed effective March 1, 1988, the Interior Department has consistently required lessees to engage in dual accounting based on its interpretation of the Indian oil and gas lease. The computational process has been defined as one that "compares the wellhead value of the wet gas with the value that the gas and separated liquids would have if lease production were processed, less applicable deductions, and ... royalty [would then be paid] based on the greater of the calculated values." *Alexander Energy Corp., 153 IBLA 238, 239 (2000)* . *See also Burlington Resources Oil & Gas Co. v. U.S. Department of the Interior, 21 F. Supp. 2d 1, 3 (D.D.C. 1998)* ("Dual accounting requires the lessee to determine two values: the value of the gas "wet," before processing, and the combined values of the "dry" methane and the separated products after processing.").

For a discussion of the dual accounting requirements for Indian oil and gas leases under 30 C.F.R. § 206.172, see *Cudd Operating Co., 176 IBLA 192 (2008)* .

Dual completion The completion of a well into two separate producing formations at different depths. Petroleum from one formation is produced from one string of pipe, inside of which is a smaller string of pipe producing from the other formation. For a case involving the right of an operator to operate a dually completed well in a unitized field, see *West Edmund Hunton Lime Unit v. Stanolind Oil & Gas Co., 193 F.2d 818, 1 O.&G.R. 462 (10th Cir. 1951)* , *cert. denied, 343 U.S. 920 (1952)* .

In *Chesapeake Operating, Inc. v. Valence Operating Co., 193 F.3d 1153 (10th Cir. 1999)* , the parties anticipated using a "dual completion" method of production if commingled production was not possible due to unleased ownership

interests. The court defined the dual completion method as one in which "the hydrocarbons from each zone are isolated all the way to the surface and are measured and produced separately." *193 F.3d at 1155* .

See also Completion; Multiple completion; Single completion well.

Dubai Marine Areas (DUMA) *See* DUMA.

Dubai Petroleum Company (DPC) *See* DPC.

DUC The Dansk Undergrunds Consortium (*q.v.*).

Due diligence clause A provision of a drilling contract (or other agreement) requiring that the work to be performed will be conducted with due diligence. *See, e.g., W. E. Myers Drilling Corp. v. Elliott, 695 S.W.2d 809, 87 O.&G.R. 156* (Tex. Ct. App.--El Paso 1985, error ref'd n.r.e.) (holding that drilling contractor had not satisfied due diligence clause of a day work Drilling contract (*q.v.*) and hence the contractor was entitled to recover only for the number of days reasonable and necessary to complete the well).

Due diligence covenant *See* Reasonable care and due diligence covenant.

Due diligence review A review by the buyer during the course of the process of acquiring producing properties to determine the validity of the land/legal/accounting assumptions which are incorporated in the seller's reserve report.

Jill Kotvis, *Environmental Due Diligence in Real Estate Transactions*, 41 Landman 33 (Issue #5 1996);

L. Gustafson, *Risks and Benefits of Environmental Audits and Assessments in the Petroleum Industry*, 40 Sw. Legal Fdn. Oil & Gas Inst. 6-1 (1995);

Bateman, *Representing Sellers and Buyers in the Sale of Producing Properties: Fundamentals of the Acquisition Process*, 34 L.S.U. Min. L. Inst. 163, 170 (1987).

Due regard doctrine *See* Accommodation doctrine.

Duhig rule The construction rule based on the case of *Duhig v. Peavy-Moore Lumber Co., 135 Tex. 503, 144 S.W.2d 878 (1940)* , relating to reservations in deeds purporting to cover 100% interest in the premises. Under this rule the grantor is said to be estopped to deny the effectiveness of the instrument to convey the interest recited in the instrument's granting clause.

See Treatise § 311 *et seq.*

Syn.: Estoppel by deed (*q.v.*).

DUMA The Dubai Marine Areas. *See* Shwadran, *The Middle East, Oil and the Great Powers* 442 (3d ed. revised and enlarged, 1973).

Dump floods A secondary recovery method by means of Water-flooding (*q.v.*). In this method, as contrasted with more scientific methods, an opening in the casing is made to allow water to enter the hole from water-bearing sands. Dump floods are not favored because they will often trap large quantities of otherwise recoverable oil.

Dump gas Gas disposed of under a so-called Dump gas contract (*q.v.*).

See also Firm gas; Interruptible gas.

Dump gas contract A gas purchase and sale contract which does not call for the delivery of a definite or fixed amount of gas but which calls for the delivery and purchase of gas remaining after satisfaction of the terms of a Firm gas contract (*q.v.*), which excess gas would otherwise be flared or vented. Dump gas contracts typically call for a lower price than do Firm gas contracts. *See State of North Dakota v. Federal Power Comm'n, 247 F.2d 173 (8th Cir. 1957)*.

See also Gas purchase contract.

Duster A dry hole.

Duty of fair dealing *See* Good faith, best efforts, and fair dealing covenant; Utmost fair dealing, duty of.

EXHIBIT 6

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

Nancy M. McLaughlin, Plaintiff, vs. CNX Gas Company, Defendant.	))))))))))	CASE NO. 5:13CV1502 JUDGE JOHN R. ADAMS **MEMORANDUM OF OPINION AND ORDER** (Resolves Docs. 8, 9, 11, 15, 17)

This matter comes before the Court on a motion for judgment on the pleadings filed by Defendant CNX Gas Company (Doc. 8). Initially, the Court GRANTS Defendant's motion to supplement its motion for judgment on the pleadings (Doc. 9) as well as Plaintiff's motion to supplement her opposition (Doc. 15). Moreover, the Court GRANTS Defendant's motion to amend its affirmative defenses and dismiss their counterclaim (Doc. 17). Accordingly, the motion to intervene (Doc. 11) is DENIED AS MOOT. The Court has been advised, having considered the complaint, pleadings, and applicable law. The motion for judgment on the pleadings (Doc. 8) is GRANTED.

I. LEGAL STANDARD

Fed.R. Civ.P. 12(c) provides that "[a]fter the pleadings are closed -- but early enough not to delay trial -- a party may move for judgment on the pleadings." The standard for evaluating a motion for judgment on the pleadings is the same as that applicable to a motion to dismiss under Rule 12(b)(6) for failure to state a claim. *Ziegler v. IBP Hog Market, Inc.*, 249 F.3d 509, 511-12 (6th Cir. 2001). The Sixth Circuit stated the standard for reviewing such a motion to dismiss in *Assn. of Cleveland Fire Fighters v. Cleveland*, 502 F.3d 545 (6th Cir. 2007) as follows:

> The Supreme Court has recently clarified the law with respect to what a plaintiff must plead in order to survive a Rule 12(b)(6) motion. *Bell Atl. Corp. v. Twombly*, 550 U.S. 544 (2007). The Court stated that "a plaintiff's obligation to provide the grounds of his entitlement to relief requires more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do." *Id.* at 1964-65 (citations and quotation marks omitted). Additionally, the Court emphasized that even though a complaint need not contain "detailed" factual allegations, its "[f]actual allegations must be enough to raise a right to relief above the speculative level on the assumption that all the allegations in the complaint are true." *Id.* (internal citation and quotation marks omitted). In so holding, the Court disavowed the oft-quoted Rule 12(b)(6) standard of *Conley v. Gibson*, 355 U.S. 41, 45-46 (1957) (recognizing "the accepted rule that a complaint should not be dismissed for failure to state a claim unless it appears beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief"), characterizing that rule as one "best forgotten as an incomplete, negative gloss on an accepted pleading standard." *Twombly*, 550 U.S. at 563.

Id. at 548.

If an allegation is capable of more than one inference, this Court must construe it in the plaintiff's favor. *Columbia Natural Res., Inc. v. Tatum*, 58 F.3d 1101, 1109 (6th Cir. 1995) (citing *Allard v. Weitzman*, 991 F.2d 1236, 1240 (6th Cir. 1993)). This Court may not grant a Rule 12(b)(6) motion merely because it may not believe the plaintiff's factual allegations. *Id.* Although this is a liberal standard of review, the plaintiff still must do more than merely assert bare legal conclusions. *Id.* Specifically, the complaint must contain "either direct or inferential allegations respecting all the material elements to sustain a recovery under some viable legal theory." *Scheid v. Fanny Farmer Candy Shops, Inc.*, 859 F.2d 434, 436 (6th Cir. 1988) (quotations and emphasis omitted).

II. FACTS

The issue squarely before this Court is a rather narrow one. Plaintiff Nancy McLaughlin seeks a declaration that certain mineral rights were abandoned under Ohio's Dormant Mineral Act (the "ODMA") and therefore merged with her surface rights. In contrast, Defendant asserts

that certain events took place that prevent application of the ODMA. Plaintiff does not dispute that these events took place, but rather she claims that they do nothing to alter her conclusion that the mineral rights were abandoned. As such, the Court is presented with a pure issue of law to resolve this matter.

As general background, in 1957, Consolidation Coal Company acquired 143 acres of land in Carroll County, Ohio inclusive of mineral rights to the property. In 1977, Consolidation entered into an Option to Lease with Republic Steel Corporation related to oil and gas rights on the lands acquired in 1957. In 1979, Republic exercised its option and leased the oil and gas rights to this land. In 1985, Consolidation conveyed the land to Conoco, reserving its oil and gas rights. In 1988, Conoco conveyed its rights to DuPont Energy Coal Holdings. On December 12, 1988, DuPont conveyed its interests to International Environmental Services, again noting the reservation of oil and gas rights. On July 6, 1992, Kelt Resources, Inc. executed a Partial Release of Oil and Gas Lease. In that document, Kelt released its rights to a portion of the oil and gas lease entered into by Consolidation and Republic.

On May 25, 1994, Plaintiff and her late husband acquired the surface rights to the 143-acre tract through a sheriff sale that was conducted based on the delinquent tax status of International Environmental Services. On September 29, 2011, Consolidation conveyed the oil and gas rights to Defendant CNX. On June 13, 2013, Plaintiff filed this action to quiet title, alleging that the mineral rights merged with the surface rights no later than January 3, 2005 because following the 1985 severance, twenty years passed without a title transaction. With that background in mind, the Court reviews the parties' arguments.

III. ANALYSIS

The Ohio Dormant Mineral Act ("ODMA"), as codified in Ohio Revised Code ("O.R.C.") § 5301.56, establishes a process by which mineral interests may be deemed abandoned and to have vested to the owner of the surface rights. Specifically, O.R.C. § 5301.56(B) provides in pertinent part as follows:

> (B) Any mineral interest held by any person, other than the owner of the surface of the lands subject to the interest, shall be deemed abandoned and vested in the owner of the surface of the lands subject to the interest if the requirements established in division (E) of this section are satisfied and none of the following applies:
>
> ...
>
> (3) Within the twenty years immediately preceding the date on which notice is served or published under division (E) of this section, one or more of the following has occurred:
>
> (a) The mineral interest has been the subject of a title transaction that has been filed or recorded in the office of the county recorder of the county in which the lands are located.

While the parties agreed on the underlying facts, they sharply dispute the application of the above provisions of the ODMA.

Plaintiff argues that the memorandum of lease relied upon by Defendant is nothing more than a license and therefore cannot act in any manner to preserve rights under the ODMA. In support, Plaintiff relies heavily on *Back v. The Ohio Fuel Gas Co.*, 160 Ohio St. 81 (1953). Plaintiff contends that *Back* makes clear that the lease at issue is nothing more than a license. Plaintiff then asserts that because a license does not formally pass property, it cannot be found to be a title transaction. The Court finds no merit in this assertion.

O.R.C. § 5301.47(F) provides:

> (F) "Title transaction" means any transaction affecting title to any interest in land, including title by will or descent, title by tax deed, or by trustee's, assignee's,

> guardian's, executor's, administrator's, or sheriff's deed, or decree of any court, as well as warranty deed, quit claim deed, or mortgage.

As the above definition makes clear, title transaction means *any transaction* affecting title to *any interest* in land. It is difficult for the Court to conceive of a broader definition than the one chosen by Ohio law. By its plain language, the statute does not require a conveyance or transfer of real property in order to constitute a title transaction. Rather, the statute simply requires a transaction that affects title to any interest in the land.

Moreover, Plaintiff's reliance on *Wellington Resource Group LLC v. Beck Energy Corp.*, 2013 WL 5311412 (S.D.Ohio Sept. 20, 2013) also does little to assist Plaintiff's arguments. In *Wellington*, the district court concluded: "In essence, this Court reaffirms its prior conclusion in *Frederick*, where it stated that 'Ohio courts, if given the opportunity to do so, would characterize the property interests involved [here] as being like or similar to the interest recognized under Oklahoma law,' and common to many oil-producing states, and hold that oil and gas leases are not a grant of real property." *Id.* at *7. Plaintiff again incorrectly assumes that an actual transfer of real property is required under the ODMA when the plain language of the statute requires far less.

Even if this Court were to agree with the analysis in *Wellington* and ignore the contrary conclusion reached by a member of this District in *Binder v. Trinity OG Land Development and Exploration*, 2012 WL 1970239, at *3 (N.D. Ohio May 31, 2012), it would not aid Plaintiff's claim. Even if Defendant's property interests through the lease are something less than a grant of real property, those interests quite clearly still **affect** title to the mineral rights in the property. As the lease itself was a title transaction, there can be no dispute that the release of rights under that lease qualifies as a title transaction as well. Accordingly, Plaintiff's claims must fail as a matter of law.

In reaching this conclusion, the Court is mindful of Plaintiff's argument that Ohio's statute includes numerous specific items that qualify as title transactions and that oil and gas leases are not among those listed transactions. However, the list is certainly not an exclusive list and an oil and gas lease falls within the same category of documents listed within the statute. Moreover, contrary to Plaintiff's argument, including the oil and gas lease as a title transaction would not render any portion of the ODMA superfluous. One savings event that includes "actual production or withdrawal of minerals" is not made superfluous by the Court's conclusion. Herein, the original lease appears to have a term of fifty years. Thus, there are factual scenarios that would allow the lease itself to operate as a savings event for twenty years, but thereafter only actual production or a new title transaction would operate as a savings event. Accordingly, the Court's construction does not render any portion of the ODMA meaningless.

Finally, the Court rejects Plaintiff's assertion that she acquired the mineral rights through the sheriff sale of the surface rights. The Court agrees with Defendant – the sale could not have included the mineral interests as they were not owned by the party delinquent in its taxes – International Environmental Services. As the mineral interests were not owned by IES, they could not have been subject to any tax lien or any sheriff sale. Accordingly, Plaintiff could not have acquired them through such a transaction.

IV. CONCLUSION

Defendant's motion for judgment on the pleadings is GRANTED. Defendant shall file a notice within seven days of this order stating whether it intends to pursue the remaining counterclaims in this matter.

IT IS SO ORDERED.

Date: December 13, 2013

/s/ John R. Adams
Judge John R. Adams
UNITED STATES DISTRICT COURT

EXHIBIT 7

GROW LICKING COUNTY
LOOKING FOR A BUSINESS LOCATION...

OTS 4.4

4.4 ENCUMBRANCES-LEASES

Problem A:

Should an oil, gas or coal lease be shown when satisfactory evidence is furnished that rentals are in default an minerals are not being produced?

Standard A:

No, provided further that the primary term of the lease has expired.

Comment A:

See R.C. Sec. 5301.332.

(Effective as amended May 20, 1965; originally effective May 21, 1953)

Problem B:

May an examiner omit from his opinion reference to a recorded lease when the terms expressed in the lease h expired?

Standard B:

Yes, in the absence of notice of renewal arising from possession, record or otherwise.

(Effective November 12, 1960)

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EXHIBIT 8

PETROLEUM LAND TITLES: TITLE EXAMINATION & TITLE OPINIONS

Joseph Shade*

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I. SCOPE AND PURPOSE

This Article represents a broad overview of the process of examining title and rendering legal opinions on title in the context of oil and gas property development. However, it is not intended to be a comprehensive treatise which answers all questions that might be encountered in the title

examination process.

This Article is directed not only to examining attorneys who render title opinions, but also to petroleum landmen who assist attorneys in the title examination process and to land managers of oil and gas exploration companies who review title opinions and make business decisions based on those opinions.[1] Each of these three groups of professionals plays a vital role in the title examination process, and each can perform that role better if he or she understands the roles played by the others.

II. FUNDAMENTAL CONCEPTS

At the most basic level, the Anglo-American system of land ownership and title transfer rests on two ancient institutions:

1. The Statute of Frauds, which requires land ownership to be evidenced by written instrument;[2] and

2. The Recording System, which says that even transactions evidenced by written instruments may be voidable unless notice of such transactions is given by recording the instruments.[3]

The recording requirement protects persons purchasing interests in real estate without knowledge of unrecorded claims ("bona fide purchasers for value"), even though the unrecorded transactions are valid and binding between the parties to the transaction.[4] Similarly, the timely recording of a deed protects a purchaser against claims to the land by others who are charged with knowledge of the public record.[5] Thus, a written instrument evidences ownership or title, and the recording system preserves evidence of that ownership.

Before consummating a transaction and paying for property, a buyer

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[1]The majority of citations are to Texas authority, although many of these citations support propositions of general application.

[2]*See, e.g.*, TEX. BUS. & COM. CODE ANN. § 26.01 (Vernon 1987).

[3]*See, e.g.*, TEX. PROP. CODE ANN. § 13.001(a) (Vernon Supp. 1994) ("A conveyance of real property or an interest in real property or a mortgage or deed of trust is void as to a creditor or to a subsequent purchaser for a valuable consideration without notice unless the instrument has been acknowledged, sworn to, or proved and filed for record as required by law".); *see also* Carroll v. Holliman, 336 F.2d 425, 429 (5th Cir. 1964), *cert. denied*, 380 U.S. 907 (1965).

[4]*See* TEX. PROP. CODE ANN. § 13.001 (VERNON 1984).

[5]*See* Hawley v. Bullock, 29 Tex. 216, 222 (1867).

justifiably wants more than a deed from the seller. The buyer wants assurance that the seller really owns the interest that the seller purports to convey, that the interest is not encumbered, that by virtue of the conveyance the buyer will succeed to the seller's ownership, and that the buyer can later sell the property.[6] A title examination will provide this information. Consequently, a party desiring to buy real property, make a loan secured by real property, or develop minerals on real property, will likely insist on examining the record prior to entering into the transaction. Obviously, few persons entering into real property transactions have the time, training, or capability to personally examine the public record to determine whether they are getting what they bargained for: "good" or "marketable" title.

Therefore, the professionals who examine the title record and render title opinions provide the essential link between the public record and potential buyers, sellers, lenders, lessors, lessees, purchasers of oil and gas production, and other interested parties. The means by which title attorneys, usually assisted by landmen, abstractors, and other professionals, provide this essential link in the context of petroleum land titles is the central question explored in this Article.

A. *Recording Statutes*

All states have recording statutes that prescribe what instruments may and must be recorded, where they should be recorded, and the protection afforded by recording them.[7] The wording, nature, effect, and details of the statutes vary, but all embody essentially the same principle. Failure to record an instrument does not affect the instrument's validity as between the parties to the transaction, but such failure will cut off rights of the grantee against subsequent bona fide purchasers for value. Courts have consistently stated the rule with respect to recordation as follows: "[a] conveyance is valid, and passes the title without registration, except as to

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[6]The buyer's mortgage lender, if any, wants similar assurances.

[7]The following are the most significant Texas recording statutes:

TEX. PROP. CODE ANN. § 11.001(a) (Vernon 1984 & Supp. 1994) ("To be effectively recorded, an instrument . . . must be recorded in the county in which a part of the property is located."); *id.* § 12.002(a) (recording a subdivision plat or replat); *id.* § 13.001(a) ("A conveyance of real property or an interest in real property or a mortgage or deed of trust is void as to a creditor or to a subsequent purchaser for valuable consideration without notice unless the instrument has been acknowledged, sworn to, or proved and filed for record as required by law."); *id.* § 13.003 (Vernon 1984) ("Recording a previously recorded instrument in the proper county does not validate an invalid instrument.").

subsequent purchasers, for a valuable consideration paid, and without notice, and creditors; and as respects them it has no effect."[8]

Under most recording statutes, conveyances and other instruments affecting title to real property are filed with the county clerk of the county where the land is situated. The county clerk places a copy of the instrument in the public record and returns the original instrument to the property owner. In most cases, parties to real estate transactions rely on the public records for proof of title rather than on the original instruments maintained by the respective owners.[9]

B. *Surface Titles—Title Insurance*

Generally, with respect to real estate transactions, title insurance companies provide the essential link between the public record and the parties to the transaction. A title insurance policy is essentially an indemnity contract in which the title insurance company agrees to indemnify the purchaser of real property for any loss or damage resulting from title defects existing at the date of the policy, except for title defects expressly excluded under the policy terms.[10] Most title insurance policies measure "loss" by the consideration that the buyer paid for the property.

The insurer writes a title insurance policy only after its employees or agents conduct a search of title to the insured property. In general, title insurance companies maintain their own private tract indices and records, called "plants," covering all real estate in the county or counties in which they operate. The title company constantly updates these plants from the public record.

Typically, when a title company receives an order for title insurance on a specified tract of land, company employees or agents conduct an examination of title to that tract using the company's title plant. Based on that examination, the title insurance company decides whether to issue a policy insuring title and what exceptions, if any, that policy will contain.

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[8]*See, e.g.*, *Hawley*, 29 Tex. at 222.

[9]*See generally* 3 FRED A. LANGE AND ALOYSIUS A. LEOPOLD, TEXAS PRACTICE §§ 251-268 (2d ed. 1992 & Supp. 1993) [hereinafter LANGE & LEOPOLD]. A full discussion of state recording statutes is beyond the scope of this Article. However, both title attorneys and landmen should have a good working knowledge of the recording statutes in the jurisdictions where they conduct title searches.

[10]TEX. INS. CODE ANN. art. 9.02a (Vernon Supp. 1994) ("'Title Insurance' means insuring, guaranteeing or indemnifying owners of real property or others interested therein against loss or damage suffered by reason of liens, encumbrances upon, or defects in the title to said property, and the invalidity or impairment of liens thereon . . . .").

In effect, a title insurance policy is an opinion on title backed by an indemnity contract.[11]

When title insurance is used, "insurability" rather than "marketable title" becomes the test of a title's acceptability. Insurability is the insurance company's willingness to insure title. Because the insurer typically accepts a degree of business risk when it issues title insurance, insurability is a broader and more flexible standard than marketable title. For example, a title insurance company will typically insure title to property if, in the insurer's opinion, the property title is sufficiently free of defects to justify issuing a policy indemnifying the insured against loss arising from potential title defects, even though the title does not meet the legal standard of "marketability."[12]

C. *Petroleum Land Titles—Overview*

Generally, title insurance is not available to insure interests acquired in oil and gas.[13] Thus, the essential link between the public record and persons desiring to acquire and develop oil and gas properties, explore for oil and gas, and market oil and gas production is provided through the process of title examination and opinion—the process examined in this Article.

In a typical oil and gas transaction, an oil and gas exploration company

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[11]*See id. See also* PAUL E. BASYE, CLEARING LAND TITLES, ch. 1(2d ed. 1970) [hereinafter BASYE]; JESSE DUKEMINIER & JAMES E. KRIER, PROPERTY 670 (2d ed. 1988) [hereinafter DUKEMINIER & KRIER] ("Title insurance is the opinion of the insurer concerning the validity of the title, backed by an agreement to make that opinion good if it should prove to be mistaken and loss results as a consequence.").

[12]*See infra* part IV for a discussion of the standards followed in examining and approving petroleum land titles, which are similar to the insurability standard that title insurance companies follow with respect to surface titles.

[13]One reason title insurance is not available in connection with oil and gas transactions is the variety of property interests that may be created in oil and gas. If mineral ownership is severed from surface ownership, two separate fee estates result—the mineral estate and the surface estate. Further, the mineral estate consists of several component parts, each of which can be separately conveyed. Finally, not only can the owner divide the mineral estate into its component parts, he can further divide it, temporarily or permanently, in all of the ways developed since the feudal beginning of modern property law. Such fractionalization regularly takes place because of the demands of oil business economics. Because the oil industry is a capital-intensive and risky business, fractionalization helps raise capital and spread the risk. *See infra* part VIII(A). *See generally* Bruce M. Kramer, *Conveying Mineral Interests—Mastering the Problem Areas*, 26 TULSA L.J. 175 (1990). [hereinafter Kramer, *Conveying Mineral Interests*].

leases lands geologically identified as "prospects."[14] The basic rights acquired by a lessee under an oil and gas lease include the right to enter upon the land, to explore for oil and gas, to drill wells, and to produce and market oil and gas.[15] Before expending large amounts of money to acquire leases, and certainly before drilling a well on the prospect, the operator will want assurance that the person from whom it is acquiring the lease has the power and authority to grant the lessee those rights.[16] Similarly, when and if production is obtained, the production purchaser will require assurances as to the identity and title of the persons entitled to receive proceeds from the sale of production.[17] As more fully discussed below, these assurances are provided at several stages of the development process through title examination and title opinions.

D. *Definitions*

The following terms used in this Article have the meanings set forth below.

1. Title and Examination of Title

"Title" is defined as a bundle of rights which constitute the ownership of property.[18] "Title" is also used to designate the means by which a property owner may evidence his or her ownership. In other words, title may relate either to ownership itself or to the acts, instruments, or records

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[14]"Prospect" is a term often employed in the oil and gas industry which may be defined in various ways depending on context. In this Article, the term is used as it relates to the future—lands having potential for producing oil and gas. In *Wurzlow v. Placid Oil*, the court defined "prospect" as follows:

> [I]n the oil and gas industry, a prospect commences with the determination of the existence of a certain geological structure conducive to the production of oil and gas underlying a certain area of land. The actual existence of such minerals must then be determined and confirmed by actual drilling and production of said minerals.

279 So. 2d 749, 754 (La. Ct. App. 1973).

[15]*See, e.g.*, Amoco Prod. Co. v. Alexander, 622 S.W.2d 563, 571 (Tex. 1981); Williamson v. Mobil Producing Texas & New Mexico, Inc., 737 S.W.2d 917, 921 (Tex. App.—Beaumont 1987, writ denied).

[16]*See infra* part IX(A) for a definition of an "Original Drilling Opinion" and a discussion of its use.

[17]*See infra* parts IX(A) and (B) for definitions of and further discussion pertaining to "division orders" and "division order title opinions."

[18]*See generally* Luckel v. White, 792 S.W.2d 485, 489 (Tex. App.—Houston [14th Dist.] 1990), *rev'd on other grounds*, 819 S.W.2d 459 (Tex. 1991).

which prove ownership. When this Article speaks of "examining title" or "rendering an opinion on title," it speaks of title in the evidentiary sense rather than the pure ownership sense. "Examination of title" thus refers to examining evidence to prove title to real property.

2. Stand-up & Sit-down Examinations.

The two methods most often employed in examining petroleum land titles are (a) "examinations from abstract" or "sit-down" examinations and (b) "direct examinations of the county records" or "stand-up" examinations. Such title searches have been described as follows:

> Mineral title opinions are based on either "stand-up" or "sit-down" searches. In a stand-up search, the examining attorney searches the official records of the county recorder's office and other county offices where the subject land is located. In a sit-down search, the attorney examines a verbatim abstract furnished by an abstract company. A verbatim abstract contains copies of all instruments affecting title to the property, copies of judgments rendered against persons in the chain of title, and statements concerning payment of taxes.[19]

3. Title Opinions

A title opinion consists of an attorney's conclusions concerning the ownership of a tract of land and the minerals underlying that land, based upon the attorney's examination of title. Title opinions are usually in letter form. Although they are expressed as statements of opinion with reservations, qualifications, and exceptions,[20] title opinions can expose the title attorney to malpractice liability for material errors and omissions.[21]

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[19]EUGENE O. KUNTZ ET AL., CASES AND MATERIALS ON OIL AND GAS LAW, 571-72 (2d ed. 1993) [hereinafter KUNTZ]. *See infra* part V for additional details on both "stand-up" and "sit-down" opinions.

[20]*See infra* part IX. *See generally* LEWIS G. MOSBURG, JR., LANDMAN'S HANDBOOK ON PETROLEUM LAND TITLES § 4.05 (1976) [hereinafter MOSBURG]; Tevis Herd, *Title Opinions for Oil and Gas Purposes - Structure and Information Needed by a Client*, 33 INST. ON OIL & GAS L. & TAX'N 285, 298 (1982) [hereinafter Herd].

[21]*See infra* part IX(B).

III. THE EXAMINATION PROCESS—PERSONS INVOLVED AND RESPECTIVE RESPONSIBILITIES

The examination of petroleum land titles requires discipline, attention to detail, knowledge in several areas of the law, and an aptitude for gathering evidence. Further, examining the record, preparing a title opinion, and deciding whether to accept title requires business judgment and teamwork on the part of three professionals, all with different roles, who are usually involved in the process: the landman, the title attorney, and the company manager.

Landmen perform a number of key functions in the examination process. In stand-up examinations the landman typically conducts a search of the indices, establishes a chain of title based on his search, and prepares a run sheet reflecting the instruments in the chain of title.[22] Although the landman's duties are generally less extensive in examinations from abstracts, he typically performs a number of valuable services in this sit-down examination as well.[23] In connection with either type of examination, the landman operates as a trained investigator and may be called on to close holes in the chain of title, develop additional facts, and cure title defects.[24]

The title attorney examines the instruments in the chain of title and prepares a title opinion which sets forth the surface and mineral ownership.[25] The title opinion also notes any deficiencies in title and contains information as to the curative measures necessary to bring title up to the desired standard.[26]

In this Article, "company management" refers to the land department of the oil and gas company that desires to develop property for oil and gas or to market production (or more specifically, the individual in that land department responsible for the prospect to which the title opinion relates). Company management determines what title risks are acceptable. Typically, the attorney will apply a "marketable title"[27] standard in examining title and preparing his opinion. Often, however, company management will accept a title which is less than "marketable" if the

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[22] *See infra* part V(B).

[23] *See infra* part V(A).

[24] *See infra* part X.

[25] *See infra* part VII. The opinion should also set forth the component elements of the mineral estate.

[26] *See infra* part IX.

[27] *See infra* part IV(A) for a definition of marketable title.

business risk in accepting such title appears reasonable.[28]

The respective functions of the three professionals involved in the process of examining petroleum land titles frequently overlap. For example, the examining attorney should point out defects in title and let company management decide on whether to waive such defects. However, the attorney should not operate in a vacuum by raising problems of little practical significance. Although company management may consult with the examining attorney prior to deciding what business risk to accept relative to a particular title, the ultimate decision rests solely with company management. A working knowledge of the law is extremely helpful to the landman, but he should not take it upon himself to waive a defect simply because he thinks the attorney is wrong on the law. On the other hand, the landman may recommend waiving a defect based on facts known to him but not known to the attorney. Furthermore, the attorney's title opinion should not contain requirements couched in terms such as "satisfy yourself" when a legal determination is involved; however, such a requirement is proper as to factual matters such as a missing delay rental receipt.

Countless additional examples could be cited to illustrate the interdependence and overlap in the respective functions performed by the examining attorney, the landman, and company management. Thus, each of the three professionals should be aware of her own role as well as the role of the others in the overall process of examining petroleum land titles.

IV. APPLICABLE STANDARDS IN EXAMINING AND APPROVING TITLES

A. *Marketable Title—The Standard Applied in Examining Titles*

Long ago, the law established an objective standard called "marketable title," against which a title would be measured for purposes of title examination. Title approval requires a different standard. A marketable title is free from reasonable doubt such that a prudent person, with knowledge of all salient facts and circumstances and their legal significance, would be willing to accept it.[29] All title opinions in Texas

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[28] *See infra* part IV(B) & (C).

[29] *See generally* J.E. Rehler, *Proposed Title Examination Standards for Texas*, REV. OF OIL & GAS LAW VI. OIL, GAS, AND MINERAL SECTION OF THE DALLAS BAR ASS'N (1991)

must be rendered based on marketable title.[30] To be marketable, a title need not be absolutely free from every technical and possible suspicion. The mere possibility of a defect which, according to ordinary experience, has no probable basis does not show an unmarketable title.[31]

Generally, title will not be considered marketable if:

1. a reasonable chance exists that a third party could challenge the validity of title against the record owner;[32]

2. parol evidence is necessary to remove doubt as to the validity and sufficiency of the owner's title;[33]

3. the title rests on a presumption of fact that would probably become a fact issue to be decided by a jury in the event of a suit;[34] or

4. the record discloses outstanding interests claimed by third parties that could reasonably subject the property owner to litigation or compel the owner to resort to parol evidence

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[hereinafter Rehler]. *See also* 16 OKLA. STAT. ANN. tit. 16, § 71 (West 1986 & Supp. 1992) (containing a similar but slightly more restrictive definition of marketable title); First Am. Title Co. v. Prata, 783 S.W.2d 697, 702-03 (Tex. App.—El Paso 1989, writ denied) ("[M]arketable title means a title free and clear from reasonable doubt as to matters of law and fact and is one not clouded by any outstanding contract, covenant, interest, lien or mortgage sufficient to form a basis of litigation.") (citations omitted); Lieb v. Roman Devel. Co., 716 S.W.2d 653, 655 (Tex. App.—Corpus Christi 1986, writ ref'd n.r.e.); Ryan Mortgage Investors v. Fleming-Wood, 650 S.W.2d 928, 936 (Tex. App.—Fort Worth 1983, writ ref'd n.r.e.) ("'Marketable title' means a title free and clear from reasonable doubt as to matters of law and fact, such a title as a prudent man, advised of the facts and their legal significance, would willingly accept."); Lund v. Emerson, 204 S.W.2d 639, 641 (Tex. Civ. App.—Amarillo 1947, no writ) (finding same general definition).

[30]Proposed Texas Title Standard 2.10 provides: "All title examinations should be made on the basis of marketability of title . . . ." Rehler, *supra* note 29. *See also* MOSBURG, *supra* note 20, § 4.05.

[31]*See supra* note 29.

[32]Texas Auto Co. v. Arbetter, 1 S.W.2d 334, 336-37 (Tex. Civ. App.—San Antonio 1927, writ dism'd w.o.j.).

[33]Owens v. Jackson, 35 S.W.2d 186, 188 (Tex. Civ. App.—Austin 1931, writ dism'd); *Texas Auto Co.*, 1 S.W.2d at 336-37.

[34]Austin v. Carter, 296 S.W. 649, 651 (Tex. Civ. App.—Eastland 1927, writ dism'd w.o.j.). *See also Lund*, 204 S.W.2d at 641; *Texas Auto Co.*, 1 S.W.2d at 336-37.

to defend his title against outstanding claims.[35]

In addition, to meet the standard of marketability, title must be unencumbered. Thus, prior oil and gas leases and mortgages should be released, taxes should be paid, and judgments should be satisfied. Where prior leases, liens, or encumbrances have not been released, marketable title must be established by producing clear, readily accessible evidence of non-production of prior oil and gas leases that have expired, or similar evidence of payment of unreleased liens or encumbrances.

B. *Business Risk—The Standard Applied to Approving Titles*

In practice, with respect to petroleum land titles, marketable title merely establishes the basis for rendering title opinions, not the type of title which must exist before accepting a lease or drilling a well. Customarily, an oil company will accept a title that is a reasonable "business risk" even though that title fails to meet the marketability standard. This does not mean a title will be accepted when serious doubts exist as to its validity. Acceptable business risk does mean that leases will be acquired and wells will be drilled on property when gaps in record title are bridged by apparently reliable affidavits of adverse possession, or proof of death or heirship, even though a remote legal possibility still exists that title could be attacked.[36]

The degree of risk considered acceptable varies with the examination's purpose and the company management's business judgment. Obviously, an acceptable risk when one is "checkerboarding" leases for a bonus of ten dollars per acre may not be acceptable when the decision involves drilling a test well costing over a million dollars.[37] Company attitudes concerning acceptable risks vary with the management's differing analyses of the likelihood of title failure balanced against the cost of curing title defects.[38]

C. *Interplay Between Examination and Approval of Titles*

Most oil companies follow a highly practical approach in approving or

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[35]*See Texas Auto Co.*, 1 S.W.2d at 336-37; Alling v. Vander Stucken, 194 S.W. 443, 444 (Tex. Civ. App.—San Antonio 1917, writ ref'd).

[36]MOSBURG, *supra* note 20, § 1.05.

[37]*Id.*

[38]*Id.*

disapproving titles. The attorney prepares an opinion based on the relatively objective standard of marketability. Company management then makes the business decision whether to accept title. That decision is usually based on the more practical standard of business risk, rather than marketability. Thus, business risk is a subjective standard that may vary from case to case.[39]

V. METHODS OF EXAMINATION, INDICES, AND LAND DESCRIPTIONS

A. *Examinations from Abstract*

In sit-down opinions, the examining attorney prepares a title opinion based on the attorney's examination of "abstracts of title." An abstract of title is a collection of verbatim copies of all instruments and proceedings contained in the public record which affect title to the land covered by the abstract.[40] With some variation, most abstracts consist of the following:

1. a caption sheet or title page which identifies the abstract by number and the legal description of the land;

2. a plat prepared by the abstractor which further identifies the land;

3. an index which lists all of the instruments contained in the abstract;

4. entries, which comprise the bulk of the abstract, consisting of verbatim copies (or in some cases excerpts or summaries) of each instrument affecting title to the land; and

5. an abstractor's certificate regarding the land abstracted, the records and time period covered, and the number of

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[39] *Id.* Compare part II(D) with part IV to understand the similarity in standards and practices followed by title insurance companies with respect to general real estate titles with those followed by oil companies with respect to petroleum land titles.

[40] *See* Pearson v. 32 Oil Ass'n, 1 S.W.2d 860, 860 (Tex. Comm'n. App. 1928, holding approved); Lambert v. Taylor Tel. Coop., 276 S.W.2d 929, 932 (Tex. Civ. App.—Eastland 1955, no writ); *see also* BLACK'S LAW DICTIONARY 10 (6th ed. 1990).

pages in the abstract.[41]

1. The Abstractor's Function

While the precise methods of compiling abstracts may vary, abstract company agents or employees generally compile abstracts using private tract indices similar to the plants maintained by title insurance companies. In many counties the same company operates as both a title insurance company and an abstract company.

Abstract companies typically maintain a set of cards (or their electronic equivalent) indexed by survey. In Texas, all lands situated in a particular county are within these surveys. Surveys typically consist of sections (640 acres), leagues (4428.4 acres), labors (177.1 acres), or fractions thereof. Originally, cards referenced under a given survey name reflected all transactions pertaining to land within that survey.[42] Today, many abstract companies have replaced these card files with computer generated files that perform the same function.

From its plant and the public records, the abstractor compiles an abstract covering the specific tract under examination. The abstract should include not only all recorded conveyances, but also copies of any relevant judicial proceedings. In addition, copies of wills and related probate proceedings, proceedings to determine heirship, and proceedings relating to title passing through inheritance should be included, as should any affidavits of record such as affidavits of possession and heirship. The abstractor is not concerned with the consequences, legal interpretation, or effect of any of the instruments contained in the abstract.[43]

2. Review of Abstracts

The title attorney is responsible for determining that the time period covered by the abstract has no gaps and that the abstract covers all of the land under examination. The attorney's responsibility may be complicated because several abstracts often cover the property under examination. For example, to save time or money, landmen sometimes borrow existing abstracts from landowners or prior lessees. The existing abstracts are then updated by "supplemental" abstracts,[44] and "base" abstracts[45] are ordered to

[41] *See* LANGE & LEOPOLD, *supra* note 9, §§ 291-299 for a general discussion of abstracts, the abstracting process, how abstracts are prepared, and what abstracts contain.

[42] *See* LANGE & LEOPOLD, *supra* note 9, § 291.

[43] *Id.* § 303.

[44] Supplemental abstracts are abstracts which cover a period of time subsequent to the date covered by a previous abstract on the same land. *Id.* § 300.

cover portions of the property for which no existing abstracts are found.

The examining attorney does not need to know the precise details of how to compile abstracts. However, the examining attorney must carefully check the abstractor's certificate to determine that the land and time period covered by the abstract are correct, complete, and adequate. He should also check to determine whether abstract entries are properly indexed and whether the abstract covers all appropriate county records. Finally, if more than one abstract covers the land being examined, the attorney must determine how the various abstracts fit together and whether in total they cover all of the land under examination.

B. *Stand-up Examinations*

A "stand-up opinion" is a title opinion based on an examination of public records in the county where the land is situated.[46] The attorney may personally search the indices and records, as well as examine the instruments in the chain of title. Usually, however, the attorney delegates the task of performing the initial search of the indices and records to a landman.[47]

Although procedures may vary to some degree,[48] a typical stand-up examination[49] is conducted as follows:

1. The landman establishes a "starting point" for the examination. The starting point is a past date such as sovereignty, fifty years ago, or the closing date of a prior opinion. The examination will cover the period between

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[45]Base abstracts are abstracts which cover a period from sovereignty, or such lessor period as is deemed appropriate, to the date shown in the abstractor's certificate. *Id.*

[46]*See supra* note 19.

[47]Engaging a landman to search the indices and prepare a run sheet is usually more economical. It saves the attorney time and allows him to focus on examining the instruments listed in the run sheet. Further, good landmen usually have more skill than attorneys at working the indices and constructing run sheets. On the other hand, although the attorney can delegate the work, he cannot delegate the responsibility. The title opinion is the attorney's opinion, and the attorney is responsible for any error that resulted because the landman omitted a key document from the run sheet.

[48]For example, local procedures and customs vary not only from state to state but also from county to county within the same state. Procedures may also vary depending on the personal preferences of the examining attorney, landman, and client oil company; time and cost factors; the structure of the indices and records in the particular county; and the purpose of the opinion.

[49]This scenario assumes that the tasks of running the records and preparing a run sheet are delegated to a landman.

the starting point and the closing date of the opinion. The closing date is the last date covered by the records, typically a few days prior to the date of the examination.

2. The landman then ascertains the structure of the indices in the county where he is working. If the index maintained by the county clerk is a "grantor-grantee" index,[50] the landman uses the grantee indices to trace title from the present to the starting point and uses the grantor indices to research title from the starting point to the present.[51]

3. In addition to the indices and records in the county clerk's office, the landman will search several other indices and records outside the county clerk's office which may reveal information affecting the status of title. These records include probate, county, and district court records; Uniform Commercial Code filings and the records of the tax assessor/collector.

4. From these various indices, the landman compiles a list of the instruments that may affect title to the property. He must then go to the record books and review each instrument to determine its relevance. Some of the instruments found in the indices will be clearly irrelevant. If doubt exists as to relevance, however, the instrument should be included in the run sheet.[52]

5. The landman's next task is to list the instruments in the chain of title in a run sheet.[53] A run sheet lists the instruments in chronological order and includes the type of instrument, parties, and recording data.

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[50]Grantor-grantee is the index required by statute in Texas. *See infra* note 54. Sometimes, though not usually, a "tract" index will also be maintained as part of the public record. *See infra* note 56.

[51]*See infra* part V(C). Today, in counties with computerized records, computer-generated chains of conveyances make this task significantly easier.

[52]The attorney makes the decisions regarding relevancy and materiality. Unless an instrument is clearly irrelevant, it should be included in the run sheet. The attorney can later dismiss the instrument if it turns out to be irrelevant or immaterial.

[53]An excerpt from a run sheet is attached in the appendices.

6. At this point, the examining attorney generally assumes the task of completing the title examination. Using the run sheet as a guide, she goes to the record books and examines each instrument listed on the run sheet. Among the things the examining attorney must look for are the current ownership of the surface and minerals, gaps in the chain of title, defects in the instruments, encumbrances, and legal requirements. The examining attorney should also check the indices, particularly if gaps exist or matters look suspect. While the landman's run sheet is an extremely valuable tool that can save the attorney countless hours, the attorney should not base her conclusions on the run sheet or the apparent content of the instruments it lists. The attorney must review each of the listed instruments and base her conclusions on her own examination.

The sequence of the above steps will vary significantly from examination to examination, although the order listed above is quite typical. Many of the steps take place more or less simultaneously or in varying order as to different chronological periods in the chain of title, which may span several decades if not centuries. Shortcuts, such as recital references to prior instruments, often speed up the search process. More often, though, the search reveals apparent gaps in the chain of title, apparent dead ends, or countless other problems which must be resolved.

The title examining process is one of evidence gathering and investigation. The result depends on the ingenuity, perseverance, and attention to detail exercised by the landman and the attorney involved in the stand-up examination. The result also depends on their ability to work together as a team. Like the abstractor, the landman locates all instruments and proceedings which may affect title. The abstractor places these instruments in his abstract, and the landman lists the instruments on his run sheet. The examining attorney bears sole responsibility for interpreting these instruments and determining their relevance, materiality, and legal effect.

C. *Indices*

The most common type of index in most states is the grantor-grantee index, in which each instrument is indexed under the names of the grantor

and the grantee. In Texas, the legislature requires each county to maintain a grantor-grantee index.[54] Clerks periodically compile additions to the index which are set forth in supplemental indices.[55] Both the main and supplemental index books must be examined, and the instruments revealed by the index must be pulled and read to determine relevancy.

The public records in some states and counties have a tract index[56] in addition to the grantor-grantee index. When a tract index is not available in the public records, the local abstract or title insurance company may have a private tract index, which can usually be used for a fee. Tracts, of course, vary in size. Generally, a tract index that lists in one place the various instruments affecting title to a particular tract of land can be helpful, even when the tract is an entire survey and the title examiner is only interested in a small portion of the land in that survey.

Finally, the structure of both public records and indices varies from county to county. Some counties maintain one set of records and indices for all instruments, while others maintain separate sets of records such as deed records, deed of trust records, and oil and gas records.[57]

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[54]Index to Real Property Records.

> (a) The county clerk shall maintain a well-bound alphabetical index to all recorded deeds, powers of attorney, mortgages, and other instruments relating to real property. The index must state the specific location in the records at which the instruments are recorded.
>
> (b) The index must be a cross-index that contains the names of the grantors and grantees in alphabetical order. If a deed is made by a sheriff, the index entry must contain the name of the sheriff and the defendant in execution. If a deed is made by an executor, administrator, or guardian, the index entry must contain the name of that person and the name of the person's testator, intestate, or ward. If a deed is made by an attorney, the index entry must contain the name of the attorney and the attorney's constituents. If a deed is made by a commissioner or trustee, the index entry must contain the name of the commissioner or trustee and the name of the person whose estate is conveyed.

TEX. LOC. GOV'T CODE ANN. § 193.003 (Vernon 1988).

[55]The clerk recompiles the main indices periodically to incorporate the supplements in much the same way that publishers reprint statute books periodically to incorporate the pocket parts. Recompilation used to take place only every decade or so, but today many counties have computerized records that can be updated much more frequently.

[56]A tract index is an index compiled according to the land affected by the transactions rather than by the parties to the transaction. This index is similar to the "plants" maintained by title insurance companies.

[57]For general information regarding the structure of indices, *see* BASYE, *supra* note 11, at 51-53.

D. *Land Descriptions*

The title examiner must examine the instruments in the chain of title to determine whether they contain adequate legal descriptions. Generally, a land description is legally adequate if the deed or other instrument contains sufficient information to identify the described land with reasonable certainty.[58] If the description is not legally adequate, the instrument is void under the statute of frauds.[59]

Most rural land[60] in the United States is described under the "rectangular survey system" which was established in 1796 when Congress passed the National Land Act.[61] The National Land Act established a series of six square mile townships identified by township lines running east and west and range lines running north and south. Each township contained thirty-six 640 acre sections arranged in a square (i.e., 1 square mile). Each section was further subdivided into 160 acre quarter sections, each of which was further divided into forty acre quarters.[62] The most prevalent method of describing land surveyed under the rectangular survey system is by reference to its location within the system; for example: the Northwest quarter of Section 10, Township 2 North, Range 4 West of the 31st principal meridian.

Various parts of the country recognize several exceptions to the rectangular survey system.[63] The most important exception to the rectangular survey system, in the context of petroleum land titles, is found in south and east Texas. Spanish and Mexican land grants subdivided vast portions of Texas into irregularly shaped surveys containing one or more

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[58]*See, e.g.*, Smith v. Sorelle, 87 S.W.2d 703, 705 (1935). *See also* LANGE & LEOPOLD, *supra* note 9, § 812.

[59]In *Greer v. Greer*, the court succinctly stated the rule as follows:

> The rule was long ago announced by this court that in all instruments for the conveyance of lands the description must be so definite and certain upon the face of the instrument itself, or in some other writing referred to, that the land can be identified with reasonable certainty; otherwise, the instrument is void under the Statute of Frauds.

191 S.W.2d 848, 849 (1946).

[60]Urban land is usually identified by lot, block, and subdivision.

[61]National Land Act, ch. 29, 1 Stat. 464 (1796) (current version at 43 U.S.C. § 52 (1986)).

[62]*Id.* § 2. *See also* 43 U.S.C. §§ 751-774 (1986).

[63]For example, the original 13 states as well as Kentucky, Tennessee, Maine, Vermont, and West Virginia were surveyed prior to adoption of the National Land Act in 1796 and thus do not use the rectangular survey system. DUKEMINIER & KRIER, *supra* note 11, at 660.

leagues of land (4428.4 acres) or one or more labors of land (177.1 acres).[64] The Spanish *vara* was the unit of linear measurement. The legislature declared that the *vara* was equivalent to 33 1/3 inches.[65] This system described land within these surveys by metes and bounds.[66]

Metes and bounds descriptions give precise boundaries by angle, distance, and course from a fixed and ascertainable starting point which can be located on the ground—the "monument." The monument can be natural, such as a tree; artificial, such as a fence post; or a point established by reference to a recognized survey, such as "480 feet south of the northwest corner of the Jason Daniel survey." All metes and bounds descriptions must "close" so that the final point is the same as the starting point.[67]

VI. TRANSFERRING TITLE

A. *Conveyances*

The most common way to transfer land title is conveyance.[68] Deeds and assignments are the types of conveyances most often used to transfer title to interests in oil and gas.[69]

A conveyance must: (1) be written, (2) name the parties—grantor and grantee, (3) contain present words of grant, (4) contain an adequate description of the property, and (5) be duly executed.[70]

An effective conveyance must be delivered.[71] Delivery contemplates a present intent to transfer title. An intent to transfer title at some future date or on the happening of some future contingency, such as the grantor's death, does not satisfy the delivery requirement.[72] Usually, a title examiner

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[64]Fractions of leagues or labors were also granted in some cases.

[65]TEX. NAT. RES. CODE ANN. § 21.077 (Vernon 1978).

[66]MOSBURG, *supra* note 20, § 2.11; LANGE & LEOPOLD, *supra* note 9, § 820.

[67]*Id.*

[68]A conveyance is a presently operative instrument which transfers ownership to an interest in land from the transferor to the transferee. *See, e.g.*, Leonard v. Benford Lumber Co., 216 S.W. 382, 383 (1919).

[69]The oil & gas lease is also a conveyance. *See infra* note 94.

[70]*See, e.g.*, TEX. PROP. CODE ANN. § 5.021 (Vernon 1984). Some state statutes impose additional requirements such as seals, witnesses, or acknowledgements.

[71]*See, e.g.*, Curry v. Curry, 270 S.W.2d 208 (1954); Koppelmann v. Koppelmann, 57 S.W. 570 (1900). *See also* LANGE & LEOPOLD, *supra* note 9, §§ 691-693.

[72]Agnew v. Brawner, 553 S.W.2d 688, 689 (Tex. Civ. App.—Eastland 1977, writ ref'd n.r.e.); Sgitcovich v. Sgitcovich, 229 S.W.2d 183, 185 (Tex. Civ. App.—Galveston 1950, writ

cannot tell from the record whether a deed has been properly delivered. Deeds are presumed to have been properly delivered unless the record or other evidence indicates the contrary.[73] However, a lengthy lapse in time between the date on the deed and the recording date may rebut the presumption of proper delivery, and should put the title examiner on notice of possible delivery problems. The prime example of such a lapse is the "dresser drawer deed." In this situation, a grantor executes a deed in favor of his son, but instead of recording the deed, he places it in his safe deposit box with instructions to record the deed after the grantor's death. Such a deed does not legally satisfy the delivery requirement,[74] and should generate a requirement in the title opinion. Quitclaim deeds or disclaimers of interest from all the grantor's heirs other than the grantee named in the "dresser drawer deed" are the usual methods of curing title.[75]

B. *Other Means of Transferring Title*

In addition to conveyance, ownership of oil and gas interests may be transferred through judicial action, inheritance, and involuntary transfers.

Judicial transfers generally occur in two situations. The first situation involves the sale of property pursuant to court order, such as mortgage or tax foreclosure proceedings. The second situation involves proceedings in which a court resolves real property ownership disputes such as quiet title suits or trespass to try title suits.[76]

When a property owner dies, title to the decedent's property passes to his beneficiaries, heirs, administrators, executors, or successors in interest through probate of the decedent's will or under laws of descent and distribution. Section 37 of the Texas Probate Code provides that "[w]hen a person dies leaving a lawful will, all of his estate devised or bequeathed by such will . . . shall vest immediately in the devisees or legatees . . . ; and all the estate of such person, not devised or bequeathed, shall vest

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ref'd n.r.e.) (holding that deeds executed but never delivered by grantor were ineffective to pass any title to realty).

[73]*See infra* part VIII(F).

[74]Ragland v. Kelner, 221 S.W.2d 357, 359 (1949) ("The test . . . is whether or not the grantor parted with all dominion and control over the instrument at the time he delivered it to the third person, with intent at the very time of its delivery that it take effect as a conveyance."); Vannerberg v. Anderson, 206 S.W.2d 217, 219 (1948) (holding that delivery is essential but may be presumed from recordation). *See also* LANGE & LEOPOLD, *supra*, note 9 §§ 691-693; MOSBURG, *supra* note 20, § 2.12.

[75]*See* MOSBURG, *supra* note 20, § 2.12. *See also infra* part X.

[76]*See infra* part X(C).

immediately in his heirs at law . . . ."[77] Generally, the same considerations that govern title transfers by will or intestate succession govern transfers of interests in oil and gas.

Finally, title may be transferred involuntarily through adverse possession. All states have statutes of limitations which generally provide that if one who is not the owner occupies land in an open, notorious, and adverse manner for the statutory time period, then mere occupancy of land may ripen into ownership divesting the former owner of title.[78]

The legal requirements associated with such transfers are beyond the scope of this Article. However, title examination requires a broad understanding of several legal areas other than oil and gas law, including conveyancing, probate, judgments, statutes of limitations, and statutes of descent and distribution.

C. *Establishing a Starting Point for the Title Run*

What should be the starting point for a title search? The answer usually depends on a variety of practical factors, including considerations related to time, cost, examination purpose, business risk, custom, and company policy. In some cases, the examining attorney and client may partially rely on a prior title opinion covering the land being examined.

In the preparation of the original or initial opinions,[79] the question arises whether the examiner should run title back to sovereignty. The time and expense of running back to sovereignty is typically weighed against the risk involved in cutting the search short. The purpose of a particular opinion may determine how far back to run a title search. For example, companies that would not consider going back to sovereignty when acquiring leases for a ten dollar per acre bonus might do so prior to

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[77]TEX. PROB. CODE ANN. § 37 (Vernon 1980 & Supp. 1994). Texas Probate Code section 38 governs the transfer of property of persons dying intestate. *Id.* § 38. A title examiner needs to be familiar with the probate code and the law of wills, intestacy, and estate administration of the state in which the property examined is located.

[78]Texas recognizes limitations periods of 3, 5, 10, and 25 years. *See* TEX. CIV. PRAC. & REM. CODE ANN. §§ 16.021-16.037, subch. B, Limitations of Real Property Actions (Vernon 1986 & Supp. 1994). *See id.* § 16.024 (the 3 year statute); *id.* § 16.025 (the 5 year statute); *id.* § 16.026 (the 10 year statute); *id.* §§ 16.027 & 16.028 (the two 25 year statutes). *See also* RICHARD W. HEMINGWAY, THE LAW OF OIL AND GAS §§ 3.4-3.5 (3d ed. 1991) (limitations title to oil and gas properties) [hereinafter HEMINGWAY]; Thomas K. McElroy, *Adverse Possession of Mineral Estates*, 11 BAYLOR L. REV. 253 (1959).

[79]*See infra* part IX(A) for definition of "original" or "initial" opinions.

spending in excess of a million dollars to drill a well. Some states have curative statutes which decrease the risk of cutting the search short.[80]

The following situation illustrates some of the practical considerations involved in deciding how far back to run a title search. In connection with a proposed loan from the Reconstruction Finance Corporation ("RFC") secured by a lien on real estate owned by his client, a New Orleans attorney prepared an extensive title opinion based on a title examination going back to 1803. The RFC hesitated to approve the loan and requested that the attorney run the title search back further than 1803. The New Orleans attorney's classic reply read as follows:

> Your letter regarding titles in case No. 189156 [was] received. I note you wish titles to extend further than I have presented them. I was unaware that any educated men in the world failed to know that Louisiana was purchased by the United States from France in 1803. The land came into possession of Spain by right of discovery made in 1492 by a Spanish-Portuguese sailor named Christopher Columbus, who had been granted the privilege of seeking a new route to India by the then reigning monarch, Queen Isabella. The good Queen being a pious woman and careful about titles (almost as careful, I might say, as the RFC) too[k] the precaution of securing the blessings of the Pope of Rome upon the voyage before she sold her jewels to help Columbus. Now, the Pope, as you know, is the emissary of Jesus Christ, who is the son of God, and God, it is commonly accepted, made the world. Therefore, I believe it is safe to presume that He also made that part of the United States called "Louisiana"—and I hope to hell you're satisfied.[81]

Although title-related literature probably over-quotes the above story, the story takes on a contemporary quality by substituting acronyms—"RTC"[82] for "RFC."

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[80] *See, e.g.*, OKLA. STAT. ANN. tit. 16 §§ 71-80 (West 1986) (A marketable record title might exist when a person holds under an unbroken chain of title extending back at least 30 years, and nothing appears of record which divests such person of title). Texas does not have such a statute. *See infra* part X(B).

[81] *See* MOSBURG, *supra* note 20, app. at 150.

[82] Resolution Trust Company.

Every title must begin with a grant, such as a patent from the sovereign. In most states the original grant is a patent from the United States. The notable exceptions are the original thirteen states and Texas.

Four different sovereigns—the Spanish government, the Mexican government, the Republic of Texas, and the State of Texas—issued patents in Texas.[83] Texas entered the Union as an independent republic in 1845 and retained its public lands. Consequently, the federal government does not own land in Texas, except for "acquired lands." In other words, no part of the "federal public domain" is in Texas.[84] In most western states, such as New Mexico, the federal government still owns a large portion of the land.

A patent establishes that the sovereign has parted with legal title to the land. Since statutes of limitations do not run against the state, one cannot rely on limitation title to lands for which a valid patent was never issued.[85] Texas patents are registered in the general land office, and copies of patents should be (and usually are) recorded in the county where the land is situated. However, failure to record does not affect the patent's validity. Thus, if an examination reveals that a copy of the patent has not been recorded in the county where the land is situated, the title examiner should search the general land office records for evidence of the patent. Numerous other problems may arise concerning patents, including the procedures for granting and perfecting patents, the validity of such patents, whether the patent passed mineral rights, the Texas Relinquishment Act,[86]

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[83]All patents to Texas land emanate from Spanish or Mexican land grants or from grants by the Republic or State of Texas. *See generally* LANGE & LEOPOLD, *supra* note 9, §§ 158-159.

[84]KUNTZ, *supra* note 19, at 855, describes "public lands" as follows:

> Federal public lands comprise . . . about 30 percent of the total land area of the 50 states. Most of this acreage is classified as "public domain:" lands that have never left federal ownership . . . . The balance is generally classified as "acquired land:" land obtained by the federal government by purchase, condemnation, gift or exchange.

[85]Texas expressly provides that limitations provisions do not bar the rights of the state, all counties, and all school districts. TEX. CIV. PRAC. & REM. CODE ANN. § 16.061 (Vernon 1986 & Supp. 1994). Thus, in the event of litigation involving title, one must show that the state parted with title through an appropriate grant of patent prior to commencement of the alleged adverse possession. *See, e.g.*, Houston Oil Co. v. Gore, 159 S.W. 924, 927 (Tex. Civ. App.—Galveston 1913, writ ref'd). *See generally* Dallas County Levee Improvement Dist. No. 6 v. Curtis, 287 S.W. 301 (Tex. Civ. App.—Dallas 1926, no writ).

[86]Persons examining title to Texas lands granted by patent from the State of Texas after September 1, 1919, should be aware of the Relinquishment Act of 1919. TEX. REV. CIV. STAT.

and vacancies.[87] However, these matters are outside the scope of this Article.[88]

D. *Chain of Title*

The chain of conveyances or other transfers by which title passes from the patentee to the present owner is called the "chain of title." All instruments in the chain of title from the title search starting point to the title opinion closing date should be included in the abstract or run sheet and examined by the examining attorney. Gaps or defects often exist in the early chain of title. Following a gap or irregularity, title examiners usually take some comfort if a regular chain of title ensues for the limitations period, prior to any severance of minerals.[89] In this situation, title examiners often rely on an affidavit of possession containing facts sufficient to establish limitation title.[90]

VII. THE ATTORNEY'S EXAMINATION

Title examiners should understand the basic distinction between the duty of the examining attorney and that of the abstractor or landman. The duties of the landman and the abstractor are to search the record and find, report, and assemble the facts. The duties of the examining attorney are to:

1. examine the instruments revealed by the abstract or the record;
2. interpret the instruments in the chain of title;
3. formulate legal and factual conclusions based on the examination; and
4. reflect these conclusions in a title opinion.

ANN. arts. 5367-5379 (Vernon 1919) (repealed but reenacted verbatim in 1977 as TEX. NAT. RES. CODE ANN. §§ 52.171-52.189 (Vernon 1977 & Supp. 1994)). The definitive article on the Texas Relinquishment Act is A.W. Walker, *The Texas Relinquishment Act*, 1 OIL & GAS INST. 245 (S.W. Legal Found.—Matthew Bender 1949). *See also* Herd, *Title Opinions*, *supra* note 20, at 291-97; LANGE & LEOPOLD, *supra* note 9, § 234.

[87]*See* LANGE & LEOPOLD, *supra* note 9, §§ 233 & 236 (discussing vacancies and vacancy litigation).

[88]For general information regarding patents, see MOSBURG, *supra* note 20, §§ 2.02 & 2.04. For further general information regarding patents to Texas land, *see* LANGE & LEOPOLD, *supra* note 9, §§ 155-159.

[89]*See infra* note 190. *See also* Lewis G. Mosburg, Jr., *Statutes of Limitation and Title Examination*, 13 OKLA. L. REV. 125, 166-67 (1960).

[90]*See* MOSBURG, *supra* note 20, § 5.03. *See also infra* part X(A).

Preceding sections of this Article focused on the practical steps involved in searching the record. This section and the following sections focus on the examination process and title opinion preparation.

The purpose of a title opinion is to advise the client of title defects and irregularities which might impair marketable title or expose the client to litigation and to suggest how those defects and irregularities may be cured. The examining attorney should strive to solve problems, not create them. The attorney's job is not to impress the client with his knowledge of obscure legal points or with his ability to uncover facts of questionable relevance. Rather, the attorney should focus on problems that might expose the client to real world risks and focus on finding solutions to those problems.

One of the examining attorney's most difficult chores in the examination process is organization. The abstract or run sheet may cover a lengthy time period and reveal countless title transfers reflected by a plethora of instruments—all of which need to be examined, sorted, and classified. The examining attorney is the master of relevancy and materiality. He must determine the importance of a particular instrument or transaction within the context of the chain of title.

The examining attorney must develop a system that reflects his title examination results as succinctly and efficiently as possible. Developing such a system avoids confusion, duplication of effort, and repeated searches through a thick abstract or set of instruments. Many examining attorneys find that making one or more graphic depictions of the chain of title is the most workable method for initially summarizing the examination results.[91] The types of diagrams and worksheets vary according to the preferences of the attorney. Each examiner should develop his or her own methodology for summarizing his search results.

The attorney should include basic information such as the grantor and grantee, recording date, and date of instrument in the diagram. In complex title situations, two or three different diagrams may be necessary. For example, one diagram may show the basic chain of title; a second may show encumbrances, mortgages, liens, and unreleased oil and gas leases; and a third may show assignments of the present oil and gas lease. In a less complex chain of title, all transactions can be combined into one

[91]The attached appendix contains examples of chain of title diagrams. One diagram tracks surface ownership and mineral ownership, while the other diagram tracks leasehold ownership. For other suggested methods of tracking chains of title, see LANGE & LEOPOLD, *supra* note 9, §§ 311-314.

diagram.[92] Diagrams depicting the chain of title can be useful tools which, when used with the run sheet or abstract index, can ease the attorney's difficult task of systematically examining instruments in the chain of title.

VIII. TITLE IRREGULARITIES

Few titles are completely free from doubt. Consequently, the examination will likely reveal various types and degrees of title irregularities. This Section discusses some commonly-encountered title irregularities. However, a discussion of every type of irregularity exceeds the scope of this Article.

A. *Nature of the Interest—Mineral or Royalty*

A title examiner often confronts the problem of determining the legal nature of an interest—whether a particular grant or reservation in a chain of title instrument creates a mineral interest or a royalty interest. This determination is critical in establishing who must join in a lease, how production and costs of production are allocated, and who receives royalty, bonus, and delay rentals. Understanding how that determination is made goes to the heart of oil and gas jurisprudence.

The incidents of mineral ownership are well-established and consist of "development rights," "executive rights," and "rights to economic benefits under the oil and gas lease." The "development right" includes the right to explore for and develop minerals, as well as the obligation to pay any costs of exploration and development. The development right also includes the right to reasonable use of the surface estate and the right of ingress and egress.[93] Although the mineral owner *can* personally exercise the development right, he rarely does so because most mineral owners do not have the capital or technical knowledge to explore for oil and gas. Instead, the mineral owner usually conveys this right to an oil company through an oil and gas lease.[94]

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[92]When the configuration of the land being examined changes (i.e., parts of the tract are sold or adjoining tracts are acquired) during the period covered by the examination, a set of plats showing these configuration changes, used in conjunction with the chain of title diagram, can be very helpful.

[93]These rights flow from the well-settled rule that when the mineral estate is severed from the surface estate, the mineral estate is dominant. The surface estate is burdened with a servitude in favor of the mineral estate. *See* Texaco, Inc. v. Faris, 413 S.W.2d 147, 149 (Tex. Civ. App.—El Paso 1967, writ ref'd n.r.e.); Hunt Oil Co. v. Kerbaugh, 283 N.W.2d 131, 135 (N.D. 1979).

[94]Eugene Kuntz describes the oil and gas lease as follows:

The "executive right" is the power to lease.[95] The "Right to Economic Benefits Under the Oil and Gas Lease" usually consists of bonus payments, delay rentals, and royalties.[96]

A mineral interest encompasses some or all of the above incidents of mineral ownership. A royalty interest, on the other hand, is only one incident of mineral ownership. A royalty interest is a share of production free of the costs of exploration and production.[97] A royalty interest does not include any right to develop the minerals, to delay rentals, or to receive bonuses.[98]

Through proper draftsmanship, interests which are clearly either mineral or royalty in nature can be easily created, reserved, or conveyed. However, any attorney or landman examining petroleum land titles will likely encounter many instruments which contain an endless variety of ambiguities relating to the nature of the interest conveyed or reserved.

When an instrument in the chain of title contains ambiguous language, title examiners face problems in determining whether the conveyance creates a mineral interest or a royalty interest.[99] What specific language

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> [The oil and gas lease is] both [a] conveyance and [a] contract. . . . [A] conveyance, because it is the instrument by which the mineral owner conveys a right to an oil company to explore for and produce oil and gas. . . . [A] contract because the oil company accepts the right to explore and produce, burdened by certain express and implied promises.
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> . . . .
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> The key to understanding [the] oil and gas lease . . . is to remember that the lease is a business transaction. A mineral owner, who generally lacks the capital or expertise to explore or develop, transfers those rights to an oil company [while reserving a royalty interest in production]. . . . Both parties expect to make a profit from the transaction, and the lease . . . sets out their bargain.

KUNTZ, *supra* note 19, at 138-39.

[95]Altman v. Blake, 712 S.W.2d 117, 118 (Tex. 1936).

[96]This is the full bundle of rights that comprises "ownership" of the mineral estate. *See Altman*, 712 S.W.2d at 118; Schlittler v. Smith, 101 S.W.2d 543, 544 (Tex. 1937). *See also* Kramer, *Conveying Mineral Interests*, *supra* note 13; MOSBURG, *supra* note 20, § 3.01.

[97]In economic terms, a royalty interest is a form of compensation used when value is speculative. It is a hedge against uncertainty. See HEMINGWAY, *supra* note 78, § 2.5.

[98]*Id.*

[99]A preliminary, and often critical, question in the interpretation process is the question of what evidence is admissible in construing the instrument. This inquiry involves application of the parol evidence rule and is beyond the scope of this Article. Generally, if a court finds the instrument to be ambiguous, it will consider extrinsic evidence. Conversely, if a court finds the instrument to be unambiguous, it will look only to the four corners of the instrument and use rules of construction to interpret the ambiguous language. In the overwhelming majority of cases

determines whether a royalty or mineral interest was reserved or conveyed? The answer to this factual inquiry depends on the interpretation given to specific language in an infinite variety of combinations and circumstances.[100]

The ultimate question in all cases is whether the parties intend to reserve or to convey a rock formation under the ground, or a can of oil at the surface. Some of the factors potentially influencing a court's interpretation of the parties' intent are discussed below.

Courts generally interpret "produced & saved" as royalty language while they generally interpret "in and under" as mineral language. These phrases are not universally controlling, and the ultimate determination often depends on whether the phrases are used alone or in combination with other words relating to the interest conveyed or reserved.

The label that the instrument places on the interest, either "mineral interest" or "royalty interest," is not controlling, but it may be some evidence of the parties' intent. Courts usually place little or no weight on the instrument's title. Many instruments entitled "Mineral Deed" have been held to convey royalty interests and vice versa. Thus, courts look to the instrument's substance, not the instrument's label, in determining whether a mineral or royalty interest was conveyed.

Courts usually consider whether the interest is cost-bearing and whether the instrument carries a right to lease or share in other economic benefits under the lease as controlling facts. Unfortunately, these factors are not usually clear from the instrument's language.

However, the presence of words indicating that the interest includes a right of ingress and egress or a right to drill suggests that the parties intended a mineral interest.[101] The question of whether a particular interest is a mineral or a royalty interest also arises in situations where a deed's granting clause grants minerals, but later deed language reserves or strips away most of the incidents of mineral ownership.

For example, in *Altman v. Blake*,[102] the granting clause provided:

> W.R. Blake, Jr. . . . does hereby grant . . . unto W.R. Blake, Sr. . . . an undivided one-sixteenth (1/16) interest in

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involving interpretation of oil and gas conveyances, courts tend to find the instruments unambiguous and refuse to hear extrinsic evidence. *See infra* part VIII (C).

[100]*See* HEMINGWAY, *supra* note 78, § 2.7(A).

[101]HOWARD R. WILLIAMS & CHARLES J. MEYERS, OIL & GAS LAW § 304 (Student Ed. 1985); HEMINGWAY, *supra* note 78, § 2.7.

[102]712 S.W.2d 117 (Tex. 1986).

> and to all of the oil, gas and other minerals in and under and that may be produced . . . . But does not participate in any rentals or leases . . . with the rights of ingress and egress at all times for the purpose of mining, drilling, exploring . . . .[103]

The Texas Supreme Court held that the deed conveyed a 1/16 mineral interest stripped of the executive right and the right to receive delay rentals.[104] In reaching that result, the court restated the component elements of the mineral estate[105] and reaffirmed the basic proposition that such component elements can be individually severed and transferred.

The court then ruled that the development right is the linchpin of the mineral estate. Although the right to develop is the most rarely used stick in the bundle of mineral rights, it is the right that is essential in distinguishing mineral interests from royalty interests. If the interest reserved or conveyed includes a right to develop, it is a mineral interest. Even when stripped of all apparent economic value, it remains a mineral interest rather than a royalty interest.[106]

B. *Size of the Interest—Double Fraction Ambiguities*

Title examiners may also encounter difficulty determining the size of the interest reserved or conveyed. Anytime someone who owns less than all of the minerals conveys or reserves a fractional interest, an ambiguity may exist as to whether the grant or reservation is intended to be a fraction of the whole estate or a fraction of that part of the estate owned by the grantor. This situation is called the "double fraction problem."[107]

One subset of the double fraction problem may arise when O, who owns 1/2 the minerals in Blackacre, conveys to E an undivided 1/4 of the

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[103] *Id.* at 117-18.

[104] *Id.* at 120. Although the deed seems ambiguous, the parties stipulated that the deed was unambiguous and the court looked only to the four corners of the instrument in construing it. By applying a rule of construction called the "greatest estate rule," *see infra* part VIII(D), the court found that 1/16 of the development rights passed under the deed and therefore concluded that the grantee received a 1/16 mineral interest rather than a 1/16 royalty interest.

[105] *See supra* note 96 and accompanying text.

[106] *See Altman*, 712 S.W.2d at 118-19. *See also* Kramer, *Conveying Mineral Interests*, *supra* note 13; Luckel v. White, 819 S.W.2d 459, 463 (Tex. 1991); Day & Co., Inc. v. Texland Petroleum, Inc., 786 S.W.2d 667, 669 (Tex. 1990).

[107] *See* HEMINGWAY, *supra* note 78, § 2.7(G).

oil and gas "produced and saved" from the above described land. A lease on Blackacre provides for a 1/8 royalty. The question is raised: What is the size of E's royalty? Is it 1/4 of the entire lease royalty or merely 1/4 of O's 1/2? Expressed mathematically, E's royalty could be:

1/4 of 1/8 = 1/32; or
1/4 of 1/2 of 1/8 = 1/64

Averyt v. Grande, Inc. illustrates this aspect of the double fraction problem.[108] In *Averyt*, the grantor, Grande, who owned the surface and 1/2 the minerals in a tract of land, conveyed the property to Averyt's predecessor in title, reserving 1/4 of the royalty on oil, gas, and other minerals produced from the "lands above described." The question was whether Grande reserved 1/4 of the royalty attributable to the entire tract or 1/4 of the royalty attributable to Grande's 1/2 interest in the tract.

The court held that Grande had reserved 1/4 of the royalty on the oil and gas produced from the entire tract.[109] The rule applicable to cases such as *Averyt*, sometimes called the "land conveyed/land described rule," has been restated as follows:

> [W]here a fraction designated in a deed is stated to be a mineral interest [(or a royalty interest)] in land described in the deed, the fraction is to be calculated upon the entire interest. . . . Where a fraction designated in a reservation clause is stated to be a mineral interest in land conveyed by the deed, the fraction is to be calculated upon the grantor's fractional mineral interest. . . ."[110]

Another subset of the double fraction problem may arise when inconsistent fractions appear in a conveyance. An example of this issue is found in the seminal case of *Alford v. Krum*.[111] The deed construed in *Alford* contained a "granting" clause which conveyed 1/2 of 1/8 of the minerals, a "subject to" clause which stated that the grantee was entitled to a 1/16 royalty interest under an existing lease, and a "future lease" clause

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[108]717 S.W.2d 891 (Tex. 1986).

[109]*Id.* at 895.

[110]*See* Will G. Barber, *Duhig to Date: Problems in Conveyancing of Fractional Mineral Interests*, 13 SW. L.J. 320, 322-23 (1959).

[111]671 S.W.2d 870 (Tex. 1984), *overruled in part*, Luckel v. White, 819 S.W.2d 459 (Tex. 1991).

which stated that upon expiration of the existing lease the grantee would receive a 1/2 interest in the minerals.[112] The Corpus Christi Court of Appeals held that the deed conveyed a 1/16 mineral interest during the pendency of the existing lease. On termination of the lease, the interest increased to a 1/2 mineral interest. The Texas Supreme Court reversed, holding that the deed conveyed a 1/16 mineral interest. The Court reasoned that the fraction in the granting clause would prevail as a matter of law due to the application of a canon of construction known as the "repugnant to the grant" doctrine.[113]

Commentators severely criticized *Alford*[114] and in 1991 the Texas Supreme Court overruled *Alford* in *Luckel v. White*.[115] *Luckel*, like *Alford*, involved inconsistent fractions in the "granting," "subject to," and "future lease" clauses.[116] In overruling *Alford*, the court rejected the "repugnant to the grant" approach and applied a well-known rule of construction known as the "four corners rule."[117] This rule of construction seeks to give effect to all portions of the deed, not just the granting clause. The four corners rule is the canon applied today in construing inconsistent fractions.

C. *Rules of Construction*

To deal effectively with mineral/royalty ambiguities, double fraction problems, and other construction problems, title examiners must understand how courts interpret ambiguities in instruments reserving or

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[112]*Id.* at 871-72.

[113]*Id.* at 872-74.

[114]*See e.g.* Tevis Herd, *Deed Construction and the "Repugnant to the Grant" Doctrine*, 21 TEX. TECH L. REV. 635 (1990); Robert Bledsoe & John Scott, *The Ten Most Regrettable Oil and Gas Decisions Ever Issued by the Texas Supreme Court—and the "Winner"—Based on a Survey*, EIGHTH ANNUAL ADVANCED OIL, GAS AND MINERAL LAW COURSE, STATE BAR OF TEXAS (1990).

[115]819 S.W.2d 459 (Tex. 1991).

[116]*Id.* at 460-61. The granting clause conveyed a 1/32 royalty interest, while the "subject to" and "future lease" clauses referred to 1/4 of lease royalties. At the time of the deed, the property was subject to an oil and gas lease with a 1/8 royalty. Leases in effect at the time of suit provided for 1/6 royalties. *Id.*

[117]*Alford*, *Luckel*, and *Jupiter Oil Co. v. Snow*, 819 S.W.2d 466 (Tex. 1991), a companion case to *Luckel*, as well as numerous other deed construction cases, are exhaustively treated in Bruce M. Kramer, *The Sisyphean Task of Interpreting Mineral Deeds and Leases: An Encyclopedia of Canons of Construction*, 24 TEX. TECH L. REV. 1 (1993) [hereinafter Kramer, *The Sisyphean Task*].

conveying interests in oil and gas.[118] Although many judicial opinions construing deeds state that the court is trying to ascertain the parties' intent, the holdings of those opinions often do not turn on the parties' subjective or objective intent. Courts do not affirmatively seek to render decisions contrary to the parties' intent, nor are they wholly indifferent to the parties' intent. On the contrary, courts do seek to ascertain the parties' intent, but generally only to the extent that the four corners of the instrument evidence such intent. Courts rarely admit extrinsic evidence to ascertain intent.[119] In oil and gas cases, when the parties' intent is not clear from the four corners of the instrument, courts generally apply rules of construction to interpret the instrument.[120]

Rules or canons of construction are not rules of law. Because the choice and use of canons of construction is discretionary with the courts, results are not always consistent.[121] Rather, canons of construction are mere statements of judicial preference used to resolve particular problems. They are based on common sense and human experience, and are designed to achieve what courts believe should be the normal result for the problem under consideration. Although the ostensible function of rules of construction is to ascertain the parties' intent, frequently the application of these rules defeats the actual intent of the parties. In reality, rules of construction are applied to resolve disputes in which the parties' intent is not clear.[122]

Courts apply rules of construction to lend a degree of certainty to the law. Although certainty is both a legitimate and powerful policy goal of property law, it is not necessarily related to intent. Results often do not reflect the parties' intent, irrespective of judicial statements to the contrary. An inverse relationship usually exists between a court's

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[118]*See* KARL LLEWELLYN, THE COMMON LAW TRADITION, DECIDING APPEALS (1960); Edwin W. Patterson, *The Interpretation and Construction of Contracts*, 64 COLUM. L. REV. 833 (1964).

[119]Courts are reluctant to admit extrinsic evidence in cases involving interpretation of written instruments. In Texas, admissibility depends on whether the court finds the deed ambiguous or unambiguous. In an overwhelming majority of cases, courts have found the language to be unambiguous. *See, e.g.*, Black v. Shell Oil Co., 397 S.W.2d 877, 887 (Tex. Civ. App.—Texarkana 1965, writ ref'd n.r.e.); Chandler v. Hartt, 467 S.W.2d 629, 634 (Tex. Civ. App.—Tyler 1971, writ ref'd n.r.e.).

[120]This Article only scratches the surface regarding the interpretation process and the use of rules of construction. *See* Kramer, *The Sisyphean Task*, *supra* note 117; MOSBURG, *supra* note 20, § 3.06.

[121]*See* Kramer, *The Sisyphean Task*, *supra* note 117, at 124.

[122]*See* 6A RICHARD R. POWELL, THE LAW OF REAL PROPERTY ¶ 899[3] (1994).

willingness to admit extrinsic or parol evidence and a court's use of canons of construction. "The more extrinsic evidence that is admitted, the less the court needs to resort to canons of construction."[123]

The idea behind the popular expression, "[t]his is tantamount to a rule of property," is that such a rule creates certainty. Once the title examiner appreciates the quest for certainty, deed construction cases and the application of rules of construction to resolve those cases become somewhat easier to understand and manage.

Numerous rules of construction exist,[124] but the following three rules are frequently found in oil and gas cases and warrant special attention:

1. The "Greatest Estate" or "Greatest Interest Rule," states that courts will interpret a deed that does not specifically limit the size or nature of the interest conveyed as conveying everything the grantor owns. In other words, the grantor conveys everything he owns except that which is specifically reserved.

2. The "In Sequence Rule" states that the court will interpret the language describing the grant before it will interpret the language describing the reservation. Thus, courts interpret each portion of the conveyance in sequence, without reference to other portions of the document. If the language of the granting clause conflicts with the language of the reservation clause, the granting clause generally prevails.

3. The "Literal Meaning Rule" directs courts to give the words of a conveyance their literal meaning. The drafter is deemed to have meant exactly what he or she stated in the instrument.

Averyt v. Grande[125] illustrates the application of the "literal meaning rule." In *Averyt*, the deed literally reserved a fraction of the "land described," and the described land encompassed the entire tract, not a 1/2 interest in the tract. *Averyt* also illustrates the "in sequence rule." The

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[123]Kramer, *The Sisyphean Task*, *supra* note 117, at 6; *see supra* note 119.

[124]*See generally* Kramer, *The Sisyphean Task*, *supra* note 117.

[125]717 S.W.2d 891 (Tex. 1986).

court construed the grant before it interpreted the reservation, and the court resolved conflicts in favor of the grant.[126]

Altman v. Blake[127] applied the "greatest estate rule." In *Altman*, the component parts of the mineral estate, which were not specifically reserved, passed to the grantee.

Courts apply dozens of other rules of construction. Some of the commonly applied rules of construction include the following:

1. Courts construe instruments against the party preparing the instrument. Accordingly, real estate leases are construed against the lessor, while oil and gas leases are construed against the lessee.

2. Typewritten or handwritten provisions prevail over printed provisions.

3. In the event of conflict between provisions, specific provisions prevail over general provisions.

4. Through the rule of *ejusdem generis*, courts interpret general words that follow specific words as referring to the same types of items described by the specific words.[128]

Although rules of construction are not rules of law, some rules of construction have become so entrenched that some courts follow them as if they were rules of law. Unfortunately, these rules occasionally are applied blindly and in lieu of rational thought.

Justice Calvert aptly described rules of construction and their place in the larger process of judicial interpretation:

> Courts try to solve disputes over the *meaning* of contracts by giving them the meaning the parties intended them to have. This is as it should be. But what meaning the parties to a contract *intended* it to have is often unclear. Once a dispute arises over meaning, it can hardly be expected that the parties will agree on what meaning was

[126]*Alford v. Krum* may be characterized as an extreme application of the "in sequence rule."

[127]712 S.W.2d 117 (Tex. 1986).

[128]*See* Kramer, *The Sisyphean Task*, *supra* note 117, at 84-100, 103-05. Professor Kramer lists and attempts to define a number of additional canons of construction in his article.

> intended. It is for this reason that the courts have built up a system of rules of interpretation and construction to arive at meaning, ignoring testimony of subjective intent.
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> "Intention of the parties" is often guesswork at best. Sometimes the true intention of one or even of both parties may be defeated. . . . So, while use of rules of interpretation and construction may not always result in ascertaining the true intention of parties in using particular language . . . , their use yet must be better than pure guesswork in most cases else they would never have been evolved.[129]

Knowledge of the process followed by courts when interpreting conveyances helps the title examiner make determinations in his title opinion. However, no title examiner has sufficient knowledge in this area to answer all interpretation questions that might arise in the course of a title examination. Potential conveyancing ambiguities in the chain of title are simply too broad and too varied. Further, judicial decisions in this area are inconsistent. As Professor Kramer propounded:

> The continued adherence to outdated forms as well as continued confusion as to the nature of the interests owned by the parties after an oil and gas lease has been executed have created difficult interpretational issues. These difficulties have led to a jurisprudence with little predictability and doctrinal upheaval.[130]

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[129]Southland Royalty Co. v. Pan Am. Petroleum Corp., 378 S.W.2d 50, 58 (Tex. 1964) (Calvert, J., concurring).

[130]Kramer, *The Sisyphean Task*, *supra* note 117, at 129. Early in his article, Professor Kramer analogizes his task of rationalizing Texas jurisprudence in the area of judicial interpretation to the task of Sisyphus, a character from Homer's *Odyssey*, who was condemned in Hell to roll a large boulder to the top of a steep hill. Each time Sisyphus got the boulder to the top of the hill, it rolled over the crest and down the other side. Professor Kramer summarized the results of his attempt to "rationalize the myriad canons of construction that have been used and abused in Texas case law" as follows:

> To continue the Sisyphean analogy, the boulder has been pushed to the top of the hill several times, only to become dislodged and roll back over me on its headlong journey back down the hillside. I hope, that by exposing the difficulties encountered in the

If an eminent legal scholar is unable to "discern the big picture or. . . categorize and rationalize the myriad canons of construction that have been used and abused in Texas case law,"[131] it is unlikely that a title examiner, struggling to complete a title opinion under time pressure, could resolve all of the inconsistencies and uncertainties. Fortunately, the title examiner does not have to resolve all of these difficult questions with perfect certainty. If controlling precedent provides a clear solution to a particular problem, the attorney can set forth appropriate conclusions in the title opinion. Otherwise, the title attorney should not speculate on how a court may resolve a particular uncertainty. Instead, the attorney should state the problem and suggest curative steps that are necessary to insure good title regardless of how the courts interpret the conveyance.[132]

D. *Overconveyances and Estoppel by Deed: The* Duhig *Rule*

All title examiners should be aware of the rule announced in *Duhig v. Peavy-Moore Lumber Co.*[133] The *Duhig* Rule, followed in Texas and most oil-producing states, is a rule of law rather than a rule of construction.[134] The rule rests on a of breach of warranty theory and estoppel by deed, and it applies with mathematical certainty, irrespective of actual knowledge or equities.

The *Duhig* Rule applies to overconveyances by general warranty deed. A clear statement of the *Duhig* Rule is as follows:

> Where a grantor conveys an interest in the minerals and in the same instrument reserves a mineral interest, and where there is a prior interest outstanding that is not excepted from the operation of the deed, so that effect may not be given to both the interest that grantor has purported to convey and the interest grantor has attempted to reserve,

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jurisprudence of deed interpretation, to have others join me in the task of pushing the boulder until it comes to rest at the top of the hill.

Id. at 128, n.591.

[131] *Id.* at 128.

[132] *See* MOSBURG, *supra* note 20, § 3.06; *supra* part IV(A) & IV(B); *infra* part X.

[133] 135 Tex. 503, 144 S.W.2d 878 (Tex. 1940).

[134] In contrast to rules of construction, which courts may apply in their discretion, rules of law are mandatory if applicable. The court clearly intended the *Duhig* rule to be a rule of law. *Id.* at 880.

> under the rule of *Duhig v. Peavey-Moore Lumber Co.*, the grantee is not limited to a suit in damages for failure of title, but the attempted reservation will fail to the extent necessary to make the grantee whole. Where complete failure of the reserved interest is insufficient to make the grantee whole, he will also have a cause of action in damages for failure of title.[135]

In other words, the grantor cannot grant and reserve the same interest. If the grantor does not own a large enough interest to satisfy both the grant and the reservation, the grant will be satisfied first under the rationale of breach of warranty and estoppel by deed. The grantor will be estopped from claiming any interest until the grantee is made whole.[136]

The *Duhig* Rule only applies to conveyances by warranty deed. Because the rationale for the *Duhig* Rule rests on breach of warranty, the rule clearly does not apply to conveyances through quitclaim deeds, which do not warrant anything.[137]

Similarly, the *Duhig* Rule does not apply to oil and gas leases. In *McMahon v. Christmann*,[138] the Texas Supreme Court reasoned that since lessors frequently execute oil and gas leases purporting to cover the entire mineral interest, even though the lessors own only an undivided interest in the leased premises, applying the *Duhig* Rule to leases would be unfair. Accordingly, if a lessor who owns only 1/2 the minerals executes a lease purporting to cover 100 percent of the minerals, courts will not take any part of the lessor's reserved royalty under the *Duhig* Rule. Of course, the lessor's interest might be reduced through operation of a proportionate reduction clause in the lease.[139]

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[135]HEMINGWAY, *supra* note 78, § 3.2 at 128.

[136]*See* Acoma Oil Corp. v. Wilson, 471 N.W.2d 476 (N.D. 1991). *Acoma* contains a good statement of the *Duhig* Rule. The *Acoma* court applied the rule even though the deed did not contain a reservation.

[137]*See* Hill v. Gilliam, 682 S.W.2d 737, 739 (Ark. 1985). In a warranty deed, the grantor warrants that he has title, while in a quitclaim deed the grantor does not warrant anything. He merely conveys whatever interest, if any, that he has. While *Duhig* does not apply to conveyances by quitclaim deed, it apparently does apply to conveyances by special warranty deed—a deed under which the grantor makes only limited warranties. *See* Blanton v. Bruce, 688 S.W.2d 908, 911-14 (Tex. Civ. App.—Eastland 1985, writ ref'd n.r.e.).

[138]157 Tex. 403, 410, 303 S.W.2d 341, 346 (1957).

[139]*See* HEMINGWAY, *supra* note 78, § 7.8 at 407-08.

E. *Other Commonly Encountered Title Problems*

Title examiners may encounter a plethora of title problems in addition to problems involving the nature and size of the interests reserved or conveyed. This Section briefly discusses some of the more commonly encountered title problems. The problems discussed in this Section represent only a small sampling of potential title problems and serve merely as examples.[140]

1. Possession

When someone other than the record owner possesses a tract of land, persons dealing with the land are charged with knowledge of possession, and they have a legal duty to determine the rights or claims of persons in possession.[141] The examining attorney normally has no knowledge of possession, and unless furnished with information of possession by the landman or client, the attorney should make a routine comment in the title opinion advising the client of its duty of inquiry.

2. Unreleased Oil and Gas Leases

The title examination may reveal prior unreleased oil and gas leases which have apparently expired but are still recorded. These unreleased leases constitute a cloud on title to the mineral estate.[142] The best method of removing this cloud on title is to secure a recordable release from the prior lessee. If a release cannot be obtained, other solutions may be available depending upon whether the unreleased lease is in its primary or secondary term.[143] The title opinion should suggest specific methods for

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[140]LANGE & LEOPOLD, *supra* note 9, the four volume work frequently cited in this Article, is the most comprehensive attempt within a single work to deal with potential title problems that might arise in Texas. Even this massive treatise falls far short of answering all potential title questions arising during the course of a title examination.

[141]*See, e.g.*, Grossman v. Jones, 157 S.W.2d 448, 451 (Tex. Civ. App.—San Antonio 1941, writ ref'd w.o.m.).

[142]*See, e.g.*, Best Inv. Co. v. Parkhill, 429 S.W.2d 531, 534 (Tex. Civ. App.—Corpus Christi 1968, writ dism'd w.o.j.). Any deed, contract, judgment, or other instrument which purports to convey an interest in or make any charge upon land, the invalidity of which would require proof, clouds the owner's title. *See also* Angus E. McSwain, *Westland Oil Development Corp. v. Gulf Oil: New Uncertainties as to Scope of Title Search*, 35 BAYLOR L. REV. 629 (1983).

[143]A primary term is "the period of time during which a lease may be kept alive by a lessee even though there is no production in paying quantities by virtue of drilling operations on the leased land or the payment of rentals," and a secondary term is the period after the primary term expires where the lease is continued by operation of the "thereafter" clause. HOWARD R.

removing this cloud on title.[144]

3. Mortgages, Deeds of Trust, and Other Liens

Mortgages, deeds of trust, and other liens against the property, including tax or judgment liens, recorded prior to the oil and gas lease, constitute clouds on title to property.[145] The title opinion should contain a requirement that the mortgage, deed of trust, or other lien be released of record or subordinated to the oil and gas lease. Few lienholders are willing to release their liens, but most are interested in the financial well-being of their debtors and the value of collateral securing payment of the loan. Since oil and gas development may enhance the property value, and thus the mortgagee's collateral, many knowledgeable mortgagees agree to subordinate their liens to the oil and gas lease. If a release cannot be obtained, or if the mortgagee is unwilling to subordinate her lien, and no satisfactory alternative solutions can be found, the lessee may exercise business judgment and waive the title requirement.[146] The lessee is particularly likely to waive the title requirement when the outstanding indebtedness secured by the mortgage is relatively small and the lease contains a subrogation clause.

4. Heirship and Probate

The death of the record property owner may raise numerous title issues. If the record owner dies intestate, her property passes to her heirs under the laws of descent and distribution. If the record owner dies with a valid will, her property passes to the decedent's devisees pursuant to the terms of the will, provided that the will is properly probated.

Succession between the decedent and her heirs or devisees is generally

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WILLIAMS & CHARLES J. MEYERS, MANUAL OF OIL AND GAS TERMS ANNOTATED 189, 225 (1957).

[144]If the lease is in its primary term, the cloud can be removed by evidence of expiration of the lease, such as by non-production and non-payment of delay rentals. After the primary term of the unreleased lease expires, the cloud can possibly be removed through physical inspection of the property and a recordable "Affidavit of Non-Production." Someone familiar with operations on the property should execute the affidavit, and if the lease has a pooling clause, the affidavit should cover all lands which might conceivably have been pooled with lands covered by the unreleased lease. *See* MOSBURG, *supra* note 20, §§ 5.03 & 5.07(b).

[145]*See id.* § 5.07(d).

[146]*See id.* § 5.07(a).

established under the probate law[147] of the state in which the property is located. The title examiner must identify the heirs or devisees and determine whether their succession was established according to applicable law. Detailed consideration of the law of wills and estates is beyond the scope of this Article. In general, intestate succession is judicially determined through various actions in probate court.[148] In some circumstances judicial action may not be necessary to determine heirship—proof of death and an affidavit of heirship may suffice as evidence of succession.[149] When property passes by will, the attorney must examine copies of the will and related probate proceedings to determine whether property title passed to the devisees named in the will, pursuant to such proceedings, and free of all liens.[150]

Title examiners often face practical problems concerning succession by inheritance. For example, assume O, the record owner of property in Goliad County, dies either testate or intestate in Harris County. O's sons, A and B, live on the property and execute leases in favor of X Oil Co., but nothing recorded in Goliad County shows their succession to title. In this situation, the examining attorney routinely makes a requirement in the title opinion relating to proof of heirship. The opinion will generally require, if O died testate, that a certified copy of his will and the related probate proceedings be recorded in Goliad County. If O died intestate, a certified copy of any proceeding to determine heirship should also be filed in Goliad County. In most circumstances, if no formal proceeding to determine heirship took place, proof of death and a recordable affidavit of heirship will usually suffice.

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[147]*See* TEX. PROB. CODE ANN. § 3 (Vernon 1980 & Supp. 1994). "Probate" is sometimes narrowly defined as the judicial process of proving a will. Modern usage gives the term broader meaning to include all judicial activity related to winding up a decedent's affairs, whether the decedent died testate or intestate. For example, Chapter II of the Texas Probate Code covers intestate succession. This Article uses the term "probate" in the broader sense.

[148]*See, e.g.*, TEX. PROB. CODE ANN. § 48(a) (Vernon 1980) (Proceedings to Declare Heirship). If a person dies intestate, the court, pursuant to statute, may determine who the decedent's heirs are as well as their respective shares and interests under Texas law.

[149]*See* TEX. PROB. CODE ANN. §§ 37-38 (Vernon 1980 & Supp. 1994). *See also* MOSBURG, *supra* note 20, § 5.06(d); LANGE & LEOPOLD, *supra* note 9, §§ 1021-1025. At the other extreme, an action to quiet title may be required to set the record straight. *See infra* note 194 and accompanying text.

[150]Numerous Probate Code provisions may impact these determinations. Thus, a title examiner must have broad knowledge of probate matters.

5. Capacity of Parties

Various questions may arise regarding the capacity of parties executing instruments in the chain of title. Instruments such as leases or deeds executed by agents, corporate officers, executors, guardians, or trustees should raise red flags for the title examiner relative to capacity issues. For example, if an agent or attorney executes a lease or deed, the title examiner will probably want to examine the power of attorney to determine whether the power of attorney gives the agent authority to execute the instrument and convey the interest.[151] Similar considerations apply to instruments executed by guardians, executors, administrators, trustees, corporate officers, and other fiduciaries or representatives. In all of these cases, the title examiner must carefully check the record, applicable statutes, and court proceedings for evidence of the representative's or fiduciary's power and authority to execute the instrument in question and bind the estate or principal. [152]

6. Name Discrepancy

Sometimes the record reveals discrepancies in the spelling of a name of a given grantee and a subsequent grantor in the chain of title. The title examiner must determine whether this name discrepancy creates a material title defect. The examiner should use common sense and reason to determine which name discrepancies are worth noting. If sufficient evidence in other chain of title instruments establishes the parties' identity, then minor discrepancies can probably be ignored, absent special circumstances. If legitimate uncertainty exists regarding the identity of a person in the chain of title, an affidavit of identity should be required in the title opinion.[153]

7. Spouses

Numerous title problems may arise relating to spouses, such as a

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[151]For example, the title examiner may have to determine that the principal was alive at the time the agent executed the instrument. Notably, the power to sell does not include the power to execute oil and gas leases. *See* Bean v. Bean, 79 S.W.2d 652, 654 (Tex. Civ. App.—Texarkana 1935, writ ref'd).

[152]*See infra* part VIII(F). Title standards such as those currently in effect in Oklahoma and those proposed in Texas, as well as local statutes, establish certain presumptions regarding capacity.

[153]*Id.* The title standards referred to in note 166, *infra*, also create certain presumptions regarding identity. *See also* MOSBURG, *supra* note 20, § 5.03(d).

spouse's non-joinder in a deed or lease. The gravity of these problems will depend on the nature of the property, such as homestead classification; local law, such as community property classification; or various other considerations. [154] The examiner must note specific problems and should suggest solutions in the title opinion.

8. Life Tenants and Remaindermen

Leases from life tenants and remaindermen may raise problems. Subject to certain exceptions, the property interest held by life tenants and remaindermen requires joinder of both parties to grant leases. The life tenant may not commit waste on the property, and the remaindermen have no possessory rights until the death of the life tenant. In addition, special rules govern the manner in which royalty, bonus, and delay rentals are allocated among life tenants and remaindermen, and the allocation should be reflected in the title opinion.[155]

9. Roads and Easements

The examiner should carefully review instruments creating roads, streets, or other strips of land to determine whether the interest granted was a fee interest or an easement. The examiner should ascertain the easement's ground location and should read the instruments creating the easement in their entirety to determine whether the easement will interfere with oil and gas operations. Conveyances by grantors who own land bounded by public highways or railroad rights-of-way may own mineral rights to the center of such roads or rights-of-way.[156]

F. *Handling Title Irregularities: Title Standards*

Although few titles are perfect, even fewer are fatally defective. The title attorney should not lose sight of the title examination's purpose and the applicable standards. The title attorney advises the client regarding

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[154]The Title Standards referred to in note 166, *infra*, also create presumptions regarding spouses.

[155]*See, e.g.*, Prairie Oil & Gas Co. v. Allen, 2 F.2d 566, 573 (8th Cir. 1924); HEMINGWAY, *supra* note 78, § 5.2 (A-D). Section 5.2(C) of HEMINGWAY discusses the "Open Mine Doctrine," which is an exception to the general rule regarding allocation of interests between the life tenant and remaindermen.

[156]*See, e.g.*, Rio Bravo Oil Co. v. Weed, 50 S.W.2d 1080, 1084 (1932), *cert. denied*, 288 U.S. 603 (1933); Cox v. Campbell, 143 S.W.2d 361, 362 (1940). *See also* LANGE & LEOPOLD, *supra* note 9, §§ 371-387.

marketability of title while exercising a high degree of judgment based on the title's vulnerability to attack. Title attorneys do not serve their client's best interest by raising objections of questionable materiality or by writing lengthy dissertations on esoteric points of law which have little practical effect. The attorney should provide the client with a title opinion that is a workable tool for rendering title acceptable. The opinion should summarize the title's current status and provide useful, relevant guidelines for dealing with title objections and making title acceptable.

In the context of this overriding objective, title attorneys routinely apply certain presumptions of fact and rules of law. For example, deeds are presumed delivered, signatures are presumed valid, and grantors are presumed competent unless the record indicates otherwise.[157] While these propositions are well-established, other propositions are weaker and may be viewed differently by different title examiners. For example, what is the impact on marketability if: (1) deeds are recorded but not acknowledged, (2) deeds fail to disclose a grantor's marital status, (3) deeds omit a spouse's signature or (4) deeds reveal name discrepancies? The answers to these and similar questions may vary significantly among title examiners. To foster a higher degree of uniformity among title examiners and to aid title examiners in distinguishing defects that impair marketability from minor irregularities which do not affect marketability, the bar associations of at least twenty-six states have promulgated "title standards" or "uniform title examination standards," terms used synonymously in this Article.[158] A title standard is a statement, officially approved by a professional organization of lawyers, which declares

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[157]Many states, including Texas, now have statutes making the public record prima facie evidence of execution and delivery. TEX. PROP. CODE ANN. § 5.021 (Vernon 1984). *See also* Hunter v. Meshack, 471 S.W.2d 155, 157 (Tex. Civ. App.—Tyler 1971, writ ref'd n.r.e.) (filing of deed for recordation establishes a rebuttable presumption of delivery); Austin Lake Estates Recreation Club, Inc. v. Gilliam, 493 S.W.2d 343, 347-48 (Tex. Civ. App.—Austin 1973, writ ref'd n.r.e.) (recording a deed results in a presumption that the grantor intended to effect a conveyance, and no further act of delivery is required); Sorsby v. State, 624 S.W.2d 227, 234 (Tex.Civ.App—Houston [1st Dist.] 1981, no writ) (recording a deed is *prima facie* evidence of grantee's acceptance). *See also* MOSBURG, *supra* note 20, § 5.05.

[158]Interim results of a survey dated October 19, 1989, conducted by the Joint American Bar Association/Oklahoma Bar Association/Oklahoma City University Title Examination Standards Resource Center Project, show that the following 26 states have adopted title examination standards: Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Iowa, Kansas, Maine, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Mexico, New York, North Dakota, Ohio, Oklahoma, Rhode Island, South Dakota, Utah, Washington, Wisconsin, and Wyoming.

solutions to problems that regularly arise in the title examination process.[159] The State bar association is usually the approving organization. The scope and function of title standards have been described as follows: A title standard should represent the substantially unanimous opinion of bar association members experienced in conveyances. However, a title standard may cover questions upon which inexperienced conveyancers are uninformed or may cover questions with respect to which over-ambitious conveyancers may take a position contrary to that of the great majority of competent experienced conveyancers. In other words, title standards should not cover questions which are controversial among competent, experienced conveyancers. However, the standards should resolve questions that cause problems for inexperienced parties.[160]

Title standards promote uniformity, establish realistic practice standards, represent the recognized practices of the organized profession, and provide useful checklists for inexperienced title examiners.[161] While the scope of title standards varies substantially from state to state,[162] they typically encompass several areas. Some commonly included areas are: (1) duration of the search; (2) effect of lapse of time on title defects; (3) presumptions of fact which title examiners ordinarily should recognize; and (4) law that applies to recurring situations.[163]

Oklahoma, a leader in the adoption and application of title examination standards, recognizes two primary purposes of title standards: (1) alleviating disagreements among bar association members on matters which impact title and (2) setting forth matters which most lawyers agree on when reviewing title. The Oklahoma Bar Association adopted its first title standards in 1946. Since 1962 these title standards have been published in the Oklahoma Statutes Annotated.[164] In 1982 the Oklahoma Supreme Court endorsed the Title Examination Standards of the Oklahoma Bar Association as follows:

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[159]LEWIS M. SIMES & CLARENCE B. TAYLOR, MODEL TITLE STANDARDS, 1 (1960) [hereinafter SIMES & TAYLOR].

[160]*Id.* at 6.

[161]*Id. at 3. See also* Rehler, *supra* note 29.

[162]Compare the Proposed Texas Title Standards, *infra* note 166, with the Oklahoma Title Standards, *infra* note 164.

[163]SIMES & TAYLOR, *supra* note 159, at 3-4.

[164]16 OKLA. STAT. ANN. tit. 16, ch. 1 (West 1986 & Supp. 1994). In addition to publication in the Oklahoma Statutes, the real property section of the Oklahoma Bar Association publishes the Oklahoma Title Standards annually. These standards are widely disseminated and extensively used by Oklahoma practitioners.

> While [the Oklahoma] Title Examination Standards are not binding upon this Court, by reason of the research and careful study prior to their adoption and by reason of their general acceptance among the members of the bar of this state since their adoption, we deem such Title Examination Standards and the annotations cited in support thereof to be persuasive.[165]

Texas does not currently have title standards. However, in 1990, the Real Estate, Probate, and Trust Law Section of the Texas State Bar established a Title Examination Standards Subcommittee. That subcommittee was charged with the task of drafting a set of title examination standards for Texas. The subcommittee's initial draft of Proposed Texas Title Standards is now in its final stages of revision.[166] The Proposed Texas Title Standards are generally modeled after Oklahoma's Title Standards but are much less extensive in their scope and coverage. Finalization and approval of the Proposed Texas Title Standards will be a positive step toward promoting uniformity and providing needed guidelines for Texas title examiners.[167]

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[165]Knowles v. Freeman, 649 P.2d 532, 535 (Okla. 1982).

[166]The Proposed Texas Title Standards have not been officially published. The latest draft furnished this writer was a discussion draft dated April 6, 1994. All references in this Article to the "Proposed Texas Title Standards" or to specific Texas title standards are to the standards set forth in the the April 6, 1994, discussion draft. To trace the evolution of the proposed Texas Title Standards compare the standards set forth in the discusion draft dated April 6, 1994, with those set forth in the concept draft dated March 1, 1991, appended to Rehler, *Proposed Title Examination Standards for Texas*, *supra* note 161.

[167]The following excerpts from SIMES & TAYLOR, *supra* note 159, at 1-3, illustrate the desirability of title standards:

> Perhaps there is no greater delusion current among inexperienced conveyancers than that land titles are either wholly good or wholly bad, and that the determinination of the person who has the title is merely a mathematical process of applying unambiguous rules of law to the abstract of the record. Yet the experienced conveyancer knows that the process of determining the marketability of a title is much more like determining whether, under all the facts, a man has a cause of action for negligence, than it is like the calculation of the amount of income tax a person owes on a given date.
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> No record, or abstract of the record, gives all the facts from which marketability must be determined. . . . If the practice of conveyancers is not uniform, the tendency always is for the standards of the overmeticulous conveyancer to determine the standards of

IX. TITLE OPINIONS

A title opinion reflects the results of the title examination and advises the client as to the current status of title and what is required to make title marketable. Although title opinions vary somewhat, they generally advise the client regarding ownership of the surface, mineral, and leasehold interests. In the course of setting out ownership of all interests, the opinion should address all aspects of title emanating from such ownership.[168]

A. *Types of Title Opinions*

At several stages in the course of leasing and developing land and marketing oil and gas production, title examinations and/or title opinions may be required. The most frequent of these stages are:

1. Lease purchase title opinions which are rendered before the lessee pays the lessor a bonus for executing an oil and gas lease.

2. Drilling title opinions which are rendered before drilling begins.

3. Division order title opinions which are rendered before production purchasers pay the owners of such production.[169]

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all conveyancers. . . . Thus, uniform title standards have great remedial value because they crystallize the practices of conveyancers; and instead of being merely the recognized practices of individuals in a profession, they become also the recognized conclusions of the organized profession itself.

[168]*See* Herd, *Title Opinions*, *supra* note 20, at 298.

[169]These are title opinions of general application. There are numerous other types of title opinions which are more limited in scope and application and are beyond the scope of this Article. The most commonly encountered of these other title opinions include: (1) purchase opinions—rendered when one or more production owners sell their interests and (2) mortgage opinions—rendered when lenders loan money secured by production. Title opinions can be either broad or quite limited. *See* John L. Beckham & Charlotte Parker, *Title Examination/Opinions*, OIL, GAS AND MINERAL LAW FOR LAWYERS AND LEGAL ASSISTANTS, PROFESSIONAL DEVELOPMENT PROGRAM, STATE BAR OF TEXAS (1990) [hereinafter Beckham]. *See also* MOSBURG, *supra* note 20, § 4.05.

The first full title opinion rendered on a piece of property is the "original" title opinion. For example, if a full title opinion is rendered at the lease purchase stage, then that opinion will be the "original" opinion, and a subsequent opinion rendered on the same property prior to drilling will be a "supplement" to the original opinion. While practices vary, most companies rely on record checks by landmen at the leasing stage and do not secure formal title opinions at that time. Thus, the opinion prepared prior to drilling is typically the "original" opinion. If drilling results in production, a Division Order Title Opinion must be prepared to facilitate preparation of "division orders."[170] Division Order Title Opinions set forth the respective percentage ownership of all parties having interests in production from the well and the land covered by the opinion.

Original Drilling Opinions and Division Order Opinions are the two most common types of title opinions. Both Original Drilling Opinions and Division Order Opinions are frequently supplemented to reflect the status of title requirements, new information, curative matters, or changes in the size or composition of the unit. Original Drilling Opinions and Division Order Opinions differ in two fundamental ways. First, Original Drilling Opinions typically trace title back a relatively long way in time, often to sovereignty, while Division Order Opinions, covering the same land, trace title back only to the closing date of the Original Drilling Opinion or the most recent supplement. Second, Original Drilling Opinions typically cover all leased property, while Division Order Opinions cover only the property allocated to the actual spacing unit established for a particular well.[171] Skeletal forms of an Original Drilling Opinion and a Division Order Title Opinion are attached as appendices to serve as examples and facilitate the discussion of the form and content of Title Opinions.

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[170] "Division order means an agreement signed by the payee directing the distribution of proceeds from the sale of oil, gas, casinghead gas, or other related hydrocarbons. The order directs and authorizes the payor to make payment for the products taken in accordance with the division order." TEX. NAT. RES. CODE ANN. § 91.401(3) (Vernon 1991) (defining "Division Order"). In other words, a division order is a special type of contract which is revocable at will by either party. As a general rule, division orders, even if erroneous, are binding on the parties until revoked or terminated. *See* Exxon Corp. v. Middleton, 613 S.W.2d 240, 250 (Tex. 1981). However, when an operator benefits from the underpayment of royalty, the underpaid owners can recover for underpayments prior to revocation. *See* Gavenda v. Strata Energy, Inc., 705 S.W.2d 690, 691-92 (Tex. 1986). *See also* HEMINGWAY, *supra* note 78, § 7.5. For information relating to title attorneys' potential liability for errors or omissions in division order title opinions, see *infra* notes 172-180 and accompanying text.

[171] *See* appendices; MOSBURG, *supra* note 20, § 4.05.

B. *Malpractice Liability*

Many people read, work with, and rely on title opinions. Consequently, material errors or omissions in a title opinion expose the title attorney to malpractice liability, as illustrated in *Gavenda v. Strata Energy, Inc.*[172] In *Gavenda*, the operators, who had drilled a producing well on certain property, hired an attorney to prepare a Division Order Title Opinion.[173] Well production proceeds were paid to the operators, who distributed these proceeds to the various owners of well production, including the Gavendas, who owned a nonparticipating royalty interest.[174] The size of the Gavenda interest was later questioned. All parties to the suit signed division orders which reflected the interests set out in the Division Order Title Opinion.[175]

The title attorney found a reservation of "a one-half (1/2) non-participating royalty" extremely high and concluded that the parties probably meant to reserve a one-half (1/2) royalty.[176] The attorney's Division Order Title Opinion and the division orders prepared and signed based on that opinion reflected that interpretation.[177] Payments were made pursuant to those division orders for several years. Subsequently, nonparticipating royalty owners revoked the division order and filed suit, claiming a full one-half royalty interest.[178] The court agreed with the royalty owners and rendered judgment against the operators for approximately $2.4 million, the amount of the underpayment from date of first production.[179] The operators filed a malpractice cross action against the attorney who rendered the opinion.[180]

C. *Form and Structure of Title Opinions*

Title opinions take the form of letters from the examining attorney to the operator or purchaser of production, expressing the attorney's conclusions as to the status of title. The form and structure of the title

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[172] 705 S.W.2d 690 (Tex. 1986).

[173] *Id.* at 690-91.

[174] *Id.*

[175] *Id.*

[176] *Id.* The opinion erroneously concluded that the Gavendas were entitled to a 1/16 royalty interest rather than a 1/2 royalty interest.

[177] *Id.*

[178] *Id.*

[179] *Id.*

[180] *Id.* at 693.

opinion may vary significantly, depending on the opinion's purposes and the preferences of the particular attorney and client. However, basic principles relative to organization, form, and structure should be followed in preparing all opinions.

All opinions should contain essential information and be written to advise the readers of the current status of title and how to bring title to marketability status. The opinion should be well organized and limited to relevant information. The examples of original and division order opinions, attached as appendices, contain the minimal information required in a title opinion. The attachments reflect the significant differences in structure, content, and organization between original opinions and Division Order Opinions.

The heart of the original opinion is the section captioned "Title," which sets forth the attorney's conclusions as to the status of the surface title, and the minerals and leasehold interests in the property under examination as of the opinion's closing date. Ideally, every other part of the opinion should implement, explain, complement, or qualify the information contained in that section. The following sections should be included in the title opinion:

1. The caption or "RE Clause" should briefly describe the property under examination with appropriate reference to the lease and land involved.

2. The "Material Examined" section sets forth the examined materials on which the attorney based his opinion.

3. The section captioned "Patent Information and Chain of Title" should contain a brief narrative description of the chain of title, which helps readers understand the basis for the attorney's conclusions and exceptions to title.

4. The section captioned "Validity and Maintenance of Lease" contains the attorney's conclusions regarding the current validity of the lease and how the lease was maintained. This section typically refers to an exhibit which summarizes the principal lease terms for easy reference by the client.

5. The sections on "Taxes" and "Easements and Rights of

Way" should contain information on the status of payment of ad valorem taxes and the existence of any easements which might affect operations on the property.

6. In a series of numbered paragraphs under the caption "Comments and Requirements," the opinion should set forth exceptions to title and the requirements to make title marketable.

7. Under the caption "Limitations," the attorney should note matters that the opinion does not cover.

8. Special facts or circumstances might call for additional captions or other information.

The heart of the division order opinion is the "Division of Interest" referred to in the opinion section of the same name and set out in detail in Exhibit A. In this section, the attorney sets forth in decimal form the well production ownership among the persons owning royalty, overriding royalty, and working interests in such production. The sum of the decimals will always equal one (1). The formula used to derive the decimal interests is set out to inform the reader how the attorney reached his or her conclusions.

The other sections of the Division Order Opinion implement, explain, complement, or qualify the Division of Interest. No title history is typically necessary in a Division Order Opinion since the time period covered is usually short. A narrative description of well interest assignments may be necessary, depending on the scope and complexity of the assignments. A section detailing the current status of the comments and requirements contained in the earlier opinion is often included.

The attorney should emphasize accuracy and completeness when preparing a title opinion. Many people, such as company management, landmen, lease analysts, division order analysts, and others, including attorneys, work with the title opinion. In fact, parties often pass around and rely on title opinions well into the future. The examining attorney should strive to write and structure the opinion in a manner that makes it as readable and as easy to work with as possible, without sacrificing

accuracy.[181] In short, the examining attorney assumes a high degree of responsibility each time he signs a title opinion. He should strive to produce complete, accurate, and relevant results, while producing succinct and well-written opinions.[182]

X. CURING TITLE DEFECTS

Curing title defects discovered during the title examination is the final step in the process discussed in this Article. Title requirements and curative matters represent two sides of the same coin; thus, curative considerations are part and parcel of the examination process. Attorneys and landmen often work closely together in curing title defects.[183] Consequently, both the examining attorney and the landman should understand the available curative tools. Detailed considerations regarding curative procedures—for example, the form and content of curative affidavits or procedures involved in judicial proceedings brought to cure title defects—are beyond the scope of this Article. The Article merely provides an overview of the primary procedures available to cure title defects.

Generally, the major types of curative procedures are as follow: (1) voluntary curative action, (2) compliance with curative statutes, and (3) suits to clear title. In curing a particular title problem, one should select the least expensive and time consuming alternative. These curative alternatives are not mutually exclusive, and the available procedures are often combined.[184]

A. *Voluntary Curative Action*

Voluntary curative action consists of preparing, executing, and recording instruments that address various title problems raised in the title opinion. If the necessary parties are alive, can be located, and are cooperative, curative conveyances such as assignments, releases, quitclaim deeds, and correction deeds usually represent the surest and least

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[181]In view of the attorney's exposure to malpractice liability, the attorney should never sacrifice accuracy for readability. However, the two are not mutually exclusive, and a well-crafted title opinion can accomplish both objectives.

[182]*See* MOSBURG, *supra* note 20, § 4.05; Herd, *Title Opinions*, *supra* note 20, at 314-15; Beckham, *supra* note 169, at 20.

[183]The curative process and stand-up title examinations are the two areas which usually call for the greatest degree of teamwork and interaction between the attorney and the landman. *See supra* section V(b).

[184]*See* MOSBURG, *supra* note 20, § 5.01.

expensive method of curing many title problems. All claimants or affected parties must execute these curative conveyances. Disclaimers, stipulations of interest, and ratification are also widely used to cure title defects. All affected parties should sign both the instrument and the curative instrument, and the curative instrument should contain words of grant.[185]

Various affidavit forms are frequently used to cure title irregularities. Affidavits usually will not be sufficient to render an otherwise defective title marketable. However, these affidavits often furnish evidence to satisfy business risk, which is the standard generally applied in approving title.[186] The five most common categories of curative affidavits are: affidavits of possession, affidavits of adverse possession, affidavits of non production, affidavits of death and heirship, and affidavits of identity.[187] Nothing magical exists in the fact that curative evidence is furnished in affidavit form. An affidavit's weight and usefulness depends on the detail, reliability, and factual accuracy of the affidavit information and on the affiant's knowledge of the facts.[188]

B. *Curative Statutes*

All states have statutes which can be utilized in varying degrees to cure title defects or eliminate title requirements. Curative statutes are generally grounded on the policy against unreasonably burdening the transfer of land and the policy favoring quieting titles. Curative statutes are also a practical necessity. For example, most chains of title, in their early years, reveal apparent gaps in title, conveyancing irregularities, or defective court proceedings. From a cost effective, practical standpoint, these defects are difficult to cure absent curative statutes.[189]

Although curative statutes vary from state to state, they generally fall into three categories:

(1) Statutes of limitations, which all states recognize,

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[185]*See* MOSBURG, *supra* note 20, § 5.02, including Appendix Five, *Sample Curative Instruments*.

[186]*See supra*, parts IV(A) & IV(B).

[187]*See* MOSBURG, *supra* note 20, § 5.03.

[188]*Id.* § 5.03; including Appendix Five, *Sample Curative Instruments*, containing a number of curative affidavit forms. *See also* J.E. Rehler, *Improving Marketability of Real Property in Texas: Affidavits, Recitals and the Evidentiary Effect of Recording*, 49 TEX. L. REV. 747, 749 (1971); MOSES, THE AAPL GUIDE FOR LANDMEN at 64 (Revised Ed. 1980).

[189]*See* MOSBURG, *supra* note 20, § 5.04(a).

although in varying forms.[190]

(2) Specific curative statutes which cure specifically enumerated defects or create irrefutable presumptions. These statutes typically relate to defects such as defective acknowledgments or executions in instruments which have been recorded for a prescribed time period, name discrepancies, enumerated deficiencies in court proceedings, and presumptions that some affidavits, if recorded for a prescribed time period, are true. These types of statutes are typically narrow in scope and vary from jurisdiction to jurisdiction.[191] The examining attorney should be familiar with the specific statutes available in the jurisdiction in which he is working, the types of defects those statutes will cure and the extent of protection afforded by such statutes.

(3) In recent years several states have adopted marketable title acts which essentially seek to bar ancient defects under certain circumstances. Texas does not have a marketable title act. In general, these acts bar title defects occurring before a specified time when an instrument, under which the record owner claims title, has been recorded for a given number of years, and no claims adverse to the record holder's title have been filed during the specified time period.[192]

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[190]Texas has a 3 year, a 5 year, a 10 year, and two 25 year statutes of limitations. *See supra*, note 78; HAROLD F. THUROW, TRESPASS TO TRY TITLE, (Butterworth Legal Publishers 1988), Chs. 13-18 (discussing elements that must be pleaded and proved to obtain title under the Texas limitations statutes).

[191]*See generally* MOSBURG, *supra* note 20, § 5.04(b) Some writers have criticized marketable title acts. *See, e.g.*, Shirley N. Jones, *Constitutional and Practical Problems in Legislation to Terminate Non-Productive Mineral Interests*, 3 MISS. C. L. REV. 175, 191 (1983) (Marketable title acts do not relieve mineral interest problems. In fact, thay have the potential to create additional problems.).

[192]*See* J.E. Rehler, *Proposed Marketable Act and Title Examination Standards for Texas*, ADVANCED OIL, GAS AND MINERALS COURSE, PROFESSIONAL DEVELOPMENT PROGRAM, STATE BAR OF TEXAS (September 1990). Texas does not have a marketable title act, but such an act was proposed in the early 1990s. Oklahoma, Kansas, and several other states have such acts. *See* 16 OKLA. STAT. ANN. tit. 16, 71-86 (West 1986); KAN. STAT. ANN. §§ 58-3401 to 58-3411 (1983).

These marketable title statutes typically provide that the record owner holds marketable title free of all interest or claims which depend on transactions occurring before the record owner's "root of title," as long as the "root of title" instrument has been recorded for a specified time period.[193] All of the marketable title acts contain exclusions, limitations, and exceptions which vary from state to state. For example, the acts typically exclude interests reflected in subsequent title transactions or preserved by filing statutory notices. Furthermore, various types of interests are excluded from the operation of the marketable title acts in some states.

C. *Suits to Clear Title*

Sometimes judicial action is the only means of curing title. Generally, judicial action should be used as a last resort due to time and expense. The most common causes of action available in Texas for establishing or curing title are (1) suits to quiet title and (2) suits in trespass to try title.[194]

A suit to quiet title is a suit in which a person in possession seeks relief against persons making claims against plaintiff's title. Plaintiff must allege his right, title, and ownership with sufficient certainty to enable the court to see that the plaintiff has an ownership right that warrants judicial interference.[195] The suit to quiet title is the principal procedural vehicle for interpreting ambiguous instruments in the chain of title, removing clouds on title, and setting the record straight.

While suits to quiet title are equitable actions, trespass to try title suits are statutory.[196] Section 22.001 of the Texas Property Code provides that "[a] trespass to try title action is the method of determining title to lands,

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[193]The "root of title" is the conveyance or other title transaction under which the record title owner claims title. The specified time period varies from 25 to 40 years under most marketable title acts.

[194]*See* LANGE & LEOPOLD, *supra* note 9, § 1091 (recognizing other Texas actions that may be brought to resolve title disputes including trespass, slander of title, and declaratory judgment).

[195]*See* Ellison v. Butler, 443 S.W.2d 886 (Tex. Civ. App.—Corpus Christi 1969, no writ). This court concluded that the appellants failed to prove title or show possession which made this a trespass to try title case rather than an equitable proceeding to remove a cloud from title. *Id.* at 889. *See also* Bibby v. Preston, 555 S.W.2d 898, 901 (Tex. Civ. App.—Tyler 1977, no writ) ("The primary requisite in a suit to quiet title is that the plaintiff must prove, and thereby recover on, the strength of his title and not on the weakness or invalidity of his adversary's title").

[196]TEX. PROP. CODE ANN. §§ 22.001 and 22.002 (Vernon 1984). Trespass to try title is a formal action which emanates from the laws of the Republic of Texas and has its origins in Spanish Law.

tenements, or other real property," and that "[t]he action of ejectment is not available in this state."[197]

A plaintiff in a trespass to try title action must recover on the strength of his own title, which he can establish by proof of: (1) a regular chain of title from the sovereign, (2) superior title from a common source, (3) limitation title or (4) prior possession. The plaintiff's petition can be in statutory form. The plaintiff is not required specifically to plead his title.[198] However, by the statutory plea of "not guilty," the defendant places the question of title in issue and places the burden on the plaintiff to prove his title.[199]

Judicial proceedings may be the only available course of action where adverse claimants are uncooperative and defects in title are serious. Therefore, title attorneys should be aware of the types of judicial proceedings available to clear title and should not hesitate to use those proceedings when necessary.

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[197]*Id.* § 22.001. *See also* Hill v. Preston, 34 S.W.2d 780, 787 (Tex. 1931) (The remedy of trespass to try title is given in all cases where right to title or interest and possession of land may be involved.); City of El Paso v. Long, 209 S.W.2d 950, 954 (Tex. Civ. App.—El Paso 1947, writ ref'd n.r.e.). *See generally* Lorino v. Crawford Packing Co., 169 S.W.2d 235 (Tex. Civ. App.—Galveston 1943), *aff'd*, 175 S.W.2d 410 (Trespass to try title is the only formal action known to Texas civil law.).

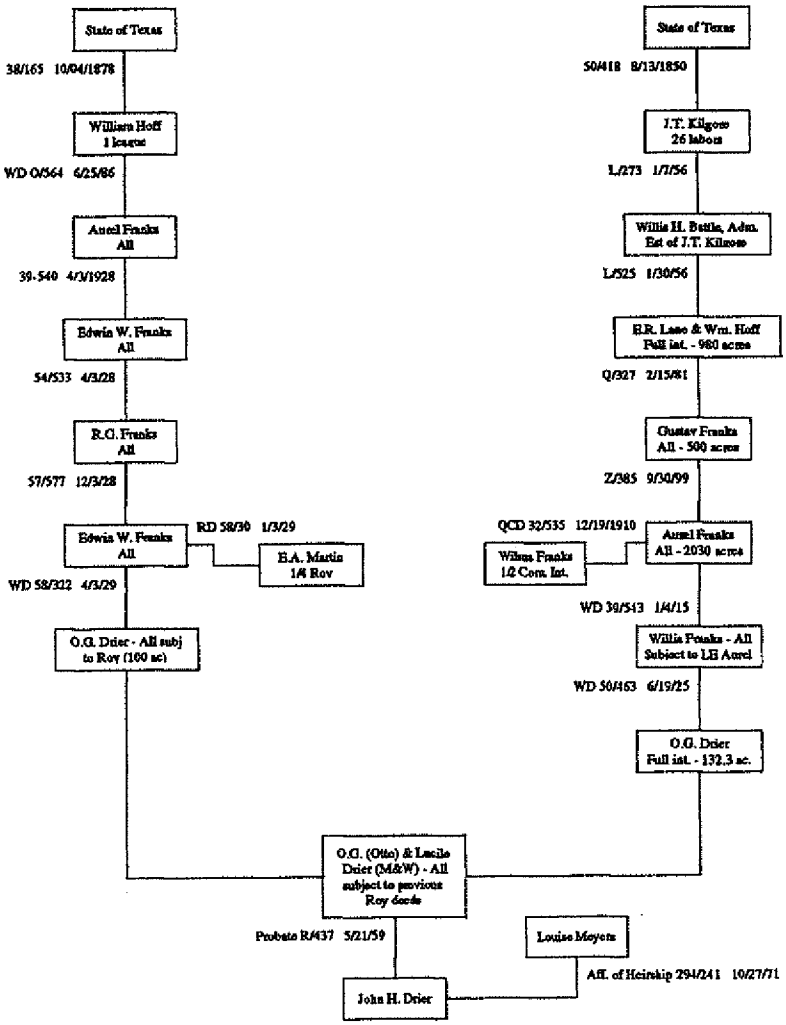
[198]TEX. R. CIV. P. 783.

[199]*See* LANGE & LEOPOLD, *supra* note 9, § 1093 and cases cited therein.

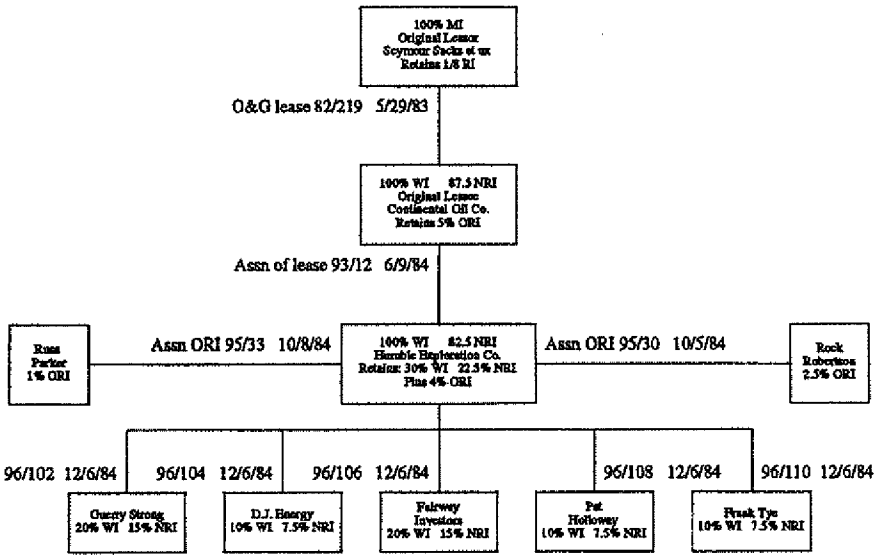
XI. APPENDICES

Chain of Title
Surface and Minerals

232 Acres in Goliad County, Texas



Leasehold Chain of Title



Sample Original Drilling Opinion

Law Offices of
STANLEY J. TITLE
1200 Dallas Parkway Tower
Dallas, Texas 75248

October 21, 1994

Aggressive Exploration, Inc.
16200 Dallas North Parkway
Dallas, Texas 75248

ORIGINAL DRILLING OPINION

Re: Bubba No. 1 Well—This opinion covers a tract of land containing 345 acres, more or less, out of the Stephen F. Austin Survey, Lee County, Texas (the "captioned land") described in an oil and gas lease dated September 15, 1989 from Bubba Blake, a single man to Aggressive Exploration, Inc. ("Aggressive"), recorded in Volume 208, Page 279 of the Deed Records of Lee County, Texas (the "captioned lease").

Dear Sir or Madam:

In order to determine the ownership of the oil and gas in and under the captioned land for the purpose of drilling a well thereon, I have examined the following:

MATERIAL EXAMINED

(List abstracts, run sheets, and/or instruments examined and which form the basis for the opinions expressed.)

TITLE

Based on my examination of the foregoing material, I am of the opinion that, subject to the terms of the captioned lease and to the comments, requirements, and limitations set forth below in this letter, title to the captioned land and to the oil and gas underlying said land as of October

12, 1992 at 8:00 a.m. is as follows:

Surface

Bubba Blake, a single man	All

Minerals

Executive Rights, Rentals, and Bonus

Bubba Blake	All

Royalty

W.E. Young and wife, Mae Young	1/4 of lease royalty
Bubba Blake	3/4 of lease royalty

Leasehold Estate

Roylaty Interest

W.E. Young and wife, Mae Young	1/4 of 1/16 of lease royalty or 1/24 of total production from the captioned land
Bubba Blake	3/4 of 1/6 of lease royalty or 3/24 of total production from the captioned land

Working Interest

Aggressive	All of the working interest under the captioned lease or a net revenue interest of 5/6 (83.333%) of total production from the captioned land

PATENT INFORMATION AND CHAIN OF TITLE

(Opinion as to the validity of the captioned lease and reference to Exhibit which summarizes the principal provisions of the lease.)

TAXES

(Indicate the status of payment of ad valorem taxes.)

EASEMENTS AND RIGHTS-OF WAY

(Identify any easements or rights-of-way that might impact proposed operations on the property.)

COMMENTS AND REQUIREMENTS

(In a series of numbered paragraphs, the title attorney should set forth information as to any encumbrances, unreleased prior leases, gaps, or irregularities in the chain of title or other defects which might make title unmarketable. This section should also include suggestions for curing such title defects or irregularities.)

LIMITATIONS

(Include matters not covered by this title opinion such as the rights of parties in possession, the genuineness of any recorded instrument, etc.)

Respectfully submitted,

Stanley J. Title

Sample Division Order Title Opinion

Law Offices of
STANLEY J. TITLE
1200 Dallas Parkway Tower
Dallas, Texas 75248

January 30, 1993

Aggressive Exploration, Inc.
16200 Dallas North Parkway
Dallas, Texas 75248

Best Price Refinery
2001 Gusher Avenue
Houston, Texas 77007

Re: Bubba No. 1 Well—This opinion covers an 80 acre tract of land in the Stephen F. Austin survey, Lee County, Texas (the "captioned land") which is the spacing unit established for the Bubba No. 1 Well and is more fully described in the field notes attached hereto as Exhibit A.

Dear Sir or Madam:

In order to determine for division order purposes the ownership of the oil and gas produced from the captioned well, which is located on the captioned land, I have examined the following:

MATERIAL EXAMINED

(List abstracts, run sheets, and/or instruments examined which form the basis of the opinions expressed. Note: the Original Drilling Opinion will usually be included and title will be brought forward from the closing date of that opinion or of the latest supplement.)

DIVISION OF INTEREST

Based upon my examination of the foregoing material, subject to the comments, requirements, and limitations hereinafter stated, I am of the opinion that as of January 21, 1993 at 8:00 a.m., which is subsequent to the date of the first sale of production, the oil and gas produced from the captioned well, located on the captioned land is owned by the parties and in the proportions set forth in Exhibit A hereto.

VALIDITY AND MAINTENANCE OF THE CAPTIONED LEASE

(Include opinion as to the validity of the captioned lease—"duly maintained by proper payment of delay rentals and now perpetuated by production from the captioned well.")

WORKING INTEREST ASSIGNMENTS

(Include description of assignments or interests in the subject well.)

TAXES

(Describe the status of the payment of ad valorem taxes.)

EASEMENTS AND RIGHTS-OF-WAY

(Identify any easements or rights-of-way that might impact the proposed operations on the property.)

STATUS OF THE COMMENTS AND REQUIREMENTS IN THE ORIGINAL DRILLING OPINION

(In a series of numbered paragraphs, the title attorney should describe any title defects or irregularities in the title of any of the interest-owners listed in Exhibit A. This section should also include the attorney's suggestions as to the steps necessary to cure such defects or irregularities. Note: Payments due any interest-owner whose title is defective should be held in suspense pending the curing or waiver of such defect.)

LIMITATIONS

(List matters not covered by title opinion such as the rights of parties in possession, the genuineness of any recorded instrument, etc.)

Respectfully submitted,

Stanley J. Title

EXHIBIT A

Division of Interest

Bubba No. 1 Well[200]

Owner		Interest
Royalties		
Bubba Blake	3/4 of 1/6 or	.1250000
Virginia Jones	1/2 of 1/4 of 1/6 or	.0208333
James D. Young	1/2 of 1/4 of 1/6 or	.0208333
	Total RI	.1666666
Overriding Royalties		
Jim Geologist	1.5% of 8/8 or	.0150000
Larry Landman	1.0% of 8/8 or	.0100000
Aggressive		.0083334*
	Total ORI	.0333334
	Total ORI or RI	.2000000

[200]In a real opinion, addresses of all interest-owners would be included. As a matter of industry practice, interests are carried out to seven decimal places.

*Under its agreement with Investors A, B, and C, Aggressive is entitled to an ORI equal to the difference between 20% of total production and the sum of all other royalty and overriding royalty interests. (.2000000 - .1916666 = .0083334).

Working Interest

Investor A	15% of 80% or	.1200000
Investor B	15% of 80% or	.1200000
Investor C	10% of 80% or	.0800000
Aggressive	60% of 80% or	.4800000
	Total WI	.8000000

Sample Run Sheet Form
Louis W. Thigpen, et ux
153 Acre Tract
Joseph T. Kilgore Survey, Abstract 172
Goliad County, Texas

Grantor	Grantee	Kind of Instrument	Acres	Book	Page	Date of Instrument
State of Texas	Joseph T. Kilgore	Cert. Copy pat.	26 labors	50	418	6/15/1925
Will of Joseph T. Kilgore		Will	26 labors	L	273	1/7/1856
Mills Battle, Administrator of Estate of Joseph T. Kilgore	H.C. Tully	Adm. Deed	26 labors	L	525	4/30/1857
William H. Battle	Henry C. Tully	QOD	1/4 lge + 26 labors	I	772	2/19/1859
H.C. Tully	E.R. Lane & William Hoff	WD	980	J	671	5/30/1874
Estate of Frances Tully, deceased	(Goliad County)	Probate	1000	Prob. 1	163	5/30/1875
E.R. Lane	William Hoff	WD	730	K	62	12/10/1874
William Hoff	Gustave Franks	SWD	500	M	350	10/26/1877
William Hoff	Aurel Franks	WD	200+	O	564	6/25/1881
Estate of Wilhelmina Franks (wife of Aurel), deceased 12/24/1912		Probate	300	Prob. F	484	8/30/1913
Herbert, Meinhold, Willie & Edwin Franks	Aurel Franks	QCD	2030	39	535	12/19/1914
Aurel Franks	Herbert Franks	WD	303.5	39	542	1/4/1915
J.B. Wilhelm	Wilson Hunter Properties	OG&ML	158.4	189	183	4/27/1960
Wilson Hunter Properties	J.B. Wilhelm	Rel. OG&ML	158.4	216	321	12/7/1964

Estate of J.B. Wilhelm	(deceased testate 2/7/1961)	Prob. Proc.		Prob. S	594	
Lula Rae Thigpen Berger	Estate of J.B. Wilhelm	Aff't Heirship		201	79	
Collector of Internal Revenue	Estate of J.B. Wilhelm	Estate Tax Receipt		204	204	11/14/1962
Louis W. Thigpin & Neva J. (H&W)	Valley Gas Transmission, Inc.	ROW & Easement		212	317	7/8/1963
Louis W. Thigpin & Neva J. (H&W)	First National Bank of Goliad	DT	443.3	A28	113	10/30/1963
Louis W. Thigpin & Neva J. (H&W)	Shell Oil Company	OG&ML	311.9	216	633	11/23/1964
Shell Oil Company	Wufuels, Inc.	Assign. of Lease	153	344	251	6/30/1982
Wufuels, Inc.	Mobil Oil Corp.	Assign. of Lease	153	350	440	1/1/1983
Mobil Oil Corp.	L.W. Thigpen	Release	153	373	749	9/28/1984
Lillian B. Smith	Public	Aff't Poss.	433	317	11	10/28/1980
Louis W. Thigpen, et ux	The Public	Aff't of Non-Prod	443	317	14	10/29/1980
Louis W. Thigpen, et ux	Rockwood Resources	OGL	153	354	29	2/17/1983
Rockwood Resources	James O. Cleveland 3%	A/OGL	503.3	362	598	10/1/1983
Rockwood Resources	Stanley Oil Co. (1/8) Ceadco Dev. (7/8)	A/ORR	385	362	354	12/31/1983

EXHIBIT 9

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

HANS MICHAEL CORBAN,

Plaintiff,

v.

CHESAPEAKE EXPLORATION, L.L.C., et al.,

Defendants.

Case No. 2:13-cv-00246-MHW-EPD

Judge Michael H. Watson

Magistrate Judge Elizabeth Preston Deavers

PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

I. FACTS

There are no genuine issues of fact, and the parties have filed a Stipulation showing that the following transactions occurred and form the basis of the Plaintiff's vested ownership of the surface of the Property[1]:

> **July 2, 1959:** North American Coal Corporation conveyed the property to Orelen and Hans D. Corban, reserving a mineral interest (Stip. Ex. B);
>
> **July 16, 1962:** Orelen Corban conveyed his interest to Carol Ann Corban (Stip. Ex. C);
>
> **August 25, 1967:** Norman Sellevaag and Carol A. Sellevaag (fka Carol A. Corban) conveyed their interest to Hans D. Corban (making Hans D. Corban the sole owner) (Stip. Ex. D);
>
> **April 4, 1980:** Hans D. Corban conveyed his interest to Gretchen A. Corban (Stip. Ex. E);
>
> **April 2, 1999:** Gretchen A. Corban conveyed her interest to the Plaintiff Hans Michael Corban (Stip. Ex. F);

[1] The "Property" is described in Ex. A to Stipulation (hereinafter Stip. Ex. __). The Exhibits attached to this Motion are identified with numbers instead of letters.

The parties have also stipulated that the following events form the basis of the Defendants' claimed ownership of the Mineral Interest, *i.e.*, the oil, gas, and other minerals, underlying the Property:

> **July 2, 1959:** North American Coal Corporation conveyed the property to Orelen and Hans D. Corban, reserving a Mineral Interest (Stip. Ex. B);
>
> **January 30, 1973:** North American Coal Corporation entered into an oil and gas lease ("NPC Lease") with National Petroleum Corporation, but there was no actual production pursuant to this lease (Stip. Ex. G);
>
> **January 16, 1984:** North American Coal Corporation entered into an oil and gas lease with C.E. Beck, but there was no actual production pursuant to this lease (Stip. Ex. J);
>
> **April 11, 1985:** C.E. Beck assigned the oil and gas lease to Carless Resources, Inc. (Stip. Ex. L);
>
> **January 28, 1988:** North American Coal Corporation change its name to Bellaire Corporation (Stip. Ex. M);
>
> **November 24, 2008:** Bellaire Corporation conveyed its interest, if any, to Defendant North American Coal Royalty Company (Stip. Ex. N), and;
>
> **January 28, 2009:** North American Coal Royalty Company entered into a lease with Mountaineer Natural Gas Company (there were various other transactions after this, but they are legally irrelevant to the issue before the Court) (Stip. Ex. O).

As will be shown below, when Ohio law is applied to these facts, the Plaintiff Hans D. Corban is entitled to a partial summary judgment determining that he is the vested owner of both the surface of the Property, and the Mineral Interest, *i.e.*, the oil, gas, and other minerals, excluding coal, underlying his property, leaving only the issue of damages for trial.

II. ARGUMENT

A. Introduction

As will be shown below, pursuant to the operation of R.C. 5301.56, entitled "Abandonment and Preservation of Mineral Interest," commonly referred to as the Dormant Mineral Rights Act ("DMA"), which became effective on March 22, 1989, the Plaintiff Hans Corban is the vested owner of the oil, gas, and other minerals, excluding coal, underlying the

Property. Further, the DMA is part of the broader Marketable Title Act, and it will also be shown that the Plaintiff is the vested owner of the subsurface oil, gas, and other minerals, excluding coal, pursuant to its provisions.

B. Dormant Mineral Rights Act

1. <u>The DMA Vests Ownership Of The Mineral Interest In The Surface Owner, After A Three year Grace Period, Unless Certain Statutory Savings Events Occurred</u>

The DMA provides that, unless certain events have occurred in the "preceding" twenty (20) years, ownership of a Mineral Interest automatically **vests** in the surface owner:

> (B)(1)Any mineral interest held by any person...shall be deemed abandoned and **vested in the owner of the surface,** if none of the following applies:
>
> * * *
>
> (c) Within the preceding twenty years, one or more of the following have occurred:
>
> (i) The mineral interest has been the subject of a **title transaction** that has been filed or recorded....,
>
> (ii) There has been **actual production** or withdrawal of minerals from the land, from lands covered by a lease to which the mineral interest is subject...,
>
> (iii) The mineral interest has been **used in underground gas storage operations**...,
>
> (iv) A **drilling or mining permit** has been issued to the holder, provided that an affidavit that [sets forth various information] has been filed and recorded...,
>
> (v) A **claim to preserve the interest has been filed** in accordance with Division (C) of this Section.
>
> (vi) In the case of a separated mineral interest, a **separately listed tax parcel number has been created**....

See R.C. 5301.56.[2]

[2] All references herein to the DMA are to the 1989 version. A copy of the legislation enacting the 1989 version is attached hereto as Ex. 1, and a clean copy of the 1989 version of R.C. § 5301.56 is attached hereto as Ex. 2.

The easiest way for a person claiming a Mineral Interest to have prevented ownership thereof from vesting in the surface owner was to have simply filed and recorded a claim to preserve that interest, and, in fact, the DMA (R.C. 5301.56(B)(2)) expressly allowed persons claiming a Mineral Interest a three year grace period in which to have done so (or to have undertaken some other statutory savings event):

> A mineral interest shall not be deemed abandoned under Division (B)(1) of this section because none of the circumstances described in that Division apply, until three years from the effective date of this statute.

2. <u>The DMA Is Self-Executing</u>

The plain language of the DMA does not require any affirmative action for ownership of the Mineral Interest to vest in the surface owner, *i.e.*, the statute is self-executing and automatically **vests** ownership of the mineral interest in the surface owner unless it is shown that one of the statutory savings events has occurred:

> Any mineral interest held by any person, other than the owner of the surface of the lands subject to the interest, shall be deemed abandoned and **vested** in the owner of the surface, if none of the following applies.... [Emphasis added.]

R.C. § 5301.56(B)(1). Ohio courts have held, therefore, that unless one of the statutory savings events occurred during the relevant time period, ownership of the mineral interest is automatically vested in the surface owner, *i.e.*, that the 1989 DMA is "self-executing":

> [T]he Court finds...that by the clear wording of the said DMA of 1989...said statute was self-executing....

Shannon v. Householder (July 17, 2013), Jefferson Cty. C.P. Ct., Case No. 12 CV 328 (attached hereto as Ex. 3).

Similarly, in *Wendt v. Dickerson* (February 21, 2013), Tuscarawas Cty. C.P. Ct., Case No. 2012 CV 0135, p. 16 (attached hereto as Ex. 4), the court found that no savings event had

occurred within the twenty years preceding the effective date of the DMA, or the three year grace period, such that ownership of the mineral interest automatically vested in the surface owner at the end of the three year grace period (March 22, 1992):

> [U]nder the former version of R.C. 5301.56(B)(1) and (2), any mineral interest that [defendants] had in the subject property was deemed abandoned and vested in the owner of the surface of the subject property, as of 3/22/1992.

See also Marty v. Dennis (April 11, 2013), Monroe Cty. C.P. Ct., Case No. 2012-203 (attached hereto as Ex. 5):

> By its very terms...the [1989] version of DMA is self-executing in the sense that nothing was required of the surface owner before the mineral interest was deemed abandoned....

3. **The Automatic ("Self-Executing") Vesting Of Ownership Of The Mineral Interest In the Surface Owner Is Constitutional**

The U.S. Supreme Court has addressed Indiana's DMA, which it described as "self-executing" like Ohio's DMA, and held that it was not statutorily, nor constitutionally, required that the surface owner take any action in order for ownership of the Mineral Interest to automatically vest in the surface owner. The Court held that Indiana's two year grace period was sufficient to allow those claiming mineral interests to take action to protect that interest, that Indiana's citizens are presumed to be aware of Indiana's laws, and that, in any legal action to determine whether the mineral rights had automatically vested in the surface owner, the person claiming the mineral interest would be entitled to show that one of the statutory savings events had occurred, *i.e.*, that ownership of the Mineral Interest did not vest in the surface owner:

> We have concluded that appellants may be presumed to have had knowledge of the terms of the Dormant Mineral Interests Act.... The question then presented is whether, given that knowledge, appellants had a constitutional right to be advised -- presumably by the surface owner -- that their 20-year period of nonuse was about to expire.

> In answering this question, it is essential to recognize the difference between the **self-executing** feature of the statute and a subsequent judicial determination that a particular lapse did in fact occur. As noted by appellants, no specific notice need be given of an impending lapse.... It is undisputed that, before judgment could be entered in a quiet title action that would determine conclusively that a mineral interest has reverted to the surface owner, the full procedural protections of the Due Process Clause -- including notice reasonably calculated to reach all interested parties and a prior opportunity to be heard -- must be provided.

Texaco, Inc. v. Short, 454 U.S. 516, 533-534 (U.S. 1982) (emphasis added). The same is true with regard to Ohio's DMA.

4. <u>The DMA Contemplates Successive Twenty Year Statutory Periods</u>

As noted above, Ohio's courts have held that if no statutory savings event occurred during the "preceding" twenty years, ownership of the Mineral Interest automatically vests in the surface owner. This twenty year time period is not static, such that it must be determined whether there was any twenty year period during which no statutory savings event occurred.

The conclusion that the DMA contemplates successive twenty year periods is mandated by the express statutory language that a Mineral Interest may be protected "indefinitely" by the "successive" filing of notices to preserve that interest:

> A mineral interest may be preserved **indefinitely** from being deemed abandoned...by the occurrence of any of the circumstances described in Division (B)(1)(c) of this section, included, but not limited to, **successive** filings of claims to preserve mineral interests.... [Emphasis added.]

R.C. 5301.56(D)(1). If the DMA did not contemplate successive twenty year periods, it would not have provided for the "successive filings of claims to preserve mineral interests."

Ohio courts have recognized that the DMA contemplates successive twenty year periods, which is sometimes referred to as a "rolling" twenty year period. For example, the Monroe County Court of Common Pleas has held that, when no statutory savings event occurred during

the twenty years from 6/30/86 to 6/30/06 (the later date is the effective date of the 2006 amendment of the DMA), the mineral interest was abandoned:

> This Court finds that the Defendants failed to satisfy any of the savings conditions set forth with the [1989 version of the] DMA from at least June 30, 1986 to June 30, 2006 (the last day the [1989 version of the] DMA was in effect).

Farnsworth v. Burkhart (July 16, 2013), Monroe Cty. Ct. C.P., Case No. 2012-133 (attached hereto as Ex. 6). *See also Marty v. Dennis* (Ex. 5) (p. 10):

> [T]he Court finds that...during the twenty (20) year period immediately preceding every date in which the [1989] version of [the DMA] was effective, none of the savings events occurred....

The Jefferson County Court of Common Pleas has reached the same conclusion, and held that a "twenty year period of inactivity would have run, at the latest, on July 13, 1999." *Shannon v. Householder* (July 17, 2013), Jefferson Cty. Ct. C.P., Case No. 12 CV 226 (Ex. 3). *See also Kross v. Ruff* (September 13, 2013), Jefferson Cty. Ct. C. P., Case No. 12 CV 303 ("the legislature intended for an event to occur every twenty (20) years") (attached hereto as Ex. 7), and *Swartz v. Householder* (July 17, 2013), Jefferson Cty. Ct. C.P., Case No. 12 CV 328 (Ex. 8).

5. <u>The 2006 Amendment Of The DMA Is Irrelevant Herein</u>

It should be noted that R.C. 5301.56 was amended in 2006 by H.B. 288. There is, however, no language in H.B. 288 that gives any indication that it was to have any retroactive effect, such that, pursuant to R.C. 1.48, that legislation may not be applied retroactively:

> Because R.C. 1.48 establishes a presumption that statutes are prospective in operation, our inquiry into whether a statute may be applied retrospectively continues only after a threshold finding that the General Assembly expressly intended the statute to apply retrospectively.

Bielat v. Bielat, 87 Ohio St.3d 350, 353. Moreover, pursuant to R.C. 1.58, even if the General Assembly had indicated that the 2006 amendment applied retrospectively, it may not "affect any right...previously acquired" under the prior version of the statute:

> The...amendment...of a statute does not...[a]ffect the prior operation of the statute...or...[a]ffect any...right...previously acquired...thereunder....

In fact, as held by the Ohio Supreme Court, the Ohio Constitution forbids statutes from retroactively destroying vested rights:

> [A] retroactive statute is substantive—and therefore unconstitutionally retroactive—if it impairs vested rights....

Bielat, 87 Ohio St.3d at p. 354.

In the instant case, therefore, as will be shown below, because the Plaintiff Hans Michael Corban acquired a **vested** right to the Mineral Interest prior to the effective date of the 2006 amendment, that amendment may not retroactively take away that vested right:

> [T]he Plaintiffs were not required to comply with the...amended version of [the DMA] because the mineral interest became **vested** in the owner of the surface lands [prior to its effective date].

Wendt v. Dickerson (February 21, 2013), Case No. 2012 CV 0135 (Ex. 4). *See also Walker v. Noon* (March 20, 2013), Noble Cty. Ct. C.P., Case No. 2120098 (emphasis added) (attached hereto as Ex. 9):

> Any discussion of [the 2006 amendment of the DMA] is moot, because as of June 30, 2006 [its effective date], any interest of Defendant in the oil and gas had [already] been abandoned.

See also Shannon v. Householder (Ex. 3) ("the DMA of 2006, is not applicable to this matter but rather the DMA of 1989 is determinative"). Accordingly, if ownership of the mineral interest vested in the Plaintiff prior to the effective date of the 2006 amendment of the DMA, the amended version may not be constitutionally applied herein to destroy that vested right.

6. Summary Of Law

In sum, then, the 1989 version of the DMA is self-executing, created vested rights, has successive, *i.e.*, "rolling," twenty year lookback periods, and is constitutional.

7. In the Instant Case, Ownership Of The Mineral Interest Vested In The Plaintiff Under the 1989 Version of the DMA Prior To The Effective Date Of The 2006 Amendment Thereof

(a) Introduction

There was no statutory savings event from 3/22/69 to 3/22/89 (the twenty years preceding the enactment of the DMA), and no claim to preserve any mineral interest was filed by the Defendants within the three year grace period (or at any time prior to the 2006 amendment of the DMA), such that ownership automatically vested in the Plaintiff at the end of the three year grace period, *i.e.*, on 3/22/92. Further, even had there been some sort of savings event during the period from 3/22/69 to 3/22/89 (or 3/22/92), there was no savings event from 4/16/1985 to 4/16/2005, such that ownership vested in the Plaintiff, at the latest, at that time. Accordingly, because ownership had vested in the Plaintiff prior to the effective date of the 2006 amendment, that amendment does not apply herein and may not operate to retroactively destroy the Plaintiff's vested rights acquired under the 1989 Act.

(b) Ownership Vested In The Plaintiff As Of 3/22/92

It is undisputed that, in the instant case, none of the Defendants filed and recorded any claim to preserve their interest in the subsurface oil, gas and other minerals during the three year grace period following the enactment of the DMA (or at any time prior to the 2006 amendment of the DMA). Thus, for the Defendants to avoid the automatic application of the 1989 version of the DMA, they must show that one of the following statutory savings events had occurred during the preceding 20 years: that the mineral interest was "the subject of a title transaction"; that there was "actual production"; that the mineral interest was "used in underground gas storage

operations," or; that a "drilling or mining permit has been issued, provided that an affidavit [sets forth various information] has been filed or recorded...in the office of the county recorder in which the lands are located."

In the instant case, none of these events[3] occurred in the twenty years preceding the effective date of the DMA, or during the subsequent three year grace period, such that the Defendants' Mineral Interest was deemed abandoned at the end of that three year grace period, *i.e.*, on March 22, 1992, as held by the Tuscarawas County Common Pleas Court in *Wendt v. Dickerson* (Feb. 21, 2013), Case No. 2012 CV 0135, pp. 14-16 (Ex. 4):

> **THE COURT**
>
> **FINDS** that John R, Dickerson and Marjorie I. Dickerson executed a warranty deed on 12/17/1952, which [reserved a mineral interest].
>
> **FINDS** that there is no evidence in the record...that the subject mineral interest was the subject of a title transaction that was filed or recorded...that there was any production of oil and gas on the subject property, on other lands covered by a lease to which the mineral interest was subject...that the subject mineral interest was used in underground gas storage operations... that a drilling or mining permit was issued...that a claim to preserve the subject mineral interest was filed in accordance with R.C. 5301.56(C)... [or] that a separately listed tax parcel number was created...within twenty years prior to 3/22/1992.
>
> **FINDS**, therefore, that under the former version of R.C. 5301.56(B)(1) and (2), any mineral interest...in the subject property was deemed abandoned and vested in the owner of the surface of the subject property, as of 3/22/1992.

See also Walker v. Noon (March 20, 2013), C.P. Ct. Noble Cty., Case No. 2012-0098 (Ex. 9), where there was no savings event during the twenty years preceding the enactment of R.C.

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3 As will be discussed below, the Defendants may argue that there was a "title transaction?

5301.56,[4] and no notice to preserve the claim was filed in the three year grace period, and the court held that ownership of the mineral interest automatically vested in the surface owner:

> Defendant...conveyed the surface and reserved the oil and gas (plus other minerals) by deed recorded July 27, 1965. Subsequent deeds in 1970 and 1977 conveyed the surface.... All other surface conveyances post date March 22, 1992.... No claim to preserve a mineral interest was filed before March 22, 1992.
>
> * * *
>
> The question becomes, do the surface transfers in 1970 and 1977 count as "title transactions"? The Court believes the answers to be no. They would be within the 20 year period prior to March 22, 1989. However, to be "title transactions," they would need to affect an interest in land..., and for purposes of this case that interest is the mineral interest. While the surface transfer references the mineral reservation, those transfers do not affect the mineral interest....
>
> Applying the statutes and case law..., the Court finds that Plaintiff is entitled to summary judgment.

In the instant case, the Defendants have Stipulated that, from July 2, 1959 (the date that North American Coal Corporation conveyed the Property to Orelen H. Corban and Hans D. Corban and reserved a Mineral Interest), until January 28, 2009 (the date that North American Coal Royalty Company leased the Mineral Interest to Mountaineer Natural Gas Company), (1) the Mineral Interest was not used for underground storage, (2) no separate tax parcel was created, (3) no preservation claim was filed and recorded, (4) no affidavit regarding any drilling permit was filed or recorded, and (5) there was no actual production. *See* para. 32 of Stipulation.

As noted above, however, the Defendants are expected to argue that the oil and gas lease that was entered into on 1/16/1984 with C.E. Beck, or the assignment of that lease to Carless Resources, Inc., on 4/16/1985, somehow prevented ownership of the Mineral Interest from vesting in the Plaintiff prior to the 2006 amendment of the DMA. As will be shown below,

---

[4] The court held that the transfers of the surface interest were not "title transaction" because the Mineral Interest, although referenced in the documents, was not the subject of the transaction.

leases are not savings events under the DMA (either the 1989 or the 2006 version), and, even assuming, *arguendo*, that leases, or the assignment thereof, are statutory savings events, there were no leases or assignments during the twenty years from 4/16/1985 to 4/16/2005, such that ownership automatically vested in the Plaintiff, at the latest, at that time.

(c) Leases Are Not Statutory Savings Events Under Ohio Law

i. The Ohio DMA Does Not Provide That Leases Unaccompanied By Actual Production Are Savings Events

The legislation that enacted the Ohio DMA, as originally introduced in the Ohio Senate (S.B. 223), expressly provided that simply leasing the Mineral Interest constituted a savings event, and did not also require that there be any actual production:

> (B) Any mineral interest…shall be deemed abandoned…if neither of the following is true:
>
> * * *
>
> (2) Within the preceding 20 years, one or more of the following have occurred:
>
> (a) The interest has been conveyed, **leased**, transferred, or mortgaged….

See S.B. 223 "As Introduced" (attached hereto as Ex. 10). Thus, the execution of a lease would have been a savings event under the version of the DMA "As Introduced."

The only reference to a "lease" in the DMA actually enacted by the General Assembly (both the 1989 version and the 2006 amended version), however, provides that the Mineral Interest automatically vests in the surface owner unless there was "actual production…from lands covered by a lease":

> (B)(1) Any mineral interest…shall be deemed abandoned…if none of the following applies:
>
> * * *
>
> (c)(ii) There has been **actual production…from lands covered by a lease** to which the mineral interest is subject.

See R.C. 5301.46(B)(1)(c)(ii). Thus, in Ohio, the mere execution of a lease, unaccompanied by actual production, is not defined as a statutory savings event.

ii. A Lease Is Not A Title Transaction Under The Ohio DMA

As noted above, the Defendants are nonetheless expected to argue that a lease constitutes a different savings event, *i.e.*, a "title transaction." A "title transaction," however, is defined by R.C. 5301.47(F), and refers to transactions where the legal "*title*" to an "*interest in land*" is conveyed by "*deed*," not when a "*mineral interest*" is "*leased*":

> "Title transaction" means any transaction affecting title to any interest in land, including **title** by will or descent, **title** by tax **deed**, or by trustee's, assignee's, guardian's, executor's, administrator's, or sheriff's **deed**, or decree of any court, as well as by warranty **deed**, quit claim **deed**, or mortgage.

This Court, in an opinion issued by Judge Marbley, recently observed that, Ohio law, like the law in most of the other states with significant oil and gas production, provides that an oil and gas lease is not "*an interest in real property*," which, of course, would mean that an oil and gas lease is not a "title transaction" because it does not affect "*title to an interest in land*":

> Indeed, from the earliest cases on this issue Ohio courts have treated oil and gas leases as different from an interest in real property....
>
> * * *
>
> In addition, this Court finds persuasive the decisions of other states with a more extensive history of oil and gas production. In Oklahoma...an oil and gas lease merely "constitutes a right to search for and capture [oil and gas]," not an interest in real property.... Many other oil-and gas producing states have come to a similar conclusion....

Wellington Resource Group, LLC v. Beck Energy Corp. (September 20, 2013), Case No. 2:12-CV-104 (attached hereto as Ex. 11). Thus, an oil and gas lease is not a "title transaction" under Ohio law.

iii. The Model DMA, And The DMA's Of Other States, Define A Lease As A Savings Event

In this regard, it should be noted that the Model DMA, which was presented to the Ohio General Assembly by the proponents of the enactment of the 1989 DMA, expressly identified leases as a statutory savings event (as did the version of the Ohio DMA "As Introduced"). *See* Section 4(B)(3) of the Model Act (which is an Exhibit to the "Proponent Testimony," which is attached hereto as Ex. 12). Thus, some of the DMA's enacted by other states expressly provide, consistent with the Model DMA, that the execution of a lease is, by itself, a savings event. For example, the Michigan DMA statute expressly includes leases in the list of transactions that constitute a savings event:

> (1) Any interest in oil or gas in any land owned by any person other than the owner of the surface, which has not been sold, **leased**, mortgaged, or transferred by instrument recorded in the register of deeds office for the county where that interest in oil or gas is located for a period of 20 years shall...be deemed abandoned....

MCLS § 554.291. As shown above, however, Ohio's General Assembly, in enacting the Ohio DMA, provided that a lease is a savings event only if there was "actual production" pursuant to the lease.

iv. Some States Include Leases In The Statutory Definition Of "Title Transaction"

Some of the DMA's enacted by other states, on the other hand, instead of listing the types of transactions that constitute a statutory savings event (like the model DMA), provide that a "title transaction" is a statutory savings event, and then statutorily define "title transaction." Importantly, however, some of these other states then expressly define "title transaction" as including leases. For example, the Oklahoma statute (16 Okla. St. §78) expressly includes leases in the definition of a "title transaction":

> (f) "Title transaction" means any transaction affecting title to any interest in land, including title by will or descent, title by tax deed, mineral deed, **lease** or reservation, or by trustee's, referee's, guardian's, executor's, administrator's, master in chancery's, sheriff's or marshal's deed, or decree of any court, as well as warranty deed, quitclaim deed, or mortgage.

Ohio's definition of "title transaction," as shown above, does not define "leases" of "mineral interests" as "title transaction." Thus, an oil and gas lease should not be considered to be a "title transaction" under the Ohio DMA, such that ownership of the Mineral Interest should be deemed to have automatically vested in the Plaintiff on March 22, 1992 (the end of the three year grace period).

Nonetheless, even assuming, *arguendo*, that the recorded execution of a lease, and the recorded assignment thereof, somehow constitute "title transactions" under Ohio's DMA, the facts in the instant case, as will be discussed below, show that more than twenty years transpired, prior to the effective date of the 2006 amendment of the DMA, without a lease being executed or assigned (4/16/85 to 4/16/2005), such that the Mineral Interest automatically vested in the Plaintiff, at the latest, on that date (4/16/2005).

(d) Ownership Vested In The Plaintiff, At The Latest, As Of April 16, 2005

As shown in the Stipulation, although the Mineral Interest was leased to C.E. Beck on 1/16/1984, and that lease was assigned to Carless Resources, Inc., on 4/16/1985, no further leases or assignments were executed within the next twenty years—the next lease was not executed until 2009. Accordingly, even if the 1974 Leases, or its assignment, are "title transactions," ownership of the Mineral Interest nonetheless automatically vested in the Plaintiff under the 1989 DMA on 4/16/2005. In this light, it can be seen that the Defendants had no rights to the oil, gas, and other minerals, underlying the Plaintiff's property after, at the latest, 4/16/2005, such that the purported conveyance of that interest to the Defendant North American

Coal Royalty Company in 2008, and Defendant North American Coal Royalty Company's subsequent lease of those rights in 2009, are legal nullities. This conclusion is supported by Ohio case law.

In *Shannon v. Householder* (Ex. 3), the Jefferson County Court of Common Pleas was presented with the following facts:

- Elva and Alma Lawrence conveyed the surface to the plaintiff on 4/9/76 and reserved a mineral interest;
- On 3/17/78, the Lawrences leased the oil and gas;
- On July 12, 1979, Elva Lawrence transferred her interest in the real estate to Alma Lawrence (but that transfer was legally ineffective because that interest had already been conveyed to the Plaintiff as part of the 1976 transfer).

Although the court held that, as argued above, ownership automatically vested in the surface owner because the mere execution of a lease, unaccompanied by actual production, is not a statutory savings event, the court also held that, assuming, *arguendo*, a lease is a statutory savings event, and further assuming that the 1979 ineffectual transfer was also a statutory savings event, there was still a twenty year period of inactivity from 1979 to 1999, *i.e.*, the court recognized that the DMA utilizes a rolling twenty year period:

> Neither the mineral lease to Belden and Blake Corp., nor the Certificate of Transfer (Volume 588, page 284), are activities which under the statute prevent the abandonment of said mineral interests....
>
> Further, even had the oil and gas lease (dated March 17, 1978) or the Certificate of Transfer (dated July 12, 1979) been considered as such a title transaction, the twenty year period of inactivity would have run, at the latest, on July 13, 1999, prior to the effective date of the DMA of 2006 and subsequent to the effective date of the DMA of 1989 which, including the three (3) year grace period, is March 22, 1992. Thus, the mineral rights vested in the surface owner on or before July 13, 1999.

> Said statute (DMA of 1989) is found to be self-executing upon the happening of the actions stated therein and no action on behalf of the plaintiffs was necessary to effectuate the abandonment.

The same is true in the instant case--even if the mere execution or assignment of a lease is a "title transaction," there was still a twenty year period, from 4/16/1985 to 4/16/2005, where no lease was executed or assigned, such that the Mineral Interest vested in the Plaintiff, at the latest, on 4/16/2005.

8. <u>Summary Of Argument Under the 1989 DMA</u>

In sum, ownership of the Mineral Interest automatically vested in the Plaintiff on March 22, 1992, or, at the latest, April 16, 2005, pursuant to R.C. 5301.46. As will be shown below, ownership of the Mineral Interest also vested in the Plaintiff pursuant to the Marketable Title Act.

C. Marketable Title Act

Ohio's Marketable Title Act, R.C. 5301.47 to 5301.56, was enacted to allow persons to rely on a record chain of title, and to eliminate dated interests which operated to cloud titles. *See, e.g., Evans v. Thomas J. Evans Found.*, 5th Dist., 2010 Ohio 541, ¶17 *citing Semachko v. Hopko* (1973), 35 Ohio App. 2d 205, 209, 301 N.E.2d 560. In general, the Marketable Title Act operates to extinguish interests and claims that were in existence prior to the effective date of the "root of title" but which are not specifically referred to in any other documents in the chain of title subsequent to the date of the "root title." *Toth v. Berks Title Ins. Co.* (1983), 6 Ohio St. 3d 338, 342, citing R.C. 5301.47(A) and 5301.50.

A "root of title" is defined in R.C. 5301.47(E) as "that conveyance or other title transaction in the chain of title of a person, purporting to create the interest claimed by such person, upon which he relies as a basis for the marketability of his title, and which was the most

recent to be recorded as of a date forty years prior to the time when marketability is being determined." The Marketable Title Act (R.C. 5301.50) then extinguishes, subject to the provisions of R.C. 5301.49, any interests and claims existing prior to the effective date of the "root of title":

> Subject to the matters stated in section 5301.49 of the Revised Code, such record marketable title shall be held by its owner and shall be taken by any person dealing with the land free and clear of all interests, claims, or charges whatsoever, the existence of which depends upon any act, transaction, event, or omission that occurred prior to the effective date of the root of title. All such interests, claims, or charges, however denominated, whether legal or equitable, present or future, whether such interests, claims, or charges are asserted by a person sui juris or under a disability, whether such person is within or without the state, whether such person is natural or corporate, or is private or governmental, are hereby declared to be null and void.

R.C. 5301.49 makes clear that the marketable title is only subject to interests referred to in either the root title, or title transactions filed after the root title, and, importantly, expressly provides that the reference to any such interest may not be general—there must be a specific identification of the prior "recorded title transaction" upon which the claimed interest is based in the chain of title subsequent to the root title:

> Such record marketable title shall be subject to:
>
> (A) All interests and defects which are inherent in the muniments of which such chain of record title is formed; **provided that a general reference in such muniments, or any of them, to easements, use restrictions, or other interests created prior to the root of title shall not be sufficient to preserve them, unless specific identification be made therein of a recorded title transaction which creates such easement, use restriction, or other interest....**
>
> * * *
>
> (D) Any interest arising out of a title transaction which has been recorded subsequent to the effective date of the root of title from which the unbroken chain of title or record is started; provided that such recording shall not revive or give validity to

> any interest which has been extinguished prior to the time of the recording by the operation of section 5301.50 of the Revised Code;

Thus, unless the Defendants' claimed Mineral Interest is specifically referred to in the "root title," or in a "title transaction" filed thereafter, their interests are null and void. *See Pinkney v. Southwick Invs., L.L.C.*, 2005 Ohio 4167, ¶34 *citing Semachko*, 35 Ohio App.2d at 209.

In the instant case, the time that marketability is being determined is 2013, such that forty years prior thereto is 1973. The most recent conveyance of the Property recorded as of a date forty years prior to the time when marketability is being determined (1973) is the Deed conveying the Property from Carol Ann Corban to Hans D. Corban, recorded on November 16, 1967, which is referred to as the "root deed." *See* Stip. Ex. D. This Root Deed contains no reference to or description of the Mineral Interest claimed by the Defendants, or the "recorded title transaction" which created that interest. The Property was next transferred from Hans D. Corban to Gretchen A. Corban on April 14, 1980, and that Deed also contains no reference to or description of the Defendants' claimed Mineral Interest, or the "recorded title transaction" creating that interest. *See* Stip. Ex. E. On April 2, 1999, Gretchen A. Corban conveyed the property to the Plaintiff on April 2, 1999, but that Deed makes no specific reference to, or description of, the Defendants' claimed Mineral Interest, or, importantly, the "recorded title transaction" creating that interest. *See* Stip. Ex. F. These deeds are the only "title transactions" relating to the Property that have been recorded since the Plaintiff's 1967 Root Deed.[5] Because none of these deeds makes any specific reference to the "recorded title transaction" creating the Defendants' claimed Mineral Interest, any interests referred to in title documents prior to the 1967 Root Title are null and void.

[5] As shown above, leases are not "title transactions."

In sum, pursuant to the Marketable Title Act, the Plaintiff's marketable title is held free and clear of all interests, claims, or charges whatsoever, the existence of which depends upon any act, transaction, event, or omission that occurred prior to the date of the Root Deed, and all such interests are null and void. *See* R.C. 5301.47(A); R.C. 5301.50; *Toth*, 6 Ohio St. 3d at 342. Accordingly, Plaintiff requests this Court to hold that Defendants' claims to the Mineral Interest have been extinguished by operation of the Marketable Title Act, and that title to the Mineral Interest is hereby quieted in Plaintiffs.

III. CONCLUSION

For the foregoing reasons, Plaintiff Hans Michael Corban respectfully requests this Court to grant him a summary judgment determining that he is the legal owner of the oil, gas, and other minerals, excluding coal, underlying his property.

Respectfully submitted:

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CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing document was served upon the following, via regular U.S. mail, postage prepaid, this 22nd day of November, 2013:

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APPENDIX

Exhibit 1	1988 Ohio Laws File 314, Sub. S.B. 223
Exhibit 2	R.C. 5301.56, entitled "Abandonment of Mineral Interest and Vesting in Owner of Surface of Lands," which is commonly referred to as the Dormant Mineral Rights Act ("DMA") (1989 version)
Exhibit 3	*Shannon v. Householder* (July 17, 2013), Jefferson Cty. C.P. Ct., Case No. 12 CV 328
Exhibit 4	*Wendt v. Dickerson* (February 21, 2013), Tuscarawas Cty. C.P. Ct., Case No. 2012 CV 0135, p. 16
Exhibit 5	*Marty v. Dennis* (April 11, 2013), Monroe Cty. C.P. Ct., Case No. 2012-203
Exhibit 6	*Farnsworth v. Burkhart* (July 16, 2013), Monroe Cty. Ct. C.P., Case No. 2012-133
Exhibit 7	*Kross v. Ruff* (September 13, 2013), Jefferson Cty. Ct. C. P., Case No. 12 CV 303
Exhibit 8	*Swartz v. Householder* (July 17, 2013), Jefferson Cty. Ct. C.P., Case No. 12 CV 328
Exhibit 9	*Walker v. Noon* (March 20, 2013), Noble Cty. Ct. C.P., Case No. 2120098
Exhibit 10	S.B. 223 "As Introduced"
Exhibit 11	*Wellington Resource Group, LLC v. Beck Energy Corp.* (September 20, 2013), Case No. 2:12-CV-104
Exhibit 12	S.B. 223 "Proponent Testimony," with copy of the Model DMA

EXHIBIT 10

Williams & Meyers, Oil and Gas Law

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CHAPTER 6 The Oil and Gas Lease--Express Provisions
Topic 1. Introduction

3-6 Williams & Meyers, Oil and Gas Law § 601

§ 601 Evolution of the Modern Lease Formn1

The basic document of the oil and gas industry is the lease which authorizes an operator, the lessee or his assignee, to enter upon described premises for the purpose of exploring for and developing the mineral resources in the premises. In the light of particular problems or judicial decisions, the lease form has been modified from time to time.

In this chapter we are concerned with selected express provisions of oil and gas leases. We shall seek to discover and explain the occasions for the employment of particular lease clauses and to analyze the significance of the common variants in the language of such clauses. We begin with a brief summary of the evolution of the oil and gas lease.

The modern oil and gas lease is the evolutionary product of conflicts between the landowner and the operator of the oil and gas interest. The operator has been desirous of securing a lease with a small capital investment, keeping the lease as long as it was productive or was valuable for speculative purposes, and at the same time, being able to terminate an unprofitable lease without liability to the lessor. The landowner has been interested primarily in obtaining royalties from the lease and therefore has pressed for early exploration and development operations. In lieu of exploration and development operations, the lessor has tried to secure a periodic return for the holding of the leasehold interest. However, he has also wanted to limit the time the lessee can postpone drilling by periodic payments, in order to prevent the lessee from holding the lease merely for speculation, and to assure the exploration and development of the lease within a short time. These conflicts have been reflected especially by variant forms of the habendum clause and of the drilling and rental clause of oil and gas leases. n2

Whether an oil and gas lease has been procured through fraud or through fraudulent inducement has recently been an issue in the development of the Marcellus and Utica Shale in the Appalachian Basin. While normally the parol

evidence rule might prevent such evidence from being proffered, most of the courts dealing with these claims have refused to apply the rule, at least at the preliminary stage of the litigation. n3

§ 601.1 Fixed, long-term lease lacking "thereafter" clause

The first commercial well in the United States was drilled under a fixed, long-term lease lacking a "thereafter" clause. n1 This type of lease terminated at the end of a fixed period regardless of whether the lessee had obtained profitable production. n2 Such a lease was obviously unsatisfactory to the lessee, since it failed to guarantee him the opportunity to realize the full return of his speculative investment. This dissatisfaction might be further aggravated by the judicial enforcement of an implied covenant to develop the lease by drilling more wells. n3 Near the end of the fixed term this covenant could place a lessee in the dilemma of choosing between forfeiting a productive lease immediately, or investing more capital only to lose everything shortly thereafter. A lessee under a fixed-term lease on which there was production clearly was in an adverse bargaining position should he attempt to negotiate a renewal of the lease. n4

If the lessee did not commence drilling operations, he could not even be assured of holding the lease for the fixed term since the courts enforced an implied covenant to drill an exploratory well within a reasonable time. n5 Consequently, should a lessee acquire a number of leases in a tract he could not conduct his development activities with sufficient predictability as to the continuance of his leases.

The fixed-term lease was also unsatisfactory t Merrill, *supra* note 3o the lessor. Since the monetary consideration paid for the lease initially was usually nominal and since such leases did not ordinarily provide for delay rentals, the lessor would not realize any return from his mineral interest unless there was production. These leases, moreover, frequently contained a clause permitting the lessee to remove all machinery and equipment from the land at the end of the term. n6 Since this clause was held to permit the removal of well casing, the withdrawal of the lessee with his "equipment" could destroy much of the value the lessor had gained by the development of the mineral interest.

§ 601.2 Lease in fee simple absolute

Occasional instruments creating operating interests in minerals purported to grant such interests in fee simple absolute. Some courts held that the interest of the grantee was subject to termination by abandonment. n1 The major reason for the disappearance of this mutation of the oil and gas lease, however, was dissatisfaction of lessors with the form. Lessors did not like a form which permitted the lessee to hold the lease for substantial periods without development and without any periodic consideration (*viz.*, rentals) paid to lessors.

§ 601.3 "No-term" lease with rental clause

Another early mutation of the oil and gas lease was the so-called "no-term" lease. This lease provided that after a short period of time, a lessee must commence drilling operations or pay the lessor a rental to continue the lease in effect for another short period. n1 No primary term was incorporated in the

lease setting a limit beyond which the lease could not be renewed by the payment of rentals.

The "no-term" lease was heavily attacked in the courts. Some courts refused to enforce these leases on the grounds that the instrument in question created a tenancy at will, n2 that the lease was without consideration, n3 and that even if there was consideration, the lease was so unfair as to be unenforceable in equity. n4

Other courts, however, have upheld these leases against such challenges, n5 and the leases have also been sustained against attacks that they violated the Rule against Perpetuities. n6 Even the courts that enforce these leases, however, hold that the lessee cannot by the payment of rentals postpone drilling indefinitely. n7 Consequently, this lease, like the fixed-term lease, fails to provide the requisite certainty as to the rights and obligations of the parties.

The amount of litigation over the enforceability of these leases has undoubtedly led to their disuse. It appears improbable that any modern lease is intended to be for "no-term." Most "no-term" leases found to have been created in the past several decades probably resulted from mistake or misunderstanding in the completion of the blanks in store-bought lease forms. n8

A variation in the form of a "no-term" lease is reported in a California case. n9 The lease had a primary term of two years but provided that it might continue from year to year, subject to cancellation by lessors, except that if the gross royalty exceeded $1,000 per year the right to cancel was waived for the next succeeding year. The Lessee agreed to pay $10 per year plus a 1/4 royalty of the gross value of the materials taken from the premises. No payments having been made by the lessee and no exploration undertaken, the lease was held to have been terminated by abandonment.

§ 601.4 Modern habendum clause with short primary term and "thereafter" clause

The habendum clause of virtually all contemporary leases provides for a short primary term of from one to ten years and provides that the lease may be preserved beyond the expiration of the primary term "so long thereafter" as oil or gas (or other specified minerals) is produced in paying quantities. n1 This evolved form satisfies the reasonable requirements of both lessor and lessee.

Originally, perhaps, when the "or" form lease was in vogue, the short primary term was desired by the lessee because it relieved him of any possible liability for rentals for the whole period of a long term. n2 (We discuss hereinafter the "surrender" clause which came into the lease to provide the lessee with a means to relieve himself of liability for rentals.) n3 The short primary term was also beneficial to the lessor in that it put pressure on the lessee to begin drilling operations within a relatively brief period. If the lessee failed to drill within this brief term, the land was freed for leasing to, and development by, another.

Similarly the "thereafter" clause was reasonably adapted to the requirements of both lessor and lessee. It assured the lessee that the lease would not terminate while it was commercially productive; it protected the lessor from having his premises tied up indefinitely except where there was commercial production on which royalties would be payable.

In a number of the very early cases, courts took the position that seemingly regardless of the language of the lease, whether it be a no-term lease or a primary/secondary term lease, if no oil is found, no estate vests in the lessee. n4 The notion that the lessee's title is somehow "inchoate" until oil or gas is found is inconsistent with the modern primary/secondary term lease and with the inclusion of various savings provisions that will maintain the oil and gas lease even in the absence of the finding of oil and gas. n5 Pennsylvania has reaffirmed its position that an oil and gas lease only conveys "inchoate title" for the purposes of exploration, until oil or gas is found, at which time the leasehold estate becomes a fee simple determinable. n6 Pennsylvania, however, also treats the leasehold estate in the secondary term where there has been a lack of production in paying quantities or a total cessation of production as creating a "tenancy at will" so that the leasehold estate may be terminated by either party but does not automatically terminate as a matter of law. n6.1

§ 601.5 "Or" and "unless" drilling and rental clauses

In the preceding discussion the relationship of the drilling and rental provisions of the lease to the evolution of the habendum clause has been indicated. We discuss later in considerable detail the variants in and the construction of drilling and rental clauses. Certain aspects of the evolution of such clauses should be noted at this point, however.

As noted earlier, many early leases did not provide for any rental payment to the lessor or any express drilling obligations of the lessee. n1 At a relatively early time, however, it came to be the custom to include in oil and gas leases some provision in which reference was made to the payment of rentals or the pursuit of drilling obligations.

Thus in the "no-term" lease form, the lessee was authorized to hold the lease only by the pursuit of drilling operations or the payment of a periodic rental. n2 This form was quickly replaced by a form with a modern-type habendum clause (*viz.*, one providing for a short primary term and containing a "thereafter" clause) and a so-called "or" form drilling and rental clause. The "or" clause of the lease provided in essence that the lessee would commence drilling operations "or" do something else. The "something else" might be forfeiture or surrender of the lease but typically the alternative was the payment of rentals. In other words during the primary term the lessee covenanted to drill a well (or to commence drilling a well) within a specified period "or" pay specified rentals to the lessor. If the obligation of the lessee was not performed, the lessor generally could choose between suing to recover the rentals or suing to forfeit the lease. n3

In a number of early cases involving the drilling and rental or delay rental clause, if the lease did not otherwise provide a forfeiture clause, the lease would not automatically terminate for failure to either commence the drilling of a well or timely and accurately make a delay rental payment. n3.1

The next stage in the evolution of the drilling and rental provisions of the lease was the so-called "unless" clause. Unlike the "or" clause, the "unless" clause did not contain any covenant by the lessee; instead, a clause of special limitation was inserted into the lease providing for expiration of the lessee's estate if the lessee should fail to engage in specified drilling operations during the primary term or, in the alternative, fail to pay specified rentals.

In substance the "unless" clause provides as follows:

> "If no well is commenced on said land on or before one year from the date hereof this lease shall terminate as to both parties *unless* the lessee on or before that date shall pay or tender to the lessor the rentals specified herein."

If this form of drilling and rental clause is employed, the lessee is never liable for delay rentals but if he fails to make timely payment thereof and also fails to pursue specified drilling operations, the leasehold terminates automatically. n4

In California, where oil and gas leases and other instruments concerned with interests in oil and gas have followed an evolutionary course somewhat different from the evolutionary course observed in other states, a drilling and rental clause has evolved which contains elements of the "or" and of the "unless" clause. We discuss this evolution hereinafter. n5

Legal Topics:

For related research and practice materials, see the following legal topics: Energy & Utilities LawLeases & LicensesGeneral OverviewReal Property LawLandlord & TenantLease AgreementsGeneral OverviewReal Property LawOil & GasContracts LawTypes of ContractsLease AgreementsGeneral Overview

FOOTNOTES:

(n1)Footnote 1. For other discussions of the evolution of the oil and gas lease, see the following:

Milam Randolph Pharo & Gregory R. Danielson, *The Perfect Oil and Gas Lease: Why Bother!*, 50 Rocky Mtn. Min. L. Inst. Ch.19 (2004);

Lynch, The *"Perfect" Oil and Gas Lease: An Oxymoron*, 40 Rocky Mt. Min. L. Inst. 3-1 (1994);

Cage, *The Modern Oil and Gas Lease--A Facelift for Old* 88, 31 Sw. Legal Fdn. Oil & Gas Inst. 177 (1980);

Irwin, *The Habendum Clause as a Special Limitation on Oil and Gas Leases in Texas*, 11 Sw. L.J. 340 (1957);

Moses, *The Evolution and Development of the Oil and Gas Lease*, 2 Sw. Legal Fdn. Oil & Gas Inst. 1 (1951);

Walker, *Defects and Ambiguities in Oil and Gas Leases*, 28 Tex. L. Rev. 895 (1950) (discussing the origin of the producers 88 lease);

Walker, *The Nature of the Property Interest Created by an Oil and Gas Lease in Texas*, 7 Tex. L. Rev. 1, 12 (1928);

Veasey, *The Law of Oil and Gas*, 19 Mich. L. Rev. 161 (1920).

For discussions of matters to be considered in representing the landowner in leasing transactions, see the following:

Hinton, *Negotiating Oil and Gas Leases for the Lessor*, 1 Nat. Resources & Environment 7 (Vol. 1, No. 2, Spring 1985);

Scott, *Unusual Provisions in Oil and Gas Leases*, 33 Sw. Legal Fdn. Oil & Gas Inst. 139 (1982);

Anderson, *David v. Goliath: Negotiating the 'Lessor's 88' and Representing Lessors and Surface Owners in Oil and Gas Lease Plays*, 27 Rocky Mt. Min. L. Inst. 1029 (1982) (setting forth several lease forms generally favorable to lessors);

Nickum, *Negotiating and Drafting a Modern Oil and Gas Lease On Behalf of Lessor*, 13 Tex. Tech L. Rev. 1401 (1982);

Lowe, Representing the Landowner in Oil and Gas Leasing Transactions, 31 Okla. L. Rev. 257 (1978).

For a detailed "laundry list" of proposed changes in the modern lease form, *see* Pierce, *Incorporating a Century of Oil and Gas Jurisprudence into the 'Modern' Oil and Gas Lease*, 33 Washburn L.J. 786 (1994).

For a discussion of matters to be considered in representing the lessee in a leasing transaction *see* Lowe, *Negotiating Oil and Gas Leases for the Lessee*, 1 Nat. Resources & Environment 7 (Vol. 1, No. 2, Spring 1985).

Under a federal oil and gas lease, a division order executed by the federal government and the purchaser, the purchaser assumes the royalty payment obligation and may be found liable for any additional royalties that may be owed under the terms of the federal oil and gas lease. GPM Gas Corp., 147 IBLA 314 (1999); Mesa Operating Limited Partnership (On Reconsideration), 128 IBLA 174 (1994).

In Maddox v. Vantage Energy, LLC, 361 S.W.3d 752 (Tex. App.--Ft. Worth 2011, pet. denied), the court rejected a putative lessor's claim that an unincorporated association of homeowners and an oil and gas operator entered into a binding contract to lease the mineral interests according to a model lease that was appended to several e-mails between the association and the operator. While the trial court found that no contract to lease was ever executed, the Court of Appeals concluded that, presuming a contract to lease existed, the individual plaintiffs were not third party beneficiaries and thus had no standing to enforce the contract to lease.

In T.W. Phillips Gas & Oil Co. v. Jedlicka, 42 A. 3d 261 (Pa. 2012), the court cited this section of the **Treatise** when describing the habendum clause of the lease as defining the duration of the lease.

(n2)Footnote 2. This paragraph of the **Treatise** was quoted in *McCullough Oil, Inc. v. Rezek, 176 W. Va. 638, 346 S. E. 2d 788, 90 O.&G.R. 596 (1986)* at note 4.

(n3)Footnote 3. *See e.g., Kropa v. Cabot Oil & Gas Corp., 716 F. Supp. 2d 375, 378-79 (M.D. Pa. 2010) ; Carey v. New Pennsylvania Exploration, LLC, 2010 U.S. Dist. LEXIS 52199 (M.D. Pa. April 28, 2010) ; Rodriguez v. Anadarko E & P Co., L.P., 2010 U.S. Dist. LEXIS 127188 (M.D. Pa. Dec. 1, 2010)* .

In *Harrison v. Cabot Oil & Gas Corp., 887 F. Supp. 2d 588 (M.D. Pa. 2012)* , the court granted the lessee's motion for summary judgment on the lessor's fraud and fraudulent inducement claims concluding that plaintiffs did not pleae that defendants made a representation which was material to the transaction, was made falsely, with knowledge of its falsity, with the intent of misleading another to rely on it, justifiable reliance on the misrepresentation and resulting injury.

In *Markowicz. v. SWEPI LP, 2013 U.S. Dist. LEXIS 53122 (M.D. Pa. April 12, 2013)* , the court dismissed a son's claim that her mother was fraudulently induced to execute a lease on a 46-acre mineral estate they co-owned. The court first concludes that such a claim must be brought in the name of the mother who was the party that executed the lease and then finds that the son waived its right to rescind the lease by waiting 50 months after the lease was executed to file this action.

See also Petrohawk Properties, L.P. v. Chesapeake Louisiana, L.P., 689 F.3d 380 (5th Cir. 2012) (a lease that is obtained through fraudulent inducement may be rescinded by lessor as a relative nullity).

(n4)Footnote 1. *See* Moses, *The Evolution and Development of the Oil and Gas Lease*, 2 Sw. Legal Fdn. Oil & Gas Inst. 1 at 7 (1951), for a copy of this form. The lease, dated December 30, 1857, from Pennsylvania Rock Oil Co. to E. B. Bowditch and E. L. Drake, was "for the term of 15 years, with the privilege of renewal for same term."

(n5)Footnote 2. *See, e.g., Griner v. Ohio Oil Co., 5 Ohio C.C. (n.s.) 126, 16 Ohio Cir. Dec. 521 (1904) , aff'd, 74 Ohio St. 455, 78 N.E. 1134 (1906)* . The lease here in question was granted for a term of 12 years. The court held that upon the expiration of that term of years the lessor was entitled to possession of the premises.

Standard Banner Coal Corp. v. Rapoca Energy Co., L.P., 265 Va. 320, 576 S. E. 2d 435 (2003) involved a 75-year fixed term lease that required lessee to extract at least 75% of the mineable coal. The court found that a subsequent lease amendment purporting to extend the fixed term by an additional 20 years did not eliminate the 75% extraction requirement, thus terminating the lease at the end of the 75-year period when the lessee had not extracted 75% of the mineable coal.

Some lease forms employed in West Texas in the 1920s, although providing for a primary and a secondary term, limited the duration of the lessee's estate to a fixed, long term. See *§ 603.4, infra*.

Mineral Resources, Inc. v. Federal Energy Regulatory Comm'n, 808 F.2d 107, 257 U.S. App. D.C. 212, 93 O.&G.R. 640 (D.C. Cir. 1986) , was concerned with the application of the so-called Southland exclusion set out in the Natural Gas Policy Act to a lease whose 50 year term had expired in 1972 where the lessors continued to allow the lessee to sell gas in interstate commerce and to accept royalties from those sales beyond May 31, 1978, the critical date for application of that exclusion. The court concluded that the exclusion was inapplicable.

(n6)Footnote 3. *See* Merrill, *Covenants Implied in Oil and Gas Leases* § 57 (2d ed. 1940).

The implied covenants of oil and gas leases are discussed in Volume 5 of this **Treatise.**

(n7)Footnote 4. Some fixed term leases contained options for renewals. *See* note 1, *supra*.

(n8)Footnote 5. *See* Merrill, *supra* note 3, § 15, n. 6.

(n9)Footnote 6. Lease clauses authorizing the removal of fixtures and casing are discussed in *§§ 674-674.6, infra.*

(n10)Footnote 1. *See, e.g., Crain v. Pure Oil Co., 25 F.2d 824 (8th Cir. 1928)* . The grant in this case was to the grantee, his heirs and assigns forever. The court held that the instrument was a lease, not a deed, and that, therefore, it was subject to termination by abandonment. Abandonment of oil and gas leases is discussed in *§ 604.3, infra.*

(n11)Footnote 1. *See, e.g.*, the following lease construed in *Federal Oil Co. v. Western Oil Co., 112 F. 373 (C.C.D. Ind. 1902) , aff'd, 121 F. 674 (7th Cir. 1902)* :

> "In consideration of the sum of one dollar, ... R. W. Bradford ... of the first part, hereby grant and guaranty unto the Federal Oil Company, ... second party, all the oil and gas in and under the following described premises, together with the right to enter thereon at all times for the purposes of drilling and operating for oil and gas, ... The first party shall have the one-eight part of oil produced and saved from said premises, ... In case no well is commenced within one day from this date, then this grant shall become null and void, unless second party shall thereafter pay at the rate of eight dollars and seventy-five cents ($8.75) for each month such commencement is delayed in advance."

The nature and characteristics of the "no-term" lease are discussed in *Thoreson v. Fox, 390 S.W.2d 308, 22 O.&G.R. 333 (Tex. Civ. App.--Amarillo 1965) , rev'd, Fox v. Thoreson, 398 S.W.2d 88, 23 O.&G.R. 808 (Tex. 1966)* . Citing this **Treatise**, the Supreme Court commented as follows:

> "Historically, a no term lease is one which does not impose an obligation on a lessee to drill a well or to produce oil or gas or other minerals as a condition to the continued life of the lease indefinitely. The no term lease, in common use in a past era in the oil and gas industry but now all but extinct, usually imposes an obligation to drill a well, but, as observed by the Court of Civil Appeals in this case, permits the lessee to forego that obligation and keep the lease alive indefinitely by the payment of rentals." *398 S.W.2d at 90-91, 23 O.&G.R. at 811* .

(n12)Footnote 2. *See, e.g.*, the following:

Federal Oil Co. v. Western Oil Co., 112 F. 373 (C.C.D. Ind.1902) , aff'd, 121 F. 674 (7th Cir. 1902) (declaring that lease was at will of lessee and hence was at will of the lessor);

Lanham v. Jones, 84 Colo. 129, 268 P. 521 (1928) (describing the lease as a naked option terminable at will by either party);

Berry v. Walton, 366 S.W.2d 173, 18 O.&G.R. 448 (Ky. 1963) (holding that "a mineral lease that does not specify a term and does not place on the lessee any express obligation except to account for and pay a royalty on whatever quantity of material he may remove is terminable at the will of the lessor").

The court in *ICG Natural Resources, LLC v. BPI Energy, Inc., 399 Ill. ApP. 3d 554, 339 Ill. Dec. 214, 926 N.E.2d 446 (Ill. App. Ct. 5th Dist. 2010)*, declared void, for want of mutuality, coalbed methane leases covering 64,000 acres with a term of 99 years during which the lessee had no obligation to explore for or produce the mineral and no obligation to pay an advance royalty, a minimum royalty, or other payments in lieu of production; under the "royalty leases," the lessor was to receive payments only if minerals were produced.

Snyder Bros. v. Peoples Natural Gas Co., 450 Pa. Super. 371, 676 A. 2d 1226, appeal denied, 546 Pa. 683, 686 A. 2d 1312 (1996) (rejecting lessor's claim that a lease which can be kept alive indefinitely by production, operations, or the payment of a $5.00/acre/year rental is a tenancy at will; it is a valid oil and gas lease which creates a fee simple determinable estate which will revert to the lessor if none of the three limitations are met);

National Oil & Pipeline Co. v. Teel, 67 S.W. 545 (Tex. Civ. App. 1902), aff'd, 95 Tex. 586, 68 S.W. 979 (1902).

See also Linton Coal Co. v. South Cent. Resources Inc., 590 So. 2d 911, 116 O.&G.R. 436 (Ala. 1991) (coal lease for initial five-year term gave lessee the right of renewal for additional five-year terms "so long as there is recoverable coal remaining in the lands leased hereby"; *held*, "the term of the lease is so incapable of ascertainment that it renders the lease void as a tenancy for years, and a tenancy at will is created").

Discussion Notes, 116 O.&G.R. at 439, 441, observed that the habendum clause of the lease construed in *Linton Coal Co.* "is disturbingly similar to the habendum clause of many oil and gas leases" and commented: "It is hoped that this case is an aberration. Without explanation, the court applied landlord and tenant doctrine to a mineral lease, never recognizing that it had previously held that doctrine to be inapplicable to a mineral lease."

Compare L.E. Cooke Corp. v. Hayes, 549 S.W.2d 837, 58 O.&G.R. 203 (Ky. App. 1977), discretionary review granted and then, on motion of parties, dismissed, 572 S.W.2d 420, 61 O.&G.R. 50 (Ky. 1978), sustaining the validity of a coal lease providing for a minimum royalty of $1 per year and providing that "the lease shall remain in full force and effect for one year and thereafter until notice is given by lessee of its intention to cancel the lease." The court rejected the contention of lessor that this was an estate at will.

(n13)Footnote 3. *See, e.g., Federal Oil Co. v. Western Oil Co., supra note 1*.

(n14)Footnote 4. *Ibid.*

An Alberta court has said that the renewal provision in a "no-term" lease

"must be considered as being void for uncertainty," *Reynolds v. Ackerman, 32 W. W. R. 289 (Alta. S. Ct., 1953)* .

(n15)Footnote 5. *See, e.g.*, the following:

Davis v. Nokomis Quarry, Inc., 77 Ill. App. 3d 1011, 33 Ill. Dec. 883, 397 N.E.2d 216 (1979) (lease for removal of limestone);

New American Oil & Mining Co. v. Troyer, 166 Ind. 402, 77 N.E. 739 (1906) (leaving open, however, the question whether the lessor might give notice of intent to refuse further rental payments and thereafter terminate the lease if the lessee failed to commence drilling a well within a reasonable time after receipt of such notice);

Ball v. Ball, 137 Misc. 693, 244 N. Y. S. 300 (1930) (lease providing for annual payments enforceable; payments are covenants and not limitations);

Northup Properties, Inc. v. Chesapeake Appalachia, L.L.C., 567 F.3d 767 (6th Cir. 2009) (lease on 4,327 acres with primary term of ten years and extended term for so long as lessee paid annual rental of $1 per acre; lessor's claim of lack of mutuality rejected);

Venedocia Oil & Gas Co. v. Robinson, 71 Ohio St. 302, 73 N.E. 222 (1905) (holding that lease did not expire automatically when lessor rejected a tender of rentals, but leaving open the question whether lessee was under an implied obligation to develop the premises);

Snyder Bros. v. Peoples Natural Gas Co., 450 Pa. Super. 371, 676 A. 2d 1226 , appeal denied, 546 Pa. 683, 686 A. 2d 1312 (1996) (finding that a lease which can be kept alive indefinitely by production, operations, or the payment of a $5.00/acre/year rental creates a fee simple determinable estate which will only revert to the lessor if none of the limitations are met);

Dallas Power & Light Co. v. Cleghorn, 623 S.W.2d 310, 72 O.&G.R. 153 (Tex. 1981) , discussed in Worthington, *Texas No-Term Leases--Dallas Power and Light Co. v. Cleghorn, 34 Baylor L. Rev. 717 (1982)* (sustaining the validity of a coal and lignite "no term" lease and holding that no implied covenant for development was to be implied contrary to an express provision of the instrument negating such a covenant);

Rosson v. Bennett, 294 S.W. 660 at 662 (Tex. Civ. App. 1927) (declaring that:

> "The courts ... have uniformly held that a provision in oil and gas leases for successive extensions after the expiration of the specific term, of the time for commencing operations for development, without limiting the number of such extensions, does not authorize unreasonable nor indefinite delay without the consent or acquiescence of the lessor");

Weed v. Brazos Electric Power Coop., Inc., 574 S.W.2d 570, 62 O.&G.R. 261 (Tex. Civ. App. 1978, error ref'd n.r.e.) (coal and lignite lease);

Iafolla v. Douglas Pocahontas Coal Corp., 162 W. Va. 489, 250 S. E. 2d 128

(1978) (coal lease);

Wilson v. Reserve Gas Co., 78 W. Va. 329, 88 S. E. 1075 (1916) (finding that lease was still in effect but declaring that:

"There is nothing in the contract to deny the lessors the right to terminate the lease upon reasonable notice."

(n16)Footnote 6. *See, e.g.,* the following cases:

Lloyd's Estate v. Mullen Tractor & Equip. Co., 192 Miss. 62, 4 So. 2d 282 (1941) ;

Lewis v. State Department of Revenue, 207 Mont. 361, 675 P.2d 107 (1984) ;

Snyder Bros. v. Peoples Natural Gas Co., 450 Pa. Super. 371, 676 A. 2d 1226 , appeal denied, 546 Pa. 683, 686 A. 2d 1312 (1996) (rule against perpetuities only applies to invalidate contingent future interests, not a present possessory fee simple determinable estate created by an oil and gas lease which under its terms may last indefinitely);

Rosson v. Bennett, 294 S.W. 660 (Tex. Civ. App. 1927) ;

Wilson v. Reserve Gas Co., 78 W. Va. 329, 88 S. E. 1075 (1916) .

Canadian Export Gas & Oil Ltd. v. Flegal, 80 D.L.R. 679, [1978] 1 W. W. R. 185 (Alta. S. Ct., Trial Div. 1977), held that an option to renew an oil and gas lease was invalid under the Rule against Perpetuities.

Although a perpetual lease is invalid in Louisiana, leases that have been stipulated to Canadian Export Gas & Oil Ltd. v. Flegal, 80 D.L.R. 679, [1978]continue during the existence of a condition have been held valid. *Cain v. Goldking Properties Co., 408 So. 2d 1364, 74 O.&G.R. 37 (La. App. 1981)* , sustained the validity of a surface lease for a site of a well to be bottomed under other premises, the lease to expire six months after lessee no longer needed the surface location or the facilities to be located on the tract.

See also **Treatise** § 322 at note 4, *supra.*

(n17)Footnote 7. *See, e.g., Logansport & W. Va. Gas Co. v. Seegar, 165 Ind. 1, 74 N.E. 500 (1905)* (refusal of lessor to accept delay rental is adequate notice of demand to drill exploratory well; lease forfeited for failure to drill within a reasonable time thereafter).

Northup Properties, Inc. v. Chesapeake Appalachia, L.L.C., 567 F.3d 767 (6th Cir. 2009) (court noted that under Kentucky law, "the *right* of providing a notice and demand on the lessee is available where a lessor determines that property lies undeveloped despite a reasonable time for development.") (emphasis in original).

See also the cases cited in note 5, *supra.*

(n18)Footnote 8. *See § 604.8, infra.*

E.H. Lester Leasing Co. v. Griffith, 779 S.W.2d 226, 107 O.&G.R. 250 (Ky. Ct. App. 1989, *discretionary review denied*), apparently involved a no-term lease arising by mistake in the completion of blanks in a printed lease form. The lease provided for a primary term of 90 days and contained a customary "as long thereafter" clause. The date included in the delay rental clause was July 6, 1982, which was the 91st day following the execution of the lease. Drilling operations commenced on July 6, 1982, resulted in paying production. The court concluded that the lease was held by production. *E.H. Lester Leasing Co.* is critically examined in Anderson, "Mineral Rights and the Duhig Doctrine," *6 Nat. Resources & Env't 43 (Summer 1991)*.

A no-term lease was apparently involved in the case of *Texaco, Inc. v. Pigott, 235 F. Supp 458, 22 O.&G.R. 46 (S.D. Miss. 1964)* . The lease, executed in 1927 by a lumber company to a trustee (the beneficiaries of the trust apparently were the stockholders of the lumber company) for a primary term of 25 years, provided that the lease could be held after the expiration of such primary term by the payment of a modest rental of 10cent(s) per acre per annum. The opinion is not clear on the matter, but it would appear that the lumber company was concerned about the possibility of loss of title to minerals along with surface tracts occupied by squatters and sought to sever minerals by a lease so that adverse possession of the surface would not be adverse to the severed minerals. Generally when lumber companies severed minerals for this purpose, mineral deeds, rather than leases, were utilized. Judgment in this case was affirmed, *358 F.2d 723, 24 O.&G.R. 121 (5th Cir. 1966)* .

(n19)Footnote 9. *Wallace v. Imbertson, 197 Cal. App. 2d 392, 17 Cal. Rptr. 117, 15 O.&G.R. 439 (1961)* .

For another case dealing with what seems to have been a "no-term" lease, see *Carroll v. Eaton, 168 Mont. 150, 541 P.2d 64, 54 O.&G.R. 168 (1975)* . The lease was for a primary term of two years and a secondary term dependent upon production of ore in commercial quantities. The court concluded that the lease was preserved when a tender of delay rental for the third year was not rejected until some eight months after tender. The opinion implies that the lessor could by action bring about a termination of the lease, *viz.*, the lessee could not, by payment of rental, preserve the lease indefinitely over the objection of the lessor.

(n20)Footnote 1. Habendum clauses are discussed in Topic 2, *infra*.

In Louisiana under the provision of Article 115 of the Louisiana Mineral Code (R.S. 31:105), effective January 1, 1975, except under specified circumstances, "a lease shall not be continued for a period of more than ten years without drilling or mining operations or production. Except as provided in this article, if a mineral lease permits continuance for a period greater than ten years without drilling or mining operations or production, the period is reduced to ten years." The exception is a lease granting the right to explore for and produce *solid* minerals which may provide for continuation for a period greater than ten years (but not in excess of twenty years) by the payment of rentals if, at the time it is extended beyond ten years, there has been discovery of a hard mineral susceptible of paying production on the leased land and mining operations have been commenced on neighboring land.

See also *McCullough Oil, Inc. v. Rezek, 176 W. Va. 638, 346 S. E. 2d 788, 90 O.&G.R. 596 (1986)* (citing and paraphrasing this section of the **Treatise**).

Wellman v. Energy Resources, Inc., 210 W. Va. 200, 557 S. E. 2d 254, 260 n.2 (2001) (relying on this **Treatise** and *Rezek* to discuss the history and interpretation of the modern habendum clause).

An occasional lease contains an option to extend the primary term of a lease by timely tender of a specified payment. *APC Operating Partnership v. Mackey, 841 F.2d 1031, 98 O.&G.R. 324 (10th Cir. 1988)* (holding that option authorized by implication the tender of payment by mail). Such a provision is also referred to as an option to renew, usually by the payment of additional bonus. In Louisiana law there is no requirement that the exercise of the option to extend or renew be recorded, just as there is no requirement to record the existence of production that extends a lease. *Sparks v. United Title & Abstract, LLC, 56 So. 3d 302 (La. App. 2 Cir. 12/15/10)* .

Chevron U.S.A., Inc. v. State of Mississippi. 578 So. 2d 644, 113 O.&G.R. 237 (Miss. 1991) , was concerned with the application of *§ 211 of the Mississippi constitution*, restricting sale or lease of "sixteenth section lands reserved for the support of township schools" for a longer term than ten years but permitting the Legislature to provide for the lease of said lands for a term not exceeding 25 years. Chevron held Oil and Gas leases issued for a primary term of six years with a "so long thereafter" clause. A divided court held the Chevron leases expired at the expiration of 25 years. A constitutional amendment approved in the November 3, 1992 election removed the 25-year limit on the duration of oil and gas leases.

See also Exxon Corp. v. Board of Educ. of Lamar County, MS, 849 F. Supp. 479, 128 O.&G.R. 279 (S.D. Miss. 1990) (holding that: (1) *Chevron* applies retroactively to leases executed before the 1992 amendment of section 211, whether or not those leases have expired; (2) the subject leases executed between 1943 and 1960 on sixteenth section lands expired twenty-five years from the date of their execution; and (3) under the provisions of *Miss. Code Ann. § 29-3-63*, as amended in 1992, giving lessees whose leases had expired by operation of law a prior right to re-lease, Exxon should have the opportunity to re-lease, subject to an accounting for production).

Even though the modern oil and gas lease is a conveyance of an interest in real property, it is also considered to be a contract. See e.g., *Hite v. Falcon Partners, 2011 PA Super 2, 13 A.3d 942, 945 (2011)* ; *Jacobs v. CNG Transmission Corp., 332 F. Supp. 2d 759, 772, 162 O.&G.R. 33 (W.D. Pa. 2004)* . Thus issues relating to the applicable statute of limitations as well as the power of the officers of a non-profit organization to enter into a lease may be governed by contract law principles and statutes. *Pinebrook Minerals, LLC v. Anadarko E & P Co., 2011 U.S. Dist. LEXIS 90676 (M.D. Pa. July 25, 2011)* , *magistrate's report adopted, 2011 U.S. Dist. LEXIS 90622 (M.D. Pa. Aug. 15, 2011)* .

(n21)Footnote 2. *See Galey v. Kellerman, 123 Pa. 491, 16 A. 474 (1889)* (holding lessee under "or" lease liable to lessor for rentals; the forfeiture clause of the "or" lease is solely for the benefit of the lessor, and therefore he can waive that remedy and sue for the rent for the term of the lease).

See § 607.5, infra, for a discussion of the lessor's right to waive forfeiture and sue the lessee for rentals during the primary term of an "or" lease.

(n22)Footnote 3. The surrender clause of oil and gas leases is discussed in *§§ 680-680.8, infra.*

(n23)Footnote 4. *See e.g., Conkling v. Krandusky, 127 A.D. 761, 112 N. Y. S. 13 (1908) ; Burgan v. South Penn Oil Co., 243 Pa. 128, 89 A. 823 (1914) ; Eaton v. Allegany Gas Co., 122 N. Y. 416 (1890) ; Venture Oil Co. v. Fretts, 152 Pa 451, 25 A. 732 (1893) ; Kennedy v. Crawford, 138 Pa. 561, 21 A. 19 (1891) .*

(n24)Footnote 5. For a recent reference to the "inchoate title" doctrine in a description of an oil and gas lease see *T.W. Phillips Gas & Oil Co. v. Jedlicka, 42 A. 3d 261, 267 (Pa. 2012) ; Hite v. Falcon Partners, 2011 Pa. Super. 2, 13 A. 3d 942 , aff'd without opinion, 23 A.3d 1075 (2011) .* In *Rice v. Chesapeake Energy Corp., 2012 U.S. Dist. LEXIS 107471 (W.D. Pa. Aug. 1, 2012)* , the court treats the lease as conveying inchoate title in something akin to a fee simple determinable estate prior to the attainment of production.

For other references to the "inchoate title" doctrine see *Ohio Oil Co. v. Detamore, 165 Ind. 243, 73 N.E. 906 (1905) .*

(n25)Footnote 6. *T.W. Phillips Gas & Oil Co. v. Jedlicka, 42 A. 3d 261 (Pa. 2012)* , citing *Burgan v. South Penn Oil Co., 243 Pa. 128, 89 A. 823, 826 (1914)* and *Calhoon v. Neeley, 201 Pa. 97, 50 A. 967, 968 (1902) .*

(n26)Footnote 6.1. *Heasley v. KSM Energy, Inc., 2012 PA Super. 151, 52 A.3d 341 , Cassell v. Crothers, 193 Pa. 359, 44 A. 446 (1899) .*

(n27)Footnote 1. *See § 601.1, supra.*

(n28)Footnote 2. *See § 601.3, supra.*

(n29)Footnote 3. Variants in and construction of "or" clauses are discussed in *§ 605.1, infra.*

(n30)Footnote 3.1. *See e.g., Davis v. Chatauqua Oil & Gas Co., 78 Kan. 97, 96 P. 47 (1908) ; Zeigler v. Hopkins, 258 F. 467 (D. Ky. 1918) , rev'd, 259 F. 43 (6th Cir. 1919)* (applying Kentucky law); *Wilson v. Purnell, 199 Ky. 218, 250 S.W. 850 (1923) ; Pure Oil Co. v. Sturm, 43 Ohio App. 105, 182 N.E. 865 (1930) ; Smith v. People's Natural Gas Co., 257 Pa. 396, 101 A. 739 (1917) ; Decker v. Kirlicks, 110 Tex. 90, 216 S.W. 385 (1919) ; Castle Brook Carbon Black Co. v. Ferrell, 76 W. Va. 300, 85 S.E. 544 (1915) .*

(n31)Footnote 4. Variants in and construction of "unless" clauses are discussed in *§ 605.2, infra.*

(n32)Footnote 5. The California form drilling and rental provision is discussed in *§ 605.3, infra.*

EXHIBIT 11

Williams & Meyers, Manual of Oil and Gas Terms

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L Terms

8-L Manual of Oil and Gas Terms L

Scope

LaBarge project A field located in Sublette County, Wyoming, consisting of 18 producing natural gas wells in three federal units. The natural gas stream from these wells is composed of approximately 65% carbon dioxide, 22% methane, 7% nitrogen, 5% hydrogen sulfide and 0.6% helium. As such the gas stream is not flammable before processing. From the wells, the gas is transported to the Black Canyon facility where the gas stream is dehydrated. It is then transported to the Shute Creek processing facility where the hydrogen sulfide and other non-hydrocarbon gases are removed from the gas stream. *ExxonMobil Corp. v. State of Wyoming, Department of Revenue, 2009 WY 139, 219 P.3d 128, 131 (2009)* . Exxon invested some $ 1 billion in the transportation and processing facilities for the project.

For other cases dealing with the tax ramifications for the LaBarge project *see Wyoming Department of Revenue v. ExxonMobil Corp., 2007 WY 112, 162 P.3d 515, 169 O.&G.R. 446 (2007)* , *on later appeal, 2011 WY 161, 266 P. 3d 944* ; *Exxon Corp. v. Board of County Commissioners, 987 P.2d 158, 143 O.&G.R. 400 (Wyo. 1999)* .

See also: Severance tax.

Laches Neglect, for an unreasonable and unexplained length of time, under circumstances permitting diligence, to do what in law should have been done; an inexcusable delay in asserting a right; an implied waiver arising from knowledge of existing conditions and an acquiescence in them; such delay in enforcing one's rights as works disadvantage to another.

For cases dealing with the effect of alleged laches on various claims, see the following:

Pope v. Pennzoil Producing Co., 288 Ark. 10, 701 S.W.2d 366, 87 O.&G.R. 488 (1986) :

"Production commenced in December 1971. Appellant personally observed the drilling, the erection of the tanks, batteries, pumping units, and the laying of the pipelines. Still, he silently stood by and made no claim until December, 1981, thirteen years after the initial leases had been executed, ten years after production had begun, and ten years after the value of the leases had dramatically increased. The Chancellor sagaciously noted:

"Due to the risks involved in the exploration for and production of oil and gas, I find that the Plaintiff [appellant] should be barred by the doctrine of laches as to any claim at this time to his allegedly unleased mineral interest. No doubt had production ceased before the well paid out the Plaintiff certainly would make no claim to a working interest and share in the cost of drilling, but would only seek payment for his 1/8 royalty."

"The Chancellor was correct. The appellant is barred by the doctrine of laches.";

Tosco Corp. v. Hodel, 611 F. Supp. 1130, 1208 et seq. (D. Colo. 1985) (discussing application of laches to the government), *motions for intervention and injunction denied on ground case was mooted by settlement, 804 F.2d 590 (10th Cir. 1986) , order vacated, 826 F.2d 948 (10th Cir. 1987)* ;

Crystal Oil Co. v. Warmack, 313 Ark. 381, 855 S.W.2d 299, 127 O.&G.R. 288 (1993) ("Laches ... requires a showing of some sort that the party asserting the doctrine has suffered or changed its position as a result of the lack of diligence or delay in assertion of rights.");

Moncrief v. Sohio Petroleum Co., 775 P.2d 1021, 108 O.&G.R. 369 (Wyo. 1989) (applying doctrine of laches to action seeking specific performance of alleged contractual obligation to offer and/or assign an interest in a renewed oil and gas lease:

"Innumerable cases have established that the doctrine of laches is particularly applicable to oil and gas mining claims due to the nature of such property interests.

"The record clearly indicates that the value of the renewed Day lease increased dramatically between 1977 and 1984 as a result of extensive drilling in the Long Butte Unit. ... From the deposition testimony and correspondence highlighted above, it can readily be seen that for several years appellants lacked sufficient interest in the Day lease to pursue their claim, until it became apparent that the Day lease was quite valuable.

Under the circumstances of this case, we hold that application of the doctrine of laches to bar appellants' claim was justified.");

Richardson v. Richland County, 219 Mont. 48, 711 P.2d 777, 89 O.&G.R.

317 (1985) , and *Anderson v. Richland County, 219 Mont. 60, 711 P.2d 784, 89 O.&G.R. 306 (1985)* (holding that an action to quiet title against a royalty interest reserved by the county in a void tax sale was barred by laches);

Jordan v. Sutton, 424 So. 2d 305, 310, 77 O.&G.R. 89, 98 (La. Ct. App. 1982) , *on remand, 450 So. 2d 1041, 83 O.&G.R. 35* (La. Ct. App.) , *writ denied, 456 So. 2d 1391 (La. 1984)* (finding that in instant case the plaintiff was not barred by laches from seeking review of order of the Commissioner of Conservation but was barred by laches as to certain other claims);

Corbello v. Sutton, 442 So. 2d 610, 80 O.&G.R. 490 (La. Ct. App. 1983) (finding action to review order of the Commissioner of Conservation was barred by laches), *dismissal of appeal from Commissioner of Conservation aff'd on different grounds, 446 So. 2d 301, 82 O.&G.R. 79 (La. 1984)* ;

Morgan v. Morgan, 431 So. 2d 1119, 77 O.&G.R. 511 (Miss. 1983) (claimants who had knowledge that deed in chain of title was a forgery were estopped by laches to assert their claim against an oil and gas lessee who had drilled and obtained production under a lease executed by the grantee of forged deed);

Hunter v. Rosebud County, 240 Mont. 194, 783 P.2d 927, 109 O.&G.R. 194 (1989) (discussing the factors significant in determining the issue of laches and concluding that contest of validity of a tax deed was barred by laches);

Clark v. Unknown Heirs, etc. of Osborn, 1989 OK 145, 782 P.2d 1384 (discussing the elements of laches);

Rogers v. Ricane Enterprises, Inc., 772 S.W.2d 76, 80, 108 O.&G.R. 331 (Tex. 1989) ("Laches is not a defense in a trespass to try title suit where the plaintiff's right is based on legal title.").

On subsequent appeal in *Rogers v. Ricane Enterprises*, the court of appeals concluded that the lease assignment in question had terminated under the Devotional limitation doctrine (*q.v.*), *Rogers v. Ricane Enterprises, Inc., 852 S.W.2d 751, 130 O.&G.R. 392 (Tex. App. 1993)* , *rev'd, 884 S.W.2d 763, 130 O.&G.R. 415 (Tex. 1994)* .

Freeman v. Samedan Oil Corp., 2000 Tex. App. LEXIS 8695 (Tex. App.--Tyler Apr. 18, 2000) (laches equated with the affirmative defenses of ratification, estoppel, and waiver, and found not to be applicable in suit asserting that the lease terminated for lack of production in paying quantities).

KMI Continental Offshore Production Co. v. ACF Petroleum Co., 746 S.W.2d 238, 104 O.&G.R. 133 (Tex. App.--Houston [1st Dist.] 1987, writ denied) (laches in exercise of option to purchase interests in oil wells caused it to expire).

Syn.: Equitable estoppel (*q.v.*).

See also Lying behind the log.

LACT *See* Lease automatic custody transfer.

Lag The time period between investment in a lease and first realization of revenue from the sale of gas. *See Permian Basin Area Rate Proceeding, 34 F.P.C. 159, 199 , 23 O.&G.R. 103, 144* (Opinion No. 468, Aug. 5, 1965), *remanded, Skelly Oil Co. v. Federal Power Comm'n, 375 F.2d 6, 26 O.&G.R. 237 (10th Cir. 1967) , aff'd in part and rev'd in part sub nom. In re Permian Basin Area Rate Cases, 390 U.S. 747, 28 O.&G.R. 689 (1968) .*

Lakehead Policy A policy adopted by the Federal Energy Regulatory Commission (*q.v.*) to deal with the use of non-taxed entities such as limited partnerships in the transmission of natural gas. The policy is named after a particular FERC decision, Lakehead Pipe Line Company Limited Partnership (*Lakehead II), 75 FERC P 61,181* (May 17, 1996) . It has been described in the following way: "In *Lakehead*, the Commission declared that where a regulated pipeline is a non-taxed limited partnership, it will not be permitted the same tax allowance as it would if the pipeline company were a corporation. However, FERC further rules that there the limited partnership includes corporate partners, it would treat the partnership as being "in essence a division of each of its corporate partners" for purposes of determining an income tax component in the partnership's cost of service computation. ..." *BP West Coast Products, LLC v. Federal Energy Regulatory Comm'n, 374 F.3d 1263, 1287 (D.C. Cir. 2004) , cert. denied sub nom. SFPP, LP v. Federal Energy Regulatory Comm'n, 125 S. Ct. 2245, 161 L. Ed. 2d 1079 (2005)* . Portions of the Lakehead policy were treated as arbitrary and capricious by the court in *BP West Coast Products*.

In litigation subsequent to *BP West Coast*, the court upheld the application of the *Lakehead* policy to the tariff filed by the owner of the oil pipeline. *ExxonMobil Oil Corp. v. Federal Energy Regulatory Commission, 487 F.3d 945 (D.C. Cir. 2007)* .

Land committee A committee charged with securing signatures of royalty owners to a pooling or unitization agreement. *See* Myers, *The Law of Pooling and Unitization* § 4.06 (2d ed. 1967).

Landed cost of oil Cost of imported oil at the dock, *viz.*, inclusive of transportation costs.

Landfill gas recovery project *See* Lfgrecovery project.

Landman An employee or independent contractor of an oil company whose primary duties are the management of the company's relations

with its landowners. Such duties include the securing of oil and gas leases, lease amendments, pooling and unitization agreements and instruments necessary for curing title defects from landowners. Landmen are often said to have a fiduciary relationship with the company that employ them.

See the following:

S. Thomas Throne & Jacob T. Haseman, *The Duty of Landmen and Legal Counsel to Former Employers in the Petroleum Industry: Ethical and Legal Considerations*, 55 Rocky Mt. Min. L. Inst. 7-1 (2009) ("'Agency' is the fiduciary relation that results from the manifestation of consent by one person to another that the other shall act on his behalf and subject to his control, and consent by the other so to act. The relationship between the professional landman and any petroleum exploration company he represents is just such a relationship.");

Philip Wm. Lear, *The Ethical Landman: All You Need To Know About Ethics You Learned In Sunday School*, Ethics and Professional Responsibility in the New Millenium 6-1 (Rocky Mtn. Min. L. Fdn. 2000);

John S. Dzienkowski, *Professional Responsibility Trends For Lawyers And Landmen In Natural Resources Transactions, 36 Rocky Mtn. Min. L. Inst. 2-1 (1990);*

John Land McDavid, *Legal and Ethical Obligations of the Landman*, 7 Eastern Min. L. Inst. ch. 20 (1986);

Rodney D. Knutson, *Legal and Ethical Obligations a Landman Owes His Employer*, 31 Rocky Mt. Min. L. Inst. 19-1 (1985);

Janet N. Harris, *Analyzing and Curing Title Requirements in Oil and Gas Title Opinions or 'What's that Fly Doing in My Soup?'*, 31 Rocky Mt. Min. L. Inst. 20-1 (1985);

Gordon L. Allott, *Unanticipated Liability of the Landman*, 31 Rocky Mt. Min. L. Inst. 21-1 (1985).

This definition in this **Manual** was cited with approval in *Mann v. Trend Exploration Co., 934 S.W.2d 709, 710* (n.1) (Tex. App.--El Paso 1996).

See also the following cases:

Textana, Inc. v. Klabzuba Oil & Gas, 353 Mont. 442, 2009 MT 401, 222 P.3d 580 (2009) ;

Gill v. Gipson, 982 So. 2d 415 (Miss. App. 2007, *cert. denied*) ;

Tenneco Oil Co. v. Joiner, 696 F.2d 768 (10th Cir. 1982) .

See also Contract landman; Contract leaseman; Lease hound (*q.v.*).

Landmen's Lease An Unless lease (*q.v.*) form prepared by the Alberta Landmen's Ass'n (Form 1). Gordon v. Connors, 8 W.W.R. (N.S.) 145, [1953] 2 D.L.R. 137, *2 O.&G.R. 467* (Alberta Supreme Court, App. Div., 1953), *appeal dism'd*, [1953] 2 S.C.R. 127, [1953] 4 D.L.R. 513 (Supreme Court of Canada 1953).

Landowner interest A generic name for a property interest in oil and gas granted or retained by a person not interested in carrying on exploration or development operations. Particular interests included within the term are: mineral interest, royalty interest, non-executive mineral interests, overriding royalty, production payments, and the variety of interests that arise upon execution of a lease, including bonus, rental, and royalty. A working interest in a lease is not referred to as a landowner interest.

See also Conditional landowner.

Landowner royalty A share of the gross production of minerals free of the costs of production. Occasionally the term is used to describe an interest in production created by a landowner independently of a lease as distinguished from a lessor's royalty, which arises under a lease. In this sense, the landowner royalty may have a perpetual or any other specified duration. In most instances the two terms, landowner royalty and lessor's royalty, are used synonymously.

Landowners' royalty pool An arrangement whereby royalty or mineral interests, or both, are transferred by a landowner to a business trust or corporation in return for beneficial trust interests or corporate shares. The purpose of the transfer is to give the landowner a share in production from all land covered by the agreement. This device was popular in Kansas, Oklahoma and Texas in the 1920's and 1930's, with some pools covering hundreds of thousands of acres located in two or three states. *See* Treatise §§ 907-*907.11*.

Land status book A book maintained by the Bureau of Land Management which shows, by township and range, lease applications and issued leases. Comptroller General's Report to the Congress, *Actions Needed to Increase Federal Onshore Oil and Gas Exploration and Development* 70 (1981).

Langbeinite A type of potash ore that is particularly valuable. Substantial amounts of langbeinite are located in Southeastern New Mexico on federal lands classified as potash enclaves. *51 Fed. Reg. 39,425 (1986)* .

The presence of langbeinite in a particular ore sample may determine whether the area will be included within a Potash Enclave (*q.v.*). *IMC Kalium Carlsbad, Inc., 170 IBLA 25, 36-37 (2006)* .

See Potash enclave.

LAPCO Lavan Petroleum Co.

LAPIDOTH The Israel Oil Prospectors Corporation Ltd.

Lapse statute A term applied to a Georgia statute, *OCGA § 44-5-168* (1975), providing that title to a reserved mineral interest may be acquired by the grantee by adverse possession if the owners of such reserved interest or their heirs or assigns have neither worked nor attempted to work the mineral rights nor paid any taxes on them for a period of seven years since the dateof the conveyance and for seven years immediately preceding the filing of the petition provided for in this Code section. *Mixon v. One Newco, Inc., 863 F.2d 846, 104 O.&G.R. 213 (11th Cir. 1989)* , *noted, 6 J. Min. L. & Policy* 119 (1990-91); *Georgia Marble Co. v. Whitlock, 260 Ga. 350, 392 S.E.2d 881, 111 O.&G.R. 30 (1990)* , *cert. denied, 498 U.S. 1026 (1991)* ; *Knox v. Wilson, 286 Ga. 474, 689 S.E.2d 829 (2010)* .

See also Dormant minerals act; Repose, rule of.

Late payment charge A charge imposed by the Minerals Management Service (MMS) (*q.v.*) for a late payment of royalty. *Exxon Company, U.S.A., 117 IBLA 199* , GFS (OCS) 1991-178 (Dec. 21, 1990).

Late penalty *See* Continental Offshore Stratigraphic Test (COST).

Lateral drilling Syn. for Horizontal drilling (*q.v.*).

Lateral line A term applied to a pipeline to move lease production to a central accumulation point. *Enron Oil & Gas Co., 99 I.D. 200, 122 IBLA 224* , GFS(O&G) 1992-17 (Feb. 26, 1992).

Law stabilizing clause A clause in a Concession (*q.v.*) agreement designed to stabilize the law of the host country in one or another respect. Such a clause may be designed to preclude changes in the taxation law of the host country or to foreclose abrogation of the agreement by the host country.

For an argument that a clause of this kind runs counter to the fundamental concept of permanent sovereignty, see Hossain and Chowdhury, *Permanent Sovereignty Over Natural Resources in International Law* (1984).

M. Darden, "Legal Research Checklist for International Petroleum Operations," ABA Section of Natural Resources, Energy and

Environmental Law Monograph Series No. 20 at 49 (1994) observes: "Stability of contract clauses generally take one of two forms. One is a stabilization clause, in which the state agrees not to change the legislation applicable to the contract. The state does not waive its sovereign power to create new legislation, it simply agrees not to apply subsequent legislation to the contract. This form is sometimes modified so that subsequent legislation will apply if it is more favorable to the foreign investor. The other form is the intangibility clause, in which the state agrees not to amend or terminate the contract unilaterally."

Syn.: Immutability clause; "No change" clause.

For discussions of this clause, see the following:

E. Lauterpacht, "Law and Policy in International Resource Development," 11 *JENRL* 145, 147 (1993);

S. Mankabady, *Energy Law* 54 (1990);

Hancock, "Dispute Resolution in International Investment Agreements," [1990] 12 *OGLTR* 399;

Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* ch. 16 (1986);

El Sheikh, *The Legal Regime of Foreign Private Investment in the Sudan and Saudi Arabia* 256 (1984);

Mughraby, *Permanent Sovereignty Over Oil Resources* 52 (1966).

See also Contract stabilizing clause; General principles of law clause.

Lay barge A barge used to lay underwater pipelines.

Laydown drilling unit (Laydown spacing) *See* Standup drilling unit (Standup spacing).

Layering A term applied to a practice which developed under the Entitlement program (*q.v.*) involving the purchase and sale of oil through the books of a number of companies within a few days during which oil was miscertified so as to be entitled to a higher price. It was alleged that some domestic producers would sell old oil to resellers and, in effect, buy it back as new oil or stripper oil. In many cases, the oil never left the pipeline; the oil companies used the resellers to "launder" the oil. Congressional investigators contend that by the end of 1980 1.3 million barrels of stripper oil was being produced daily in the U.S., yet far more than that, 2 million barrels per day, were being reported as purchased by refiners. At the same time, 700,000 barrels of old oil, worth as much as $30 less, was disappearing every day between the production fields and the

refiners. *See* Greenberg, "The rise and well-cushioned fall of Robert Sutton," *Forbes Magazine* (Aug. 1, 1983) page 34.

The so-called "layering rule" [10 C.F.R. § 212.186], designed to ensure that price regulations would not permit abuses by crude oil resellers, was sustained and applied in MAPCO International Inc. v. Federal Energy Regulatory Commission, CCH, *Energy Management*--26,663 (D.C. District Court 1991). *MAPCO*, was affirmed as to the validity of the order and the award of prejudgment interest and reversed as to the disallowance of some prejudgment interest, CCH, *Energy Management*--26,678 (Temp. Emer. Ct. of App. April 29, 1993).

Lazy bench A bench on which workers or visitors may rest; a bench from which drilling operations may be observed. *See* Drilling rig.

LDC Local distribution company (*q.v.*).

Leaded gasoline Gasoline containing lead as an additive. *See* Reitze, "The Regulation of Fuels and Fuel Additives Under Section 211 of the Clean Air Act," *29 Tulsa L.J. 485 (1994)*.

League A measurement unit employed in Mexico with a value equal to 5,000 varas. *State of California, 98 I.D. 321* note 9, *121 IBLA 73* (Oct. 28, 1991) .

A measure of distance, varying for times and countries. A land league was equal to 3 statute miles and a marine league to three nautical miles.

A measure of area such as the old Spanish square league (equal to 4439 acres or 1796 hectares in old California surveys and to 4428.4 acres or 1792.1 hectares in Texas) or the English land league (equal to 5760 acres).

Lean gas Gas containing little or no liquefiable hydrocarbons. *Syn.:* Dry gas.

Lean oil process A process whereby lean oil is added to a natural gas stream with entrained liquids at a processing facility whereby the lean oil bonds with the entrained liquids to remove them from the gaseous phase. *Forest Oil Corp. v. Eagle Rock Field Services, L.P., 349 S. W. 3d 696, 700-01* (Tex. App.--Houston [14th Dist.] 2011) .

See also: Natural gas liquids.

LEAP oil and natural gas well A well subject to the provisions of the Louisiana Economic Acceleration Program (LEAP). La. Rev. Stat. §§ 148.1 *et seq*. *See* Strain, "Leap and Step-Louisiana's Incentive

Programs," 35 *L.S.U. Min'l L. Inst.* 1 (1988).

Lease (1) The conveyance of a nonfreehold interest in land.

(2) The instrument by which a leasehold or working interest is created in minerals.

The oil and gas lease has passed through an evolutionary development. Early leases were generally for long terms without a Thereafter clause (*q.v.*). Another early form of the lease was the No-term lease (*q.v.*). Most contemporary leases are of the Unless or Or types [*See* Or lease; Unless lease].

The very name, "lease," is unfortunate as it tends to give the impression to the uninformed that the "oil and gas lease" is of the same genus as the common law "lease" of land, whereas, except in Louisiana [*see Dees v. Hunt Oil Co., 123 F. Supp. 58, 3 O.&G.R. 1860 (W. D. La. 1954)* ; *Gulf Ref. Co. v. Hayne, 138 La. 555, 70 So. 509 (1915)*] the dissimilarities are more important than the similarities.

The most common oil and gas lease in the mid-continent area is the so-called "Producers 88" lease. [*See* 88 lease.] Even this does not describe a specific instrument or indicate the interests created thereby, although generally speaking Producers 88 lease forms contain an "unless" clause rather than an "or" clause and are executed for a term of years and so long thereafter as oil and gas is produced. The Or lease is commonly employed in California. *See* 86 lease.

The distinction between a lease and a deed is difficult to draw but it has importance in a number of legal contexts. *See* Treatise §§ 205-207; Hoffman, *Determination of Whether an Instrument Is a Lease or an Absolute Conveyance of Oil and Gas, 25 Texas L. Rev. 157 (1946)*. The principal interests arising from an oil and gas lease are the working or leasehold interest of the lessee, and the royalty, delay rental, bonus, and possibility of reverter or power of termination interests of the lessor. *See* Masterson, *A Survey of Basic Oil and Gas Law*, 4 Sw. Legal Fdn. Oil & Gas Inst. 219, 258-277 (1953).

(3) The instrument under which mineral development of affected premises is prosecuted.

State of Utah v. Babbitt, 830 F. Supp. 586, 127 O.&G.R. 173 (D. Utah) , concluded that a reference to tribal leases in an Act of 1933, providing that "371/2 per centum of the *net royalties* accruing [from specified lands] derived from *tribal leases*" should be paid to the State for the benefit of the Indians who settle thereon, included an oil and gas operating agreement authorizing the conduct of oil and gas operations on tribal land. The opinion refers to a number of statutes and regulations in which the term "lease" was broadly defined to include a broad variety of contracts, arrangements and agreements.

(4) A geographical location and the physical property thereon.

Taussig v. GoldKing Properties Co., 495 So. 2d 1008, 1016, 94 O.&G.R.

265, 281 (La. Ct. App. 1986) , *writs denied, 502 So. 2d 111 (La. 1987)* , reports testimony that "persons in different sections of the oil industry often use the term 'lease' loosely referring to a geographical location and the physical property, the wells, the tank battery, etc."

Gary Drilling Co. v. Department of Revenue, 250 Mont. 313, 820 P.2d 428, 117 O.&G.R. 398 (1991) , held that for purposes of a statute providing favorable treatment for "new production" from any "lease" that has not produced during the five years immediately preceding the first month of qualified new production, the term "lease" did not mean "a tract of land" but instead:

"We are persuaded that the word 'lease' as used in this statute, refers to the contract or legal arrangement giving the driller the right to go on the land and drill for oil. The 'lease' is not 'the land,' but is a separate interest. This definition is consistent with customary usage in the oil and gas industry. [Quoting the first two sentences of this entry in the 7th edition of this Manual of terms. The opinion did not refer to the portion of that entry referring to *Taussig v. GoldKing Properties Co.*, indicating that the term 'lease' is often used referring to a geographical location.] Further, by so construing the word 'lease' in the instant case, we effectuate the legislature's public policy of encouraging new production on newly leased lands."

The dissenting opinion of two justices contended:

"... what is not clear is the meaning of the word 'lease' if one looks at it in isolation but when used in the context of 'production of natural gas, petroleum, or other crude or mineral oil from any lease' it becomes clear. The word 'from' refers to the source. Oil and gas are produced from a place, real property and premises. For an example, the oil and leases involved herein and agreements of the lessees herein, provide in their text for oil and gas produced and saved from the premises. Oil and gas are not produced from a written instrument or lease; if it were to be from a written lease, it would be production under or by virtue of a lease."

For a discussion of whether an oil and gas lease is an "executory contract or unexpired lease of the debtor" which may be assumed or rejected under *section 365(a) of the Bankruptcy Code*, see Byers and Tuggey, *Oil and Gas Leases and Section 365 of the Bankruptcy Code: A Uniform Approach*, 63 Am. Bankruptcy L.J. 337 (1989). *See also In re Aurora Oil & Gas Corp., 439 B.R. 674 (Bkrtcy. W.D. Mich. 2010)* (oil and gas lease qualified as an "unexpired lease" which the debtor must either assume or reject pursuant to Section 365).

See also Abandonment; Ad valorem lease; Automatic termination of lease; Block lease; Bottom lease; Cancellation decree; Cents-per-ton lease; Checkerboard leasing; Combination lease; Combined hydrocarbonlease; "Commence" lease; Community lease; Competitive lease; "Completion" lease; Conditional lease; Correction lease; Counterpart lease; Cover lease; Departmental lease; Development of a lease; Discovery lease selection; Drill or forfeit lease; Drill or pay

lease; Down-dip lease; Edge lease; 86 lease; 88 lease; Exchange and renewal lease; Exploration retention lease; Federal lease; Fixed rate lease; Flat-rate roylaty lease; Fractional or future interest lease; Full-interest lease; Future interest lease; "Gotcha" lease; Joint lease; Landmen's lease; Leveraged lease; Lieu lease; Long term lease; Market value lease; Mid-continent lease; Mineral lease; Multiple community lease; Net profit share lease (NPSL); New lease; Noncompetitive lease; Nonconventional oil recovery stipulation; Nondrilling lease; No-prejudice clause; No surface occupancy (NSO) lease; No term lease; Oil age 86-C form; Old lease; On the lease; Open-end lease; Open parcel lease; Or lease; Over-the-counter lease; Paid-up lease; Perpetual lease; Pooling lease; Preference right lease; Proceeds lease; Protection lease; Protective lease; Ratification of lease; Relinquishment of lease; Retention lease; Section 6 lease; Section 8 lease; Security lease; Selection lease; Shooting lease; Split lease; Split level lease; Split title lease; Store lease; Stripper well lease; Surface lease; Termination of lease; Tolling of term of a lease and rental payment; Tolling the running of the lease term; Top lease; Unexpired lease; Unitized lease; Unless lease; Up-dip lease; Waste water lease.

Lease acquisition costs Bonus payments. In Canada such costs have in practice been treated as non-deductible capital expenditures. *See Discussion Notes, 4 O. & G. R. 814 (1955)* ; McDonald, *Canadian Income Tax* § 53.2 (a) (1955). In the United States prior to the Tax Reduction Act of 1974, cash bonus was treated as advance royalty which was depletable.

See also Bonus.

Lease acquisition fund An alternative to a Drilling fund (*q.v.*) by which one may invest in varying combinations of exploratory, development, or wildcat oil and gas properties. The traditional fund of this type involves a limited partnership which the corporate general partner uses to carry its lease inventory or to purchase leases from third parties. Subscribers are usually called "participants." *See* Reiff, "Tax Perspectives of Lease Acquisition Funds Used as a Financing Vehicle in a Declining Market," 53 *Okla. B.A.J.* 2548 (1982) , 32 *O.&G. Tax Q.* 367 (1983).

See also Income fund; Production fund; Royalty trust.

Lease allowable *See* Allowable; Prorationing.

Lease allowable system The lease allowable system, permitting the combination of the allowables of all the wells on a lease into one total allowable for the entire lease, is discussed in Blazier, "The Lease Allowable System: New Method of Regulating Oil Production in Texas," *47 Texas L. Rev. 658 (1969)*.

See also Allowable.

Lease automatic custody transfer (LACT) A completely automatic gauging system to take readings for volume, temperature, gravity, and amount of foreign matter when a new batch of oil leaves a tank and enters a pipeline. *See API Bulletin 2509A;* Hardwicke, *The Oilman's Barrel* 97 (1958).

Three surveys conducted among oil producers, pipeline companies, and suppliers of LACT equipment are discussed in Graham, "LACT Requirements Pose New Considerations of Oil Regulatory Authority," 7 *IOCC Comm. Bull.* 23 (Dec. 1965).

A LACT meter may be installed downstream of the wellhead, especially where a unit agreement is in force and measurements worked back to determine production from each individual well within the unit. *BP America Production Co. v. Wyoming Department of Revenue, 2006 WY 27, 130 P.3d 438, 447 n.7* .

Lease bidding systems *See* Ad valorem charge; Auction; Bonus bidding; Chilling the bid; Deferred bonus bidding; Economic rent; Fishing bid; Halbouty concept; Installment bonus payment with forgiveness option; Intertract bidding; Joint bid agreement; Money left on the table; Net profits bidding; Open bonus bid; Performance type leasing; Privatization; Profit sharing bidding; Royalty bidding; Tapered royalty; Variable net profit share bidding system; Variable work commitment bidding system; Winner's curse; Work commitment bidding; Working interest bidding.

Energy Action Educational Foundation v. Andrus, 631 F.2d 751 (D.C. Cir. 1979) , on subsequent appeal, 654 F.2d 735 (D.C. Cir. 1980) , rev'd sub nom. Watt v. Energy Action Educational Foundation, 454 U.S. 151, 72 O.&G.R. 1 (1981) , dealt with the requirement imposed by Congress for the use of alternative bidding systems in the leasing of Outer Continental Shelf Lands. Pending Supreme Court review of *Andrus*, a final rule was issued by the Department of Energy establishing an Outer Continental Shelf Oil and Gas Variable Work Commitment Bidding system. The rule summarizes the anticipated effect of various lease bidding systems. *46 Fed. Reg. 35614* (July 9, 1981) .

For discussions of alternative bidding systems to maximize the capture of economic rent, see the following:

Mead, Moseidjord, Muraoka, and Sorensen, *Offshore Lands: Oil and Gas Leasing and Conservation on the Outer Continental Shelf* (1985);

Mikesell, *Petroleum Company Operations and Agreements in the Developing Countries* 38 *et seq.* (1984);

Ramsey, *Bidding and Oil Leases* (1980);

McDonald, *The Leasing of Federal Lands for Fossil Fuels Production* 95 (1979);

Mark Gergen, "The Use of Open Terms in Contracts," *92 Columbia L. Rev. 907, 1026-1037 (1992);*

Muraoka and Mead, "Economic Issues in Federal Geothermal Leasing Procedures," 27 *Nat. Res. J.* 675 (1987) ;

Reece, *Leasing Offshore Oil: An Analysis of Alternative Information and Bidding Systems* (1979);

Crommelin and Thompson, *Mineral Leasing as an Instrument of Public Policy* (1977);

Gaffney, *Oil and Gas Leasing Policy: Alternatives for Alaska in 1977* (1977);

Dam, *Oil Resources* (1976);

Mead, Moseidjord, and Sorensen, "Competition in Outer Shelf Oil and Gas Lease Auctions: A Statistical Analysis of Winning Bids," 26 *Nat. Res. J.* 95 (1986) ;

Burris & Robson, "Evaluation of Royalty Bid and Profit Share Bid Bidding Systems," 20 *Sw. Legal Fdn. Exploration and Economics of the Petroleum Industry* 123 (1982);

McDonald, "The Economics of Alternative Leasing Systems on the Outer Continental Shelf," *18 Houston L. Rev. 967 (1981);*

Gilley, Karels and Lyon, "The Economics of Oil Lease Bidding," *18 Houston L. Rev. 1061 (1981);*

Logue, Sweeney and Willett, "Optimal Leasing Policy for the Development of Outer Continental Shelf Hydrocarbon Resources" 51 *Land Economics* 191 (1975);

Crommelin, "Offshore Oil and Gas Rights; A Comparative Study," 14 *Nat. Res. J.* 457 (1974) ;

"Alaska's Petroleum Leasing Policy," in University of Alaska Institute of Social, Economic and Government Research, *Review of Business and Economic Conditions* (Vol. 7, No. 3, July 1970).

Lease bonus *See* Bonus.

Lease broker A person who seeks to secure leases for speculation and resale in areas where survey or exploration work is being done.

See also Landman; Lease hound; Leaseman.

Lease burdens As defined in a Rocky Mountain unit operating agreement, the royalty reserved to the lessor in an oil and gas lease, an overriding royalty, a production payment and any similar burden,

but not including a carried working interest, a net profits interest or any other interest which is payable out of profits. *See* Rocky Mountain Unit Operating Agreement Form 1 (Undivided Interest) May, 1954, Section 1.8, Treatise § 920.3.

Lease case file A file maintained by the Bureau of Land Management (*q.v.*) for each mineral application and containing copies of the applications, issued leases, correspondence, etc. Comptroller General's Report to the Congress, *Actions Needed to Increase Federal Onshore Oil and Gas Exploration and Development* 70 (1981); Case file.

Lease clause or provision *See* Abandonment and takeover provision; Acreage estimate provision; Acreage retention clause; Acreage selection clause; After-acquired rights clause; All-or-nothing clause; Alternative fuel clause; Amount-realized provision; Anti-entirety clause; Assignment clause; Bonus; Bottom hole severance clause; Buried pipe covenant; Casinghead gas clause; Casing, pull; Catch-all clause; Cessation of production clause; Change of ownership clause; Cheap gas clause; Commence drilling clause; Commencement clause; Commencement provision; Compensatory royalty clause; Completion clause; Compliance with lease clause; Contingent right stipulation; Continuous drilling clause; Continuous drilling operations clause; Continuous operations clause; Covenant of title; Cover-all clause; Default clause; Defensive clause; Delay rental clause; Depletory covenant; Designation-and-filling provision; Development clause; Diluent clause; Directional drilling clause; Drilling and operating restrictions; Drilling clause; Drilling operations clause; Dry hole clause; Economic operation covenant; Entirety clause; Exploration covenant; Express covenant; Express drilling clause; Extension clause; Federal-floor provision; Fixed-price royalty clause; Force majeure clause; Forfeiture clause; Freedom of the rig floor; Free gas clause; Free oil clause; "Free of cost" provision; Freestone clause; Further exploration covenant; Future acquisition clause; Good faith clause; Granting clause, lease; Habendum clause; Horizontal pugh clause; Implied covenants; Implied easements; "In gross" provision; Initial exploratory well covenant; Irrigation gas clause; Judicial ascertainment clause; Lease extension clause; Lease renewal clause; Lease stipulation; Lessor approval provision; Lessor's special inspection clause; Limitation clause; Liquidated damages clause; Market-value/amount-realized provision; Mistake clause; Most favorable lessor agreement; Mother hubbard clause; Nonconventional oil recovery stipulation; Nonforfeiture clause; Nonunitization clause; Nonwaiver clause; No-prejudice clause; No-term lease; Notice and demand clause; Offset clause; Offset royalty clause; Offset well covenant; Open-end gas royalty clause; Operation clause; Option to renew clause; Or clause; Payment for surface acreage clause; Penalty clause; Pooling clause; Primary term clause; Production-and-allotment provision; Production and marketing covenant; Products royalty clause; Proportionate increase clause; Proportionate reduction clause; Proration clause; Pugh clause; Reasonable development covenant; Reddendum clause; Release of record clause; Removal of fixtures clause; Resumption of operations clause; Retained acreage clause;

Reworking clause; Right-to-cure clause; Riparian lease clause; Royalty apportionment clause; Royalty clause; Royalty-free clause; Royalty proration clause; Savings clause; Shut-in gas well clause; Sixty-day clause; Special warranty; Subrogation clause; Substitute fuel clause; Surface and subsurface user provisions; Surface damage clause; Surrender clause; Take-over clause; Tax shifting clause; Term clause; Terminal provision; Termination clause; Thereafter clause; Thirty day-sixty day clause; Tight well clause; Time of essence clause; Two-pronged gas royalty clause; Undivided interest clause; Unless clause; Waiver and release clause; Warranty; Well completion clause.

Lease extension clause The term employed by Brown, *The Law of Oil and Gas Leases § 9.02* (1984 Revision), for a Continuous drilling operations clause (*q.v.*) or a Drilling operations clause (*q.v.*).

See also Extension clause.

Leasehold interest The interest of one holding as a grantee or lessee under an oil and gas lease or lease of oil, gas and other minerals. Such interest includes the right on the part of the lessee to drill and produce, and is subject to the payment to the lessor of a Royalty (*q.v.*) of a stated fraction or percentage of the production, free of operating expense, either in kind or at the prevailing price at the time of production.

See also Miller v. Schwartz, 354 N.W.2d 685, 84 O.&G.R. 143 (N.D. 1984) , citing this Manual for the proposition that "it appears that the term 'working interest,' as commonly used in the oil industry, is generally synonymous with the term 'leasehold interest.' "

OXY USA, Inc. v, Colorado Interstate Gas Co., 20 Kan. App. 2d 69, 883 P.2d 1216, 1223, 132 O.&G.R. 44 (1994) , discussed in the entry for Working interest (*q.v.*) concluding that "The term 'working interest' is virtually synonymous with the term 'leasehold interest.' [citing this Manual of Terms] ... . These authorities make it clear that the term 'working interest' refers to the usual interest of a lessee in an oil and gas lease and is generally composed of seven-eighths of the production. It is contrasted with the landowner's royalty interest, which bears no part of the production expense."

Syn.: Working interest.

Lease hound A person engaged in securing oil and gas leases from landowners. A lease hound may be an employee of an oil company, in which case he is also called a Landman (*q.v.*). But many lease hounds are self-employed; taking leases on their own account in an active area and then assigning them to an operator for exploration and development, usually retaining an Overriding royalty (*q.v.*) or other interest in production.

Lease interest (1) A term sometimes used in mineral deeds executed at a time when the minerals are subject to a lease. Under this circumstance, the deed may provide for the conveyance of a given fraction or percentage of the "lease interest" after the termination of the existing lease as well as a given fraction or percentage of the interests arising under the existing lease. The words apparently have no technical or customary meaning according to a dissenting opinion in *Garrett v. Dils Co., 157 Tex. 92, 299 S.W.2d 902, 910, 7 O.&G.R. 322, 329 (1957)* ; in general, however, the words are used to include the right to join in any future lease and to receive a proportionate share of the lease proceeds, including bonus, rental and royalty.

(2) The term "lease interest" was said to mean "the right to execute oil and gas leases" in *Delta Drilling Co. v. Simmons, 161 Tex. 122, 338 S.W.2d 143, 13 O.&G.R. 68 (1960)* .

(3) The term "leasehold interest" was deemed to be ambiguous in *Comet Energy Services, LLC v. Powder River Oil & Gas Ventures LLC, 2008 WY 69, 185 P.3d 1259* . The issue was whether an assignment of a well and a "leasehold interest" constituted a sale of the lease containing 760 acres or a sale of the drilling or spacing unit of 40 acres that surrounded the referred-to well. On remand, the trial court heard testimony from a person involved in the negotiation of the assignment from the grantor's perspective, who testified that it was his intent to convey all of the grantor's interest in the relevant testimony. The trial court then found that the first grantee received the leasehold interest. The Wyoming Supreme Court affirmed, holding that the testimony relied on by the trial court was relevant and admissible given the finding that the assignment was ambiguous. *Comet Energy Services, LLC v. Powder River Oil & Gas Ventures, 2010 WY 82, 239 P.3d 382, 387-88* .

See Executive right.

Leasehold interest *See* Lease interest.

Lease line *See* Pipeline.

Lease lottery *See* Noncompetitive lease.

Leaseman A person who engages in negotiating and acquiring oil and gas leases from various landowners. *Aladdin Oil Corp. v. Perluss, 230 Cal. App. 2d 603, 41 Cal. Rptr 239, 241 (1964)* . *Syn:* Lease hound.

See also Landman.

Lease renewal clause A clause giving the lessee a preferential right to acquire a new lease from the lessor on the same terms and conditions as the lessor is willing to accept from a third party. This type of lease clause is said to have come into vogue during the oil

and gas boom of the late 1970's and early 1980's, mainly to avoid the risk of being "top leased," typically in "hot areas" when an existing lease is nearing the end of its primary term and a well had not been commenced. *See* T. Lynch, *The "Perfect" Oil and Gas Lease (An Oxymoron)*, 40 Rocky Mt. Min. L. Inst. 3-1, 3-40 (1994).

Lease selection The selection for lease which a permittee may make from the lands subject to a permit to explore. *See, e.g.*, Saskatchewan Petroleum and Natural Gas Regulations, 1969 (O.C. 8/69) § 21.

See also Selection lease.

Lease separation A term used in the Permian Basin Area Rate Proceeding to refer to the separation of condensate liquids from gas on the lease property, rather than by later processing. *34 F.P.C. 159, 215, 23 , 23 O.&G.R. 103, 165* (Opinion No. 468, Aug. 5, 1965), *remanded, Skelly Oil Co. v. Federal Power Comm'n, 375 F.2d 6, 26 O.&G.R. 237 (10th Cir. 1967) , aff'd in part and rev'd in part sub nom. In re Permian Basin Area Rate Cases, 390 U.S. 747, 28 O.&G.R. 689 (1968) . See also* Gas separation; Separation.

Lease tank *See* Tank.

Lease termination clause A term to describe a clause in a Three grant mineral deed (*q.v.*) or Royalty deed (*q.v.*) that creates a freestanding royalty interest upon termination of the lease or leases in effect at the time of the execution of the deed. *Neel v. Killam Oil Co., Ltd., 88 S.W.3d 334, 340, 156 O.&G.R. 85* (Tex. App.--San Antonio 2002, writ denied) . The holding in *Neel* was disapproved of in *Hausser v. Cuellar, 2010 Tex. App. LEXIS 5678* (Tex. App.--San Antonio July 21, 2010, en banc) , insofar as the *Neel* opinion did not attempt to harmonize the disparate fractions used in the granting, subject to, and future lease clauses in a royalty deed.

Lease transfer gas The term employed in *Carter v. Exxon Corp., 842 S.W.2d 393, 121 O.&G.R. 501* (Tex. App.--Eastland 1992, writ denied) , to refer to gas produced from a lease and used by the lessee for gas lift operation on other leases. At a time when gas sold in intrastate commerce was worth more than gas sold in interstate commerce, the court sustained the right of the lessee to pay royalty on lease transfer gas on the basis of the lower price for interstate commerce gas, reasoning that if the gas had been sold it would gave been sold underthe lessee's contract (to which the lessor was not a party) for the sale of gas in interstate commerce. There is no indication in the opinion that the court was asked to consider, or did consider, the question whether such contract breached the implied marketing covenant of the lessee. *See* Treatise § 856.3.

Leasing service company A company engaged in the business of filing for its clients a Drawing entry card (*q.v.*) in a federal Non-competitive lease (*q.v.*). *Lloyd Chemical Sales, Inc., IBLA 80-94, 49 IBLA 392* , GFS (O&G) 1980-163 (Sept. 5, 1980).

A variant is a company engaged in the business of sending standardized form letters to second drawees under the simultaneous oil and gas leasing system, offering to search for any possible defects in the offer of the first drawee. Should a potential defect be discovered, the company protests the issuance of the lease and if the protest is successful and the lease is issued to the second drawee, the company retains a percentage of the lease. *See Geosearch, Inc. v. Andrus, 508 F. Supp. 839, 69 O.&G.R. 327 (D. Wyo. 1981)* ; connected case at *517 F. Supp. 1245 (D. Wyo. 1981)* .

For a discussion of the activities of leasing service companies, see Allenbright, *$ 10 Wildcat* 119 (1979).

See also the following:

Lowey v. Watt, 684 F.2d 957, 73 O.&G.R. 480 (D.C. Cir. 1982) (giving effect to disclaimer by a leasing service company of a possibly illegal exclusive sales agency clause in standard agreements clients executed before filing applications for noncompetitive leases);

Geosearch, Inc. v. Watt, 721 F.2d 694, 71 O.&G.R. 416 (10th Cir. 1983) , cert. denied sub nom. Geosearch, Inc. v. Clark, 466 U.S. 972 (1984) (following rationales and conclusions of *Lowey v. Watt* and holding that second drawees or their assignee could not successfully contest issuance of a lease to qualified first drawees).

See also Filing services; Put option.

LEG Liquefied energy gas (LEG) (*q.v.*).

Legacy litigation This term refers to certain tort and contract suits that were brought in Louisiana following the decision in *Corbello v. Iowa Production, La. 2002-0826, La. 2002-0826, 850 So. 2d 686, 157 O.&G.R. 1120 (La. 2003)* . Hundreds of new lawsuits were filed by landowners seeking damages from oil and gas exploration companies for alleged environmental damage to their properties. "These types of actions are known as 'legacy litigation' because they often arise from operations conducted many decades ago, leaving an unwanted 'legacy' in the form of actual or alleged contamination." Loulan Pitre, Jr., "*Legacy Litigation" and Act 312 of 2006, 20 Tul. Envtl. L. J. 347, 348 (2007)*. Responding to concerns raised by the *Corbello* line of cases, the Louisiana legislature enacted Act 312 of 2006. It established procedures for judicial resolution of claims for environmental damage to property arising from activities subject to the jurisdiction of the Department of Natural Resources, Office of Conservation. When this reform proved inadequate to the tasks, the Louisiana legislature in 2012 enacted Acts 754 and 779, which changed the procedures to be followed in such suits. *See* Treatise, §218.12.

Legal committee A committee charged with handling the legal problems arising in the negotiation of a pooling or unitization agreement, the drafting of necessary instruments, and advising on legal problems generally. *See* Myers, *The Law of Pooling and Unitization § 4.03* (2d ed. 1967).

Legal life estate A life estate arising by operation of law, *e.g.*, under local law creating a dower, curtesy or homestead interest, as distinguished from a Conventional life estate (*q.v.*) which is created by a volitional act.

Legal oil or gas Oil or gas produced from a well not in excess of the amount allowed by any rule, regulation, or order of the regulatory board or commission (*e.g.*, a proration order), as distinguished from oil or gas produced in excess of the amount allowed by any rule, regulation, or order, which is Illegal oil or gas (*q.v.*).

Legal subdivision A quarter-quarter section of land (*viz.*, 1/16th of a section, or 40 acres).

In *Robert P. Kunkel, 74 I.D. 373, 376,* GFS SO-1967-44 (Nov. 7, 1967) , it was declared that a legal subdivision:

"can embrace a collection of smaller legal subdivisions. ... Of course, the larger unit must be a 'legal subdivision,' a unit which is provided for by the public land surveys, such as a half-quarter section, quarter section, half section, etc. Thus, only two contiguous quarter-quarter sections located in the same quarter section can be designated as a half-quarter section, such as 'N 1/2 *NE* 1/4,' 'E 1/2 *NE* 1/4,' etc. but two contiguous quarter-quarter sections located in different quarter sections cannot be so designated. They must be separately described, such as 'SE 1/4 *NE* 1/4 ' and 'NE 1/4 *SE* 1/4.' Also, two cornering quarter-quarter sections located in the same quarter section must be separately described, *e.g.*, 'NE 1/4 *NE* 1/4 ' and 'SW 1/4 *NE* 1/4.'

"This is also true with respect to lots. ...

"The position taken in the decisions below that 'legal subdivision' in the regulation means only combinations of perfectly regular subdivisions is not required by the language of the regulation or by any other authority that we know."

In *Jacob N. Wasserman, 74 I.D. 392,* GFS SO-1967-47 (Nov. 22, 1967) , the description "E 3/4 of SE 1/4 *NW* 1/4 " was held not to be a proper description of a legal subdivision; to be sufficient, a description must be in terms of aliquot portions, *viz.*, in terms of halves, quarters, halves of quarters, and quarter-quarters.

For purposes of section 30(a) of the Mineral Leasing Act, the term

"legal subdivision" refers to a quarter-quarter section. "Partial Assignments Under Section 30(a) of the Mineral Leasing Act," *76 I.D. 108* , GFS SO-1969-23 (June 23, 1969).

See also General Land Office Survey; Regular subdivision; Survey.

Legal usufruct A Usufruct (*q.v.*) arising by operation of law, as that of a surviving spouse in community. *See also* Conventional usufruct.

Lens A relatively porous, permeable, irregularly shaped, sedimentary deposit surrounded by impervious rock. The lens may serve as a local center of concentration of oil in the formation. A lenticular sedimentary bed that pinches out in all directions.

The definition of Lens in this Treatise was quoted in *Railroad Comm'n v. Graford Oil Corp., 557 S.W.2d 946, 59 O.&G.R. 338, 344 (Tex. 1977)* , and *Seagull Energy E & P, Inc. v. Railroad Commission, 99 S.W.3d 232, 235* (Tex. App.--Austin 2003) , aff'd, *226 S.W.3d 383, 385 (Tex. 2007)* .

Lenticular reservoir A lens of porous and permeable sediments surrounded by strata of low permeability, often shale. There may be a number of such lens unconnected with each other in an area. Such reservoirs are often small, but completely saturated with oil or gas. The shoestring sands of the mid-continent region are notable examples of lenticular reservoirs.

The definition of Lenticular reservoir in this Treatise was quoted in *Railroad Comm'n v. Graford Oil Corp., 557 S.W.2d 946, 59 O.&G.R. 338, 344 (Tex. 1977)* .

Accord Seagull Energy E&P, Inc. v. Railroad Commission, 226 S.W.3d 383, 385, n.3 (Tex. 2007) , aff'g 99 S.W.3d 232, 235, 157 O.&G.R. 942 (Tex. App.--Austin 2003) .

See also Reservoir; Shoestring sands.

Lesion A civil law concept enabling the vendor of immovable property to rescind a sale where it can be shown that the purchase price did not equal at least one half of the true value of the property. *La. Civ. Code arts. 1860-62* (1970). Article 17 of the Louisiana Mineral Code (1975) provides that the sale of a mineral right, including a mineral servitude, cannot be rescinded on account of lesion. *See* McCollam, "A Primer for the Practice of Mineral Law Under the New Louisiana Mineral Code," *50 Tulane L. Rev. 729, 740 (1976). See also Hornsby v. Slade, 2002-2138 (La. App. 1 Cir. 8/20/03), 854 So. 2d 441* (Article 17 of Mineral Code held not applicable to a sale of land containing sand and gravel, thereby allowing claim of lesion beyond moiety where the value--when adding sand and gravel value as of date of sale--was more than twice the sale

price of the land). In *Thomas v. Pride Oil & Gas Properties, Inc., 633 F. Supp. 2d 238 (W.D. La. 2009)* , the court applied Article 17 of the Mineral Code to a lessor's claim for rescission of lease alleging that his consent was vitiated through fraud by suppression of the truth concerning the presence and value of a certain productive formation. *Accord, Cascio v. Twin Cities Development, LLC, 48 So. 3d 341* (La. App. 2 Cir. 9/22/10) .

See also Rescission.

Lessee (1) The person entitled under an oil and gas lease to drill and operate wells, paying the lessor a royalty and retaining the remainder, often 7/8 ths of the production, known as the "working interest." The lessee pays all production costs out of his fraction, the lessor's fraction being free and clear of all such costs.

(2) The term "lessee" is defined by some statutes to include the lessee under an oil and gas lease, or the owner of any land or mineral rights who conducts or carries on any oil and gas development, exploration and operation thereon, or any person so operating for himself or others. Wash. Laws 1951, ch. 146, § 3 (6), *R. C. W. 78.52.010(7)* (1962).

(3) This term has been defined in 30 C.F.R. § 206.101 and § 206.151 to include "any person who has been assigned an obligation to make royalty or other payments required by the lease. This includes any person who has an interest in a lease as well as an operator or payor who had no interest in the lease but who has assumed the royalty payment responsibility." Comments on the definition are found in *53 Fed. Reg. 1184, 1195, 1242* (Jan. 15, 1988) .

See also Common lessee; Third party lessee.

Lesser estate clause *See* Proportionate reduction clause.

Lesser interest clause *See* Proportionate reduction clause.

Lessor The owner of mineral rights who has executed a lease. He is normally entitled to the payment of a royalty (often 1/8th) on production, free and clear of the cost of developing or operating the property, except taxes on his share of the production. Other interests of a lessor arising from a lease include a possibility of reverter or power of termination, a right in many instances to a bonus and delay rentals, and the benefit of implied covenants.

Lessor-approval provision The term applied by *State of Wyoming v. Moncrief, 720 P.2d 470, 92 O.&G.R. 220 (Wyo. 1986)* , to a gas royalty provision stating that "the value [of gas and natural gasoline] shall be as approved by the lessor." In this case the court found consistency between this provision, a Market-value/amount-realized

provision (*q.v.*), and a Federal-floor provision (*q.v.*).

See also Cities Service Oil and Gas Corp. v. State of Wyoming, 838 P.2d 146, 122 O.&G.R. 179 (Wyo. 1992) .

Lessor form A term applied to a lease form with a gas royalty clause providing for payment at the point of sale without deduction from the sales price (or from value at point of sale) except as specifically authorized by the lease. A Company form (*q.v.*), on the other hand, provides for royalty to be calculated At the well (*q.v.*). *See* Owen Anderson, "Calculating Royalty: 'Costs' Subsequent to Production--'Figures don't lie, but ... ,' " *33 Washburn L.J. 591, 593 (1994)*.

Lessor's royalty A share of the gross production of minerals free of the costs of production, arising under an oil and gas lease. For many years the usual lessor's royalty was one-eighth of the production but the interest is frequently greater or may be less than this amount. In California the royalty is usually expressed as a percentage rather than as a fraction of production. Occasionally the term is used to describe an interest in production arising under the terms of a lease as distinguished from a Landowner royalty, which term may be used to describe an interest in production created by a landowner independently of a lease. In most instances the two terms are used synonymously.

Lessor's special inspection clause A clause reported to have been included in at least one lease under which, in lieu of being furnished an electrical log, the Lessor shall have the right to be lowered head first down the casing equipped with a two cell battery flashlight to a depth of 7,000 feet, or some lesser depth if heaving shales be encountered. The clause further provided that "Lessee agrees that Lessor will be lowered at a rate of speed not to exceed that rate which any prudent operator would lower his Lessor into a well bore. It is further understood that if lowering line should part, immediate fishing operations shall be commenced, and in no event shall Lessor be cemented, plugged or abandoned." Hemingway, *The Law of Oil and Gas* 409 (2d ed. 1983).

Letter *See* Acreage contribution letter; Aneth letter; Bernstein letter; Bottom hole donation letter; Bottom hole letter; "Cash call" letter; Comfort letter; Contribution agreement; Counter letter; Donation letter; Dry hole agreement; Gusher letter; Purchase letter; Take-out letter; Valuation letter.

Huggs, Inc. v. LPC Energy, Inc., 889 F.2d 649, 107 O.&G.R. 263 (5th Cir. 1989) , gave effect to exculpatory clauses in a letter agreement and in a joint operating agreement relating to loss of a lease or an interest therein through mistake or oversight in nonpayment or erroneous payment of delay rental or shut-in gas royalty payment, but declined to apply those exculpatory clauses to a breach of a

reassignment clause.

Esplanade Oil & Gas, Inc. v. Templeton Energy Income Corp., 889 F.2d 621, 112 O.&G.R. 271 (5th Cir. 1989) , rejected contentions that a contracting purchaser under a letter agreement was excused from performance because of: (a) failure of plaintiff to perform certain conditions precedents including execution of a "mutually definitive Purchase and Sale Agreement" when defendant failed to enter or even negotiate a definitive purchase and sale agreement and defendant repudiated the letter agreement solely for economic reasons prior to the closing date and before plaintiff was required to satisfy the conditions, and (b) doctrines of *force majeure* and failure of cause as a result of an unforeseen plunge in the market price of oil prior to the scheduled closing date.

Letter-in-Lieu of Transfer Order In the course of a large acquisition of producing properties the process of transferring payment on a well-by-well basis using each purchaser's transfer order form may be excessively burdensome and time-consuming. Payments may be redirected by furnishing each purchaser with a Letter-in-Lieu of Transfer Order. Bateman, "Representing Sellers and Buyers in the Sale of Producing Properties: Fundamentals in the Acquisition Process," 34 *L.S.U. Inst. on Mineral Law* 163, 183 (1987).

Letter of intent A letter agreement entered into by parties to a proposed oil and gas acquisition setting forth the parties' mutual expression of the major terms of the transaction, *i.e.*, price, parties, subject matter, conditions to close and time of performance. "The buyer's primary concern in this early stage of the acquisition process is to restrict the seller from soliciting third-party offers and inquiries during the period that the buyer's acquisition personnel conduct their due diligence evaluation. ... The seller wants to insure that the buyer will rapidly and conscientiously undertake its due diligence review so as to minimize the amount of time that it must keep its oil and gas properties off the market in the event that the transaction does not close." Bateman, "Representing Sellers and Buyers in the Sale of Producing Properties: Fundamentals of the Acquisition Process," 34 *L.S.U. Inst. on Mineral Law* 163, 168 (1987).

See also C. Godfrey, *Legal Aspects of the Purchase and Sale of Oil and Gas Properties* 10 (A.B.A. Natural Resources, Energy, and Environmental Law Section Monograph Series No. 17 (1992);

Gordon T. Whitman, "Letters of Intent: How Binding Are They?," 43 Landman 35-38 (July/August 1998) (looks at *Chevron U.S.A., Inc. v. Martin Exploration Co., 447 So. 2d 469 (La. 1984))* .

Watson, "Using a Letter of Intent in the Purchase and Sale of Producing Oil and Gas Properties," 39 *Landman* 23 (No. 2, March/April 1994);

Abbott, "Fundamental Issues and Practical Requirements Affecting the Purchase and Sale of Producing Resources Properties," *29 Alta. L. Rev.*

85, 89 (1991);

Husky Oil Operations Ltd. v. Forest Oil Corp., [1991] 4 W.W.R. 336 (Alta. Ct. App. 1991) , *lv. to appeal to Canada Supreme Court dismissed.*

Leveraged drilling fund A Drilling fund (*q.v.*) in which a portion of the capital subscribed is derived from nonrecourse borrowing. *See* Dauber, "Oil and Gas for the Passive Investor--Tax and Business Considerations," 25 *Sw. Legal Fdn. Oil & Gas Inst.* 419, 449 (1974); Klein, "The State of Leverage," 24 *O.&G. Tax Q.* 282 (1975).

Leveraged lease A transaction in which the lessor participants seek to obtain the taxation benefits associated with ownership of the property.

"In a leveraged lease, the equity parties separate the transaction from normal business by borrowing specifically to acquire the particular asset to be leased, rather than drawing upon their general funds. These borrowings are normally made by a partnership of equity parties. I use the word 'partnership' in the income tax sense since the joint financing arrangement in a leveraged lease will always constitute a partnership for income tax purposes. ... The partnership may borrow between 60% and 95% of the cost of the asset to be leased. These borrowings are on a non-recourse basis so that the partners' personal liability to the lender is limited to what is generally described as a 'fraudulent or wilfull misconduct or gross neglect,'..." Blaikie, "Leveraged Leasing," 3 *Australian Mining & Petroleum L.J.* 70, 71 (1981).

This arrangement was described as follows in *CRC Corp. v. Comm'r of Internal Revenue, 693 F.2d 281, 75 O.&G.R. 429 (3d Cir. 1982) , cert. denied, 462 U.S. 1106 (1983)* : "Under these arrangements an oil and gas operator assembles a package of leasehold interests which he conveys to a limited partnership, for a cash payment and a nonrecourse note secured by a mortgage on the leaseholds and equipment used in resulting wells. Simultaneously, the operator enters into a fixed price no-out turnkey contract to drill wells, at no further cost to the investors. The operator also simultaneously obtains a completion joint venture option under which the operator can recover an interest in a completed well by remitting to the limited partners a portion of the cash consideration which they paid."

See also Nonrecourse financing.

LFG recovery project A project for the recovery of methane gas from landfills. *See* Kahn, "Methane from Landfills," 1 *Nat. Res. & Environment* 13 (Vol. 1, No. 2, Spring 1985).

Liberative prescription Prescription *liberandi causa. See* Prescription.

LIBOR London Interbank Offer Rate, an average of the interest rates at which several major banks lend between themselves in the London money market. P. Stevens, *Oil and Gas Dictionary* 113 (1988).

Libyan General Petroleum Corporation (LIPETCO) A state oil company which was abolished in 1970 and was succeeded by the Libyan National Oil Corporation (LINOCO) (*q.v.*).

Libyan National Oil Corporation (LINOCO) A state oil company established in July, 1970, as the successor to the Libyan General Petroleum Corporation (LIPETCO) (*q.v.*). *See* OPEC, *Selected Documents of the International Petroleum Industry 1970* at p. 61.

Libyan premium A premium paid at one time for Libyan crude oil based on the fact that the transportation costs of marketing such crude was less than the transportation costs of marketing crude produced in the Gulf States (Abu Dhabi, Iran, Iraq, Kuwait, Qatar and Saudia Arabia).

Libyan producers agreement A 1971 agreement by producers of Libyan oil that if a party's crude oil production was cut back as a result of government action, all other parties would share in such cut back as provided in the Agreement. And if there was insufficient Libyan oil to meet the contractual obligations due to restrictions or shut down by the Libyan government, those parties with Persian Gulf production would supply the Libyan producers who were cut back with Persian Gulf oil at cost. *See Hunt v. Mobil Oil Corp., 410 F. Supp. 10 (S.D. N.Y. 1975) , aff'd, 550 F.2d 68 (2d Cir. 1977) , cert. denied, 434 U.S. 984 (1977) ; 465 F. Supp. 195 (S.D. N.Y. 1978) , aff'd without opinion, 610 F.2d 806 (2d Cir. 1979) .*

For discussions of the agreement see the following:

Jackson, *Negotiations between American Contractors and Foreign Host Governments*, 8 Nat. Res. Law. 1, 6 (1975);

Sampson, *The Seven Sisters* 217 (1975).

Syn.: Safety net; Sharing agreement.

See also Back-up crude.

License With the decline in the popularity of the term Concession (*q.v.*) to describe the natural resources exploration and development agreements made by host nations with foreign oil companies, the term "license" has come to be applied to some such agreements. *See* Dam, *Oil Resources* 14 (1976).

The details of the license system employed in the United Kingdom for onshore and continental shelf exploration and production are set forth in Daintith and Willoughby, *A Manual of United Kingdom Oil and Gas Law* 20-70 (1977).

Licensing procedures and criteria are discussed in the following papers:

Cameron, *North Sea Oil Licensing: Comparisons and Contrasts*, [1984/85] 4 OGLTR 99;

Cameron, *UK Licensing Criteria*, [1984/85] 2 OGLTR 27.

See also Appraisal license (AL); Conventional license; Development license; Exploration license (EXL); Exploratory license (Canada); Methane drainage license; Petroleum license; Production license; Reconnaissance license; Significant discovery license.

License fee system A system established in 1973 by Presidential Proclamation 4210 replacing the prior Oil Import quota (*q.v.*) program with a modified tariff system with potentially unlimited imports. *See* Preston, "National Security and Oil Import Regulation: The License Fee Approach," 15 *Va. J. Int. Law* 399 (1975).

Licitation Partition by sale of property and division of the proceeds of the sale. *See La. Civ. Code Art. 1339* (1952). The property to be partitioned is sold at public auction after the advertisements required by law. Where land is burdened by a mineral right created by fewer than all of the co-owners of the land, partition by licitation is favored over partition in kind. *Patrick v. Johnstone, 361 So. 2d 894, 62 O.&G.R. 173 (La. Ct. App. 1978) , writ denied, 364 So. 2d 600 (1978)* .

See also Gates, "Partition of Land and Mineral Rights," *43 La. L. Rev. 1119 (1983)*.

Campbell v. Pasternack Holding Co., 625 So. 2d 477 (La. 1993) , held that (1) "a co-owner with perfect ownership [may] partition by licitation property as to which another undivided interest has been bifurcated into usufructuary and naked interests"--revisiting and overruling prior case authority--and that (2) "the same plaintiff co-owner, who has no attendant mineral rights, may partition her 'surface' interests in the landonly, by licitation, where one or more of the defendant co-owners has full interests in the land, including mineral rights"--concluding that limitations on the right to partition should be strictly construed, and that the Mineral Code supports the right that property may be partitioned subject to the mineral rights.

See also Equitable partition; Partition.

Lie-down drilling unit (Lie-down spacing) *See* Standup drilling unit (Standup spacing).

Lien A charge, security, or encumbrance upon property. *Consolidated Oil Wells Services, Inc. v. State Oil Co., 12 Kan. App. 2d 422, 747 P.2d 183, 97 O.&G.R. 283 (1987)* , held that a prior valid statutory lien for labor and materials had priority on leasehold equipment and fixtures over a lessor's equitable lien arising from express provisions of the lease.

In *In re SemCrude, L.P., 407 B. R. 140, 172 O.&G.R. 140 (Bkrtcy. D. Del. 2009)* (Oklahoma), the bankruptcy court rejected a claim that the Oklahoma Oil and Gas Owners Lien Act, *Okla. Stat. Ann. tit. 52, § 548 et seq.* , gave producers a statutory lien in revenue or proceeds from Oklahoma production that was superior to other perfected security interests. The court noted that the Lien Act expressly states that this section does not "impair or affect the rights, priorities, or remedies of any person under provisions of the Uniform Commercial Code." The court also found that the Production Revenue Standards Act (*q.v.*) did not operate to impose a trust for the benefit of the Oklahoma Producers. For related matters under special statutes and nonuniform amendments to Article 9 to provide special protections to mineral owners, *see In re SemCrude, L.P., 407 B. R. 82, 69 UCC Rep. Serv. 2d 212, 171 O.&G.R. 658 (Bkrtcy. D. Del. 2009)* (Kansas); *In re SemCrude, L.P., 407 B. R. 112, 69 UCC Rep. Serv. 2d 245, 172 O.&G.R. 1 (Bkrtcy. D. Del. 2009)* (Texas).

In re Semcrude, L.P., 456 Fed. Appx. 167 (3rd Cir. 2012) , aff'g, 2011 U.S. Dist. LEXIS 16481 (Bkrtcy. D. Del. 2011) (claim by largest creditor of Sem Group Holding, L.P. that it is owed $50 million by SemCrude Pipeline, LLC, is dismissed under the equitable mootness doctrine);

In re Semcrude, L.P., 443 B. R. 472 (Bkrtcy. D. Del. 2011) (Plains Marketing, L.P. given leave to amend its complaint to add two additional claims for relief, one based on a recoupment theory and the other on an indemnity theory);

In re Semcrude, L.P., 442 B. R. 258 (Bkrtcy. D. Del. 2010) (Bankruptcy Court has jurisdiction to hear producer's claims against the first purchasers and thus the transfer of the various state-based actions will not be undone);

In re Semcrude, L.P., 436 B. R. 317 (Bkrtcy. D. Del. 2010) (debtor's motion to dismiss claims based on their purchaser of shares of SemGroup Energy Partners, L.P., denied since SGLP is not an affiliate of any of the debtors, which is a requirement before such claims may be dismissed);

In re Semcrude, L.P., 428 B. R. 590 (Bkrtcy. D. Del. 2010) (Chevron, a first purchaser, sought relief from the automatic stay to make a payment based on its contractual right of set-off; court denied relief due to a lack of mutuality);

In re Semcrude, L.P., 428 B. R. 82 (Bkrtcy. D. Del. 2010) (Bankruptcy Court will not dismiss adversary claims made by first purchasers

regarding their attempts to make payments to the bankruptcy estate based on a set-off of the bankrupty's credits and debits; the producers who had filed numerous state court actions seeking to impose liens on the first purchasers had filed the motion so that the state court actions could move forward);

In re Semcrude, L.P., 418 B. R. 98 (Bkrtcy. D. Del. 2009) (resulting trust as to funds held by Semcrude entity on behalf of Vess Oil that were to be distributed to third parties existed under Kansas, Oklahoma or Texas law);

In re Semcrude, L.P., 399 B. R. 388 (Bkrtcy D. Del. 2009) (in order for first purchasers to exercise contractual right of set-off, the bankruptcy statute requires that the set-off right satisfy a mutuality requirement; under the Semcrude purchase and sale contracts, that mutuality did not exist).

See also Arkla Exploration Co. v. Norwest Bank of Minneapolis, 948 F.2d 656, 660 (10th Cir. 1991) (a lender with a prior perfected security interest under the Oklahoma UCC had superior rights relative to an Oklahoma gas producer under the Oklahoma Lien Act as a matter of law).

Mineral liens are provided for in Chapter 53 of the Texas Property Code. *Tex. Prop. Code §§ 56.001 et seq.* One of the requirements in filing an affidavit for such a lien is to provide an adequate description of the leasehold estate. What meets the "adequacy" requirements is a matter of some dispute. *See Blanco, Inc. v. Porras, 897 F.2d 788 (5th Cir. 1990)* ; *In re Reichmann Petroleum Corp., 2009 U.S. Dist. LEXIS 30983* (S.D. Tex.) ; *In re Mid-America Petroleum, Inc., 83 B.R. 937 (N.D. Tex. 1988)* ; *Trevor Rees-Jones, Trustee for Atkins Petroleum Corp. v. Trevor Rees-Jones, Trustee for Apache Services, Inc., 799 S.W.2d 463* (Tex. App.--El Paso 1990) .

In *Sun Coast Plumbing Co., Inc. v. Shell Offshore Inc., 2010 U.S. Dist. LEXIS 34139* (S.D. Tex. April 7, 2010) , the court refused to grant the defendants' motion for summary judgment that the Texas mineral lien statute did not apply to the provision of plumbing services for a structure destined to be located offshore.

Fourth National Bank of Tulsa v. Appleby, 1993 OK 153, 864 P.2d 827, 127 O.&G.R. 610 , was concerned with the priority of an operator's lien under a forced pooling order and the lien of a mortgagee on a mineral interest covered by the order. By a 5-4 division the court held "that the priority of a mechanics' and materialmen's lien runs from the earliest date labor or materials are furnished, a claim for payment of which is *not barred by the applicable statute of limitations on the date the lease is perfected.* In other words, only labor or materials furnished within the applicable statute of limitations on the date a mechanics' or materialmen's lien is perfected may by used to establish the date of priority of the lien." The case was remanded with instructions to enter judgment for Bank on its mortgages.

North Finn v. Cook, 825 F. Supp. 278, 125 O.&G.R. 613 (D. Wyo. 1993)

, held that: (1) a farmor's Back-in working interest (*q.v.*) under a Farmout agreement (*q.v.*) was a possibility of reverter (which is alienable and exempt from the Rule against Perpetuities); (2) the statutory lien under *Wyo. Stat. § 29-3-103* for work or materials supplied the owner of the working interest in oil, gas or other wells did not attach to the farmor's back-in interest since there was no agreement by the farmor-reversioner to pay costs; and (3) even if the back-in interest was lienable, its owner was not served in the foreclosure proceeding and was not named in the foreclosure order, and hence it was not extinguished in the proceeding.

Coates v. Shell Western E & P, Inc., 5 Cal. App. 4th 904, 7 Cal. Rptr. 2d 187 (Cal. App. 1992) , concluded that "subtractive process," as used in the California Oil and Gas Lien Act, "is complete or terminates upon a permanent cessation of operation and/or abandonment of the field," and hence one who performed services in connection with the excavation, dismantling and removal of unused and abandoned shipping lines from Shell leases to eliminate possible interference with the surface owner's farming operation was not entitled to a lien against Shell leases under this Act.

For a discussion of the reasonableness of operating expenses incurred, in action by operating owner to recover share from nonoperating owner, see *Matlow v. Rosenfeld, 245 Ill. App. 3d 448, 185 Ill. Dec. 386, 614 N.E.2d 520, 127 O.&G.R. 483 (1993)* .

See also the following:

Timothy C. Dowd, *Oil and Gas Liens in Oklahoma, 51 Okla. L. Rev. 309 (1999);*

Terry I. Cross & Jason T. Barnes, *Oil and Gas Liens & Foreclosures--A Multi-state Perspective, 51 Okla. L. Rev. 175 (1999);*

Patricia H. Chicoine, *Lien on LOWLA; It's a Privilege: Recent Revisions to the Louisiana Oil Well Lien Act, 57 La. L. Rev. 1133 (1997);*

Harrell & Anderson, *Report of the ABA UCC Committee Task Force on Oil and Gas Finance, 24 Tex. Tech L. Rev. 805 (1994);*

Harrell, *Oil and Gas Security Interests in the 1990s: A Need for Consistency and Uniformity, 44 Okla. L. Rev. 71 (1991);*

Stockwell & Cole, "Operators' Liens Under the 1989 AAPL Form 610 Operating Agreement," *The Oil and Gas Joint Operating Agreement* Paper No. 5 (Rocky Mt. Min. L. Fdn. 1990);

Pettifer, *Status of the Operator's Lien in Law and in Equity, 26 Alta. L. Rev. 87 (1987).*

See also Mechanic's lien; Privilege; Subordination agreement.

Lieu lease A new lease given by a lessor to an assignee of the

lessee "in lieu of" the original lease. An Extension and renewal clause (*q.v.*) in the assignment may entitle the lessee-assignor to an interest in the new lease. *See* Seaman, "Financial Aspects of Oil Transactions," *3 U.C.L.A. L. Rev. 550, 552 (1956).*

Lieu royalty *Syn.:* for Compensatory royalty (*q.v.*) or Substitute royalty (*q.v.*) or Shut-in royalty (*q.v.*).

In Alaska, where a storage lessee also holds the right to produce oil or gas not previously produced in conjunction with stored oil or gas, the storage lease may provide for a royalty upon stored oil or gas when produced. In lieu of a storage fee or rental on stored oil or gas or both, the storage lease may provide for a royalty upon stored oil or gas when produced, which royalty rate may be the same as or different from the royalty rate or rates provided for in any oil or gas leases involved. *See* the Alaska Mineral Leasing Regulations, *11 AAC 83.510.*

Life index A measure of remaining gas reserves based on current production obtained by dividing the known reserves by annual production.

Life estate *See* Conventional life estate; Legal life estate; Open mine doctrine.

Lifeline rate A special low rate for a commodity (*e.g.*, gas, electricity, or telephone service) made available (1) for the consumption of a fixed "lifeline" quantity of the commodity, that low rate being uniformly available to all residential users, or (2) for a relatively small class of qualifying consumers (*e.g.*, the poor or elderly). *Cal. Publ. Util. Code § 739*, enacted in 1975, requires the California Public Utilities Commission to designate lifeline quantities for gas and electricity and to require gas and electric utilities to include lifeline rates in their schedules. *See* Sackett, "Lifeline Rates for Natural Gas Utilities--A Hit or a Myth?" *2 J. Contemp. L. 218 (1976).*

Life of lease contract A Gas purchase contract (*q.v.*) having the duration of the life of the lease owned by seller.

Lifting (1) The term utilized in a Joint operating agreement (*q.v.*), Production sharing contract (*q.v.*), Service contract (*q.v.*), or other contract between or among two or more parties having an interest in production to indicate that a party has taken and removed some or all or more than its share of production for the period in question.

See also Balancing; Cancelled underage; Deemed purchase formula; Deferred production agreement; Gas bank agreement; Lifting tolerance;

"Out of balance" production plan; Overlift; Split connection; Underage; Underlift; Underlift/overlift provision.

(2) The process of bringing oil to the surface. *See* Artificial lift; Gas lift; Lifting costs.

Lifting costs The expenses of lifting oil from a producing formation to the surface, being part of the current operating expenses of a working interest.

I.R.B. 1960-47, 11 declares that this term "as used in the oil and gas producing industry, is usually considered to be synonymous with 'operating costs' and consists of those deductible costs incurred in the production of oil and gas after completion of drilling and before its removal from the property for sale or transportation. Such costs consist of labor, superintendence, supplies, repairs and assets having a life not in excess of one year, maintenance, applicable overhead costs, as well as those items properly includible in the computation of gross income under the provisions of *Revenue Ruling 141* ." *13 O.&G.R. 164, 165 (1961)*.

Hininger v. Kaiser, 738 P.2d 137, 94 O.&G.R. 167 (Okla. 1987) , declares that "[t]he term 'lifting costs' relates to a portion of the cost of producing oil and gas exclusive of drilling and equipping costs--the term defies a more precise definition." In footnote 4 of the opinion, the court noted, "We have held that lifting expenses may include: costs of operating the pumps, pumper's salaries, costs of supervision, gross production taxes, royalties payable to the lessor, electricity, telephone repairs, depreciation, and other incidental lifting expenses." *In accord: Smith, d/b/a Smith Oil, v. Marshall Oil Corp., 2004 OK 10, 85 P.3d 830* .

Lifting sub A Sub (*q.v.*) used with a drill collar to provide a shoulder to which to fit the drill-pipe elevators so that the drill collar can be raised or lowered into the hole.

Lifting tolerance A provision of a Joint operating agreement (*q.v.*), Production sharing contract (*q.v.*), Service contract (*q.v.*), or other contract between or among two or more parties having an interest in production under which a party's "lifting" (taking of production in kind as required by the contract) during the latter dates (*e.g.*, 21 days, 30 days) of an accounting period (*e.g.*, a quarter of a year, a year) may be counted as lifted in the next succeeding accounting period (thus avoiding or reducing the party's overlift in the prior period) or under which a party's "lifting" during the early dates of an accounting period may be counted as lifted in the prior accounting period (thus avoiding or reducing the party's underlift in the prior period).

See also Balancing; Cancelled underage; Deemed purchase formula; Deferred production agreement; Gas bank agreement; Lifting; "Out of balance" production plan; Overlift; Split connection; Underage;

Underlift; Underlift/overlift provision.

"Light end" products Naphtha, kerosene, diesel fuel and lube oil produced by a refinery from crude oil. *See Texas American Asphalt Corp. v. Walker, 177 F. Supp. 315 (S.D. Tex. 1959)* . *See also* Product; Topped crude oil.

Light petroleum products (LPP) A term including No. 2 fuel oil, diesel fuel, kerosine, jet fuel, and gasoline. Florida Gas Transmission Co., 23 FPS 5-421 (FERC Opinion No. 144 , Sept. 2, 1982). *See also* Product.

Limitation clause The clause of a deed or lease specifying the duration of the interest granted. Limitation clauses may be subdivided into clauses of general limitation (which state the maximum duration of the granted interest) and clauses of special limitation (which provide for earlier termination of the granted interest upon the happening of a specified event, *e.g.*, upon the cessation of specified drilling or production operations upon an oil and gas leasehold).

See also Conditional limitation; Devotional limitation doctrine; Possibility of reverter.

Limitation notice A notice served on a licensee setting the limits within which rates of production may thereafter be required to be increased or reduced in the national interest. *See* Daintith and Willoughby, *A Manual of United Kingdom Oil and Gas Law* 49 (1977).

Limitations, statute of *See* Statute of limitations.

Limitation, words of Words employed in a deed or will having the effect of marking the duration of an estate.

Limited assignment A term applied to an assignment limited in a spatial dimension, either vertically or horizontally. Terrell, "Limited Assignments--Who Gets What?," 35 *Rocky Mt. Min. Law Inst.* 17-1, 17-3 (1989).

Limited capacity well A well incapable of producing the Allowable (*q.v.*) that would normally be assigned to it. *Railroad Comm'n v. Woods Exploration & Producing Co., 405 S.W.2d 313, 315, 24 O.&G.R. 831, 834 (Tex. 1966)* , *cert. denied sub nom. Aluminum Co. of America v. Woods Exploration & Producing Co., 385 U.S. 991 (1966)* .

Syn.: Limited well (*q.v.*).

Limited carried interest A Carried interest (*q.v.*) which is to be carried for the initial development phase only of the operation. After the operator has recouped his advances to the carried interest, the carry terminates. *See* "Carried Interests Revisited by Tax Court." 8 *O.&G. Tax Q.* 159, 161 (1959).

Limited liability company A hybrid type of organization having characteristics of both a corporation and a Limited partnership (*q.v.*).

The first limited liability company statute was adopted in Wyoming in 1977, and the Internal Revenue Service proposed to treat the company as a corporation, thereby eliminating any tax advantages and apparently dooming the adoption of similar statutes elsewhere. In 1988 the IRS reversed its position, classifying in Rev. Ruling 88-76 the Wyoming limited liability company as a partnership even though none of its members is personally liable for the company's debts. *See* Koutrodimos, Bell and Moore, "The Texas Limited Liability Company," 42 *O.&G. Tax Q.* 29 (1993).

See also the following:

Maxfield, O'Connor and Wolf, "New Oil and Gas Exploration and Investment Vehicle: The Limited Liability Company," 38 *Rocky Mt. Min. L. Inst.* 17-1 (1992);

Burke & Meyer, "Federal Income Tax Classification of Natural Resource Ventures: Co-Ownership, Partnership or Association?" *37 Sw. L.J. 859, 887 (1984).*

Limited offer exemption An exemption under the Blue Sky law (*q.v.*) of certain states to offerings to a limited number of persons or offerings of a given amount or offerings for particular purposes. *See* Treatise § 441.4 at note 20. A Uniform Limited Offering Exemption has been drafted by a committee of the North American Securities Administrators Association, Inc. (NASAA) and approved at the 1981 annual meeting of the *Association. 1 CCH Blue Sky L. Rep. P 5294. See* Treatise § 441.4.

Limited overriding royalty A term sometimes used to describe an Oil payment (*q.v.*). *See, e.g., Fleming v. Commissioner, 24 T.C. 818, 4 O.&G.R. 1609 (1955) , rev'd, 241 F.2d 78, 6 O.&G.R. 1458 (5th Cir. 1957) , rev'd sub nom. Commissioner v. P. G. Lake, Inc., 356 U.S. 260, 8 O.&G.R. 1153 (1958) .*

Limited partnership A form of organization, frequently employed in financing oil and gas ventures, by which an investor of funds becomes a limited partner with limited liability. *See* the Uniform Limited Partnership Act (1969).

Sixth Geostratic Energy Drilling Program 1980 v. Ancor Exploration

Co., 544 F. Supp. 297, 74 O.&G.R. 89 (N.D. Okla. 1982) , while concluding that certain limited partners were indispensable parties to an action where receivership of partnership assets was sought, held that the limited partners, like shareholders of a corporation, should not be considered in determining diversity of citizenship.

Eisenbaum v. Western Energy Resources, Inc., 218 Cal. App. 3d 314, 267 Cal. Rptr. 5, 110 O.&G.R. 1 (1990) , concluded that "A promoter or insider, or a seller of a limited partnership interest, owes a fiduciary duty to the prospective purchaser of such an [Limited Partnership] interest. ... Where a fiduciary obligation is present, the courts have recognized a postponement of the accrual of the cause of action [for breach of the Securities law] until the beneficiary has knowledge or notice of the act constituting a breach of fidelity."

See also the following:

Keyser, "Publicly Traded Limited Partnerships: The Treasury Fights the Wrong War," 36 *Sw. Legal Fdn. Oil & Gas Inst.* 10-1 (1985);

Giannola, "Structuring Oil and Gas Limited Partnerships--an Update," 36 *Sw. Legal Fdn. Oil & Gas Inst.* 11-1 (1985);

McMillan, "Obtaining Equity Capital for Drilling Operations: The Securities Aspect," *Rocky Mt. Min. L. Inst. on Mineral Financing* 6-1 *et seq.* (1982) (containing examples of forms employed in limited partnership financing of oil and gas ventures);

"Investing in Oil and Gas Through Limited Partnerships," *P.H. Oil & Gas/Natural Resources Taxes* P 3004 (1983).

See also Cherrypicking; Developmental program well; Drilling fund; Drilling partnership; Drop down limited partnership; Lease acquisition fund; Limited liability company; Listed depository receipt; Master limited partnership; Partnership in commendam; Presentment right; Public limited partnership (PLP); Roll down limited partnership; Roll-up.

Limited recourse financing Financing of a project by a loan for which there is limited recourse to assets of the borrower other than funds generated by the project for which the loan is made. Limited recourse financing is distinguished from Nonrecourse financing (*q.v.*) inasmuch as under some but not all circumstances there may be access to other assets of the borrower, *e.g.*, for breach of a completion covenant, a covenant that the facilities will work, or a covenant to contribute the borrower's share of costs regardless of overruns. *See* Willoughby, "Limited Recourse Loans," in *Proceedings of the Petroleum Law Seminar* (Jan. 8-13, 1978), organized by the Committee on Energy and Natural Resources, Section on Business Law, International Bar Association; Ladbury, "Recent Trends in Limited Recourse Financing with Particular Reference to Limited Recourse Loans, Production Payments and Forward Sale and Purchase Agreements," 2 *Austl. Mining & Petroleum L.J.* 68 (1979); McCormick, "Legal Issues in Project Finance," 1 *JENRL* 21 (1983).

See also Financing; Nonrecourse financing; Project financing.

Limited royalty A term which has been applied to a Production payment (*q.v.*). *Texas Gas Exploration Corp. v. Brian Investments, Ltd., 544 So. 2d 67, 71, 104 O.&G.R. 509 (La. App. 1989)* , *writs denied, 548 So. 2d 1246, 1255 (La. 1989)* .

Limited term abandonment Authorization by the Federal Energy Regulatory Commission permitting gas previously committed to interstate commerce to be sold in the spot market and transported by any means allowed under Order No. 436. *See* Griggs, "Restructuring the Natural Gas Industry: Order No. 436 and Other Regulatory Initiatives," *7 Energy L.J. 71, 84 (1986)*.

See also Abandonment of facilities or service.

Limited term certificate A Certificate of public convenience and necessity (*q.v.*) issued by the Federal Power Commission or its successor, the Federal Energy Regulatory Commission, for the sale of natural gas for resale in interstate commerce for a specified limited term. 18 C.F.R. §§ 2.70, 159.29 (1980). In *Moss v. Federal Power Comm'n, 424 U.S. 494, 54 O.&G.R. 247 (1976)* , the court made it clear that while the Commission could issue a certificate without term limitation despite the fact that a producer had applied for a limited term certificate, the Commission could also issue a certificate for a limited term or a certificate authorizing abandonment at a future date certain.

See also One hundred and eighty day emergency sales; Pregranted abandonment; Sixty-day emergency sales.

Limited term sale *See* Limited term certificate.

Limited term working interest A Limited working interest (*q.v.*).

Limited well A well which is not capable of producing to the full extent of prorated allowable as distinguished from a prorated well, which is assigned a pro rata share of a reservoir' s allowable. *Texas Producing, Inc. v. Fortson Oil Co., 798 S.W.2d 622, 114 O.&G.R. 174 (Tex. Ct. App. 1990)* (holding that Railroad Commission order reinstating cancelled allowable for prorated well and denying cancelled allowable for limited well violate correlative rights of owner of limited well).

Syn.: Limited capacity well (*q.v.*).

Limited working interest A Working interest (*q.v.*) which will terminate prior to the economic exhaustion of the reserves upon the happening of some event, *e.g.*, the passage of time, production of a specified quantum or realization of a predetermined sum of money. The tax treatment of such an interest is discussed in Griffith, "Current Developments in Oil and Gas Taxation," 25 *Sw. Legal Fdn. Oil & Gas Inst.* 323 (1974); *Miller's Oil and Gas Federal Income Taxation* § 13-5 (1980 edition).

Line flood A system of water flood in which two rows of oil wells are staggered on both sides of an equally spaced line of water intake wells. When the oil wells reach their economic limit of production another row of oil wells is drilled ahead of the flood and the former oil wells are converted into water intake wells. *See* Lytle, "History, Present Status, and Future Possibilities of Secondary Recovery Operations in Pennsylvania," 1 *IOCC Comm. Bull.* 29, 33 (Dec. 1959).

See also Secondary recovery; Water flooding.

Line loss The amount of gas lost in a distribution system or pipeline.

Line pack gas The volume of gas maintained in a pipeline at all times in order to maintain pressure and effect uninterrupted flow or transportation of natural gas through the pipeline. *Revenue Ruling 68-620, 1968-49 I.R.B. 16, 30 O.&G.R. 319* .

Transwestern Pipeline Co. v. United States, 639 F.2d 679 (Ct. Cl. 1980) , held that for federal income tax purposes, the cost of line pack in a natural gas pipeline system constitutes a capital expenditure which is depreciableover the useful life of the system, rejecting the position long taken by the Internal Revenue Service that the cost of line pack is a nondepreciable inventory expense.

In *Technical Advice Memorandum 8040005,* dated June 17, 1980, the Internal Revenue Service ruled that a taxpayer must treat as inventory the volume of gas needed in a gas pipeline to maintain the uninterrupted flow of gas in the pipeline. 29 *O.&G. Tax Q.* 599 (1981).

Line test well A test well drilled near the line between two separate properties designed to test the area (particularly in the Outer Continental Shelf) for a show of oil or gas. Typically the owner(s) of each of the properties contribute to the cost of the well. Frequently the well is a so-called Escrow well, Expendable well, or Pre-platform well (*q.v.*) not expected to be completed as a producing well even if the test is favorable. The transaction may be structured as a pooling unit to which each of the properties contribute acreage or as a Contribution agreement (*q.v.*).

LINOCO The Libyan National Oil Corporation (*q.v.*).

LIPETCO The Lybian General Petroleum Corporation (*q.v.*)

Liquefied energy gas (LEG) A term inclusive of Liquefied petroleum gas (LPG) (*q.v.*) and Liquefied natural gas (LNG) (*q.v.*). *See* "Liquefied Energy Gases," Hearings before the Senate Committee on Commerce, Science and Transportation, 95th Cong., 2d Sess. Serial No. 95-134 (1978).

Liquefied natural gas (LNG) Natural gas that has been cooled to about--160 degree Centigrade for storage or shipment as a liquid in high pressure cyrogenic containers. *See* Resor, "Revolution in the Natural Gas Industry," 102 *Trusts & Estates* 1092 (1963). For a discussion of certain of the problems of shipping this gas and common provisions of contracts of affreightment, see Mankabady, "The Affreightment of Liquefied Natural Gas," 9 *J. World Trade Law* 654 (1975); Greenwald, "Japanese LNG Contracts," [1983/84] 10 *OGLTR* 222 (1984).

The siting of LNG facilities is exclusively within the power of the Federal Energy Regulation Commission *(q.v.)* by virtue of the Natural Gas Act *(q.v.). 15 U.S.C. § 717b(e) (1)*. Efforts by state and local governments to regulate the location and/or operation of LNG facilities have been found to be preempted.

In *AES Sparrows Point LNG v. Wilson, 589 F. 3d 721 (4th Cir. 2009)* , the court upheld Maryland's decision relating to a water quality certification of a proposed LNG terminal under Section 401 of the Clean Water Act (*q.v.*). *33 U.S.C. § 1341(a)(1)*.

See e.g., Weaver's Cove Energy, LLC v. Rhode Island Coastal Resources Management Council, 583 F. Supp. 2d 259, 168 O.&G.R. 574 (D.R.I. 2008) , aff'd, 589 F.3d 458 (1st Cir. 2009) ;

AES Sparrows Point LNG, LLC v. Smith, 470 F. Supp. 2d 586 (D. Md. 2007) .

For recent developments on LNG matters, *see* Harry W. Sullivan, Jr., *LNG and Its Impact on the Natural Gas Industry*, 51 Rocky Mtn. Min. L. Inst. Ch. 10 (2005); and Julia R. Richardson, Howard E. Shapiro & E. Brendan Shane, *LNG: Revival of an Industry*, 55th Inst. on Oil & Gas Law Ch. 18 (2004).

Special problems of liquefied natural gas are discussed in several papers in International Bar Ass'n, 2 *Energy Law 1981 (Proceedings at The Banff Centre 26 April--2 May 1981)*.

Problems of regulation of the price of imported liquefied natural gas are dealt with in *West Virginia Public Services Comm'n v. U. S. Dept. of Energy, 681 F.2d 847 (D.C. Cir. 1982)* .

Many of the current issues relating to LNG are discussed in the papers presented at the "Law of LNG Conference" sponsored by the Center for American and International Law's Institute for Energy Law.

For discussions of sales and shipping agreements for liquefied natural gas, see the papers by McCarthy, Masuda, and Susuki in International Bar Association, *Energy Law in Asia and the Pacific* 651 *et seq.* (1982).

For a discussion of problems of the carriage of LNG by ships, see S. Mankabady, *Energy Law* 371 (1990).

See also Marathon Oil Co. v. United States, 604 F. Supp. 1375, 1386, 87 O.&G.R. 455 (D. Alaska 1985) , aff'd, 807 F.2d 759, 767, 90 O.&G.R. 6 (9th Cir. 1986) , cert. denied, 480 U.S. 940 (1987) .

Problems of allocation of project and other risks in Liquefied natural gas sales contracts are discussed in "Topic 7: Gas Projects," in IBA Section on Energy & Natural Resources Law, *Energy Law* '90, 551 to 627 (1990).

See also Clean Water Act; Natural Gas Act; Preemption.

Liquefied petroleum gas (LPG) Butane and propane separated from natural gasoline and sold in liquid form as fuel, commonly known as bottled gas, tank gas, or simply LPG. Domestic use of LPG is confined largely to those areas where other gaseous fuels are not available. Industrial uses of LPG are varied and many. Some plants use it as firm fuel or as stand-by fuel for natural gas, while others use it in special heat-treating processes or in steel cutting or in other special heating operations.

Natural gas liquids used as motor fuel blending stocks provide clean-burning characteristics, give volatility control, and impart other desirable qualities. Many of the liquids can be upgraded into a variety of chemicals: alkylates, disopropyl, butadiene, ethylene, cyclohexene, *etc.*

For a discussion on problems of the carriage of LPG by ships, see S. Mankabady, *Energy Law* 371 (1990).

Liquidated damages clause A clause in a lease or other agreement providing for payment of an agreed sum of money as an alternative to performance of a contract obligation. *See, e.g., Perlman v. Pioneer Limited Partnership, 918 F.2d 1244, 114 O.&G.R. 407 (5th Cir. 1990)* (discussing the requirements for enforceability of such a clause). *See also* Treatise § 430 at note 9, § 671.2 at notes 7-9, § 697.12, and § 885.5

Liquid constituents Hydrocarbons in solution in natural gas which are liquefiable at surface temperature and pressure or by treatment and processing.

Liquid hydrocarbons Hydrocarbons which are liquid at surface temperature and pressure.

Liquid products This term was employed in *Carter v. Exxon Corp., 842 S.W.2d 393, 395, 121 O.&G.R. 501 (Tex. App. 1992)* , to refer to the marketable products (*e.g.*, ethane, propane, butane, and pentane) separated from Raw make (*q.v.*) by further processing after separation of oil and condensate from casinghead gas by a separator (thereby producing Raw gas) followed by extraction of liquefiable hydrocarbons by a gas processing facility.

Listed depository receipt A transferable receipt from a bank or trust company acknowledging that the institution holds the thing described in the receipt as agent for the receipt holder; the receipt is described as "listed" when listed for trading on a stock exchange. *See* Mann, "Financing Oil and Gas Operations--Recent Developments," 33 *Sw. Legal Fdn. Oil & Gas Inst.* 407, 418 (1982):

"In this context, an oil and gas limited partnership interest that cannot be listed for trading according to the rules of a stock exchange would be deposited with a bank for the account of the limited partner. The limited partner would hold the depository receipt which, under the rules of the stock exchange, would be eligible for listing. The Apache Corporation was the first to use this innovative idea for an oil and gas limited partnership."

Little big inch pipeline A 20-inch products pipeline from east Texas to the east coast built during World War II to meet the problem caused by tanker losses at sea as a result of submarine warfare. After the war the pipeline was sold to Texas Eastern Transmission Corp. and converted to a gas pipeline. Subsequently, in 1958, the pipeline was returned to products service. *See* Johnson, *Petroleum Pipelines and Public Policy, 1906-1959*, 324, 341-348, 383 (1967); C. Castaneda, *Regulated Enterprise: Natural Gas Pipelines and Northeastern Markets (1993)*.

Little frac This term is defined by *Stoltz, Wagner & Brown v. Cimarron Exploration Co., 564 F. Supp. 840 at n.5, 77 O.&G.R. 529 at n.5* (W.D. Okla, 1981) , as follows: "A 'little frac' is a limited-entry type of technique with fewer perforations than the big frac and pumping the gel water into the hole at a rate not over twice the number of holes, i.e., if you had ten perforations then pump 20 gallons of water a minute."

See also Big frac; Fracturing.

Live oil Crude oil before gas has been separated from the liquid.

Syn.: Unstabilized crude oil.

LNAPL (liquid fuel products-light non-aqueous phase liquid) Petroleum products that, due to spills or leaks, seep through the soil and may create a hydrocarbon plume. *Baker v. Chevron U.S.A., Inc., 2009 U.S. Dist. LEXIS 110524* (S.D. Ohio Nov. 4. 2009) .

LNG Liquefied natural gas (*q.v.*)

LNOC The Libyan National Oil Corporation (*q.v.*).

Load diesel Diesel oil injected into a well to swab the well.

Load factor Average daily requirement divided by maximum daily requirement, stated as a percentage.

In *Lynchburg Gas Co. v. Federal Power Commission, 336 F.2d 942, 944* note 1 (D.C. Cir. 1964) , this term is defined as "the ratio between a buyer's average daily purchases and its contract demand, the maximum volume it has a right to take under its contract."

Load factor rate *See* One hundred percent load factor rate.

Loading *See* Front-end loading.

Load oil (1) Any oil or liquid hydrocarbon which has been used in any remedial operation in an oil or gas well. New Mexico Oil Conservation Comm'n, *Rules and Regulations* 3 (1958).

(2) Oil injected into a well as part of a fracturing operation. *See Whitaker v. Texaco, Inc., 283 F.2d 169, 13 O.&G.R. 502 (10th Cir. 1960)* ; Fracturing.

(3) " 'Load oil' means any oil which has been used with respect to the operation of oil or gas wells for wellbore stimulation, workover, chemical treatment or production purposes. It does not include oil used at the surface to place lease production in marketable condition." 30 C.F.R. § 206.101, commented on in *53 Fed. Reg. at 1195* (Jan. 15, 1988).

Load-on-top A procedure adopted by major oil companies in 1964 designed to reduce pollution by deballasting and tank washing operations of tankers at sea. *See* Daintith and Willoughby, *A Manual of United Kingdom Oil and Gas Law* 66 (1977).

See also S. Mankabady, *Energy Law* 263 (1990).

Loan *See* Mezzanine loan; Political risk loan; Production loan.

Loan participation Division of a loan among several financial institutions as a means of enabling an originating lender to accommodate large customers which it could not otherwise handle. The institutions participating in the loangenerally see it as a way to invest profitably with a minimum of cost, effort, and risk. *See* Fisher & Muratet, "The Aftermath of Penn Square Bank: Protecting Loan Participants from Setoffs," *18 Tulsa L.J. 261 (1982)*.

LOC Louisiana Office of Conservation.

Local distribution company (LDC) The local company distributing gas acquired from a pipeline to local residential, commercial, and industrial consumers. *Associated Gas Distributors v. Federal Energy Regulatory Comm'n, 824 F.2d 981, 993, 96 O.&G.R. 557 (D.C. Cir. 1987) , cert. denied, 485 U.S. 1006 (1988), 111 S. Ct. 373 (1990)* .

Rochester Gas & Electric Corp. v. Public Service Comm'n, 71 N.Y.2d 313, 525 N.Y.S.2d 809, 520 N.E.2d 528 (1988) , sustained the validity of a New York statute providing for Mandatory carriage (*q.v.*) of gas by certain utilities under specified circumstances.

Local distribution facility A term which "connotes a network of small local lines used to transmit gas from a large interstate pipeline to individual consumers spread out in a local geographic area--not a high-pressure line connecting as an interstate pipeline to a single end-user." *Oklahoma Natural Gas Co. v. Federal Energy Regulatory Comm'n, 906 F.2d 708, 710 (D.C. Cir. 1990)* .

On subsequent review of the Commission's opinion after remand, the court again remanded to the Commission for an adequate explanation. *Oklahoma Natural Gas Co. v. Federal Energy Regulatory Comm'n, 940 F.2d 699 (D.C. Cir. 1991) , on later appeal, 28 F.3d 1281 (D.C. Cir. 1994)* .

Local drainage *See* Drainage.

Location (1) A well site. The usage varies somewhat according to context. For example, newspapers will announce the "location" of a wildcat well at a certain place. This means that it has been decided that a well will be drilled at that place. It is also proper to speak of spacing units as "locations," *e.g.*, the *X* well is two "locations" south of the *Y* well.

(2) "A claim to public lands which is established either by the surrender of scrip or by the initiation of a mining claim or a

settlement claim." United States Department of the Interior Bureau of Land Management, *Glossary of Public-Land Terms* 27 (1949).

See also Completion location; Location exception order.

Location damages Compensation paid by an operator to the surface owner for injury to the surface or to growing crops in the drilling of a well. Such payment may be required by law for excessive user of surface easements, by statute, by a Surface damage clause (*q.v.*) in an oil and gas lease, by a Tenants consent agreement (*q.v.*) or by other agreement.

Location exception A well location authorized as an exception to the regular well spacing rule.

See also Allowable penalty; Exception well; Rule 37; Sistrunk formula; Well spacing.

Location exception order A regulatory order permitting an exception to be made in the location of a well within a drilling and spacing unit. The order may also provide for a special allowable for the exception well. *Forest Oil Corp. v. Corporation Comm'n, 807 P.2d 774, 114 O.&G.R 92 (Okla. 1990)* .

Locked-in rate A rate in which an "increased rate is later superseded by a further increase." It is thus "effective only for the limited intervening period, called the 'locked-in' period, and retains significance in § 4(e) proceedings only in respect of its unrefundability if found unlawful." *Wisconsin v. Federal Power Comm'n, 373 U.S. 294, 298 n.5, 18 O.&G.R. 541, 544 n.5 (1963)* .

Lode or vein A continuous zone or belt of mineral-bearing rock or other earthy matter in place in fissure or rock, or lying within well defined channels and having boundaries sharply defined by rocky walls; or a continuous body of mineral that is clearly distinguished from neighboring rock and the general mass of the mountain. *Fuller v. Mountain Sculpture, Inc., 6 Utah 2d 385, 314 P.2d 842, 8 O.&G.R. 90 (1957)* .

For a discussion of the distinction between lode and placer deposits, see Keller, "Lode or Placer?--Locating the Distinction," 31 *Rocky Mt. Min. L. Inst.* 12-1 (1985).

See also Harris, "Location of Lode Claims Over Placer Claims," 34 *Rocky Mt. Min. L. Inst. 12-1* (1988).

Log As defined by the United States Department of Labor, Occupational Health and Safety Administration, a log is "a systematic recording of data, such as a driller's log, mud log, electrical well

log, or radioactivity log. Many different logs are run in wells to discern various characteristics of downhole formation."; as cited in *Grey Wolf Drilling Co., L.P. v. Boutte, 154 S.W.3d 725, 731 n.7* (Tex. App.--Houston [14th Dist.] 2003) , *review granted, judgment vacated and remanded by agreement, 2005 Tex. LEXIS 202* (Tex. Mar. 4, 2005) .

See Caliper log; Cemetron log; Chlorinilog; Driller's log; Electrical well log; Gamma ray-gamma ray logging; Well log.

"Logging off" The accumulation of liquids in the well bore of gas wells preventing gas from rising to the surface.

LOIA The Louisiana Oilfield Indemnity Act (*q.v.*).

London dumping convention The International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 whereby the contracting States undertook to prevent pollution of the sea by the dumping of waste and other matter.

London Policy Group (LPG) An organization created in 1971 in order to negotiate jointly as an industry with OPEC regarding increases in producer-government "take." It was composed of representatives from approximately twenty-four petroleum companies operating in the Persian Gulf and Libya. Krueger, *The United States and International Oil* 31, 65 (1975).

Long oil payment An Oil payment (*q.v.*) with a long pay-out. *See Discussion Notes, 4 O.&G.R. 1074 (1955).*

See also Short-lived in-oil payment.

Long section A section of land in the United States Governmental Survey which contains more than 640 acres. *See Stevens v. State Corporation Comm'n, 185 Kan. 190, 341 P.2d 1021, 11 O.&G.R. 804 (1959)* .

See also General Land Office survey; Lot; Section; Short section.

Long-stroking The process in which the length of the pump's stroke is increased resulting in increased pumping capabilities. *Bargsley v. Pryor Petroleum Corp., 196 S.W.3d 823, 826* (Tex. App.--Eastland 2006) .

Long term lease An oil and gas lease executed for a long primary term without a thereafter clause. This was an early form of oil and gas lease which has passed out of use because it was not found satisfactory by either lessors or lessees. The former desired some

assurance of a periodic return from the land in the form of rentals or royalties, and the latter desired to insure that their interest would last so long as oil or gas was produced from the land. This lease form has been largely supplanted by the Unless lease (*q.v.*) and Or lease (*q.v.*) forms in which the habendum clause includes a Thereafter clause (*q.v.*). *See* Treatise § 601.1.

Long ton *See* Ton.

Look *See* Free look.

Lookback An agreement between the buyer and seller whereby the sale price of a property will be redetermined or adjusted at a time after the sale has been consummated. *See* "Lookbacks," 11 *O.&G. Tax Q.* 88 (1962).

Look-see assignment The term applied by L. Skeen, *West Virginia Oil and Gas Law* 46 (1984), to a lease assignment form said to give the purchaser an interest for a fixed sum covering drilling and logging and which gives the purchaser a look at the well before deciding if he desires to pay an additional pro rata sum for his share of completion costs. Form 20 in this work, described as a Look-see assignment, appears to give the operator the right to complete a well after which the purchaser is to be notified of his share of completion expenses; if the purchaser fails to pay his share the *operator* is given the option to consider the assignment of a share of the working interest "null and void" or the option to sue the purchaser for his proportionate share of the completion expenses.

LOOP The Louisiana Offshore Oil Port (*q.v.*).

See also Brownsville Loop.

Looping The construction of a second pipe line parallel to another existing pipe line, thus increasing the carrying capacity of that part of the line. *See Battle Creek Gas Co. v. Federal Power Comm'n, 281 F.2d 42 (D.C. Cir. 1960)* .

See also Partial looping.

Loop lines Additional pipe lines on the original right-of-way paralleling the original pipe lines which are laid to increase capacity. *Northern Natural Gas Co. v. O'Malley, 174 F. Supp. 176, 10 O.&G.R. 423 (D. Neb. 1959) , rev'd, 277 F.2d 128, 12 O.&G.R. 335 (8th Cir. 1960)* .

Losing returns Loss of drilling Mud (*q.v.*) used to control high

pressure into underlying structure.

Heavy gas pressure may be encountered during drilling. In order to control the pressure it is necessary to use heavy drilling mud. The mud is normally returned to the surface by mud circulating pumps but sometimes the mud disappears into the reservoir down in the earth. This disappearance of mud into the underlying structure is known as "losing returns." When this occurs, the mud is forced into the underlying geological structure containing the gas and has a tendency to seal off the flow of gas into the hole. After casing is set, perforated and tubing run, it is necessary either to swab the tubing or flow the well to complete the well as a producer. When high pressures are encountered, swabbing may not be feasible as the pressure may blow the swab out of the well and possibly cause loss of control of the well. *See Rogers v. Osborn, 152 Tex. 540, 261 S.W.2d 311, 2 O.&G.R. 304, 1439 (1953)* ; Returns.

Loss *See* Abandonment loss; Joint loss provision; Worthlessness, Loss from.

Lost and unaccounted for gas (LAUF) A cost that may be recovered by a pipeline, usually by means of withholding a specified volume of gas from delivery to the end-user. *Florida Gas Transmission Co., LLC v. Bay Gas Storage Co., Ltd., 2009 U.S. Dist. LEXIS 10038* (S.D. Tex.) .

"Lost and unaccounted for gas occurs from leakage, variations in metering at different locations and other reductions in the volume of gas transmitted ... incurred as part of a pipeline's daily operations. *Colorado Interstate Gas Co. v. Federal Energy Regulatory Commission, 599 F.3d 698 (D.C. Cir. 2010)* . In this case, the court disallowed CIG's attempt to treat gas that leaked from an underground storage facility as lost and unaccounted for gas.

See also Dynegy Midstream Services, Limited Partnership v. Apache Corp., 294 S.W.3d 164, 52 Tex. Sup. Ct. J. 1176 (2009) (where the contracts specify that the seller is entitled to a percentage of the net proceeds from the sale of the residue gas "F.O.B. the Plant tailgate," the seller bears the risk of loss caused by lost or unaccounted for gas between the wellhead and the plant tailgate).

Lost circulation The loss of drilling fluids to the formation, usually cavernous or very permeable, evidenced by the complete or partial loss of drilling fluid returns to the surface. *See* Circulation.

" 'Lost circulation' is a very serious but not altogether uncommon event which usually occurs when in the drilling process a cavern or some extremely porous formation is encountered into which the drilling mud escapes without returning to the surface. Drilling mud is initially pumped under high pressure down inside the drill pipe and through holes in the rotating bit. Full circulation is essential to

the rotary drilling process. The mud lubricates and cools the bit. It returns in suspension to the surface the cuttings which geologists study for the presence of hydrocarbons and which, if left in the hole, would clog the bit and stick the pipe; and, on its return journey, the mud cakes the well bore, sealing harmful formations while protecting valuable ones, and it creates support for the walls of the hole. In the case of lost circulation, cuttings and cave-ins will fall on top of the drill collars and bit, causing the pipe to get stuck in the hole." *Burger Drilling Co. v. Bauman, 643 F.2d 240, 241, 69 O.&G.R. 511, 513* (5th Cir., Unit A, 1981) . *See also* Reverse circulation.

Startex Drilling Co. v. Sohio Petroleum Co., 680 F.2d 412, 74 O.&G.R. 384 (5th Cir. 1982) , was concerned with the question whether there had been loss of circulation in a well which, under the terms of a drilling contract, caused the day rate rather than the footage rate to be applicable. The court discusses in detail the controversy over the meaning of this somewhat ambiguous term, *viz.*, whether there was lost circulation when returns of drilling mud amounted to 80 percent.

Drilling contract provisions concerning lost circulation are discussed in Anderson, "The Anatomy of an Oil and Gas Drilling Contract," *25 Tulsa L.J. 359, 442 (1990)*.

Lost or neglected grant doctrine *See* "Presumed grant" doctrine.

Lost royalty rule The rule applied in some jurisdictions that the appropriate measure of damages for breach of an express drilling covenant is the royalties that the claimant would have received on production from the well if it had been drilled in accordance with the contract. *See* Treatise § 885.2.

Lot "A subdivision of a section which is not described as an aliquot part of the section but which is designated by number, *e.g.*, Lot 2. A lot is ordinarily irregular in shape and its acreage varies from that of a regular subdivision." United States Department of the Interior Bureau of Land Management, *Glossary of Public-Land Terms* 27 (1949).

Lottery *See* Noncompetitive lease.

Louisiana Offshore Oil Port (LOOP) An oil unloading facility located in the Gulf of Mexico 18 miles offshore adjacent to La Fourche Parish, in waters of sufficient depth (105 to 115 feet) to accommodate a Very Large Cargo Carrier (VLCC) (*q.v.*) which has a draft of up to 95 feet when fully loaded. *See* Wolbert, *U.S. Oil Pipe Lines* 68 (1979).

The operations of LOOP are described in *United States Fidelity & Guaranty Co. v. LOOP, Inc., 769 F. Supp. 210, 117 O.&G.R. 471 (E.D. La. 1991)* (holding that the Louisiana Oilfield Indemnity Act was not applicable to LOOP).

Louisiana Oilfield Indemnity Act (LOIA) *La. Rev. Stat. Ann. § 9:2780* (West 1991), declaring void and unenforceable indemnity, hold harmless, or additional assured provisions in agreements pertaining to wells for oil, gas or water, or drilling for minerals. *See United States Fidelity & Guaranty Co. v. LOOP, Inc., 769 F. Supp. 210, 117 O.&G.R. 471 (E.D. La. 1991)* (holding that this Act was not applicable to LOOP which was engaged in underground storage of oil in salt dome caverns and "withdrawal" of oil from storage, rather than in "production and extraction as is contemplated of oil wells in the conventional sense").

Louisiana Oilfield Site Restoration Law In 1993, the Louisiana Legislature enacted the Louisiana Oilfield Site Restoration Law (Acts 1993, No. 404, codified at *La. Rev. Stat. § 30:80 et seq.*). The Legislature established a 10-member oilfield site restoration commission and an oilfield site restoration fund to provide for the proper and timely cleanup, closure, and restoration of oilfield sites, to be administered by the Commissioner of Conservation within the Department of Natural Resources. The Commissioner has the authority to declare a site an orphaned oilfield site upon a finding that: no responsible party can be located, or such party has failed or is financially unable to undertake actions ordered by the assistant secretary; and the oilfield site either: "(a) was not closed or maintained in accordance with all statutory requirements and the regulations adopted thereunder; or (b) constitutes or may constitute a danger or potential danger to the public health, the environment, or an oil or gas strata." Once a site has been declared orphaned, no sale or removal of property from the orphaned site may be made without the written consent of the Commissioner, and conducting operations on the site is prohibited without the consent of the Commissioner. *La. Rev. Stat. § 30:91(B)(3) & (4)*. Once a site has obtained orphaned status, the Commissioner is authorized to conduct site restoration, defined by the act as "any and all oilfield site restoration activities required of a responsible party of an oil or gas property by regulations adopted by the office of conservation pursuant to this Subtitle, including without limitation plugging of oil and gas wells, pit closure, site remediation, and removal of oilfield equipment." *La. Rev. Stat. § 30:82(11)*. *See generally* Rob Scheffy Jr. & Andrew J. Harrison Jr, *Current Oil and Gas Environmental Considerations*, 48th Ann. Inst. on Min. Law 263, 268-70 (2001/2008). *See Giorgio v. Alliance Operating Corp., 2005-0002 (La. 1/19/06), 921 So. 2d 58, 77* ; http://dnr.louisiana.gov/cons/CONSEREN/oilsite-res.ssi. *See also Cedyco Corp. v. Department of Natural Resources, 993 So.2d 271, 2007-2500* (La. App. 1 Cir. 7/23/08) (Commissioner's declaration that well sites were orphaned upheld).

Lo-Vaca problem The problem arising from the failure of the Lo-Vaca Gathering Company to meet its contractual obligations to supply natural gas to a large area of Texas in 1972. *See* Prindle, *Petroleum Politics and the Texas Railroad Commission* 108 *et seq.* (1981).

Lower tier crude oil This term is defined by Section 4988 of the National Energy Act (H.R. 8444), as passed by the House of Representatives on August 5, 1977, as controlled crude oil which is certified by the producer as having been sold pursuant to the lower tier ceiling price rule in effect (at the time of the first purchase) under section 4(a) of the Emergency Petroleum Allocation Act of 1973.

See also Exempt crude oil, Second tier oil.

Syn.: First tier oil; Old oil.

Lower tier oil *Syn.*: for Old oil (*q.v.*).

Low-priority user Any user other than a High-priority user (*q.v.*).

Low temperature extraction (LTX) A process by which gaseous hydrocarbons are caused to condense or liquify in a gas stream by refrigeration to temperatures below zero degrees *Fahrenheit. Colorado Interstate Gas Co. v. HUFO Oils, 626 F. Supp. 38 91 O.&G.R. 115 (W.D.Tex. 1985) , aff'd, 802 F.2d 133, 91 O.&G.R. 134 (5th Cir. 1986) , reh'g en banc denied, 806 F.2d 261 (5th Cir. 1986) .*

Colorado Interstate Gas Co. v. HUFO Oils, supra , and *HUFO Oils v. Railroad Commission, 717 S.W.2d 405, 100 O.&G.R. 187* (Tex. App.--Austin 1986, writ denied) , held that white oil extracted from natural gas by low temperature extraction could not be counted as "oil" for purposes of classification of a well as an oil well or gas well.

Amarillo Oil Co. v. Energy-Agri Products, Inc., 794 S.W.2d 20, 109 O.&G.R. 524 (Tex. 1990) , was concerned with a gas owner's claim against a producer of white oil by a low-temperature extraction process. The court concluded that since the parties to a Phase severance (*q.v.*) did not define the term "casinghead gas," they "evidenced their intent to incorporate the statutory definition of" the term. It then held that classification of the gas turned on whether it was produced from an "oil stratum": "When oil rights are severed from gas rights in a phase severance, and the parties do not otherwise specify in the conveying instrument, the party who owns the right to casinghead gas owns only that gas or vapor which is indigenous to an oil stratum and is produced from that stratum along with oil, as contrasted to gas produced from a separate gas stratum through an oil well." *109 O.&G.R. at 534* .

See also Albino oil; Gas condensate; Gas well; Natural gasoline; Water-white oil; White oil.

Low-volume system A liquid petroleum pipeline system or a segment

of a system which transports less than 100 BPH on a regular basis. Alberta Energy Resources Conservation Board Informational Letter IL-PL 76-1 (Jan. 9, 1976).

See also High-volume system; Intermediate-volume system.

LPG (1) Liquefied petroleum gas (*q.v.*), being liquefied propanes and butanes separately or in mixtures.

(2) London Policy Group (*q.v.*).

LPGA Liquefied Petroleum Gas Association.

LPG-gas drive Use of high-pressure enriched gas or an LPG-slug to achieve the miscible or partly miscible displacement of oil by gas. *See* Morse, "Trends in Oil Recovery Methods," 1 *IOCC Comm. Bull.* 1, 5 (Dec. 1959).

See also Secondary recovery.

LPP Light petroleum products (*q.v.*).

LSD Abbreviation of Legal subdivision (*q.v.*).

LTA Limited term abandonment (*q.v.*).

LTX An acronym for Low temperature extraction (LTX) (*q.v.*).

LTX products White oil (*q.v.*) produced by Low temperature extraction (LTX) (*q.v.*). *Amarillo Oil Co. v. Energy-Agri Products, Inc., 794 S.W.2d 20, 109 O.&G.R. 524 (Tex. 1990)* .

Lubricating oil An oil used for the lubrication of machinery.

The process of preparing such oil was described in *Asiatic Petroleum Corp. v. United States, 183 F. Supp. 275, 12 O.&G.R. 841* (Customs Court, 1959) , as follows:

"The heavy distillate fraction of petroleum crude oil is further distilled under vacuum, which is then followed by a solvent extraction, which is followed by a solvent dewaxing, then occasionally is followed by acid treatment, and then clay filtration, which permits the basic stocks to be run down to separate storage tanks. ... [T]hese basic stocks are later blended together in mixing tanks ... to meet certain specifications of viscosity and flash and gravity, and then to this mixture is added a chemical or chemicals, which are known as

additives. These are mainly used to enhance the properties of the lubricating oil."

Lurgi process A commercial process, originated in Germany, for coal gasification. *See Henry v. Federal Power Comm'n, 513 F.2d 395, 52 O.&G.R. 135 (D.C. Cir. 1975)* .

See also Manufactured gas.

Lying behind the log A term applied to conduct of the lessor during drilling operations by the lessee which may cause the court to find a lease preserved by estoppel and laches despite the expiration of the primary term. For this argument to prevail, the lessee must show (1) a duty on the part of the lessor to speak or act in some manner, and (2) detrimental reliance on a failure to perform such duty. Kuykendall v. Helmerich & Payne, Inc., 54 *Okla. B.A.J.* 26 (Okla. Ct. App. 1982) , noted, *19 Tulsa L.J. 271 (1983), opinion vacated and trial court judgment aff'd, 741 P.2d 869, 97 O.&G.R. 120 (Okla. 1987)* .

Duer v. Hoover & Bracken Energies, Inc., 753 P.2d 395, 98 O.&G.R. 130 (Okla. Ct. App. 1986, *cert. denied)* , rejected equitable defense of laches based upon allegation that lessee was prejudiced because lessor "laid behind the log" until the venture proved profitable and then asserted his claim that the lease had terminated automatically by reason of failure to make timely payment of rentals: "Because Lessee commenced drilling knowing Lessor never received his payment, it is evident any prejudice it suffered was the result of its own actions and not as a result of Lessor's 'delay' in instituting suit. He who seeks equity must do equity."

See also Laches.

Syn.: Riding the well down.

EXHIBIT 12

Williams & Meyers, Manual of Oil and Gas Terms

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P Terms

8-P Manual of Oil and Gas Terms P

Scope

Pacific lease agreement An agreement closely similar to a Gas lease agreement (*q.v.*). *See El Paso Natural Gas Co. v. Sun Oil Co., 708 F.2d 1011, 1016 (5th Cir. 1983)* .

Packer A device used on casing or tubing to prevent fluid from passing; material employed to prevent water or other foreign substances from entering a sand.

"[A]device for packing the space between the wall of an oil well and the pipe or between two strings of pipe." *Cressman Tubular Products Corp. v. Kurt Wiseman Oil & Gas, Ltd., 322 S.W.3d 453, 456 n.3* (Tex. App.--Houston [14th Dist.] 2010) .

"A packer is a steel pipe containing a rubber outside casing that is inserted and lowered several thousand feet into an existing well, and turned and locked into place, in order to prevent water from entering the well from a source above the packer." *Temple Oil & Gas Co. v. Henning, 2002 Ohio 6549, 2002 Ohio App. LEXIS 6343* (Ohio Ct. App. Nov. 22, 2002) (not reported in N.E.2d).

See also Production injection packer.

"Packerless" salt water disposal well A saltwater disposal well operated without a device known as a packer. *See McGowan v. Mississippi State Oil & Gas Bd., 604 So. 2d 312, 120 O.&G.R. 316 (Miss. 1992)* , *cert. denied, 506 U.S. 1052 (1993)* , dealing with a challenge to the Board's denial of permission to operate disposal wells without a packer. Appellant argued that the packerless design enabled him to dispose of huge volumes of salt water more economically, thus avoiding premature abandonment of wells with loss of substantial production. The court found the Board's decision arbitrary and capricious by reason of failure to make adequate findings concerning waste prevention capabilities of the packerless system as well as its environmental hazards, and the Board's failure to explain how it evaluated and

balanced those competing interests.

Packing *See* Gravel packing.

Pad An area of some 75 x 150 feet around a well which serves as a foundation for the drilling rig. *Robinson Rat Hole Service, Inc. v. Richardson Oils, Inc., 393 S.W.2d 629, 630, 23 O.&G.R. 587, 588* (Tex. Civ. App.--El Paso 1965, error ref'd n.r.e.) .

PAD Petroleum Administration for Defense (PAD) (*q.v.*).

PAD Districts Five geographical areas into which the nation was divided by the Petroleum Administration for Defense (PAD) (*q.v.*) in 1950 for purposes of administration.

Paid-up lease A lease effective during the primary term without further payment of delay rentals, the aggregate of rentals for the entire primary term having been paid in advance. The delay rental clause may be deleted from the lease if rentals are paid up, but it appears generally preferable to leave the delay rental clause in the lease since striking the clause may give rise to a covenant to drill an exploratory well [*see* Exploration covenant] during the primary term. If the clause is left in the lease and rentals paid up, the lease should recite the payment of the rentals in order to protect the lessee in the event the lessor's interest is assigned during the primary term to a person who does not know that the lease was paid up. *See* Malone, "Problems Created by Express Lease Clauses Affecting Implied Covenants," 2 *Rocky Mt. Min. L. Inst.* 133 (1956); Treatise § 603.1.

See Parking and lending service.

Paleontologist A scientist who deals with the life of past geological periods, basing his study on fossils.

Palmer v. Bender assignment A term occasionally used to describe a transaction involving the assignment of a working interest for cash, in which assignment an overriding royalty is retained. *See* Appleman, "Sales and Assignments of Leases and Other Interests in Oil and Gas," 1 *Sw. Legal Fdn. Oil & Gas Inst.* 427, 439 (1949).

See also Assignment.

P & A Plug and abandon, *viz.,* the placing of a plug in a dry hole, then abandoning the well.

P & I *See* Protection and Indemnity (P&I) Clubs.

Paper barrel Oil traded on the futures market for delivery a few months ahead and mostly used by

players for hedging their actual buys of oil or for speculating to make money. On futures markets traders rarely intend to take delivery of the oil or to deliver it. *Wall Street Journal,* Mar. 6, 1986, at 6.

Syn.: Video barrel.

See also Barrel of oil; Prompt barrel; Wet barrel.

Paper cargo In a Daisy chain (*q.v.*) a cargo of oil which is not in fact delivered.

Paper deal *Syn.:* for Dry deal, *viz.*, "the purchase or sale of a claim on a cargo of Brent in some future month." *Transnor (Bermuda) Ltd. v. BP North American Petroleum, 738 F. Supp. 1472* at note 32 (S.D.N.Y. 1990) .

See also Transnor case.

Paraffin base oil Crude oil containing an appreciable amount of wax (paraffin). In general, the oil produced in Pennsylvania, New York, West Virginia, and southeastern Ohio are paraffin base oils, as well as some of the oil produced in Texas and California. Paraffin base oils are usually lighter in color and gravity than asphaltic oils and are excellent sources of high-grade lubricants.

See also Asphalt base oil; Green oil; Mixed base oil.

Paraffin wax Wax removed from petroleum distillates and residues by chilling, dewaxing, and de-oiling. When separating from solution it is a colorless, more or less translucent, crystalline mass, slightly greasy to touch, and consisting of a mixture of solid hydrocarbons in which the paraffin series predominate. *38 Fed. Reg. 34,416* (Dec. 13, 1973) .

Paramarginal reserves or resources The portion of Identified-subeconomic reserves or resources (*q.v.*) that (a) borders on being economically producible or (b) is not commercially available solely because of legal or political circumstances. 2 *OCS Oil and Gas--An Environmental Assessment,* A Report to the President by the Council on Environmental Quality (April 1974) at p. 12.

See also Reserves; Resource.

Pari passu undertaking An agreement by a borrower that it will not grant security to other creditors, but that as far as possible it will not allow any other creditor to obtain priority over the credit given by those to whom the undertaking is given. McCormick, *Legal Issues in Project Finance,* 1 JENRL 21, 27 (1983).

See also Project financing.

Parking and lending service (PAL) A service for which pipelines sought FERC approval that would allow shippers to park gas on the pipeline system as well as to borrow gas from the pipeline system on an

interruptible basis. *Stand Energy Corp. v. Columbia Gas Transmission Corp., 373 F. Supp. 2d 631, 634 (S.D. W. Va. 2005)* .

See also: *Energy Marketing Services, Inc. v. Columbia Gas Transmission Corp., 2009 U.S. Dist. LEXIS 40949* (S.D. W. Va.) (antitrust claim based on actions taken by pipeline pursuant to its PAL service survives motion for summary judgment notwithstanding FERC's approval of PAL services).

Partial assignment The transfer of less than the whole interest created in either lessor or lessee by execution of an oil and gas lease. This transfer may occur in one of two ways: (1) by conveyance of an undivided interest, or (2) by conveyance of part of the tract under lease in severalty. Some of the problems arising from either form of partial assignment are the same, but others differ depending on the form.

In the case of assignment by the lessor of an undivided interest in the royalty, the usual question is whether one co-owner can bring an action for breach of express or implied drilling covenants without the joinder of all other co-owners. *See Sun Oil Co. v. Oswell, 258 Ala. 326, 62 So. 2d 783, 2 O.&G.R. 145 (1953) Thiessen v. Weber, 128 Kan. 556, 278 P. 770 (1929)* ; *Compton v. Fisher-McCall, 298 Mich. 648,* (1941) *Royal Petroleum Corp. v. Dennis, 299 N.W. 750 332 S.W.2d 313, 12 O.&G.R. 578, 160 Tex. 392 (1960)* .

In the case of assignment by the lessee of an undivided interest in the lease, it seems clear that acts by either cotenant are acts of the other, sufficient to keep the lease alive.

In the case of assignment by the lessor of the lease benefits in a segregated portion of the leasehold (*e.g.*, the SW 1/4 of Section 3), the usual problem is the apportionment of royalty between assignor and assignee. That is, the royalty may be divided according to the proportion that the land of each bears to the whole leasehold acreage, the Apportionment (*q.v.*) rule. Or the full royalty may be paid to the owner of the segregated tract on which the well is located, the Nonapportionment (*q.v.*) rule. Absent express lease provisions, the second rule of nonapportionment is followed in a majority of producing states. *See, e.g., Central Pipe Line Co. v. Hutson, 401 Ill. 447, 82 N.E.2d 624 (1948)* ; *Japhet v. McRae, 276 S.W. 669 (Tex. Com. App. 1925)* ; *Carlock v. Krug, 151 Kan. 407, 99 P.2d 858 (1940)* ; *Gypsy Oil Co. v. Schonwald, 1924 OK 1133, 107 Okla. 253, 231 P. 864 (Okla. 1924)* . There is some support for the apportionment theory: *Standard Oil Co. v. John N. Mills, 3 Cal. 2d 128, 43 P.2d 797 (1935)* ; *Griffith v. Gulf Ref. Co., 215 Miss. 15, 60 So. 2d 518, 61 So. 2d 306, 1 O.&G.R. 1627 (1952)* ; Stayton, "Apportionment and the Ghost of a Rejected View," *32 Tex. L. Rev. 682 (1954).*

Where an Entirety clause (*q.v.*) is present in the lease, apportionment is sometimes applied in nonapportionment jurisdictions. *Thomas Gilcrease Foundation v. Stanolind Oil & Gas Co., 153 Tex. 197, 266 S.W.2d 850, 3 O.&G.R. 673 (1954)* ; *Krone v. Lacy, 168 Neb. 792, 97 N.W.2d 528, 11 O.&G.R. 492 (1951). Contra: Iskian v. Consolidated Gas Utilities Co., 1952 OK 404, 207 Okla. 615, 251 P.2d 1073, 2 O.&G.R. 240* . *See* Hardwicke & Hardwicke, "Apportionment of Royalty to Separate Tracts." *32 Tex. L. Rev. 660 (1954);* Treatise § 521.4.

In the case of assignment by the lessee of portions of the working interest in severalty, several problems may arise:

(1) The effect of non-payment of rentals by one assignee. This contingency is nearly always provided for in the lease, under which the lease lapses only as to the assignee's portion of the lease hold. *See* Treatise §§ 407-*407.2*.

(2) The effect of the partial assignment upon the habendum clause of the lease. It is generally held that production anywhere on the leasehold will continue the lease in force as to all assignees, whether they have drilled or not. *See Berry v. Tidewater Assoc. Oil Co., 188 F.2d 820 (5th Cir. 1951)* , and the many cases cited therein. In some instances, Louisiana is *contra. See* Treatise § 406.

(3) The effect of the partial assignment upon the covenant obligations of the lease. *See* Treatise §§ 409-*409.4*.

For a general discussion of the various problems arising out of partial assignments, see Treatise §§ 404-*410*.

See also Assignment; Sublease.

Partial cancellation Cancellation of the lease insofar as it covers undeveloped portions of the leased premises or insofar as it covers undeveloped formations. In a limited number of cases, the remedy of partial cancellation has been given for breach of implied covenants of an oil and gas lease, either by an absolute decree of partial cancellation or a conditional decree of partial cancellation. *See* Treatise § 844.2.

See also Alternative decree; Cancellation decree; Conditional decree of cancellation.

Partial looping A method of expansion of the carrying capacity of a pipeline by constructing a second pipeline parallel to a portion of the existing pipeline. *See Battle Creek Gas Co. v. Federal Power Comm'n, 281 F.2d 42 (D.C. Cir. 1960)* .

See also Looping.

Partial ownership clause *Syn.:* Proportionate reduction clause (*q.v.*).

Partial requirements customer A customer who obtains gas from two or more natural gas suppliers. *See Atlantic Seaboard Corp. v. Federal Power Comm'n, 404 F.2d 1268 (D.C. Cir. 1968)* .

A gas customer who relies on more than one pipeline for its anticipated gas needs. *Associated Gas Distributors v. Federal Energy Regulatory Comm'n, 824 F.2d 981, 1013, 96 O.&G.R. 557 (D.C. Cir. 1987)* , *cert. denied, 485 U.S. 1006 (1988)* .

See also Full requirements customer.

Partial requirements rate schedule A Rate schedule (*q.v.*) applicable to a Partial requirements customer (*q.v.*) requiring the customer to pay for a minimum volume of gas, both monthly and annually, regardless of whether the gas is used. *See Atlantic Seaboard Corp. v. Federal Power Comm'n, 404 F.2d 1268 (D.C. Cir. 1968)* .

Participant (1) A term used in some unitization agreements to describe an owner at the date of the agreement, and each successor, assignee or transferee of such owner, of the right to develop and operate lands within the unitized area and to produce unitized substances, whether as lessee or otherwise, including the owner of such lands not under lease as well as the lessee of such lands under lease. *Belridge Oil Co. v. Commissioner, 27 T.C. 1044, 7 O.&G.R. 673, 676 (1957)* , *aff'd, 267 F.2d 291, 10 O.&G.R. 662 (9th Cir. 1959)* . *See also* Election to participate.

(2) A subscriber to a Lease acquisition fund (*q.v.*).

Participating area "That part of a unit area which is considered reasonably proven to be productive of unitized substances in paying quantities or which is necessary for unit operations and to which production is allocated in the manner prescribed in the unit agreement." *43 C.F.R. § 3180.0-5.*

"That part of the Unit Area which is deemed to be productive from a horizon or deposit and to which production would be allocated in the manner described in the unit agreement assuming that all lands are committed to the unit agreement." *43 C.F.R. § 3286.1* (Model Unit Agreement for Geothermal Resources).

See generally Cox, "Unitization and Communitization," *Law of Federal Oil and Gas Leases § 18.03[2][b][vi]* (LexisNexis Matthew Bender).

Where a unitization clause requires that production shall be allocated to the portion of the lease unitized, if the lease is committed to a federal unit, but not inside a participating area, the lease has been improperly unitized since it is not entitled to an allocation of production. *Trans-Western Petroleum, Inc. v. United States Gypsum Co., 584 F.3d 988 (10th Cir. 2009)* , *aff'g in part and dismissing in part Trans-Western Petroleum, Inc. v. Wolverine Gas & Oil Corp., 2007 U.S. Dist. LEXIS 88453* (D. Utah Dec. 3, 2007) .

The size of a participating area can have significant monetary repercussions for owners of operating and nonoperating interests. *See, e.g., BHP Petroleum Co. v. Okie, 836 P.2d 873, 121 O.&G.R. 540 (Wyo. 1992)* (mineral owner committed her minerals to a unit in exchange for a unique consent agreement giving her the right among other things, to participate in decisions affecting development of the unit. A unit well costing $19.8 million was drilled to a depth of over 24,000 feet, and the well was shut in pending construction of a plant, at an estimated cost of $40 million, to remove the hydrogen sulphide. Without consulting the mineral owner, the unit operator obtained BLM approval of a 4,000 acre participating area around the well, rather than the 2560-acre area expected by the mineral owner. If an additional well did not have to be drilled, this could conceivably save the unit operator its share of the $20 million cost of such well and would reduce the mineral owners estimated royalty payment by about $11,000 per year.).

The concept of a participating area can be significant for state leases included in units as well as federal leases. An Alaska regulation pertaining to state leases defines "participating area" as "that part of an oil and gas lease unit area to which production is allocated in the manner described in a unit agreement." *11 AAC 88.185 (21)*. Another Alaska regulation specifies the effect of inclusion of a portion of a lease in a participating area: "The participating area may include only the land reasonably known to be underlain by hydrocarbons and known or reasonably estimated through use of geological, geophysical, or engineering data to be capable of producing or contributing to production of hydrocarbons in paying quantities. If any portion of a lease is included in a participating area formed under a unit agreement, the entire leased land will be committed to the unit and the lease will not be severed." *11 AAC 83.351*. These

provisions were applied in *Gottstein v. State, Dept. of Natural Resources, 223 P.3d 609 (Alaska 2010)* (lease terminated for lack of production; excluded from participating area of unit).

See *Geo-Energy Partners-1983 Ltd. v. Salazar, 613 F.3d 946 (9th Cir. 2010)*, *aff'g 551 F. Supp. 2d 1210 (D. Nev. 2008)*, for a case contracting a geothermal unit to the approved participating area due to the unit operator's failure to comply with the diligent development requirements imposed upon the prior approval and extension of the unit.

Participating financing arrangement A financing arrangement in which the lender obtains an Equity kicker (*q.v.*). *See* Wilson, "Tax Considerations in Selecting a Mineral Financing Vehicle," *Rocky Mt. Min. L. Inst. on Mineral Financing* 7-1, 7-95 (1982).

Participating interest (1) As defined in a Rocky Mountain unit operating agreement, the proportion (expressed as a percentage) that the acreage of a party's Committed Working Interest or Interests bears to the total acreage of all the Committed Working Interests of the parties. *See* Rocky Mountain Unit Operating Agreement Form 1 (Undivided Interest) May, 1954, Section 1.6, Treatise § 920.3.

(2) The percentage of cost and benefits under a unit operating agreement borne and to be received by various parties. *See Rocky Mt. Min. L. Fdn. Landman's Legal Handbook* 155 (3d ed. 1977).

(3) A portion of the working interest, frequently evidenced by a certificate. *See Miller's Oil and Gas Federal Income Taxation* § 14-1 (1980 Edition).

(4) Fractional undivided interest or right of participation in the oil or gas or in the proceeds from the sale of oil or gas, produced from a specified tract or tracts, or well(s) which right is limited in duration to the terms of an existing lease and which is subject to any portion of the expense of development, operation, or maintenance. *17 C.F.R. § 230.300 (a)(5) (1980).*

(5) This term is employed in certain operating agreements between host nations and foreign oil companies to designate the percentage in which each party is to participate in the costs and benefits of the agreement. *See, e.g.,* the Operating Agreement between Abu Dhabi and the Middle East Oil Co., Ltd., in OPEC, *Selected Documents of the International Petroleum Industry 1970* at p. 172.

Participating royalty A royalty interest, independent of a subsisting lease, if any, which shares in some other lease benefits than gross production, such as bonus, rental, or the right to join in the execution of leases. The term is ambiguous since it does not indicate in each particular *which* other lease benefit is joined to the royalty interest.

This term has also been used to describe a so-called Per cent interest (*q.v.*). *United States v. Adamant Co., 197 F.2d 1, 1 O.&G.R. 1072 (9th Cir. 1952)*, *cert. denied, 344 U.S. 903 (1952)*.

See also Nonexecutive mineral interest; Nonparticipating royalty; Royalty.

Participation (1) The term which has come to be applied to the arrangements between certain host nations and foreign oil companies for the exploitation of natural resources involving national ownership of an interest in the concessions for development of those resources. *See* Note, "From Concession to

Participation: Restructuring the Middle East Oil Industry," *48 N.Y.U. L. Rev. 774 (1973).*

For a discussion of participation agreements, see Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* ch. 7 (1986).

The difficulty of defining this term was emphasized in *Hunt v. Mobil Oil Corp., 465 F. Supp. 195, 239 (S.D.N.Y. 1978) , aff'd without opinion, 610 F.2d 806 (2d Cir. 1979)* . The court observed: "Whatever conflicts there may be, one concept seems to emerge from the various definitions offered at trial: participation concerned a working relationship between the host government and a concessionaire whereby the government had an equity interest in the company's concession."

For specific aspects or provisions of Participations, see the entries under Concession.

(2) The term is also applied to the division of a loan among several financial institutions as a means of enabling an originating lender to accommodate large customers which it could not otherwise handle. *See* Loan participation.

Participation and Bidding Agreement An agreement entered into by parties entering into a joint adventure for the conduct of exploration, development and production operations. *See* A. Derman, *International Oil and Gas Joint Ventures* 10 (A.B.A. Natural Resources, Energy and Environmental Law Section Monograph Series No. 16, 1992).

The term "participation agreement" can also refer to a domestic agreement whereby certain parties agree to participate, usually by the contribution of capital, in an exploration and/or development project.

See Consolidated Petroleum, Partners, I, LLC v. Tindle, 168 S.W.3d 894, 162 O.&G.R. 943 (Tex. App.--Tyler 2005) (participation agreement relating to the acquisition and disposition of leases within a designated geographic area; under terms of the agreement, participant was entitled to repayment in full of his capital contribution upon the sale of the leases whether or not the ultimate sales price exceeded the costs of acquisition).

Participation crude That portion of the crude oil produced by an oil company which is deliverable as the host nation's share of production under the terms of a Participation (*q.v.*) agreement.

See also Bridging crude; Buyback oil; Concession; Phase-in crude.

Participation formula The formula employed in the allocation of costs and proceeds of production under an operating, pooling or unitization agreement. A variety of factors have been utilized in participation formulae, including the following (listed approximately in the order of frequency as revealed by one study): (1) number of wells, current and cumulative production; (2) productive sand volume; (3) productive acreage; (4) estimated reserves; (5) total acreage; (6) number of wells and current production; (7) acreage and number of wells; (8) allowable; (9) allowable and potential; (10) number of wells, bottom-hole pressures, acreage, and sand thickness; (11) cumulative production, number of wells, volume of oil and gas sands, and current production; and (12) number of wells, productive acre-feet, and productive acreage. The difficulty of obtaining agreement on a participation formula has been a considerable barrier to the adoption of plans for cooperative, pooled or unitized development. *See* Treatise §§ *970-970.4.*

See B. Kramer & P. Martin, *The Law of Pooling and Unitization § 17.02* (3d ed. Matthew Bender).

Participation type contract A contract for the sale of casinghead gas or wet gas providing for the seller to receive a varying portion of the products extracted from the gas or of the proceeds of sale of such products, depending on the richness of the gas in liquefiable hydrocarbon content.

See also Products royalty clause.

Participator A person liable for the Petroleum Revenue Tax established by the Oil Taxation Act, 1975. *See* Daintith and Willoughby, *A Manual of United Kingdom Oil and Gas Law* 110 (1977).

Parties, joinder of *See* Indispensable parties; Necessary parties; Proper parties.

Partition The conversion of a concurrent estate--either a joint tenancy or a tenancy in common--into (1) a fund of money, by sale, which is divided pro rata by the tenants or (2) into estates owned in severalty. The former is partition by sale; the latter partition in kind. Either form of partition may be made by voluntary agreement or by judicial action. In general, courts favor partition in kind where feasible. On the availability of partition and the considerations governing the form of partition in oil and gas property, see *Strait v. Fuller, 184 Kan. 120, 334 P.2d 385, 10 O.&G.R. 145 (1959)* ; *Henson v. Bryant, 330 P.2d 591, 9 O.&G.R. 923 (Okla. 1958)* ; *Sweeney v. Bay State Oil & Gas Co., 1943 OK 32, 192 Okla. 28, 133 P.2d 538 (1943)* ; Treatise §§ 506-*507.*

See also Equitable partition; Licitation.

Partnership *Eglin v. Schober, 759 S.W.2d 950, 107 O.&G.R. 574* (Tex. App.--Beaumont 1988, writ denied) , concluded that a constructive trust may be imposed to protect against the violation of the fiduciary duty arising from a joint venture or partnership.

See Completion partnership; Drilling partnership; Drill or drop provision; Gain charge back provision; Limited partnership; Mining partnership; Partnership in commendam; Qualified partnership; Repurchase price; Tax partnership agreement.

Partnership-for-partnership roll-up *See* Exchange offer.

Partnership in commendam A Limited partnership (*q.v.*). *White v. Dore, 643 So. 2d 905 (La. App. 1994)* .

Party *See* Abandoning party; Antarctic Treaty Consultative Parties (ATCPs); Carried party; Carrying party; Consent party; Drilling party; Indispensable parties; Necessary parties; Nonabandoning party; Non-consent party; Nonconsultative parties (NCPs); Nondrilling party; Proper parties; Sole party in interest; Take-over party; Third-party beneficiary; Third-party favored nation clause; Third-party lessee;

Third-party top lease; Two-party favored nation clause; Two-party top lease.

Party-in-interest statement A statement required in an application for a federal lease or in a request for approval of an assignment or sublease thereof indicating whether or not the offeror for the lease or the assignee or sublessee is the sole party in interest in the offer, assignment or sublease. Nondisclosure of the interests of other parties may result in loss of priority of an offer or may affect the validity of the lease, sublease or assignment. *See Law of Federal Oil and Gas Leases § 20.08[9]* (LexisNexis Matthew Bender).

See also Federal lease.

PASO Petroleum Accountants Society of Oklahoma.

PASO form A form of accounting procedure devised by the Petroleum Accountants Society of Oklahoma for operating agreements. The form may be found in Irving and Draper, *Accounting Practices in the Petroleum Industry* 147 (1958).

Pass-on provision *Syn.:* Pass-through provision (*q.v.*).

Pass out *Syn.:* for Bypass (*q.v.*).

Pass-through prohibition A provision of a law or regulation designed to prevent particular increased costs from being passed through to the consumer by price increases. Thus several states enacted gross receipts taxes or similar taxes applicable to oil companies and sought to prohibit the "pass-through" of the tax to the consumer by means of increases in price. In *Mobil Oil Corp. v. Tully, 653 F.2d 497* (Temp. Emer. Ct. of App. 1981), *vacated and remanded for reconsideration in light of expiration of federal price control authority, 455 U.S. 245 (1982)*, *remanded to Dist. Ct., 689 F.2d 186* (Temp. Emer. Ct. of App. 1982), this pass-through prohibition was held to be invalid by reason of preemption by federal regulation.

Eagerton v. Exchange Oil and Gas Corp., 404 So. 2d 1, 71 O.&G.R. 205 (Ala. 1981), sustained the validity of a severance tax statute pass-through prohibition designed to prevent passage of the burden of the tax, directly or indirectly, from the producer or severer of oil or gas to the consumer. *Eagerton* was affirmed in part, reversed in part, and remanded *sub nom. Exxon Corp. v. Eagerton, 462 U.S. 176, 77 O.&G.R. 209 (1983)* (holding the pass-though prohibition was pre-empted by federal law insofar as it applied to the sale of gas in interstate commerce but not insofar as it applied to producer sales of gas in intrastate commerce; sustaining the pass-through prohibition against challenges under the contracts and *equal protection clauses of the Constitution*; and remanding the case on the question of the severability of the pass-through prohibition from the balance of the Act, that being a question of state law). On remand, *440 So. 2d 1031, 79 O.&G.R. 424 (Ala. 1983)*, the court gave effect to the severability clause of the statute and sustained the act despite invalidity of the pass-through prohibition. *Eagerton v. Terra Resources, Inc. 426 So. 2d 807, 76 O.&G.R. 187 (Ala. 1982)*, *appeal dismissed for want of substantial federal question, 464 U.S. 801 (1983)*, rejected a construction of the statute that would exempt gas from the tax.

For a study of pass-through prohibitions in New York, see Brown, "New York State Oil Company Gross Receipts Taxation," 32 *O.&G. Tax Q.* 271 (1983).

Pass-through protection clause A clause in a gas purchase and sale contract or in a contract resolving a dispute over take-or-pay obligations that provides for the producer to reimburse a pipeline if a pass-through of a cash payment by buyer to producer in settlement of a take-or-pay obligation is challenged by a customer of buyer and subsequently denied by the Federal Energy Regulatory Commission or an appropriate state regulatory agency. Lemay, "Settling Natural Gas Contract Disputes: The Pipeline Perspective," *3 Nat. Res. & Env't 7, 49* (No. 4, Winter 1989).

See also Gas purchase contract; Take-or-pay clause.

Pass-through provision A provision of a price control law or regulation permitting certain increased costs to be "passed through" to consumers by allowable price increases. *McCulloch Gas Transmission Co. v. Public Service Comm'n, 627 P.2d 173, 180 (Wyo. 1981)* .

See also Anti-pass-through provision.

Pass-through royalty A Royalty (*q.v.*) paid on production from a well drilled upon or through one tract and bottomed under another tract. Hearings of California Senate Fact Finding Committee on Natural Resources 33 (Jan. 6, 1964); Stucky, "Current Developments and Views Concerning Rights and Status of Landowner-Lessors," 21 *Sw. Legal Fdn. Oil & Gas Inst.* 83, 88 (1970).

Patent The original conveyance granting to the recipient legal title to public lands, and containing all the reservations for easements, rights-of-way, or other interests in land, provided by the applicable act or imposed on the land by applicable law.

See also Unpatented claim.

Patterned compensated drainage spacing The term applied to a rectangular spacing pattern with diagonal offsetting used with Horizontal drilling(*q.v.*). *See* Wilson, "Bent Pegs and Round Holes: New Concerns for Oil and Gas Commissions," 18 *Resource Law Notes* 4 (Natural Resources Law Center, University of Colorado School of Law, Sept. 1989).

PAW (1) Petroleum Administration for War (*q.v.*).

(2) The acronym PAW is also used for the Petroleum Association of Wyoming.

Pay Reservoir rock containing oil or gas. *Vera Kochergan, GFS (O&G) 1987-89, 99 IBLA 194* (Interior Board of Land Appeals, Oct. 13, 1987).

The definition in this Manual of Terms was quoted in *Rubinstein v. Collins, 20 F.3d 160, 163 (5th Cir.*

1994) .

See also Effective pay.

Pay-as-you-go basis Payment of expenses incurred in a drilling operation as the expenses are incurred, as distinguished from prepayment of the expenses. *See also* Prepaid IDC. *See Keller v. Comm'r of Internal Revenue, 79 T.C. 7, 74 O.&G.R. 129 (1982)* , *aff'd, 725 F.2d 1173, 80 O.&G.R. 639 (8th Cir. 1984)* .

Payback of gas When extraordinary relief from a Curtailment plan (*q.v.*) is granted, the order may be conditioned on the obligation that when curtailment is not in effect, the pipeline shall withhold volumes over and above the purchaser's minimum requirements as a payback for volumes delivered in excess of those daily volumes to which the purchaser would be entitled under the normal operation of the curtailment plan. The rationale of the requirement is that "it encourages expeditious conversion to alternate fuel, deters exploitation of extraordinary relief, prevents an undue advantage going to the recipient of relief, and partially restores volumes taken from other customers." Texas Eastern Transmission Corp., F.P.C. Opinion No. 716, 3 FPS 5-531, 5-541 (Dec. 16, 1974).

Payback order (1) An order of the Federal Power Commission or its successor, the Federal Energy Regulatory Commission, requiring a producer or pipeline company to "pay back" to a buyer entitled to the gas under a contract or Commission certificate an amount of gas equal to that which had been diverted to another buyer under a Curtailment Plan (*q.v.*).

(2) An order by the Federal Power Commission or its successor, the Federal Energy Regulatory Commission, requiring a gas producer to "pay back" to a buyer entitled to the gas under a Commission certificate an amount of gas equal to that which had been improperly delivered to another buyer in violation of the Natural Gas Act. *See McCombs v. Federal Energy Regulatory Comm'n, 705 F.2d 1177, 78 O.&G.R. 601 (10th Cir. 1980)* (holding that the Commission lacked authority to issue the order under the facts of the instant case), *vacated and remanded on other grounds, appeal dismissed per stipulation, 710 F.2d 611 (10th Cir. 1983)* .

Tenneco Oil Co., 23 FPS 5-*938* (FERC Opinion No. 10 -B, Dec. 23, 1982), rejected a payback demand under the facts of the instant case.

Texas Gas Exploration Corp., F.E.R.C. Opinion No. 182, 24 FPS 5-564 (July 20, 1983), dealt with the price to be paid the supplier upon the delayed delivery of payback gas.

For a discussion of cases on payback orders, see Horvath, "The Federal Energy Regulatory Commission's Authority to Order In Kind Refunds of Natural Gas," 33 *Case West. Res. L. Rev.458* (1983).

Pay dirt The potential producing horizon penetrated by an oil or gas discovery well.

Pay horizon The geological deposit in which oil and gas is found in commercial quantities. *See* Horizon.

Amarillo Oil Co. v. Energy-Agri Products, Inc., 794 S.W.2d 20, 109 O.&G.R. 524 (Tex. 1990) , quoted and relied on the foregoing definition of "pay horizon."

Paying production *See* Production; Production in paying quantities.

Paying quantities *See* Production in paying quantities.

Payment *See* Advanced minimum payments; Advance payment; Advance payment agreement; Advance payment financing; Advance payment order; Barrel payment; Buydown payment; Buy-out payment; Compensation payment; Deferred-payment open-end sale; Forced-take payment; Guaranteed royalty payment; Late payment charge; Makeup payment; Netback payment; Nonrecoupable take-or-pay payment; Oil payment; Petroleum compensation payment (PCP); Pre-initial delivery payment; Prepayment provision; Production payment; Recoupable take-or-pay payment; Royalty payment act; Seismograph permit payment; Suspended royalty payment; Take-or-pay prepayment; Tender of payment.

Payment for surface acreage clause A lease clause providing for a payment to be made to the lessor for surface acreage utilized by the lessee in its operations. *See* Scott, "Unusual Provisions in Oil and Gas Leases," 33 *Sw. Legal Fdn. Oil & Gas Inst.* 139, 152 (1982).

See also Forced-take payment.

Payor Handbook The *Oil and Gas Payor Handbook* (1986), published by the Minerals Management Service, Royalty Management Program.

Payor Information Form (PIF) A form (Form MMS-4025) which must be submitted to MMS by the party who is making the royalty payment for each lease on which royalties are paid. 30 CFR 210.51. *Mesa Operating Limited Partnership, 99 I.D. 274, 125 IBLA 28* GFS (O&G) 1993-2 (Dec. 31, 1992), concluded that the filing of a PIF did not make Mesa a lessee within the meaning of the Federal Oil and Gas Royalty Management Act (FOGRMA) or liable as an agent of the lessees for underpayment of royalties. *Mesa Operating Limited Partnership* was modified, *101 I.D. 8 , 128 IBLA 174* , GFS (O&G) 1994-6 (Feb. 3, 1994) (setting aside, rather than reversing, the decision of the Deputy to the Assistant Secretary-Indian Affairs (Operations), and remanding for action consistent with this opinion declaring that division orders may be accepted as evidence that they assigned responsibility for paying the royalty, even though Mesa did not sign them).

Payout (1) In a Carried interest arrangement (*q.v.*), the recovery from production by the Carrying party (*q.v.*) of development and operating costs.

(2) In a Production payment (*q.v.*) the recovery by the payee of the stipulated sum of money from production.

(3) Generally, the recovery from production of costs of drilling and equipping a well.

(4) In a limited partnership agreement the term has been defined as "the first day of the calendar month following the calendar month in which the Limited Partners' cumulative allocable share of revenues equals the Limited Partners' cumulative allocable share of all costs and expenses."

In *Arkoma Basin Exploration Co. v. FMF Associates 1990-A, Ltd., 249 S.W.3d 380, 389* (n.31) (Tex. 2008), reference was made to the definition of "payout" used in the Manual to describe an expert's valuation of the alleged fraudulent over-estimation of reserves. The court noted that in determining payout, a discount rate is not used even though the period of time in which the payout calculations occur may be lengthy.

In *San Juan Basin Consortium, Ltd. v. Enervest San Juan Acquisition Limited Partnership, 67 F. Supp. 2d 1213, 1214, 146 O.&G.R. 1 (D. Colo. 1999)* , the court said: " 'Payout' occurs when the working interest owners who participate in the costs of drilling and completing a well (the 'consenting owners') recoup the costs and expenses of drilling and completing that well. Only then are the owners who chose not to contribute to these initial costs (the 'non-consenting owners') entitled to be 'back-in' among the other owners and take and sell gas production and share in the expenses and revenues associated with the well." (Held: neither the cost nor benefit of taxes should be taken into account when determining payout.)

In *Energy Oils, Inc. v. Montana Power Co., 626 F.2d 731, 736, 68 O.&G.R. 255, 263 (9th Cir. 1980)* , the court said that "In the parlance of the oil and gas industry, 'payout' refers to the recoupment of costs of production by a driller or developer pursuant to an agreement like the ones in issue here."

Humble Exploration Co. v. AMCAP Petroleum Associates--1977, 658 S.W.2d 860, 79 O.&G.R. 205 (Tex.App.--Dallas 1983, error ref'd n.r.e.) , held that for purposes of the vesting of a reversionary Back-in Interest (*q.v.*), the tax imposed under the Crude Oil Windfall Profit Tax Act of 1980 (*q.v.*) was a cost required to be recovered from production before payout was achieved.

In the context of an agreement wherein a group of investors promised to assign, upon payout, to one of them a 15% interest of mineral rights that they acquired, payout was defined as "that time and point at which the investor has received in income or sufficient income to cover his cost of drilling. ... [I]t's that point in time at which the participant has received sufficient income to cover the cost of buying it and managing it. ..." *Daughtrey v. Allred, 22 So. 3d 1253 (Miss. App. 2009)* . For another treatment of payout in the context of a specific investment agreement, *see D.R. Four Beat Alliance, LLC v. Sierra Production Co., 352 Mont. 435, 2009 MT 319, 218 P.3d 827 (2009)* .

The problem of ambiguity in defining payout is illustrated in *Krafve v. O'Keeffe, 753 S.W.2d 220, 103 O.&G.R. 633* (Tex. App.--Tyler 1988, writ denied) .

In Australian Energy Ltd. v. Lennard Oil N.L., [1986] 2 Qd.R. 216, two Justices agreed that the term "payout," as used in a farmout agreement, meant that the total accumulated exploration expenses, as distinguished from expenses occurring in relation to one well, must be recouped to enable payout to occur; a third Justice did not regard the question as having been resolved and would leave it open for further determination by the parties or by further litigation.

For a discussion of the payout provisions of a farmout agreement, see Lowe, "Analyzing Oil and Gas Farmout Agreements," *41 Sw. L.J. 759, 833 (1987).* The writer (at page 836) distinguishes a "basket payout" (where the revenues from more than one well are used to compute payout) and a "well-by-well

payout" provision (under which payout is determined on an individual well basis).

See also Lowe, "The Meaning of 'Payout' in Oil and Gas Farmout Agreements," 10 *Eastern Min. Law Inst.* 13-1 (1989).

Payout period The period required for a well to produce sufficient oil or gas to reimburse the investment in the well. In the sale of producing wells, for many years the price of the well typically was in the neighborhood of one-half of the expected net proceeds of the well after deducting operating expenses; in other words, the purchaser expected to receive over the period of production of the well, $2 for each $1 of investment. *See* Fiske, "The Valuation of Oil and Gas Properties in Estates and Trusts," 2 *Rocky Mt. Min. L. Inst.* 371 (1956).

See also Complete payout period; Payout.

Payout rule The name given a position taken by the Internal Revenue Service that an owner of the working interest in an oil or gas well may deduct intangible drilling costs only to the extent that he has the right to hold the working interest throughout the well's complete payout period, that is, until he recovers all the drilling expenses plus the operating costs during the payout period. Linden, "Should the Intangible Drilling Cost Payout Rule in Farmout Transactions Be Modified or Abandoned?" 40 *Sw. Legal Fdn. Oil & Gas Inst.* 13-1, 13-4 (1989).

Pay string *See* Flow string.

Payup privilege An option given the carried party in a Carried interest arrangement (*q.v.*) to pay the carrying party the balance due for carrying him, in which case the parties thereafter shall share in operating and management of the premises. *See* "The Carried Interest Pay-Up Privilege," 3 *O.&G. Tax Q.* 185 (1954); Treatise § 426.

PCP Petroleum compensation payment (*q.v.*).

PCRC The Petroleum Corporation of The Peoples Republic of China (*q.v.*).

PCWPC The Permanent Council of the World Petroleum Congress (*q.v.*).

PDO Petroleum Development Oman.

PDWL Pre-enactment deep-water lease.

Peak Oil Theory The concept of "peak oil" is that aggregate global oil production will reach (or has reached) a maximum level after which it can only decline; geological scarcity will make it impossible for

production to avoid falling, heralding the end of the oil age. It was first described in the 1950s by Dr. M. King Hubbert, a Shell Oil geologist. *See* Michael Lynch, *'Peak Oil' Is a Waste of Energy*, N.Y. Times, August 25, 2009. A rejection of Hubbert's theory is Jerome R. Corsi, Ph.D. and Craig R. Smith, *Black Gold Stranglehold: The Myth of Scarcity and the Politics of Oil* (2005) (based on assertion that oil is an abiotic, natural product that the Earth generates on a constant basis).

Peak shaving The use of a supplemental supply of gas (*e.g.*, propane-air mixtures) for distribution by gas utilities to augment normal pipeline supplies during peak demand periods of relatively short duration. *See Valley Gas Co. v. Federal Power Comm'n, 487 F.2d 1182, 47 O.&G.R. 409 (D.C. Cir. 1973)* ; *38 Fed. Reg. 34422* .

Pedis possessio A "foothold," or actual, physical occupancy of some area. "As a legal concept in mining, it means that if a qualified person peaceably enters vacant, unappropriated public domain for the purpose of exploring for a valuable mineral, while he is so exploring he may exclusively hold the place where he is working against those having no better rights, and he will be protected against all forcible, fraudulent, or clandestine intrusions so long as he remains in continuous, exclusive occupancy and diligently works toward making a discovery." Fiske, "Pedis Possessio--New Dimensions or Back to Basics?" 34 Rocky Mt. Min. L. Inst. 8-1, 8-3 (1988).

Pegasus pipeline An 858-mile pipeline from Nederland, Texas to Patoka, Illinois which prior to 2006 transported crude oil from Texas to Illinois. In April 2006, Mobil Pipe Line, the operator of Pegasus, reversed the flow and began to use the pipeline to transport Western Canadian crude oil to *Texas. Mobil Pipe Line Co. v. Federal Energy Regulatory Commission, 676 F. 3d 1098 (D.C. Cir. 2012)* .

PEMEX Petroleos Mexicanos (*q.v.*).

Penalty *See* Allowable penalty; Bonus penalty; Carriage penalty; Gas-oil ratio penalty factor; Late penalty; Nonconsent penalty; Off-pattern penalty; Off target penalty; Overrun penalty; Pipeline imbalance penalty; Production penalty; Risk fee act; Risk penalty; Water-oil ratio penalty factor.

Penalty clause A clause in a legal instrument providing for the assessment of a penalty under certain stated circumstances. Thus some unit agreements or joint operating agreements include a clause providing that if one party refuses to drill or participate in the expenses of drilling a well, the other (or others) may proceed with the drilling in which event he (or they) may receive all income from the property until recovery of 200% to 300% of actual expenses. *See* Stroud, "Major Points of Impact of New Natural Resources Regulations on Oil and Gas," 8 *Sw. Legal Fdn. Oil & Gas Inst.* 393, 403 (1957).

See also Continental Offshore Stratigraphic Test (COST).

Penalty factor *See* Gas-oil ration penalty factor; Water-oil ratio penalty factor.

Penalty gas Quantities of gas provided in excess of the contracted amount for a given period of time.

Penalty gas customarily commands a higher price than gas supplied in accordance with the provisions of the gas purchase contract.

Pencil abstract A term apparently used to describe an abbreviated or Bob-tail abstract (*q.v.*). The term "is neither widely understood nor self-defining." *Jean Oakason, 22 IBLA 311, 312* , GFS(O&G) 132 (Nov. 10, 1975).

Penn Square Bank N.A. An Oklahoma City bank, heavily engaged in oil and gas investments, which was declared insolvent on July 5, 1982. Because of the Bank's extensive Loan participation (*q.v.*) program involving other banks around the country, the collapse of Penn Square Bank resulted in difficult problems for a number of banking institutions. *See* Fisher & Muratet, *The Aftermath of Penn Square Bank: Protecting Loan Participants From Setoffs, 18 Tulsa L.J. 261 (1982).*

Pennsylvania grade crude oil Oil with characteristics similar to the crude oil produced in Pennsylvania from which superior quality lubricating oils are made.

Pennsylvania Minimum Royalty Act A statute enacted in 1979 that provides as follows:

A lease or other such agreement conveying the right to remove or recover oil, natural gas or gas of any other designation from lessor to lessee shall not be valid if such lease does not guarantee the Lessor at least one-eighth royalty of all oil, natural gas or gas of other designations removed or recovered from the subject real property. 58 P. S. § 33.

In *Kilmer v. Elexco Land Services, Inc., 990 A.2d 1147 (Pa. 2010)* , plaintiff royalty owners claimed that the net-back method of calculating royalties under mineral leases violated Pennsylvania's Guaranteed Minimum Royalty Act (GMRA). They based their argument in part on the assertion that the legislature in 1979 intended to reflect the "First Marketable Product Doctrine" by requiring lessees to bear all the costs necessary to market the gas, which would include post-production costs. They also relied on Pennsylvania's Conservation law, which defines royalty owner as "any owner of an interest in oil or gas lease which entitles him to share in the production of the oil or gas under such lease or the proceeds therefrom without obligating him to pay any costs under such lease." The court rejected both claims, ruling instead that "the GMRA should be read to permit the calculation of royalties at the wellhead, as provided by the net-back method in the Lease ..." Under the *Erie* doctrine, the Pennsylvania decision should supersede the federal court decision in *Kropa v. Cabot Oil & Gas Corp., 609 F. Supp. 2d 372 (M.D. Pa. 2009)* (lease that provided for a 1/8 royalty but allowed use of the netback methodology violated the Act). Indeed, in *Kropa v. Cabot Oil & Gas Corp., 716 F. Supp. 2d 375 (M.D. Pa. 2010)* , the court conformed its holding to the *Kilmer* interpretation of the Act.

After *Kilmer*, a number of pending actions challenging oil and gas leases under the Minimum Royalty Act were dismissed insofar as they covered claims for lease termination under the Act.

See, e.g, Carey v. New Penn Exploration, LLC, 2010 U.S. Dist. LEXIS 52199 (M.D. Pa. April 28, 2010) ;

Julia v. Elexco Land Services, Inc., 2010 U.S. Dist. LEXIS 45821 (M.D. Pa. May 11, 2010) ;

Pollock v. Energy Corporation of America, 2011 U.S. Dist. LEXIS 93612 (W.D. Pa. June 27, 2011) ;

Puza v. Elexco Land Services, Inc., 2010 U.S. Dist. LEXIS 43346 (M.D. Pa. May 3, 2010) ;

Rodriguez v. Anadarkeo E & P Co., LP, 2010 U.S. Dist. LEXIS 127188 (M.D. Pa. Dec. 1, 2010) ;

Ulmer v. Chesapeake Appalachia, LLC, 2011 U.S. Dist. LEXIS 38499 (M.D. Pa. Apr. 8, 2011) .

Pentane An hydrocarbon of the paraffin series. It is liquid at ordinary atmospheric conditions, although small amounts may be present in the gas associated with petroleum. *See* Interstate Oil Compact Commission, *Oil and Gas Production* 26 (1951).

Percentage *Syn.:* Per cent interest (*q.v.*). *See Phillips v. Bruce, 41 Cal. App. 2d 404, 106 P.2d 922 (1941)* .

Percentage depletion *See* Depletion, percentage.

Percentage of proceeds contract A contract for the purchase of gas providing that the payment to be made by the purchaser shall be a percentage of the proceeds realized by said purchaser on the resale of said gas. *See Duke Energy Natural Gas Corp. v. Commissioner of Internal Revenue, 172 F.3d 1255 (10th Cir. 1999)* ; *Phillips Petroleum Co. v. Adams, 513 F.2d 355, 51 O.&G.R. 370* (5th Cir.) , *reh'g en banc denied, 515 F.2d 1183* (5th Cir.) , *cert. denied, 423 U.S. 930 (1975)* .

Where the parties to a gas purchase contract have agreed that the seller is to be paid on the basis of a percentage of the net proceeds of the sale of the gas "F.O.B. the tailgate of the Plant," the seller bears the risk of loss for lost or unaccounted for gas between the wellhead and the tailgate. *Dynegy Midstream Services, Limited Partnership v. Apache Corp., 294 S.W.3d 164, 52 Tex. Sup. Ct. J. 1176 (2009)* .

Occidental Permian Ltd v. Helen Jones Foundation, 333 S.W.3d 392, 396 (Tex. App.--Amarillo 2011) (lessee sold casinghead gas under a percentage of proceeds contract lasting for the life of the plant whereby lessee would get 50% of the proceeds from the sale of the processed residue gas and 33.3% of the proceeds from the sale of natural gas liquids);

Howell v. Texaco Inc., 2004 OK 92, 112 P.3d 1154, 1157 ("Under POP [percent-of-proceeds] contracts, the producer is paid a percentage of the proceeds from the sale of some of the products after processing.").

See also 53 Fed. Reg. 50422 (Dec. 15, 1988) (proposal by Minerals Management Service to treat gas sold under this type of contract as unprocessed gas).

Amended regulations, effective Nov. 1, 1991, were published in *56 Fed. Reg. 46527* (Sept. 13, 1991) .

Amoco Production Co., 126 IBLA 124 , GFS(O&G) 1993-14 (April 30, 1993), held that MMS may require a lessee selling unprocessed casinghead gas at the wellhead pursuant to an arm's-length "percentage-of-proceeds" contract to value such gas for royalty purposes at an amount equal to one-third of the value of natural gas liquids plus the full value of residue gas.

"These contracts typically are made in instances where the primary output of a well is crude oil and byproduct gas is produced in quantities that are large enough to discourage venting or flaring a commodity that otherwise could be sold. The gas extracted from any single lease, however, is generally not sufficient to cover the costs associated with building a processing plant, so facilities are sited at centralized locations to handle the output from a number of leases through POP agreements." CCH, *Energy Management* 1 (Issue No. 976, Sept. 24, 1991).

Percentage sale A sale of gas by a producer to the operator of a processing plant at a price which is a percentage of the proceeds from the resale of the residue gas or products obtained from the gas. *See* 18 C.F.R. § 154.91(e) (1980).

Per cent interest An undivided interest in the royalty, mineral or working interest, expressed in terms of a percentage of the whole, *e.g.*, a 50 per cent mineral interest or a 121/2 per cent royalty interest. The term is not one of art but typically it refers to a fractional or percentage interest created by the owner of executive or operating rights in the premises by grant or reservation, but the so-called percent interest may or may not include executive or operating rights. *See* Treatise §§ 425-*425.2*.

See also Ownership certificate; Production assignment; Production certificate.

Percussion drilling *Syn.:* Churn drilling (*q.v.*).

Perfect ownership The term employed in Louisiana to describe an interest which is generally analogous to that described by the common law term "fee simple absolute." *Louisiana Civil Code art. 490* (1870) provides that "Ownership is perfect, when it is perpetual, and when the thing is unencumbered with any real right toward any other person than the owner." *See* McCollam, "A Primer for the Practice of Mineral Law Under the New Louisiana Mineral Code," *50 Tulane L. Rev. 729, 736 (1976).*

Perforation The making of holes in casing and cement (if present) to allow formation fluids to enter the well bore. One common method of perforating is by shooting pellets through the casing by means of a special gun lowered into the hole.

See also Bullet perforator; Gun perforation; Jet perforation.

Performance guarantee A provision of a Petroleum international agreement (PIA) (*q.v.*) or Concession (*q.v.*) by which the parent company of an international oil company guarantees performance of the obligations of that company to the host country. *See* Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* 128 (1986).

Performance-type leasing A leasing program for public lands whereunder the basic criteria for acceptance of a bid is the development program guaranteed by the bidder rather than the amount of bonus or royalty bid. *See* Statement of John F. O'Leary, Natural Gas Policy Issues, Hearings before the

Committee on Interior and Insular Affairs, United States Senate, Pursuant to S. Res. 45, 92nd Cong., 2d Sess., February 25, 29, and March 2, 1972, Serial No. 92-22, at page 655.

The performance-type licensing program adopted for the North Sea by the United Kingdom is described in Kenneth Dam, "Oil and Gas Licensing and the North Sea," 8 *J. L. & Economics* 51 (1965). "[B]y a process which is none too clear to the outsider looking in after the fact, a 'going price' came to be known for each area. This going price was denominated in such things as holes drilled and exploration work undertaken. He who was unwilling to pay the going price could not expect to be awarded a license. This system could thus be characterized as a competitive bidding system in which the bid was the work programme of the applicant." *Id.* at 59.

For a thorough discussion of the use of various licensing (or leasing) systems to capture the economic rent for the lessor, see K. W. Dam, *Oil Resources* (1976).

See also Lease bidding systems.

Periodic flowing A technique to clear Mud (*q.v.*) out of a well by allowing it to build up a head of pressure and then opening the flow valve into the pits. The head of gas is followed by a flow of oily mud. After the flow ceases, it is shut off to accumulate more pressure, after which the process is repeated.

Syn.: "Bleeding" a well; "Rocking" a well. *See Rogers v. Osborn, 152 Tex. 540, 261 S.W.2d 311, 2 O.&G.R. 304 (1953)* .

See also Blowing a well; Cleaning a well.

Periodic increase clause *See* Escalator clause.

Permanent carried interest A Carried interest (*q.v.*) which is to be carried for the life of the lease, as opposed to a Limited carried interest (*q.v.*) which is to be carried for the initial development phase only of the operation. A permanent carried interest is treated as the equivalent of a Net profits interest (*q.v.*), and hence, when a lease is conveyed, the grantor retaining a permanent carried interest, the transaction is treated as a lease rather than as a sale for tax purposes. *See* Burke and Bowhay, *Taxation of Natural Resources* § 4.01 (1980); "Carried Interests Revisited by Tax Court," 8 *O.&G. Tax Q.* 159, 161 (1959).

Syn.: Unlimited carried interest.

Permanent cessation of production A prolonged interruption in production from an oil or gas well. Permanent cessation of production terminates a lease or term interest in the secondary term. *See* Treatise §§ 334.8, 604.4.

See also Cessation of production; Temporary cessation of production.

Permanent Council of the World Petroleum Congress (PCWPC) A council, composed of members from a number of nations, which meets in Congress every four years to consider papers on topics related to petroleum.

Permeability of rock A measure of the resistance offered by rock to the movement of fluids through it. It is measured in darcies or millidarcies.

See also Darcy; Millidarcy; Wetting.

Permit *See* Drilling permit; Exploratory permit; Geophysical exploration permit; Special renewal permit (SPR); Well permit.

Permit (Canada) A right to explore for oil and gas in a specified area. *See, e.g., 4 O.&G.R. 546 (1955)* , for the terms of permits applicable to Indian Reserves. *See also* Saskatchewan Petroleum and Natural Gas Regulations, 1969, O.C. 8/69, Part II.

Permit rent The annual advance rent payable during the term of a permit to explore for oil and gas. *See* the Saskatchewan Petroleum and Natural Gas Regulations, 1969, O.C. 8/69, § 10.

See Permit (Canada).

Permitted charging clause A clause in a joint venture agreement providing that, notwithstanding the restrictions imposed by the agreement on transfers of the interest of a party, a party may grant a floating charge over its interest to secure borrowings to meet its commitments to the joint venture. Merralls, "Mining and Petroleum Joint Ventures in Australia: Some Basic Legal Concepts," 3 *Australian Mining & Petroleum L.J.* 1, 19 (1981).

See also Joint adventure.

"Permitted" drainage A term used by Professor Merrill [Merrill, "Permitted Drainage--The Sellers Case and Local Law," *4 Okla. L. Rev. 58 (1951)]* to describe a rule of law that required a lessee to pay damages for failure to protect against drainage without proof that the protection well would probably be profitable. In contrast to such rule was the rule that required proof of profit if a lessor sought cancellation for failure to protect from drainage. The distinction, if ever valid, is not recognized in Oklahoma now. Whether a lessor seeks damages or cancellation for breach of the offset well covenant, he must prove that the offset well would be profitable, in the ordinary case. *See Sunray Mid-Continent Oil Co. v. McDaniel, 361 P.2d 683, 14 O.&G.R. 348 (Okla. 1961)* ; Treatise § 822.2, note 16-28.

See also Drainage.

Permitted production The allowable for a particular well or lease.

Perpetual carried interest *Syn.:* Permanent carried interest (*q.v.*).

Perpetual lease *Syn.:* No-term lease (*q.v.*). The validity of a perpetual lease for the quarrying of limestone was sustained in *Davis v. Nokomis Quarry, Inc., 77 Ill. App. 3d 1011, 33 Ill. Dec. 883, 397 N.E.2d 216 (1979)* .

Perpetual nonparticipating royalty Nonparticipating royalty (*q.v.*) of perpetual duration. Classified by duration, there are two other types of nonparticipating royalty:

(1) defeasible term royalty (see Term mineral or royalty interest), which endures for a fixed term and so long thereafter as production exists, and

(2) Fixed term royalty (*q.v.*), which endures for a period certain, such as twenty years.

Perpetuities, Rule Against A rule invalidating future interests limited to become possessory at a remote future time. *See* Treatise § 322 *et seq.* for a discussion of numerous oil and gas transactions that have been subjected to attack for alleged violation of this Rule.

See Kramer, "Modern Application of the Rule Against Perpetuities to Oil and Gas Transactions: What the Duke of Norfolk Didn't Tell You," 37 *Nat. Res. J.* 1 (1997).

Persian-Gulf pricing system A Single base-point system (*q.v.*) with the Persian Gulf as the base point. *See* Danielsen, *The Evolution of OPEC* 166 (1982).

Pertamina P.N. Pertamina [Perusahaan Negara Pertambangan Minjak dan Gas Bumi National], Indonesia's Oil and Natural Gas Enterprise, with responsibility for all activities pertaining to handling and production of oil minerals and natural gas.

See the following discussions:

Chandler, "Current Developments in Oil and Gas Law: The ASEAN Countries," International Bar Ass'n, 1 *Energy Law 1981* at p. 217;

Clapham, "Legal Aspects of Foreign Investments in Oil & Mining," *Int'l Bus. Law* 113 (March 1979 Special Issue);

Fabrikant, "Production Sharing Contracts in the Indonesian Petroleum Industry," *16 Harv. Int'l L.J. 303 (1975);*

OPEC, *Selected Documents of the International Petroleum Industry* 1968 at p. 7.

Per-well charge In a joint operation or drilling program, this is a monthly charge per well based upon the depth of a well. The charge compensates the operator for supervising the drilling operations and it is separate from other charges which reimburse the operator for its direct and indirect costs of administrative overhead and program management. *See Keller v. Comm'r of Internal Revenue, 79 T.C. 7, 74 O.&G.R. 129, 145 (1982) , aff'd, 725 F.2d 1173, 80 O.&G.R. 639 (8th Cir. 1984)* .

See also Drilling fund; Joint operating agreement.

Petitory action An action in Louisiana "brought by a person who claims the ownership, but who is not in possession, of immovable property or of real right, against another who is in possession or who claims the ownership thereof adversely, to obtain judgment recognizing the plaintiff's ownership." La. Code of Civil Procedure Art. 3651 (1961). The action may be brought by a person who claims ownership, but who is not in possession, against: (1) an adverse claimant of ownership who is in possession; (2) a person in possession who may not be asserting any adverse claim of ownership; or (3) an adverse claimant of ownership who is out of possession. The defendant's possession, or lack of it, determines the burden of proof imposed on the plaintiff. *See* La. Code of Civil Procedure Art. 3653 (1961).

Petrangol The Companhia de Petroleos de Angola.

Petro-Bonds A proposed form of bonds to be issued by a corporation with oil reserves, the bonds to be issued at par bearing a lower than market rate of interest but payable at maturity, at the election of the holder, in either the number of dollars stated or in the number of dollars produced by an index based on the price of oil. *See* Mann, "Financing Oil and Gas Operations--Recent Developments," 33 *Sw. Legal Fdn. Oil & Gas Inst.* 407, 424 (1982): "The object, obviously, would be to provide the bond holder with the potential of an economic benefit above a nominal rate of interest if oil prices increase before maturity. At the same time, protection against an oil price decline would be provided by the option to receive the face value."

See also Project Financing.

Petrobras Petroleo Brasileiro SA (*q.v.*), the Brazilian Petroleum Corporation.

Petro-Canada Canada's National Oil Company incorporated by Act of the Parliament of Canada in 1975. *See* Harrison, "State Involvement in the Canadian Petroleum Industry: The Petro-Canada Experience," in International Bar Ass'n, *Proceedings of the Energy Law Seminar* (organized by the Committee on Energy and Natural Resources, Section on Business Law) Topic R, Paper 4 (1979); "The Need for National Oil Companies and Their Relationship to Government and Industry," International Bar Ass'n, *Energy Law 1981* 31.

See also Special Renewal Permit.

Petrochemicals Chemicals derived from oil and natural gas.

For a detailed analysis of the petrochemical industry, see Hearings before the Committee on Interior and Insular Affairs, United States Senate, Pursuant to S. Res. 45, A National Fuels and Energy Policy Study, 93d Cong., 1st Sess., May 1, 1973, at page 617, reporting that total petrochemical sales in 1970 were almost $19 billion.

PETROCORP The Petroleum Corporation of New Zealand Ltd. (PETROCORP) (*q.v.*).

Petrodollars The term applied to the surplus oil revenues of Arab and other oil-exporting countries after the dramatic increase in the price of oil as a result of the embargo established by the Arab nations at the time of the Arab-Israeli war in 1973. Many such petrodollars were "recycled" by loans, bank deposits, or investments in oil consuming countries.

See "Balance-of-Payment Adjustment to Higher Oil Prices: Managing the Petrodollar Problem," in "The Economics of Energy and Natural Resource Pricing," Committee Print, A Compilation of Reports and Hearings of the Ad Hoc Committee on the Domestic and International Monetary Effect of Energy and Other Natural Resource Pricing, House Committee on Banking, Currency and Housing, 94th Cong., 1st Sess., March, 1975; Campbell and Mytelka, "Petrodollar Flows, Foreign Aid and International Stratification," 9 *J. World Trade L.* 557 (1975); Salacuse, "Arab Capital and Middle Eastern Development Finance," 14 *J. World Trade L.* 283 (1980).

Petrofracturing A process in which a mixture of oil, sand and chemical is pumped under pressure into an oil-bearing sand at the bottom of a well for the purpose of increasing the flow of oil. There are two methods of conveying the mixture from the top of the well into the sand at the bottom: (1) the tubing and packer method, by which the emulsion is injected through steel tubing inserted inside the well casing, and a packer is fitted against the walls of the casing at the bottom to prevent the emulsion from rising; and (2) the casing method, by which the fluid is injected directly into the well casing itself. *See Dowell, Inc. v. Lyons, 238 F.2d 633, 7 O.&G.R. 248 (6th Cir. 1956)* .

See also Fracturing; Hydraulic fracturing; Sandfracing.

Petrolbangla The national oil company of Bangladesh.

Petroleo Brasileiro SA (PETROBRAS) The Brazilian Petroleum Corporation created in 1953. *See* Chester, *United States Oil Policy and Diplomacy* 199 (1983); Keener, "Current Legal Developments in Brazilian Energy Laws and Performance of Services Thereunder," International Bar Ass'n Section on Energy and Natural Resources, *International Energy Law* (1984) (Topic 2); Weiland, "Survey of Oil and Gas Development Policy in Brazil," *Id.*

Petrobras has been described as a "mixed economy" corporation, which under Brazilian law means that it is a joint stock corporation in which the Federal Republic of Brazil owns more than 50% of the voting shares and capital. Its principal place of business is Rio de Janiero, Brazil. Petrobra is governed by a Conselho do Administracao, the members of which are appointed by the President of Brazil. It is managed by a Board of Directors or Diretoria, which is made up of the officers of the corporation. Petrobras has created several subsidiary corporations, including *Braspetro Oil Services Co. and Petrobras Internacional S.A.-Braspetro. United States Fidelity & Guaranty Co. v. Braspetro Oil Services, 219 F. Supp. 2d 403, 411-12 (S.D.N.Y. 2002)* , *aff'd in part and rev'd in part, 369 F.3d 34 (2d Cir. 2004)* .

Petroleos de Venezuela S.A. (Petroven) A Venezuelan holding company with separate subsidiaries for oil operations, petrochemicals, purchasing, and research and development.

Petroleos Mexicanos (PEMEX) The national oil company of Mexico. For a discussion of the history of PEMEX and its subjection to suit in the United States, see *Matter of the Complaint of Sedco, Inc., 543 F. Supp. 561 (S.D. Tex. 1982)* .

See also the following:

Arruda, "Effect of the North American Free Trade Agreement on Trade Between the United States and Mexico in the Energy and Petrochemical Industries," 39 *Rocky Mt. Min. L. Inst* ch. 5 (1993);

Kirksey, "Energy and Free Trade: A New Look at the Current Needs of Mexico's Petroleum Industry," *28 Texas Int'l L.J. 539 (1993);*

Prager, "PEMEX at the Crossroads: A National Oil Industry in Crisis," 15 *Hous. J. of Int'l L. 115* (1992);

Chester, *United States Oil Policy and Diplomacy* (1983);

Barrera, "The International Sale of Natural Gas: The PEMEX-Border Gas, Inc. Contract," *17 Tex. Int'l L.J. 15 (1982).*

Petroleos Peruanos (Petroperu) The national oil company of Peru. *See* Harten, "Oil and Gas Law and Policies in Peru," International Bar Ass'n Section on Energy and Natural Resources, *International Energy Law* (1984) (Topic 2).

Petroleum A complex liquid mixture of hydrocarbon compounds, oily and inflammable in character.

In Louisiana, petroleum is defined by statute as "crude petroleum, crude petroleum products, distillate, condensate, liquified petroleum gas, any hydrocarbon in a liquid state, any product in a liquid state which is derived in whole or in part from any hydrocarbons, and any mixture or mixtures thereof." La. Rev. Stat., L.S.A.--R.S. § 45-251 (1951) (1980 Supp.)

Petroleum is defined by The Petroleum (Production) Act 1934, 24 & *25 Geo. 5,* c. 36, § 1 as including "any mineral oil or relative hydro-carbon and natural gas existing in its natural condition in strata, but does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation."

See also Crude oil; Oil.

Petroleum Accountants Society of Oklahoma The organization that devised the Paso form (*q.v.*).

Petroleum Administration Act The Canadian Statute, 23-24 Eliz. II, c. 47 (1975), as amended by Stat. 26-27 Eliz. II, c. 24 (1978), imposing a charge on the export of crude oil and petroleum products, providing compensation for certain petroleum costs, and regulating the price of Canadian crude oil and natural gas in interprovincial and export trade. The Act was designed to achieve a uniform price, exclusive of transportation costs and service costs, for crude oil and gas used in Canada outside its province of production, to achieve a balance in Canada between the interests of consumers and producers

in Canada, to protect consumers in Canada from instability of prices for petroleum and gas in the international markets, and to encourage the discovery, development, and production of a supply of crude oil and gas adequate to the self-sufficiency of Canada. Eligible importers of petroleum are entitled to import compensation under the Act and suppliers of petroleum to areas in short supply are entitled to transfer payments for making supplies available. *See* Irving Oil Ltd. v. The Queen, 96 D.L.R.3d 534 (Federal Court, Trial Division, 1979).

See also Petroleum Import Cost Compensation Regulations.

Petroleum Administration for Defense (PAD) An agency established on October 3, 1950, by Order No. 25991, *15 Fed. Reg. 6767* , to administer the defense responsibilities of the Secretary of the Interior with respect to petroleum and gas. The Secretary was designated Petroleum Administrator and the activities were to be directed by a Deputy Administrator. The organization was patterned after that of the Petroleum Administration for War (PAW) which operated during World War II.

Petroleum Administration for War (PAW) The federal agency regulating drilling practices (by its control of oil field supplies such as casing) and the distribution of petroleum products during World War II. PAW was established by Exec. Order No. 9276, *7 Fed. Reg. 10091 (1942)* . The history of the agency is sketched in Frey and Ide, *A History of the Petroleum Administration for War* (1946), and in Ely, "The Government in the Exercise of the War Power," in Murphy, Ed., *Conservation of Oil and Gas, A Legal History, 1948* (1949) at p. 664.

Petroleum and Gas Revenue Tax (PGRT) A levy imposed by the Government of Canada on the wellhead revenue from the production of oil and gas. *See* Brussa, "Canada's Petroleum and Gas Revenue Tax," [1983/84] 11 *OGLTR* 254.

This tax was eliminated effective 1 October 1986. *See* [1986/87] 3 *OGLTR* D-29.

Petroleum and Submarine Pipe-Lines Act 1975 The Act establishing the British National Oil Corporation (BNOC) and making provisions for licenses to search for and get petroleum. Stat. 1975, c. 74.

Petroleum Authority of Thailand (PTT) This organization is discussed in Chandler, "Current Developments in Oil and Gas Law: The ASEAN Countries," International Bar Ass'n, 1 *Energy Law* 1981 at p. 217.

Petroleum Board *See* Federal Petroleum Board.

Petroleum coke A solid residue which is the final product of the condensation process in cracking, and consisting mainly of highly polycyclic aromatic hydrocarbons very poor in hydrogen. *38 Fed. Reg. 34,416* (Dec. 13, 1973) .

Petroleum compensation charge A levy on all Canadian and imported oil to permit compensation of eastern Canadian refiners relying on higher-cost imported oil. *See* Lucas, "The Canadian National Energy Program Legislation," 1 *J. of Energy & Natural Resources Law* 104, 105 (1983).

See also National Energy Program (NEP).

Petroleum compensation payment (PCP) A payment made to refineries in eastern Canada importing foreign crude oil after 1974, the amount of the payment approximating the difference between the average cost of the imported oil (purchased at the world or international price) and the controlled domestic price of conventionally produced crude oil. The PCP payment was made from the Petroleum compensation charge (*q.v.*). *See* Norcen International Ltd. v. Suncor Inc., 36 Alta.L.R.2d 218; [1985] 4 W.W.R. 35 (Alta. Q.B. 1985) (dealing with PCP payments made under an extension of the program to producers of synthetic oil and whether such payments were part of the "price received" for purposes of royalty payment), *appeal allowed in part,* [1986] 4 W.W.R. 57 (Alta. Ct. App. 1986).

Petroleum Corporation of New Zealand, Ltd. (PETROCORP) A corporation, the shares of which are owned by the government, organized under the provisions of the Companies Act 1955 as a commercial enterprise. For discussion of the company and of petroleum development in New Zealand, see the following:

Fisher, "Law and Policy for Accelerating Petroleum Exploration and Development in New Zealand," 16 *Victoria University of Wellington L. Rev.* 11 (1986);

Fisher, "State Participation in Petroleum Development in New Zealand," [1986/87] 7 *OGLTR* 190;

Haughey and Gundersen, "Energy Law in New Zealand," 2 *J. of Energy & Nat. Resources L.* 117 (1984);

Symposium, Petroleum Development and New Zealand Law, 14 *Victoria University of Wellington L. Rev.* 1 et seq. (1984);

Hogg, "The New Zealand Experience--Public Sector Participation in the New Zealand Oil Industry," International Bar Ass'n Committee on Energy and Natural Resources, *Energy Law in Asia and the Pacific* 373 (1982).

Petroleum Corporation of the People's Republic of China (PCRC) For a discussion of this company's activities, see Barrows, "China--Chinese Oil Regulations and Proposed Petroleum Contracts," International Bar Ass'n, *Energy Law 1981* at p. 173; Bevan, "Exploration in China: What Next?" *Id.* at 195.

Petroleum density *See* Density of petroleum.

Petroleum exchange *See* Exchange.

Petroleum exclusion The exclusion provided in the Comprehensive Environment Response,

Compensation, and Liability Act (CERCLA) (*q.v.*), *42 U.S.C. §§ 9601-9675*, for petroleum from the CERCLA definitions of "hazardous substance" and "pollutant or contaminant."

See Bellack, "Distilling a Useful Petroleum Exclusion," *Natural Resources & Environment* No. 3 at 25 (1992);

Zachos, "Liabilities Arising From Ownership or Operation of Dead and Dying Oil Fields," 42 *Rocky Mt. Min. L. Inst.* 17-1 (1996);

Armstrong, "CERCLA's Petroleum Exclusion: Bad Policy in a Problematic Statute," 27 *Loyola (L.A.) L. Rev.* 1157 (1994);

D. Pierce, "Structuring Routine Oil and Gas Transactions to Minimize Environmental Liability," *33 Washburn L.J. 76, 82 (1993).*

Morgan v. Exxon Corp., 869 So. 2d 446 (Ala. 2003) applied the CERCLA exclusion to a landowners' complaint that defendant oil companies had "willfully, wantonly, recklessly and negligently caused the [plaintiffs'] real and personal property to become contaminated with radioactive scales, residues, precipitates and other harmful and hazardous materials."

Cose v. Getty Oil Co., 4 F.3d 700, 129 O.&G.R. 583 (9th Cir. 1993) , noted *33 Washburn L.J. 897 (1994),* held that crude oil Tank bottoms (*q.v.*) are not "petroleum" for purposes of the petroleum exclusion in Cercla. (*q.v.*).

Petroleum gas equipment Equipment used for the production of gas from petroleum derivatives, such as propane, butane, or gasoline. 18 C.F.R. § 201.311 (1980).

Petroleum Geological Province *See* Province.

Petroleum Import Adjustment Program A program proclaimed by the President of the United States *[45 Fed. Reg. 22,864, 25,371 and 27,905 (1980)]* designed to reduce imports of oil by raising the domestic retail price of gasoline by ten cents per gallon. The program was invalidated in *Independent Gasoline Marketers Council v. Duncan, 492 F. Supp. 614 (D.D.C. 1980)* .

Petroleum Import Cost Compensation Regulations Regulations SOR/75-384 (P.C. 1975-1487, June 30, 1975) made pursuant to the Petroleum Administration Act (*q.v.*). *See* Irving Oil Ltd. v. The Queen, 96 D.L.R.3d 534 (Federal Court, Trial Division, 1979).

Petroleum Incentives Program Act A Canadian Act establishing categories of incentives, eligibility rules, administrative provisions, and enforcement powers and duties designed to provide incentive payments to applicants who are Canadian controlled and have a Canadian Ownership rate of at least 50 percent. *See* Lucas, "The Canadian National Energy Program Legislation," 1 *J. of Energy & Natural Resources Law* 104, 108 (1983).

See also National Energy Program (NEP).

Petroleum incentives program (PIP) A program of public grants to those engaged in exploration and, in some cases, development, depending upon the rate of Canadian ownership and control of enterprises. *See* MacDonald, "Current Developments in Oil and Gas Law," *Energy Law 1981,* Seminar of the International Bar Association Committee on Energy and Natural Resources Law 136, 143 (1981).

For a discussion of certain of the problems encountered in the administration of this program, see "Canada Beset by Huge Costs in Oil Program," *Wall Street Journal,* Oct. 31, 1983, at 27.

Petroleum international agreement (PIA) The term employed by one treatise to describe any major type of petroleum exploration/exploitation agreement. Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* 12 (1986).

Petroleum Joint Venture Association Gas Balancing Agreement Forms Forms of gas balancing agreements prepared by a Task Force established by the Petroleum Joint Venture Association (PJVA). Two forms were prepared, one for use in connection with unitized lands subject to a standard unit agreement and the other for use in connection with lands governed by a CAPL Operating Procedure (*q.v.*).The forms are set forth in an Appendix to Park, "Marketing Production From Joint Property: The Past, The Present and the Future," *28 Alta. L. Rev. 34, 56 (1990).*

See also Balancing.

Petroleum license The right, granted by the Board of Trade on behalf of the Crown to search and bore for and get petroleum. The Petroleum (Production) Act 1934, 24 & *25 Geo 5,* c. 36, § 2. The powers of the Board of Trade in respect to mines and minerals under this act were subsequently transferred to the Ministry of Fuel and Power. The title of the Minister of Fuel and Power was changed to the Minister of Power in 1957, and the Ministry of Power was dissolved and the functions of the Minister of Power were transferred to the Minister of Technology in 1969.

See also Concession; Exploration license; Production license.

Petroleum (Production) Act 1934 Statutes of England, 24 & *25 Geo. 5,* c. 36, vesting in the Crown the property in petroleum and natural gas within Great Britain and making provision with respect to the searching and boring for and getting of petroleum and natural gas.

Petroleum province A region with common geological characteristics which embraces a number of oil and gas reservoirs. *See* Province.

Petroleum reserve *See* Reserve; Strategic petroleum reserve; Strategic petroleum reserve drawdown plan.

Petroleum Revenue Tax (PRT) A tax established by the United Kingdom Oil Taxation Act 1975. The

details of the tax and its operation are discussed in the following:

Henderson *et al., Oil and Gas Law: The North Sea Exploitation* 4.1010 *et seq.* (1979);

Daintith and Willoughby, *A Manual of United Kingdom Oil & Gas Law* 107-143 (1977);

Skinner, "Oil and Gas Policy--The Part Played by Tax Considerations," *Int'l Bus. Law.* 169 (March 1979 Special Issue).

See also Advance Petroleum Revenue Tax (APRT) System; Excluded oil; Supplementary petroleum tax.

Petroleum spirit *See* Casinghead petroleum spirit; Vapor.

Petroleum (Submerged Lands) Act 1967 (PSLA) Act No. 118 of 1967, the principal Austrailian statute dealing with off-shore petroleum exploration and development. For discussions of the Act, see Lang and Crommelin, *Australian Mining and Petroleum Laws* (1979); Reid, "Commonwealth-State Relations Offshore Mining and Petroleum Legislation; Recent Developments; an Historic Milestone or Millstone?" 2 *Austl. Mining & Petroleum L.J.* 58 (1980).

See also Mirror legislation.

Petroleum tar sands Native asphalt, solid and semisolid bitumen, and bituminous rock (including oil-impregnated rock or sands from which oil is recoverable only by special treatment after the deposit is mined or quarried). Under the Mineral Leasing Act Revision of 1960, *30 U.S.C. § 184*, the maximum acreage which may be held under lease by a person in any one State is limited to 7,680 acres. *See 43 C.F.R. § 3501.1-4(b)(6) (1978).*

See also Heavy oil; Reverse combustion.

The U.S. Department of Energy's Assistant Secretary for Resource Applications defined Tar Sand for the purpose of DOE's Alternate Fuels Incentives Programs as follows: "Tar sand is any consolidated or unconsolidated rock (other than coal, oil shale, or gilsonite) that (1) contains a hydrocarbonaceous material with a gas-free viscosity, measured at reservoir temperature, greater than 10,000 centipoise, or (2) contains a hydrocarbonaceous material that is extracted from the mined or quarried rock." 39 *Oil & Gas Compact Bull.* 10 (1980).

The Tar Sands Subcommittee of the Enhanced Recovery Committee of the Interstate Oil Compact Commission adopted the following definition at its 1981 meeting:

"Tar sand is any consolidated or unconsolidated rock containing a crude oil which is too viscous at natural reservoir temperature to be commercially producible by conventional primary recovery techniques." 30 *Oil & Gas Compact Bull.* 4 (June 1981).

It was reported that several agencies have adopted a similar definition with the following quantitative cut-offs:

Tar sand Heavy oil

Viscosity, centipoises	10,000	100 to 10,000
Gravity, degreesAPI	10	10 to 20

See also the following:

Egghart, "The Combined Hydrocarbon Leasing Act of 1981 and Hydrocarbon Extraction in Utah's Tar Sand Triangle," 8 *J. of Energy L. & Policy* 119 (1987);

Dobray, "Oil Shale, Tar Sands, and the Definition of a Mineral: An Old Problem in a New Context," *22 Tulsa L.J. 1 (1986).*

See also Alsands project; Special tar sand area.

Petroleum Technology Transfer Council (PTTC) A Washington, D.C. based non-profit organization established to serve as an information conduit between producers and researchers. IT operates through 10 regional centers that focus on the needs of producers in each center's area. The regional centers are directed by the heads of university petroleum engineering or geology departments and state geological survey members.

Petrolian Nasional Berhad (Petronas) The Malasyian national oil company. *See* Moorthy, *PETRONAS--Its Corporate and Legal Status;* Chandler, "Current Developments in Oil and Gas Law: The ASEAN Countries," International Bar Ass'n, 1 *Energy Law,* 1981 at p. 217; "The Malaysian National Oil Corporation--Is It a Government Instrumentality?," *30 Int'l & Comp. L.Q. 638 (1981);* Moorthy, "Legal Aspects of Foreign Investment in Resources Projects in Malaysia," *Int'l Bus. Law* 81, 86 (March, 1979, Special Issue).

Petromin The General Petroleum and Minerals Organization, a Public Organization under the laws of the Kingdom of Saudi Arabia "entrusted by the laws of Saudi Arabia with the promotion and achievement of development projects related to petroleum operations and other mining endeavors in order to increase the industrial wealth and the national welfare in Saudi Arabia." *See* OPEC, *Selected Documents of the International Petroleum Industry 1967* at pp. 190 and 209.

Petronas The Malaysian national oil company, Petrolian Nasional Berhad (*q.v.*).

Petroperu The Petroleos Peruanos of Peru (*q.v.*).

Petroven Petroleos de Venezuela S.A., a holding company with separate subsidiaries for oil operations, petrochemicals, purchasing, and research and development.

PEV Presale estimate of value assigned by the Bureau of Land Management to a parcel prior to a competitive oil and gas lease sale. *Hanna Oil & Gas Co., 113 IBLA 76* , GFS(O&G) 1990-9 (Feb. 9, 1990).

PFA Participating Financing Arrangements (*q.v.*).

P-4 Form The form used by the Railroad Commission of Texas (*q.v.*) to designate the operator of a well.

Failure by an operator who has been removed from the operatorship to execute a P-4 Form must be remedied though a court action, not through a Commission hearing, since the Commission lacks jurisdiction to resolve private disputes between parties to a Joint operating agreement (*q.v.*). *R & R Resources Corp. v. Echelon Oil & Gas, L.L.C., 2006 Tex. App. LEXIS 326* (Tex. App.--Austin Jan. 10, 2006) (unpublished opinion).

Filing of the P-4 form designating the operator of the well fixes the responsibility of the operator to properly plug and abandon the well. *Shoreham Oil & Gas Co., Inc. v. State, 260 S.W.3d 249* (Tex. App.--Austin 2008) .

PGA clause Purchased gas adjustment clause (*q.v.*).

PGA procedure The Purchased gas adjustment (PGA procedure (*q.v.*)) adopted by the Federal Power Commission in 1972.

PGRT The Petroleum and Gas Revenue Tax (*q.v.*).

Phantom freight The additional freight obtainable from sales of oil from a source closer to the point of delivery than the base point employed for purposes of calculating freight under Base-point pricing (*q.v.*). *See* Danielsen, *The Evolution of OPEC* 59 (1982).

Phase-down clause A clause in a crude oil supply contract that allows a buyer to reduce lifting--usually at a specified rate in a given period--if the buyer does not like the price being charged by the seller. P. Stevens, *Oil and Gas Dictionary* 149 (1988).

Phase-in crude The share of Participation crude (*q.v.*) which the host nation *may* sell and which the operating oil company *must* accept. "This provision, in effect, offers the governments an assured dump market while they develop their own crude outlets." *See* "The Economics of Energy and Natural Resource Pricing," Committee Print, A Compilation of Reports and Hearings of the Ad Hoc Committee on the Domestic and International Monetary Effect of Energy and Other Natural Resource Pricing, House Committee on Banking, Currency and Housing, 94th Cong., 1st Sess. March 1975, at p. 100.

See also Bridging crude; Buyback oil; Concession.

Phase-out option *See* Phase-down clause.

Phase severance A term applied to the severance of the ownership of gas and gas rights from oil and oil rights. *See* Midkiff, "Phase Severance of Gas Rights from Oil Rights," *63 Tex. L. Rev. 133 (1984).*

See also the following:

REO Industries, Inc. v. Natural Gas Pipeline Co., 932 F.2d 447, 115 O.&G.R. 322 (5th Cir. 1991) (dealing with construction of agreement between owners of gas rights and owners of oil rights specifying procedures to be followed when, in drilling, the oil operator finds gas or the gas operator finds oil; owner of gas rights who already had a producing gas well on the spacing unit did not breach agreement by opposing application by owner of oil rights who had drilled a gas well for a Rule 38 exemption application to the Railroad Commission to permit production from a second gas well on the unit);

Amarillo Oil Co. v. Energy-Agri Products, Inc., 794 S.W.2d 20, 21, 109 O.&.G.R. 524 (Tex. 1990) (holding that "When oil rights are severed from gas rights in a phase severance, and the parties do not otherwise specify in the conveying instrument, the party who owns the rights to casinghead gas owns only that gas or vapor which is indigenous to an oil stratum and is produced from that stratum along with oil, as contrasted to gas produced from a separate gas stratum through an oil well.").

See also Horizontal severance; Severance; Vertical severance.

Philippines National Oil Company (PNOC) A state owned oil company. *See* Chandler, "Current Developents in Oil and Gas Law: The ASEAN Countries," International Bar Ass'n, 1 *Energy Law 1981* at p. 217.

Physical depletion *See* Depletion.

Physical waste Operational losses in the production of oil and gas. There are two main divisions of loss of oil and gas, namely, surface loss and underground loss. Surface loss of oil is due principally to evaporation and surface loss of gas is due principally to burning at field flares or blowing into the atmosphere. Underground loss is due to failure to recover the maximum quantity which theoretically could be produced, as by dissipation of reservoir pressure.

"[T]he loss or destruction of oil or gas after recovery thereof such as to prevent proper utilization and beneficial use thereof, and the loss of oil or gas prior to recovery thereof by isolation or entrapment, by migration; by premature release of natural gas from solution in oil, or in any other manner such as to render impracticable the recovery of such oil or gas." 30 C.F.R. § 221.2(n)(1) (1980).

"Physical waste generally refers to the unnecessary flaring, evaporation, or other surface loss of oil and gas or production practices that reduce or tend to reduce the total ultimate recovery of oil or gas from any pool." Browning v. Luecke, n.3, *149 O.&G.R. 127 (Tex. App.--Austin 2000), 38 S.W.3d 625* . The court also refers to this entry in the Manual of Terms. *Id.*

Union Pacific Resources Co. v. Texaco, Inc., 882 P.2d 212, 224, 133 O.&G.R. 549 (Wyo. 1994) , paraphrased and quoted from this entry in the Manual of Terms, concluding that "Wyoming has recognized that correlative rights and the right to produce oil and gas from a pool are limited by a duty not to injure the pool and a duty not to cause waste."

See also Waste.

PIA Petroleum international agreement (*q.v.*).

PIAP The Petroleum Import Adjustment Program (*q.v.*).

Pick-up oil Oil which has escaped from a well or storage tank by overflow or seepage recovered by a Pick-up station (*q.v.*).

Pick-up station A surface pit or other type of trap utilized to gather oil which has escaped from a well or storage tank by overflow or seepage.

Piercement type salt dome *See* Salt dome.

PIF Payor Information Form (*q.v.*).

Pig A scraping device for cleaning and testing petroleum and natural gas pipelines or to separate different throughputs in a pipeline. The term is an acronym for pipeline inspection gauge. *Reese v. BP Exploration Co., 643 F. 3d 681, 684 n.1 (9th Cir. 2011)* .

See Batching; Go-devil; Smart pig.

Pigging "Pigging consists of (a) cleaning pipelines to rid them of sediment and bacteria and (b) pushing an in-line inspection tool through the pipelines to assess the presence and extent of any corrosion." *Reese v. BP Exploration Co., 643 F. 3d 681, 684 n.1 (9th Cir. 2011)* .

Piled steel platform A conventional drilling and production platform for offshore drilling and production operations. A steel jacket enclosing conductor pipes is pinned to the sea bed by long steel piles and is surmounted by a steel deck on which is located housing, a drilling rig, and other installations.

Pill The term applied to drilling Mud (*q.v.*) containing lubricant additives which is circulated down the drill pipe and back up the annulus to where a drill pipe is stuck. The pill dislodges the stuck pipe. When the drill pipe is freed the pill is circulated to the surface, removed and set aside for disposal. *American Petroleum Institute v. Environmental Protection Agency, 787 F.2d 965, 89 O.&G.R. 8 (5th Cir. 1986)* .

See also American Petroleum Institute v. United States Environmental Protection Agency, 858 F.2d 261, 102 O.&G.R. 443 (5th Cir. 1988) (sustaining EPA requirement that mineral oil be used as replacement for diesel oil in pill which may be discharged in offshore Alaskan waters), *clarified, 864 F.2d 1156, 102 O.&G.R. 453 (5th Cir. 1989)* .

Pincher Creek Decision The decision of the Public Utilities Board of Alberta, pursuant to an application under Section 9 of The Gas Utilities Act, relating to charges and deductions to be allowed for processing costs in determining the value of gas for royalty purposes. *See* Rae, "Royalty Clauses in Oil and Gas Leases," *4 Alberta L. Rev. 323, 346 (1965);* Muir, "Utilization of Alberta Gas," *13 Alberta L. Rev. 64 (1975).*

Pinch out A trap formed by the disappearance or wedging out of a porous, permeable rock between two layers of impervious rock.

PIP Petroleum incentives program (*q.v.*).

Pipe *See* Annular space; Behind the pipe exclusion; Bleeder pipe; Buried pipe covenant; Drill pipe; Gas behind the pipe; Joint; Pipeline; String; Stringing pipe; Tubing.

Pipeline A tube or system of tubes used for the transportation of oil or gas. Types of oil pipelines include: lead lines, from pumping well to a storage tank; flow lines, from flowing well to a storage tank; lease lines, extending from the wells to lease tanks; gathering lines, extending from lease tanks to a central accumulation point; feeder lines, extending from leases to trunk lines; and trunk lines, extending from a producing area to refineries or terminals.

In the case of gas, the Gathering system (*q.v.*) delivers the gas to the main pipeline which takes the gas directly to the distributor at the place of consumption.

Static capacity of a pipeline is calculated by multiplying the square of the pipe diameter (in inches) by .0009714 to give barrels of oil per lineal foot or by multiplying the square of pipe diameter (in inches) by .005454 to give cubic feet of gas per lineal foot. The quantity passing through the line in a given period will depend on initial pressure, flow characteristics, ground elevation, density, delivery pressure, and the booster stations employed.

For a detailed analysis of the pipeline industry, see Wolbert, *U.S. Oil Pipe Lines* (1979). "Today there are over 227,000 miles of operating crude and products lines (including gathering lines) in the United States, exceeding by nearly 40 percent the total miles of mainline railroad right-of-way." *Id.* at 26 .

For a detailed examination of the history of pipeline regulation and an order prescribing new criteria for the derivation of maximum permissible rates of return, see Williams Pipe Line Co., 23 F.P.S. 5-*685* (F.E.R.C. Opinion No. 154 , Nov. 30, 1982).

Interstate Natural Gas Association of America v. Federal Energy Regulatory Commission, 617 F.3d 504 (D.C. Cir. 2010) , approves changes in the rules challenged in *INGAA I* (see below) based on the Commission's reasoned explanation for the change.

Interstate Natural Gas Association of America v. FERC, 285 F.3d 18, 157 O.&G.R. 381 (D.C. Cir. 2002) (*INGAA I*) relies on the approach taken in *Farmers Union* to review the general validity of FERC's decision to deregulate certain aspects of natural gas pipeline pricing as it relates to short-term releases of pipeline capacity promulgated in Orders No. 636, 636-A, 637 and 627-A.

Farmers Union Central Exchange, Inc. v. Federal Energy Regulatory Comm'n, 734 F.2d 1486 (D.C. Cir. 1984) , *cert. denied, 469 U.S. 1034 (1984)* , discusses at length the responsibilities of, and factors to be considered by, the Federal Energy Regulatory Commission in determining "just and reasonable" oil pipeline rates.

State of Oregon v. Federal Energy Regulatory Commission, 636 F.3d 1203 (9th Cir. 2011) (while a bankrupt party may transfer a Section 3 (Natural Gas Act) permit to build a LNG import terminal, it may not transfer the certificate of public convenience and necessity).

For a collection of papers delivered at a 1983 Symposium on Contracts for the Construction of Oil and Gas Pipelines,

see *International Business Lawyer* (July/August 1984).

For cases dealing with the boundary of a pipeline easement, see the following:

Andrews v. Columbia Gas Transmission Corp., 544 F.3d 618 (6th Cir. 2008) , aff'g 2007 U.S. Dist. LEXIS 25797 (S.D. Ohio Apr. 6, 2007) (easement created by express grant gives pipeline company the right to remove trees without compensation in a 50-foot swath straddling the pipeline);

Miller v. Southeast Supply Header, LLC, 2009 U.S. Dist. LEXIS 121714 (S.D. Ala. Aug. 29, 2009) (surface owner may assert an inverse condemnation claim against a pipeline company whose actions allegedly led to both permanent and temporary flooding of the surface estate);

Enbridge Pipelines (Illinois) LLC v. Burris, 2010 U.S. Dist. LEXIS 31586 (S.D. Ill. 2010) (pipeline operator able to show that it was the owner of the easement in question and that the easement had not been abandoned because there was no showing of an intent to abandon);

Centerpoint Energy-Illinois Gas Transmission Co. v. Varble, Dkt. No. 07-CV-439-WDS (S.D. Ill 2007) (pipeline company entitled to TRO in order to enjoin further construction of in-ground swimming pool within 3.5 feet of pipeline).

For cases dealing with the condemnation procedures as well as the amount of compensation due, see the following:

Transwestern Pipeline Co., LLC v. 46.78 Acres ... , 2010 U.S. Dist. LEXIS 50609 (D. Ariz. Apr. 26, 2010) (proffered testimony relating to fair market value of land taken should be excluded under *Daubert*);

Transwestern Pipeline Co., LLC v. 0.43 Acre, ... *2010 U.S. Dist. LEXIS 46390* (D. Ariz. Apr. 12, 2010) (testimony of general manager of farming operations relating to both direct and severance damages does not meet the *Daubert* requirements of reliability and expertise);

Transwestern Pipeline Co., LLC v. 3.51 Acres ... , 2010 U.S. Dist. LEXIS 46063 (D. Ariz. Apr. 2, 2010) (proffered testimony relating to fair market value of land taken should be excluded under *Daubert*);

Southern Star Central Gas Pipeline, Inc. v. Greul, 2008 U.S. Dist. LEXIS 102168 (D. Kan. June 26, 2008) (pipeline can bring declaratory judgment action asserting that it has an irrevocable license or prescriptive easement to locate its pipeline after it is discovered that the original easement deed was never recorded);

Portland Natural Gas Transmission System v. 19.2 Acres of Land, 195 F. Supp. 2d 314 (D. Mass. 2002) (where pipeline engages in a temporary taking of the surface estate, prior to the eventual condemnation of a permanent easement, it must compensate the surface owner for loss rental value and any impairment of access value that occurred during the temporary taking);

Millenium Pipeline Co., LLC v. Certain Permanent and Temporary Easements, 2011 U.S. Dist. LEXIS 39470 (W.D.N.Y. 2011) (pipeline possessing certificate of public convenience and necessity can condemn an easement of access over lands adjacent to, but not necessarily overlying, the physical location of the pipeline);

American Energy Corp. v. Rockies Express Pipeline LLC, 622 F.3d 602 (6th Cir. 2010) , aff'g 2009 U.S. Dist. LEXIS 59972 (S.D. Ohio) (coal company may not challenge in federal district court a FERC certificate of public convenience and necessity for pipeline even though the pipeline may endanger its right to mine coal because FERC and the Court of Appeals have exclusive jurisdiction over such certificates);

Rutherford v. Columbia Gas, 575 F.3d 616 (6th Cir. 2009) (follows *Andrews* in dismissing claim by surface owner that pipeline owes it damages for removing trees from within the boundaries of the express easement);

Columbia Gas Transmission Corp. v. Bennett, 71 Ohio App. 3d 307, 594 N.E.2d 1 (1990) (assuming, arguendo, that an enforceable pipeline easement existed, the "evidence indicates that a twenty-five foot easement was reasonable under the circumstances"; however, the recorded easement was not within the landowner's chain of title, the landowner could not be charged with constructive notice, and hence the easement was unenforceable against the landowner);

Columbia Gas Transmission Corp. v. Large, 63 Ohio Misc. 2d 63, 619 N.E.2d 1215 (1992) (sustaining claim to pipeline easement extending 25 feet on either side of the pipeline);

Columbia Gas Transmission, LLC v. David N. Martin Revocable Trust, 833 F. Supp. 2d 552 (E.D.Va. 2011) (scope of express easement not determined by earlier litigation between other parties; scope of easement and right of pipeline to cut trees and destroy vegetation reserved for trial);

Columbia Gulf Transmission Co. v. McCann, 2011 U.S. Dist. LEXIS 138656 (M.D.Tenn. Dec. 2, 2011) (servient owner's counterclaim that pipeline exceed scope of easement dismissed; pipeline's request for relief against servient owner's use of surface estate that threatens integrity of pipeline remains open);

Rockies Express Pipeline LLC v. 4. 895 *Acres of Land, 2011 U.S. Dist. LEXIS 104618* (S.D. Ohio Sept. 15, 2011) (valuation of coal estate taken by location of pipeline in area of active coal mining);

Rockies Express Pipeline LLC v. Hopkins, 2012 U.S. Dist. LEXIS 65121 (S.D. Ind. May 9, 2012) (evidence of zoning ordinance prohibition against placing structures within 500 feet of a natural gas evidence admissible evidence to show that surface estate may not be available for future residential development. thus decreasing its fair market value);

Rockies Express Pipeline LLC v. Hopkins, 2012 U.S. Dist. LEXIS 65122 (S.D. Ind. May 9, 2012) (*Daubert* motion granted to exclude appraisal testimony of before and after value where such testimony is unreliable and lacks factual support);

Rockies Express Pipeline, LLC v. 4. 895 Acres, 2011 U.S. Dist. LEXIS 41779 (S.D. Ohio April 18, 2011) ; Rockies Express Pipeline, LLC v. 4. 895 Acres, 2010 U.S. Dist. LEXIS 136817 (S.D. Ohio Dec. 1, 2010) ; Rockies Express Pipeline, LLC v. 4. 895 Acres, 2010 U.S. Dist. LEXIS 142100 (S.D. Ohio Nov. 3, 2010) ; Rockies Express Pipeline, LLC v. 4. 895 Acres, 2010 U.S. Dist. LEXIS 136803 (S.D. Ohio Sept. 13, 2010) ; Rockies Express Pipeline, LLC v. 4. 895 Acres, 2010 U.S. Dist. LEXIS 94125 (S.D. Ohio Sept. 9, 2010) ; Rockies Express Pipeline, LLC v. 4. 895 Acres, 2010 U.S. Dist. LEXIS 77244 (S.D. Ohio July 30, 2010) (series of cases attempting to determine just compensation for various owners along pipeline easement, including reports of the commissions created to ascertain the amount to be paid);

Enbridge Pipelines (Ozark), LLC v. Bailey, 2009 U.S. Dist. LEXIS 60775, 2009 U.S. Dist. LEXIS 56569 (N.D. Okla. 2009) (pipeline easement requires servient owner not to place fill material over the pipeline; federal court has jurisdiction to order removal because amount in controversy exceeds $ 75,000 when one considers fill removal costs and value of the pipeline);

Columbia Gas Transmission Corp. v. Tarbuck, 845 F. Supp. 303, 128 O.&G.R. 580 (W.D. Pa. 1994) , aff'd, 62 F.3d 538, 136 O.&G.R. 152 (3d Cir. 1995) (finding width of pipeline easement to be 50 feet);

Midwestern Gas Transmission Co. v. Various Acres of Land, 2009 U.S. Dist. LEXIS 68798 (M.D. Tenn. 2009) (where pipeline makes preliminary entry on land awaiting final FERC decision on certificate of public convenience and necessity, it will be liable for both temporary damages, typically measured by fair rental value for the time of the

temporary taking, and permanent damages on the date that the pipeline exercised full ownership of its easement to construct and locate a pipeline);

McArthur v. East Tennessee Natural Gas Co., 813 S.W.2d 417, 112 O.&G.R. 301 (Tenn. 1991) (affirming judgment that margins of gas pipeline easement extended twenty-five feet on each side of the existing pipeline: "Today, we have established a duty upon the owner of an easement to notify the landowner, by recorded instrument, of the selected boundaries of the easement, and absent such notice, the law presumes that the structure or improvement was placed in the center of the easement so that the boundaries are equidistant from the center line of the improvement");

Questar Pipeline Co. v. 94. 86 *Acres of Land, 2011 U.S. Dist. LEXIS 25844* (D. Utah Mar. 14, 2011) (condemnor's report properly excluded since it discussed lost profits and increased costs of development rather than the before and after valuation of the surface estate as impacted by the pipeline easement);

Columbia Gas Transmission Corp. v. An Easement to Construct ... , *2009 U.S. Dist. LEXIS 91272 (W.D. Va. 2009)* (damage award included value of temporary easements, value of permanent easement and diminution in value to remainder of the surface estate);

Columbia Gas Transmission Corp. v. Burke, 768 F. Supp. 1167 (N.D. W. Va. 1990) (holding that an express gas pipeline easement which was silent as to its width extended for purposes of repairing the pipeline twenty-five feet on either side of the pipeline);

Guardian Pipeline, LLC v. 295,49 Acres ... , 2010 U.S. Dist. LEXIS 125485 (E.D. Wis. Nov. 26, 2010) (court rejects landowner's motion to revise decision lowering award, except as to the computation of interest);

Guardian Pipeline, LLC v. 295.49 Acres ... , 2010 U.S. Dist. LEXIS 87154 (E.D. Wis. Aug. 24, 2010) (commission's determination of fair market value reversed; award should have been $28,796.32 and not $107,100 as found by the commission).

See also the following:

Murray Energy Corp. v. Federal Energy Regulatory Commission, 629 F.3d 231 (D.C. Cir. 2011) (FERC has the power to authorize a pipeline to be constructed nearby, or over, existing longwall mining operations; FERC properly considered impact of pipeline on the mining operations and did not act arbitrarily or capriciously in concluding that the condition contained in the certificate of public convenience and necessity requiring the pipeline to minimize its impact on the mining operations had been complied with);

Enbridge Pipelines (Illinois) L.L.C. v. Moore, 633 F.3d 602 (7th Cir. 2011) (pipeline not abandoned even though it was not used for 18 years where pipeline owner engaged in periodic inspections to check on the integrity of the pipe);

Columbia Gas Transmission, LLC v. Caiman Energy, LLC, 2011 U.S. Dist. LEXIS 69833 (N.D.W.Va. June 27, 2011) (plaintiff pipeline is not entitled to a preliminary injunction prohibiting a second pipeline from using its rights-of-way which the second pipeline has the legal right to do until such time as the second pipeline conducts a safety analysis and review);

Reading Blue Mountain & Northern Railroad Co. v. UGI Utilities, Inc., 2012 U.S. Dist. LEXIS 8719 (M.D. Pa. Jan. 25, 2012) (Interstate Commerce Commission Termination Act of 1995 does not preempt state law authorizing pipeline to condemn land underneath a railroad right-of-way for pipeline purposes);

Beaver Coal Co., Ltd. v. Cabot Oil & Gas Corp., 2009 U.S. Dist. LEXIS 13271 (S.D. W. Va.) (dispute over lease and pipeline easement improperly removed to federal court because of lack of diversity; remand ordered);

Texas Gas Transmission, LLC v. Butler County Board of Commissioners, 2009 U.S. Dist. LEXIS 41813 (S.D. Ohio) (County right of way easement superior to pipeline easement; County may order pipeline to relocate, at its own expense, existing pipeline that encroaches upon its right of way easement);

Rockies Express Pipeline, LLC v. Billings, 2008 U.S. Dist. LEXIS 104390 (S.D. Ohio Mar. 5, 2008) (pipeline entitled to preliminary injunction preventing surface owners from interfering with surface access in order to conduct civil, architectural and environmental surveys as a prelude to construction of a pipeline);

Texas Gas Transmission, LLC v. Butler County Board of Commissioners, 2007 U.S. Dist. LEXIS 91297 (S.D. Ohio Dec. 12, 2007) (dispute between owners of separate easements in same area can only be determined by looking at the scope of each of the easements and the date the easements were created);

Township of Piscataway v. Duke Energy, 488 F.3d 203, 166 O.&G.R. 557 (3rd Cir. 2007) (question of fact existed as to whether scope of pipeline easement required elimination of trees so that pipeline operator could conduct aerial surveillance in order to properly maintain the pipeline);

Township of East Brunswick v. Transcontinental Gas Pipeline Corp., 2008 N.J. Super. Unpub. LEXIS 27 (N.J. Super.) (express easement giving pipeline the power to cut trees will be enforced where pipeline shows some evidence that trees are interfering with the integrity of the pipeline);

Southtex 66 Pipeline Co., Ltd. v. Spoor, 238 S.W.3d 538 (Tex. App.--Houston [14th Dist.] 2007, rev denied) (condemned pipeline easement may be leased to another entity as commercial easements in gross are assignable in Texas);

Moore v. Cabot Oil & Gas Corp., 2007 U.S. Dist. LEXIS 32503 (S.D. W. Va. May 2, 2007) (action asserting easement did not authorize construction of new pipeline; court refused to remand action to state court after removal by the defendant);

Mid-America Pipeline Co. v. Lario Enterprises, Inc., 716 F. Supp. 511 (D. Kans. 1989) (dealing with remedies of a pipeline owner when surface user causes an interference with easement rights), *rev'd and remanded, 942 F.2d 1519, 116 O.&G.R. 56 (10th Cir. 1991)* (holding that the district court erred in balancing the equities between parties in this case, there is no adequate remedy at law for the injury, and that plaintiff is entitled to a mandatory injunction requiring the removal of materially interfering structures above its pipelines);

Rochester Gas & Electric Corp. v. Public Service Comm'n, 71 N.Y.2d 313, 525 N.Y.S.2d 809, 520 N.E.2d 528 (1988) (sustaining the validity of a statute providing for Mandatory carriage (*q.v.*) of gas by certain utilities under specified circumstances);

Guitar Holding Co. L.P. v. El Paso Natural Gas Co., 2011 U.S. Dist. LEXIS 64385 (W.D. Tex. June 17, 2011) (litigation is stayed pending arbitration of dispute pursuant to arbitration clauses in some of the easement deeds);

Guitar Holding Co., L.P. v. El Paso Natural Gas Co., 2010 U.S. Dist. LEXIS 85817 (W.D. Tex. Aug. 18, 2010) (surface owner alleges tort liability upon abandonment of pipeline and surrender of easement due to presence of asbestos in the soil);

Ft. Worth & Western Railroad Co. v. Enbridge Gathering (NE Texas Liquids), L.P., 298 S.W.3d 392 (Tex. App.--Ft. Worth 2009) (gas utility in Texas has power to condemn a pipeline easement lying underneath the tracks of a railroad; the federal Surface Transportation Board does not have exclusive jurisdiction because the condemnation does not impact railroad operations);

Trenolone v. Cook Exploration Co., 166 S.W.3d 495, 165 O&G.R. 218 (Tex. App.--Texarkana 2005) (abandoned pipeline may be realty or personalty depending on the intent of the parties so that ownership may either revert to the owner of the realty or be subject to the law of finders);

Duke Energy Field Services, Inc. v. King Ranch, Inc., 2004 Tex. App. LEXIS 8896 (Tex. App.--Corpus Christi Oct. 7, 2004) (unpublished opinion) (failure by pipeline owner to make annual payments will not cause the easement to be terminated since under the terms of the easement deed and contract the easement may only be abandoned or surrendered);

Grimes v. Corpus Christi Transmission Co., 829 S.W.2d 335 (Tex. App.--Corpus Christi 1992, writ denied) (sustained the right of a utility, after obtaining permission of the Texas Highway Department, to maintain a high pressure pipeline under a public highway right-of-way, rejecting the claim of an abutting landowner with fee title, encumbered by this easement, to the land extending to the midpoint of the highway that the pipeline constituted a trespass);

Avery v. Colonial Pipeline Co., 213 Ga. App. 388, 444 S.E.2d 363 (1994) (sustaining authority of pipeline operators to clear easements to permit aerial inspection and access by maintenance crews);

Thomas Sand Co. v. Colonial Pipeline Co., 349 S.C. 402, 563 S.E.2d 109, 156 O.&G.R. 216 (S.C. 2002, cert. denied) (explores level of proof needed to show that an alleged pipeline spill of diesel oil proximately caused injury to a mining company's sand deposits);

Quintain Development, LLC v. Columbia Natural Resources, Inc., 210 W. Va. 128, 556 S.E.2d 95, 159 O.&G.R. 630 (2001) (analyzes scope of pipeline easement deed insofar as whether the pipeline must be relocated in order to develop the underlying coal resources; allocates to coal owner the duty to pay the cost of relocating the pipeline);

C. Castaneda, *Regulated Enterprise: Natural Gas Pipelines and Northeastern Markets*, 1938-1954 (1993);

Roggenkamp, *The Impact of the NOGAT Pipeline on Netherlands Output and Development*, [1993] 5 OGLTR 135;

Bernhardt, *Is Natural Gas Pipeline Regulation Worth the Fuss? 40 Stanford L. Rev. 753 (1988);*

Reed, *The New Carbon Dioxide Pipelines: Revival of the Common Carrier at Common Law*, 12 Okla. City L. Rev. 103 (1987);

Mogel, *Impact of FERC Order No. 436 on the Natural Gas Industry: Will It Affect Contracting Practices?* 32 Rocky Mt. Min. L. Inst. 15-1 (1986);

Pierce, *Reconsidering the Roles of Regulation and Competition in the Natural Gas Industry, 97 Harv. L. Rev. 345 (1983)* (arguing that the natural gas market would function more efficiently if Congress deregulated gas pipeline companies and required them to compete against one another);

Malet, *Oil Pipelines as Common Carriers: Issues of Form and Substance, 20 Houston L. Rev. 801 (1983);*

Rappoport, *The Structure of Gas Tariffing Agreements*, [1985/86] 7 OGLTR 175;

Fisher, *Access to Submarine Pipelines and Tariffs: The Legal Framework*, [1982] 1 OGLTR 9;

Adams and Brock, "Deregulation or Divestiture: The Case of Petroleum Pipelines," *19 Wake Forest L. Rev. 705 (1983)* (a detailed argument for requiring divestiture of pipeline ownership by integrated oil companies);

Mitchell (ed.), *Oil Pipelines and Public Policy* (American Enterprise Institute, 1979), discussing proposals for industry reform and reorganization.

For cases dealing with the right of a pipeline to take immediate possession of the premises prior to receiving final construction permission see the following:

Rockies Express Pipeline, LLC v. 4.895 Acres of Land, 2009 U.S. Dist. LEXIS 58893 (S.D. Ohio) (pipeline entitled to injunction where it has its FERC certificate and the parties have failed to reach an agreement on the amount of compensation due);

Guardian Pipeline, L.L.C. v. 295. 49 *Acres of Land, 2008 U.S. Dist. LEXIS 45785* (E.D. Wis.) ;

Gulf Crossing Pipeline Co., LLC v. 86.36 Acres of Land, 2009 U.S. Dist. LEXIS 4612 (W.D. La. Jan. 23, 2009) ;

Guardian Pipeline, L.L.C. v. 950. 80 *Acres of Land, 210 F. Supp. 2d 976 (N.D. Ill. 2002)* ;

Northwest Pipeline Corp. v. Douglass, 197 F. Supp. 2d 1241 (E.D. Wash. 2002) .

For cases dealing with the statutory right of pipelines to condemn easements in Texas, see also the following:

Bulanek v. WestTex 66 Pipeline Co., 209 S.W.3d 98 (Tex. 2006) (follows *Zwahr*);

Exxon Pipeline Co. v. Zwahr, 88 S.W.3d 623, 630-31, 155 O.&G.R. 82 (Tex. 2002) (applies *Daubert* test for expert testimony regarding value of land taken for pipeline easement);

Occidental Chemical Corp. v. ETC NGL Transport, LLC, 2011 Tex. App. LEXIS 5565 (Tex.App.--Houston [1st Dist.] July 7, 2011) , *writ of mandamus denied, 2011 Tex. App. LEXIS 5576* (Tex. App.--Houston [1st Dist.] July 20, 2011) (*Tex. Gov't Code § 25.1032* does not limit jurisdiction over action seeking injunctive relief sought by a common carrier to enter upon the land of another to investigate the potential location of a pipeline since the statute only gives the county court of law exclusive jurisdiction over eminent domain actions);

East Tenn. Natural Gas Co. v. 7.74 Acres, 228 F. App'x 323 (4th Cir. Va. 2007) (unpublished opinion) (applies *Daubert* test for expert testimony and finds the condemnee's experts satisfy the test).

Hubenak v. San Jacinto Gas Transmission Co., 141 S.W.3d 172, 159 O.&G.R. 380 (Tex. 2004) (resolves conflicts between several of the court of appeals decisions listed below by finding that the "unable to agree" requirement is not jurisdictional in nature and that the offers made by the pipelines satisfy that requirement even if they contain provisions outside of the scope of the eminent domain power; the court consolidated nine separate actions affirming some, reversing some and remanding some);

Pitts v. Sabine River Authority of Texas, 107 S.W.3d 811 (Tex. App.--Texarkana 2003, rev. denied) (analyzes "good faith offer" requirement and distinguishes both *Dernehl* and *Hubenak*);

MidTexas Pipeline Co. v. Dernehl, 71 S.W.3d 852, 159 O.&G.R. 351 (Tex. App.--Texarkana 2002) (analyzes "unable to agree" and "good faith offer" statutory requirements);

Cusack Ranch Corp. v. MidTexas Pipeline Co., 71 S.W.3d 395, 155 O.&G.R. 580 (Tex. App.--Corpus Christi 2001) (analyzes "unable to agree" and "good faith offer" statutory requirements; disagrees with *Dernehl* analysis of good faith offer);

Hubenak v. San Jacinto Gas Transmission Co., 65 S.W.3d 791, 155 O.&G.R. 565 (Tex. App.--Houston [1st Dist.] 2001) (analyzes "unable to agree" and "good faith offer" statutory requirements);

Hubenak v. San Jacinto Gas Transmission Co., 37 S.W.3d 133, 155 O.&G.R. 558 (Tex. App.--Eastland 2001) (analyzes "unable to agree" and "good faith offer" requirements);

Exxon Pipeline Co. v. Harrison Interests, Ltd., 93 S.W.3d 188, 155 O.&G.R. 597 (Tex. App.--Houston [14th Dist.] 2002) (analyzes "unable to agree" and "good faith offer" requirements and agrees with *Cusack*);

Vardeman v. Mustang Pipeline Co., 51 S.W.3d 308 (Tex. App.--Tyler 2001) (analyzes common carrier and public use requirements);

Mercier v. MidTexas Pipeline Co., 28 S.W.3d 712 (Tex. App.--Corpus Christi 2000, writ denied) (authority of pipeline to condemn is a matter of law to be determined by trial judge);

Marburger v. Seminole Pipeline Co., 957 S.W.2d 82, 139 O.&G.R. 618 (Tex. App.--Houston [14th Dist.] 1997, writ denied) .

For cases dealing with toxic tort claims against pipelines relating to emissions, spills or soil contamination, see e.g.:

Pluck v. BP Oil Pipeline Co., 640 F.3d 671 (6th Cir. 2011) (plaintiff's expert on causal connection between plaintiff's alleged benzene exposure and the onset of non-Hodgkins' lymphoma was properly excluded on *Daubert* grounds);

Laura Hanley, *Judicial Battles Between Pipeline Companies and Landowners: It's Not Necessarily Who Wins But by How Much, 37 Hous. L. Rev. 125 (2000).*

See also Affiliated entities limitation; Agreement on principles; Alaska Natural Gas Pipeline Financing act; ANGTA; ANGTS; Back-haul arrangement; Batching; Big inch pipeline; Blanket certificate; Bleedline; Bundling; Bypass; Bypass pipeline; Capacity brokering; Catchpot; Cathodic protection; Distribution line; Firm sales contract; First-come, first-served formula; 533 program; Flow line; Full requirements customer; Gas behind the pipe; Gas Inventory Charge (GIC); Gathering line; Hepburn act; High-volume system; Hinshaw pipeline; Independent pipeline; Intermediate-volume system; Interruptible transportation service rate (IT rate); Lateral line; Line loss; Line pack gas; Little big inch pipeline; Loop; Looping; Loop lines; Low-volume system; Mandatory carriage; Mandatory contract carriage; Mother Hubbard case; Minimum tender; Natural Gas Pipeline Safety Act (NGPSA); No-bump rule; No-fee exchange; Northern Tier Pipeline co.; Off-system customer; Open-access pipeline; Optional expedited certificate procedure; Order 436; Order 500; Order 533; Order 636; Partial looping; Partial requirements customer; Pig; Postage stamp rate; Pre-initial delivery payment; Prudence rule; Prudent pipeline standard; Purchase-contract carriage arrangement; Quality bank; Quality standards; Reservation fee; Service line; Shipping line; Smart pig; Tapline; Tap and meter facility; Taps agreement; Throughput and Deficiency agreement; Trans-Alaska Pipeline Authorization Act; Transit Pipeline Treaty; Transmission line; Transmission system; Trunk line; Turned into the line; Unbundling; Unconnected well; Undivided interest pipeline; Use-or-lose rule; Wetheader system; Yambur-Urnegoi Pipeline.

Pipeline consent decree of 1941 The agreement entered into by the Department of Justice, 20 major oil companies, and 59 pipeline companies stipulating that dividends paid by the pipeline companies to their shipper-owners would not be unlawful rebates if they did not exceed 7 percent of the Interstate Commerce Commission's valuation of the pipelines' properties. Since the dividend limit was based on valuation rather than on equity in the pipelines, debt capital has been resorted to for much of the cost of constructing pipelines, thus leading to a high rate of return on equity capital. *See* Report to the Congress by the Comptroller General, *Petroleum Pipeline Rates and Competition* 14 (July 13, 1979).

Debt financing of construction costs has been facilitated by Throughput and deficiency agreements (*q.v.*). The result has been debt-equity of 90:10 or higher.

For a discussion of this decree, see Adams and Brock, *Deregulation or Divestiture: The Case of Petroleum Pipelines, 19 Wake Forest L. Rev. 705, 729 (1983).*

Pipeline gas A term used to describe gas which has sufficient pressure to enter the high pressure lines of the purchaser for distribution to its customers without further compression and which is sufficiently dry so that the liquid hydrocarbons therefrom will not drop out in the transmission lines. *Greenshields v. Warren Petroleum Corp., 248 F.2d 61, 8 O.&G.R. 937 (10th Cir. 1957)* , *cert. denied, 355 U.S. 907 (1957)* .

Pipeline gauger A person who gauges the run of oil or gas for the pipeline purchaser. *See Cox v. De Soto Crude Oil Purchasing Corp., 55 F. Supp. 467 (W. D. La. 1944)* . *See also* Gauger.

Pipeline imbalance penalty A penalty assessed against a lessee/shipper for overdelivery or underdelivery of the agreed transport quantities when the overdelivery or underdelivery exceeds certain specified tolerances. Hardwick and Hayes, "Gas Marketing Royalty Issues in the 1990s; Part II," [1993] 9/10 *OGLTR* 279, 287.

Pipeline interest A term occasionally used to describe a royalty or overriding royalty interest. *See State v. Walters, 244 Iowa 1253, 58 N.W.2d 4, 2 O.&G.R. 649 (1953)* , *cert. denied, 346 U.S. 940 (1954)* .

Pipeline oil Oil of such quality as to be acceptable for pipeline shipment.

Pipeline producer A pipeline company that produces gas from company-owned wells in addition to transporting natural gas from production fields to consumers. *Public Utilities Comm'n of State of Cal. v. Federal Energy Regulatory Comm'n, 817 F.2d 858* at note 1 (D.C. Cir. 1987) , *on subsequent appeal, 894 F.2d 1372 (D.C. Cir. 1990)* .

Pipeline-producer gas Gas produced by a Pipeline producer (*q.v.*).

Pipeline prorationing *See* Purchaser prorationing.

Pipeline quality gas Gas of the quality which may be taken by a pipeline purchaser.

This term is defined by Section 416 of the National Energy Act (H.R. 8444), as passed by the House of Representatives on August 5, 1977, as meaning a mixture of hydrocarbons in a gaseous state (i) the principal ingredient of which is methane and (ii) which is interchangeable and compatible with natural gas as determined by a rule of the Commission.

Pipeline rider An employee of an oil or gas pipeline company whose job is to check the condition of the pipeline and the right of way from time to time.

Pipeline Safety Act A statute enacted in 1994 that recodified without substantive changes the Natural Gas Pipeline Safety Act of 1968 *(q.v.)* and the Hazardous Liquids Pipeline Safety Act of 1979 *(q.v.)*. Pub. L. No. 103-272 (1994). The purpose of the statute was to provide adequate protection against risks to life and property posed by pipeline transportation and pipeline facilities. The Act is codified at *49 U.S.C. §§ 60101*. The Department of Transportation has enacted regulations implementing the PSA at *49 C.F.R. §§ 192.1-193.2917* and *195.0-195.589*.

See Texas Midstream Gas Services, L.L.C. v. City of Grand Prairie, 2008 U.S. Dist. LEXIS 95991 (N.D. Tex.) , *aff'd, 608 F.3d 200 (5th Cir. 2010)* , *on remand, 2010 U.S. Dist. LEXIS 93454* (N.D. Tex. Sept. 8, 2010) (PSA provisions do not preempt local zoning ordinance to the extent that the local regulations do not infringe upon the Department of Transportation's safety regulations).

While the Act provides for express Preemption (*q.v.*) of state or local regulation of pipeline safety issues, the Act also provides for a cooperative federalism approach to regulation whereby state or local governments may supplant federal regulation if so approved by the Department of Transportation. *See, e.g., Olympic Pipe Line Co. v. City of Seattle, 437 F.3d 873 (9th Cir. 2006)* ; *Kinley Corp. v. Iowa Utilities Board, 999 F.2d 354 (8th Cir. 1993)* ; *Natural Gas Pipeline Co. of America v. Railroad Comm'n, 679 F.2d 51 (5th Cir. 1982)* ; *Washington Gas Light Co. v. Prince George's County Council, 2012 U.S. Dist. LEXIS 31798* (D. Md. March 9, 2012) (PSA does not preempt county zoning ordinance); *Washington Gas Light Co. v. Prince George's County Council, 2011 U.S. Dist. LEXIS 29408 (D. Md. 2011)* ; *Washington Gas Light Co. v. Prince George's County Council, 2010 U.S. Dist. LEXIS 29281* (D. Md. Mar. 26, 2010) ; *Southern Union Co. v. Lynch, 321 F. Supp. 2d 328 (D.R.I. 2004)* .

See also Hazardous Liquids Pipeline Safety Act of 1979; Natural Gas Pipeline Safety Act of 1968.

Pipeline Safety Improvement Act (PSIA) A statute, Pub. L. No. 107-355, *116 Stat. 2985,* designed to modernize and upgrade the requirements for pipeline safety.

See Interstate Natural Gas Ass'n of America v. FERC, 494 F.3d 1092, 377 U.S. App. D.C. 446 (D.C. Cir. 2007) (upholding FERC accounting procedure relating to mandate testing and assessment under PSIA).

Pipeline title opinion *Syn.:* Division order title opinion. *See* Title opinion.

Pipe racks As defined by the United States Department of Labor, Occupational Health and Safety Administration, pipe racks are "horizontal supports for tubular goods," as cited in *Grey Wolf Drilling Co., L.P. v. Boutte, 154 S.W.3d 725, 730 n.4* (Tex. App.--Houston [14th Dist.] 2003) , *review granted, judgment vacated and remanded by agreement, 2005 Tex. LEXIS 202* (Tex. Mar. 4, 2005) .

Pipe ramp As defined by the United States Department of Labor, Occupational Health and Safety Administration, a pipe ramp is "an angled ramp for dragging drill pipe, casing and other materials up to the drilling floor or bringing such equipment down," as cited in *Grey Wolf Drilling Co., L.P. v. Boutte, 154 S.W.3d 725, 730 n.5* (Tex. App.--Houston [14th Dist.] 2003) , *review granted, judgment vacated and remanded by agreement, 2005 Tex. LEXIS 202* (Tex. Mar. 4, 2005) .

See also casing.

Pipe stringing *See* Stringing pipe.

PIPP The Pennsylvania Independent Petroleum Producers, a nonprofit organization whose membership consists primarily of small independent oil producers who operate at a low level of capacity. *Pennsylvania Independent Petroleum Producers v. Commonwealth, Dep't of Environmental Resources, 106 Pa. Commw. 72, 525 A.2d 829, 93 O.&G.R. 543 (1987)*, *aff'd, 520 Pa. 59, 550 A.2d 195 (1988)*, *cert. denied, 489 U.S. 1096 (1989)*.

PIR Progressive incremental royalty (*q.v.*).

Pit *See* Brine storage pit; Burn out pit; Burn pit; Evaporation pit; Manifold pit; Reserve pit; Retention pit; Slush pit; Spillover pit; Sump hole or slump pit; Surface pit.

Pittman Underground Water Act of 1919 One of a series of statutes, ch. 77, *41 Stat. 293,* designed to convey federal lands to settlers or homesteaders, in this case within the then territory of Nevada, by encouraging private citizens to search for water. The patents issued pursuant to the Pittman Act reserved to the United States "valuable minerals." In *BedRoc Ltd., LLC v. United States, 541 U.S. 176, 124 S. Ct. 1587, 158 L. Ed. 2d 338, 159 O.&G.R. 857 (2004)*, the Supreme Court determined that sand and gravel did not fall within the Act's reservation of "valuable minerals" and were thus conveyed to the patentee.

PJVA The Petroleum Joint Venture Association (PJVA). The Association's Task Force on Gas Balancing prepared guideline forms of gas balancing agreements in Canada together with a related Guide and Commentary, and Options to the Gas Balancing Agreement. *See* Park, "Marketing Production From Joint Property: The Past, The Present and The Future," *28 Alta. L. Rev. 34, 56 (1990);*

Guichon, "The 1992 PJVA Model Form Unit Agreement," *31 Alta. L. Rev. 26 (1993)* (discussing provisions of this form which is included as an appendix).

PLA Pacific lease agreement (*q.v.*).

Place of production The place at which oil or gas is treated as produced, *viz.*, where such substance is severed from the earth. The place of production is generally viewed as being the Christmas tree of a well. *See* Production.

In an Australian arbitration of a dispute involving the payment of overriding royalty on offshore production, it was concluded that the "place of production" (at which the value of the product must be determined for purposes of payment of the royalty) within the meaning of the royalty agreement was offshore at the last valve off the platform at sea. This determination was not attacked by the parties in subsequent judicial proceedings which led to dismissal of motions seeking to set aside the interim awards of the arbitrators. Oil Basins Ltd. v. BHP Petroleum Pty. Ltd.,--Vict. R.--(27 May, 1988), noted in [1987/88] 10 *OGLTR* D-110.

"Natural gas is produced at the 'wellhead.' " *Associated Gas Distributors v. Federal Energy Regulatory Comm'n, 899 F.2d 1250, 1253 (D.C. Cir. 1990)*.

"The 'place of production' is generally viewed as being the wellhead," *viz.*, at the Christmas tree, which is another term

for the wellhead. *Wood v. TXO Production Corp., 1992 OK 100, 854 P.2d 880, 125 O.&G.R. 139* (dissenting opinion at note 9).

For a discussion of place of production for purposes of ad valorem and severance taxes, see *Union Pacific Resources Co. v. State of Wyoming, 839 P.2d 356 (Wyo. 1992)* .

See also Fleishman, "Oil and Gas: Should the Cost of Transporting Oil be Deducted in the Computation of Gross Value for Oklahoma's Gross Production Tax?" *42 Okla. L. Rev. 309, 319 (1989)* ("The place of production is where the oil is brought to the surface and confined for measurement.")

See also Production.

Place of recovery For the distinction between this term and Place of production (*q.v.*), see Recovery.

Plans of development (Pods) *See* Pods.

Plant *See* Absorption plant; Casinghead gasoline plant; Channel type carbon black plant; Combination plant; Compression plant; Compressor plant; Cycling plant; Dehydration plant; Extraction plant; Fold plant; Field separator; Helex plant; Natural gasoline plant; Processing plant; Reclamation plant; Reduction works; Scrubbing plant; Separator; Steaming plant; Straddle plant; Stripping plant; Treating plant.

Plant condensate *See* Condensate.

Plant fuel Fuel employed by a lessee in operating a plant (*e.g.*, a Dehydration Plant or Treating Plant (*q.v.*)) or a plant to remove sulfur from oil or gas produced by the lessee.

Rocky Mt. Oil & Gas Ass'n v. Conrad, 405 N.W.2d 279, 93 O.&G.R. 651 (N.D. 1987) , in holding that the transaction by which processors obtained plant fuel constituted a retail sale subject to sales or use tax, described plant fuel as follows: "While the facts are undisputed, we believe it helpful to outline the steps involved in gas processing. Raw gas is collected from various lease sites into the processing facilities' gathering systems. The raw gas is separated into its component parts and certain chemical contaminants are removed. The gas remaining after raw gas is processed is called residue gas. Most of the residue gas exits the plant tailgate and is sold to Montana-Dakota Utilities. However, a portion of the residue gas, called 'plant fuel,' is withdrawn from the residue gas stream for use by the processing facilities. The 'plant fuel' is used to run hot oil furnaces, compression/refrigeration units, flares, sulfur plant facilities, and booster stations along the pipeline system."

See also Piney Woods Country Life School v. Shell Oil Co., 726 F.2d 225, 79 O.&G.R. 244 (5th Cir. 1984) , reh'g denied, 750 F.2d 69 (5th Cir. 1984) , cert. denied, 471 U.S. 1005 (1985) (holding that plant fuel is "gas used off the lease" for purposes of royalty clause of lease there construed), *on later appeal, 905 F.2d 840, 111 O.&G.R. 72 (5th Cir. 1990)* (holding that the cost of plant fuel materially enhances the value of the gas and hence the cost of plant fuel must be borne by the royalty owners in proportion to their royalty share).

Plant operating agreement The agreement incident to a pooling or unitization agreement concerning the operation of a plant for the handling, processing and compression of certain of the unitized substances and for the furtherance of

such pressure maintenance and other fluid injection programs as are carried on under the agreement. *See* Myers, *The Law of Pooling and Unitization* § 5.21 (2d ed. 1967).

Plant operator The person designated by a Plant operating agreement (*q.v.*) to operate, maintain, alter, enlarge and extend the plant authorized by such agreement.

Plant protection gas Minimum volumes of gas required to prevent physical harm to plant facilities or danger to plant personnel when such protection cannot be afforded through the use of an alternate fuel. Statement of Chairman John N. Nassikas, Federal Power Commission, "Federal Power Commission Oversight--Natural Gas Curtailment Priorities," Hearing before the Senate Committee on Commerce, 93d Cong., 2d Sess., June 20, 1974, at p. 82; F.P.C. Order No. 493 (Sept. 21, 1973).

For a discussion of the operation of curtailment plans on plant protection gas, see *Process Gas Consumers Group v. United States Dept. of Agriculture, 694 F.2d 728 (D.C. Cir. 1981)*, *modified on rehearing en banc, 694 F.2d 778 (D.C. Cir. 1982)*, *cert. denied, 461 U.S. 905 (1983)*.

Plat book A book containing plats arranged according to township and range numbers preserved in District Land Offices of the Bureau of Land Management (*q.v.*). *See Rocky Mt. Min. L. Fdn. Landman's Legal Handbook* 114 (3d ed. 1977). The plats show information concerning the lands appearing thereon as to whether patented or not, whether subject to lease, etc.

Platform *See* Gravity structure; Hybrid platform; Jack-up rig; Mobile rig; Mat supported jack-up; Piled steel platform; Templet-type platform; Tension leg platform.

Platform privileges Privileges to be on or about a drilling well at all times and to have access to all reports, records, logs, samples and cores. *Augusta Oil Co. v. Watson, 204 Kan. 495, 499, 464 P.2d 227, 231, 35 O.&G.R. 147, 153 (1970)*.

PLATO (1) The acronym for the Drilling fund (*q.v.*) involving Pennzoil Louisiana and Texas Offshore, Inc. *See* Collins, "Recent Developments Affecting Investors in Oil and Gas," 22 *Tulane Tax Inst.* 55, 81 (1973).

(2) A proposed voluntary agreement among tanker owners, not unlike TOVALOP (*q.v.*) providing higher levels of compensation for pollution damages, cost of taking preventive measures and cost of threat removal measures. *See* "PLATO: Pollution Agreement Among Tanker Owner," [1985/86] 9 *OGLTR* 237.

See also CRISTAL.

Platt's Inside FERC's Gas Market Report A natural gas index price reporting publication that bases its price on voluntarily reported volumes and prices. *Rio Grande Royalty Co., Inc. v. Energy Transfer Partners, L.P., 620 F.3d 465, 467*, *aff'g 2009 U.S. Dist. LEXIS 126612, 126696 (S.D. Tex. 2009)*.

See also: Inside FERC's Gas Market Report.

Platt's Oil Price Handbook and Oilmanac A standard reporting service on petroleum and product prices at major centers.

See also Market center.

Play *See* Probe stage.

PLCA Pipe Line Contractors Association.

Pledge *See* Negative pledge.

Pledged production payment *See* Equipment production payment.

Plow depth A unit of measurement equivalent to one foot below ground level. The term is commonly used in a provision of an oil and gas lease requiring lessees to bury pipe line "below plow depth." *See Allain v. Shell Western E & P, Inc., La. App. 99-0403, 762 So. 2d 709, 146 O.&G.R. 114 (La. Ct. App. 2000)* .

Treatise § 673.4.

Plug (1) (Verb) To stop the flow of water, gas or oil from one stratum to another in connection with the abandoning of a well.

(2) (Noun) The object placed in the well bore to stop the flow of water, gas or oil from one stratum to another in connection with the abandoning of a well.

See also Bridge plug; Double suspension plug; Dry hole plug.

Plug back "To cement off lower section of casing; to block fluids below from rising in casing to a higher section being tested." Bureau of Mines, *A Dictionary of Mining, Mineral, and Related Terms* (1968); *William Perlman, 93 I.D. 159* (April 2, 1986) .

Plugging of well The sealing off of the fluids in the strata penetrated by a well, so that the fluid from one stratum will not escape into another or to the surface. This is usually accomplished by introducing cement and Mud (*q.v.*) into the hole. Conservation regulations of many states require the plugging of abandoned wells.

This term was defined in a jury instruction as "closing" a well-bore "in such a way or manner as to prevent the migration of oil, gas, salt water, or other substance, from one stratum into another." *Salmon Corp. v. Forest Oil Corp., 1974 OK 51, 536 P.2d 909, 911, 52 O.&G.R. 413, 417* . The court concluded that failure of a lessee to comply with the Osage Indian Agency's requirements as to plugging of well would subject such lessee to liability to a subsequent lessee required to replug the wells in the course of a secondary recovery operation on proof that compliance with those requirements would have sealed off the wells in such a way as to have withstood the increased pressure of

waterflooding.

See also the following:

Kramer & Martin, *The Law of Pooling and Unitization § 3.01* (3d ed. LexisNexis Matthew Bender);

Pierce and Flanery, "Orphans, Foundlings and Wards of the State: Plugging Liability for Orphan and Abandoned Wells in the Eastern States," 14 *East. Min. L. Inst.* 19-1 (1993);

Flannery and Beckett, "Abandoned Well Regulatory Initiatives: An Examination of Recently Enacted Legislation in the Easter United States," 14 *East. Min. L. Inst.* 20-1 (1993);

Mitchell, "A Duty to Plug--The Deep Pocket Theory," 9 *Eastern Min. L. Inst.* ch. 20 (1988);

Douglass, "The Obligations of Lessees and Others to Plug and Abandon Oil and Gas Wells," 25 *Sw. Legal Fdn. Oil & Gas Inst.* 123 (1974).

Harmeyer v. Mason, 133 Ohio App. 3d 320, 727 N.E.2d 971, 153 O.&G.R. 43 (1999) extends the *Houser* rationale to the situation where the present lessee executed a new lease upon which there were located numerous Abandoned wells (*q.v.*) left by a former lessee. Under *Ohio Rev. Code § 1509.01(K)*, the present lessee was an owner who was statutorily responsible for properly plugging all wells on the leasehold.

State v. Wallace, 40 Ohio Misc. 29, 69 Ohio Op. 2d 228, 318 N.E.2d 883, 49 O.&G.R. 507 (Municipal Court of Hancock County, 1974), *appeal dismissed on procedural ground, 43 Ohio St. 2d 1, 330 N.E.2d 697 (1975)* , held unconstitutional as an illegal delegation of legislative authority a statute imposing criminal sanctions for failure to comply with an administrative order requiring the plugging of a well "which is or becomes incapable of producing oil and gas in commercial quantities."

Jarvis Drilling, Inc. v. Midwest Oil Producing Co., 626 N.E.2d 821, 129 O.&G.R. 9 (Ind. App. 1993) , deals with the liability of successive owners for the cost of plugging a well abandoned but not adequately plugged by the first of successive owners of a leasehold.

Houser v. Brown, 29 Ohio App. 3d 358, 505 N.E.2d 1021, 94 O.&G.R. 344 (1986) , held that a lease assignee became subject to a statutory duty to plug a well incapable of paying production by accepting an assignment of the lease on which the nonpaying well was located, and he could not relieve himself of that statutory duty by surrendering the lease to the lessor.

Marshall v. El Paso Natural Gas Co., 874 F.2d 1373, 105 O.&G.R. 532 (10th Cir. 1989) , noted by Osterhaus, "Oil and Gas Law: Using Tort Law to Police Oil and Gas Operations," *30 Washburn L.J. 163 (1990)*, affirmed a judgment awarding landowners compensatory and punitive damages for negligence in drilling and plugging a well on the land.

Pro Gas, Inc. v. Har-Ken Oil Co., 883 S.W.2d 485, 488-89, 129 O.&G.R. 219 (Ky. 1994) , held that the assignee of a lease acquired a statutory duty to plug oil and gas wells or to post bond to ensure the plugging of the well:

"As Pro Gas paid a substantial sum to receive its interest in the aforementioned leases, its argument that some of the acquired leases had been terminated or abandoned or a legal interest therein could not be acquired lacks substance and is a nondeterminative issue in this case. Thus, the axiom, 'caveat emptor' applies.

"... .

"The language of *KRS 353.590(6)* provides that a 'successor to the well operator shall post bond.'

"... Absent is any requirement that the successor actually operate the leases before the obligation begins ... .

"... Acquiring title to the lease, by design or otherwise, imposes a responsibility."

When the Railroad Commission expends its own funds to plug a well after the operator has filed for bankruptcy, the Commission's expenditures are entitled to be treated as an administrative expense and given priority in the bankruptcy proceeding. *In re American Coastal Energy, Inc., 399 B.R. 805 (S.D. Tex. 2009)* .

See also: *In re H.L.S. Energy Co., Inc., 151 F.3d 434 (5th Cir. 1998)* ; *Total Minatome Corp. v. Jack/Wade Drilling, Inc., 258 F.3d 385 (5th Cir. 2001)* .

Where the Railroad Commission expends its own funds to plug a well prior to the a working interest owner's filing a bankruptcy petition, the Commission may only recover by participating in the bankruptcy proceeding. *Strata Resources v. State, 264 S.W.3d 832* (Tex. App.--Austin 2008) .

Where the Railroad Commission expends its own funds to plug a well under Rule 14, the fact that the wells are given to the surface owner for use as injection wells does not diminish the liability of the working interest owners for the costs to plug the well. *Strata Resources v. State, 264 S.W.3d 832* (Tex. App.--Austin 2008) .

Road Runner Oil, Inc. v. Board of Oil, Gas & Mining, 2003 UT App 275, 76 P.3d 692, 158 O.&G.R. 578 , *cert. denied, 78 P.3d 987 (Utah 2003)* , analyzed Board rules regarding the ability of an operator to suspend or delay the statutory obligation to plug an abandoned well. The court upheld the Board's decision not to allow the further delay in the plugging of the wells because there was substantial evidence in the record to support the Board's conclusion that the wells were not potentially viable as producers. *76 P.3d at 695* , applying *Utah Admin. Code R649-3-36(1) et seq.*

Pitch Energy Corp., 169 IBLA 267, 272-73 (2006) found that former federal oil and gas lessees who had been recorded title owners at one time might be responsible for plugging and abandonment costs even though they had assigned their interests to third parties. *See also Petroleum, Inc., 161 IBLA 194 (2004)* , *aff'd sub nom*, Monahan v. United States Department of the Interior, No. 04-CV-205-J (D. Wyo. May 17, 2005).

Anderson Oil Co., 156 IBLA 212 (Feb. 6, 2002) analyzed the federal regulatory program for the plugging of abandoned wells on federal oil and gas leases, imposing plugging responsibility on a former federal lessee even though due to some boundary line changes the wells were no longer on the federal lease.

For a more complete discussion of the various types of statutory schemes relating to the plugging of abandoned wells, see B. Kramer & P. Martin, *The Law of Pooling and Unitization § 3.01[2]* (3d ed. LexisNexis Matthew Bender).

See also: Rule 14.

PNOC The Philippines National Oil Company (*q.v.*).

POD (Plan of development) A term used to describe a plan of development and/or operational segment relating to a federal Coal bed methane (CBM) (*q.v.*) lease. *National Wildlife Federation, 170 IBLA 240, 242 (2006), 169 IBLA 146 (2006)* .

See Yates Petroleum Corp., 176 IBLA 144 (2008) (discusses two separate PODs in Wyoming).

See also: Environmental Assessment; Environmental Impact Statement; Finding of No Significant Impact; Resource Management Plan.

POGG power The "Peace, Order and Good Government" or residual power of the Canadian Parliament. *See* Richardson and Quigley, "The Resources Industry, Foreign Ownership and Constitutional Methods of Control," *39 Sask. L. Rev. 92* (1974-75).

POGO plan A plan for financing oil and gas exploration developed primarily for use in financing offshore exploration. The basic form is corporate and the investor receives shares of capital stock and subordinated convertible debentures of a new subsidiary corporation.

"A 'POGO' type fund became somewhat popular a few years ago and typically involves a major or quasi-major oil company with participations in offshore oil and gas leases contributing these leases to a new corporation. The new corporation then raises funds for drilling by a public offering. The concept was that if the oil and gas operations were successful, the separate drilling fund corporation would at some point merge into a large public oil company, usually the affiliate of the drilling fund corporation. This concept was a result of some investment banker's imagination in seeking different ways to raise capital primarily to finance expensive offshore oil and gas activities." Bean, "Entity Selection--An Experience in Alchemy--A Comparison of Corporations, Partnerships, and Joint Ventures," 30 *Sw. Legal Fdn. Oil & Gas Inst.* 363, 365 (1979).

For other discussions of the POGO plan, see the following:

Record, *Recent Developments in Exploration Financing*, 24 Sw. Legal Fdn. Oil & Gas Inst. 111, 123 (1973);

Collins, *Recent Developments Affecting Investors in Oil and Gas*, 22 Tulane Tax Inst. 55, 77 (1973).

See also Drilling fund; PLATO.

Point One percentage point of interest in production. For example, a royalty of 121/2% is sometimes referred to as 121/2 points. Albrecht v. Imperial Oil Ltd., 21 W.W.R. 560, *7 O.&G.R. 739* (Alberta Supreme Court, 1957) .

Point of royalty settlement The place approved by the Bureau of Land Management or the Minerals Management Service for onshore or OCS leases, respectively, for the determination of the quantity and quality of oil or unprocessed gas for purposes of royalty computation. 30 C.F.R. §§ 206.103, 206.154, commented on in *53 Fed. Reg. at 1206 and 1255* (Jan. 15, 1988).

Political risk "The term political risk is used here to mean both the danger of political and financial instability within a given country and the danger that government action (or inaction) will have negative impacts on the cashflow-generating capacity of a project. Insurrections, prolonged strikes, suspensions of foreign-exchange payments/enforced rescheduling of foreign debts or nationalization of oil and gas assets could all have potentially disastrous impacts on the ability of a project to retire a lender's debts. In certain countries--usually those most stable politically and economically--banks will be willing to assume country risk for project-finance transactions. In such circumstances political risk is not really an issue. Banks do, however, add together all their exposures to a given country and they are careful to avoid exceeding a preset 'country limit.' This limit is likely to be reduced as a country's condition

worsens." S. Mills, "Project Financing of Oil and Gas Field Developments: The Banker's View," [1993] 11/12 *OGLTR* 359, 363.

Political risk insurance Insurance designed to protect investors in eligible projects in developing countries against certain specific political risks. *See* Chalmers, "Political Risk in Latin American Investments," Int'l Oil, Gas & Mining Development in Latin America, Paper No. 2, 2-6 (Rocky Mt. Min. L. Fdn. 1994).

See also Overseas Private Investment Corporation (OPIC).

Political risk loan A form of Project financing (*q.v.*) in which the field's sponsors guarantee all commercial risks but the banks take the political risks of expropriation, changes in tax and royalty, and depletion controls. *See* Adamson, "North Sea Financing--A Commercial Banker's View," in International Bar Ass'n, *Proceedings of the Energy Law Seminar* (organized by the Committee on Energy and Natural Resources, Section on Business Law) Topic N, Paper 1 (1979).

For a discussion of national programs of investment insurance against political risks, see the following:

El Sheikh, *The Legal Regime of Foreign Private Investment in the Sudan and Saudi Arabia* 158 *et seq.* (1984);

Zakariya, "Insurance Against the Political Risks of Petroleum Investment," 4 *J. of Energy & Natural Resources Law* 217 (1986).

Polymerization A process whereby light hydrocarbon molecules are combined to form a high octane gasoline blending stock. The reaction is produced by the use of high pressures and temperatures in the presence of a catalyst.

Pontoon A hollow buoyancy tank used to support a semi-submersible rig, barge or other structure.

Pool (1) (Noun). An underground reservoir containing or appearing to contain a common accumulation of oil and natural gas. A zone of a structure which is completely separated from any other zone in the same structure is a pool. *Ore. Rev. Stat. § 520.005*; *Wash. Rev. Code § 78.52.010(16)*. An underground accumulation of petroleum in a single and separate natural reservoir characterized by a single pressure system so that production of petroleum from one part of the pool affects the reservoir pressure throughout its extent. A pool is so bounded by geologic barriers that it is effectively separated from other pools that may be present. Buckley, *Petroleum Conservation* 80 (Am. Inst. of Mining & Metallurgical Engineers, 1951).

This definition was quoted in *Trees Oil Co. v. State Corporation Comm'n, 105 P.3d 1269 (Kan. 2005)* . The court concluded that for purposes of the unitization act, the definition of "pool" properly encompasses a single pressure system (via commingled oil and gas well formations) where production from one part of the pool affects the reservoir pressure throughout the pool. In 2004, the Kansas legislature revised the definition to read: "(b) 'Pool' means an underground accumulation of oil and gas in one or more natural reservoirs in communication so as to constitute a single pressure system so that production from one part of the pool affects the pressure throughout its extent. ..." *Kan. Stat. Ann. § 55-1302*. The court concluded that the revision represented nothing more than a clarification of the definition consistent with the Kansas Corporation Commission's interpretation reflected in this case. *See* Ernest E. Smith, *The Kansas Unitization Statute: Part II, 17 Kan. L. Rev. 133, 137 (1968),* which the court found persuasive.

State of Texas v. Secretary of the Interior, 580 F. Supp. 1197, 80 O.&G.R. 573 (E.D. Tex. 1984) , concluded that "*pool* may be construed to include a stratigraphic interval containing one or more reservoirs." Thus, under this construction, the term "pool" is more encompassing than is the term "reservoir." For purposes of Section 8 lands [see Section 8 Lease], the term "pool" was "construed as referring to hydrocarbon-prone area which may or may not be subject to cross migration."

See also Allocated pool; Commercial oil pool; Common pool; Common pool problem; Common source of supply; Confidential pool; Designated pool; Field; Non-confidential pool; Oil pool; Reservoir.

(2) (Verb) To combine two or more tracts of land into one unit for drilling purposes. This may be accomplished voluntarily, or through compulsion.

See generally B. Kramer & P. Martin, The Law of Pooling and Unitization (3d ed. LexisNexis Matthew Bender).

See also Compulsory pooling; Pooling; Well spacing.

Pooled unit (1) A unit formed by the bringing together of separately owned interests under the provisions of pooling clauses of leases or of some special agreement. *See Whelan v. Manziel, 314 S.W.2d 126, 9 O.&G.R. 390* (Tex. Civ. App. 1958, error ref'd n.r.e.) , where a pooled unit is distinguished from a proration unit.

(2) A Forced pooling unit (*q.v.*) established by a compulsory pooling order. For cases distinguishing a forced pooling unit from a spacing unit, see Spacing unit.

Bennion v. Graham Resources, Inc., 849 P.2d 569, 122 O.&G.R. 597 (Utah 1993) , held that a nonconsenting interest owner, *i.e.*, an owner "who refuses to agree to bear his proportionate share of the costs of the drilling and operation of the well in a drilling unit," had no enforceable right to require an accounting and payment of a share of oil and gas production proceeds in the absence of a pooling arrangement, voluntary or involuntary.

Pooling A term frequently used interchangeably with Unitization (*q.v.*) but more properly used to denominate the bringing together of small tracts sufficient for the granting of a well permit under applicable spacing rules, as distinguished from unitization, which term is used to describe the joint operation of all or some portion of a producing reservoir. Pooling is important in the prevention of drilling of unnecessary and uneconomic wells, which will result in physical and economic waste. *See* Hoffman, *Voluntary Pooling and Unitization* (1954).

The term pooling is also used occasionally to describe cross-conveyances of mineral or royalty interests by separate owners or conveyances of such interests to a trustee for the purpose of sharing the income from production of wells drilled anywhere on the consolidated tract. *See Carlson v. Tioga Holding Co., 72 N.W.2d 236, 4 O.&G.R. 1755 (N.D. 1955)* .

The former usage of the term relates to the working interest alone or to the working and non-operating interests; the latter usage typically relates to the non-operating interests only. On pooling generally, see Treatise Ch. 9.

The definition in this Manual was cited in *Whelan v. Manziel, 314 S.W.2d 126, 9 O.&G.R. 390, 396* (Tex. Civ. App. 1958, error ref'd n.r.e.) .

"The term 'pooling,' the present participle of the verb 'pool,' is used to denominate the bringing together of small tracts of land for the granting of a well permit within an established drilling unit." *Union Pacific Resources Co. v. Texaco, Inc., 882 P.2d 212, 216, 133 O.&G.R. 549 (Wyo. 1994)* (citing the Manual of Terms).

Kansas City Royalty Co. L.L.C. v. Thoroughbred Associates, L.L.C., 215 F.R.D. 628, 632 (D. Kan. 2003) ("While frequently used interchangeably, the terms 'pooling' and 'unitization' refer to separate procedures. Pooling involves the combination of several small tracts of land to meet the spacing requirements for a single well. Unitization refers to field-wide or partial field-wide operation of a producing reservoir which involves multiple adjoining land tracts.").

See also Communitization; Compulsory pooling; Consent party; Contract theory of pooling; Cross-assignment; Cross-conveyance theory of pooling; Cross-transfer of royalties; Equitable pooling; Good faith pooling; Landowners' royalty pool; Pooling by a drilling and spacing unit; Pooling by the borehole; Unitization.

Pooling agreement An agreement bringing together separately owned interests for the purpose of obtaining a well permit under applicable spacing rules. *See* Treatise §§ 920-*921.19*.

Pooling by a drilling and spacing unit Pooling of an entire drilling and spacing unit for all formations, as distinguished from Pooling by the borehole (*q.v.*) which is limited and designed to cover only one borehole and the production from those formations tested or established to be productive of hydrocarbons within the unit.

Pooling by the borehole Pooling limited and designed to cover only one borehole and the production from those formations tested or established to be productive of hydrocarbons within the unit, as distinguished from pooling of an entire drilling and spacing unit for all formations. *See* the following cases:

SKZ, Inc. v. Petty, 782 P.2d 939, 107 O.&G.R. 63 (Okla. 1989) (reversing Commission orders allowing owners of leasehold interests to participate in increased density wells even though such owners or their predecessors had previously elected not to participate in the first test well in the unit; Commission lacked authority to force pool by the wellbore instead of force pool by the drilling and spacing unit);

Inexco Oil Co. v. Corporation Comm'n, 767 P.2d 404, 103 O.&G.R. 113 (Okla. 1988) , *cert. denied sub nom. Ward Petroleum Corp. v. Louisiana Land & Exploration Co., 490 U.S. 1040,* (1989) (order forced-pooled the entire unit, not just the well-bore);

Amoco Production Co. v. Corporation Comm'n, 752 P.2d 835, 97 O.&G.R. 604 (Okla. App. 1987, *cert. denied and opinion approved by Sup. Ct. for publication*), (holding that the Commission was without authority to force pool by the well bore. This was consistent with the view of Division I of the Court of Appeals in *Amoco Production Co. v. Corporation Comm'n, 751 P.2d 203, 97 O.&G.R. 503* (Okla. App. 1986, *opinion adopted as the opinion of the Sup. Ct.,* 1988) (invalidating a Corporation Commission order which declared that a prior forced pooling order was limited to only one borehole, and hence non-consenting owners were entitled to a second election to participate in the drilling of a second well on the spacing unit).

See also the following papers:

Correll, "Oil and Gas: *Unit v. Borehole Pooling:* Where Do We Stand After *Amoco Production Co.* And Its Progeny?" *42 Okla. L. Rev. 663 (1989);*

Kelkar, "Forced Pooling By Well Bore: Just and Reasonable?" *23 Tulsa L.J. 681 (1988);*

"Oil and Gas: Participation in Increased Density Drilling in an Oil and Gas Spacing Unit by an Original Nonparticipating Party," *39 Okla. L. Rev. 123 (1986);*

Dunmire, "Oklahoma Forced Pooling," *Institute on Oil and Gas Conservation Law and Practice* (Rocky Mt. Min. L. Fdn. 1985).

See also Borehole.

Pooling clause A lease clause authorizing a lessee to "pool" or join the particular leased premises with other leases for the purpose of aggregating a tract sufficient for a well permit under applicable spacing regulations. Also, a lease clause authorizing the lessee to unitize the leased premises with other parcels.

A typical pooling clause provides as follows:

"Lessee is granted the right, power and option at any time or times to pool and combine the land covered by this lease or any portion thereof with any other land, lease or leases in the vicinity thereof when in the Lessee's judgment it is necessary or advisable to do so. Such pooling may include all oil, gas and other minerals or may be limited to one or more such substances and may extend to all such production or may be limited to any one or more zones or formations."

The clause will typically provide further for (1) a maximum size of the unit to be formed, (2) notification to the lessor of the formation of the unit, (3) provision for apportionment of royalties, and (4) the effect of production or other operations within the unit upon the lease, both as to the portion of the leased premises included within the unit and as to the portion of the leased premises excluded from the unit. Considerable care needs to be exercised in the drafting of the latter provision or the lessor may find that inclusion of a small portion of a leasehold in a unit will suffice to excuse payment of delay rentals on the substantial portion of the leasehold excluded from the unit and that production on the unit, from which the lessor receives only a nominal payment, will suffice to keep the entire leasehold alive after the expiration of the primary term.

On the contents of pooling clauses, see Treatise §§ 668-*670.8*.

See also All or nothing clause; Anti-dilution clause; Non-unitization clause; Pugh Clause.

Pooling method A term applied to a Work-back valuation method (*q.v.*) employed to determine royalties when a gas producer makes direct sales of gas at locations distant from the wellhead or employs marketing companies directly affiliated with the producer. "Under this method, gas sources are pooled into geographic regions sharing common market characteristics, and sales are made from these geographic pools. The total sales from the pool, less transportation costs from the pool to points of sale, are aggregated, and a weighted average price for all gas sold from the pool (net of transportation downstream of the pooling point) is determined and allocated back to all wells contributing to the pool. This results in a net weighted average pooled price allocated back to the wells that contributed to the pool. Royalty is then paid on the price allocated back to each well, net of transportation from the well to the pooling point." Hardwick and Hayes, "Gas Royalty Issues Arising From Direct Gas Marketing," 43 *Sw. Legal Fdn. Oil & Gas Inst.* 11-1, 11-11 (1992).

Pooling order An order of a regulatory commission imposing compulsory pooling *See* Treatise §§ 940-*948*.

Pool-of-capital doctrine The name given the rule that a person who contributes services or property to the exploration or development of a mineral property in exchange for an interest in the mineral property does not have taxable income on the receipt of the mineral interest. The taxpayer is deemed to have made a nontaxable investment in

the venture rather than a taxable sale of goods or services. *See* Glancy, "Compensating Key Employees in the Oil and Gas Business," 33 *Sw. Legal Fdn. Oil & Gas Inst.* 369, 371 (1982).

See also the following:

Zuhone v. Comm'r, 1988-142, 100 O.&G.R. 635 (Tax Court 1988) , *aff'd, 883 F.2d 1317, 105 O.&G.R. 630 (7th Cir. 1989)* (discussing much of the authority on the doctrine and concluding that the taxpayer had failed to carry the burden of proof to establish his right to rely on the doctrine);

Burke, "Receipt of Property for Services: The Pool of Capital Doctrine," 43 *Sw. Legal Fdn. Oil & Gas Inst.* 15-1 (1992);

O'Daniel, "Muddy Waters in the Pool of Capital: ZuHone and the Abolition of the Doctrine," *70 Tex. L. Rev. 243 (1991);*

Schwidetzky, "The Pool of Capital Doctrine: A Peace Proposal," *61 Tul. L. Rev. 519 (1987);*

Curnow, "The Evolution of the Mineral Pool of Capital Investment Doctrine," *39 Okla. L. Rev. 627 (1986);*

Morgan, " *Revenue Ruling 83-46* : Taxing the Service Contributor to Oil Well Development--The IRS Abandons the Pool of Capital Doctrine," *22 Houston L. Rev. 813 (1985);*

Dumas, "The Pool of Capital Doctrine in Oil and Gas Taxation: Its Status Under Revenue Ruling 83-46," *52 Tenn. L. Rev. 291 (1985);*

Crichton, "Planning Multi-Party Operations: A Primer on Pool of Capital Doctrine," 30 *L.S.U. Min. L. Inst.* 360 (1984);

Parker, "Contribution of Services to the Pool of Capital," 35 *Sw. Legal Fdn. Oil & Gas Inst.* 313 (1984).

See also Drilling Fund.

Poor Boy *See* Shoestringer.

POP contract A Percentage of proceeds contract *(q.v.).*

Popping The blowing of natural gas into the air. In the 1930's this was a common practice with respect to sour gas and casinghead gas, after the liquid constituents had been removed, because there was no market for the gas. *See* Cheek, "Legal History of Conservation of Gas in Texas," in Am. Bar Assn., *Legal History of Conservation of Oil and Gas* 269, 278 (1938).

See also Flaring of gas.

Pore space *See* Saturated hydrocarbon pore space.

Porosity of rock The relative volume of the pore spaces between mineral grains as compared to the total rock

volume. This porosity measures the capacity of the rock to hold oil, gas, and water. The usual range of porosities is from 15 to 20 per cent, but they may be as high as 43 per cent or higher in highly fractured and cavernous limestones.

The definition in this Manual of Terms was quoted in *Vera Kochergan, GFS (O&G) 1987-89, 99 IBLA 194* (Interior Board of Land Appeals, Oct. 13, 1987) (discussing methods of measuring porosity); *Marathon Oil Co. v. Corporation Comm'n, 1994 OK 28, 910 P.2d 966, 135 O.&G.R. 549* ; and *Browning v. Luecke, 38 S.W.3d 625, 634, 149 O.&G.R. 127* (Tex. App.--Austin 2000, writ denied) .

Port Acres case A term used to describe *Halbouty v. Railroad Comm'n, 163 Tex. 417, 357 S.W.2d 364, 16 O.&G.R. 788 (1962) , cert. denied sub nom. Dillon v. Halbouty, 371 U.S. 888 (1962)* .

Possession *See* Adverse possession; Ejectment.

Possessory interest This term is defined by the *Restatement of Property § 7* (1936) as follows:

"A possessory interest in land exists in a person who has

"(a) a physical relation to the land of a kind which gives a certain degree of physical control over the land, and an intent so to exercise such control as to exclude other members of society in general from any present occupation of the land; or

"(b) interests in the land which are substantially identical with those arising when the elements stated in Clause (a) exist."

On the effect of the classification of an interest in land as possessory or nonpossessory upon such remedies as ejectment and partition, see Treatise § 210.2.

Possessory remedy *See* Ejectment; Partition; Trespass.

Possibility of reverter The property interest left in a grantor or lessor after a grant of land or minerals subject to a special limitation. Upon the occurrence of the event specified in the special limitation, the granted estate reverts to the grantor or lessor without the necessity of affirmative re-entry.

In a limited number of cases, however, it has been held that the interest of the lessee has not terminated despite occurrence of the event specified in the clause of special limitation. *See* Williams, "Primary Term and Delay Rental Provisions," 2 *Sw. Legal Fdn. Oil & Gas Inst.* 93, 115 *et seq.* (1951); Treatise § 604.7.

The Delay rental clause (*q.v.*) of the Unless lease (*q.v.*) contains such a special limitation in that the estate granted is to revest in the lessor at any anniversary date of the lease during the primary term if there is then no production or if drilling operations have not then been commenced unless delay rentals are paid.

To be compared is the delay rental clause of an Or lease (*q.v.*), which has the effect of creating a Power of termination (*q.v.*) in the lessor rather than a possibility of reverter. Upon the happening of the event stated by the clause of limitation, the estate is vested in the owner of the possibility of reverter automatically; hence equitable considerations are said to be irrelevant. *Baldwin v. Blue Stem Oil Co., 106 Kan. 848, 189 P. 920 (1920)* .

In the law of many jurisdictions, the habendum clause of a lease creates two possibilities of reverter: (1) upon the expiration of the primary term without production [absent a Savings clause (*q.v.*)], and (2) upon the cessation of production after the primary term.

"The 'possibility of reverter' is the real property term of art for what the grantor owns as a future interest in a determinable fee grant: it is the grantor's right to fee ownership in the real property reverting to him if the condition terminating the determinable fee occurs." *Luckel v. White, 819 S.W.2d 459, 464, 115 O.&G.R. 121 (Tex. 1991)* . A mineral deed reserving a possibility of reverter is interpreted using the same canons of construction applied to any mineral deed. *Howard v. Arhopulos, 2001 Tex. App. LEXIS 3238* (Tex. App.--Houston [1st Dist.] May 17, 2001, writ denied) (unpublished opinion). In *Howard*, the court found that the limitation was not triggered when the grantee mortgaged one of three tracts included in the deed, because the language of the limitation required a mortgaging of the entire estate, meaning all three tracts.

See also North Finn v. Cook, 825 F. Supp. 278, 125 O.&G.R. 613 (D. Wyo. 1993) (holding that: (a) a farmor's Back-in working interest (*q.v.*) under a Farmout agreement (*q.v.*) is a possibility of reverter which is alienable and exempt from the Rule against Perpetuities; (2) the statutory lien under *Wyo. Stat. § 29-3-103* for work or materials supplied the owner of the working interest in oil, gas or other wells did not attach to the farmor's back-in interest since there was no agreement by the farmor-reversioner to pay costs; and (3) even if the back-in interest was lienable, its owner was not served in the foreclosure proceeding and was not named in the foreclosure order, and hence it was not extinguished in the proceeding).

For a discussion of the historical origins of the possibility of reverter, see Kramer, "The Temporary Cessation Doctrine: A Practical Response to an Ideological Dilemma," *43 Baylor L. Rev. 519 (1991).*

See also Estate; Fee simple determinable.

Postage stamp rate A uniform rate for transportation of gas which does not vary on the basis of the distance the gas is transported. W. Mogel and J. Mann, *Natural Gas: Current Federal and State Developments* 113 (1987).

An all-inclusive fee for the transportation of natural gas between points in a Market Area Grid as opposed to a distance based fee structure. *Mobil Oil Corp. v. Federal Energy Regulatory Commission, 886 F.2d 1023, 1032 (8th Cir. 1989)* .

In Parry v. Amoco Production Co., No. 94*CV105, 2003 WL 23306663* (Colo. Dist. Ct. Oct. 6, 2003) (not reported in P.3d), the court approved a "postage stamp" method for royalty calculation. By "postage stamp," the parties and court referred to "a procedure whereby a fee was established for each set of GTC [gathering, treatment and compression] facilities and deducted from royalty payments at a uniform charge per Mcf. for all wells on the system." *See also* Owen L. Anderson, "Royalty Valuation: Calculating Freight in a Marketable-Product Jurisdiction," 20 *Energy & Min. L. Inst.* 10-1, 342-43 (1999).

Posted field price The announced price at which a crude oil purchaser will buy the oil (of specified quality) from a field. At one time, the price was actually announced by a statement posted in the field. Now, the announcement is usually made in the newspapers.

It is not always clear that posted field price is a proper measure of the "value" of oil produced. *See, e.g., Bass Development Corp. v. Mississippi State Tax Commission, 271 So. 2d 432, 44 O.&G.R. 167 (Miss. 1973)* , dealing with a contract whereby the ultimate purchasers of oil agreed to pay lessors an additional twenty-five cents per barrel of royalty oil in consideration of waiver of lessors' right to take royalty in kind, the agreement providing that if the posted price should exceed $2.00 per barrel the contract would terminate unless the former party elected to continue it in effect.

The court concluded that severance tax was payable on the payment of twenty-five cents per barrel while declaring that the value of the working interest oil remained the posted field price. In other words, working interest oil was viewed as having a value of $2. per barrel and royalty oil as having a value of $2.25 per barrel for severance tax purposes. One may speculate why a purchaser of oil would be willing to pay lessors a premium of twenty-five cents per barrel of royalty oil for waiving the right to take royalty in kind; was it because the royalty owner would have been able to sell the oil at a higher price than the posted field price, thus evidencing its artificial character?

See also Posted price.

Posted price The term "Posted price" is defined in 10 C.F.R. § 212.31 (1980) as "a written statement of crude petroleum prices circulated publicly among sellers and buyers of crude petroleum in a particular field in accordance with historic practices, and generally known by sellers and buyers within the field."

" 'Posted price' means the price specified in publicly available posted price bulletins, offshore or onshore terminal postings, or other price notices net of all adjustments for quality (*e.g.,* API gravity, sulfur content, etc.) and location for oil in marketable condition." 30 C.F.R. § 206.101, commented on in *53 Fed. Reg. at 1196* (Jan. 15, 1988). *See also* 30 C.F.R. § 206.151 (posted price of gas), commented on in *53 Fed. Reg. at 1244* (Jan. 15, 1988).

Syn.: Posted field price (*q.v.*).

Also, in the case of foreign production, a price fixed by government order on the basis of which royalties and taxes are assessed.

"A 'posted price' in the foreign oil industry traditionally has been a *public offering price by the seller, f.o.b. port of origin,* based on his assessment of the value of petroleum to him, in terms of replacement and opportunity costs, and its value to buyers around the world. While the posted price is by its very nature the most visible to the public, the competitively significant price is the *actual transaction price of oil delivered to refineries* in the consuming countries. It is an individually negotiated price. An unaffiliated refining company in, say, West Germany, is interested only in the net delivered price per barrel because this is the price which determines his competitive ability to sell refined products in his market area. Typically, various oil-producing firms will offer him a variety of deals designed to satisfy his requirements. Each proposal will involve a somewhat different package of attributes including for instance: a specified *type* of crude oil, an *f.o.b. price* per barrel at the port of origin, a *transportation charge* per barrel from that port or origin to a refinery, a *schedule of deliveries,* and specified *terms of payment.* In addition, a seller may suggest a variety of other features to make his proposal more attractive. These may include agreements to provide technical assistance, to make loans or extend special credits, to buy back surplus products from the refiner, or to provide a variety of quid pro quo's. Indeed, the number of different factors that may be involved in sellers' negotiations with the buyer is limited only by the ingenuity of the human mind." Jacoby, *Multinational Oil* 218 (1974).

Temp. Treas. Reg. § 150.4989-1(c)(8)(B) described posted price as "a written statement of crude oil prices constituting an offer to purchase oil at that price circulated publicly among sellers and buyers of crude oil in a particular field in accordance with historic practices. Although the formality of a printed price bulletin such as is published by major purchasers is not necessary for a price to be a valid posted price, the formality of a publicly circulated written notice is necessary. The requirement that the offer be in writing and publicly circulated eliminates oral offers and offers made only to specified producers. Accordingly, other than the published price bulletins of the type traditionally issued by major oil companies, written offers to purchase constitute a 'posted price' only if they are bona fide public offers of general applicability to crude oil producers in the field. For example, a letter from a purchaser to all crude oil producers in a field or in an area would constitute a posted price if the letter was a bona fide offer to purchase from all producers in that field or area. A written contract, of course, would not qualify as a posted price because it represents an agreement between a buyer and a specific producer, not a bona fide offer to purchase from all producers."

Osborn v. Department of Energy, CCH *Federal Energy Guidelines* P 26,475 (Temp. Emer. Ct. App. 1984), concluded that an offer by a potential buyer circulated to some, but not all, of the producers in the area of his operations was not a posted price within the meaning of Department of Energy regulations.

See also Adjusted posted price; Buyback oil; Expected third-party price; Flat sale of crude oil; Guaranteed sales price; International market price; Price; Realized price; Reference price; Tax reference price.

Posting As used in regulations of the Federal Power Commission, and of its successor, the Federal Energy Regulatory Commission, the term means "(a) making a copy of a natural-gas company's tariff and contracts available during regular business hours for public inspection in a convenient form and place at the natural-gas company's offices where business is conducted with affected customers and (b) mailing to each customer affected a copy of such tariff or part thereof at the time it is sent to the Commission for filing." 18 C.F.R. § 154.16 (1980).

Post-production costs A term which in a number of contexts must be distinguished from Production costs (*q.v.*) or from Production-related costs (*q.v.*).

Schroeder v. Terra Energy, Ltd., 223 Mich. App. 176, 565 N.W.2d 887, 890, 138 O.&G.R. 361 (1997) , *appeal denied, 458 Mich. 863, 587 N.W.2d 638* , *reconsideration denied, 458 Mich. 863, 584 N.W.2d 588 (1998)* ("The term 'postproduction costs' refers to costs associated with making the natural gas marketable after the gas is severed or removed from the ground.").

Syn.: Subsequent-to-production costs.

Post sale analysis chart A chart prepared by the Bureau of Land Management (BLM) following an Outer Continental Shelf (OCS) lease sale to evaluate the high bid to determine whether it satisfies the statutory objective of return of fair market value. *See Kerr-McGee Corp. v. Watt, 517 F. Supp. 1209, 71 O.&G.R. 494 (D.D.C. 1981)* .

Syn.: Post sale matrix.

Post sale matrix *Syn.:* Post sale analysis chart (*q.v.*).

Pot *See* Catchpot; Drip pot.

Potash enclave An area "where potash ore is known to exist in sufficient thickness and quality to be mineable under existing technology and economics." These areas are subject to federal regulation, entitled "Oil, Gas & Potash Leasing and Development Within the Designated Potash Area of Eddy & Lea Counties, New Mexico," *51 Fed. Reg. 39,425 (1986)* . The regulatory scheme is discussed in *IMC Kalium Carlsbad, Inc. v. Interior Board of Land Appeals, 206 F.3d 1003 (10th Cir. 2000)* ; *IMC Kalium Carlsbad, Inc., 170 IBLA 25 (2006)* .

See Intrepid Potash-- New Mexico, LLC, 176 IBLA 110 (2008) (affirms BLM decision to issue APD's in potash enclave);

IMC Kalium Carsbad, Inc., 170 IBLA 25 (2006) .

See also Langbeinite; Van Sickle Standard.

Potential *See* Field potential; Wellhead absolute open flow (whaof) potential; Well potential.

Potential hydrocarbon accumulations A term used in the federal regulations to describe a requirement for inclusion of a lease in a unit area for lands located on the Outer Continental Shelf. 30 C.F.R. § 250.50(b) (1987). In *Samedan Oil Corp., 173 IBLA 23, 2007 IBLA LEXIS 57 (IBLA 2007)* , the Board determined that the term requires the federal oil and gas lessee to prove more than the potential for hydrocarbon accumulations in order to have leases remain in a unit. Instead, a lessee must prove that a potential hydrocarbon-bearing geologic structure has been reasonably delineated on the basis of existing geophysical data but that the reservoir itself has yet to be proved.

Potential value *Syn.:* Speculative value (*q.v.*). *See* Daggett, *Mineral Rights in Louisiana* 388 (rev. ed. 1949).

Potentiometric surface An imaginary surface representing the static head of ground water and defined by the level to which water will rise in a tightly cased well. *Grynberg Petroleum Co., 152 I.D. 300 (2000),* quoting from "The Federal Glossary of Selected Terms: Subsurface-Water Flow and Solute Transport," Department of Interior, U.S. Geological Survey, Office of Water Data Coordination (Aug. 1989). The term is used by BLM officials in determining how a federal oil and gas well is to be plugged in order to avoid groundwater pollution.

Potestative condition A condition "which makes the execution of the agreement depend on an event which it is in the power of the one or the other of the contracting parties to bring about or to hinder." *La. Civ. Code Art. 2024* (1977).

Other conditions are described as casual or mixed. A casual condition "depends on chance, and is in no way in the power either of the creditor or of the debtor." *Id.,* Art. 2023. A mixed condition "is one that depends at the same time on the will of one of the parties and on the will of a third person, or on the will of one of the parties and also on a casual event." *Id.,* Art. 2025.

An obligation is null that has been contracted on a potestative condition on the part of him who binds himself (Art. 2034), but this provision is limited to potestative conditions which make the obligation depend solely on the exercise of the obligor's will; "if the condition be, that the obligor shall do or not do a certain act, although the doing or not doing of the act depends on the will of the obligor, yet the obligation depending on such condition, is not void." Art. 2035.

Power *See* Exclusive leasing power; Statutory power in trust; Suspension of absolute power of alienation, rule against.

Power coupled with an interest A power given an agent having an interest in the affected property over an interest of the principal in the same property. *See* Treatise § 324.2.

Power gas A low-energy gaseous fuel, generally produced from coal, whose principal combustible components (carbon monoxide and hydrogen) are generally diluted by air. Also called producer gas, it differs from Coal gas (*q.v.*) in that the energy content is only about 150 to 250 Btu per standard cubic foot. Because of its low energy content, power

gas cannot be transported economically and is generally burned at the production site for the generation of electricity. *See* Hammond, Metz, and Maugh, *Energy and the Future* 164 (1973).

Power of re-entry *See* Power of termination.

Power of resumption In some of the states of Australia, the power of the Crown to resume privately owned land containing minerals, on payment of compensation. *See* Lang and Crommelin, *Australian Mining and Petroleum Laws* 159 (1979).

Power of termination The power or right of a grantor or lessor to re-enter the estate granted or leased upon the occurrence of a stated event or breach of a condition and terminate the granted or leased estate. Affirmative re-entry or its equivalent (an action at law) is required before the estate is terminated, whereas when an estate is granted subject to a special limitation [the grantor or lessor retaining a Possibility of reverter (*q.v.*)] the estate granted is automatically terminated upon the occurrence of the stated event.

The delay rental clause of the Or lease (*q.v.*) provides for a power of termination rather than a possibility of reverter [which is found in the delay rental clause of an Unless lease (*q.v.*)]. The power of termination is considered a forfeiture clause and equity may grant relief against the forfeiture under some circumstances; in the case of a special limitation, the equities are usually considered irrelevant and relief against the automatic reversion of the estate is rarely if ever available. *See* Walker, *The Nature of the Property Interests Created by an Oil and Gas Lease in Texas, 8 Tex. L. Rev. 483, 536 -540 (1930).*

For a discussion of the constructional preference for a covenant over a condition (and the consequences thereof), see *Rogers v. Ricane Enterprises, Inc., 772 S.W.2d 76, 79, 108 O.&G.R. 331 (Tex. 1989)*, in the entry for Covenant. On subsequent appeal in that case, the court of appeals concluded that the lease assignment in question had terminated under the Devotional limitation doctrine (*q.v.*). *Rogers v. Ricane Enters., Inc., 852 S.W.2d 751, 130 O.&G.R. 391* (Tex. App.--Amarillo 1993), *rev'd and remanded, 884 S.W.2d 763, 130 O.&G.R. 414 (Tex. 1994)*, *on remand, 930 S.W.2d 157, 135 O.&G.R. 178* (Tex. App.--Amarillo 1996).

But cf. Jelen & Son, Inc. v. Kaiser Steel Corp., 807 P.2d 1241, 113 O.&G.R. 413 (Colo. App. 1991) ("conditions subsequent in deeds will be given effect when they are clearly created. Although no precise form of words is necessary to create a condition, the express terms or clear implication must leave no doubt as to the grantor's intention.").

Syn.: Right of re-entry; Power of re-entry; Re-entry clause; Grant on condition subsequent.

See also Forfeiture clause; Termination of lease.

Powerplant and Industrial Fuel-Use Act of 1978 Pub. L. No. 95-620 (Nov. 9, 1978). The major provisions of this Act related to:

(1) restrictions on the use of oil and natural gas for new and existing power plants and major fuel-burning installations;

(2) an investigation and study of the alternative national uses of coal to meet the nation's energy requirements consistent with national policies for the protection and enhancement of the quality of the environment and for economic recovery and full employment.

For a symposium on this Act, see *29 U. Kan. L. Rev. 297 et seq.* (1981).

PPA Natural Gas Price Protection Act (*q.v.*).

PPROA The Panhandle Producers and Royalty Owners Association.

Practically impenetrable substance *See* Impenetrable substance.

Practice *See* Good oil field practice; Good production practice (GPP).

Preemption The doctrine that on certain matters federal laws preempt or take precedence over state laws. *See, e.g., Lone Star Gas Co. v. Railroad Commission, 798 S.W.2d 888, 117 O.&G.R. 152* (Tex. App.--Austin 1990) (Railroad Commission's ratable take and proration rules governing the natural gas industry held to be prempted by Natural Gas Act and Natural Gas Policy Act of 1978), *rev'd sub nom. Railroad Comm'n v. Lone Star Gas Co., 844 S.W.2d 679, 117 O.&G.R. 168 (Tex. 1992)* (sustaining Railroad Commission Rules 30 and 34 regulating special marketing programs against claims of preemption by the Natural Gas Act or the Natural Gas Policy Act of 1978);

Wagner v. Chevron Oil Co., 321 F. Supp. 2d 1195, 159 O.&G.R. 320 (D. Nev. 2004) (Geothermal Leasing Act does not preempt state law claims by private mineral owner that her interests were included in a federal unit that produced geothermal resources);

Colorado Interstate Gas Co. v. State of Oklahoma ex rel Comm'rs of the Land Office, 760 F. Supp. 1466, 115 O.&G.R. 618 (W.D. Okla. 1991) (holding that Oklahoma statutes purporting to impose upon gas purchasers, rather than the gas producers, the liability for making royalty payments to the royalty owners were not preempted by the Natural Gas Act (*q.v.*) and the Natural Gas Policy Act (NGPA) (*q.v.*).

Coosewoon v. Meridian Oil Co., 25 F.3d 920, 927, 129 O.&G.R. 490 (10th Cir. 1994) ("given the pervasive federal regulation concerning Indian oil and gas leases which protects Indian interests, and lack any state interests justifying the application of Oklahoma law, Plaintiffs' state law cause of action for interest under § 570.10 and § 581.10 is preempted.").

The Natural Gas Act (NGA) (*q.v.*) has been found to preempt state regulation of certificated pipelines in various contexts. *See, e.g.:*

Schneidewind v. ANR Pipeline Co., 485 U.S. 293, 108 S. Ct. 1145, 99 L. Ed. 2d 316 (1988) (state regulation of pipeline's ability to issue long-term bonds preempted by NGA);

Islander E. Pipeline Co., LLC v. Connecticut Dep't of Envtl. Prot., 467 F.3d 295, 305, 163 O.&G.R. 159 (2d Cir. 2006) (NGA preempts state regulation of pipeline location);

National Fuel Gas Supply Corp. v. Public Serv. Comm'n, 894 F.2d 571 (2d Cir. 1990) (NGA preempts New York environmental regulation of FERC-certificated pipeline);

Weaver's Cove Energy, LLC v. Rhode Island Coastal Resources Management Council, 583 F. Supp. 2d 259 (D.R.I. 2008) , aff'd, 589 F.3d 458 (1st Cir. 2009) (NGA and implementing regulations preempt local regulation of proposed

LNG facility);

AES Sparrows Point LNG, LLC v. Wilson, 589 F.3d 721 (4th Cir. 2009) (NGA does not preempt states from granting or denying water quality certifications under Section 401 of the Clean Water Act);

AES Sparrows Point LNG, LLC v. Smith, 470 F. Supp. 2d 586, 598 (D. Md. 2007) (NGA expressly preempts local regulation of LNG facility siting decision);

Islander E. Pipeline Co., L.L.C. v. Blumenthal, 478 F. Supp. 2d 289, 167 O.&G.R. 253 (D. Conn. 2007) (NGA preempts Connecticut permit scheme for wetlands development);

NE Hub Partners, L.P. v. CNG Transmission Corp., 239 F.3d 333, 153 O.&G.R. 121 (3rd Cir. 2001) (state regulatory process relating to FERC-certificated natural gas storage facility preempted by Natural Gas Act);

Northern Natural Gas Co. v. Munns, 254 F. Supp. 2d 1103 (S.D. Iowa 2003) (Iowa statute and regulations regarding environmental effects of interstate gas pipelines preempted by the Natural Gas Act);

Texas Midstream Gas Services, L.L.C. v. City of Grand Prairie, 2008 U.S. Dist. LEXIS 95991 (N.D. Tex.) , *aff'd, 608 F.3d 200 (5th Cir. 2010)* (Pipeline Safety Act *(q.v.)* does not preempt local zoning ordinance insofar as local ordinance does not impinge upon the Department of Transportation's exclusive right to regulate pipeline safety issues);

Rockies Express Pipeline LLC v. Indiana State Natural Resources Commission, 2009 U.S. Dist. LEXIS 87750 (S.D. Ind. Sept. 23, 2009) (challenge to Commission's right to review right-of-way location for FERC-certificated pipeline ripe for review because underlying issue is one of federal preemption which is a pure question of law);

Washington Gas Light Co. v. Prince George's County Council, 2012 U.S. Dist. LEXIS 31798 (D. Md. March 9, 2012) (Pipeline Safety Act does not preempt county zoning ordinance);

Washington Gas Light Co. v. Prince George's County Council, 2010 U.S. Dist. LEXIS 29281 (D. Md. Mar. 26, 2010) (under amendment to Natural Gas Act, Washington Gas Light is not subject to NGA preemption merely because it provides end-user service in multiple states).

The NGA, however, specifically incorporates state eminent domain law so that there is no preemption of state law regarding a pipeline's ability to enter upon land, prior to condemnation, to engage in preliminary examination and survey work before receiving the FERC certificate of public convenience and necessity. *15 U.S.C. § 717f(h). See Midwestern Gas Transmission Co. v. Fenimore, 2006 Tenn. App. LEXIS 131* (Tenn. Ct. App. Feb. 24, 2006) (unpublished opinion).

See generally B. Kramer & P. Martin, *The Law of Pooling and Unitization §§ 16.05, 24.04* (3d ed. LexisNexis Matthew Bender).

Preemption right *Syn.:* for Preferential right of purchase (*q.v.*).

Pre-enactment deep-water lease "... an Outer Continental Shelf (OCS) lease issued as a result of a lease sale held before November 28, 1995. The lease must be in a water depth of at least 200 meters and in the Gulf of Mexico west of 87 degrees, 30 minutes West longitude." *30 C.F.R. § 203.50 (1996)*. Under the OCSLA (*q.v.*) MMS (*q.v.*) may grant several types of royalty relief to lessees in order to promote production. *30 C.F.R. § 203.51 (1996)*.

Preference eligible refiner A small, independent refiner made eligible for purchase of government royalty oil produced in a given area under the provisions of *30 U.S.C. § 192*, as amended. *See Laketon Asphalt & Refining, Inc. v. United States Dept. of Interior, 476 F. Supp. 668 (N.D. Ind. 1979)*, *aff'd, 624 F.2d 784 (7th Cir. 1980)*.

Preference right A first or prior right to acquire a lease or other interest, *e.g.*, the preference right of an agricultural entryman to an oil and gas lease under the federal Mineral Leasing Act of 1920. *See* Brown, *The Preferential Right of an Entryman Under the Federal Leasing Act*, 3 Rocky Mt. Min. L. Inst. 671 (1957).

See also Richard W. Rowe, 20 IBLA 59, 82 I.D. 174 (1975) (distinguishing between a preference right to a new lease and a "statutory priority right" as the first qualified applicant in the event the Department decides to issue a lease).

Preference right lease This term is used by the Department of the Interior regulations to describe a lease given to a prospecting permittee who makes a commercial discovery. *Natural Resource Defense Council v. Berklund, 609 F.2d 553 (D.C. Cir. 1979)*, rejected the contention that the term "preference right" signifies no more than a right of first refusal should the Secretary decide to award a lease to anyone, holding that the term meant an automatic entitlement of a prospecting permittee who establishes the presence of commercial quantities of coal in the area covered by its permit.

A lease of public lands issued to a person having a preference right. *See* 43 C.F.R. § 3520 (1978).

Preference statute *See* Producing state preference statute.

Preferential right of purchase (or Preferential right to purchase) (1) A right reserved to parties to an operating agreement or pooling or unitization agreement to buy any part of a committed working interest which a party proposes to sell; before the sale by the latter may be made, he must offer to sell the same interest to the other parties on the same terms at which the proposed sale is to be made. *See* Treatise §§ 428.3, 503.2, 921.13.

(2) A right reserved by a party to a farmout or other agreement to buy the interest of the other party provided it was willing to pay for such interest at a price which was offered therefor in good faith. *See, e.g., Luling Oil & Gas Co. v. Humble Oil & Refining Co., 144 Tex. 475, 191 S.W.2d 716 (1945)*.

(3) A right reserved by a party to the purchase of a processing facility and gathering lines to provide processing and gathering services should the seller either purchase or gather gas within the described geographic area. *El Paso Natural Gas Co. v. Lea Partners, L.P., 2003 Tex. App. LEXIS 7003* (Tex. App.--El Paso Aug. 14, 2003) (unpublished opinion) (court describes the contract provision as a "non-competition" provision).

Syn.: First refusal clause.

Coral Production Corp. v. Central Resources, Inc., 273 Neb. 379, 730 N.W.2d 357, 165 O.&G.R. 597 (2007) (preferential right in AAPL 610-1977 joint operating agreement was modified by typewritten interlineations; preferential right could apply to overriding royalty sale). The court made the following observation:

"It is correct that a preferential right to purchase ensures that the owners retaining their interest in the contract area have some degree of control in excluding undesirable participants who may not have the necessary financial ability to bear their share of expenditures or who might frustrate development with management and engineering philosophies which current owners oppose. However, this is not the only purpose of a preferential right to purchase: In joint operating

agreements, each owner believes that the other interests in the subject property are of some value. The preferential right, therefore, assures each owner the opportunity to purchase those valuable rights should a co-owner of an interest decide to sell his interest to a third party. It thus allows those owners, who may have been at risk in exploratory efforts which contributed to the development of the property, to have an opportunity to acquire an additional interest in the property before a third party who did not participate in such risks."

730 N.W.2d at 373 .

Larson Operating Co. v. Petroleum, Inc., 32 Kan. App. 2d 460, 84 P.3d 626, 162 O.&G.R. 283 (2004) (sale by non-operating working interest owner of its interest to a third party triggered preferential right; court held that the operator was acting as the agent for the other working interest owners as was authorized by the JOA to enforce its terms, and thus met the statutory definition of a real party in interest; preferential rights provision did not violate Rule against Perpetuities).

Samson Resources Co. v. Amerada Hess Corp., 2002 OK CIV APP 32, 41 P.3d 1055, 153 O&G.R. 59 (unless the preferential rights clause of JOA is worded to the contrary, the party seeking to exercise the right must make an unconditional and identical offer that does not modify, delete or introduce any new terms).

Online Resources, Inc. v. Stone Energy Corp., 1999 U.S. Dist. LEXIS 17057 (E.D. La. Oct. 28, 1999) (citing the Treatise, "interest" subject to preferential right includes overriding royalty).

El Paso Production Co. v. Geomet, Inc., 228 S.W.3d 178 (Tex. App.--Dallas 2007) (preferential right to purchase in joint operating agreement applied to overriding royalty interest).

Palmer v. Liles, 677 S.W.2d 661, 82 O.&G.R. 376 (Tex. App.--Houston [1st Dist.] 1984, error ref'd n.r.e.) , held that a contractual prohibition of assignment of an interest in property did not amount to a preferential right of purchase or right of first refusal.

Barela v. Locer, 103 N.M. 395, 708 P.2d 307 (1985) , concluded that a right of first refusal to acquire mineral rights contained in a realty purchase agreement was not merged in a subsequent warranty deed which, though reserving minerals, made no reference to the purchaser's right of first refusal to acquire mineral rights.

See also Rainbow Oil Co. v. Christmann, 656 P.2d 538, 77 O.&G.R. 401 (Wyo. 1982) (holding that farmor's preferential right to purchase had not been triggered by transfers by farmee, such transfers not having been "sales").

In some jurisdictions, the Rule against Perpetuities has been held to be applicable to a preferential right of purchase. *See, e.g., Producers Oil Co. v. Gore, 437 F. Supp. 737, 60 O.&G.R. 78 (E.D. Okla. 1977)* . On appeal, the United States Tenth Circuit Court of Appeals certified to the Oklahoma Supreme Court the question of whether the preemptive opinion provisions in question violated the Oklahoma Rule against Perpetuities, and the question was answered in the negative. *Producers Oil Co. v. Gore, 1980 OK 62, 610 P.2d 772, 68 O.&G.R. 281* . Thereafter, the Court of Appeals vacated the judgment of the federal district court in this case and remanded it for proceedings consistent with the opinion of the Oklahoma court. *634 F.2d 487 (10th Cir. 1980)* . *See* Treatise § 322 at note 17.

Kentucky-West Virginia Gas Co. v. Martin, 737 S.W.2d 700 98 O.&G.R. 258 (Ky. Ct. App. 1987, *discretionary review denied*), held that a lease provision giving the lessor "the refusal of buying gas from the lessee for thirty cents ($.30) per thousand cubic feet" violated the Rule against Perpetuities and created an invalid unreasonable restraint on alienation.

Mobil Exploration & Producing North America, Inc. v. Graham Royalty Ltd., 910 F.2d 504, 111 O.&G.R. 9 (8th Cir. 1990) , held that burden of preferential right of purchase provision of joint operating agreement runs with the land to transferee of burdened land; that transferor and transferee breached rights of beneficiary of the preferential right by

failure to notify beneficiary of a transfer; that doctrines of laches and estoppel were inapplicable to beneficiary; and that under the transfer agreement transferor was required to indemnify transferee against claims arising by reason of the preferential rights.

Bays Exploration, Inc. v. PenSa, Inc., 2011 U.S. Dist. LEXIS 63476 (concluding that operator had provided "full information" regarding the prospective sale; although the initial notice of the proposed sale had omitted a full legal description, this had been supplemented with additional information and the time to exercise the right had been extended);

Boyd & Mahoney v. Chevron U.S.A., Inc., 419 Pa. Super. 24, 614 A.2d 1191 (1992) (preferential right to purchase may not be defeated by including interest in a package sale; preferential right may be enforced through a decree of specific performance).

FWT, Inc. v. Haskin Wallace Mason Property Management, L.L.P., 301 S.W.3d 787 (Tex. App.--Ft. Worth 2009) (distinguishes *Navasota Resources* insofar as it holds that holder of preferential right only has to exercise that right as to a single property interest where there is a package sale; case involved sale of land and a business).

Tenneco, Inc. v. Enterprise Products Co., 925 S.W.2d 640, 646 141 O.&G.R. 149 (Tex. 1996) (preferential right to purchase provision in processing facility agreement not triggered by the sale of stock of an affiliate; such provisions are to be narrowly interpreted).

Navasota Res., L.P. v. First Source Texas, Inc., 249 S.W.3d 526 (Tex. App.--Waco 2008) (exhaustive review of the preferential right to purchase provision; while right holder normally must exercise the option in an unqualified and unambiguous manner, matching all terms of the offer to purchase that triggered the right, the right holder can not be compelled to purchase assets beyond those covered by the preferential rights provision; preferential rights provision triggered by "package sale" of multiple interests).

First Permian, L.L.C. v. Graham, 212 S.W.3d 368 (Tex. App.--Amarillo 2006, rev. denied) (construed assignment of leases containing preferential right to purchase provision as extinguishing the preferential right upon full satisfaction of the production payment that provided the majority of the compensation for the transfer).

Fasken Land & Minerals, Ltd. v. Occidental Permian Ltd., 225 S.W.3d 577, 169 O.&G.R. 395 (Tex. App.--El Paso 2005, rev. denied) (under terms of preferential right to purchase provision in unit operating agreement, the party purchasing the affected interests in a package deal containing other mineral interests does not have to provide the methodology it uses in coming up with the price allocated to the interests affected by the preferential rights provision).

Mulvey v. Mobil Producing Texas & New Mexico, Inc., 147 S.W.3d 594, 164 O&G.R. 121 (Tex. App.--Corpus Christi 2004, rev. denied) (court noted that prior parties to JOA ignored the preferential right to purchase provision, but found that the plaintiff non-operating working interest owner was estopped from challenging those violations because it had accepted benefits of allegedly breaching farmout agreements).

McMillan v. Dooley, 144 S.W.3d 159, 160 O&G.R. 488 (Tex. App.--Eastland 2004, rev. denied) (explores in depth the preferential right to purchase provision contained in a farmout agreement, including the requirements for presentment of the offer by the putative seller of the leases subject to the preferential right).

Questa Energy Corp. v. Vantage Point Energy, Inc., 887 S.W.2d 217, 129 O.&G.R. 335 (Tex. App.--Amarillo 1994, writ denied) held that the sale of a portion of an oil and gas lease to a third party, which, as part of the transaction, became the transferor's subsidiary, did not trigger plaintiff's preferential right to purchase under the Joint operating agreement (*q.v.*).

Brown v. Samson Resources Co., 229 F.3d 1162 (10th Cir. 2000) , unpublished opinion at *2000 U.S. App. LEXIS 22389* (10th Cir. Okla. Aug. 31, 2000) (JOA's preferential right to purchase provision did not give holder of right power to purchase single well that was part of a "package deal" of wells sold by the working interest owner).

Citgo Petroleum Corp. v. Occidental Chemical Corp., 29 Fed. Appx. 525, 2002 U.S. App. LEXIS 1053 (10th Cir. 2002) (unpublished opinion) (applying Louisiana law) (preferential right to purchase provision triggered by the execution of an occupancy agreement, not triggered by the execution of an operating agreement; arm's length transaction not a sham agreement designed to avoid application of preferential right to purchase provision).

Fina Oil & Chemical Co. v. Amoco Production Co., 673 So. 2d 668, 136 O.&G.R. 544 (La. Ct. App.) 679 So. 2d 1353 (La. 1996) (stock sale did not trigger the preferential right to purchase provision).

Williams Gas Processing-- Wamsutter Co. v. Union Pacific Resources Co., 2001 WY 57, 25 P.3d 1064, 1071-71, 163 O&G.R. 926 (preferential right to purchase provision in processing facility agreement triggered by various transactions designed to avoid its application; rejects view of *Tenneco* that such provisions are to be narrowly interpreted).

See also the following:

Terry I. Cross, *The Ties That Bind: Preemptive Rights and Restraints on Alienation That Commonly Burden Oil and Gas Properties, 5 Tex. Wesleyan L. Rev. 193 (1999);*

Mark D. Christiansen, *Preferential Right of Purchase Issues in Oil and Gas Property Sales*, 10-SPG Nat. Resources & Env't 35 (1996);

Dann, *Asset Exchanges and Pre-emption*, [1994] 12 OGLTR 397 (discussing problems presented by pre-emption rights exercisable where a non-cash consideration is offered by a third party);

K. Smith & S. Denstedt, *Preemptive Rights and the Sale of Resource Properties: Practical Problems and Solutions, 31 Alberta L. Rev. 57 (1992);*

Cooney & Ausherman, *Preferential Purchase Rights in Mineral Agreements*, 37 Rocky Mt. Min. L. Inst. 9-1 (1991);

Tew, *Rights of First Refusal: The ' Options' That Are Not Options, But May Become Options*, 10 Eastern Min. Law Inst. 7-1 (1989);

Conine, *Property Provisions of the Operating Agreement--Interpretation, Validity, and Enforceability, 19 Tex. Tech L. Rev. 1263, 1315 (1988);*

Kutzschbach, *Operating Agreement Considerations in Acquisitions of Producing Properties*, 36 Sw. Legal Fdn. Oil & Gas Inst. 7-1, 7-3 *et seq.* (1985);

Scott, *Restrictions on Alienation Applied to Oil and Gas Transactions*, 31 Rocky Mt. Min. L. Inst. 15-1 (1985);

Allen and Cottee, *The Effect of the Rule Against Perpetuities on Pre-Emptive Rights in Joint Ventures*, 4 Australian Mining & Petroleum L.J. 190 (1982);

Abright, *Preferential Right Provisions and their Applicability to Oil and Gas Instruments, 32 Sw. L.J. 803 (1978).*

In *Post v. Prati, 90 Cal. App. 3d 626, 153 Cal Rptr. 511, 62 O.&G.R. 153 (1979)* , the court sustained the validity of a statute giving a "bidding preference in favor of a surface owner" whose land contains geothermal resources owned by

the state when such resources are offered for lease.

Preferred net royalty A prior right of participation, limited to the terms of an existing lease, in the entire net proceeds from the sale of oil and/or gas produced from a specified tract or well until a certain fixed preferred amount in dollars has been paid to the holders thereof as set forth in "Trust Agreement," but such right of participation is subject to prior payment of (a) "Landowner's Royalty" and "Over-riding Royalty"; (b) all production equipment, acidization, operating cost, taxes, assessment and any other deductions authorized by the "Trust Agreement" under which such right of participation is created. After payment of said fixed preferred amount, "Preferred Net Royalties" rank *pari passu* with "Net Royalties" and "Deferred Net Royalties" in the net proceeds from the sale of oil and/or gas. *Saskatchewan Amended Regulations, Securities Act, O.C. 1704/52, July 14, 1952, 1 O.&G.R. 1541 (1952)* .

See also Deferred net royalty; Net royalty; Royalty.

Preferred use *Syn.:* Superior use (*q.v.*). *See Discussion Notes, 7 O.&G.R. 1047 (1957).*

Pregranted abandonment A provision of a certificate of public convenience and necessity issued by the Federal Power Commission or its successor, the Federal Energy Regulatory Commission, for the sale of natural gas for resale in interstate commerce which authorizes abandonment on a future date certain. *See* 18 C.F.R. §§ 2.70, 2.75 (1980). The power of the commission to issue a certificate with such a provision was sustained in *Moss v. Federal Power Comm'n, 424 U.S. 494, 54 O.&G.R. 247 (1976)* .

The pregranted abandonment provisions of FERC Order No. 451 and 451-A were invalidated in *Mobil Oil Exploration & Producing Southeast, Inc. v. Federal Energy Regulatory Comm'n, 885 F.2d 209,* (5th Cir. 1989) , *rev'd sub nom. Mobil Oil Exploration & Producing Southeast, Inc. v. United Distribution Co., 498 U.S. 211, 110 O.&G.R. 366 (1991)* .

See also American Gas Ass'n v. Federal Energy Regulatory Comm'n, 912 F.2d 1496, 1513-1518, 109 O.&G.R 411 (D.C. Cir. 1990) , *cert. denied, 498 U.S. 952 (1990), 498 U.S. 1084 (1991)* .

See also Abandonment of facilities or service; Limited term certificate.

Pre-I.D. payment Pre-initial delivery payment (*q.v.*).

Pre-initial delivery payment Prepayment for gas agreed to be made to the producer of gas by the pipeline purchaser in the event the pipeline is not hooked up by a specified time. The promise for payment is made in exchange for the producer's promise to commit gas owned by it to the pipeline purchaser upon completion of the pipeline. *Forest Oil Corp. v. Tenneco, Inc., 626 F. Supp. 917, 89 O.&G.R. 291 (S.D. Miss. 1986)* .

Prepaid IDC Advance payment by a limited partner to the general partner of the costs of drilling oil and gas wells. For rulings on the taxable year in which the limited partner may claim an income tax deduction for intangible drilling and development costs, see *Rev. Rul. 80-70, 1980-11 I.R.B. 7, 64 O.&G.R. 245 (March 17, 1980), Rev. Rul. 71-252, 1971-1 C.B. 146* .

On the deductibiltiy of prepaid IDC, see *Keller v. Comm'r, 79 T.C. 7, 74 O.&G.R. 129 (1982)* , *aff'd, 725 F.2d 1173, 80 O.&G.R. 639 (8th Cir. 1984)* ; Behnke and Gentzler, "Deductibility of Prepaid Intangible and Development Costs in the

Year of Payment--A Current Review," *17 Tulsa L.J. 428 (1982).*

See also Intangible drilling and development costs (IDC); Pay-as-you-go basis.

Prepayment provision A provision in (or supplementary to) a Gas purchase contract (*q.v.*) relating to an interest-free loan or advance payment for gas to be delivered at some future time. A typical provision of this kind provides for a payment based on the producer's recoverable gas reserves, the payment to be recovered out of subsequent deliveries of gas. *See* Holland, "Comparative Analysis of Gas Purchase Contracts," *9 Alberta L. Rev. 479 (1972).*

Pre-platform well A well drilled in deep water from a mobile rig to determine whether there is a reservoir containing hydrocarbons. If production is found, additional wells are drilled to determine the extent of the reservoir and the optimum location for a platform. These wells are drilled in a conventional manner but are in many instances plugged and abandoned because it is uneconomic to complete them under present technology. *See* Bullion, "Special Tax Considerations in Relation to Offshore Operations and Financing," *Rocky Mt. Min. L. Fdn. Offshore Exploration, Drilling and Development Institute* 14-3 (1975).

Revenue Ruling 88-10 took the position that intangible costs incurred while drilling expendable holes to determine the location and delineation of offshore hydrocarbon deposits are within the option to expense intangible drilling and development costs (IDC).

Gates Rubber Co. & Subsidiaries v. Commissioner, 74 T.C. 1456, 67 O.&G.R. 647 (1980) , aff'd, 694 F.2d 648 (10th Cir. 1982) , and *Sun Oil Co. v. Commissioner, 74 T.C. 1481, 68 O.&G.R. 353 , aff'd, 677 F.2d 294, 76 O.&G.R. 619 (3d Cir. 1982) acq.*, I.R.B. 1983-26 (1983), held that the deduction for Intangible Drilling and Development Costs (*q.v.*) is available for a pre-platform well.

Syn.: Borehole, Escrow well, Expendable well (*q.v.*).

See also Line test well.

Prescription (1) At common law, a means of creating or extinguishing an incorporeal interest in land, such as an easement. *See* 3 Powell, *Real Property* PP 13, 423, 424 (1952).

(2) In Louisiana, a means of creating or extinguishing some right. In particular, mineral servitudes and mineral royalties (except for certain servitudes or royalties reserved in transfers to governmental agencies) are subject to extinguishment of operation of the civil law concept of prescription *liberandi causa* on ten years nonuse. And title to land may be acquired by prescription *acquirendi causa* (acquisitive prescription). It is immaterial to the application of the doctrine of prescription *liberandi causa* whether the mineral servitude or mineral royalty was created by grant or by reservation, or whether the owner of the interest has the right to enter upon the premises and drill. The grant of an interest for a term in excess of ten years does not prevent extinguishment of the interest upon the expiration of a ten year period of nonuse. Under earlier law the running of the prescriptive period might be suspended in certain cases by the minority of the owner or co-owner of the interest, but this restriction on the prescription doctrine has been eliminated by statute. The running of the prescriptive period against a mineral servitude may be interrupted by the commencement of drilling operations in good faith, whether or not successful in obtaining production, or by an acknowledgment of the servitude which is made for the purpose of interrupting the running of the prescriptive period. In the case of mineral royalties, however, actual production as opposed to drilling operations, is necessary to interrupt the prescriptive period. Once prescription *liberandi causa* has been interrupted, the ten year period starts anew. Prescription *liberandi causa* is discussed in this Treatise at § 216 *et seq.*, and prescription *acquirendi causa* is discussed in this Treatise at § 224.6. The

law concerning prescription *liberandi causa* is codified in Articles 27-61, 85-100, 107, and 126 [R.S. 31:27-61, 85-100, 107, 126 (1975)], and the law concerning prescription *acquirendi causa* is codified in Articles 153-163 [R.S. 31:153 to 31:163 (1975)] of the Louisiana Mineral Code.

See also Acknowledgement; Acquisitive prescription; Adoption; Extension; Obstacle; Reversionary interest; Suspension of prescription.

Presentment right The term utilized by a limited partnership agreement to describe the right of a limited partner for a designated period of time "to present his Partnership Units, on an all or none basis, to the Managing General Partner for purchase." The agreement specifically limits the "duty" of the general partner to purchase the units presented and provides a method for determining the value of the units presented.

Pressure *See* Back pressure; Back pressure method; Base pressure; Bleed line; Blow-out; Blow-out preventer; Bottom hole abandonment pressure; Bottom hole differential pressure (BHPD); Bottom hole pressure; Bubble point of oil; Casing pressure; Closed pressure; Cross-flow; Deliverability standard pressure; Delivery pressure; Differential pressure; Differential pressure flow meter; Field pressure; Flowing tubing pressure (FTP); Flow test meter; Gas pressure; Head; High pressure area; High pressure gas injection; Hydrostatic pressure; Kick; Multipoint Back Pressure Test; Open flow pressure; Periodic flowing; PSIG; Reservoir energy; Reservoir Limit Test; Reservoir pressure; Rock pressure; Saturation pressure; Shut-in pressure; Standard pressure base; Swabbing the hole; Tubing pressure.

Pressure clause The clause in a Gas purchase contract (*q.v.*) providing that the agreement shall terminate should gas pressure from the properties drop below the point where delivery would not be possible against the working pressure of the purchaser's gas line. *Skelly Oil Co. v. Federal Power Comm'n, 532 F.2d 177, 54 O.&G.R. 553* , 9 FPS 6-12 (10th Cir. 1976).

Pressure-decline-curve method A method of estimating non-associated gas reserves in reservoirs which do not have a water drive. The method is discussed in Leeston, Crichton and Jacobs, *The Dynamic Natural Gas Industry* 47-8 (1963).

Pressure flooding A method of water flooding involving the application of additional hydraulic pressure to that of the hydrostatic head. *See* Lytle, "History, Present Status, and Future Possibilities of Secondary Recovery Operations in Pennsylvania," 1 *IOCC Comm. Bull.* 29 at 33 (Dec. 1959).

See also Secondary recovery; Water flooding.

Pressure lease A term used in Pennsylvania to describe a lease that establishes natural gas royalty payments to the lessor based upon the pressure of the well rather than upon a percentage of the value or proceeds of the sale. *See T. W. Phillips Gas & Oil Co. v. Komar, 424 Pa. 322, 227 A.2d 163, 25 O.&G.R. 950 (1967)* ; *T.W. Phillips Gas and Oil Co. v. Jedlicka, 964 A.2d 13, 2008 PA Super 293* , *aff'd, 42 A.3d 261 (Pa. 2012)* .

Pressure maintenance The injection of gas, water or other fluids into oil or gas reservoirs to maintain pressure or retard pressure decline in the reservoir for the purpose of increasing the recovery of oil or other hydrocarbons therefrom. IOCC, *A Suggested Form of General Rules and Regulations for the Conservation of Oil and Gas* (1960), Rule III.

See also Bubble point of oil; Cycling; Recycling; Secondary recovery.

Pressure, shut in *See* Shut in pressure.

"Presumed grant" doctrine The doctrine that under appropriate circumstances a court may presume a lost or neglected grant. *See, e.g., El Paso Production Co. v. PWG Partnership, 116 N.M. 583, 866 P.2d 311, 127 O.&G.R. 564 (1933)*, *cert. denied, 512 U.S. 1207 (1994)*:

"The doctrine of presumed grant is a rule of property law that crystallizes from a rebuttable presumption. ... For many years it has received recognition in the United States as an appropriate means to quiet long possession and it is based upon concepts of both logic and policy. It is logical because the inference of a lost or neglected grant is a natural one to be drawn from the facts; it serves the policy of protecting those who have maintained long possession of property with acquiescence from the record owner. ...

"Therefore, a presumption of grant may be found from evidence supporting the inference (a logical presumption) of a lost or neglected grant followed by a long-term, open claim of right and acquiescence or no resistance by interested parties to that possession or claim of right."

See also Adverse possession: Presumed lost deed doctrine.

Presumed lost deed doctrine A common law analog to adverse possession that is sometimes referred to as the Presumed grant doctrine (*q.v.*) It is a means of establishing title in a party who has otherwise failed to prove title under the adverse possession statutes. *Conley v. Comstock Oil & Gas, LP, 356 S.W.3d 755, 765* (Tex. App.--Beaumont 2011), citing *Purnell v. Gulihur, 339 S.W.2d 86, 92* (Tex. Civ. App.--El Paso 1960, writ ref'd n.r.e.).

The rationale for the presumed lost deed doctrine was stated by the Texas Supreme Court:

"Since it is not consistent with human experience for one really owning property of value to assert no claim thereto, but to acquiesce for a long period of time in an unfounded, hostile claim, the rule is sound which permits the inference that an apparent owner has parted with his title from evidence, first, of a long- asserted and open claim, adverse to that of the apparent owner; second, of nonclaim by the apparent owner; and third, of acquisecence, by the apparent owner, in the adverse claim."

Magee v. Paul, 110 Tex. 470, 221 S.W. 254, 256-57 (1920).

See also: Adverse possession; "Presumed grant" doctrine.

Presumed production The amount of production "presumed" to have been recovered by an operator under a concession or similar agreement on the basis of which presumed amount the Government take (*q.v.*) is calculated. *See Phoenix Canada Oil Co. Ltd. v. Texaco Inc., 658 F. Supp. 1061 at 1075 (D. Del. 1987)* (presumed production exceeded not only the actual production but also the maximum volume which the government permitted the operator to produce), *aff'd in part, vacated in part, and remanded, 842 F.2d 1466, 99 O.&G.R. 1 (3d Cir. 1988)*, *cert. denied, 488 U.S. 908 (1988)*.

Presumptive production costs The production costs "presumed" to have been incurred by an operator under a concession or similar agreement on the basis of which the operator's income taxes are calculated. *See Phoenix Canada Oil Co. Ltd. v. Texaco, Inc., 658 F. Supp. 1061, 1075 (D. Del. 1987)* (actual costs were, in fact, higher than the "presumptive costs"), *aff'd in part, vacated in part, and remanded, 842 F.2d 1466, 99 O.&G.R. 1 (3d Cir. 1988)* , *cert. denied, 488 U.S. 908 (1988)* .

See also Norsul Oil & Mining Co., Ltd. v. Texaco, Inc., 703 F. Supp. 1520, 1536, 103 O.&G.R. 446 (S.D. Fla. 1988) .

Prevailing An adjective sometimes employed in an oil and gas lease royalty clause to denote a quality of such a word or term as "price," "value," "market price," "market value," or "posted price."

It is not clear when this word first came to be used in lease royalty clauses, but there is ample evidence of its use in Texas leases executed in the 1930s. *See, e.g.,* A.W. Walker, Jr., *The Nature of the Property Interests Created by an Oil and Gas Lease in Texas, 10 Tex. L. Rev. 291, 310-311 (1932)* (commenting on the use of the word "prevailing" in royalty clauses). By the 1940s such use was reasonably common. *See, e.g.,* J.T. Sneed, *Value of Lessor's Share of Production Where Gas Only Is Produced, 25 Tex. L. Rev. 641, 647 (1947)* (reference to the term "prevailing market price in the field"); *Foster v. Atlantic Refining Co., 329 F.2d 485, 20 O.&G.R. 422 (5th Cir. 1964)* (concerned with a 1944 Texas lease in which the word "prevailing" was employed in connection with the term "market value"). Apparently the word "prevailing" was more commonly employed in the 1930s and 1940s in royalty clauses of Rocky Mountain oil and gas leases than in those executed in Texas.

The State of Alaska Lease Form No. DL-1, drafted in the late 1950s borrowing from a Colorado lease form, employed the word "prevailing" in the context of prevailing price received by other producers.

There is a paucity of evidence on the meaning to be ascribed to the word "prevailing" in the context of a lease royalty clause. If the word is employed in the sense of "predominant," the royalty provision may be rendered nugatory for want of a predominant price or value. More logically, therefore, the word should be viewed as meaning a statistical mean, median, or mode. And inasmuch as the "prevailing" price or value is utilized as the multiplicand (the price or value of the lessee's production) and the agreed royalty fraction or percentage is utilized as the multiplier for calculating the royalty payable to a lessor, it would appear that an arithmetic mean on a weighted average basis (rather than a median or mode) should be utilized as "prevailing."

Foster v. Atlantic Refining Co., supra , and *Texas Oil & Gas Corp. v. Vela, 429 S.W.2d 866, 29 O.&G.R. 121 (Tex. 1968)* , appear to be consistent with defining "prevailing" as an arithmetic mean. In *Foster* the court observed: "The lease calls for royalty based on the market price prevailing for the field where produced when run. The fact that the ascertainment of future market price may be troublesome or that the royalty provisions are improvident and result in a financial loss to Atlantic 'is not a web of the Court's weaving.' Atlantic cannot expect the court to rewrite the lease to Atlantic's satisfaction." And in *Vela,* the court indicated that lessors entitled to royalty based on "market price at the well" were entitled clearly to "the prevailing market price at the time of the sale or use." It then approved of an expert's mathematical calculation producing an average price for all gas sold during the period in question which disregarded as "too far out of line" prices paid under 1933 life of the lease contracts.

See also Plateau Mining Co. v. Utah Division of State Lands, 802 P.2d 720, 112 O.&G.R. 546 (Utah 1990) (coal lease requiring payment of royalty "at the rate prevailing ... for federal leases" if higher than the agreed cents per ton; *held,* "The language of the lease-provision is clear. The intent of the parties was that the higher of the two rates should be paid the State. ... Extrinsic evidence will, no doubt, have to be adduced to determine how that federal rate was to be calculated, what the rate was, and when it became 'prevailing,' if it did. It follows that the trial court should not have held the alternative rate provision unenforceable because it is ambiguous. ... The alternative rate provision is sufficiently clear to be enforceable. If there is ambiguity as to how the prevailing federal rate clause should be applied, the trial

court should admit parol evidence to clarify its construction.").

Prevailing market rate *Schroeder v. Terra Energy, Ltd., 223 Mich. App. 176, 565 N.W.2d 887, 896 (1997)* (prevailing market rate is defined as "predominant," and thus the defendant was "under no affirmative duty to obtain the best market rate").

Price *See* Adaptation clause; Adjusted base price; Adjusted posted price; Alberta border price; Area pricing policy; Barter deals; Benchmark crude; Buyback oil; Buyback price; Ceiling price; Cifpricing; Composite price ceiling; Contract price; Countertrade; Current btu related price; Differential; Entitlement program; Escalator clause; Expected third-party price; Fair field price method; Field price; Flat sale of crude oil; FPC clause; FPC price protection clause; Gnpimplicit price deflator; Grandfather price; Guaranteed sales prices; Gulf-plus pricing structure; Imputed alberta border price; Imputed stripper well lease oil price; Incentive price gas; Incremental pricing; In-line price; International market price; Mandatory Petroleum Price Regulations (MPPR); Marker price; Market price; Mid-way price; Minimum wellhead price; Natural gas price protection act; Natural gas price regulation; Natural gas pricing agreement act; Negotiated contract price requirement; Netback pricing; Norm price; Official selling price (OSP); Offtake price; Oil-price swap; One-price system; Out of line price; Persian gulf pricing system; Posted field price; Posted price; Prevailing; Proceeds-less-expense method; Processing deal; Processing/tolling arrangement; Quarter-way price; Realized price; Reduced PGA method; Reference price; Removal price; Repurchase price; Reservation price; Rolled-in price; Suspect price; Tax reference price; Threshold price; Transfer price; Two-price system; Two-tier pricing system; Weighted average arm's length price; Wellhead price; Work-back valuation method.

Price at which production is sold *Enron Oil & Gas Co. v. State of Utah, Department of Natural Resources, 871 P.2d 508, 128 O.&G.R. 162 (Utah 1994)* , was concerned with the question whether ad valorem and severance tax reimbursements paid by gas purchasers to gas producers are included in the "reasonable market value at the well of all gas produced and saved or sold from the leased premises" for purposes of calculating royalty. Three Justices answered this question in the affirmative. Two Justices took a contrary position by reason of a definition in the applicable leases of "reasonable market value" as the "price at which the production is sold" in a contract either approved or conditionally approved by the lessor.

See also Tax reimbursement provision.

Price control of oil, gas and petroleum products Under the decision in *Phillips Petroleum Co. v. State of Wisconsin, 347 U.S. 672, 3 O.&G.R. 745 (1954)* , the Federal Power Commission was charged with responsibility for regulating the rates charged by a natural gas producer and gatherer in the sale in interstate commerce of gas for resale. The subsequent history of price control of natural gas is traced in *Freeport Oil Co. v. Federal Energy Regulatory Comm'n, 638 F.2d 702 (5th Cir. 1980)* , and in Williams, Maxwell and Meyers, *Cases on Oil and Gas* 42 *et seq.* (4th ed. 1979). The Natural Gas Policy Act of 1978 (*q.v.*) includes provision for the expiration (with certain exceptions) of price controls on natural gas in 1985.

Mobil Oil Exploration & Producing Southeast, Inc. v. Federal Energy Regulatory Comm'n, 885 F.2d 209, (5th Cir. 1989) , *rev'd sub nom. Mobil Oil Exploration & Producing Southeast, Inc. v. United Distribution Co., 498 U.S. 211, 110 O.&G.R. 366 (1991)* , traces the history of natural gas regulation following the *Phillips* case.

Puerto Rico Department of Consumer Affairs v. Isla Petroleum Corp., 485 U.S. 495 (1988) , held that regulation of prices of gasoline and other petroleum products by Puerto Rico ceased to be preempted upon the expiration of the Emergency Petroleum Allocation Act of 1973 (EPAA) (*q.v.*), which had contained an express preemption provision.

For a discussion of the regulation of the wellhead price of natural gas, see Gilliam, "Wellhead Regulation Under the Natural Gas Act and the Natural Gas Policy Act," American Gas Ass'n, *Regulation of the Gas Industry* ch. 20 (1981).

Price control of oil and petroleum products was imposed by President Nixon on August 15, 1971, acting under the Economic Stabilization Act of 1970 (ESA) (*q.v.*). Controls were soon lifted on the economy as a whole but were continued on the petroleum industry. *See* the mandatory price regulations in *10 C.F.R. § 212 (1980)*. On January 30, 1981, by executive order, President Reagan decontrolled prices of crude oil and refined petroleum products. *45 Fed. Reg. 9901* .

Several states sought to control intrastate natural gas sales prices. In Louisiana, the Energy Act of 1973 was designated to avoid "the sale of intrastate natural gas at a price below the fair market value of such gas, especially as compared to the price of other fuels." La. R.S. § 30.592 (1975). In some other states, legislation was enacted to curtail the operation of certain types of indefinite escalator clauses in natural gas contracts involving intrastate deliveries. *See* Natural Gas Price Protection Act.

For discussions of the legislative and administrative history of federal price controls and regulation of the petroleum industry, see the following:

Fox, *Federal Regulation of Energy* Chs. 6, 15-21 (1983);

Goodwin (Ed.), *Energy Policy in Perspective* (1981);

Kalt, *The Economics and Politics of Oil Price Regulation* (1981);

Lane, *The Mandatory Petroleum Price and Allocation Regulations: A History and Analysis* (1981);

Allison, *Natural Gas Pricing: The Eternal Debate, 37 Baylor L. Rev. 1 (1985);*

Pierce, *Natural Gas Regulation, Deregulation, and Contracts, 68 Va. L. Rev. 63 (1982);*

Aman, *Institutionalizing the Energy Crisis: Some Structural and Procedural Lessons, 65 Cornell L. Rev. 491 (1980).*

See also the following:

Nance, *Natural Resource Pricing Policies and the International Trading System, 30 Harv. Int'l L.J. 65 (1989);*

Petroleum Law Supplement, *26 Alta. L. Rev. 1 et seq.* (1987) (discussing Canadian price control).

See also Advance payment order; Alternative fuel cost; Annual inflation adjustment factor; Area pricing policy; Area rate clause; Base period control level (BPCL); Buy-sell list; Buy-Sell oil; Catcocase; Ceiling price; Commodity charge theory; Completion location; Composite price ceiling; Condensate; Contract Date Vintaging; Contract price; Controlled crude oil; Cost bank; Cost of Living Council; Crude Oil Windfall Profit Tax Act of 1980; Current Btu related price; Deeper drilling exception; Economic Regulatory Administration; Economic Stabilization Act of 1970 (ESA); Effective tariff; Emergency Petroleum Allocation Act of 1973; End-use rate schedule; Entitlement program; Escalator clause; Evergreen clause; Exempt crude oil; Existing contract; Fair field price method; Federal Energy Administration; Federal Energy Regulatory Commission; Federal Power Commission; First tier oil; FPC price protection clause; Front-end tertiary oil; Global Settlement; Gnpimplicit price deflator; Grandfather clause; Grandfather price; High cost natural gas; High priority user; Imputed stripper well crude oil exemption; Imputed stripper well lease oil price; Incentive price gas; Incentive rate of return (IROR); Incremental price method; Incremental pricing; Injection well; In line price;

Jurisdictional sales; Lower tier crude oil; Maximum surcharge absorption capability (MSAC); Minimum rate; Minimum well head price; Molecular theory; National rate; National rate case; Natural Gas Act; Natural Gas Policy Act of 1978; Natural Gas Price Protection Act; New contract; New lease; Newly discovered reservoir; New natural gas; New oil; New well; Old oil; One hundred and eighty day emergency sales; One-price system; Pass-through prohibition; Pass-through provision; Petroleum Administration Act; Petroleum Administration for Defense (PAD); Petroleum Administration for War (PAW); Produced and sold; Production enhancement procedures; Property; Qualified production enhancement gas; Rate base approach; Rate schedule; Rate tilting; Replacement contract policy; Rolled-in allocation method; Rollover contract; Rollover gas; Sadlerochit oil; Second tier oil; Sixty day emergency sales; Stripper well natural gas; Stripper well oil; Successor to an existing contract; Tertiary Incremental Program; Threshold price; Tight formation; Tight Formation Gas; Transfer price; Two-price system; Two-tier pricing system; Upper tier crude oil; Well Commencement Date Vintaging; Well determination.

Price escalation clause *See* Escalator clause.

Price protection act Natural Gas Price Protection Act (*q.v.*).

Price protection clause *See* FPC price protection clause.

Price redetermination clause An Escalator clause (*q.v.*) in a Gas purchase contract (*q.v.*). By virtue of this clause a readjustment of the contract price may be made periodically or at the end of some stated period.

Edwards v. Lone Star Gas Co., 782 S.W.2d 840, 108 O.&G.R. 563 (Tex. 1990) , concluded that a clause providing for *annual* price redeterminations did not preclude monthly adjustments as part of the redetermined price. "There is no inconsistency between an annual price redetermination and a redetermined price that allows for fluctuation in accordance with federal regulatory standards."

Alberta Energy Co. v. Canadian Western Natural Gas Co. [1993] W.W.R. 665 (Alta. C.A. 1992), was concerned with the price to be paid for gas pending redetermination of price under the clause construed. The court "concluded from the words of the contract itself that it was the intention of the parties to continue the price last agreed to, until, in accordance with the notice to redetermine, a new price would be set by the arbitrators. Then, as expressly stated in para. 10.1(c), the price so redetermined is to have retrospective effect to the notice date."

See Wyatt, "Effect of Deregulation Upon Existing and New Gas Contracts," 32 *L.S.U. Min. L. Inst.* 1, 10 (1986).

Price spike The specter of substantial price increases for natural gas when decontrolled in 1985. Morgan & Patterson, "The Natural Gas Policy Act of 1978," *71 Ky. L.J. 105, 106* (1982-83). For a study of the actual trend of natural gas pricing subsequent to the adoption of the Natural Gas Policy Act of 1978 (NGPA) (*q.v.*), see "Natural Gas Pricing," Committee Print 98-Q, a Staff Report prepared for the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, U.S. House of Representatives, 98th Cong., 1st Sess., Nov. 1983.

Syn.: Gas fly-up.

See also Oil shock.

Pricing *See* Area pricing policy; Base-polnt pricing; Basing point pricing; Cifpricing; Contract pricing area; Faspricing; Fobpricing; Gulf-plus pricing structure; Incremental pricing; Indefinite pricing clause; Marginal cost pricing; Market basket pricing; Market-related pricing; Market responsive pricing; Multiple base point system; Natural gas pricing agreement act; Netback pricing; Persian-gulf pricing system; Retroactive pricing; Single base-point a system; Two-tier pricing system.

Pricing structure *See* Base point pricing; Basing point; Equalization point; Gulf-plus pricing structure; Multiple base-point system; Persian-gulf pricing system; Phantom freight; Single base-point system.

Primary function test Under the Natural Gas Act (*q.v.*), Gathering (*q.v.*) of natural gas is not regulated, while transportation of natural gas is regulated. FERC (*q.v.*) has developed a series of tests, labeled the primary function test, to determine whether the gas is being transported or gathered. The test usually employs the following six physical critieria:

"(1) the length and diameters of the lines; (2) the extension of the facility beyond the central point in the field; (3) the geographic configuration of the facility; (4) the location of compressors and processing plants; (5) the location of wells along all or part of the line facility; and (6) the operating pressure of the lines." *Lomak Petroleum Corp. v. FERC, 206 F.3d 1193, 1196, 153 O.&G.R. 533 (D.C. Cir. 2000)* .

In addition to the physical criteria, FERC usually looks to the following non-physical criteria:

"(1) the purpose, location and operation of the facility; (2) the general business activity of the owner of the facility; (3) whether a jurisdictional determination, i.e., gathering versus transmission is consistent with the objectives of the NGA and the Natural Gas Policy Act (NGPA); and (4) the changing technical and geographic nature of exploration and production activities." *Id. at 1196* .

None of the above-listed factors is determinative, and not all of the factors apply in every situation. *Williams Gas Processing-- Gulf Coast Co., L.P. v. Federal Energy Regulatory Commission, 331 F.3d 1011, 1013-14, 157 O.&G.R. 980 (D.C. Cir. 2003)* ; *Williams Field Services Group, Inc. v. Federal Energy Regulatory Commission, 194 F.3d 110, 116, 154 O.&G.R. 147 (D.C. Cir. 1999)* ; *Conoco, Inc. v. Federal Energy Regulatory Commission, 90 F.3d 536, 542 (D.C. Cir. 1996)* ; *Louisiana Intrastate Gas Corp. v. Federal Energy Regulatory Commission, 962 F.2d 37 (D.C. Cir. 1992)* . The test is particularly difficult to apply for OCS (*q.v.*) facilities because most of the processing occurs onshore. *EP Operating Co. v. FERC, 876 F.2d 46 (5th Cir. 1989)* . Individual decisions relating to OCS facilities will be reviewed under a deferential standard by the courts. *ExxonMobil Gas Marketing Co. v. Federal Energy Regulatory Commission, 297 F.3d 1071, 153 O.&G.R. 498 (D.C. Cir. 2002)* .

While the Fifth Circuit applies the primary function test to determine whether a pipeline is a gathering line, it appears to give less deference to FERC findings than does the *District of Columbia Circuit. Jupiter Energy Corp. v. Federal Energy Regulatory Commission, 482 F.3d 293 (5th Cir. 2007)* ; *Jupiter Energy Corp. v. Federal Energy Regulatory Commission, 407 F.3d 346 (5th Cir. 2005)* .

The historical development of the primary function test is explored in *Williams Gas Processing- Gulf Coast Co., L.P. v. Federal Energy Regulatory Commission, 475 F.3d 319 (D.C. Cir. 2007)* . The six-part test was originally developed in 1983 in *Farmland Industries, Inc., 23 F.E.R.C. 61,063 (1983). 475 F.3d at 323-25* .

See also Behind the plant test; Central point in the field test; FERC; FPC; Gathering; Gathering facility; Natural Gas Act; Refunctionalization.

Primary jurisdiction doctrine A doctrine applied by the courts that defers to an appropriate administrative agency the power to decide a particular issue or case where both the court and the agency have jurisdiction over the matter. *See generally* B. Kramer & P. Martin, *The Law of Pooling and Unitization § 25.04* (3d ed. LexisNexis Matthew Bender). The policy underlying the application of the doctrine is that administrative agencies should not be bypassed on matters where the state legislature has delegated the power to decide those matters to such agencies. *Foree v. Crown Central Petroleum Corp., 431 S.W.2d 312, 316, 30 O.&G.R. 374 (Tex. 1968)* . When the matter lies outside of the powers delegated to the agency, however, such as the power to adjudicate common law claims, be they contract or tort-based, the primary jurisdiction doctrine does not apply. *In re Apache Corp., 61 S.W.3d 432, 436, 152 O.&G.R. 59* (Tex. App.--Amarillo 2001) ; *Amarillo Oil Co. v. Energy-Agri Prods., Inc., 794 S.W.2d 20, 26, 109 O.&G.R. 524 (Tex. 1990)* .

The Railroad Commission does not have primary jurisdiction to resolve common law tort claims relating to oil and gas operations even though it possesses extensive regulatory powers over such operations. Amarillo Oil Co. v. Energy-Agri Prods., Inc.; *In re Discovery Operating, Inc., 216 S.W.3d 898* (Tex. App.--Eastland 2007) .

See also Exclusive Jurisdiction Doctrine.

Primary production Production from a reservoir by primary sources of energy, that is, from natural energy in the reservoir when it is in an early stage of production, with little loss of pressure and with most wells still flowing. *See also* Production.

This definition was quoted and adopted in *Sivert v. Continental Oil Co., 497 S.W.2d 482, 487, 46 O.&G.R. 355, 363* (Tex. Civ. App. 1973--San Antonio, error ref'd n.r.e.).

See also Secondary recovery; Tertiary recovery.

Primary production payment A production payment which must be satisfied out of production before payment begins on a deferred production payment. *See Discussion Notes, 7 O.&G.R. 321 (1957).*

Syn.: Front end of production payment.

See also Oil payment; Production payment.

Primary recovery As defined by a subcommittee of the American Petroleum Institute, "the oil, gas, or oil and gas recovered by any method (natural flow or artificial lift) that may be employed to produce them through a single well bore; the fluid enters the well bore by the action of native reservoir energy or gravity." American Petroleum Institute, *Secondary Recovery of Oil in the United States* 255 (1942).

Primary term The period of time during which a lease may be kept alive by a lessee even though there is no production in paying quantities by virtue of drilling operations on the leased land or the payment of rentals. After the expiration of the primary term, the lease usually can be kept alive only by Production in paying quantities (*q.v.*), absent some savings clause in the lease, such as a Shut-in gas well clause, Drilling operations clause or Continuous drilling operations clause (*q.v.*).

The habendum clause of a typical contemporary lease grants the land for a primary term "and so long thereafter" as oil

or gas is produced, in manner as follows: "It is agreed that this lease shall remain force for a term of ten years from date and as long thereafter as oil, or gas of whatsoever nature or kind, or either of them is produced from said land or drilling operations are continued as hereinafter provided."

The subsequent drilling or delay rental clause of the lease typically provides for possible extinguishment of the lessee's interest on any anniversary date of the lease before the expiration of the primary term. In the Unless lease (*q.v.*), the delay rental clause provides for termination of the lessee's interest on the anniversary date during the primary term if no well has been commenced or completed *unless* rentals are paid. In the Or lease (*q.v.*), the drilling clause contains a covenant to drill or to do something else (*e.g.*, pay rentals, forfeit, surrender) before a stated anniversary date, and if there is a breach of the covenant, the lessor has a cause of action for the breach and in some instances may terminate the lessee's interest prior to the expiration of the primary term. *See* Treatise §§ 601-*635*.

For the purpose of construction of the *Mineral Leasing Act of 1920, Celsius Energy Co., Southland Royalty Co., 94 I.D. 394, 99 IBLA 53* , GFS (O&G) 1987-82 (Sept. 8, 1987), distinguished the words Extended term, Fixed term, Original term, Primary term, and Term (*q.v.*). As employed in the act, the words "primary term" mean the fixed period of time specified by the habendum clause during which the lease can be kept alive by a lessee even though there is no production in paying quantities.

For purposes of the Mineral Leasing Act of 1920, the phrase "primary term" has been said to include the entire period in the life of the lease prior to the period of extension because of production. *See* Olpin, "Processing of Lease Applications and Terms of Leases," *Law of Federal Oil & Gas Leases* 195, 206 (1967); *67 I.D. 357* (Sept. 23, 1960) .

Ashland Oil, Inc., 79 I.D. 532, 7 IBLA 58 , GFS(O&G) 41 (Aug. 9, 1972), held that a lease which had been extended because of production not on it, but on a unit, is not within its primary term. Actual drilling operations on a lease so extended created no right to an extension under the Mineral Leasing Act.

Modern Exploration, Inc. v. Maddison, 708 S.W.2d 872, 879, 92 O.&G.R. 387, 398 (Tex. App.--Corpus Christi 1986, no writ) , apparently took the position that the primary term of a lease does not end so long as production continues; such a view is contrary to the clear weight of authority.

Inexco Oil Co., 20 IBLA 134 , GFS(O&G) 1975-52 rejected the contention that the primary term includes anything more than the initial term of years specified in the lease.

See also Secondary primary term; Secondary term.

The definition in this Manual of primary term was quoted and discussed in *Fox v. Thoreson, 398 S.W.2d 88, 23 O.&G.R. 808 (Tex. 1966)* .

Primary term clause The lease clause specifying the Primary term (*q.v.*) of the interest granted the lessee.

Principal meridian "A line which runs in a north-south direction from an initial point and from which are initiated other lines for the cadastral survey of the public lands within a specified area. Each principal meridian has a correlated base line that runs through the same initial point. Every principal meridian has a distinctive name, *e.g.*, Huntsville Meridian and Fourth Principal Meridian." United States Department of the Interior Bureau of Land Management, *Glossary of Public-Land Terms* 37 (1949).

Prior deed reference A reference in a deed to a prior deed. *See* Treatise §§ 219.1 at notes 2-5; 313, 340-340.5; 697.2.

Priority *See* High priority user.

Private offering exemption An exemption under the Federal Securities Act and under the Blue Sky Law (*q.v.*) of some states for certain private offerings as defined in the statute or regulations. *See* Treatise § 441.4.

See also Regulation B; Regulation D; Rule 146.

Private placement drilling fund "A private placement drilling fund is substantially the same as a public drilling fund except for the fact that the transaction relies upon the 'private placement' exception to public registration with the Securities and Exchange Commission, and the units of participation are usually larger and spread among fewer 'sophisticated investors.' In recent years, these transactions also have usually taken the form of limited partnerships. In fact, there are substantial private placement 'offerings' that involve a limited partnership with just one investor." Bean, "Entity Selection--An Experience in Alchemy--A Comparison of Corporations, Partnerships, and Joint Ventures," 30 *Sw. Legal Fdn. Oil & Gas Inst.* 363, 365 (1979).

See also Drilling fund.

Privatization (1) A term which has been applied to the sale of mineral rights by the federal government without a primary lease, thus shifting the management of resources from the public sector to the private sector. Mead, Moseidjord, Miraoka and Sorensen, *Offshore Lands: Oil and Gas Leasing and Conservation on the Outer Continental Shelf* 112 (1985).

(2) A term also applied to the transfer of state mineral and other monopolies to private ownership. *See, e.g.*, D. Bianchi, "Privatization of the Oil and Gas Industry in Argentina: A Model for Latin-America?" [1993] 8 *OGLTR* 257; 38 *Rocky Mt. Min. L. Inst.* ch.17 (1993).

Privilege In *La. Rev. Stat. § 9:4861* (West 1991), this term is used to describe what is known in other states as a Lien (*q.v.*). *See Amoco Prod. Co. v. Horwell Energy, Inc., 969 F.2d 146, 148, 120 O.&G.R. 500 (5th Cir. 1992)* .

Privity A mutual or successive relationship to the same right of property, or an identification of the interest of one person to another. Privity of contract is a relationship between two or more contracting parties; privity of estate is a mutual or successive relationship to the same right in property. For a discussion of these concepts in the context of liability for breach of express and implied covenants in leases and deeds, see Treatise §§ 402-*421*.

PRO A Proposed Remedial Order of a federal regulatory agency.

Probable reserves An estimate of Reserves (*q.v.*) taking into consideration known geology, previous experience with similar types of reservoirs, and seismic data if available.

Probe stage A term applied to a portion of the exploration and production cycle following the identification by geologists and geophysicists of areas with potential oil and gas reserves.

"If petitioner decided to investigate these potential reserves further, the exploration and production cycle entered the 'probe' state. During this stage preliminary studies were made by the exploration department, including regional geological studies and seismographic testing, and by the land department, which determined the amount of acreage available in the area and the probable cost of the mineral rights in terms of lease bonuses and royalty provisions. The production department was also involved at this stage providing information for the economic analysis to determine whether the probe should be developed further. When the exploration department decided, with the input of the land and production departments, that a probe warranted further exploration, it was termed a 'play.' " *Shell Oil Co. v. Commissioner, 89 T.C. 371, 95 O.&G.R. 622, 626 (1987)* .

See also Abandoned g & g costs.

Problem bid A bid for an Outer Continental Shelf lease that falls below the Mean of the range of values (MROV) (*q.v.*) and the Discounted MROV (DMROV) (*q.v.*) but equals or exceeds the Average evaluation of tract (AEOT) (*q.v.*). *See Superior Oil Co. v. Watt, 548 F. Supp. 70, 74 O.&G.R. 423 (D. Del. 1982)* (sustaining the rejection of a problem bid by the Secretary of the Interior).

Procedure *See* Abridged hearing procedure; Accounting procedure joint operations; Caploperating procedure; Copasaccounting procedure; Flow back procedures; Good faith negotiation procedures; Optional certificating procedure; Optional expedited certificate procedure; Production enhancement procedures; Refunds interest rate (RIR) procedures.

Proceeds The money obtained by an actual sale. *Waechter v. Amoco Production Co., 217 Kan. 489, 512, 537 P.2d 228 (1975)* , *on reh'g, 219 Kan. 41, 546 P.2d 1320, 53 O.&G.R. 350 (1976)* . In this case the court concluded that the gas royalty clauses in question required the lessee to account to the lessor for proceeds rather than market value of the gas produced:

"Nor can we say the parties used the terms 'proceeds' and 'market value' as equivalents in the royalty clauses. They were not used interchangeably. ... Proceeds ordinarily refer to the money obtained by an actual sale. The connotation is not without significance in the gas business. Where the sale is at the wellhead the lessor does not consent to the uncertainties of what the market or fair value or price of the gas may be--he is willing to take what the lessee sells it for, relying on the lessee's self-interest in obtaining the best price possible."

The Kansas court revisited its definition of proceeds in relation to a "conservation fee" authorized by Kansas statute to be assessed against operators and withheld by the purchaser from its payment to the lessee. Referring to *Waechter* and other Kansas cases, the court in *Hockett v. Trees Oil Co., 251 P.3d 65, 72 (Kan. 2011)* , stated:

"[W]hat the cases cited by Oil Company teach us is that the term 'proceeds' in a royalty clause refers to the gross sale price in the contract between the first purchaser and the lessee/producer/seller, so long as the contractual rate per mcf has been approved by the applicable regulatory authority."

The term "proceeds" is frequently used as synonymous with Amount realized (*q.v.*). *See, e.g., Sondrol v. Placid Oil Co., 23 F.3d 1341, 1343, 129 O.&G.R. 227 (8th Cir. 1994)* , a case concerned with a lease providing for royalty based on proceeds for gas sold from the well and for royalty based on market value at the well for gas used off the premises. Separate from the lease was a gas processing agreement between the lessee and the processor under which the processor

paid the lessee under a Percentage of proceeds contract (*q.v.*) and a Gas purchase contract (*q.v.*) between the processor and MDU (an interstate pipeline and natural gas distributor) containing a Take-or-pay clause (*q.v.*). MDU repudiated its gas purchase contract, refusing to pay for a substantial portion of the gas taken but placed in storage. Subsequently the processor transferred the storage gas to the lessee who resold it for much less than the amount specified in the gas purchase contract. The court concluded that: (1) royalty payable to Lessor was to be based on proceeds rather than market value at the well; (2) proceeds means "the money obtained from an actual sale," and lessee had paid royalties on all the cash proceeds it received, including the cash received when lessee took back and resold the stored gas; (3) lessee properly deducted the gross production tax paid on the stored gas in calculating proceeds; and (4) proceeds means net rather than gross proceeds and hence lessee was entitled to deduct processing expenses from gross proceeds of gas sales: "unless the royalties are reduced by ... processing expenses, they would be based upon the value of the processed gas, contrary to the royalty's purpose of 'compensat[ing] the lessor for the value of the gas at the well,' ..."

See also Lightcap v. Mobil Oil Corp., 221 Kan. 448, 562 P.2d 1, 57 O.&G.R. 487 (1977) , *cert. denied, 434 U.S. 876 (1977)* , *reh'g denied, 440 U.S. 931 (1979)* , and *Exxon Corp. v. Middleton, 613 S.W.2d 240, 67 O.&G.R. 431 (Tex. 1981)* (distinguishing a "proceeds lease," *viz.*, one providing for royalty of a portion of the proceeds of sale of oil or gas, from a "market value" lease, *viz.*, one providing for royalty of a portion of the market value of oil or gas produced and sold), *on remand, dism'd in part, rev'd and remanded in part on joint motion of parties, 619 S.W.2d 115, 69 O.&G.R. 115 (Tex. Civ. App. 1981)* .

Marathon Oil Co. v. United States, 604 F. Supp. 1375, 1384, 87 O.&G.R. 453 (D. Alaska 1985) , *aff'd,*

807 F.2d 759, 90 O.&G.R. 6 (9th Cir. 1986) , *cert. denied, 480 U.S 940 (1987)* , rejected a narrow construction of a "proceeds" type royalty clause, construing the royalty provision in question as combining characteristics of a "wellhead value" royalty clause with the characteristics of a "proceeds" type royalty clause.

Holmes v. Kewanee Oil Co., 233 Kan. 544, 664 P.2d 1335, 77 O.&G.R. 447 (1983) , *cert. denied, 474 U.S. 953 (1985)* , concluded that the royalty payable under a lease providing for royalty of one-eighth "of the gross proceeds at the prevailing market rate" is based on "market value."

See also Gross proceeds; Percentage of proceeds contract; Production-related costs reimbursement; Tax reimbursement provision.

Proceeds interest A term which has been used to describe a Per cent interest (*q.v.*). Kuechler, "Oil and Gas; 'Overriding Royalties'; 'Proceeds Interests'," *26 Cal. L. Rev. 480 (1938).*

Proceeds lease A lease providing for a royalty of a portion of the proceeds of the sale of oil or gas as distinguished from a Market value lease (*q.v.*) under which the royalty is based on the market value of the product rather than the proceeds of the sale of the product.

Proceeds-less-expense method A method to determine the value of oil or gas at the wellhead in the absence of comparable sales. The method is discussed in *Northern Natural Gas Co. v. Grounds, 393 F. Supp. 949, 970, 51 O.&G.R. 453, 486 (D. Kan. 1974)* .

See also Old Kent Bank & Trust Co. v. Amoco Production Co., 679 F. Supp. 1435 (W.D. Mich. 1988) (adopting this method for calculating royalties on "amount realized at the mouth of the well" for oil, condensate, and gas "not sold at the mouth of the well but sold or used off the premises or for the manufacture of gasoline or any other product").

See also Netback pricing; Work-back valuation method.

Proceeds production payment A production payment payable from a portion of the net revenues from the sale of that portion of oil or gas produced which is attributable to production enhancement procedures undertaken by the payee. *See NL Industries, Inc. v. GHR Energy Corp., 940 F.2d 957, 960, 967-68, 115 O.&G.R. 565 (5th Cir. 1991)* , *cert. denied, 502 U.S. 1032 (1992)* (concluding that limitation of payee to share of net revenues did not prevent payee from recovery of damages for breach of workover agreement, citing and quoting from this Treatise).

Process *See* Absorption process; Alcohol slug process; Artificial process; Claus recovery process; Global process; Lurgi process.

Processed gas Gas that is processed in a gasoline plant for the removal of liquids.

Process gas (1) Natural gas utilized by industrial users as a raw material in creating an end product rather than as (a) an agent for heating, cooling, dehydrating or otherwise affecting industrial process materials, or (b) for other industrial purposes. *State of Louisiana v. Federal Power Comm'n, 503 F.2d 844, 872 (5th Cir. 1974)* .

(2) Gas use for which alternate fuels are not technically feasible such as in applications requiring precise temperature controls and precise flame characteristics. Statement by Chairman John N. Nassikas of the Federal Power Commission, "Federal Power Commission Oversight--Natural Gas Curtailment Priorities," Hearing before the Senate Committee on Commerce, 93rd Cong., 2d Sess., June 20, 1974, at p. 83; F.P.C. Order No. 493 (Sept. 21, 1973); *18 C.F.R. § 2.78(c)(8) (1979).*

Process Gas Consumers Group v. Federal Energy Regulatory Comm'n, 712 F.2d 483 (D.C. Cir. 1983) sustained the validity of a final rule issued by the Commission defining the extent to which certain agricultural users of natural gas would have priority access to gas at time of shortage despite clear reservations by the court as to the merits of the rule.

The term "process fuel" as used in the Natural Gas Policy Act (*q.v.*) was said to have the same meaning as process gas, thus excluding boiler fuel from the definition. *Process Gas Consumers v. U.S. Department of Agriculture, 657 F.2d 459 (D.C. Cir. 1981)* .

Processing In *State of Alabama v. Four States Drilling Co., 278 Ala. 273, 177 So. 2d 828, 23 O.&G.R. 321 (1965)* , the court, for purposes of an excise tax on tangible personal property, upheld "a finding that processing begins at the bottom of the oil well," stating that "somewhere along the line from the bottom of the well to the storage tank, the mixture of sediment, sand, oil, gas, and water, as it occurs in nature, is subjected to a treatment that separates the oil from the other elements originally in the mixture." The court rejected a contention that "processing does not in fact begin until the crude oil passes into the 'separator and/or treater ...' ."

In *Petron Development Co. v. Washington County Board of Equalization, 91 P.3d 408, 411-12 (Colo. Ct. App. 2003)* , the Colorado court of appeals defined the Colorado constitutional term "unprocessed" by looking to the meaning of "processing," which it took from *Webster's Third New International Dictionary* to be "subject[ing] to a particular method, system, or technique of preparation, handling, or other treatment designed to effect a particular result ... to prepare for market, manufacture, or other commercial use by subjecting to some process." The court concluded that "that injection of chemicals, breakdown of the emulsion, and removal of impurities and water subject the oil to a particular method, system, or technique of preparation, handling, or other treatment designed to prepare it for market,

and enhance the oil's marketability by changing its physical characteristics ... constitutes 'processing.' "

In *Amoco Production Co. v. New Mexico Taxation and Revenue Department, 134 N.M. 162, 2003-NMCA-092 , 74 P.3d 96 (N.M. Ct. App. 2003)* , the New Mexico appeals court held that "processing" includes removal of CO[2] from coal seam gas for purposes of the New Mexico Natural Gas Processors Tax. The court rejected the producers' argument that the removal of carbon dioxide is a form of purification exempted as a "field or lease operation."

A Wyoming taxation statute (*Wyo. Stat. Ann. § 39-14-201(a)(xviii)*) defines processing as

any activity occurring beyond the inlet to a natural gas processing facility that changes the well stream's physical or chemical characteristics, enhances the marketability of the stream, or enhances the value of the separate components of the stream. Processing includes, but is not limited to, fractionation, absorption, adsorption, flashing, refrigeration, cryogenics, sweetening, dehydration within a processing facility, beneficiation, stabilizing, compression (other than production compression such as reinjection, wellhead pressure regulation, or the changing of pressures and temperatures in a reservoir), and separation which occurs within a processing facility[.]

See RME Petroleum Co. v. Wyoming Dep't of Revenue, 2007 WY 16, 150 P.3d 673, 681-82, 164 O.&G.R. 391 (2007) .

In the context of federal royalty requirements for the Marketable condition rule (*q.v.*), the regulations of the Minerals Management Service provide the following: " 'Processing' means any process designed to remove elements or compounds (hydrocarbon and nonhydrocarbon) from gas, including absorption, adsorption, or refrigeration. Field processes which normally take place on or near the lease, such as natural pressure reduction, mechanical separation, heating, cooling, dehydration, and compression are not considered processing. The changing of pressures and/or temperatures in a reservoir is not considered processing." 30 C.F.R. §§ 206.101 and 206.151 (1991).

Exxon Company, U.S.A.; *Chevron U.S.A., Inc., 98 I.D., 121* IBLA 234 , GFS(OCS) 1991-184 (Nov. 15, 1991), distinguishing "processing" from "treatment," concluded that removal of hydrogen sulfide from natural gas was treatment within the meaning of applicable regulations rather than processing, and held that such costs of treatment were not deductible or chargeable against the federal royalty interest. The opinion observed: "We note that the distinction between 'treatment' and 'processing' has significance only in the Federal royalty context. In private leases, while the royalty owner is not typically required to bear any production costs (except as otherwise provided by contract), the royalty interest does bear a proportionate share of the costs to market the lease products, including the costs of placing the gas in a marketable condition, be those costs 'treatment' or 'processing' costs. Hence, in the private lease context, so long as the royalty interest shares in post-production or marketing costs, it is immaterial as to how those costs are classified. 3 Williams and Meyers, *Oil and Gas Law* §§ 642, 642.3, 645, 645.2 (1990). Because the classification of such costs is largely immaterial in the private lease context, cases employing these terms employ them interchangeably and accordingly provide little aid in distinguishing them as they are used in Federal lease matters." The opinion was *aff'd as modified, 99 I.D. 121, 121 IBLA 252A* (Oct. 2, 1992) .

Western Gas Resources, Inc. v. Heitkamp, 489 N.W.2d 869, 873, 121 O.&G.R. 405 (N.D. 1992) , cert. denied, 507 U.S. 920 (1993) , quoted the federal regulation in this entry as supporting the proposition that "[t]he technical meaning of processing indicates that processing does not include normal field processes like compression, natural pressure reduction, and heating."

Processing agreement A type of contract between a producer or other owner of gas and a plant operator for the processing of the natural gas. Under it, as contrasted with a Casinghead agreement (*q.v.*), the plant operator does not take title to the natural gas delivered to the plant, but charges the owner of the natural gas a fee for the plant's processing services. The fee may be paid in cash or in-kind in the form of a portion of the processed products. *Blackwood & Nichols Co. v. New Mexico Taxation and Revenue Department, 964 P.2d 137, 1998 NMCA 113, 139 O.&G.R. 221* ,

cert. denied, 126 N.M. 107, 967 P.2d 447 (1998) .

See also Northern Natural Gas v. Conoco, 986 S.W.2d 603, 141 O.&G.R. 436 (Tex 1998) ; case below, *939 S.W.2d 676, 141 O.&G.R. 426* (Tex. App.--El Paso, 1996) (processing contract interpreted as requiring party to deliver gas that it purchased for processing, but did not obligate party to continue to purchase natural gas for processing).

An instrument executed by lessors authorizing the extraction of gasoline or other liquid products from the gas produced under a unit. *Whelan v. Placid Oil Co., 274 S.W.2d 125, 4 O.&G.R. 442* (Tex. Civ. App. 1954, error ref'd n.r.e.) .

See "Keep whole" clause.

Processing allowance "Processing allowance means an allowance for the reasonable costs of processing gas determined under this subpart." 30 C.F.R. § 201.151 (1996).

"The allowance for the cost of manufacture is also known as a processing allowance." *Ladd Petroleum Corp., 127 IBLA 163, 170* , GFS(O&G) 1993-21 (Aug. 27, 1993).

The amount of processing allowance that may be deducted will depend on whether the processing contract is deemed to be an Arm's-length contract (*q.v.*) or a non-arm's length contract. *Marathon Oil Co., 155 IBLA 83* (May 1, 2001) .

Problems in calculating the processing allowance are discussed in *Cities Service Oil & Gas Corp., 97 I.D. 243, 117 IBLA 17* , GFS (OCS) 1991-175 (Nov. 26, 1990) (dealing with the allowability of a profit factor or the value of imputed interest on undepreciated investment in computing processing allowances. The opinion concluded that other producers who paid Cities Service 12.4 percent of the NGLP as a fee for fractioning the liquid components extracted from the natural gas stream were entitled to claim this percent as processing allowance as it represented the "actual costs" of those producers; Cities Service, however, was not entitled to the same 12.4 percent processing allowance in calculating royalty payable on its own production as it did not represent the "actual costs" borne by it.).

See also Allowance; Transportation allowance.

Processing deal An oil agreement between a producing country and a refiner in a consuming center by which the latter lifts crude oil, refines it and sells the refined products at the ongoing selling price, and repatriates the proceeds of the sale to the producing country concerned after having deducted all costs of refining and transportation, as well as his or her own profit. Al-Chalabi, "The World Oil Price Collapse of 1986," in Kohl (ed.), *After the Oil Price Collapse: OPEC, the United States, and the World Oil Market* 1, 25 (1991).

See also Price.

Processing plant A plant to remove liquefiable hydrocarbons from wet gas or casing-head gas. The process employed is described in *Freeland v. Sun Oil Co., 184 F. Supp. 754, 756, 13 O.&G.R. 758, 761 (W.D. La. 1959)* , *aff'd, 277 F.2d 154, 13 O.&G.R. 764 (5th Cir. 1960)* , *cert. denied, 364 U.S. 826 (1960)* , as follows: "The gas, which is carried full stream to the plant, is first sent through an inlet separator which removes the condensate from this full stream gas. After the condensate is removed by the inlet separator, the separator gas is sent to absorption towers where additional liquids are absorbed from such gas. The residue gas remaining after the absorption tower process is then sent through a dehydrator and is delivered to the pipe line company or is returned to the cycling unit by the producers. All liquids recovered, both from the inlet separator and from the absorption tower process, are then further processed to obtain propanes, butanes, motor fuel and other products."

Burns v. Exxon Corp., 892 F. Supp. 914, 916, 134 O.&G.R. 290 (S.D. Tex. 1995) , *aff'd, 158 F.3d 336, 142 O.&G.R. 98 (5th Cir. Tex. 1998)* . In resolving a dispute regarding royalty owed on liquid products the court quoted the definition in this Manual of Terms to describe the nature of how the nature of how the natural gas was processed in determining that even though an older processing plant was only used for fractionating, that was sufficient to trigger the application of an earlier executed processing agreement governing the payment of royalties.

See Fractionation; separation.

See also Shamrock Oil & Gas Corp. v. Commissioner, 35 T.C. 979, 13 O.&G.R. 1090, 1128-30 (1961) ; Plant.

Processing/tolling arrangement "Another pricing option for exporting countries is to negotiate tolling arrangements with refiners having spare refining capacity. In a tolling arrangement, the producing country negotiates an appropriate fee with the refiner for processing its crude and storing refined product until it is sold. Given the amount of surplus refining capacity available, such arrangements have been carried out in every refining center." Morse & Nanay, "The Oil Price Collapse: The Response of the Oil Exporters," in Kohl (ed.), *After the Oil Price Collapse: OPEC, the United States, and the World Oil Market* 175, 185 (1991).

See also Price.

Produced This term may refer to production in measurable quantities or to production in commercial quantities. Seneca Oil Co. v. Department of Energy, *CCH, Energy Management* P 26,372 (W.D. Okla. 1982), held that the Department of Energy Ruling 1980-3 was invalid insofar as it adopted the former definition of this term. This judgment was reversed with directions, *712 F.2d 1384 (Temp. Emer. Ct. App. 1983)* , the court concluding that Ruling 1980-3 was a reasonable and legally correct interpretation of the applicable legislative regulation as it existed until the effective date of amendments of November 25, 1980.

For purposes of Department of Energy Mandatory Petroleum Price Regulations, it was held in United States v. Ladd Petroleum Corp., Fed. Energy Guidelines P 26597 (Temp. Emer. Ct. App. 1988), that oil was "produced" once it was extracted from the ground in a measurable amount even though it was not sold, and in Lease Exploration, Inc. v. Department of Energy, Federal Energy Guidelines P 26598 (Temp. Emer. Ct. App. 1988), that oil was "produced" when it was extracted from the ground in a measurable amount even though it was allowed to run into a test pit where it was burned off.

Amoco Canada Resources Ltd. v. Potash Corp. of Saskatchewan Inc.; [1992] 2 W.W.R. 313, 86 D.L.R. 4th 700 (Sask. C.A. 1991), indicated that the term "produced," as used in a mineral lease, if "taken, as it would appear it should be, [means] brought forth, and not to make, to manufacture. If 'produced' be taken to mean 'brought forth,' then the minerals and substances at issue are capable of being the subject of a profit a prendre."

The Oklahoma Supreme Court has held that the term "produced" as used in oil and gas leases "means 'capable of producing in paying quantities' and does not include marketing of the product," and that the term "production" has the same meaning in the habendum clause and the "cessation of production" clause. *Pack v. Santa Fe Minerals, 1994 OK 23, 869 P.2d 323, 128 O.&G.R. 550* , discussed in Treatise § 604.4 n.13.

"It is generally recognized the 'found in paying quantities' is synonymous with 'produced in paying quantities.' " *Greenfield v. Thill, 521 N.W.2d 87, 89, 131 O.&G.R. 547 (N.D. 1994)* (citing this Manual of Terms).

Under the terms of the Outer Continental Shelf Lands Act of 1953 (*q.v.*), as amended, *43 U.S.C. §§ 1331 (m), 1337 (a),*

and *Sections 102* and 308 of the Federal Oil & Gas Royalty Management Act (FOGRMA) (*q.v.*), *30 U.S.C. §§ 1712(a), 1756*, oil recovered in the clean-up operations following the Macondo well blowout is oil that is produced from the lease and subject to federal royalty payments. *Anadarko Petroleum Corp., 181 IBLA 388* , GFS(OCS) 254 (2012).

Produced and saved In construing an instrument to determine whether it grants or reserves a mineral interest or a royalty interest, these words are persuasive that the interest is a royalty. *See* Treatise § 304.7, 307.3.

Produced and sold This term, as used in regulations creating a two-tier pricing system for crude oil, was the subject of dispute in *Tenneco Oil Co. v. Federal Energy Administration, 613 F.2d 298, 65 O.&G.R. 452 (Temp. Emergency Ct. App. 1979)* . To calculate the amount of new oil produced in a given month, producers were to determine the amount "produced and sold" from a property and subtract the BCPL (*q.v.*), which was defined as the amount of crude petroleum "produced and sold" from that property during the same month in 1972. Tenneco, the owner of an oil producing property, delivered oil from the property in accordance with a processing agreement under which the processor "topped" the lightest hydrocarbons (about 20%) and returned the balance (about 80%) to Tenneco for use to fuel steam generators providing steam for injection into oil reservoirs to aid in the recovery of crude oil. The FEA contended that the fuel consumed by Tenneco was "produced and sold" within the meaning of the price regulations; the court rejected the contention, holding that the processing or use of oil was not a sale.

State of Wyoming v. Pennzoil Co., 752 P.2d 975, 100 O.&G.R. 359 (Wyo. 1988) , held that under a lease requiring payment of royalty on gas "produced from said land saved and sold or used off the premises," no royalty was payable on the amount received by a lessee under the Take-or-pay clause *(q.v.)* of a gas purchase contract for gas which was not taken by the purchaser.

Producer (1) An operator who owns wells that produce oil or gas. *See also* Independent producer; Natural gas producer; Pipeline producer; Severance producer; Small producer.

(2) In some instances this term "producer" is defined as a person who owns or is entitled to a share of production or the proceeds thereof, and in other instances it is defined as the "operator" of a well or wells. *See, e.g., Hilliard v. Shell Western E & P, Inc., 836 F. Supp. 1365, 128 O.&G.R. 261 (W.D. Mich. 1993)* , *rev'd, 149 F.3d 1183* (6th Cir.) (Table), *cert. denied, 525 U.S. 1048 (1998)* (holding that the pass-through of the burden of a tax imposed upon a "producer" to owners of interests in production depended on whether the former or the latter definition of "producer" was used in the tax statute).

See also Severance tax.

(3) *Syn.* for Producing well (*q.v.*).

Producer gas *Syn.:* Power gas (*q.v.*).

Producer gas equipment Equipment used for the production of producer gas. 18 C.F.R. § 201.309 (1979).

Producer nomination *See* Nominations by producers.

Producer reservation gas Outer continental shelf gas that under a contract between the producer and a pipeline is reserved for the producer's own purposes. Since OCS gas crosses a state border when it is delivered onshore, the Federal Energy Regulatory Commission must authorize the transportation of the producer's gas. Tenneco Oil Co., 23 FPS 5-*938* (Opinion No. 10-B, Dec. 23, 1982); Hollis, "Notable Recent Developments in Federal Natural Gas Regulation," 34 *Sw. Legal Fdn. Oil & Gas Inst.* 31, 56 (1983).

See also Chandeleur Incentive Doctrine.

Producers 88 Lease *See* 88 lease.

"Produce to earn" farmout A Farmout agreement (*q.v.*) under which the farmee earns no rights unless production is obtained. *See* Schaefer, "The Ins and Outs of Farmouts: A Practical Guide for the Landman and the Lawyer," 32 *Rocky Mt. Min. L. Inst.* 18-1, 18-21 (1986).

See also "Drill to earn" farmout.

Producible well A term sometimes used as meaning the same as a "well capable of producing in paying quantities." *Kerr-McGee Oil Industries, Inc., 73 I.D. 110* , GFS SO-1966-30 (April 14, 1966).

San Mateo Community College Dist. v. Half Moon Bay Limited Partnership, 65 Cal. App. 4th 401, 76 Cal. Rptr. 2d 287, 292 (1998) ("a well merely capable of producing oil or gas but not actually doing so," citing this Manual of Terms).

See also Well.

Producing days *See* Scheduled allowable days.

Producing interval That portion of an oil well through which oil is taken into the well, thereupon to be raised to the mouth of the well at the surface. *Victory Oil Co. v. Hancock Oil Co., 125 Cal. App. 2d 222, 270 P.2d 604, 3 O.&G.R. 1233 (1954)* .

In *EOG Resources, Inc. v. Wagner & Brown, Ltd., 202 S.W.3d 338, 344* (Tex. App.--Corpus Christi 2006, pet. denied) , the court interpreted a farmout agreement and correction deed that assigned down to a depth of 100 feet below the "deepest producing interval as obtained in the test well" as not authorizing the granting of an interest in depths below that fixed mark, even though the producing interval went deeper on surrounding tracts. The court found that the language "as obtained in the test well" had to be given meaning, and it restricted the assignment to 100 feet below the depths reached by the test or earning well.

Producing sand A rock stratum that contains recoverable oil or gas. Strictly, the term would apply only to a sandstone, but in loose usage it also applies to other sedimentary rocks.

Producing state preference statute A statute designed to give persons in a producing state a preference right to scarce natural resources produced in the state. *See, e.g., Tex. Nat. Res. Code § 52.291 et seq.* , enacted in 1975 (Texas

consumers given a preferential right to natural gas produced from state owned lands); *La. R.S. § 30:144*, enacted in 1979 (Louisiana refiner given preferential right to in-kind royalty oil); *La. R.S. 30:607*, enacted in 1979 (Louisiana consumers given preferential right to state-owned natural gas). For a discussion of such statutes, see Anson and Schenkkan, "Federalism, the Dormant *Commerce Clause*, and State-Owned Resources," *59 Tex. L. Rev. 71 (1980).*

See also Rule 69.

Producing well A well that produces oil or gas. It is not a term of art, for it may mean a well that produces in paying quantities (that is, a well for which proceeds from production exceed operating expenses) or it may mean a well that produces in any quantity whatsoever. The term does not include a well that has discovered oil or gas but does not produce either. *Rogers v. Osborn, 152 Tex. 540, 261 S.W.2d 311, 2 O.&G.R. 1439 (1953)* ; *Holchak v. Clark, 284 S.W.2d 399, 5 O.&G.R. 595* (Tex. Civ. App.--San Antonio 1955, error ref'd) . When the meaning of the term arises in connection with the termination of an interest created for a term of years and so long thereafter as oil or gas is produced, it is usually held that producing well means a well producing in paying quantities. *See Alsip's Adm'r v. Onstott, 283 S.W.2d 711, 5 O.&G.R. 334 (Ky. 1955)* .

In *Aeroplane Oil & Refining Co. v. Disch, 203 Ky. 561, 262 S.W. 939 (1924)* , the court declared that it was shown by proof that oil men do not consider a well a producing well unless it produces at least five barrels a day, but in construing an instrument that contained this term, it applied the meaning of the term in ordinary speech, that is, a well that is producing some oil.

See also Commercial producer; Production in paying quantities; Well.

Product Any commodity made from oil or gas, including refined crude oil, crude tops, topped crude, processed crude petroleum, residue from crude petroleum, crackingstock, uncracked fuel oil, fuel oil, treated crude oil, residuum, gas, oil, casinghead gasoline, natural gas gasoline, naphtha, distillate, gasoline, kerosene, benzine, wash oil, waste oil, blended gasoline, lubricating oil, blends or mixtures of oil with one or more liquid products or by-products derived from oil or gas, and blends or mixtures of two or more liquid products or by-products derived from oil or gas. Code of Ala. 1975 § 9-17-1(9).

" 'Product' includes refined crude oil, crude tops, topped crude, processed crude petroleum, residue from crude petroleum, cracking stock, uncracked fuel oil, fuel oil, treated crude oil, residuum, casinghead gasoline, natural gas gasoline, gas oil, naphtha, distillate, gasoline, kerosene, benzine, wash oil, waste oil, blended gasoline, lubricating oil, blends or mixtures of petroleum and/or any and all liquid products or by-products derived from crude petroleum oil or gas, whether hereinabove enumerated or not." Railroad Commission of Texas, *Rules Having Statewide General Application to Oil, Gas, and Geothermal Resource Operations Within the State of Texas* Rule 79 (17) (Sept. 1985).

That which is produced. In the United States the term Production (*q.v.*) is frequently treated as synonymous with product.

See also Tesoro Alaska Petroleum Co. v. Kenai Pipe Line Co., 746 P.2d 896, 98 O.&G.R. 223 (Alaska 1987) (citing this Manual of Terms).

See also Black products; By-products cost accounting method; Fast marketable product; Illegal product; "Light end" product; Light petroleum product (LPP); Liquidproducts; Modified single marketable product method; Natural gas liquid product (NGLP); Products royalty clause; Refined petroleum product; Refined product; Refined product entitlement; White products.

Production (1) The act or process of producing; that which is produced. The typical contemporary lease requires that there be production in order to keep a lease alive after the expiration of the primary term. Occasionally leases attempt to define the character of production sufficient to keep a lease alive after the expiration of the primary term. Among the variant forms are the following:

"so long thereafter as there is production in paying quantities";

"... production in any quantity";

"... production whether or not in paying quantities";

"... as oil, gas or other minerals is or can be produced."

Absent a definition of the term in the lease, "production" sufficient to keep a lease alive after the expiration of the primary term under the "so long thereafter" clause is normally construed to mean production in paying quantities, that is, production in quantities sufficient to yield a return in excess of operating costs, even though drilling and equipment costs may never be repaid and the undertaking considered as a whole may ultimately result in a loss. *See Garcia v. King, 139 Tex. 578, 164 S.W.2d 509 (1942)* . If there is a permanent cessation of production, at or after the expiration of the primary term, the lessee's interest in the premises will terminate. If, however, the cessation of production is temporary in character, the lease will not be extinguished if the production is resumed within a reasonable time. Some courts have been more than generous in finding that prolonged cessation of production was merely temporary. *See* Treatise § 604.4.

(2) As used in common speech, producing oil or gas wells, *e.g.,* in the sentence, "Smith has production in Harris County." This would normally be understood to mean oil production unless the word "gas" is added.

For purposes of the Natural Gas Act, it becomes necessary to determine when production is completed. *See Continental Oil Co. v. Federal Power Comm'n, 266 F.2d 208, 10 O.&G.R. 601 (5th Cir. 1959)* , *cert. denied, 361 U.S. 827 (1959)* , for a detailed discussion of this matter.

In allocating costs between operating and nonoperating owners it may be necessary to determine when "production is completed," *viz.,* what is the "place of production" or "point of production." *See, e.g., Merritt v. Southwestern Electric Power Co., 499 So. 2d 210, 213, 93 O.&G.R. 491 (La. Ct. App. 1986)* (concluding that "the point of production" was the wellhead). *See* Treatise §§ 645-*645.3*.

This definition was quoted in *Glass v. Commissioner, 76 T.C. 949, 69 O.&G.R. 18 (1981)* .

(3) In the United States the word production is frequently used to describe the product of a well or lease, *viz.,* the crude oil or natural gas produced.

Diamond Shamrock Exploration Co. v. Hodel, 853 F.2d 1159, 1165, 103 O.&G.R. 38, 49 (5th Cir. 1988) , discussed the term "production" as follows:

"The word 'production' is a horse of many colors. ...

"The term 'production' is used in the oil and gas industry in several different but related senses. The term can be used to refer to an abstract noun: (i) the act or process of producing. It can also refer to either of two concrete nouns: (ii) the products of an oil and gas well, or (iii) the well itself.

"... .

"In the interests of consistency, logic and economics, this court adopts as the legal definition of the word 'production,' as used in the context of calculating royalty payments, the actual physical severance of minerals from the formation. For purposes of royalty calculation and payment, production does not occur until the minerals are physically severed from the earth."

Circuit Judge John R. Brown observed in *Amoco Production Co. v. Sea Robin Pipeline Co., 844 F.2d 1202, 1210* note 25, *100 O.&G.R. 36, 51 (5th Cir. 1988)* , that: "The word 'production' is used in the oil and gas industry in several different but related senses. A definition for the term is found in Williams and Meyers, *Oil and Gas Law (Manual of Terms)* 755 (1969): ... According to this definition, the term can be used to refer to an abstract noun--the act or process of producing--or to either of two concrete nouns--either the *products* of an oil or gas well or the *well* itself. This tripartite nature of the term 'production' has always to be kept in mind."

Diamond Shamrock and *Sea Robin* were interpreted to require a physical severance from the ground for there to be production in *Anadarko Petroleum Corp., 181 IBLA 388* , GFS(OCS) 254 (2012), where, as noted below, the Board concluded that oil recovered as part of the clean up efforts for the Macondo well blowout constituted production for the purposes of triggering the federal royalty obligation.

Riley v. Meriwether, 780 S.W.2d 919, 923, 111 O.&G.R. 336 (Tex. Ct. App. 1989, error denied) , defined production so as to exclude flaring gas, a leaking valve, or other fortuitous circumstance: "Production of a well involves actually taking oil or gas from the well in a captive state for either storing or marketing the product for sale." [Citing this **Treatise**].

Mesa Operating Limited Partnership v. United States Dept. of Interior, 931 F.2d 318, 325, 116 O.&G.R. 263 (5th Cir 1991) , *cert. denied, 502 U.S. 1058 (1992)* , in the context of the so-called Merchantable condition rule (*q.v.*) defined "production" in the phrase "amount or value of the production" as "meaning 'gas conditioned for market.' "; "accordingly, where the purchaser reimburses the lessee for treatment costs ... these payments become part of the value of production (gross proceeds) subject to royalty." *Id. at 323* .

The Outer Continental Shelf Lands Act of 1953 (*q.v.*,), as amended, defines production as: "...those activities which take place after the successful completion of any means for the removal of minerals, including such removal, field operations, transfer of minerals to shore, operation monitoring, maintenance, and work over drilling." *42 U.S.C. § 1331(m)*. In *Anadarko Petroleum Corp., 181 IBLA 388* , GFS(OCS) 254 (2012), the Board concluded that oil recovered after the Macondo well blowout constituted production for which royalties were owed.

Rogers v. Westerman Farm Co., 29 P.3d 887, 905, 2001 Colo. J. C.A.R. 3418 (Colo. 2001) ("It is submitted that acts which constitute production have not ceased until a marketable product has been obtained.").

In response to the decision in *Sun Exploration & Production Co., 97 I.D. 1 , 112 IBLA 373* , GFS(O&G) 1990-4 (Jan. 19, 1990) (that for purposes of a sliding scale royalty, the MMS could properly apply prospectively a definition of "gross production" as meaning "total" rather than "net" production), the MMS adopted a new definition of onshore oil "production" from sliding-scale leases "in a manner consistent with the well-established practice that lessees have relied on" excluding from the definition oil used on the lease or unavoidably lost. *56 Fed. Reg. 63661* (Dec. 5, 1991) .

In denying the right of a royalty owner to a share of take-or-payments, *Killam Oil Co. v. Bruni, 806 S.W.2d 264, 267, 118 O.&G.R. 280* (Tex. App.--San Antonio 1991) observed that "it has become well established under Texas law that the term 'production' as used in oil and gas leases means the actual physical extraction of the mineral from the soil."

See also Hurd Enters., Ltd. v. Bruni, 828 S.W.2d 101, 118 O.&G.R. 311 (Tex. App.--San Antonio 1992, writ denied)

(following *Killam Oil Co. v. Bruni*).

State of Wyoming v. Pennzoil Co., 752 P.2d 975, 979, 100 O.&G.R. 359, 367 (Wyo. 1988) , concluded that "The word 'production' has an established meaning when used in a royalty or habendum clause of an oil and gas lease. 'Production' requires severance of the mineral from the ground."

BHP Petroleum Pty Ltd. v. Balfour, (1987) 61 A.L.J.R. 345 (High Court of Australia, June 11, 1987), noted, 16 *Melbourne U.L. Rev.* 436 (1987), held that, for purposes of determining value of production at the wellhead, the wellhead of a subsea completion was the Christmas tree located on the seabed immediately above the well and was not on a platform some four kilometers away which was connected with the Christmas tree by pipelines and flow lines.

See also the following:

Kramer, *Royalty Obligations Under the Gun-- The Effect of Take-or-Pay Clauses on the Duty to Make Royalty Payments*, 39 Sw. Legal Fdn. Oil & Gas Inst. 5-1, 5-8 *et seq.* (1988).

See also Merchantable and minable coal; Place of production; Presumed production.

The term "production" may have different meanings as used in separate lease clauses. *See P.M. Drilling, Inc. v. Groce, 792 S.W.2d 717, 111 O.&G.R. 127* (Tenn. Ct. App. 1990, *permission to appeal denied by S. Ct.*) (definition of production applicable to habendum clause in the instant lease was not applicable to the term as used in the "cessation of production" clause).

On the other hand, the Supreme Court of Oklahoma has held that the term "produced," as used in oil and gas leases, "means 'capable of producing in paying quantities' and does not include marketing of the product," and that the term "production" has the same meaning in the habendum clause and the "cessation of production" clause. *Pack v. Santa Fe Minerals, 1994 OK 23, 869 P.2d 323, 128 O.&G.R. 550* .

For purposes of an exception contained in the retail sales tax law relating to services in "the exploration for, and production of, crude oil and natural gas," *Kilbarger Construction Co. v. Limbach, 37 Ohio St. 2d 234, 525 N.E.2d 483, 103 O.&G.R. 175 (1988)* , held that exploration and production did not include site preparation prior to actual drilling of a well. *See also Lyons v. Limbach, 40 Ohio St. 3d 92, 532 N.E.2d 106, 104 O.&G.R. 205 (1988)* (equipment for reclaiming crude oil and natural gas sites and "frac" tanks).

For purposes of the Illinois Oil and Gas Lien Act, *770 ILCS 70/1 et seq.* , the court in *Marlin Energy, Inc. v. Sorling, Northrup, Hanna, Cullen & Cochran, Ltd., 243 F. Supp. 2d 835 (C.D. Ill. 2003)* , made use of the definition of "production" from *Rogers v. Westerman Farm Co., 29 P.3d 887, 143 O.&G.R. 1 (Colo. 2001)* , to determine that a company engaged in gathering, compressing and dehydrating natural gas was an "operator" upon which a law firm could place a lien to secure payment for legal services.

See also Affidavit of production; Average daily production; Call on production; Cessation of production; Commercial producer; Commercial quantity; Commingled production; Constructive production; Constructive production doctrine; Excessive production; Flush production; Gross production; Held by production (HPB); Illegal production; Initial production; Just and equitable share of the production; Marginal production; Nonpaying production; Operations for production; Optimum rate of flow (or production); Over production; Paying production; Permanent cessation of production; Place of production; Presumed production; Primary production; Primary recovery; Qualified production; Qualified royalty production; Secondary recovery; Settled production; Stripper production; Temporary cessation of production; Tertiary recovery; Value of production.

Production affidavit *See* Affidavit of production.

Production agreement *See* Deferred production agreement.

Production-and-allotment provision A provision found in some leases affecting sizable tracts under which a lease may terminate at the expiration of the primary term (or other designated time) except as to acreage allocated to a well for production purposes. *See* Treatise § 603.1 at n.8.3. The lease may also include a Designation-and-filing provision (*q.v.*) requiring the lessee to file with the county clerk a written designation allocating portions of the leased premises to producing wells at the end of the primary term (or other designated time).

The lease construed in *Parten v. Cannon, 829 S.W.2d 327, 121 O.&G.R. 315* (Tex. App.--Waco 1992, writ denied) , contained both such provisions. The designation-and-filing provision was construed as a covenant, and the production-and-allotment provision was construed as a condition. The opinion writer did not appear to understand the consequences of use of the term "condition," for immediately after noting that in *Mayfield v. de Benavides, 693 S.W.2d 500, 85 O.&G.R. 162* (Tex. App.--San Antonio 1985, error ref'd n.r.e.) , the court "held that such a provision was a 'special limitation' on the grant," the writer declared: "Therefore, we construe the production-and-allotment provision of paragraph 18 as a condition." (Emphasis added).

Production and marketing covenant The implied covenant in an oil and gas lease requiring the lessee to produce and market the product. *See* Implied covenants.

Production area shipment point The decisive place for the determination of the quantity of production under a Norwegian production license. This is "the place where the pipeline to the land terminal is connected to the main terminal of the production site in the North Sea. If the transport is by means of tanker, the point of shipment is considered to be that point where the petroleum produced passes the ship's side." Krohn, Kaasen, *et al., Norwegian Petroleum Law* 2-27 (1978).

Production assignment A term occasionally used to describe a participating interest in the production from a leasehold, sometimes evidenced by a certificate. *See Rawco, Inc., Ltd. v. Commissioner, 37 B.T.A. 128 (1938)* .

Syn.: Per cent interest (*q.v.*)

See also Assignment.

Production bonus An additional Bonus (*q.v.*) payable by an operating oil company to a host nation upon the attainment of a specified oil production. *See, e.g.,* Paragraph 6.1 of an Abu Dhabi Petroleum Concession Agreement in OPEC, *Selected Documents of the International Petroleum Industry* 1967 at p. 165.

Boulos, "Mutuality of Interest Between Companies and Governments--Myth or Fact?" IBA Section on Energy & Natural Resources Law, *Energy Law '90,* at 3, 22 (1990), observed that "production bonuses are more useful and acceptable than signature bonuses. ... A production bonus at some level of production has a less negative impact on the energy companies than a signature bonus."

See also the discussion of the requirement of a production bonus under certain Norwegian licenses in K. W. Dam, *Oil*

Resources 61 (1976).

Production casing *See* Casing.

Production certificate A certificate evidencing a Per cent interest (*q.v.*). Such certificates may be in the form of Preferred and Common, the holders of the former being entitled to payment of an amount equal to their contribution before anything is paid on the common interests. *Monrovia Oil Co. v. Commissioner, 83 F.2d 417 (9th Cir. 1936)* . The certificate may evidence participation in a specifically named well only. *Rogan v. Blue Ridge Oil Co., Ltd., 83 F.2d 420 (9th Cir. 1936)* , *cert. denied, 299 U.S. 574 (1936)* .

Production cessation *See* Cessation of production; Cessation of production clause; Permanent cessation of production; Temporary cessation of production.

Production company A company engaged primarily in exploration for and production of oil, and not in transportation, refining or marketing of petroleum.

Production costs For a number of purposes, *e.g.*, the determination of costs burdening only operating interests as opposed to costs burdening both operating and nonoperating interests, it becomes necessary to classify certain costs as "production costs" or as "subsequent-to-production costs." Cases and materials dealing with this problem are discussed in Treatise §§ 645-*645.3*

For other purposes it may become necessary to classify costs as either "production costs" or "production-related costs" or as "production costs" or "post-production costs." *Sandstone Resources, Ltd. v. Federal Energy Regulatory Comm'n, 973 F.2d 956 (D.C. Cir. 1992)* , rejected a challenge to a Commission ruling that costs incurred in removing brine produced with natural gas, after it left the wellhead but before the gas was delivered to the pipeline purchaser, were production-related costs for purposes of Order 94 and Order 94-A which distinguished between costs incurred to perform "production functions" and those incurred to perform "production-related functions."

The difficulty of defining such terms as "production costs"and "post-production costs" is illustrated by *Garman v. Conoco, Inc., 886 P.2d 652, 661, 132 O.&G.R. 488 (Colo. 1994)* , which appears to use another ill-defined term, "marketable product," to distinguish between production costs and post-production costs:

"Upon obtaining a marketable product, any additional costs incurred to enhance the value of the *marketable gas* ... may be charged against nonworking interest owners ...

"For the above reasons our answer to the certified question is that, absent an assignment provision to the contrary, overriding royalty interest owners are not obligated to bear any share of post-production expenses, such as compressing, transporting and processing, undertaken to transform raw gas produced at the surface into a marketable product."

See also Post production costs; Production-related costs.

Production enhancement gas *See* Qualified production enhancement gas.

Production enhancement procedures Procedures, undertaken in order to increase production, which entitles a producer to a higher maximum lawful price for gas produced. *See* Federal Energy Regulatory Commission Order No. 107, High-Cost Natural Gas: Production Enhancement Procedures, 21 FPS 5-585 (Nov. 13, 1980). Among such procedures are the following: re-entry into a well that has been plugged and abandoned; re-entry into a well to drill deeper, or to sidetrack, to a different location; recompletion by reperforation of a zone from which natural gas has been produced or by perforation of a different zone; repair or replacement of faulty or damaged casing, tubing or related downhole equipment; fracturing, acidizing, or installing compression equipment; installation of equipment necessary for removal of excessive water, brine, or condensate from the well bore in order to establish, continue, or increase production from the well; workover operations designed to reduce production of excessive water or brine in order to establish, continue, or increase production of gas from the well; operations for disposing of water or brine, the presence of which prohibits or severely limits gas production from the well; workover operations to control sand production in the well bore, or to remove sand from the well bore and downhole equipment in order to continue to produce gas from the well; and "inert" gas injection. *See* 18 C.F.R. § 271.803 (1980).

See also Secondary recovery; Tertiary recovery.

Production entity For purposes of the Alberta Natural Gas Royalty Regulations (Alta. Reg. 16/74), production entity means the area of (a) a block, project or production spacing unit as defined in The Oil and Gas Conservation Act, or (b) a unit operation as defined in The Mines and Minerals Act, or (c) the drilling spacing unit of a well that is not within the area of a block, project or production spacing unit referred to in clause (a) or of a unit operation referred to in clause (b).

Production facilities Facilities used in the production of oil after completion of a well. For federal income tax purposes, the Revenue Service regards a well as completed when a Christmas tree (*q.v.*) is installed. Pumping equipment, salt water disposal equipment, flow lines, separators, storage tanks, treating equipment, etc. are production facilities, and the Revenue Service requires capitalization of production facilities as equipment costs. *See* Burke and Bowhay, *Income Taxation of Natural Resources* P 1.13 (1981).

Production fund An investment fund formed to acquire and operate producing oil and gas properties or nonoperating interests in such properties.

See also Drilling fund; Income program; Lease acquisition fund; Limited partnership; Royalty trust.

Production imbalance "In a jointly owned well, a production imbalance occurs when one co-owner takes a share of the total production that is disproportionate to its ownership interest in the well. When a co-owner produces more than its proportionate share it is overproduced. On the other hand, a co-owner who produces less than its proportionate share is said to be underproduced." *Weiser-Brown Oil Co. v. Samson Resources Co., 966 F.2d 431, 432, 119 O.&G.R. 7 (8th Cir. 1992)* (holding that assignment of underproduced co-owner's interest construed did not convey previously accrued rights to underproduction; the assignor "had no contractual right to the underproduction, it merely held a right to an accounting as between co-tenants. This right is personal to Mobil and does not run with the land to the successive tenant, Weiser-Brown. ... Two, Mobil made no attempt to assign any right to recover production to Weiser-Brown before Mobil released Samson from all claims, pursuant to a settlement agreement under a different lawsuit. Therefore, because Mobil had no contractual right to the underproduction and made no assignment to Weiser-Brown of any interest in the underproduction, Weiser-Brown holds no legal right to recover the underproduction."), noted by Moon, "Assigning Gas Balancing Rights in the Absence of a Gas Balancing Agreement," *14 Energy L.J. 407 (1993).*

See also Balancing.

Production in commercial quantities This term was defined for purposes of the Behind the Pipe Exclusion (*q.v.*) of the Natural Gas Policy Act of 1978 (NGPA) (*q.v.*) in *True Oil Co. v. Federal Energy Regulatory Commission, 663 F.2d 75, 71 O.&G.R. 445 (10th Cir. 1981)* . In the economic and practical sense, the term was said to require "a capability to market," and a well may be capable of producing natural gas in commercial quantities before the completion of marketing facilities.

"But, the act in question here speaks not in terms of capability but of the fact of production. 'Production in commercial quantities' requires means of transportation of the product from the producer to the consumer. Otherwise the quantities are not commercial in the plain sense of the word."

For purposes of an Undeveloped acreage clause (*q.v.*) of a Gas Lease-Sales Agreement (GLA) (*q.v.*), *El Paso Natural Gas Co. v. American Petrofina Co. of Texas, 733 S.W.2d 541, 93 O.&G.R. 379* (Tex. Ct. App. 1986, error ref'd n.r.e.) , *petition for cert. dism'd pursuant to Rule 53, 485 U.S. 930, cert. denied, 485 U.S. 987 (1988)* , concluded that both the basic lease royalty and the cost of overriding royalties burdening the property were to be considered as costs in determining whether undeveloped acreage was capable of producing in commercial quantities.

See also Commercial quantity; Merchantable and minable coal.

Production injection packer A device inserted into an oil and gas well to seal off one zone from another, generally to stop water from entering the well bore and interfering with production. *Transamerica Oil Corp. v. Lynes, Inc., 723 F.2d 758 (10th Cir. 1983)* .

Production in paying quantities Production in such quantity as to enable the operator to realize a profit.

The term has different meanings for purposes of the habendum clause of the lease and for purposes of the covenants, express or implied, in the lease. For purposes of the habendum clause, that is, for the purpose of keeping the lease in force after the expiration of the primary term, paying quantities means production in quantities sufficient to yield a return in excess of operating costs, even though drilling and equipment costs may never be repaid and the undertaking considered as a whole may ultimately result in a loss. For purposes of measuring the duties of the lessee under the covenants of the lease, express or implied, the term means production in quantities sufficient to yield a return in excess of drilling, development and operating costs. Thus, if drainage occurs, under the Offset well covenant (*q.v.*) a lessee is normally required to drill an offset well to protect the leased premises from drainage, but he is not required to do so (subject to certain exceptions) unless the well, if drilled, would produce in paying quantities in the latter sense, that is, unless the well would repay all costs of drilling and operation. *See Transport Oil Co. v. Exeter Oil Co., Ltd., 84 Cal. App. 2d 616, 191 P.2d 129 (1948)* . *See* Treatise §§ 604.6-*604.6(h)*.

The Oklahoma court in *Smith, d/b/a Smith Oil, v. Marshall Oil Corp., 2004 OK 10, 85 P.3d 830, 833* , stated that production in paying quantities for habendum clause purposes "is a term defined by Oklahoma case law to mean 'production of quantities of oil and gas sufficient to yield a profit to the lessee over operating expenses, even though the drilling costs or equipping costs are never recovered, and even if the undertaking as a whole may result in a loss to the lessee.' [citing *Hininger v. Kaiser, 738 P.2d 137, 94 O.&G.R. 167 (Okla. 1987)]* The phrase denotes a return in excess of 'Lifting expenses,' [*q.v.*] costs associated with lifting the oil from the ground after the well has been drilled."

El Paso Natural Gas Co. v. American Petrofina Co. of Texas, 733 S.W.2d 541, 93 O.&G.R. 379 (Tex. Ct. App. 1986, error ref'd n.r.e.) , *petition for cert. dism'd pursuant to Rule 53, 485 U.S. 930, cert. denied, 485 U.S. 987 (1988)* ,

concluded that under the Unprofitability clause (*q.v.*) of a Gas Lease Sales Agreement (GLA) (*q.v.*) both the lease royalty and any overriding royalty burdening a property were to be considered in determining profitability, although for lease habendum clause purposes only the basic lease royalty would be so considered.

See also Yates Petroleum Corp., 89 I.D. 480, 67 IBLA 246 (Sept. 24, 1982) , emphasizing that this term takes its meaning from the context, and finding that as used in a unit agreement, the term incorporated a requirement that the costs of drilling must be recouped. However it was held that for purposes of the extension provisions of *30 U.S.C. § 226(j) (1976)*, production in paying quantities "requires that the well drilled be able to produce sufficient hydrocarbons to recover the costs of operating and marketing but need not recoup the costs of drilling."

American Resources Management Corp., IBLA 79-10, GFS(O&G) 1979-58, concluded that the term "a well capable of producing oil or gas in paying quantities" refers to a well which is actually in physical condition to produce a sufficient quantity of oil or gas to yield a reasonable profit over and above the costs of operating the well and marketing the product. A satisfactory test of a well to establish its capability is necessary.

Article 124 of the Louisiana Mineral Code [R.S. 31:124 (1975) (1980 Supp.)] provides that production "is considered to be in paying quantities when the production allocable to the total original right of the lessee to share in production under the lease is sufficient to induce a reasonably prudent operator to continue production in an effort to secure a return on his investment or to minimize any loss." The Comment to this Article discusses in considerable detail the Louisiana cases and the concept of Serious consideration (*q.v.*)

For efforts to distinguish "commercial quantity" from "paying quantities," and "commercial production" from "production in paying quantities," see the entry for Commercial quantity.

"It is generally recognized that 'found in paying quantities' is synonymous with 'produced in paying quantities.' " *Greenfield v. Thill, 521 N.W.2d 87, 89, 131 O.&G.R. 547 (N.D. 1994)* (citing this Treatise).

Cases on the meaning of "paying quantities" are collected in Annotation, "Meaning of 'Paying Quantities' in Oil and Gas Lease," *43 A.L.R.3d 8.*

See also the following:

Rick G. Strange, "Production in Paying Quantities," 44 *Landman* 51-57 (May/June 1999);

Schnell v. Hudson, 141 Ill. App. 3d 617, 96 Ill. Dec. 16, 490 N.E.2d 1052 (1986, *cert. denied*) (citing this Manual);

Solicitor's Opinion, "Section 2(a)(2)(A) of the Mineral Leasing Act of 1920," *92 I.D. 537* (Feb. 12, 1985) .

Most federal unit agreements require wells to "produce in paying quantities" if there is to be an adjustment in the Participating areas (*q.v.*) The Madden Deep Unit Agreement defines paying quantities as "quantities sufficient to repay the cost of drilling, and producing operations, with a reasonable profit." The capital costs of building a processing plant in order to remove sulfur dioxide, however, is treated as an extraordinary cost and is not part of the production in paying quantities analysis. *Rio de Viento, Inc., 153 IBLA 32 (2000)* .

A number of the factors going into the determination of whether production is in paying quantities are discussed in *Discussion Notes, 12 O.&G.R. 695 (1960). See also* Treatise §§ 604.6-*604.6 (h).*

See also Administrative overhead; Capable well; Commercial quantity; Commercial well; Merchantable and minable coal; Production.

Production license In the United Kingdom, the authorization by the Secretary of State for Energy to engage in exploration for and exploitation of petroleum, whether oil or natural gas. At one time the license had an initial term of six years at the end of which the license could be continued for a further 40 years as to not more than one-half of the original area. Later licenses have an "initial term" of four years which may be continued for a "second term" of three years, subject to due performance and observance of prescribed terms and conditions. The license may elect to continue the license for a "third term" of thirty years as to a part of the original area (called the "continuing part"); the license is "determined" (terminated) as to the residue of the area, called the "surrendered part". The surrendered part (including any portions previously surrendered) must amount to not less than two-thirds of the number of sections contained in the area originally comprised in the license. Details of the licensing procedure are set forth in The Petroleum (Production) Regulations 1976. *See* Henderson *et al., Oil and Gas Law: The North Sea Exploitation* 3.1014 *et seq.* (1979); J. Salter, *U.K. Onshore Oil and Gas Law* (1986).

In Norway, a license granting exclusive right of exploration for and exploitation of petroleum in specific areas. *See* Krohn, Kaasen, *et al., Norwegian Petroleum Law* Part 2 (1978), for a detailed study of the production license.

See also Area fee; Block; Entitlement; Exploration license; Exploration retention license; Exploratory license (Canada); Exploratory title; Illustrative agreement; Invited application; Noninvited application; Non-recurrent fee; Petroleum license; Reconnaissance license.

Production loan A loan on a producing property, usually taken to finance further development of a producing reservoir. *See* Project financing.

For a discussion of repayment provisions of production loans, see Cross, "Structuring and Documenting Oil and Gas Financing Transactions: Part One," 6 *Tex. Oil & Gas L.J.* 38 and 54 (1992). Among repayment programs are (1) demand payment program, under which a lender may demand payment in full at any time that the lender, in its sole discretion, feels insecure; (2) term payment program, under which interest and principal payments are required to be made on a quarterly or monthly installment basis; payments of principal are often based upon a percentage of either gross or net revenues; and (3) revolving loan format, under which the lender commits to extend a line of credit to the borrower for a specified term; during the revolving period, the borrower may borrow funds, repay, and then re-borrow the committed funds.

Production of gas The act of bringing forth gas from the earth. *Saturn Oil & Gas Co. v. Federal Power Comm'n, 250 F.2d 61, 8 O.&G.R. 365 (10th Cir. 1957) , cert. denied, 355 U.S. 956 (1958) .*

See also Production.

Production or decline curve (S curve) The annual production of an oil or gas reservoir through time is a dome-shaped profile with its peak usually to the left of center. The progress of the production from its peak toward depletion is called the decline curve. If this is plotted as cumulative production it follows a gradual S-shape as it approaches the total, or ultimate, production of the reservoir. 58 *Resources for the Future* 2 (March 1978).

Production or gathering exclusion The Natural Gas Act of June 21, 1938, *52 Stat. 821, 15 U.S.C. § 717* provides for regulation of "the business of transporting and selling natural gas for ultimate distribution to the public" but Section 1(b) of the Act exempted from regulation the "production or gathering" of natural gas. Over the years there has been a steady erosion of the scope of the production or gathering exclusion, as noted in *Shell Oil Co. v. Federal Energy Regulatory*

Comm'n, 566 F.2d 536, 60 O.&G.R. 310 (5th Cir. 1978) , *aff'd by equally divided court, 440 U.S. 192 (1979)* . In that case, however, the court concluded that the production or gathering exclusion rendered invalid FPC Order No. 539-A providing for a certificate condition that the seller of natural gas "shall observe the standard of a prudent operator to develop and maintain deliverability from reserves dedicated hereunder." *566 F.2d at 538* . "To hold that the power to issue Order No. 539-B is within the jurisdiction of the FERC would all but eliminate the 'production or gathering' exclusion and would allow the FERC to encroach on areas reserved to the states." *566 F.2d at 540* .

See also Northwest Central Pipeline Corp. v. State Corporation Comm'n, 240 Kan. 638, 732 P.2d 775, 92 O.&G.R. 290 (1987) (holding that proration order cancelling certain underages in production of gas allowable fell within the production or gathering exclusion), *aff'd, 489 U.S. 493, 100 O.&G.R. 269 (1989)* . This case if discussed in the following papers:

Martin, *Federalism and State Regulation of the Production of Natural Gas --The Supreme Court Revisits Preemption*, 5 J. of Min. L. & Policy 207 (1989-90);

Maudlin, *Oil and Gas Law: State Production Regulation Under the Natural Gas Act Revisited, 29 Washburn L.J. 123 (1989);*

Note, *Preemption and Regulatory Efficiency in Federal Energy Statutes, 103 Harvard L. Rev. 1306, 1317 (1990);*

Pierce, *Reconciling State Oil and Gas Conservation Regulation with the Natural Gas Act: New Statutory Revelations, 1989 BYU L. Rev. 9 (1989).*

See also the following:

Northern Natural Gas Co. v. Federal Energy Regulatory Comm'n, 929 F.2d 1261, 1271 (8th Cir.) , *cert. denied, 502 U.S. 856 (1991)* (discussing the scope of this exclusion);

EP Operating Co. v. Federal Energy Regulatory Comm'n, 876 F.2d 46, (5th Cir. 1989) (discussing the classification of a pipeline as a gathering line or as a transmission line for purposes of this exclusion);

Walker Operating Corp. v. Federal Energy Regulatory Comm'n, 874 F.2d 1320, 1326, 109 O.&.G.R. 613, 620 (10th Cir.) , *cert. denied, 493 U.S. 954 (1989)* (discussing the construction of this exclusion).

Production payment Another name for Oil payment (*q.v.*). Production payment is a broader term, since it would include interests in oil, gas, sulphur, or other minerals. However, oil payment is the more common term even where minerals other than oil are included.

A production payment "refer[s] to an interest created out of the lessee's estate which is a share of the minerals produced from described premises, free of the costs of production at the surface... But a production payment terminates when the lease expires, or sooner if the owner of the interest has received the agreed quantum of production or dollar amount from the sale of production." *QEP Energy Co. v. Sullivan, 444 Fed. Appx. 284, 289 (10th Cir. 2011)* .

Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* 273 (1986), observe that production payments, like most other forms of project lending, originated in the United States; however, they have proved more difficult to transpose to other parts of the world where oil in the ground is the property of the host country and the grantor acquires a property right only after the oil has been extracted.

See also the following:

Strohl, *Gas Into Gold: The New Alchemy of Financing Oil and Gas Acquisitions in the 1990's*, 39 Rocky Mt. Min. L. Inst. ch. 16 (1993);

Hardie, *A Reexamination of the Definitional Elements of Production Payments*, 38 Sw. Legal Fdn. Oil & Gas Inst. 14-1 (1987).

Successful employment of production payments in the United Kingdom are discussed in Preece, *Financing North Sea Projects* [1991] 5 OGLTR 135, 143.

See also Advance payment financing; Blanket production payment; Deferred production payment; Equipment production payment; Equity production payment; Forward oil purchase; Guaranteed production payment; Limited royalty; Primary production payment; Proceeds production payment; Project financing; Volumetric production payment; Wrap-around carved-out production payment.

Production payment agreement A financing agreement between a producer and a buyer under which the buyer advances money to the producer for a certain amount of output. See *Enron Sells Production Payment*, Wall St. J., Oct. 1, 1992, at C16, where it was reported that Enron sold gas for $326.8 million.

For a discussion of the use of production payments as a source of capital for the oil and gas industry, see Heintz, "Emerging Alternative Financing Structures in the Energy Industry," 45 *Sw. Legal Fdn. Oil & Gas Inst.* 5-1 (1994).

See also Financing.

Production payment reservation agreement An agreement, incident to a pooling or unitization agreement, concerning production payments reserved in such agreement. *See* Myers, *The Law of Pooling and Unitization* § 15.35 (2d ed. 1967).

Production payment trust A trust in the form of a Royalty Trust (*q.v.*) that has as its corpus production payments rather than royalty interests. *See* Crichton, *Royalty Trusts and Other Exotic Distributions to Shareholders*, 40 N.Y.U. Inst. on Federal Taxation 12-1, 12-45 (1982).

Production penalty *Syn.:* for Nonconsent penalty (*q.v.*). *See* Johnson, *Non-Operators' Rights Under the CAPL Operating Procedure, 28 Alta. L. Rev. 1, 30 (1990).*

Santa Fe Exploration Co. v. Oil Conservation Comm'n, N.M., 835 P.2d 819, 822, 114 O.&G.R. 103 (1992) , employed this term as synonymous with Allowable penalty (*q.v.*)

Production plan *See* "Out of balance" production plan.

Production point The term used in the Utah severance tax statute to further define the term "at the well," which is where the oil and gas must be valued for tax purposes. *Utah Code Ann. § 59-5-101(19)*. As interpreted by the court in *ExxonMobil Corp. v. Utah State Tax Commission, 2003 UT 53, 86 P.2d 706, 711* , the production point is not necessarily the extraction point but will be the separator tank where basic sediments are removed from the oil. The

substantive decision in *ExxonMobil* as to how to value oil and gas for Utah severance tax purposes was affirmed in *Union Oil Co. of California v. Utah State Tax Commission, 2009 UT 78, 222 P.3d 1158 (2009)* , although the *Union Oil* opinion modified *ExxonMobil* insofar as how it was to be applied to pending and future cases.

See also At the well.

Production process A term used in the Wyoming severance tax statute to demarcate the point at which the natural gas is to valued. *Wyo. Stat. Ann. § 39-14-203(b)(iv)* provides:

"The production process for natural gas is completed after extracting from the well, gathering, separating, injecting and any other activity which occurs before the outlet of the initial dehydrator. When no dehydration is performed, other than within a processing facility, the production process is completed at the inlet to the initial transportation related compressor, custody transfer meter or processing facility, whichever occurs first."

The statute was interpreted as it applied to Coalbed methane (CBM) (*q.v.*) in *Williams Production RMT Co. v. State of Wyoming, Department of Revenue, 2005 WY 28, 107 P.3d 179 (Wyo. 2005)* .

Production-related costs Under Order No. 94 of the Federal Energy Regulatory Commission, *45 Fed. Reg. 53099 (1980)* , designed to implement its authority to allow a production-related cost allowance under Section 110 of the Natural Gas Policy Act of 1978 (NGPA) (*q.v.*), the Commission adopted the following definitions:

" 'Production costs' means all costs incurred for exploration, development, production and abandonment operations, enhanced recovery techniques (including costs of compression incurred in the production of stripper well natural gas to which the pricing provisions of Subpart H of Part 271 apply), gaslift pumping or other liquid lifting equipment located on or in the vicinity of the wellhead or the point of commingling gas on the offshore platform from which the gas is produced, and costs that attend compression necessary for lifting liquids, cycling gas in a gas-condensate reservoir or pressurizing an oil reservoir.

" 'Non-allocable costs' means all costs incurred for the construction or operation of facilities to recover, separate, extract, process, treat, dehydrate, store, or transport crude oil or natural gas liquids or both.

" 'Production-related costs' means costs (excluding production costs and non-allocable costs) of compressing, gathering, processing, treating, liquefaction, conditioning, or transporting natural gas, or other similar costs."

Sandstone Resources, Inc. v. Federal Energy Regulatory Comm'n, 973 F.2d 956 (D.C. Cir. 1992) , rejected a challenge to a Commission ruling that costs incurred in removing brine produced with natural gas, after it left the wellhead but before the gas was delivered to the pipeline purchaser, were production-related costs for purposes of Order 94 and Order 94-A which distinguished between costs incurred to perform "production functions" and those incurred to perform "production-related functions."

Okland Oil Co. v. Conoco, Inc., 144 F.3d 1308, 141 O.&G.R. 325 (10th Cir. 1998) , upheld the liability of a gas processor for deducting "production related costs" from the sale price of the gas at the tailgate of the plant. The producer was to be paid a percentage of price received for sale by the processor at the tailgate, but the processor deducted a sum of money from the actual sale price without disclosing that such sums were being deducted from the sale price.

See also Presumptive production costs; Production costs.

Production-related costs reimbursement The amount of production-related costs for which a first seller of natural gas may receive reimbursement over and above the otherwise applicable ceiling price under FERC Order 94 (*q.v.*) and supplementary orders, codified at 18 C.F.R. §§ 271.1100-271.1106 (1990).

Syn.: Section 110 reimbursement.

The amount of production-related costs reimbursement has been held to be part of gross proceeds subject to royalty:

Mesa Operating Limited Partnership v. U.S. Department of Interior, 931 F.2d 318, 116 O.&G.R. 263 (5th Cir. 1991), *cert. denied, 502 U.S. 1058 (1992)*;

Pogo Producing Co., 124 IBLA 76, GFS(OCS) 1992-191 (Sept. 9, 1992).

See also Tax-reimbursement provision.

Production Revenue Standards Act *52 Okla. Stat. §§ 570.1-570.15*, added by Okla. Laws 1992 effective Sept. 1, 1992.

The Act is discussed in McNamara & Miller, *Oklahoma's Production Revenue Standards Act Post FERC Order 636-Measurement, Delivery and Quantity Issues, 29 Tulsa L.J. 639 (1994).*

The bankruptcy court in *In re SemCrude, L.P., 407 B.R. 140 (Bkrtcy. D. Del. 2009)* (Oklahoma), reviewed the Production Revenue Standards Act and said that it provides a comprehensive regulatory structure governing how interest owners and operators work together at the wellhead and serves to hold operators accountable to their interest owners. It characterized the statute as primarily a reporting and remittance statute and said that it did not create a trust. Thus, the bankruptcy court concluded that § 570.10(A) of the Act did not operate to impose a trust for the benefit of the Oklahoma Producers; properly perfected Article 9 security interests in Oklahoma oil and gas production and the proceeds thereof were senior and superior to any interest held by the Oklahoma Producers.

See also Market sharing requirement; Natural gas market sharing act; Sweetheart bill.

Production saved, removed, or sold The history of the usage of this term is discussed in *Exxon Co., U.S.A., 94 I.D. 329, 98 IBLA 218*, GFS (OCS) 1987-110 (Interior Board of Land Appeals, July 2, 1987) (hearing ordered to determine whether before 1974 the Department exempted oil or gas produced from OCS leases from royalty if it was used for production or operations outside the lease or unit from which it was produced).

See also Won and saved.

Production, settled *See* Settled production.

Production shack *Syn.:* for Doghouse (*q.v.*). *See Champlin Petroleum Co. v. Heinz, 665 S.W.2d 544* (Tex. Ct. App. 1983, error ref'd n.r.e.) (holding that maintenance of such a shack on a leasehold was not a sufficient basis for establishing venue under a statute referring to "a fixed and established place of business").

Production sharing contract A contract for the development of mineral resources under which the contractor's costs

are recoverable each year out of the production but there is a maximum amount of production which can be applied to this cost recovery in any year. In many such contracts, the maximum is 40%. This share of oil produced is referred to as "cost oil." The balance of the oil (initially 60%) is regarded as "profit oil" and is divided in the net profit royalty ratio--for instance, 55% to the government. After the contractor has recovered its investment, the amount of "cost oil" will drop to cover operating expenses only and the profit oil increases by a corresponding amount.

For discussions of the details of production sharing contracts, see the following:

B. Taverne, An Introduction to the Regulation of the Petroleum Industry 20-29 (1994).

Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* ch. 5 (1986);

Mikesell, *Petroleum Company Operations & Agreements in the Developing Countries* (1984);

Martyn R. David and Susan Hodgshon, "Production-Sharing Agreements: The Commercial Implications of Their Development," [1999] OGLTR 302-306;

Dean Rolfe, "Production Sharing Agreements in Russia," [1999] OGLTR 280-284;

Peter Roberts, Tan Lan Yok and L. Nurani Usman Ismail, "Production Sharing Contracts: The Indonesian Experience," [1998] OGLTR 10-16;

Maniruzzaman, "The New Generation of Energy and Natural Resource Development Agreements: Some Reflections," 11 *JENRL* 207 (1993);

T. Machmud, "Production Sharing Contracts in Indonesia: 25 Years' History," 11 *JENRL* 179 (1993);

Boulos, "Mutuality of Interest Between Companies and Governments--Myth or Fact?" IBA Section on Energy & Natural Resources Law, *Energy Law '90* 3, 20 (1990) ("all other things being equal, the Tax-Royalty contracts are generally considered preferable for energy companies when compared to the Production Sharing Contracts. This of course depends on the specific terms and conditions of each contract.");

Moquet, "Problems related to the Negotiation of Production-Sharing Contracts," *Energy Law '88* (International Bar Ass'n Section on Energy & Natural Resources Law) 762 (1988);

Taverne, "Methods of Participation of Host Countries in Crude Oil Exploration and Production Ventures in the Middle East and Northern Africa," in International Bar Ass'n, *World Energy Laws* (Proceedings of the IBA Seminar on World Energy Law held in Stavanger, Norway) 133 (1975);

Hossain, *Law and Policy in Petroleum Development* 138 (1979);

"Outer Continental Shelf Oil and Gas Development," Hearings before the Subcommittee on Minerals, Materials and Fuels of the Senate Committee on Interior and Insular Affairs, 93rd Cong., 2d Sess. (1974) at p. 1192 (Statement submitted by the Natomas Company);

Fabrikant, "Production Sharing Contracts in the Indonesian Petroleum Industry," *16 Harv. Int'l L.J. 303 (1975).*

For a typical Indonesian Production Sharing Contract, see OPEC, *Selected Documents of the International Petroleum Industry 1968*, at 81.

For specific aspects or provisions of contracts of this kind, see the entries under Concession.

Production spacing unit The drilling Spacing unit (*q.v.*) for a well, which may be referred to as a single production spacing unit, or one established by Board order consisting of one or more drilling spacing units, which may be referred to as a multiple production spacing unit. Alberta Oil and Gas Conservation Regulations (Alta. Reg. 151/71) § 5-010.

Production string A string of casing set above the pay zone or through the pay zone and cemented in place to prevent water encroachment into the pay zone or the loss of oil and/or gas from the pay zone into nonproductive zones. The last, longest and smallest string of casing placed in a well. *See* Ball, Ball, and Turner, *This Fascinating Oil Business,* 97 (2d ed. 1965).

Syn.: Capital string; Oil string; String.

Production tax (1) In one usage, a Severance tax (*q.v.*); that is, a tax levied on each unit of production--barrell of oil or thousand cubic feet of gas. Severance taxes are usually levied as occupation taxes.

(2) In another and inconsistent usage, an ad valorem property tax, measured by the value of the product removed annually, or by such value less certain expenses.

Thus, the same term may describe two different sorts of taxes, measured by different means. The local type of statute, whether an occupational severance tax or a real property ad valorem tax, seems to govern the meaning of the term in each state. *See* Hill, "State Taxation of Oil and Gas," *33 Tex. L. Rev. 854 (1955);* Tippit, "Property Taxation of Oil and Gas Interests," *24 Rocky Mt. L. Rev. 170 (1952).*

See State ex rel. Oklahoma Tax Commission v. Sun Co., Inc., 2009 OK 11, 222 P.3d 1046 (use of Barrel-back transaction *(q.v.)* whereby purchaser of oil at the well transports it to a market center and then sells it back to the producer at the same price plus transportation costs who then re-sells the oil to third parties at a higher price is not illegal under Oklahoma production tax statutes; production tax measured by price set for initial transaction and not the price paid by the ultimate purchaser); *Samson Hydrocarbons Co. v. Oklahoma Tax Comm'n, 1998 OK 82, 976 P. 2d 532 (Okla. 1998)* (Oklahoma Tax Commission unsuccessfully sought to impose gross production taxes and gas excise taxes on certain payments made by a gas purchaser to a natural gas producer pursuant to take-or-pay claims; although the Oklahoma legislature passed an act in 1983 to impose the tax on take-or-pay deficiency payments that are identifiable as having been made as a result of the failure or refusal of the purchaser to take gas, *Okla. Stat. Ann. tit. 68, § 1009(g)*, the court held the payments did not come within the statute);

State v. Texaco Exploration & Production, Inc., 2005 OK 52, 131 P.3d 705 (Oklahoma Tax Commission alleged Texaco had devised a scheme for calculating gross production and petroleum excise taxes on a price less than the fair market value with the intent of evading taxes; held: in the absence of an actual arm's length sale at the wellhead, the correct method to determine gross value of gas for calculation of gross production and petroleum excise taxes is the prevailing market price method or the work-back method, whichever results in the higher value.).

See also Fleishman, "Oil and Gas: Should the Cost of Transporting Oil be Deducted in the Computation of Gross Value for Oklahoma's Gross Production Tax?" *42 Okla. L. Rev. 309 (1989).*

See also Tax-reimbursement provision.

Production term *Syn.:* Secondary term (*q.v.*).

"Production"-type lease The name given to an oil and gas lease which requires that there be actual production as in a physical severance of the hydrocarbons from the ground before the royalty obligation is triggered. The term has been used in litigation relating to whether royalty is due on Take-or-pay clause (*q.v.*) settlements.

See, e.g., Watts v. Atlantic Richfield Co., 115 F.3d 785, 792, 137 O.&G.R. 106 (10th Cir. 1997) ;

Harvey E. Yates Co. v. Powell, 98 F.3d 1222, 135 O.&G.R. 100 (10th Cir. 1996) .

Production unit A somewhat artless term which was found to be ambiguous in *Holly Energy, Inc. v. Patrick, 239 Kan. 528, 722 P.2d 1073, 90 O.&G.R. 34 (1986)* (affirming the trial court's determination from extrinsic evidence of the meaning of the term as employed in the instrument construed).

A term that regularly appears in Pooling clauses (*q.v.*) that purports to limit the lessee's power to pool. In *Freeman v. Samedan Oil Corp., 2000 Tex. App. LEXIS 8695* (Tex. App.--Tyler Apr. 18, 2000) , the court distinguished between production or drilling units and fieldwide secondary recovery units, concluding that the pooling clause did not authorize the lessee to include the royalty owner's interest into a fieldwide secondary recovery unit.

Productive capacity of crude oil The maximum daily rates of production which can be attained under specified conditions.

"The ninety-day crude oil productive capacity is the maximum daily crude production rate, at the point of custody transfer, that could be achieved in ninety days (following December 31 of any given year) with existing wells and equipment, and surface facilities--plus work and changes that can be reasonably accomplished within the time period using present service capabilities and personnel and with productivity declining as it would under capacity operation." American Petroleum Institutes Division of Statistics, *Organization and Definitions for the Estimation of Reserves and Productive Capacity of Crude Oil* 21 (Technical Report No. 2, June 1970).

Productivity factor A factor employed by the Federal Power Commission in determining just and reasonable rates. In Opinion No. 770-A, 10 FPS 5-854, 5-884 (Nov. 5, 1976), the Commission employed a productivity factor of 300 Mcf per successful foot drilled to compute the denomination for each incremental cost calculation in the discounted cash flow analysis employed.

Products royalty clause A clause, occasionally appearing in oil and gas leases, providing that where gas or casinghead gas is used in the manufacture of gasoline or other products, the lessor will receive a stipulated fraction of the net proceeds from the sale of such gasoline or other products. In another form, the clause will provide that lessor is to receive a fraction of the proceeds from the sale of gasoline or other products manufactured from gas or casinghead gas produced on the lease, less a proportionate share of the manufacturing expense. *See* Hardwicke, "Problems Arising out of Royalty Clauses," *29 Tex. L. Rev. 790, 796 (1951);* Treatise § 643.5.

The difficulties of determining the royalty due on gas under the usual lease provision make the products royalty clause desirable from the lessor's viewpoint. Regarding these difficulties, see Sneed, "Value of Lessor's Share of Production Where Gas Only Is Produced," *25 Tex. L. Rev. 641 (1947).*

Profitability In various contexts the question of whether production is "profitable" may be raised, *e.g.*, for habendum clause purposes and for measuring the duties of the lessee under the covenants of a lease. *See* Production in paying quantities. *El Paso Natural Gas Co. v. American Petrofina Co. of Texas, 733 S.W.2d 541, 93 O.&G.R. 379* (Tex. App. 1986, error ref'd n.r.e.) , *petition for cert. dism'd pursuant to Rule 53, 485 U.S. 930* , *cert. denied, 485 U.S. 987 (1988)* , concluded that under the Unprofitability clause (*q.v.*) of a Gas Lease-sales Agreement (GLA) (*q.v.*), both the basic lease royalty and any overriding royalty burdening a property were to be considered in determining profitability, although for lease habendum clause purposes only the basic lease royalty would be so considered.

Profit a prendre An incorporeal interest in land authorizing entry upon a tract of land and the severance and removal of a part of the corpus of the land. In some of the oil and gas producing states, *e.g.*, California, the working interest of an oil and gas lessee is treated as a *profit a prendre;* in some other states, *e.g.*, Texas, the working interest is treated as a separate corporeal estate in land.

"A profit a prendre ('profit'), like an easement, is an incorporeal interest in land. But, while an easement confers a right to use another's land for a specific limited purpose, a profit a prendre confers the right to enter upon another's land and remove something of value from the soil or the products of the soil." *Goss v. C.A.N. Wildlife Trust, Inc., 852 A.2d 996, 1002 (Md. Ct. App. 2004)* .

Oakley Valley Stone, Inc. v. Alastra, 110 Idaho 265, 715 P.2d 935, 92 O.&G.R. 15 (1985) , reversed a trial court holding that a trespasser acquired a profit a prendre by mining quartzite for a number of years even though the trespasser did not acquire title to the land by adverse possession by reason of failure to pay taxes. The Supreme Court concluded that a mining operation of the size and character involved in the instant case "amounts to nearly a complete taking of the land and is inconsistent with a prescriptive claim. ... One cannot gain title to land by adverse possession without paying the taxes for the full statutory period. ... Nor can one acquire a prescriptive right to property which in effect usurps the ownership of a fee title without paying the taxes thereon. ... Because Oakley had effectively usurped ownership of the property without paying the requisite taxes, it is not entitled to a profit a prendre to remove quartzite from the Alastras' land."

"[A] profit a prendre ... is also an interest in land that involves the additional power to acquire or remove things from the land. Rights often associated with a profit include hunting and fishing rights, mineral and timber rights, and, as in the case at bar, sand removal rights." *Borek Cranberry Marsh, Inc. v. Jackson County, 2010 WI 95, 328 Wis. 2d 613, 620, 785 N.W.2d 615* , *aff'g 2009 WI App 129, 321 Wis. 2d 437, 773 N.W.2d 522* (internal citations omitted).

Amoco Canada Resources Ltd. v. Potash Corp. of Saskatchewan Inc., [1992] 2 W.W.R. 313, 86 D.L.R. 4th 700 (Sask. C.A. 1991), indicated that the term "produced," as used in a mineral lease, if "taken, as it would appear it should be, [means] *brought forth,* and not *to make, to manufacture.* If 'produced' be taken to mean 'brought forth,' then the minerals and substances at issue are capable of being the subject of a profit a prendre."

Hamilton Brothers Corp. v. Royal Trust Corp. of Canada, [1991] 4 W.W.R 44 (Alta Q.B. 1991), discussed classification of a petroleum and natural gas lease and overriding royalty interests as profits a prendre and chattels real.

For a discussion of certain of the difficulties which may arise from rigidity in classification of petroleum titles as *profits a prendre* in Australia, see Crommelin, "Petroleum (Submerged Lands) Act: The Nature and Security of Offshore Titles," 2 *Austl. Mining & Petroleum L.J.* 134, 142 *et seq.* (1979).

See also Rents and profits.

Profit oil Under a so-called Production sharing contract (*q.v.*) between a contractor and the host government, some portion of the oil produced is applied to the recovery of costs incurred by the operator ("cost oil") and the balance of the oil, described as "profit oil" is divided between the contractor and the host government on an agreed basis, for instance, 55% to the government.

See Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* 75 (1986).

See also Rents and profits.

Profit sharing bidding A form of lease bidding in which the variable is the percentage of the total profits to be paid to the lessor by the successful lessee. *See* the following:

Mead, Moseidjord, Muraoka and Sorensen, *Offshore Lands: Oil and Gas Leasing and Conservation on the Outer Continental Shelf* 96 (1985);

Gaffney, *Oil and Gas Leasing Policy: Alternatives for Alaska in 1977* (1977) (Appendix L by R. F. Rooney).

See also Lease bidding systems.

Profits tax *See* Additional profits tax; Crude Oil Windfall Profits Tax Act of 1980.

Program management fee In a joint operation or drilling program this is a fee paid the operator for its managing the activities of the operation or program. *See Keller v. Comm'r of Internal Revenue, 79 T.C. 7, 21, 74 O.&G.R. 129, 146 (1982)*, *aff'd, 725 F.2d 1173, 80 O.&G.R. 639 (8th Cir. 1984)*.

See also Drilling fund; Joint operating agreement.

Progressive incremental royalty A proposed (but unimplemented) royalty provision for leases of Crown lands in Canada under which fields were to be subject to an increased royalty after achieving a 25 percent floor rate of return based on revenues received after deducting operating costs, basic royalty, and allowances for investment and income tax. *See* Hossain, *Law and Policy in Petroleum Development* 178 note 35, 220 (1979).

Project *See* Alsands project; Enhanced recovery project; LFG recovery project.

Project costs The costs incurred in making geological and geophysical studies and surveys of a project area. A project area is a large territory designated for survey, from which smaller areas of potentially productive land are selected or more intensive study, and ultimately for leasing and exploratory drilling.

Under Under I.T. 4006, *1950-1 Cum. Bull. 48*, project costs must be capitalized. The ultimate allocation of such costs among properties depends on the acreage acquired and other future actions. *See* Burke and Bowhay, *Income Taxation of Natural Resources* P 13.03 (1979).

Project financing A term applied to a program to raise debt or debt-type capital to finance major development well

programs, the construction of associated production facilities, and the transportation of minerals to market.

For discussions of project financing, see the following:

Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* ch. 15 (1986);

Rocky Mt. Min. L. Inst. on Mineral Financing (1982);

S. Mills, *Project Financing of Oil and Gas Field Developments: The Banker's View*, [1993] 11/12 OGLTR 359;

Preece, *Financing North Sea Projects*, [1991] 5 OGLTR 135;

Ladbury, *Financing Resources Projects*, 62 Australian L.J. 937 (1988);

Schweinfurth, *Patchwork in the Oilpatch: Lender Liability for Improper Interference with the Business Affairs of an Oil and Gas Borrower*, 7 Rev. of Litigation 71 (1987);

International Bar Ass'n, *Offshore Petroleum Installations Law and Financing* (Gault ed. 1986);

Burke and Meyer, *Federal Income Tax Classification of Natural Resource Ventures: Co-Ownership, Partnership or Association?, 37 Sw. L.J. 859 (1984);*

Swan, *Ocean Oil and Gas Drilling & The Law* 130 *et seq.* (1979);

McCormick, *Legal Issues in Project Finance*, 1 JENRL 21 (1983);

Barnett and Coffin, *New Financing Techniques in the Oil and Gas Industry*, 34 Sw. Legal Fdn. Oil & Gas Inst. 431 (1983);

Mitchell, *Project Financing--The Bankers Approach to Project Risk*, International Bar Ass'n, Energy Law in Asia and the Pacific 711 (1982);

Cheyne, *Project Finance--Structure*, International Bar Ass'n, Energy Law in Asia and the Pacific 732 (1982);

Ladbury, Fox, and Nettle, *Current Legal Problems in Project Financing*, 3 Australian Mining and Petroleum L.J. 139 (1981);

Hunt and Camp, *Project Financing-- Oil and Gas Ventures*, 27 Sw. Legal Fdn. Oil & Gas Inst. 215 (1976).

For a detailed discussion of project financing of pipelines, see *Ozark Gas Transmission System, Opinion No. 125, 16 FERC P 61,099* ; *Opinion No. 125-A, 17 FERC P 61,024 (1981).*

See also Advance payment financing; Clawback provision; Comfort letter; Consent clause; Cost company; Cross-charge; Cross-default clause; Drilling fund; Drill or drop provision; Financing; Forward oil purchase; Forward sale; Gain charge back provision; Joint adventure; Loan participation; Limited resource financing; Maturity clause; Negative pledge; Net present value (NPV); Nonrecourse financing; Oil man's deal; Pari passu undertaking; Petro-bonds; Petroleum incentives program (PIP); Political risk loan; Production loan; Production payment; Project watchdog; 66.3 company; Take-or-pay contract; Take-or-pay financing; Throughput and deficiency agreement; Two-to-one agreement; Wrap-around carved-out production payment.

Project Independence A program initiated in March 1974 designed to improve the energy position of the United States and perhaps to gain independence from reliance on foreign energy sources by 1985. *See* Federal Energy Administration, *Project Independence Report* (Nov. 1975); "Project Independence," Hearings before the Senate Committee on Interior and Insular Affairs," 93rd Cong., 2d Sess. (Nov. 21, 1974), Serial No. 93-54 (92-89); De Marchi, "Energy Policy Under Nixon: Mainly Putting Out Fires," in Goodwin (Ed.), *Energy Policy in Perspective* 295, 458 (1981).

C.C.H., *Energy Management* (Issue No. 771, Oct. 20, 1987), briefly summarized federal energy programs under four presidents in the fourteen years following the announcement of Project Independence, concluding with the following observations:

"*Statistics*

"Oil imports in 1973 supplied the U.S. with 6 million barrels a day at a cost of about $5 a barrel. After jumping to about $12 a barrel as a result of the embargo, prices remained relatively steady and imports declined in 1974 and 1975 before rising to 7.1 million b/d in 1976 and to 8.6 million b/d in 1977. In 1978, prices edged up slightly and imports dipped to 8 million b/d. An increase to $21.70 a barrel in 1979 shaved a mere 100,000 b/d off demand, causing imports to average 7.9 million b/d before a whopping price increase to $34.60 a barrel caused imports to drop to 4.3 million b/d.

"American dependence on foreign supplies then stabilized at between 4.3 million and 4.7 million barrels, remaining in that range through 1985--the last 'normal' year--when the average refiner cost for a barrel of crude was $26.76 a barrel. Then came the reverse price shock, when Saudi Arabia adopted a market share stance that sent prices plummeting. Net oil imports have since risen to 6.8 million b/d, 58% above the average two years ago, at mid-September prices of just under $17.50 a barrel. Imports of oil from OPEC as a whole, meanwhile, have risen from 1.8 million b/d in 1985 to 2.8 million b/d now, while the Arab states by the beginning of 1987 had increased their portion of the American market to about 1.2 million b/d from the 472,000 b/d average of 1985.

"*Pre-Embargo Speculations*

"Energy supply/demand projections occasionally turn out to be little more than bad guesses, as with the 1970 estimate by the federal cabinet task force on oil import control that U.S. oil imports would rise to 'only 9.8 million barrels a day by 1980 even if import restrictions were removed and the average U.S. price of crude oil fell to $2 a barrel.' At $3.30 a barrel, which would have been near the 1970 level that had been maintained by import fees, the task force estimated 1980 imports to be 5.1 million b/d. A year later, the National Petroleum Council projected imports of 10.7 million b/d by 1980.

"A 1973 report put out by the Senate Interior Committee stated that the minimum price for Middle East oil 'between now and 1985 or 1990 could conceivably be less that $2 a barrel, and the long-term maximum could be as high as $5 (in 1972 dollars).' At $4 to $5 a barrel, however, the report noted that 'several alternative energy sources could be made competitive.'

"Anticipating higher energy costs, the report continued that 'the net foreign exchange burden to the United States of energy imports may be as high as $10 billion per year by 1980,' an amount 'large enough for serious concern.' In 1980, the net cost of energy imports--less exports--was $75 billion. Last year, by contrast, the energy import bill had fallen to just over $29 billion."

Project watchdog An engineer employed to report to the financing institutions on the progress of a project and the continuing credit worthiness of the project. *See* "The Emerging Role of the Reporting Engineer: Project Watchdog,"

International Bar Ass'n Section on Energy and Natural Resources, *International Energy Law* (1984 (Topic 10)).

See also Project financing.

Promotion device A term sometimes applied to Front-end loading (*q.v.*) or a Third-for-a-quarter deal (*q.v.*).

Prompt barrel In a futures market a barrel of oil may be described as a Paper barrel (*q.v.*), a Wet barrel (*q.v.*), or as a Prompt barrel. Once a delivery date has been assigned a paper barrel it becomes a wet barrel. If the delivery date (*i.e.,* the conversion from paper to wet) is specified within a few days of the transaction then the barrel becomes a prompt barrel. P. Stevens, *Oil and Gas Dictionary* 218 (1988).

Prone drilling unit (Prone spacing) *See* Standup drilling unit (Standup spacing).

PROOF The Petroleum Royalty Owners of Florida.

Propane A hydrocarbon associated with petroleum. It is gaseous at ordinary atmospheric conditions but is readily converted to the liquid state. When compressed to a liquid, it is usually handled in metal containers under high pressure. It is highly volatile, and when released into the atmosphere, vaporizes instantly, and in certain quantities, forms a highly explosive mixture, heavier than air. It is odorless and colorless, and its presence cannot be detected unless there has been added to the liquid propane an adequate odorizing agent which will give a distinctive stench noticeable to persons with an ordinary sense of smell. *See* Interstate Oil Compact Commission, *Oil and Gas Production* 26 (1951); *Parkinson v. California Co., 255 F.2d 265 (10th Cir. 1958)* .

See also Liquefied petroleum gas.

Proper law clause A "provision drafted with a view to insulating the [concession] contract from the influence of the law of the host State. That was the purpose, for example, of Article 46 of the 1954 Consortium Agreement which declared that it should be governed by 'principles of law common to Iran and the several nations in which the other parties were incorporated and, in the absence of such common principles, then by and in accordance with principles of law recognized by civilized nations in general, including such of those principles as may have been applied by international tribunals.' " E. Lauterpacht, "Law and Policy in International Resource Development," 11 *JENRL* 145, 146-7 (1993).

Proper parties Those persons whose interest in litigation is such that they appropriately may be joined in the litigation but whose absence will cause no concern. *See* Treatise § 875 *et seq.*

See also Indispensable parties; Necessary parties.

Property The term used in a variety of tax statutes and regulations and in producer price statutes and regulations to identify the source of production. The definition of the term "has been heavily shrouded in both ambiguity and controversy since its inception." Overstreet and Wilcox, "The Department of Energy Crude Oil 'Property' Definition--A Controversial Concept With Critical Continuing Importance Under the Windfall Profit Tax Act," 26 *Rocky Mt. Min. L.*

Inst. 645, 746 (1980) (discussing in detail the definition of this term under successive crude oil producer price regulations, current judicial and administrative litigation, and use of the DOE definition under the Crude Oil Windfall Profit Tax Act of 1980).

For a discussion of the definition of this term as used in implementing the Stripper well exemption (*q.v.*), see *Sauder v. Department of Energy, 648 F.2d 1341* (Temp. Emer. Ct. of App. 1981).

See also Pennzoil Co. v. United States Department of Energy, 680 F.2d 156 (Temp. Emer. Ct. App. 1982) , *cert. dism'd pursuant to Rule 53, 459 U.S. 1190 (1983)* (concluding that the property definition in the case of unitized property focused upon the right to produce, not the fee or leasehold nature of ownership interest; for purposes of price control, DOE regulations required that 1972 base production control levels of leases later designated a unit must be aggregated for comparison with total production from the unit during the critical periods in determining the quantity to be priced as new oil, if any).

State of Louisiana v. Department of Energy, 507 F. Supp. 1365 (W.D. La. 1981), 519 F. Supp. 351 (W.D. La. 1981) , held that reservoir-wide production units established by the Louisiana Office of Conservation constituted separate "properties" for the purpose of federal oil and gas pricing regulations. The case was reversed on this point, *690 F.2d 180 (Temp. Emer. Ct. App. 1982)* , *cert. denied, 460 U.S. 1069 (1983)* .

See also Aggregation of properties; Community property.

Property unit, for tax purposes The accounting unit for determining the depletion allowance in federal taxation. The term was defined for the first time by the 1954 *Internal Revenue Code § 614*: "The term 'property' means each separate interest owned by the taxpayer in each mineral deposit in each separate tract or parcel of land."

There is authority to support the proposition that four conditions must occur to create a single property unit for tax purposes:

(1) one parcel of land, including contiguous tracts

(2) the several interests must be acquired at the same time

(3) from the same person

(4) and must be of the same nature, *i.e.*, working interests or royalties, etc.

See Berkshire Oil Co., 9 T.C. 903 (1947) ; *Herndon Drilling Co., 6 T.C. 628 (1946)* ; Bird, "The 'Property' for Purposes of Depletion," *33 Tex. L. Rev. 785 (1955);* Burke and Bowhay, *Income Taxation of Natural Resources* P 16.01 *et seq.* (1980).

See also Aggregation of properties; Depletion, percentage; Nonoperating mineral interest, for tax purposes; Operating mineral interest, for tax purposes; Operating unit, for tax purposes.

Proportional Btu adjustment provision A provision of a Gas purchase contract (*q.v.*) providing for the price of gas to vary proportionately with variation of the Btu content of the gas from 1,000 *Btus per Mcf. Kaiser-Francis Special Account C v. Federal Energy Regulatory Comm'n, 675 F.2d 249, 73 O.&G.R. 614 (10th Cir. 1982)* .

Proportionate increase clause A lease clause providing for the increase of rentals and royalties in proportion to any estate or interest or acreage in addition to that specifically described which passes under the lease or to any after-acquired interest or reversion after a term or other interest which passes under the lease. *See* Treatise §§ 686-*686.1*.

Proportionate profits method A method used to determine a taxpayer's constructive gross income from mining for purposes of the depletion deduction taken under *Section 611 of the Internal Revenue Code* when the taxpayer engages in an integrated mining-manufacturing process. *See Commissioner of Internal Revenue v. Portland Cement Co. of Utah, 450 U.S. 156 (1981)* .

Proportionate reduction clause A clause commonly included in contemporary leases providing for the reduction of the payments to a lessor if his interest is less than that which he purported to lease, as follows:

"If said lessor owns a less estate in the above described land than the entire and undivided fee simple estate therein, then the royalties and rentals herein provided shall be paid the lessor only in proportion which his interest bears to the whole and undivided fee."

Variations in the form of the clause are legion. If the parties have agreed on the payment of a substantial bonus or on a production payment, the clause may provide for a proportionate reduction of "bonus and production payments" in addition to "royalties and rentals."

A lease executed by a concurrent owner normally purports to cover all of the minerals in the described tract. The lessee will usually seek to have the lease executed in this fashion so that he may be entitled to the benefit of the doctrine of estoppel by deed in the event the leasing cotenant thereafter should acquire some or all of the outstanding undivided interest in the minerals. A number of problems for the parties may arise from this practice; hence before executing the lease they should carefully consider the consequences and the interrelation of the several clauses of the lease form adopted for use. Specifically, in drafting the lease, the parties should carefully analyze the interrelation of the granting, delay rental, royalty, proportionate reduction clause may give rise to considerable difficulty in any lease executed by a concurrent owner, even one which purports to lease only the lessor's undivided interest. *See* Treatise §§ 686.2-*686.11*.

Syn.: Pro rata clause; Lesser estate clause; Lesser interest clause.

Proposed remedial order An order issued by the Economic Regulatory Administration (ERA) (*q.v.*), after a finding that a violation of a Department of Energy regulation has occurred, is continuing, or is about to occur, which sets forth the relevant facts and law. *10 C.F.R. § 205.192 (1980)*.

Proppants Small granules contained in a slurry mix injected as part of a hydraulic fracturing operation that is designed to keep the pore spaces open after the initial injection of fluids under high pressure. Proppants may include sang, ceramic beads or bauxite. *Coastal Oil & Gas Corp. v. Garza Energy Trust, 268 S.W.3d 1, 6-7 (Tex. 2008)* .

See FPL Farming Ltd. v. Environmental Processing Systems, L.C., 351 S. W. 3d 306, 314, 54 Tex. Sup. Ct.J. 1744 n.7 (2011) (paraphrases the definition provided in the Manual of Terms).

See also: Effective length; Hydraulic fracturing; Hydraulic length; Propped length.

Propped length The designed length or distance for which the Proppants *(q.v.)* are designed to travel in a Hydraulic fracturing *(q.v.)* operation. *Coastal Oil & Gas Corp. v. Garza Energy Trust, 268 S.W.3d 1, 6-7 (Tex. 2008)* .

See also: Effective length; Hydraulic fracturing; Hydraulic length; Proppants.

Proratable allowables A term used to describe non-exempt allowables or allowables subject to the market demand factor. Thus in Texas some allowables were not subject to being reduced by the market demand factor (*viz.*, Exempt allowables for discovery, marginal and special situation wells, and for county-regular, salt-dome, and certain waterflood fields). Allocation of the Texas monthly market demand for crude oil involved the subtraction from the market demand of the exempt allowables after which the remainder (proratable allowables) was allocated. *See* Governors' Special Study Committee of the Interstate Oil Compact Commission, *A Study of Conservation of Oil and Gas in the United States* 105-107 (1964).

See also Allowable.

Pro rata clause *See* Proportionate reduction clause.

Pro rata plan The name given a form of gas curtailment plan under which all customers would receive the same proportion of the natural gas they contracted for. *See Consolidated Edison Co. of New York v. Federal Energy Regulatory Comm'n, 676 F.2d 763 (D.C. Cir. 1982)* .

See also Curtailment plan; End use plan.

Prorated well A well capable of full production which is assigned a pro rata share of a reservoir's allowable, as distinguished from a Limited well (*q.v.*) which is not capable of producing to the full extent of prorated allowable. *Texaco Producing, Inc. v. Fortson Oil Co., 798 S.W.2d 622, 114 O.&G.R. 174 (Tex. Ct. App. 1990)* (holding that Railroad Commission's order reinstating cancelled allowable for prorated well and denying reinstatement of cancelled allowable for limited well violated correlative rights of owner of limited well).

Proration clause A term sometimes used in referring to an Entirety clause (*q.v.*). *See Central Pipe Line Co. v. Hutson, 401 Ill. 447, 82 N.E.2d 624 (1948)* .

Proration formula The basis on which the field Allowable (*q.v.*) is allocated to the wells in the field. These formulae vary considerably in the factors given weight: some allocate production on a per well basis only; some on a combination of per well allocation plus an acreage factor (see 50-50 allowable formula); some include acre feet of formation, bottom hole pressure, potential, well depth, and expense of drilling.

The definition in this Manual was quoted in *Northern Michigan Exploration Co. v. Public Service Comm'n, 153 Mich. App. 635, 396 N.W.2d 487, 492, 93 O.&G.R. 275 (1986)* .

See also Adjusted deliverability formula; Net pay proration formula.

Prorationing (1) Restriction of production by a state regulatory commission, usually on the basis of market demand.

The commission determines what amount shall be produced in a state during a given period of time and then allocates this total amount among the producing fields in the state (field allowables) and then allocates the field allowable to the various leaseholds and wells within the field (lease and well allowables).

In times of high demand the problem of prorationing is relatively simple. State regulatory agencies with power to restrict production to prevent waste and protect correlative property rights are then concerned only with limiting production from particular pools and wells to the maximum efficient rate (MER). When, however, available productive capacity is such that production at the MER for all wells will glut the market and result in waste by reason of excess surface storage, the problem of limiting production becomes more complex. In all major producing states except California there is some mechanism available whereby a regulatory agency of the state exercises power to prorate production. [To a limited extent, prorationing has been accomplished by voluntary agreement in California through the California Conservation Committee of producers.]

The mechanics of the process are relatively simple. The initial step is to make a determination of what the whole state should produce. A formula developed by the Federal Oil Conservation Board during the Hoover administration is followed. This involves a technique of forecasting consumption during short periods of time followed by an analysis of the amount of crude oil needed to satisfy this demand. This is broken down among the producing states by the Bureau of Mines by tracing the past history of crude oil from producing states to refineries and finally to consumers. The state prorationing authorities, guided by the estimates furnished by the Bureau of Mines, fix the allowables--the amount which may be produced per day from the various fields, pools, and wells in the state--in order that the production from the state shall not exceed a reasonable estimate of market demand. *See* Williams, Maxwell, Meyers, and Williams, *Cases on Oil and Gas* 201 (5th ed. 1987).

For a discussion of the origin and impact of market demand prorationing, see Danielsen, *The Evolution of OPEC* 87 (1982).

For an argument that prorationing on the basis of market demand results in waste, see Vafai, "Market Demand Prorationing and Waste--A Statutory Confusion," *2 Ecology L. Q. 118 (1972).*

For a discussion or proposed reforms to remedy inadequacies in the existing statutory scheme for gas production and ratable taking, see Falk, "Natural Gas Regulation and Vested Property Interests: Ratable Taking, Proration Standards, and Fieldwide Civil Liability," *62 Tex. L. Rev. 691 (1983).*

As noted in B. Kramer & P. Martin, *The Law of Pooling and Unitization § 5.01[3]*, at 5-8 (3d ed. LexisNexis Matthew Bender): "In current practice, the market demand producing states that have been of greatest historical importance (Louisiana, Oklahoma, and Texas) no longer prorate oil production on a statewide basis. Oil well allowables are primarily set on the basis of special field rules, depth bracket yardsticks or schedules, and oil-gas ratios. These other factors have been present in the allowables systems of the producing states even when market demand has also been a factor."

See also the following:

Sullivan and Marsland, "Recent Changes in State Regulations Related to the Proration of Natural Gas," 44 *Sw. Legal Fdn. Oil & Gas Inst.* ch. 7 (1993);

Wiggins and Libecap, "Firm Heterogeneities and Cartelization Efforts in Domestic Crude Oil," 3 *J. of Law, Economics, & Organization* 1 (1987);

Libecap and Wiggins, "Contractual Responses to the Common Pool: Prorationing of Crude Oil Production," 74 *American Economic Review* 87 (1984);

Symposium: Workshop on Natural Gas Prorationing and Ratable Take Regulation, 57 *U. of Colo. L. Rev.* 149-393 (1986);

Libecap and Wiggins, "Contractual Responses to the Common Pool: Prorationing of Crude Oil Production," 74 *American Economic Review* 87 (1984);

Hollingsworth and Snider, "Some Aspects of 1985 Deregulation of Petroleum," *25 Alta. L. Rev. 36, 42 (1986)* (discussing prorationing in Alberta);

Erickson, "Crude Oil Prices, Drilling Incentives and the Supply of New Discoveries," 10 *Nat. Res. J.* 27 (1970) ;

Kahn, "The Combined Effects of Prorationing, and Depletion Allowance and Import Quotas on the Cost of Producing Crude Oil in the United States," 10 *Nat. Res. J.* 53 (1970) ;

Lovejoy, "Oil Conservation, Producing Capacity, and National Security," 10 *Nat. Res. J.* 64 (1970);

Dutton, "Proration in Texas: Conservation or Confiscation?" *11 Sw. L.J. 186 (1957).*

See also Allowable; Associated gas proration; Depth bracket method of prorationing; Henze type proration order; Rule 34.

(2) This term is also applied to the allocation of capacity of an undersized pipeline among shippers. *See* Flexner, "Oil Pipelines: The Case for Divestiture," in Mitchell, ed., *Oil Pipelines and Public Policy* 3, 11 (1979).

(3) Another use of the term is in connection with purchases by a pipeline when the allowable production for a given period is in excess of the amount of oil which the purchasing company wishes to take. *See* Purchaser prorationing or pipeline prorationing).

Proration order *See* Allowable; Basic proration order (BPO); Henze type proration order; Prorationing.

Proration unit (1) The area in a pool that can be efficiently and economically drained by one well, as determined by the commission. *N.M. Stat., 1973, § 70-2-17(B).*

(2) The acreage assigned to an individual well for the purpose of allocating allowable production thereto. *See Whelan v. Manziel, 314 S.W.2d 126, 9 O.&G.R. 390* (Tex. Civ. App.--Texarkana 1958, error ref'd n.r.e.) , where a proration unit is distinguished from a pooled unit.

See also Basic proration unit (BPU); Gas proration unit; High gas-oil ratio proration unit; Marginal unit.

It is emphasized in *Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 87 N.M. 286, 532 P.2d 582, 50 O.&G.R. 488 (1975)* , that the terms proration unit and Spacing unit (*q.v.*) are not synonymous as employed in the New Mexico statutes.

An unusual lease clause construed in *Fisher v. Walker, 683 S.W.2d 885, 84 O.&G.R. 378* (Tex. App.--El Paso 1985, error ref'd n.r.e.) , was held to cause termination of a lease at the expiration of its primary term as to each proration unit upon which there was neither a producing well nor a shut-in gas well for which shut-in gas royalty payment had been made currently.

Prospect A term frequently employed in various types of oil and gas agreements and that may be defined very broadly or narrowly according to the context. Thus, in *Wurzlow v. Placid Oil Co., 279 So. 2d 749, 754 (La. Ct. App. 1973)*, *writ ref'd, 282 So. 2d 140 (La. 1973)*, the court observed:

"The term is of course a term of art, and its meaning must be determined from the context in which it is used. Philologically, it is formed from two Latin words 'pro,' meaning forward or ahead and 'spicere' meaning to see or look. There are, of course, many shades of meaning attributed to the term, depending on the frame of reference in which it is applied; but from all of the evidence bearing on its meaning in the oil and gas industry, the literal translation of forward looking or looking to the future seems a quite proper basis on which to build a more technical and more accurate definition."

The court then turned to parol evidence to assist it in defining the term as used in the instrument construed:

"[We] have reached the conclusion that in the oil and gas industry, a prospect commences with the determination of the existence of a certain geological structure, conducive to the production of oil and gas underlying a certain area of land. The actual existence of such minerals must then be determined and confirmed by actual drilling and production of such minerals. The continued exploration and drilling of additional wells then determine the extent of the area underlain by the geological structure which originally formed the basis for the drilling of the first well or wells. When by drilling it is ascertained that the limits of the producing geological structure have been reached, then the whole area underlain by that structure becomes a 'field.' From that, we conclude that a 'prospect' contemplates, in its optimum aspect, the creation of a 'field.' "

Blackmore v. Davis Oil Co., 671 P.2d 334, 80 O.&G.R. 431 (Wyo. 1983), defined this term as: "[A] promoter's assessment of a drilling or mining site which is based on information obtained from observations, tests and other sources."

In *Mobil Exploration & Producing U.S., Inc. v. Dover Energy Exploration, LLC, 56 S.W.3d 772, 774 n.1* (Tex. App.--Houston [14th Dist. 2001], no writ), the court cited Mobil's definition of a prospect as "a location where hydrocarbons such as oil and gas are believed to be present in quantities which are economically feasible to produce."

See also Authority to prospect (ATP); Designated prospect; Gross prospect acreage; Net prospect acreage.

Prospecting *See* Geochemical prospecting.

Prospecting license *Syn.:* Exploration license (*q.v.*).

Protection and Indemnity (P&I) Clubs Mutual non-profit insurance companies organized to provide protection against losses arising from the operation of a vessel. *See* Cooney, "The Stormy Seas of Oil Pollution Liability: Will Protection and Indemnity Clubs Survive?," 16 *Hous. J. of Int'l L.* 343 (1993).

Protection covenant Another name for the Offset well covenant (*q.v.*).

Protectionist natural resource legislation *See* Producing state preference statute.

Protection lease A quit claim lease, mainly in the form of an ordinary oil and gas lease, taken from a person who may have an interest in the land, but providing that the obligations of the lessee shall not take effect until the interest of the lessor has been determined by a court. The purpose of the protection lease is to protect the lessee in case title of the original lessor should fail. It is used where a quit claim of possible outstanding interests cannot be obtained.

Several cases have held that the taking of protection leases does not give any cause of action to the original lessor. *Nabors Oil & Gas Co. v. Louisiana Oil Ref. Co., 151 La. 361, 91 So. 765 (1922)* ; *Shell Oil Co. v. Howth, 138 Tex. 357, 159 S.W.2d 483 (1942)* .

American Lung Ass'n v. State of Louisiana, 645 So. 2d 1219, 1222, 133 O.&G.R. 31 (La. Ct. App. 1994) , *writ denied, 650 So. 2d 1182 (La. 1995)* , concluded that § 121 of the Louisiana Mineral Code impliedly authorized the execution of a protection lease of mineral rights actually owned by another person, and therefore "it cannot be said that the non-owner lessor who enters into such a protective lease pursuant to this authority is, at the same time, guilty of a violation of the rights of the true owner of the minerals." The court reversed a judgment awarding damages to the true mineral owner in an amount equal to the bonuses received by the State [the non-owner lessor] under its leases. "It would be absurd to think that both American Lung (as true owner) and the State's lessees would each be able to recover the amounts received by the State as bonus money and rentals. Such a finding would defeat the policy considerations underlying the enactment of article 121 of the Mineral Code, which facilitates the exploration and production of minerals by a lessee."

See also Treatise § 697.4.

See also Cover lease; Top lease.

Protection well Another name for an Offset well (*q.v.*).

Protective lease The name given in *American Lung Ass'n v. State of Louisiana, 645 So. 2d 1219 (La. Ct. App. 1994)* , to a Protection lease (*q.v.*).

Protective leasing "Where jurisdiction over disposition of mineral deposits in land set apart for other Government agencies has been transferred to the Department of the Interior because of drainage of its oil or gas content, such land must be offered for lease by competitive bidding. Protective leases may cover public domain lands which have been withdrawn from oil or gas leasing or acquired lands not subject to leasing under the Acquired Lands Leasing Act." *43 C.F.R. § 3100.3-3 (1978).*

Protective string *See* Casing.

Protest clause A clause in a Gas purchase contract (*q.v.*) authorizing the buyer to protest any new rate schedule and any rate changes before the Federal Power Commission. *See Pacific Natural Gas Co. v. Federal Power Comm'n, 276 F.2d 350 (9th Cir. 1960)* .

Provable reserves A term coined by Chief Judge Bazelon's majority opinion for the court in *Transcontinental Gas*

Pipe Line Corp. v. Federal Power Comm'n, 562 F.2d 664, 668 (D.C. Cir. 1976) , *cert. denied, 436 U.S. 930 (1978)* , to describe reservoirs of gas which might be moved from the "possible" or "probable" categories into the category of "proved reserves" by "physically and economically achievable acts lying entirely within the control of a pipeline or producer." The dissenting opinion of Circuit Judge MacKinnon concluded that the majority "have coined an *ad hoc* definition and gratuitously endowed it with their own non-scientific trappings." *562 F.2d at 670 n.1* .

See also Reserves.

Proved acreage "Proved acreage is the area which has been credited with proved reserves. Acreage is credited with proved reserves if the presence of a productive formation has been verified by drilling and testing. Undrilled acreage adjacent to drilled acreage and certain other undrilled acreage are also credited with proved reserves if geological and engineering information demonstrate with reasonable certainty that the underlying formations are continuous and productive." American Petroleum Institute Division of Statistics, *Organization and Definitions for the Estimation of Reserves and Productive Capacity of Crude Oil* 18 (Technical Report No. 2, June 1970).

See also Reserves.

Proved developed reserves "[P]roved reserves estimated to be recoverable through existing wells. Reserves in proved reservoirs penetrated by wells but currently not being produced are classified as 'developed' if it is anticipated that such reserves will be recovered through existing wells requiring no more than workover operations." American Petroleum Institute Division of Statistics, *Organization and Definitions for the Estimation of Reserves and Productive Capacity of Crude Oil* 13 (Technical Report No. 2, June 1970).

See also Reserves.

Proved oil and gas reserves As defined by the federal regulations dealing with securities regulation:

"Proved oil and gas reserves are the estimated quantities of crude oil, natural gas, and natural gas liquids, which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions, i.e., prices and costs as of the date the estimate is made." *17 C.F.R. § 210.4-10(a)(2).*

The definition in this Manual was cited in *Arkoma Basin Exploration Co. v. FMF Associates 1990- A, Ltd., 249 S.W.3d 380, 384 n.5 (Tex. 2008)* . The Texas Supreme Court held that under Virginia law, overstatements of reserves would not be actionable as fraud as applied to undeveloped fields because they were merely statements of opinion, but would be actionable as fraud as to already developed fields.

See Highland Capital Mgmt., L.P. v. Ryder Scott Co., 212 S.W.3d 522 (Tex. App.--Houston [1st Dist.] 2006) .

See also Provable Reserves; Proved Acreage; Proved-Developed Reserves: Proved Reserves; Reserves.

Proved reserves A term used by California as the basis for determining the assessed valuation of various mineral properties for ad valorem tax purposes. It is defined by regulation as "the volumes of crude oil and natural gas 'which geological and engineering information indicate with reasonable certainty to be recoverable in the future, taking into account reasonably projected physical and economic operating conditions.' " *Texaco Producing, Inc. v. County of Kern, 66 Cal. App. 4th 1029, 78 Cal. Rptr. 2d 433, 437 (1998)* (quoting from Rule 468(b) of the Board of Equalization).

See also Proved Oil and Gas Reserves; Reserves.

Proved undeveloped reserves "[E]conomically recoverable reserves estimated to exist in proved reservoirs which will be recovered from wells to be drilled in the future. Reserves in undrilled areas are included in proved reserves estimates if they are considered proved by geologic analysis of the current well information." American Petroleum Institute Division of Statistics, *Organization and Definitions for the Estimation of Reserves and Productive Capacity of Crude Oil* 14 (Technical Report No. 2, June 1970).

See also Reserves.

Proven oil or gas property transfer For purposes of the Crude Oil Windfall Profit Tax Act of 1980 (*q.v.*), this term means any transfer (including the subleasing of a lease or the creation of a production payment which gives the transferee an economic interest in the property) of an interest (including an interest in a partnership or trust) in any proven oil or gas property (within the meaning of section 613A(c)(9)(A)). *Internal Revenue Code § 4988.*

Proven or semi-proven acreage ("Drainage") method of evaluation A method of evaluation of bids received for leases on Outer Continental Shelf Lands, defined as follows:

"Leasing tract occupies part of a drilled structure. Geologic and engineering data adequate to prepare structure and net pay maps, to make standard reserve calculations, and to perform profitability analyses utilizing appropriate rate of return and discount factors. Any production found on unleased acreage would be considered a field extension." *Exxon Company, U.S.A., 15 IBLA 345, 355 n.7* , GFS(OCS) 55 (May 14, 1974).

See also Range of values method; Risk-free value; Wildcat acreage method of evaluation.

Proven reserves Oil that is still in the ground but that has been located and determined to be recoverable.

United States Department of the Interior, *An Appraisal of the Petroleum Industry* 13-14 (1965), declares that the term proven (or proved) reserves is frequently used "to denote the amount of oil in known deposits which is estimated to be recoverable under current economic and operating conditions. Reserves, so defined, are probably on the conservative side. For example, oil which can be recovered by secondary recovery methods is only included after installation of secondary recovery equipment. Because of the manner in which the development of a field and recovery technology proceeds in increments after the discovery well, 80 to 90% of the additions to proved reserves have been through revisions and extensions of previous estimates of the proved reserves of older fields, rather than as additions from new exploratory discoveries, although they all trace their lineage back to the original wildcat well. For most of the past thirty years, the ratio of proved reserves to annual production of crude oil has kept in a narrow range of between 12 and 14 to 1, although it has declined in recent years to slightly over 11 to 1 because additions to reserves have not kept pace with production."

The following is the definition of proved reserves adopted by the AGA in its annual publication, *Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada and United States Productive Capacity,* Volume 28, June 1974. The definitions are derived from pages 99-102 of this publication.

"... The statistics on natural gas reserves and production ... take into account the shrinkage of the reservoir gas volume resulting from the removal of the liquefiable portions of the hydrocarbon gases and the reduction of volume due to the

exclusion of non-hydrocarbon gases where they occur in sufficient quantity to render the gas unmarketable.

"... .

"The Committee's definition of proved reserves defines the current estimated quantity of natural gas and natural gas liquids which analysis of geologic and engineering data demonstrate with reasonable certainty to be recoverable in the future from known oil and gas reservoirs under existing economic and operating conditions. Reservoirs are considered proved that have demonstrated the ability to produce by either actual production or conclusive formation test.

"The area of a reservoir considered proved is that portion delineated by drilling and defined by gas-oil, gas-water contacts or limited by structural deformation or lenticularity of the reservoir. In the absence of fluid contacts, the lowest known structural occurrency of hydrocarbons controls the proved limits of the reservoir. The proved area of a reservoir may also include the adjoining portions not delineated by drilling but which can be evaluated as economically productive on the basis of geological and engineering data available at the time the estimate is made. Therefore, the reserves reported by the Committee include total proved reserves which may be in either the drilled or the undrilled portions of the field or reservoir."

"The proved reserves estimated are to include all gas reserves regardless of size, availability of market, ultimate disposition or use." *Federal Trade Comm'n v. Texaco, Inc., 517 F.2d 137* at note 2 (D.C. Cir. 1975) .

Adelman, Bradley, and Norman, *Alaskan Oil: Costs and Supply* 16 (1971), define the term as follows: "Proved reserves, as estimated by the American Petroleum Institute--American Gas Association (API-AGA), are those quantities recoverable 'with reasonable certainty ... under existing economic and operating conditions.' This covers little beyond facilities already in place: the drilled portion of a reservoir and the adjoining area judged productive on the basis of 'available geological and engineering data.' Reserves coming from application of improved recovery techniques are included as proved reserves only if the facilities have already been installed or at the very least there has been 'successful testing by a pilot project.' Proved reserves are that small part of oil-in-place which has been developed for production by the drilling and connecting of wells and associated facilities; the total of planned production from all facilities already installed and paid for."

See also Reserves.

Proven territory Territory so situated with reference to known producing wells as to establish the general opinion that because of its relation to them, petroleum is contained in it. Burns' Ind. Stat. Ann. § 14-38-1-4 (1996).

See also Semi-proven territory.

Province A geological term employed to describe an area throughout which geological history has been substantially the same or which is characterized by particular structural or physiographical features.

See also Favorable Petroleum Geological Province (FPGP); Geologic Province; Petroleum Province.

PR rate Partial requirements rate schedule (*q.v.*).

PRT The Petroleum revenue tax (*q.v.*) established by the Oil Taxation Act 1975. *See* Daintith and Willoughby, *A Manual of United Kingdom Oil and Gas Law* 107-143 (1977).

Prudence rule A rule of the Federal Energy Regulatory Commission preventing pipeline operators from passing along increased prices of gas to the consumer if it is found that the operator did not take prudent steps to reduce gas prices. *Panhandle Eastern Pipeline Co. v. Corporation Comm'n, 715 F. Supp. 1055, 106 O.&G.R. 125 (W.D. Okla. 1989)* , rejected the argument that the prudence rule created a property interest for pipeline operators because they could not pass along increased prices to the consumer if the Commission found that the operators did not take prudent steps to reduce gas prices:

"...This Court will not presume that FERC will deem the Oklahoma increased density proceedings as creating imprudent gas prices. Furthermore, nothing in the record indicates that FERC interprets the outcome of the increased density proceedings as violative of the FERC prudence rule. In fact, the operators of the pipelines acknowledge that they are unaware of a single case where FERC held that the operators of pipelines failed to satisfy the prudence standard based on the outcome of an increased density proceeding." *715 F. Supp. at 1058* .

Prudent administrator standard A standard codified by Article 122 of the Louisiana Mineral Code requiring a mineral lessee to perform his contract in good faith and to develop and operate the property leased as a reasonably prudent operator for the mutual benefit of himself and his lessor. *See* Treatise § 802.3.

See also Barton v. Gifford-Hill & Co., 760 F. Supp. 95, 115 O.&G.R. 502 (W.D. La. 1991) (concluding that there was a genuine question whether plaintiffs were entitled to site restoration under the prudent administrator standard even though the lease was silent on a site restoration duty).

Prudent man standard A test applied in assessing the valuableness of mineral claims to determine whether a patent may be issued:

"As first stated in *Castle v. Womble, 19 L.D. 455, 457 (1894)* , '[W]here minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditures of his labor and means, with a reasonable prospect of success, in developing a valuable mine, the requirements of the statute are met.' This 'prudent-man' standard is supplemented by the so-called 'marketability' test. The claimant must show that a man of ordinary prudence could extract and market the claimed minerals at a profit. This requires that there exists, at the time of discovery rather than at some speculative future date, a market for the discovered minerals that is sufficient to attract the efforts of a person of ordinary prudence." *Roberts v. Morton, 389 F. Supp. 87, 91 (D. Colo. 1975) , aff'd, 549 F.2d 158 (10th Cir. 1976) , cert. denied, 434 U.S. 834 (1977)* .

Prudent operations covenant *See* Diligent and prudent operations covenant.

Prudent operator standard The generally applicable test for determining whether the lessee has breached his Implied covenants (*q.v.*). The lessee is held to that performance of the covenants that would be made by an ordinary, prudent operator under the same or similar circumstances.

The test does not mean the same thing for all implied covenants. In the case of the Offset well covenant (*q.v.*), it usually means that breach of covenant has occurred if an offset well would probably produce oil in paying quantities. The same is true of the Reasonable development covenant (*q.v.*). But in the case of the Further exploration covenant (*q.v.*), some courts have held the duty to be breached without proof of probable profitable production. *See* Meyers, "The Implied Covenant of Further Exploration," *34 Tex. L. Rev. 553 (1956).*

See also Archer v. Grynberg, 738 F. Supp. 449, 111 O.&G.R. 385 (D. Utah 1990) , discussed in Treatise § 921.18 note 26 (concerned with alleged inconsistency of the language of an operating agreement excusing the Operator from losses and liabilities "except such as may result from gross negligence or willful misconduct," and language of a unit agreement requiring the operator to develop the unitized area "as a reasonably prudent operator"), *aff'd without opinion, 951 F.2d 1258 (10th Cir. 1991)* .

See Treatise §§ 806-*806.3*.

See also Good and workmanlike manner.

Prudent pipeline standard A standard utilized by the Federal Energy Regulatory Commission in reviewing purchase gas adjustment filings which pipelines must make in order to pass through increased purchase costs. A five-pronged standard was defined by the Commission in Transcontinental Gas Pipeline Corp., Order on Rehearing (Nov. 12, 1975) (No. RP76-2) as including the following elements: (1) the pipeline's need for gas; (2) the availability of other gas supplies; (3) the amount of gas dedicated to the purchase; (4) comparison of the price with appropriate market prices in the same or nearby areas; and (5) the relationship between the purchaser and the seller. *See* Morgan and Garrison, "Enforcement Policies and Procedures of the Federal Energy Regulatory Commission, *15 Tulsa L.J. 501, 517 (1980).*

PSC Production sharing contract (*q.v.*).

psi Pounds per square inch.

PSIA The Pipeline Safety Improvement Act (*q.v.*).

psia Pounds of pressure per square inch absolute.

PSIG Pounds per square inch gauge. "If pressure is measured relative to absolute zero, it is called absolute pressure; when measured relative to atmospheric pressure as a base, it is called gauge pressure. This is because practically all pressure gauges register zero when open to the atmosphere and hence measure the difference between the pressure of the fluid to which they are connected and that of the surrounding air." Daughtery and Franzini, *Fluid Mechanics With Engineering Applications* 28 (7th ed. 1977); *Gilmore v. Oil and Gas Conservation Comm'n, 642 P.2d 773* at note 5, *75 O.&G.R. 172* at note 5 (Wyo. 1982) .

See also Pressure.

PSLA The Petroleum (Submerged Lands) Act 1967 (*q.v.*).

PSU Production spacing unit (*q.v.*).

PTT The Petroleum Authority of Thailand (*q.v.*).

PTTC Petroleum technology transfer fund (*q.v.*).

Public convenience and necessity, certificate of *See* Certificate of public convenience and necessity.

Public drilling fund This term has been used by Bean, "Entity Selection--An Experience in Alchemy--A Comparison of Corporations, Partnerships, and Joint Ventures," 30 *Sw. Legal Fdn. Oil & Gas Inst.* 363, 364 (1979), to describe those investments registered with the Securities and Exchange Commission initiated by an oil company or independent oil operator who has either undeveloped properties or "expertise" and desires to raise investor money from the public to provide the capital for the venture and to spread the risk:

"The offerings in recent years have ranged from $1 million to $20 million, and the 'unit' size for participation has decreased, *e.g.,* an investor now with $5,000 or $10,000 may be eligible to buy a unit of participation in a drilling fund. The drilling fund usually contemplates the formation of a limited partnership with the fund promoter being the general partner and the investors being limited partners. The general partner ordinarily contributes oil and gas leases, and the limited partners contribute funds for drilling and completion. The manner in which they share the revenues varies, but customarily the limited partners receive in excess of 50 percent of the net revenues after they recoup the drilling costs. The limited partners, in addition, are allocated all or substantially all of the deductions attributable to intangible drilling and development costs. There is also a 'blind pool' drilling fund in which the promoter puts up some of the funds and raises the rest of the money from public investors with no predetermined drilling locations but general 'areas of interest.' The idea is to generate a 'pool of funds' in order to acquire leases, explore, drill, and, hopefully, produce from such leases."

See also Drilling fund.

Public lands Land owned by the state or federal government.

In the case of federally owned public land, there are two classifications: the public domain and acquired lands. In addition to public lands, the federal government also supervises Indian lands. The public domain is land acquired by the federal government by treaty. Acquired land is land purchased or condemned by or donated to the federal government.

The distinction between acquired lands and public domain lands is discussed in Bobby Lee Moore, A-30433 (Mimeo Dec., Dep't of the Interior, Nov. 1, 1965), holding that public land which has been patented and has passed into private ownership does not regain the status of public land upon being acquired subsequently by the United States through purchase or condemnation.

For detailed discussions of mineral development of federal lands, see the following:

G. Coggins, *Public Natural Resources Law* (1990);

Rocky Mt. Min. L. Fdn., *American Law of Mining* (2d. ed. 1984, with annual Supplements/Revisions);

Rocky Mt. Min. L. Fdn., *Law of Federal Oil & Gas Leases* (1964, with annual Supplements/Revisions);

National Research Council (U.S.), *Land Use Planning and Oil and Gas Leasing on Onshore Federal Lands* (1989).

Many states also own land. Most notable are Texas, which retained title to its public lands when entering the Union, and Alaska. Leasing of state-owned public land is governed by local statutes which vary considerably from state to state.

For a detailed discussion of the leasing of Texas public lands, see Whitworth, "Leasing and Operating State-Owned Lands for Oil and Gas Development," *16 Tex. Tech L. Rev. 673 (1985).*

See also Acquired federal lands; Acquired Lands Leasing Act of 1947; Alaska National Interest Lands Conservation Act (ANILCA); Alaska Native Claims Settlement Act of Dec. 18, 1971 (ANCSA); Allotment; Appropriated public lands; Bid files; Board of Land Appeals; Bureau of Land Management; Cherrystemming practice; Classification and Multiple Use Act of Sept. 19, 1964; Excess lands; Federal Land Exchange; Federal lease; Federal Onshore Oil and Gas Leasing Reform Act of 1987; FLMPA; Forest service lands; Indian allotment; Indian lands; Isolated tract; Minerals Management Service (MMS); Multiple Mineral Development Act or Multiple Use Act of Sept. 19, 1964; Outer Continental Shelf (OCS); Outer Continental Shelf Lands Act of 1953; RARE; Relinqishment act lands; Reservation; Right of Way Leasing Act of 1930; Submerged Lands Act of 1953; Tracing method; Vacancy; Withdrawal.

Public limited partnership (PLP) "[A]n organizational structure classified as a limited partnership, the ownership interests in which are either freely tradable on an established securities market or are represented by freely tradable depositary receipts registered on an established securities market. In either case, the freely tradable entity usually is a limited partner in another limited partnership through which all operations of the PLP are conducted. Because of the free tradability of the ownership interests and depositary receipts, investors possess a liquid asset that may be easily converted to cash." Manford and Kalteyer, "Restructuring Oil and Gas Operations into Public Limited Partnerships," 35 *Sw. Legal Fdn. Oil & Gas Inst.* 361, 363 (1984).

See also Limited partnership.

Publicly traded limited partnership *See* Master limited partnership.

Public Right/Private Right distinction A distinction made by the Oklahoma courts to determine the relative jurisdiction of the Corporation Commission and the district courts. "[D]isputes over private rights are properly brought in the district court. ... [T]he [C]ommission's jurisdiction is limited to protection of public rights in development and production of oil and gas." *Leck v. Continental Oil Co., 1989 OK 173, 800 P.2d 224, 226 . See generally* Martin & Kramer, *Jurisdiction of Commission and Court: The Public Right/Private Right Distinction in Oklahoma Law, 25 Tulsa L.J. 535 (1990);* B. Kramer & P. Martin, *The Law of Pooling and Unitization § 13.08[2]* (3d ed. LexisNexis Matthew Bender).

Public Utilities Regulatory Policies Act of 1978 (PURPA) Pub. L. No. 95-617 (Nov. 9, 1978). Major provisions of this Act related to:

(1) a requirement that state public utility commissions consider rate reforms (time-of-day, seasonal, or lifeline rates) when reviewing utility prices beginning in 1981;

(2) authorization for the Department of Energy to intervene in state proceedings to advocate rate reforms and to appeal commission decisions in state courts;

(3) authorization for any rate payer to participate in the regulatory proceedings and to be compensated for his costs by the utility involved or through a state program; and

(4) a requirement that public utilities provide information to state commissions and the Department of Energy on the cost of providing electric service at different times of day and to different types of customers.

The constitutionality of this Act was sustained in *Federal Energy Regulatory Comm'n v. Mississippi, 456 U.S. 742 (1982)* , *reh'g denied, 458 U.S. 1131 (1982)* .

Pugh clause The name given to a type of pooling clause which provides that drilling operations on or production from a pooled unit or units shall maintain the lease in force only as to lands included within such unit or units. This clause was said to have been originated in 1947 by Lawrence C. Pugh of Crowley, Louisiana, and to take its name from him. Similar clauses were in use in other states prior to 1947. *See, e.g.,* the 1943 lease construed in *Rist. v. Westhoma Oil Co., 385 P.2d 791, 19 O.&G.R. 692 (1963)* . *See* Treatise §§ 669.14, 670.4.

The definition from this Manual of Terms was quoted in *Egeland v. Continental Resources, Inc., 2000 ND 169, 616 N.W.2d 861, 863, 145 O.&G.R. 469 (2000)* .

Bibler Brother Timber Corp. v. Tojac Minerals, Inc., 281 Ark. 431, 664 S.W.2d 472, 81 O.&G.R. 24 (1984) , was concerned with the provision of a lease pooling clause that in the event only a part of the leasehold was included in a voluntary unit, "then the remaining portion of the lands embraced by this lease shall be subject to delay rental payments as provided in Paragraph 4 [the delay rental clause of the lease]." The court concluded that the quoted language did not amount to a Pugh clause permitting the leasehold to be canceled as to excluded acreage in the secondary term.

See also All or nothing clause; Extended primary term; Freestone clause; Horizontal Pugh clause; Secondary primary term; Statutory Pugh clause; Vertical Pugh clause.

Pugh clause rental Rentals paid under the terms of a Pugh clause (*q.v.*) on the acreage in a lease excluded from a unit which includes other acreage from the same lease. Payment of such rental is required to preserve the lease as to the acreage excluded from the unit when there is no drilling on such excluded acreage or on a unit which includes such acreage. *See Canik v. Texas International Petroleum Corp., 308 So. 2d 453, 52 O.&G.R. 363 (La. Ct. App. 1975)* , *writ denied, 310 So. 2d 850 (La. 1975)* .

Pulling a well A term applied to the act of removing pipe and other underground equipment from the well. *Corpus, Jr. v. K-J Co., 720 S.W.2d 672, 94 O.&G.R. 181* (Tex. App. 1986, error ref'd n.r.e.) .

See also Pulling casing.

Pulling casing The removal of casing from a hole, upon the abandonment of a well, to salvage its value. Most oil and gas leases expressly provide that the lessee may remove casing after the lease has expired. *See* Treatise §§ 674-*674.4*.

Pulling wet In a Drill stem test (*q.v.*) this term refers to pulling the drill pipe from the well with the oil and gas in place through the process. *Slane v. Jerry Scott Drilling Co., 918 F.2d 123 (10th Cir. 1990)* .

Pump *See* Bubble-point pump; On the pump; Vacuum pump.

Pumping jack "An oil-well pumping unit consisting of a gasoline engine or electric motor that actuates a walking beam in a pumping action. At the well end of the walking beam is a horsehead attached to the string of sucker rods or pump rods. The other end of the beam is weighted with counterweights to balance the string of rods in the well." R.D. Langenkamp, *Handbook of Oil Industry Terms & Phrases 230* (4th ed. 1984).

See also Donkey head; Nodding donkey.

Pumping schedule A program of pumping a well for a period of hours each day and then allowing time for additional fluid to enter the well base to be pumped out. *See Long v. Magnolia Petroleum Co., 166 Neb. 410, 89 N.W.2d 245, 9 O.&G.R. 41, 54 (1958)* .

Pumping station One of the pumping plants located at intervals along a main pipeline (a trunk line) to maintain the flow to the terminal point. Both oil and gas pipelines have pumping stations. The interval between the stations depends on the terrain, the nature of the product being transported, and the diameter of the pipe, among other factors. Smaller sized pumping stations on a natural gas pipeline are called booster stations.

Pumping well A well which is not a Flowing well (*q.v.*) and from which oil is produced by the use of artificial lifting methods, such as pumping. *See Ferguson v. Housh, 227 S.W.2d 590* (Tex. Civ. App.--Galveston 1950) .

Punitive damages Exemplary damages awarded by reason of defendant's evil or wrongful motives in its conduct. *See* Treatise § 825.2 at note 14.

There are constitutional limits to the amount of punitive damages that may be awarded. *State Farm Mutual Automobile Insurance Co. v. Campbell, 538 U.S. 408, 123 S. Ct. 1513, 155 L. Ed. 2d 585 (2003)* ; *BMW of North America, Inc. v. Gore, 517 U.S. 559, 116 S. Ct. 1589, 134 L. Ed. 2d 809 (1996)* ; *TXO Production Corp. v. Alliance Resources Corp., 187 W. Va. 457, 419 S.E.2d 870 (1992)* , *aff'd, 509 U.S. 443 (1993)* .

See also the following:

Cass v. Stephens, 156 S.W.3d 38, 76-77 (Tex. App.--El Paso 2004) (original punitive damages award for fraud and conversion that totaled over $25 million, reduced to $600,000);

Maxedon v. Texaco Producing, Inc., 710 F. Supp. 1306, 106 O.&G.R. 251 (D. Kan. 1989) (discussing the circumstances under which punitive damages may be awarded);

Nickerson v. Winkle, 161 A.D.2d 1123, 556 N.Y.S.2d 414 (1990) ("We agree with defendant's contention that a new trial must be granted on the issue of punitive damages. When a plaintiff seeks punitive damages, all circumstances surrounding the transaction that tend to show or explain defendant's motivation or actions are admissible to rebut plaintiff's contention that defendant acted with evil or wrongful motives. ... Since the trial court improperly excluded defendant's evidence of motive and of the circumstances surrounding its trespass, a retrial of the punitive damages issue is mandated.").

See also Damages; Exemplary damages.

Purchase agreement An agreement for the purchase and sale of oil and/or gas produced from designated leases, setting forth the terms and conditions of purchase and sale, and requirements as to quality and condition of the product and measurement of quantities.

Purchase contract A contract for the sale and purchase of oil or gas entered into by the purchaser and the owners of interests in the oil or gas. *See* Treatise §§ 724-*738*.

See also Gas purchase contract; Kickout clause; Minimum purchase obligation; Oil purchase and sale contract; Spot purchases (or sales) of gas.

Purchase-contract carriage arrangement A phrase used to describe an arrangement whereby a large consumer of gas purchases gas from producers and then makes a contract with a pipeline company for the transmission of such gas from seller to buyer. In the *Matters of Transcontinental Gas Pipe Line Corp., 21 F.P.C. 138 , 9 O.&G.R. 1199* (Jan. 30, 1959) .

See also Mandatory carriage.

Purchase deficiency allocation mechanism A method adopted by the Federal Energy Regulatory Commission to implement the take-or-pay cost passthrough provisions of Order No. 500. To allocate the buyout and buydown costs among customers the Commission proposed the imposition of a demand surcharge on each pipeline customer based upon the customer's "deficiency" of purchases during a past period *Associated Gas Distributors v. Federal Energy Regulatory Comm'n, 893 F.2d 349 (D.C. Cir. 1989) , cert. denied, 498 U.S. 907 (1990)* , held that the mechanism violated the Filed rate doctrine (*q.v.*)

Purchased gas adjustment (PGA) clause A clause in a Rate schedule (*q.v.*) providing for automatic changes in rates for every change, *e.g.*, of 1 cent per Mcf or more, in the rate at which the company purchased gas. Report of the Committee on Natural Gas, A.B.A., Mineral Law Section, *1956 Proceedings* 126, 151 (1956).

Consolidated Edison Co. v. Federal Energy Regulatory Comm'n, 958 F.2d 429 (D.C. Cir. 1992) , sustained the authority of the Commission under the facts of the instant case to accelerate the effective date of a pipeline's out-of-cycle purchased gas adjustment.

The validity of a purchased gas adjustment clause was sustained in *San Antonio Independent School District v. City of San Antonio, 550 S.W.2d 262 (Tex. 1976)* , against the claim that it amounted to an unlawful delegation of legislative authority over ratemaking.

The operation of this clause is discussed in Adair and Helman, "Distributor Rates," American Gas Ass'n, *Regulation of the Gas Industry* 40-1, 40-66 (1981).

An argument against employment of automatic fuel adjustment clauses in fixing utility rates is made in Leaffer, "Automatic Fuel Adjustment Clauses: Time for a Hearing," *30 Case W. Res. L. Rev. 228 (1980).*

For an argument in favor of use of this form of clause in natural gas utility tariffs, see Fowler, "Purchased Gas Adjustment Clauses: An Adjuster's Viewpoint," *6 St. Mary's L.J. 567 (1974).*

Attorney General v. Public Service Comm'n, 175 Mich. App. 592, 438 N.W.2d 620 (1988) , held that feedstocks

constituted "purchased gas" within the meaning of a statute authorizing purchased gas adjustment clauses.

See also Prudent pipeline standard.

The clause is sometimes referred to as a Cost of gas riders clause (*q.v.*).

Hill v. Kansas Gas Service Co., 323 F.3d 858, 861 n.3, 158 O.&G.R. 271 (10th Cir. 2003) (PGA clause allows local distribution companies (LDCs) to pass on charges from regulated pipelines, including reimbursement charges for state ad valorem taxes).

Purchased gas adjustment (PGA) procedure A procedure adopted by the Federal Power Commission in 1972 to reduce the administrative burdens of dealing with rapid fluctuations in the prices that natural gas producers were charging pipelines. "If a PGA clause is included in a pipeline's tariff, the pipeline must document its purchased gas costs in periodic filings with the Commission. Any changes in these costs may then be passed along in the form of higher or lower rates. For purposes of the present case, the critical fact about the PGA procedure is that it enables pipelines to obtain full (*i.e.*, 100 percent) recovery of their purchased gas costs." *Williams Natural Gas Co. v. Federal Energy Regulatory Comm'n, 3 F.3d 1544, 1546, 129 O.&G.R. 620 (D.C. Cir. 1993)* (sustaining Commission order denying recovery of Take-or-pay costs (*q.v.*) under this procedure and holding that such costs could only be recovered under Order 500 (*q.v.*) which permitted the pass-through of such costs only if the pipeline agreed to absorb between 25 and 50 percent of the costs).

Purchase letter An agreement, usually contained in a letter, whereby the owner of a lease agrees to drill a test well at a specified location, upon the completion of which the lease owner agrees to convey certain acreage under the lease or under adjoining leases to the assignee, who agrees to pay a stipulated sum of money for the assignment. Purchase letters take the form of a Dry hole agreement (*q.v.*) or a Bottom hole letter (*q.v.*) depending upon whether the agreement calls for completion of the test well as a dry hole or to a specified depth. Purchase letters may be used by the assignor to finance the drilling of the well. *See Bank v. Republic Supply Co., 166 S.W.2d 373 (Tex. Civ. App. 1942)* . For forms, see Maxwell, Williams, Martin and Kramer, *Cases on Oil and Gas* 1079-82 (6th ed. 1992). *See* Treatise §§ 431-*431.2*.

For other forms of letter agreements, see Letter.

Purchaser *See* Bona fide purchaser; Common purchaser act; Good faith purchaser; Nominations by purchasers.

Purchase rights The rights created by a covenant entitling a contracting party to share in future acquisitions. *See Courseview, Inc. v. Phillips Petroleum Co., 298 S.W.2d 890, 7 O.&G.R. 1068 (Tex. Civ. App. 1957)* , *modified, 158 Tex. 397, 312 S.W.2d 197, 9 O.&G.R. 249 (1957)* .

See also Area of mutual interest agreement.

Purchaser prorationing (or pipeline prorationing) Informal prorationing by pipeline when the allowable production for a given period is in excess of the amount of oil which the purchasing company wishes to take because of market conditions or lack of storage facilities.

For discussions of this form of prorationing, see the following:

Wolbert, *U.S. Oil Pipe Lines* 356 (1979);

American Petroleum Institute, *Witnesses for Oil, The Case Against Dismemberment* 155 (1976) (describing the policy employed by Colonial Pipeline Co. when its line becomes full and space must be prorated among shippers);

Rogers, "Common Purchaser, Market Demand, Pipeline Proration," 9 *Sw. Legal Fdn. Oil & Gas Inst.* 45 (1958);

Treatise § 724.4.

See also Prorationing.

Purchaser representative For purposes of Regulation D (*q.v.*) of the Securities and Exchange Commission providing for a Private offering exemption (*q.v.*) under the Federal Securities Act, it is required that the issuer reasonably believe that any Nonaccredited investor (*q.v.*), either alone or acting with a "purchaser representative," understood the merits and risks of the offering. For this purpose, a purchaser representative must meet certain criteria specified in Rule 501(h), *17 C.F.R. § 230.501(h) (1982)* (relating to knowledge and experience, acknowledgement of status by the purchaser in writing after disclosure in writing of material relationship of the representative and the issuer). *See* Treatise § 441.4.

Pure service agreement A form of service agreement--as distinguished from a Risk service contract (*q.v.*)--between a host country and an international oil company under which the international oil company is paid a flat fee for its services. Under this form of agreement the oil company does not carry any element of exploration risk. *See* Blinn, Duval, Le Leuch, and Pertuzio, *International Petroleum Exploration & Exploitation Agreements* 97 (1986).

Syn.: No-risk service agreement.

Pure simulation *See* Simulation.

Pure takes An alternative under consideration by the Minerals Management Service (MMS) (*q.v.*) to replace the Tracing method (*q.v.*) of determining value of gas produced from Federal and Indian leases committed to a federally approved unitization or communitization agreement when a lessee for some period of time does not actually take its proportionate share of the production attributable to its lease under the terms of the agreement but thereafter takes more than its proportionate share to balance its account or is paid a sum of money by the other agreement participants to balance its account. "A pure takes royalty system would have each lessee, or its agent, paying only when the lessee removes or sells production on its own account, or when some other party has removed or sold production to which the lessee was entitled settles with the lessee by transferring money or other consideration to the lessee. Working-interest would report and pay royalties only on their own leases." Department of the Interior; Minerals Management Service, "Valuation of Gas Production Under Unitization or Communitization Agreements," *57 Fed. Reg. 23068, 23070* (June 1, 1992) .

Purging a tank A process employed to eliminate moisture and other matters which adversely affect liquefied petroleum gas placed in the tank. *Parkinson v. California Co., 255 F.2d 265 (10th Cir. 1958)* .

Purification The removal of impurities or contaminants. Exxon Co., U.S.A.; *Chevron U.S.A., Inc., 98 I.D. 409, 121 IBLA 234* , GFS(OCS) 1991-184 (Nov. 15, 1991) (finding that "purification" and "treatment" are synonymous,

distinguishing "processing" from "treatment," concluding that removal of hydrogen sulfide from natural gas was treatment rather than processing, and holding that such costs of treatment were not deductible or chargeable against the Federal royalty interest), *aff'd as modified, 99 I.D. 191, 121 IBLA 252A* (Oct. 2, 1992) .

Purification equipment Apparatus used for the removal of impurities from gas and apparatus for conditioning gas, including pumps, wells, and other accessory apparatus. 18 C.F.R. § 201.317 (1980).

PURPA The Public Utilities Regulatory Policies Act of 1978 (*q.v.*).

Put option The term used to describe an agreement between a leasing service and its client for whom the service files a Drawing entry card (*q.v.*) in a simultaneous noncompetitive oil and gas lease offer. Under this agreement the service agrees in advance to purchase, at the client's sole election, a specified percentage of any lease which the client might be awarded at a pre-determined price. The leasing service has no right to compel the client to convey any interest to it, so that when the lease issues to the client, the service has no enforceable interest therein. *Nicolazzi v. Commissioner, 79 T.C. 109, 73 O.&G.R. 619 (1982)* ; *D. E. Pack, 40 IBLA 45, 46* , GFS(O&G) 1979-38 (1979). *See also Harry S. Hills, IBLA 80-135, 48 IBLA 356* , GFS(O&G) 1980-132 (July 11, 1980), remanding case for determination of whether nondisclosure of put option violated regulations requiring disclosure of other parties in interest and prohibiting multiple filings in simultaneous oil and gas lease filings.

Put-together *See* Exchange offer.

CERTIFICATE OF SERVICE

I certify that on this 2nd day of October, 2014, a copy of the foregoing was served via Regular U.S. Mail upon the following:

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