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# PETROLEUM INDUSTRY GLOSSARY

| Name | Definition |
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| **A-frame** | SEE: Gantry; Mast. |
| **A-scan** | A method of data presentation on a CRT (Cathode Ray Tube) utilizing a horizontal base line that indicates distance, or time, and a vertical deflection from the base line which indicates amplitude. |
| **A-scan Display** | A cathode ray tube display in which the received signal is displayed as a vertical excursion from the horizontal sweep time trace, the horizontal distance between any two signals represents the material distance between the two conditions causing the signals. |
| **Abandon** | (1) The proper plugging and abandoning of a well in compliance with all applicable regulations, and the cleaning up of the wellsite to the satisfaction of any governmental body having jurisdiction with respect thereto and to the reasonable satisfaction of the operator.(2) To cease efforts to find or produce from a well or field.(3) To plug a well completion and salvage material and equipment. |
| **Abandoned Date** | The date a well, well completion or field was abandoned. |
| **Abandoned Pay Zone** | The pay zone within the wellbore that was abandoned. |
| **Abandoned Rate** | The rate of production at the time the well, well completion, or field is abandoned. |
| **Abandonment Pressure** | The pressure at which a reservoir was, or is, expected to be abandoned. |
| **Abatement** | (1) The act or process of reducing the intensity of pollution.(2) The use of some method of abating pollution. |
| **Abbreviated Parish Name** | SEE: Abbreviated County Name |
| **Abbreviated State Name** | The standard post office abbreviation for each state. |
| **Abc Production Payment Amount** | The typical production payment where party A is the seller of a given property, party B is the party desiring to ultimately own party A's property, and party C is either a limited partnership or corporation which borrows from a commercial bank. The purpose of party C is to reduce party B's outlay and risk. The bank has no recourse against party B's general assets. The loan must be repaid solely from project proceeds. |
| **Abnormal Operating Condition** | A condition which occurs in a process component when an operating variable ranges outside of its normal operating limits. |
| **Abrasion** | The damage on the pipe resulting from a rubbing or pounding action against other pipes or some protrusion in the vessel. This latter condition may result in the initiation of fatigue cracks at the damaged areas during transit. |
| **Absolute Age** | The geologic age of a fossil organism, rock, geologic feature, or event given in units of time, usually years. |
| **Absolute Permeability** | A measure of the ability of a single fluid; e.g., water, gas or oil, to flow through a rock sample when the sample is saturated with that single fluid. |

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| **Absolute Porosity** | The percentage of the total bulk volume of a rock sample that is composed of pore spaces or voids. |
| **Absolute Pressure Measurement** | Pressure measured from absolute zero pressure. It is ordinarily expressed as gauge pressure (the pressure reading on a pressure gauge) plus atmospheric pressure. |
| **Absolute Shut-in Pressure Measurement** | The absolute pressure measurement recorded within a shut-in casing, tubing, or drill system. |
| **Absolute Time Constraint** | A constraint that restricts an activity to a specific time, and which is not relative to the start or end of any other activity. For example, the statement that an activity must finish before May 31, 1993 is an absolute constraint. |
| **Absolute Volume** | The volume per unit mass, reciprocal of absolute density. |
| **Absorbed Dose** | The amount of radiation energy absorbed per unit mass. |
| **Absorber** | A vessel containing an oil solution through which gas is counterflowed for the purpose of removing heavier liquifiable hydrocarbons. |
| **Absorber Tower** | SEE: Absorber. |
| **Absorption** | The penetration or apparent disappearance of molecules or ions of one or more substances into the interior of a solid or liquid; ie.g., in hydrated bentonite, the planar water that is held between the mica like layers is the result of absorption; to soak up as a sponge takes water |
| **Absorption Oil** | An oil with a high affinity for light hydrocarbons but containing few if any of the light compounds that compose gasoline or natural gas. The oil used in an absorption plant. |
| **Ac Field** | The active electromagnetic field produced by the use of alternating current. |
| **Accelerated Recovery** | Additional field development for the purpose of faster recovery, possibly at the expense of the field's total production over time. |
| **Acceleration Method** | Uses the angles at which the top and bottom of the course length and from these generates a curve on the assumption that the measured angles change smoothly from top to bottom of the measured course as though under the influence of a constant force of acceleration. The results obtained are the same as the Balanced Tangential, Trapezoidal, and Vector Averaging Methods. |
| **Accelerator (cement)** | SEE: Cement Accelerator. |
| **Acceptance Criteria** | (1) Limit of shape, size, and position of discontinuities acceptable within the context of the specific flame arrestor design requirements.(2) Defined limits placed on characteristics of materials, products, or services. |
| **Access Opening** | An opening which allows communication to the interior of the flame arrestor housing making the mixer, pilot, burner, etc., accessible. This opening is normally closed by a flat plug or plate 3 to 4 inches in diameter, securely attached to the housing and tightly sealed against the opening. |
| **Accessory** | A secondary part or assembly of parts which contributes to the overall function and usefulness of a machine. |
| **Acclimation** | The process of adjusting or adapting to changes in climate or environment. |
| **Accounting Lease** | An accounting representation of property assets used as a recording point for financial information. Normally a common ownership associated with an instrument; e.g., a lease agreement. |
| **Accounting Lease Number** | A number used in oil and gas accounting to identify the properties that must be established to account for oil and gas finances, production, etc. |
| **Accounting Lease Sub-number** | A break down of an accounting lease because of ownership or price differences within an accounting lease number. |
| **Accounting Procedure** | An exhibit attached to and made a part of an operating agreement which sets forth the provisions under which the working interest owner designated as the operator is permitted or required to account for costs and expenses incurred for the joint operations. |

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| **Accumulator** | (1) A small tank or pressure vessel to hold air, gas or liquid under pressure for use in a hydraulic or air actuated system. Accumulators store a source of pressure for use at a regulated rate in mechanisms or equipment in a plant or in drilling or production operations.(2) A vessel or tank that receives and temporarily stores a liquid used in a continuous process in a gas plant. |
| **Acid** | Any chemical compound containing hydrogen capable of being replaced by positive elements or radicals to form salts. In terms of the dissociation theory, it is a compound which, on dissociation in solution, yields excess hydrogen ions over hydroxyl ions. Acids lower the pH. Examples of acids or acidic substances are: hydrochloric acid, tannic acid, sodium acid pyrophosphate. |
| **Acid Bottle** | Early method of measuring the angle of inclination. A glass bottle with hydrofluoric acid was lowered to the bottom and allowed to set until the acid etched the glass. The angle of inclination was determined by the etched line. |
| **Acid Fracturing** | The process of opening cracks in reservoir rock by using a combination of oil and acid under high pressure. |
| **Acid Gas** | SEE: Sour Gas. |
| **Acid Resistance** | The ability of a hardened cement slurry to withstand the softening and corrosive effects of organic or mineral acids, or water solutions of these acids and their salts having a pH lower than 7.0. |
| **Acid Type** | The classification of chemical compounds containing hydrogen capable of being replaced by positive elements or radicals to form salts. Examples are: hydrochloric acid, tannic acid, sodium acid pyrophosphate. |
| **Acidity** | The relative acid strength of liquids as measured by pH. A pH value below 7. |
| **Acidize** | (1) A technique used to increase permeability in the reservoir rock immediately around the borehole by injecting acidic fluids.(2) The process used to clean the walls of the borehole, screens or liners by circulating or injecting acidic fluids. |
| **Acoustic Impedance** | The product of the material's density and its acoustic velocity. The refraction and reflection of acoustic energy is governed by changes in acoustic impedence. |
| **Acoustic Intensity** | The power per unit area associated with a sound. |
| **Acoustic Log** | A well log recording one or more specific characteristics of acoustic waves propagated in or around the borehole. Typical measurements are interval transit time, acoustic velocity and compressional or shear wave amplitude. |
| **Acoustic Travel Time** | The time required for an acoustic wave to travel from one point to another. |
| **Acquired Gas Other Volume** | The volume of gas acquired from field and or operator other than the facility being reported. |
| **Acquired Gas Volume** | The volume of gas acquired from field operator other than the facility being reported. |
| **Acquisition** | An activity in which data samples are collected or observations recorded. |
| **Acquisition End Date** | SEE: Field Acquisition End Date. |
| **Acquisition Start Date** | SEE: Field Acquisition Start Date. |
| **Acreage** | SEE: Areal Extent; Company Acreage. |
| **Acreage Based Royalty** | Royalty payable on a per acre basis; e.g., a royalty expressed as a fixed sum per acre on a shut-in well. |
| **Acreage Contribution** | The amount of property contributed to the operator for drilling a well on a property in which the contributer has no direct interest, payable only in the event the well is a dry hole. |
| **Acreage Dedicated Date** | The date the acreage is dedicated to a specific market. |
| **Acreage Dedicated Description** | This identifies acreage dedicated under a contract as Federal, nonfederal or an area dedication. The area dedication applies when a large area is dedicated under a contract and it is not feasible to enter every line of the acreage description. |

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| **Act Meter** | SEE: LACT UNIT. |
| **Act Unit** | SEE: LACT Unit. |
| **Activation Log** | A well log in which the rock around the borehole is irradiated with neutrons to provide a means for identifying the elements present. Also referred to as: Neutron Activation Log, Induced Gamma Ray Spectroscopy Log. |
| **Active Zone** | A region in which the ice moves and deforms. |
| **Activity** | An activity is an action that may result in a change of the state of a system or of knowledge of the system and can be instantaneous or have a duration. |
| **Activity Cost** | Costs associated with services and activities; e.g., drilling; perforating; logging. |
| **Activity Duration Constraint** | A limitation on the length of time for a period activity. |
| **Actual Cost** | The total dollar amount spent to perform a work activity. The cost calculated by totaling vendor/contractor invoices and allocated overhead charges. |
| **Actual Residue Gas Remaining** | The volume of gas remaining in a plant after processing. |
| **Actuator** | A mechanism for the remote or automatic operation of a valve or choke by pressure or electricity. |
| **Acute Toxicity** | Any poisonous effect produced within a short period of time, usually up to 24-96 hours, resulting in severe biological harm and often death. |
| **Adapter** | A pressure containing piece of equipment having API end connections of different nominal sizes and/or pressure ratings, used to connect other pieces of equipment of different API nominal sizes and/or pressure ratings. |
| **Added Mass** | Effective addition to the system mass which is proportional to the displaced mass of water. |
| **Additional Permit Required Flag** | An indicator of whether additional permits are required other than the Application for Permit to Drill or Sundry Notice. |
| **Additional Value Amount** | The additional financial value for the product produced. |
| **Additive** | (1) Substance to enhance certain characteristics of a product; e.g., acids, mud, gels, cement.(2) A material, other than cement or water, which is added to a cement subsequent to its manufacture to modify properties. Equivalent to admixture in ASTM usage. |
| **Address** | The location at which someone or something may be found. |
| **Adequate Ventilation** | Ventilation (natural or artificial) which is sufficient to prevent the accumulation of significant quantities of vapor/air mixtures in concentrations above 25% of their lower flammable (explosive) limit (LEL). |
| **Adequately Ventilated Area** | An adequately ventilated area is an area that has a ventilation system (natural or artificial) which prevents the accumulation of gases to an explosive level. Adequate ventilation is provided by a change of air volume each five minutes, or 1.5 cubic feet of air volume flow per minute per square foot of floor area, whichever is greater. |
| **Adfreeze** | Adhesion between ice and a structural surface. |
| **Adhesion** | The molecular attraction or force exerted across the surfaces of contact between unlike liquids and solids which resist their separation. |
| **Adjudication Completed Date** | The date adjudication of an application is complete; determined by the date the adjudicator signs off on the Application for Permit to Drill, lease, agreement, or approval. |
| **Adjudication Reviewer Name** | The name of the adjudicator reviewing the document. |
| **Adjustable Choke** | A choke in which the position of a conical needle in a seat can be used to vary the rate of flow through the choke. |
| **Adjusted Net Taxable Amount** | The adjusted value on which tax is based, for amended returns only. |

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| **Adjusted Volume** | The revised volume after adjustments are applied. |
| **Adjustment** | Activities associated with the sizing or setting of equipment as defined in the Manufacturer's Manual. Adjustments may be made at the wellsite or other location. |
| **Adjustment Value** | The revised value after adjustments are applied. |
| **Adjustment Volume** | The net increase or decrease in a previously reported volume. |
| **Administrative Or Regulatory Authority** | SEE: Regulatory Agency Name. |
| **Administrative Overhead** | All costs incurred at the home, divisional, area, regional, or similar administrative office. |
| **Admix** | To add one material to another by mixing. Note: Admix should not be used replaceably with addition, additive or admixture. |
| **Adsorbed Liquid** | That liquid on the surfaces of solid particles that cannot be removed by draining, even with centrifugal force. |
| **Adsorption** | (1) A surface phenomenon exhibited by a solid (adsorbent) to hold or concentrate gases, liquids, or dissolved substances (adsorptive) upon its surface, a property due to adhesion; e.g., water held to the outside surface of hydrated bentonite is adsorbed water.(2) Removal of gas entrained liquids from gas by passing the gas through a bed of granular solids with a special attraction for the liquids which are to be removed. The liquids are retained on the surface of the particles of the solid material. |
| **Advalorem Tax** | A form of tax based on the appraised value of tangible assets; e.g., equipment; product; reserves. This can be a local, county or state tax. |
| **Advance Payment Agreement** | An agreement between a producer and purchaser to make an advance payment for gas to be delivered at a future date. |
| **Advance Payment Amount** | The amount of the advance payment adjustment. |
| **Advance Release Notice Day Count** | The number of days advance notice required to give a purchaser prior to the lapse or sale of a leasehold dedication to a gas contract. |
| **Advance Rental** | Money/property paid in advance of the lease year to retain the mineral interest in the lease in the absence of drilling or production of minerals. |
| **Advance Rental Amount** | The amount of money or value of other property paid in advance of the lease year to maintain the mineral lease in the absence of drilling or mining operations for production of minerals. |
| **Advance Rental Expiration Date** | Indicates the expiration date for the requirement of the advance rental payment on a property. |
| **Advance Rental Period** | The calendar period that covers the advance rental payment. |
| **Aerate** | To add air into water by agitation. |
| **Aeration** | The technique of injecting air or gas in varying amounts into a fluid. |
| **Aerial Engine Water Cooler** | Process equipment or radiator-type equipment used to cool a liquid product or equipment. |
| **Aerobic** | The condition associated with the presence of free oxygen in an environment; living, active, or occurring only in the presence of oxygen. |
| **Aerobic Bacteria** | Bacteria that are active primarily in the presence of oxygen. |
| **Aerosol** | Suspension of liquid or solid particles in air or gas. |
| **Afe** | SEE: Authorization For Expenditure. |
| **Afe Approval Flag** | IAn indicator of an approval or lack thereof of an Authorization for Expenditure of Funds (AFE). |
| **Afe Cost Descriptor Code** | An identifier of various cost types associated with authorizations for expenditures (AFE); e.g., compressor station, land, fuel, pipe, etc. |

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| **Afe Currency Code** | An indicator of the currency used for all costs for an Authroization for Expenditure (AFE). |
| **Afe Date** | The transmittal date of the Authorization for Expenditure (AFE) to partners, which is also considered the official date of the AFE. |
| **Afe Job Type Code** | An indicator of the Authorization for Expenditure (AFE) purpose or objective. |
| **Afe Master Unique Identifier** | Number assigned by the originator of the Authorization for Expenditure (AFE) to identify the total AFE package. (The binder clip of the AFE package.) |
| **Afe Name** | SEE: Operator Appropriations Name |
| **Afe Number** | SEE: Operator Appropriations Number. |
| **Afe Response Required Flag** | An indicator showing whether or not a response is required for the Authorization for Expenditure (AFE). |
| **Afe Revision Flag** | A unique number assigned to the revision or supplement relating to a previous Authorization for Expenditure (AFE). |
| **Afe Revision Number** | A unique number assigned to the revision relating to a previous Authorization for Expenditure of Funds (AFE). |
| **Afe Revision/supplement Flag** | A flag indicating an additional request for or information relating to a previous AFE. |
| **Afe Segment Unique Identifier** | The number assigned by the originator of the Authorization for Expenditure (AFE) to identify the approval level components of the master segment. (The Staple of the AFE package.) |
| **Afe Supplement Number** | A unique number assigned to the supplement relating to a previous Authorization for Expenditure of Funds (AFE). |
| **Affiliate** | With respect to the relationship between corporations, an affiliate is one controlled by the other or both of them are controlled by the same person, corporation, or body politic; for this purpose a corporation shall be deemed controlled by those persons, corporations, or bodies politic who own or effectively control sufficient voting shares of the corporation (whether directly through the ownership of shares of the corporation or indirectly through the ownership of shares of another corporation which owns |
| **Affiliation Code** | An agency assigned indicator of the relationship of the parties involved. |
| **Affine** | Denoting a relation between two planar coordinate systems. In particular, this denotes the relationship between the local map coordinates and projection coordinate. An affine transformation can accommodate a translation, a coordinate rotation, and a scale change. A general affine transformation of this type is of the form x' = Ax + b where x', x, and b are three component vectors and A is a 3x3 matrix. Generally, the z coordinate is handled separately, and the equation reduces to a planar mapping. |
| **Aftercooler** | Heat exchanger used to reduce gas temperatures. |
| **Agglomerate** | A mass of particles or substances closely associated and clustered together. |
| **Agglomeration** | The grouping of individual particles. |
| **Aggregate** | An essentially inert material of mineral origin having a particle size predominantly greater than 10 mesh. Also a group of two or more individual particles held together by strong forces which are not subject to dispersion by normal mixing or handling. |
| **Aggregation** | Formation of aggregates. In drilling fluids, aggregation results in the stacking of the clay platelets face to face , decreasing the viscosity, and gel strength. |
| **Aging (cement)** | Natural or artificial curing of cement, cement slurries, and hardened cement paste during which various physico-chemical changes take place. |
| **Agitator** | A motor-driven paddle or blade used to mix liquids and solids. |
| **Agreement** | A written understanding of the rights, liabilities, and obligations of the parties to the agreement. |

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| **Aid Number** | An assigned identification number used for reporting payments to the government. It is the number assigned by the Minerals Management Service (MMS) to the lease instruments on Federal (either onshore or offshore) or Indian property. |
| **Aime** | SEE: American Institute of Mining, Metallurgical, and Petroleum Engineers. |
| **Air Curtain** | A method for mechanical containment of oil spills. Air is bubbled through a perforated pipe causing an upward water flow that retards the spreading of oil. Air curtains may also be used as barriers to prevent fish from entering a polluted body of water. |
| **Air Cutting** | The inadvertent mechanical incorporation and dispersion of air into a drilling fluid system. |
| **Air Drilled Interval Base Depth** | The base depth of the interval that was air drilled. |
| **Air Drilled Interval Top Depth** | The top depth of the interval that was air drilled. |
| **Air Drilling** | Drilling employing air or gas rather than a liquid drilling fluid to remove cuttings from the borehole. |
| **Air Drilling Capacity** | The largest rate of flow of air/gas available from the air contractor or gas source during an air drilling operation. |
| **Air Drilling Rate** | The rate of injection of air or gas during the air drilling operation. |
| **Air Drilling Type** | The type of air drilling operation, which is either air or gas. |
| **Air Equipment Pack** | Self-contained, positive-pressured air supply which permits personnel to enter toxic environments. |
| **Air Injection Volume** | The volume of air injected into a borehole. |
| **Air Pollution** | The presence of contaminants in the air in concentrations that interfere directly or indirectly with human health, safety, comfort, or with the full use and enjoyment of property. |
| **Air Quality Criteria** | The levels of pollution and lengths of exposure at which adverse effects on health and welfare occur. |
| **Air Quality Standard** | The prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographic area. |
| **Air Receiver Tank** | SEE: Tank, Air Receiver. |
| **Air Starting Unit** | A device using air to start a prime mover. |
| **Air Vortex** | A cylindrical or conical shaped core of air or vapor lying along the central axis of the rotating slurry inside a hydrocyclone. |
| **Alias** | (1) Frequency ambiguity resulting from the sampling process. Where there are fewer than two samples per cycle, an input signal at one frequency yields the same sample values as another frequency at the system output. (2) An alternative identifier for something. |
| **Alias Filter** | A filter used before sampling to remove undesired frequencies which the sampling process would otherwise alias. Often called an anti alias filter. |
| **Aliquot Area** | The surface area that is part of the equal subdivision of a block in which all portions are equal and the combined areas of all portions equals the total of the leasehold block. Part of the quarter-quarter-quarter description; e.g., the northwest 1/4 of the southeast 1/4 of the northeast 1/4. |
| **Aliquot Remark** | An explanation or description associated with the aliquot portion of a lease . |
| **Alkali** | Any compound having marked basic properties; opposite of acid. |
| **Alkalinity** | The combining power of a base measured by the maximum number of equivalents of an acid with which it can react to form a salt. In water analysis, it represents the carbonates, bi-carbonates, hydroxides, and occasionally the borates, silicates, and phosphates in the water. It is determined by titration with standard acid to certain datum points. |
| **Allocated Oil Well Flag** | An indicator of whether an allocated oil well is under special field rules. |

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| **Allocation Basis** | A well allocation factor (various formulas) to determine a well's prorated share of pool wide nominations. Used in specified allocated fields. |
| **Allocation Settlement Basis** | The basis on which each product component is allocated for settlement volumes; e.g., test gallons, mol percent, residue curve. |
| **Allowable** | Production rate of oil or gas a well or leasehold is permitted to produce under proration orders of a regulatory body. |
| **Allowable Daily Volume** | The daily allowable volume of hydrocarbons a well, lease or pool is assigned. |
| **Allowable Effective Date** | The year and month that the report is effective for allowable purposes. |
| **Allowable Rope Load** | The nominal breaking strength of the rope divided by a design factor. |
| **Allowable Volume** | The volume of hydrocarbons a well, lease or pool is assigned. |
| **Allowance Identification Number** | The number assigned by the agency which identifies the party who is entitled to an allowance. |
| **Allowance Recipient Name** | The name of the party who is entitled to an allowance. |
| **Alloy** | A metal composed of two or more elements, combined to produce certain metallic properties. |
| **Alternate Contract Designation** | Another associate designated as an alternate for the business associate designated in a contract. |
| **Alternating Current** | Electric current that reverses its direction of flow at regular intervals. |
| **Alternative Casing** | Casing set in lieu of conductor or surface casing under special circumstances or by special authorization. The casing method is most typically used in wells of shallow depths. |
| **Alternative Casing Flag** | An indicator of whether there is an alternative casing. |
| **Aluminum Stearate** | An aluminum salt of stearic acid used as a defoamer. |
| **Ambient Temperature** | The temperature of the surrounding medium. |
| **Amendment Number** | A number assigned by an agency which uniquely identifies the amendment. |
| **Amendment Reason Remark** | A description of the reason for an adjustment. |
| **American National Standards Institute** | The coordinating organization for America's federated national standards system. Sponsored by the Business Equipment Manufacturers Association (BEMA) and consisting of a large number of companies, large and small, as well as many trade, technical, professional, labor, and consumer organizations, its purpose is the establishment of voluntary industry standards. Commonly abbreviated ANSI. |
| **American Petroleum Institute** | Headquartered in Washington, D.C. The trade association for the petroleum industry. |
| **American Society For Testing And Materials** | Commonly abbreviated ASTM. |
| **Amine** | A compound containing an NH2 group. It may be used to sweeten sour liquids or gases. |
| **Amine Unit** | A treatment unit for removing contaminants (H2S, COS, CO2) from a process stream by the use of amines. |
| **Ammeter** | An instrument for measuring electric current in amperes. |
| **Amortization** | (1) A noncash deduction from current revenue on the financial books which provides for the recovery of a portion of the capitalized intangible investments due to use or passage of time. (2) The liquidation of a debt on an installment basis. |
| **Ampere Turns** | The product of the number of turns in a coil and the number of amperes of current flowing through it. This is a measure of the magnetizing strength of the coil. For example: 800 amperes in a 6 turn coil = 800 x 4800 A-t. |

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| **Amplification Reduction Factor** | Coefficient applied to bending term in interaction equation for members subjected to combined bending and axial compression to account for overprediction of secondary moment given by the amplification factor 1/(1-fa/F'e). |
| **Amplifier** | (1) A device to increase or amplify a signal.(2) A device used to increase voltage, current or power. |
| **Amplitude** | The distance from the mean position to the point of maximum displacement. In the case of a vibrating screen with circular motion, amplitude would be the radius of the circle. in the case of straight line motion or elliptical motion it would be one-half of the total movement or one-half of the major axis of the ellipse, thus one-half stroke. |
| **Amplitude Log** | A record of the amplitude of the compression wave or shear wave portion of the acoustic wave propagated through the borehole environment in acoustic logging. |
| **Anaerobic** | Refers to life or processes that occur in the absence of oxygen. |
| **Analytical Balance** | An instrument used for weighing, consisting of a beam that is supported freely in the center and counterbalanced with precision weights. Also referred to as: Scales. |
| **Anchor** | (1) A device for holding, fixing, or fastening any object which may tend to change its position. Examples include dead line, wire line, derrick anchors.(2) A length of tubing extending below the working barrel in a pump.(3) Gas anchor and mud anchor.(4) A length of tubular goods extending below the packer when drillstem testing. |
| **Anchor Tension** | The tension measurement for a floating rig anchor. |
| **Anemometer** | An instrument for measuring the force or speed of the wind. |
| **Angle Averaging Method** | SEE: Borehole Survey Calculation Method; Average Angle Method. |
| **Angle Testing** | An ultrasonic testing method in which transmission is at an angle to one test surface. |
| **Angle Transducer** | A transducer that transmits or receives the acoustic energy at an acute angle to the surface to achieve a special effect such as the setting up of shear waves in the part being inspected. |
| **Angular Velocity** | The rate of rotation. |
| **Anhydrite** | A mineral consisting of anhydrous calcium sulfate. It represents gypsum without its water of crystallization, and it alters readily to gypsum. Anhydrite usually occurs in white or slightly colored, granular to compact masses, forming large beds or seams in sedimentary rocks or associated with gypsum and halite in evaporites. |
| **Anhydrous** | Without water in chemical combination. |
| **Aniline Point** | The lowest temperature at which equal volumes of freshly distilled aniline and an oil being tested are completely miscible. This test gives an indication of the character (paraffinic, naphthenic, asphaltic, aromatic, mid-continent, etc.) of the oil. The aniline point of diesels or crudes used in drilling fluid is also an indication of the deteriorating effect these materials may have on natural or synthetic rubber. The lower the aniline point of an oil the more severe it usually is in damaging rubber p |
| **Anion** | A negatively charged atom or radical, such as Cl-, OH-, SO4-, etc., in solution of an electrolyte. Anions move toward the anode (positive electrode) under the influence of an electrical potential. |
| **Anisotropic Formation Theory** | Stratified, anisotropic formations are assumed to possess different drillabilities parallel and normal to the bedding planes, with the result that the bit does not drill in the direction of the resultant force. |
| **Anistropy** | The variation of elastic and mechanical properties depending on direction. For example, the variation of acoustic velocity, of shear modulus and of shear strength. |
| **Annual Gross Rental** | The total amount of rental (payable or receivable) required to maintain a land property for a period of one year. |
| **Annual Net Rental** | The portion of the total gross amount of annual rental, payable or receivable, applicable to the company's interest in a property. |
| **Annular Flow** | Formation fluids are produced up through the tubing /casing annulus and recovered at the surface. |

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| **Annular Packer** | A mechanism that seals off annular pressure between the outside diameter (OD) of a suspended tubular member or hanger and the inside diameter (ID) of the head or thru spool which the tubular member passes or hanger is suspended. |
| **Annular Pressure Measurement** | The pressure measured in the annulus. |
| **Annular Preventer** | A device which can seal around any object in the borehole or upon itself. Compression of a reinforced elastomer packing element by hydraulic pressure effects the seal. |
| **Annular Velocity** | The velocity of a fluid moving in the annulus. |
| **Annulus** | The space between: (1) The casing and the wall of the borehole.(2) Two strings of casing.(3) Tubing and casing. |
| **Anode** | (1) The portion of a corrosion cell which corrodes. Oxidation always occurs at anode. Usually a piece of sacrificial metal connected to equipment for corrosion protection.(2) The positive terminal of an electrolytic cell, which reduces electrolysis to prevent corrosion/erosion. |
| **Ansi** | SEE: American National Standards Institute. |
| **Ansi X12** | SEE: American National Standards Institute X12 Committee. |
| **Antenna** | A device, usually metallic rod or wire, for radiating or receiving radio waves. |
| **Anthracite Medium** | A type of coal which is commonly used in water filters. |
| **Anticline** | A structural fold of which the core contains older rocks and is generally concave downward. |
| **Antidegradation Clause** | A provision in air quality and water quality laws that prohibits deterioration of air or water quality in areas where the pollution levels are presently below those allowed. |
| **Antifoam** | A substance to prevent foam formation by greatly decreasing the surface tension. |
| **Antiform** | A structural fold whose limbs close upward in strata for which the stratigraphic sequence is unknown. |
| **Apd Approval Date** | The date the Application to Drill (APD) was approved. |
| **Aperture** | (1) An opening in a screening surface; the clear opening between wires.(2) An opening.(3) The spatial range at a given time over which seismic migration is affected. |
| **Api** | SEE: American Petroleum Institute. |
| **Api Corrected Gravity Measurement** | The API gravity corrected to 60 degrees Fahrenheit. |
| **Api County Code** | An indicator developed by the American Petroleum Institute (API) to identify the following: a. Counties, b. Parish, c. Other subdivisions of areas identified by state codes: (1) Canadian quadrangles, municipal counties and districts.(2) Alaskan quadrangles.(3) Offshore areas. Each of these areas may consist entirely of either state or federal waters or may include both. Defined by API Bulletin D12A, as amended. This code becomes a part of the API Well Number. |
| **Api Fluid Loss** | The volume of mud filtrate loss measured from the filter press test. |
| **Api Gravity Adjustment Flag** | An indicator of whether or not volumes should be adjusted for API gravity. |
| **Api Gravity Measurement** | Gravity (weight per unit of volume) of crude oil or other liquid hydrocarbon expressed in degrees API where a specific gravity of 1.0 is the equivalent of 10 degrees API. Reported in conjunction with an observed temperature; e.g., 40 degrees API at 80 degrees Fahrenheit. |
| **Api Pseudo County Code** | An indicator assigned to offshore Federal water areas. This indicator is defined in API Bulletin D12A, as amended. This code becomes a part of the API Well Number. |
| **Api Pseudo State Code** | An indicator assigned to offshore Federal water areas. This indicator is defined in API Bulletin D12A, as amended. This code becomes a part of the API Well Number. |
| **Api State Code** | The indicator assigned to a state, as defined in API Bulletin D12A, as amended. This code is a part of the API Well Number. |

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| **Api Well Number** | A well identifier assigned as defined in API (American Petroleum Institute) Bulletin D12A, as amended. The API Well Numbers are assigned by the appropriate state or federal regulatory agency. |
| **Applicant Name** | The name of the person making an application to a regulatory agency. |
| **Applicant Title** | The title of the filling or reporting entity. |
| **Application Date** | The date on which an application was made. |
| **Application Name** | Specifies the name of a software program or application; e.g., Sierra; SIVA; Disco; Gridzo; Zycor. |
| **Approach** | (1) Heat exchanger: the number of degrees temperature difference between the hot fluid inlet and the cold fluid outlet, or between the hot fluid outlet and the cold fluid inlet, whichever is the smaller.(2) Cooling tower: the difference between the cold water temperature and the wet bulb temperature. |
| **Approval Process Comments** | The comments regarding nonoperator approvals and their operational requirements; e.g., drilling, wireline, log requirements, etc. |
| **Approved** | A sanctioned, endorsed, accredited, certified, or accepted by a duly constituted and recognized authority or agency. |
| **Approved Mpr Rate** | The maximum production rate (MPR) that a completion is approved by the regulatory agency to produce. |
| **Apron Ring** | The first or lowest ring of plates in a upright cylindrical tank. |
| **Apron Spreader** | A flat plate in the bottom of a gunbarrel tank that causes fluid coming into the tank to spread out. |
| **Aquifer** | An underground bed or stratum of earth, gravel, or porous rock that contains water. |
| **Arbitrary Trademark** | A word that has a common meaning, but is used as a trademark for a product that has no relationship to this common meaning. |
| **Arc Burns** | Localized points of surface melting caused by arcing between electrode or ground and pipe surface. |
| **Archeological Report Approval Date** | The date the regulatory aggency approved or accepted the archeological report. |
| **Arcing** | Current flow through a gap, often accompanied by intense heat and light. |
| **Arcing Device** | A device which during its normal operation produces an arc with sufficient energy to cause ignition of an ignitible mixture. |
| **Area Code** | An indicator of the area of operations such as Onshore, Intermediate or Offshore. |
| **Area Of Damage** | An area of interest for which property damage has occurred. |
| **Area Of Interest** | A business term for a selected area or set of areas on the surface of the earth. |
| **Area Of Mutual Interest** | Any area which, by prior agreement, is the subject of mutual sharing of ownership of any leasing rights acquired. |
| **Area Rate Clause** | A clause in a gas sales contract which permits the increase of the price of gas in the event of an increase in the area rate established by the Federal Energy Regulatory Commission (FERC). |
| **Areal Extent** | Two dimensional geographical area enclosed by defined boundaries for the entity involved; e.g., reservoir, lock, lease. |
| **Array (geophysical)** | A configuration of similar receivers; e.g., electrodes or geophones, or seismic sources, designed to enhance the detectability of certain transient events, while surpressing other interfering events. |
| **Array (geophysical)** | A configuration of similar receivers; e.g., electrodes or geophones, or seismic sources, designed to enhance the detectability of certain transient events, while surpressing other interfering events. |
| **Arrestor** | A device for stopping motion or action. |
| **Arrestor (flame Or Lightning)** | A device attached to a burner or equipment to control fire or lightning. |

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| **Arrow Plot** | A display of dipmeter or drift measurements. |
| **Artificial Ice Island** | A grounded mass of mostly manmade ice. |
| **Artificial Lift** | Any means of lifting liquid from a well completion other than natural flow, such as gas lift and submersible pump. |
| **Artificial Lift Equipment** | Equipment installed on, or in a wellbore, to remove fluids from a well completion when it is no longer able to produce these fluids with its own energy;, e.g., conventional rod pumping unit; hydraulic pump; submersible pump; gas lift. |
| **Artificial Lift Substance** | A specific substance being used in hydraulic and gas lift operations; e.g., oil; gas; water. |
| **As Delivered Btu** | The number of British thermal units (BTUs) contained in a cubic foot of natural gas adjusted to reflect the actual water content of the gas at delivered pressure, temperature, and gravity conditions. |
| **Asbestos** | (1) Mineral fiber (as amphibole) with numerous industrial uses, some forms of which are used in drilling fluids.(2) A hazardous air pollutant when inhaled. |
| **Ascii** | SEE: American Standard Code for Information Interchange. |
| **Asphalt** | A solid hydrocarbon which may be deposited: in the reservoir rock, in well equipment, in the surface lines in tanks. Crude oils of high asphaltic content may be subjected to distilling operations wherein lighter fractions; such as, naphtha; kerosene; are removed leaving as a residue asphalt which at normal temperatures is a solid. |
| **Asphalt Base Crude Oil** | Crude oil containing an appreciable amount of naphthenes or similar hydrocarbons, and very little paraffin, which yields an asphaltic residue. |
| **Assessment Amount** | The amount on which penalty or interest is calculated. |
| **Assigned Acreage** | The number of acres assigned to a property by the operator and approved by the regulatory agency. |
| **Associated Gas** | Gas that occurs in an oil reservoir either as free gas or solution gas. |
| **Associated Production Facility Cost** | Equipment and installation costs to initiate production from a lease or facility. |
| **Associated Well Number** | The number assigned to any well associated with a producing well. |
| **Astm** | SEE: American Society for Testing and Materials. |
| **Atmosphere** | The layer of air immediately surrounding the earth. |
| **Atom** | According to atomic theory, the smallest quantity of an element which is capable of entering into chemical combination or that can exist alone. |
| **Atomic Number** | A number, characteristic of an element, which designates the place of the element in the periodic table. This number represents the net positive charge on the nucleus of an atom and is also equal to the number of protons within the nucleus. In a neutral atom, the atomic number necessarily equals the number of electrons outside the nucleus. |
| **Attack Angle** | (1) In drilling, inclination (or deviation) is the angle measured from vertically down being zero.(2) In magnetics, it is the angle as measured from the horizontal being zero. |
| **Attapulgite Clay** | A colloidal, viscosity building clay used principally in salt water drilling fluids. Attapulgite, a special fullers earth, is a hydrous magnesium aluminum silicate. |
| **Attenuation** | The loss in energy which occurs between any two points of travel (this loss may, be due to absorption, reflection, etc.), or the controlled reduction in sensitivity within the instrument. |
| **Attenuator** | A device for introducing attenuation; i.e., reducing the amplitude on an electrical signal without appreciable distortion. Calibrations are usually in decibels (db). |
| **Audiometer** | An instrument for measuring hearing sensitivity, calibrated in decibels. |
| **Audit** | A documented investigation conducted to verify that applicable requirements are being implemented. |

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| **Audit Report** | Formal statement, after examination and verification, of the condition of books of account pertaining to the specified area of audit. |
| **Auger** | A tool for boring holes. |
| **Austenite** | A solid solution of one or more elements in face-centered cubic iron. |
| **Austenitic** | A nonmagnetic state of iron or an iron alloy. |
| **Austenitic Stainless** | A stainless steel whose structure is austenitic at room temperature and which is used for nonmagnetic drill collars. |
| **Authorization For Expenditure** | Request for authorization to spend money, usually for a specified purpose and amount. Abbreviated AFE. |
| **Authorized Completion Cost** | The authorized cost to complete the well. |
| **Authorized Cost** | The total dollar amount, granted by company management with approval authority, which may be spent to perform a work activity. |
| **Authorized Drilling/dry Hole Cost** | The authorized cost to drill and evaluate the well to the target formation. |
| **Authorized Person's Name** | A person assigned by the employer to perform or supervise the performance of a specific type of duty or duties, or to be at a specific location(s) at the work site. |
| **Authorized Person's Title** | The job title of an authorized person. |
| **Authorized Signature Date** | The date an authorized person signs a document. In electronic commerce, this date is usually handled through the Electronic Commerce Agreement. |
| **Autoclave Expansion** | A measurement or test made as provided in ASTM C 151: Test for Autoclave Expansion of Portland Cement, Book of ASTM Standards, Part 13. |
| **Autocorrelation** | A crosscorrelation in which a signal is correlated with itself. The autocorrelation function measures the statistical dependence of a waveform at a later time with the waveform at an earlier time. |
| **Automatic Chart Changer** | A device for automatically changing a chart on recorders upon completion of time cycle. |
| **Automatic Contract Extension Days Count** | The number of days a gas contract term will automatically be extended if the right of termination is not exercised. |
| **Automatic Custody Transfer** | A unit designed to automatically move oil from lease storage to a pipeline. Normally consists of a pump, back pressure valve, BS&W monitor, and oil meter. |
| **Automatically Fired Vessel** | A fired vessel with the burner fuel controlled by an automatic temperature or pressure controller. |
| **Automation** | The automatic, self regulating control of equipment, systems, or processes. |
| **Automation Cost** | Costs associated with design and implementation of automation systems including volumetric measuring systems, control systems, etc. |
| **Auxiliary Channel** | Additional channels through which supporting data can flow from a device to a recording instrument, such as a Vibroseis sweep. |
| **Auxiliary Line** | An external conduit (excluding choke and kill lines) arranged parallel to the riser pipe for enabling fluid flow outside the riser annulus. Example: control system fluid line, buoyancy control line. |
| **Auxiliary Transit Control** | Secondary instruments or control mechanisms used to regulate or control operations of equipment. |
| **Auxillary Hoist** | SEE: Whipline. |
| **Average Absolute Amplitude** | The average of the absolute values of seismic trace samples. |
| **Average Angle** | The arithmetic average of the two angles, one at each end of the course length. |

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| **Average Angle Method** | A borehole survey that uses the angles measured at both the top and bottom of the course length in such a fashion that the average of the two sets of measured angles is the assumed inclination and direction. The borehole survey is then calculated tangentially using these averaged angles over the course length. |
| **Average Cost Amount** | The inventory costs of material based on an appropriate average cost system as determined by the operator and includes purchase cost, freight, inspection, duty and taxes, threading costs for tubulars and any other costs. |
| **Average Pool Pressure** | The average shut in pressure of the wells in a pool. |
| **Average Shut-in Temperature** | The average temperature at the surface during the stabilization period. |
| **Average Unit Price Amount** | The average price received for the product sold. |
| **Axial Direction** | Longitudinal direction of a member. |
| **Azimuth** | (1) The clockwise angle of departure from true (geographic) north, measured in a horizontal plane.(2) Dipmeter and directional survey: the clockwise angle from magnetic north to the tool reference point or electrode. This measurement must be corrected for magnetic declination to compute the true azimuth. |
| **Azimuth Frequency Plot** | A diagram on polar chart paper which presents only a count of the number of dip azimuth measurements which fall within each ten degree sector within a given group of dips. Dip magnitude is ignored. |
| **B** | |
| **Babbit** | An alloy of metal for lining bearings, largely composed of tin with copper and antimony. |
| **Back- In Farm- Out** | A farm-out agreement in which a retained nonoperating interest may later be converted into a specified individual working interest. |
| **Back Off** | To unscrew the drill pipe, casing, tubing, or rods at a point above which it is stuck in the hole or to unscrew a joint of pipe at the surface. |
| **Back Pressure** | The pressure resulting from restriction of full natural flow. |
| **Back Pressure Coefficient No. 1** | The calculation factor resulting from the shut in wellhead pressure squared, divided by the differential of the shut in wellhead pressure squared and the static column wellhead pressure squared. |
| **Back Pressure Coefficient No. 2** | The calculation factor resulting from taking the Back Pressure Coefficient No. 1 and raising it to the power of the Slope value. The calculated absolute open flow will be this result times the calculated rate of flow (or Test Gas Volume). |
| **Back Pressure Valve** | A valve that permits flow in only one direction. |
| **Back Reflection** | In ultrasonic testing, the signal received from the back surface of the pipe wall. |
| **Back Scatter** | The scattering of radiant energy into the hemisphere bounded by the plane normal to the direction of the incident radiation and lying on the same side as the incident ray. |
| **Back Trapping** | An undesirable bubble tray operating condition in which gas pulsation causes liquid to flow down through the chimneys to the tray below, bypassing the normal flow over the downcomer weir. |
| **Back-in** | An agreement in which a retained nonoperating interest may later be converted into a specified working interest. |
| **Back-in Farm-out** | A farm-out agreement in which a retained nonoperating interest may later be converted into a specified individual working interest. |
| **Back-in Option** | A provision in a farm-out agreement whereby the owner retains an option to exchange a retained override for a share of the working interest. |
| **Back-in Provision Flag** | An indicator of whether or not a back-in provision exists in the lease agreement. |
| **Backflow** | Fluid flow in a process component opposite to the normal flow direction. |

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| **Backhoe** | An excavating machine whose bucket is attached to a boom and drawn toward the machine in operation. |
| **Backup** | The act of holding one section of pipe while another is screwed out of it or into it. For example, a backup wrench refers to any wrench being used to hold the pipe; backup tongs are applied to the drill pipe tongs suspended in the derrick and used to hold a section of drill pipe while another section is screwed into it by use of other tongs. |
| **Backward Station Method** | Also referred to as: Balanced Tangential Method. |
| **Backwashing** | The process of flushing the rock around the borehole by injecting fluids into the rock, then releasing pressure within the borehole to allow the fluids to flow back into the borehole. |
| **Bacteria** | Single celled microorganisms that lack chlorophyll. Some bacteria are capable of causing human, animal, or plant diseases; others are essential in pollution control processes because they break down organic matter in water and air. |
| **Baffle** | A device (e.g., a series of plates, wall, or screen) to deflect, check, or regulate flow. |
| **Bail** | (1) To recover wellbore fluids, samples, or drill cuttings by lowering a cylindrical vessel, called a bailer, to the wellbore bottomhole, filling it, and retrieving it. (2) A link of steel attached to pipe elevators for lifting. |
| **Bailer** | A long tubular vessel fitted with a bail at the upper end and with a valve at the bottom, used to remove water, cuttings, sand, mud and oil from a borehole. |
| **Balanced Tangential Method** | Uses the inclination and direction angles at the top and bottom of the course length in a manner so as to tangentially balance the two sets of measured angles over the course length. Results obtained are the same as the Acceleration, Trapezoidal, and Vector Averaging Methods. |
| **Balancing** | SEE: Gas Balance. |
| **Balancing Agreement** | A contractual agreement between two or more legal entities to account for differences between chart measured quantities and the total confirmed nominations at a point. They have been used to keep track of over/under production relative to entitlements between producers; over/under deliveries relative to confirmed nominations between operators of wells, pipelines, and Local Distribution Companies (LDC's). |
| **Ball And Seat Valve** | A type of valve used in a plunger pump. |
| **Ball Valve** | A type of quick opening valve with a spherical core, a ball with a full-bore port, that fits and turns in a mating cavity in the valve body. |
| **Ballast** | For mobile offshore drilling rigs, weight added to make the rig more seaworthy, increase its draft, or sink it to the seafloor. Sea water is usually used for ballast, but sometimes concrete or iron is used also to lower the rigs center of gravity permanently. |
| **Bandpass** | A range of frequencies; e.g., those passed (band-pass) or rejected (band-reject) by a filter. Measurements are usually made between points where the amplitude is down by 3 dB (i.e. 70% of amplitude or half power) from the peak value. |
| **Bank Service Charge Override Amount** | The amount to be used in lieu of the standard bank charge when the standard charge cannot be used. |
| **Barite** | Barium Sulfate, a mineral used to increase the weight of drilling fluid. Commonly abbreviated as BaSO4. |
| **Barium Sulfate** | BaSO4. SEE: Barite. |
| **Barometer** | An instrument for determining the pressure of the atmosphere. |
| **Barometric Pressure Measurement** | The pressure of the atmosphere as measured by a barometer. |
| **Barrel** | A unit of volumetric measurement at 60 degrees Fahrenheit (42 U.S. gallons or 5.61458 cubic feet). Commonly abbreviated as BBL. |
| **Barrels Of Oil Equivalent** | The quantity of Natural Gas Liquids (NGL) or natural gas necessary to equate on a British Thermal Unit (BTU) basis with a barrel of crude oil. For natural gas, 5.8 x 10(6th power) BTU equals one barrel of oil equivalent. For NGL, 1.455 barrels of NGL is equal to one barrel of oil equivalent. Commonly abbreviated as: BOE. |

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| **Base** | (1) A compound of a metal, or a metal like group, with hydrogen and oxygen in the proportion to form an OH- radical, which ionizes in aqueous solution to yield hydroxyl ions in higher concentrations than hydrogen ions. Bases are formed when metallic oxides react with water. Bases increase the pH. Examples are caustic soda and lime. |
| **Base Depth** | The measured depth along a wellbore path of a well to the wellbore point that is the base (greater value of measured depth) point of reference for the interval. |
| **Base Exchange** | The replacement of cations associated with the clay surface by those of another species; e.g., the conversion of sodium clay to calcium clay. |
| **Base Exchange Capacity** | SEE: Cation Exchange Capacity (CEC). |
| **Base Line** | The distance trace (horizontal) across the A scan CRT display. |
| **Base Map** | A map on which information may be placed for purposes of comparison or geographical comparison. |
| **Base Map Source Name** | The originator of the base map; e.g., Muldrow; Tobin. |
| **Base Mounting** | SEE: Pedestal. |
| **Baseline** | (1) A very accurately surveyed line on the earth's surface, the exact length and position of which have been precisely determined. This survey line is used as a reference for accurately computing the distances and positions of remote points and objects.(2) The distance trace (horizontal) across the A-scan CRT display. |
| **Basement** | (1) Igneous and metamorphic rock ordinarily underlying sedimentary rock.(2) The undifferentiated rocks lying below the rocks of interest. |
| **Basic Lease Description** | The legal description of the land involved in the oil and gas lease. |
| **Basic Sediment And Water** | SEE: Sediment and Water (S AND W). |
| **Basic Size** | The theoretical or nominal standard size from which all variations are measured. |
| **Basicity** | The relative base strength of liquids as measured by pH. A pH value above 7. |
| **Basin** | (1) A low area in the earth's crust, of tectonic origin, in which sediments have accumulated.(2) Any area with thick sediments. |
| **Basis Swap** | Swap which typically involves one party paying the counterparty the NYMEX last three days +/- a location basis differential and receiving a specified monthly pipeline index price. |
| **Basket Sub** | A fishing accessory run above a bit to permit recovery of small fragments of metal or junk in a wellbore. |
| **Batch** | (1) A measured amount of oil, mud, acid, or other liquid in a tank or pipeline; a shipment of oil or product by pipeline.(2) One specific cement mixture, with additives. |
| **Batch Number Within Stage Of Squeeze Process** | The number of the individual cement batch within a stage of the squeeze job. A batch is defined as one specific cement mixture and the additives that go with that specific mixture. |
| **Batch Treatment** | Describes the batch injection of fluids to perform remedial and preventive treatment operations; e.g., scale removal; sand control; corrosion inhibition; asphaltene removal; paraffin removal. |
| **Bathymetry Zone** | Environmental zones which indicate approximately the same water depth; e.g., brackish; inner neritic or inner shelf; upper continental slope; abyssal. |
| **Battery** | SEE: Tank Battery. |
| **Bay Closing Line** | The dividing line at the mouth of a bay, or river, drawn from headland to headland which separates inland state waters and the shoreward boundary of the Submerged Lands Act grant to a coastal state. |

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| **Beach** | (1) Area between the liquid pool and the solids discharge ports in a decanting centrifuge.(2) The unconsolidated material that covers a gently sloping zone, typically with a concave profile, extending landward from the low water line to the place where there is a definite change in material or physiographic form (such as a cliff) or to the line of permanent vegetation (usually the effective limit of the highest storm waves). |
| **Beam** | The walking beam of a pumping unit. |
| **Beam Angle** | The beam angle or angle of incidence is the angle between the normal to a plane surface of the specimen and the axis of the beam in the specimen. It is a function of the specimen material. |
| **Beam Hanger** | A steel hanger attached to the end of the walking beam, used to suspend the sucker rods in a wellbore. |
| **Beam Spread** | The divergence of the sound beam as it travels through a medium. |
| **Beam Well** | A well having fluid lifted by rods and a pump actuated by a beam pumping unit. |
| **Bean** | A type of choke used to regulate the flow of fluid from a wellbore. Different sizes of beans are used for different producing rates. |
| **Bean Back** | To use a smaller size bean or choke to reduce flow rate. |
| **Bearing** | (1) The angular direction of any place or object at one fixed point in relation to another fixed point, especially the horizontal direction of a line on the earth's surface with reference to the cardinal points of the compass.(2) A machine part in which another part, such as a journal or pin, turns or slides. |
| **Bearing Definition Date** | The date that the bearing was derived from positioning operations, derived by calculations, or revised according to some other method. |
| **Bed Azimuth Angle** | The angle that the bed surface deviates from the true vertical. |
| **Bed Interval Type** | Descriptive information about the type(s) and thickness of depositional bedding of the rock of a zone. |
| **Bed Load** | Coarse material; e.g., coarse sand, granules, pebbles; moved by rolling or bouncing along the bottom of a river undergoing erosion. |
| **Bed Name** | The name of a lithostratigraphic bed. |
| **Bedding Plane** | A planar or nearly planar bedding surface that visibly separates each successive layer of stratified rock from the preceding or following layer. It often marks a change in circumstance of deposition. |
| **Bedding Type** | The general physical and structural character or pattern of beds and their contacts within a rock mass; e.g., cross bedding; graded bedding; homogenous; wave ripples; planar cross beds. |
| **Beginning Interest Period Date** | The first date of a period when a check stub detail line represents more than one month's money. Used primarily for money that has been released from suspense. |
| **Beginning Inventory Volume** | The measured or calculated quantity of oil or condensate in storage tanks at the beginning of a specified period. |
| **Beginning Test Date** | The date that the identified test was started. Tests include drillstem test, formation test, reservoir limits, etc. |
| **Bell Hole** | A bell shaped hole dug beneath a pipeline to provide room for use of tools. |
| **Bell Nipple** | A casing nipple installed in the top of the blowout preventer. The top end of the nipple is expanded (belled) to guide drilling tools into the wellbore and usually has side connections for the fill line and the mud return line. Also referred to as: Mud Riser, Flow Nipple. |
| **Bellows** | An expansible accordion shaped device used to: (1) Impart motion to a recording or controlling element in an instrument.(2) Provide a flexible seal for pump shafts. |
| **Belt** | A flexible band or cord connecting and wrapping around each of two or more pulleys to transmit power or impart motion. |

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| **Benchmark** | A relatively permanent material object, natural or artificial, bearing a marked point whose elevation above or below an adopted datum; e.g., sea level, is known. |
| **Bending Moment** | The moment tending to bend the drill string or bottomhole assembly. |
| **Bending Stress** | A bending moment generating a tensile stress on one side and a compressive stress on the other. As the drillstem rotates these stresses reverse and, consequently, can cause fatigue of the metal. |
| **Benefit Cost Ratio** | Present worth of a project divided by the present worth of the investment. |
| **Bentonite** | A colloidal clay composed of the mineral montmorillinite and having the property of swelling when wet. |
| **Beta Ratio** | The relationship between the diameter of an orifice and the inside diameter of the line; this ratio must be kept within a specific range for measurements to be accurate. |
| **Bevel Angle** | The angle between the weld preparation (and subsequently the fusion line) and the member surface. |
| **Bha** | SEE: Bottomhole Assembly. |
| **Bha Material Type** | Material that each element or component in the bottomhole assembly (BHA) is made of; e.g., steel, monel, aluminum. |
| **Bhp** | SEE: Bottomhole Pressure. |
| **Bht** | SEE: Bottomhole Temperature. |
| **Bia** | The Bureau of Indian Affairs of the Department of the Interior. |
| **Bia Lease** | A legal document authorized by and approved by the Bureau of Indian Affairs (BIA), on Indian Tribal properties, conveying certain rights to a lessee to explore for and to recover specified minerals or materials. |
| **Bia Lease Number** | An unique identifier assigned to leases and rights of way on tribal property by the Bureau of Indian Affairs (BIA). |
| **Bia Release Date** | The date the Bureau of Indian Affairs (BIA) determines that an operator has taken care of the Incidence of Noncompliance thereby allowing the Bureau of Land Management (BLM) to release the operator; i.e., release a shut in order. |
| **Bid Week** | The week of active trading, driven by the pipeline nomination process, typically around the 21st-27th of the month. |
| **Bimetallic Cell** | A corrosion cell in which dissimilar metals are connected together electrically both with a metallic path and with a liquid which is corrosive to at least one of the metals. |
| **Bin** | Historical: An area associated with a node as part of the binning process. |
| **Bin Center** | Historical: The geometric center of the bin. |
| **Bin Centroid** | The average (possibly weighted) value of source receiver midpoint locations (X and Y coordinates) of all traces that contributed to the stack for this bin node. |
| **Bin Grid** | A set of bin nodes arranged in inline and crossline directions, usually for a 3D survey. |
| **Bin Node** | An indexed reference point representing a horizontal position on the surface of the earth or a downhole position in a well. In 3D seismic the bin nodes normally define a regular, orthogonal grid. In 2D seismic, the bin nodes represent a corvilinear (not necessarily straight) sequencet of ground locations with which a final stacked or migrated trace will be associated. Also referred to as: a CDP or CMP location. In VSP surveys, the bin node is the position within a borehole with which a VSP trace is ass |
| **Bin Set** | Identifies a collection of nodes in a local grid. The grid is defined for the purpose of collecting data using an algorithm based on the location of the midpoint between the source and the reciever. Each node will be referenced by an Inline Index (2D line or VSP) and optional Crossline Index (3D survey). This entity and the Bin Nodes that point to it only define the grid. No assumption is made as to the algorithm which assigns data to nodes. |

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| **Binary Interaction Coefficient** | The characteristic that defines the interaction of two fluid components in an equation of state. |
| **Binning** | The process of defining bin nodes within a seismic survey and later assigning seismic traces to those bin nodes by some criteria, usually spatial. Binning is an algorithmic process. |
| **Bioassay** | An assessment or test made using living organisms as the sensors; e.g., a fish toxicity test. |
| **Biochemical Oxygen Demand** | A standardized measure of the amount of oxygen consumed in the biological processes that break down organic matter in water. It is measured as the quantity of dissolved oxygen (mg/l) required during stabilization of the decomposable organic matter by aerobic biochemical action. Commonly abbreviated as BOD. |
| **Biocide** | A chemical agent used to destroy bacteria in water systems. |
| **Biodegradable** | Decomposable as a result of the action of microorganisms. |
| **Biological Oxidation** | The process by which bacterial and other microorganisms feed on complex organic materials and decompose them. The process is also called biochemical oxidation. |
| **Biology** | The science dealing with the origin, structure and life history of living organisms. |
| **Biomonitoring** | The use of living organisms, to test the suitability of effluent for discharge into receiving waters and to test the quality of such waters downstream from a discharge. |
| **Biostratigraphic Unit** | A classification of geologic time based on biostratigraphy. |
| **Biostratigraphy** | The branch of Stratigraphy dealing with the paleontologic aspects of rocks, or stratigraphy based on paleontologic methods, specifically the differentiation of rock units on the basis of the description and study of the fossils they contain. |
| **Bioturbation** | The mixing of sediments by burrowing organisms. |
| **Bird Cage** | (1) To flatten and spread the strands of a cable or wire rope.(2) The slatted or mesh enclosed cage used to hoist workmen from crew boats to offshore platforms. |
| **Bit** | SEE: Drill Bit. |
| **Bit Hydraulic Horsepower** | SEE: Drill Bit Hydraulic Horsepower. |
| **Bitumen** | A generic name for various solid or semisolid hydrocarbons; e.g., resins, asphaltines. |
| **Black Crested Thread** | Thread crests exhibiting the original pipe surface after machining. |
| **Black Water** | A term generally used to describe water that contains products of corrosion caused by bacterial action. |
| **Blade** | SEE: Flute. |
| **Blank Flange** | A solid disk used to dead end, or close off, a companion flange. |
| **Blank Liner** | A liner without perforations or slots. |
| **Blank Off** | To close off by sealing or plugging. |
| **Blanket Gas** | Gas from an outside source maintained in the space above the liquid used to keep air out of a liquid storage tank. |
| **Bleed** | To drain off liquid or gas, generally slowly, through a valve called a bleeder. To bleed down, or bleed off, is to slowly release the pressure of a well or of pressurized equipment. |
| **Bleed Into** | To cause a gas or liquid to mingle slowly with another gas or liquid, usually by pressure. |
| **Bleeder** | A connection on a line or piece of equipment used for releasing pressure or draining off undesirable liquids. |
| **Bleeder Valve** | (1) A small valve on a pipeline, pump, or tank from which samples are drawn or to vent air or oil.(2) Sample valve. |

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| **Bleeding** | Separation of the liquid phase in a cement slurry due to settling of solids. |
| **Blind** | To close a line to prevent flow. |
| **Blind Flange** | A flange with no center bore, used to close off completely a flanged end or outlet connection. |
| **Blind Ram** | A ram whose end is not intended to fit drill pipe, but to seal against another and shut off completely the space below. |
| **Blind Shear Ram** | Blind ram with a built in cutting edge that will shear tubulars that may be in the wellbore, thus allowing the blind rams to seal the wellbore. Used primarily in subsea systems. |
| **Blind Sidetrack** | SEE: Sidetrack; Uncontrolled Sidetrack. |
| **Blinding** | A reduction of open area in a screening surface caused by coating or plugging. |
| **Blister** | A raised spot on the surface of pipe caused by expansion of gas in a cavity within the pipe wall. |
| **Blm** | The Bureau of Land Management of the Department of the Interior. |
| **Blm Case File** | A legal document authorized by and approved by the Bureau of Land Management (BLM), usually for onshore properties, conveying certain rights to a lessee to explore for and to recover specified minerals or materials. Includes leases, unit agreements, communitization agreements, royalty agreements, gas storage agreements, and development contracts. |
| **Block** | In mechanics, one or more pulleys or sheaves mounted to rotate on a common axis; any assembly of pulleys on a common framework. The crown block is an assembly of sheaves mounted on beams at the top of the derrick.. The drilling cable is reeved over the sheaves of the crown block alternately with the sheaves of the traveling block, which is hoisted and lowered in the derrick by means of the drilling cable. |
| **Block (federal Non- 8g Area)** | Surface area under the jurisdiction of the United States government located more than three nautical miles of the seaward boundary of any coastal state. |
| **Blooie Line** | Flow line for air or gas drilling. |
| **Blow Case** | (1) A coded horizontal or vertical vessel employed in moving low pressure liquids to a higher pressure destination by pressure sequencing accomplished with instrumentation.(2) A small vessel into which gas pressure is applied to blow liquid to another destination, such as a stock tank. |
| **Blowdown** | The venting of pressure from a wellbore, vessel, or pipeline. |
| **Blowdown Period** | Period following completion of a cycling or pressure maintenance operation in a reservoir, in which remaining gas is produced from the reservoir without being replaced by gas injected. |
| **Blowdown Valve** | An automatically operated normally open valve used to vent the pressure from a process station on shutdown. |
| **Blowdown Valve Setting** | The pressure setting for an automatically operated, normally closed valve (fail open) used to vent the pressure from a process station on shutdown. |
| **Blowout** | A sudden, violent escape of subsurface fluids from a wellbore. A blowout occurs when a high pressure zone is penetrated and the zone's fluid pressures are not counterbalanced by the weight of the column of drilling fluid within the wellbore. Fluids from the zone enter the borehole without restriction. |
| **Blowout Material** | The material that is involved in the blowout; e.g., oil, mud, gas, water. |
| **Blowout Preventer** | Equipment installed at the wellbore origin, below the drilling floor on land and platform rigs and on the seafloor of floating offshore rigs to close in the wellbore. Abbreviated as BOP. SEE ALSO; Blowout; Close In; Wellbore Origin; Wellbore. |
| **Blowout Preventer Actuation Test** | The closing and opening of a blowout preventer unit to assure mechanical functionability. |
| **Blowout Preventer Annular Type** | A device that can form a seal in the annular space around any object in the wellbore or upon itself. Compression of a reinforced elastomer packing element by hydraulic pressure effects the seal. |

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| **Blowout Preventer Drill** | A training procedure to determine that rig crews are familiar with correct operating practices to be followed in the use of blowout prevention equipment. A dry run of blowout preventive action. |
| **Blowout Preventer Guide Base** | The structure located on the sea floor used to guide the drilling assembly and to stabilize the blowout preventer stack. The structure may be permanent or temporary. |
| **Blowout Preventer Operating And Control System** | The assembly of pumps, valves, lines, accumulators, and other items necessary to open and close the blowout preventer equipment. |
| **Blowout Preventer Pressure Test** | The process of pressure testing internally a blowout preventer or blowout preventer assembly. |
| **Blowout Preventer Ram Type** | A device designed to form a seal on the wellbore with no pipe or in the annular space with pipe. The equipment can use pipe rams, blind rams, or blind/shear/cutter rams to affect the required seal, according to equipment availability, arrangement of the equipment, and/or existing well conditions. Pipe rams have ends contoured to seal around pipe to close and seal the annular space. Blind rams have ends not intended to seal against any tubulars, rather they seal against each other to effectively close an |
| **Blowout Preventer Remote Control** | A control that actuates the blowout preventer from a position apart from the blowout preventer. |
| **Blowout Preventer Size** | The nominal inside diameter of an item of blowout prevention equipment used during drilling operation. |
| **Blowout Preventer Stack** | The assembly of well control equipment including preventers, spools, valves, and nipples connected to the top of the casinghead. |
| **Blowout Preventer Test Pressure Measurement** | The minimum acceptable pressure at which the blowout preventer is tested for integrity. |
| **Blowout Preventer Test Tool** | A tool to allow pressure testing of the blowout preventer stack and accessory equipment by sealing the wellbore immediately below the stack. |
| **Blowout Preventer Type Code** | An indicator of the type of blowout preventer ( annular, diverter, pipe ram, etc.). |
| **Blowout Well** | A well in which a blowout occurred during drilling operations. |
| **Bluff Body** | An opaque object located in a fluid flow stream and developing a high drag force because it lacks streamlining. |
| **Blunt Start** | The removal of the partial thread at the entering end of thread. |
| **Bob Tail Plant** | A plant which extracts liquefiable hydrocarbons from gas, but does not break down the liquid stream into its separate components. |
| **Boiler** | A closed pressure vessel that has a furnace equipped to burn coal, oil, or gas and is used to generate steam from water. |
| **Boilerhouse** | (1) To make up a report on a condition as fact without knowledge of its accuracy.(2) Sometimes referred to as doghouse. |
| **Boiling Point** | The temperature at which a liquid boils at a standard pressure of 760 mm Hg (1 atmosphere). |
| **Boll Weevil** | An inexperienced rig or oil field employee. Sometimes the word is shortened simply to weevil. |
| **Bolting** | Threaded fasteners (studs, nuts, bolts and capscrews) used to assemble pressure containing parts or join end or outlet connections. |
| **Bomb** | SEE: Bottomhole Pressure Bomb; Vapor Pressure Bomb. |
| **Bond** | (1) Adhering, binding, or joining of two materials; e.g., cement to casing.(2) A monetary guarantee. |
| **Bond Collateral Amount** | The value of the guarantee by a security pledged against the performance of an obligation. |
| **Bond Collateral Effective Date** | The date that a guarantee by a security pledged against the performance of an obligation became effective. |
| **Bond Collateral Number** | The identifier associated with the guarantee by security pledged against the performance of an obligation associated with a mineral lease or pipeline right of way. |

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| **Bond Collateral Type Code** | Indicates the type of security pledged against the performance of an obligation; e.g., surety bond; treasury note; insurance policy; letter of credit. |
| **Bonding** | The state of bond between cement and casing and/or formation. |
| **Bonnet** | The part of a valve that packs off and encloses the valve stem. |
| **Bonus** | The monetary consideration submitted by a prospective lessee in exchange for obtaining the rights to explore, develop and produce minerals. The monetary consideration may be called an oil and gas royalty bonus. This may be in the form of an overriding royalty reserved for the mineral rights owner in addition to the usual 1/8 royalty. |
| **Bonus Amount** | The amount of money paid by the lessee for the execution of an oil and gas lease to the mineral rights owner. |
| **Bonus Date** | The date a bonus agreement occurred. |
| **Bonus Rate** | The amount of money per acre or hectare needed to secure a leasehold. |
| **Bonus Type** | The type of the bonus paid; e.g., amount per acre, amount per lease. |
| **Book Value** | Net amount at which an asset is valued on financial books. May vary from its market or intrinsic value. Book value is unrecovered cost; i.e., original cost less accumulated depreciation, depletion, amortization, abandonments. |
| **Boom** | (1) A member hinged to the revolving upperstructure and used for supporting the hoist tackle.(2) A long beam supported by a derrick to hoist loads. (3) A tubular shaped absorbent material utilized in spill containment. |
| **Boom Angle** | The angle above or below horizontal of the longitudinal axis of the base boom section. |
| **Boom Angle Flag** | An indicator that an accessory which measures the angle of the boom above horizontal is present. |
| **Boom Chord** | A main corner member of a lattice type boom. |
| **Boom Extension** | Intermediate section of a telescoping boom. |
| **Boom Foot Pin** | The boom pivot point on the upperstructure. |
| **Boom Hoist Mechanism** | Means for supporting the boom and controlling the boom angle. |
| **Boom Hoist Wire Rope** | Wire rope that operates on a drum controlling the angle positioning of the boom. |
| **Boom Lacing** | Structural truss members at angles to and supporting the boom chords of a lattice type boom. |
| **Boom Length** | The straight line distance from the centerline of boom foot pin to centerline of boom point load hoist sheave pin, measured along the longitudinal axis of the boom. |
| **Boom Lift Cylinder** | Means for supporting the boom and controlling the boom angle. |
| **Boom Point Sheave Assembly** | An assembly of sheaves and pin built as an integral part of the boom point. |
| **Boom Splice** | Splicing connections for sections of basic crane boom and additional sections usually of the splice plate type, pin type or butt type. |
| **Boom Stop** | A device used to limit the angle of the boom at the highest recommended position. |
| **Boom Tip Extension** | SEE: Jib. |
| **Boomer** | A device used to tighten chains on a load of pipe or other material on a truck to make it secure. |
| **Boot** | (1) A large section of large size pipe used as a surge column on a vessel. (2) In regard to a flow or tank boot, a tubular device placed in a vertical position, either inside or outside a larger vessel, through which fluids are conducted before they enter the larger vessel. A boot aids in the separation of gas from wet oil. Also known as: Flume. |

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| **Bop** | SEE: Blowout Preventer. |
| **Borehole** | A physical hole created by boring or drilling. The term borehole is used in a descriptive sense, as in borehole axis, borehole diameter, borehole effect (on wireline log response), borehole caving and borehole televiewer. |
| **Borehole Axis** | A line through the axis of the borehole, generally considered to be the centralized position that would be taken by a stiff tubular member inserted through that section of the borehole. |
| **Borehole Azimuth Angle** | The angle between north and the projection of the borehole axis onto a horizontal plane. Angle is referred to either true north, magnetic north, or grid north. |
| **Borehole Compensated Sonic Log** | A well log of the interval transit time; i.e., the time required for a compression wave to travel a unit distance in the rocks surrounding the borehole; the reciprocal of the compressional velocity. The borehole compensated sonic tool has tranducers arranged to reduce effects of sonde tilt, changes in borehole size and other factors. |
| **Borehole Course** | The path of the axis of the borehole over an interval length. |
| **Borehole Course Bearing** | The azimuth of the borehole course. |
| **Borehole Course Deviation** | The length of a line made by projecting a borehole course length onto a horizontal plane. In practice, the horizontal displacement between two stations regardless of direction. |
| **Borehole Course Length** | The difference in measured depth or actual borehole length from one station to another. |
| **Borehole Diameter** | Measurement of the diameter of the borehole. |
| **Borehole Direction** | Refers to the azimuth in which the borehole is heading. |
| **Borehole Directional Survey** | SEE: Directional Survey. |
| **Borehole Gravimeter** | A gravimeter designed for use within a wellbore and equipped for remote leveling and reading at precisely determined depths. It can be used to measure bulk density of rocks surrounding the borehole. |
| **Borehole High Side** | The side of the borehole in the upward direction with respect to gravity. |
| **Borehole Hole Change** | A supplemental operation in a borehole; e.g., redrill; deepen; recomplete; rework. |
| **Borehole Hole Clearance** | The space between the outside of the pipe and the side of the drilled hole. |
| **Borehole Hole Curvature** | Refers to the changes in inclination and direction of the borehole. |
| **Borehole Low Side** | The side of the borehole in the downward direction with respect to gravity. |
| **Borehole Problem Flag** | An indicator that problems were encountered within the borehole. |
| **Borehole Problem Type** | The type of borehole problem that was encountered; e.g., keyseat; dogleg; junk; sloughing; lost hole; unintentional sidetrack. |
| **Borehole Segment Problem Measured Top Depth** | The measured depth to the top of a borehole segment where an operational problem is occurring. |
| **Borehole Segment Problem Measured Top Depth** | The measured depth to the top of a borehole segment where an operational problem is occurring. |
| **Borehole Survey Calculation Method** | Refers to the mathematical methods and assumptions used in reconstructing the path of the borehole and in generating the space curve path of the borehole from inclination and direction angle measurements taken along the borehole. These measurements are obtained from gyroscopic or magnetic instruments of either the single shot or multi shot type. (1) Acceleration Method Utilizes the angles at the top and bottom of the course length and from these generates a curve on the assumption that the measured an |
| **Borehole Televiewer** | A well logging system wherein a pulsed, narrow acoustic (sonar) beam scans the borehole wall in a tight helix as the tool moves up the wellbore. A display of the amplitude of the reflected wave on a cathode ray tube (television screen) is photographed yielding a picture of the borehole wall. |
| **Borescope** | A long optical instrument with an illuminating lamp for inspecting the inside surface of a pipe. |

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| **Bottom** | Used in conjunction with top to represent a vertical interval. Also can refer to ocean bottom or sea bottom. |
| **Bottom Casing Packer** | A mechanism that seals off annular pressure between the outside diameter of a suspended tubular member or hanger and the inside diameter of the spool or tubing head adapter being placed over the suspended tubular or hanger. |
| **Bottom Flooding** | The behavior of a hydrocyclone when the underflow discharges in a liquid stream. |
| **Bottom Latitude Of Area** | The latitude bounding the bottom of the area. The southern most latitude. |
| **Bottom Settlings** | Sediment, earthy matter or inert organic matter which accumulates when crude petroleum is stored in tanks. |
| **Bottom Water** | Water occurring in a producing reservoir below the oil or gas in the reservoir. |
| **Bottomhole** | Bottomhole is used to describe a position along a wellbore path that is usually at or near a terminus of an open borehole. Bottomhole is also used to describe equipment used at these positions, or physical conditions or agreements related to these positions. |
| **Bottomhole Assembly** | (1) An assembly composed of the bit, stabilizers, reamers, drill collars, subs, etc., used at the bottom of the drillstring. Commonly abbreviated BHA. |
| **Bottomhole Assembly Start Up Date** | The date the bottomhole assembly (BHA) is entered into the borehole to commence drilling. |
| **Bottomhole Assembly Start Up Depth** | The depth at which the bottomhole assembly (BHA) will commence drilling; i.e., the present total depth of the wellbore prior to inserting the bottomhole assembly into the wellbore. |
| **Bottomhole Back Torque** | Torque on the drillstem causing a twisting of the string. |
| **Bottomhole Choke** | A device with a restricted opening placed in the lower end of the tubing to control the rate of liquid or gas flow to the surface. |
| **Bottomhole Circulating Pressure Measurement** | The pressure at the bottom of a wellbore during circulation of any fluid. It is equal to the hydrostatic head plus the annulus friction loss required to move the fluid to the surface plus any back pressure held at the surface. |
| **Bottomhole Cost** | SEE: Bottomhole Money Contribution. |
| **Bottomhole Depth** | The maximum measured depth to a wellbore bottomhole. |
| **Bottomhole Formation Name** | Name of the formation at the wellbore bottomhole. |
| **Bottomhole Location** | The location of a wellbore bottomhole. |
| **Bottomhole Location Civil Survey** | The bottomhole location referenced to a civil survey. |
| **Bottomhole Location Method Code** | A code assigned by Minerals Management Service (MMS) to identify the method (Latitude, Longitude, metes and bounds, etc.) that is used to report the bottomhole location of the wellbore/zone. |
| **Bottomhole Location X-coordinate** | The measurement for a bottomhole location from either a Lambert or Mercator map using a common reference point moving +/- (n/s) from that point. |
| **Bottomhole Location Y-coordinate** | The measurement for a bottomhole location from either a Lambert or Mercator map using a common reference point moving +/- (e/w) from that point. |
| **Bottomhole Money Contribution Amount** | The amount of money contribution to the drilling party for reaching a specified wellbore depth or stratigraphic equivalent, irrespective of productivity. |
| **Bottomhole Offset Distance** | The horizontal distance between the surface location of a wellbore and its bottomhole. |
| **Bottomhole Orientation Sub** | A sub in which a free floating ball rolls to the low side and opens a port indicating an orientation position. Sometimes abbreviated as BHO SUB. |
| **Bottomhole Pressure Bomb** | A device consisting of a pressure element and a recording device which may be run into a wellbore on wire line or a DST tool and used to record the pressure at any depth. |

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| **Bottomhole Pressure Depth** | The depth at which a bottomhole pressure measurement is recorded. |
| **Bottomhole Pressure Elapsed Time** | The time between beginning and ending of the bottomhole pressure test. |
| **Bottomhole Pressure Measurement** | The pressure measurement recorded at a point within a wellbore, usually the wellbore bottomhole, and generally associated with the pore pressure of the rocks surrounding the borehole. Commonly abbreviated as BHP. |
| **Bottomhole Pressure Required Flag** | An indicator of whether a bottomhole pressure needs to be filed. |
| **Bottomhole Separator** | A downhole device to separate gas from oil while the pump is fully submerged. |
| **Bottomhole Static Pressure** | SEE: Shut in Bottomhole Pressure. |
| **Bottomhole Temperature** | The temperature measurement recorded at a point within a wellbore, usually at the wellbore bottomhole, and generally associated with the temperature of the rocks surrounding the borehole. Commonly abbreviated as: BHT. |
| **Bottomhole Temperature For Log Run** | Bottomhole temperature as measured during the log run using a maximum-reading thermometer. |
| **Bottomhole Temperature Measured Depth** | The measured depth at which a bottomhole temperature measurement is recorded. |
| **Bottomhole Test Run Number** | A number used to identify a specific bottomhole pressure test when multiple tests are conducted concurrently. |
| **Bottomhole Test True Vertical Depth** | The true vertical depth from the surface to the depth where the bottomhole pressure test is performed. |
| **Bottoms** | The bottom liquid stream leaving a separation process in which a lighter or more volatile stream goes overhead. |
| **Bottoms Up** | To wash rock cuttings from the wellbore bottomhole to the surface by maintaining circulation after halting the drilling operation. This allows time for the closer inspection of the cuttings and for a decision based on the results of that inspection. |
| **Bouguer Correction** | A correction to gravity data because of the attraction of the rock between the station and the elevation of the datum, often sea level. |
| **Bouguer Density** | The gravity survey measurement. |
| **Boulder** | A clastic, sedimentary particle with a diameter greater than 256 millimeters, based on the Wentworth Scale of Measurement. |
| **Boundary Echo** | A reflection of an ultrasonic wave from an interface. |
| **Bowl** | A device that fits in the rotary table or wellhead to hold the wedges or slips that support a string of drill pipe, casing or tubing while tripping in or out of the wellbore. |
| **Bowl Pump** | The metal housing for an impeller on a vertical pump. |
| **Boyle's Law** | The volume of any weight of gas is inversely proportional to the absolute pressure provided the temperature remains constant. |
| **Brace** | Structural members that serve to stiffen the hull structure and provide deck support. |
| **Brackish Water** | Water containing low concentrations of any soluble salts. |
| **Bradenhead** | A casinghead. |
| **Bradenhead Gas** | SEE: Casinghead Gas. |
| **Bradenhead Squeeze** | The process by which hydraulic pressure is applied to fluids in the wellbore to force local fluid movement. Annular returns may be prevented by closing the casinghead valves instead of installing a packer. |
| **Braided Line** | Fibers or filaments twisted together to form a cable. Also called Stranded Line. |
| **Brake** | A device used for retarding or stopping motion or holding. |

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| **Brake Shoe** | That part of a shoe type brake or clutch which makes contact with brake drum. |
| **Braking Capacity** | The load which the drawworks brake and auxiliary brake can retard to a constant reasonable speed, or hold. |
| **Brass** | An alloy of copper (60 percent or over) and zinc. |
| **Breach Block Connector** | Driveable quick connections normally used for conductor casing. |
| **Break Circulation** | To start movement of the drilling fluid after it has been quiescent in the wellbore. |
| **Breaker** | An electrical device that terminates the flow of electricity. |
| **Breaking Down** | SEE: Laying Down. |
| **Breaking Out Pipe** | SEE: Breakout. |
| **Breakout** | To unscrew one section of pipe from another section. |
| **Breakout Oil** | Oil that has risen to the surface of the drilling fluid which previously had been combined in the fluid as emulsion. |
| **Breakout Torque** | The torque required to break out the pipe connection, associated with casing or tubing in a borehole. |
| **Breather** | A vertical piece of pipe, equipped with an open end return bend, located on top of an atmospheric pressure vessel to permit air to flow into or out of the vessel and thus prevent a vacuum or excessive pressure. |
| **Breathing** | (1) Surging in the flow of gas from a well.(2) The vertical motion of tubing during pumping operations.(3) The escape of gas from stock tanks due to changes in temperature. |
| **Breeching** | An extension of the firetube outside of the vessel which is being heated. The arrestor breeching serves as the attachment for the flame arrestor and surrounds the mechanical devices; i.e., mixer; igniter. |
| **Bridge** | An obstruction of the wellbore caused by collapse of the borehole walls. |
| **Bridge Plug** | A borehole tool, composed primarily of slips, plug mandrel, and a rubber sealing element, which is run in and set in casing or liner to isolate a wellbore interval. |
| **Bridging Material** | Fibrous, flaky, or granular material added to a cement slurry or drilling fluid to aid in sealing formations in which lost circulation has occurred. |
| **Bridle** | SEE: Floating Harness. |
| **Brief** | A document used to supply all necessary information and outline essential steps, in chronological order, for performing work activities. |
| **Bright Spot Code** | Indicates the probability that a bright spot exists in a borehole. |
| **Brine** | Water saturated with or containing a high concentration of common salt (sodium chloride); hence, any strong saline solution containing such other salts as calcium chloride, zinc chloride, calcium nitrate, etc. |
| **Bring In A Well** | To complete a well and put it on production. |
| **British Thermal Unit** | The quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit. Commonly abbreviated as BTU. |
| **Broken Thread** | A thread tooth that exhibits a fracture through it, or that has a portion missing with its remaining surfaces having a broken appearance. |
| **Bromine Value** | The number of centigrams of bromine which are absorbed by 1 g of oil under certain conditions. This is a test for the degree of unsaturatedness of a given oil. |
| **Bronze** | An alloy of tin (usually under 12 percent) and copper. Frequently used as a name for brass. |

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| **Brownian Movement** | Continuous, irregular motion exhibited by particles suspended in a liquid or gaseous medium, usually as a colloidal dispersion. |
| **Bs & W** | SEE: Basic Sediment and Water. |
| **Bs&w Percentage** | The percent of basic sediments and water (BS&W) contained in the total liquids produced. |
| **Btu** | SEE: British Thermal Unit. |
| **Btu ( Dry)** | SEE: Dry BTU. |
| **Btu Sample Point Code** | An indicator of whether a British Thermal Unit (BTU) adjustment is to be made using the well BTU or plant outlet BTU. |
| **Btu ( Saturated)** | SEE: Saturated BTU. |
| **Btu Test Interval** | This is the interval between British Thermal Unit (BTU) tests required by the contract. Normally reported in months. |
| **Btu Value** | The quantity of heat required to raise the temperature of one pound of water by one degree fahrenheit. |
| **Btu Value Limit** | British Thermal Unit (BTU) value limit set by a lease contract. |
| **Bubble Cap** | A metal cap designed with openings to cause the upward flowing gas bubbles in a gas processing tower to intimately contact downward flowing liquids, causing some of the gas to condense to liquid. Bubble caps are mounted on a perforated steel bubble cap tray. |
| **Bubble Cap Tray** | Shelves or horizontal baffles inside a fractionation tower or column that are perforated to allow the fluid charge to run down to the bottom of the column and the vapors to rise through the trays to the top where they are drawn off. The perforations in the trays are made with small, umbrella-like caps called bubble caps whose purpose is to force the rising vapors to bubble through the several inches of liquid standing on each tray before the vapors move upward to the next tray. The hot vapors bubbling th |
| **Bubble Point** | The state of a liquid phase system when it is in equilibrium with an infinitesimal amount of vapor phase. |
| **Bubble Point Pressure Measurement** | The pressure at reservoir temperature at which gas in solution in crude oil comes out of solution as free gas. Synonymous with saturation pressure of the crude oil. |
| **Bubble Tower** | A process vessel equipped with bubble trays and arranged to permit multi-stage, countercurrent contacting of two phases, usually a liquid and a vapor. |
| **Bubble Tray** | A circular metal plate equipped with slotted metal caps inverted over short chimneys in the plate. Its purpose is to break up an ascending gas stream into small bubbles in order to present a large surface area to a contacting liquid flowing over the tray. |
| **Buckle** | A distortion, bend, or kink. |
| **Buffer** | Any substance or combination of substances which, when dissolved in water, produces a solution which resists a change in its pH upon the addition of acid or base. |
| **Buffer Capacity** | The ability of a solution to maintain a definite pH when subjected to the action of certain chemicals. |
| **Build And Hold Wellbore** | A wellbore configuration where the inclination is increased to some terminal angle of inclination and maintained at that angle to the specified target. |
| **Building Cost** | Costs associated with buildings such as residences, laboratory, storage, garages, bunkhouses, bathhouses, toolhouses, and firehouses. Buildings serving as office, storehouse, repair garage, machine shop, electric shop, etc., are charged to the applicable plant facility. |
| **Buildup** | That portion of the wellbore in which the inclination angle is increased: rate of buildup is usually expressed as the angular increase per unit length measured depth. |
| **Buildup Test** | A test in which a well completion is shut in for a period of time, after which the bottomhole pressure measured. |

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| **Bulk Data** | Data of relatively simple structure and large volume usually managed as a coherent set rather than piecemeal. |
| **Bulk Density** | The mass per unit volume of an object or material divided by its volume, including the volume of its pore spaces. |
| **Bulk Volume** | (1) The total volume of a rock including the pore volume.(2) The portion of the total volume of a substance occupied by one component. |
| **Bulkhead** | Stiffened vertical or horizontal load bearing diaphragm. |
| **Bull Gear** | SEE: Swing Gear. |
| **Bull Plug** | A threaded nipple with a rounded, closed end used to close a wellhead or flowline opening or close off the end of a line. |
| **Bullhead Squeeze** | The process by which hydraulic pressure is applied to fluids in a wellbore to force local fluid movement. Annular flow (returns) is prevented by a packer set in the casing above the perforations and/or in open borehole. |
| **Bump A Well** | To lower a sucker rod string on a pumping unit into a wellbore so that the pump hits bottom on the downstroke. |
| **Bump Down** | SEE: Bump a Well. |
| **Bumper Jar** | SEE: Jar. |
| **Buoyancy** | The capacity to remain afloat. |
| **Buoyancy Equipment** | Devices added to tendon or riser joints to reduce their weight in water, thereby reducing top tension requirements. The devices normally used for risers take the form of syntactic foam modules or open bottom air chambers. |
| **Burn Pit** | An earthen pit for accumulating and burning unsalvable oil. |
| **Burner** | A fuel-burning device producing a flame. |
| **Burr** | A localized point of roughness, or a thin ridge or protrusion, produced by mechanical damage or in machining the thread or chamfer. |
| **Burst Pressure Measurement** | The internal pressure required to rupture the given tubular product. |
| **Bushing** | In the case of pipes and rods, a removable cylindrical adapter (usually threaded) to change or limit the size of an opening. A pipe or rod protector from friction. |
| **Business Associate** | A party with which some form of products and/or services is exchanged; e.g., seismic/logging company, applicant, working interest owner, drilling contractor, designated operator, original operator, previous operator. |
| **Business Associate Code** | An indicator assigned to representt a business associate. |
| **Business Associate Identification Number** | The unique number assigned to identify a business associate. |
| **Business Associate Mailing Address** | The complete office mailing address for the Business Associate. |
| **Business Associate Name** | The name of the company or individual which distinguishes it from others. |
| **Business Associate Number** | SEE: Business Associate Identification Number |
| **Business Associate Type Code** | An indicator of the type of business associate; e.g., company; applicant; working interest owner; contractor; operator; original operator; previous operator, surface owner. |
| **Business Contact** | A record of interaction between business associates. |
| **Butt Welded Pipe** | Pipe having one longitudinal seam formed by mechanical pressure to make the welded junction, the edges being furnace heated to the welding temperature prior to welding. |

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| **Butterfly Valve** | A type of quick opening valve whose orifice is opened and closed by a disk that pivots on a shaft in the throat of the valve. |
| **Bypass** | A pipe connection around a valve or other control mechanism. A bypass is installed in such cases to permit passage of fluid through the bypass line while adjustments or repairs are made on the control which is bypassed. |
| **Bypass Valve** | SEE: Remedial Sidetrack. |
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| **C.O.S.T. Well** | Continental Offshore Stratigraphic Test (C.O.S.T.) well. A stratigraphic well, offshore. |
| **C-axis** | The principal crystallographic axis perpendicular to the direction of growth. |
| **Cable** | SEE: Seismic Cable. |
| **Cable Seal** | A cable terminator filled with compound and designed to contain an explosion in the enclosure to which it is attached. A conduit seal may also be used as a cable seal. |
| **Cable Tool Drilling** | A system of drilling employing a heavy string of tools suspended from a walking beam by a cable. Reciprocating motion, imparted to the walking beam by a crank, causes the drill bit at the bottom of the cable to strike the bottom of the wellhole and deepening it by chipping. |
| **Cable Tool Well Flag** | An indicator of whether cable tools were used in drilling the well. |
| **Cage** | The container for the ball in a ball valve; e.g., found in the subsurface pump ordinarily used in oil production. It holds the ball to limit its movement. |
| **Caisson** | A protective tubular device for wells drilled in water locations. |
| **Cake Consistency** | Such notations as hard, soft, tough, rubbery, firm, etc., may be used to convey some idea of cake consistency. |
| **Calcareous Coating** | A chalky coating of calcium carbonate and/or magnesium hydroxide. |
| **Calcium** | One of the alkaline earth elements with a valence of 2 and an atomic weight of about 40. Calcium compounds are a common cause of the hardness of water. It is also a component of lime, gypsum, limestone, etc. |
| **Calcium Carbonate** | A slightly soluble calcium salt (limestone, oyster shells, etc.) sometimes used as a weighting material, and also as a standard unit for expressing hardness of water. |
| **Calcium Chloride** | A highly soluble calcium salt sometimes added to drilling fluids to impart special properties, but primarily to increase the density of the fluid and to accelerate the hydration reaction of cement and water. Commonly abbreviated as: $CaCl_2$. |
| **Calcium Contamination** | Dissolved calcium ions in sufficient concentration to impart undesirable properties in a drilling fluid; e.g., flocculation; reduction in yield of bentonite; increase in fluid loss. |
| **Calcium Hydroxide** | The active ingredient of slaked lime. It is also the main constituent in cement (when wet). This material is referred to as lime in field terminology. |
| **Calcium Sulfate** | Anhydrite ($CaSO_4$); hemihydrate or plaster of paris ($CaSO_4 \frac{1}{2} H_2O$); and gypsum ($CaSO_4 2H_2O$), or a combination of these. Calcium sulfate occurs in drilling fluids as a contaminant or may be added to certain drilling fluids to impart special properties. |
| **Calcium Treated Mud** | Drilling fluids to which quantities of soluble calcium compounds have been added or allowed to remain from the formation drilled in order to impart special properties. |
| **Calculated Absolute Open Flow Rate** | The rate of flow per 24 hours that would be produced by a well if the only pressure against the face of the reservoir rock within the borehole were atmospheric pressure. Commonly abbreviated as CAOP. Also referred to as: open flow potential. |

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| **Calculated Flow Temperature Factor** | The calculated temperature correction factor = (520/(460 + line temperature farenheit)). |
| **Calculated Gravity Factor** | The specific gravity correction factor = the square root of (1 + the specific gravity of the flowing fluid). |
| **Calculated Pressure** | The calculated pressure is the atmospheric pressure + gauge pressure at pressure base. |
| **Calculated Settlement Price** | The calculated price to be used in the settlement. |
| **Calculated Super Compressibility Factor** | The super compressibility multiplier for use with these meters is = 1/Z. |
| **Calculation Method** | SEE: Borehole Survey Calculation Method. |
| **Calendar Day Count** | The number of days in a calendar month. |
| **Calibration** | Measurement correction by comparison to a standard of known accuracy. |
| **Caliche** | A natural unconsolidated limestone occurring over large areas of west and south Texas, often near the surface. |
| **Caliper Log** | (1) A record of the diameter of the borehole or the internal diameter of tubular goods. The log indicates undue enlargement of the borehole due to caving, washout, or other causes.(2) Section gauge log: made from tools with many fingers used to measure the corrosion of casing and tubing. |
| **Call** | The right to purchase hydrocarbons from an outside party. |
| **Canadian Petroleum Association (cpa) Well Number** | The identifier assigned to wells (holes in the ground) drilled in Canada. It defines the approximate geographical location of the bottom of a drilled hole. |
| **Cant Angle** | Orientation of sound beam relative to axis of member. |
| **Caof** | SEE: Calculated Absolute Open Flow. |
| **Cap** | A fitting that goes over the end of a pipe to close it, producing a dead end. |
| **Cap Rock** | (1) In a salt dome, an impervious body of anhydrite, gypsum and minor calcite and sulfur that overlies the salt body.(2) Any cap rock can form part of a trap for a hydrocarbon accumulation. |
| **Capable Well** | A well with well completions that are physically capable of producing at a specified level for a specified time period. Some of these wells may be actually producing while others are shut in for reasons other than their ability to produce. (Normally at a lease or field level.). |
| **Capacitor** | An electrical device that, when wired in the line of an electrical circuit, stores a charge of elecricity and returns the charge to the line when certain electrical conditions occur. |
| **Capacity** | Maximum throughput, maximum producing rate, or maximum content possible for a given set of conditions. |
| **Capacity Allocation** | A process by which capacity available in a pipeline is distributed to parties in the event requests for quantitiies (i.e., nominations) are in excess of the available space. Typically the allocation is based on service type, contract type, and a company's tariff provisions. |
| **Capacity Index** | An indication of the capacity of an injection well to take water. It is usually measured in barrels per hour per pound increase in bottomhole pressure. |
| **Capacity Reduction Factor** | Coefficient which accounts for the effects of shape imperfections, nonlinear behavior and boundary conditions (other than classical simply supported) on the buckling capacity of the shell. |
| **Capillary Number** | The ratio of capillary to viscous forces on fluids in a porous media. |
| **Capillary Pressure Measurement** | The difference in pressure existing between two phases or fluids, measured at points of the interconnected phases. |
| **Capillary Water Rise** | The rise of water in a loosely compacted material such as a sand fill, due to capillary forces. |
| **Capital Asset** | The assets intended for long, continued use or possession. May be further classified as tangible; e.g., land, buildings, and intangible; i.e., the costs of drilling a well other than materials. |

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| **Capital Investment** | Funds spent to acquire additions to assets for the betterment of the operation. Depreciation is taken on such expenditures rather than charging them off as expense or operating cost. |
| **Capping A Well** | A method by which the uncontrolled flow of a well is stopped or controlled in order to temporarily abandon a well. |
| **Carbon Black** | A fine, bulky carbon obtained as soot by burning natural gas in large horizontal ovens with insufficient air. |
| **Carbon Dioxide** | A colorless, odorless, nonpoisonous gas that is a normal part of ambient air. Dissolved in the aqueous phase of drilling fluids, C02 may contribute to corrosivity of these fluids or to unstable rheological properties. |
| **Carbon Dioxide Content** | Carbon dioxide content of the sample. |
| **Carbon Dioxide Encountered Depth** | The depth at which carbon dioxide is encountered in the wellbore. |
| **Carbon Oxygen Log** | A log which presents a measure of the relative abundance of carbon to oxygen derived from induced gamma ray spectroscopy. |
| **Carbonate Analysis Log** | A log which presents computed porosity in complex lithology and sometimes includes secondary porosity and movable oil plots. |
| **Carcinogen** | A substance or agent producing or inciting cancerous growths in living tissues. |
| **Cardiopulmonary Resuscitation** | To revive the heart and lungs from apparent death or unconsciousness. Commonly referred to as CPR. |
| **Carried Interest** | SEE: Carried Working Interest. |
| **Carried Working Interest** | An agreement under which one party (carrying party) agrees to pay a portion or all of the development and operating costs applicable to the working interest owned by another party (carried party). The carrying party has the right to recover such costs from the carried party's share of the reserves if, as, and when produced from the property. |
| **Carrier Gas** | One of two phases in the gas chromatography process. It carries the components through the stationary bed. |
| **Carter Coordinates** | The surface location established by the Carter Grid System occurs in the following sequence: township number and direction, range number and direction and section. Used in Kentucky and Tennessee. |
| **Carter Grid System** | A rectilinear system of township, range and section for a surface location to locate parcels of land. System used in Kentucky and Tennessee. |
| **Carter Range** | In Kentucky and Tennessee where the Carter Coordinate System is used, this is a strip of land 5 miles wide, running east and west, parallel to a baseline, and is consecutively numbered east and west from that principal meridian line. When used in conjunction with a township number, it forms a parcel of land to define a quadrangle, each of which consists of 25 one-square-mile sections. |
| **Carter Range Direction** | Provides unique range direction values for the Carter Township Area. |
| **Carter Range Number** | The range number assigned in the Carter Coordinate System to uniquely identify a strip that runs east and west. |
| **Carter Reference Latitude** | The latitude used to calculate the township, range, and section for a surface location by the Carter Grid System. |
| **Carter Reference Longitude** | The longitude used to calculate the township, range, and section for a surface location by the Carter Grid System. |
| **Carter Survey System** | The rectilinear grid system of township, range and section with an origin at a reference latitude and longitude. |
| **Carter Township** | In Kentucky and Tennessee where the Carter Coordinate System is used, this is a strip of land 5 miles wide, running north and south, parallel to a baseline, and is numbered consecutively north or south from that baseline. When used in conjunction with a range number, it forms a a parcel of land to define a quadrangle. Each of the quadrangles consist of 25 one square mile sections. |

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| **Carter Township Direction** | Township directional information provides unique township direction values for the Carter Township Area. |
| **Carter Township Number** | The number designating a township position south or the letter designating the township position north of the base line. |
| **Carved-out Production Payment** | Production payment in which the owner of the royalty or working interest sells a production payment while retaining the residual interest in the property. |
| **Case File Number** | An identifier which relates operator,assessment type, processing period, etc to leases, communitization agreements, participating areas, unit agreements, royalty agreements, gas storage agreements, and development contracts. |
| **Cased Hole** | A wellbore segment within which casing has been run. |
| **Cash Advance Exercised Iflag** | An indicator of whether or not special provisions have been made in the operating agreement which require nonoperators to make cash advances. Most contracts require a provision for cash advances on joint properties. |
| **Cash Contribution** | Amounts paid in cash only and will exclude the value of interest in acreage contributed. Such cash contributions are applicable to bottomhole/dry hole contribution. |
| **Casing** | Steel pipe installed in the wellbore of a well as drilling progresses. The functions of casing are: (a) to prevent the wall of the borehole from caving into the wellbore during drilling; (b) to provide control of the well if it tries to blow out; (c) to limit fluid production to the wellbore segment that was perforated or left open. |
| **Casing Above Mudline Height** | The distance that a casing is cut above the mudline. |
| **Casing Average Pressure Measurement** | The average measured casing pressure at a given point, usually the surface. |
| **Casing Cement** | Cement used to hold the casing in place in the borehole. |
| **Casing Cementing Movement** | The type of pipe movement used during cementing to improve cement bonding to the formation wall; e.g., reciprocate; rotate. |
| **Casing Centralizer** | A device that is secured around the casing to centralize the pipe in the borehole and thus provide a uniform cement sheath around the pipe. |
| **Casing Clamp** | Two heavy steel bars that support casing in a wellbore. |
| **Casing Collar Locator** | A logging tool used to locate casing collars and other features of downhole hardware; e.g., packers, which often serve as reference depths in subsequent completion operations. |
| **Casing Collar Log** | A record of casing collar responses with depth as measured by a casing collar locator. |
| **Casing Cut Below Mudline Depth** | The distance that the casing is cut below the mudline. |
| **Casing Cut Flag** | A flag used to indicate whether the well's casing is cut and removed. |
| **Casing Failure Date** | The date when the casing failure was first detected. |
| **Casing Failure Reason** | The primary reason for casing failure; e.g., stuck, corrosion, wear, burst pressure, tension. |
| **Casing Flange** | A flange affixed at the top of the casing string used to attach production equipment; i.e., Christmas tree. |
| **Casing Flange Elevation** | The elevation of casing flange. |
| **Casing Flow** | SEE: Annular Flow. |
| **Casing Grade Code** | An indicator of the grade given to the material properties of casing that fall within the tolerances set by API specifications; e.g., H40, J55, K55. SEE ALSO: Tubular Grade Code. |
| **Casing Hanger** | A mechanism used to support a casing string in a casinghead by gripping the pipe with wedge type members. |

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| **Casing Hanger (threaded)** | A mechanism used to support a casing string in a casinghead by means of a male or female thread attached to the casing. |
| **Casing Hanger Type** | The type of slip device used to attach the liner to the casing. |
| **Casing Inside Diameter** | The inside diameter of the casing. |
| **Casing Inspection Log** | A record of casing condition as measured using a method of relating the effects of eddy currents on a magnetic field to casing wall thickness. |
| **Casing Integrity Requirement** | A statement of the pressure integrity checks that have to be made against an installed casing string. Typically, one would be required immediately after a string is installed. Others may subsequently be required to satisfy casing wear concerns or prior to making a critical commitment; e.g., before running a completion string. |
| **Casing Maximum Outside Diameter** | The maximum outside diameter of the casing run into the wellbore. |
| **Casing Maximum Pressure Measurement** | The maximum measured casing pressure measurable within the tubing. |
| **Casing Minimum Inside Diameter** | The minimum inside diameter of the casing run into the wellbore. |
| **Casing Outside Diameter** | The outside diameter of the casing. |
| **Casing Point** | Point in cased wellbore of cementing through perforations. Commonly abbreviated as: CP. |
| **Casing Potential Profile Log** | A record of electrical potential of the casing at various levels to detect current entering or leaving the casing. The amount of cathodic protection needed can be determined and results monitored. |
| **Casing Pressure Measurement** | (1) Pressure measurable in the annular space between casing strings, casing and tubing, or casing and drill pipe.(2) Pressure measurable at a wellhead casing outlet. |
| **Casing Removed Length** | SEE: Tubular Removed Length. |
| **Casing Section** | Identifies a contiguous casing string interval with identical tubular and connection properties. |
| **Casing Section Plan** | Proposed design of all casing string sections required to drill the wellbore. |
| **Casing Set Date** | The date the casing string was set within a wellbore. |
| **Casing Shoe** | A short, heavy, hollow cylindrical steel section, beveled on the bottom edge, which is placed on the end of the casing string to serve as a reinforcement and to aid in cutting off minor projections from the borehole wall as the casing is being lowered. |
| **Casing Shoe Depth (logger)** | Depth of the casing shoe for a logging run. |
| **Casing Shoe Measured Depth** | The measured depth of the casing shoe being cemented. |
| **Casing Shut-in Pressure Measurement** | The pressure measurement recorded within a shut-in casing string. |
| **Casing String** | The casing run into a wellbore; e.g., surface string; intermediate string; production string. |
| **Casing String Measured Bottom Depth** | The measured depth to the bottom of the casing string run into a wellbore; e.g., surface string, intermediate string, production string. |
| **Casing String Measured Top Depth** | The measured depth to the top of the casing string. |
| **Casing String True Vertical Bottom Depth** | The true vertical depth to the bottom of the casing string run into a wellbore; e.g., surface string, intermediate string, production string. |
| **Casing String True Vertical Top Depth** | The true vertical depth to the top of the casing string. |
| **Casing Temperature** | The temperature inside the casing. |
| **Casing Tool Type** | Type tool used on casing; e.g., rigid centralizers, spud scratchers, frac baffle. |

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| **Casing Tubing Connector Type** | Type of casing or tubing connector according to that particular thread manufacturer; e.g., 8 RD ST&C, 8 RD LT&C, buttress, hydril FJ-P, atbrad FL-3S. |
| **Casing Type Code** | An indicator of the type of casing or tubing that is being run; e.g., conductor casing, intermediate casing, surface casing, liner, tubing. |
| **Casing Weight** | The weight of the casing expressed as weight per unit length. |
| **Casinghead** | A heavy, steel, flanged fitting that connects to the surface string of casing and provides a housing for the slips and packing assemblies by which intermediate strings of casing are suspended and the annulus sealed off. |
| **Casinghead Gas** | SEE: Solution Gas. |
| **Casinghead Gas Production Volume** | The total volume of casinghead gas the well/reservoir produced for the specified period of time. |
| **Casinghead Gas Purchase Contract** | Agreement covering the sale of casinghead gas by a producer to a plant for the purpose of processing. |
| **Casinghead Housing** | Equipment attached to the uppermost end of the surface casing which serves to suspend and seal a casing string. |
| **Casinghead Price Per Unit Amount** | The value per unit of measure of casinghead gas. |
| **Cast Iron** | An alloy of iron and about 2 to 4 percent carbon. (1) Grey cast iron: The graphite (carbon) is present as flakes. This makes a fracture appear grey.(2) White cast iron: The carbon is present as carbides. With no graphite to color it, a fracture appears metallic white. |
| **Cast Lot Heat** | Material originating from a final melt. For remelted alloys, a heat shall be defined as the raw material originating from a single remelted ingot. |
| **Casting** | (1) An object at or near finished shape obtained by solidification of a substance in a mold.(2) Pouring molten metal into a mold to produce an object of desired shape. |
| **Catalog Item** | A product offered by an organization. |
| **Catalyst** | A substance used to speed up or retard a chemical reaction without undergoing a chemical change itself during the reaction. |
| **Catalytic Cracker** | A large refinery vessel in which a foreign substance called a catalyst breaks down the hydrocarbon molecules while they are heated to a high temperature preparatory to their rearrangement into new and different molecules. When a particular oil is subjected to a certain temperature and pressure, a certain cracking takes place, making certain products. Also referred to as: cat cracker. |
| **Catalytic Cracking** | A cracking process that uses a catalyst to promote a chemical reaction that breaks up (cracks) the hydrocarbon molecules into smaller ones. Catalysts permit the use of less pressure to split the molecules and provide more control over the splits, allowing higher octane products. Two major kinds of catalytic cracking processes are fluid catalytic cracking and hydrocracking. |
| **Catalytic Reforming** | In the reforming process, catalysts are used to change the nature and shape of the molecules, producing ring like or branched molecules from straight ones. In other words, the molecules are rearranged, reformed, rather than split, as they are in the cat cracking process. Catalytic reforming is an upgrading process to raise the octane of heavy virgin naphtha and is the major process used to make high octane gasoline. Several chemical reactions occur during the reforming process, including: (1) The remova |
| **Catastrophe Overhead Flag** | An indicator of whether or not the contract provides for catastrophe overhead rates to reimburse the operator for additional overhead costs incurred during a catastrophe. |
| **Catcher** | A device employed to catch a scraping tool which has cleaned the pipe of foreign matter. |
| **Cathead** | One of the component drums or reels of the drilling rig draw works assembly which furnishes power, through the catline and jerk lines, to lift heavy objects, make up drill pipe joints, break out drill pipe joints, make up casing joints and similar operations. |
| **Cathode** | The negative terminal of an electrolytic cell. The portion of a corrosion cell which does not corrode. Reduction always occurs at cathode. |

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| **Cathode Ray Tube** | A vacuum tube with a luminescent screen often used for viewing ultra sonic echo signals or for video readout of computer stored data. Commonly abbreviated as: CRT. |
| **Cathodic Protection Insulator** | A kit containing a plastic gasket and plastic bolt sleeves that is inserted between flanges for the purpose of stopping cathodic protection at that point. |
| **Cathodic Protection Rectifier** | A device for converting alternating current into direct current. Used to reduce corrosive action caused by reversing electric current flow in the soil. |
| **Cation** | The positively charged particle in the solution of an electrolyte which, under the influence of an electrical potential, moves toward the cathode or negative electrode. |
| **Cation Exchange Capacity** | A measure of the extent to which a substance will supply exchange cations. Also referred to as: Base exchange capacity. |
| **Catline** | A hoisting or pulling line operated from a cathead on a drilling or workover rig. |
| **Cattleguard** | A pipe or steel fabricated gateway that inhibits crossing by animals. |
| **Catwalk** | (1) A raised, narrow walkway between tanks or other installations.(2) The ramp to the side of the drilling rig where pipe is laid out to be lifted to the derrick floor by the catline. |
| **Caustic** | (1) The envelope representing the local convergence of rays of energy, e.g., light rays, acoustic rays, elastic rays, water waves.(2) Also referred to as Caustic Soda. SEE: Sodium Hydroxide. |
| **Caustic Embrittlement** | The intercrystalline cracking of metal due to accumulation of alkaline residue in a crevice. |
| **Caustic Test** | A test to determine the quantity of free sodium hydroxide in a caustic solution. |
| **Caustic Unit** | A system in which caustic is used to remove mercaptans and hydrogen sulfide from a liquid hydrocarbon stream, normally propane, LPG, or gasoline. The unit is regenerative if the caustic is continuously regenerated. It is batch if the caustic is periodically replaced without regeneration. |
| **Cave In** | Cave in is a severe form of sloughing. |
| **Cavernous Formation** | A formation having voluminous voids, usually the result of dissolving by formation waters which may or may not be still present. |
| **Caving** | Particles that fall from the wall of the borehole. Also referred to as: Sloughing. |
| **Caving Proportion** | That proportion of the sample which are interpreted to be cavings. |
| **Cavitation** | (1) The situation where the pressure in a liquid becomes lower than the hydrostatic pressure.(2) The collapse of bubbles in a fluid, caused by the static pressure being less than the fluid vapor pressure. |
| **Cdp** | SEE: Common Depth Point. |
| **Cec** | SEE: Cation Exchange Capacity. |
| **Cellar** | Excavation under the derrick to provide space for items of equipment at the top of the wellbore. Also serves as a pit to collect drainage of water and other fluids under the floor for subsequent disposal. |
| **Cellar Deck** | A deck located immediately below the main deck. |
| **Cement** | (1) The substance used to bond the casing in the borehole.(2) Sedimentology: Mineral material, usually chemically precipitated that occurs in the spaces among the individual grains of a consolidated sedimentary rock, thereby binding the grains together as a rigid, coherent mass; e.g., carbonate; calcite; illite. |
| **Cement Accelerator** | A chemical additive that speeds the setting time of cement.A material which accelerates or speeds up the normal rate of reaction between cement and water, resulting in an increase in the development of early strength, and, in some cases, a decrease in the setting time or thickening time. |
| **Cement Addition** | A material added to a cement clinker during manufacture, commonly gypsum/anhydrite and water. |
| **Cement Additive Concentration Percentage** | The percentage by weight of the additive contained in the cement. |

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| **Cement Additive Name** | The trade name of the additive that is contained in the cement. |
| **Cement Additive Type Code** | An indicator of the type of additive used in the cement to perform a specific function in controlling cement properties; e.g., accelerator, retarder, weight reducer, filtration, water loss control. |
| **Cement (api Classes)** | Cement, API Classes A through J, meeting the applicable requirements of API Spec. 10. |
| **Cement (astm Types)** | Cement, types I through V, meeting the applicable requirements of Standard Specifications for Portland Cement ASTM C 150. |
| **Cement Bond Index** | The ratio of attenuation in zone of interest to attenuation in well cemented section. The computed bond index value is an indicator of the quality of cement bond. |
| **Cement Bond Log** | A well log of the vibrations of an ultrasonic acoustical signal as it passes through a four phase system of fluid, pipe, cement and rockof the borehole wall. If the pipe is not acoustically coupled tightly with a dampening material; e.g., cement, very little energy of the acoustical signal is lost. If the cement is bonded or acoustically coupled tight to the pipe, the energy is extremely dampened and the signal nearly disappears, thereby indicating that the casing is well cemented. The log may consist o |
| **Cement Bond Log Run Flag** | An indicator of whether a cement bond log was run. |
| **Cement (calcium Aluminate)** | The product obtained by pulverizing clinker which consists of hydraulic calcium aluminates formed by fusing or sintering a suitably proportioned mixture of aluminous and calcareous materials. |
| **Cement Class Code** | An indicator of an API cement class for well cements defined in API Specification 10. |
| **Cement Column Length** | The length of cement colum ; e.g., left inside the pipe, between the top and bottom of the cement, etc. |
| **Cement (common, Regular Or Ordinary)** | A cement intended for use under conditions not requiring moderate to high sulfate resistance. Corresponds to API Class A or Class C which are similar to ASTM Type I or Type III cements, respectively. |
| **Cement (construction)** | SEE: Cement (Common, Regular or Ordinary). |
| **Cement Density** | The specific gravity of a well cement as determined by a method similar to ASTM C 188: Test for Density of Hydraulic Cement. Most portland cements have a specific gravity of about 3.15 when tested by this method. Cement density should not be confused with slurry density. |
| **Cement Displacement Fluid Type** | The type of fluid used to displace cement during a cementing operation; e.g., water, brine, oil, mud. |
| **Cement Evaluation Log** | A cased wellbore cement evaluation log that displays data processed from ultrasonic transducers in such a way that channels in the cement sheath can be detected. |
| **Cement Filler Material** | A material added to a cement or cement slurry for the primary purpose of increasing the yield of the slurry. |
| **Cement Fluid Characteristic** | A description of any fluid used in a cementing stage. |
| **Cement (gel)** | A cement or cement slurry that has been modified by the addition of bentonite. |
| **Cement (gypsum)** | Composed primarily of the hemihydrate from of Calcium Sulfate (CASO4 1/2H2O). Plaster of Paris. |
| **Cement (high Alumina)** | SEE: Cement (Calcium Aluminate). |
| **Cement (high Early)** | (1) API Class C Cement,(2) ASTM Type III Cement. |
| **Cement (high Temperature)** | A cement designed to overcome strength retrogression within the temperature limits designated by the supplier. |
| **Cement (hydraulic)** | A cement that sets and hardens by chemical interaction with water and that is capable of doing so under water. |
| **Cement Job Type** | The type of cementing job being performed; e.g., casing, liner, plug, squeeze. |

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| **Cement Measured Top Depth** | The measured depth to the top of cement inside the annulus between the casing and the wall of the wellbore. This is often determined by readings on a cement record log or may be calculated/estimated by volumes pumped when casing is originally cemented. |
| **Cement (modified)** | A cement whose properties, chemical or physical, have been altered by additives. This refers to specific formulations of gel cement containing certain concentrations of dispersing agent. |
| **Cement (neat)** | A cement paste or slurry containing no additives. |
| **Cement (ordinary)** | SEE: Cement (Common, Ordinary or Regular). |
| **Cement Plan** | Proposed cementing required for setting proposed casing strings. |
| **Cement Plug** | A portion of cement placed at some point in the wellbore to affect a sealing action. |
| **Cement (portland)** | Hydraulic cement produced by pulverizing clinkers consisting essentially of hydraulic calcium silicates and usually containing one or more of the forms of calcium sulfate as an interground addition. |
| **Cement (portland Blast Furnace Slag)** | An intimate and uniform blend of portland cement (or clinker) and fine granulated blast furnace slag in which the slag is within specified limits. |
| **Cement (portland Pozzolan)** | A hydraulic cement consisting of an intimate and uniform blend of portland cement or portland blast furnace slag and fine pozzolan produced: (1) by intergrinding portland cement clinker and pozzolan;(2) by blending portland cement or portland blast furnace slag cement and finely divided pozzolan;(3) or a combination of intergrinding and blending, in which the amount of the pozzolan constituent is within specified limits. |
| **Cement Pump Pressure Measurement** | The pump pressure required to displace fluid down the wellbore during the entire cementing operation; e.g., rig pump pressure, cement truck pump pressure. |
| **Cement Quantity** | The quantity of cement used for casing, plugging or performing a squeeze job. |
| **Cement Rate** | The flow rate of the cement entering or leaving the wellbore, measured with a flow sensor. |
| **Cement (regular)** | SEE: Cement (Common, Ordinary or Regular). |
| **Cement (retarded)** | A cement in which the thickening time is extended by adding a chemical retarder. |
| **Cement Retarder** | A chemical which is added to cements or slurries to lengthen thickening time. |
| **Cement Return Flow Percentage** | The percentage of return flow during the cementing operation. |
| **Cement Return Volume** | The cumulative volume of cement returned to the surface during cementing. Does not include mud circulation prior to job. |
| **Cement Sand Content** | In cementing work, the term refers to the weight of sand blended with dry cement powder. The sand content is expressed as percent by weight of cement or as pounds of sand per sack of cement. |
| **Cement (slag)** | SEE: Cement (Granulated Blast Furnace Slag). |
| **Cement (slow Set)** | A cement in which the thickening time is extended by: (1) Eliminating the rapid hydrating components in its composition. (2) By adding a chemical retarder. API classes D, E and F are slow set cements. |
| **Cement Slurry** | The liquid state of the cementing material after water has been added. After it has set to a solid, it is called cement. |
| **Cement Slurry Density** | The weight per unit volume of the cement slurry used in the primary cementing job. |
| **Cement Slurry Occurrence Count** | The stage number of slurry in the cementing process; e.g., 1, 2. etc. |
| **Cement Slurry Volume** | The sum of the absolute volumes of solids and liquids that constitute a slurry. |
| **Cement Slurry Water Percentage** | The water content of a cement slurry expressed as parts of water per 100 parts of dry cement by weight. Per cent usually refers to per cent by weight. If per cent by volume is meant, it should be so stated. |
| **Cement Slurry Yield** | The volume of cement slurry in cubic feet that is obtained from a sack of cement. |

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| **Cement (sulfate Resistant)** | Cements which meet applicable requirements of API Spec 10. |
| **Cement System** | The combination of materials which make up well cement formulations. |
| **Cement Temperature** | Measured temperature of the cement entering or leaving the wellbore. |
| **Cement Thickening Time** | The time required for a cement slurry of a given composition to reach a consistency of 100 Bearden units of consistency (Be). |
| **Cement To Surface Flag** | An indicator of whether cement was circulated to ground surface or bottom of the cellar outside the casing. |
| **Cement Top Behind Casing Depth** | SEE: Cement Measured Top Depth. |
| **Cement Types (astm)** | SEE: Cement Classes (API). |
| **Cement (weighted)** | A cement slurry containing additives to increase its normal density. |
| **Cement (well)** | A cement or mixture of cement with other materials that is intended for use in oil, gas, geothermal or water wells. |
| **Cementation** | Sedimentary: The process that deposits chemical precipitate out of water to form bridges between the grains, solidifying the rock. |
| **Cementer Authorized Person's Title** | The job title of the Cementer's Authorized person. |
| **Cementer Certification Date** | The date a document test, etc. is certified as correct by the Cementer. |
| **Cementing** | The operation by which cement slurry is forced down through the casing and out at the lower end in such a way that it fills the space between the casing and the sides of the borehole to a predetermined height above the wellbore bottomhole. This activity is for the purpose of securing the casing in place and preventing water and other fluids from entering the borehole from the surrounding rock. |
| **Cementing Date** | The date the cementing operation was performed. |
| **Cementing Displacement Pressure Measurement** | The pressure at which the cement slurry is pumped into the borehole. |
| **Cementing Displacement Rate** | The volumetric flow rate at which the cement slurry is pumped into the borehole. |
| **Cementing Time** | The total elapsed time for a cementing operation from the beginning of mixing until the completion of displacement to final depth and complete circulation of any excess slurry to the surface. |
| **Center** | The center of the smallest circle circumscribing a defined area. For regular geometric shapes; e.g., rectangles; triangles; this corresponds to the intuitive location of the center. |
| **Center Pin** | Vertical pin or shaft which acts as rotation centering device and connects revolving upperstructure and base mounting. Also referred to as: King Pin. |
| **Center Post** | A tubular member which acts as the centerline of rotation and as the connective member to the platform. Also referred to as: King Post. |
| **Central Conductor** | A conductor that is passed through the pipe, for the purpose of creating a circular or circumferential magnetic field in the pipe. This term does not imply that the current rod must be centered in the pipe. Also referred to as: Shooting Rod. |
| **Central Facility** | Installation serving two or more leases, providing one or more of such functions as separation, compression, dehydration, treating, gathering, or delivery. |
| **Central Meridian** | (1) A longitude passing through the center of a projection. It is generally a straight line about which the projection is centered (symmetrical). Usually the central meridian defines the x-origin of the map.(2) The meridian on a graticule that is the axis of symmetry for the geometric properties of the graticule as displayed on a map projection. |
| **Centralizer** | Guides which are attached to casing and which serve to keep it centered in the borehole. |
| **Centralizer Count** | The number of centralizers used on a casing string. |

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| **Centralizer Logging Tool** | A device which positions the logging tool in the center or near center of the borehole, aligned with the borehole axis. |
| **Centrate** | Clarified liquid discharged from a centrifuge. |
| **Centrifugal Force** | Force tending to pull outwardly on a body when it is rotating around a center. |
| **Centrifugal Separator** | A general term applicable to any device using centrifugal force to shorten and/or to control the settling time required to separate a heavier mass from a lighter mass. |
| **Centrifugal Separator Retention Time** | The time the liquid phase is actually in the separating device. |
| **Centrifuge** | A machine using centrifugal force for separating substances of different densities. |
| **Centrifuge Port** | The opening in a centrifuge for entry or exit of materials. Usually applied in connection with a descriptive term; e.g., feed ports; overflow ports. |
| **Centripetal Force** | That force which tends to propel matter inward. |
| **Certificate** | A certificate of public convenience and necessity issued under the Natural Gas Act, 1938, as amended. |
| **Certificate Of Fiscal Responsibility Number** | The number of a certificate of fiscal responsibility (COFR) issued by a regulatory agency to certify that the lessee has a minimum amount of liability insurance. |
| **Certificated Natural Gas** | Any natural gas which has a certificate issued and in effect, transported by any interstate pipeline. |
| **Certification** | Written notification of pricing basis under regulations. |
| **Certification Date** | The date a document, test, etc. is certified as correct. |
| **Chain Hoist Beam** | A section of steel I-beam or other structural steel which supports and allows a chain hoist to be moved from one portion of a building to another. |
| **Chain Tongs** | A tool used in assembling or disassembling pipe or pipe fittings, having a lever with a serrated end, provided with a chain, to either turn pipe or hold it from turning. |
| **Chamber Lift** | A special type of intermittent gas lift which uses the tubing casing annulus or a bottle on the end of the tubing string for the accumulation of formation liquids between cycles. |
| **Chamber Vessel** | A vessel which measures by volume. |
| **Change Of Address Flag** | An indicator of whether the reporter's mailing address has changed. |
| **Channel** | A single series of interconnected devices through which data can flow from source to recorder. A recording device that is N-channel will allow the simultaneous recording of N groups of geophones. |
| **Channeling** | Ordinarily refers to bypassing of reservoir oil by gas or water. Also refers to bypassing of mud by cement during cementing operations. An undesirable flow condition existing when a fluid bypasses portions of a packed vessel or bubble tray due to improper packing or poor liquid distribution. |
| **Charge** | An explosive material, used as a seismic source. |
| **Charles Law** | The volume of a given weight of gas varies directly as its absolute temperature, provided the pressure remains constant. |
| **Chart Integrator** | A mechanical or optical device employed to calculate the cumulative or total flow recorded on a flow meter chart. |
| **Chase Thread** | To straighten and clean threads of any kind. |
| **Chatter** | (1) A noisy indication that a mechanical part, pipe, valve, etc. is behaving erratically and/or destructively.(2) A wavy surface of the thread flank, root, crest, or chamfer, produced by a vibrating cutter insert. |
| **Check Valve** | A valve that permits flow in one direction only, by automatically closing when the fluid attempts to flow in the reverse direction. |

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| **Checklist Id Code** | An indicator of what the checklist record money represents; e.g., tax exemption, state withholding, Federal code computation code withholding, Regular interest (will accrue gross amount paid for owner), Qualified goverernmental interest, Qualified charitable interest, Exempt Indian oil (tribal). |
| **Checkshot Survey** | A survey to determine formation seismic wave velocities over specified depth intervals by measuring time from a surface energy source to a geophone located at different depths within a wellbore. |
| **Chemical** | In drilling fluid terminology, a chemical is any material that produces changes in the viscosity, yield point, gel strength, and fluid loss, as well as surface tension. |
| **Chemical Barrel** | A container in which various chemicals are mixed prior to addition to the drilling fluid. |
| **Chemical Feeder** | A small-volume pump used to inject chemicals. |
| **Chemical Oxygen Demand** | A measure of the amount of oxygen required to oxidize organic and oxidizable inorganic compounds in water. The COD test, like the BOD test, is used to determine the degree of pollution in an effluent. Commonly abbreviated as: COD. |
| **Chemistry** | The science dealing with the nature and composition of substances and of the reactions which cause substances to break down or combine to form other substances. |
| **Chemotaxis** | The orientation or movement of a living organism in response to chemical agents. |
| **Chiller** | A heat exchanger employed to cool a process stream, such as absorption oil or rich gas, with brine or refrigerant. |
| **Chimney Tray** | A circular metal plate, with a large chimney in the center, such as used in a bubble tower or packed column, to collect liquid without preventing upward flow of vapor from below. |
| **Chisel Tongs** | Pipe tongs that grip the pipe with a chisel like insert in the jaw of the wrench. |
| **Chloride Concentration** | The concentration of chlorides in water analysis. |
| **Chloride Stress Cracking** | The stress corrosion cracking of ferrous based alloy steels, which may result when exposed to wellstreams containing water and chlorides under certain conditions of concentration and temperature. Other constituents present, such as oxygen, may contribute to chloride stress cracking. |
| **Chloride Stress Cracking Service** | Process streams which contain water and chlorides under conditions of concentration and temperature high enough to induce stress cracking of ferrous base alloy materials. Other constituents present, such as oxygen (O2), may contribute to such chloride stress cracking. |
| **Chloride Test** | The Mohr test for determination of soluble chlorides in water by titration with a standard silver nitrate solution in the presence of potassium chromate indicator. Results of the chloride test are used to evaluate and control blowdown and to calculate makeup in boilers and cooling systems. |
| **Chlorinator** | A device for injecting chemicals into a well or process. |
| **Chlorine Log** | A well log based on the counting rate of capture gamma rays produced by capture of thermal neutrons by chlorine in the rocks surrounding the borehole. The interpretation of such curves yields a calculated water saturation. |
| **Chock** | Block or wedge used beneath a length of pipe so that it cannot roll. |
| **Choke** | A type of orifice installed in a line to restrict flow and control the rate of production. Surface chokes are a part of the Christmas tree and contain a choke nipple, or bean, with a small diameter bore (an orifice) that serves to restrict the flow. Also, chokes are used to control the rate of flow of the drilling fluid out of the wellbore when the wellbore is shut in with the blowout preventer and a kick is being circulated out of the wellbore. |
| **Choke Bean** | SEE: Flow Bean. |
| **Choke Line** | An extension of pipe from the blowout preventer assembly, used to direct wellbore fluids from the annulus to the choke manifold. |
| **Choke Line Joint Percentage** | The proportion of the total choke line which is made up of joints, expressed as a percentage. |
| **Choke Line Joint Size** | The internal diameter of the joints in the choke line. |

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| **Choke Line Length** | The total length of the choke line. |
| **Choke Line Size** | The internal diameter of the choke line. |
| **Choke Line Valve** | The valve(s) connected to and a part of the blowout preventer stack that controls the flow to the choke manifold. |
| **Choke Manifold** | An assembly of valves, chokes, gauges, and lines used to control the rate of flow from the well completion when the blowout preventers are closed. |
| **Choke Size** | The inside diameter of the choke orifice. |
| **Christmas Tree** | The valves and fittings assembled above the tubing head at the wellbore origin to control the flow of hydrocarbons and other fluids from a completed well. The Christmas Tree is attached to the top of the tubing head, and may consist of the tubing head flange, the bottom most master valve, the crown or swabbing valve, the wellhead choke and all valves and fittings in between. |
| **Chromate** | A compound in which chromium has a valence of 6; e.g., sodium bichromate. Chromate may be added to drilling fluids either directly or as a constituent of chrome lignites or chrome lignosulfonates. In certain areas, chromate is widely used as an anodic corrosion inhibitor, often in conjunction with lime. |
| **Chromatograph Analyzer** | An analytical instrument that separates mixtures of substances into identifiable components by allowing them to seep through an absorbent so that each compound becomes absorbed in separate layers. |
| **Chromatograph Sample Depth** | Measured depth corresponding to the chromatograph cycle sample while circulating. |
| **Chromatograph Test** | A laboratory analysis of a gas sample to determine composition of the gas. The analysis will determine the mole percent of each component of the gas which can be used to calculate liquid volume percents, Gallons per thousand cubic feet (GPM), British thermal units (BTU), and gravity. |
| **Chrome Lignite** | Mined lignite, usually leonardite, to which chromate has been added. The lignite can also be treated with either sodium or potassium hydroxide. |
| **Chronic Bioassay** | A test involving a substantial portion of the life span of a fish or other organisms. |
| **Chronological Zone Code** | Indicates the maximum flooding surface within a depositional sequence (Regional stratigraphy marker). |
| **Chronostratigraphic Unit** | A classification of a geologic body based on chronostratigraphy. |
| **Chronostratigraphy** | The branch of Stratigraphy dealing with the age of rock strata and their time relationships. Also referred to as: time rock stratigraphy. |
| **Chronozone Net Sand Thickness Value** | The net sand thickness for a stratigraphic marker. |
| **Chronozone Sand Percentage** | The percentage of sand contained in the chronozone. |
| **Chronozone True Vertical Depth** | The subsea depth to the top of the chronozone. |
| **Circular Arc Method** | Uses both sets of measured angles associated with each course length to recreate the wellbore path geometry as a sequence of small circular arcs constrained by the measured angles to pass through the end points with inclination and direction angles as measured. |
| **Circular Magnetic Field** | The magnetic field in or surrounding a current carrying conductor pipe, or pipe with an interior current carrying rod. Also referred to as: Circumferential Magnetic Field. |
| **Circular Magnetization** | The production of a magnetic field in a pipe wall or coupling such that the magnetic field is oriented circumferentially. Also referred to as: Circumferential Magnetization. |
| **Circulating Pressure Measurement** | The pressure required to circulate a fluid at a given rate and at a specified depth. |
| **Circulation** | The process of cycling drilling fluid through pipe and wellbore while drilling operations are temporarily suspended. This is done to condition the drilling fluid and the borehole walls before hoisting the drill pipe and to obtain cuttings from the wellbore bottomhole before drilling proceeds. Circulation of the drilling fluid while drilling is suspended is usually necessary to prevent drill pipe from becoming stuck while being retracted. |

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| **Circulation Device** | A flow control device; e.g., a sliding sleeve or side pocket mandrel which is run on production/injection tubing for the purpose of establishing communication between tubing and the tubing annulus. |
| **Circulation Duration** | Duration of drilling fluid circulation. |
| **Circulation Rate** | The rate of air, gas, or foam being circulated as drilling fluid. |
| **Circulation Stopped Date** | Date that circulation of the drilling fluid was stopped. |
| **Circumferential Magnetization** | SEE: Circular Magnetization. |
| **City Block** | Identifies a geographic area within a city subdivision. |
| **City Gate** | Delivery point of gas to a local distribution company's system inlet. |
| **City Location** | The city location is composed of the subdivision, block, and city lot. |
| **City Lot** | Identifies a geographic area within a city block. |
| **City Name** | The legally recognized name of a city. |
| **City Subdivision** | The city location is composed of the subdivision, block, and city lot. |
| **Cladding** | A process for covering one metal with a thinner sheet of another to obtain increased corrosion resistance or other desirable properties of the thinner. |
| **Clamp Connection** | A pressure sealing device used to join two items without using conventional bolted flange joints. The two items to be sealed are prepared with clamp hubs. These hubs are held together by a clamp containing two to four bolts. |
| **Class I Location** | A National Electrical Code (NEC) Class I location is one in which flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive or ignitible mixtures. |
| **Classifier** | SEE: Coalescer. |
| **Clay Classification** | The classification of clays, based on size, using the Wentworth Scale. Particles have a diameter of less than 1/256 millimeters. |
| **Clay Extender** | (1) An agent which has been added to clay to increase its initial yield. Peptization usually refers to the addition of an electrolyte to increase the initial yield; i.e., soda ash.(2) A newer term, beneficiation, generally applies to the addition of organic compounds; e.g., polyacrylamide. |
| **Clay Mineral** | A plastic, soft, variously colored earth, commonly a hydrous silicate of alumina, formed by the decomposition of feldspar and other aluminum silicates. Clay minerals are essentially insoluble in water but disperse under hydration, shearing forces such as grinding, velocity effects, etc., into the extremely small particles varying from submicron to 100 micron sizes. |
| **Clay Solid** | SEE: Colloidal Solid. |
| **Clean Out** | To remove sand, scale, and other deposits from the well completion to restore or increase production. |
| **Clean Sand** | Sand that is well sorted, having a narrow range of particle sizes, and less than 10%-15% clay content. |
| **Cleanout Plate** | An opening in a tank or other vessel through which sediment may be removed. |
| **Clearance** | (1) Space between the outer diameter of the downhole tool and the wall of the borehole; the difference in the diameter of the borehole and the tool. |
| **Clearance Pocket** | A fixed or variable volume device on a reciprocating compressor cylinder. It is used to change the capacity of the cylinder. |
| **Client** | SEE: Business Associate. |
| **Clinograph** | An instrument to measure and record inclination. |
| **Clip** | A U-bolt or similar device used to fasten parts of a wire cable together. |

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| **Close In** | (1) SEE: Shut In.(2) To close the blowout preventers on a wellbore that is being drilled or worked over in order to control a kick. |
| **Close Nipple** | A very short piece of pipe having threads over its entire length. |
| **Closed Fracture Count** | The number of closed fractures counted in a depth interval. |
| **Closed In** | A well capable of producing oil or gas, but temporarily shut in. |
| **Closed In Bottomhole Pressure** | SEE: Shut In Bottomhole Pressure. |
| **Closed In Pressure** | SEE: Shut in Formation Pressure. |
| **Closed Traverse** | Term used to indicate the closeness or repeatability of two surveys, one survey going in the wellbore and the second survey coming out of the wellbore. |
| **Closed Water Treating System** | A system of treating water in which the water does not come in contact with air. |
| **Closing Ratio** | The ratio of the wellhead pressure to the pressure required to close the blowout preventer. |
| **Closure** | The vertical distance between the anticlinal crest and the highest point at the base of the fold. Also referred to as: Line of Closure. |
| **Cloth** | SEE: Screen Cloth. |
| **Cloud Point** | The temperature at which fluid begins to congeal and becomes cloudy. |
| **Clutch** | A piece of equipment for the engagement or disengagement of power. |
| **Cmp** | SEE: Common Midpoint. |
| **Co2 Content** | SEE: Carbon Dioxide Content. |
| **Coagulant** | (1) That agent which produces clotting; i.e., to change from a fluid into a thickened mass.(2) To curdle, congeal, or clot. |
| **Coagulation** | The joining together of finely divided particles of matter suspended in water, forming a mass large enough to settle out of suspension. Chemicals such as lime or alum are often used to induce the clumping of particles in order to settle out impurities. In drilling fluid terminology, it is a synonym for flocculation. |
| **Coal Oil** | (1) Illuminating and heating oil obtained from the destructive distillation of bituminous coal.(2) Kerosene made from distilling crude oil. |
| **Coalescence** | The change from a liquid to a thickened curdlike state by chemical reaction. Also, the combination of globules in an emulsion caused by molecular attraction of the surfaces. |
| **Coalescer** | (1) An agent which helps materials unite into one body or mass. |
| **Coastal Zone** | Coastal waters and the adjacent lands that exert a measurable influence on the uses of the sea and its ecology. |
| **Coastline** | The line of ordinary low water along that portion of the coast which is in direct contact with the open sea or the line marking the seaward limit of inland waters. |
| **Coat And Wrap** | To cover pipe with bituminous, or similar material, and textiles for protection against corrosion. |
| **Coating** | (1) A film as applied to the substrate.(2) A condition wherein undersize particles cover the apertures of the screening surface by virtue of stickiness. |
| **Coating Material** | The liquid material prior to application on the substrate. |
| **Cobalt Bromide Tester** | The laboratory apparatus for determining the dryness of commercial propane by observing the color variation of cobalt bromide when contacted with the vapors at 32 degrees Fahrenheit and 50 psig. |
| **Cobble** | A clastic sedimentary particle with a diameter between 64 and 256 millimeters, based on the Wentworth Scale of Measurement. |

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| **Coefficient Of Thermal Expansion** | SEE: Thermal Expansion CoeffiThe change in length of a material as a function of its total length due to a change in temperature. |
| **Cohesion** | The attractive force between the same kind of molecules; i.e., the force which holds the molecules of a substance together. |
| **Coil** | A compact section of pipe or tubing used for cooling or heating either the fluid in the pipe or the material surrounding it. |
| **Coil Area** | The coil area is the heat transfer area and is normally calculated using the outside surface area of the pipe. |
| **Coil Method** | A method of magnetization in which pipe is encircled by a current carrying coil. |
| **Coil Shot** | A short pulse of magnetizing current passed through a coil surrounding a pipe for the purpose of longitudinal magnetization. |
| **Cold Weld** | A metallurgically inexact term generally indicating a lack of adequate weld bonding strength of the abutting edges, due to insufficient heat and/or pressure. |
| **Collar** | A coupling device used to join two lengths of pipe. A combination collar is a coupling with left hand threads in one end and right hand threads in the other. Sometimes drill collars are called simply collars. |
| **Collar Locator** | A well logging device that detects casing or tubing collars for depth orrelation purposes. It may be operated mechanically or electrically to produce a log showing the location of each casing collar or coupling in a wellbore. When properly interpreted, this well log provides an accurate way to measure depths in a wellbore. |
| **Collateral Coverage Type Code** | Indicates the type of coverage a collateral provides. |
| **Collector Pipe** | A perforated or slotted pipe near the top of the coalescing section in a treater to remove the treated oil as uniformly as possible through this portion of the treater. |
| **Colloid** | A state of subdivision of matter which consists either of single large molecules or of aggregations of smaller molecules dispersed to such a degree that the surface forces become an important factor in determining its properties. The size and electrical charge of the particles determine the different phenomena observed with colloids; e.g., Brownian movement. The sizes of colloids range from 1 x 10-7 cm to 5 x 10-5 cm (0.001 to 0.5 microns) in diameter, although the particle size of certain emulsoids can |
| **Colloidal** | Pertaining to suspended solids so finely divided that they will not settle. |
| **Colloidal Composition** | A suspension containing one or more colloidal constituents. |
| **Colloidal Solid** | A clay having unusual properties; e.g., plasticity; thixotropy; swelling; a solid particle of less than two micron equivalent sperical diameter. |
| **Colloidal Suspension** | A stable, homogenous system of very fine particles of matter dispersed uniformly throughout a liquid medium, having properties which differ both from a true solution and from a suspension of larger particles. True colloidal suspensions have particle size range of 5 to 200 micrometers. |
| **Color** | A property of a sediment represented by the hue caused by combinations of colors of the particles, surface coating, matrix and cement, and controlled in part by the degree of fineness of the particles; e.g., white, light brown, black. |
| **Color Bodies** | Those complex molecules which impart color (usually undesirable) to a solution. |
| **Color Code** | Paint band identification of pipe classification in accordance with appropriate specifications. |
| **Color Unit** | Measure of the intensity of coloration of water using a platinum cobalt standard. |
| **Column** | A tall vertical processing vessel; e.g., fractionator, absorber. |
| **Columnar Oriented Ice** | Columnar grained ice with c-axis orientation in a preferred horizontal direction. |
| **Columnar Random Ice** | Columnar grained ice with c-axis orientation in a random horizontal direction. |

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| **Combination Trap** | A reservoir trap having characteristics of both structural and stratigraphic traps in approximately equal proportions. |
| **Combined Fixed Rate Or Percentage Basis** | SEE: Combined Rate. |
| **Combined Method** | SEE: Borehole Survey Calculation Method (Refer to Mercury Method). |
| **Combined Rate** | A rate provided by the accumulation of all charges considered includable in district expense, administrative overhead, and the operator's warehouse operating and maintenance expense. This rate may be stated in dollars or as a percent of specific costs. Also known as: Combined Fixed Rate or Percentage Basis. |
| **Combustible** | Capable of burning. |
| **Combustible Liquid** | A liquid having a flash point at or above 100 F (37.8 C). Combustible Liquids are subdivided as follows: Class II Liquid: Those having flash points at or above 100 F (37.8 C) and below 140 F (60 C). Class IIIA Liquid: Those having flash points at or above 140 F (60 C) and below 200 F (93 C). Class IIIB Liquid: Those having flash points at or above 200 F (93 C). |
| **Combustion** | The chemical reaction of rapid oxidation which is accompanied by the emission of light and heat (the flame). Combustion begins when the temperature of the ignitible substance reaches its apparent ignition temperature. This process will be self sustaining as long as the heat released in combustion maintains the temperature within the flammable range of the ignitible substance. |
| **Come Along** | A stretching or tightening device that crawls along a length of chain. |
| **Come Out Of The Hole** | To pull drill pipe, tubing, wireline tools, etc., out of the wellbore. |
| **Commercial Elevation** | The distance to a particular point on the drilling rig which is above or below the reference datum as reported by a commercial elevation company. |
| **Commercial Elevation Source** | The companies which are the source that provided the commercial elevation; e.g., Abilene, Powers, Laughlin & Simmons. |
| **Commercial Ground Elevation** | The ground level elevation of a wellbore origin of the well as measured and reported by a commercial elevation company. |
| **Commercial Well** | A well which produces reserves in sufficient quantities to be expected to be economical for commercial operation; i.e., one in which the revenues are higher than the costs of operating and maintaining the well. |
| **Commingle** | Mixing fluids from more than one source to make a single fluid stream. |
| **Commingled Gas** | Gas from two or more sources which is combined in a single stream. |
| **Commingling** | The act of mixing fluids from more than one source to make a single fluid stream. |
| **Commingling Facility** | An installation, serving two or more leases, which provides services such as gathering, separating, treating, and storing more economically than could several smaller facilities. |
| **Commingling Permit** | A regulatory agency's permission for an operator to perform commingling. |
| **Commingling Permit Number** | An identifier of the leases and facilities involved in commingled production arrangements with the regulatory numbers issued by certain state regulatory agencies or tax commissions. These numbers are primarily for the purpose of enabling the states to associate data furnished on production and/or tax reports with the leases or horizons being commingled. |
| **Commingling Test Requirement Flag** | An indicator of whether a comingling test is required for the well. |
| **Commingling Type Code** | An indicator of where production is commingled; e.g., downhole, surface, multiple zones not commingled, etc. |
| **Common Depth Point** | Seismic traces that have a nonzero offset can be grouped into gathers that have the same reflection point at depth. In the case of layered media with no dip, the common depth point (CDP) is directly below the midpoint of the source and receiver. Hence, a CDP gather is identical to a common midpoint (CMP) gather. When dip is present, CMP gather no longer shares a common depth point. Special processing is required in order to create traces that do share common depth points at all times. Commonly abbreviat |

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| **Common Midpoint** | (1) The portion of the subsurface which is midway between a seismic source and a receiver.(2) Having the same or nearly the same midpoint between a seismic source and receiver. The meaning of nearly is an algorithmic question. The process of binning assigns common midpoint (CMP) traces to a bin node. |
| **Communication Contact Telephone Number** | The telephone number of the communication contact. |
| **Company Acreage** | Any acreage in which the indicated company owns a direct interest, including working interests, fee lands, mineral interests, payments out of production, and royalty and overriding royalty interests. This includes both company and outside operated properties. |
| **Company Assigned Well Code** | The unique identifier, assigned by the company, to identify a particular completion. |
| **Company Leased Acreage** | The indicated company's net acreage leased in producing working interest properties. |
| **Company Owned Acreage** | The indicated company's net acreage owned in producing working interest properties. |
| **Compensated Acceleration Method** | SEE: Borehole Survey Calculation Method (Refer to Mercury Method). |
| **Compensated Formation Density Log** | A dual spacing formation density log. The compensated formation density logging device employs two receivers spaced at different distances from the source, thus allowing compensation for mud and mud cake effects. |
| **Compensated Neutron Log** | A well log made with a neutron logging tool having two neutron detectors to reduce borehole effects. The neutron porosity is derived from the ratio of the counting rates of the two detectors. |
| **Compensatory Royalty** | Payments to royalty owners as compensation for losses in income which they may be suffering due to failure to adequately develop a lease. |
| **Competitive Reservoir** | A reservoir in which there are one or more well completions in a single reservoir encompassed by two or more leases from which the lessees plan future production. |
| **Completion Cost** | Monies expended in preparing a well for the taking of production up to and including the initial installation of tubing and the wellhead in and on a well but does not include equipping costs. |
| **Completion Date** | SEE: Well Completion Date. |
| **Completion Identification** | The identifier for a specific well completion. |
| **Completion Location** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, any subsurface location from which natural gas is being, or has been, produced in commercial quantities. When this term is used in reference to any marker well, it means any subsurface location which has had natural gas produced from the location in commercial quantities after January 1, 1970 and before April 20, 1977. |
| **Completion String** | SEE: Producing String. |
| **Completion Type Code** | SEE: Well Completion Type Code. |
| **Complex** | A grouping of two or more man made offshore structures connected by walkways. |
| **Complex Identifification Number** | The unique identifier assigned to a single man-made structure or a group of structures connected by a walkway. |
| **Composite Log** | Several well logs of the same or similar types, usually from different logging runs, which have been spliced together to form a single countinuous record from the shallowest to the deepest log reading along a wellbore path. |
| **Composite Sample** | A fluid containing all elements (components) originally present in fluid at point of origin; i.e., downhole sample containing water, oil and gas. |
| **Composition Pipe** | A pipe that is porous in nature and made of components such as cement, clay, fibers, ethylene, and asbestos. |
| **Compressibility** | The change in specific volume and density of a sample under hydrostatic pressure. |
| **Compressibility Factor** | SEE: Z-Factor. |

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| **Compressibility Factor Pressure Measurement** | The pressure at which the compressibility factor was measured. |
| **Compressibility Factor Temperature** | The temperature at which the compressibility factor was measured. |
| **Compression** | Act of compressing, or state of being pressed together to make more compact. In the sense of being the opposite of tension. |
| **Compression Adjustment** | The adjustment to make to theoretical residue volumes for compression calculations. |
| **Compression Deduction Value** | The value used to adjust the base residue rate for compression of gas in a gas system. |
| **Compression Range** | Identifies the method of calculating the compression deduction to residue price. |
| **Compression Ridge** | First year ridge formed primarily by buckling, bending, or local crushing of colliding ice sheets caused by relative motion in the direction perpendicular to their common boundary. Generally composed of loosely stacked angular ice blocks, the ridge tends to be a curvilinear feature with a weaving pattern established by the extent of finger rafting. |
| **Compression Stage Adjustment Flag** | An indicator of whether or not the settlement should be adjusted for the number of stages used in compressing the gas stream. |
| **Compressional Wave** | Waves in which the particle motion or vibration is in the same direction as the propagated wave (longitudinal wave). |
| **Compressive Strength** | The degree of resistance of a material to force acting along one of the axis in a manner tending to crush it. |
| **Compressor** | A rotating or reciprocating machine, together with its driver and associated scrubbers, coolers, pipe, valves, controls, etc., used to compress gas or air from a lower to a higher pressure. |
| **Compressor Bottle** | A coded, customized, fabricated vessel attaching the pipe to compressor cylinders by means of flange or threads. Has value in reducing vibration or pulsation and improves flow characteristics of the medium being compressed. |
| **Compressor Cylinder** | Chamber in a compressor containing the piston, liner, compressor valves and chairs. |
| **Compressor Station Cost** | Costs of acquiring and installing compressor buildings and equipment, including auxiliaries, foundations, guard rails, enclosures, and other items incidental to compressor operations. |
| **Computed Gravity** | The computed gravity at a point on the surface. |
| **Computed Magnetics** | The computed magnetics at a point on the surface. |
| **Computer Production Control** | An operation wherein field conditions and activities are monitored and/or controlled automatically by a computer system; i.e., well testing; lease production; equipment operational and safety status. Commonly abbreviated as: CPC. |
| **Concentration Cell** | (1) Metal ion: A corrosion cell in which a potential difference is produced by a difference in concentration of metal ions.(2) Oxygen: A corrosion cell in which a potential difference is produced by differences in oxygen concentration. Region of low oxygen concentration is the anode or corroding area. |
| **Concentric Control System** | A system utilizing a concentric tubular arrangement to transmit control signals to the surface controlled subsurface safety valve (SCSSV). |
| **Concentric Operation** | A well operation conducted using small diameter tubing inside conventional tubing or tubingless completions, normally with the Christmas Tree in place and using a small rig or hoisting unit. |
| **Concession** | An area of interest and subsurface volume identified by a concession agreement. |
| **Concession Agreement** | An agreement (usually from a host government) permitting a foreign petroleum company to prospect for and produce minerals in the area subject to the agreement. The terms ordinarilly include a time limitation and a provision for royalty to be paid to the government. |
| **Concession Block Number** | A number that uniquely identifies a block relating to a concession. The relationship of a concession to a block is very arbitrary depending on the government and the circumstances involved. The boundaries of a concession can fall within a single block, consist of the entire block, or fall within multiple blocks. |

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| **Concession Number** | An unique identifier of a concession. |
| **Condensate** | Liquid hydrocarbons produced with natural gas that are separated from the gas by cooling and various other means. Condensate generally has an API gravity of 50 degrees to 120 degrees and is water white, straw, or bluish in color. It is the liquid recovery from a well classified as a gas well. It is generally in the gaseous state under reservoir conditions but becomes liquid either in passing up the hole or at the surface. These hydrocarbons, from associated and nonassociated gas well gas, normally are r |
| **Condensate Beginning Inventory Volume** | The measured or calculated quantity of condensate in storage facilities at the beginning of a specified period. |
| **Condensate Ending Inventory Volume** | The measured or calculated quantity of condensate in storage facilities at the end of a specified period. |
| **Condensate Gas Ratio** | The ratio of condensate produced to a unit volume of gas. |
| **Condensate Net Taxable Amount** | The value of condensate on which tax is based. |
| **Condensate Production Volume** | The volume of condensate produced for a specified period. |
| **Condensate Reported As Oil Volume** | The volume of condensate reported as oil. |
| **Condenser** | (1) An electrical device that, when wired in the line of an electrical circuit, stores a charge of elecricity and returns the charge to the line when certain electrical conditions occur. (2) A heat exchanger employing air or water to partially or completely liquify a vapor stream. |
| **Conductance Bridge** | An instrument, similar to a wheatstone bridge, used to estimate the dissolved solids content of water by measuring the specific electrical conductance of the solution. |
| **Conductivity** | A measure of the quantity of electricity transferred across a unit area per unit potential gradient per unit time. It is the reciprocal of resistivity. |
| **Conductor Pipe** | A relatively short string of large diameter pipe which is set to keep the top of the wellbore open and to provide means of conveying the upflowing drilling fluid from the wellbore to the surface drilling fluid system until surface casing string is set in the well. Conductor pipe may also be used in well control. Conductor pipe is usually cemented. |
| **Conduit Seal** | A sealing fitting poured with cement like potting compound designed to contain an explosion in the enclosure to which it is attached. |
| **Cone** | SEE: Hydrocyclone. |
| **Confidentiality Expiration Date** | 1. An indicator of the status of the release of privately owned information and data that are not available for public review or distribution to the public, as specified by law, regulation, order, or policy. Regulatory agencies define such data as proprietary data; e.g., electric logs, core descriptions and analysis, seismic record section, geological, geophysical, engineering information, maps; reports, correspondence, based on or containing information furnished by industry sources to the agencylc in co |
| **Configured Flow Area** | The effective flow area of a restricted portion of a drill string. |
| **Confining Pressure Measurement** | An equal, surrounding pressure. |
| **Confirmed Nomination** | An agreement by a seller to deliver/cause delivery or a transporter to receive and deliver a specifiic quantity of gas for a specified period at various points under a sales or transportation agreement or for all contracts at one specific point. The confirmed nomination is in response to a purchaser's or shipper's nomination. |
| **Conformance** | Compliance with specified requirements. |
| **Congressional Range** | North-south tier of townships identified by its relation to a principal meridian. |
| **Congressional Survey** | A location survey dividing the map into ranges and townships usually of 6 mile dimensions and numbered and referenced to standard survey base and meridian lines. |
| **Congressional Township** | A quadrangle approximately 6 miles on a side with boundaries conforming to meridians and parallels. It is further subdivided into 36 sections, each approximately one mile square, an east-west tier identified by its relation to a principle meridian. |

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| **Coning** | (1) A reservoir effect usually associated with high producing rates. In the case of water, the bottom water is attracted upward when the pressure differential over the producing zone is increased beyond the critical limits. In the case of gas, the gas is attracted downward by the same phenomena.(2) A condition, detrimental to good vapor-liquid contact, existing when vapor velocity through bubble cap slots is excessive and gas pushes the liquid away from the slots. |
| **Connate Water** | Fossil sea water trapped within sediments during deposition. |
| **Connection** | The joining of two lengths of pipe. |
| **Connector** | (1) Riser devices used to latch and unlatch risers and lower marine riser packages to subsea equipment.(2) Tendon devices used to latch and unlatch tendons to the foundation system and to connect the tendon to the platform. |
| **Conodont Alteration Index** | The degree of thermal maturity as measured by the color of specimens of conodonts, fossils found in rocks of combrian to triassic age. Also known as conodont color index. |
| **Conodont Color Index** | SEE: Conodont Alteration Index. |
| **Consenting Owner** | A working interest owner who elects to participate in a project or operation. |
| **Conservative Pollutant** | A pollutant that is relatively persistent and quite resistant to degradation, such as parachlorobiphenyls. |
| **Consistency** | (1) A rheological property of matter which is related to the cohesion of the individual particles of a given material, its ability to deform, and its resistance to flow. The consistency of cement slurries is determined in accordance with required standards. It is expressed as Bearden units of consistency (Be) when determined either on the pressurized consistometer or on the atmospheric pressure consistometer.(2) The viscosity of a nonreversible fluid, in poises, for a certain time interval at a give |
| **Consistometer** | A tester having a stirring apparatus to measure the thickening time of cement slurries under predetermined temperatures and pressures. |
| **Consolidation** | A process of solidification of an ice mass by freezing water in voids between ice blocks. |
| **Constant Composition Expansion** | A pressure-volume-temperature (PVT) test performed on condensate reservoir fluids in which the overall composition of the fluid in a test cell remains constant as the system pressure is varied. |
| **Constant Volume Depletion** | A pressure-volume-temperature (PVT) test performed on condensate reservoir fluids in which gas is removed from the test cell to reduce the system pressure while the overall system volume remains constant. |
| **Constructed Ice** | Ice formed by surface flooding, spraying, subsurface convection cells, or other techniques. |
| **Construction Cost** | Costs include construction costs applicable to each sub-category of plant operations, except those applicable to injection wells. |
| **Construction Overhead Flag** | An indicator of whether or not the contract provides for the operator to charge construction overhead on a joint property. |
| **Construction Overhead Negotiated Flag** | An indicator of whether or not construction overhead is to be or has been negotiated. |
| **Construction Project** | (1) The installation and/or construction of capital facilities pursuant to the agreement in effect.(2) Any construction or installation undertaken for the joint account, including each subsequent addition thereto or alteration thereof or AFE'd (Authorization For Expenditure) replacement of material thereon and equipping costs of a well, but does not include drilling. Each addition, alteration, or replacement will be considered as a separate Construction Project except that multiple projects of a similar n |
| **Consumer** | SEE: Business Associate. |
| **Contact** | The interface of no significant thickness between two distinct entities, such as stratigraphic formations or fluid types within a reservoir. |
| **Contact Date** | The date the given fluid contact is determined. |
| **Contact Depth** | Measured depth to the fluid contact. |
| **Contact Inspection** | The method in which the search unit makes direct contact with the material, with a minimum couplant film. |

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| **Contact Log** | A generic term referring to the log produced by any logging tool which uses pad or skid devices to make direct contact with the formation wall. |
| **Contact Mark** | Intermittent marks adjacent to the weld line resulting from the electrical contact between the electrodes supplying the welding current and the pipe surface. |
| **Contact Method** | A process of magnetizing pipe by passing a current through its wall via prods or hand held contacts. Also referred to as: Current Flow Method. |
| **Contact Name** | A person who represents a company or group on a special topic of interest. |
| **Contact Transducer** | A transducer which is coupled to a test surface either directly or through a thin film of couplant. |
| **Contact Type** | The type of fluid contact; e.g., top of gas, bottom of gas. |
| **Contactor** | (1) A processing vessel in which gas is contacted countercurrently with a solution to extract specific components in the gas; e.g., amine solution to extract acid gas; glycol solution to remove water vapor.(2) A vessel in which two or more substances are brought into solution for the purpose of removing contaminants. |
| **Containment** | Any method used on an offshore platform to collect and direct escaped liquid hydrocarbons to a safe location. |
| **Contaminant** | (1) Material, usually a mud component, which becomes mixed with the cement slurry during the displacement process, and which has a deleterious effect on cement properties.(2) A harmful or undesirable constituent; any substance that might constitute a health hazard or adversely affect desirable properties of drilling fluids. |
| **Content Settlement Method** | The type of calculation used for the settlement on the liquids content of gas, based on a unit price per mcf. |
| **Contiguous Acreage Flag** | An indicator of whether acreage is or is not contiguous. On nonproducing records, will reflect the acreage situation as initially established. On producing records, will be maintained to reflect the current status of contiguity; i.e., Noncontiguous tract(s) involved, all acreage contiguous. |
| **Contingency Cost** | Includes cost of an event (as an emergency) that is possible but not expected. |
| **Contingent Market Order** | A market order stipulating that the price must move up or down to a specified level (strike) before the order can be executed. |
| **Continuous Flow Gas Lift** | Gas lift operation in which gas is injected continuously into the liquid column. Reservoir fluids and the injected gas are produced from the wellhead at the surface without interruption. |
| **Continuous Flowmeter** | A velocimeter which is designed to measure fluid velocities in the casing. |
| **Continuous Method** | A process of searching for flaws while the magnetizing current is being applied. |
| **Continuous Phase** | The fluid phase which completely surrounds the dispersed phase that may be colloids, oil, etc. |
| **Continuous Reeled Tubing** | Tubing stored on a reel that can be run in and out of a well without making a connection. |
| **Continuous Treatment** | Describes the process of the continuous injection of liquids to treat produced fluids. |
| **Continuous Wave** | A constant flow of ultrasonic waves, as opposed to pulsed. |
| **Contour** | The gradual tapering by filing or grinding to prevent abrupt changes in the wall thickness. |
| **Contour Line** | A line connecting points of equal value (generally elevation) above or below some reference value; e.g., a datum plane. Contour lines are commonly used to depict topographic or structural shapes. The quantified properties of sediments or other phenomena can be recorded by contour lines. |
| **Contour Map** | Topographic, structural, thickness or facies differences of the mapped area shown by contour lines. |
| **Contract** | A legally enforcable agreement between two or more parties. |

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| **Contract Advanced Payment Flag** | An indicator of whether or not the contract contains a clause requiring the buyer to pay seller for certain gas volumes based on projected usage, nominations, or some other criteria before the actual receipt of said volumes. This clause will usually contain a mechanism to achieve the later balancing of the advance payment account once actual deliveries occur. |
| **Contract All Depths Flag** | An indicator of whether or not the seller is dedicating all owned depths to the contract. |
| **Contract All Wells Dedicated Flag** | An indicator of whether or not all wells in the contract area are subject to the same conditions or whether one or more individual wells are not dedicated or they are dedicated at different depths, horizons, etc. |
| **Contract All Wells Price Adjustment Flag** | An indicator of whether or not there are no price adjustment requirements or that the basic price will be adjusted upward or downward if contractual and/or regulatory requirements are met. |
| **Contract Amendment Clause** | A clause which amends or modifies an existing clause in a contract, including previous (instances of) contract amendment clauses. |
| **Contract Amendment Document Date** | The date the contract amendment was prepared, or associated with the instrument which constitutes the amendment or letter. |
| **Contract Amendment Effective Date** | The date a contract amendment goes into effect. |
| **Contract Amendment Letter Type Code** | An indicator of the type of amendment to a contract or to classify a type of operational letter; e.g., area covered by contract, accounting procedure, assignment, buyer address or name. |
| **Contract Arbitration Flag** | An indicator of whether or not the contract provides for settlement of disputes by arbitration; i.e., by a third party. |
| **Contract Area Rate Clause** | SEE: Area Rate Clause. |
| **Contract Area Rate Flag** | An indicator of whether or not the gas purchase contract contains an area rate clause. |
| **Contract Area Rate Percentage** | The percentage of the applicable area rate provided to be paid for gas under a gas contract. |
| **Contract Assignment Permitted Flag** | An indicator of whether or not the contract can be assigned to a third party. |
| **Contract Beginning Effective Date** | The date that the data pertaining to a legal document, agreement, contract, change of ownership, transaction, or authorization either went into effect or is to go into effect; i.e., the date that a particular business associate gained ownership into an identified property. |
| **Contract Btu Adjustment Base** | The denominator of a fraction of which an actual British thermal Unit (BTU) value per cubic foot is the numerator and which will be used to adjust the contract current price or percent. |
| **Contract Btu Adjustment Flag** | An indicator of the type of British thermal Unit (BTU) adjustment required by the contract. This may involve gas quality and/or price; e.g., No provision, Proportional to specific base, Downward from specified base, Upward from specified base. |
| **Contract Btu Basis** | Identifies the contract requirement that the British thermal unit (BTU) value of the gas be determined on a wet, dry or actual basis. |
| **Contract Btu Pressure Base** | The pressure specified in a gas contract for the determination of the British Thermal Unit (BTU) content of the gas. |
| **Contract Cancellation Advanced Days Count** | The number of days before a cancellation is effective. One or more parties to the contract may have the right to cancel the agreement before the end of the primary term by serving written notice to the other party(ies) under the cancellation provisions of the contract. The written notice requires a specified time before the intended effective date of cancellation. |
| **Contract Change Frequency Interval** | The time between price revisions. |
| **Contract Clause** | A set of text that describes a distinct section of a contract, usually addressing a separate subject. |
| **Contract Clause Set** | A set of clauses that may be applied in contracts. These sets may be prepared by a government, an association, or a company and accepted by industry. |
| **Contract Component Retention Percentage** | The percent of the component which the owner may acquire or retain under the contract. |

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| **Contract Compression Cost Flag** | An indicator of whether there are or are not provisions in the contract pertaining to compression costs which may qualify the properties under the contract for production related cost. |
| **Contract Conditioning Cost Flag** | An indicator of whether there are or are not provisions in the contract pertaining to conditioning costs which may qualify the properties under the contract for production related costs. |
| **Contract Counterpart Document Date** | The date on which the associated owner has signed a counterpart to the contract. There may be one or many counterparts to a contract. |
| **Contract Current Price Or Percentage** | The current contract price including all escalations or revisions that have occurred. This may represent a decimal rather than a price. The decimal is required by some contracts to calculate the contract minimum. |
| **Contract Date** | The date on which the parties to a contract acknowledge agreement has been reached. If no date is stipulated in the contract, the date of execution by the last party executing the contract will be used. This date usually appears on the first or second page of the contract. |
| **Contract Dedication Limit Flag** | An indicator of whether or not gas committed under a gas contract is limited by depth, volume, formation, or if there is no provision. |
| **Contract Dedication Type Code** | An indicator of the type of acreage or other dedication under a contract; i.e., Leases owned now and hereafte, Leases owned now, Processed gas from plant, Specified lease(s). |
| **Contract Delivery Cost Flag** | An indicator of whether there are or are not provisions in the contract pertaining to delivery costs which may qualify the properties under the contract for production related costs. |
| **Contract Delivery Date** | The date in the contract by which the company shall commence the actual taking of the gas under a gas purchase contract. |
| **Contract Depth Restriction** | Identifies any depth restriction that applies to the contracted acreage. |
| **Contract Designation** | The contractual right, title, share or role possessed or belonging to a business associate participating in a contract. |
| **Contract Expiration Date** | The date the primary term of a contract expires. |
| **Contract Extension Allowed Flag** | An indicator of whether or not the contract provides for extending the primary term other than through an Evergreen Clause. |
| **Contract First Delivery Date** | The date the product is first delivered under a contract. |
| **Contract Fuel Cost Flag** | An indicator of whether or not the contract specifies that cost is to include fuel for the rig. |
| **Contract Gas Adjustment Temperature** | The temperature which the contract requires for the gas volume to be adjusted. Normally measured in Fahrenheit degrees and defaults to 60 (standard), if not otherwise specified. |
| **Contract Lease Percentage** | The lease owners entitled share of production after processing. |
| **Contract Lower Btu Adjustment Gap** | If the actual British thermal unit (BTU) is greater than this limit and less than the contract upper BTU adjustment gap limit, then no BTU adjustment is made. |
| **Contract Maximum Btu** | This is the maximum British thermal unit (BTU) value permitted by contract as an adjustment to the calculation of gas values. If the actual BTU is greater than the maximum, then the maximum is used for BTU adjustments to gas values. |
| **Contract Maximum Delivery Pressure Measurement** | The maximum pressure at the delivery point as specified in the gas contract. |
| **Contract Maximum Quantity** | The maximum quantity of gas the seller is required to make available to the purchaser during a specified period under terms of a gas sales contract. |
| **Contract Minimum Btu** | This is the minimum British thermal unit (BTU) value permitted by contract as an adjustment to the calculation of gas values. If the actual BTU is less than the minimum, then the minimum is used for BTU adjustments to gas values. |
| **Contract Minimum Delivery Pressure Measurement** | The minimum pressure at the delivery point as specified in the gas contract. |

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| **Contract Minimum Maximum Flag** | An indicator of whether or not the content value may be adjusted to conform to contractual minimums and/or maximums. |
| **Contract Minimum Quantity** | The minimum quantity of gas the purchaser is required to take during a specified period under terms of a gas sales contract. |
| **Contract Mutual Interest Area** | Specified land area where two or more operators act independently, but all expenses and revenue for the specified land area are shared by the operators based upon a predetermined percentage split applicable to the contract. |
| **Contract Number** | The company assigned number to uniquely identify a contract. |
| **Contract Party Interest Type** | Designates the party's type of interest in a contract; e.g., owner; buyer; seller. |
| **Contract Party Name** | The name of a party to a contract as it appears on the contract and as it is updated with successors' names. |
| **Contract Percentage** | The initial decimal used to calculate a contract minimum price. |
| **Contract Pressure Base** | The absolute pressure per cubic foot specified for the determination of the number of mcf of gas measured by a certain meter to which the contract price is applicable. |
| **Contract Price** | The initial rate used to calculate a contract minimum price. |
| **Contract Price Basis** | Denotes the basis for determining the various oil and/or gas prices stipulated by contract. |
| **Contract Price Effective Date** | The date on which the current contract price or percent is effective. |
| **Contract Price Escalation Change Date** | The date on which the next price escalation or deescalation is due. |
| **Contract Price Escalation Rate** | The amount that the contract provides as an increase or decrease in contract price. |
| **Contract Price Escalation Start Date** | The month and day on which a contract price escalation cycle began. |
| **Contract Price Escalations Count** | The number of price escalations provided by the contract. |
| **Contract Pricing Code** | An indicator of the type of price the contract price represents; e.g., British thermal unit (BTU) delivery specifications, Contract percent minimum, Contract price minimum, Content price minimum. |
| **Contract Producer Percentage** | The percent of the allocable lease value (or price) for a product that is paid to the producer. This percentage is determined from contract provisions. |
| **Contract Product Percentage** | The contract percent used to adjust the total value for a product to arrive at the final settlement value. |
| **Contract Provision Action Date** | The date that a specific contract provision requires certain action to be taken. |
| **Contract Provision Action Notice** | The notice required prior to exercising an option or taking a certain action under a contract. |
| **Contract Provision Review Frequency** | This identifies how much time should elapse between reviews of contract provisions. |
| **Contract Provision Type Requiring Action** | Indicates the type of contract provision requiring action. |
| **Contract Quantity Adjustment Flag** | An indicator of whether or not the contract percent should be adjusted based on the quantity of gas produced for all leases under the contract. |
| **Contract Quantity Increment** | The percentage amount that the value is changed ( + or - ) due to a contract stipulation regarding volume of gas delivered for a contract. |
| **Contract Quantity Unit Of Measurement** | Identifies the units in which the contract quantity is to be measured. |
| **Contract Reference** | Catalog or cross reference table that identifies a specific contract as being referenced by another contract. For example, an instance of subcontract may refer to a head contract instance. |
| **Contract Release Reason** | Identifies why the preceding contract was terminated and gas was released to the new contract. |

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| **Contract Service Type** | Identifies the type of services to be performed by an outside vendor as specified by a contract. |
| **Contract Signatory Code** | An indicator of how each outside party has entered into the contract. Examples are: Executed/ratified, Successor party, Approved under unit operating agreement, No formal document, Acting agent, Prior party. |
| **Contract Special Negotiations Date** | The date on which a special negotiation provision of a contract is required or is open to action. |
| **Contract Special Negotiations Frequency** | Identifies how often a particular contract requirement should be reviewed. |
| **Contract Special Negotiations Notice** | Identifies the length of time a written notice is required to exercise certain options or contract requirements. |
| **Contract Special Negotiations Type** | Identifies the type of special negotiations required for a contract; e.g., redetermination; renegotiations. |
| **Contract Specific Gravity Test Interval** | The interval between specific gravity tests required by contract. |
| **Contract Status Code** | Indicates the status of each contract; e.g., Active Assigned (rights and obligation under contract transferred to another party.); Correction (information entered in error corrected.); Expired (the contract expired under its own terms.) Modified (information changed in accord with authorization.); Terminated (action was taken to terminate the contract.) |
| **Contract Status Date** | Date that the indicated status of the contract became effective. |
| **Contract Sulphur Test Frequency** | The interval between sulphur content tests required by contract. |
| **Contract Term** | The period of time that the provisions of the contract are legally binding to the contract parties, which may be represented by the productive life of the lease(s) under the contract. |
| **Contract Term Period Code** | An indicator of the span of time in which the contract term is expressed; e.g., months, years, life of lease. |
| **Contract Termination Date** | The contract may specify an exact date on which either party may cancel the contract or the termination date may be indefinite if the agreement remains in effect for the production life of the lease(s) under the contract. |
| **Contract Treatment Cost Flag** | An indicator of whether or not there are provisions in the contract pertaining to treating costs which may qualify the properties under the contract for production related costs. |
| **Contract Type Code** | Identifies the nature of each of the many types of contracts that are negotiated; e.g., Operating agreement; Gas sales; Farm in/out (with operating agreement); CO2 contract; Working interest area. |
| **Contract Upper Btu Adjustment Gap** | If the actual British thermal unit (BTU) is less than this limit and greater than the Contract Lower BTU Adjustment Gap limit, then no BTU adjustment is made. |
| **Contract Verification Date** | The date on which the pricing codes associated with this contract were verified for correctness. |
| **Contract Verification Flag** | An indicator of whether or not the pricing codes contained on this contract have been reviewed and are correct. |
| **Contract Verifier Name** | The name of the person verifying the contract pricing codes for this contract. |
| **Contract Volume** | Quantity of gas based on measurement conditions and procedures specified in a gas sales contract. |
| **Contract Volume Description** | Text briefly describing the quantity of gas to be purchased or sold or how such quantity shall be determined by contract provisions. |
| **Contract Volume Limit** | The volume used as a limit to determine if a quantity adjustment should be made to the contract. |
| **Contract Well Cost** | The agreed upon cost for drilling the well, or portion thereof, based upon the specific type of contract awarded. |
| **Contracted Sweep** | A contraction of the horizontal sweep on the viewing screen of the ultrasonic instrument. Contraction of this sweep permits viewing reflections occurring over a greater depth of material or duration of time. |

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| **Contractor** | (1) Any outside individual, company, firm, agency, etc. which provides goods and/or service as specified within a contract; e.g., drilling a well.(2) Any person or company who contracts all or part of oil and gas well drilling or servicing. |
| **Contribution** | Contributions, generally referred to as dry hole or bottomhole contributions, are amounts paid and/or interests in acreage assigned to promote the drilling of wells on acreage in which the contributor does not own a working interest or does not, by reason of the contribution, acquire a working interest in the test well tract. A contribution is for the acquisition of geological information only. Some deals may comprise both a contribution and the acquisition or retention of an interest in acreage. In such |
| **Contribution Well** | SEE: Farm-Out Well. |
| **Control Cylinder** | Hypothetical limits in the form of a cylinder around the planned trajectory of the wellbore and within which the wellbore path is to be maintained. |
| **Control Echo** | In ultrasonic testing, the reference signal from a constant reflecting surface, such as a back reflection. |
| **Control Feature** | A documented activity to ensure conformance with specific requirements of applicable specifications. |
| **Control Head** | A heavy fitting that screws on the innermost casing top of a well. |
| **Control Line** | An individual conduit utilized to transmit control signals to the Surface Controlled Subsurface Safety Valve (SCSSV). |
| **Control Manifold** | The system of valves and piping to control the flow of hydraulic fluid to operate the various components of the blowout preventer stack. |
| **Control Panel** | Switches and devices to start, stop, measure, monitor or signal what is taking place. |
| **Control Pod** | An assembly of subsea valves and regulators which when activated from the surface will direct hydraulic fluid through special apertures to operate blowout preventer equipment. |
| **Control Valve** | An automatically actuated valve for controlling flow, in reponse to an impulse from an instrument which measures the flow, or some function affected by it; e.g., pressure. |
| **Control Well** | A wellbore segment drilled to intercept a wellbore that has blown out or is out of control. |
| **Controllable Material** | (1) Material which is ordinarily so classified and controlled by the operator in the conduct of the operations of the property and as agreed to by the parties to the agreement.(2) COPAS: Material which at the time is so classified in the Material Classification Manual as most recently recommended by the Council of Petroleum Accountants Societies of North America or in the Controllable Material Price Catalogue as most recently recommended by the Petroleum Accountants Society of Canada. |
| **Controlled Aggregation** | A condition in which the clay platelets are maintained stacked by a polyvalent cation, such as calcium, and are deflocculated by use of a thinner. |
| **Controlled Area** | A defined area that requires control of access, occupancy, and working conditions for protection purposes. |
| **Controlled Directional Drilling** | SEE: Directional Drilling. |
| **Controlled Directional Well** | SEE: Directional Well. |
| **Conventional Core Sample Taken Flag** | An indicator of whether a conventionalcore sample was taken. |
| **Conventional Operation** | A well activitiy conducted using a rig equipped with fluid pumps, rotary table, and other equipment designed to perform well workovers, recompletions, and other work which requires removal of the Christmas tree and pulling or manipulation of the tubing. |
| **Conversion** | SEE: Well Conversion. |
| **Conversion Clause** | A clause in an assignment or other instrument providing for the conversion, either automatically or at the option of one of the parties, of one interest granted or reserved into another interest; i.e., conversion of an overriding royalty or net profits interest into a share of the working interest. |

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| **Convertible Interest** | An interest which is convertible into an interest of another type. By the terms of the instrument creating an overriding royalty; i.e., it may be provided that at the owner's option the interest may be converted after the completion of a well to a share of the working interest. |
| **Convertible Working Interest** | The working interest the company can obtain under the contract terms involving a given exploratory well. |
| **Conveying Speed** | On a decanting centrifuge, the difference in speeds between the outer bowl and the screw conveyor in rpm. |
| **Conveyor** | A mechanical device for moving material from one place to another. |
| **Cooler** | (1) A refrigerated water bath used to cool pressure charged gas lift valves to 60 degrees F prior to setting them. (2) A heat exchanger using air or water to cool a vapor or liquid. |
| **Cooling Tower** | An open-air heat exchanger which uses air-cooled recirculating water with the purpose of cooling a hot process fluid. |
| **Cooling Tower Basin** | The lower section of a cooling tower which stores water after it has gone through the cooling process, and prior to recirculation. |
| **Coordinate Transformation** | A method and set of parameter values used to convert from one coordinate system to another coordinate system. |
| **Copas** | Council of Petroleum Accounting Societies. Studies petroleum accounting issues, particularly those where joint operations are involved, and periodically issues guidelines (bulletins) on those issues. |
| **Copas Accounting Year** | One of the exhibits attached to the operating agreement on a property is the accounting procedure. Normally, all new agreements have some type of accounting procedure that was developed by Council of Petroleum Accounting Societies (COPAS). The COPAS accounting year indicates that a COPAS accounting procedure exists, and the year of the procedure. |
| **Copolymer** | A substance formed when two or more substances polymerize at the same time to yield a product which is not a mixture of separate polymers but a complex having properties different from either polymer alone; e.g., polyvinyl acetatemaleic anhydride copolymer (clay extender and selective flocculant); acrylamide-carboxylic acid copolymer (total flocculant). |
| **Copper Free Aluminum** | Aluminum alloys containing 0.4% or less copper. Also referred to as: Low Copper Content Aluminum. |
| **Copper Treater** | A vessel in which residual mercaptans are chemically converted to less objectionable disulfides by reaction to air or oxygen in contact with a copper chloride catalyst. |
| **Core** | A rock sample extracted from the borehole by various coring methods. |
| **Core Analysis** | Laboratory work performed on core samples to determine the physical characteristics and/or fluid content of the samples. |
| **Core Analysis Date** | The date that the core sample was analyzed. |
| **Core Analysis Interval** | The depth interval for which core analysis is performed. |
| **Core Analysis Type** | The type of analysis performed on the core sample; e.g., Boyles law; summation of fluids; grain density; resaturation; Washburn-Bunting. |
| **Core Analyzed Type** | The type of core that was analyzed; e.g., washed cuttings; conventional core; diamond core; plug. |
| **Core Barrel** | A device used in rotary drilling to cut cores. The core barrel, varying in length, is run at the bottom of the drill pipe or in conjunction with a special type of bit. |
| **Core Bit** | An item of equipment which is designed to drill a hole of a given diameter while leaving a smaller central column intact. Typically this central column slides into a specifically designed barrel and is retrieved for analysis. |
| **Core Bit Head** | The bit attached to the bottom of a core barrel for the purpose of obtaining formation samples. |
| **Core (conventional)** | SEE: Conventional Core. |

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| **Core Date** | Date on which the core was recovered. |
| **Core Diameter** | The diameter of the recovered core. |
| **Core Extraction Method Type** | The extraction method used in analyzing the core; e.g., Dean Stark; gas driven solvent; retort. |
| **Core Flow Efficiency** | Core flow efficiency is the ratio of the experimental permeability ratio to the theoretical permeability ratio, (kp/ko)/(ki/ko), for the same total core penetration. |
| **Core Gamma Log** | A gamma ray log which is run directly on the core and not in the borehole. |
| **Core Graph** | Results of core analysis illustrated or graphed in the form of a log. |
| **Core Interval Base Depth** | The base depth of the interval of the coring activity. |
| **Core Interval Length** | The length of the wellbore interval cored. |
| **Core Interval Top Depth** | The top depth of the interval of the coring activity. |
| **Core Oil Saturation Percentage** | The weighted saturation of oil in the core sample, expressed as a percentage or fraction. |
| **Core Oriented** | A core sample whose position, including compass orientation, in the reservoir has been measured and recorded. |
| **Core Permeability Value** | The laboratory value of the permeability of the core analyzed. |
| **Core Plug Length** | The length of the core plug; a sample removed from the total core length. |
| **Core Plug Orientation** | Plug orientation when bored from core; e.g., horizontal; vertical; 90 degrees to horizontal. |
| **Core Porosity Analyzed Length** | The total length of the cored interval analyzed for porosity. |
| **Core Porosity Type** | The porosity of the core analyzed; e.g., intergranular; sucrosic; cavernous. |
| **Core Recovery Length** | Amount of core recovered from a conventionally cored interval. |
| **Core Recovery Mechanism Type** | The type of core recovery mechanism used to recover the core; e.g., rubber sleeve; fiberglass barrel; sponge. |
| **Core Run Identifier** | An identifying number, unique within a wellbore path, assigned to each core run. This number is assigned only to conventional cores and not to sidewall cores. |
| **Core Sample** | Cylindrical sections of rock cut by the drill bit and removed from the wellbore for study. |
| **Core Sample Drill** | SEE: Core Barrel. |
| **Core Sample Type** | The sample type of core or sample taken from the interval. |
| **Core Show Length** | The length of cored interval that exhibits the indicated quality and type of show. |
| **Core Show Type** | The type of show indicated in the cored interval. |
| **Core (sidewall)** | SEE: Sidewall Core. |
| **Core Slab** | A lengthwise slice of the core. |
| **Core Type** | The type core recovered from the borehole. |
| **Core Water Saturation Percentage** | The weighted saturation of water in the core sample. |
| **Coring** | The well activity of extracting a core. |
| **Coring Fluid Type** | The type of fluid that was in the borehole at the time the coring operation. |

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| **Coring Report Remark** | Text indicating significant information about the conduct on the coring operation. This field can also be used to note the existance and location of any rig site geologic interpretation, including visual inspections, core descriptions, etc. |
| **Corner Effect** | The reflection of a sound beam directed normal to the intersection of two perpendicular planes. |
| **Corporation Flag** | An indicator of whether or not a business associate subject to Federal excise tax on crude oil is classified as a corporation on IRS Form 6248. |
| **Correction** | A quantity that is applied to a measured quantity to account for known effects. It is used to reduce a measurement to some arbitrary standard. |
| **Corrective Jetting Run** | Action taken with a directional jet bit to change the direction or inclination of the wellbore axis. |
| **Correlation** | The matching over horizontal distance (from well to well), of zones or intervals over which the same geological or other events are interpreted as having occurred. |
| **Correlation Length** | The length of zone or interval over which a depth-related correlation is made in order to determine the depth wise displacement between log curves on which the same geological events have been interpreted. |
| **Corrosion** | The adverse chemical alteration on a metal or the eating away of the metal by air, moisture, or chemicals. Usually an oxide is formed. |
| **Corrosion Agent** | Any substance causing corrosion. |
| **Corrosion Bomb** | A pressure test cylinder containing a polished copper strip used to detect the presence of hydrogen sulfide and other corrosive compounds in LPG. Discoloration of the copper strip when the cylinder is filled with LPG and held at 122 degrees Fahrenheit for one hour indicates the presence of a corrosive material. |
| **Corrosion Erosion** | The phenomenon of a protective film of corrosion product being eroded away by the erosive action of the process stream, exposing fresh metal which then corrodes. Extremely high metal weight loss may occur under these conditions. |
| **Corrosion Fatigue Failure** | Failure of a metal exposed to repeated loading in corrosive service. |
| **Corrosion Inhibitor** | Any agent which, when added to a system, slows down or prevents a chemical reaction or corrosion. Corrosion inhibitors are used widely in drilling and producing operations to prevent corrosion of metal equipment exposed to hydrogen sulfide, carbon dioxide, oxygen, salt water, etc. Common inhibitors added to drilling fluids are filming amines, chromates, and lime. |
| **Corrosion Product** | The material which results from a metal combining with its corrosive environment. |
| **Corrosion Resistant Ring Groove** | A ring groove lined with metal resistant to metal loss corrosion. |
| **Corrosive Gas** | A gas which when dissolved in water or other liquid causes metal corrosion. Usually included are hydrogen sulfide (H2S), carbon dioxide (CO2) and oxygen (O2). |
| **Corrosive Hydrocarbon Service** | Process streams which contain water or brine and carbon dioxide (CO2), hydrogen sulfide (H2S), oxygen (O2) or other corrosive agents under conditions which cause metal weight loss. |
| **Corrugated Plate Interceptor Unit** | Nonpressure separation process which uses a series of corrugated plates to remove oil from water. |
| **Cost Code** | Identifies costs detail; e.g., drilling/dry hole, completion, total. |
| **Cost Depletion** | In federal income taxation, the method of figuring the depletion allowance in relation to the taxpayer's investment. |
| **Counterbalance** | A weight attached to a crank, pulley rim, walking beam or other moving part of a pumping unit providing for even distribution of loads and for the reduction of peak torque during the up and down stroke. |
| **Countershaft** | The main shaft of a gear box. |
| **Counterweight** | Weight used to supplement the weight of the machine in providing stability for lifting working loads and usually attached to rear of revolving upperstructure. Also referred to as: Ballast. |

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| **Country** | Major political division of the topography, biology, or culture of an area. |
| **Country Abbreviation** | The abbreviation for a country. |
| **Country Code** | An indicator to identify sovereign nations, colonies, areas independent in terms of internal affairs but under the protection of another country, overseas territories, and dependencies of other countries. |
| **Country Name** | A name that identifies a country. |
| **Country Subdivision** | A territory governed as an administrative or political unit of a country; e.g., state; province. |
| **County Name** | The name of the county or parish, within a state. |
| **County Name Abbreviation** | Abbreviated name of a county or parish. |
| **Couplant** | A material (usually a liquid) used between ultrasonic transducer and the test specimen to conduct ultrasonic energy between them. |
| **Coupling** | A mechanical means for joining two sections of riser pipe in end to end engagement. |
| **Coupling Mill End** | The end of the pipe to which the coupling is applied at the mill. Also referred to as: The box end of integral joint pipe. |
| **Coupling Outside Diameter Value** | The outside diameter of the given coupling type. |
| **Coupling Preload** | Compressive bearing load developed between pin and box members at their interface. This is accomplished by elastic deformation during makeup of the coupling. |
| **Coupling Strength Value** | The pressure required to yield the given coupling type. |
| **Coupon** | Small metal strips which are exposed to corrosive systems for the purpose of determining nature and severity of corrosion. |
| **Course Displacement Value** | The course length multiplied by the displacement. |
| **Course Length** | The measured length between survey points. |
| **Coutler Counter** | An electronic device used in measuring the finer sizes of clastic sedimentary particles; e.g., silt; clay. |
| **Coverage** | SEE: Nominal Fold. |
| **Cpa** | SEE: Canadian Petroleum Association. |
| **Cpi Unit** | SEE: Corrugated Plate Interceptor Unit. |
| **Cpr** | SEE: Cardiopulmonary Resuscitation. |
| **Crack** | (1) A stress induced separation of the metal which, without any other influence, is insufficient in extent to cause complete rupture of the material.(2) A planar discontinuity formed by separation of previously continous material. |
| **Cracker** | Bottomhole assembly in which single joints of drill string can be run between drill collars to produce a limber assembly. |
| **Cracking** | A conversion process that breaks big molecules into smaller ones by using heat, pressure and catalysts. Lighter oils can be made from the heavier products of the distillation process. Two types of cracking processes are thermal cracking and catalytic cracking. |
| **Crater** | A large sink hole or cavity around a wellbore origin. Sometimes accompanies a violent blowout during which the surface surrounding the wellbore origin drops. |
| **Crawler** | SEE: Pig. |
| **Creaming Of Emulsion** | The settling or rising of the particles of the dispersed phase of an emulsion as observed by a difference in color shading of the layers formed. This can be either upward or downward creaming, depending upon the relative densities of the continuous and dispersed phases. |

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| **Created Fracture** | An induced fracture by means of hydraulic or mechanical pressure exerted on the formation. |
| **Credit Reference Number** | The number assigned to a credit. |
| **Credit Taken Amount** | The amount of credit applied to reported amounts. |
| **Creep** | (1) Time dependent increase in strain during a state of constant stress.(2) The gradual deformation of metals or plastics under loads applied for a long time. |
| **Crest** | (1) The highest point of a given stratum in any vertical section of a fold.(2) The top of a thread. |
| **Crest Clearance** | The distance between the crest and root of mating threads. |
| **Crest Truncation** | The distance between the sharp crest (crest apex) and the finished crest. |
| **Cricondenbar** | The maximum pressure at which a vapor phase can exist in a multi-phase fluid system. |
| **Cricondentherm** | The maximum temperature at which a liquid phase can exist in a multi-phase fluid system. |
| **Crippled Bit** | By removing one cone, a drilling bit is crippled and made to act erratically. Such bits have been used for deviation drilling. |
| **Critical Angle** | The smallest angle of incidence in which a sonic, electromagnetic, or optic wave that strikes an interface will be totally reflected. |
| **Critical Flaw** | A defect which is capable of causing a failure. |
| **Critical Flow** | The rate at which the velocity through an orifice or small opening has reached it's maximum, and remains a constant. The rate of flow is directly proportional to upstream pressure, and changes only with upstream pressure. Downstream pressure has no effect on flow rate when critical flow velocity is obtained. |
| **Critical Flow Prover** | A steel tube 12" long with provisions for installing an orifice plate at one end. Two sizes are available, either 2" or 4" internal diameter. Two connections are provided on tube one for a thermometer bulb and the other for connecting a pressure recording meter. |
| **Critical Gas Saturation** | The lowest gas saturation in the reservoir rock at which gas will flow. When the gas saturation is less than the critical value, the permeability to gas is zero. |
| **Critical Pressure Measurement** | The pressure at which a vapor turns to a liquid at the critcal temperature. |
| **Critical Saturation** | The saturation of a fluid phase that must be exceeded for that phase to become mobile. |
| **Critical Temperature** | The temperature above which a particular substance exists only as a gas no matter what the pressure. |
| **Critical Velocity** | That velocity at the transitional point between laminar and turbulent types of fluid flow. This point occurs in the transitional range of Reynolds numbers of approximately 2,000 to 3,000. |
| **Critical Volume** | The inverse of density at the critical point of a fluid, describing the volume occupied by a fluid of unit mass. |
| **Critical Z-factor** | The real gas deviation factor at the critical point. |
| **Crooked Hole** | SEE: Crooked Wellbore. |
| **Crooked Hole Area** | An area where the drilling tends to produce wells with crooked wellbores. |
| **Crooked Hole Tendency** | A characteristic of the rocks, bottomhole assembly, or drilling practices to cause a crooked wellbore to be drilled. |
| **Crooked Wellbore** | A wellbore path that has numerous unintentional deviations from the vertical. |
| **Cross** | A pressure containing fitting with a minimum of four openings. Usually all four openings are at 90 degrees to one another. Crosses may be threaded or flanged. |
| **Cross Assignment** | When several producers, either voluntarily or by state regulation, pool acreages to form a unit. They may cross-assign their leases to one another, creating a common obligation to each royalty owner. |

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| **Cross Head** | In an integral reciprocating compressor, the connecting piece which transposes oscillating motion of the connecting rod into horizontal motion of the compressor piston rod. |
| **Cross Talk** | An unwanted condition in which acoustic energy is coupled from the transmitting crystal to the receiving crystal without propagating along the intended path through the material. |
| **Cross Threaded** | Male and female threads do not match. |
| **Crosscorrelation** | A statistical process in which the similarity of the two waveforms from a seismic source is calculated as a function of the time shift or lag between the waveforms. |
| **Crossline** | The direction orthogonal to the inline direction. |
| **Crossline Traverse** | A collection of seismic traces from a 3D survey in which the bin node inline index remains constant. |
| **Crossover Flange** | A double or single studded adapter flange with a restricted area sealing means and with a top connection pressure rating above that of the lower connection. |
| **Crossover Point** | In multiple layer spooling of rope on a drum, the point of rope contact where the rope crosses the preceding rope layer. |
| **Crossover Seat** | A special seat for a gas lift valve which directs the pressure applied at the nose of the gas lift valve to the bellows and the pressure applied to the holes in the side of the valve to the underside of the seat. It is used most often in fluid operated valves. |
| **Crossover Spool** | Flanged equipment with a restricted area sealing means, at or near the face of its lower flange. Crossover spools are also provided with suitable means to suspend and seal around an inner string of casing or tubing. A crossover spool has a top connection with a pressure rating above that of the lower connection. |
| **Crossplot** | A plot of one parameter versus another. |
| **Crowd The Bit** | Term used to indicate that more weight is applied to the bit than needed for efficient drilling. A crowded bit will usually increase the inclination or cause an azimuth change. |
| **Crown** | The curvature of the screen deck or the difference in elevation between the high and low points. |
| **Crown Block** | Sheaves (pulley wheels) and supporting beams on top of a derrick. |
| **Crown Valve** | The uppermost valve on the vertical bore of the christmas tree above the flowline outlet. |
| **Crude Oil** | A mixture of varying proportions of hydrocarbons, natural gas, and entrained sediments and water. Crude oil exists in the liquid phase in natural underground reservoirs and remains a liquid at atmospheric pressure and 60 degrees Fahrenheit. |
| **Crude Oil Characterization Factor** | The characterization factor developed by United States Bureau of Mines (USBM) for crude oils, defined as the cube root of the molal average boiling point (degrees Rankine) divided by the specific gravity at 60 degrees Fahrenheit. |
| **Crude Oil Posting Amount** | The maximum price payable based on crude oil postings. (Flat rate contracts only). |
| **Crusher** | Equipment used to break, pound, or grind larger objects into smaller fragments. |
| **Cryogenics** | Technique utilizing extremely low temperatures to produce natural gas liquids from a raw gas stream. |
| **Crystal** | (1) A piezoelectric element in a probe or search unit.(2) (Mineralogical) A homogeneous, solid body of a chemical element, compound or isomorphous mixture, having a regularly repeating atomic structure that may be externally apparent as plane faces. |
| **Cumulative Displacement Value** | The sum of the displacement through the current reading. |
| **Cumulative Fatigue Damage** | The total of fatigue damage caused by repeated cyclic stresses. |
| **Cumulative Gas Production Volume** | The total amount of gas produced from the property/well/ reservoir from the beginning of production through a specific production date or until abandonment. |

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| **Cumulative Oil Production Volume** | The total amount of oil or condensate produced from the reservoir within the well from the beginning of production through the specified production date or until the reservoir was abandoned. |
| **Cumulative Water Production Volume** | The total amount of water produced from the property/well/ reservoir from the beginning of production through a specified production date or until abandonment. |
| **Cupronickel** | An alloy of copper (70 percent or over) and nickel. |
| **Curing** | Aging of cement specimens under specified conditions. |
| **Curing Atmospheric Pressure** | The aging of cement specimens for test purposes at normal atmospheric pressure of 14.7 psi (1 kg/cm2) at sea level and temperature below about 200 F (93.3 C), for a designated period of time under certain given conditions of temperature and humidity. Also referred to as: Curing Pressure. |
| **Current Authorization Cost** | Cost associated with this appropriation/AFE number. |
| **Current Overpayment Gross Amount** | The balance of the gross value for an accounting lease associated with an overpayment that has not yet been recovered. |
| **Current Reservoir Depth** | Measured depth of present reservoir. |
| **Current Reservoir Name** | The name of the present reservoir to which the well is completed. |
| **Current Tax Due Amount** | The tax calculated and due in the current reporting period. |
| **Current Value Balance Amount** | The total accumulated value tracked against a bonus, advanced rental, or overpayment. |
| **Current Well Activity Date** | The start date of the current well site activity. |
| **Current Well Activity Type** | The current activity for the well. Reports of activities are accompanied by a start date, which defines when the well began the activity. |
| **Curvature In The Horizontal Plane** | Projection of the curvature of the wellbore onto a horizontal plane. |
| **Curvature In The Vertical Plane** | Projection of the curvature of the wellbore onto a vertical plane. |
| **Cushion** | Water, drilling fluid, or nonflammable gas placed inside of the drill pipe or tubing to control both annular and formation pressure. |
| **Cushion Fluid Type** | The type of cushion fluid; e.g., water; drilling fluid; gas. |
| **Cushion Gas Pressure Measurement** | Gas pressure equal to a liquid height to maintain pressure on the formation being tested. |
| **Cushion Volume** | The quantity of water, drilling fluid or gas placed inside of the drillpipe or tubing to control both annular and formation pressure. Usually the vertical height of the cushion. |
| **Customer Number** | The number assigned by the reporting party to the particular entry required by the regulatory agency, and used primarily to assist the reporting party in relating their database to regulatory agencies. |
| **Cut** | (1) A narrow boiling range mixture separated from a wider boiling range mixture.(2) A petroleum fraction; a product; e.g., gasoline or naphtha distilled from crude oil.(3) Crude oil contaminated with water so as to make an oil water emulsion.(4) A gouge or distortion in two or more thread crests in a line either parallel to the pipe or at an angle across the threads.(5) The effectiveness of a liquid solids separation device expressed as the particle size that is removed from the feed stream at a |
| **Cut Oil** | Oil that contains water, usually in the form of an emulsion. |
| **Cutting** | A small piece of rock that results from the chipping and/or crushing action of the drill bit during drilling. |
| **Cuttings Type** | Type of cutting from the wellbore. |
| **Cycling** | SEE: Gas Cycling. |
| **Cyclone** | A device for the separation of various particles from a drilling fluid, most commonly used as a desander. The fluid is pumped tangentially into a cone, and the fluid rotation provides enough centrifugal force to separate particles by mass weight. |

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| **Cylinder** | (1) A device which converts fluid power into linear mechanical force and motion.(2) A chamber in a compressor, engine, or pump from which the piston expels fluids, gas, or air. |
| **Cylinder Drilling** | Refers to drilling in which the course of the wellbore path is held within previously determined limits set by the circumference of an imaginary cylinders extending from the surface location to the target. |
| **Cylindrical Plot** | A graphic presentation of the stratigraphic boundaries intersecting the borehole. The beds are usually plotted on a clear plastic sheet, which is rolled up to simulate the borehole and the patterns an observer might see. |
| **D** | |
| **D** | The symbol (d) refers to the nominal internal diameter of a conduit. |
| **D & P Platform** | A drilling and production platform. |
| **Daily Condensate Volume** | The volume of gas well condensate produced in a 24 hour period. |
| **Daily Drilling Progress Length** | The footage drilled since the last daily report. |
| **Daily Gas Production Average Volume** | The average daily gas production volume the well and or reservoir produced. |
| **Daily Gas Volume** | The quantity of gas which the property/well/reservoir produced or injected in a 24 hour period. |
| **Daily Oil Volume** | The volume of oil produced from a property,well, or reservoir during a 24 hour period. |
| **Daily Production Volume** | The quantity of a product produced during a 24 hour period. |
| **Daily Water Production Volume** | The quantity of water produced from a property/well/reservoir during a 24-hour period. |
| **Damage Cost** | Costs associated with property refurbishment as a result of this project. |
| **Dampener** | A device used to reduce surge; i.e., a chamber used to reduce liquid surge from a pump. |
| **Damping** | A slowing down or opposition to oscillation due to dissipation of the oscillation energy. For underdamped systems (most geophones) the quotient of the logarithm of the ratio of two successive oscillations is the damping factor. |
| **Damping Transducer** | A device that limits the duration of vibration in the search unit by either electrical or mechanical means. |
| **Damping, Ultrasonic** | Decrease or decay of ultrasonic wave amplitude with resspect to time. |
| **Darcy's Law** | The rate of flow of a homogeneous fluid through a porous medium is proportional to the pressure or hydraulic gradient and to the cross sectional area normal to the direction of flow and inversely proportional to the viscosity of the fluid. |
| **Darcys Law** | The rate of flow of a homogeneous fluid through a porous medium is proportional to the pressure or hydraulic gradient and to the cross sectional area normal to the direction of flow and inversely proportional to the viscosity of the fluid. |
| **Data Accepted Code** | An indicator of whether data has been received, processed and accepted by the agency. |
| **Data Source** | A company, company suborganization, vendor, individual, state or government agency designated as the source of information. |
| **Dataset** | A general term for any set of data. |
| **Date Of First Delivery** | SEE: First Delivery Date. |
| **Date Of Manufacture** | The date of manufacturer's final acceptance of finished equipment. |
| **Datetime** | Any of year, month, day, hours, minutes, seconds to an appropriate accuracy. |

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| **Datum** | (1) General: A Reference value used as a basis for calculating or measuring.(2) Seismic Processing: An arbitrary reference surface or location. Reduction to this surface minimizes local topographic and near surface effects. |
| **Datum Horizon** | A horizon used as a reference for elevations. For most topographic work, the datum plane is mean sea level. In structural mapping, the bed or horizon to which all elevations are finally reduced to called datum horizon, key bed, or marker. For bottomhole pressure mapping, the datum is usually selected at the approximate mid-elevation of the reservoir referred to sea level. |
| **Datum Statics** | SEE: Seismic Datum Shift. |
| **Days For Billing To Be Paid Count** | Provisions in the operating agreement state that all joint interest billings are due to be paid within a given number of days from the date that the billing is received by the nonoperator. |
| **Days Late Count** | The total number of days the interest and or penalty is calculated. |
| **Days On Injection Count** | The number of days the particular injectant was injected into the wellbore during the month. |
| **Days On Production Count** | The number of producing days the well/reservoir produced or injected for the month. A producing day is the amount of uptime, to the nearest hour, in a day. Producing days are used in the allocation process. |
| **Days Operated Count** | The total number of days a well produced or injected during the month. An operating day is a day in which a minimum of 10 minutes of operation occurred. Operational days are reported to state and Federal regulatory agencies. |
| **Days Shut-in Count** | The number of days during the year that a well was curtailed due to mechanical failure or disruption. |
| **Dc Field** | This is either a residual magnetic field or an active magnetic field produced through the use of direct current (DC). |
| **Dead Oil** | Crude oil containing essentially no dissolved gas when it is produced. |
| **Dead Well** | A well which has ceased to produce, either temporarily or permanently. |
| **Dead Zone ( Ultrasonic)** | SEE: Ultrasonic Dead Zone. |
| **Deadline** | The end of the drilling line which is not reeled onto the hoisting drum of the rotary rig. This end of the drilling line is anchored (usually to the derrick substructure) and does not move as the traveling block is hoisted, hence the term deadline. |
| **Deadman** | A timber, concrete block, metal block or pipe buried in the earth to which a line may be attached, thus serving as an anchor. |
| **Decanting Centrifuge** | A continuously conveying centrifuge which removes solids drained of their free liquid. |
| **Decimal Interest Number** | A fraction of the total ownership applicable to one owner. Ownership relates to an entity that has been identified; e.g., property; lease. 100% would be shown as 1.0000000 and 50% would appear as 0.50000000. |
| **Deck** | The upper sections of a platform above the waterline on which equipment is placed. |
| **Deck Area (cantilever)** | That portion of the main deck, cellar deck or sub cellar deck area outside the boundary line of perimeter deck columns. |
| **Deck Area (central)** | That portion of the main deck, cellar deck or sub cellar deck within the boundary line of perimeter deck columns. |
| **Deck Area (rig)** | That area of the deck necessary for support of drilling or workover operations. |
| **Deck Beam** | Secondary structural elements spanning between intermediate girders and/or main girders. |
| **Deck Plate** | Flat plate or grating spanning between deck beams. |
| **Deck Screen** | A vibrating screen component consisting of a support frame, screening surface, and accessories. Used to classify materials. |

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| **Declination** | SEE: Magnetic Declination. |
| **Decline** | The decrease in yield of oil or gas from a well, well completion; lease, reservoir or field. The first yield is called the flush production. For a while, the decline may be rapid, becoming more steady until settled production is reached. Decline curves in which yield is plotted against time show graphically the change in rate of production. |
| **Decline Curve** | Plotted points of production volume vs. time on either Cartesian coordinates or on semi-log graph used to estimate future recoverable reserves, to study reservoirs, and to study the rate of production decline for wells. |
| **Decontaminant** | Material added to cements or cement slurries for the specific purpose of counteracting the effects of contamination. |
| **Dedendum** | The distance between the pitch line and root of thread. |
| **Deducted Volume** | The volume of product deducted before calculation of tax liability. |
| **Deep Plate Girder** | Deep plate girder with the web stiffened in both the longitudinal and transverse directions. |
| **Deep Propagation Log** | A well log that provides the resistivity and dielectric constant of the formation by measuring the attenuation and velocity of an electromagnetic wave traveling in the formation. |
| **Deepest Tool When Pipe Stuck Depth** | The measured depth to the deepest tool when the pipe became stuck. |
| **Deethanizer** | Equipment used to remove ethane and lighter components from a hydrocarbon stream. |
| **Defect** | An imperfection whose size, shape, orientation, location or properties make it detrimental to the useful service of the pipe or exceed the accept/reject level of the applicable specification. |
| **Defect Reflection** | The oscilloscope presentation of the energy returned by a rejectable flaw in the material. |
| **Deferred Bonus Amount** | A mineral owner's bonus, the payment of which is made 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. |
| **Deferred Bonus Flag** | An indication of whether or not a bonus is still due to a mineral owner. |
| **Deferred Production Agreement** | An agreement between working interest owners of a lease under which an owner's share of the gas reserves under the lease is considered to remain in the reservoir while other owners' share of the gas is being produced. |
| **Deferred Production Payment** | A production payment which does not commence until after the operator has realized a specific sum from production on the lease or after a primary production payment. |
| **Deferred Tax** | A result of time differences between recognition of tax liability and actual payment. Occurs when taxable income differs from financial book income, often because of different depreciation and amortization methods employed for tax and financial books. |
| **Deficiency Gas Volume** | The difference between the quantity of gas a purchaser is obligated by a gas sales contract to either take or to pay for if not taken, and the quantity of gas actually taken. |
| **Deficiency Payment** | The amount paid by the purchaser for the quantity of Deficiency Gas as required by a gas sales contract. |
| **Deflected Hole** | SEE: Deflected Wellbore. |
| **Deflected Wellbore** | A wellbore that has been intentionally deviated. |
| **Deflocculation** | Breakup of floes of gel structures by use of a thinner. |
| **Defoamer** | Any substance used to reduce or eliminate foam by reducing the surface tension. Also referred to as: Defoaming Agent. |
| **Deformed Ice** | The antithesis of smooth ice. |
| **Degasser** | Equipment used to remove undesired gas from a liquid, especially from drilling fluid. |

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| **Degrees Api** | An arbitrary scale for expressing the gravity of hydrocarbon liquids. Degrees API = (141.5/specific gravity) - 131.5. |
| **Dehydration** | Removal of water and water vapor by any means from a gas, liquid, or solid; i.e., loss of water by filtration of cement slurries during or after displacement. |
| **Dehydration Deduction Value** | The value used to adjust the base residue rate for dehydration in a gas system. |
| **Dehydration Unit Cost** | Includes costs for all equipment such as meters, heaters, exchangers, and vessels used primarily for the dehydration and treating of LPG stored underground. |
| **Dehydrator** | A piece of production equipment utilizing glycol in a process to remove water vapor from natural gas. |
| **Dehydrator Count** | The number (count) of dehydrators on a facility. |
| **Delay Rental Amount** | A sum of money payable to the lessor by the lessee for the privilege of deferring the commencment of drilling operations or the commencement of production during the primary term of the lease. |
| **Delayed Sweep** | A means of delaying the start of horizontal sweep, thereby eliminating the presentation of early response data. |
| **Deleted Bit** | SEE: Crippled Bit. |
| **Deliquescence** | The liquefaction of a solid substance due to the solution of the solid by adsorption of moisture from the air; e.g., calcium chloride. |
| **Deliverability Capacity** | The maximum amount of gas a producer can deliver to the purchaser at a specified delivery point. |
| **Deliverability Test Period** | A specified period of time, agreed to by the producer and purchaser, to flow the well completions covered under the gas sales contract at their maximum rate in order to establish the producer's true delivery capacity. |
| **Delivered Production Volume** | The volume of production reported as being delivered or transferred: (1) If allocated by meter measurements, this is the actual meter readings. (2) If allocated by well tests, this is the production calculated from the well test data. |
| **Delivery In Kind** | SEE: Take In Kind. |
| **Delta Effect** | Acoustic energy reradiated by a discontinuity. |
| **Demagnetization** | The process of removing part or all of the existing residual magnetism from pipe. |
| **Demulsifier** | A chemical used to break down crude oil/water emulsions so the water may be removed from the oil. |
| **Densitometer** | An electronic device used to determine the density of a liquid hydrocarbon stream for measurement calculations. |
| **Density** | (1) Mass per unit volume of a substance.(2) The number of bytes per unit area on a recording media. |
| **Density Gradient** | The variation in density as a function of depth. |
| **Density Log** | A well log which records formation density. |
| **Dent** | A local change in surface contour caused by mechanical impact, but not accompanied by loss of metal. |
| **Department Name** | The name of the company department or agency program. |
| **Department Of Energy** | A Department of the U.S. Federal Government, commonly abbreviated DOE. |
| **Department Of Transportation** | A Department of the U.S. Federal Government, commonly abbreviated DOT. |
| **Departure** | Horizontal displacement of one station from another in an east or west direction. |
| **Dephlegmator** | The rectifying section of an oil stripping still. The term is usually applied where that section is a vessel separate from the stripping section. |

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| **Depletion** | (1) In financial terms, it is the provision for noncash deduction from current income which provides for the recovery of a portion of the capitalized costs of an oil or gas property due to exhaustion of resources.(2) In nonfinancial terms, depletion is the act of emptying, reducing, or exhausting, as in depletion of natural resources. |
| **Depletion Drive** | SEE: Reservoir Drive Mechanism; Solution Gas Drive; Reservoir Energy. |
| **Depolarize** | To increase rate of corrosion reaction by removing a polarizing corrosion product. |
| **Depositional Environment** | A geographically restricted complex within which a sediment accumulates, described in geomorphic terms and characterized by physical, chemical and biological conditions, influences or forces; e.g., lake; swamp; floodplain; near shore marine. |
| **Depository Bank Number** | A unique number assigned to identify a depository bank, savings and loan institution or credit union which accepts deposits into a payee's account. |
| **Depth** | The distance below a specified reference datum, commonly the surface of the earth or the mean sea level. A positive value denotes a point deeper than the reference point. When given without specifying a reference value, it is assumed that it is referenced to the earth's surface or sea surface as appropriate. |
| **Depth Basis Code** | Code identifying the basis for depth measurement. |
| **Depth Control Log** | A well log run in cased holes for the purpose of providing correlation with open-hole logs in order to establish depth control for certain well completion operations. Usually the depth control log is made with a radioactivity logging tool in conjunction with a casing collar locator. |
| **Depth Of Invasion** | The distance from the borehole wall radial to the centerline of the borehole to which mud filtrate has invaded porous and permeable rock. |
| **Depth Shift** | Amount of change to the depth scale of a core record or well log necessary to align that scale to another depth scale used as a depth reference. |
| **Derating (engine)** | The horsepower reduction of an internal combustion engine because of altitude. |
| **Deregulated** | Statutory or federal administrative removal of government regulations in regard to pricing. Deregulation of Natural Gas Liquids (NGLs) occurred in 1980 and 1981. Deregulation of certain Natural Gas Policy Act (NGPA), 1978, as amended, vintages occurred January 1, 1985. |
| **Dermal Toxicity** | The ability of a chemical to poison an animal or human by skin absorption. |
| **Derrick** | A semipermanent structure of square or rectangular cross section having members that are latticed or trussed on all four sides. This unit must be assembled in the vertical or operation position, as it includes no erection mechanism. It may or may not be guyed. |
| **Derrick Lift Capacity** | The maximum weight which a structure or mechanism is certified to support or lift. |
| **Derrick Mast** | The steel tower component of a drilling or well servicing rig which supports the crown block, traveling block, and hoisting lines. Derricks and masts may be stationary structures normally requiring dismantling and disassembly when moved from location to location, or may be portable with the capability of being laid down and raised to and from ground level fully assembled. |
| **Derricking** | The operation of changing boom angle in a vertical plane. |
| **Derrickman** | An individual whose work station is in the derrick while tubular goods are being hoisted from or lowered into the wellbore. |
| **Desalinization** | Salt removal from sea or brackish water. |
| **Desalting** | This is a form of emulsion treating which may be identical to conventional treaters with the addition of supplemental injection and mixing of low salinity water into the feed emulsion to dilute the brine phase and thereby lower the salt content of the treated crude. Desalting is used both in oil producing areas and refineries. It may consist of one or more stages to achieve maximum desalting efficiency. |
| **Desand** | To remove sand particles from the drilling fluid. |
| **Desander** | A centrifugal device for removing sand from drilling fluid to prevent abrasion of the pumps. |

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| **Design Life** | Maximum anticipated operational years of service for the platform; i.e., the period of time from commencement of construction until removal of the structure. |
| **Design Load** | That force or combination of forces which a structure is designed to withstand without exceeding the allowable stress in any member. |
| **Design Pressure Measurement** | The performance rating of a given system or system component, usually expressed in pounds per square inch (psi) or pounds per square inch gauge (psig). Not the maximum vented pressure that the system can sustain. |
| **Design Verification** | The process of proving design by testing. |
| **Desilt** | To remove the ultra fine and larger particles from the drilling fluid. |
| **Desilter** | A centrifugal device capable of removing a very high proportion of the ultra fine and larger particles from a drilling fluid. |
| **Destination Price Amount** | The weighted-average sales price received at a delivery point. |
| **Desuperheater** | A device for the removal of superheat from steam by the injection of water. |
| **Detector Group** | SEE: Receiver Group. |
| **Detector Orientation** | SEE: Receiver Orientation. |
| **Detector Shoe** | A scanning shoe carrying one or more transducers. Is used to protect transducers from mechanical damage from the pipe surface, etc. |
| **Detector Spacing** | SEE: Receiver Spacing. |
| **Detergent** | A substance that has cleansing action due to a combination of properties including lowering of surface tension, wetting action, emulsifying and dispersing action, and foam formation in some cases. |
| **Developed Gross Areal Extent** | The sum of all developed tract gross acres or hectares on a lease. Contains the total number of acres or hectares covered by the legal description of the entity in which it is included. |
| **Developed Net Areal Extent** | The sum of all developed tract net acres or hectares on a lease. Contains the total number of net acres or hectares covered by the legal description of the entity in which it is included. |
| **Developing Field** | An oil or gas property whose reserve life is undetermined. |
| **Development Activity Type** | Those activities which take place following discovery of hydrocarbons, CO2, or minerals in paying quantities, including geophysical activity, drilling, platform construction, and operation of all support facilities, and which are for the purpose of ultimately producing the minerals, hydrocarbons, or CO2 discovered. |
| **Development Well** | Well drilled to a pay zone in an area already proven productive. |
| **Deviated Hole** | SEE: Deviation. |
| **Deviated Well** | A well having a wellbore path that deviates from the vertical. |
| **Deviation** | (1) Departure of the axis of a wellbore path from vertical. |
| **Deviation Angle** | The angle from vertical derived from the directional sensor during the surveying at the point the measurement was taken. |
| **Deviation Bit** | A drill bit specifically designed to reduce the tendency to drill a crooked wellbore. |
| **Deviation Control Technique** | (1) Fulcrum Technique: Utilizes a bending moment principle to create a force on the drill bit to counteract reaction forces which are tending to push the drill bit in a given direction. (2) Mechanical Technique: Utilizes bottomhole equipment which is not normally a part of the conventional drill string to aid deviation control. This equipment acts to force the drill bit to turn axis of the borehole in inclination. (3) Packed hole Technique: Utilizes the borehole wall to minimize bending of the bottom |

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| **Deviation Depth** | The measured depth from the surface datum reference to the point of departure of the axis of the wellbore or drainhole path from vertical. |
| **Deviation Survey Measured Depth** | The measured depth of the directional sensor at the point the measurement was taken during the deviation survey. |
| **Deviation Survey True Vertical Depth** | True vertical depth (TVD) of the directional sensor at the point the measurement was taken during the deviation survey. |
| **Deviation Survey Type** | A well activity performed to determine wellbore path deviation. There are two basic deviation survey or drift survey instruments. One measures the angle of deviation only and the other measures both the angle and direction of deviation. |
| **Deviation Tool** | Drilling tool or equipment used to change the inclination and direction of the borehole axis. |
| **Deviation Type** | (1) Abnormal Deviation: Usually associated with highly faulted rocks having fracture planes on either side of a fault. (2) Abrupt Deviation: Usually associated with interbedded, anisotropic, or laminar rocks. (3) Drift Deviation: Usually associated with a gradual change of borehole axis. (4) Induced Deviation: Engineered, intentional or unintentional. (5) Rotational Deviation: Usually results from the drill bit moving in a slow spiral due to drill stem rotation. |
| **Dew Point** | Temperature and pressure at which a liquid begins to condense out of a gas. |
| **Dew Point Pressure** | SEE: Saturation Pressure. |
| **Dew Point Tester** | An instrument for visually determining the temperature at which a liquid condenses from a gas. |
| **Dextral Fault** | SEE: Right Lateral Strike Slip Fault. |
| **Diagenesis** | Post-depositional alteration of a rock or its constituent minerals. |
| **Diastem** | A relatively short interruption of deposition, involving a brief period of time, with little or no erosion before depostion is resumed. |
| **Diatomaceous Earth** | An infusorial earth composed of siliceous skeletons of diatoms and being very porous. (1) Sometimes used for combatting lost circulation and as an additive to cement.(2) Additive to special drilling fluids for a particular purpose.(3) Used for filtration and polishing. |
| **Diatomaceous Earth Filtration** | A process in which a filter cake or precoat of diatomaceous earth is used as a filter medium. |
| **Diesel Electric Rig** | A rotary drilling rig using self generated electric power. |
| **Diesel Oil Plug** | SEE: Gunk Plug. |
| **Differential** | (1) A difference in quantity or degree between two measurements or units (as the pressure differential across a choke; i.e., the pressure on one side of the choke compared with the pressure on the other side. |
| **Differential Angle Deck** | A screen deck in which successive screening surfaces of the same deck are at different angles. |
| **Differential Liberation Value** | A pressure-volume-temperature (PVT) test performed on oils in which evolved gas is withdrawn from the fluid as the system pressure is reduced. |
| **Differential Pen** | Marking device on an orifice meter recording the difference between upstream pressure and downstream pressure across an orifice plate. Usually calibrated in inches of water difference. |
| **Differential Pressure Measurement** | (1) The difference between hydrostatic borehole pressure and reservoir pressure.(2) The difference in pressure between two points in a fluid system. It may represent the drop in pressure of the fluid in passing from the tubing to the flow line,(3) In the case of an orifice meter, the difference of the pressure on the upstream and the downstream sides of the orifice. |
| **Differential Pressure Sticking** | Sticking which occurs because part of the drillstring (usually the drill collars) becomes embedded in the filter cake resulting in a nonuniform distribution of pressure around the circumference of the pipe. The conditions essential for sticking require a permeable formation and a pressure differential across a nearly impermeable filter cake and drillstring. |
| **Differential Sp Log** | A curve recorded as a result of simultaneous spontaneous potential (SP) measurements from two electrodes located downhole, each serving as a reference potential for the other. |

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| **Differential Sticking** | The action of a differential pressure holding the drillstem against the wall of the borehole. |
| **Differential Vaporization Gas Gravity** | Gravity of the gas phase at the given temperature and pressure. |
| **Differential Vaporization Gas Oil Ratio** | Cumulative standard volume of gas evolved per unit volume of oil at saturation pressure. |
| **Differential Vaporization Relative Volume** | Volume of the liquid hydrocarbon phase at the given temperature and pressure relative to saturation pressure. |
| **Differential Vaporization Z Factor** | Compressibility factor for the gas phase at the given temperature and pressure. |
| **Differential Wiring** | Electrically connected in opposed series such that the output of one coil effectively opposes the other coil. In search coils, the differential wiring results in equal and opposite voltages being developed when the magnetic field changes equally in each coil. Thus, no net voltage output is produced. |
| **Diffraction** | The deflection of a wave front when passing the edges of an obstacle. |
| **Diffuse Indication** | With magnetic particles, this is an indicationis that is not clearly defined as; e.g., indication of subsurface defects. |
| **Diffuse Reflection** | Scattered incoherent reflections caused by rough surfaces or associate interface reflections of waves from irregularities of the same order of magnitude or greater than the wave length. |
| **Diffusion** | The spreading, scattering, or mixing of a material; e.g., gas; liquid; solid. |
| **Dilatant Fluid** | A dilatant or inverted plastic fluid is usually made up of a high concentration of well dispersed solids which exhibits a nonlinear consistency curve passing through the origin. The apparent viscosity increases instantaneously with increasing rate of shear. The yield point, as determined by conventional calculations from the direct indicating viscometer readings, is negative; however, the true yield point is zero. |
| **Diluent** | Liquid added to dilute or thin a solution. |
| **Dilution** | Increasing the liquid content of a slurry, by addition of water, oil or other fluid constituting the liquid phase. |
| **Dilution Ratio** | Ratio of volume of dilution liquid to the volume of raw mud in the feed to a liquid-solid separator. |
| **Dilution Water** | Water used for dilution of raw mud. |
| **Ding** | A flattened area or indentation on a chamfer or thread crest caused by mechanical impact. |
| **Dip Angle** | The maximum angle that a surface ( e.g., a bedding or fault surface), makes with the horizontal, measured perpendicular to the line of strike direction of the structure and is measured in the vertical plane. |
| **Dip Azimuth** | The azimuth of maximum dip or slope of a surface, such as a bedding or fault surface. Dip direction is perpendicular to the line of strike direction, and is oriented in the down dip direction. |
| **Dip Log** | SEE: Dipmeter Log. |
| **Dip Slip Fault** | A fault in which the movement of the fault blocks is parallel to the dip of the fault. |
| **Dip Tube** | Tubing inserted in the orifice fitting of meter tubes upstream and downstream of the orifice plate. |
| **Dipmeter Log** | A well log from which dip magnitude and azimuth of bedding of rocks surrounding the borehole can be determined. Also referred to as: Dip Log. |
| **Dipmeter Tool** | A downhole tool used to make a dipmeter log or dip log. |
| **Direct Charge** | Those costs permitted under Direct Charges in the COPAS Materials Classification Manual. |
| **Direct Cost** | SEE: Direct Charge. |
| **Direct Current** | Refers to an electric current flowing continually in one direction only through a conductor. |
| **Direct Fired Vessel** | A vessel in which the temperature of fluids is increased by the addition of heat supplied by a flame. The flame is applied direct to the fluid container. |

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| **Direct Ignition Source** | A point of sufficient temperature and heat capacity to ignite a combustible mixture. |
| **Direct Indicating Viscometer** | Commonly called a V-G meter. The instrument is a rotational type device powered by means of an electric motor or handcrank, and is used to determine the apparent viscosity, plastic viscosity, yield point, and gel strengths of fluids. |
| **Direct Sale** | Contract sale of natural gas by producer to end user or local distibution company, usually for a term of a year or longer. The pipeline company transports the gas for a fee. |
| **Direction** | In the description of the a wellbore path, refers to the azimuth. The direction of vertical projection of the wellbore path onto a horizontal plane. |
| **Direction Control** | SEE: Directional Drilling. |
| **Directional Drilling** | Intentional drilling of an off-vertical wellbore path at a closely-controlled, predetermined angle and direction through use of special equipment and surveys. |
| **Directional Drilling Contractor** | A service company that can supply the special deflecting tools, bottomhole assemblies, survey instruments, and a technical representative to perform the directional drilling aspects of an operation. |
| **Directional Drilling Data Sheet** | Data sheet on which a detailed description of the bottomhole assembly and operating parameters are indicated as a function of depth. |
| **Directional Hole** | SEE: Directional Well; Directional Drilling; Directional Sidetrack. |
| **Directional Permeability** | An oriented permeability measurement. |
| **Directional Redrill** | SEE: Directional Sidetrack. |
| **Directional Service Company** | SEE: Directional Drilling Contractor. |
| **Directional Sidetrack** | A drilling activity in which an additional wellbore segment, called a sidetrack, is drilled from an existing wellbore between the wellbore origin and wellbore bottomhole. A whipstock is set in the existing wellbore as the starting point. This new wellbore segement is directionally drilled to a new target. |
| **Directional Surveillance** | SEE: Directional Drilling. |
| **Directional Survey** | An engineering survey that measures the deviation of a wellbore path from vertical and the direction of departure. Measurements are made of drift, azimuth and inclination of a borehole axis with the vertical. A directional survey is often made as part of a dipmeter survey or sometimes as a continuous log with a photoclinometer. Sometimes measurements are made at discrete depths with a photoclinometer. |
| **Directional Survey Dogleg Severity** | The rate of change of deviation angle and/or direction evaluated between the current survey point and the next shallowest survey point. |
| **Directional Survey Drift Angle** | The deviation at the depth of measurement. |
| **Directional Survey East West Offset** | The distance, at the depth of measurement, that the axis of the wellbore path lies east or west of the axis of the wellbore path at its wellbore origin. A positive number denotes east, a negative number west. |
| **Directional Survey Flag** | An indicator of whether a directional survey was performed. |
| **Directional Survey Gravity Tool Face** | The gravity tool face measured by the directional sensor. |
| **Directional Survey Inclination** | The inclination from the vertical, at the depth of measurement, of the axis of the wellbore path as measured by the directional sensor in the wellbore. |
| **Directional Survey Instrument Type** | The type of instrument used for a directional survey, e.g., measurement while drilling, magnetic single shot, magnetic multi-shot, gyro rate integrating. |
| **Directional Survey Interval** | An interval of a wellbore path that has been surveyed in a manner that is consistent with the surveying criteria specified for a directional surveying activity. |
| **Directional Survey Interval Base Depth** | The measured depth to the bottom of the directionally surveyed interval. |
| **Directional Survey Interval Top Depth** | The measured depth to the top of the directionally surveyed interval. |

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| **Directional Survey Magnetic Tool Face** | The magnetic tool face measured by the directional sensor. |
| **Directional Survey Method Code** | The method of measurement that was used for the directional survey taken; e.g., acid bottle; continous dipmeter; gyroscope; multishot. |
| **Directional Survey North South Offset** | The distance, at the depth of measurement, that the axis of the wellbore pathl lies north or south of the axis of the wellbore path at its wellbore origin. A positive number denotes north, a negative number south. |
| **Directional Survey Source** | The vendor which supplies directional survey information. |
| **Directional Survey Tool** | An instrument for measuring angular or positional data within a wellbore. |
| **Directional Survey Tvd** | The true vertical depth (TVD) at the depth of measurement for the directional survey. |
| **Directional Survey Walk** | A measurement of the tendency of the drillstem to be displaced to either side of the intended wellbore path. |
| **Directional Turbodrill** | A turbodrill which can follow the borehole curvature developed with a bent sub, usually shorter in length than a straight hole turbodrill. |
| **Directional Well** | A well having a wellbore path purposely deviated from the vertical using controlled angles to reach an objective that is not directly beneath the wellbore origin of the wellbore path. |
| **Dirty Sand** | Sand that is poorly sorted, having a wide range of particle sizes including some shale particles. |
| **Discharge Lip** | SEE: Discharge Spout. |
| **Discharge Spout** | Extension at the discharge end of the screen deck. It may be vibrating or stationary. |
| **Discontinuity** | A detectable interruption in the material which may or may not have undesirable connotations; e.g., any interruption in the normal physical structure or configuration of a pipe such as cracks, laps, seams, pits and laminations. A discontinuity may or may not affect the usefulness of a pipe or critical flaw size. Also referred to as: A flaw or imperfection. |
| **Discounted Return On Investment** | The ratio of the (1) present worth of the ultimate value of the reserves attributable to a well less the drilling investment, taxes, operating costs, and other needed investment anticipated during the life of the well, to (2) the present worth of the drilling and other investments anticipated during the life of the well. |
| **Discounted Roi** | SEE: Discounted Return on Investment.T |
| **Discovery Date** | SEE: Field Discovery Date. |
| **Discovery Gas Reserves** | Field gas reserves reported for the discovery well. |
| **Discovery Well** | A wellbore that encounters a new and previously untapped petroleum reservoir and is believed to be capable of producing in paying quantities. |
| **Discovery Well Name** | The name used by the operator to label the discovery well. |
| **Discovery Well Pool Flag** | An indicator of whether the data reported is for a discovery well or pool. |
| **Dispersant** | Agent, compatible with the solvent, which holds very finely divided matter in a scattered or broken up state. |
| **Dispersed Oil Recovery Unit** | A vessel which removes minute amounts of oil from water via coalescing (droplet growth). The vessel would normally include a large holding pond, a media filter, gas flotation, etc. |
| **Dispersed Phase** | The scattered phase (solid, liquid, or gas) of a dispersion. The particles are finely divided and completely surrounded by the continuous phase. |
| **Dispersion Of Aggregates** | Subdivision of aggregates. Dispersion increases the specific surface of the particle; hence results in an increase in viscosity and gel strength. |
| **Dispersoid** | A colloid or finely divided substance. |

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| **Displaceable Gas Saturation** | The difference in the gas saturation at the start of the secondary and enhanced recovery project and that which existed behind the flood front. |
| **Displacement Efficiency** | The relative effectiveness with which a saturating fluid is displaced by another fluid with which it is in contact. |
| **Displacement Fluid Type** | The type of fluid; e.g., water, oil, mud, in the wellbore when a sand control well activity is in progress or the type fluid used to displace resin into the rocks surrounding the borehole. |
| **Displacement Fluid Volume Required** | The volume of fluid used to displace the treatment fluid into the formation. |
| **Displacement Measurement** | In the drilling of a well, the lateral distance from the surface location to the primary target. |
| **Displacement Saturation** | The saturation of the displacing fluid at the displacement shock front. |
| **Displacement Velocity** | The velocity of the shock or displacement front. |
| **Disposal** | The placement or discarding of unwanted material. |
| **Disposal Pit Count** | The number (count) of disposal pits on a facility. These disposal pits are used to dispose of water by evaporation and must be approved prior to use. |
| **Disposal Well** | A well used for permanent disposal of fluids wastes, such as salt water. |
| **Disputed 8g Acreage** | The acreage contained in areas within the 8(g) zone which are under the jurisdiction of the United States government but which is claimed as state waters by a coastal state. The dispute is evidenced by a lawsuit. |
| **Disputed Federal Acreage** | The acreage contained in areas seaward of the 8(g) zone which are under the jurisdiction of the United States government but which are claimed as state waters by a coastal state. The dispute is evidenced by a lawsuit. |
| **Dissociation** | The splitting up of a compound or element into two or more simple molecules, atoms, or ions. Applied usually to the effect of the action of heat or solvents upon dissolved substances. The reaction is reversible and not as permanent as decomposition; i.e., when the solvent is removed, the ions recombine. |
| **Dissolved Gas** | SEE: Solution Gas. |
| **Dissolved Gas Drive** | A natural reservoir drive mechanism where an oil reservoir derives its energy for production from the dissolved gas in solution with the crude oil. |
| **Dissolved Load** | That part of the total stream load that is carried in solution. |
| **Dissolved Oxygen** | The oxygen dissolved in water or sewage. Adequately dissolved oxygen is necessary for the life of fish and other aquatic organisms and for the prevention of offensive odors. Low dissolved oxygen concentrations generally are due to discharge of excessive organic solids having high BOD, the result of inadequate waste treatment. |
| **Dissolved Solids Concentration Measurement** | The concentration of dissolved material, organic and inorganic, contained in water or wastes. Excessive dissolved solids make water unpalatable for drinking and unsuitable for industrial use. |
| **Distillate** | (1)The condensed overhead product of a fractionator. (2) Liquid hydrocarbons, usually of high API gravity (above 60 degrees API), recovered from wet gas by a separator that condenses the liquid out of the gas stream. (Distillate is an old term for the liquid; today it is called condensate or natural gasoline.) |
| **Distillate Recovery Percentage** | The percentage of distalliate recovered at or over the boiling point. |
| **Distillation** | Process of first vaporizing a liquid and then condensing the vapor into a liquid (the distillate), leaving behind nonvolatile substances, the total solids of a drilling fluid. The distillate is the water and/or oil content of a fluid. |
| **Distillation End Point Temperature** | The highest temperature observed on the distillation thermometer before the mercury starts to fall consistently, after the bottom of the distillation flask has become dry. |
| **Distortion Energy Theory** | Failure theory defined where the applied stresses are positive for tension and negative for compression. |
| **Distributee Code** | An indicator of the fund for distribution purposes. |

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| **Distribution Tax Flag** | An indicator of whether or not the company is or is not required to remit production taxes on gas produced and sold. |
| **Distribution Tax Reimbursement Flag** | An indicator of whether or not a gas purchase contract requires the company to reimburse the seller for any portion of production tax increases. |
| **District Expense** | An accumulation of overhead costs incurred at the property operation level, and of such a nature as to benefit proportionately all wells, leases, and facilities in a specified territory or district. |
| **Divergence** | Spreading of ultrasonic waves after leaving search unit, a function of diameter and frequency. |
| **Diverter** | (1) A device attached to the wellhead or marine riser to close the vertical access and direct any flow into a line away from the rig. Diverters differ from blowout preventers in that flow is not stopped but rather the flow path is redirected away from the rig.(2) A device used to direct tools at a branch connection. |
| **Diverting Tool Measured Depth** | The measured depth of the cement diverting (DV) tool at the time of the cement job. |
| **Divestment Package** | A package of information regarding a group of lease parcels and/or assets which are offered for sale to prospective purchasers. |
| **Divided Agreement** | A type of operating agreement that provides for sharing of costs and benefits based on participating areas that may change. |
| **Divided Deck** | A deck having a screening surface longitudinally divided by partition(s). |
| **Division Order** | A written statement which, among other things, describes a certain property and stipulates the basis for distribution of the proceeds resulting from the sale of production from the property. |
| **Document** | A writing conveying information, either electronic or hard copy. |
| **Document Due Date** | The date a document is required. |
| **Document Line Number** | The line number of each individual transaction in an invoice. |
| **Document Lines Billed Count** | The total number of lines being billed from an original document. |
| **Document Supplement Code** | An indicator of whether the report is complete or is supplemented with additional transactions. |
| **Doe** | SEE: Department of Energy. |
| **Doe Eia Field Code** | The code assigned by the Department of Energy/ Energy Information Administration (EIA) as an industry standard. |
| **Doe Eia Field Name** | The assigned Department of Energy/ Energy Information Administration (EIA) name that relates to the DOE/EIA field code. |
| **Doe State Field Number** | Field number assigned by Department of Energy. |
| **Dog Leg** | SEE: Dogleg. |
| **Doghouse** | A small house used for keeping lease records, changing clothes, or any other use around a lease. |
| **Dogleg** | A term applied to a sharp change of direction in the borehole axis or ditch. Applied also to the permanent bending of wire rope or pipe. |
| **Dogleg Angle** | SEE: Dogleg Severity. |
| **Dogleg Control Program** | Drilling program designed specifically to decrease the severity of or eliminate doglegs in a wellbore. |
| **Dogleg Severity** | A measure of the amount of change in the inclination and/or direction of a borehole axis, usually expressed in angular units per length of wellbore path. |

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| **Dogleg Type** | (1) Abrupt Dogleg: A dogleg caused by a sudden change in inclination and/or direction of the borehole axis over a short distance.(2) Decreasing Dogleg: A dogleg in the borehole axis with the change in inclination returning the borehole axis toward vertical.(3) Excessive Dogleg (Severe Dogleg): Doglegs larger than Permissible Doglegs.(4) Increasing Dogleg: A dogleg in the borehole axis with the change in inclination increasing the angle away from vertical.(5) Long Dogleg: A dogleg with a gradu |
| **Dollie** | A low frame with wheel or rollers designed to support heavy loads to be moved, as casing dollie to support the end of casing as it is taken into the derrick from the walkway. |
| **Dolomite** | A type of sedimentary rock similar to limestone but rich in magnesium carbonate. |
| **Domain** | The set of values which an independent variable may take. |
| **Dome** | (1) An uplift or anticlinal structure in which the rocks dip gently away in all directions.(2) The volume chamber inside the bellows of a gas lift valve. |
| **Dominant** | Strongest. For filters, this is generally the modal frequency, or the frequency in the spectrum passing most of a signal's amplitude. |
| **Dope** | (1) A viscous material used on casing or tubing as a lubricant, and to prevent corrosion.(2) A tar for pipelines to prevent corrosion. |
| **Dor Unit** | SEE: Dispersed Oil Recovery Unit. |
| **Dose Rate** | The amount of ionizing radiation energy absorbed per unit of mass and time of irradiated material. |
| **Dosimeter** | A device that measures radiation dose, such as film badge or ionization chamber. |
| **Dot** | SEE: Department of Transportation. |
| **Double** | A section of drill pipe, casing or tubing consisting of two joints screwed together. |
| **Double Crystal Method** | The method of ultrasonic testing, using two transducers with one acting as the transmitter and one as the receiver. |
| **Double Doglegging** | SEE: S-Type Borehole. |
| **Double Flute** | Two flutes advancing simultaneously at the same angle and 180 degrees apart. |
| **Double Lead** | SEE: Double Flute. |
| **Double Seam Pipe** | Pipe having two longitudinal seams formed by the submerged arc welding process or the gas metal arc welding process or the combination welding process. |
| **Double Section** | SEE: Repeated Section. |
| **Double Wall Drill Pipe** | A two tube concentric drill pipe assembled with the inner pipe in compression and the outer pipe in tension. Used to replace drill collars in directional wellbores. |
| **Doughnut** | A ring of wedges or a threaded, tapered ring that supports a string of pipe. |
| **Downcomer** | A tube that conducts liquids downward in a vessel; e.g., an absorber; stripper; heater-treater. |
| **Downhole** | (1) A term to describe tools, equipment, and instruments used within the wellbore e.g., downhole motor and downhole pump.(2) Conditions or techniques applying to the wellbore. |
| **Downhole Commingling** | The combining of hydrocarbons produced from multiple reservoirs within the wellbore. |
| **Downhole Commingling Approval Flag** | Indicates whether downhole commingling has been approved. |
| **Downhole Motor** | A power source located just above the bit to rotate the bit. Usually refers to the turbodrill or the Dyna Drill. |
| **Downhole Motor Rpm Average** | The average rotary speed (revolutions per minute - RPM) of a downhole motor as measured by a measurement while drilling (MWD) tool over the interval. |

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| **Downstream** | A term used in describing operations after those at a point of reference. |
| **Downstream Pipeline** | The pipeline receiving natural gas at a pipeline inter-connect point. |
| **Downthrown Side** | The side of a fault that has slipped down relative to the other side. |
| **Downthrown Side Of Fault Formation Name** | The formation penetrated by the wellbore on the downthrown side and adjacent to the fault. |
| **Downtime** | The period of time a well is shut down for workover, maintenance, or other reasons. |
| **Dp** | SEE: Drill Pipe. |
| **Drag** | The extra force needed to move the drillstem resulting from the drillstem being in contact with the wall of the borehole. |
| **Dragline** | A machine used to drag material along the ground or any other surface. |
| **Drain Deck** | SEE: Beach. |
| **Drain Holes** | Several high-angle wellbore segements drilled laterally from a single wellbore into the reservoir. |
| **Drainage Area** | (1) Petroleum: That area from which one well can produce the hydrocarbons contained in the reservoir rock.(2) Streams: The horizontal projection ofthe area whose surface directs water toward a stream above a specified pointon that stream.(3) Also know as: Drainage Basin. |
| **Drainhole Direction** | The direction or bearing of the drainhole bottom or terminus from the surface location. |
| **Drainhole Number** | The number of the drainhole in the wellbore of a horizontal well for which data is being submitted. |
| **Drainhole Turn Radius Value** | The extrapolated radius of the turn of a horizontal drainhole. The turn is the averaged or extrapolated deviation arc between the beginning point of deviation and the point where the drainhole reaches its final angle from vertical. |
| **Draw Off** | Draining one fluid from a measurement vessel to determine relative volumes of heavy vs. light fluid. |
| **Drawdown** | (1) The difference in shut in and flowing bottomhole pressures, at a constant rate of fluid production. (2) The difference between levels in a water well when the pump is not working (static level) and when it is working (pumping level). |
| **Drawdown Pressure** | SEE: Drawdown. |
| **Drawworks** | The hoisting mechanism on a drilling rig. It is essentially a large winch which spools off or takes in the drilling line and thus raises or lowers the drillstring and bit. |
| **Dress** | To sharpen or repair items of equipment in order to make them ready for reuse; e.g., drill bits; tools; sucker rod pumps. |
| **Dresser Sleeve** | A slip type collar that is used to join plain end pipe. |
| **Drift** | (1) The horizontal component of the distance from the surface reference position to a point within the wellbore.(2) A gauge used to check minimum inside diameter flowlines, nipples, etc. |
| **Drift Angle** | (1) The angle between the axis of the borehole and the gravity vertical (Inclination).(2) More or less constant angle at which the axis of the borehole is carried after sufficient angle has been obtained in the buildup. |
| **Drift Flag** | SEE: Inclinometer. |
| **Drift Mandrel** | A precision dimensioned cylinder sized to pass through each diameter and weight of pipe. It is passed through the pipe ID to locate obstructions and/or to assure compliance with appropriate specifications. |
| **Drift Survey** | SEE: Deviation Survey. |
| **Drill** | An implement with cutting edges used to bore holes. |
| **Drill Bit** | A cutting or pulverizing tool attached to the drill pipe for drilling. |

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| **Drill Bit Activity** | Describes the operating conditions while using the bit during a drilling activity. |
| **Drill Bit Bearing Grading** | The grade value assigned to a bit following its use to indicate its bearing condition. |
| **Drill Bit Center Jet Diameter** | The diameter of the center jet (nozzle). |
| **Drill Bit Company Name** | The name of the company that manufactured the drill bit. |
| **Drill Bit Depth** | The measured depth of a drill bit at a specific point in time. |
| **Drill Bit Diameter** | The outside diameter of the bit. |
| **Drill Bit Distance** | The total distance drilled by the bit during a particular run. |
| **Drill Bit Dulling Characteristic** | The dulling characteristic of the cutting structure of the drill bit, such as broken cone, broken teeth/cutters, balled up. |
| **Drill Bit Elapsed Time** | The number of hours the bit was in the wellbore. |
| **Drill Bit Geometry** | Refers to the geometric construction of a bit; e.g., 3 cone; 4 cone; 2 cone; flat face; configuration of the teeth. |
| **Drill Bit Hydraulic Horsepower** | The hydraulic horsepower generated by the flow of fluid through the bit nozzles. |
| **Drill Bit Hydraulic Horsepower Area** | The total hydraulic horsepower divided by the cross sectional area of the bit. |
| **Drill Bit Iadc Type** | The identifying code assigned by the International Association of Drilling Contractors (IADC) for the bit type. |
| **Drill Bit Jet** | The nozzle in a drill bit used to force drilling fluids into the borehole. |
| **Drill Bit Jet Diameter** | The diameter of the drill bit jet or drill bit nozzle. |
| **Drill Bit Jet Impact Force** | The force exerted on the wellbore bottomhole by the flow of drilling fluid through the drill bit. |
| **Drill Bit Jet Velocity** | The velocity of the drilling fluid as it exits the bit nozzles. |
| **Drill Bit Mechanical Horsepower** | The horse power required to rotate the bit only, not including that required to rotate the drill string contacting the walls. |
| **Drill Bit Name** | The manufacturer's name for the bit. |
| **Drill Bit Number** | Number assigned to a drill bit as it is used sequentially in the drilling of the well. |
| **Drill Bit Overswing** | Term denoted to excessive walk of the bit. Walk of the bit greater than expected. |
| **Drill Bit Penetration Rate** | The average distance drilled per unit of time during the bit run. |
| **Drill Bit Pilot** | A drill bit with a smaller diameter than the ultimate borehole. Used on deflecting tools; e.g., the whipstock and knuckle joint. Also used with borehole openers which follow and enlarge the original borehole. |
| **Drill Bit Plan** | Identification of drill bits required to drill the wellbore. |
| **Drill Bit Port** | A fluid flow port in a bit. |
| **Drill Bit Pulled Depth** | The measured depth at which the bit was removed from drilling service. The leading character, d, is used to indicate that the bit is still drilling. |
| **Drill Bit Pulling Reason** | The reason for pulling a drill bit from the wellbore; e.g., change bottomhole assembly, condition mud, downhole motor failure. |
| **Drill Bit Ream Time** | The elapsed time spent reaming during this bit run. |
| **Drill Bit Rotation Speed** | The average speed of rotation of the drill bit, normally reported in revolutions per minute. |

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| **Drill Bit Run Date** | The initial date that the bit was being used during drilling operations. |
| **Drill Bit Serial Number** | The manufacturer's serial number of the bit. |
| **Drill Bit Stabilization** | Refers to stabilization of the downhole assembly near the bit. A stabilized bit is forced to rotate around its own axis. |
| **Drill Bit Torque** | Measured downhole (bit) torque, averaged over the interval. |
| **Drill Bit Total Flow Area** | The total flow area for fluid calculated for any bit. |
| **Drill Bit Type** | SEE: Drill Bit IADC Type. |
| **Drill Collar** | Heavy, thick walled tube, usually steel, employed between the drill pipe and the bit in the drill string to provide weight on the bit in order to improve its performance. |
| **Drill Collar Inside Diameter** | The inside diameter of drill collars used in the bottomhole assembly. |
| **Drill Collar Length** | The total length of drill collars used in the bottomhole assembly. |
| **Drill Collar Outside Diameter** | The outside diameter of drill collars used in the bottomhole assembly. |
| **Drill Collar Top Depth When Pipe Stuck** | The measured depth to the top of the drill collar when the pipe became stuck. |
| **Drill Collar Type** | Round, square or triangular drillstem elements utilized to provide a load on the bit while drilling. |
| **Drill Core Valve** | Valve in the top of the gas lift valve used in charging the bellows with nitrogen. |
| **Drill Pipe** | Tubular goods used in drilling a well with rotary tools. |
| **Drill Pipe Inside Diameter** | The inside diameter of the drill pipe. |
| **Drill Pipe Outside Diameter** | The outside diameter of the drill pipe. |
| **Drill Pipe Safety Valve** | An essentially full opening valve located on the rig floor with threads to match the drill pipe in use. This valve is used to close off the drill pipe to prevent flow. |
| **Drill Pipe Stand Joints** | The number of tool joints per stand of drill pipe. |
| **Drill Pipe Stand Length** | The average length of a stand of drill pipe. |
| **Drill Pipe Upset** | The thicker wall part of a tubular that is usually located at the ends. |
| **Drilled By Cable Tools Interval** | The distance drilled using cable tools. |
| **Drilled By Rotary Tools Interval** | The interval drilled using rotary tools. |
| **Drilled Interval** | A planned or actual wellbore segment which has a single nominal diameter. |
| **Drilled Measured Depth** | The maximum measured depth the driller is able to penetrate down the borehole prior to any given logging run. |
| **Drilled True Vertical Depth** | The depth to the base of the borehole currently drilled measured from a surface lreference point straight down to the base of the borehole. |
| **Driller** | An individual directly in charge of a drilling rig and crew. Operation of the drilling and hoisting equipment constitute his main duties. |
| **Driller's Report** | A record kept on the rig for each tour to show the footage drilled, drilling fluid tests, bit record, and all important occurrences during that tour. |
| **Driller's Total Depth** | The total depth of the well as reported by the drilling contractor. |

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| **Drilling** | The using of a rig and crew for the drilling, suspension, completion, production testing, capping, plugging and abandoning, deepening, plugging back, sidetracking, redrilling or reconditioning of a well (except routine cleanout and pump or rod pulling operations) or the converting of a well to a source, injection, observation, or producing well, and including stratigraphic tests. Also includes any related environmental studies. Associated costs include completion costs but do not include equipping costs. |
| **Drilling Clause Type** | Used to describe the type of action required on the expiration date to maintain a lease beyond its normal expiration date. Examples are: Completion (production) prior to expiration date; Start drilling operations prior to expiration date; No drilling clause in lease; Start operations for drilling prior to expiration date; Not applicable. |
| **Drilling Collision** | SEE: Intersection. |
| **Drilling Contract Type** | Identifies rig contract as: daywork ($/hour); footage ($/foot); or turnkey ($/well). |
| **Drilling Contractor Name** | The name of the company that owns and operates the drilling rig and does the actual drilling. Can be the operating company. |
| **Drilling Design** | A specification of how wells can be drilled in a given geological environment. It will include details of the development strategy and specify the type of resources required to meet the design criteria. |
| **Drilling Direction Code** | An indicator of the diviation of the path of the wellbore; e.g., horizontal, straight, directional, etc. |
| **Drilling Fluid** | A fluid circulated through the borehole during drilling and workover operations to remove rock cuttings made by the drill. Drilling fluid also helps to cool the bit, prevent the sides of the borehole from caving, and control flow of rock fluids into the borehole. |
| **Drilling Fluid Additive** | The additive to the drilling fluid. |
| **Drilling Fluid Analysis** | Examination and testing of the drilling fluid to determine its physical and chemical properties and condition. |
| **Drilling Fluid Annular Velocity** | The calculated velocity of the drilling fluid in the annulus. |
| **Drilling Fluid Balance** | A beam type balance used in determining drilling fluid density. It consists primarily of a base, graduated beam with constant volume cup, lid, rider, knife edge, and counterweight. |
| **Drilling Fluid Cake** | The sheath of drilling fluid solids which coats the wall of the borehole when the drilling fluid filtrate is forced into the rocks surrounding the borehole. |
| **Drilling Fluid Cake Resistivity** | A surface measurement of the drilling fluid cake resistivity at a reported temperature. |
| **Drilling Fluid Cake Temperature** | Temperature at which the resistivity was measured for the drilling fluid cake. |
| **Drilling Fluid Cake Thickness** | The measure of the wall thickness of the drilling fluid upon removal of the fluid content. |
| **Drilling Fluid Conditioning Equipment** | Equipment used to condition the drilling fluid. |
| **Drilling Fluid Cycle Time** | The time of a cycle, or down the wellbore and back, is the time required for the pump to move the drilling fluid in the wellbore along this path. |
| **Drilling Fluid Density** | The density of the drilling fluid at the surface. |
| **Drilling Fluid Filtrate** | The liquid component of the drilling fluid with the solids removed or filtered out. |
| **Drilling Fluid Filtrate Resistivity** | A surface measurement of the filtrate resistivity at a reported temperature. |
| **Drilling Fluid Filtrate Temperature** | Temperature at which the resistivity was measured for the drilling fluid filtrate. |
| **Drilling Fluid Function** | The most important function of drilling fluids in rotary drilling is to bring cuttings from the wellbore bottomhole to the surface. Other important functions are: control subsurface pressures, cool and lubricate the drill bit and drill string, deposition of impermeable well cake, etc. |
| **Drilling Fluid Inhibitor** | A drilling fluid having an aqueous phase with a chemical composition that tends to retard and even prevent (inhibit) appreciable hydration (swelling) or dispersion of formation clays and shales through chemical and/or physical means. |

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| **Drilling Fluid Logging** | The recording of information derived from examination and analysis of return drilling fluid and associated drill bit cuttings. A portion of the drilling fluid is diverted through a gas detecting device and examined further under ultraviolet light for the purpose of detecting the presence of oil or gas. |
| **Drilling Fluid Loss** | The measurement at the surface of the fluid loss for a standard period of time and pressure differential. This serves as an indicator of the rate of drilling fluid filtrate invasion into permeable rocks penetrated while drilling. |
| **Drilling Fluid Measured Bottom Depth** | The measured depth to the bottom of the interval in which a specified drilling fluid is used. |
| **Drilling Fluid Measured Top Depth** | The measured depth to the top of the interval in which a specified drilling fluid is used. |
| **Drilling Fluid Ph** | The alkalinity/acidity (pH) of the drilling fluid measured at the surface. |
| **Drilling Fluid Plan** | Identification of drilling fluids required to drill the wellbore. |
| **Drilling Fluid Pump** | A large reciprocating pump used to circulate drilling fluid in order to maintain the flow of drilling fluid through the wellbore to the settling pit. |
| **Drilling Fluid Resistivity** | A surface measurement of the resisitivity of the drilling fluid at a reported temperature. |
| **Drilling Fluid Resistivity Temperature** | The temperature at which the resistivity of the drilling fluid was measured. |
| **Drilling Fluid Salinity** | The salinity of the drilling fluid present during the logging run. |
| **Drilling Fluid Screen** | SEE: Shale Shaker. |
| **Drilling Fluid Tank Volume** | The total volume of drilling fluid, indicated by sensors, in all the compartments of the tank. The reading is averaged over a time interval. |
| **Drilling Fluid Temperature** | The temperature of the drilling fluid at the surface. |
| **Drilling Fluid Type Code** | An indicator of the type of drilling fluid present in the drilling media; e.g., chemical gel mud; crude oil; caustic (high pH); gypsum mud; native mud; air; salt water. |
| **Drilling Fluid Viscosity** | The viscosity of the drilling fluid measured at the surface. |
| **Drilling Fluid Weight** | The density of the drilling fluid. |
| **Drilling Fluid Weight Recorder** | An instrument in the drilling fluid system which continuously measures drilling fluid density. |
| **Drilling Fluid Yield Point** | An additional thixotropic measurement yield point which is the resistance to internal fluid flow measured as stress. |
| **Drilling Hydraulics** | The employment of the science of the effects of fluid velocities and pressures and forces involved. |
| **Drilling In** | The process of drilling into or through the oil or gas pay zone for well completion. |
| **Drilling Jar** | A jointed section in a string of tools made with slack between the joints. |
| **Drilling Line** | The wireline used in the rig's main hoisting system. |
| **Drilling Log** | A log of drilling parameters; e.g., penetration rate; rotary speed; weight on the bit; pump pressure; pump strokes. |
| **Drilling Mud** | SEE: Drilling Fluid. |
| **Drilling Operations Suspended Date** | The date drilling operations were suspended for a well. |
| **Drilling Out** | The drilling out of the residual cement which normally remains in the lower section of casing and the borehole after the casing has been cemented. |
| **Drilling Overhead Percentage** | The operating agreement may provide that the operator will charge the joint interest account using a percentage of the cost of drilling the well rather than the normal per well overhead charge. |

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| **Drilling Overhead Rate** | The monthly rate of overhead that can be charged on a drilling or recompletion/workover well. This is usually defined in an attachment to the operating agreement. |
| **Drilling Permit** | The authorization obtained from a regulatory agency to drill a well or extend the wellbore of an existing well. |
| **Drilling Permit Approval Date** | The date the application for the drilling permit was approved and work can begin to construct the drill site and start drilling. Commonly referred to as Application for Pemit to Drill (APD). |
| **Drilling Permit Extension Approval Date** | The date the extension to a drilling permit is approved. |
| **Drilling Permit Number** | The number assigned to the permit, granting authority to drill, plug back, or deepen. |
| **Drilling Permit Number Assigned Date** | The date the drilling permitnumber was assigned to the permit granting authority to drill, plugback, or deepen a well. |
| **Drilling Permit Received Date** | The date an application for a drilling permit or a notice for staking (NOS) is received. |
| **Drilling Plan** | Plan of the materials, directional drilling, projections, and schedules to drill a particular wellbore. |
| **Drilling Problem Type** | The type of drilling problem that occurred; e.g., blow out; fishing; storm; abnormal pressure. |
| **Drilling Report** | Describes the drilling rig activities. |
| **Drilling Rig** | Equipment and machinery assembled primarily for the purpose of drilling. |
| **Drilling Rig Rotary** | Includes prime movers, hoisting, rotating, circulating, and auxiliary equipment necessary for drilling. |
| **Drilling Rig Rotating System** | SEE: Rig Rotary System. |
| **Drilling Schedule** | Projection of daily costs and depths for drilling the wellbore. |
| **Drilling Show Basis** | The basis used in determining drilling shows; e.g., bailer; mud log; samples. |
| **Drilling Slot** | Opening in a drilling platform or drilling vessel through which drilling operations are conducted. |
| **Drilling Slots Available** | The number of drilling slots that are available on the offshore drilling platform. |
| **Drilling Spool** | A connection component with ends either flanged or hubbed. It must have an internal diameter at least equal to the bore of the blowout preventer and can have smaller side outlets for connecting auxiliary lines. |
| **Drilling Through Valve** | A valve with an oversize bore. These valves must pass a drift test. |
| **Drilling Unit** | The smallest area permitted by state authorities in which a well may be completed. Determined in accordance with a well spacing plan for the field. |
| **Drillship** | A large seagoing vessel which incorporates a derrick amidships and all the associated drilling equipment. |
| **Drillstem** | The entire drilling assembly from the swivel to the bit consiting of the kelly, drill string, subs, drill collars, and other downhole tools; e.g., stabilizers; reamers. This assembly is used to rotate the bit, carry the drilling fluid to the bit and conduct downhole activities, such as drillstem tests. |
| **Drillstem Buckling** | (1) To bend the drillstem.(2) To have the drillstem become distorted due to effects of forces on the drillstem while in the wellbore. |
| **Drillstem Test** | A test through the drillstem taken by means of special testing equipment attached to the drillstem to determine if oil or gas in commercial quantities have been encountered in the wellbore. Because the drillstem test is a temporary well completion, it is not necessary to set casing or to remove drilling fluid from the wellbore to conduct the test. |
| **Drillstem Test Bottomhole Pressure Measurement** | The bottomhole pressure recorded during a drillstem test. |
| **Drillstem Test Bottomhole Temperature** | The bottomhole temperature recorded during a drillstem test. |
| **Drillstem Test Cumulative Gas Production** | The total gas production during a drillstem test up to the time the record is generated. |

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| **Drillstem Test Cumulative Liquid Production** | The total liquid production during a drillstem test up to the time the record is generated. |
| **Drillstem Test Cumulative Total Production** | The total production of all products up to the time the record is generated. |
| **Drillstem Test Damage Ratio** | The percentage of the estimated damage done to the formation from drillstem test (DST) pressure build up. |
| **Drillstem Test Date** | The date that a drillstem test was taken. |
| **Drillstem Test Elapsed Time** | The time elapsed since the tool began running for a drillstem test (DST). |
| **Drillstem Test Gas Rate** | The measured gas flow rate during a drillstem test (DST). |
| **Drillstem Test Liquid Rate** | The measured liquid flow rate during a drillstem test (DST). |
| **Drillstem Test Perforation Distance** | The distance obtained by totaling the individual perforated intervals of each of the zones tested while conducting a drillstem test (DST). |
| **Drillstem Test Type** | Indicates what type of drillstem test (DST) was performed and whether the DST was taken through perforations and with a treatment, or if wireline test was used; e.g., bailer test; casing packer with treatment; straddle packer. |
| **Drillstem Test Well Status** | The well status value at the time of the drillstem test operation. |
| **Drillstring** | SEE: Drillstem. |
| **Drillstring Behavior** | A term describing the mechanics and action of the drillstring/ drillstem. |
| **Drillstring Fatigue** | The cumulative effect of the stresses imposed on the drillstring due to cyclic stressing during drilling operations. |
| **Drillstring Float** | A check valve in the drillstring that will allow fluid to be pumped into the wellbore but will prevent flow from the wellbore through the drill pipe. |
| **Drillstring Section** | A unique element or contiguous group of unique elements belonging to the drillstring. |
| **Drip** | A vessel attached to a gas well or gas line to capture and accumulate any liquid that might find its way into the gas lines. Drips are installed in low places in the line and must be blown out or emptied periodically. |
| **Drive** | All the immediate elements used to provide motive power to the mud processing equipment; e.g., V-belts; sheaves; motor; motor base. |
| **Drive Head** | A circular steel coupling like tool, used to protect a coupling from drive clamp damage. |
| **Drive Mechanism** | SEE: Reservoir Energy; Reservoir Drive Mechanism. |
| **Drive Pipe** | A relatively short string of large diameter pipe driven or forced into the ground to function as conductor pipe. |
| **Droop Error** | The error introduced by the hanging downward of the protruding instrument extending through and ahead of the trigger bit. |
| **Drop Angle** | The average rate of angular decrease at which a deviated wellbore path departs from the hold angle in an s-type well. |
| **Drop Off** | That portion of the wellbore path in which the inclination is reduced. |
| **Drop Off Angle** | Rate of change (degrees/100 ft) of the inclination angle in the section of the wellbore path that is decreasing toward vertical. |
| **Drop Off Interval** | The wellbore path interval where the inclination angle is purposely decreased and returned toward the vertical while drilling. |
| **Drop Off Measured Depth** | Measured depth to the wellbore point the hold angle begins to decrease in an s-type wellbore. |

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| **Drop Off Rate** | The rate of change of the inclination in the part of the wellbore path where the inclination angle is purposely returned toward the vertical while drilling. |
| **Drop Time** | The amount of time needed for a go devil type instrument to fall from the surface through the drilling fluid within the drillstem to the desired position. |
| **Drop Type Survey** | A directional or inclination survey taken with an instrument that is free released to fall within the drillstem to the desired position within the wellbore. |
| **Drum** | The small scrubbers, separators, and coalescers are referred to as drums in a gas processing plant; i.e., reflux drum, surge drum, etc. |
| **Drum Rope** | A rotating cylinder with side flanges on which wire rope used in machine operation is wrapped. |
| **Drunken Thread** | Distortions in the spiral path of a thread around the pin. Sometimes applied to wavy threads or threads with crests that undulate around the periphery of the threads. |
| **Dry And Abandoned** | SEE: Plugged and Abandoned. |
| **Dry Bottom** | A dry condition at the underflow of a hydrocyclone. |
| **Dry Btu** | Heating value contained in a cubic foot of natural gas measured and calculated free of moisture content. Contractually, dry may be defined as less than or equal to seven pounds of water per one million cubic feet of gas. |
| **Dry Gas** | Gas which does not contain significant liquifiable hydrocarbons. |
| **Dry Hole** | An unsuccessful well. A well drilled to a certain depth without finding commercial quantities of oil or gas. |
| **Dry Hole Money Contribution** | Money given to an operator in payment for drilling a well on property in which the contributor has no direct interest, but payable only in the event the well is a dry hole. |
| **Dry Inspection Method** | A magnetic particle inspection method in which the particles employed are in dry powder form. |
| **Dry Plug** | The plugging of the underflow opening of a dry bottom hydrocyclone. |
| **Dryer ( Air/gas)** | Equipment used to remove water/condensation from air/gas lines. |
| **Dst** | SEE: Drillstem Test. |
| **Dual Completion** | SEE: Multiple Well Completion. |
| **Dual Search Unit** | A probe or search unit containing two elements, one a transmitter, the other a receiver. |
| **Dual Transducer** | An ultrasonic probe containing two piezoelectric crystals, one for transmitting and one for receiving. |
| **Due The Owner After Tax Amount** | Net amount, after tax deduction, due to the owner based on the owner's interest in the lease, calculated against the total lease production. |
| **Due The Owner Before Tax Amount** | Net amount, before tax deduction, due to the owner based on the owner's interest in the lease, calculated against the total lease production. |
| **Dummy** | A blank tool installed in a side pocket gas lift mandrel landing nipple and/or sliding sleeve. |
| **Dump Bailer** | A cylindrical container with a valve that is used to release small batches of cement, water, or mud downhole in a remedial cementing operating or for other special purposes. |
| **Dump Valve** | A valve used to reduce liquid level in a vessel or line, usually an automatic drain valve. |
| **Duns Number + 4** | An extension of the DUN & BRADSTREET (DUNS) unique corporate identifier code commonly used as an electronic mailing address for Electronic Commerce (EC) documents. The "+4" refers to a 4-digit suffix that is defined and maintained separate of the DUNS number by the referenced entity. The suffix typically is used to more uniquely identify sub-entities such as subsidiaries, locations, and/or cost centers. The two primary uses for this code within American National Standards Institute (ANSI) X12 documents a |

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| **Duster** | SEE: Dry Hole. |
| **Dutchman** | (1) A piece of pipe that has been twisted off inside a female connection.(2) A short section of material; i.e., belting or pipe, used to lengthen existing equipment. |
| **Dv Tool** | A tool used to divert cement, when pumping, to control the placement of cement slurry. |
| **Dynamic Loading** | Loads introduced into a structure or the machine or its components due to accelerating or decelerating forces. |
| **Dynamic Positioning System** | A mechanism by which floating rigs may maintain their position above a wellbore. Normally done by thrusters on the hull(s) of a rig being controlled by a computerized positioning system. |
| **Dynamic Range** | The ratio of maximum to minimum reflective areas that can be distinguished on the cathode ray tube at a constant gain setting. |
| **Dynamic Stress** | Varying or fluctuating stress occurring in a structural member as a result of dynamic loading. |
| **Dynamometer** | As applied to sucker rod load measurements, an instrument which measures the polished rod loads in relation to the position of the rod within the pumping cycle. |
| **Dynamotor** | A special form of motor generator combining the motor and generator in a single machine. |
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| **E-mail** | SEE: Electronic Mail. |
| **E-mail Address** | The address to which electronic mail is sent. |
| **Earthfill Structure** | A gravity structure made from gravel or other earthfill material. |
| **East West Code** | An indicator of the east-west direction of a measurement from an identifiable line; e.g., lease; boundary; block. |
| **East West Distance** | The East/West footage or distance that represents the length of a measurement from an identifiable line; e.g., lease; boundary; block. |
| **Easting** | The map projection grid coordinate of a point on a projection measured eastward (positive) from the north south line through the origin. |
| **Ebulition Cooling** | A method in which all heat picked up in engine jackets vaporizes the cooling water and the steam thus formed is subsequently condensed and recirculated through the engine. This method maintains the coolant at a constant temperature. |
| **Eccentering Arm** | An extendable device, sometimes a bow spring, which presses the sonde body against the borehole wall. Also referred to as: eccentralizer or decentralizer. |
| **Eccentricity** | A condition of pipe in which the OD and ID axes are not coincident, resulting in wall thickness variation around the circumference at a given section plane. |
| **Echo** | An indication of reflected energy. |
| **Echo Amplitude** | The vertical height of an A scan received signal, measured from base to peak or peak to peak. |
| **Eco Out** | SEE: Economic Out. |
| **Ecological Impact** | The total effect of an environmental change, either natural or man made, on the ecology of the area. |
| **Ecology** | The interrelationships of living things to one another and to their environment, or the study of such interrelationships. |
| **Economic Interest** | Any interest in minerals or reserves in place, in which the owner must look solely to the proceeds derived from the extraction of such minerals or reserves, (if, as, and when produced) for a return of his capital. |

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| **Economic Limit** | The level beyond which operation of a producing property no longer yields sufficient cash flow for an element monetary profit. May be defined in terms of water cut, oil cut, gas-oil ratio, production rate, or other business or engineering factor. |
| **Economic Limit Factor** | The economic limit factor as computed. |
| **Economic Limit Factor Standard Volume** | The daily production volume per well at the economic limit. |
| **Economic Out** | Provision in gas purchase contracts which permits the purchaser to rescind contracts involving deregulated natural gas if prices of competitive fuels drop to the extent that distributors cannot compete in selling the gas. Also referred to as: ECO OUT. |
| **Economizer** | A distinct heat exchanger associated with refrigeration systems lowering the refrigerant feed temperatures to the chiller. |
| **Ecosystem** | The interacting system of a biological community and its nonliving environment. |
| **Ecozone** | (1) An ecostratigraphic unit.(2) A body of rock bounded by observable faunal changes. |
| **Eddy Current** | Circulating current caused to flow in the pipe by varying magnetic fields. |
| **Edge Water** | Formation water occupying the perimeters of an oil or gas reservoir. |
| **Edi** | SEE: Electronic Data Interchange. |
| **Effective Beam Angle** | That beam angle which, when plotted for a flat workpiece of the same thickness, accounts for the lengthening of skip distance which occurs in a curved test piece. |
| **Effective Date** | The date on which something becomes effective. |
| **Effective Flange Breadth** | The reduced breadth of a plate subjected to bending and/or tensile load, which, with an assumed uniform stress distribution, produces the same effect on the behavior of a structural member as the actual breadth of the plate with its nonuniform stress distribution. While the effective flange width applies to a member under compression, the effective flange breadth applies to a member under bending and/or tensile loading, and is associated with shear lag effects. |
| **Effective Flange Width** | The reduced width of a plate subjected to compressive load, which, with an assumed uniform stress distribution produces the same effect on the behavior of a structural member as the actual width of the plate with its nonuniform stress distribution. |
| **Effective Injection Percentage** | The percentage of fluid injected that goes into the zone of interest. |
| **Effective Length** | The equivalent length used in compression formulas and determined by a bifurcation analysis. |
| **Effective Length Factor** | The ratio between the effective length and the unbraced length of the member. |
| **Effective Penetration** | The maximum depth in a material at which the ultrasonic transmission is sufficient for proper detection of discontinuities. |
| **Effective Permeability** | A measure of the ability of a single fluid to flow through a rock when the pore spaces of the rock are not completely filled or saturated with the fluid. |
| **Effective Porosity** | The percentage of the bulk volume of a rock sample that is composed of interconnected pore spaces that allow passage of fluids through the sample. |
| **Effective Radius** | The characteristic radius used to quantify the behavior of a reservoir. This is the radius that a reservoir would have if circular in shape. |
| **Effective Screening Area** | Portion of screen surface available for material separation. |
| **Effective Thread Length** | Threads having fully formed roots, but not necessarily finished crests. |
| **Effective Width** | The reduced width of shell or plate which, with an assumed uniform stress distribution, produces the same effect on the behavior of a structural member as the actual width of shell or plate with its nonuniform stress distribution. |

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| **Effluent** | A discharge of liquids and/or solids into the environment, partially or completely treated or in their natural state. Generally used in regard to discharges into waters. |
| **Effluent Seepage** | Diffuse discharge onto the ground of liquids that have percolated through solid waste or another medium; they contain dissolved or suspended materials. |
| **Eft** | SEE: Electronic Funds Transfer. |
| **Elastic Modulus** | The degree to which a solid body undergoes elastic deformation under stress. |
| **Elastomer** | Any of the class of materials, including natural and synthetic rubbers, which return to their original shape after being subjected to large deformations. |
| **Elbow** | A fitting that allows two pipes or nipples to be joined together at an angle of less than 180, usually 90 or 45 degrees. Also referred to as: ell. |
| **Electric Controller** | An electric control panel used for starting, cycling, or varying the speed of an electric motor that is rated by National Electrical Manufacturers Association (NEMA) size. |
| **Electric Generator** | A rotating machine together with its driver and associated switch gear used to generate electrical energy. |
| **Electric Line** | Single or multiple electrical conductor housed within a braided wireline. |
| **Electric Log** | A generic term used to refer to well logging of resistivities of the rocks surrounding the uncased borehole. Electric logs generally include a measurement of spontaneous potential (SP) generated within the borehole. |
| **Electric Log Run Flag** | An indicator of whether an electric log was run. |
| **Electric Logging** | The well activity of measuring resistivity and self potential properties of rocks immediately adjacent to the borehole by passing electrodes down the wellbore and inducing an electric current in the rocks adjacent to the borehole. |
| **Electric Pilot** | An instrument, used in well surveying, which utilizes an electrical current in connection with two fluids, a conductor and a nonconductor, to determine accurately the interface between the two fluids. |
| **Electric Rig** | A rotary drilling rig using electric power. |
| **Electric Welded Pipe** | Pipe having one longitudinal seam formed by electric resistance welding, or electric induction welding without the addition of extraneous metal. |
| **Electrical Area Classification** | Locations are classified according to API RP 500B: Recommended Practice for Classification of Areas for Electrical Installations at Drilling Rigs and Production Facilities on Land and on Marine Fixed and Mobile Platforms. |
| **Electrical Condenser** | SEE: Capacitor. |
| **Electrical Cost** | Costs include construction costs, wiring, poles, transformers, and generating equipment serving the booster station. |
| **Electrical Enclosure** | The case or housing of electrical apparatus provided to prevent personnel from accidentally contacting energized parts and to protect the equipment from physical damage. Certain enclosures also serve to prevent electrical equipment from being a source of ignition of flammable mixtures outside the enclosure. |
| **Electrical Noise** | Extraneous signals caused by externally radiated electrical signals or from electrical interferences within the instrumentation. |
| **Electrical Stability** | A measure of the quality of water emulsion within an oil based mud. The better the emulsion, the greater the electical potential difference required to pass a current through the fluid. Typically, a fluid which has the water fully emulsified; i.e., the oil is in a continuous phase, would require a potential difference of up to 1000 volts. |
| **Electrical Survey** | A generic term used to refer to specific electric logging, usually consisting of short normal, long normal, lateral resistivity curves and SP curves. Often used incorrectly to refer to borehole electric logs of other types. |
| **Electrochemical** | Chemical changes associated with flow of electric current. |

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| **Electrode** | A conductor used to establish electrical contact with a nonmetallic part of a circuit. |
| **Electrolyte** | A substance which dissociates into charged positive and negative ions when in solution or a fused state and which will then conduct an electric current. Common electrolytes are: Acids, bases, and salts. |
| **Electromagnet** | Ferromagnetic material surrounded by a current carrying coil which becomes magnetized. Commonly abbreviated as: EM. |
| **Electromagnetic Propagation Log** | A well log that shows the propagation time and attenuation of electromagnetic energy through the rocks surrounding the borehole. |
| **Electromagnetic Thickness Log** | A well log of casing thickness as determined by using an array of electromagnetic transducers. |
| **Electronic Casing Caliper Log** | A survey which uses an electromagnetic noncontact method of relating currents induced on the inner surface of casing or tubing to the inner diameter of that casing or tubing. |
| **Electronic Data Interchange** | Commonly abbreviated as: EDI. The electronic exchange of business documents from the computer of one company to the computer of another company, in a standard format agreed on by both companies. Not all kinds of electronic communication with an outside company are considered EDI. For example, electronic messaging, e-mail, voice messaging, facsimile (fax), and telex are not considered EDI because they are free form and do not fit a standard format. The American National Standards Institute (ANSI) is dev |
| **Electronic Funds Transfer** | The electronic, paperless, transfer of money (electronic funds transfer - EFT) between companies in response to an invoice or other obligation. |
| **Electronic Mail** | Mail or messages sent electronically, frequently cited as e-mail. |
| **Electronic Transfer** | SEE: Electronic Data Interchange. |
| **Electrostatic Treater** | An emulsion treating vessel that utilizes an electrical grid and usually a fire tube to coalesce the fluid. This type of treater usually operates at lower temperatures than ones without grids. |
| **Elemental Analysis** | Parameters derived during organic geochemical analysis. |
| **Elevation** | The distance above a specified reference datum, commonly the surface of the earth or mean sea level. A positive value denotes a point higher than the reference point. When given without specifying a reference value, it is assumed that the elevation is referenced to mean sea level |
| **Elevation Negative Sign** | A data field that contains a negative sign (-) if the elevation of the identified entity is below sea level. |
| **Elevation Reference Point Code** | An indicator of a point in, on, or closely associated with a well, from which depths along a wellbore path are measured (the zero measurement point) or at which the elevation datum (with respect to mean sea level) is determined and recorded (the permanent elevation reference point); e.g., Bradenhead; Casing Flange; Derrick Floor; Estimated; Ground; Kelly Bushing; Rotary Bushing; Rotary Elevation; Rotary Table; Sea Level; Topo Sheet Ground Estimate. |
| **Elevation Statics** | SEE: Field Statics. |
| **Elevator** | A hinged circle or latch block provided with long links to hang on the elevator hook used to hoist or lower drill pipe, casing, tubing, and sucker rods. |
| **Ellipsoid** | Mathematical surface to which coordinates are referenced. Defined by an ellipsoid of revolution which is revolved about its minor axis and which approximates to the earth's surface, devoid of topographic undulations. Examples: Clarke-1866; GRS-80; International-1924. |
| **Ellipsoid Name** | Reference ellipsoid and year on which the latitude and longitude are based; e.g., Clarke-1866. |
| **Elution** | The extraction from an adsorbent by using a solvent. |
| **Email** | SEE: Electronic Mail. |
| **Email Address** | SEE: E-Mail Address. |
| **Embedded Accounting** | Accounting entries electronically generated as part of a non-accounting business activity instead of being treated as a separate business activity. |

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| **Emergency Gas Relief System** | A system for discharging gas by manual actuation or by an automatic pressure relief valve from a pressurized system to the atmosphere for the purpose of relieving an abnormally high pressure. |
| **Emergency Pits Count** | The number (count) of emergency pits on a facility. These pits must be approved and normally must be emptied within 24 to 48 hours. |
| **Emergency Shutdown System** | A system of manual stations which, when activated, initiate system shutdown. Commonly referred to as: ESD System. |
| **Emi Inspection** | A colloquial expression for new pipe inspection performed with an inspection unit having these four scanners: (1) Rotating scanner for detection of longitudinal defects.(2) Fixed scanner for detecting transverse defects.(3) Rotating scanner for wall thickness measurement.(4) Grade verifier or comparator (optional). |
| **Emission Factor** | The average amount of a pollutant emitted from each type of polluting source in relation to a specific amount of material processed. |
| **Emission Standard** | The maximum amount of a pollutant legally permitted to be discharged from a single source either mobile or stationary. |
| **Emulsifier** | A substance used to produce an emulsion of two liquids which do not mix. Emulsifiers may be divided, according to their behavior, into ionic and nonionic agents. The ionic types may be further divided into anionic, cationic, and amphoteric, depending upon the nature of the ion active groups. Also referred to as: Emulsifying Agent. |
| **Emulsion** | A mixture of two immiscible liquids; i.e., liquids which do not mix together under normal conditions. |
| **Emulsoid** | Colloidal particles which take up water. |
| **Encircling Coil** | A coil surrounding the pipe under test. |
| **Enclosed And Gasketed Busway** | An enclosed and gasketed, grounded metal enclosure containing factory mounted, bare or insulated conductors which are usually copper or aluminum bars, rods, or tubes. |
| **Enclosed And Gasketed Lighting Fixtures** | Lighting fixtures (formerly referred to as vapor tight) designed to prevent the entrance of gas and vapors. Such enclosures will not absolutely prevent the entrance of gases and vapors, as such tend to breathe as they are heated and cooled. |
| **Enclosed Area** | A three dimensional space enclosed by more than two-thirds (2/3) of the possible projected plane surface area and of sufficient size to allow the entry of personnel. For a typical building, this would require that more than two-thirds (2/3) of the walls, ceiling, and/or floor be present. |
| **Enclosure** | A structure which may provide environmental protection for the machine. |
| **End And Outlet Connection** | (1) Integral threads, male or female.(2) Flanges, studded or through bolted used to join together equipment that contains or controls pressure. |
| **End Damage** | Damage to the pipe, such as during loading, unloading or that resulting from longitudinal shifting of the load and striking a bulkhead or an adjacent pipe pile. |
| **End Effect** | The reduction in magnetization near the ends of a length of magnetized pipe due to the demagnetizing effect of the poles at the pipe ends. |
| **End- Point** | Indicates the end of some operation or when a definite change is observed. In titration, this change is frequently a change in color of an indicator which has been added to the solution or the disappearance of a colored reactant. |
| **End Point Temperature Measurement** | The maximum temperature readsing obtained during the distillation test. |
| **End- Point (titration)** | The point at which the last of a substance whose quantity is being determined has reacted with a measured amount of a standard reagent. Normally indicated by the change taking place in the color of an indicator when reaction is completed. |
| **End User** | Ultimate consumer and user of natural gas. An end user purchases the gas for consumption but not for resale purposes. Sometimes applied to a local distribution company (LDC). |

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| **Ending Inventory Flag** | An indicator of whether there is an ending inventory of condensate on hand at the time of workover or recompletion. |
| **Ending Inventory Volume** | The measured or calculated quantity of oil and/or condensate in storage tanks at the end of a specific period. |
| **Ending Test Date** | The date that the identified test was completed. Tests include drillstem test, formation test, reservoir limits, etc. |
| **Ending Test Time** | The end time in hours, minutes of the test. |
| **Ending Tract Number** | The ending tract number assigned by the Minerals Management Service (MMS) at the time of a lease sale to identify a leasable component as a single bidding entity in a particular lease sale. A tract may be comprised of one block or of portions of several blocks as long as the total acreage in one entity does not exceed 5,760 acres. |
| **Engine Analyzer** | Electronic diagnostic equipment for compressors and compressor drivers. |
| **Engineer (mud Or Drilling Fluid)** | An individual versed in drilling fluids whose duties are to manage, carry through, and maintain the various types of well drilling fluid programs. |
| **Engineering** | The science or application of science to planning, constructing or using machinery, structures or other functional assemblies. |
| **Enhanced Recovery** | Recovery methods for minerals which go beyond the more conventional secondary recovery techniques of pressure maintenance and water flooding. Enhanced recovery methods now being employed include micellar surfactant, steam drive, polymer, miscible hydrocarbon, CO2, and steamsoak. |
| **Enriched Gas Drive** | The injection into a reservoir of fluids (usually liquefied petroleum gases--LPG) that will mix with the native reservoir fluid to displace oil that would not be recovered with natural reservoir energy. Also referred to as: Miscible Displacement Operation. |
| **Ensemble** | Historical. SEE: Gather. |
| **Entitlement** | Working interest owner's share of production. This volume may not equal actual sales due to contractual or market conditions. |
| **Entity Identifier Code** | An indicator of the business function of the company ; e.g., operator, lessee, purchaser, etc. |
| **Entrained Gas** | Gas suspended in bubbles in a stream of liquid such as water or oil. |
| **Entrained Liquid** | A mist size liquid droplet occurring in a gas stream. Special designed separators, with a mist extractor, are used to remove the liquid from the gas stream. |
| **Entrainment** | (1) The picking up and carrying along to where it is finally deposited.(2) The trapping of gas bubbles in a cement slurry.(3) The trapping of water droplets or mist in a gas stream. |
| **Environment** | The sum of all external conditions and influences affecting the life, development, and ultimately the survival of an organism. |
| **Environmental Action Cost** | Costs associated with meeting environmental regulations. |
| **Environmental Impact Statement** | A document prepared by a Federal agency on the environmental impact of its proposals for legislation and other major actions significantly affecting the quality of the human environment. Environmental impact statements (EIS's) are used as tools for decision making and are required by the National Environmental Policy Act. |
| **Environmental Protection Agency** | An Agency of the U.S. Federal Government, commonly abbreviated EPA. |
| **Environmental Seal** | A seal which uses O-rings, epoxy, molded elastomer, silicone compound, or potting compound to prevent corrosion due to moisture or vapors. |
| **Epa** | SEE: Environmental Protection Agency. |
| **Equalizing Feature** | A subsurface safety valve (SSSV) mechanism which permits the well pressure to bypass the SSSV closing element to aid in opening the valve. |

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| **Equipment** | Devices for service within specific applications or tasks. |
| **Equipment Packing** | Any compressible material used to obtain a tight, leakproof seal around pump shafts, valve stems, etc. |
| **Equipment Series** | Groupings of equipment; i.e., flanges, flanged valves, etc., based on size, material makeup, nominal pressure, etc. Groupings are established by American Standards Association (ASA). |
| **Equipment Test** | Describes the various types of tests performed on casing strings, drillstrings, blowout preventers, tubing strings, and Christmas trees. |
| **Equipping Cost** | Monies expended beyond completion costs, to acquire and install equipment required to produce petroleum substances from the well including the pump (or other artificial lift equipment), the acquisition and installation of flow lines and production tankage serving the well and where necessary a heater, dehydrator, or other facility for the initial treatment of the petroleum substances produced from the well to prepare such production for transport to market, but specifically excluding costs incurred beyond |
| **Equivalent Circulating Density** | For a circulating fluid, the equivalent circulating density in lb/gal equals the hydrostatic head (psi) plus the total annular pressure drop (psi) divided by the depth (ft) and by 0.052. |
| **Equivalent Spherical Diameter** | The theoretical dimension usually referred to when the sizes of irregularly shaped small particles are discussed. These dimensions can be determined by several methods; e.g., settling velocity; electrical resistance; light reflection. |
| **Equivalent Weight** | The atomic or formula weight of an element, compound, or ion divided by its valence. Elements entering into combination always do so in quantities proportional to their equivalent weights. Also referred to as: Combining Weight. |
| **Erection Load** | The load produced in the mast and its supporting structure during the raising and lowering operation. |
| **Eroded Orientation Pockets** | Enlargements made on one side of the borehole by jetting methods. |
| **Erw Pipe** | Pipe having one longitudinal seam formed by electric flash welding or electric resistance welding, without the addition of extraneous metal. |
| **Estimate Indicator Flag** | An indicator of whether a reported line is related to a previous month's estimate. |
| **Estimated Farm-out Deal Cost** | The estimated cost of a farm-out deal associated with a specific exploratory well. |
| **Estimated Gas Rate Per Well Test After Work** | The estimated volume of gas anticipated to be produced during a well test, calculated over 24 hours, after the proposed work has been completed. |
| **Estimated Recovery** | The estimated quantity of oil or gas that a reservoir, a field, or a property will produce. |
| **Estimated Royalty Payment Amount** | The amount of the estimated payment. This is an approximation of the royalty due when actual production figures are unavailable or are normally received too late for timely reporting. |
| **Estimated Royalty Payment Flag** | An indicator that the amount of royalty payment is an estimated amount. |
| **Estimated Tax Payment Amount** | The amount of taxes estimated and paid for a sales month and year. |
| **Estimated Tax Payment Previously Remitted Amount** | The amount of taxes estimated and paid previously for a sales month and year. |
| **Estimated Ultimate Gas Yield** | The ultimate gas yield estimated for the life of the reservoir/field/lease. |
| **Estimated Water Rate Per Well Test After Work** | The estimated volume of water anticipated to be produced during a well test, calculated over 24 hours, after the proposed work has been completed. |
| **Estuary** | An area where the fresh water meets salt water; e.g., bay; mouth of rivers; salt marsh; lagoon. An estuary is a delicate ecosystem. Estuaries serve as nurseries or spawning and feeding grounds for a large group of marine life and provide shelter and food for birds and wildlife. |
| **Evaporation Pond** | Shallow, artificial ponds into which liquids or aqueous suspensions are pumped, permitted to dry, and either removed or buried by more added materials. |
| **Evaporation Rate** | The quantity of produced water which can be evaporated through atmospheric processess adjusted for annual rainfall. |

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| **Evaporator** | A vessel, usually steam heated, for the production of steam which is subsequently condensed for boiler makeup. |
| **Event Activity** | An activity that takes place at a single datetime associated with it. |
| **Event Activity Datetime** | The datetime associated with the event activity. |
| **Event Occured Time** | The time of day that an event occurred, in hours and minutes. |
| **Event Sequence** | A suppplemental operation performed on a wellbore, such as redrill, deepen, recomplete or rework. Used by the API Well Numbering System. Also Known as: Hole Change. |
| **Event Sequence Code** | (1) The event sequence code (column 16 of the CPA well number) for Saskatchewan wells is reported as follows: 0 = original oilwell; 1 = re-entry; 2 = recompletion oil to oil (plug-back); 3 = second recompletion oil to oil; 4 = dual (also twin if two strings of casing are used in the same borehole. Do not use for twin wells which have separate wellbores as the difference is indicated in the quad.); 5 = gas; 6 = water; 7 = water injection.(2) Columns 13 and 14 of the API Well Number: A non-unique op |
| **Evergreen Clause** | Provision which extends the life of the contract after the primary term has expired. As a rule, the clause will provide that the terms of the contract will remain in effect until a written notice of termination (required) is furnished by one party to the other. |
| **Exception Required Flag** | An indicator of whether or not a regulatory exception will be required for the project. |
| **Excess Butane** | SEE: Free Butane. |
| **Excess Capacity Volume** | The difference in the amount of gas between the producer's deliverability capacity and the purchaser's nominations. |
| **Excess Temperature** | Temperature in a process component in excess of the rated working temperature. |
| **Excessive Reinforcement** | Outside weld beads which extend above the prolongation of the original surface of the pipe. Also referred to as: Excessive Overfill. |
| **Exchange Agreement** | Agreement between producers providing for the exchange of gas produced from one property or interest for gas produced from another property or interest. |
| **Exchange Gas** | Gas exchanged under provisions of an exchange agreement. |
| **Exempt Interest** | An interest owned in a property, usually by a charitable or governmental agency, which is not subject to state production taxes as provided in the applicable tax regulations. Differs from a Tax Free Interest. |
| **Existing Contract** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, any contract for the first sale of natural gas in effect on November 8, 1978, the day before the date of the enactment of the NGPA. |
| **Exit Duct** | SEE: Overflow Opening. |
| **Expanded Perlite** | A siliceous volcanic rock that is ground to small size and subjected to extreme temperature in an oven, resulting in an expansion and release of combined water, leaving the rock particle considerably expanded and porous. |
| **Expander** | A high speed turbine device generating extreme cold temperatures in a cryogenic plant by rapidly reducing the pressure of the inlet gas stream thereby expanding the volume. |
| **Expander Shaft** | The center section rotating assembly of an expander comprised of shaft, compression and expansion wheel. |
| **Expander Unit** | SEE: Fuel Gas Treating Unit. |
| **Expansion Bellows** | A corrugated piping device designed for absorbing expansion and contraction. |
| **Expansion Bend** | A piping configuration designed to absorb expansion and contraction. |
| **Expansion Joint** | A device used to permit linear expansion or contraction as the temperature rises or falls. |
| **Expansion Liquid Volume** | Volume fraction of liquid hydrocarbon present at the given temperature and pressure. |

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| **Expansion Loop** | A bend placed in a line to absorb line movement or line crawl due to expansion and contraction of the pipe. |
| **Expansion Pressure Measurement** | Pressure at which the liquid volume measurement was made. |
| **Expansion Temperature** | Temperature at which the liquid volume measurement was made. |
| **Expected Action Date** | The month and year when the action will occur. |
| **Expenditure Limit Amount** | The contractual amount provided in the operating agreement which the operator of a joint interest account can spend for one repair or construction without securing the nonoperators' approval. |
| **Experimental Permeability Ratio** | The experimental permeability ratio (kp/kd) is the ratio of the perforated effective permeability to the original effective permeability. These permeabilities are determined from flow tests on the core target. |
| **Expiration Date** | The date of expiration. |
| **Exploration** | The process of searching for minerals, including: (1) Geophysical surveys where magnetic, gravity, seismic or other systems are used to detect orimply the presence of such minerals. (2) Any drilling, whether on or off known geological structures, including the drilling of a well in which the discovery of oil or natural gas in paying quantities is made and the drilling of any additional delineation well after such discovery which is needed to delineate any reservoir and to enable the lessee to determine |
| **Exploration Program** | Geological, geophysical, and geochemical examinations and other investigations relating to geology, and any related environmental studies, other than drilling, conducted under the terms of the agreement. |
| **Exploration Project Name** | The name of an exploration program or project. |
| **Exploratory Unit** | An administrative unit involving undeveloped oil and gas properties embracing a structure or block of lands considered potentially productive, which is formed, due to the diversity of ownership, so that development and operations may be conducted and the expense shared on a fieldwide basis, and in the interest of conservation. |
| **Exploratory Well** | A well drilled in an unproven area, or to find a new reservoir in a field already productive, or to significantly extend a known reservoir. |
| **Explosion Proof Enclosure** | An enclosure which is capable of withstanding an explosion of a gas or vapor within it and of preventing the subsequent ignition of a flammable gas or vapor which may surround it, and which operates at such an external temperature that a surrounding flammable gas or vapor will not be ignited. |
| **Explosive Limit** | The explosive limits of a gas or vapor are the lower and upper percentages by volume of concentration of gas in a gas and air mixture that will form an ignitible mixture. |
| **Extended Reach Drilling** | A special drilling technique in which the horizontal wellbore component is significantly greater than the vertical component. |
| **Extension Well** | A well drilled for the purpose of extending the proven limits of a known reservoir to include the unproven area being tested. |
| **External Authorization Date** | The month, day, year on which the official authority has received all written or verbal approvals to proceed with a specific work activity from working interest partners. |
| **External Guyline** | Lines which provide stability and run from some point in the derrick, mast, or pole to ground anchors or to a special substructure or derrick base which provides a substitute for ground anchors. |
| **External Thread** | A thread on the outside surface of a pipe. |
| **External Upset** | An extra thick wall at the threaded end of drill pipe or tubing. Externally upset pipe does not have a uniform outside diameter throughout its length but is enlarged at each end. |
| **Extra Weight Drill Pipe** | (Registered trademark of Reed Drilling Tools, Inc.) Commercial name for a particular manufacturer's heavy weight drill pipe. |
| **Extraction** | The percent of a given component of the plant inlet gas which is removed from the gas stream by absorption or condensation. |
| **Extraction Loss** | SEE: Shrinkage. |

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| **Extraneous Gas** | (1) Gas injected into a reservoir other than the reservoir from which produced.(2) Gas used in the operations of a lease other than the lease from which produced. |
| **Extrapolated Thickening Time** | The time required for a cement slurry to reach a consistency of 100 Bearden units of consistency (Bc) obtained by extending the curve recorded during a thickening time test which may be stopped at 70 under given conditions. |
| **Extreme Platform Offset** | An estimated maximum offset of the platform corresponding to given environmental conditions. |
| **Extreme Pressure Lubricant** | Additives which, when added to the drilling fluid, impart lubrication to the bearing surfaces when subjected to extreme pressure conditions. |
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| **Fabrication Weld** | A weld joining two or more parts. |
| **Facility** | An installation consisting of equipment, machinery, vessels, buildings, or other physical assets constructed, assembled, and/or otherwise acquired or designated for a specific purpose. |
| **Facility Identifier** | The number or code assigned to a facility by the regulatory agency. |
| **Facility Measurement Point** | (1) A facility that sells, stores, or transfers production prior to or at the point of royalty determination. (2) A metering point where production is measured for sales, transfers, and/or royalty determination.(3) Also referred to as: FMP. |
| **Facility Measurement Point Code** | The Federal agency code assigned to a Facility/Measurement Point. Commonly abbreviated: FMP. |
| **Facility Measurement Point Name** | The official Federal agency name assigned to a Facility/Measurement Point, commonly abbreviated: FMP. |
| **Facility Measurement Point Number** | The official Federal agency number assigned to a Facility/Measurement Point, commonly abbreviated: FMP. |
| **Facility Name** | The name used to identify the facility. |
| **Facility Reference Point** | A describable point situated on or in a facility. Ideally it should be a permanent feature which shall exist for the lifetime of the facility. |
| **Facility Type Code** | An indicator of a classification of a facility entity according to its physical equipment or principal service performed. |
| **Factory Seal** | A seal provided in an explosion proof device during manufacture for the purpose of eliminating external, field installed conduit seals for that device. |
| **Fail Safe** | Equipment or a system so constructed that, in the event of failure or malfunction of any part of the system, devices are automatically activated to stabilize or secure the safety of the operation. |
| **Fail Safe Device** | A device, which upon loss of the control medium, automatically shifts to the safe position. |
| **Failed Casing Depth** | The measured depth at which the casing failure occurred. |
| **Failure** | (1) Drilling a dry hole. Probability of failure is one minus the probability of success. In some analyses, drilling a dry hole is not the only condition defining a failure case.(2) Improper performance of a device or equipment item that prevents completion of its design function.(3) Any condition of a valve system that prevents the valve from performing its design function for wellbore or surface control; i.e., inability to close due to breakage, erosion, corrosion, or fouling. |
| **Fairlead** | A device to guide wire rope for proper spooling. |
| **False Easting** | A value added to the Easting value of a projection coordinate system to eliminate negative numbers. A translation of the Easting axis. |
| **False Indication** | An indication that may be interpreted erroneously as a defect or imperfection. An irrelevant indication. Also referred to as: Artifact. |

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| **False Northing** | A value added to the Northing value of a projection coordinate system to eliminate negative numbers. A translation of the Northing axis. |
| **False Set** | An abnormal early thickening of cement slurry wherein the slurry remains pumpable for the usual thickening time. The thickening may be reversible during the pumping history of the slurry. |
| **False Starting Thread** | A circumferential tool mark on a round thread chamfer that precedes the actual starting thread. Sometimes referred to as a double starting thread. |
| **Fan Cooler** | A heat exchanger employing a fan to move air across a coil and thereby remove heat from a fluid in the coil. |
| **Far Field** | The region beyond the near field in which intervals of high and low acoustic transmission intensity cease to occur. |
| **Farm-in** | To execute a Farm-In Agreement. |
| **Farm-in Agreement** | A Farm-Out Agreement, but viewed from the standpoint of the farmee rather than from that of the farmor. |
| **Farm-in Agreement Number** | The reference number assigned to a Farm-in Agreement for identification purposes. |
| **Farm-out** | To execute a farm-out agreement. |
| **Farm-out Agreement** | A pact between operators whereby a working interest owner of a lease agrees to assign his interest or a portion of it to another operator who wishes to drill on the lease. The assignor (the farmor) may or may not retain an interest (royalty or production payment) in the production |
| **Farm-out Agreement Number** | The number assigned to a Farm-out Agreement for identification purposes. |
| **Farm-out Name** | The name applied to a leasehold held under a farm-out agreement. |
| **Farm-out Well** | Well drilled by outside parties in which the designated company neither acquired nor retained a working interest: (1) Toward which the company made: (a) Dry or bottomhole cash contributions; (b) Acreage contributions; (c) Contributions of assets other than cash or acreage; (d) Combinations of (a), (b), or (c). (2) Under dry hole contracts where no money was paid by the company because the well was completed as a producer. A test well in which the company retained or acquired an economic interest othe |
| **Farmee** | The party to whom a transfer in acreage under a farm out agreement has been made; i.e., the recipient of the acreage. |
| **Farmor** | The party who transfers acreage to another under a farm out agreement. |
| **Fast Ice** | Any type of sea ice that remains attached to a shoreline, island, or grounded ice features. |
| **Fast Ice Zone** | Any type of sea ice that remains attached to a shoreline or grounded. Also referred to as: Landfast. |
| **Fast Line** | The end of the hoisting (drilling) line which is affixed to the drum or reel. |
| **Fatigue** | Failure of a metal or equipment under repeated loading and stress. |
| **Fatigue Life** | Number of cycles a metal can endure at a given stress level before failure will occur. |
| **Fault** | A fracture or zone of fractures along which there has been displacement of the sides relative to one another parallel to the fracture. |
| **Fault Cut** | SEE: Fault Vertical Separation. |
| **Fault Dip** | The dip angle of the fault. |
| **Fault Heave** | Heave is the horizontal component of dip slip, measured in the vertical cross section perpendicular to the fault strike. |
| **Fault Name** | The name of the fault. |
| **Fault Strike Azimuth Measurement** | The strike azimuth of the fault plane. |

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| **Fault Throw** | The vertical component of dip slip. It is the difference in vertical depth between the fault intersection with a line or plane (such as a formation top) in one fault block and the fault intersection with the same line or plane in the opposing fault block, measured in the vertical cross section perpendicular to the strike of the fault. |
| **Fault Type Code** | An indicator of the type of fault; e.g., normal; reverse; strike slip; thrust. |
| **Fault Vertical Displacement** | SEE: Fault Vertical Separation. |
| **Fault Vertical Separation** | The vertical component of bed displacement. It is the distance the rock column is displaced vertically as a result of fault block movement. It is also the vertical thickness of stratigraphic section missing or repeated in the wellbore as a result of fault intersection. Also referred to as Fault Cut, or Fault Vertical Displacement. |
| **Fault Zone** | A fault, instead of being a single clean fracture, may be a zone hundreds or thousands of meters wide. The fault zone consists of numerous interlocking small fractures, or a confused zone of gouge, breccia or mylonite. |
| **Faunal Assemblage** | SEE: Fossil Assemblage. |
| **Fcf** | SEE: Fisherman's Contingency Fund. |
| **Featheredge** | A thin sharp crested portion of a thread normally formed when the starting thread on round or buttress (pipe threads) runs out to the face of the pipe and not on the chamfer. |
| **Federal 8g Acreage** | Acreage under the jurisdiction of the United States government within three nautical miles of the seaward boundary of any coastal state. |
| **Federal Area** | Areas under the sovereignty and/or jurisdiction of the United States government; e.g., Federal; Indian. |
| **Federal Chargeable Acres** | Federal regulations limit the total area which a company can hold in certain types of U.S. government leases at any one time in any one state. This is the area under a given land property that is chargeable to this Federal limit for that state. |
| **Federal Chargeable Flag** | An indicator of whether or not a government lease is chargable against the maximum acreage limitation; i.e., Federal chargeable acres. |
| **Federal Energy Regulatory Commission** | An agency of the U.S. Federal Government that is responsible for the regulation of energy policies. Commonly abbreviated as FERC. |
| **Federal Exempt Volume** | The Federal government's royalty interest share of volume produced from a lease. Its value is exempt from taxes. |
| **Federal Indian Code** | An indicator of whether the property is a Federal or Indian Lease. |
| **Federal Or Indian Royalty In Kind Interest** | The royalty expressed as interest if the Federal or Indian lease takes its royalty in kind for the identified property. |
| **Federal Report Of Operations Id** | An identifier that uniquely identifies the report requirement of the Federal agency involved. The identifier is assigned by the Federal agency or the company. Types of identifiers are: communitization agreement number; government lease number; unit agreement/participation area name. |
| **Federal Royalty Exempt Amount** | The monetary amount exempt from taxation that relates to a federal royalty exemption. |
| **Federal Royalty Rate Code** | The indicator for the type of royalty rate applicable to a Federal property. |
| **Federal Source Of Revenue Number** | Number assigned by the Mineral Management Service (MMS) which further identifies a lease sub-account; e.g., unitized production allocation; communitized production allocation; single well; group of wells; all wells on a lease. |
| **Federal Tax Id Number** | A unique number used to identify an individual or corporation for reporting payee revenues to the Federal government. |
| **Fee** | The title or ownership of land. The owner of the fee holds title to the land. |
| **Fee Acres** | Acreage on which the landowner has ownership in both surface and mineral rights. The owner of the fee holds title to the land. |

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| **Fee Interest** | An economic interest, either decimal or percent of the fee acreage, representing the landowner`s title to income. |
| **Fee Property Net Surface Acres** | The actual net acres of the surface owned in a fee type property. |
| **Fee Royalty** | (1) The lessor's share of mineral production.(2) The landowner's royalty. |
| **Feed Capacity** | The maximum feed rate that a solids separation device can effectively handle, dependent upon particle size, particle concentration, viscosity, and other variables. |
| **Feed Chamber** | That part of a device which receives the mixture of diluents, mud, and solids to be separated. |
| **Feed Header** | A pipe, tube, or conduit to which two or more hydrocyclones are connected and from which they receive their feed slurry. |
| **Feed Manifold** | An arrangement by which liquids, solids, or slurries from one or more sources can be fed to one or more solids separation devices. |
| **Feed Opening** | SEE: Inlet. |
| **Feed Pressure** | The actual gauge pressure measured as near as possible to, and upstream of, the inlet of a device. |
| **Feed Slurry** | A mixture of solids and liquid entering a liquid solids separation machine, including dilution liquid if used. |
| **Feed Water** | Water introduced into a system to replace an outgoing stream, such as water fed to an operating boiler. |
| **Feet Of Lateral Distance** | The measured distance of the lateral from the point of entry of the specified interval to the endpoint or terminus of the lateral in said interval. |
| **Female Connection** | A pipe or rod coupling with the threads on the inside. |
| **Ferc Gathering Allowable Permit Flag** | An indicator of whether or not a Federal Energy Regulatory Commission (FERC) gathering allowance is to be included in determining the applicable gas price. |
| **Ferc Out** | Provision in gas purchase contracts that allows the purchaser to reduce the price paid to the producer by an amount which the Federal Energy Regulatory Commission (FERC) did not allow in the purchaser's rate base for ultimate pass through to the purchaser's customer. |
| **Fermentation** | Decomposition process of certain organic substances; i.e., starch in which a chemical change is brought about by enzymes, bacteria, or other microorganisms. Also referred to as Souring. |
| **Ferromagnetic** | A term applied to magnetic materials that can be magnetized or strongly attracted by a magnetic field. |
| **Fibrous Material** | Any tough stringy material used to prevent loss of circulation or to restore circulation. In field use, fiber generally refers to the larger fibers of plant origin. |
| **Field** | An area consisting of a single reservoir or multiple reservoirs all grouped on, or related to, the same individual geological structural feature and/or stratigraphic condition. The field name refers to the surface area, although at times it may refer to both the surface and the underground productive zones. |
| **Field Acquisition End Date** | The ending date of field acquisition operations, at which time data samples are collected or observations recorded. |
| **Field Acquisition Start Date** | The starting date of field acquisition operations, at which time data samples are collected or observations recorded. |
| **Field Annual Gas Production Volume** | The total quantity of gas produced in the last 12 months. |
| **Field Annual Oil Production Volume** | The total quantity of oil produced from a field in the last 12 months. |
| **Field Discovery** | SEE: Discovery Well. |
| **Field Discovery Date** | Date the field was discovered, as shown by publications/reports issued or accepted by the governing regulatory body. |
| **Field End** | The pipe end opposite the coupling or box. |

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| **Field Environment** | Specifies the type of field environment in which seismic surveys are acquired. |
| **Field Estimated Cumulative Cost** | Total dollar amount for expenses incurred relating to a specific work activity derived by summing field estimated daily costs. |
| **Field Estimated Daily Cost** | Total dollar amount obtained by adding together service company work tickets received by workover foreman on a given day for a specific work activity. |
| **Field Estimated Job Cost** | Total dollar amount for expenses incurred relating to a specific job within a work activity. Cost figure derived from service company work tickets received by workover foreman. Expenses include indirect costs such as enlarging a location in order to accommodate frac tanks as well as those directly associated to the job. |
| **Field Facility** | An installation designed for one or more specific field processing units scrubbers, absorbers, drip points, compressors, single or multiple stage separation units, low temperature separators, and other types of separation and recovery equipment. |
| **Field Gas Facility** | SEE: Central Facility. |
| **Field Name Code** | An indicator of the name of the field in which the well is located. This name may be company specific or regulatory. |
| **Field Office** | Those offices, other than the operator's major administrative offices, at which are located the operator's personnel. |
| **Field Operations Gas Volume** | The volume of gas used in lease fuel operations. |
| **Field Operations Oil Volume** | The volume of oil and or condensate used in lease fuel operations. |
| **Field Print** | A preliminary print of the well log presented at the wellsite at the completion of the well survey activity. |
| **Field Producing Completions Count** | The number of producing completions in a field. |
| **Field Remaining Gas Reserves Volume** | The quantity of gas that remains to be produced from a field. |
| **Field Remaining Oil Reserves Volume** | The quantity of liquid hydrocarbons that remains to be produced. |
| **Field Repair** | An activity involving disassembly, reassembly and functional testing of equipment with or without the replacement of qualified parts. Field repair does not include machining, welding, heat treat or other manufacturing operations. Redress or adjustment does not constitute field repair. Field repair can also be accomplished at an Authorized Facility. |
| **Field Seismic** | SEE: Seismic Acquisition. |
| **Field Statics** | Static corrections applied to seismic traces to account for differences in elevations of sources and receivers and near surface velocity variations. A near surface velocity model is generally necessary to convert the elevation differences to time shifts. |
| **Field Status Code** | An indicator of the classification of fields other than normal active fields as to activity status with respect to the company's interest; e.g., inactive; temporary abandoned. |
| **Field Total Completions Count** | The total number of completions in a field. |
| **Field Use Volume** | The volume of product used in the field for fuel, lift, etc. |
| **Filing Date** | The date a form is to be or was filed with a regulatory agency. |
| **Filing Purpose Code** | An indication of the reason a document is submitted. |
| **Filling The Hole** | Pumping drilling fluid into the wellbore to keep it filled, for example, while downhole equipment is being withdrawn. |
| **Fillup Area** | The area of the reservoir that is to be influenced by the injection operation. |

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| **Fillup Line** | A line usually connected into the bell nipple above the blowout preventers to allow adding drilling fluid to the wellbore while pulling out of the wellbore to compensate for the metal volume displacement of the drillstring being removed. |
| **Filming Amine** | An amine which forms an impervious nonwettable film on metal surfaces that excludes carbon dioxide and oxygen and thus prevents corrosion in a steam or condensate system. |
| **Filter** | (1) A part of a system that discriminates against some information entering it (usually on the basis of frequency, wavelength, moveout, coherence or amplitude). |
| **Filter Cake** | The suspended solids that are deposited on a porous medium during the process of filtration. |
| **Filter Cake Texture** | The physical properties of a cake as measured by toughness, slickness, and brittleness. |
| **Filter Loss** | SEE: Filtrate Volume. |
| **Filter Paper** | Porous unsized paper for filtering liquids. API filtration test specifies one thickness of 9-cm filter paper Whatman No. 50, S&S No. 576, or equivalent. |
| **Filter Press** | (1) Device for determining the fluid loss of a drilling fluid or cement system having specifications in accordance with API Spec 10 or RP 13B.(2) A porous medium through which fluid is forced under pressures described in API Spec 10 or RP 13B to separate the fluid from material held in suspension. |
| **Filter Response** | The amplitude gain and phase shift characteristics of a linear filter as a function of frequency. The response of a filter is designated by specifying the frequencies at which the amplitude is down by 3dB and by the slope of the cutoff. Thus, 14/18-56/36 specifies a lowcut filter down by 3dB at 14 Hz with an 18dB/ octave slope and a highcut filter down 3dB at 56 Hz with a 36 dB/octave slope. |
| **Filter Slope** | In seismic, the reduction/increase rate in amplitude or energy caused by the physical characteristics of a filter. The slope is measured in units of decibels per octave, dB/octave. |
| **Filter Type** | The type of filter used for processing seismic or logging curves, or other series data; e.g., box car; binomial; truncated binomial; exponential; Ormsby; Butterworth; Ricker; deconvolution; adaptive. |
| **Filtrate** | The liquid that is forced through a porous medium during the filtration process. |
| **Filtrate Resistivity** | SEE: Drilling Fluid Filtrate Resistivity. |
| **Filtrate Resistivity Temperature** | SEE: Drilling Fluid Filtrate Resistivity Temperature. |
| **Filtrate Volume** | Measure of the volume of fluid lost through filter media (usually filter paper) when drilling fluid is subjected to a differential pressure in accordance with the filtration procedure contained in API RP 13B. |
| **Filtration** | The process of separating suspended solids from their liquid by forcing the latter through a porous medium. Two types of fluid filtration occur in a well: dynamic filtration while circulating and static filtration while at rest. |
| **Filtration Quality** | The filtration characteristics of a drilling fluid. Generally these qualities are inverse to the thickness of the filter cake deposited on the face of a porous medium and the amount of filtrate allowed to escape from the drilling fluid into or through the medium. |
| **Filtration Rate** | SEE: Filtrate Volume. |
| **Fin** | A thin, long ridge of metal protruding above a chamfer surface or thread profile. |
| **Final Angle** | Final deviation of the wellbore path from true vertical below the drop off point in an s-type well. |
| **Final Cement Set** | Cement shall be considered to have acquired its final set when it will bear, without appreciable identation, the final Gillmore needle. |
| **Final Cement Strength** | The strength of a cement at such a time when under the given conditions of temperature and pressure it ceases to change significantly. Also referred to as: Ultimate Strength. |
| **Final First Flowing Pressure Measurement** | The final flowing pressure measurement recorded for the well test flowing phase having a well test phase sequential discriminator indicating the phase is the first of multiple well test flowing phases. |

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| **Final Flowing Pressure** | The last flowing pressure measurement recorded during a well test flowing phase. |
| **Final Flowing Tubing Pressure Measurement** | The final flowing pressure measurement recorded in the tubing during a well test flowing phase. |
| **Final Hydrostatic Pressure Measurement** | The first hydrostatic pressure measurement recorded during the well test removal phase. |
| **Final Log Print** | A print generally supplied as the permanent well log record. |
| **Final Maximum Shut- In Pressure Measurement** | The maximum pressure measured after the well had been shut- in for the final time during the drillstem test. |
| **Final Modified Lahee Class** | The final modified well classification, according to the Lahee well classification system. |
| **Final Open Final Measurement** | The final flowing pressure measurement recorded for the well test flowing phase having a well test phase sequential discriminator indicating the phase is the last of multiple well test flowing phases. |
| **Final Open Initial Pressure Measurement** | The initial flowing pressure measurement recorded for the well test flowing phase having a well test phase sequential discriminator indicating the phase is the last of multiple well test flowing phases. |
| **Final Open Time** | The time stamp recorded at the end of a well test flowing phase. |
| **Final Open Time Interval** | The time interval recorded for the well test flowing phase having a well test phase sequential discriminator indicating the phase is the last of multiple well test flowing phases. |
| **Final Return Flag** | An indicator of whether this is the final return. |
| **Final Second Flowing Pressure Measurement** | The final flowing pressure measurement recorded for the well test flowing phase having a well test phase sequential discriminator indicating the phase is the second of multiple well test flowing phases. |
| **Final Shut- In Pressure Measurement** | The last shut in pressure measurement recorded during well test shut- in phase. |
| **Final Shut- In Pressure Time** | The time stamp at the recording of a final shut- in pressure measurement. |
| **Final Shut- In Time** | The time stamp recorded at the end of a well test shut-in phase. |
| **Final Shut- In Time Interval** | The shut- in time interval recorded for the well test shut in phase having a well test phase sequential discriminator indicating the phase is the last of multiple well test shut- in phases. |
| **Final Shut-in Tubing Pressure Measurement** | The final shut-in pressure measurement recorded in the tubing during a well test shut- in phase. |
| **Final Squeeze Pressure** | The pressure at the well completion of a squeeze cementing operation. Usually refers to the pressure at the surface. |
| **Final Static Reservoir Pressure** | The last static reservoir pressure measurement recorded during the well test static reservoir pressure phase. |
| **Final Time Formation Open** | SEE: Final Open Time Interval. |
| **Final Well Class** | The final well classification, according to a well classification system. |
| **Financial Accounting Standards Board** | A body recognized pursuant to rule 203 of the Rules of Conduct of the American Institute of Certified Public Accountants (AICPA) to formulate and constitute accounting principles. |
| **Financial Book Tax** | The tax liability which arises on a firm's financial books, as opposed to on its tax books. A timing difference may lead to deferred taxes. |
| **Fine Screen Shaker** | A vibrating screen designed for screening drilling fluids through screen cloth finer than 30 mesh. |
| **Fineness** | The particle size to which a cement clinker is ground. This value is generally reported as surface area as determined with the Blaine air permeability apparatus or Wagner turbidimeter. See American Society for Testing and Materials (ASTM) C 204 and C 115. |
| **Finger Board** | A board located up in the derrick to support the upper end of stands of pipe standing on the derrick floor. |

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| **Finger Rafting** | Rafted ice in which two sheets alternately override each other along their common boundary. Predominant feature for thin ice sheets, but can be identified with most first year compression ridges. |
| **Fire** | The phenomenon of combustion manifested in light, flame and heat. |
| **Fire Loop** | A pneumatic control line containing temperature sensing elements; e.g., fusible plugs; synthetic tubing; which, when activated, will initiate platform shutdown. |
| **Fire Wall** | (1) A dike built around oil tanks, oil pumps and other oil handling equipment to contain any oil which may be accidentally discharged from the equipment. It also serves to block the spread of a fire or give protection for a period of time while emergency action is taken.(2) A partition fabricated from noncombustible materials to prevent the spreading of flames and to provide a heat shield. |
| **Firebox** | A complete assembly consisting of the firetube, mounting flange, intake and stack adaptors. |
| **Fired Process Area** | That area in which a fired vessel is located. |
| **Fired Vessel** | A vessel in which the temperature of a fluid is increased by the addition of heat supplied by an indirect flame. |
| **Firetube** | Natural gas is normally used to fire the heater through a submerged furnace chamber called the firetube. The firetube normally consists of one or more U-tubes fired at one end and exhausting through a vertical stack for each U-tube. In larger heaters the firetube may consist of a large diameter first pass firetube and multiple return tubes manifolded into a common stack. The firetube is that portion of the firebox in contact with the heater bath. |
| **Firm Transportation** | Transportation services for which facilities have been designed, installed, and dedicated to a certified quantity. Firm transportation service takes priority over interruptible service. |
| **First Delivery Date** | For oil, the day on which liquid hydrocarbons are first sold or shipped from a temporary storage facility or are first produced into a permanent storage facility, whichever occurs first. For gas, the day on which gas is first measured through a sales metering facility or the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, whichever comes first. |
| **First Drop Over** | The temperature at which the first drop falls from the tip of the condenser tube in a distillation; e.g., ASTM; Engler. |
| **First Level Supervisor** | An employee whose primary function is the direct supervision of other employees and/or contract labor directly employed in a field operating capacity. |
| **First Nearby Month** | SEE: Spot Month. |
| **First Production Date** | The date indicating the start of recovery of products from the subsurface for the identified entity; e.g., reservoir, well, lease. |
| **First Rental Date** | Date that first delay rental payment on a mineral lease is due. |
| **First Sale Of Natural Gas** | Any sale of natural gas to any interstate pipeline or intrastate pipeline to any local distribution company or to any person for use by such person. Federal Enery Regulatory Commission) |
| **First Sale Of Ngl Or Nglp** | The Economic Regulatory Administration (ERA) defines as the first transfer for value to a class of purchaser for which a fixed price per unit of volume is determined. |
| **First Sales Date** | The date on which first sale of a product from a well, lease or facility occurred. |
| **First Year Ice** | Sea ice that is less than one year old. Typically, first year ice has a salinity of 4 to 6 ppt. However, fresh water ice may be found near some river deltas. |
| **First Year Ridge** | A linear ice feature created by motion interference between two ice sheets. Usually a result of higher ice movement rates than for the formation of rafted ice. |
| **Fish** | A name given to any item lost in a wellbore. |
| **Fisherman's Contingency Fund** | A fund set up by the Outer Continental Shelf (OCS) Lands Act, as amended, to compensate commercial fishermen for economic losses attributable to oil and gas development in Federal waters. Commonly referred to as: FCF. |

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| **Fisherman's Contingency Fund Incident** | An occurrence in Outer Continental Shelf (OCS) Federal waters, where a fisherman claims a loss or damage to equipment as a result of underwater hazards created by oil and gas operations; e.g., lease operators; pipeline companies. If a liability is incurred, settlements are made through the Fisherman's Contingency Fund (FCF). |
| **Fishing** | A well activity requiring special tools and a considerable degree of skill, with the objective of recovering tools, casing or other items lost or stuck in a wellbore. |
| **Fishing Neck** | A groove in the top of many wireline tools to allow other tools to clamp the tool and remove it from the wellbore. |
| **Fishing Tool** | A tool designed to recover equipment that is lost or left in the wellbore. |
| **Fitness For Purpose** | The manufacture or fabrication of an assembly or component to the quality level required (but not necessarily the highest level attainable) to assure material properties, environmental interactions, and any imperfections present in the assembly or connection are compatible with the intended purpose. Fitness for purpose connotes an assembly or component may contain material or fabrication imperfections of sizeable dimensions but their presence has no influence on its performance or reliability. |
| **Fitting** | A small pipe, nipple, coupling, elbow, union, tee, swage, etc., used to make up a system of piping. |
| **Five Spot** | Four injection wells located in a square pattern with the production well in the center. |
| **Fixed Minimum Maximum Price** | The minimum or maximum price to be used in lieu of the base price. Subject to minimum or maximum code will determine whether it is a minimum or a maximum price. |
| **Fixed Offshore Platform** | A platform extending above and supported by the sea bed by means of piling, spread footings or other means with the intended purpose of remaining stationary over an extended period. |
| **Fixed Platform** | SEE: Platform; Fixed Offshore Platform; Tension Leg Platform. |
| **Fixed Price Adjustment Month** | Identifies the month of the year the fixed price is to be updated. This price increase will normally be specified in the contract and will occur at a fixed interval. |
| **Fixed Price Adjustment Rate** | A rate to adjust the content value. Can either be a percentage of the price or a percentage of value adjustment. |
| **Fixed Price Volume Unit Of Measurement Code** | Identifies the units on which the volume for the fixed price is based; e.g., mcf/d; mmBTU/d. |
| **Fixed Rate Royalty** | Royalty calculated on the basis of a fixed rate per unit of production, without regard to the actual proceeds received from the sale of such production. |
| **Fixed/floating Swap** | Provision for one party to pay a fixed price stream (typically the NYMEX price for one or more future months at the time the swap is entered into) and receive a floating or to-be-determined price stream (typically the average settlement price of the last three trading days for one or more months' futures contracts). |
| **Flag** | (1) A piece of cloth, rope, or nylon strand used to mark a stranded wire line when swabbing, bailing, etc.(2) A code used to indicate yes or no. |
| **Flame Arrestor** | A device which prevents the propagation of flame from an enclosed area which contains the burner. If the area outside the enclosure were to contain an ignitible mixture, flashback would thus be prevented. The flame arrestor must be able to accomplish this without stopping the communication of air between the two areas. |
| **Flame Arrestor Element** | A device which is mounted in a housing that serves as the combustion air intake. Its function is to prevent propagation of the flame from the firebox to the outside atmosphere. Sustained exposure to direct flame impingement may render the element inoperative. Also referred to as: Flame Cell. |
| **Flame Arrestor Housing** | An enclosure which contains the flame arrestor element and may contain mechanical devices; e.g., mixer; air controller. It bolts to the breeching. |
| **Flame Failure** | A flame which is inadequate to instantaneously ignite combustible vapors entering the firing chamber. |
| **Flammable** | Capable of igniting easily, burning intensely or having a rapid rate of flame spread. |
| **Flammable Highly Volatile Liquid** | SEE: Highly Volatile Liquid. |

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| **Flammable Limit** | The lower and upper percentages by volume of concentration of gas in a gas and air mixture that will form an ignitible mixture. |
| **Flammable Liquid** | Any liquid having a flashpoint below 100 F (37.8 C). |
| **Flange** | A protruding rim with holes to accept bolts and having a sealing mechanism used to join pressure containing equipment. |
| **Flange Point** | A point of contact between rope and drum flange where the rope changes layers. |
| **Flange Tap** | Tap holes in which the upstream tap is 1 inch from the upstream face of the plate and the downstream tap is 1 inch from the downstream face. |
| **Flange Union** | A fitting consisting of a pair of threaded plates and bolts to connect threaded pipe. |
| **Flank Angle** | The angle of the individual flanks. |
| **Flare** | Gaseous hydrocarbons discharged from a safety relief valve during production or processing operations. |
| **Flare System** | A system for discharging gas through a control valve from a pressurized system to the atmosphere during normal operations. This discharge may be either continuous or intermittent, and may or may not be ignited. |
| **Flared Gas** | Gas vented or released into the atmosphere. |
| **Flared Gas Nonexempt Tax Volume** | The flared volume in excess of allowances. |
| **Flared Gas Tax Exempt Volume** | The volume of flared gas exempt from taxation. |
| **Flash** | Excess metal squeezed out between forging die faces. |
| **Flash Cement Set** | Flash set is abnormal early thickening or setting of cement slurry wherein the cement slurry becomes unpumpable. |
| **Flash Drum** | SEE: Drum. |
| **Flash Gas** | A gas that is liberated from solution in oil as a result of increasing the space occupied, increasing the temperature, and/or decreasing the pressure. |
| **Flash Gas Gravity** | Gravity of the gas evolved from the fluid sample at the given temperature and pressure. |
| **Flash Gas Liberation** | A process whereby gas is liberated from solution in the oil by increasing the space occupied by the gas and oil. The mass and composition of the system remain constant. |
| **Flash Liberation** | A pressure-volume-temperature (PVT) test performed on reservoir fluids in which the initial composition is the reservoir composition and fluid behavior is measured as the conditions are varied. |
| **Flash Phase** | The phase of the hydrocarbon sample prior to flashing; e.g., liquid; gas. |
| **Flash Point** | The minimum temperature at which a product momentarily ignites, but does not burn continuously. |
| **Flash Pressure Measurement** | Pressure at which the gas and liquid phase properties were measured. |
| **Flash Relative Volume** | Volume of the liquid phase of the fluid sample remaining at the given temperature and pressure relative to the volume at saturation pressure. |
| **Flash Separator** | SEE: Flash Tank. |
| **Flash Separator Gas Oil Ratio** | SEE: Flash Tank Gas Oil Ratio. |
| **Flash Tank** | A vessel in which volatile components of a liquid are vaporized by decreasing pressure and/or by increasing temperature. |
| **Flash Tank Gas Oil Ratio** | Standard volume of gas per unit volume of oil at the given temperature and atmospheric pressure. |

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| **Flash Temperature** | Temperature at which the gas and liquid phase properties were measured. |
| **Flat Bottom Bit** | A bit which produces a nearly plane surface when drilling, usually a four cone bit. |
| **Flat Face Flange** | A type of flange having a flat mating surface. |
| **Flat Gel** | A condition wherein the 10 minute gel strength is substantially equal to the initial gel strength. |
| **Flat Pricing** | Pricing directly from the posting, without reference to gravity. None |
| **Flat Rate Overhead** | A fixed dollar amount charged to a joint interest account to cover all administrative overhead costs. This is a provision that can be made in the operating agreement. |
| **Flex Element** | Any of a variety of devices that permit relative angular movement of the riser or tendon in order to reduce bending stresses caused by vessel motions and environmental forces. |
| **Flexure** | SEE: Monocline. |
| **Flight** | On a decanting centrifuge, one full turn of a spiral helix, such as a flute or blade of a screw type conveyor. |
| **Flipped** | When the opposite occurs of what is intended in a drilling fluid. In an invert water in oil emulsion, the emulsion is said to be flipped when the continuous and dispersed phases reverse. |
| **Float** | A hollow ball or cylinder which floats in a liquid and actuates a liquid level indicator or controller. |
| **Float Collar** | A collar inserted one or two joints above the bottom of the casing string, and which contains a check valve that permits fluid to pass downward through the casing but prevents it from passing upward. The float collar prevents the drilling mud from entering the casing while it is being lowered, thus allowing the casing to float during its descent, and decreasing the load upon the derrick. The float collar also prevents the back flow of cement during the cementing operation. |
| **Float On The Line** | A mode of operation where the pressure in a piece of equipment, such as an oil and gas separator, is regulated by the pressure of the system to which it is connected. |
| **Float Separator** | SEE: Auxiliary Transit Control. |
| **Float Valve** | (1) A valve which is operated by a float.(2) The valve in a float collar. |
| **Floating Harness** | A frame equipped with sheaves and connected to the boom by stationary ropes usually called pendants. |
| **Floating Ice Platform** | A floating mass of either man made or natural ice that is used as a working surface. |
| **Floating Pad** | The pad of any contact logging tool that does not make sufficiently good contact with the formation wall to record quality information. |
| **Floc** | SEE: Flocculate. |
| **Flocculate** | A group of aggregates or particles in suspension subject to being broken up by normal shaking and stirring and reforming on standing. |
| **Flocculating Agent** | Substances that bring about the thickening of the consistency of a drilling fluid; e.g., most electrolytes; some polysaccharides; certain natural or synthetic polymers. In Bingham plastic fluids, the yield point and gel strength increase. |
| **Flocculation** | (1) Loose association of particles in lightly bonded groups, nonparallel association of clay platelets. In concentrated suspensions, flocculation results in gelation; e.g., drilling fluids. In some drilling fluids, flocculation may be followed by irreversible precipitation of colloids and certain other substances from the fluid, e.g., red beds.(2) The coagulation, coalesence or aggregation of finely suspended particles. |
| **Flocculent** | Resembling wool especially in loose, fluffy organization. |
| **Floe** | A relatively flat areal ice feature surrounded by distinguishable boundaries. Sheet ice features separated by thermally induced or other ice motion. Also referred to as: Pan. |

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| **Flooding** | (1) The drowning of a well by water. (2) A process by which oil is driven to the wellbore by either designed water injection or natural water influx.(3) The unstable operation of a packed column or bubble tower whereby the entire vessel or a section of it is full of liquid due to high liquid or gas loading. Pressure drop of the gas through the vessel under such conditions is excessive because of the high liquid head. |
| **Floor Block And Pulley** | An arrangement of equipment for routing or directing the wireline into the wellbore. |
| **Floorman** | Member of the rig crew whose work station during hoisting is on the rig floor. Also performs numerous other operating and maintenance duties as dircted by the supervisor. May also be referred to as rotary helper, roughneck, driller's helper, or well puller. |
| **Flow Bean** | The replaceable orifice part used in positive chokes to control flow rates. |
| **Flow By Head** | The intermittent flow from a well completion. |
| **Flow Channel Length** | The length of tubing or casing through which the gas is flowing. |
| **Flow Chart** | A record of the flow rate made by a recording meter. |
| **Flow Coefficient** | The calculation factor resulting from multiplying the differential pressure (inches H2O) and the meter pressure (psia), then taking the square root. |
| **Flow Conditioner** | A series of small tubes that are welded together and anchored into the meter tube to reduce turbulent gas flow. |
| **Flow Coupling** | A heavy walled nipple, designed to resist erosion that can result from turbulence created by a restriction in the flow string. |
| **Flow Line Segment** | Any portion of a flow line that has an operating pressure different from another portion of the same flow line. |
| **Flow Measurement Computer** | A computer capable of reading and computing a volume of gas or liquid passing through a point. |
| **Flow Rate** | The volume of fluid per unit time. |
| **Flow Regime** | The flow condition of a multiphase process stream; e.g., slug; mist; stratified flow. |
| **Flow Size** | The size of the flow line expressed as the size of the orifice times the diameter of the prover line. |
| **Flow Splitter** | A device dividing and directing flow streams to specialized process areas by stringent means of control. |
| **Flow Stream Sample** | Small quantity of fluid taken from the production lines to wellhead connections or from flow line, for an analysis of fluid composition. |
| **Flow String** | The string of casing or tubing through which produced fluids from a well completion flow to the surface. |
| **Flow Tank** | A lease tank to which produced oil is run after having gas or water removed. Also referred to as: Production Tank. |
| **Flow Treater** | A single unit which acts as an oil and gas separator, an oil heater, and an oil and water treater. |
| **Flow Tube** | The inner movable sleeve or tube in a subsurface safety valve (SSSV) through which well fluids must flow. |
| **Flowing** | The condition of being open to flow of fluids, whether flow is assisted or not. |
| **Flowing Bottomhole Pressure Measurement** | A flowing pressure measurement recorded for a specified depth. |
| **Flowing Casing Pressure Measurement** | The pressure measurement recorded for the space between the surface casing and the producing casing during a well test flowing phase. |
| **Flowing Pressure Measurement** | The pressure measurement recorded with the tubing or drillstem open and flowing fluids. |
| **Flowing Temperature Measurement** | The temperature of a flowing fluid over a given period of time. |

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| **Flowing Time Interval** | The length of time the drillstem or tubing has been open or flowing since the previous pressure measurement. |
| **Flowing Tubing Pressure Measurement** | A flowing pressure measurement recorded for the tubing during a well test flowing phase. |
| **Flowing Well** | A well which produces or flows fluids naturally from one or more well completions without artificial aid. |
| **Flowing Wellhead Pressure Measurement** | A flowing pressure measurement recorded at the wellhead. |
| **Flowline** | The pipeline connecting a well with a tank battery. |
| **Flowline Header** | Common line at production facility into which flowlines from several wells may be connected to provide commingling of production through separation or treating equipment. May be connected to a second common line through a system of valves to provide individual well testing without interrupting normal production. |
| **Flowmeter** | A downhole tool used to measure the rate of flow and sometimes direction of flow of wellbore fluids. Usually these tools utilize impellers. During use the tools are run continuously with or against the direction of the fluid flow. Examples include: continuous flowmeter, fullbore spinner flowmeter, packer flowmeter, spinner survey, radioactive tracer log. |
| **Fluid** | A substance that flows and yields to any force tending to change its shape. Liquids and gases are fluids. |
| **Fluid Component** | Chemical constituents of a fluid used to characterize its composition and behavior; e.g., methane; isobutane; water; hydrogen sulfide; surfactant. |
| **Fluid Component Liquid Density** | The liquid density of the given fluid component. |
| **Fluid Component Weight Fraction** | The weight fraction of the named component in the fluid sample. |
| **Fluid Composition** | Specification of the fluid component and its proportions in a fluid. |
| **Fluid Compressibility** | Compressibility of a fluid sample at a specific temperature and pressure. |
| **Fluid Contact** | An interface between fluid bodies, such as an oil-water contact. |
| **Fluid Density Used To Compute Porosity** | Fluid density value used to compute porosity. |
| **Fluid Differential Vaporization** | Properties of the gas and liquid hydrocarbon phases of a fluid sample as a function of temperature and pressure (evolved gas is removed from the cell). |
| **Fluid Differential Vaporization Temperature** | Temperature at which the given measurements were made during a differential vaporization analysis. |
| **Fluid Drive** | Special pump and turbine unit connecting engine to load, permitting some slip and flexibility. |
| **Fluid End** | The portion of a fluid pump that contains the parts involved in moving the fluid. |
| **Fluid Entry** | The amount of fluid that entered a wellbore in a given period of time. This is usually measured in unit length from zero which is above a permanent datum point, to the top of the fluid level between swab runs, then calculataed into volume units of entry. Using feet and barrels as the units of measure, an example would be: 500 feet of fluid increase in 7 inch, 23# casing would calculate to 19.65 barrels of fluid entry into the wellbore. |
| **Fluid Flow** | The state of fluid dynamics of a fluid in motion is determined by the type of fluid (e.g., Newtonian; plastic; pseudoplastic; dilatant), the properties of the fluid (e.g., viscosity; density) the geometry of the system, and the velocity. Thus, under a given set of conditions and fluid properties, the fluid flow can be described as plug flow, laminar (called also Newtonian, streamline, parallel, or viscous) flow, or turbulent flow. |
| **Fluid Inclusion** | In a mineral, a tiny cavity 1 to 100 microns in diameter, containing liquid and/or gas, formed by the entrapment in crystal irregularities of fluid, commonly that from which the rock is crystallized. |
| **Fluid Injection** | Pumping fluid into a producing formation to increase or maintain reservoir pressure and, thus, production. |
| **Fluid Level Above Pump** | The level of fluid in a well as measured above the level of the pump. |

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| **Fluid Level Depth** | Ordinarily the distance from the surface, wellhead, to the top of liquid in the wellbore. May be measured as either static or dynamic. |
| **Fluid Loss** | SEE: Drilling Fluid Loss. |
| **Fluid Loss Control** | A means by which the volume of filtrate lost to a permeable material is reduced. |
| **Fluid Quantity Recovered** | The amount of fluid recovered during a well test. |
| **Fluid Sample** | A small quantity of fluid extracted for analysis. The sample may be obtained directly from the reservoir rock during a well test or sampled from the production stream. |
| **Fluid Sample Density** | The density of the fluid sample at the given temperature and pressure. |
| **Fluid Sample Depth** | The depth to the wellbore point at which the fluid sample was collected. |
| **Fluid Sample Expansion** | The volume of liquid hydrocarbon dropout from a condensate as a function of temperature and pressure at constant composition (cell volume is varied). |
| **Fluid Sample Pressure Measurement** | The pressure at which the fluid sample was collected. |
| **Fluid Sample Source** | Description of the source of the fluid sample; e.g., bailer; extracted core; test trap. |
| **Fluid Sample Type** | The type of fluid sample; e.g., gas; oil; condensate. |
| **Fluid Sample Viscosity** | The viscosity of the fluid sample at the given temperature and pressure. |
| **Fluid Sample Volume** | The volume of the fluid sample recovered. |
| **Fluid Sampler** | A device used to recover accurately depth-controlled fluid samples of wellbore fluids from Pressure-Volume-Temperature (PVT) analysis. |
| **Fluid Saturation Pressure Measurement** | Saturation pressure of a fluid at a given temperature. |
| **Fluid Separator Gas Analysis** | Composition of gas sample from a gas and oil separator. |
| **Fluid Separator Liquid Analysis** | Composition of liquid sample from a gas and oil separator. |
| **Fluid Separator Phase** | The phase of the hydrocarbon sample prior to separating; e.g., liquid; gas. |
| **Fluid Transfer System** | System for transmitting fluid flow between the top of the risers to the platform mounted manifold. Jumper hoses or an articulated system of hard piping may be used to accommodate the relative motion between these points. Also referred to as: Jumper Hose. |
| **Fluid Type Produced On Test** | SEE: Fluid Sample Type. |
| **Fluid Valve** | A gas lift valve that utilizes the pressure in the production conduit as its primary operating medium. |
| **Fluid Viscosity Density** | Density of the fluid sample at specific temperature and pressure. |
| **Fluidity** | The reciprocal of viscosity. The measure of rate with which a fluid is continuously deformed by a shearing stress. Ease of flowing. |
| **Flume** | SEE: Boot. |
| **Fluorescence** | The glow and color of hydrocarbons under ultraviolet light, either on the rock or cuttings sample directly, or after carbon tetrachloride has been used to leach hydrocarbons from the sample. Salt water will also fluoresce but has a different glow. |
| **Fluorescent Magnetic Particle Inspection** | The magnetic particle inspection process employing a finely divided fluorescent ferromagnetic inspection medium that fluoresces when activated by ultraviolet light (3200 to 4000 angstrum). |
| **Flush Production** | The yield of a well completion during the early period of production, before the output has settled down to what may be regarded as usual for the reservoir in which the well was completed. |

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| **Flushed Zone** | The interval at a relatively short radial distance into the the rock from the borehole wall, immediately behind the mud cake, which is considered to be penetrated and flushed by drilling fluid filtrate; i.e., is considered to have all mobile rock fluids displaced from it. |
| **Flute** | The curved metal blade wrapped around a shaft as on a screw conveyor. |
| **Fluted Drill Collar** | Drill collar with external deep grooves. |
| **Flux Density** | The strength of a magnetic field, expressed in flux lines per unit area; e.g., gauss; kilogauss. |
| **Flux Leakage** | This is the magnetic field forced out into the air by the distortion of the field within the pipe caused by the presence of a discontinuity. |
| **Flux Line** | An imaginary magnetic line used as a means of explaining the behavior of magnetic fields. Their conception is based on the pattern of lines produced when iron filings are sprinkled on a piece of paper laid over a magnet. Also referred to as: Magnetic Lines of Force. |
| **Fly Ash** | The finely divided residue that results from the combustion of ground or powdered coal in thermal generating plants and is transported from the firebox through the boiler by flue gases. It is an artificial pozzolan. |
| **Fmp** | SEE: Facility Measurement Point. |
| **Foam** | A foam is a two phase system, similar to an emulsion, where the dispersed phase is a gas or air. |
| **Foaming Agent** | A substance that produces fairly stable bubbles at the air liquid interface due to agitation, aeration, or ebullition. In air or gas drilling, foaming agents are added to turn water influx into aerated foam. This is commonly called mist drilling. |
| **Foaming (boiler)** | An undesirable condition, resulting from the formation of a substantial height of bubbles on the surface of the water in a boiler, causing appreciable entrainment of water with the steam. The principal factors causing foaming are concentration of dissolved solids at the steaming surface, presence of oil or grease, excessive alkalinity, and finely divided suspended solids. |
| **Fob Point** | Point at which title transfers from seller to buyer per contract. |
| **Focused Beam** | Converging energy of the sound beam at a specified distance. |
| **Focused Transducer** | A transducer with a concave face which converges the acoustic beam to a focal point or line at a definite distance from the face. |
| **Fold** | (1) Structural: A style of rock deformation resulting from a shortening of the crust by compressional forces. These compressional forces must be aligned perpendicular to the resulting fold axis. |
| **Follow Up** | Change in inclination angle and/or direction in addition to that obtained from the original tool run. |
| **Following Flank** | The opposite flank to the leading flank. Also referred to as: Back Flank. |
| **Footwall** | The portion of the fault block beneath the fault plane. |
| **Force Majeure** | As used in gas sales contracts, conditions which conceivably can occur but which are beyond the control or responsibilities of the parties to the contract. |
| **Forging** | (1) Plastically deforming metal, usually hot, into desired shapes with compressive force, with or without dies.(2) A shaped metal part formed by the forging method. |
| **Form Generation Date** | The date the original turnaround form was generated by a regulatory agency. |
| **Formation** | (1) Stratigraphic: A body of rock strata, of intermediate rank, in the hierarchy of lithostratigraphic units, which is unified with respect to adjacent strata by consisting dominantly of a certain lithologic type or combination of types or by possessing other unifying lithologic features. The formation is the fundamental unit of lithostratigraphic classification. A formation may be combined into geologic groups or subdivided into geologic members.(2) Drilling: A general term applied by drillers with |
| **Formation Age** | SEE: Geologic Age. |

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| **Formation Age At Total Depth** | The geologic age of the formation or rocks at the wellbore bottomhole. |
| **Formation Allocation Factor** | The amount of hydrocarbon production assigned to a formation when the production from more than one formation in a borehole is commingled. |
| **Formation Allocation Percentage** | The percentage of a commingled stream allocated to a specified formation. |
| **Formation At Total Depth** | The name of the formation interpreted to be at the wellbore bottomhole. |
| **Formation Base Depth** | SEE: Geologic Marker Measured Base Depth |
| **Formation Bottom Measured Depth** | The measured depth to the bottom of a geologic formation in a borehole. |
| **Formation Bottom True Vertical Depth** | The depth to the base of a geologic formation imeasured from a surface reference point straight down to the base of the formation. |
| **Formation Breakdown Pressure Measurement** | The amount of pressure required at the wellhead to rupture the formation in a fracture treatment or squeeze job. |
| **Formation Breakdown Rate** | The rate at which fluid is pumped into the formation to achieve breakdown. |
| **Formation Damage** | The reduction of permeability in a reservoir rock arising from the invasion of drilling and treating fluid filtrate into the flushed zone. |
| **Formation Density** | The density (mass per unit volume) of rocks, measured in the subsurface usually during logging operations, pertaining to a particular formation. |
| **Formation Description Code** | SEE: Lithology Type Code. |
| **Formation Factor Log** | A well log in which the formation resistivity factor curve derived from a resistivity or porosity estimating device is recorded as a function of depth. |
| **Formation Fluid Density** | The density of the fluid recovered during the formation test. |
| **Formation Fluid Flow Depth** | (1) The measured depth at which the fluid flowed into the borehole.(2) The feet of drill pipe in the wellbore when the kick occurred. Also referred to as: Kick Depth. |
| **Formation Fluid Recovery Volume** | The volume of fluid recovered during the formation test. |
| **Formation Gas** | Gas initially produced from the reservoir in which it was formed. |
| **Formation Integrity Test Value** | The external force applied to the formation below the casing shoe (shoe test, leak off, etc.) to test the integrity of the cement job and the formation. |
| **Formation Name** | The name given to a rock strata or formation. |
| **Formation Overlapped** | The name of the formation overlapped by the formation test, other than the formation being tested. |
| **Formation Overlapped By Core** | The name of a second formation (not the primary formation) that was penetrated and extracted as a part of the core sample. |
| **Formation Pressure Measurement** | The pressure exerted by the fluids in a formation and recorded at the depth of the formation. |
| **Formation Recovery Flow Rate** | The amount of fluid recovered for a given period of time during the formation test. It consists of the amount, unit of measurement, and time period. |
| **Formation Recovery Fluid Type** | The basic type of fluid recovered during the formation test; e.g., brackish water; basic sediment and water; emulsion of oil and water; fresh water; shot gas; mud; gas; condensate; oil. |
| **Formation Recovery Measuring Technique** | The measuring technique used during the formation test flowing recovery; e.g., estimate; head; orifice meter; pits; metering separator; tank. |
| **Formation Sensitivity** | The tendency of certain producing formations to adversely react with invading mud filtrates. |
| **Formation Test** | SEE: Drillstem Test; Production Test; Potential Test. |

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| **Formation Test Cushion Type** | The type of cushion material used for the formation test; e.g., carbon dioxide; oil and water; mud; salt water; water; nitrogen. |
| **Formation Test Cushion Volume** | The volume of cushion material used during the formation test. |
| **Formation Test Flowing Recovery Time To Surface** | The amount of time required for the fluid to flow from the formation to the surface after the test valve has been opened. |
| **Formation Test Type** | The type of test performed on the formation; e.g., absolute open flow; bailer test; air flow tests; initial potential rate test; isochronal test; 1st DST of 3 combined; production test; multi-point test; wireline test. |
| **Formation Tester** | SEE: Drillstem Test. |
| **Formation Top Depth** | SEE: Geologic Marker Measured Top Depth. |
| **Formation Top Measured Depth** | The depth to the top of a geologic formation measured along the borehole from a surface reference point to the top of the formation. |
| **Formation Top True Vertical Depth** | The depth to the top of a geologic formation measured from a surface reference straight down to the top of the formation. |
| **Formation True Vertical Base Depth** | SEE: Geologic Marker True Vertical Depth. |
| **Formation True Vertical Top Depth** | SEE: Geologic Marker True Vertical Depth |
| **Formation Tvt Md Tvd Code** | Indicates whether the true vertical thickness (TVT) of the formation was calculated from a measured depth (MD) or true vertical tdepth (TVD) log. |
| **Formation Tvt Top Contact Code** | Indicates whether the true vertical thickness (TVT) of the formation was calculated from the top of the formation or the gas/oil contact. |
| **Formation Volume Factor** | (1) The ratio of the volume occupied by a quantity of fluid at reservoir conditions to that occupied by the same quantity at stock tank or standard conditions.(2) The inverse of Reservoir Volume Factor. |
| **Formation Water** | Water that fills a portion of rock pore space. Water that is inherent to the rock. |
| **Formation Water Dissolved Solid Volume** | The total dissolved solids content in formation water. |
| **Formation Water Resistivity** | Resistivity of formation water at reservoir temperature. |
| **Formation Water Salinity Ions** | The salinity ions of the formation water; e.g., boron; chlorides; bromide; iodide; silica; lithium. |
| **Formation Water Salinity Quantity** | The quantity of sodium chloride contained in a unit volume of formation water. |
| **Formation Water Specific Gravity** | Specific gravity of formation water. |
| **Former Operator Name** | The name of the previous operator. |
| **Forward Sales (nymex)** | The process of selling NYMEX futures contracts or entering into swaps to price gas for future month deliveries, when traditional cash markets are unable or unwilling to commit to prices equivalent to those available at NYMEX or over-the-counter. |
| **Fossil** | Preserved remains, impressions or indications of ancient animals or plants in the rocks. |
| **Fossil Assemblage** | A group of fossils occurring at the same stratigraphic level and used for geologic interpretations. |
| **Fossil Fuel** | Coal, oil, and natural gas; so called because they are derived from the remains of ancient plant and animal life. |
| **Fossil Name** | Name of fossil found in the indicated interval. |
| **Foundation Bolt** | The bolts used to connect a swing bearing to the upper structure and/or pedestal. Also referred to as: Foundation Fastener. |
| **Four Cone Symmetrical Bit** | A four cone roller rock bit with nearly a flat face and no cone offset. Used in some areas to hold inclination and direction when three cone rock bits have a tendency to walk or deviate. |

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| **Four Point Test** | A method used to determine the productive capacity of gas wells. The wellhead pressures and quantities of gas produced are measured under stabilized conditions or at certain fixed time intervals. From a plot of these data, the amount of gas the well completion would be able to deliver may be computed. Choke size and choke variations are essential in computations. |
| **Frac Oil** | Oil injected into a well in a fracturing operation which may then be recovered through subsequent production. Also known as Load Oil. |
| **Frac Oil Volume** | The volume of frac (load) oil injected into a well in a fracturing operation which may then be recovered through subsequent production. |
| **Fractional Township, Range, And Section** | The fractional portion of a township, range, and section. |
| **Fractionation** | The separation of a liquid stream into its separate components. |
| **Fractionation Tower** | A tall, cylindrical refining vessel where liquid feedstocks are separated into various components or fractions. Also referred to as: Fractionator. |
| **Fracture** | The cracks, crevices, faults or joints in the formation either inherent or induced. |
| **Fracture Azimuth** | The azimuth of the fractures in a depth interval. |
| **Fracture Fluid Type** | Classification of substances used to hold liquids in suspension. Examples are: Nitrogen Foam, CO2 Foam, and treated water (gel). |
| **Fracture Gradient Measurement** | The minimum yield strength of a given formation expressed over the depth of the well. |
| **Fracture Height** | The height of the given hydraulic fracture where the rock fracture intersects wall of the borehole. |
| **Fracture Length** | The length of one wing of the given hydraulic fracture. |
| **Fracture Log** | A well log designed to indicate fractures in the rocks surrounding the borehole. The logging tool may use acoustic techniques or resistivity measurements. |
| **Fracture Mechanism** | A description of the fracture mechanism; e.g., tension; shear. |
| **Fracture Permeability** | The single phase permeability of a fracture. |
| **Fracture Spacing** | The distance between adjacent fractures. |
| **Fracture Treatment Type** | The type of fracture treatment; e.g., acid; proppant. |
| **Fracture Width** | The average width of the given hydraulic fracture. |
| **Fracturing** | The use of explosives, hydraulics, or other techniques in a borehole to fracture the surrounding formation, allowing oil and gas to flow more freely to the borehole. |
| **Framework** | Sedimentology: The rigid arrangement created in a sediment or sedimentary rock by particles that support one another at their points of contact. The mechanically firm structure capable of supporting open pore spaces. |
| **Free Butane** | The quantity of butane extracted in a processing plant for which lease settlement is included in the settlement made for natural gasoline, by virtue of the gasoline settlement being based on a higher vapor pressure natural gasoline than the vapor pressure of the natural gasoline actually extracted. Also referred to as: Excess Butane. |
| **Free Gas** | Gas produced from the gas cap of an oil reservoir. |
| **Free Liquid Film** | The layer of liquid that surrounds each separate particle in the underflow of a hydrocyclone and screens. The thickness of this film depends upon design of the device and viscosity of the liquid. |
| **Free Machining** | A characteristic of being machined easily; i.e., this may be accomplished by adding sulfur to steel or lead to brass. |
| **Free Point Depth Measurement** | The depth at which at which a pipe is free to move in or out the wellbore. |

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| **Free Point Tool Flag** | An indicator that a tool designed to measure the amount of stretch in a string of stuck pipe, and in so doing to indicate the deepest point at which the pipe is free is being used. The free point indicator is lowered into the wellbore on a conducting cable. |
| **Free Water Knockout** | A vertical or horizontal vessel into which oil or emulsion is run in order to allow the water that is not emulsified with the oil (free water) to drop out. |
| **Freezing Operation** | Creation of a plug by freezing a liquid in a pipe or fitting to confine the pressure while removing defective or inadequate equipment downstream of the plug. |
| **Frequency** | The repetition rate of a periodic waveform usually measured in cycles per second or hertz. |
| **Fresh Water System Cost** | Includes construction costs and all general water lines, water-storage tanks, water-treating facilities, wells, pumps, regulators, meters, and controllers installed primarily for general plant service and not classified under other items. |
| **Friction** | The resistance to movement created when two surfaces are in contact. When friction is present, heat is produced. Sometimes referred to as drag, in wireline operations. |
| **Front Month** | SEE: Spot Month. |
| **Frozen Up** | Equipment in which the components do not operate freely. |
| **Fuel** | Any material which will burn. |
| **Fuel Cost Amount** | The total of all construction costs and all general fuel-gas lines, regulators, and accessory equipment, such as fuel-gas lines to engines, boilers, heaters. |
| **Fuel Gas Scrubber** | A vessel through which fuel passes to purify fuel, primarily of moisture prior to use. |
| **Fuel Gas System Cost** | Costs include contruction costs and all general fuel gas lines, regulators, and accessory equipment in the plant, such as fuel gas lines to engines, boilers, and heaters. |
| **Fuel Gas Treating Unit** | A device designed to cryogenically remove heavier components of the natural gas stream for the purpose of providing a clean, dry fuel with a lowered BTU content at remote engine sites. |
| **Fuel Gas Volume** | The measured or calculated volume of gas consumed by production and operational facilities. Commonly referred to as lease use gas. |
| **Full Bore Valve** | A valve whose closure mechanism has the same bore dimensions as the valve body. |
| **Full Cost Accounting Method** | An accounting method under which all costs incurred in searching for, acquiring, and developing oil and gas reserves are capitalized and amortized using units of production, as defined by the Securities and Exchange Commission (SEC) in Federal Regulation SX 210:4-10. |
| **Full Crest Thread Length** | The length of machine threads, from the end of the machined threads, including the incomplete starting threads, where the crests have full form. |
| **Full Packed Assembly** | A configuration of tools with a relatively high degree of rigidity and wall bearing surfaces. |
| **Full Well Stream** | The production of a well prior to any separation of fluid components. |
| **Fullbore Spinner Flowmeter** | A flowmeter with retractable impeller blades which can be used below the bottom of tubing where the impeller blades open to almost full inside diameter of the casing. |
| **Function** | A function will be of the form y = f(x) where both x and y may be vectors (or matrices): x [x(l),...,x(m)] and y = [y(l),...,y(n)]. A discretely defined function will consist of (m+n)-tuples of x and y values. A function has the property that, for any given x, there is more than one y defined. |
| **Funnel Viscosity** | SEE: Marsh Funnel Viscosity. |
| **Furnishings Cost** | Costs include furnishings located in all buildings in the camp, such as stoves, beds, tables, chiffoniers, chairs, work tables, and testing stands. |
| **Furring** | Buildup or bristling of magnetic particles at the ends of a longitudinal magnetized pipe; i.e., at its poles. |

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| **Fusible Material** | A material that will melt at a predetermined temperature to identify an abnormal operating condition. A meltable plug or seal. |
| **Fusible Plug** | A plug or portion of a valve or system which is designed to melt in case of excess heat or a fire and actuate the fail safe features of the valve or system. |
| **Future Acquired Reserves Provision Flag** | An indicator of whether or not the contract has a provision committing gas reserves acquired after the date of the contract. |
| **G** | |
| **G** | The acceleration of gravity (32.2 ft/sec/sec, 9.8 m/sec/sec). Accelerations are usually expressed as multiples of one gravity (viz, 1G, 2G, 3.6G). |
| **Gafs** | SEE: Gas Available for Sale. |
| **Gain** | An increase (or change) in signal amplitude (or power) from one point in a circuit or system to another, often from system input to output. |
| **Gain Control** | A sensitivity adjustment of an amplifier or circuit. |
| **Galena** | Lead sulfide (PbS). |
| **Gall** | To score or ridge a bearing or shaft. |
| **Galling** | Surface damage on threads caused by localized friction welding of high spots. |
| **Gallons Per Mcf** | The liquid content of natural gas. Abbreviated GPM. |
| **Gallons Per Mcf Range** | The minimum gallon per mcf and/or maximum gallon per mcf for liquid content of the gas in the gathering system. |
| **Gallons Per Mcf Test Interval** | The interval of time between gallons per mcf (GPM) tests required by contract. The methods used to determine this GPM are: Field compression test; Charcoal adsorption test. |
| **Gallons Per Mcf Test Type** | Indicates the type of test used to recovered liquid product from a gas stream used for a settlement of liquid content of a the gas stream. Methods used to determine this GPM are: Field Compression Test and Charcoal Adsorption Test. |
| **Galvanize** | To coat a metal with zinc. |
| **Gamma Ray** | A high energy, shortwave length electromagnetic radiation emitted by a nucleus. Energies of gamma rays are usually between 0.010 and 10 MeV. Gamma rays are penetrating and are best attenuated by dense materials like lead and tungsten. |
| **Gamma Ray Log** | A well log of the intensity of natural radioactivity in the rocks surrounding the borehole. An important indicator of rock shaliness, the shape of the gamma ray log curve is used for well correlation, whether logged in cased or open hole. |
| **Gantry** | A structural frame, extending above the upperstructure to which the boom support ropes are reeved. Also referred to as: A Frame. |
| **Gap Scanning** | Short fluid column coupling technique. |
| **Gas** | (1) A fluid substance that completely fills any container in which it is confined and whose volume is dependent on the size of and pressure exerted upon the container. A gas is readily compressible.(2) Natural gas, including casinghead gas produced with crude oil, gas from gas wells and gas from condensate wells, and synthetic natural gas. |
| **Gas Analysis Test Interval** | The time interval between analysis tests (mass spectrometer; gas chromatography; fractional analysis) required by contract. |
| **Gas Anchor** | A device for the downhole separation of oil and gas in a pumping well. It serves to prevent gas lock by minimizing gas entry into the pump. |

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| **Gas Available For Sale** | The amount of natural gas available for sale. |
| **Gas Balance** | Comparison of the sum of the volumes of gas production or receipts with the sum of the volumes of the dispositions of the gas. |
| **Gas Balancing Agreement** | An agreement covering the manner in which volumes of deferred gas production or exchange gas will be balanced between the parties to the agreement. |
| **Gas Blanket** | A certain volume and pressure of gas contained just above the surface of a fluid in storage. |
| **Gas Blowby** | The discharge of gas from a process component through a liquid outlet. |
| **Gas Breakout** | Fluids containing gas in solution will release this gas when pressure is reduced or temperature increases. Shrinkage of oil in storage tanks may be due to gas breakout. |
| **Gas Cap** | An accumulation of gas in the highest part of a reservoir, overlaying an accumulation of oil but not in solution with the oil. |
| **Gas Cap Drive** | The drive energy supplied naturally by the expansion of gas in a cap overlying the oil in a reservoir. |
| **Gas Cap Gas** | SEE: Free Gas. |
| **Gas Charge Type** | A type of charge deducted from the lease value determined by volume of gas produced. |
| **Gas Chart Scanner** | SEE: Integrator. |
| **Gas Collection System Cost** | Costs associated with design and construction of gas gathering networks. |
| **Gas Component Owner Name** | The name of the party who currently holds the title to a product component of a raw gas stream. |
| **Gas Component Percentage** | The percent content of specific identifiable components in a gas stream. |
| **Gas Component Title Disposition** | Identifies the title right pertaining to the acquisition or retention of a component of gas. The acquisition may be an option or an obligation and may be through a purchase or in lieu of a fee. |
| **Gas Concentration Value** | The concentration of specified gases in a gas stream. |
| **Gas Cut** | Gas entrained by a drilling fluid. |
| **Gas Cycling** | Return to a reservoir the gas remaining after extraction of liquids, for the purpose of maintaining pressure in the reservoir and thus increasing the recovery of liquids from the reservoir. |
| **Gas Dedicated Type Code** | The type of gas dedicated or committed for delivery under a contract; e.g., gas well gas; casinghead gas; associated gas. |
| **Gas Dedication Type** | Indicates the type of gas dedicated under a contract; e.g., Specific acreage; Gathering system; Designated area; Defined area; Available volume; Surplus volume. |
| **Gas Deliverability** | The daily open flow potential volume of all natural gas from gas wells. |
| **Gas Delivered To Plant Volume** | The volume of gas delivered to a plant. |
| **Gas Delivery Point** | The point specified in a contract where physical control of the gas passes from one party to another. |
| **Gas Detection System** | A control system which monitors the concentration of combustible gases and initiates alarm and shutdown functions at predetermined concentrations. |
| **Gas Drive** | Expansion of gas within a reservoir to force liquid hydrocarbons to the wellbores of producing wells. |
| **Gas Electric Rig** | SEE: Diesel Electric Rig. |
| **Gas Evolution** | The ratio of change in solution gas-oil ratio to the original solution gas-oil ratio. |

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| **Gas Expansion** | When oil and gas are found in the same reservoir under pressure, the drilling of a well into the reservoir releases the pressure, causing the gas to expand. The expanding gas drives the oil toward and up the wellbore. The expansive energy of the gas can be harnessed whether the gas is in solution or forming a cap above the oil. |
| **Gas Expansion Factor** | The measured gas expansion factor for the gas condensate found in a reservoir. |
| **Gas Flare** | An open flame used to dispose of unwanted or unusable gas. |
| **Gas Flaring Flag** | An indicator of whether there is approved burning or disposition of produced gas through a pipe or underwater flare. |
| **Gas Gathering Rate Flag** | An indicator of whether or not the rate must be adjusted for gathering before a settlement is calculated. |
| **Gas Gravity Factor Value** | The factor used to adjust for specific gravity during a gas production test. |
| **Gas Gravity Measurement** | The specific gravity of gas relative to air. |
| **Gas Gross Sales Amount** | The gross sales value for the year where no plant products are involved. Includes all revenue relating to the production for the reported year, including tax reimbursements and all other revenue received or credited to all interest owners not taking in-kind and reporting on their behalf, and including all Federal, State or Tribal royalty owner's interest. |
| **Gas Group Code** | An identifier assigned by a regulatory agency to identify gas acquisitions and dispositions. |
| **Gas Hydrate** | Ice-like solid, formed by a combination of water and an encaged gas molecule, that can remain stable above the freezing point of water. |
| **Gas Injection** | Gas injected into a formation to maintain or restore reservoir pressure to enhance ultimate recovery of hydrocarbons. |
| **Gas Injection System Cost** | Costs associated with design and construction/implementation of a gas injection system. |
| **Gas Injection Well** | An injection well for which the injected fluid is gas. |
| **Gas Input Well** | SEE: Gas Injection Well. |
| **Gas Lift** | A method of mechanical lifting of oil in which the energy of compressed gas is used as the source of power for bringing the well fluid to the surface. |
| **Gas Lift Gas** | Gas injected near the well completion for the purpose of lifting oil. The gas does not leave the wellbore, and it tends to lift the oil as it makes its way back to the surface. |
| **Gas Lift Gas Injected Volume** | The volume of gas used to lift oil. |
| **Gas Lift Input Gas Rate** | The rate of gas injected into the wellbore during a gas lift well test. |
| **Gas Lift Mandrel** | A device run in the tubing string into which a gas lift valve is installed. The two most common types of mandrels are the conventional mandrel and the sidepocket mandrel. The gas lift valve is installed in the conventional gas lift mandrel as the tubing is placed in the wellbore. To replace or repair the valve the tubing string must be pulled. On the other hand, the gas lift valve is installed and removed from the sidepocket mandrel by wireline while the mandrel is still in the wellbore, eliminating t |
| **Gas Lift System Cost** | Costs associated with design and construction/implementation of a gas lift system. |
| **Gas Lift Valve** | A device installed on the tubing string of a gas lift well completion that is sensitive to tubing and casing pressures, which cause the valve to open and close. The functioning of the valve is to allow gas to be injected into the fluid in the tubing in order to cause the fluid to rise to the surface. |
| **Gas Lift Vented Volume** | The disposition of gas into the atmosphere after use for gas lift. |
| **Gas Liquid Ratio** | The number of standard cubic feet of gas produced with a stock tank barrel of liquid (oil and water). Usually stated in cuft per bbl. |
| **Gas Liquid Volume** | The volume of natural gas liquids. |

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| **Gas Lock** | The condition of oil well pumps in which gas in the pumping chamber is compressed and expanded between the valves, resulting in loss of fluid delivery. |
| **Gas Measurer Name** | The person or company who is authorized to measure gas. |
| **Gas Measurer Number** | The number of the gas measurer. |
| **Gas Metal Arc Welded Pipe** | Pipe having one longitudinal seam formed by continuous gas metal inside and at least one pass from the outside of the pipe. Gas metal arc welding is an arc welding process wherein coalescence is produced by heating with an arc between continuous filler metal (consummable) electrode and the work. Shielding is obtained entirely from an externally supplied gas or gas mixture. The shielding gas protects the fluid weld metal from oxidation or contamination by the surrounding atmosphere. |
| **Gas Meter Count** | The number (count) of gas meters on a facility. |
| **Gas Meter Type** | The type of measurement device for determining volume of gas flowing past a given point in a line. |
| **Gas Mixture Gravity Measurement** | The specific gravity of the mixture of the gas and liquid hydrocarbons. |
| **Gas Movement Code** | A indicator of inter- or intra-state sales or a combination of both. |
| **Gas Net Taxable Amount** | THe value of gas on which tax is based. |
| **Gas Oil Contact** | The contact between the accumulations of gas and oil within a reservoir. |
| **Gas Oil Contact Acres** | The areal extent of the gas oil contact in the reservoir. |
| **Gas Oil Contact True Vertical Depth** | The subsea depth to the gas/oil contact in the borehole. |
| **Gas Oil Ratio** | A measure of the volume of gas produced with oil. Commonly abbreviated as GOR. |
| **Gas Plant** | The Economic Regulatory Administration (ERA) defines as a facility in which natural gas liquids are separated from natural gas, or in which natural gas liquids are fractionated or otherwise separated into natural gas liquid products, or both. Gathering facilities and related transportation lines shall be considered a part of gas plant, only if the first seller of the natural gas liquids or natural gas liquid products produced in the plant has no beneficial interest in the residue gas from the plant. |
| **Gas Plant Number** | The number assigned to uniquely identify a gas processing plant. |
| **Gas Plant Product** | A liquid recovered from natural gas in a gas processing plant or, from field facilities. |
| **Gas Processing Plant** | A facility designed: (1) To achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities. (2) To control the quality of the natural gas to be marketed. Also referred to as: Gas Plant. |
| **Gas Production After Treatment** | The amount of gas that was recovered during the test period after the interval had been treated. |
| **Gas Production Volume** | The total volume of gas the well/reservoir produced for the specified period of time. |
| **Gas Purchaser Type** | Identifies the type of gas purchaser. This identifies the sale as a direct or indirect sale to a ldc, end user, etc. |
| **Gas Quality Method** | The method used for adjusting a settlement based on the quality of the gas stream. |
| **Gas Quantity Adjustment Flag** | An indicator of whether or not an adjustment is necessary due to reduced production. |
| **Gas Quantity Allocation** | The distribution of volumetric data which was measured at a central point to specific entities based upon data acquired through common measurement procedures utilizing common quality factors. |
| **Gas Rate Per Well Test Before Work** | The volume of gas produced during a well test, calculated over 24 hours, before the proposed work has started. |
| **Gas Regulator** | A device for controlling the pressure of gas flowing in a pipeline. |
| **Gas Reservoir** | A reservoir that contains hydrocarbons predominently in a gaseous (single phase) state. |

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| **Gas Returned From Processing Plant Volume** | The volume of gas returned to lease from gas processing plant. |
| **Gas Revenue Accounting Data Exchange** | An Electronic Data Interchange (EDI) that is the collection of gas volume and statement information on the movement of natural gas and natural gas liquids (NGL). Commonly referred to as GRADE. |
| **Gas Royalty Calculation Method Code** | An indicator of the method used to calculate gas royalties. |
| **Gas Sales Volume** | The volume of gas sold during the specified reporting period. |
| **Gas Sand** | A porous sandstone reservoir which contains natural gas. |
| **Gas Saturation** | The extent to which the pore space in a formation contains gas. |
| **Gas Saturation Percentage** | The percentage of the porosity volume that is saturated with gas. |
| **Gas Sweetening Unit** | SEE: Treater. |
| **Gas Temperature Factor Value** | The factor for correcting voluimes of gas for standards during the gas test. |
| **Gas Test Method Code** | An indicator of the method use to measure a gas volume during a test. |
| **Gas Total Tax And Fees Due Amount** | The total calculated tax and fee liability for gas. |
| **Gas Transferred Off-lease Volume** | The volume of gas moved off from lease on which the gas was originally produced or gathered. |
| **Gas Treating Plant** | A plant to remove contaminants from natural gas. |
| **Gas Type Code** | Used to classify natural gas according to types of gas utilized by industry and regulatory agencies; e.g., casinghead gas; gas well gas; residue gas; coal seam gas. |
| **Gas Value Calculation Rate** | The rate used to calculate the value of a gas stream which is applied to the volume of gas without adjustment for British thermal unit (BTU) content. |
| **Gas Water Contact** | The contact between the accumulation of gas in a reservoir and its bottom waters. |
| **Gas Water Contact Depth** | The measured depth at the point between the accumulation of gas in a reservoir and the bottom water underlying the gas. |
| **Gas Well** | (1) A well capable of producing gaseous hydrocarbons.(2) A regulatory designation of gas well filed by the operator. |
| **Gas Well Completion** | A well completion in a gas reservoir or in the gas cap of an oil reservoir. |
| **Gas Well Gas** | (1) Gas not associated with oil. (2) Gas produced from wells designated as gas wells. |
| **Gas Well Gas Price Per Unit Amount** | The value per unit of measure for gas well gas. |
| **Gasket** | A thin sheet of composition or metal used in making a joint water, gas, oil, or steam tight. It is squeezed between metal surfaces. |
| **Gasoline** | A volatile, inflammible, liquid hydrocarbon mixture in the C6 to C9 hydrocarbon range. |
| **Gasoline Plant** | SEE: Gas Processing Plant. |
| **Gasometer** | An apparatus used to hold and measure gases. |
| **Gate** | (1) An electronic means to monitor an associated segment of time, distance, or impulse.(2) A movable, closing apparatus of a valve.(3) The interval of record time over which a function (such as an autocorrelation or crosscorrelation) is evaluated.(4) An opening in a fence to secure entrance into an area. |
| **Gate Valve** | A valve made with a slab or wedge-shaped disk that is moved from open to closed position by the action of the threaded valve stem. The valve may or may not be full opening. |
| **Gather** | A grouping of seismic traces having some common attribute. Examples are common source gather, common receiver gather, common midpoint (bin node) gather. |

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| **Gatherer** | A legal entity which has responsibility for the collection of the gas from the wellhead and the delivery of that gas to either a gas plant or a pipeline. |
| **Gathering Facility** | The set of flow lines, valves, manifolds, and other equipment that transports produced fluids between wells and production or injection facilities. |
| **Gathering Line** | Pipe, usually of small diameter, used to transport oil or gas from the lease to the main pipeline in the area. In the case of oil, the lines run from lease tanks to a central pump station at the beginning of the main pipeline. In the case of gas, the flow is continuous from the wellhead to the main pipeline. |
| **Gathering System** | A series of pipes connecting one or more natural gas wells which is used to deliver gas into a mainline transmission system or gas plant for processing. The system is typically managed by a single operator. |
| **Gauge** | An instrument for measuring or testing volumes, pressures, sizes, or quantities. |
| **Gauge And Test Port Connection** | Holes drilled and tapped into API Specification equipment through which internal pressure may be measured or through which pressure may be applied to test the sealing mechanisms. |
| **Gauge Differential Measurement** | The meter differential pressure as measured in inches of water or the square root in inches of water for a 100 inch meter. For shorter or longer meters the length is factored. |
| **Gauge Glass** | A glass tube that furnishes a visual indication of the level of water or other liquid within a vessel. |
| **Gauge Line Paste** | A material which is put on a gauge line that changes color when contacted with water. Used to find water or BS&W level in tanks. |
| **Gauge Point** | A predetermined point on the thread flanks used as a reference for measuring thread elements. |
| **Gauge Pressure** | The pressure exerted on the interior walls of a vessel by the fluid contained in the vessel as indicated by the device capable of measuring this pressure (a pressure gauge). Absolute pressure being equal to gauge pressure plus atmospheric pressure (psig= pounds per square inch gauge). |
| **Gauge Reamer** | A sub with a set of cutting edges or rollers with an outer diameter equal to that of the bit. |
| **Gauge Tester** | An instrument to calibrate a gauge. |
| **Gauge Type** | The type of gauge used in a test; e.g., pressure; rate. |
| **Gauged Shut- In Pressure Measurement** | The pressure measurement recorded within a shut-in casing, tubing or drillstem. |
| **Gauger** | A person who measures the quantity and quality of oil and/or gas for custody transfer. Normally the gauger is an agent of the purchasing company and in effect purchases the product. |
| **Gauging** | The act of using a measuring line or tape to determine liquid level in a tank or a storage vessel. |
| **Gauging Nipple** | A small section of pipe in the top of a tank through which a tank may be gauged. |
| **Gaussmeter** | SEE: Magnetometer. |
| **Gear Ratio** | On a decanting centrifuge, the ratio of the outer bowl speed to the difference in speed between the outer bowl and the conveyor, usually expressed as the number of revolutions of the outer bowl for a difference of one complete revolution between the outer bowl and the screw conveyor. |
| **Gear Unit** | On a centrifuge, a reduction device connected to the rotating bowl and driving the conveyor at a slightly different rate. |
| **Gearbox** | The enclosure or case containing a gear train or assembly of gears to increase or decrease revolutions between a driver and driven unit. |
| **Gel** | A term used to designate highly colloidal, high yielding, viscosity building commercial clays; e.g., bentonite; attapulgite clays. |
| **Gel Cement** | Cement having a small to moderate percentage of bentonite added as a filler and/or to reduce the slurry weight. SEE: Gunk Plug. |

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| **Gel Strength** | Measurement of mud colloidal dispersion to develop and retain a gel form, based on the resistance to shear. |
| **Gelation** | The formation of a gel. |
| **Gelled Up** | Oil field jargon usually referring to any fluid with high gel strength and/or highly viscous properties. Often a state of severe flocculation. |
| **General Gas Law** | A combination of Boyle's and Charles' laws that is used to calculate standard gas volumes when the gas temperature and pressure are at non-standard conditions. |
| **Genus** | The biological genus classification of the fossil. |
| **Geocentric Coordinate System** | A Cartesian coordinate system based on the center of the Earth. The z-axis is subparallel to the axis of rotation of the Earth. The x-axis lies in the intersection of the equatorial and reference meridian planes. The y-axis is in the equatorial plane 90 degrees east from the x-axis, forming a right handed coordinate system. |
| **Geochemical Sample Taken Flag** | An indicator of whether a geochemical sample was collectedc for the borehole. |
| **Geochemistry** | The branch of geology dealing with the chemistry of the earth, including the distribution and abundance of chemical elements and isotopes in minerals, ores, rocks, soils, water, hydrocarbons and the atmosphere. |
| **Geodetic Datum** | A reference object that describes the position, orientation, and scale relationships of a reference ellipsoid to the Earth. Modern geodetic datums are defined with respect to the center of the Earth, while historical geodetic datums are defined with respect to fundamental points on the surface of the Earth. |
| **Geographic Coordinate System** | A curvilinear coordinate system based upon a geodetic datum. This coordinate system is defined by the axes of latitude, longitude, and height. The latitude of a point is specified as an angle between the equatorial plane and a suitably chosen line through the point. The longitude of a point is specified as an angle between the local meridian of the point and the chosen reference meridian, measured in the equatorial plane. The height is the distance between a point and a vertical datum, such as the ellip |
| **Geoid** | The equipotential surface of the gravity field of the Earth which best fits, in a least squares sense, mean sea level. |
| **Geologic Age** | Geochronological: A geologic time unit shorter than an epoch and longer than a subage, during which the rocks of the corresponding stage were formed. |
| **Geologic Age Name** | Name of the geologic age. |
| **Geologic Basin Code** | The numeric indicator assigned by the American Association of Petroleum Geologists (AAPG) to a geologic basin. |
| **Geologic Era** | A geologic time unit next in order of magnitude below an eon, during which the rocks of the corresponding erathem were formed; e.g., Paleozoic Era; Mesozoic Era; Cenozoic Era. |
| **Geologic Group** | The formal lithostratigraphic unit next in rank above formation, containing two or more contiguous or associated formations with significant lithologic features in common. |
| **Geologic Hazard Code** | An indicator of geologic hazards; e.g. high pressure zones, theft zone, hyrogen sulfide zone. |
| **Geologic Marker Measured Base Depth** | The measured depth of the bottom of a geologic marker. |
| **Geologic Marker Measured Top Depth** | The measured depth at the top of a geologic marker. |
| **Geologic Marker Name** | The name of a lithostratigraphic marker. |
| **Geologic Marker True Vertical Bottom Depth** | The true vertical depth at the bottom of the geologic marker. |
| **Geologic Marker True Vertical Top Depth** | The true vertical depth to the top of the geologic marker. |
| **Geologic Member** | A division of a formation differentiated by separate paleo or distinct lithology or a complex of lithologies. |
| **Geologic Pick** | The interpreted intersection of a geologic object and a wellbore. |

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| **Geologic Pick Interval** | The spatial intersection of a wellbore and a geologic object. |
| **Geologic Pick Kind** | A type of geologic pick, such as a top, base, midpoint, etc. |
| **Geologic Province** | Large region characterized by similar geologic history and development. |
| **Geologic Series** | Stratigraphy: A chronostratigraphic unit generally classed next in rank below system and above stage. The rocks formed during an epoch of geologic time. |
| **Geologic Stage** | Stratigraphy: A chronostratigraphic unit next in rank below series and above substage. The rocks formed during an age of geologic time. |
| **Geologic Structure** | A large-scale geologic feature produced by deformation or displacement of rocks masses by geologic compressional or shear forces to yield features such as faults, anticlines, synclines, domes and basins. |
| **Geologic Structure Type Code** | An indicator of the geologic structure; e.g., fault; anticline; dome; stratigraphic. |
| **Geologic System** | (Stratigraphy) A major chronostratigraphic unit of world wide significance, representing the fundamental unit of chronostratigraphic classification of Phanerozic rocks. The rocks formed during a period of geologic time. It is next in rank above series and below erathem. Examples of systems include Quaternary; Tertiary; Cretaceous; Jurassic; Triassic; Permian; Pennsylvanian; Mississipian; Devonian; Silurian; Ordovician; and Cambrian (U.S.). |
| **Geologic Time** | The period of time dealt with by historical geology, or the time extending from the formative period of the Earth as a separate planetary body to the beginning of written or human history. The time of the Earth's history that is represented by and recorded in the succession of rocks. |
| **Geologic Time Absolute Age** | The geologic age of a fossil organism, rock, or geologic feature or event in measured, not relative units of time. Absoluteness does not imply accuracy or precision. Also referred to as: actual age. |
| **Geologic Time Age** | Name of stratigraphic unit representing an Age of geologic time. |
| **Geologic Time Eon** | Name of stratigraphic unit representing an Eon of geologic time. |
| **Geologic Time Epoch** | Name of stratigraphic unit representing an Epoch of geologic time. |
| **Geologic Time Era** | Name of stratigraphic unit representing an Era of geologic time. |
| **Geologic Time Informal Unit** | Name of informal, or user defined, stratigraphic unit representing geologic time. |
| **Geologic Time Period** | Name of stratigraphic unit representing a Period of geologic time. |
| **Geologic Time Stratigraphy** | The branch of Stratigraphy dealing with the order and succession of geologic time, as observed in the rock record. |
| **Geologic Time Subage** | Name of stratigraphic unit representing a Subage of geologic time. |
| **Geologic Time Unit** | Name of stratigraphic unit representing a span of continuous time in geologic history, during which a corresponding chronostratigraphic unit was formed. Also referred to as: geochronologic unit. |
| **Geologic Trend** | The spatial distribution and position of stratigraphic units. In petroleum engineering, this is a geographic area usually of sedimentary deposits of similar producing characteristics, structural style, and age. |
| **Geological Target** | A drilling target based upon geological criteria. |
| **Geology** | The scientific study of the origin, history and structure of the earth as recorded in rocks. |
| **Geophone** | A seismic receiver that measures vibrations passing through the crust of the earth, used in conjunction with seismography. The geophone, also referred to as a seismometer, converts seismic oscillations of the ground into electrical signals. Downhole geophones are used in velocity check shot surveys and vertical seismic profiling. |
| **Geophysical Method** | Any method based on physics, used to investigate the properties of the Earth. Examples include: seismic reflection, seismic refraction, gravity, magnetic, electrical, electromagnetic, radiometric, and nuclear. |

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| **Geophysics** | The study of the earth by quantitative physical methods; includes seismology, tectonophysics and engineering geophysics. |
| **Geopolitical Area** | An area of interest that is usually administrered by a specific political entity, such as a government or regulatory agency. |
| **Geopolitical Entity** | An organization that has the authority to govern, rule, or administer within a well defined area on the surface of the Earth. Examples are countries, cities, states, provinces, parishes, etc. |
| **Geoscience** | The science dealing with the earth, encompassing geology and geophysics. |
| **Geothermal** | Of or pertaining to the heat of the Earth's interior. |
| **Geothermal Gradient** | The temperature gradient with respect to vertical depth. |
| **Germicide** | A chemical or agent that kills microorganisms such as bacteria. Such compounds must be registered as pesticides with EPA. Also referred to as: Bactericide. |
| **Gfi** | Ground Fault Interruptor. |
| **Ghost** | An indication which has no direct relation to reflected pulses from discontinuities in the materials being tested. |
| **Gilsonite** | A naturally occurring solid hydrocarbon belonging to the asphalt group. A granular form of gilsonite is sometimes used as a cement additive. |
| **Gimble Correction** | The difference in measurements obtained with the gimbel system of a gyroscope in a plane nonparallel to the horizontal plane of a borehole and those obtained if the gimble system were in the horizontal plane. |
| **Gin Pole** | A pole used with hoisting equipment to lift heavy loads. |
| **Gin Pole Truck** | A truck equipped with a pair of poles and hoisting equipment for use in lifting heavy machinery around a lease. |
| **Girth** | One of the horizontal braces between the legs of a derrick. |
| **Girth Seam** | A circumferential butt welded seam lying in a plane normal to the longitudinal axis of the pipe, used to join sections into lengths of straight pipe. |
| **Gland** | (1) A device used to form a seal around a reciprocating or rotating rod to prevent fluid or vapor leakage.(2) the ring used to compress packing around a valve stem, pump shaft, etc. |
| **Global Stresses** | Stresses resulting from global frame action. |
| **Globe Valve** | A type of pipeline valve that shuts off as the stem, rotated by the hand wheel, moves a mating part downward into a ground seat that is integral to the valve body. |
| **Glr** | SEE: Gas Liquid Ratio. |
| **Glycol** | A liquid dehydrating agent used in the continuous drying of a natural gas. |
| **Glycol Unit** | A unit which lowers water content from a natural gas system. |
| **Go In The Hole** | To lower drill pipe, tubing, workover tools, or other devices into the wellbore. |
| **Go-devil** | (1) A scraper with self adjusting spring blades, inserted in a pipeline and carried forward by the fluid pressure, clearing away accumulations, particularly paraffin, from the walls of the pipe. |
| **Going In Hole** | SEE: Go In The Hole. |
| **Gone To Water** | Describes a well completion in which oil production has decreased and water production has greatly increased. |
| **Goniometer** | An instrument for measuring angles, as in surveying. |
| **Goodman Diagram** | A plot of reversed bending stress versus the average tensile stress in; e.g., drill pipe. |

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| **Goose Neck** | The connecting member of the hose on a rotary swivel. |
| **Gor** | SEE: Gas Oil Ratio. |
| **Gouge** | Elongated grooves or cavities caused by mechanical removal of metal. |
| **Gouging** | The scraping of the seabed by ice features. |
| **Government Lease Number** | The number assigned by agencies of the United States, Canada, states of the United States, or provinces of Canada to identify properties. |
| **Government Lease Subcategory** | Represents a further breakdown or subcategory for a government mineral lease. For a Federal lease, it will indicate the type acquired or public domain. For an Indian lease, it will indicate the name of the Indian tribe. |
| **Gpm** | Gallons per thousand cubic feet. This is the quantity of liquefiable hydrocarbons contained in a gas stream. |
| **Gpm Adjustment** | Indicates whether GPM is to be adjusted by plant efficiency factor before determining the contract percent from the content table. |
| **Graben** | A down dropped block between two normal faults. |
| **Grade** | SEE: Gas Revenue Accounting Data Exchange. |
| **Gradiomanometer** | A production logging tool that measures a continuous profile of a pressure gradient, recorded as specific gravity as a function of depth. The tool uses two nearly adjacent sensitive membrane pressure sensors for high resolution. |
| **Grain Density** | Specific gravity of the grains composing a sediment. |
| **Grain Size** | Average diameter of the particles in a sediment or rock; e.g., boulder; coarse sand; clay. |
| **Granny Rag** | A canvas sling used in hand coating of pipe to catch excess coating material and to swab it over the pipe. |
| **Granular Ice** | Ice consisting of granular ice crystals. |
| **Granulated Blast Furnace Slag** | A nonmetallic material consisting essentially of glassy, noncrystalline silicates of calcium and other bases. Slag, depending upon its form, may be pozzolanic and/or cementitious. |
| **Granule** | A clastic sedimentary particle with a diameter between two and four millimeters, based on the Wentworth Scale of Measurement. |
| **Grasshopper** | A piping device used to control the level of the interface between oil and water in a storage tank. |
| **Graticule** | A network of lines representing geographic parallels and meridians forming a map projection. |
| **Gravel Mesh Size** | The mesh size of the gravel used in the packing operation. |
| **Gravel Pack** | (1) A technique of well completion that installs a layer of well sorted gravel in the borehole at the pay zone to minimize caving and clogging of the borehole. |
| **Gravel Pack Fluid Viscosity** | Viscosity of the fluid used during the gravel packing operation. |
| **Gravel Pack Log** | The gravel pack logging tool is a neutron type device that evaluates the condition of the gravel pack. |
| **Gravel Prepack Mesh Size** | The mesh size of the gravel used in prepacking operations. |
| **Gravel Screen Diameter** | The outer diameter of the gravel pack screen. |
| **Gravel Screen Length** | The length of the gravel pack screen from top to bottom. |
| **Gravimeter** | An instrument for measuring variations in gravitational attraction. Also known as a gravity meter. |
| **Gravitometer** | SEE: Gravimeter. |

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| **Gravity Adjustment Code** | An indicator of how to calculate the adjustment to a liquid product stream for the API gravity. |
| **Gravity Api** | SEE: API Gravity. |
| **Gravity Drainage** | The movement of the oil in the reservoir toward the wellbore due to the force of gravity. |
| **Gravity Factor** | A calculated value derived by taking the square root of the value of one divided by the specific gravity. It is used as a multiplier factor in rate-of-flow equations. |
| **Gravity Force** | The force of attraction between bodies because of their masses. |
| **Gravity Gathering System** | A gathering system that depends upon differences in elevation of ground level for the movement of fluid. |
| **Gravity Scale Pricing** | When the corrected gravity influences the price of oil in a run to a maximum for high gravity, low density oil. |
| **Gravity Structure** | A structure deriving its support on the seabed from the forces of gravity imparted through one or more mat foundations. |
| **Grazing Incidence** | Immersion inspection with the beam directed at a glancing angle to the test surface. |
| **Greasing Out** | Certain organic substances, usually fatty acid derivatives, which are added to drilling fluids as emulsifiers, extreme pressure lubricants, etc., may react with such ions as calcium and magnesium that are in or will subsequently come into the system. An essentially water insoluble greasy material separates out. |
| **Greenwich** | Longitude measured with respect to the prime meridian which passes through the Royal Astronomic Observatory at Greenwich, England. |
| **Grid** | (1) Geographic: A rectangular mesh overlain on a map for location reference; e.g., a commercial grid reference system.(2) Computer Mapping: To interpolate irregularly spaced values onto a regular spacing.(3) A set of integral values identifying the intersections of two families of parallel lines. Generally, the families are mutually perpendicular, and the lines are evenly spaced for form a regular grid.(4) Electrostatic treaters: the electric field is distributed by a steel assembly of plates, |
| **Grid Angle** | Angle between the positive inline direction and the positive crossline direction in a seismic grid. The angle is measured as counter clockwise being positive from the inline direction to the crossline direction. |
| **Grid Name** | The identifying name assigned to the grid. |
| **Grid Origin** | Survey location used in seismic to start numerically numbering bins, receivers, etc. The units of the grid origin are spatial ((x,y), (latitude,longitude), (easting,northing), etc.). |
| **Grind Out** | SEE: Shake Out. |
| **Grinding** | Removing material from a pipe surface by abrading; e.g., grinding wheel; file. |
| **Gross Acres In Original Instrument** | (1) For nonoperating, nonproducing interest type properties and unleased mineral interests, it is the total surface or equivalent acres stipulated (or computed) in instrument of acquisition by the indicated company.(2) For operating interest, nonproducing type properties (excluding unleased mineral interest), it is the total surface or equivalent acres stipulated in original lease instruments.(3) For producing type properties, it is the total surface or equivalent acres stipulated (or computed) in t |
| **Gross Allocation Interest** | The percentage that is input to allocate costs that appear on the outside operator's joint interest billings to the leases and/or units that the facilities serve. It is the percentage of the total gross charges that is allocated to the lease. |
| **Gross Gas Production** | The total quantity of gas produced, including reproduced gas lift or injected gas. Also referred to as total gas produced. |
| **Gross Heating Value** | The heat energy derived from the combustion of a unit quantity of a fuel when the reaction products are cooled to 60 degrees Fahrenheit. |
| **Gross Pay** | Entire thickness of pay zone, including nonproducing portions, within a specified overall interval. |
| **Gross Production Tax Due Amount** | The amount of Gross Production Tax due. |

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| **Gross Production Tax Interest Amount** | The interest calculated on gross production tax for late payment and or reporting. |
| **Gross Production Tax Paid Return Amount** | The amount of gross production tax remitted with the return. |
| **Gross Production Tax Penalty Amount** | The amount of penalty or penalties associated with the gross production tax for late payment and or reporting. |
| **Gross Production Tax Price Amount** | The price used to calculate the value on which taxes are based. |
| **Gross Production Tax Remitted By Others Amount** | The amount of Gross Production Tax remitted by other parties. |
| **Gross Production Volume** | The total quantity of product (oil, gas, water, etc.) the well and or reservoir produced for the specified period of time. |
| **Gross Rental** | Total amount of delay rental due on a mineral lease. |
| **Gross Reserves** | 100% of a hydrocarbon product that is estimated to be inplace in the reservoir(s). |
| **Gross Revenue Interest** | The total interest a working interest owner has in a lease including the interest of his royalty interest owners in connection with product sales. |
| **Gross Sales Amount** | The gross total value assigned to product(s) produced or sold. |
| **Gross Tax Value** | The total value paid for taxes on which proceeds are distributed to owners of the property. This value will be actual sales value, total lease value or entitled value depending on how the settlement is made for the specific accounting lease. |
| **Gross Working Interest Amount** | The lessee's interest in a lease before deducting the royalty interest and any overriding royalty and/or production payment interests. The working interest, therefore, reflects revenue due the royalty interest owner as well as that due the lessee, and represents the lessee's participation in exploration, development and producing costs either on a cash, penalty, or carried basis. |
| **Ground Anchor** | A static holding device installed in the ground separate from the rig structure and to which guylines may be attached. |
| **Ground Elevation** | The elevation of the ground relative to mean sea level. |
| **Groundwater** | Water present in the saturated zone of an aquifier. |
| **Group** | An array of geophones deployed at a station which collectively feed a single recording channel. The group identifer is the station identifer at which it is placed, combined with an array identifier (in case there are multiple arrays deployed at a station). All groups are associated with stations, but there may be stations not associated with groups. |
| **Grouting** | The filling of void space with a substance that hardens (grout). |
| **Growth Fault** | A fault in sedimentary rocks that forms contemporaneously and continuously with deposition, so that the throw increases with depth and the strata on the downthrown side are thicker than the correlative strata on the upthrown side. |
| **Gsna District** | Geothermal Survey of North America district. |
| **Guar Gum** | A naturally occurring hydrophilic poly saccharide derived from the seed of the guar plant. The gum is chemically classified as a galactomannan. Guar gum slurries made up in clear fresh or brine water possess pseudoplastic flow properties. |
| **Guaranteed Royalty** | The minimum amount of royalty income a royalty owner is to receive under the terms of the lease agreement, regardless of the royalty owner's share of actual proceeds from the sale of producton. |
| **Guard Log** | A well log of rock resistivity which involves the use of a guard tool. |
| **Guard Tool** | A resistivity logging device in which a current beam is focused by the use of guard electrodes, thus enhancing resolution of thin beds and permitting the use of the tool in wellbores filled with saline drilling fluids. |

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| **Guarded** | Covered, shielded, fenced, enclosed, or otherwise protected by means of suitable covers or casings, barrier rails, or screens to eliminate the possibility of accidental contact with or dangerous approach by persons, animals, or objects. |
| **Guidance Equipment** | Guidance equipment is used to direct and orient risers or tools to the seafloor template. Guidelines, tendons, submersibles, etc., can be used for this purpose. |
| **Guide** | A structure lowered to the ocean floor prior to offshore drilling used to guide and anchor drilling tools and wellhead housings. |
| **Guide Base** | An offshore platform whose supporting legs fit into a frame previously constructed and anchored to the seafloor. |
| **Guide Fossil** | SEE: Index Fossil. |
| **Guide Shoe** | A short, heavy cylindrical steel section filled with concrete and rounded at the bottom, which is placed at the bottom end of the casing string. The guide shoe prevents the casing from hanging up on irregularities in the borehole as it is lowered into the wellbore. |
| **Gum** | Any hydrophilic plant, polysaccharides or their derivatives which when dispersed in water, swell to produce a viscous dispersion or solution. Unlike resins, they are soluble in water and insoluble in alcohol. |
| **Gumbo** | (1) Any relatively sticky formation encountered in drilling; e.g., clay.(2) A term used locally in the U.S. for a clay soil that becomes sticky, impervious and plastic when wet. |
| **Gunbarrel** | A vertical separator, usually a tall, large diameter vessel permitting extended settling times for oil and water separation due to difference in specific gravity. |
| **Gunbarrel Count** | The number (count) of gunbarrels on a facility. |
| **Gunk Plug** | A slurry in crude or diesel oil containing any of the following materials or combinations: bentonite, cement, attapulgite, and guar gum (never with cement). Used primarily in combatting lost circulation. The plug may or may not be squeezed. |
| **Gunk Squeeze** | A bentonite, diesel oil mixture that is pumped down the drill pipe to mix with drilling fluid being pumped down the annulus. These two mix to form a stiff, putty like material that can be squeezed into lost circulation zones. |
| **Gunning The Pit** | Mechanical agitation of the drilling fluid in a pit by means of a mud gun, electric mixer, or agitator. |
| **Gusher** | A well from which oil flows spontaneously under a strong gas or water pressure from within the reservoir. |
| **Guy** | A rope, chain, or rod attached to anything to steady it. A wire line attached to the top of the derrick and extending obliquely to the ground where it is fastened to a guy anchor. |
| **Guy Line** | SEE: Guy. |
| **Guying Pattern** | A plan view showing the manufacturer's recommended locations and distance out to the anchors with respect to the wellhead. |
| **Gyro Rigidity** | First property of a gyroscope, tendency of a spinning gyroscope to maintain the original axis of rotation. |
| **Gyroscope Survey** | A directional survey conducted using a gyroscope for directional control, usually used where magnetic directional control cannot be obtained. |
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| **H Member** | A nipple assembly that provides hydraulic communication between strings of tubing installed in the wellbore. |
| **H2s** | SEE: Hydrogen Sulfide. |
| **Half Life** | The period of time required for a radioactive substance to lose half of its active characteristics; used especially in radiological work. |

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| **Hand Hole** | A small opening for inspection purposes in a pressure vessel or boiler. |
| **Hand Tight** | Threaded joint that has been madeup by hand without the aid of tools or tongs. |
| **Hand Tight Standoff** | The length at hand tight engagement from the face of the coupling to vanish point of the pipe. Positive values indicate vanish point is exposed. Negative values indicate vanish point is buried. |
| **Handling Cost** | SEE: Marketing Cost. |
| **Handling Damage** | Cuts, gouges, dents, or flattened crests (mashes) that occurred during handling; e.g., loading; unloading; shifts in transit. |
| **Handling Tight** | The coupling is sufficiently tight that it cannot be removed except by use of a wrench. |
| **Handy** | A connection that can be unscrewed by hand. |
| **Hang The Rod** | To pull the sucker rod out of the wellbore and hang it in the derrick. |
| **Hangdown** | The weight of drillstem suspended below a dogleg. |
| **Hanger** | SEE: Casing Hanger; Tubing Hanger. |
| **Hanger Mandrel** | That portion of a casing or tubing hanger which is attached by a threaded connection to the tubular string and forms the upper end of that tubular string. |
| **Hanging Wall** | The portion of the fault block above the fault plane. |
| **Hard Banding** | A hard metal deposited on tool joints to resist abrasion from contact of the tool joint to the wall of the borehole. |
| **Hard Hat** | Molded plastic hat worn in the field for protection. |
| **Hard Spot** | An area in the pipe with a hardness level considerably higher than that of the surrounding metal, usually due to localized quenching. |
| **Hardness (metal)** | A measure of the hardness of a metal, as determined by pressing a hard steel ball or diamond penetrator into a smooth surface under standard conditions. Results are often expressed in terms of Rockwell Hardness Number (HRB or HRC) or Brinell Hardness Number (BHN). |
| **Hardness Test (metal)** | Any of several arbitrary methods for determining the hardness of metals. Usually an indentation is made under specified conditions and the hardness is indicated by the diameter (Brinell hardness) or the depth (Rockwell hardness) of the indentation. |
| **Hardness (water)** | Undesirable scale-forming salts, principally calcium and magnesium. |
| **Harmonics** | Those vibrations which are integral multiples of the fundamental frequency. |
| **Hash** | Numerous, small indications appearing on the oscilloscope of the ultrasonic instrument indicative of many small inhomogeneities in the material or background noise. Also referred to as grass. |
| **Hatch** | A covered opening in the top of a tank or storage vessel. |
| **Hazardous Air Pollutant** | According to law, a pollutant to which no ambient air quality standard is applicable and that may cause or contribute to an increase in mortality or in serious illness; e.g., asbestos; beryllium; and mercury have been declared hazardous air pollutants. |
| **Hazardous Substance** | Any substance which by reason of being explosive, flammable, toxic, corrosive, oxidizing, irritating, or otherwise harmful, has the potential to cause injury, illness, or death. |
| **Head** | (1) Pressure of liquid upon a unit area due to the height of the liquid column above the point at which the pressure is measured.(2) A single flow of a well when flowing intermittently. |
| **Head Well Puller** | An individual directly in charge of a well servicing rig and crew. Also referred to as crew chief or pulling unit operator. |

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| **Header** | (1) A large diameter pipe into which a number of smaller pipes are perpendicularly welded or screwed.(2) A collection point for oil or gas gathering lines. |
| **Heading** | Alternating fluid slugs separated by gas which causes pressure variation at wellhead. |
| **Heat Affected Zone** | That portion of the base metal which has not been melted, but whose mechanical properties or microstructure has been altered by the heat of welding or cutting. |
| **Heat Capacity** | The amount of heat required to raise the temperature of a unit volume of borehole or tubular material by one degree. |
| **Heat Checking Of Tool Joint** | A condition that exists when a tool joint is excessively heated by the friction caused by rotation against the wall in the borehole. |
| **Heat Density** | The heat release through the cross section of the firetube, usually expressed as British thermal unit (BTU)/hour/square inch of cross sectional area. |
| **Heat Duty** | Heat absorbed by the process, usually expressed as British thermal unit (BTU)/hour. |
| **Heat Exchanger** | Technically, any equipment used for the indirect transfer of heat. Conventionally, a specific piece of equipment used to conserve energy by transferring heat from a process stream being cooled to one being heated. |
| **Heat Flux** | The average transfer rate through the firetube, usually expressed as British thermal unit (BTU)/hour/square foot of exposed area. |
| **Heat Sensitive Lockopen Device** | A device installed on a subsurface safety valve actuator to maintain the valve in a full open position, until exposed to sufficient heat to cause the device to release and allow the valve to close. |
| **Heat Treatment** | Alternate steps of controlled heating and cooling of materials for the purpose of changing physical or mechanical properties. Also referred to as heat treating. |
| **Heat Treatment Load** | Material placed on loading or carrying devices moved as a batch through one heat treatment cycle. |
| **Heater** | A vessel in which heat is applied to a series of internal coils or tubes to increase temperature of fluid flowing through coils or tubes. |
| **Heater Bath** | The indirect heating medium is referred to as the heater bath and within a particular scope is limited to water or water solutions. When freezing is possible, ethylene glycol may be added for antifreeze protection. Other additives to the water bath may include corrosion inhibitors. |
| **Heater Treater** | A vessel that heats an emulsion and removes water and gas from the oil to raise it to a quality acceptable for pipeline transmission. A heater treater is a combination of a heater, free water knockout, and oil and gas separator. |
| **Heater Treater Count** | The number (count) of heater treaters on a facility. |
| **Heating Shroud** | Baffle surrounding firetubes in treaters designed to increase emulsion heating efficiency by minimizing the heating of free water which separates from the emulsion before heating. Also referred to as heating hood. |
| **Heating System Cost** | Costs include construction costs, buildings, and equipment, such as pipe, fittings, furnace, and boilers in a central heating system, from and including the central heating plant to outside walls of buildings served. This is applicable only when a central haating plant serves two or more buildings. |
| **Heating Value** | The heat energy derived from a unit volume of gas. |
| **Heating Value, Higher Or Gross** | The heat energy derived from the combustion of a unit quantity of a fuel when the reaction products are cooled to 60 degrees fahrenheit. |
| **Heating Value, Lower Or Net** | The gross heating value less the heat of condensation of any water formed in combustion. |
| **Heave** | The vertical motion of a ship or an offshore drilling rig. |
| **Heavies** | SEE: High Specific Gravity Solids. |

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| **Heaving** | The partial or complete collapse of borehole walls resulting from internal pressures due primarily to swelling from water absorption or formation of gas pressures. |
| **Heavy Crude Oil** | Crude oil of 20 degrees API gravity or less. |
| **Heavy Metal** | Metallic element with high atomic weight, which may be toxic to plant and animal life depending on their oxidation and chemical state. Such metals may be residual in the environment and exhibit biological accumulation; e.g., arsenic; cadmium; chromium; mercury; lead. |
| **Heavy Weight Drill Pipe** | An intermediate drillstem member used between the relatively heavy and rigid drill collars, and the relatively light and flexible drill pipe. The heavy weight drill pipe consists of heavy walled tubes attached to special extra length tool joints. For ease of handling, the heavy weight drill pipe retains similar external dimensions to that of regular drill pipe. |
| **Hedge Book** | The paper portfolio or paper trade balances used to offset the physical (i.e., cash) portfolio or trading activity. |
| **Held-by Reason** | Describes the method by which the company's interest in a property is maintained; e.g., Co-owner or co-tenant pays rent on nonproducing property (during primary term); Co-owner or co-tenant pays rent on producing property (during/beyond primary term); Co-owner or co-tenant pays rent for a specific period on nonproducing acreage also part of HBP (during/beyond primary term). |
| **Helical Buckling** | Buckling in which the pipe forms a helix or spiral shape. |
| **Helicopter** | A rotary wing aircraft which depends principally for its support and motion in the air upon the lift generated by one or more power driven rotors, rotating on substantially vertical axes. |
| **Helicopter Gross Weight** | The certified maximum takeoff weight of the helicopter for which the heliport is designed to accommodate. |
| **Heliport** | An area on a structure used for the landing and takeoff of helicopters and which includes some or all of the various facilities useful to helicopter operation; e.g., parking; tiedown; fueling; maintenance. |
| **Helix** | SEE: Flute. |
| **Helix Angle** | The angle made by the conical spiral of the thread at the pitch diameter with a plane perpendicular to the axis. |
| **Henry Hub** | The location designated by NYMEX as the standard delivery point for its natural gas futures contracts, which is located at the tailgate of Texaco's Henry Gas Plant in southern Louisiana. |
| **Hermetic Seal** | SEE: Hermetically Sealed Device. |
| **Hermetically Sealed Device** | A device that prevents a hazardous or corrosive gas or vapor from coming in physical contact with an arcing or high temperature component. |
| **Heterogeneous** | Nonuniform at the scale of interest. Different parts have different properties. |
| **High Angle Hole** | Generally considered to be a wellbore path for which the inclination angle from vertical exceeds 50 degrees. |
| **High Cost Natural Gas** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, gas produced from a well, the drilling of which commenced on or after February 19, 1977 and was completed at a depth of more than 15,000 feet (See Section 107 - Natural Gas Policy Act (NGPA), 1978, as amended). Such gas was decontrolled December 1, 1979. Other high cost gas remains controlled, and is defined as that produced from geopressurized brine, coal seams, Devonian shale, and produced under any other conditions deemed by the Federal Energy |
| **High Liquid Level** | Liquid level in a process component above the highest operating level. |
| **High Ph Drilling Fluid** | A drilling fluid with a pH range above 10.5. A high alkalinity drilling fluid. |
| **High Pressure** | Pressure in a process component in excess of the maximum operating pressure but less than the maximum allowable working pressure (for pipelines, maximum allowable operating pressure). |
| **High Pressure Sensor Setting** | The setting of a device in a process component set to alarm when the pressure is in excess of the maximum safe or design working pressure. Commonly abbreviated as PSH. |

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| **High Specific Gravity Solids** | In the petroleum industry, this usually refers to the barite solids (could be Galena or other solids more than 4.2 specific gravity). |
| **High Speed** | Indicates screen speed generally in excess of 3,000 revolutions or cycles per minute. |
| **High Temperature** | Temperature in a process component in excess of the design operating temperature. |
| **High Temperature Sensor Setting** | The setting for a device in a process component on a platform set to alarm when the temperature exceeds the maximum safe or design temperature. Commonly abbreviated as TSH. |
| **Highcut** | Frequency designator specific to a frequency where the filter's amplitude response is attenuated 3 decibels (to 70% amplitude or half power) of the total signal amplitude. Frequencies greater than the highcut are reduced by more than 3 decibels, and frequencies less than the highcut are reduced by less. |
| **Highly Volatile Liquid** | Liquids whose vapor pressure exceeds 40 pounds per square inch absolute (276 kilopascals) at 100 F (37.8 C). |
| **Hoist** | SEE: Hoist Mechanism. |
| **Hoist Mechanism** | A hoist drum and rope system used for lifting and lowering loads. |
| **Hoist Rope** | Wire rope involved in the process of lifting. |
| **Hoisting** | The process of lifting. |
| **Hoisting Equipment** | A piece of equipment used to vertically lift materials, supplies, etc., from boats or barges to one of the structure decks. This is usually a crane or stiffleg derrick located on the main deck and may be driven by internal combustion engine or an electric, pneumatic or hydraulic motor. |
| **Hoisting Horsepower** | SEE: Hook Horsepower (for formula to calculate). |
| **Hoisting Line** | SEE: Drilling Line. |
| **Hold Angle** | Maximum deviation of the wellbore path from true vertical, expressed in decimal degrees. |
| **Hold Down** | (1) A clamp used on rod line posts to keep the rod from moving in any direction but back and forth.(2) Hydraulic: A device used for anchoring and packing-off a pump in wells when a pump seating nipple has not been provided.(3) Insert Pump: Mechanical arrangement installed with the pump to prevent upward movement. |
| **Hold Down Nipple** | Usually a one foot portion of the tubing string in which the pump is seated. Commonly located above the gas anchor. Its function is to hold the stationary part of the pump in place during the upstroke. |
| **Holdup** | Refers to the volume fraction of a specific fluid phase in the upward moving flow stream; e.g., water holdup; oil holdup. |
| **Hole** | SEE: Borehole; Wellbore. |
| **Hole Axis** | SEE: Borehole Axis. |
| **Hole Azimuth Angle** | SEE: Borehole Azimuth Angle. |
| **Hole Caving** | SEE: Caving. |
| **Hole Change** | SEE: Event Sequence. |
| **Hole Change Code** | (1) SEE: Event Sequence Code.(2) As used with the Federal Lease Production Reporting System (FLPRS), this item refers to a perforation interval. It is used along with the well completion code (FCBS) to form the FLPRS three character producing interval code. |
| **Hole Change Type** | SEE: Event Sequence Code. |
| **Hole Clearance** | SEE: Clearance; Borehole Hole Clearance. |
| **Hole Curvature** | Refers to the changes in inclination and direction of the borehole axis. |

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| **Hole Test Condition** | The condition of the wellbore at the time of the production test; e.g., open hole and perforations; open hole; perforations. |
| **Holiday** | Areas of metal that have been missed by one or more applications of a coating material, resulting in pinholes or reduced film thickness. |
| **Homing Beacon** | A radio transmitter emitting signals for guidance. |
| **Homocline** | SEE: Monocline. |
| **Homogeneous** | A substance or fluid that has at all points the same property or composition. It is uniform or of similar nature throughout. |
| **Hook Block** | Block with hook attached used in lifting service. It may have a single sheave for double or triple line or multiple sheaves for four or more parts of line. |
| **Hook Crack** | Metal separations, resulting from imperfections at the edge of the plate or skelp, parallel to the surface, which turn toward the inside or outside pipe surface when the edges are upset during welding. |
| **Hook Horsepower** | Weight indicator reading (lb) x length of middle joint (ft) / Time to hoist middle joint (sec) x 550 = Hook Horsepower. |
| **Hook Roller** | A roller which prevents the lifting of the revolving upperstructure from the roller path. Hook rollers are the means to connect the upperstructure to the foundation or pedestal. |
| **Hook Strip** | A hook on the edge of a screen section which accept the tension member. |
| **Hopper** | A large funnel or container through which solids may be passed and mixed with liquids; e.g., cement, drilling mud, etc. |
| **Horizon** | (1) Geology: An interface indicative of a particular position in a stratigraphic sequence, usually a distinctive and very thin bed.(2) Seismic: An interface associated with a seismic reflection that can be traced over a broad area.(3) Soil: A layer of soil distinguishable from over and underlying layers of physical or chemical properties and structures.(4) Surveying: One of several lines or planes used as references for observation and measurement relative to a given location on the earth's su |
| **Horizontal Component Distance** | The calculated horizontal displacement distance of the lateral from the point of entry of the specified interval to the endpoint, or terminus of the lateral in said interval. This distance may either be expressed as one overall value, or as two values denoting a north/south component and an east/west component. |
| **Horizontal Displacement Measurement** | The distance between two points that are projected onto a horizontal plane. |
| **Horizontal Drilling** | A special drilling technique used in drilling the horizontal component of a wellbore. |
| **Horizontal Permeability** | Absolute permeability measured on a horizontally oriented core or surface sample. |
| **Horizontal Well** | A well in which a wellbore path deviates from the vertical by at least 75 degrees. |
| **Horst** | The ridge left standing between two grabens or down dropped fault blocks. |
| **Hot Oil** | Oil production in violation of state regulations or transported interstate in violation of federal regulations. |
| **Hot Oil Treatment** | A treatment using heated oil to melt and remove accumulated paraffin from the tubing, annulus, flow lines or production equipment. |
| **Hot Spot** | (1) An abnormally hot place on the tube in a boiler or furnace.(2) A location of active corrosion of buried pipe. |
| **Hot Tapping** | Making repairs or modifications on a tank, pipeline, or other installation without shutting down operations. |
| **Hot Wire Analyzer** | A device used to detect hydrocarbon gases returned to the surface by the drilling mud. |
| **Hot Working** | Deforming metal plastically at a temperature above the recrystallization temperature. |
| **Hp** | Abbreviation for Horsepower. |

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| **Hub** | A connector machined to the top of a subsea wellhead on which the blowout preventor (BOP) and subsequent completion tree is attached. |
| **Humic Acid** | Organic acids of indefinite composition in naturally occurring leonardite lignite. |
| **Hunting** | (1) The fluctuation observed in a control instrument when it is attempting to establish a stable operating condition.(2) Uneven or cycling operation of an internal combustion engine due to bad timing or erratic fuel injection. |
| **Hybrid Structure** | A structure consisting of several different construction materials. |
| **Hydrant** | A discharge pipe with a valve and spout through which water may be drawn from a water main. |
| **Hydrate** | (1) A chemical compound of water and gaseous hydrocarbons, or hydrogen sulfide. Similar to porous snow in appearance, this solid has a specific gravity close to that of water. Accumulation of hydrates in pipelines and processing equipment results in freeze ups, a considerable source of trouble.(2) A substance containing water combined in the molecular form, such as CaSO4.2H2O. |
| **Hydration** | (1) The act of a substance to take up water by means of absorption and/or adsorption.(2) The chemical reaction between hydraulic cement and water forming new compounds most of which have strength producing properties. |
| **Hydraulic** | Operated, moved, or affected by a liquid pressure. |
| **Hydraulic Drive** | A motor driven hydraulically by a pump. |
| **Hydraulic Efficiency** | The percentage relation of hydraulic horsepower output to mechanical horsepower input. |
| **Hydraulic Gradient** | The change in pressure head between any two points along a line of flow divided by the length between the points. |
| **Hydraulic Orientating Sub** | Used in directional wellbore paths, with inclination greater than six degrees, to find the borehole low side. A ball falls to the low side of the sub and restricts an orifice causing an increase in the circulating pressure. The position of the tool is then known with relation to the borehole low side. |
| **Hydraulically Operated Bent Sub** | A deflection sub which is activated by hydraulic pressure of the drilling fluid. |
| **Hydrocarbon** | A compound consisting only of molecules of hydrogen and carbon. |
| **Hydrocarbon Acreage** | The areal extent of the hydrocarbon zone of a reservoir. |
| **Hydrocarbon Charge** | Replacement of nonhydrocarbon pore fluids of a reservoir rock in a reservoir with hydrocarbon fluids. |
| **Hydrocarbon Generation** | The conversion of organic material in source rock to hydrocarbons. |
| **Hydrocarbon Generation Stage** | The hydrocarbon generation stage interpreted from the vitrinite reflectance data from the source rock sample; e.g., oil; gas; dry gas. |
| **Hydrocarbon Migration** | The movement of hydrocarbons through the pores of rock from source rock to reservoir. |
| **Hydrocarbon Prospecting** | The search for an oil or gas trap using geological and geophysical methods. |
| **Hydrocarbon Water Contact** | The point at which hydrocarbons are encountered above and water below within a reservoir. |
| **Hydrocarbon Wetability** | The ability of the process stream to form a protective hydrocarbon film on metal surfaces. |
| **Hydrocyclone** | A liquid solids separation device utilizing centrifugal force for settling; obtaining the rotation of slurry and resulting centrifugal acceleration from high velocity tangential entry of the feed into the major circular cross section of the stationary restraining walls. |
| **Hydrocyclone Size** | The maximum diameter of a hydrocyclone. |
| **Hydrodynamic Damping** | Component of hydrodynamic force proportional to the velocity of the body and 180 degrees out of phase with the velocity. |

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| **Hydrodynamic Trap** | A reservoir trap having part of its geometrical configuration determined by a fluid potential gradient, caused by movement of fluids in the reservoir rock. Hydrodynamic traps typically have tilted contacts between reservoir fluids. |
| **Hydrodynamics** | A branch of Science that deals with the motion of fluids and the forces acting on solid bodies immersed in fluids and in the motion relative to them. |
| **Hydrogen Ion Concentration** | Moles of hydrogen ions per mole of liquid. |
| **Hydrogen Sulfide** | A gaseous compound, commonly known by its chemical formula, H2S, frequently found in oil and gas reservoirs. It has a distinctive rotten egg odor. It is extremely poisonous and corrosive and quickly deadens the olfactory nerve so that its odor is no longer a warning signal. |
| **Hydrogen Sulfide Encountered Depth** | The measured depth at which hydrogen sulfide was encountered. |
| **Hydrogen Sulfide Percentage** | The MOL percentage of hydrogen sulfide in a gas stream. |
| **Hydrogenation** | In a refinery cracking unit, hydrocarbons are subjected to a high temperature, while simultaneously free hydrogen is being introduced. The hydrogen atoms combine into smaller molecules of the lighter hydrocarbons. |
| **Hydrology** | The science dealing with the properties, distribution, and circulation of water and snow. |
| **Hydrolysis** | The reaction of a salt with water to form an acid or base. |
| **Hydrometer** | A floating instrument for determining the specific gravity or density of liquids, solutions, and slurries. A common example is the Mudwate hydrometer used to determine the density of drilling fluid. |
| **Hydrophile** | A substance usually in the colloidal state or an emulsion, which is wetted by water; i.e., it attracts water or water adheres to it. |
| **Hydrophilic** | A property of a substance having an affinity for water or one that is wetted by water. |
| **Hydrophilic Lipophilic Balance** | The hydrophilic-lipophilic balance (HLB) is one of the most important properties of emulsifiers. It is an expression of the relative attraction of an emulsifier for water and oil, determined largely by the chemical composition and ionization characteristics of a given emulsifier. The HLB of an emulsifier is not directly related to solubility, but it determines the type of an emulsion that tends to be formed. It is an indication of the behavior characteristics and not an indication of emulsifier efficien |
| **Hydrophobe** | A substance, usually in the colloidal state, not wetted by water. |
| **Hydrophobic** | Descriptive of a substance which repels water. |
| **Hydrophone** | A seismic receiver that is sensitive to pressure variations. It is used in marine and marsh environments by placing it a few feet below the water surface. |
| **Hydroprocessing** | Used to remove sulfur, nitrogen, and oxygen compounds from both the gasoline and distillate streams. These nonhydrocarbon compounds are hydrogenated (have hydrogen atoms added to their molecules) and are removed later by either stripping or fractionation. Also referred to as hydrotreating. |
| **Hydrostatic Head** | The pressure exerted by a column of fluid; i.e., the unit weight of the fluid times the vertical height of the column of that fluid. |
| **Hydrostatic Pressure Measurement** | The hydrostatic head measurement. |
| **Hydrostatic Test** | To apply hydraulic pressure (usually with water) in order to find leaks in tubing, lines, piping, vessels and equipment. |
| **Hydroxide** | A designation that is given for basic compounds containing the OH- radical. When these substances are dissolved in water, they increase the pH of the solution. |
| **Hygrometer** | An instrument used for measuring dew points of gases. |
| **Hygroscopic** | The property of a substance enabling it to absorb water from the air. |

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| **I** | |
| **Iadc** | SEE: International Association of Drilling Contractors. |
| **Ice Island** | Large ice pieces of glacial or shelf ice origin. |
| **Ice Slot** | A manmade cut in an ice sheet. May be wet (completely through the ice), partially refrozen, or dry (partially through the ice). |
| **Ice Structure** | A gravity structure largely composed of natural and/or man made ice. |
| **Ichnofossil** | SEE: Trace Fossil. |
| **Id** | (1) Inside Diameter.(2) Identification/identifier. |
| **Ideal Perforated Permeability** | The ideal perforated permeability of a Berea sandstone core target is the calculated permeability to kerosine of the core target containing an ideal perforation at the outflow end based on the cross section and length of the Berea sandstone core used in determining the perforated effective permeability. |
| **Identifier** | A value assigned to distinguish an object from others. Identifiers are usually assigned by those authorized to do so and tend to conform to a convention. |
| **Igneous Rock** | Rocks formed by cooling and solidifying molten or partially molten material; i.e., lava flowing out of a volcano onto the earth's surface or by magma injecing itself into preexisting rocks below the surface of the ground. |
| **Ignite** | To cause to burn. |
| **Ignitible Mixture** | A gas and air mixture that is capable of being ignited by an open flame, electric arc or spark or device operating at or above the ignition temperature of the gas and air mixture. |
| **Ignition** | SEE: Explosive Limit; Ignitible Mixture. |
| **Ignition Source** | A source of temperature and energy sufficient to initiate combustion. |
| **Ignition Temperature** | The minimum temperature required, at normal atmospheric pressure, to initiate or cause self sustained combustion (independent of any externally heated element). Also referred to as autoignition. |
| **Ignitor (thermowell)** | Downhole ignitor used in fire flood operations. |
| **Impact Loading** | This loading results from sudden changes in the state of motion of components of the rig. |
| **Impedance (acoustic)** | SEE: Accoustic Impedance. |
| **Impeller** | The rotating element which converts rotational energy to head in a centrifugal pump. |
| **Imperfect Thread Length** | Threads having imperfect thread forms. |
| **Imperfection** | A discontinuity or irregularity in a product. Also referred to as flaw. |
| **Impermeable** | Preventing the passage of fluids. Lack of permeability. |
| **Impervious** | SEE: Impermeable. |
| **Impervious Sheathed Cable** | Cable constructed with an impervious metallic or nonmetallic overall covering that prevents the entrance of gases, moisture, or vapors into the insulated conductor or cable. |
| **Implementation Plan** | A document of the steps to be taken to ensure attainment of environmental quality standards within a specific time period. Implementation plans are required by various laws. |
| **Impoundment** | A body of water confined by a dam, dike, floodgate, or barrier; e.g., a pond. |

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| **Impression Block** | A block with lead or another relatively soft material on the bottom. The block may be made up on drill pipe, tubing, or wireline at the surface, run into a wellbore, and allowed to rest on a tool or other object that has been lost in the wellbore. On retrieval to the surface, an idea of the size, shape and position of the fish is obtained from an examination of the impression left in the lead. This helps in selecting the appropriate fishing tools. |
| **Improper Thread Form** | An excessive deviation from a normal thread profile (in an axial plane) over a length of one pitch or over multiple pitch lengths. |
| **Improper Thread Height** | Lack of sufficient thread height (depth). This may be caused by a shaved condition where an excess of metal has been removed from the root or crest, distorting the contour of the thread. |
| **Improvements Cost** | The costs applicable to enhancements made to facilities ( does not include well operations). |
| **In-kind** | SEE: Take-In-Kind. |
| **In-situ Combustion** | The setting afire of some portion of the reservoir hydrocarbons in order that the gases produced by combustion will drive oil ahead of it to the wellbores of producing wells. |
| **Inadequate Flash Trim** | A condition in which height of weld flash after trimming exceeds the limits set in the specifications to which the pipe was manufactured. |
| **Inadequate Ventilation** | Ventilation which is less than adequate for safety purposes. |
| **Inadequately Ventilated Area** | An area that does not have the proper airflow to be considered adequate ventilation. |
| **Incendiary Energy** | Hot particle energy sufficient to ignite a specific ignitible mixture. |
| **Inches/root Code** | An indicator of whether the meter differential pressure is being reported in inches of water or in roots. |
| **Incidence Angle** | The included angle between the direction of the transmitted wave and the normal to the interface at the point of incidence. |
| **Incident Of Noncompliance** | A violation of Federal regulations as defined in Title 30 Code of Federal Regulations (CFR), as amended. The violation was noted by a Minerals Management Service (MMS) employee during an inspection of a platform, drilling rig, pipeline, etc., in OCS Federal waters. |
| **Incident Report** | A report that describes incidents of non-compliance. |
| **Incineration** | (1) The controlled process by which solid, liquid, or gaseous combustible wastes are burned and changed into gases.(2) The residue produced contains little or no combustible material. |
| **Inclination Angle** | SEE: Deviation Angle. |
| **Inclination Data Certification Authorized Title** | The job title of the authorized person representing the inclination company. |
| **Inclination Data Company Name** | The name of the company perorming the inclination survey. |
| **Inclination Survey** | SEE: Deviation Survey. |
| **Inclination Surveyor Name** | The name of the person pertforming the inclination survey. |
| **Inclinometer** | A device for measuring wellbore inclination and azimuth. |
| **Included Angle** | The angle between the flanks of the threads. |
| **Inclusion** | (1) Foreign material or nonmetallic particles entrapped within the metal during solidification.(2) A fragment of older rock within an igneous rock to which it may or may not be genetically related. |
| **Incomplete Fusion** | Lack of complete coalescence of some portion of the metal in a weld joint. |
| **Incomplete Penetration** | A condition where the weld metal does not continue through the full thickness of the joint. Also referred to as: Lack of Penetration. |
| **Increased Density Order Number** | A number identifying an order or authorization by a regulatory agency permitting one or more additional wells within a specific drilling and spacing unit. |

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| **Increment** | The integral amount by which an index is changed to get to the next index value. An increment may be negative, but cannot be zero. If the index is a rational value, the increment refers to the change in the numerator. |
| **Incremental Injection Rate** | The rate of increase for the fluid or mineral being injected into a well. |
| **Incremental Pricing Account** | Account maintained by a pipeline which contains the costs subject to pass through to certain users. |
| **Incrustation** | The undesirable material which collects on interior walls of production vessels such as separators, meters, tanks, etc., reducing internal dimensions or capacity. Paraffin, gyp, etc., are examples. |
| **Indefinite Pricing Clause** | Any provision of any contract which provides for the establishment or adjustment of the price for natural gas delivered under such contract by reference to other prices for natural gas, crude oil or refined petroleum products, or allows for the establishment or adjustment of the price of natural gas delivered under any contract by negotiation between the parties. |
| **Indented Drill Collar** | Round drill collar with a series of indentations on one side to form an eccentrically weighted collar. |
| **Index** | (1) A price calculated by private industry publications, through bid week price surveys, for natural gas delivered at regional locations into major pipelines.(2) A pointer which changes incrementally to indicate position along a scale, as in a depth index along a depth scale. |
| **Index Fossil** | A fossil that identifies the geologic age of a formation or the top of a geologic unit. |
| **Indian Agency Code** | The indicator identifing an individual Indian Agency within a tribe or area. |
| **Indication** | A response from nondestructive inspection that requires interpretation in order to determine its significance; i.e., blip on the log; powder buildup on the pipe. |
| **Indicator** | (1) Various displays of pressure, weight, temperature, volume, flow, direction, current, or movement.(2) A device for indicating a condition, a current or potential. Typical ones used on inspection instruments are galvanometers, meters both De Arsenval or digital, Cathode Ray Tube (CRT) or a warning light. Also referred to as readout.(3) Substances in acid base titrations which, in solution, change color or become colorless as the hydrogen ion concentration reaches a definite value, these values varyi |
| **Indirect Charge** | SEE: Overhead. |
| **Indirect Cost** | SEE: Overhead. |
| **Indirect Fired Vessel** | A vessel used to increase the temperature of a fluid by the transfer of heat from another fluid which is heated by a flame in the same vessel. The flame is contained within a firetube or tubes. |
| **Indirect Heated Component** | A vessel or heat exchanger used to increase the temperature of a fluid by the transfer of heat from another fluid, such as steam, hot water, hot oil or other heated medium. |
| **Indirect Heated Vessel** | SEE: Indirect Heated Component. |
| **Induced Gamma Ray Spectroscopy Log** | A record of formation response to neutron bombardment. Measurements are used to compute the hydrocarbon saturation, salinity, lithology, porosity and shaliness of the formation. Also referred to as: carbon-oxygen log, induced spectral gamma-ray log or neutron activation log. |
| **Induced Permafrost** | Permafrost caused by thermal disturbance from construction or operation at the planned installation site. |
| **Induced Polarization** | An exploration method involving measurements of the slow decay of voltage in the ground following the cessation of an excitation current or low frequency variation of earth impedance. |
| **Induction** | The magnetism induced in a ferro-magnetic body by an outside magnetizing force. |
| **Induction Log** | A well log which uses electromagnetic induction principles for the measurement of rock conductivity or resistivity. |
| **Inert Gas** | A noncombustible gas that does not react readily with other substances under ordinary conditions. It generally contains a large percentage of nitrogen and is sometimes used for repressuring or gas injection operations. |
| **Infiltration** | The flow of a fluid into a substance through pores or small openings. Commonly used in hydrology to denote the flow of water into soil material. |

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| **Inflow Performance Relationship** | The relationship of flowing bottomhole pressure to gross liquid producing rate for a particular well completion. Referred to as IPR. |
| **Informal Stratigraphy** | The branch of Stratigraphy dealing with the relative ordering of rock strata, using formal stratigraphic nomenclature and guidelines. |
| **Initial Adjustment Total Amount** | The initial revised value after adjustments are applied. |
| **Initial Boiling Point Temperature Measurement** | The temperature reading which is observed at the instant drop of condensate forms at the lower end of the condenser tube. |
| **Initial Contract Price Or Percentage** | The initial rate or the initial decimal used to calculate a contract minimum price. |
| **Initial First Flowing Pressure Measurement** | The initial flowing pressure measurement recorded for the well test flowing phase having a well test phase sequential discriminator indicating the phase is the first of multiple well test flowing phases. |
| **Initial Flowing Pressure** | The first flowing pressure measurement recorded during a well test flowing phase. |
| **Initial Flowing Tubing Pressure Measurement** | The initial flowing pressure measurement recorded in the tubing during a well test flowing phase. |
| **Initial Gas Oil Ratio** | The initially reported standard cubic feet (SCF) of gas produced divided by the barrels of stock tank oil (STO). |
| **Initial Hydrostatic Pressure Measurement** | The initial hydrostatic pressure measurement recorded during the well test installation phase. |
| **Initial Maximum Shut- In Pressure Measurement** | SEE: Initial Shut-In Pressure. |
| **Initial Modified Lahee Class** | The initial modified well classification, according to the Lahee well classification system. |
| **Initial Open Time** | The time stamp recorded at the beginning of a well test flowing phase. |
| **Initial Open Time Interval** | The time interval recorded for the well test flowing phase having a well test phase sequential discriminator indicating the phase is the first of multiple well test flowing phases. |
| **Initial Potential** | The results of an initial potential test of a well completion. |
| **Initial Potential Test** | The first potential test of a well completion. Usually required by a regulatory agency. |
| **Initial Pulse** | The first indication which may appear on the screen. This indication represents the emission of ultrasonic energy from the crystal face (main bang). |
| **Initial Second Flowing Pressure Measurement** | The initial flowing pressure measurement recorded for the well test flowing phase having a well test phase sequential discriminator indicating the phase is the second of multiple well test flowing phases. |
| **Initial Set** | Cement shall be considered to have acquired its initial set when it will bear, without appreciable indentation, the initial Gillmore needle. This is not an API test. See ASTM C 266: Time of Setting of Hydraulic Cement by Gillmore Needles. |
| **Initial Shut- In Pressure Measurement** | The first shut- in pressure measurement recorded during a well test shut- in phase. |
| **Initial Shut- In Pressure Time** | The time stamp at the recording of an initial shut- in pressure measurement. |
| **Initial Shut- In Tubing Pressure Measurement** | The initial shut-in pressure measurement recorded in the tubing during a well test shut-in phase. |
| **Initial Static Reservoir Pressure Measurement** | The first static reservoir pressure measurement recorded during the well test static reservoir pressure phase. |
| **Initial Water Saturation** | The average original fractional water saturation in a reservoir. |
| **Initial Well Class** | The initial well classification, according to a well classification system. |
| **Injected Gas Oil Ratio** | The ratio between the volume of gas injected and the volume of oil produced. |
| **Injection** | The condition of forcing a flow of fluids into the reservoir. |

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| **Injection Cycle Number** | A number assigned to each cycle phase of injection which permits the tracking of cyclic injection used in tertiary projects. Regular waterflood projects are recorded as cycle number zero. Only those projects which are in a cycle of alternating injection substances will be assigned a number other than zero. |
| **Injection Cycle Start Date** | The date the injectant was first injected into the well completion. |
| **Injection Daily Average Gas Volume** | The daily average gas volume injected into a borehole; this does not include gas-lift injection volumes. |
| **Injection Daily Average Liquid Volume** | The daily average volume of oil or water injected into a borehole; this does not include gas-lift injection volumes. |
| **Injection Date** | The date the injection process began. |
| **Injection End Date** | Ending date of the period the given volume was injected. |
| **Injection Facility** | A facility that treats fluid and pressurizes it for injection (or disposal). |
| **Injection Flag** | An indicator of whether the reported volumes are net reservoir numbers. |
| **Injection Fluid** | Fluid that is input through a well completion into a reservoir for purposes of enhanced recovery or pressure maintenance. |
| **Injection Fluid Density** | Density of this particular injection fluid at reservoir temperature and pressure. |
| **Injection Fluid Specific Gravity** | Specific gravity of this particular injection fluid. |
| **Injection Fluid Temperature** | The temperature of the injection fluid at the surface. |
| **Injection Fluid Type** | The type of fluid injected into a well completion. |
| **Injection Fluid Viscosity** | The measured viscosity of the injection fluid at reservoir temperature. |
| **Injection Fluid Volume** | The volume of fluids injected into a reservoir through one or more well completions as a part of a pressure maintenance, secondary recovery, or recycling operation. |
| **Injection Gas** | Gas put into a reservoir for purposes of cycling, maintaining reservoir pressure, displacing liquids, or storage. |
| **Injection Gas Volume** | The volume of gas injected into a borehole. This does not include gas-lift injection volumes. |
| **Injection Head** | Uppermost control on a water injetion well. |
| **Injection Liquid Volume** | The volume of oil or water injected into a borehole; this does not include gas-lift injection volumes |
| **Injection Oil Bubble Point Pressure Measurement** | The measured bubble point pressure for the oil phase. |
| **Injection Oil Bubble Point Pressure Temperature** | The temperature at which the indicated bubble point pressure is effective. |
| **Injection Pattern** | The spacing and pattern of well surface locations in an enhanced recovery project. The more common injection patterns include line drive, five spot, seven spot, nine spot, and peripheral. |
| **Injection Pressure Measurement** | The pressure under which fluid is injected into a well. |
| **Injection Pressure Of Fluid After Work** | The surface measurement of injection pressure into a well completion, after work has been performed on the completion; applicable to service wells only. |
| **Injection Pressure Of Fluid Before Work** | The surface measurement injection pressure into a well completion, before work is performed on the completion; applicable to service wells only. |
| **Injection Pump** | A pump that: (1) injects chemcals into a flow line system for the purpose of treating emulsions or corrosion;(2) injects liquids underground for disposal or to enhance recovery. |
| **Injection Rate** | The flow rate of fluids injected into a reservoir. |

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| **Injection Rate After Horizon Work** | The injection rate of fluid into the identified horizon, after work has been performed on the horizon. This element is applicable to injection, disposal and service wells only. |
| **Injection Rate Before Horizon Work** | The injection rate of fluid into the identified horizon, before work is performed on the horizon. This element is applicable to injection, disposal and service wells only. |
| **Injection Total Gas Volume** | The total volume of gas injected during the period covered. |
| **Injection Total Monthly Gas Volume** | The total monthly gas volume injected into a borehole; this does not include gas-lift injection volumes. |
| **Injection Total Monthly Liquid Volume** | The total monthly liquid volume injected into a borehole; this does not include gas-lift injection volumes. |
| **Injection Total Oil/ Condensate Volume** | The total volume of oil and or condensate injected during the period covered. |
| **Injection Total Water Volume** | The total volume of water injected during the period covered. |
| **Injection Volume** | The volume of oil, gas, or water injected into a borehole. This may include fluids injected for the purpose of disposal.. Does not include gas-lift injection volumes. |
| **Injection Water Dissolved Solids** | The total dissolved solids content for injection water. |
| **Injection Water Resistivity** | Resistivity measured as a part of particular injection water. |
| **Injection Water Undissolved Solids** | The total undissolved solids content for injection water. |
| **Injection Well** | A well used to introduce fluids into a reservoir, usually for enhanced recovery. |
| **Injectivity Test** | A well test to determine the injection rate a given pressure. |
| **Injector** | Device for adding liquids, chemicals, etc., to a system by driving force. |
| **Ink Blob** | An early method of measuring inclination of a borehole axis. |
| **Inlet** | The actual opening through which the feed enters the device. |
| **Inline** | For 2D seismic data, direction along the survey line. If the line is not straight, the inline direction will change. For 3D seismic data, a direction within the data set designated as the inline direction. Possible directions are in the direction in which the cable was laid or the direction in which the survey boat sailed. It may be some arbitrary direction. The sense of the inline direction is such that the inline indexes increase in the positive inline direction. |
| **Inline Traverse** | A collection of seismic traces from a 3D survey in which the bin node crossline index remains constant. |
| **Input Gas** | That gas which is compressed and returned to a wellbore to be used for gas lift or as injection gas for pressure maintenance. |
| **Input Horsepower** | The horsepower that is put into an operating system. |
| **Input Well** | SEE: Injection Well. |
| **Inside Blowout Preventer** | A device that can be installed in the drillstring that acts as a check valve allowing drilling fluid to be circulated down the string but prevents back flow. |
| **Inside Diameter** | The nominal inside diameter of the body of the given tubular product. Commonly abbreviated as ID. |
| **Inside Pressure Measurement** | The pressure measured inside the drillstring or vessel. |
| **Inspection Spool** | A short length of pipe inserted in a pipeline in such a manner that it is easily removed for inspection. It should be of the same material as the remainder of the pipeline. |
| **Inspector Name Code** | An indicator of the authorized agent of the purchaser, operator, regulatory agency, etc. |
| **Insulated Flange** | A flange which contains insulating material to separate the metal parts. Also referred to as insulating flange. |

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| **Intake Flame Arrestor** | A device placed on the air intake of the firetube to prevent propagation of flame from inside the firetube to the outside atmosphere. |
| **Intangible Aircraft Expense** | Cost of helicopters and planes used to service drilling operations. |
| **Intangible Auto And Truck Expense Amount** | Cost includes the rental or operating costs of automobiles and trucks for the hauling of equipment, material, and personnel. |
| **Intangible Bit And Core Barrel Cost** | Cost of drilling bits and the use and repair of core cutting equipment. |
| **Intangible Cement And Cementing Services Cost** | Cost of cement and cementing services for cementing casing in the well, to include but not limited to additives, floats, collars, centralizers, and guide shoes. |
| **Intangible Communication Equipment Cost** | Cost of various communications systems including radio, telex, microwave and rig telephones. |
| **Intangible Company Labor And Expense Cost** | Cost associated with salaries, wages, and expenses paid to company personnel performing work or supervising work directly in connection with drilling operations. |
| **Intangible Contract Labor Cost** | Cost includes labor furnished by contractors for performance of work incident to drilling not specifically mentioned in another intangible cost category. |
| **Intangible Drilling Dayrate Cost** | Costs paid to a contractor for drilling a well at a specified price per day. |
| **Intangible Drilling Footage Cost** | Costs paid to a contractor for drilling a well to a certain depth at a specified price per foot. |
| **Intangible Drilling Turnkey Cost** | Cost paid to a contractor for all services incurred to perform a specified job. |
| **Intangible Formation Testing Cost** | Cost of taking and recording physical measurements about the formations being drilled including well surveys, electric logs, sidewall cores, drillstem tests, and directional surveys. |
| **Intangible Fuel And Power Cost** | Cost of diesel fuel, gas, and purchased utilities used during drilling operations. |
| **Intangible Geological Services Cost** | Cost associated with geological services for duties such as core analysis, and palentological services. |
| **Intangible Location Cost** | Costs in connection with the building of roads, bridges, canals to a drilling location including bulldozers, barges, drag lines, shale, gravel, and lumber. This classification also includes surface damage payments made to landowners caused by drilling operations and location restoration. |
| **Intangible Marine Transportation Cost** | Cost includes crew boats, barges, and other marine transportation used to transport equipment, material, and personnel. |
| **Intangible Miscellaneous Expense** | Intangible costs not identified elsewhere. |
| **Intangible Mud Logging And Materials Cost** | Costs of drilling mud and related material, such as bentonite weighting material, lost circulation material, chemicals, and crude oil used to condition the hole or maintain circulation. Also included are mud logging services provided by contract or company personnel. |
| **Intangible Overhead Cost** | Cost includes the flat rate or percentage amount assessed in lieu of district expense and administrative overhead, in accordance with provisions of the Accounting Procedure Exhibit of the operating agreement. |
| **Intangible Payroll Burden Cost** | Cost for vacation, sickness and disability, and other similar allowances applicable to employees serving drilling operations, as well as the current cost of group insurance, pension, retirement, and other benefit plans of like nature applicable to company labor charged to the well. |
| **Intangible Perforating Cost** | Cost to penetrate through the casing opposite the producing formation to allow the oil or gas to flow into the borehole. |
| **Intangible Rental Equipment Cost** | Cost of various rental equipment which is not included in a specific category. |
| **Intangible Stimulation Treatment Cost** | Cost of various acidization, fracturing, or squeezing procedures necessary to break down the formation in order to obtain production. |
| **Intangible Tubular Inspection And Treatment Cost** | Expenditures incurred inspecting and treating casing, tubing, and other tubulars to insure compliance with designated specifications. |
| **Intangible Water And Water Well Cost** | Cost to drill and monitor water wells for use in drilling operations. |

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| **Integrating Meter** | A meter that calculates, records and gives instantaneous readout of throughput volumes or rates. |
| **Integrator** | A device which scans pen measurements on gas charts and converts them into production rates for calculating volume settlement. |
| **Integrity Test Pressure Measurement** | The surface pressure applied to verify the mechanical integrity of the tubular. |
| **Intentional Deviation Flag** | An indicator of whether there is intentional deviation. |
| **Interest Acquisition Date** | The date that the indicated company acquired its interest in the property pr zone or, under appropriate conditions as indicated by the acquisition type, that the company has no interest in the zone. |
| **Interest Acquisition Type** | Used to provide a permanent record of the manner in which the indicated company acquired its interest in the zone or, under appropriate conditions, to indicate that it has no interest in the property or zone. Associated with acquisition date; e.g., company nonconsent; back in; working interest; drilling; development. |
| **Interest Amount** | The interest calculated for late payment and or reporting. |
| **Interest Calculation Method** | Indicates how an owner's portion of lease money is to be computed; e.g., Regular decimal (value less tax); Regular interest credit; Regular interest gas purchase; Tax exemption (state); Tax exemption (Federal excise tax on crude oil). |
| **Interest Calculation Method Code** | An indicator of the method used to calculate an interest rate or amount. |
| **Interest Limitation** | Description of how interests are owned as limited by depths, tracts, products owned and encumbrances to those interests; e.g., Overriding Royalty Interests (ORI's); production payments. |
| **Interest Period End Date** | The date the accrual of interest ends. |
| **Interest Period Start Date** | The date the accrual of intere begins. |
| **Interest Rate** | The percentage rate of interest applied to delinquent payments. |
| **Interest Refund Provision Flag** | An indicator of whether or not the contract contains a provision dealing with interest on refundable amounts. |
| **Interest Suspension Date** | The effective date an owner's interest was put into a suspense status instead of pay status. |
| **Interest Type Code** | An indicator of the kind of interest an owner has in a property; e.g., Royalty interest; Working interest; Overriding royalty interest; Production (bonus) payment interest; Carried interest; Net profit; Mineral interest (owner holds royalty interest and working interest); Royalty adjust. |
| **Interface Drain** | A pipe connection extending to the normal interface level with a vortex breaker which is used periodically to drain off any accumulated sludge. |
| **Interfacial Tension** | The force required to break the surface between two immiscible liquids. The lower the interfacial tension between the two phases of an emulsion, the greater the ease of emulsification. When the values approach zero, emulsion formation is spontaneous. |
| **Intermediate Casing** | The string of casing set in the wellbore after the surface casing is set in order to keep the hole from caving. Also referred to as: Protection Casing. |
| **Intermediate Column** | Vertical, cylindrical or multifaceted buoyancy members of the hull structure, which primarily assist in deck and/or pontoon support. |
| **Intermediate Deck** | Deck levels between lower deck and upper deck consisting of girder, beam and plate elements. |
| **Intermediate Girder** | Primary deck elements spanning between main girders. |
| **Intermittent Flow** | Gas lift operation in which gas is injected periodically into the liquid column, with reservoir fluids and injected gas being produced from the wellhead at the surface for an interval of time following each injection period. |
| **Intermittent Gas Lift** | Pressurized gas injected at intervals of time into tubing downhole at a point below top of fluid in tubing to lift slugs of fluid to surface. |

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| **Intermitter** | A surface control which may be adjusted and set to operate a motor valve at predetermined intervals of time and also control the duration of the operating or injection period. |
| **Internal Mute** | A time window which is to be or has been muted (zeroed). Note that zero is considered to be a valid value. A window which has been muted does not have any acquired information in the window even though non-zero values may be placed into a muted window subsequent to application of the mute. A gain taper may have been applied to unmuted data on each side of the muted window to prevent edge effects from sudden changes in amplitude. |
| **Internal Thread** | A thread on the inside surface of a coupling or pipe. |
| **International Association Of Drilling Contractors** | The International Association of Drilling Contractors (IADC) is an organization that defines and classifies drilling bit characteristics. |
| **Interrupted Starting Thread** | The absence of a portion of the true starting thread groove on the chamfer of a round or buttress (pipe thread) caused by thread axis misalignment with the chamfer axis, or out of round chamfer diameter. |
| **Interstate Pipeline** | Any party engaging in natural gas transportation subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) under the Natural Gas Act. |
| **Interstate Rollover Contract** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, a rollover contract for gas which was committed or dedicated to interstate commerce on November 8, 1978, including any contract that rolled over prior to the date of enactment. |
| **Interstitial Water** | Water contained in the interstices or voids of formations. |
| **Interval** | The measured distance or time between two values or other reference points. Interval refers to nonindexed information. In a general context, an interval may be unbounded with only one reference point defined. |
| **Interval Cement Fracture Percentage** | The percentages of healed, cemented and filled fractures in a depth interval. |
| **Interval Transit Time** | The travel time of a compressional wave (usually) over a unit distance, hence proportional to the reciprocal of compression wave velocity. |
| **Interval Velocity** | The ratio of any length interval to the corresponding interval transit time. |
| **Intrastate Pipeline** | Any party engaged in natural gas transportation (not including gathering) which is not subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) under the Natural Gas Act. |
| **Intrastate Rollover Contract** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, a rollover contract for gas that was not committed or dedicated to interstate commerce on November 8, 1978. |
| **Intrinsically Safe System** | An electrical system which is incapable of releasing sufficient electrical or thermal energy under normal or abnormal conditions to cause ignition of a specific hazardous atmospheric mixture in its most easily ignitible concentration. |
| **Invert Emulsion** | A water in oil emulsion where fresh or salt water is the dispersed phase and diesel, crude, or some other oil is the continuous phase. Water increases the viscosity and oil reduces the viscosity. |
| **Inverter** | A device that alters or changes electrical voltage. |
| **Invoice Code** | An indicator of the type of invoice. |
| **Invoice Date** | The date the invoice is issued. |
| **Invoice Due Date** | The date payment for an invoice is due. |
| **Invoice Number** | The number assigned that uniquely identifies an invoice. |
| **Invoice Reason Code** | An indicator of the reason for the issuance of the invoice. |
| **Invoice Remark** | Textual information pertaining to the invoice. |
| **Invoice Type Code** | An indicator of the type of invoice. |

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| **Iodine Number** | Indicates the amount of iodine absorbed by oils, fats, and waxes, giving a measure of the unsaturated linkages present. Generally, the higher the iodine number, the more severe the action of the oil on rubber. |
| **Ion** | Electrically charged particle, atom, or radical. |
| **Ion Exchange** | A reversible exchange of ions. In water and waste water treatment, the solids (ion exchange resins) exchange the polluting ions in the water for ions originally on the resin. |
| **Ionization Chamber** | An instrument that detects and measures ionizing radiation by observing the electrical current created when radiation ionizes gas in the chamber, making it a conductor of electricity. |
| **Ip** | SEE: Initial Potential; Induced Polarization. |
| **Iron Sponge Unit** | SEE: Treater. |
| **Irs State Of Production Readiness Date** | The date when all casing, tubing, packers, and the Christmas tree are installed. This represents the definition of a completed well by the Internal Revenue Service (IRS). |
| **Island Building** | The installation, construction, and maintenance of an island, glory hole, or berm for the purpose of conducting drilling operations and the dismantlement and/or clean-up of such island, glory hole, or berm following conclusion of the drilling program, and all activities associated therewith including any related environmental studies. |
| **Isogonic Chart** | A chart showing lines of equal magnetic declination. |
| **Isotope** | Atoms with the same atomic number (same chemical element) but different atomic weights. |
| **J** | |
| **J Slot** | A locking arrangement utilizing a slot in the form of a j and a pin which prevents premature setting of bottomhole equipment and at the same time provides a method of surface control for setting the equipment at the proper time and depth. |
| **Jack Board** | A device used to support the end of a length of pipe while another length is being screwed on. |
| **Jack Line** | The pull rod line running from a central power unit to a pumping jack. |
| **Jack Screw** | A screw or bolt used to spread two elements apart. |
| **Jack Shaft** | A short shaft between the couplings on a rotating unit and its drive. |
| **Jacker (platform)** | A supporting structure for an offshore platform. |
| **Jacker (well)** | A protective structure surrounding a wellhead in shallow water, usually fabricated of either steel or wood. |
| **Jacket** | (1) The lower or supporting section of a platform.(2) A tubular piece of steel in a tubing liner type of sucker rod pump, inside of which is placed an accurately bored and honed liner. In this type of sucker rod pump, the pump plunger moves up and down within the liner, and the liner is inside the jacket. |
| **Jacketed Cable** | Cable with a nonmetallic protective covering. |
| **Jar** | A percussion tool that operates on a mechanical or hydraulic principle and is designed to deliver a heavy hammer blow to objects in the borehole to which it is attached. Jars are used for such purposes as freeing objects stuck in the borehole in fishing operations or imparting a jarring motion to stuck tools for the purpose of freeing them. The design of the jar often permits blows to be delivered in either a downward or upward direction, with control being regulated at the surface. To apply a heavy upw |
| **Jar Accelerator** | A hydraulic tool used in conjunction with a jar. The accelerator is made up in the fishing string above the jar and serves to increase the magnitude of the jarring blow delivered to the fish. |
| **Jar Test** | Pretesting in small containers to see what the reaction will be before large volumes are utilized. Generally used to show the effects of adding chemicals to fluids to produce a change; i.e., if the chemical will break an emulsion. |

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| **Jet Bit** | SEE: Jet Type Bit. |
| **Jet Bit Deflection** | A method of changing the inclination angle and direction of the borehole axis by using the washing action of a jet nozzle at one side of the drill bit. |
| **Jet Nozzle** | A fluid flow port in a jet bit. |
| **Jet Perforating** | An operation similar to gun perforating except that a shaped charge of high explosives is used to burn a hole through the casing instead of using the gun which fires a projectile. |
| **Jet Spud Bit** | A special bit used to cause deflection of the borehole axis by a combination of jetting and spudding action. |
| **Jet Type Bit** | A bit employing directed, rapid flow of fluid from a nozzle or nozzles. |
| **Jetting** | (1) The action of causing erosion of the borehole wall by the high pressure impact of drilling fluid.(2) The process of periodically removing a portion of, or all, water, drilling fluid, and/or solids from the pits, usually by means of pumping through a jet nozzle arrangement. |
| **Jetting Runs** | Trips, jetting and drilling made to change the inclination and direction of the borehole axis. |
| **Jib** | An extension attached to the boom to provide added boom length for lifting specified loads. Also referred to as Tip Extension. |
| **Joint** | The place or part where two lengths of tubular goods or sucker rods are joined or united. Oil field vernacular usually refers to one length of tubular goods (usually 20-30 feet long) as one joint. |
| **Joint Account** | The account showing the charges paid and credits received as a result of the Joint Operations and which are to be shared by the parties in accordance with the terms of the agreement. |
| **Joint Audit Data Exchange** | An Electronic Data Interchange (EDI) group that provides outside auditors with voucher listings on personal computer diskettes for upstream joint interest properties. Also referred to as JADE. |
| **Joint (blast)** | An external coated tube set across the producing interval to protect against the effects of abrasing sands or abnormal pressures. |
| **Joint Interest Billing Exchange** | An Electronic Data Interchange (EDI) group that is the electronic transmission of invoices and operating statements on upstream properties. This is the first petroleum exchange using American National Standards Institute (ANSI) formats. Also referred to as JIBE. |
| **Joint Operation** | An operation necessary or proper for the exploration, development, operation, protection, and maintenance of a joint property. |
| **Joint Property** | The real and personal property and/or area of interest subject to the agreement in effect. |
| **Joint (rock)** | A linear break within a rock strata without movement of one side of the joint relative to the other. |
| **Joint Venture** | A sharing of the total working interest in a property by two or more parties. |
| **Joint Volume Estimate** | The volume per stand or joint which should be gained or lost from the trip tank due to the movement of the pipe. |
| **Jointer** | A length of pipe made up of two shorter pieces of pipe. |
| **Jointly Owned Lease** | A lease owned jointly by two or more working interest owners. |
| **Jones Effect** | The net surface tension of salt solutions first decreases with an increase of concentration, passes through a minimum, and then increases as the concentration is raised. |
| **Julian Date** | A system of dating which counts the number of days from a given base date, normally the beginning of a calendar year; e.g., January 1, 1991 is represented by 91001; December 31, 1981 is represented by 81365. |
| **Junk** | The metal debris lost in a wellbore. Junk may be lost tools, pieces of wire, or any relatively small object that impedes activity to the extent that it must be fished out of the wellbore. |

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| **Junk Basket** | A fishing tool run into the wellbore when it is necessary to retrieve small parts or lost tools. |
| **K** | |
| **Keep Whole** | Provision in gas processing agreements that essentially allows the producer to receive at least an amount equal to proceeds the producer would have been entitled to had he sold the gas at the wellhead without processing. |
| **Kelly** | The heavy square or hexagonal steel member which is suspended from the swivel through the rotary table and connected to the drill pipe to turn the drillstring. |
| **Kelly Bushing** | Device fitted to the rotary table through which the kelly passes and by means of which the torque of the rotary table is transmitted to the kelly and to the drillstem. Sometimes called drive bushing. |
| **Kelly Bushing Elevation** | The distance from the rotary kelly bushing of the drilling rig to the mean sea level. |
| **Kelly Cock** | A valve installed between the swivel and kelly. When a high pressure backflow begins, the operator can close this valve and keep the pressure off the swivel and rotary hose. |
| **Kelly Internal Diameter** | The inside diameter of the kelly. |
| **Kelly Length** | The length of the kelly. |
| **Kelly Valve** | An essentially full opening valve installed immediately below the kelly, with outside diameter equal to the tool joint outside diameter. Valve can be closed to remove the kelly under pressure and can be stripped in the borehole for snubbing operations. |
| **Kerogen** | Fossilized insoluble organic material found in sedimentary rocks, usually shales, which can be converted to petroleum products by distillation. |
| **Keyes Field Annual Pressure Constant** | The value of 40% of the average shut in psia pressure of wells in the Keyes field, determined annually. Used in the calculation of permitted production rates of wells in this field. |
| **Keyes Field Flow Coefficient** | Partial flow calculation (labeled "Extention" on older Form 1018 versions). Defined as the 24 hour coefficient, times the square root (Differential pressure(inches water) x psia Meter Pressure). |
| **Keyes Field Well Pressure Control Factor** | The shut-in pressure of a particular well, minus the Keyes Field Annual Pressure Constant. Used in the determination of permitted production rates of wells in this field. |
| **Keyseat** | A condition wherein the wall of the borehole is abraded and enlarged sideways and with a diameter smaller than the drill collars and the bit. Usually caused by the tool joints on the drill pipe. |
| **Keyseat Wiper** | A special reamer device designed to run in the drillstem assembly to enlarge the diameters of keyseats to the size of the drill collars. |
| **Kick** | An unintended entry of water, gas, oil, or other rock fluid into the borehole. A kick occurs because the pressure exerted by the column of fluid in the wellbore is not great enough to overcome the pressure exerted by the fluids in the rocks drilled. If prompt and proper action is not taken, a blowout may occur. |
| **Kick Over Tool** | The wireline tool which guides the wireline gas lift valve into the mandrel pocket when installing the valve or guides the pulling tools onto the valve when recovering the valve. |
| **Kickoff Date** | The initiation date of sidetrack drilling operations. |
| **Kickoff Point** | The depth of wellbore intersection where drilling begins to deviate the wellbore path from vertical, or from a lateral to a spoke in a horizontal well. |
| **Kill A Well** | (1) The act of bringing under control a well which is blowing out.(2) To stop a well from producing so that surface connections may be removed for well servicing or workover. This is usually accomplished by circulating water or mud to load the hole and render it incapable of flowing. |
| **Kill Line** | A high pressure line (pipe or hose) below the blowout preventer, connecting the mud pump and the wellbore through which heavy drilling fluid can be pumped to control a threatened blowout. . |

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| **Kill Weight Fluid** | A drilling fluid with a density yielding a hydrostatic pressure equal to or greater than the pressure of the reservoirs exposed in the borehole wall. |
| **Kinematic Viscosity** | The kinematic viscosity of a fluid is the ratio of the viscosity (e.g., cp in g/cm-sec) to the density (e.g., g/cc) using consistent units. In several common commercial viscometers the kinematic viscosity is measured in terms of the time of efflux (in seconds) of a fixed volume of liquid through a standard capillary tube or orifice. |
| **Kinetic Mixer** | A section of pipe containing baffles with the purpose of inducing turbulent flow forcing multiple streams into solution. |
| **Kitchen** | That portion of a geologic basin having the temperature and pressure conditions to generate hydrocarbons from source rocks. |
| **Klinkenberg Correction** | Absolute permeability corrected for Klinkenberg effect. |
| **Klinkenberg Effect** | The difference between the flow of a gas and a liquid through a reservoir, affecting the permeability. Gas flow is less impeded by grain surfaces than liquid flow. |
| **Knife Edge** | A sharp edge at the end of the pipe producing no face. Caused by an excessively small chamfer diameter and/or excessive inside diameter bevel. Also referred to as razor edge. |
| **Knock Off Block** | The post and hook that are used to hang off a well operated through a rod line. |
| **Knockout** | SEE: Water Knockout. |
| **Knuckle Joint** | A deflection tool, placed above the tools in the work string, that has a ball and socket arrangement which allows the tool to be deflected at an angle. A knuckle joint is sometimes useful in fishing operations because it allows the fishing tool to be deflected to the side of the borehole where a fish may have come to rest. |
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| **Laboratory Name** | Name of the lab responsible for performing an analysis. |
| **Lact** | SEE: Lease Automatic Custody Transfer. |
| **Lact Unit** | An equipment assembly designed to measure, sample, and record liquid product volumes while delivering product to a pipeline on an unattended basis. Referred to as Lease Automatic Custody Transfer Unit (LACT). |
| **Lact Unit Count** | The number (count) of Lease Automatic Custody Transfer (LACT) unit(s) on a facility. |
| **Lag Strokes** | The total strokes (based on the pump(s) currently operating) during drilling operations being used for lagging cuttings, using either the calculation or tracer method. |
| **Lagging** | An insulating cover which prevents heat from flowing either to or from a piece of equipment. |
| **Laggings** | Removable and interchangeable drum spool shells for changing hoist drum diameter to provide variation in rope speeds and line pulls. This construction is optional with manufacturer. |
| **Lahee Well Class** | The well classification system as defined by Lahee. |
| **Lambert Coordinate System** | A system of coordinates on a conical projection based on two standard parallels. |
| **Lamellar Tearing** | A cracking phenomenon resulting from nonmetallic inclusions which occurs beneath welding principally in rolled steel plate fabrication. |
| **Laminar Flow** | Fluid elements flowing along fixed streamlines which are parallel to the walls of the channel of flow. In laminar flow, the fluid moves in plates or sections with a differential velocity across the front which varies from zero at the wall to a maximum toward the center of flow. |
| **Lamination** | A metal defect with separation or weakness generally aligned parallel to the worked surface of the metal. |

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| **Land Category Code** | An indicator of the type of lease oragreement being reported on (i.e. single lease, communitized, unitized, non-unitized, etc.) |
| **Land Cost** | Includes the cost of land purchased, recording fees, and other costs incidental to the purchase of lands. |
| **Landing Casing** | To set the casing at a given depth along a wellbore path. |
| **Landing Nipple** | A receptacle in a production string with an internal profile to provide for latching and sealing of various types of plugs or valves. |
| **Large Fracture Count** | The number of fractures in a depth interval that are 10cm or greater in length. |
| **Last Engaged Thread** | The last thread on a pin engaged with the coupling. |
| **Last Log Date** | The date the last log was run. |
| **Last Production Date** | The month and year in which production last occurred. |
| **Last Scratch** | Last visible evidence of the machined thread tool mark on the pipe surface. |
| **Late Delivery Penalty Flag** | An indicator of whether or not there is a penalty for failure to commence taking gas by a set delivery date. |
| **Late Payment Interest Amount** | The interest calculated for late payment and or reporting. |
| **Lateral** | For a horizontal well, it is that portion of the wellbore from the kickoff point to the terminus. |
| **Lateral Line** | Pipeline segment that ties into a trunk line. |
| **Laterolog** | A resistivity log made with a tool which achieves focusing through the use of additional current electrodes above and below a central measure current electrode. |
| **Latitude** | Angle subtended with equatorial plane by a perpendicular from a point on the surface of a spheroid. A positive value denotes north. |
| **Latitude Measurement** | The distance measured north or south from the equator. |
| **Latitude Shift Pole** | Latitude of the rotated pole. Usually used when working with geological data. |
| **Lattice Boom** | Boom of open construction with angular or tubular lacing between main corner members (chords) in form of truss. |
| **Launch ( Survival Capsule)** | A platform or decking containing a motorized windlass/winch used for raising or lowering a survival capsule from a drilling production platform. |
| **Lay Barge** | A shallow draft, barge like vessel used in the construction and laying of underwater pipelines in swampy areas and to offshore platforms. |
| **Laying Down** | Usually means unscrewing the drillstem into single joints and placing them on the pipe rack. |
| **Ldc** | SEE: Local Distribution Company. |
| **Leachate** | Liquid that has percolated through solid waste or other medium and has extracted dissolved or suspended materials from the medium. |
| **Leaching** | The process by which soluble materials in the soil, such as nutrients, pesticide chemicals, or contaminants are washed into a lower layer of soil or are dissolved and carried away by water. |
| **Lead** | (1) On a decanting centrifuge, the slurry conducting channel formed by the adjacent walls of the flutes or blades of the screw conveyor.(2) The distance that a thread moves along its longitudinal axis.(3) The distance from a point on a thread to a corresponding point on the next thread, measured parallel to the axis of the thread section. |
| **Lead Acetate Test** | A test for determining whether the hydrogen sulfide content of a gas stream is in excess of about 0.25 grains per 100 cubic feet of gas. |
| **Lead Angle** | A method of setting the direction of the borehole axis in anticipation of the drill bit walking. |

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| **Leading Flank** | The flank of the pipe thread facing the near end of pipe. The flank of the coupling thread facing the open end of the coupling. Also referred to as front flank or stab flank. |
| **Leak** | The accidental escape from a process component of liquid and/or gaseous hydrocarbons to atmosphere. |
| **Leak Locator** | An electrical device for locating leaks underground. |
| **Leakage Field** | The magnetic field forced out of the material into the air by the distortion of the field within the material caused by the presence of a discontinuity. |
| **Leaker** | A length of pipe that will not hold hydrostatic pressure. |
| **Leakoff Test** | A gradual pressurizing of the casing after blowout preventers have been set to permit estimation of the formation fracture pressure at the casing seat. |
| **Leakoff Test Pressure Measurement** | The pressure exerted on the wellbore bottom before or after the squeeze operation has been completed to determine the maximum pressure the reservoir rocks can withstand without rupturing or fracturing. The pressure is expressed in terms of a full column of drilling fluid having a certain density (hydrostatic head). |
| **Lean Amine** | Stripped aqueous monoethanolamine (MEA) or diethanolamine (DEA) solution. |
| **Lean Gas** | Natural gas containing little or no liquefiable hydrocarbons. |
| **Lean Oil** | The absorbent oil in a gasoline absorption plant from which the absorbed gasoline fractions have been removed by distillation. |
| **Lease** | A term used ambiguously. Resulting from a legal document, the term has taken on various meanings depending on the context in which it is used. It is preferable to use terms with explicit definitions which remove ambiguity. |
| **Lease Abandonment Authorized Cost** | The estimated costs associated with abandoning the lease. |
| **Lease Acquisition Date** | The date a lease was acquired which may be different from the lease effective date. |
| **Lease Agreement Name** | The name assigned by a regulatory agency to a lease or agreement. |
| **Lease Agreement Number** | The regulatory assigned number to identify various types of leases or agreements; e.g., unitization, Indian., communiitization, etc. |
| **Lease Agreement Type Code** | An indicator of the type of Federal, State, Crown, Indian, and other governmental agency lease and/or license. Examples include: Federal acquired options, Bituminous sands (Canada), crossing agreement (Canada), Crown natural gas (Canada), Communitization agreement. |
| **Lease Assignee Name** | The name of the party (lessor) assigning a lease to the lessee. |
| **Lease Assignment Date** | The date on which the lease assignment is executed. |
| **Lease Automatic Custody Transfer** | The process of utilizing equipment (measuring, monitoring, recording, and transferring) for custody transfer of liquid products in order to eliminate the need for any manual activity. Commonly abbreviated as LACT. |
| **Lease Bid** | A timely, sealed submittal to a mineral owner offering a monetary consideration for a specific property during a lease sale. |
| **Lease Check Type** | The category of recipient of the lease rental; e.g., depository bank; direct. |
| **Lease Class** | Indicates whether a lease is classified as oil or gas, normally determined by a regulatory agency. |
| **Lease Description** | The legal description of the included lands given in terms of boundary lines of the applicable mapping system on the executed lease document. |
| **Lease Effective Date** | The date on which a lease instrument becomes valid. |
| **Lease Expiration Date** | The date that the primary term of the mineral lease instrument expires. |
| **Lease Facility** | Facility such as a dehydrator, compressor, or separator installed to serve only a single lease. |

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| **Lease Form Number** | The number identifying a standard form used for a lease instrument. |
| **Lease Gross Rental** | Total amount of all rentals for a given lease. |
| **Lease Gross Value** | The gross value before taxes for an accounting lease. |
| **Lease Gross Volume** | The total volume on which proceeds are distributed to owners of the property. This volume may be total lease volume, actual sales volume, or entitled volume depending on the type of settlement used for the specific accounting lease. |
| **Lease Instrument** | The legal instrument by which a leasehold is created in minerals. A contract that, for a stipulated sum, conveys to an operator the right to drill for oil and gas. The oil lease is not to be confused with the usual lease of land or a building (lease property). |
| **Lease Mineral Type** | Specifies the mineral to be produced from the area of land covered by the original mineral lease; e.g., oil; gas; uranium; geothermal; oil shale; tar sand; metallic mineral; sulphur; salt. |
| **Lease Name** | The name assigned to a lease by the regulatory agency having jurisdiction over mineral activity in the territory where the lease is located. |
| **Lease Net Rental** | The portion of the lease gross rental which is payable by the indicated company. |
| **Lease Number** | The number assigned to a lease by the regulatory agency having jurisdiction over mineral activity in the territory where the lease is located. |
| **Lease Operator** | The Business Associate charged with the responsibility of operating all wells and equipment on a lease. May be required to test wells, gauge tanks, make minor repairs to maintain well production, make reports of production and sales, etc. |
| **Lease Operator Flag** | An indicator of whether the reporting party is the operator. |
| **Lease Operator Name** | SEE: Operator Name. |
| **Lease Parcel** | A specific tract of the Earth defined by areal extent and possibly depth (numeric depth range or stratigraphic units). The lease parcel is the basic unit of ownership for portions of the Earth; it may be onshore or offshore. |
| **Lease Parcel Agreement** | A legal document that conveys the right to win, take, and explore for mineral resources, or that conveys the right to access and occupy an area of the Earth. |
| **Lease Parcel Alias** | An alternate unique name assigned to a lease parcel. |
| **Lease Participation Percentage** | The percentage of production that a lease will be allocated from a unit. |
| **Lease Platform Approval Date** | The date that the first platform is approved for a lease by the regulatory agency. |
| **Lease Producing Completions Count** | The number of completions that produce from a lease. |
| **Lease Property** | SEE: Lease Parcel. |
| **Lease Release Date** | The date that a lease instrument was released. |
| **Lease Rental Partner** | A partner to be billed for lease rental. |
| **Lease Rental Payment Date** | The date a delay rental payment was made on a mineral lease. |
| **Lease Reoffered Flag** | An indicator that a block or bidding entity has expired, terminated, been relinquished, or been rejected and is reoffered in a subsequent lease sale. |
| **Lease Royalty Rate** | The lessor's decimal share of the wellhead value of minerals on a lease. |
| **Lease Shut- In Clause Flag** | An indicator that a lease instrument has a shut- in clause. |
| **Lease Status Code** | An indicator of the lease status or contract arrangements such as arms length, all dispositions, and RIK indicators. |

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| **Lease Stipulation** | Operational restrictions or requirements imposed on a block or lease which addresses site specific conditions not encompassed by standard lease terms. |
| **Lease Term Initial Period** | The primary term, in years, of a lease. May be for a fraction of a year. |
| **Lease Term Period** | The number of years following lease issuance that the lessee can withhold exploration, development, and production activities without the lease being subject to forfeiture. |
| **Lease Total Completion Count** | The total number of completions on a lease. |
| **Lease Tract Number** | An internally assigned number to identify a tract of land within a lease. |
| **Lease Type** | The classification of a lease; e.g., fee; state; Federal. |
| **Lease Type Code** | Identifies the type of lease; e.g., fee; state; Federal Acquired; Contested; Federal Public Domain; Indian Alloted; Indian Tribal. |
| **Lease Unit Nonparticipating Acreage** | The total lease surface area for that portion of the unit that is not receiving unit allocation. |
| **Lease Unit Participating Acreage** | The lease surface area that has been made part of and is receiving an allocation from a unit agreement. |
| **Lease Unit Reservoir Acre Feet Volume** | The total acre feet of all the reservoirs that have been included in a unit agreement and which underlie a lease. |
| **Lease Use Gas Nonexempt Volume** | The lease use volume in excess of allowances. |
| **Lease Use Volume** | The volume of product used on lease for fuel, lift, etc. |
| **Lease Well Count** | The total number of wells on a lease. |
| **Leasehold** | A tract of land, on which a lease has been obtained, for the purpose of exploration and development of hydrocarbons. Such leases typically describe the right to produce by surface boundaries or subsurface intervals or boundaries. |
| **Leasehold Acres** | Acreage on which a party (lessee) has acquired, by lease, the right to explore for and produce oil, gas, and/or other minerals in return for a stated royalty, and possibly other considerations. |
| **Leasing Agreement** | SEE: Lease Instrument. |
| **Left Lateral Strike Slip Fault** | A strike slip fault in which the opposite fault block has moved relatively to the left, with the predominate motion being strike slip. Also referred to as: Sinistral Fault. |
| **Left Longitude Of Area** | The westernmost longitude of an area. |
| **Legal Subdivision Number** | Smallest division in the Canadian township-range-section survey system. |
| **Lens** | A lentil shaped bed of rock that pinches out or lenses out in all directions. |
| **Lessee** | The one to whom a lease is granted. |
| **Lessee Identification Number** | An identifier of the name of the lessee. |
| **Lessee Name** | The name of lessee. |
| **Lessor** | The one who grants a lease. |
| **Lessor's Mineral Interest** | The interest in minerals owned by the lessor. |
| **Letter Of Indemnity** | An agreement in which a party receiving gas sales proceeds agrees to refund part of such proceeds in the event the Federal Energy Regulatory Commission (FERC) orders the party to return part of the gas sales proceeds to the purchaser because a portion of the rate is deemed unjustified. |
| **License** | SEE: Permit. |

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| **Life Cycle Cost** | Total cost of ownership of a commodity; includes initial purchase price and estimated administrative , operating and maintenance costs over the anticipated life of the item. |
| **Lifting Cost** | The cost of producing oil from a well or a lease. |
| **Light Crude Oil** | (1) Crude oil that flows freely at atmospheric temperature and has an API gravity in the high 30's and low 40's.(2) A light colored crude oil. |
| **Light Discharge** | SEE: Overflow. |
| **Limb** | The area of a structural fold between adjacent fold hinges. |
| **Limestone** | A sedimentary rock consisting chiefly (more that 50% by weight) of calcium carbonate, primarilly in the form of mineral calcite, and with or without magnesium carbonate. Specifically, a carbonate containing more than 95% calcite and less than 5% dolomite. |
| **Limit Order** | An instruction to purchase or sell a futures contract that specifies the maximum price to pay or minimum price to accept. |
| **Limited Partnership** | An agreement between two or more parties providing for at least one of the parties having limited liability. |
| **Limited Ventilation** | Ventilation (natural or artificial) which is sufficient to reasonably assure that significant quantities of vapor and air mixtures in concentrations above 25% of the lower flammable (explosive) limit (LEL) will not accumulate for significant periods of time due to hydrocarbon emissions which are relatively small in size or short in duration. |
| **Line Item Balance Due Amount** | The difference between the amount due and the amount paid for a line item. |
| **Line Item Due Date** | The amount due for a line item. |
| **Line Item Paid Amount** | The amount originally paid for a detail line. |
| **Line Number** | The line number of each individual transaction in a royalty report. |
| **Line Pressure Measurement** | The measured pipeline pressure into which the well is flowing at the time of the test. |
| **Line Recording Direction** | The general azimuthal direction along which a seismic line is physically recorded. |
| **Linear Imperfection** | An imperfection that includes, but is not limited to, seams, laps, cracks, plug scores, cuts and gouges. |
| **Liner** | (1) A short string of casing that does not extend up to the surface. Liners are suspended from an existing casing string by a liner hanger.(2) The lining of barrels of pumps. |
| **Liner Base Depth** | The measured depth to the base of the liner. |
| **Liner Cement Quantity** | The quantity of cement used in cementing the liner in place in the wellbore. |
| **Liner Inside Diameter** | The inside diameter of the liner. |
| **Liner Outside Diameter** | The outside diameter of the liner. |
| **Liner Set Date** | The date the liner was set in the wellbore. |
| **Liner Top Depth** | The measured depth to the top of the liner. |
| **Liner Type** | The type of liner used; e.g., coal protecting; gravel packed; preperforated; slotted. |
| **Liquefiable Hydrocarbon** | The hydrocarbon component of natural gas which can be extracted and saved in liquid form. |
| **Liquefied Natural Gas** | SEE: Natural Gas Liquid. |
| **Liquefied Petroleum Gas** | A mixture of gaseous paraffinic hydrocarbons composed principally of butane, ethane and propane, but not pentanes and heavier products. These gases, easily liquefied at moderate pressures, may be transported as liquids but converted to gas on release of the pressure. Commonly abbreviated as LPG. |

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| **Liquid** | A substance which flows readily, does not tend to expand indefinitely like a gas, assumes the form of its container while retaining its independent volume, and has form which can be seen and felt. |
| **Liquid Charge Type** | A type of charge deducted from the lease value for liquids determined by volume of liquid produced. |
| **Liquid Deduction Type** | The type of deduction to be applied to the base liquid price for a particular state, gathering system, etc. |
| **Liquid Diamondoid** | One of a series of saturated polycyclic hydrocarbons in a cage like configuration with formulas of C10, H16, C14, H20, etc. with a melting point of approximately 500 degrees F. These are very unstable long chain hydrocarbons. They occur in very dry gas and precipitate out at atmospheric pressures and temperatures. |
| **Liquid Discharge** | That stream from a liquid solids separation device which contains a higher percentage of liquid fraction than does the feed. |
| **Liquid Hydrocarbon** | SEE: Natural Gas Liquid. |
| **Liquid Level Controller** | A device that measures and regulates the amount of fluid in a vessel. |
| **Liquid Meter** | A measurement device to determine volume of liquid passing a given point in line. Usually calibrated in barrels or gallons. |
| **Liquid Overflow** | The discharge of liquids from a process component through a gas (vapor) outlet. |
| **Liquid Packed** | In horizontal treaters, the coalescing section or entire treater may operate completely full of liquid. Also referred to as fluid packed. |
| **Liquid Products Price Per Unit Amount** | The value per unit of measure of liquid |
| **Liquid Recovery Minimum Percentage** | The minimum percentage of liquids which must be recovered from gas being processed under a certain contract. This is attributable to each liquid component recovered. |
| **Liquid Settlement Type** | Indicates the type of settlement made for liquid under a contract; e.g., monetary; in kind. |
| **Liquid Sump** | A vessel installed below grade into which open drain system effluents are flowed. |
| **Liquids Returned Nonexempt Volume** | The volume of liquids returned to lease in excess of allowances. |
| **Liquids Returned Volume** | The volume of liquids used on lease for fuel, lift, etc. |
| **Lithofacies** | The rock record of any sedimentary environment, including both physical and organic characteristics. |
| **Lithologic Body** | A subsurface body characterized by its lithologic content or character. |
| **Lithologic Log** | A log plotting lithology versus depth. Lithology can be shown by colors or by symbols, or both. A strip log is usually based on sample examination. A lithologic log may be a computed log is derived from other well logs. |
| **Lithology** | The description of rocks, especially in hand specimen and in outcrop, on the basis of characteristics; e.g., color; mineralogic composition; grain size. |
| **Lithology Major Rock Type** | SEE: Lithology. |
| **Lithology Modifier** | Modifier of a lithologic description. |
| **Lithology Sample Taken Flag** | An indicator of whether a lithological sample was collected for a well. |
| **Lithology Type Code** | An indicator of the type of lithology; e.g., sandstone, salt, dolomite, coal. |
| **Lithostatic Pressure** | The pressure at a specified depth exerted by the weight of the overlying rock column. |
| **Lithostratigraphic Unit** | A geologic body characterized by its position within a lithology and chronology-based classification of rock units. Unit hierarchy is described by terms such as group, formation, member, and marker. |
| **Lithostratigraphy** | The branch of Stratigraphy dealing with the lithology of strata and with their organization into units based on lithologic character. Also referred to as: rock stratigraphy. |

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| **Live Oil** | Crude oil that contains gas and has not been stabilized or weathered. |
| **Live Roller Circle** | An assembly of multiple swing rollers free to roll between revolving upperstructure and mounting. |
| **Lng** | SEE: Liquified Natural Gas. |
| **Load Binder** | (1) Chain or rope used to tie down loads of equipment.(2) The boomer used to tighten the chains; i.e., ties pipe down for transportation. |
| **Load Factor** | The ratio of average load to the maximum demand during a given period, expressed as a percentage. |
| **Load Oil** | SEE: Frac Oil. |
| **Load Rating** | A crane rating as established by the manufacturer. |
| **Load The Hole** | The action of filling the wellbore with some liquid to provide a hydrostatic head to control high reservoir pressures and to force acid, hydrafrac process or other treatment fluids into the reservoir rocks being treated. |
| **Load Working** | The external load applied to the crane including the weight of load attaching equipment such as load block, shackles, and slings. |
| **Loading Rack** | A loading platform with pipes and hoses at the side of a railroad track for loading various products into tank cars or in a facility for loading trucks. |
| **Local Dihedral Angle** | The dihedral angle between tangent surfaces at a given point along a weld joining two curved surfaces. |
| **Local Distribution Company** | Companies which purchase gas for resale to end users, such as residential or commercial customers within an urban or rural area. Commonly abbreviated as LDC. |
| **Local Vertical Datum** | A set of fundamental elevations to which other elevations are referenced. These fundamental elevations are determined for a country or continent through measurements in a network of reference benchmarks which are connected to sea level. |
| **Location** | Position on the earth's surface. |
| **Location Basis Swap** | Swap which typically involves one party paying the counterparty the NYMEX last three days +/- a location basis differential and receiving a specified monthly pipeline index price. |
| **Location Direction** | The direction from a speciific reference point. |
| **Location Distance** | The distance from a refernce point or reference line. |
| **Location Exception Order Number** | An identifier of an order or authorization by a regulatory agency permitting a well within a drilling and spacing unit to be drilled in an off-pattern location. |
| **Location Exception Order Number Assigned Date** | The identifier of an order or authorization by a regulatory agency permitting a wellwithin a drilling and spacing unit to be drilled in an off-pattern location. |
| **Location Exception Saskatchewan** | The location exception code (columns 2-3 of the Canadian Petroleum Association (CPA) well number) Dominion Land Survey (DLS) reported wells in Saskatchewan. |
| **Location System Code** | An indicator of the system used to define a location; e.g., latitude-longitude; x-y; metes and bounds; section-township-range; descriptive. |
| **Location To A Lease Distance** | The distance from a reference point or line to a lease. |
| **Location To A Well Distance** | The distance from a refernce point or line to a well. |
| **Lock Out** | A system to specify that equipment is out of service until locks or tags are removed by the authorized person. Also referred to as tag out. |
| **Locked In** | Refers to the condition where the bottomhole assembly is held relatively fixed within the borehole by the outer diameter of the assembly being nearly the same diameter as the drill bit, the inclination and direction of the borehole axis are maintained. |

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| **Locomotive Piston** | A swabcup unit used to transport and manipulate TFL tools, which are tools that work "thru flow line" (TFL). |
| **Log** | (1) A regularly kept record or journal, including results of sampling or interpretation of data with respect to a coordinate system, such as time, depth, or distance.(2) The act of producing or updating a log. |
| **Log Curve** | A trace representing a continuous record of some property or occurrence in the borehole environment versus depth. One or more curves may constitute a well log. |
| **Log Curve Base Depth** | Deepest measured depth for a log curve. |
| **Log Curve First Reading** | The measured depth of the first usable reading or value recorded for a log curve at the onset of the survey. This depth differs from the log curve base depth, due to curve memorization or to a delay in sensor movement with respect to cable movement as measured at surface. |
| **Log Curve Id** | An identifier for a log curve which, when used in combination with context information for the logging job, serves to distinguish it from all other log curves. Often this identifier is a code or mnemonic supplied by the logging company. |
| **Log Curve Index Id** | Identifier for a data array which is used as an index for the data corresponding to a log curve. |
| **Log Curve Index Type** | Type of index for a particular log curve; e.g., true vertical depth; measured depth; two way time. |
| **Log Curve Name** | A descriptive log curve identifier, generally used for labeling log curves for visual recognition. |
| **Log Curve Sample Rate** | Time or depth interval between successive value samples on a log curve. |
| **Log Curve Top Depth** | Shallowest measured depth for a log curve. |
| **Log Curve Type** | General classification for log curves, independent of the specific sensor type used; e.g., gamma ray; caliper; formation density; resistivity; SP. |
| **Log Data Method** | The method of obtaining the log data; e.g., wireline log; mud log; drilling log. |
| **Log Digitizer** | (1) Company or person that digitized the log.(2) An electromechanical device that scans and digitizes a log. |
| **Log Digitizing Date** | The date the log was digitized. |
| **Log Permanent Datum** | The permanent elevation reference entity, independent of the equipment at the location. Generally, mean sea level (MSL) or ground level (GL) is used. |
| **Log Repeat Section** | A log rerun over a short section of the borehole, generally 200 feet, to enable comparison of similarity with the main survey to show instrument stability and repeatability. |
| **Log Run Number** | An integer that indicates one of a series of distinct and different occasions that loggers have run equipment down the wellbore to take measurements. |
| **Log Start Time** | Date and time a particular log run was started. |
| **Log Status Code** | An indicator of information pertaining to a well log. |
| **Log Stop Time** | Date and time a particular log run was completed. |
| **Log Trace** | A curve on a well log. |
| **Log Type** | An identifier of the type of log run; e.g., acoustic log; caliper log; dipmeter; microlateral log. |
| **Log Zero Depth Reference** | The elevation reference (datum) from which logging depths are measured. Typically, the logging engineer sets the depth measurement system to zero while the measure point of the logging tool is positioned at this reference point. Frequently used reference points are derrick floor (DF) or kelly bushing (KB) for open-hole logging, casing flange for production logging. |
| **Logged Interval Base Depth** | The deepest (base) depth included in this logged interval. |
| **Logged Interval Top Depth** | The shallowest (top) depth included in this logged interval. |

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| **Logging Company Name** | Name of the service company that logged the well. |
| **Logging Depth Reference Elevation** | Elevation of the Logging Zero Depth Reference above the Log Permanent Datum. |
| **Logging Direction** | Direction in which the logging tool was moving when the data were recorded, either up or down. |
| **Logging Engineer** | The person who does the well logging at the wellsite. |
| **Logging Operation Start Time** | Date and time the logging company rigged up to start logging. |
| **Logging Operation Stop Time** | Date and time the logging company rigged down after completion of well logging operations. |
| **Logging Speed** | Speed at which a particular log run was made, generally taken as the speed of the logging cable measured at surface. The actual speed of the logging tool may differ considerably from the cable speed; it can be measured with the use of accelerometers. |
| **Logging Tool** | The equipment used to perform well logging. |
| **Logging Unit Id** | Unique identifier for the surface equipment used in the logging operation. |
| **Logging Unit Type** | Type of surface equipment used in the logging operation. |
| **Long Natural Gas Position** | When a company produces more natural gas than it consumes in its operations. |
| **Long Spaced Sonic Log** | Long spaced sonic well logging tools are used to provide shear wave analysis, travel time through casing, and more accurate acoustic data in enlarged boreholes and in areas where rocks surrounding the borehole are altered by the drilling process. |
| **Longitude** | Angle measured about the spheroid axis from a local prime meridian to the meridian through the point. A positive value denotes east. |
| **Longitude Measurement** | The distance measured east or west of the prime meridian, as from Greenwich, England. |
| **Longitude Shift Pole** | Longitude of the rotated pole. Usually used when working with geological data. |
| **Longitudinal Imperfection** | An imperfection which has its principal direction or dimension in the approximately longitudinal direction. |
| **Longitudinal Seam** | A butt welded seam which parallels the axis of the pipe. |
| **Longitudinal Wave** | SEE: P Wave. |
| **Loop** | (1) A curved section of tube bent to a minimum 5 foot (1.524 m) radius allowing change in direction of Thru Flow Line (TFL) lines.(2) A section of pipe substantially parallel with, and connected at both ends to another line to increase flow rate or to decrease pressure drop. |
| **Loose Flange** | A flange, as manufactured, not intended to be made integral with another piece of API Spec 6A equipment. They are blind, threaded, spacer, welding neck, and studded adapter flanges. |
| **Loose Gear** | Includes all slings, nets, hooks, baskets, shackles, chains, ropes, cables, life vests, etc., necessary in crane operations to attach the load to the crane hook or block and to move the load. |
| **Loss Of Back Reflection** | Absence of or a significant reduction of an indication from the back surface of the article being inspected. |
| **Lost Circulation** | Loss of drilling fluid into the rocks surrounding the borehole during drilling operations. |
| **Lost Circulation Depth** | The measured depth at the lost circulation event occurred. |
| **Lost Circulation Interval** | The measured depth interval within which a lost circulation event occured. |
| **Lost Circulation Interval Base Depth** | The measured depth to the base of the lost circulation interval. |
| **Lost Circulation Interval Top Depth** | The measured depth to the top of the lost circulation interval. |
| **Lost Circulation Material** | A material added to cement slurries or drilling fluids which is designed to prevent the loss of cement or mud to the rocks surrounding the borehole. |

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| **Lost Circulation Material Added Quantity** | The quantity of material added in treating the lost circulation interval. |
| **Lost Circulation Material Concentration** | Measurement of any sealing material added to the drilling fluid to control loss of circulation. |
| **Lost Circulation Material Type** | The type of material used in treating the lost circulation interval; e.g., cane; chicken feathers; hay; mica; walnut hulls. |
| **Lost Circulation Treatment Material Name** | The brand or trade name of the lost circulation material used in treatment. |
| **Lost Circulation Volume** | The measured amount of drilling fluid lost in the lost circulation interval. |
| **Lost Circulation Zone Treated Date** | The date the lost circulation interval was treated. |
| **Lost Oil Volume** | The volume of oil unavoidably lost and not considered to be recoverable. |
| **Lost Percentage** | The percentage resulting from subtracting the sum of the total recovery percentage and the residue percentage from 100. |
| **Lost Return** | SEE: Lost Circulation. |
| **Lost Section** | SEE: Missing Section. |
| **Lot In Township Or Farm** | The lot within a township, farm or city tract. |
| **Lot Number** | The number assigned by an administrative agency to a specific parcel of land as a result of a cadastral survey. |
| **Low Flow** | Flow in a process component less than the minimum operating flow rate. |
| **Low Liquid Level** | Liquid level in a process component below the lowest operating level. |
| **Low Pressure** | Pressure in a process component less than the minimum operating pressure. |
| **Low Pressure Sensor Setting** | The setting of a device in a process component set to alarm when the pressure is less than the allowable minimum operating pressure. |
| **Low Temperature** | Temperature in a process component less than the minimum operating temperature. |
| **Low Temperature Separator** | SEE: LTX Unit; Separator. |
| **Lowcut** | Frequency designator specific to a frequency where the filter's amplitude response is attenuated 3 decibels (to 70% amplitude or half power) of the total signal amplitude. Frequencies less than the lowcut are reduced by more than 3 decibels, and frequencies greater than the lowcut are reduced by less. |
| **Lower Explosive Limit** | The lowest concentration by volume of combustible gases in mixture with air that can be ignited at ambient conditions. |
| **Lpg** | SEE: Liquified Petroleum Gas. |
| **Ltx Unit** | A low temperature separator. A mechanical separator which uses refrigeration obtained by expansion of gas from high pressure to low pressure to increase recovery of gas entrained liquids. |
| **Lubricator** | (1) In an oil field, in addition to its ordinary meaning, the term is applied to special devices for introducing chemicals, fluids, and instruments into a system under pressure. Example: oil and mud lubricators.(2) An apparatus injecting lubricating oil into engine power cylinders and compressor cylinders between the piston and liner. |
| **Luster** | The appearance of a mineral in reflected light; e.g., dull; earthy; metallic. |
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| **Macaroni String** | A string of tubing of very small diameter. |

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| **Machinery Area** | The location of equipment incorporating rotating or reciprocating mechanical equipment; e.g., internal combustion engines; gas turbines; electric motors; generators; pumps; compressors. |
| **Magnetic Declination** | The angular difference, east or west, at any geographical location, between true north or grid north and magnetic north. |
| **Magnetic Field Flag** | An indicator of whether or not a device which indicates the direction and strength of a magnetic field is present. Also referred to as a penetrameter. |
| **Magnetic Force** | The physical force experienced by a magnetic substance when placed in a magnetic field. |
| **Magnetic Inclination** | The angle between a magnetic line's direction and the horizontal. |
| **Magnetic North** | The direction from any geographical location on the earth's surface to the north magnetic pole. |
| **Magnetic Permeability** | The ease with which a material can become magnetized. |
| **Magnetic Permeability Value** | The ratio of flux density produced to magnetizing force. |
| **Magnetic Susceptibility** | A material property which is the ratio of induced magnetization to the strength of the magnetic field causing the magnetization. |
| **Magneto** | A machine which generates the current for the ignition in internal combustion engines and which receives its driving force from the operation of the engine. |
| **Magnetometer** | A device for measuring the strength of magnets or magnetic fields. Also referred to as: Gaussmeter. |
| **Mailing Address** | The street or post office address. |
| **Mailing Clause Identifier** | Identifies properties, maintained by the payment of delay rentals, where the lease instrument stipulates a payment mailed on the rental due date is sufficient to constitute a valid payment. Instruments silent with regard to mailing of the checks are also identified; i.e., no mailing clause in lease; not appropriate; lease has mailing clause. |
| **Main Deck** | The uppermost deck on the structure. |
| **Main Line** | A large diameter pipeline into which smaller lines connect. Usually a line that runs from an oil producing area to a refinery. |
| **Major Cone** | An imaginary cone that passes over the crest of the external thread and the root of internal thread. |
| **Major Construction** | Construction, installation, or expansion of fixed assets, excluding drilling and workover wells. Usually involves significant amounts of design work and indirect supervision. |
| **Major Diameter** | The crest diameter of the external thread and the root diameter of the internal thread; i.e., the largest diameter of the thread. |
| **Major Lithology** | The dominant lithology type of a formation, rock sample, zone or other rock related entity; e.g., arkose; dolomite; sand. |
| **Major Structural Revision** | A change to the structure which reduces the load carrying capability of any structural component or for which a revised load chart has been established. |
| **Major Type Work Performed** | The primary action that will be taken on the well during the course of the repair. |
| **Make Tank** | A tank in which a product ("Make") is stored. |
| **Make- Up Gas** | The volume of gas, taken by a purchaser, which has previously been paid for by means of a deficiency payment in a prior period. Gas delivered to a gas pipeline company or purchaser to replace gas volume reductions occasioned by the processing of gas belonging to the gas pipeline company or purchaser. |
| **Make-up** | To screw together, as drill pipe or a string of tools. |
| **Male Connection** | A connection with the threads or prongs on the outside. |

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| **Malfunction** | Any condition of a device or piece of equipment that causes it to operate improperly, but does not prevent the performance of its design function. |
| **Man Rack** | A portable doghouse or cab mounted on a flatbed truck for transporting workers to and from a job. |
| **Man Riding Winch** | The designation for a type of winch used offshore for man riding applications; e.g., diving bells; divers' baskets; bird cages. The winches have a built in safety factor with special steel cable and dual braking systems. |
| **Mandrel** | A shaft, line or piece of tubular goods on which a working tool is mounted. |
| **Manhole** | A hole in the side of a tank or other vessel through which a man can enter. The hole is covered by a plate bolted in place with a gasket when the tank or vessel is in use. The hole can be used to clean out residue or other material build up or to make repairs to the interior of the tank or vessel. |
| **Manifold** | An area where pipelines entering and leaving a pumping station or tank farm converge and that contains all valves for controlling the incoming and outgoing stream. |
| **Manifold Header** | The gathering point where lines merge to one line. |
| **Manometer** | A continuous, borehole pressure measuring device used in some production logging tools. |
| **Manufacturer** | A term denoting individuals or companies who make or process equipment, material and/or software. |
| **Map Locator Description** | The legal description of a land property; e.g., township; range. |
| **Map Projection** | A scheme for displaying the Earth's curved surface on a plane surface. The relation between the spheroid coordinate system and planar coordinate system. Often given common names; e.g., Transverse Mercator; Lambert Conic Conformal. |
| **Map Quadrangle Name** | The name of a map quadrangle or, in Texas, a special map survey. |
| **Map Quadrangle Type Code** | The map quandrangle type; e.g., 7.5 or 15 minute area. |
| **Map Scale** | The ratio of the distance between two points shown on a map and the actual distance between the points on the earth's surface. Scale is commonly expressed as a representative fraction (r.f.) such as 1/1000. |
| **Margin Money** | Funds kept in an account as collateral against futures or derivative market losses. Earnest money that must be escrowed to open and maintain a financial market position. |
| **Marginal Well** | SEE: Stripper Well. |
| **Marine Cable** | (1) In offshore seismic acquisition, a marine cable incorporates pressure hydrophones, position sensors, and or equipment to control cable depth. The entire cable may be 3 to 6 km long. Also called a streamer.(2) SEE: Shipboard Cable. |
| **Marine Riser System** | The pipework that is designed to close the fluid system loop between the subsea blowout preventer (BOP) and the fixed flowlines of a rig. It also includes separate high pressure choke and kill lines to allow pressure kicks to be handled. Buoyancy devices may be attached as local conditions dictate. |
| **Marker Well** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, any well from which natural gas was produced in commercial quantities at any time after January 1, 1970 and before April 20, 1977. Also, a well that qualifiies as a new well because its depth was increased after February 19, 1977 to at least 1,000 feet below the deepest completion location before February 19, 1977, and whose production began in commercial quantities before April 20, 1977, will qualify as a marker well. |
| **Market Order** | A request to purchase or sell securities, options, or futures in which the financial service provider is instructed to execute the transaction at the current market price. Buy/sell at whatever the market (floor price) is. |
| **Market Out** | Provision in gas contracts which provides for release of certain wells or acreage dedication when a price for such gas is considered economically unacceptable to either buyer or seller, or allows the buyer and seller to redetermine price in light of economic conditions. |
| **Market Type** | Indicates whether the gas delivered under the contract is for resale in the same state (intra) or in a different state (inter) from where it is produced. This is the contract requirement. What actually takes place could vary. |

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| **Marketer** | A buyer and seller of natural gas. Also known as broker. |
| **Marketing Agreement** | A statement of the terms and conditions comprising a formal and legally binding agreement between two parties for the supply and receipt of specified quantities of products over specified periods of time. This agreement may be for compensation, or in kind, or both. |
| **Marketing Cost Amount** | The cost incurred in making gas merchantable, such as compression, dehydration or treating, and the cost of transporting gas to the point of delivery to the purchaser. Also called handling cost. |
| **Marking** | Refers to the assorted marks on tubular products, and includes inspection markings made with paint sticks and stencils, and ballpoint paint tubes. |
| **Marsh Buggy** | A tractor like vehicle whose wheels are fitted with extra large rubber tires for use in swamps. |
| **Marsh Funnel** | A calibrated funnel commonly used in field tests to determine the viscosity of drilling mud. |
| **Marsh Funnel Viscosity** | Commonly called the funnel viscosity. The Marsh funnel viscosity is reported as the number of seconds required for a given fluid to flow 1 qt through the Marsh funnel. In some areas the efflux quantity is 1,000 cc. |
| **Mass** | The property of a body that is a measure of its inertia, that is commonly taken as a measure of the amount of material it contains, and causes it to have weight in a gravitational field. |
| **Mass Flow Meter** | Provide measurement of fluid volume and fluid density through the same meter. |
| **Mast** | A long pole or tube rising in an almost vertical direction to support some member of a drilling or hoisting machine. |
| **Mast Set Up Distance** | The distance from the borehole axis at the wellbore orgin to a designated point on the mast structure defined by a manufacturer to assist in the setup of the rig. |
| **Master Clutch** | Disengages prime mover from all motions of the crane. |
| **Master Coupling Link** | An alloy steel welded coupling link used as an intermediate link to join alloy steel chain to master links. |
| **Master Link Or Gathering Ring** | Is a forged or welded steel link used to support all members (legs) of an alloy steel chain sling or wire rope sling. |
| **Master Terminal Computer** | An electronic equipment package used in a supervisory capacity over a network of remote units. |
| **Master Valve** | A large valve used to shut in a wellbore or well completion. |
| **Material** | Personal property, equipment, and/or supplies acquired or held for use. |
| **Material Balance** | (1) In reservoir engineering, a volumetric balance which states that since the volume of a reservoir is constant, the algebraic sum of the volume changes of the oil, free gas, and water volumes must be zero.(2) A mass balance in which all materials entering an area under study are equated to all materials leaving an area. Used as a tool in determining quantity of an unknown stream, verifying metered streams, etc. |
| **Material Noise** | In ultrasonic testing, extraneous signals caused by the structure of the material being tested. |
| **Material To Surface Rate** | The amount of material that surfaced in a specified or unspecified time during a drillstem test. |
| **Material To Surface Time** | The measured time that it took for the materials to travel to the surface during a drillstem test. |
| **Material To Surface Type** | Material that comes to the surface and flows during a formation test (drillstem test); e.g., condensate; gas; mud; oil; water; drilling fluid. |
| **Matrix** | The finer grained material (noncement) within the pore spaces of a rock. |
| **Matrix Density Used To Compute Porosity** | Matrix density assumed for porosity computations. |
| **Matrix Treatment** | History of any treatments done on a well completion to restore or improve the flow performance of the near borehole reservoir rock, including treatments designed to clean the completion tubular goods. Materials used include acid, solvent, and surfactant treatments. |

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| **Matrix Treatment Type** | The type of treatment performed on a borehole or well completion; e.g., mud acid; HCl; surfactant. |
| **Matrix Used To Compute Porosity** | Matrix rock type assumed in porosity computation. |
| **Matting** | Material (wood, steel, concrete, etc.) used for support. |
| **Maturation Level** | The level of maturation for the measured vitrinite reflectance. |
| **Mature Field** | Oil or gas property with a long reserve life and low activity. |
| **Maximum Allowable Operating Pressure** | The highest operating pressure allowable at any point in a system/vessel during normal flow or static conditions. Also referred to as MAOP. |
| **Maximum Allowable Working Pressure** | The highest operating pressure allowable at any point in any component other than a pipeline during normal operation or static conditions. |
| **Maximum Anticipated Surface Pressure Measurement** | The maximum pressure expected at the surface during workover/drilling operations. |
| **Maximum Approved Injection Rate** | The maximum approved injection rate for an injection well. |
| **Maximum Co2 Content** | The maximum carbon dioxide content permitted in gas delivered under a contract. Normally measured and expressed in mol percent by volume of carbon dioxide. |
| **Maximum Efficient Rate** | The highest rate at which a well completion or reservoir may be produced without causing physical waste in the reservoir. Also referred to as: MER. |
| **Maximum Fuel Consumption** | The maximum percentage of the processed gas which can be used for plant fuel. |
| **Maximum H2o Content** | The maximum water vapor content permitted in gas delivered under a gas contract. |
| **Maximum Hydrogen Sulfide Content** | The maximum hydrogen sulfide content permitted in gas delivered under a gas contract. |
| **Maximum Injection Pressure Measurement** | 1. The maximum approved operating pressure for an injection well. 2. The maximum surface pressure at which a formation takes fluid. |
| **Maximum Injection Rate** | The highest quantity per unit measured that is injected into a formation or through perforations during a particular job. |
| **Maximum Operating Temperature** | The highest operating temperature allowable at any point in a system/vessel during normal flow or static conditions. |
| **Maximum Overhead Limit** | A monetary amount stated in an operating agreement which limits the total amount of overhead that can be charged by the operator to a joint interest account. |
| **Maximum Permeability** | Absolute permeability measured horizontally on a conventional core sample in the direction of maximum permeability. |
| **Maximum Pressure** | The greatest amount of force applied per unit area to inject a substance into a formation or through perforations during a particular job. |
| **Maximum Production Rate Current Date** | The date the current maximum production rate (MPR) becomes effective for a well completion. |
| **Maximum Production Rate Product Code** | Indicates whether the current maximum production rate (MPR) product is oil or gas. |
| **Maximum Reading Thermometer** | A mercury filled thermometer with a constriction in the capillary tube which registers the maximum temperature attained. |
| **Maximum Recorded Temperature** | The highest temperature measured in the borehole during logging. |
| **Maximum Residue Deduction Charge** | Maximum amount deducted from a residue price for the sum of the compression, transportation, treating, and dehydration deductions. |
| **Maximum Shear Stress Theory** | Failure theory defined by the following equation: u1 - u2 = Fy where u1 is the maximum principal stress and u2 is the minimum principal stress, with tension positive and compression negative. |
| **Maximum Stripper Rate Volume** | The volume of oil produced by a well completion efficiently producing less than ten barrels per day. |

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| **Maximum Wellhead Rated Pressure Measurement** | The minimum acceptable pressure for which the wellhead is rated. |
| **Md** | SEE: Measured Depth. |
| **Mea** | SEE: Monoethanolamine. |
| **Mean Effective Pressure Measurement** | The average pressure that exists in an engine power cylinder during operation. Commonly abbreviated as MEP. |
| **Measured Depth** | Depth into a wellbore measured along a wellbore path from the wellbore path datum to a wellbore point. Commonly abbreviated as: MD. All measured depth values are recorded relative to a wellbore path and its datum and basis. |
| **Measured Depth Coordination System Axis** | A coordinate system axis used to describe locations along a wellbore path in a well, typically used to describe measured depths. The wellbore path begins at the surface of the Earth, and extends into the Earth. The orientation of the path is positive in the direction that was initially toward the center of the Earth (downward). |
| **Measured Depth True Vertical Depth Code** | An indicator for the depth measurement value as to whether it is a measured depth or true vertical depth value. |
| **Measurement Allocation** | The assignment of a total measured quantity of gas at a point to the various contracts active at that point during a specific period of time. |
| **Measurement Point** | Point where measurements are gathered and/or quantified. Measurements may be implied or real. |
| **Measurement While Drilling** | A wireless system for making downhole measurements of azimuth, inclination, and tool orientation as well as rock properties such as natural radioactivity, resistivity and temperature. These measurements are made while drilling by sensors located close to the drill bit. Commonly abbreviated as: MWD. |
| **Measuring Tank** | A calibrated tank that automatically measures the volume of liquid run in and then released. Measuring tanks are used in Lease Automatic Custody Transfer (LACT) systems. Also referred to as metering tank or dump tank. |
| **Mechanical Coupling Link** | A nonwelded, mechanically closed steel link used to attach master links, hooks, etc., to alloy steel chain. |
| **Mechanical Damage** | SEE: Galling. |
| **Mechanical Efficiency** | The ratio of mechanical power output to mechanical power input, usually expressed as a percent. |
| **Mechanical Integrity Test** | The act of setting a packer or retrievable bridge plug above the perforations in a wellbore and applying pressure to the annulus in order to ensure soundness of the casing. |
| **Mechanical Seal** | A type of seal employed instead of packing to prevent leakage of fluid. |
| **Mechanism** | The working parts of a machine; or a system whose parts work together like those of a machine. |
| **Media** | Physical object used to exchange information. This includes magnetic tapes, disks, and storage chips. It is expected that this list will expand. |
| **Media Bed** | (1) A filter bed.(2) The filtering material through which a fluid gravitates or is pumped to remove impurities or suspended material. Filter beds can consist of sand, charcoal, walnut shells, or special clays. |
| **Median Cut** | The effectiveness of a device in separating solids particles from a specific liquid solids slurry under specified conditions expressed in the particle size that reports 50% to the overflow. |
| **Median Lethal Concentration** | A standard measure of toxicity. Indicates the concentration of a substance or test material that causes death to fifty percent (50%) of a population within a given time period. |
| **Median Lethal Dose** | The dose of a test material ingested or injected that kills fifty percent (50%) of a group of test organisms. Commonly abbreviated as LD50. |
| **Medium Voltage Cable** | Medium voltage solid dielectric insulated conductor or cable rated 2001 to 35,000 volts as defined by Article 326 of the National Electrical Code (NEC). Also referred to as MV Cable. |
| **Megger Instrument** | A device for measuring resistances. Used for determining coating insulation or electrolyte resistance. |

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| **Melt** | (1) To convert a solid substance into the liquid state through a process of heating.(2) A quantity of metal melted at a single operation. |
| **Membrane Stress** | The in plane stress in the shell; e.g., longitudinal, circumferential; shear. |
| **Meniscus** | The curved upper surface of a liquid column, concave when the containing walls are wetted by the liquid and convex when not. |
| **Mep** | SEE: Mean Effective Pressure. |
| **Mer** | SEE: Maximum Efficient Rate; Most Efficient Rate. |
| **Mer Waiver Flag** | Indicates whether a waiver of maximum efficient rate (MER) reporting requirements have been granted for a sensitive reservoir. |
| **Mercaptan** | A compound chemically similar to alcohol with sulfur replacing oxygen in the chemical structure. Many mercaptans have an unpleasant odor and are used as odorants in natural gas. |
| **Mercator Projection** | The projection of a map onto a flat surface in which the meridians and latitudes appear to be at right angles, and the areas appear larger away from the equator. |
| **Mercury Method** | SEE: Borehole Survey Calculation Method (Refer to Mercury Method). |
| **Meridian** | The longitude from which ranges, azimuths or departures is measured. |
| **Meridian Seeking Compass** | A gyroscopic compass that has the capability to return itself to the meridian if moved away by some disturbing force. |
| **Mesh** | (1) The average openings (distance between parallel wires) both in the warp and shoot directions of a woven wire screen expressed as the number of openings per linear inch.(2) The number of openings (and fraction thereof) per linear inch in the screen, counting from the center of a wire. |
| **Mesh Equivalent** | As used in oilfield drilling applications; the US Sieve number which has the same opening as the minimum opening of the screen in question. |
| **Metal Clad Cable** | Metal clad cable as defined by Article 334 of the National Electrical Code (NEC). Also referred to as: MC Cable. |
| **Metal Fold** | Circumferential discontinuity produced when two surfaces of metal fold against each other without metallurgical bonding. This can occur when flash produced by one forging operation is pressed into the metal surface during a subsequent operation. Also referred to as: Cold Shut. |
| **Metal Working Machine** | Equipment used for threading, boring, or shaping metal. |
| **Metallurgy** | The art and science of extracting metals from their ores, refining them, and preparing them for use. Also includes the combining of metals into alloys. |
| **Metamorphic Rock** | Rock formed by alteration of a preexisting rock by intense heat and pressure. |
| **Meter** | A device designed to measure and record the volume or pressure of a fluid. |
| **Meter Calibration Interval** | The interval of time between meter calibrations required by contract. |
| **Meter Chart** | A circular chart which records the differential and static pressures. |
| **Meter Difference** | Difference in a volume determined from separate meters measuring the same gas stream, occasioned by the fact that gas volumes in field operations are not precisely determinable. |
| **Meter Factor** | A factor, specific to each liquids meter, determined by meter calibrations and used to adjust measured volume to net volume. |
| **Meter Number** | The number assigned to the meter on the project or lease from which the well's production is supplied and receives an allocation of that meter's volume. |
| **Meter Pressure Measurement** | The pressure recorded at the meter. |

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| **Meter Prover** | A device used to calibrate an oil or gas meter and measure its accuracy. |
| **Meter Prover Size** | The diameter of the device used to calibrate an oil or gas meter. |
| **Meter Prover Type** | The type of device that is used to calibrate an oil or gas meter. |
| **Meter Prover Volume** | The volume of the tank used to calibrate an oil or gas meter. |
| **Meter Prover Wall Thickness** | The pipe wall thickness in the proving device used to calibrate an oil or gas meter. |
| **Meter Run Flag** | An indicator of whether test was by meter run. |
| **Meter Run Length** | An orifice meter installation designed such that the pipe on each side of the orifice plate is of sufficient length to permit uniform flow and representative measurements of the static and differential pressures. |
| **Meter Run Tubes** | Two segments of pipe precisely bored, cut to predetermined lengths, then assembled with the segment of greatest length upstream of the orifice fitting and the segment of lesser length downstream of the orfiice fitting. |
| **Meter Skid Unit** | A unit consisting of recorders, meter runs, and piping which is mounted on a skid. |
| **Meter Spring Size** | The size of the spring in a gas measurement meter. |
| **Meter Type Code** | An indicator of the meter type. |
| **Metered Separately Flag** | An indicator of whether production from a well is being metered separately. |
| **Metering Point Identifier** | The number assigned to a metering point by the regulatory agency. |
| **Metering Separator** | A vessel which measures liquid after separation of gas, usually by means of a positive volume chamber which dumps a measured volume of liquid each time the chamber is filled. |
| **Methane** | Light gaseous, flammable paraffin hydrocarbon and is the chief component of natural gas. Chemical formula: CH4. |
| **Methane Show** | The amount of methane present in the gas extracted from the drilling fluid sample and injected into the chromatograph. Alternatively, where a steam still is not used, this is the value of methane measured from the gas stream at the peak of the show. |
| **Methyl Alkalinity Test** | The method for determining the alkalinity present in water up to the methyl orange end point. |
| **Methylene Blue Test** | A measurement of the activity (equivalent concentration) of clay in the drilling fluid. |
| **Microballoon** | A foam blanket that floats on the liquid in a storage tank to reduce losses from evaporation. The blanket is composed of billions of hollow, ballonlike plastic spheres containing a sealed in gas (usually nitrogen). The spheres are almost microscopic in size. When poured in sufficient quantity on top of crude oil or refined products, they spread across the surface, forming a dense layer that is sufficient to reduce evaporation. |
| **Microresistivity Log** | A log of the resistivity of the flushed zone in the rocks surrounding the borehole, measured with electrodes on a pad pressed against the borehole wall; e.g., microlog; microlaterolog; microspherically focused log; proximity log. |
| **Mid Baffle** | In horizontal emulsion treaters a baffle or bulkhead may be located between the heating section and the coalescing section. |
| **Migration** | (1) The re-arrangement of seismic energy so that reflections are vertically plotted at their true locations.(2) The reintepretation of a plan view map so that events are properly located directly below the surface.(3) The movement of oil from the area in which it was formed to another location. |
| **Mill** | A downhole tool having a rough, sharp and extremely hard cutting head for removing metal by grinding or cutting. Mills are run on drill pipe or tubing and are used for such purposes as grinding up debris in the wellbore, removing sections of casing for sidetracking and reaming out tight spots in the casing. They are also called junk mills, reaming mills, etc., according to the use for which they were designed. |
| **Mill End** | The pipe end having the coupling or box. |

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| **Mill Grind** | An area of the pipe surface removed by grinding during the manufacturing process. |
| **Mill Scale** | An oxide of iron which forms on the surface of hot steel. |
| **Mineral** | Scientifically, a chemical element or compound occuring naturally as a product of inorganic processes. This has been broadened in the petroleum industry to include hydrocarbon products of organic processes; e.g., coal; oil; gas. |
| **Mineral Acres** | Acreage on which ownership of the minerals in place has not been divided into royalty and working interests. |
| **Mineral Insulated Cable** | Mineral insulated metal sheathed cable as defined by Article 330 of the National Electrical Code (NEC). Also referred to as: MI Cable. |
| **Mineral Interest** | The percent ownership of the mineral interest without regard to the ownership of the surface. |
| **Mineral Right** | The right of ownership of gas, oil, and other minerals beneath the surface of the earth, conveyed by deed. |
| **Mineralogy** | The branch of geology dealing with minerals, their formation, occurence, properties, composition and classification. |
| **Minerals Management Service** | Minerals Management Service (MMS) of the Department of the Interior. A regulatory agency; a collector of lease rental fees and royalties from Indian Lands; Federal lands, both onshore and offshore. Also, conducts sealed bid lease offerings for minerals, both onshore and offshore. |
| **Minimum Curvature Method** | SEE: Borehole Survey Calculation Method. |
| **Minimum Injection Rate** | The lowest quantity per unit measured that is injected into a formation or through perforations during a particular job. |
| **Minimum Payment Flag** | An indicator of whether a minimum payment obligation exists. |
| **Minimum Price Adjustment Frequency** | Frequency at which the minimum price is adjusted. The adjustment is dependent upon the minimum price adjustment rate. |
| **Minimum Price Adjustment Rate** | The rate of periodic adjustment of the minimum price as specified by contract. This adjustment is dependent upon the minimum price adjustment frequency. |
| **Minimum Residue Btu** | The minimum British thermal unit (BTU) required in the residue gas after processing under a gas processing agreement. |
| **Minimum Royalty Payment** | A payment to be made regardless of production. Such payment is to be chargeable against future production, if any, accruing to the royalty interest. |
| **Minimum Royalty Payor Flag** | Indicates the party who completed the form will be responsible for the payment of any minimum royalty deficiencies. |
| **Minor Cone** | An imaginary cone that passes over the root of the external threads and the crest of internal threads. |
| **Minor Diameter** | The root diameter of the external thread and the crest diameter of the internal thread; i.e, the smallest diameter of the thread. |
| **Minor Type Work Performed** | The secondary action(s) that will also be taken on the well during the course of the repair. |
| **Miscible Displacement** | SEE: Miscible Flood. |
| **Miscible Flood** | An oil recovery process which involves the injection into a reservoir of fluids that will mix with the native reservoir fluids to displace oil that would not be recovered with natural reservoir energy. The injected substance can be dry gas, enriched gas, liquefied petroleum gases, or, in some cases, nonhydrocarbon fluids. Also referred to as: Miscible Displacement. |
| **Miscible Hydrocarbon Injection** | Miscible hydrocarbon injected into a formation to maintain or restore reservoir pressure to enhance ultimate recovery of hydrocarbons. |
| **Misrun** | The failure of operations; e.g., perforations; log run; drillstem test. |

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| **Missing Section** | A portion of the rock column missing during drilling or surface transect. Missing sections are encountered across normal faults and unconformities, but they can also be encountered in severly deformed rocks without faults. Also referred to as: Lost Section. |
| **Mist Extractor** | A finely woven pad usually of stainless steel placed in scrubbers, towers, and other process vessels for the removal of entrained liquids in the vapor stream. |
| **Mixer, Pilot, Burner** | Mechanical device located in the arrestor housing and breeching which mix the fuel and air and control burning and flame position. |
| **Mms** | SEE: Minerals Management Service. |
| **Mms Inspection Enforcement Code** | The designator of an enforcement action taken by a regulatory inspector of an offshore pipeline, platform, drilling rig, or other site in the event of an Incident of Noncompliance (INC). Each Potential Incident of Noncompliance (PINC) has one or more possible enforcement actions associated with it based upon the severity of the infraction and the magnitude of the safety hazard involved. |
| **Mms Lease** | A legal document authorized by and approved by the Minerals Management Service (MMS), for onshore properties, offshore properties, or for Indian Tribal Properties. The lease conveys certain rights to a lessee to explore for and to recover specified minerals or materials. |
| **Mms Lease Number** | A number assigned by the Minerals Management Service (MMS) to a lease instrument on Federal (either onshore or offshore) or Indian property. |
| **Mobile** | Capable of moving or being moved from one place to another. |
| **Mobile Platform** | A self contained, offshore drilling platform with the means for self propulsion. Some of the larger semisubmersible drilling platforms are capable of moving in the open sea at five to seven knots. |
| **Mobile Production Units** | More or less temporary production units offshore that serve as oil and gas processing stations with oil storage and loading facilities. |
| **Mobilization And Demobilization Cost** | Costs incurred from time to time to move in, arrange for, and assemble a drilling unit or other vessels, personnel, equipment, materials, services, and supplies, including without limitation, inspection and certification costs of the drilling unit or other vessels, and the cost in returning same. |
| **Modified Schmidt Diagram** | A plot of dipmeter information on polar chart paper where 0 degrees dip is represented on the circumference and 90 degrees at the center. Dips close to the structure form a group near the circumference. The center of this group represents the structural dip. |
| **Module** | An assembly that is functional as a unit and can be joined with other units to increase the functionality. |
| **Modulus Of Elasticity** | The degree to which a solid body undergoes elastic deformation under stress. |
| **Moisture Analyzer** | A device to monitor the presence of moisture in the inlet stream to a cryogenic plant by means of an electronic probe and a recorder. |
| **Molar Solution** | A solution containing one gram mol of solute in one liter of total solution. Mistakenly referred to as: Molal Solution. |
| **Mole** | That quantity of any substance whose weight in pounds, grams, or other units is numerically equal to its molecular weight. Also referred to as Mol. |
| **Molecular Adjustment Method** | The method to use in determining the residue molecular percent. This is used in the theoretical residue calculations. |
| **Molecular Sieve** | A bed of desiccant material that absorbs water from a refinery or hydrocarbon recovery unit's feedstock. The material is in layers in a bed and the feedstock is passed through the material which absorbs the water. |
| **Molecular Weight** | The sum of the atomic weights of all the constituent atoms in the molecule of an element or compound. |
| **Molecule** | The smallest particle of any substance that can exist free and still exhibit all the properties of the original substance. |
| **Moment** | The product of quantity (as a force) and a distance to a given point or axis. |

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| **Moment Controlling Device** | Devices such as ball joints or elastomeric joints used to reduce bending stresses induced by relative angular movements at the ends of the riser. When curvature control is necessary, tapered joints may also be used. |
| **Monkey Board** | Platform on which the derrickman works during the time a trip is being made. |
| **Monocline** | A local steepening in an otherwise uniform gentle dip. |
| **Monoethanolamine** | An organic base used in an amine unit to remove hydrogen sulfide and carbon dioxide from a gas stream. |
| **Monte Carlo Simulation** | A mathematical model of a process in which variables cannot be fixed to single values but are represented by probability distributions. A sample value of each variable is randomly selected and answers are calculated. The process is repeated many times to derive a probability distribution of answers. |
| **Monthly Allowable Volume** | The permissible amount, as assigned by a regulatory agency, that the entity can produce during a month of the identified product involved; e.g., oil; gas. |
| **Monthly Disposition Volume** | The monthly movement (disposition) volume of oil, gas or condensate which has been produced. |
| **Monthly Downtime** | SEE: Downtime. |
| **Monthly Gas Disposition Volume** | The gas quantity relating to a specific method of disposition of lease or unit production in a given month. |
| **Monthly Gas Production Volume** | The quantity of gas well gas or solution gas that was produced from a property/well/reservoir during the month indicated. |
| **Monthly Oil /condensate Disposition Volume** | The monthly movement (disposition) volume of oil/condensate relating to a specific method of disposition of lease or unit production in a given month. |
| **Monthly Oil Production Volume** | The amount of oil or condensate that was produced from a property/well/reservoir during the month indicated. |
| **Monthly Production Volume** | The quantity of a product (oil, gas, water, etc.) produced and reported during a calendar month. |
| **Monthly Water Disposition Volume** | The water volume relating to a specific method of disposition of lease or unit production in a given month. |
| **Monthly Water Production Volume** | The amount of water that was produced from a property/well/reservoir during the month indicated. |
| **Monthly Well Injection Volume** | The volume of substance injected into the well during the month for the identified cycle phase. This may be an input volume or an allocated volume. |
| **Montmorillonite** | A clay mineral commonly used as an additive to drilling fluids and cements. Sodium montmorillonite is the main constituent in bentonite. |
| **Moonpool** | The opening in a drillship through which drilling operations are conducted. |
| **Mosquito Bill** | A tube mounted at the bottom of a sucker rod pump and inside a gas anchor to provide a conduit for well fluids into the pump. |
| **Most Efficient Rate** | The highest rate at which a reservoir can be produced without either reservoir or surface physical waste; i.e., a reservoir may be produced at the maximum efficient rate, but at such a rate, gas production will be in excess of the capacity of facilities in the field to handle the gas, so a lower or most efficient rate is set up for the reservoir to avoid surface waste of valuable hydrocarbons in the form of flared gas. |
| **Mouse Hole** | A hole drilled under the derrick floor and temporarily cased in which a length of drill pipe is temporarily suspended for later connection to the drillstring. |
| **Movable Oil Plot** | A computed log, based on several logging operations, prepared for the purpose of determining the presence and quantity of movable hydrocarbon (usually oil) at different parts of a formation. |
| **Moveout** | The difference in arrival time of a reflection event at different source receiver distances. |
| **Mud** | SEE: Drilling Fluid. |
| **Mud Additive** | SEE: Drilling Fluid Additive. |

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| **Mud Analysis** | SEE: Drilling Fluid Analysis. |
| **Mud Annular Velocity** | SEE: Drilling Fluid Annular Velocity. |
| **Mud Balance** | SEE: Drilling Fluid Balance. |
| **Mud Cake** | SEE: Drilling Fluid Cake. |
| **Mud Cake Resistivity** | SEE: Drilling Fluid Cake Resistivity. |
| **Mud Cake Temperature** | SEE: Drilling Fluid Cake Temperature. |
| **Mud Cake Thickness** | SEE: Drilling Fluid Cake Thickness. |
| **Mud Conditioning Equipment** | SEE: Drilling Fluid Conditioning Equipment. |
| **Mud Density** | SEE: Drilling Fluid Density. |
| **Mud Filtrate Resistivity** | SEE: Drilling Fluid Filtrate Resistivity. |
| **Mud Filtrate Temperature** | SEE: Drilling Fluid Filtrate Temperature. |
| **Mud Fluid Loss** | SEE: Drilling Fluid Loss. |
| **Mud House** | A structure at the rig to store and shelter sacked materials used in drilling fluids. |
| **Mud Log Received Date** | The date the drilling fluid (mud) log(s) was/were received. |
| **Mud Logging** | SEE: Drilling Fluid Logging. |
| **Mud Motor** | A downstring motor at the end of the bottomhole assembly whose power source is the drilling fluid. |
| **Mud Ph** | SEE: Drilling Fluid pH. |
| **Mud Pit** | Earthen or steel storage facilities for the surface drilling fluid system. Mud pits which vary in volume and number are of two types: circulating and reserve. Drilling fluid testing and conditioning is normally done in the circulating pit system. |
| **Mud Plan** | SEE: Drilling Fluid Plan; Mud Program. |
| **Mud Program** | A proposed or followed plan or procedure for the type(s) and properties of drilling fluid(s) used in drilling a well with respect to depth. Some factors that influence the mud program are the casing program and rock characteristics, such as type, competence, solubility, temperature, pressure, etc. |
| **Mud Pump** | SEE: Drilling Fluid Pump. |
| **Mud Raw** | Mud to be processed by solids removal equipment, before dilution. |
| **Mud Resistivity** | SEE: Drilling Fluid Resistivity. |
| **Mud Resistivity Temperature** | SEE: Drilling Fluid Resistivity Temperature. |
| **Mud Salinity** | SEE: Drilling Fluid Salinity. |
| **Mud Scale** | SEE: Drilling Fluid Balance. |
| **Mud Screen** | SEE: Shale Shaker. |
| **Mud Still** | An instrument used to distill oil, water, and other volatile material in a drilling fluid to determine oil, water, and total solids contents in volume percent. |
| **Mud Tank Volume** | SEE: Drilling Fluid Tank Volume. |
| **Mud Temperature** | SEE: Drilling Fluid Temperature. |

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| **Mud Type** | SEE: Drilling Fluid Type. |
| **Mud Viscosity** | SEE: Drilling Fluid Viscosity. |
| **Mud Weight** | SEE: Drilling Fluid Weight. |
| **Mud Yield Point** | SEE: Drilling Fluid Yield Point. |
| **Mudding Off** | Commonly thought of as reduced productivity caused by the penetrating, sealing, or plastering effect of a drilling fluid. |
| **Mule Head** | (1) The curved device on the end of a walking beam of an oil well pumping unit.(2) A horse head. |
| **Mule Shoe** | A shaped form used on the bottom of orienting tools to position the tool. The shape resembles a mule shoe or that of the end of a pipe cut both diagonally and concave. The shaped end forms a wedge to rotate the tool when lowered into a mating seat for the mule shoe. |
| **Multibuoy Mooring System** | A tanker loading facility with multiple mooring buoys to which the vessels are moored as they take on cargo or bunkers from submerged hoses that are lifted from the seabottom. |
| **Multiple Back Reflection** | A repetitive echo from the far boundary of the material being examined. |
| **Multiple Drilling** | The drilling of one or more sidetracks within the same wellbore to to reach two or more reservoirs, or to drain one reservoir at widely separated points. |
| **Multiple Lease Recovery Code** | An indication of whether an overpayment will be recovered from the original lease affected or also from additional leases. Indications are: Recover from the original lease only; Recover from additional leases specified; Recover from all leases the owner has an interest in except Louisiana leases. |
| **Multiple Well Completion** | A wellbore with completions in more than one zone. |
| **Multiple Well Completion Code** | Indicates whether the well will be completed as a single or multiple producer or injector. |
| **Multiple Zone Order Number** | A number identifying an order or authorization by a regulatory agency permitting a well to produce from more than one common source of supply with such common sources of supply completely segregated. |
| **Multistage Tool** | SEE: DV Tool |
| **Multiyear Floe** | An ice floe that has survived one or more melt seasons. The floe may contain an embedded ridge having a weathered, rounded, consolidated sail and a relatively solid keel, approximately 3 to 4 times the sail height. |
| **Multiyear Ice** | Sea ice that has survived one or more melt seasons. |
| **Multiyear Ridge** | An ice ridge that has survived one or more summer melt seasons. |
| **Mute** | The concept of treating specific samples of a seismic trace as being zero. Used to remove refracted energy and other unwanted energy from seismic traces. |
| **Mwd** | SEE: Measurement While Drilling. |
| **N** | |
| **Nameplate Rating** | The manufacturers' ratings as to speed, working pressure, horsepower, type of fuel, voltage requirements, etc. printed or stamped on the nameplate attached to equipment. |
| **Naphthene Base Crude Oil** | SEE: Asphalt Base Crude Oil. |
| **National Topographic Series Survey Canada** | A Canadian rectilinear grid system delineated by lines of latitude and longitude. |
| **Native Gas** | SEE: Formation Gas. |

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| **Natural Clay** | A clay that is encountered when drilling various formations. The yield of these clays varies greatly, and they may or may not be purposely incorporated into the drilling fluid system. |
| **Natural Flow** | Production of oil to the surface by use of available reservoir energy which may be water pressure, free gas pressure, solution gas or a combination of these factors and without the use of artificial lift methods. |
| **Natural Gamma Ray Spectroscopy Log** | A well log in which the specific energy levels of natural gamma ray radiation are analyzed to provide a means to identify and quantify the elements (isotope) which are the sources of the radiation. This measurement is used primarily to determine clay content. Also referred to as: spectral gamma ray log. |
| **Natural Gas** | Gaseous forms of petroleum consisting of mixtures of hydrocarbon gases and vapors, the more important of which are: methane, ethane, propane, butane, pentane, and hexane. It may exist either in the gaseous phase or in solution with crude oil in reservoirs. |
| **Natural Gas Futures Contract** | A commodity contract traded on NYMEX to buy or sell natural gas for future month deliveries. One contract equals 10,000 MMBTUs of natural gas, with a standard delivery point of Henry Hub. |
| **Natural Gas Liquid** | Commonly abbreviated as : NGL. Hydrocarbon found in natural gas which has been liquefied at the surface in field facilities or in gas processing plants. NGL's include but are not limited to: ethane, propane, normal butane, isobutane, pentanes, debutanized natural gasoline, and plant condensate not recovered by mechanical separation. Liquid hydrocarbons extracted in gas processing plants are often referred to as plant products. |
| **Natural Gas Liquid Products** | The separate products derived from natural gas liquids, including butane (isobutane and normal butane), propane, propane mixtures and natural gasoline, but not ethane. Refer to DOE/ERA Regulations, Section 212.162. |
| **Natural Gas Plant** | SEE: Gas Processing Plant. |
| **Natural Gas Policy Act Of 1978** | Enacted on November 9, 1978 and became effective December 1, 1978. The Act has been amended, and it replaced or amended the Natural Gas Act. Refer to 15USC 3301-3432. |
| **Natural Gas Stripping** | The countercurrent bubbling of a gas through a fluid to remove certain components or impurities in the fluid. |
| **Natural Ice Island** | SEE: Ice Island. |
| **Naturally Deviated Wellbore** | A wellbore path which has deviated from vertical without use of deflection tools. Drilling tends to creep updip, for example. |
| **Near Size Material** | That material very nearly the size of the screen aperture, generally considered as plus or minus 25% of the aperture. |
| **Needle Valve** | A valve having a tapered gate that rests in a tapered orifice for extremely fine regulation of flow. |
| **Negative Buoyancy** | When a body weighs more than the weight of fluid that it displaces. |
| **Negatively Skewed Bit** | A bit with offset built into the cones in an opposite direction to that normally used. |
| **Nema Enclosure** | An electrical enclosure manufactured to National Electrical Manufactures Association (NEMA) standards. |
| **Net Acre Feet** | The total acre feet applicable to one owner based on a calculation of the owner's interest applied to the total acre feet in the entity involved. |
| **Net Additional Burden** | The decimal expression of the net additional nonoperating type burden which is payable out of the company's working interest. Does not include royalty reserved by the lessor(s). |
| **Net Amount** | The gross value plus or minus adjustments. |
| **Net Back** | Economic Regulatory Administration (ERA) defines, with respect to natural gas liquids, any transfer for value to a class of purchaser for which a percentage of the revenues from the first sale of natural gas liquids or natural gas liquid products is received. |
| **Net Delivered/sold Volume** | The volume of production delivered to a plant or sold. Net of exempt and nonexempt adjustments |
| **Net Effective Gas Thickness** | The cumulative net vertical gas thickness of gaseous hydrocarbons within a borehole. |

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| **Net Effective Oil Thickness** | The cumulative net vertical thickness of liquid hydrocarbons within a borehole. |
| **Net Heating Value** | The gross heating value less the heat of condensation of any water formed in combustion. |
| **Net Oil Computer** | A combination of electronic and mechanical devices that automatically determines the amount of oil in a water and oil emulsion. |
| **Net Pay** | The cumulative reservoir rock thickness capable of producing commercial hydrocarbons, excluding nonproducing portions, within a specified interval. |
| **Net Positive Suction Head** | The differential, in feet of liquid pumped, of the pressure at the intake of a pump over the bubble point pressure of the liquid at pumping temperature. Commonly abbreviated as: NPSH. |
| **Net Price Per Unit Amount** | The gross price received less allowable deductions. |
| **Net Production** | Production derived from ownership of all working interests less any royalty, overriding or any other economic interests. |
| **Net Profits Interest** | An interest in a property which entitles the owner to receive a stated percentage of the net profit as defined in the instrument creating the interest. It is carved out of the working interest. |
| **Net Profits Lease** | When the lessor shares in the net proceeds of production after the lessee has recovered his initial investment. The various expenses to be allowed as deductions from gross proceeds are points of negotiation. Also applies to working interest relationships. |
| **Net Reserves** | Reserves derived from ownership of working interests less any royalty, override or other economic interests. |
| **Net Reservoir Thickness** | SEE: Net Pay. |
| **Net Revenue Interest** | The total interest a working interest owner has in a lease including any royalty interest. This excludes any royalty, overriding royalty, production payments, etc., that the owner owns that he must pay to others. |
| **Net Taxable Amount** | The value on which tax is based. |
| **Net Volume** | The gross volumes plus or minus applicable volume adjustments. |
| **Net Working Interest** | A working interest owner's gross working interest in production, less the related royalty, overriding royalty, production payment, and net profits interests. |
| **Network Well** | A well in which component wellbores may start at many points on the surface of the earth but are interconnected below the surface of the Earth, and are created for the acquisition of many primary geological targets. A network well may have many surface access points to shared geological targets. |
| **Neutral Point** | This term has been defined variously as: (1) The point where tension is zero.(2) The point where stresses are zero. |
| **Neutralization** | A reaction in which the hydrogen ion of an acid and the hydroxyl ion of a base unite to form water, the other ionic product being a salt. |
| **Neutralization Number** | The acidic content of a lubricating oil, normally expressed as milligrams of potassium hydroxide per gram of oil. |
| **Neutralizing Amine** | An amine introduced into a condensate or boiler system to neutralize acidity. |
| **Neutron Log** | A porosity log of a nuclear logging tool whose response is primarily related to hydrogen concentration in the formation. Used with other porosity information, the neutron log is useful to ascertain the presence of gas and determine mineralogy and shaliness. |
| **New Contract** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, any contract entered into on or after November 9, 1978 for the first sale of natural gas not previously subject to an existing contract. |
| **New Mexico Battery Code** | A code assigned by the New Mexico Oil and Gas Conservation Commission to uniquely identify commingled oil/condensate tank batteries, for reporting purposes. |

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| **New Mexico Hole Code** | A code assigned by the New Mexico Oil & Gas Conservation Commission to indicate that a lease has two or more wells per 40 acre spacing. |
| **New Mexico Lease Control Identifier** | An identifier assigned at the lease regulatory horizon level by the New Mexico Oil and Gas Conservation Commission to provide separate identification of each well horizon/zone with its parent lease regulatory horizon within each of the three sections of the Form C-115, Operator's Monthly Report; e.g., oil section; gas section; commingled section. |
| **New Ocs Lease** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, with respect to the Outer Continental Shelf, a lease of submerged acreage entered into on or after April 20, 1977. |
| **New Taxes Reimbursed Percentage** | The percent of new tax increases on gas for which the buyer is obligated to reimburse seller. |
| **New Well** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, a well for which surface drilling began on or after February 19, 1977, or the depth of which was increased by means of drilling on or after February 19, 1977. |
| **Ngl** | SEE: Natural Gas Liquid. |
| **Ngpa** | SEE: Natural Gas Policy Act of 1978. |
| **Ngpa Category Type** | An indicator of the Natural Gas Policy Act (NGPA) gas category for which gas from the well qualifies. |
| **Nipple** | A pipe fitting that is usually threaded on both ends and is less than 12 inches in length. |
| **Nipple Up** | To assemble a system of pipe, valves, and nipples as in a Christmas tree. |
| **Nitroglycerine** | A heavy, oily explosive poisonous liquid C3H5(NO3)3. |
| **No Drift** | A length of pipe which will not pass an API drift with reasonable pressure. |
| **Node** | (1) A point in a standing wave where a given characteristic of the wave field has zero amplitude.(2) A location on a marine cable that contains a positioning sensor, or a seismic source, or a receiver. |
| **Noise** | Any undesired signal that tends to interfere with the normal reception or processing of the desired signal. Origin may be electrical, traffic, small reflectors, etc. |
| **Noise Logging** | A well logging process for measuring the amplitude of background noise in the borehole environment, for specific frequencies in the audible range, at selected stations in the wellbore. It is used to ascertain fluid movement profiles and fluid movements behind tubing or casing. |
| **Nominal Far Offset** | The distance from center of source to farthest live receiver, as specified in the acquisition plan, and which is planned for a typical source occurrence. |
| **Nominal Fold** | SEE: Fold. |
| **Nominal Near Offset** | The distance from center of source to nearest live receiver, as specified in the acquisition plan, and which is planned for a typical source occurrence. |
| **Nominal Spread Type** | The spread used for the acquisition line which occurs for a typical source occurrence; e.g., split,end on, H. |
| **Nominate** | The method whereby the purchaser or seller establishes a volume of gas delivery to accomodate market conditions. |
| **Nominated Quantity** | The physical quantity of gas requested for a specific contract or for all contracts at a specific point. |
| **Nomination** | (1) A request for a physical quantity of gas under a specific purchase, sales, or transportation agreement or for all contracts at a specific point. A nomination will continue for a specified number of days or until superseded by another service request for the same contract.(2) The amount of oil or gas proposed to be taken from a field as reported to a regulatory agency, operator, transporter, etc. |
| **Nomination Allocation** | SEE: Capacity Allocation. |
| **Nonassociated Gas** | Gas produced from reservoirs that do not contain significant quantities of oil. |

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| **Nonconformance** | Any deviation from specified requirements. |
| **Nonconsenting Owner** | A working interest owner who has elected not to participate in a project or operation. |
| **Noncorrosive Hydrocarbon Service** | Process streams under conditions which do not cause significant metal weight loss, selective attack, or stress corrosion cracking. |
| **Nondestructive Evaluation** | SEE: Nondestructive Testing. |
| **Nondestructive Testing** | Inspection to detect internal, surface and concealed defects or flaws in materials using techniques that do not damage or destroy the items being tested. |
| **Nonfull Crested Thread** | A thread on which the profiled or machined pipe surface still appears on the thread crests. |
| **Nonincendive Circuit** | A circuit that, under normal conditions, does not release sufficient energy to ignite a specific ignitible mixture. |
| **Nonincendive Equipment** | Electrical equipment which in its normal operating condition would not ignite a specific hazardous atmosphere in its most easily ignitible concentration. |
| **Noninterest Property** | Producing leases, units, and tracts of units in which the company owns no interest and is not the operator, but has need for identification for one of the following recording and/or reporting purposes: (1) The company purchases the crude oil and/or condensate production from such properties.(2) The company operates a plant or facility that processes the gas production from such properties and makes settlement for the gas and/or extracted product(s).(3) The company farms out acreage or contributes m |
| **Nonoperator** | A working interest owner other than the one designated as operator of the property. |
| **Nonoperator Administrative Contact Fax Number** | The facsimile number supplied by the nonoperator for financial information. |
| **Nonoperator Administrative Contact Fax User Id** | The Fax User ID supplied by the nonoperator for financial information. |
| **Nonoperator Administrative Contact Name** | The name of the individual supplied by the nonoperator to be contacted for financial information. |
| **Nonoperator Individual Approving Afe** | The name of the individual of the nonoperating company with the authority to approve the AFE. |
| **Nonoperator Name** | The name of the working interest owner other than the one designated as the operator of the property. |
| **Nonoperator Technical Contact Fax Number** | The Fax number supplied by the nonoperator for technical, engineering, or geological information. |
| **Nonoperator Technical Contact Fax User Id** | The Fax User ID supplied by the nonoperator for technical, engineering, or geological information. |
| **Nonoperator Technical Contact Name** | The name of the individual supplied by the nonoperator to be contacted for technical, engineering, or geological information. |
| **Nonoperator Technical Contact Telephone Number** | The telephone number supplied by the nonoperator for technical, engineering, or geological information. |
| **Nonpressure Containing Weld** | A weld, the absence of which will not reduce the pressure containing integrity of the part. |
| **Nonrecoverable Usage** | Production from a well which is burned in support facilities such as generators, boilers, etc. |
| **Nonsensitive Reservoir** | A reservoir in which ultimate recovery is not decreased by high reservoir production rates. |
| **Normal Bhp** | A reservoir is said to have a normal bottomhole pressure (BHP) when the initial BHP approximates the hydrostatic pressure of a column of salt water corresponding to the depth of the reservoir. |
| **Normal Fault** | A fault in which the hanging wall appears to have moved downward relative to the footwall. |
| **Normal Solution** | A solution containing one gram equivalent of the dissolved substance per liter of total solution. |
| **Normally Closed Valve** | A valve which will shift to the closed position upon loss of the power medium. |
| **Normally Open Valve** | A valve which will shift to the open position upon loss of the power medium. |

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| **North American Datum Code** | The name of a latitude/longitude datum used as a standard reference point; e.g., North American Datum (NAD) 27; NAD 83. |
| **North American Veritical Datum Code** | An indicator of the name of a elevation datum used as a standard reference point; e.g., North American Vertical Datum (NAVD 29, NAVD88). |
| **North Axis Direction** | The basis for defining the North direction. Examples include: true, magnetic, local grid, and geodetic. |
| **North Dakota Well Code** | Used to categorize individual wells or properties (whichever constitutes the taxable entity) by relative oil well production rates as defined by North Dakota for determining and reporting North Dakota's gross production and extraction tax(es). Codes are assigned by the state of North Dakota. Codes are: h=high producer well (average daily production greater than 100 bbls for the month reported); m=moderate producer well (not stripper, not high producer); s=stripper well (certified as stripper by producer |
| **North South Descriptor** | The North/South descriptor that indicates the direction of a measurement from an identifiable line; e.g., lease; boundary; block. |
| **North South Footage** | The North/South footage or distance that represents the length of a measurement from an identifiable line; e.g., lease; boundary, block. |
| **Northing** | The map projection grid coordinate of a point measured northwards (positive) from the east-west line through the origin. |
| **Nose** | A short, plunging anticline without closure. |
| **Notch** | SEE: Notch Filter. |
| **Notch Filter** | Designated filter used to remove a narrow band of frequencies. |
| **Nozzle** | A projecting part with an opening; i.e., a piping connection on a vessel or pump, through which a fluid is discharged. |
| **Npsh** | SEE: Net Positive Suction Head. |
| **Nuclear Cement Log** | A well log of scattered gamma rays, differing from the density log in that the gamma-ray source and detector are so spaced as to be sensitive to the density of material in the annulus between casing and borehole wall. |
| **Nuclear Log** | A well log of some parameter in the borehole environment derived from techniques utilizing nuclear reactions taking place in the downhole logging tool and/or in the rocks surrounding the borehole. Nuclear logs usually are well logs obtained by using radiation sources in the logging tool. |
| **Nuclear Magnetism Log** | A well log designed to measure free fluid index. The free fluid index indicates the free fluid (the hydrogen in free fluid hydrocarbons and water) in the rocks surrounding the borehole. Also referred to as: Free Fluid Log or Nuclear Magnetic Resonance Log. |
| **Number Of Stages** | The total number of steps in a given process whereby one or more batches are pumped at different depth intervals within a wellbore. |
| **Nutating Disc** | Wobble disc used in a liquid flowmeter to transfer motion of the flowing fluid to the counter. |
| **Nymex** | New York Mercantile Exchange, a price reference point for natural gas futures contracts, with physical receipt and delivery at Henry Hub. |
| **Nymex Pricing** | A market pricing mechanism that provides an alternative to index pricing. |
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| **Obligation Date** | The date by which the company must comply with a provision stipulated in a lease instrument or related contract. |
| **Oblique Slip Fault** | A fault on which the slip is oblique to, rather than parallel or perpendicular to, the dip of the constituent rocks or dominant structure. Also referred to as Diagonal Slip Fault. |

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| **Observed Gravity** | This term is routinely used on run tickets to indicate API gravity. |
| **Observer** | Person in charge of the recording on a seismic acquisition crew. |
| **Observer's Report** | A report produced periodically or as appropriate (e.g., at end of line) by the person responsible for recording seismic and/or positioning data. |
| **Ocean Disposal** | The deposition of waste into an ocean or estuarine body of water. |
| **Ocs** | SEE: Outer Continental Shelf. |
| **Ocs Area** | A geographical unit on the Outer Continental Shelf (OCS) for identification purposes. The area, when suffixed to the OCS state, is used in the identification of OCS leases. The OCS area represents geographical areas recognized by the Minerals Management Service (MMS), a subdivision of the U.S. Department of the Interior. |
| **Ocs Area Abbreviation** | The designated abbreviation assigned to Outer Continental Shelf (OCS) geographical units for identification purposes and for use on maps and in data bases. |
| **Ocs Area Code** | An indicator assigned to Outer Continental Shelf (OCS) geographical units for identification purposes. |
| **Ocs Area Name** | The name assigned to geographical units on the Outer Continental Shelf (OCS) for identification purposes and for use on leasing maps and Official Protraction Diagrams (OPD). |
| **Ocs Block** | A subdivision of a geographically defined Outer Continental Shelf (OCS) area being either a Federal block or a state tract (depending on closeness to shore line) in which the surface rig site is located. May also be divided into large or small blocks. A block is identified by the unique code within each pseudo county as well as within the state or Federal line. There is an indication in the code to signify whether it is a state number or a Federal number. The state assigns the state number and the Fede |
| **Ocs Block Number** | An identifier corresponding to an Outer Continental Shelf (OCS) block. |
| **Ocs Block Portion Grouping** | Indicates what part of an Outer Continental Shelf (OCS) block is covered by the lease. Example groupings are: (A) All (lease covers entire block--a block being roughly 5,000 acres of land designated by the Bureau of Land Management (BLM) and expressed by the Lambert grid); (B) Portion (lease covers a zone of a block--a portion being a tract of land subdivided into partials; e.g., N 1/2, SW 1/4); (C) Zone (lease covers a zone of a block--state waters; state claims it as their water, but Federal gov |
| **Ocs Irregular Block** | An Outer Continental Shelf (OCS) block that is bounded by non perpendicular, nonuniformly spaced grid lines and is adjacent to a grid zone boundary or an Official Protraction Diagram (OPD)/ leasing map interface. |
| **Ocs Irregular Block Count** | The number of irregular blocks. An Outer Continental Shelf (OCS) block that is bounded by nonperpendicular, nonuniformly spaced grid lines and is adjacent to a grid zone boundary or an Official Protraction Diagram OPD)/leasing map interface. |
| **Ocs Lease** | A legal document authorized by and approved by the responsible regulatory agency on submerged lands lying seaward of and outside of lands beneath navigable waters as defined in the Submerged Lands Act. The lease conveys certain rights to the lessee to explore for and recover specified minerals or materials. |
| **Ocs Lease Type** | Used in the Outer Continental Shelf (OCS) leases to indicate the category of the lease; e.g., drainage; exploratory; wildcat. |
| **Ocs Lessee** | Specifically in offshore operations, the party authorized by a lease, or an approved assignment thereof, to explore for and develop and produce the leased deposits in accordance with the Outer Continental Shelf (OCS) regulations in Title 30 CFR 250. This term includes all persons holding that authority by or through the lessee. |
| **Ocs Order** | A rule or regulations promulgated by the Minerals Management Service that govern oil and gas operations for Outer Continental Shelf (OCS) waters under Federal control. |
| **Ocs Planning Area** | A group of contiguous blocks located in a particular region of the Outer Continental Shelf (OCS) that is considered to be a unit for administrative reporting and planning purposes. |
| **Ocs Planning Area Code** | The code assigned to a group of contiguous blocks located in a particular region on the Outer Continental Shelf (OCS) that is considered to be a unit for administrative reporting and planning purposes. |

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| **Ocs Planning Area Name** | The name assigned to a group of contiguous blocks located in a particular region on the Outer Continental Shelf (OCS) that is considered to be a unit for administrative reporting and planning purposes. |
| **Ocs Qualifying Type** | The method used to determine that a lease on the Outer Continental Shelf (OCS) is capable of producing in paying quantities and therefore qualifies a lease as producible, as defined in Title 30 Code of Federal Regulations (CFR) Part 250; e.g., logs; cores; tests. |
| **Ocs Qualifying Well** | A well on the Outer Continental Shelf (OCS) that is determined to be producible under Title 30 Code of Federal Regulations (CFR) 250.11; e.g., logs; cores, tests. Therefore, the lease is held by minimum royalty rather than by rental payment. |
| **Ocs Qualifying Well Name** | The well name assigned to the well on the Outer Continental Shelf (OCS) that is determined to be producible under Title 30 CFR 250.11, and therefore qualifies a lease as producible. |
| **Ocs Regular Block** | An Outer Continental Shelf (OCS) geographic area bounded by uniformly mutually perpendicular grid lines. |
| **Ocs Regular Block Portion** | An Outer Continental Shelf (OCS) block, usually bounded by uniformly spaced, mutually perpendicular grid lines, even though it usually is rectangular in shape as opposed to square. |
| **Ocs Section-6 Area** | The surface area of a submerged land area which was originally leased for mineral exploration by a coastal state. The area was subsequently determined to be subject to Federal jurisdiction and was transferred to the Federal government. The area is currently maintained under Section 6 of the Outer Continental Shelf Lands Act (OCSLA), as amended. |
| **Ocs Section-6 Lease** | A lease that was originally leased by a coastal state for mineral exploration. The area was subsequently determined to be subject to federal jurisdiction and was transferred to the Federal government. The area is currently maintained under Section 6 of the Outer Continental Shelf (OCS) Lands Act, as amended. |
| **Ocs Section-7 Area** | The surface area of a submerged land area of the Outer Continental Shelf (OCS) which is in dispute between the Federal government and a coastal state because of conflicting claims of jurisdiction. The dispute is evidenced by litigation. These areas may be included in an OCS mineral offering if a Section 7, the OCS Lands Act, as amended, agreement is in effect. |
| **Ocs Section-7 Lease** | A lease in an area of the Outer Continental Shelf (OCS) that is in dispute between the Federal government and a coastal state because of conflicting claims of jurisdiction. This dispute is evidenced by litigation. These areas may be included in an OCS mineral offering if a Section 7 (the OCS Lands Act, as amended) agreement is in effect. |
| **Ocs Section-8g Area** | The surface area of the federally administered portion of an Outer Continental Shelf (OCS) block that lies between the State Seaward Boundary and the limit of the 8G Zone. |
| **Ocs Section-8g Lease** | A lease that is in an area of the Outer Continental Shelf (OCS), as defined in the Code of Federal Regulations (CFR). |
| **Ocs Split Block** | A geographic area on the Outer Continental Shelf (OCS) that is intersected by an offshore boundary line; e.g., the seaward boundary of the Submerged Lands Act Grant; the 8(g) limit; or a maritime boundary or convention line. |
| **Ocs Split Block Area** | The surface area of an Outer Continental Shelf (OCS) block which is intersected by an offshore boundary line(s); i.e., the seaward boundary of the Submerged Lands Act Grant; the 8(g) limit; a maritime boundary or convention line. |
| **Ocs Split Block Code** | A designation for the area of an Outer Continental Shelf (OCS) block which is intersected by an offshore boundary line(s); i.e., as the seaward boundary of the Submerged Lands Act Grant; the 8(g) limit; a maritime boundary or convention line. |
| **Ocs Split Block Type** | The type of an Outer Continental Shelf (OCS) block which is intersected by an offshore boundary line(s); i.e., the seaward boundary of the Submerged Lands Act Grant; the 8(g) limit; a maritime boundary or convention line. |
| **Ocs State Area** | Submerged land areas subject to the jurisdiction of a coastal state, thatare on the Outer Continental Shelf (OCS). |
| **Ocs Tract** | A bidding unit in an Outer Continental Shelf (OCS) lease offering. |

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| **Ocs Tract Area** | The area contained in a tract at the time of an Outer Continental Shelf (OCS) lease offering to identify a leasable component as a single bidding entity. A tract may be comprised of one block or of portions of several blocks. |
| **Ocs Tract Id Number** | The identification number assigned by the Minerals Management Service (MMS) at the time of an Outer Continental Shelf (OCS) lease offering to identify a leasable component as a single bidding entity in a lease offering. A tract may be comprised of one block or of portions of several blocks as long as the total acreage in one entity does not exceed 5,760 acres. |
| **Ocs Well** | An offshore well in U.S. Offshore Federal Waters of the Outer continental Shelf (OCS). |
| **Ocs Well Number** | A federally assigned identifier to an Outer Continental Shelf (OCS) well. |
| **Ocs Wellsite Type** | The type of offshore well site or barge; e.g., barge; drillship; floater; artificial island/fill; semisubmersible mobile; tender. |
| **Ocs Zone Code** | An indicator identifing the coordinate points on the Outer Continental Shelf (OCS) defining the seaward limit of state, Federal, or contested waters along the coasts and around offshore islands of the U.S. and Canada. The code consists of the state code and the location type code. |
| **OCTG** | See Oil Country Tubular Goods |
| **Ocsla Section Number** | The applicable section number (6,7,etc.) of the Outer Continental Shelf Lands Act (OCSLA), as amended, that authorizes the lease issuance. |
| **Od** | The measurement for an outside surface diameter. Commonly abbreviated as: OD. |
| **Odorizer** | A container placed in a gas line to add a scent or malodorent to the gas for leak detection. |
| **Off Lease Gas** | Gas used on a lease other than the lease from which produced, or gas sold. |
| **Off Production** | A well completion when it is shut in or temporarily not able to produce. |
| **Off Seam Weld Beads** | A condition in which the inner and/or outer weld beads are sufficiently out of radial alignment with the abutting edges of the joint to cause incomplete penetration. Also referred to as: Out of Line Weld Beads. |
| **Official Protraction Diagram** | A diagram showing approved subdivisions (OCS blocks) of the Outer Continental Shelf. The areas included in each mineral lease are described in accordance with the appropriate OPD. OPD's are constructed on the Universal Transverse Mercator (UTM) grid system and utilize the United Nations' international map of the world alphanumeric numbering system. This worldwide system consists of main blocks (or zones) subdivided into minor blocks which correspond to individual OPD's. OPD's have 5,693 acres per bloc |
| **Official Protraction Diagram Number** | The identifier of an official protraction diagram (OPD), which can be of two types: an official protraction diagram or a leasing map. |
| **Offset** | (1) The horizontal distance between the seismic source location and the seismic receiver location. At acquisition, the offset is the recorded distance. This is referred to as the acquisition offset. During processing, the offset will vary in response to certain processes. Normal moveout will change the offset to zero. This is called the apparent offset.(2) A well drilled on an adjacent location. |
| **Offset Of Plate Edges** | The radial offset of plate edges in the weld seams. |
| **Offset Well** | A well drilled on a location adjacent to an existing well. An offset well may be drilled to compensate for production from an adjoining lease or tract. |
| **Offshore** | That geographic area which lies seaward of the coastline. |
| **Offshore Area** | SEE: OCS Area. |
| **Offshore Block** | SEE: OCS Block. |

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| **Offshore Facility** | Platforms and support systems such as oil and gas handling facilities, living quarters, offices, shops, cranes, electrical supply equipment and systems, fuel and water storage and piping, heliport, marine docking installations, communication facilities, navigation aids, and other similar facilities necessary in the conduct of offshore operations. |
| **Offshore Field Number** | A number assigned to an offshore field by the Federal government. |
| **Offshore Lease** | A mineral lease that is seaward of the coastline. |
| **Offshore Location Type** | Indicates the category of offshore location identified; e.g., onshore; offshore state; offshore Federal; Outer Continental Shelf. |
| **Offshore Well** | A well that is seaward of the coastline or bottomed seaward of the coastline. |
| **Offsite** | General term for facilities built off the immediate site of a processing plant or refinery but still required for operation of the plant. |
| **Offtake Percentage** | The share of production actually taken by lessee. |
| **Ogor C Adjusted Oil Production Volume** | The oil quantity used to adjust the monthly ending lease or unit inventory on the Oil and Gas Operations Report (OGOR) Part C. |
| **Ogor C Error Remark** | An explanation regarding an error on the Oil and Gas Operations Report (OGOR) Part C, the Sales Report. |
| **Ogor C Sold Oil Production Volume** | The oil quantity sold from inventory during a month and credited to a lease or unit as reported on the Oil and Gas Operations Report (OGOR) Part C. |
| **Ohmmeter** | A device used to measure units of electrical resistance. |
| **Oil** | SEE: Crude Oil. |
| **Oil Acreage** | The areal extent of the oil portion of a reservoir. |
| **Oil And Gas Separator** | SEE: Separator. |
| **Oil And Water Separation Facility** | A gunbarrel, settling tank, water knockout, or emulsion treater, installed to separate produced oil and water. |
| **Oil Barrels To Transporter Count** | The monthly count of barrels of oil which has been transferred to a transporter. |
| **Oil Beginning Inventory Volume** | The measured or calculated quantity of oil in storage tanks at the beginning of a specified period. |
| **Oil Bulk Saturation** | The percentage of the sample bulk volume that is saturated with oil. |
| **Oil Classification Code** | An indicator of the sulfur content of oil produced. |
| **Oil Column** | Thickness of an oil layer; e.g., appearing in the reservoir rock, used in a drillstem test or refining process, etc. |
| **Oil Condensate Inventory Adjustment Volume** | The volume of oil/condensate associated with a particular inventory adjustment; e.g., BS&W; lost; water draw off. |
| **Oil Condensate Production Test Rate** | The rate of oil or condensate production determined from the initial potential or production test. |
| **Oil Country Tubular Goods** | Oil Country Tubular Goods ( OCTG) The collective name for downhole tubing and casing |
| **Oil Ending Inventory Volume** | The measured or calculated quantity of oil in storage tanks at the end of a specific period. |
| **Oil Extraction Tax Due Amount** | The amount of Oil Extraction Tax due. |
| **Oil Extraction Tax Interest Amount** | The interest calculated on oil extraction tax for late payment and/or reporting. |
| **Oil Extraction Tax Paid Amount** | The amount of Oil Extraction Tax that was paid with the return. |

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| **Oil Extraction Tax Penalty Amount** | The amount of penalty or penalties associated with the oil extraction tax for late payment and/or reporting. |
| **Oil Extraction Tax Remitted By Others Amount** | The amount of Oil Extraction Tax that is to be remitted by others. |
| **Oil Field** | SEE: Field. |
| **Oil Gravity Measurement** | SEE: API Gravity. |
| **Oil Gravity Observed Temperature** | The temperature at which the observed gravity of the oil was measured. |
| **Oil Immersed Equipment** | Equipment immersed in electrical insulating oil for the purpose of preventing an ignitible or corrosive gas or vapor from coming in physical contact with the equipment or for the purpose of reducing arcing of circuit breaking devices. Also referred to as Oil Sealed. |
| **Oil Or Condensate Rate Per Well Test Before Work** | The volume of oil or condensate produced during a well test, calculated over 24 hours, before the proposed work has started. |
| **Oil Patch** | A colloquial expression for an oil field. If one goes to an oil field, then one goes to the oil patch. |
| **Oil Produced Prior To Test Volume** | The volume of oil which is produced from the current completed interval prior to performing a regulatory potential test. |
| **Oil Reservoir** | A reservoir that contains hydrocarbons predominantly in a liquid (single phase) state. |
| **Oil Reservoir With An Associated Gas Cap** | A reservoir that contains hydrocarbons in both a liquid and gaseous (two phase) state. |
| **Oil Resistant** | Ability to withstand exposure to oil. |
| **Oil Sales Volume** | The volume of oil sold to a buyer. |
| **Oil Sand** | Any oil saturated sand body. |
| **Oil Saturation** | SEE: Saturation; Oil Saturation Percent. |
| **Oil Saturation Percentage** | The percentage of the porosity volume that is saturated with oil. |
| **Oil Saturation Weight** | The percentage of the sample weight that is oil. |
| **Oil Saver** | A device used to prevent the escape of oil and gas from the well when pulling or running tubular goods, sucker rods, or swab line. Rubbers are normally used as the wiping and sealing medium. |
| **Oil Shale** | Shales high in organic content and yield liquid hydrocarbons upon retorting. This is probably the source rock for the creation of hydrocarbon. |
| **Oil Spill** | The accidental discharge of oil. Methods of oil spill control include chemical dispersion, combustion, mechanical containment, and absorption. |
| **Oil Squeeze** | The forcing of oil into the reservoir rock to improve the producing characteristics of a well completion. |
| **Oil String** | A string of casing used to protect and to keep the borehole open down to or through the pay zone. |
| **Oil Tanks Count** | The number (count) of oil tanks on a facility. |
| **Oil Transporter Fuel Volume** | The volume of oil or condensate used for oil transporter fuel. |
| **Oil Water Contact** | The contact between the accumulation of oil in a reservoir and its bottom water. |
| **Oil Water Contact Depth** | The measured depth at the point between the accumulation of oil in a reservoir and the bottom water underlying the oil. |
| **Oil Water Contact Measured Depth** | The measured distance at the point between the accumulation of oil in a reservoir and the bottom water underlying the oil. |
| **Oil Water Contact True Vertical Depth** | The subsea depth to the oil/water contact in the borehole. |

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| **Oil Water Cut** | The oil to water ratio that is determined after analyzing a measured sample of produced fluid from a well. For example: a 50/50 cut would mean 50% oil and 50% water. |
| **Oil Well** | A well capable of producing liquid hydrocarbons in sufficient quantity to be designated as an oil well by a regulatory agency. |
| **Oil Well Completion** | A well completion in an oil reservoir or in the oil accumulation of an oil reservoir with an associated gas cap. |
| **Oil Well Gas** | (1) Gas associated with oil.(2) Gas produced from a well designated as an oil well. |
| **Old Taxes Reimbursed Percentage** | The percent of existing taxes on gas purchased for which the buyer is obligated to reimburse seller. |
| **Old Total Depth Prior To Deepening** | The measured depth of the wellbore bottomhole prior to reentering the wellbore to drill deeper. |
| **Old Well** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, any well other than a new well. |
| **Oldest Formation Name** | The name of the oldest formation that was penetrated by the wellbore. Not necessarily Formation At Total Depth. |
| **On Lease Gas** | Gas used in the operation of the lease from which it was produced. |
| **One Degree Quadrangle** | The area enclosed by two lines of latitude, one degree apart, forming two sides of the area and two lines of longitude, one degree apart , forming the other two sides. |
| **One Phase Fluid-rock System** | A fluid-rock system characterized by a single mobile phase, which behaves as the wetting phase. An aquifer is an example of this type of fluid-rock system. |
| **Onshore Offshore Code** | An indicator of whetheria well is located onshore or offshore. |
| **Opd** | SEE: Official Protraction Diagram. |
| **Open Area Percentage** | Ratio of the area of the apertures to the total area of the screening surface. Also referred to as: Open Area. |
| **Open Ended** | A piece of pipe or tubing not equipped with a fitting for closing it. |
| **Open Flow Potential** | SEE: Calculated Absolute Open Flow. |
| **Open Flow Test** | A test to determine the volume of gas or oil that will flow from a well during a given time span when all surface control valves are wide open. |
| **Open Fracture Count** | The number of open fractures in a depth interval. |
| **Open Hole Bottom Depth** | The measured depth to the bottom of the open hole portion of a borehole. |
| **Open Hole Top Depth** | The measured depth to the top of the open hole portion of a borehole. |
| **Open Interest Count** | The number of futures or options contracts that have been established and have not yet been offset or exercised; i.e., the number of outstanding contracts. |
| **Open Lead** | A wet opening in the sea ice of navigable width, not thermally induced. A small, wet opening will be considered a crack. |
| **Open Storage** | Storage of oil production in open surface pits or earthen tanks. |
| **Open Type Platform** | A platform that has sufficient natural ventilation to minimize the accumulation of vapors. |
| **Open Water Treating System** | A system of treating water in which the water comes in contact with air. |
| **Openhole** | The wellbore segment that has no casing. |
| **Openhole Interval** | An interval in a wellbore that is not cased. This interval may be related to a well completion to describe the origin or destination of fluid flow. |

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| **Opening Ratio** | The ratio of the pressure in the wellbore to the pressure required to open the blowout preventer. |
| **Operating Agreement** | A document that establishes the basis of cost, production and ownership of property, and the operator's rights, powers and limits in a joint venture. |
| **Operating Pressure Measurement** | The actual pressure to which a particular system or system component is subjected during normal operations. |
| **Operation Completion Date** | 1. The date well operations or activities were suspended. 2. The date a drilling rig moves off or is ready to move off the well location. |
| **Operation Start Date** | The date on which an activity begins. |
| **Operation Target Depth** | The anticipated depth at which work is to be done. |
| **Operations And Maintenance** | All operations other than exploration programs, drilling, and construction projects conducted under the terms of the agreement in effect. |
| **Operator** | The individual, partnership, firm, or corporation having control or management of operations for a facility or on the leased area or a portion thereof. The operator may be a lessee, designated agent of the lessees, or holder of operating rights under an approved operating agreement. |
| **Operator Administrative Contact E-mail Address** | The electronic mail ( E-Mail) address supplied for the operator. |
| **Operator Administrative Contact Fax Number** | The facsimile number supplied by the operator. |
| **Operator Administrative Contact Fax User Id** | The Fax User ID supplied by the operator for financial information. |
| **Operator Administrative Contact Name** | The name of the individual supplied by the operator to be contacted for financial information. |
| **Operator Administrative Contact Telephone Number** | The telephone number supplied by the operator for financial information. |
| **Operator Appropriation Number** | The unique number assigned by the operator to the proposal used for identification, approval, and billing purposes. |
| **Operator Change Effective Date** | The date the new operator is responsible for operating the property. |
| **Operator Contract Number** | The unique number assigned by the operator to the Joint Operating Agreement (JOA). |
| **Operator Field Name** | The field name as carried by the operator, if different from the regulatory field name. |
| **Operator Identifier** | An identifier assigned by the regulatory agency to the operator. |
| **Operator Lease Number** | The number assigned to a lease by the operator. |
| **Operator Name** | The name of the individual, partnership, firm or corporation having control or management of the operations of the leased area, facility, etc., or a portion thereof. The operator may be a lessee, a designated agent of the lessees, or holder of operating rights under an approved operating agreement. |
| **Operator Number** | The number assigned by a regulatory agency to identify an individual, partenership, firm, or corporation having control or management of operations for a facility, or on the leased area , or a portion thereof. |
| **Operator Office Code** | A unique code provided by originator of the AFE to assist with internal routing. Examples are: building location, individual, User ID, Server ID, internal electronic mail address, etc. |
| **Operator Property Or Facility Code** | The unique identifier assigned by the operator identifying the property or facility. |
| **Operator Property Or Facility Name** | The name assigned by the operator to the property or facility. |
| **Operator Suffix** | A code assigned by the regulatory agency to operator numbers on tape transmitted reports. |
| **Operator Technical Contact Fax Number** | The Fax number supplied by the operator for technical, engineering, or geological information. |
| **Operator Technical Contact Fax User Id** | The Fax User ID supplied by the operator for technical, engineering, or geological information. |

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| **Operator Technical Contact Name** | The name of the individual supplied by the operator for technical, engineering, or geological information. |
| **Operator Technical Contact Telephone Number** | The telephone number supplied by the operator for technical, engineering, or geological information. |
| **Operator Technical Contact X.400 E-mail Address** | The X.400 E-Mail address supplied by the operator for technical, engineering, or geological information. |
| **Operator Working Interest Percentage** | The percentage of the operator's interest in expenditures. |
| **Optimum Water** | The amount of water used in a cement slurry which gives the slurry the best properties for its particular application. |
| **Option** | A right, but not an obligation, to buy or sell a commodities contract at a set (strike) price for a specific period of time. |
| **Order Number** | A number identifying an order or authorization by a regulatory agency. |
| **Organic Amine Inhibitor** | A chemical consisting of carbon, hydrogen, and nitrogen which reduces corrosion rates. |
| **Organic Matter Composition** | The abundance of an organic matter substance within a lithologic sample. |
| **Organic Matter Type** | A description of the organic matter type present in a sample based on the Van Krevelan classification; e.g., i; ii-iii; iii-ii. |
| **Organization** | An administrative and functional structure such as a business or a political party. |
| **Ori** | SEE: Overriding Royalty Interest. |
| **Orientation** | Direction without a length. An orientation can be given as an angle or azimuth when the data is being described on a plane, or as a pair of such measures when the data is located in 3D space. |
| **Orienting Technique** | Used in positioning the tools that change the inclination and the direction of the borehole axis. |
| **Orifice Coefficient** | The factor which compensates for the orifice diameter and the conditions of the flowing fluid when converting a chart reading to the actual rate of flow. |
| **Orifice Fitting** | A device placed in a gas line to accommodate the orifice plate. |
| **Orifice Flange** | A device that holds the orifice plate in the center of the meter tube. |
| **Orifice Meter** | A gas or liquid flow measuring device employing a thin plate with an orifice inserted in a pipeline to create a pressure differential and having a mechanism for indicating or recording the amount of pressure differential. When measuring gas, due to its compressibility, the static pressure of the gas on the line must also be determined. |
| **Orifice Meter Station** | The complete station for measuring gas which includes the orifice plate, flanges, fittings, flow recorder and associated piping and tubing. |
| **Orifice Plate** | A plate with centered hole of precise diameter placed as a restriction in a pipe to determine flow rates by measuring pressure drop across the plate. |
| **Orifice Plate Holder** | Two flanges bolted together to hold an orifice plate. Used in lieu of an orifice fitting. |
| **Orifice Plate Size** | The diameter of the orifice plate. |
| **Orifice Well Tester** | SEE: Orifice Meter. |
| **Original Advance Rental Amount** | The total amount paid at the beginning of an advance rental. |
| **Original Advanced Rental Date** | The date an advanced rental occurred. Normally the date on the advance rental check. |
| **Original Amendment Code** | An indicator of whether the document is an original or an amendment. |
| **Original Completion** | The earliest completion made in a borehole/sidetrack. |
| **Original Completion Date** | The date that the first well completion was installed within the wellbore. |

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| **Original Completion Type** | The original (first) type of well completion installed; e.g., abandoned (producer); gas condensate; abandoned (no production); gas; associated gas; junked; oil; shut in gas well; injection; suspended. |
| **Original Condensate In Place** | The original amount of condensate that is estimated to exist in a reservoir prior to production. |
| **Original Free Gas In Place** | The original amount of free gas that is estimated to exist in a reservoir prior to production. |
| **Original Lease Date** | The date the lease instrument was executed. This may not be the same as the lease effective date. |
| **Original Lessee Name** | The name(s) of the original lessee(s) of the mineral lease instrument. |
| **Original Lessor Name** | The name(s) of the original lessor(s) of the mineral lease instrument. |
| **Original Oil In Place** | The original amount of crude oil that is estimated to exist in a reservoir prior to production. |
| **Original Overpayment Amount** | The total amount paid at the beginning of an overpayment. |
| **Original Payment Check Amount** | The amount of the original payment. |
| **Original Reservoir Pressure Measurement** | The reservoir pressure measurement recorded or interpreted to exist before any fluid extraction from the reservoir. |
| **Original Reservoir Temperature** | The original (first) static reservoir temperature measurement recorded. All other fluid properties are assumed to be referenced to this temperature. |
| **Original Solution Gas In Place** | The original amount of solution gas that is estimated to exist in solution in the crude oil in a reservoir prior to production. |
| **Orthogonal** | At right angles to (90 degrees). |
| **Oscillogram** | A common term for photograph of data displayed on a cathode ray tube (CRT). |
| **Otc** | SEE: Over-the-Counter. |
| **Other** | A Reference category for references not appropriate to the other categories. |
| **Other Penalty Order Number** | A number identifying an order or authorization by a regulatory agency permitting some form of exception or relief from the agency's general rules, practices or policies not hertofore described. |
| **Outage** | The difference between the full interior volume of a storage or transport vessel and the volume of liquid therein. For gasoline and lighter products, the regulatory bodies set a minimum limit for outage in order to provide space for expansion of the liquid. |
| **Outcrop** | A surface exposure of bed rock. |
| **Outcrop Sample** | Rock and associated material collected from surface exposures. |
| **Outer Continental Shelf** | All submerged lands lying seaward and outside of the area of lands beneath navigable waters as defined in the Submerged Lands Act (43 U.S.C. 1301) and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control. This is for all areas except for the Gulf coast of Florida and offshore Texas. The Outer Continental Shelf (OCS) generally starts at the seaward boundary of the Submerged Lands Act grant to the states, or 3 geographical miles from the coastlin |
| **Output Horsepower** | The horsepower that is put out by an operating system. |
| **Outrigger** | A structural extension of the mast or pole base protruding at approximately 90 degrees from the longitudinal axis of the rig to provide overturn stability. |
| **Outside Company Contract Number** | The outside company's number for a seller's contract. |
| **Outside Operator Investment Expenses Interest** | The interest used by the outside operator to calculate payout based on investment and expenses. |
| **Over 60 Bopd Flag** | An indicator of whether oil production from a well exceeds sixty barrels per day (BOPD). |
| **Over Under Delivery** | The extent to which one or more owners of a property have sold or used a volume of gas which is more or less than their gross working interest share of the total gas production. |

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| **Over-the-counter** | A market for swaps or options in which financial products are traded off exchange; i.e., not on a recognized commodities exchange, such as NYMEX. |
| **Over/under Production Volume** | Volume of produced hydrocarbons which deviates above or below the permitted rate for a specific period of time. |
| **Overbalance** | The condition in the borehole whereby the hydrostatic pressure of the fluids in the borehole is greater than the reservoir pressure at the specified depth. |
| **Overburden Pressure Estimate** | The estimated overburden pressure at the specified depth, expressed as equivalent column of drilling fluid of a given weight. |
| **Overburden Pressure Measurement** | SEE: Lithostatic Pressure. |
| **Overfill** | Longitudinal ridges formed during bar rolling when the bar is too large for the rolling pass it is entering. |
| **Overflow** | The discharge stream from a centrifugal separation that contains a higher percentage of liquids than does the feed. |
| **Overflow Header** | A pipe, tube, or conduit into which two or more devices discharge their overflow. |
| **Overflow Manifold** | An arrangement by which the overflow from one or more solids separation devices, or from one or more overflow headers can be diverted to various directions. |
| **Overflow Opening** | The actual opening through which the overflow leaves the centrifugal separation. |
| **Overhead** | (1) Fiscal: All costs not readily identifiable with a lease or product. Also called : Indirect Costs.(2) Fractionator: The vapor stream leaving the top tray of a fractionator. |
| **Overhead Escalation Flag** | An indicator of whether or not the operating agreement provides for annual escalation of overhead rates. |
| **Overhead Percentage Development** | The operating agreement may provide that the operator will charge the joint interest account using a percentage of the development costs rather than the normal per well overhead charge. |
| **Overload** | To feed separable solids to a separating device at a rate greater than its solids discharge capacity. |
| **Overpayment Balance Volume** | The balance of a volume associated with an unrecovered overpayment. |
| **Overpayment Date** | The date an overpayment occurred. Normally the closing date the actual overpayment occurred. |
| **Overpayment Taken Amount** | Total of overpayment notice taken. |
| **Overpressure** | (1) Pressure in a process component in excess of the maximum allowable working pressure; i.e., pipelines maximum allowable operating pressure.(2) Reservoir pressure in excess of lithostatic pressure. |
| **Overproduction Volume** | The volume of production that exceeds its allowable for the well or leasehold. |
| **Overriding Royalty After Payout Interest Amount** | An owner has retained an overriding royalty interest (ORI) due to a farm out of acreage to an outside party. Once the acreage has paid out (the expenses recovered from the revenue), then the owner has the option to escalate its overriding royalty interest. The percentage represents the owner's interest after the acreage has paid out. |
| **Overriding Royalty Before Payout Interest Amount** | The owner has retained an overriding royalty interest (ORI) in a property that is farmed out to an outside party. The ORI has an option to be converted or escalated at time of pay out. This is the owner's overriding royalty interest before the property has paid out. |
| **Overriding Royalty Interest** | An economic interest created in addition to the royalty named in the lease. It can be made payable out of all or a fraction of the revenue or production attributable to the net working interest; i.e., working interest less the royalty interest and production payment interest, if any. An overriding royalty interest (ORI) is limited by the duration of the lease under which it is created. Commonly abbreviated as: ORI. |
| **Overshot** | A fishing tool used to lower over the lost or stuck pipe or sucker rods thereby to obtain a frictional grip thus to permit recovery from the wellbore. It is the female counterpart of a spear. |
| **Oversize** | Material having particle size larger, at least in one dimension, than a specified aperture. |

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| **Owner** | A person, group of people, corporation, etc., that has monetary rights and interest in any aspect of mineral exploration, development and production; e.g., working interest owner; royalty interest owner; land owner. |
| **Owner Check Amount** | The total amount an owner receives on a check. |
| **Owner Gross Acres** | The total surface or surface equivalent acres for a land property (or tract) in which the owner either owns some type of interest in any or all of the minerals or will receive revenue from the sale of minerals thereunder. |
| **Owner Gross Interest** | Identifies the gross interest (unadjusted for nonoperating burdens; e.g., royalty; overriding royalty.) applicable to the owner. |
| **Owner Gross Interest Check Amount** | The total money that is included on a check for all an owner's lease interests before taxes. |
| **Owner Interest Effective Date** | The date an owner's interest in a lease becomes active. |
| **Owner Interest Termination Date** | The date an owner's interest in a lease becomes inactive. |
| **Owner Lease Net Amount** | The amount that is calculated for an owner's interest in a lease. This includes amount payable and corrections deducted. |
| **Owner Lease Volume** | The total lease volume times the owner decimal of interest. |
| **Owner Net Acres** | Gross acres times fractional economic interest owned (working interest). Term may apply to leasehold, fee, mineral, royalty acres, etc. |
| **Owner Net Rental Participation Interest Percentage** | The percentage indicating the portion of the total rental to be borne by each operating interest owner in a land property. |
| **Owner Rental Amount** | Total amount of delay rental paid to an interest owner. |
| **Owner Transfer Type** | Indicates how the current owner obtained his interest. Examples are: Inheritance (Escheat, Purchase); Assignment (Gift, Conveyance); Litigation awards (Garnishment, Compromise Agreements). |
| **Ownership Transfer Effective Date** | The date on which the documented transfer of ownership will become effective. |
| **Oxidation** | (1) A chemical change or reaction in which oxygen unites or combines with other elements or substances. Organic matter may be oxidized or broken down by the action of aerobic bacteria as in certain waste-water treatment procedures.(2) Electrochemically, as the loss of electrons at the anode of a corrosion cell. |
| **P** | |
| **P** | The phenolphthalein alkalinity of the filtrate, reported as the number of milliliters of 0.02 Normal (N/50) acid required per milliliter of filtrate to reach the phenolphthalein end point. |
| **P & A** | SEE: Plugged and Abandoned. |
| **P Wave** | An elastic body wave in which particle motion is in the direction of propagation. |
| **Pack Ice** | Any sea ice other than fast ice. |
| **Pack Off** | To place a packer in the wellbore and activate it such that it forms a seal between the tubing and casing. |
| **Packer** | A device, usually employing rubber, used to produce a seal between tubing, casing, or drill pipe and the borehole wall or casing. |
| **Packer Depth** | The measured depth at which the packer was set. |
| **Packer Flowmeter** | A spinner type velocimeter which utilizes an inflatable packer bag to divert the fluid flow through the spinner assembly. |

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| **Packer Fluid Type** | Any fluid placed in the annulus between the tubing and casing above a packer. Along with other functions, the hydrostatic pressure of the packer fluid is utilized to reduce the pressure differentials between the formation and the inside of the casing and across the packer itself. |
| **Packer Test** | Application of hydraulic pressure either through the tubing or annulus to assure that the packer is properly set and sealed. |
| **Packer Type Code** | An indicator of the name and model of the packer used in the operation. |
| **Packing** | Material used in the stuffing box of a valve or between flange joints to maintain a leakproof seal. |
| **Packing Gland** | The metal part that compresses and holds the packing in place in a stuffing box. |
| **Packing ( Process)** | Any material, arranged to present considerable surface area and voids, for use in place of bubble trays. Expanded metal bundles or small rings, spirals or saddles made of ceramic, carbon or metal are usually used. |
| **Page Count** | The total number of pages contained in the report. |
| **Page Number** | The alpha/numeric field used for identification purposes. |
| **Paid Up Lease Flag** | An indicator of whether or not a delayed rental on a lease has been paid. |
| **Paleontological Sample Taken Flag** | An indicator of whether a paleontological sample was taken. |
| **Paleontology** | The branch of geology dealing with the study of life in past geologic time, based on fossil plants and animals and including phylogeny, their relationships to existing plants, animals and environments, and the chronology of Earth's history. |
| **Paleontology Marker Age** | The age in millions of years of the paleontology marker. |
| **Panel** | SEE: Stiffened Panel. |
| **Panel Stress** | Stress on stiffened panels resulting from local applied pressures or transverse loads. |
| **Paraffin** | A hydrocarbon having the formula CnH2n+2; e.g., Methane, ethane. Heavier paraffin hydrocarbons form a waxlike substance; i.e., hydrocarbons C18H38 and heavier. These heavier paraffins often accumulate on the walls of tubing amd other production equipment restricting or stopping the flow of oil. |
| **Paraffin Base Crude Oil** | A crude oil that will yield large quantities of paraffin in the process of distillation. |
| **Paraffin Inhibitor** | A chemical that, when injected into the production string prevents or minimizes paraffin deposition. |
| **Paraffin Scraper** | Any tool used to remove paraffin from inside tubular goods. |
| **Paraffin Treatment** | The injecting of a chemical into the production string which removes paraffin deposition. |
| **Parallel Flow** | SEE: Laminar Flow. |
| **Parish Name** | Political subdivision of the state of Louisiana; such subdiviisons in other states are called counties. |
| **Parish Name Abbreviation** | An abbreviation of the parish name. |
| **Part** | An individual piece used in the assembly of single equipment units; e.g., body, bonnet, gate, are parts of a valve. Also may be a piece in raw material form. |
| **Participating Area Name** | The name given to the part of a unit area to which production is allocated in the manner described as in a unit agreement. |
| **Participating Royalty** | A royalty interest, independent of any existing lease, which shares in some lease benefits other 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 case which other lease benefit is joined to the royalty interest. |
| **Particle** | A minute unit of matter, usually a single crystal, or of regular shape with a specific gravity approximating that of a single crystal. |

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| **Particle Size Distribution** | The fraction or percentage of particles of various sizes or ranges of sizes as measured through a sieve. |
| **Particulate** | A finely divided solid or liquid particle in the air or in an emission. Particulates include dust, smoke, fumes, mist, spray, and fog. |
| **Partner Allocation Interest Percentage** | The percentage that is used to allocate costs that appear on the outside operator's joint interest billings to the leases and/or units that the facilities serve. It is the percentage that is used for the other partner's interest in the lease. |
| **Partner Rental Percentage** | The percentage of the total rental which is borne by the partner in the lease. |
| **Party** | SEE: Seismic Crew. |
| **Pass** | One of several similar repetitive operations; i.e., in pipe welding, a pass is one welding circuit of the pipe; in a tubular exchanger, a pass is the flow of fluid from one end to the other, either in the tubes or the shell. |
| **Pass Through Royalty** | A royalty paid on production from a well drilled upon or through one tract, and bottomed under another tract. |
| **Pawl** | A device for positively holding a member against motion in one or more directions. |
| **Pay Code** | Indicates how often a lease number can receive a mineral check. Examples are: Paid when interests are accumulated to a specific amount or more; Paid currently regardless of amount accrued; Paid quarterly; Paid annually; Semi-annual payment. |
| **Pay Formation** | The formal or informal stratigraphic zone that contains producible oil and/or gas in commercial quantities. |
| **Pay Rent Required Flag** | An indicator of whether or not a provision requiring payment of rent regardless of production or expiration of term. |
| **Pay Sand** | SEE: Pay Zone. |
| **Pay Zone** | The reservoir rock interval that will yield commercial quantities of hydrocarbons. |
| **Pay Zone Name** | The name which identifies the pay zone. |
| **Pay Zone Thickness** | The stratigraphic thickness of reservoir rock that will yield commercial quantities of hydrocarbon. |
| **Payee Name** | The name of the organization where the payment should be remitted. |
| **Payload** | SEE: Load Working. |
| **Payment Date** | The date of receipt of original payment. |
| **Payment Identifier** | A unique number to identify the payment associated with the report. |
| **Payment Information Remark** | Additional textual information for remitting payment. |
| **Payment Method Code** | An indicator of the method used to remit payment; e.g. check; wire transfer; direct pay; etc. |
| **Payment Recovery Flag** | An indicator that overpayment or advanced rental recovery is being made from an owner. |
| **Payment Recovery Percentage** | The percentage of an owner's interest that goes toward recovering an advance rental or overpayment. |
| **Payor Identifier** | The payor of royalties due. |
| **Payout** | That point when the revenue received, net of taxes and royalties, equals the capital and operating costs expended plus penalty, if applicable for the project or operation. |
| **Payout Statement** | A statement which details status of payout based on revenue less expenditures and penalties if applicable, as required by the agreement. Generally, these statements contain current period and inception to date data. |
| **Pe** | Abbreviation for: Polyethylene, petroleum engineer. |

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| **Pearlitic** | Alternate parallel platelets of iron and a microstructural arrangement having iron carbide in one grain. May also refer to a steel with a preponderance of such carbine arrangements. |
| **Pebble** | A clastic sedimentary particle with a diameter between 4 and 64 millimeters, based on the Wentworth Scale of Measurement. |
| **Pedestal** | The supporting substructure upon which a revolving upper structure is mounted. |
| **Peening** | SEE: Abrasion. |
| **Penalty Amount** | The amount of penalty or penalties from an agency ordered assessment. |
| **Penalty Clause** | A legal instrument (such as a unit agreement) providing for the assessment of a penalty under certain stated circumstances. |
| **Penalty Description Remark** | A description of the penalty or penalties resulting from agency ordered adjustment of well allowable. |
| **Penalty Provisions Flag** | An indicator of whether or not the operating agreement allows a provision to the nonoperator to elect to not participate in the work that is being requested by the operator. The nonoperator can notify the operator that they elect to be carried under the nonconsent provisions of the contract. The operator and all consenting parties will carry the nonconsenting parties interest. The penalty provision provides that the consenting parties will recover in addition to the actual costs incurred, an additional |
| **Pendant** | A nonoperating standing rope of specified length with fixed end connections. Also referred to as: Guy Rope. |
| **Pendulum Effect** | Refers to the pull of gravity on a body; i.e., as a pendulum to return to a vertical position. |
| **Pendulum Force** | The force of gravity on a body as on a pendulum. |
| **Penetrameter** | SEE: Magnetic Field Indicator. |
| **Penetration** | The maximum depth in a material from which indications can be measured. |
| **Penetration Rate** | SEE: Drill Bit Penetration Rate. |
| **Penetrator** | A localized spot of incomplete fusion. |
| **Peptization** | An increased dispersion due to the addition of electrolytes or other chemical substances. |
| **Peptized Clay** | A clay to which an agent has been added to increase its initial yield; e.g., soda ash is frequently added to calcium montmorillonite clay. |
| **Percentage Depletion** | In federal income taxation, the method of figuring the depletion allowance on the basis of an arbitary percentage of gross income from production. |
| **Percentage Of Proceeds Contract** | SEE: Casinghead Gas Purchase Contract. |
| **Percolation** | Downward infiltration of water through the pores or spaces of a rock or soil. |
| **Perfect Thread Length** | A design length from the end of pipe or coupling to a specified location. For buttress thread this is an L7. Some threads may have unfinished crests. |
| **Perforated Cylinder Centrifuge** | A mechanical centrifugal separator in which the rotating element is a perforated cylinder (the rotor) inside of and concentric with an outer stationary cylindrical case. |
| **Perforated Effective Permeability** | The perforated effective permeability of a Berea sandstone core target is the effective permeability to kerosine of the core target after it has been perforated at the outflow end by a bullet or shaped charge, base on the original cross section and length of the core target. Normally abbreviated as: kp. |
| **Perforated Pad Stabilizer** | Stabilizer with a built on perforated pad to extend the outer diameter. Also referred to as: Perforated Sleeve Stabilizer. |
| **Perforated Rotor** | The rotating inner cylinder of the perforated cylinder centrifuge. |

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| **Perforation** | An interval of uncased wellbore or casing pierced with holes after it has been set in the wellbore, to allow flow of the reservoir fluids. |
| **Perforation Abandonment Date** | Date the specified perforated interval was squeezed or abandoned by any means. |
| **Perforation Balance Pressure Measurement** | The differential between the hydrostatic pressure in the casing and the reservoir pressure when the perforations are made. Positive number indicates overbalance; negative number indicates underbalance. |
| **Perforation Charge Size** | The size of the charge per shot used during the perforation operation. |
| **Perforation Cleaning Type** | Type of perforation cleaning operation carried out before the gravel packing operation; e.g., acidization; surge; wash. |
| **Perforation Date** | The date a perforation activity was performed on the well. |
| **Perforation Diameter** | The size (diameter) of the perforations. |
| **Perforation Fluid Type** | The type of fluid within the casing during the perforation activity. |
| **Perforation Gun Outside Diameter** | The outside diameter of the perforating gun. |
| **Perforation Gun Type** | The type of perforating gun used to shoot the given interval. |
| **Perforation Interval Count** | The number (count) of separate intervals perforated or open to production within the perforation interval top and base depths. |
| **Perforation Interval Measured Base Depth** | The measured depth to the deepest perforation in the perforated interval. |
| **Perforation Interval Measured Top Depth** | The measured depth to the shallowest perforation in the perforated interval. |
| **Perforation Interval Status** | Identifies the state or conditions of perforations within a perforated interval; e.g., open; clogged; squeezed. |
| **Perforation Interval True Vertical Base Depth** | The true vertical depth to the deepest perforation in the perforated interval. |
| **Perforation Interval True Vertical Top Depth** | The true vertical depth to the shallowest perforation in the perforated interval. |
| **Perforation Net Open** | The net perforated distance open to production. |
| **Perforation Phasing** | Radial phasing of perforations within the perforation interval. Expressed as angular units between holes. |
| **Perforation Set** | A group of perforations within a wellbore having common phase, spacing, hole diameter, etc., probably from a common genesis. |
| **Perforation Shot Density** | The perforation density; i.e., shots per unit length. |
| **Perforation Surge Volume** | The volume of fluid flowed from the well completion after the perforation activity. |
| **Perforation Type** | The method used to perforate the casing. Examples are: bullet, jet, combination. |
| **Perforations Midpoint True Vertical Depth** | The true vertical depth at the midpoint of the completion perforations. |
| **Period Activity** | An activity that takes place over a period of time and has both a start and end datetime. |
| **Period Activity End Date** | The end datetime of the period activity. |
| **Period Activity Start Date** | The start datetime of the period activity. |
| **Permafrost** | Soil with partially or completely frozen pore water. Sometimes defined as soil at a temperature below O C. Used only to indicate ice bonded soil. |
| **Permafrost Depth** | The measured depth to the top of permafrost. |
| **Permanent Magnet** | A magnet or body which retains a strong residual magnetic field. |

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| **Permeability** | A property of rock denoting its ability to pass fluids and commonly used by the oil industry to distinguish between rocks which will give up no fluids and those which will produce oil, gas and water. |
| **Permeability ( 90 Degree)** | Absolute permeability measured horizontally on a conventional core sample in the direction perpendicular to the direction for maximum permeability. |
| **Permeability Method** | The method of analysis used to determine the permeability of the sample. |
| **Permit** | The written permission providing specific rights to perform those activities within stated conditions and restrictions as specified therein. Normally granted by the agency having jurisdiction. In the absence of a jurisdictional agency, the instrument may be executed by the operators involved or, as in the case of a geophysical exploration permit, by the owner(s). Examples include: commingling permit, drilling permit, exploratory permit, geophysical exploration permit; well permit. |
| **Permit Number** | The number assigned to a permit approval by the regulatory agency to |
| **Permit Report Type Code** | An indication of the type of permit or report being submitted. |
| **Perpendicular** | SEE: Orthogonal. |
| **Personal Expense** | Travel and other reasonable reimbursable expenses. |
| **Petrography** | The branch of geology dealing with the description and systematic classification of rocks, especially igneous and metamorphic rocks, and especially by means of microscopic examiniation of thin sections. |
| **Petroleum** | Oil or gas obtained from the rocks of the earth by drilling down into a reservoir rock and piping them to the surface. |
| **Petroleum Excise Tax Due Amount** | The amount of Petroleum Excise Tax due. |
| **Petroleum Industry Data Exchange** | The Petroleum Industry Data Exchange is a global forum for delivering the process, information and technology standards that facilitates seamless, efficient electronic business within the oil and natural gas industry and its trading community. |
| **Petroleum Product Exchange System** | An EDI system that provides for the collection of bill of lading and bulk custody information on finished product exchange transactions. Commonly abbreviated as: PETROEX. |
| **Petrology** | The branch of geology dealing with the origin, occurence, structure and history of rocks. |
| **Petrophysics** | The study of physical properties of reservoir rocks, especially porosity and permeability. |
| **Ph** | The negative logarithm of the hydrogen ion concentration. The lower the pH (more acidic), the higher the concentration of hydrogen ions. The higher the pH (more basic), the lower the concentration of hydrogen ions. |
| **Phantom Thread** | SEE: False Starting Thread. |
| **Phase** | In Vibroseis acquisition: the lead (positive) or lag (negative) of the emitted signal relative to the pilot signal. In wave propagation: the phase is the argument (kx-ft) of the wave function V(kx-ft), where the velocity of the travelling wave is c=f/k. |
| **Phenols** | A group of aromatic organic compounds containing one or more hydroxyl functions similar in structure to phenol (C6H5OH). Such compounds may produce a taste and odor problem in water at very low concentrations. In higher concentrations, they are toxic to aquatic life. |
| **Phosphate** | Certain complex phosphates, usually sodium tetraphosphate (Na6P4Ol3) and sodium acid pyrophosphate (SAPP, Na2H2P2O7), are used either as drilling fluid thinners or for treatment of various forms of calcium and magnesium contamination. |
| **Photoclinometer** | A well logging device which photographically records the wellbore path azimuth and deviation from the vertical. |
| **Physics** | The science dealing with matter and energy, particularly if changes are not chemical or physiological. |
| **Pi** | SEE: Productivity Index; Profitability Index. |

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| **Pickling** | The act of preserving a wellbore by isolating the open horizons within a well with either packers or cast iron bridge plugs and filling the casing with packer fluid. |
| **Pidx** | SEE: Petroleum Industry Data Exchange. |
| **Piezoelectric Effect** | The characteristic of certain materials to generate electrical charges when subjected to mechanical vibrations, and conversely to generate mechanical vibrations when subjected to electrical pulses. |
| **Pig** | A scraping tool forced through a flow line or pipeline to clean out wax or other deposits. Also referred to as rabbit or crawler. |
| **Pile** | A cylindrical tubular member, usually driven through the leg of an offshore platform, that carries vertical loads and resists lateral forces. |
| **Pile Supported Structure** | A structure deriving its support from piles inserted into the seabed. |
| **Piling** | A heavy beam driven into the earth as a support for a structure. |
| **Pilot Hole** | A borehole of small diameter that is drilled ahead of the main borehole. Sometimes ambiguously referred to as a rat hole. |
| **Pilot Testing** | A method of predicting behavior of drilling fluid systems by mixing small quantities of drilling fluid and additives, then testing the results. |
| **Pin End** | The threaded end of a pipe without a coupling applied. |
| **Pinhole** | A short unwelded area in the weld line extending through the entire pipe thickness so that fluid will leak out through the area very slowly. |
| **Pipe** | SEE: Tubular Goods. |
| **Pipe Coefficient** | A factor used in the Hazen-Williams flow formula to correct for roughness of the inside surface of the pipe. |
| **Pipe Connection Type** | The type of pipe or fitting used to join a pipe with another pipe or tank. For purposes of gas testing, connection types are either flange taps or pipe taps. |
| **Pipe Cost** | Cost includes all pipe, sized 2 inches and over, except pipe installed in or on injection wells, storage wells, or salt water wells. |
| **Pipe Finder** | A device to detect pipe underground. |
| **Pipe Lean** | The angle between the vertical and a typical stand of pipe with the setback. |
| **Pipe Locator** | SEE: Pipe Finder. |
| **Pipe Racking Board Guyline** | A line which runs from racking board to ground anchors or special substructure or base which provide a substitute for ground anchors. Also referred to as: Tubing Board Guyline. |
| **Pipe Ram** | The closing and sealing component on a blowout preventer whose end is contoured to seal around pipe to close the annular space. Unless special rams accommodating various pipe sizes are used, separate rams are necessary for each size (outside diameter) pipe in use. |
| **Pipe Still** | A refinery installation, in which crude oil is vaporized while passing through a series of pipes. |
| **Pipe Tap** | Tap hole in which the upstream tap is located 2 1/2 times the inside diameter of the pipe from the upstream face of the orifice plate; the center of the downstream tap is placed 8 times the pipe inside diameter from the downstream face of the plate. |
| **Pipe Tapping** | The act of drilling a hole through the wall of pipe which is under pressure. A special saddle is used to attach a valve and lubricator to the pipe. The saddle and valve remain on the pipe after the tapping operation is completed. |
| **Pipe Wind Up Angle** | The twist in the drillstem due to reactive torque. Also referred to as: Angle of Twist. |
| **Pipeline** | The piping, risers and appurtenances installed for the purpose of transporting gas, oil, sulphur, water, etc. |

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| **Pipeline Abandon Flag** | An indicator of whether a plipeline has been abandoned. |
| **Pipeline Abandonment Approved Date** | The day, month and year that the abandonment of the pipeline was approved by the regulatory agency office. |
| **Pipeline Abandonment Date** | The day, month and year the abandonment of the pipeline was completed by the operator. |
| **Pipeline Authority Code** | An indicator of the authority under which the pipeline operates. |
| **Pipeline Bidirectional Flag** | An indicator of whether the product in the pipeline can be passed in either direction. |
| **Pipeline Boot** | Installed on road casing to seal the casing to the pipeline. |
| **Pipeline Capacity** | The maximum quantity of gas that can be moved through a pipeline system at any given time based on existing service conditions such as available horsepower, pipeline diameter(s), maintenance schedules, regional demand for natural gas, etc. |
| **Pipeline Connection** | The point at which a product is transferred to a pipeline. |
| **Pipeline Construction Date** | The day, month and year the pipeline was built. |
| **Pipeline Day** | The 24-hour period designated by each pipeline company for the operation of its pipeline system. |
| **Pipeline Gas** | Gas which meets gas pipeline purchaser specifications. |
| **Pipeline Interconnection** | A point at which facilities of two pipelines interconnect. |
| **Pipeline Oil** | Oil of sufficient purity to meet the specifications of the purchaser and to be run into a pipeline. |
| **Pipeline Origination Area Code** | The designated abbreviation for the origination of a pipeline segment as assigned to Outer Continental Shelf (OCS) geographical units for identification purposes and for use on maps and in data bases. |
| **Pipeline Pipe Wall Thickness Value** | The wall thickness of the pipeline pipe. |
| **Pipeline Pipe Weight Value** | The weight per foot of the pipeline pipe installed. |
| **Pipeline Status Code** | An indicator of the current status of the pipeline. |
| **Pipeline Storage** | Volume of gas within the pipeline for which title has not yet passed to the purchaser. |
| **Pipeline Type Code** | An indicator of whether the pipeline is departing, incoming or bidirectional. |
| **Pit** | (1) An emergency tank or shallow pond to hold water, etc., prior to disposal.(2) A depression resulting from the removal of foreign material rolled into the surface during manufacture. (3) A depression or cavity that may be caused by corrosion or removal of roll in or extraneous material. |
| **Pit Liner** | Material used to line a pit to prevent leakage. |
| **Pit Liner Type Code** | An indicator of the type of pit liner. |
| **Pit Volume Flag** | An indicator of whether a device is installed in the drilling fluid tank to indicate the fluid level in the tank. |
| **Pit Volume Totalizer** | A device that combines all of the individual pit volume indicators and registers the total drilling fluid volume in the various tanks. |
| **Pitch** | (1) The rotation of an object about a horizontal axis perpendicular to the foreward/aft direction of the object. For drilling platforms, this horizontal axis is east-west. For a ship, movement should be bow/stern.(2) The distance from a point on a thread to a corresponding point on the next thread, measured parallel to the axis. |
| **Pitch Cone** | An imaginary cone which passes through the thread profile at approximately the thread center. |
| **Pitch Diameter** | (1) The diameter of the pitch cone or the distance between the pitch line of the thread.(2) Root diameter of drum, lagging or sheave, plus the diameter of the rope. |

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| **Pitch Line** | An imaginary line drawn approximately through the center of the thread making the widths of the thread tooth and gap equal at the pitch line. |
| **Pitman** | The arm that connects the crank to the walking beam on a pumping unit. |
| **Pitot Tube** | A measuring device for determining the gas flow rates during tests. The impact pressure of the gas flow at the end of the tube compared to the static pressure in the stream is used in determining the flow rate. |
| **Pitted Thread** | A depression or cavity on a chamfer or thread surface caused by inclusions or porosity exposed after machining or by corrosive attack during storage of the pipe. |
| **Plain End** | Pipe end without threads or tool joint. |
| **Plane Of Closure** | Vertical plane that contains both the surface location of the wellbore and the last station of the survey. |
| **Plane Table** | A small board mounted on a tripod by means of a swivel or ball and socket joint and used for mapping surface geologic structures and features. |
| **Plant** | A locale or installation consisting of tanks, atmospheric vessels, pressure vessels, pumps, etc. required for treating, storing, or processing an oil or gas stream. |
| **Plant Name** | The name used to identify the plant or facility. |
| **Plant Shrinkage** | The amount of gas volume loss due to plant extraction of liquids during processing. |
| **Plant Thermal Reduction** | The British Thermal Unit (BTU) equivalent of the liquid products extracted from the producer's gas plus the portion of plant fuel necessary to extract those liquids, plant flare and other plant losses. When expressed as volume, this is known as Plant Volume Reduction or PVR. |
| **Plant Volume Reduction** | The gas volume or British thermal unit (BTU) equivalent of the liquid products extracted from the producer's gas plus the portion of plant fuel necessary to extract those liquids, plant flare and other plant losses. |
| **Plastic** | One of a large group of organic, synthetic or processed materials used for coating; or that are molded, cast, or extruded and used for making structural items. (1) Acetate Butyrate: produced by reacting cellulose with acetic and butyric anhydride.(2) Epoxy: produced by reaction between epichlorohydrin and biphenol H to A.(3) Phenolic: produced by reacting formaldehyde and phenol.(4) Polyester: produced from polybasic alcohols and polybasic acids.(5) Polyethylene: composed of polymers of ethyl |
| **Plastic Flow** | SEE: Plastic Fluid. |
| **Plastic Fluid** | A complex, nonNewtonian fluid in which the shear force is not proportional to the shear rate. A definite pressure is required to start and maintain movement of the fluid. Plug flow is the initial type of flow and only occurs in plastic fluid. Most drilling fluids are plastic fluid. The yield point as determined by direct indicating viscometer is in excess of zero. |
| **Plastic Squeezing** | A procedure by which a quantity of resinous material is squeezed into the sandy rock surrounding the borehole to consolidate the sand and prevent its flowing into the borehole. |
| **Plastic Viscosity** | A measure of the internal resistance to fluid flow attributable to the amount, type, and size of solids present in a given fluid. It is expressed as the number of dynes per sq cm of tangential shearing force in excess of the Bingham yield value that will induce a unit rate of shear. This value, expressed in centipoises, is proportional to the slope of the consistency curve determined in the region of laminar flow for materials obeying Bingham's Law of Plastic Flow. When using the direct indicating visco |
| **Plasticity** | The property possessed by some solids, particularly clays and clay slurries, of changing shape or flowing under applied stress without developing shear planes or fractures. Such bodies have yield points, and stress must be applied before movement begins. Beyond the yield point, the rate of movement is proportional to the stress applied, but ceases when the stress is removed. |
| **Plate** | This term refers to a flat thin rectangular plate. |
| **Plate Stress** | Stress on a thin rectangular plate resulting from lateral pressure. |
| **Platform** | Any man-made structure installed to support drilling, production or processing operations. |
| **Platform Allocation Meter Flag** | An indicator of whether a location has an allocation meter. |

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| **Platform Commingle Production Flag** | An indicator of whether a location is commingling production. |
| **Platform Discharge Vent Flag** | An indicator of whether there is approved burning or disposition of produced gas through a pipe or underwater flare. |
| **Platform District Code** | An indicator assigned to a sub-office of an Outer Continental Shelf (OCS) regional office which has delegated authority for field operations activities including: permitting wells, inspections, drilling and production operations. |
| **Platform Gas Sale Meter Flag** | An indicator of whether a location has a gas sale meter. |
| **Platform Heliport Flag** | An indicator of whether a heliport is present. |
| **Platform Injection Code** | An indicator of whether a location is injecting gas or water. |
| **Platform Installation Date** | The day, month and year that the facility was placed in the Outer Continental Shelf (OCS). |
| **Platform Lact Meter Flag** | An indicator of whether a location has a Liquid Automatic Custody Transfer (LACT) meter. |
| **Platform ( Marine Steel)** | A structure raised above the level of the water supported by pillars constructed of steel. |
| **Platform Meter Location Number** | A number that uniquely identifies a measurement facility. |
| **Platform Name** | The name commonly used to refer to a platform. |
| **Platform Oil Production Flag** | An indicator of whether a location is producing crude oil. |
| **Platform Piping** | Refers to any piping, on a platform, intended to contain or transport fluid. |
| **Platform Production Code** | An indicator of whether the platform is producing crude oil and/or gas well gas |
| **Platform Removal Application Number** | The number assigned to an application to remove a platform which is composed of the year and an incremented three digit number. |
| **Platform Removal Approved Date** | The day, month and year the application was approved by the regulatory agency to authorize the removal of the platform. |
| **Platform Removal Received Date** | The day, month and year the application to remove a platform was received in the Minerals Management Service (MMS) office. |
| **Platform Removed Date** | The day, month and year the platform was removed. |
| **Platform Safety System** | An arrangement of safety devices and Emergency Support Systems to effect platform shutdown. The system may consist of a number of individual process shutdowns and may be actuated by either manual controls or automatic devices sensing detectable abnormal conditions. |
| **Platform Shutdown** | The shutting in of all wells, process stations, and all support equipment for a platform production process. |
| **Platform Slot** | A design feature of a platform which accommodates a rig to drill or maintain wellbores from the platform while limiting the total number of wellbores that can be drilled from that platform. Wellbores can only be drilled from the slots so the number of slots determines the number of wellbores that may be drilled/produced from the platform. |
| **Platform Structure Type Code** | An indicator of the type of structure. |
| **Platform Sulfur Production Flag** | An indicator of whether a location is producing sulfur. |
| **Platform Water Production Flag** | An indicator of whether a location is producing water. |
| **Play** | Investments actions for the purpose of generating hydrocarbons. |
| **Plug** | A pipe fitting or piece of suitable material designed to fill a hole. In wellbores, a plug may be used to shut off flow of unwanted fluids. |
| **Plug Back** | The act of partly filling a wellbore with impervious materials for the purpose of shutting off lower rocks in order to permit reservoir rocks above the plugged back point to be produced. |

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| **Plug Back Measured Depth** | The measured depth to the wellbore point at which the wellbore was temporarily plugged back; i.e., to set a retrievable bridge plug. |
| **Plug Back Temporary Depth** | The depth to the wellbore point at which the wellbore is temporarily plugged back. |
| **Plug Back Total Depth** | The measured depth to which a specified wellbore path was plugged back prior to setting casing or performing a well completion. If the well completion is an open hole type, the plug back total depth will be the same as reported total depth. |
| **Plug Back True Vertical Depth** | The true verticall depth to the wellbore point at which the wellbore was plugged back. |
| **Plug Bottom Measured Depth** | The measured depth to the bottom of the plug from the surface of the borehole. |
| **Plug Diameter Measurement** | The diameter of the plug. |
| **Plug Flow** | The movement of a material as a unit without shearing within the mass. Plug flow is the first type of flow exhibited by a plastic fluid after overcoming the initial force required to produce flow. |
| **Plug Number** | The sequence in which a plug was set in a wellbore. |
| **Plug Score** | An internal longitudinal groove occurring in seamless pipe, usually caused by hard pieces of metal adhering to the high mill plug. |
| **Plug Sequence Number** | The number associated with the order in which a plug is set. |
| **Plug Top Calculated Depth** | The calculated depth to the top of the plug in the hole from the surface of the borehole. |
| **Plug Top Measured Depth** | The measured depth to the top of the plug from the surface of the borehole. |
| **Plug Type Code** | An indicator of the composition of the plug. |
| **Plug Valve** | A type of quick opening valve constructed with a central core or plug. The valve can be opened or closed with one quarter turn of the plug. Also referred to as: Plug Cock. |
| **Plugged** | The state of a well or well completion that had inserted within all or part of its wellbore a solid plug of metal or concrete to prevent escape of fluids. |
| **Plugged And Abandoned** | The state of a well that has been both plugged and abandoned. Commonly abbreviated as P&A. |
| **Plugging Material** | A material used to block off zones while treating or working on other parts of wellbores. Blocking may be temporary or permanent. |
| **Plugging Reason Code** | An indicator of why a well is plugged. |
| **Plumb Bob Effect** | The pendulum action, due to the force of gravity, pulling the drillstem to a vertical position. |
| **Plunger Lift** | A method of lifting oil using a swab or free piston propelled by compressed gas from the lower end of the tubing string to the surface. |
| **Plunging Fold** | A fold in which the axis is tilted with respect to the earth's surface. The eroded surface pattern is lobate shaped. The oldest rocks crop out in the center if it is a plunging anticline and the youngest occur in the center if it is a plunging syncline. |
| **Pm** | The phenolphthalein alkalinity of the drilling fluid reported as the number of milliliters of 0.02 Normal (N/50) acid required per milliliter of drilling fluid. |
| **Pneumatic Power System** | A system which supplies pressure to operate pneumatic actuators. |
| **Pocket** | The gas lift valve receiver inside a wire line (retrievable) mandrel. |
| **Point Of Disposition Identifier** | The Point of Disposition (POD) is an identifier for the physical point of measurement of the product as it moves from the wellhead through the state or the market. Examples would be meters, Tank Batteries and LACT Units. |
| **Point Of Entry Depth** | (1) The depth at which the wellbore first intersects the top of the reservoir.(2) For horizontal wells, it is the depth at which the targeted reservoir is penetrated by a lateral/spoke. |

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| **Point Of Sale Code** | An indicator of where the title to production is transferred. |
| **Polar Organic** | A compound of carbon which will adsorb on a solid surface. |
| **Polar Plot** | Plots on polar coordinate paper usually used to aid dipmeter interpretation. Polar plots may take different forms; e.g., modified Schmidt plot; azimuth frequency diagrams. |
| **Polarity** | The convention used to determine the meaning of the sign of seismic samples. |
| **Polarity Standard** | The Society of Exploration Geophysicists (SEG) standard for causal seismic data specifies that the onset of a compression from an explosive source is represented by a negative number; i.e., by a downward deflection when displayed graphically. Positive polarity for a seismic waveshape relates to an increase in acoustic impedance or a positive reflection coefficient. For a zero phase wavelet, a positive reflection coefficient is represented by a central peak. |
| **Polarize** | Retard an electrochemical corrosion reaction by deposition of a corrosion product. |
| **Pole** | The area on a magnetized part from which the magnetic field is leaving or returning into the part. |
| **Pole Mast** | Structure consisting of one or more tubular sections, telescoping or not telescoping, which are the load bearing members. The structure, when erected to working position, usually requires guylines. It may be attached to a carrier, skid base, or substructure. It is used in place of a derrick. |
| **Pole Piece** | The ferromagnetic portion of a magnetic circuit attached to the core used to shape and direct the magnetic field through the air gaps into the wall of the pipe being inspected. |
| **Polished Rod** | A rod with polished surface at upper end of sucker rod string, which passes through the stuffing box of a pumping well. |
| **Polished Rod Clamp** | A clamp which grips the polished sucker rod of a pumping well. |
| **Pollutant** | Any introduced gas, liquid, or solid that makes a resource unfit for a specific purpose. |
| **Pollution** | The presence of matter or energy whose nature, location, or quantity produces undesired environmental effects. |
| **Poly** | (1) Having several atoms, groups or molecules.(2) Prefix signifying many. |
| **Poly Electrolysis** | (1) Passage of electric currents through a solution with resultant migration of ions to positive and negative electrodes. (2) The decomposition of a chemical compound brought about by the passage of electrical currents through the compound. |
| **Polymer** | A substance formed by the union of two or more molecules of the same kind linked end to end into another compound having the same elements in the same proportion but a higher molecular weight and different physical properties; e.g., paraformaldehyde. |
| **Polymerization** | A refining process of combining two or more molecules to form a single heavier molecule. |
| **Polynya** | An areal opening in sea ice, ultimately refreezing to a thickness less than the normal ice sheet growth. |
| **Polyphosphate** | A phosphate compound used for water stabilization and corrosion inhibition. |
| **Pond** | A containment structure, normally earthen, constructed for the retention of fluids; e.g., water, discharge from a drilling rig. |
| **Pontoon** | Horizontal, cylindrical or rectangular buoyancy member of the hull structure which interconnect with columns to form a frame below the water line. |
| **Pony Rod** | A sucker rod made in short lengths of 2 ft to 8 ft. |
| **Pool Code** | The regulatory agency assigned identifier of the pool from which a well or |
| **Pool Name** | The name given to either (1) The oil accumulation from which a well or group of wells produce. NOTE: It is recommended that this term not be used within the U.S. and its territories. or(2) The reservoir of fluid formed in a decanting centrigage in which classification or separation occurs due to application of centrifugal force to accellerate solids settling rates. |

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| **Pooling** | The bringing together of small tracts of land sufficient for the granting of a well permit under applicable spacing rules and as provided for in the leases being pooled as distinguished from unitization, which term is used to describe the joint operation of all or some portion of a producing reservoir. |
| **Pooling Clause Flag** | An indicator of whether or not a pooling clause is present in a lease. |
| **Pop Valve** | A valve that opens when the pressure builds up to a predetermined amount. Also referred to as Pop Off Valve. |
| **Pop-off Valve** | SEE: Pop Valve. |
| **Popping Of Gas** | The flaring, burning, or wasting of gas at a wellhead. |
| **Pore Pressure Measurement** | The interstitial fluid pressure within a formation. |
| **Pore Space** | The open space, or voids, between the individual grains of a rock mass, for fluid accumulation. |
| **Pore Volume** | The volume of pore space used to calculate the original fluid in place volumes. |
| **Porosity** | The percentage by volume of pore space within a sample. It is defined as the ratio of pore volume to bulk volume multiplied by 100. |
| **Porosity Pressure Measurement** | The pressure at which the porosity values were measured. |
| **Porosity Type** | The type of porosity for either carbonate or clastic rocks; e.g., intercrystal; breccia; leached vuggy. |
| **Porous Zone Measured Base Depth** | The measured depth at the bottom of a porous zone. |
| **Porous Zone Measured Top Depth** | The measured depth at the top of a porous zone. |
| **Porous Zone Name** | The name given to a porous zone. |
| **Portable Mast** | SEE: Derrick Mast. |
| **Portable Well Tester** | Specialized unit with all necessary separation equipment and measuring instruments to obtain fluid production measurements on a well. Unit is connected to a well or battery on a temporary basis, and can be disconnected for moving to other locations as needed. |
| **Portland Cement Clinker** | Hard granular nodules composed essentially of hydraulic calcium silicates, with smaller quantities of calcium aluminates and ferrites, produced by the heat treatment of cement raw materials in a kiln. Clinker is pulverized with the proper quantity of calcium sulfate in the manufacture of portland cements. |
| **Positive Displacement Meter** | A mechanical fluid measuring device that measures by filling and emptying chambers of a specific volume. Also referred to as: PD Meter. |
| **Post Weld Heat Treatment** | Any heat treatment subsequent to welding, including stress relief. |
| **Postal State Code** | The state code as assigned by the U.S. Postal Service. |
| **Posted Field Price Amount** | The announced price the purchaser will pay for crude oil with a specified gravity, in a particular field or area. |
| **Potable Water** | Water suitable for drinking or cooking purposes from both health and aesthetic considerations. |
| **Potassium** | One of the alkali metal elements with a valence of 1 and an atomic weight of about 39. Potassium compounds, most commonly potassium hydroxide (KOH), are sometimes added to drilling fluids to impart special properties, usually inhibition. |
| **Potential** | The total estimated oil or gas yield of a well completion, usually on a 24 hour basis. Under proration, only a portion of a high potential output is ordinarily allowed. |
| **Potential Surface** | The height that a head of fresh water would rise above a given datum plane due to the energy of the formation being tested. |
| **Potential Test** | A well test that indicates the maximum rate at which a well completion can produce. |

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| **Potential Test Rate** | The tested maximum rate at which a well can produce. |
| **Potential Test Slope Value** | The slope exponent of a back pressure equation, used in calculating the potential or deliverability of a well. A slope may either be determined by a multipoint plot on a log arithmetic graph or assigned a specified value by the regulatory agency. |
| **Potentiometer** | An instrument used to measure electrical potentials. |
| **Potting** | The encapsulation of electrical components with epoxy, elastomeric, silicone or asphaltic or similar compounds for the purpose of excluding moisture of vapors. Potted components are not necessarily hermetically sealed. |
| **Pounding Fluid** | The striking down on fluid by the traveling valve of a sucker rod pump due to the pump barrel being only partially filled. |
| **Pour Point** | The lowest temperature at which a fluid will flow. |
| **Powder Dry** | A pipe surface that is sufficiently dry so as to allow any type of powder, applied to the surface, to be blown from the surface without a remaining residue. |
| **Power Controlled Lowering** | A system or device in the power train, other than the load hoist brake, which can control the lowering rate of speed of the load hoist mechanism. |
| **Power Oil** | Oil pumped down a tubing string to operate a free pump or jet pump installed downhole. |
| **Power Pump Head** | The main cover for internal parts of a power pump. |
| **Power Rating** | Rating given by a manufacturer of an engine operating at its most efficient output. |
| **Power Take-off** | A gearbox-type device serving to relay the power of a prime mover to auxiliary equipment. |
| **Power Tight** | A threaded connection that has been fully made up by mechanical means using power tongs or a screw on machine. |
| **Power Tool** | Equipment operated hydraulically or by compressed air for making up and breaking out drill pipe, casing, tubing, rods, nuts, etc. |
| **Pozzolan** | A siliceous or siliceous and aluminous material, which in itself possesses little or no cementitious value, but will, in finely divided form and in the presence of moisture, chemically react with calcium hydroxide at ordinary temperatures to form compounds possessing cemetitious properties. |
| **Pozzolanic Reaction** | The chemical combination of certain finely divided siliceous or siliceous and aluminous materials with calcium hydroxide to form compounds which have cementitious properties. |
| **Precession** | A comparatively slow gyration of the rotation axis of a spinning body about another line intersecting it so as to describe a cone. It is caused by the application of a torque tending to change the direction of the rotating axis. |
| **Precipitate** | Material that separates out of solution or slurry as a solid. Precipitation of solids in a drilling fluid may follow flocculation or coagulation, such as the dispersed red bed clays upon addition of a flocculation agent to the fluid. |
| **Precipitator** | A vessel designed to remove solids (undissolved and dissolved), dissolved gases, and suspended oil particulated from liquid streams. |
| **Preflush** | The well activity of purging or flushing the borehole to clean it out prior to cementing. |
| **Preflush Fluid Density** | The density of the fluid used to flush the borehole prior to cementing. |
| **Preflush Fluid Type** | The type of fluid used to flush the borehole prior to cementing; e.g., water; brine; oil; mud; oil mud; air or gas. |
| **Preflush Fluid Volume** | The volume of fluid used to flush the borehole prior to cementing. |
| **Preheater** | A steam heater or direct fired heater used to raise the temperature of the feed to a fractionator or still. |

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| **Preload** | Load purposely induced in a component to improve its in service strength, fatigue life, or sealing capabilities. |
| **Present Worth** | The principal of a sum of money payable at a future date, such that this principal plus all accrued interest at the given interest rate will amount to the sum at the date on which the sum is to be paid. Also referred to as the discounted value of that sum which is to be paid. |
| **Preservative** | Usually paraformaldehyde. Any material used to prevent starch or any other substance from fermenting through bacterial action. |
| **Pressure Base** | An absolute pressure expressed in pounds per square inch absolute (psia) agreed upon as a basis for comparison of volumes of gases measured at different pressures. The standard base pressure for gas volume calculations in the United States varies from state to state, and between regulatory agencies. |
| **Pressure Charged Valve** | A gas lift valve which uses a gas charge inside the responsive element to provide the closing force for the valve. The gas is usually Nitrogen. The responsive element is usually a bellows. |
| **Pressure Containing Part** | Those parts exposed to wellbore fluids whose failure to function as intended would result in a release of those fluids to the environment, such as bodies, bonnets and stems. Also referred to as: Pressure Containing Member. |
| **Pressure Containing Weld** | A weld, the absence of which will reduce the pressure containing integrity of the part. |
| **Pressure Drop Loss** | The pressure lost in a pipeline or annulus due to the velocity of the liquid in the pipeline, the properties of the fluid, the condition of the pipe wall and the alignment of the pipe. |
| **Pressure Extension** | A value by which the corrected basis orifice coefficient is multiplied to obtain the actual flow quantity. It is numerically equal to the square root of the product of the static pressure and the differential pressure. |
| **Pressure Gauge** | A device which measures instantaneous fluid or gas pressure, ordinarily reading in pounds per square inch above atmospheric pressure (psig). Also referred to as: Pressure Gage. |
| **Pressure Gradient Value** | Uniform change in pressure from one point to another; i.e., the pressure gradient of a column of pure water is about 0.433 psi/ft of vertical elevation. |
| **Pressure Loss** | The reduction in fluid pressure within a system due to friction or lack of integrity. |
| **Pressure Maintenance** | A program to prevent or control decline of reservoir pressure as the reservoir fluids are produced, to increase ultimate recovery and profit. Ordinarily accomplished by the injection of fluids; e.g., gas; water. |
| **Pressure Measurement** | The measurement of the force per unit area. |
| **Pressure Operated Valve** | A gas lift valve that utilizes injection gas pressure as its primary operating medium. |
| **Pressure Regulator** | A device for maintaining pressure in a line, downstream from the device. |
| **Pressure Relief Valve** | A valve that opens at a preset pressure to relieve excessive pressures within a vessel or line. |
| **Pressure Retaining Part** | Those parts not exposed to wellbore fluids whose failure to function as intended would result in a release of those fluids to the environment such as closure bolts, clamps. Also referred to as: Pressure Retaining Member. |
| **Pressure Safety Valve Setting** | The setting on a valve installed on a pressure vessel or gas compressor to ensure that pressure in the vessel does not exceed safe working pressures. The valve must have sufficient pressure to discharge maximum vessel input rates when the maximum allowable pressure for the vessel is exceeded. |
| **Pressure Sensor Depth** | The measured depth to the sensor used in measuring the pressure in a borehole. |
| **Pressure Surge** | A sudden, usually short duration increase in pressure. When pipe or casing is run into a wellbore too rapidly, an increase in the hydrostatic pressure results, which may be great enough to cause lost circulation. |
| **Pressure Survey** | An operation to measure and record the pressures at various depths in the wellbore with the well completions either producing or shut in. The pressures may be measured and recorded by either a self contained unit run on a solid wireline or a unit run on an electric wireline with an instantaneous recording at the surface. |

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| **Pressure Temperature Recorder** | A device used for recording pressures and temperatures in lines and vessels. |
| **Pressure Transient Test** | (1) A well test that measures pressure changes at a well completion relative to pressure changes at other well completions in the same reservoir.(2) A well test on a well completion for which the flow rate is precisely controlled to obtain pressure measurements as a function of time. The pressure transient test is used to qualitatively identify parameters that control production, such as permeability, skin thickness, reservoir boundaries. Types of pressure transient tests include drawdown, buildup and |
| **Pressure Vessel** | A vessel used to hold fluid in a liquid or gaseous state under pressure. |
| **Pressure Vessel Quality** | Metallic material whose integrity is such that it can be used to safely contain pressure without risk of leakage or rupture. |
| **Pressurized Surge Vessel** | An unfired pressure vessel used to provide for fluctuations in liquid flow to pumps. |
| **Pretension** | Tension applied to a tendon in its static, zero offset equilibrium position. |
| **Pretest Choke Size** | The inside diameter of the choke orifice before the test. |
| **Pretest Time** | The number of hours (usually 6 or more) that the well completion was produced under stablized conditions, immediately prior to the test. |
| **Previous Authorized Cost** | All previously approved costs associated with the original Authorization for Expenditure (AFE) and all revisions/supplements. |
| **Previous Operator Name** | The previous operator for a particular well, lease, unit, permit, etc. |
| **Previous Period Correction** | Restatement of a production month's measurement allocation or contract quantities in subsequent months. |
| **Previous Taxable Amount** | The previous value on which tax was based, for amended returns only. |
| **Previously Billed Amount** | The value of the original or most reent billing. |
| **Previously Billed Volume** | The volume of the original or most recent billing. |
| **Previously Produced Reservoir Name** | The name of any reservoir in which the well has been produced. |
| **Price Per Mmbtu Amount** | The value per million British thermal units (Btu). |
| **Price Per Unit Amount** | The value per unit of measure. |
| **Pricing Method** | The method for determining the product price; e.g., posted price; highest price; NGPA. |
| **Primary Cementing** | SEE: Cementing. |
| **Primary Escape Means** | Fixed stairways or fixed ladders of metal construction. |
| **Primary Load Carrying Subsystem** | Structure tying column tops together and supporting deck levels. This structure may consist of either trusses, box girders, plate girders or a combination thereof. |
| **Primary Production** | That portion of a reservoir's reserves that are recovered using pumps or the natural energy content of the reservoir and surrounding fluid, without the injection of gas, water or other sources of energy. |
| **Primary Recovery** | The stage of extraction of the primary production. |
| **Primary Sort** | The primary value used to sort data. In a multiple key sort, this value changes the most slowly. |
| **Primary Water Treatment** | The first stage in waste water treatment in which substantially all floating or settleable solids are mechanically removed by screening and sedimentation. |
| **Prime Meridian** | The name of a meridian from which longitudes are reckoned. Normally the meridian through Greenwich is defined to be the prime meridian. |
| **Prime Mover** | The source of power for a pump or other device, usually gas engines or electric motors. |

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| **Prime Pipe** | Pipe meeting all of the specified inspection and testing requirements. |
| **Principal Meridian** | A meridian line accurately located and used as a basis from which to construct interior lines of monuments, called meridians, for the use of surveyors, and to assign numbers to ranges; e.g., 1st principal meridian (US); Michigan meridian; Indian meridian. The principal meridian is the basis for ranges measured east and west from that meridian. |
| **Probe** | Transducer or search unit. |
| **Probe Grind** | An exploratory grind made to determine the depth of an imperfection. |
| **Process Capability** | The ability of a process or method of nondestructive testing (NDT) to repeatedly detect a defect under normal conditions of variability. |
| **Process Component** | A single functional piece of production equipment and associated piping, used in a process station such as a separator, heater, pump or tank. |
| **Process Furnace** | A device that provides heat for processing liquids/gases (complete Unit). |
| **Process Shutdown** | The isolation of a given process station from the process by closing the appropriate shut down valve (SDV) to shut in flow to the process station or divert flow to another process station. |
| **Process Station** | One or more process components performing a specific process function; e.g., separating; heating; pumping. |
| **Processed Gas** | Gas handled through a plant for the extraction of liquefiable hydrocarbons. |
| **Processing Agreement** | Agreement between a producer and a plant owner providing for the processing of the producer's gas in a plant for a fee, either in cash or products in kind. |
| **Processing Agreement Number** | A number assigned by the company to a processing agreement. |
| **Processing Deduction Amount** | The amount deducted for processing. |
| **Processing Rights** | Provision in gas purchase contracts in which the producer reserves the right to separate and extract liquefiable hydrocarbons, except methane, and nonhydrocarbon substances from the natural gas. |
| **Processing Rights Flag** | An indicator of whether the seller has retained the right to process upstream and/or downstream from the delivery point or if the contract lacks specific processing language. |
| **Prod** | Hand held electrodes attached to cables to transmit the magnetizing current from the source to the pipe under inspection. |
| **Prod Magnetization** | Magnetization of the pipe by direct contact; i.e., passing current through the pipe wall with prods. |
| **Produced Gas** | That portion of reservoir gas recovered with fluid production from a well completion. |
| **Produced Prior To Test Oil Volume** | The measurement of oil produced prior to a test. |
| **Producer** | Any party owning, controlling, managing, or leasing any oil or gas well and/or any party who produces in any manner minerals by taking them from the earth or waters. |
| **Producer Imbalance Quantity** | The extent to which one or more owners of a property deliver to a transporter a quantity of gas (production delivery) which is more or less than their gross working interest share of total gas available for delivery (production, less used in operations) or entitlement. |
| **Producer Liability Amount** | The value on which the tax is based, for which the producer is liable. |
| **Producer Purchaser Identification Code** | The regulatory agency assigned identifier of a particular producer or purchaser name. |
| **Producibility Index Log** | A computed well log showing a comparison of various parameters important to the producibility of a reservoir rock; e.g., effective porosity; clay content; permeability index. |
| **Producing Days On Lease Count** | The total number of days that all oil or gas wells were in a producing status during the production period. On a two well lease, if one well produced 15 days and one well produced 30 days, the number would be 45. |

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| **Producing Formation Name** | The name given to a rock strata or formation that is producing. |
| **Producing Horizon** | SEE: Pay Zone. |
| **Producing Interval Code** | An indicator of the number of tubing strings and identifies the producing or injection interval of the well. |
| **Producing Interval Measured Base Depth** | The measured depth to the deepest part of the producing interval. |
| **Producing Interval Measured Top Depth** | The measured depth to the shallowest part of the producing interval. |
| **Producing Overhead Rate** | The monthly rate of overhead that can be charged for one producing well. These rates are sometimes determined by depths, and are stated in an attachment to the operating agreement. |
| **Producing String** | A tubular string whose primary purpose is to allow the direct production of hydrocarbons from the well. They are therefore exposed to the flow of fluids for a large part of the operational life which may provide an extremely harsh environment. As a consequence, they are normally designed for easy retrieval and replacement. The provision for downhole wireline work is normally catered for by inclusion of profiled nipples, etc., within these strings. |
| **Producing String Code** | An indicator of whether the well is producing through the tubing or casing. |
| **Producing Well Count** | The total number of oil and gas wells in a producing status at a specified level during a specified time period. (Normally at a lease or field level). |
| **Product** | The specific commodity produced or recovered; e.g., oil, gas, water, carbon dioxide, geothermal heat, steam, helium, nitrogen. |
| **Product Allocation Method** | The method used for allocating production. Liquids may be allocated either by production or on a test basis. |
| **Product Code** | An indicator of the primary product. |
| **Product Component Price Basis** | The basis on which the value of the product component is to be determined for payment to seller/owner by contract; e.g., resale value; posted price; contract price. |
| **Product Component Seller Due Percentage** | The percentage of the product component due the seller. |
| **Product Component Test Required Type** | The type of test required by contract to determine the hydrocarbon content of a gas stream. |
| **Product Disposition Code** | An indicator of how production is disposed of , transported from lease, or destination of product. Includes codes for oil such as truck, pipeline, tank car, lost, skim liquid, scrubber oil. Includes codes for gas such as lease fuel, transmission line, vented, gas lift. |
| **Product Value Adjustment Amount** | The monetary adjustments to value of the product. |
| **Product Value Adjustment Code** | An indicator of the type of adjustment taken. |
| **Production** | (1) The yield of an oil or gas well completion.(2) Also that branch of the petroleum industry that has to do with bringing the reservoir fluids to the surface and separating them, and with storing, gauging, and otherwise preparing the product for the collection. |
| **Production Area** | Those areas where flammable petroleum gas and volatile liquids are produced, processed, stored, transferred, or otherwise handled prior to entering the transportation facilities. |
| **Production Casing** | The last string of casing which is set in a wellbore prior to production. |
| **Production Casing Multiple Parallel String Flag** | An indicator of whether there is multiple string of production casing cemented all the way back to the surface. |
| **Production Casing Set Date** | The date that the production casing was set. |
| **Production Date** | The calendar period in which production occurred. |
| **Production Decline Curve** | Curves plotted to show the producing engineering history of individual wells, well completions, leases, or fields, for the purpose of evaluating reservoir characteristics and the rate of production decline of well completions producing from the reservoir. |

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| **Production End Date** | Ending date of the period the given volume was produced. |
| **Production Incentive Minimum Volume** | Minimum quantity of gas required to be produced in order to obtain the production incentive. |
| **Production Interest Amount** | The monetary share in production revenue. |
| **Production Log** | A well log run in a development or injection well. Small diameter tools are used so that they can be lowered through tubing. Services and devices include continuous flowmeter, packer flowmeter, gradiomanometer, manometer, densimeter, water cut meter, thermometer, radioactive tracer logs, temperature logs, calipers, casing collar locator, fluid sampler, water entry survey, etc. |
| **Production Method Code** | The indicator for the method used by the operator to produce the oil, gas, or water from the well. |
| **Production Office Name** | An office or offices the primary function of which is to directly serve the daily production operation and maintenance of the joint property(ies). |
| **Production Operated Valve** | SEE: Fluid Valve. |
| **Production Payment** | The right reserved by a seller to a specified percentage of the production until the proceeds, free of costs, equal a specified sum. |
| **Production Payment Interest** | An economic interest limited to a specific portion of reserves in place. The limitation may be expressed as a stated amount of production, money (including interest and other charges), or time. A production payment cannot be liquidated out of revenue from any source other than reserves produced from the property against which it is applied, or should it be guaranteed directly or indirectly. Types of production payments are: carved out, production payment, pledged reserves, ABC Production Payment, etc. |
| **Production Payment Percentage** | The portion of a property's production that is applicable to a production payment. |
| **Production Percentage** | The share of production actually taken. |
| **Production Platform** | SEE: Platform. |
| **Production Related Costs** | Most notably related to the Federal Energy Regulatory Commission (FERC) Order 94. Production related costs refer to all costs associated with bringing natural gas or liquified petroleum gas (LPG) to a marketable point of title transfer. The more common production related costs include, but are not limited to, compression, dehydration, gathering, processing, treating, liquefication, conditioning, or transporting of natural gas. |
| **Production Start Date** | A date a well or well completion is placed in a producing status. |
| **Production Tax Flag** | An indicator of whether production taxes are paid by the purchaser of the hydrocarbon stream. |
| **Production Test** | A general term for any well test of a well completion. |
| **Production Unit Code** | An agency assigned indicator identifing a well or group of wells for tax or royalty calculation and payout. |
| **Production Unit Suffix Identifier** | An identifier to further qualify a production unit number for tax and or royalty purposes. |
| **Production Volume** | The volume of production. |
| **Production Volume Adjustment Code** | An indicator of the reason for an increase or decrease to production volumes reported during the previous reporting period. |
| **Production Well** | SEE: Development Well. |
| **Productive Horizon Abandoned Date** | SEE: Well Completion Abandoned Date. |
| **Productivity Index** | A measure of a well completion's ability to produce, expressed in volume of gross liquid produced per day per unit of differential pressure between the static reservoir pressure and the well's flowing bottomhole pressure (drawdown). |
| **Productivity Test** | A well test of a well completion's capability to produce, usually conducted at various pumping or flow rates, with possible extrapolation to maximum flow. Productivity tests measure the effect of flow rates on pressures. |

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| **Profile** | A profile is an internal conduit configuration used to engage tools. |
| **Profitability Index** | Essentially an internal rate of return, it is the compound interest rate whose discount factors will make the present worth of a projects net cash flow equal zero. The Profitability Index is equal to the constant effective annual percent earnings on the unrecovered capital in a project. |
| **Project** | A group of activities defined to accomplish a set of objectives. |
| **Project Area** | The joint lands, and other land areas, subject to the terms of the agreement in effect. |
| **Project Ballot Identifier** | A unique code assigned by the originator to identify the project (such as a system unique identifier, preliminary Authority for Expenditure ( AFE) document number, work order number, etc.). It is the operator's internal number and is used when the AFE number is not available. |
| **Project Comment** | Additional information that describes the project. |
| **Project Description** | A concise narrative description of the project proposal. |
| **Project Support Facility** | Those facilities located within or near the project area that during the conduct of joint operations provide such service to the joint operations as a point for receiving and transshiping material; a point of debarkation for drilling personnel and services; a communication, scheduling, and dispatching center; and other associated functions benefitting the joint operations; e.g., workshops, field offices, camps, airstrips, heliports, harbors, docking facilities, staging areas, and housing for employees. |
| **Property** | A unique entity, that can be a producing property (oil or gas), compressor station, tool account, plant, store, system, etc., for revenue and expense and/or investment to which accounting transaction are related. |
| **Property Event Description** | The description of the event which occurred resulting in the creation or change of the property recording; e.g., change in operator; sale of the property; working interest change. |
| **Property Number** | The number assigned that uniquely identifies a property. |
| **Property Type** | Indicates if the property is a producing property, enhanced recovery, royalty property, salt water disposal, tool account, etc. |
| **Proportional Band** | That percentage of the controller's range which operates the controlled valve over the valve's full range. |
| **Proportional Limit Stress** | Stress above which the stress-strain curve is no longer linear and which represents the onset of plastic behavior. |
| **Proportional Reduction** | A clause commonly included in a contemporary lease providing for the reduction of payments to a lessor if his interest is less than that which he purported to lease. |
| **Proposed Bottomhole Location** | Intended location of the wellbore bottomhole. |
| **Proposed Project Completion Date** | The date the proposed project is estimated to be completed. |
| **Proposed Project Start Date** | The date the proposed project is estimated to begin. |
| **Proposed Well Total Depth** | The total measured depth of the well that has been proposed to reach the targeted wellbore bottomhole location. |
| **Proppant** | Granular material used to prop open hydraulically created fractures. |
| **Propping Agent** | SEE: Proppant. |
| **Propping Volume** | The volume of proppant used in treating an interval during an initial potential or production test. |
| **Proprietary Code** | An indicator of the status of the release of privately owned information and data that are not available for public review or distribution to the public, as specified by law, regulation, order, or policy. Regulatory agencies define such data as proprietary data; e.g., electric logs, core descriptions and analysis, seismic record section, geological, geophysical, engineering information, maps; reports, correspondence, based on or containing information furnished by industry sources to the agency in compli |
| **Proprietary Data Release** | SEE: MMS Well Data Release Code. |

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| **Prorate** | As applied in the petroleum industry, pertains to the allocation of oil or gas production among the properties producing from a common reservoir or among the fields in a given state on some agreed or enforced basis. Among the factors used as a basis for proration are acreage, number of wells or well completions, well potential, or a combination of these and other factors. |
| **Proration** | A system enforced by the regulatory agency or by agreement between operators which limits the amount of oil which can be produced from a particular well, well completion; reservoir or field within a given period. |
| **Proration Unit** | An area attributed to a well by a regulatory agency in order to control development drilling in an oil or gas field. |
| **Prospect** | Drilling opportunities which, if successful, will endure as producing fields until depleted or abandoned. |
| **Prospect Name** | The name assigned to a prospect. |
| **Protection Casing** | SEE: Intermediate Casing. |
| **Protective Wall** | A barrier designed to withstand or deflect falling or flying objects, prevent flow of liquids from one area to another or restrain minor explosions. |
| **Prototype** | A preliminary unit of a specific design with essential functionality for purposes of testing and demonstration; e.g., manufactured component or piece of software. |
| **Proved Acres** | (1) Area believed to contain economically producible hydrocarbon reserves.(2) Also be used in context of maximum limits of the proved portions of all producing zones. |
| **Proved Reserves** | Reserves of minerals that can be estimated with reasonable certainty to be recoverable under current economic conditions. Current economic conditions include prices and costs prevailing at the time of the estimate. Proved reserves musthave facilities to process and transport the reserves to market that are operational at the time of the estimate, or there is commitment or reasonable expectation to install such facilities. |
| **Prover** | A device used to calibrate meters used in measuring oil volume. |
| **Province (canadian)** | The legal description is composed of either a dominion land survey or a National Topographic System (NTS) identifier. The dominion land survey identifier consists of a township, meridian, range, section, legal subdivision, exception, event sequence, and survey system. The NTS identifier consists of a NTS code, map code, number code, block code, unit code, sub unit code, and location exception. |
| **Proximeter** | A remote sensing device used to detect change; i.e., vibration, movements. |
| **Prudhoe Bay Unit Of Alaska** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, the geographical area subject to the voluntary unit agreement approved by the Commissioner of the Department of Natural Resources of the State of Alaska on June 2, 1977. |
| **Pseudoplastic Fluid** | A complex non Newtonian fluid that does not possess thixotropy. A pressure or force in excess of zero will start fluid flow. The apparent viscosity or consistency decreases instantaneously with increasing rate of shear until at a given point the viscosity becomes constant. The yield point as determined by direct indicating viscometer is positive, the same as in Bingham plastic fluids; however, the true yield point is zero. An example of a pseudoplastic fluid is guar gum in fresh or salt water. |
| **Psia** | An absolute pressure value obtained by adding gauge pressure to atmospheric pressure. The acronym for pounds per sqyuare inch absolute. |
| **Pto** | SEE: Power Take-Off. |
| **Ptr** | SEE: Plant Thermal Reduction. |
| **Puddling** | (1) In cement evaluation work, the agitation of cement slurry in molds with a rod to remove trapped air bubbles.(2) In field practice, the movement by reciprocation or rotation of the casing during or after the cementing operation.(3) A type of cementing operation wherein the cement slurry is spotted in open hole through drill pipe or tubing, the casing is then run in the well and puddled into cement. Also referred to as: Puddle Job. |
| **Pugh Clause Flag** | An indicator of whether a Pugh clause is present in the lease instrument; i.e., the portions of the lease not involved in production are not held by production. |

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| **Pulling Cost** | The expense of servicing wells by pulling and repairing rods, tubing, or the pump. |
| **Pulling Flange** | SEE: Fishing Neck. |
| **Pulling Line** | The cable on a servicing unit winch used to raise and lower the rods and tubing in the derrick while servicing a well. |
| **Pulling Machine** | SEE: Pulling Unit. |
| **Pulling Tool** | A hydraulically operated tool that is run in above the fishing tool and anchored to the casing by slips. By means of hydraulic power derived from fluid that is pumped down the fishing string, the pulling tool exerts a strong upward pull on the fish. |
| **Pulling Unit** | A portable, truck mounted mast equipped with winch, wire lines, and sheaves, used for pulling sucker rods or preforming a well workover. |
| **Pulsation Dampener** | A device used to reduce surge; i.e., a chamber containing a pressurized bladder used to reduce liquid surge from a pump. |
| **Pulse** | (1) A short wave train of mechanical vibrations.(2) A wave of short duration. |
| **Pulse Echo Method** | A single crystal ultrasonic test method that both generates ultrasonic pulses and receives the return echo. |
| **Pulse Length** | The time between the points at which the instantaneous value of current exceeds 10% of the maximum pulse current. |
| **Pulse Rate** | For the pulse method, the number of pulses transmitted in a unit time. Also referred to as: Pulse Repetition Rate. |
| **Pulse Tuning** | Control on some instruments used to optimize the response of the search unit and cable to the transmitter by varying the frequency. |
| **Pulser** | Electronic device and probe for generating a controlled magnitude magnetic pulse for standardizing transducers. |
| **Pump** | A rotating or reciprocating machine together with its driver and associated pipe, valves, pulsation dampners, etc., used to transfer fluids; e.g., sucker rod; reciprocating; centrifugal; rotary; gear; jet. |
| **Pump Bowl** | A portion of the pump of a vertical turbine or hydraulic pumping system. |
| **Pump Compressor Pressure Measurement** | The pressure used to pump mud into the drillstring at the pump discharge or the manifold. |
| **Pump Cup** | A form of piston used in reciprocating pumps. |
| **Pump Horsepower** | The rated horsepower of the pump. |
| **Pump Impeller** | The wheel like fan inside a centrifugal pump that impels or propels the fluid forward and out of the discharge opening. As the impeller turns at high speed, it pulls in the fluid at the suction opening of the pump and, with numerous vanes (small fixed blades) on the impeller, impels the liquid around the circular body or housing of the pump, into the discharge opening, and on to the pipeline. |
| **Pump Input Horsepower** | Mechanical horsepower put into the pump. |
| **Pump Liner** | A cylindrical, accurately machined metallic section of reciprocating pumps. |
| **Pump Off** | To pump so rapidly that the oil level drops below the standing valve on the pump. |
| **Pump Output Horsepower** | Hydraulic horsepower put out by pump. |
| **Pump Piston Diameter** | Size of the pump cylinder or piston diameter. |
| **Pump Piston Stroke Length** | The length of the pump stroke. |
| **Pump Stroke** | The vertical distance the sucker rods travel in a pumping well, as measured at the polished rod. |
| **Pump Stroke Frequency** | The stroke frequency in strokes per minute for the pump used during this bit run. |

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| **Pump Through Tubing Plug** | A plug set inside the tubing string which will not permit back flow, but will permit pumping through from the top side. |
| **Pumpdown** | The hydraulic transport and manipulation of tools. |
| **Pumper** | (1) A workman who produces oil wells.(2) An oil producing well which does not flow its production but requires artificial lift. |
| **Pumping** | (1) Act of moving fluids by mechanical means, plunger pump, jet pump.(2) In a wellbore, the act of lifting fluid to surface by artificial lift. |
| **Pumping Unit** | Surface equipment assembled for the purpose of performing artifical lift in a borehole. |
| **Pup Joint** | A joint of tubular goods shorter than standard length. |
| **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 the requirements as to the quality, condition, measurement and quantity of the product. |
| **Purchased Volume** | The volume of product purchased. |
| **Purchaser Identifier** | The identification number or code assigned to a purchaser. |
| **Purchaser Liability Amount** | The value on which the tax is based, for which the purchaser is liable. |
| **Purchaser Name** | (1) The name of the person, firm, company, or corporation entering into a contract or agreement for purchase.(2) COPAS: The party who buys the gas from a supplier. A purchaser has the obligation to pay for gas based on the gas purchase contract. |
| **Purchasing Percentage** | The percentage of volume the purchaser receives from the royalty volume allocated to the state. |
| **Purged Enclosure** | An enclosure supplied with clean air or an inert gas at sufficient flow and positive pressure to reduce to an acceptably safe level the concentration of any flammable gases or vapors initially present, and to maintain this safe level by positive pressure with or without continuous flow. |
| **Purifier** | A vessel in which undesirable heavy ends are removed from a stream by vaporizing material within a desired boiling range. |
| **Put A Well On** | To start a well producing. |
| **Put On Pump** | To install or activate an artificial lift pumping system to produce a well completion. |
| **Pvc** | Polyvinylchloride. |
| **Pvf** | Abbreviation for: Pump Volume Factor. |
| **Pvr** | SEE: Plant Volume Reduction. |
| **Pvt Analysis** | An examination of reservoir fluids in a laboratory under various pressures, volumes and temperatures (PVT) to determine the characteristics and behavior of the fluid. |
| Q | |
| **Quadrant Bearing** | SEE: Bearing. |
| **Quadratic Method** | A borehole survey calculation method. In modeling a wellbore as a curve, it is a method in mathmatical modeling. The projections into three vertical planes are quadratic functions. |
| **Qualified Part** | A part manufactured under an authorized quality assurance program and, in the case of replacement, produced to meet or exceed the performance of the original part. |
| **Qualifying Well** | SEE: OCS Qualifying Well. |

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| **Quality** | Conformance to specified requirements. |
| **Quality Assurance** | Those planned, systematic, and preventive actions which are required to ensure that materials, products, or services will meet specified requirements. |
| **Quality Control** | Inspection, test, or examination to ensure that materials, products, or services conform to specified requirements. |
| **Quality Program** | An established documented system to ensure quality. |
| **Quarter Quarter Quarter Section Identifier** | Identifies a subdivision of a quarter quarter section divided through its center, which is generally ten acreas in area. A quarter of a quarter quarter section refers to one-sixty-fourthth of a section. |
| **Quarter Quarter Section Identifier** | The quarter-quarter area within a quarter section divided through its center. A quarter of a quarter section refers to one sixteenth of a section. |
| **Quarter Quarter Spot Location** | The geographic location within a section of the Congressional Survey. This value defines a portion of a Section. Each section is divided into quarters (SE, SW, NE, NW). Each quarter can also be quartered and can be quartered again. The final division equals a ten acre parcel. Any of these divisions can then be halved or centered creating a spot which can be used in locating a well. |
| **Quarter Section Identifier** | A quarter section identifies a 160 acre area within a section. The quarter section is one-fourth of each section divided north to south and east to west through its center. |
| **Quarter Unit** | Quarter unit (Canadian). |
| **Quebracho** | A drilling fluid additive used for thinning or dispersing to control viscosity and thixotropy. It is a crystalline extract of the quebracho tree consisting essentially of tannic acid. |
| **Quick Union** | A union with coarse threads that employs an O-Ring seal for a quick lock. |
| **R** | |
| **R F Flange** | SEE: Raised Face Flange. |
| **Rabbit** | Used to test the size of tubular goods. |
| **Rack** | A framework on or in which items such as pipe may be placed for containment. |
| **Rack Pipe** | To stand tubular goods in the derrick when coming out of the wellbore or to stack tubular goods on a pipe rack. |
| **Racking Platform** | A platform located at a distance above the working floor for laterally supporting the upper end of racked pipe. |
| **Radar Unit** | A device utilizing a method of detecting distant objects and determining their position, velocity, or other characteristics by analysis of very high frequency radio waves reflected from their surface. |
| **Radial Pressure** | Uniform external pressure acting only on the sides of a member. |
| **Radiation Source** | (1) The origin of radiation.(2) An X-ray tube or a radioisotope. |
| **Radical** | Two or more atoms behaving as a single chemical unit; i.e., as an atom; e.g., sulfate; phosphate; nitrate. |
| **Radioactive Half Life** | The time that it takes one-half of the parent atoms to decay radioactively. |
| **Radioactive Tracer Log** | A production log which measures radioactive tracer movements and, therefore, fluid movements in the immediate vicinity of the borehole. |
| **Radioactivity** | The spontaneous decay of certain atoms. An atom can decay by giving off: (1) An alpha particle (two neutrons and two protons).(2) A beta particle (one electron).(3) Gamma rays (energy). |
| **Radioisotope** | An unstable isotope of an element that disintegrates spontaneously, emitting radiation. |

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| **Radius Grind** | Grinding performed to remove sharp edges and/or abrupt changes in the wall thickness around exploratory grinds or imperfections. |
| **Radius Of Curvature Method** | A borehole survey calculation method. The sets of angles are measured at the top and bottom of the course length to generate a space curve (representing the wellbore path) that has the shape of a spherical are passing through the measured angles at both the upper and lower ends of the measured course. |
| **Rafted Ice** | An ice sheet consisting of two or more layered ice sheets as a result of overriding. |
| **Raised Face Flange** | A type of flange having the gasket contact surface raised. |
| **Ram** | The closing and sealing component on a blowout preventer. Rams are of three types: blind, pipe, and shear. Pipe rams, when closed, have a configuration such that they seal around the pipe; shear rams cut through drill pipe and then form a seal. Blind rams seal on each other with no pipe in the wellbore. |
| **Random Sampling** | A prescribed number of units selected from a lot for inspection in such a manner that no unit is more likely to be selected than any other unit. |
| **Range** | (1) A single division, series or column of townships, each usually 6 miles square, extending parallel to and numbered east and west from a standard survey base meridian line.(2) The maximum value minus the minimum value.(3) The maximum ultrasonic path length that can be displayed. |
| **Range Direction** | Identifies the range direction (E or W) of a survey. |
| **Range Number** | The number of full or partial range divisions (approx. 6 miles wide) east or west of the reference principal meridian. |
| **Ranking Scale** | An absolute temperature scale that is used to determine standard gas volumes using a constant, such as degrees Fahrenheit plus 459.67. |
| **Rapid Sand Filter** | A relatively small filtering unit containing sand. The liquid movement through the sand bed is fairly rapid. The filter bed usually has to be cleaned often, by backwashing. |
| **Rat Hole** | A slanting hole located inside and near a corner of the derrick. It is cased with a large size length of casing and is about 25 feet deep. It forms a depository for the kelly so that the swivel, which connects to the upper end of the kelly can be conveniently adjusted and lubricated. It also provides an out of the way place for the kelly, swivel and kindred parts when drill pipe or casing is being run into the wellbore. |
| **Rate Of Flow Calculations Remark** | The calculations for determining well flow rates. |
| **Rate Of Gas Flow Volume** | The calculated volume of gas flow per specified time, typically 24 hours. Used as an intermediate value in further calculations to determine potentials or deliverabilities. |
| **Rated Capacity** | The rated load at specified radii as established by the manufacturer and are the maximum loads at those radii covered by the manufacturer's warranty. |
| **Rated Setback Load** | The maximum weight of tubular goods which can be supported by the substructure in the setback area. |
| **Rated Static Rotary Load** | The maximum weight being supported by the rotary table support beams. |
| **Rated Working Pressure** | The maximum internal pressure equipment is designed to contain and/or control. |
| **Raw Gas** | Gas as produced from a well before the extraction of liquefiable hydrocarbons. |
| **Raw Make** | Natural gas liquid stream that has not been separated into its component parts; e.g., ethane; propane; butane; gasoline. |
| **Raypath Parameter** | The quantity p = dt/dx = (1/V)sin i, where dt/dx is the reciprocal of apparent velocity, V is instantaneous velocity, and i is the angle a raypath makes with the vertical. For horizontal velocity layering, i = angle of incidence on a horizontal reflector, and p constant specifying a raypath. |
| **Reactive Torque** | Based on the physical property that action equals reaction, the torque reacting on the drillstem is that torque being generated at the point in question, such as at the bit. |
| **Reactor** | A vessel wherein two or more components react chemically under controlled conditions, often in the presence of a catalyst, to form one or more new components. Broadly speaking, may include catalytic crackers, regenerators and fractionators. |

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| **Readout** | A device that visually indicates a condition or voltage or current. Typical devices used in inspection requirements are galvanometers and cathode ray tube (CRT). |
| **Reamer** | A downhole tool used to smooth the wall of a borehole, enlarge the borehhole, stabilize the drill bit, and straighten the borehole axis where kinks or doglegs are encountered. |
| **Reaming** | The operation of enlarging an existing borehole. Used to enlarge an undersized core hole so that the regular drilling bit can be run to bottom and drilling continued. |
| **Rear End Radius** | SEE: Tail Swing. |
| **Reassignment Clause Flag** | An indicator of whether or not a reassignment restriction is placed on a lease. |
| **Reboiler** | A refinery heater that reheats or reboils a part of a process stream drawn off a distilling column and then reintroduced to the column as a vapor. |
| **Receiver Group** | The set of geophones which collectively feed a single recording channel. Previously referred to as Detector Group. |
| **Receiver Orientation** | The orientation of a seismic receiver. The orientation is given as two angles. The first angle is the horizontal angle measured from a given reference direction (such as True North or the Inline Direction), measured positive in the counter clockwise direction. The second angle is the deviation from the horizontal, with vertically up being equivalent to 90 degrees and vertically down being equivalent to -90 degrees. Previously referred to as Detector Orientation. |
| **Receiver Spacing** | Distance between elements in a seismic spread. Previously referred to as Detector Spacing. |
| **Receiving Waters** | Rivers, lakes, oceans, or other bodies that receive treated or untreated waste waters. |
| **Recess** | (1) The counter bored section at the end of line pipe and oil country tubular goods couplings to facilitate stabbing the thread.(2) An enlargement in conduit bore, generally concentric with the bore. |
| **Reciprocating** | The propelling of fluids by the use of a piston moving in a to-and-fro motion through a cylinder. |
| **Reclaimed** | Processed for reuse. |
| **Reclaimer** | A vessel in which undersirable heavy ends or impurities are removed from a stream by vaporizing material within a desired boiling range. |
| **Recompletion Date** | The date that recompletion operations ended and production resumed. |
| **Recompletion Project** | Operations involving any of the following: (1) Deepening from one zone to another zone.(2) Completing well in an additional zone.(3) Plugging back from one zone to another zone.(4) Sidetracking to purposely change the location of the bottom of the well, but not including sidetracking for the sole purpose of bypassing obstructions in the borehole.(5) Conversion of a service well to an oil or gas well in a different zone.(6) Conversion of an oil or gas well to a service well in a different zon |
| **Reconcentrator** | A low pressure heated vessel designed to boil impurities out of a liquid, thereby reconcentrating the liquid. |
| **Record** | SEE: Seismic Acquisition Record. |
| **Record Type Code** | An indicator of whether a tape transmitted report record is a district (D) record or a report (R) record. |
| **Recording Book** | The recording book identifies the book where the lease is recorded in the county or recording district records. |
| **Recording District Code** | Indicates the recording location is a district rather than a county. The recording is made in a state/province authorized recording district; e.g., Bolivar cty-dist-Rosedale; Bolivar cty-dist 2-Cleveland; Carroll cty-dist 1-Carrollton. |
| **Recording File Number** | Shows the file number assigned by the recording county or district to a legal instrument. |
| **Recording Gauge** | A device that provides a chronological record of gauge readings. |
| **Recording Instrument** | A device used to capture signals from seismic receivers during a seismic event. |

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| **Recording Location** | Shows the state and county or recording district in which a legal instrument is recorded. |
| **Recording Location County** | The county or parish where a lease instrument is recorded. |
| **Recording Location Date** | The date that a mineral lease, amendment, or correction was recorded in the Recording Book. |
| **Recording Location State** | The state in which a legal instrument is recorded, in combination with the county or recording district, shows where the instrument is recorded. |
| **Recording Memo** | Any recording information which does not fit into the commonly used book page format; e.g., the Louisiana register number. |
| **Recording Page** | Shows the page or microfilm reel number on which a legal instrument is recorded. Also referred to as: Reel Number. |
| **Recording Type** | Specifies the type of recording; e.g., amendments; corrections; original; releases. |
| **Recoverable Usage** | The injection of oil into a formation to stimulate production. This oil may be recovered in later production. |
| **Recovered Gas Flow Rate During Test** | The estimated average flow rate of gas recovered during the entire test; e.g., drillstem test; formation; reservoir limits. |
| **Recovered Gas Lift Gas** | Gas lift gas which has returned to the wellbore origin and is re-produced. Also referred to as: Spent gas lift gas. |
| **Recovered Water Flow Rate During Test** | The estimated average flow rate of water recovered during the entire test; e.g., drillstem test; formation; reservoir limits. |
| **Recovery Factor** | Percentage of the total hydrocarbon in a reservoir that ultimately can be withdrawn by primary or enhanced techniques. |
| **Recovery Overpayment Federal Tax Amount** | The portion of a lease Federal tax associated with an overpayment that goes with the current month's recovery. |
| **Recovery Overpayment Gross Amount** | The portion of a lease gross value associated with an overpayment that goes with the current month's recovery. |
| **Recovery Overpayment State Tax Amount** | The portion of a lease state tax associated with an overpayment that goes with the current month's recovery. |
| **Recovery Overpayment Volume** | The portion of a lease volume associated with an overpayment that goes with the current month's recovery. |
| **Recovery Project Identifier** | An indicator of a grouping of wells in an enhanced recovery project. |
| **Recovery Project Name** | The name of an enhanced recovery project. |
| **Recovery Start Date** | The year, month and day that the recovery of an overpayment is to begin. |
| **Recovery Volume** | The total volume of hydrocarbons that has been or is anticipated to be produced from a well or field, or the fluids obtained from a drillstem test. |
| **Rectifier** | A device for converting alternating current into direct current. Used to reduce corrosive action caused by reversing electric current. |
| **Recycle** | The return of part of a stream to a location for additional processing in order to increase recovery of the desired components. |
| **Recycling** | The process by which materials pass through a cycle and undergo change or treatment, thus permitting their reclamation in some form to further use. |
| **Redelivery** | The delivery of natural gas by a pipeline to a shipper or for a shipper's account. |
| **Redress** | Replacement of items as defined in the Manufacturer's Operating Manual. Redress may be performed on or away from well site. Each replacement item should be a qualified part. |

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| **Reduced Opening Valve** | A valve which has a reduced opening through its closure mechanism. |
| **Reducer** | That which narrows down, lowers, or drops;e.g., reducing tubular size, speed of an engine or motor, gear, etc. |
| **Reel System** | A circular drum and assorted mechanical equipment used to spool wireline. |
| **Reeving** | A rope system where the rope travels around drums and sheaves. |
| **Reference Block** | A block or series of blocks of material containing artificial or actual discontinuities of one or more reflecting areas at one or more distances from the test surface, which are used for reference in calibrating instruments and in defining the size and distance of defective areas in materials. |
| **Reference Document Line Number** | The line number of the original reference document. |
| **Reference Document Number** | The number of the original document to which the invoice refers. |
| **Reference Document Receipt Date** | The date the original reference document is received. |
| **Reference Document Type** | The original document type to which the invoice refers. |
| **Reference Electrode** | A standard cell of known voltage used for making voltage measurements of a corrosion cell. Calomel and copper sulfate are common reference electrodes. |
| **Reference Magnet** | Magnets inset in the wall of the nonmagnetic drill collar. Used to indicate a position of the deflecting tool with respect to magnetic north. A picture of a magnetic needle compass at the magnets is imposed on the picture of the magnetic north compass. |
| **Reference Set** | A collection of information referred to by another attribute. Example is a collection of map projection information and affine transformation parameters to define the local map and absolute location for a point. |
| **Reference Standard** | A pipe containing machined notches or natural defects used as a base for comparison or for inspection equipment standardization. |
| **Refiner Name** | The name of the entity who processes crude oil and condensate. |
| **Refitting Cost** | Costs incurred from time to time to move a drilling unit to a suitable port, carry out repairs, maintenance, and modifications on the drilling unit including inspection costs and obtaining the necessary certifications by the relevant government authorities. |
| **Reflection** | The process in which a portion of the wave energy does not transmit across a surface, but is returned from the surface. |
| **Reflection Angle** | The angle defined by the direction of the reflected wave and the normal to the interface at the point of incidence. The angle of reflection is equal to the angle of incidence. |
| **Reflector** | Any material variation returning wave energy. |
| **Reflux** | The liquid condensed from overhead vapors that is returned to the top tray of a fractionator. |
| **Reformer** | A vessel that causes oil or gas cracking (a process in which relatively heavy hydrocarbons are broken up by heat into lighter products). |
| **Refraction** | The bending of transmitted rays in wave propagation caused by a change in the properties of the transmitting medium. The bending may occur at an abrupt change of properties (a discontinuity) or gradually if the properties change gradually. |
| **Refraction Angle** | The angle between the refracted rays and the normal to the refracting surface. |
| **Refraction Statics** | SEE: Static Correction. |
| **Refractive Index** | The ratio of the velocity of a wave in one medium to the velocity of the wave in a second medium is the refractive index of the second medium with respect to the first. It is a measure of the amount a wave will be refracted when it enters the second medium after leaving the first |

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| **Refrozen Lead** | Lead in which ice has grown, but remains relatively smooth. Thickness can vary from a few inches to several feet. |
| **Refund Provision Flag** | An indicator of whether the gas purchaser must currently disburse questionable amounts. |
| **Regenerator** | A vessel in which a diluted, spent, or contaminated catalyst or stream is brought toward its original condition. |
| **Regenerator Unit** | A unit to strip the gas components which are absorbed in the absorber/contactor from the absorbent liquid, molecular sieve, or other absorbants. |
| **Regular Minimum Payable Amount** | The minimum amount of money allowed to be paid by a check prepared by the regular check writing process. This amount is controlled by pay code. |
| **Regular Opening Valve** | A valve which may have a reduced opening, either round or oblong, through the closure member. The area of this opening is usually from 50 to 100 % of the pipe cross sectional flow area. |
| **Regulation** | A rule or policy defined by a regulatory agency which obligates a business associate to specific procedures and reporting. |
| **Regulator** | (1) A piece of equipment used to control a phase of a process or operation. (2) A device that automatically controls the flow, pressure, or temperature of a liquid or gas through a line. |
| **Regulatory Agency** | A geopolitical entity that is empowered to create, administer, and/or enforce regulations within a specific jurisdiction. |
| **Regulatory Agency Name** | The name of the state or Federal regulatory agency which receives reports or statements. |
| **Regulatory Agency Representative Name** | The name of an official or authorizing person representing a state or federal regulatory agency. |
| **Regulatory Area** | An area of interest defined by a regulatory agency for the purposes of implementing a regulation or rule. |
| **Regulatory District Name** | The name assigned to a state or Federal regulated district. |
| **Regulatory District Number** | The number assigned to a state or Federal regulated district by the appropriate regulatory agency. |
| **Regulatory Field** | A field that has been defined by a regulatory agency. |
| **Regulatory Field Code** | An indicator of a surface area containing a subsurface accumulation of a natural resource. These indicatorss are unique within the state and are assigned by the regulatory agency. In the states of Illinois, New Mexico and Oklahoma, it is synonymous with pool number. |
| **Regulatory Field Name** | The name assigned by the regulatory agency or state to the field; an assigned name that describes a producing oil & gas field. |
| **Regulatory Guideline Identifier** | The identifier for the regulation or order issued by a regulatory agency. |
| **Regulatory Lease** | A boundary, surface or subsurface, established by a regulatory agency for the right to explore for and produce hydrocarbons. Parameters involved in defining a lease: product, spacing orders, ownership, etc. |
| **Regulatory Lease Name** | A name assigned to a lease by the responsible regulatory agency. |
| **Regulatory Lease Number** | A lease number assigned by a regulatory agency to a legal document for the right to explore for and produce hydrocarbons. |
| **Regulatory Lease Well Name** | The name assigned to a well by a regulatory agency. |
| **Regulatory Property Number** | A number assigned by the regulatory agency to a property. |
| **Regulatory Purchaser Name** | The standard name for a particular purchaser assigned by a specific regulatory agency. |
| **Regulatory Renewal Type** | Identifies contracts as: Original; Replacement renewed prior to 11-08-78; Rollover; Renewed on or after 11-08-78. |
| **Regulatory Report Id Code** | An agency identifier for a regulatory report. |

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| **Regulatory Report Identifier** | The agency identifier for a regulatory report. |
| **Regulatory Reservoir** | A reservoir defined by a regulatory agency. |
| **Regulatory Tax And Fee Due Amount** | The amount of regulatory tax and fee due. |
| **Reheater** | A device used to reheat a stream. |
| **Reinjection Volume** | The volume of gas reinjected to the reservoir. |
| **Reject** | A control for minimizing or eliminating low amplitude signals (electrical or material noise) so that larger signals are emphasized. Also referred to as: Suppression. |
| **Reject Level** | The value that is established as a baseline test signal, and is used to determine whether specimens that are above or below the baseline may be rejectable, or otherwise distinguished from the remaining specimens. |
| **Reject Opening** | SEE: Underflow Opening. |
| **Related Contract Number** | Identifies a specific contract that is associated to the host contract. |
| **Related Contract Type** | This indicator shows the relationship between two contracts; i.e., superceded contract; related over/short contract for sales contract with split delivery. |
| **Relative Age** | The geologic age of a fossil organism, rock, geologic feature, or event, defined relative to other organisms, rocks, features, or events rather than in terms of years. |
| **Relative Bearing** | The clockwise azimuthal angle from the upper side of the survey tool to the reference electrode, measured looking down the wellbore. |
| **Relative Density** | The ratio of the mass of a given volume of a substance to the mass of a like volume of a standard substance; e.g., water; air. |
| **Relative Permeability** | A measure of the ability of two or more fluids to flow through a rock sample when the sample is saturated with more than one fluid; e.g., water; gas; oil. |
| **Relay** | An electromagnetic device for remote or automatic control actuated by variation in conditions of an electric circuit and operating in turn other such devices (such as switches) in the same or different circuit. |
| **Release Gas** | Gas previously contracted and dedicated between producers/brokers and a transporter company which, through mutual agreement between the parties, was thereafter released from contract and ultimately made available for purchase by third parties. |
| **Relevant Indication** | An indication resulting from a discontinuity in the pipe. |
| **Relief Valve** | A valve that opens when the pressure reaches a predetermined value. |
| **Relief Well** | A wellbore segment drilled to intersect an existing wellbore that is out of control. |
| **Remaining Producing Wells Count** | The number of wells remaining on the property or facility that are producing or capable of producing. |
| **Remaining Royalty Producing Wells Count** | The number of wells remaining on the royalty account that are producing or capable of producing. |
| **Remanent Magnetization** | The component of the earth's magnetization that has a fixed direction relative to the rock and is independent of moderate applied magnetic fields; i.e., the earth's magnetic field. |
| **Remanufacture** | Any activity involving disassembly, reassembly and testing of equipment or any item thereof, with or without the replacement of qualified parts where machining, welding, heat treating or other manufacturing operation is employed. |
| **Remark Type Code** | An indicator of the type of remark associated with a specific entry. |
| **Remedial Sidetrack** | The basic bypassing of obstructions in the borehole, such as stuck pipe, while drilling a well and returning to the original objective. |
| **Remnant Permafrost** | Permafrost existing in a soil prior to construction and installation activities. |

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| **Remote Control Panel** | A panel containing a series of controls that will operate the valves on the control manifold from a remote point. |
| **Remote Control Station** | A centrally located station containing equipment to control and regulate operations in one or more fields. |
| **Remote Reading Gauge** | An instrument capable of providing indications of pressure, vacuum, voltage, etc., at a point remote from the place that such indications are actually taken. |
| **Remote Terminal Unit** | An electronic equipment package used to control an individual location connected to a supervisory unit. |
| **Rent Payor Flag** | An indicator that the party who completed the form will be responsible for payment of advanced rentals. |
| **Rental** | Money or other property given to maintain a mineral lease in the absence of drilling or mining operations or production of minerals. |
| **Rental Amount Type** | Indicates whether the payment was made on a per acre or lease basis. |
| **Rental Check Number** | The identifier of a lease rental check which includes the bank account number followed by a sequential check number. |
| **Rental Frequency** | Frequency of mineral lease rental payments; e.g., annual; semiannual; quarterly; monthly. |
| **Rental Payment Agent** | Party charged with the rental paying responsibility; e.g., we pay; partner pays. |
| **Rental Period** | The calendar period that covers the contractual rental payment agreeement. |
| **Repair Grind** | A grind made to remove a questionable imperfection and make the product comply with the appropriate specification. |
| **Repair Of Oil Or Gas Or Service Well** | SEE: Workover. |
| **Repeat Formation Test** | SEE: Drillstem Test; Production Test. |
| **Repeated Section** | A portion of the geologic column encountered more than once during drilling or surface transect. Repeated sections are encountered across reverse or thrust faults, but they can also be encountered in severly deformed rocks without faults or across normal faults in such rocks. |
| **Repetition Rate** | The rate at which the individual pulses of acoustic energy are generated. Also referred to as Pulse Repetition Rate. |
| **Replacement Velocity** | The velocity used in static corrections and wave equation datuming to compensate for low velocity near surface materials. |
| **Reply Due Date** | The date the originator has requested response from the other parties. |
| **Report Attachment Code** | An indicator of which attachments accompany a report. Options include log section, reservoir structure map, soil sample analysis, etc. |
| **Report Attachment File Format Type Code** | The format type of an electronic file submitted as an attachment to a report. E.g., ASCII, LIS, LAS, GIFF, etc. |
| **Report Attachment File Name** | The name given to an electronic file attached to a report. |
| **Report Date** | The month and year of the report. |
| **Report Filing Code** | An indicator of whether reported data is original, corrected, re-submission, proposed, information copy, etc. |
| **Report Number** | The number used to identify a report as an original or the sequential number of the amendment. |
| **Report Period Date** | The calendar period for which the report is submitted. |
| **Report Period End Date** | The ending date of the reported period. |
| **Report Period Start Date** | The starting date of the reported period. |

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| **Report Preparer Name** | The name of the individual filing a report . |
| **Report Preparer Title** | The title of the individual filing a report . |
| **Report Remark** | A narrative of pertinent report information. |
| **Report Submission Date** | The date the return was submitted. |
| **Report Total Production Volume** | The total production volume as reported. |
| **Reporter Identifier** | An identifier of the person or company filing a report with a regulatory agency. |
| **Repressuring** | A program of increasing or maintaining reservoir pressure by injecting gas or fluids into one or more wells with completions in the reservoir to increase oil producing rate and ultimate oil recovery. |
| **Requested Maximum Production Rate** | The maximum production rate (MPR) applied for by the operator. |
| **Rerun** | (1) To reprocess an off specification material to produce an acceptable product.(2) A second run of an electric log or drillstem test. |
| **Reserve Calculation Method Code** | An indicator to describe the method of calculating reserves. |
| **Reserved Production Payment** | A production payment in which the owner of the royalty or working interest sells the residual interest to a second party but reserves a production payment, which he may retain or sell simultaneously to a third party. |
| **Reserves** | Reserves are the estimated volumes of crude oil, condensate, natural gas, natural gas liquids, and associated substances anticipated to be commercially recoverable from known accumulations from a given date forward, under existing economic conditions, by established operating practices, and under current government regulations. Reserves estimates are based on interpretations of geologic and/or engineering data available at the time of the estimate. Reserves do not include volumes of crude oil, condensate |
| **Reservoir** | A volume of reservoir rock containing a contiguous natural accumulation of producible fluids and characterized by a single pressure system. |
| **Reservoir Acre Feet Volume** | An acre of hydrocarbon reservoir one foot thick. |
| **Reservoir Boi Calculation Code** | Indicates whether the initial oil bubble point value (Boi) is manually calculated or internally calculated. |
| **Reservoir Bulk Volume** | The total volume of rock and included fluids contained in a reservoir segment interval. |
| **Reservoir Current Reservoir Pressure Date** | The date the current reservoir pressure is determined. |
| **Reservoir Current Static Pressure** | The current static pressure at reservoir datum depth. |
| **Reservoir Datum Depth** | The subsea depth to the average depth of the reservoir. |
| **Reservoir Drive Mechanism** | The natural drive mechanism of a reservoir for the recovery of reservoir fluids; e.g., solution gas drive; dissolved gas drive; water drive; depletion drive; gas cap drive; gravity drainage; combination drive. |
| **Reservoir Drive Mechanism Code** | An indicator of the mechanism that provides the primary source of reservoir energy. |
| **Reservoir Energy** | The energy inherent in a reservoir which forces the reservoir fluids to the borehole. |
| **Reservoir Fluid** | Natural fluids within a reservoir rock. The reservoir fluid may be either a liquid or a gas and may contain certain nonhydrocarbon compounds. The nonhydrocarbon compounds which are of sampling importance are nitrogen, carbon dioxide, hydrogen sulfide, helium, and water (usually brine). |
| **Reservoir Fluids Contact** | SEE: Oil Water Contact; Gas Oil Contact; Gas Water Contact. |
| **Reservoir Gas Acreage** | The areal extent of the gas portion of a reservoir. |
| **Reservoir Gas Recoverable Reserves Volume** | The quantity of gas that is expected to be recovered from the reservoir. |
| **Reservoir Initial Gas Reserves Volume** | The original quantity of gas that has accumulated in the reservoir. |

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| **Reservoir Interval** | The vertical declination of a reservoir rock. |
| **Reservoir Name** | The name given to an oil or gas reservoir. |
| **Reservoir Oil Acreage** | The areal extent of the oil portion of a reservoir. |
| **Reservoir Pay Thickness** | The vertical length of the pay zone. |
| **Reservoir Pressure Measurement** | The pressure measurement recorded for the fluids present in a reservoir. |
| **Reservoir Pseudoreduced Pressure** | The pseudoreduced reservoir pressure (Pr). |
| **Reservoir Pseudoreduced Temperature** | The ratio of the reservoir temperature (T) to the critical temperature (Tc) by the formula (Tr=T/Tc). This ratio is used to calculate the gas compressibility factor (Z factor) according to the Law of Corresponding States. Pseudo refers to the fact that the gas involved is a mixture of gases and not a pure compound. All temperatures are expressed in degrees Absolute. |
| **Reservoir Pseudoreduced Temperature Calc Code** | Indicates whether the pseudoreduced temperature (Tr) value is manually calculated or internally calculated. |
| **Reservoir Remaining Gas Reserves Volume** | The quantity of gas that remains to be produced from the total reservoir. |
| **Reservoir Remaining Oil Reserves Volume** | The liquid hydrocarbons that remain in a reservoir which can be economically produced. |
| **Reservoir Rock** | Porous and permeable rock that potentially can accumulate producible fluids. |
| **Reservoir Seal** | The confining barrier or restriction to migration of pore fluids through the reservoir rock of a reservoir. |
| **Reservoir Segment** | An areally differentiated portion of a reservior. A reservoir segment may contain one or more vertically differentiated reservoir zones. |
| **Reservoir Static Pressure Date** | The year and month of the most recent pressure test for a specific reservoir. |
| **Reservoir Temperature Measurement** | The temperature measurement recorded for the reservoir rock and/or its fluids. |
| **Reservoir Volume Factor** | (1) Factor used for converting surface hydrocarbon volumes to reservoir volumes.(2) The inverse of Formation Volume Factor. |
| **Reset Point** | A means for shifting the proportional band on a control instrument with respect to its control point. |
| **Reshoot** | To reoccupy a seismic source location, and set off another shot. |
| **Residual** | In refining: (1) The concentration of chemicals which form in a boiler or other treater water system.(2) Oils that are leftovers in various refining processes.(3) Heavy black oils used in ships' boilers and in heating plants. In measurement: (1) The difference between a measurement (or estimation) of a quantity and the expected value. |
| **Residual Field** | The remaining magnetic field retained by ferromagnetic materials after they have been exposed to a magnetic force. |
| **Residual Method** | Inspection utilizing the residual magnetic field remaining in the pipe after magnetization for obtaining indications. |
| **Residual Oil** | In laboratory reservoir fluid analysis, the liquid remaining at atmospheric pressure following the differential liberation of gas at reservoir temperature. |
| **Residual Percentage** | The percent of product remaining after a test. |
| **Residual Statics** | Static corrections applied to cause a better coherency among seismic events within a gather. The mean shift within the gather is zero. Residual statics is generally required because the near surface model is not known in enough detail to create this coherency. |
| **Residual Stress** | The stress that remains in an unloaded member after it has been formed and installed in a structure. Some typical causes are forming, welding and corrections for misalignment during installation in the structure. The misalignment stresses are not accounted for by the plasticity reduction factor n. |

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| **Residual Time** | Difference between the observed time and the regional time. |
| **Residue** | The remaining fluid after the removal of certain elements and compounds in a fractionator, separator, tank, plant process, etc. |
| **Residue Allocation Charge Type** | Identifies the type of charge deducted from the lease value determined by amount of residue allocated to a lease. |
| **Residue Gas** | Gas from a processing unit after extraction of liquids. Also referred to as: Tail Gas. |
| **Residue Gas Available For Sale Volume** | Plant residue gas which is not used as plant fuel or returned to the producer for use in lease operations. |
| **Residue Gas Minimum Percentage** | The minimum percentage of residue gas which must be available for sales after processing under a gas processing agreement. |
| **Residue Gas Price Per Unit Amount** | The value per unit of measure of residue gas. |
| **Residue Gas Returned Nonexempt Volume** | The residue returned to lease in excess of allowances. |
| **Residue Gas Returned Volume** | Plant residue gas delivered back to the producer for use in lease operations. |
| **Residue Percentage** | The percentage calculated by dividing the volume of the residue by the initial sample volume. |
| **Residue Pooling** | Provision in many casinghead gas purchase contracts providing that all of the seller's properties covered by the contract will be treated as a single property in determining whether producer has taken more residue gas for use in operations than the quantity to which he is entitled |
| **Residue Purchaser Name** | The name whichIdentifies the residue purchaser for a gathering system/plant. |
| **Resin** | Semisolid or solid complex, amorphous mixture of organic compounds having no definite melting point nor tendency to crystalize. Resins may be a component of compound materials that can be added to drilling fluids to impart special properties to the system, wall cake, etc. |
| **Resistivity** | The electrical resistance offered to the passage of a current, expressed in ohm-meters; the reciprocal of conductivity. Fresh water drilling fluids are usually characterized by high resistivity; salt water drilling fluids by a low resistivity. |
| **Resistivity Log** | Any of several types of well logs on which some aspect of rock resistivity has been recorded. |
| **Resistivity Measurement Date** | The date that resistivity measurements were taken. |
| **Resistivity Meter** | An instrument for measuring the resistivity of drilling fluids and its cakes. |
| **Resolution** | (1) The ability of ultrasonic equipment to give simultaneous, separate indications from discontinuities having nearly the same range and lateral position with respect to the beam axis.(2) The ability to separate two features that are very close together. |
| **Response Date** | The date that response is transmitted to the originator, generated by an electronic data interchange (EDI) transmission. |
| **Response Factor** | The relationship between the amount of a component in a sample and its resulting electrical response on a chromatogram. |
| **Restricted Area Sealing Means** | A seal which encloses a pressure containment area smaller than the adjacent API ring gasket. |
| **Retention Percentage** | The ratio of recovery to extraction for a given component, expressed as a percentage. |
| **Retention Time** | The time any given particle of material is actually on the screening surface. |
| **Retrievable** | Ordinarily has reference to special subsurface equipment which , after use, can be released and recovered from the wellbore. |
| **Retrograde Condensation** | Condensation of hydrocarbons from a gaseous state to liquids as a result of reduction of pressure. Begins as pressure in a reservoir drops to about 3,600 pounds per square inch and reaches maximum at reservoir pressure of about 1,600 psi. |

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| **Return On Investment** | The ratio of: (1) the ultimate value of the reserves attributable to a well less the drilling investment, taxes, operating costs, and other needed investments anticipated during the life of a well, to (2) the drilling and other investments anticipated during the life of the well. Frequently cited as ROI. |
| **Revenue Source Code** | An assigned indicator denoting the type of agreement where by wells are placed and produced; examples are state spacing requirements and unit operating agreements. |
| **Reverse Circulation** | The direction of drilling fluid circulation in which the circulating liquid returns to the surface through the drill pipe after being pumped down the annular space. Typically done to remove potentially combustible material from the drillstring after drillstem testing. |
| **Reverse Fault** | A dip slip fault in which the hanging wall moves up and over the footwall. |
| **Reversed Cone Offset** | SEE: Negatively Skewed Bit. |
| **Reversionary Option Exercised Code** | An indicator of whether or not the company has elected to exercise its option to convert to a working interest or to escalate its overriding royalty interest (ORI). |
| **Reversionary Option Exercised Date** | The company has the option to convert to a working interest or to escalate its overriding royalty interest (ORI). This is the actual date that the company elects to convert to a working interest or to escalate its ORI. |
| **Revolving Upperstructure** | The rotating upper frame structure and the operating machinery mounted thereon. |
| **Reworking A Well** | SEE: Workover. |
| **Reynolds Number** | A dimensionless number that occurs in the theory of fluid dynamics. The diameter, velocity, density, and viscosity (consistent units) for a fluid flowing through a cylindrical conductor are related as follows: Re = (diameter) (velocity) (density)/(viscosity). The number is important in fluid hydraulics calculations for determining the type of fluid flow; i.e., whether laminar or turbulent. The transitional range occurs approximately from 2,000 to 3,000; below 2,000 the flow is laminar, above 3,000 the |
| **Rheology** | The study of the deformation and flow of matter. |
| **Rheostat** | A resistor for regulating a current by means of variable resistances. |
| **Rhp** | SEE: Rotary Horsepower. |
| **Rich Amine** | Monoethanolamine (MEA) which contains all the acid gas extracted in the contactor. |
| **Rich Gas** | SEE: Wet Gas. |
| **Rich Oil** | Absorption oil which contains all materials extracted in the absorber. |
| **Ridge Keel** | The portion of an ice ridge that extends below the water line. Can be partially consolidated in first year ridges but the depth of consolidation is variable. |
| **Ridge Sail** | The portion of a ridge that extends above sea level. In early season the sail of a first year ridge is generally composed of loosely stacked blocks. In multiyear ridges, the sail becomes eroded or worn smooth due to summer melting and ultimate refreezing, and is generally composed of almost solid, freshwater ice with numerous air pockets. |
| **Rig** | The derrick, drawworks and attendant surface equipment of a drilling or workover unit; e.g., rotary, cable tool, wire line spudder, auger type spudder, service unit. |
| **Rig Anchor** | The anchors installed around a floating rig for stabilization. |
| **Rig Arrival Date** | The date the rig is moved onto the well site. |
| **Rig Catwalk** | SEE: Catwalk. |
| **Rig Contractor Name** | The name of the contractor operating the drilling rig. |
| **Rig Fluid System** | A network of tanks, pipework, pumps, and solids control equipment that is capable of building, maintaining, delivering, and handling the return of sufficient fluid to support drilling and completion activities. |

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| **Rig Height** | The height of the drilling rig floor above ground or water level. |
| **Rig Moved On Well Location Date** | SEE: Rig Arrival Date. |
| **Rig Name** | The name of a drilling rig. |
| **Rig Number** | The rig number assigned by the rig contractor or regulatory agency. |
| **Rig Power System** | A package of equipment which is designed to provide electrical, hydraulic, or pneumatic power. |
| **Rig Released Date** | The date that any rig is released from operations as specified in the contract and can be moved from the well site. |
| **Rig Rotating System** | A package of equipment which is designed to provide rotational power to a drillstring. Two distinct mechanisms are in common use: 1) the rotary table, which is set into the drill floor with power being transmitted to the drillstring via a bushing and a profiled kelly; 2) the top drive, a large motor and gear box assembly mounted in the derrick directly above the rotary table which is free to travel vertically as required. |
| **Rig Type** | The type of rig installation; e.g., land; barge; submersible; platform; jackup; drillship; semisubmersible; artificial island. |
| **Rigging Up** | The on site erection and connection of the rig components in preparation for drilling or well servicing operations. |
| **Right Hand Thread** | A thread that winds in a clockwise receding direction when viewed axially. |
| **Right Lateral Strike Slip Fault** | A strike slip fault in which the opposite fault block has moved relatively to the right, with the predominant motion being strike slip. Also referred to as: dextral fault. |
| **Right Longitude Of Area** | The easternmost longitude of an area. |
| **Rights Of Way Permit Number** | The number assigned by a regulatory agency to identify the permit granting permission to construct facilities on public surface. |
| **Rigidity** | (1) The stiffness or flexibility characteristics of a bottomhole assembly or an element thereof.(2) The property of a material to resist applied stress that would tend to distort it. |
| **Rik** | SEE: Royalty-In-Kind. |
| **Ring Gear** | SEE: Swing Gear. Also referred to as: Bull Gear. |
| **Ring Stiffened** | A member with circumferential stiffeners. |
| **Ringing** | SEE: Springing. |
| **Ringing Time** | The time that the mechanical vibrations of a crystal continue after the electrical pulse has stopped. |
| **Riparian Right** | Rights of a land owner to the water on or bordering his property, including the right to prevent diversion or misuse of upstream water. |
| **Riser** | A pipe through which fluid travels upward. |
| **Riser Box** | The female coupling member of a riser assembly. |
| **Riser Handling Equipment** | Usually consists of a riser handling sub and a riser spider. The riser sub latches on to the end of the riser joint permitting it to be connected to the surface lifting device. The riser spider is used to support the riser string, during deployment/retrieval, as a joint is being made or broken. Also referred to as: Riser Running Equipment. |
| **Riser Joint** | A section of riser pipe having ends fitted with a box and a pin. |
| **Riser Pin** | The male coupling member of a riser assembly. |
| **Riser Pipe** | The basic pipe from which riser joints are fabricated. |

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| **Riser Spacer Frame** | A purpose designed frame to maintain lateral separation among risers. |
| **Riser Spider** | A device used to support the riser string as a joint is being made or broken during riser deployment/retrieval operations. |
| **Riser Spoiler** | Used in areas where high velocity currents are encountered to preclude vortex induced riser vibration. Various types of spoilers have been effective in reducing these vibrations; however, they frequently result in increase in drag forces. |
| **Riser Sub** | A device which latches on to the end of the riser joint permitting it to be connected to the surface lifting device. |
| **Rock** | (1) Aggregate of one or more minerals; e.g., granite; shale; marble.(2) A body of undifferentiated mineral matter; e.g., obsidian.(3) Solid organic matter; e.g., coal. |
| **Rock A Well** | To alternately bleed pressure from casing, then tubing, of a dead well, in an effort to start to flow. |
| **Rock Anisotropy** | Refers to the differences in physical properties of rocks as related to the directional characteristics. |
| **Rock Pressure** | SEE: Reservoir Pressure. |
| **Rock Stratigraphy** | SEE: Lithostratigraphy. |
| **Rock Type** | SEE: Igneous Rock; Metamorphic Rock; Sedimentary Rock. |
| **Rockwell Hardness** | The resistance of a material to indentation with a small diamond point or a 1/16 inch diameter ball. This correlates directly with strength. |
| **Rod** | SEE: Sucker Rod. |
| **Rod Board** | A platform located at a distance above the working derrick floor for supporting sucker rods. |
| **Rod Guide** | An attachment to sucker rods which serves to prevent them from rubbing on the sides of the tubing. |
| **Rod Pumping Unit** | A piece of equipment used to reciprocate a rod pump installed on a well in order to produce fluid. |
| **Roi** | SEE: Return on Investment. |
| **Roll** | Platform rotation about the plant north-south axis. |
| **Roll Mark** | A term applied to surface imperfections caused by improper roll alignment or roll surface damage. Such imperfections may be periodic or continuous. |
| **Roll Mean Period** | The average time elapsing between successive occurrences of roll, measured over the interval. |
| **Roll Off** | SEE: Filter Response. |
| **Roll Off Angle** | A measure of the tendency of a drill bit to spin off the face of a whipstock. The roll off angle affects the azimuth but not the inclination of the deviation and is used to correct the whipstock orientation before the well is kicked in. |
| **Roll P P Max** | The average of the highest one-tenth observations of the roll of the vessel measured over the interval. |
| **Roll P P Sig** | The average of the highest one-third observations of roll of the vessel measured over the interval. |
| **Rolled In Scale** | A surface imperfection caused by scale, formed during a previous heating, which has not been eliminated prior to surface rolling. Also referred to as: Scab. |
| **Rolled In Slug** | A foreign metallic body rolled into the metal surface, usually not fused. |
| **Roller Path** | The surface upon which the rollers that support the revolving upperstructure bear. It may accommodate either cone rollers or live rollers. |
| **Rolling Cutter Reamer** | The outermost radius provided by cutting roller members. |

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| **Rolling Element** | The balls or rollers contained between the rings of the swing circle bearing. |
| **Rollover Contract** | (1) Contract that expires and is renegotiated.(2) Under the NGPA, any contract that is entered into on or after November 9, 1978 for the first sale of natural gas that was previously subject to an existing contract which expired at the end of a fixed term. |
| **Root** | The bottom of a thread. |
| **Root Truncation** | The distance between the sharp root (root apex) and the finished root. |
| **Rope** | Length of fibrous strands (at least one inch in circumference) woven, twisted or braided together. |
| **Rope Discharge** | The characteristic underflow of a hydrocyclone so viscous and overloaded with separable solids that not all the solids reporting to the underflow can crowd through the underflow opening. Also referred to as: Rope. |
| **Rope Falls** | Block and tackle arrangements to assist in wireline operation equipment placement. |
| **Rose Diagram** | A polar plot or diagram in which radial distance indicates the relative frequency of an observation at a certain azimuth. |
| **Rotary** | A device that moves fluids by use of an impeller rotating around its own axis. |
| **Rotary Bit** | A cutting device at the end of a drill pipe rotated by an engine powered table on the rig floor. Rotary bits are of many shapes and designs, from the simple fishtail bits to the cones or rollers which revolve as the tool turns. |
| **Rotary Bushing** | A metal lining that fits into the rotary table opening to reduce its size for special purposes; e.g., to fit the slips; to fit the kelly bushing. Also referred to as: Master Bushing. |
| **Rotary Drilling** | The method of drilling that depends on the rotation of a column of drill pipe to the bottom of which is attached a drill bit. A drilling fluid is circulated to remove the cuttings. |
| **Rotary Horsepower** | The horsepower required to rotate the drillstring and the bit. Rotary Horsepower= Torque (ft-lb) x RPM/5,250. |
| **Rotary Hose** | On a drilling rig, the hose that conducts the drilling fluid from the mud pump and standpipe up to the swivel and kelly. Also referred to as: Mud Hose. |
| **Rotating Head** | A rotating pressure sealing device used in drilling operations utilizing air, gas, foam, or any other drilling fluid whose hydrostatic pressure is less than the shut in formation pressure. |
| **Rotating System** | SEE: Rig Rotating System. |
| **Rotation Axis** | The vertical axis around which the rotation takes place. |
| **Rotation Resistant Rope** | A wire rope consisting of an inner layer of strand laid in one direction covered by a layer of strand laid in the opposite direction. This has the effect of counteracting torque by reducing the tendency of the finished rope to rotate. |
| **Rotator** | A device installed on polished rods to turn sucker rods if paraffin scrapers are attached. |
| **Rotor Diameter** | The diameter of a circle by the rotor blades while rotating. Commonly abbreviated as: RD. |
| **Roughneck** | A driller's helper and general all around worker on a drilling rig. |
| **Round Trip** | Pulling the drill pipe, usually for changing the drill bit or tubing and rerunning to the wellbore bottomhole. |
| **Roundness** | Indicates the degree of abrasion of a clastic particle as shown by the sharpness of its edges and corners; e.g., very angular; rounded. |
| **Roustabout** | An employee who does general oil field work related to the production, transportation, treating, and storing of oil and gas. |

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| **Royalty** | The share of the production or proceeds therefrom reserved to the lessor under the terms of a mineral lease. Normally, royalty interests are free of all costs of production (as distinguished from costs of marketing) except production taxes. |
| **Royalty Acreage** | Includes fee lands and mineral interests (leased and unleased), royalties, overriding royalties, oil payments out of production, and any other interests in acreage in which the company has a working interest. |
| **Royalty Clause Type** | Indicates whether the oil & gas lease royalty clause is a provision or deduction. |
| **Royalty Disbursement Flag** | An indicator of whether or not the company is required to disburse payment to royalty owners. |
| **Royalty Due Amount** | The amount of royalties due. |
| **Royalty Due Amount** | The amount of royalties due. |
| **Royalty Interest Percentage** | The share of the minerals reserved, free of expense, by a mineral interest owner when leasing the property to another party. |
| **Royalty Owner Percentage** | The share of royalty reserved for the mineral interst owner. |
| **Royalty Production** | The share of total lease production which is reserved for the mineral interest or fee owner. |
| **Royalty Provision Type** | Identifies the type of standard royalty provision clauses contained in mineral leases; e.g., market value; percent on proceeds; special type of an oil and gas lease; gas royalty agreement; government; state; Indian; right for the free use of gas. |
| **Royalty Rate** | The percentage of product due as royalty. |
| **Royalty Rate Code** | SEE: Federal Royalty Rate Code. |
| **Royalty Sales Quantity** | The share of total lease sales volume which is reserved for the mineral interest or fee owner. |
| **Royalty Sales Value** | The portion of the value, received from the sale of a quantity of a product, that is payable to the royalty owner. |
| **Royalty-in-kind** | The royalty owner exercises his royalty interest by taking his share of the product(s) produced and marketing them rather than receiving his royalty portion of the value by the company. Also referred to as: RIK. |
| **Royalty-in-kind Flag** | An indicator of whether the take-in-kind interest owner has exercised the right to take the product(s) and market them rather than receive their royalty portion of the value received by the company when the company markets the product(s). |
| **Rrc Record Number** | A temporary number assigned to a well by the Texas Railroad Commission (RRC) to assist in identifying that well in subsequent processes. |
| **Rubble Field** | A region of deformed ice, usually composed of upturned blocks refrozen into an ice sheet. May contain a series of closely spaced ridges unseparated by sheet ice and has larger areal extent than a rubble pile. |
| **Rubble Pile** | An ice feature of areal, rather than linear extent, created by ice failing against a structure of a grounded feature. |
| **Run** | Oil taken from a tank for delivery. |
| **Run A Tank** | To transfer oil from a stock tank into a pipeline. |
| **Run In** | To go into the wellbore with tubing, drill pipe, etc. |
| **Run Speed** | The speed of the drillstring while heading in or out of the wellbore. |
| **Run Statement** | A monthly summary of run tickets given by the purchaser or operator of crude oil, detailing volume, gravity, price, and value of each run ticket. |
| **Run Ticket** | The basic legal instrument evidencing the volume, gravity, temperature, BS and W content, etc., of oil being delivered. |

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| **Run Ticket Number** | An identifying number on the basic legal instrument used to record the run volume of oil. |
| **Run Volume** | The volume of crude oil sold and transferred to the pipeline by the producer. |
| **Running A Free Point** | Lowering a tool on a cable designed to measure the stretch in a stuck pipe, or using a free point indicator to determine the deepest point at which there is no cement behind pipe. |
| **Running Casing** | The act of latching onto casing with elevators, slips, and tongs and lowering casing into a wellbore. |
| **Runoff** | The portion of rainfall, melted snow, or irrigation water that flows across ground surface and eventually is returned to streams. |
| **Runout** | Intersection of the thread cone and the pipe outside surface. Location on the outer surface where the thread groove vanished. |
| **Rupture Disc** | A pressure relieving safety device, containing a frangible disc designed to break when pressure on one side exceeds a specified amount. Also referred to as: Safety Head; Safety Plug. |
| **S** | |
| **S& W Probe** | An instrument used in the detection of S&W (Sediment & Water). |
| **S Wave** | A body wave, in which the particle motion is perpendicular to the direction of propagation. |
| **S&w** | The preferred term for Basic Sediment and Water (BS and W). This is commonly used as a measure for treating performance of hydrocarbon liquids. The American Society for Testing and Materials (ASTM) Standard Test No. D96-82, entitled Water and Sediment in Crude Oils, is an accepted standard for this test. |
| **S&w Automatic Monitor** | An electronic device detecting and measuring sediment and water (S&W) in producing oil and pipeline condensate. |
| **S-turn Borehole** | SEE: S-Type Wellbore. |
| **S-type Wellbore** | A wellbore path drilled with a vertical segment, a deviated segment, and a return toward a vertical segement. |
| **Sack** | An oil field measure of quantity which is converted to volume using yield of cement per sack. A known number of sacks of cement will yield a known volume of slurry. Example: surface casing was cemented with 2000 sx of class H. 16.4#/gal. cement (sx is the industry accepted abbreviation for sacks). The yield for this cement is 1.06 cubic feet per sack. |
| **Saddle** | (1) A fitting made in parts to clamp onto a pipe for the purpose of stopping a leak or providing an outlet.(2) A welded fitting used to reinforce an opening in a pipeline. |
| **Saddle Bearing** | A bearing between the walking beam and the sampson post of a pump jack or pumping unit. |
| **Safe** | Conforms in every detail to a design which has been demonstrated to perform satisfactorily in the service intended. |
| **Safety Device** | An instrument or control used within the safety system. |
| **Safety Factor** | The ratio of the maximum permissible working load to the load causing failure. |
| **Safety Hat** | SEE: Hard Hat. |
| **Safety Head** | A pressure relieving safety device containing a frangible disc designed to break when pressure on one side exceeds a specified amount. |
| **Safety Joint** | A fishing tool accessory placed above the tool. If the tool is engaged and the fish cannot be pulled, the safety joint will permit disengagement. |
| **Safety Latch** | A latch provided in a hook or elevator to prevent these devices from opening and dropping the weight prematurely. |

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| **Safety Net** | A netting section around the perimeter of the flight deck used for personnel safety, and is normally provided in lieu of a safety shelf where the flight deck alone provides ground cushion effect. |
| **Safety Shelf** | A section of solid construction around the perimeter of the flight deck used for safety of personnel, and may be included in the ground cushion area. |
| **Safety System Flare Volume** | The volume of flaring pilot of purge gas or fuel to test safety flare system. |
| **Safety Valve** | An automatic valve designed to close or open when an abnormal condition exists. |
| **Safety Valve Lock** | A device attached to or a part of the subsurface safety valve (SSSV) that holds the valve in place. |
| **Safety Valve Working Pressure Measurement** | The performance rating of a safety valve. |
| **Sale Transfer Volume** | The sale or transfer volume, in whole units, that has been allocated to each source listed. |
| **Sales Agreement** | An agreement between a purchaser/buyer and seller (e.g., producer, marketer, pipeline LDC) which defines the terms and conditions of a purchase/sale and title transfer of product quantities. |
| **Sales Allocation** | The process by which supply is assigned to purchasers in accordance with a given priority during periods when total sales requests exceed the sellers' total supply. |
| **Sales Date** | The month and year that minerals are bought or sold off a lease. |
| **Sales Delivery Point Location** | The point of delivery for sales. |
| **Sales Volume** | The volume of product sold or traded. |
| **Salinity** | The concentration of salt in water. |
| **Salt** | (1) Chemically, the term salt is also applied to any one of a class of similar compounds formed when the hydrogen of an acid is partly or wholly replaced by a metal or a metallic radical.(2) In drilling fluid terminology, the term salt is applied to Sodium Chloride, NaCl. |
| **Salt Bath Heater** | A direct fired heater employing molten salt as a heat transfer medium. |
| **Salt Dome** | A dome shaped mass of rock salt that is formed by the intrusion of rock salt into the overlying sediments. |
| **Salt Dome Storage** | Cavities created out of underground salt formations for the storage of petroleum products, toxic waste, or other materials. |
| **Salt Measured Depth** | The measured depth in the borehole to the salt dome. |
| **Salt True Vertical Depth** | The subsea depth at the point where the borehole penetrates the salt dome. |
| **Salt Water Clay** | SEE: Attapulgite Clay. |
| **Salt Water Disposal** | SEE: Product Disposition. |
| **Salt Water Flow** | An influx of salt water into the borehole from the surrounding rocks. |
| **Salt Water Intrusion** | The invasion of salt water into a body of fresh water, occurring in either surface or ground water bodies. When this invasion is caused by oceanic waters, it is called sea water intrusion. |
| **Sample** | Material (solid, liquid or gas) collected and cataloged for reference or examination. |
| **Sample Bomb** | A thick-walled container, usually steel, used to hold samples of oil or gas under pressure. |
| **Sample Catcher** | (1) A device for catching gas vapor and/or liquids from a process area or pipeline for compositional analysis.(2) A device for catching drilling fluids as they emerge from the wellbore for geological analysis. |
| **Sample Count** | Number of values in a series of sampled data. |
| **Sample Date** | The date that the sample was obtained. |

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| **Sample Interval** | (1) Interval at which samples are taken. The increment is dependent on the units of the incrementing index; e.g., time; depth.(2) The interval between readings; i.e., the time between successive samples of a digital seismic trace or depth between measurements in a well log curve. |
| **Sample Interval Base Depth** | The deepest measured depth of a sampled interval. |
| **Sample Interval Depth** | SEE: Sample Interval Top Depth OR Sample Interval Base Depth. |
| **Sample Interval Top Depth** | The shallowest measured depth of a sample interval. |
| **Sample Rate** | The rate at which the cuttings of the rock formation broken up by the drill bit are brought to the surface. |
| **Sample Recovery Temperature** | The temperature of distillate at the initial boiling point and specified distillate recovery percentages. |
| **Sample Source Code** | An indicator of the special type of vessel from which the sample was taken; e.g., separator , tank, etc. |
| **Sample Type Code** | The type of sample collected; e.g., washed cuttings; cuttings; conventional core; diamond core; lithology cut; drilling fluid; formation fluid. |
| **Sampler** | A device attached to a flowline permitting automatic sampling of products flowing in the line. |
| **Sampson Post** | An upright timber near a cable tool well on which is balanced a walking beam. It is used only in cable tool drilling. |
| **Sand** | A clastic sedimentary particle with a diameter between 1/16 and 2 millimeters, based on the Wentworth Scale of Measurement. |
| **Sand (api)** | Solid particles in a drilling fluid that are too large to pass through a U.S.S. No. 200 screen (74 micron equivalent), as referenced in API RP 13B. |
| **Sand Bottom True Vertical Depth** | The subsea depth to the bottom of the sand horizon. |
| **Sand Class** | The classes of sand, based on size, using the Wentworth Scale of Measurement; e.g., fine; medium; coarse. |
| **Sand Control** | Any method by which large amounts of sand are prevented from entering the wellbore. Methods include: Gravel Pack; Screen Liner; and Sand Consolidation. |
| **Sand Control Treatment** | A workover done on a borehole to mitigate sand production. Includes gravel packs done after initial completion and plasticizing treatments. |
| **Sand Control Type** | The type of sand control treatment performed on a well completion; e.g., gravel pack; screen; reperf. |
| **Sand Discharge Gate** | SEE: Underflow Opening. |
| **Sand Jet** | A system of one or more perforated pipes, or nozzles, located near the bottom of emulsion treaters which is used periodically to clean out sediments by flushing with water. |
| **Sand Pan** | An inverted angle baffle or trough located above the sand (sediment) outlet connections to facilitate uniform sand or sediment removal. Notches in the troughs or pans increase the velocity of the water leaving the vessel to prevent bridging. |
| **Sand Pump** | (1) A cylinder with a plunger inside and a valve at the bottom, lowered into a wellbore from time to time to take out the accumulated slime resulting from the action of the drill on the rock. Also referred to as: Shell Pump; Sludger. (2) A pump for artificially lifting wells producing fluids containing sand. |
| **Sand Screen Liner Gauge** | The gauge, or measure, of the opening in the sand control screen. |
| **Sand Top Measured Depth** | The measured depth to the top of the sand. |
| **Sand Top True Vertical Depth** | The subsea depth to the top of a sand. |
| **Sanded Up** | Borehole or well completion clogged by sand entering it from the surrounding rocks. |
| **Sandstone** | A cemented or consolidated sedimentary rock composed of; e.g., quartz; feldspar. Sandstone is a common rock in which petroleum and water accumulate. |

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| **Saturated Btu** | The heating value contained in a cubic foot of natural gas fully saturated with water. |
| **Saturated Btu At Delivery Conditions** | The number of British thermal units (BTUs) contained in a cubic foot of natural gas fully saturated with water under actual delivery pressure, temperature, and gravity conditions. |
| **Saturated Btu At Test Conditions** | The number of British thermal units (BTUs) contained in a cubic foot of natural gas fully saturated with water at a specified pressure base and 60 degrees Fahrenheit. |
| **Saturated Liquid** | A liquid which is in equilibrium with a vapor at the prevailing pressure and temperature. |
| **Saturated Solution** | A solution is saturated if it contains at a given temperature as much of a solute as it can retain. |
| **Saturated Vapor** | A vapor which is in equilibrium with a liquid at the prevailing pressure and temperature. |
| **Saturation** | The fraction or percentage of the pore volume occupied by a specific fluid; e.g., oil; gas; water. |
| **Saturation Pressure Measurement** | The pressure where gas begins to be released from solution in oil or liquid begins to condense out of gas. |
| **Saturation Pressure Type** | Type of saturation pressure at the given temperature for the fluid; e.g., bubble point; dew point. |
| **Saturation Temperature** | The temperature at which the given saturation pressure was measured. |
| **Scab** | An imperfection in the form of a shell or veneer, generally attached to the surface by sound metal. It usually has its origin in an ingot defect. |
| **Scale** | A deposit precipitated out of water through an oxidation or other chemical process onto surfaces in contact with the water. |
| **Scale Treatment** | The act of chemically removing an encrusted oxide film formed inside a casing string. |
| **Scattered Energy** | Energy that is reflected in a random fashion by small reflectors. |
| **Scheduling** | A process by which nominations are first consolidated by key point, by contract, and verified with upstream/downstream parties. If the verified capacity is greater than or equal to the total nominated quantities, all nominated quantities are scheduled. If verified capacity is less than nominated quantities, nominated quantities will be allocated according to scheduling priorities. |
| **Schmidt Diagram** | In dipmeter interpretation, a polar plot where the azimuth indicates dip or drift direction and the distance from the origin indicates the dip or drift magnitude. |
| **Schrader Core Valve** | SEE: Drill Core Valve. |
| **Scour** | Soil erosion from waves and current action. |
| **Scraper** | Any device that is used to remove deposits (as scale or paraffin) from tubing, casing, rods, or flow lines; e.g., line scraper; paraffin scraper. |
| **Scraper Trap** | A pipeline quick connection for inserting or removing a scraper, or pipeline pig. The pig is forced through the line for cleaning or testing for obstructions. |
| **Scratcher** | A device fastened to casing which removes the mud cake from the wall of the borehole to condition it for cementing. The scratcher is fashioned of stiff wire. |
| **Screen** | A machine with screening surface(s) used to classify materials by size. Sieve analysis. |
| **Screen Analysis** | Determination of the relative percentages of substances, passing through or retained on a sequence of screens of decreasing mesh size. Analysis may be by wet or dry methods. Also referred to as: Sieve Analysis. |
| **Screen Cloth** | A type of screening surface, woven in square, rectangular, or slotted openings. |
| **Screen Cloth Protector** | SEE: Support Rubber. |
| **Screen Cloth Rectangular Opening** | When referring to wire cloth, having elongated openings defined by single or multiple cross wires. The mesh count in one direction is different from that at right angles to that direction. |

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| **Screen Liner** | A special perforated pipe or casing which has the perforations protected by screen, usually used in loosely consolidated sand formations. |
| **Screen Liner Depth** | The measured depth the top of the screen liner set in the wellbore. |
| **Screen Section** | A finished piece of screening surface complete with edge or other preparation. |
| **Screen Surface Plugging** | The wedging or jamming of openings in a screening surface by particles, preventing passage of undersize material. |
| **Screening** | A mechanical process which accomplishes a division of particles on the basis of size by their acceptance or rejection by a screening surface. |
| **Screening Surface** | The medium containing the apertures for passage of the undersize material. |
| **Screw Conveyor** | SEE: Conveyor. |
| **Screw Thread** | A ridge of uniform section in the form of a helix on the internal or external surface of the pipe. Also referred to as: Thread. |
| **Scroll** | SEE: Flute. |
| **Scrubber** | A vessel in which entrained liquids or solids are removed from a gas stream. |
| **Seal** | (1) A thin metal strip used to seal a valve in an open or closed position. Seals are used on tanks in a battery to prevent the undetected opening and closing of the tanks.(2) An air tight or water tight closure or fitting.(3) SEE: Reservoir Seal. |
| **Seal Record Review Date** | The date the Bureau of Land Management (BLM) reviewed the seal record(s). |
| **Seal Section** | A device used to seal off pressure and prevent leakage in wellheads, submersible pumps, etc. |
| **Sealing Agent** | Any of many materials added to drilling fluid or cements to restore circulation. |
| **Sealing Bore** | The polished section of conduit that receives a packing element. |
| **Seam** | A straightline longitudinal crack or opening extending radially inward from the original outside surface. The seamless tube making process generally imparts a spiral path to the seam, but this is not usually noticeable in the threaded area. Seams may be caused by ingot cracks, surface pits on ingots, subsurface blowholes, or poor heating practices. |
| **Seamless Pipe** | Wrought steel tubular product made without a welded seam. It is manufactured by hot working steel, or if necessary, by subsequently cold finishing the hot worked tubular product to produce the desired shape, dimensions, and properties. Cold drawn tubular products, without appropriate heat treatment, are not acceptable. |
| **Search Coil** | Small coil or coils mounted in a transducer shoe. |
| **Search Interval** | In dipmeter interpretation, a depth interval corresponding to anticipated maximum dips. |
| **Search Probe** | A small coil or coil assembly that is placed on or near the pipe surface for detecting flaws and defects. |
| **Search Unit** | A device incorporating one or more transducers. |
| **Seat** | The fixed portion of the valve against which the movable part of the valve seals when in the closed position. |
| **Secant Method** | SEE: Trapezoidal Method and Average Angle Method under Borehole Survey Calculation Method. |
| **Second Level Supervisor** | An employee whose primary function is the direct supervision of the First Level Supervisor(s). |
| **Secondary Means Of Escape** | Fixed stairways or fixed ladders of metal construction or portable flexible ladders, knotted man ropes, and other satisfactory devices. |
| **Secondary Recovery** | The extraction of hydrocarbons from a reservoir beyond what can be recovered by normal methods of flowing or pumping. The use of waterflooding, gas injection, etc. |

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| **Secondary Sort** | The secondary value on which the data is sorted. If multiple sort keys are used, this value will change faster than the primary key, yet slower than all remaining keys. |
| **Secondary Water Treatment** | Waste water treatment, beyond the primary state, in which bacteria consume the organic parts of the wastes. This biochemical action is accomplished by use of trickling filters or tha activated sludge process. Effective secondary treatment removes virtually all floating and settleable solids and approximately 90% of both BOD5 and suspended solids. Customarily, disinfection by chlorination is the final stage of the secondary treatment process. |
| **Section Identifier** | An indicator of (1) a subdivision of a township and which can be identified as Federal section and resurvey tracts, dominion section, Texas block (including block, league or block and township), Carter section, city subdivision, and civil section. A section usually contains 640 acres (more or less) and it may be divided by survey into subsections, lots or tracts.(2) one of the 36 divisions of a township in congressional areas. In nonCongressional areas there are 25 divisions in a township; e.g., The Ca |
| **Section Milling** | The process by which a portion of pipe casing is actually removed by a cutting operation involving a mill. |
| **Section Number** | The number corresponding to sections within a township and range. Section 1 is in the NE and section 36 is in the SE corner of the Congressional township. Sections are generally 1 mile square. |
| **Sediment And Water** | The preferred term for Basic Sediment and Water (BS and W), which consists of impurities present in oil as it comes from the well. S and W content is commonly used as a measure for treating performance of hydrocarbon liquids. The American Society for Testing and Materials (ASTM) Standard Test No. D96-82, entitled Water and Sediment in Crude Oils, is an accepted standard for this test. |
| **Sedimentary Rock** | (1) A rock formed from the consolidation of loose sediment that has accumulated in layers. Includes clastic rock, which consists of mechanically formed fragments of pre-existing rock, which may or may not have been transported by water, wind, ice or gravity;(2) Chemical rock, formed by precipitation from solution; (3) Organic rock, consisting of remains or secretions of plants and animals. |
| **Sedimentary Structure** | SEE: Structure (Sedimentary). |
| **Sedimentation** | (1) In waste water treatment, the settling out of solids by gravity.(2) The process of accumulating, transporting and depositing matter or material by wind or water. |
| **Sedimentology** | The branch of geology dealing with the study of sedimentary rocks and of the processes by which they were formed. The description, classification, origin and interpretation of sediments. |
| **Seepage** | Water that flows through the soil. |
| **Seismic** | Generation, propagation, recording, processing, and interpretation of acoustic or elastic body waves through the earth. Seismic generally implies lower frequency waves than the logging term sonic. Seismic will generally be used as a modifier to indicate that the term it modifies is in some way associated with a seismic experiment. |
| **Seismic Acquisition** | Term used to identify seismic information acquired or generated, usually in a land or marine environment. |
| **Seismic Acquisition Line** | A spatially contiguous collection of single or multiple occurrences of utilization of seismic source, receivers, or platform, at stations whose location and identity may be specified. |
| **Seismic Acquisition Record** | A collection of seismic traces. Usually the collection of traces representing a common source. Also referred to as record or shot record. |
| **Seismic Acquisition Set** | The seismic data created in an area of interest for processing together, including associated positioning data. A seismic acquisition set may include surface and/or well data. Examples are: a 3D seismic data volume, a 2Dseismic line, a checkshot or Vertical Seismic Profile. |
| **Seismic Acquisition Survey Environment** | The type of field environment in which seismic data was acquired; e.g., marine; land; marsh. |
| **Seismic Amplitude** | The deflection of a seismic receiver from a rest state caused by a seismic event. This deflection is typically sensed electronically. |
| **Seismic Array** | A geometric pattern of similar receivers and/or sources, such as electrodes, geophones, or hydrophones. An array is generally designed to enhance the detectability of certain transient events, while suppressing other interfering events. |
| **Seismic Array Receiver Distance** | The distance between the receivers in the seismic receiver array. |

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| **Seismic Array Source Distance** | The distance between the sources in the seismic source array. |
| **Seismic Cable** | In seismic, the assembly of electrical conductors used to connect geophones or hydrophones to a recording instrument. This term can also refer to the telemetry connecting recording stations to a recording instrument. |
| **Seismic Channel** | A logical input port to a recording instrument. The term has meaning only in connection with recording systems. For a given recording event, each channel is associated with a specific signal generating device; i.e., a geophone array at a specific location. |
| **Seismic Contract** | A contract under which seismic data was acquired. |
| **Seismic Crew** | The group working together to carry out a geophysical field project. |
| **Seismic Cube** | Data which is representable via a matrix. The "surface indexes" of this matrix must represent inline indexes and crossline indexes from bin nodes from a single binset through its association to bin nodes. |
| **Seismic Data** | The collection of seismic data that exists at a particular state of the processing. Processing that changes the data will normally create a new seismic data set. The fundamental characteristic of data in this collection is that it references seismic objects; e.g., source/receiver occurrences, bin nodes, stations, etc. |
| **Seismic Datum Shift** | A correction value to observed reflection times which, when applied, gives the arrival time as if sources and/or receivers had been located on the datum surface. |
| **Seismic Detector** | SEE: Seismic Receiver. |
| **Seismic Device** | A device that generates, detects, or communicates either seismic waves or electric signals which represent seismic waves. |
| **Seismic Device Node** | A node within the spread at which location is determinable indirectly by offset from network nodes. This is normally the case with seismic detectors: source arrays often have positioning sensors mounted within them. |
| **Seismic Facies** | A region containing seismic reflections whose characteristic elements, such as amplitude, abundance, continuity, frequency, and configuration, distinguish the region from adjacent regions. |
| **Seismic Feature** | An identifiable linear surfacial or regional feature within a seismic image of the Earth. Seismic features are given identifying names which serve to support correlation between different seismic data sets. |
| **Seismic Grid** | A set of intersecting 2D seismic lines. (This is not to be confused with the term grid which refers to a coordinate system.) SEE: Grid(3). |
| **Seismic Line** | (1) A linearly, ordered collection of bin nodes or stations to which one or more seismic traces is associated.(2) A collection of seismic traces representing data collected along a specified path. The term Seismic Line alone is not sufficient to represent the desired collection of data. In general, there will need to be qualifiers to more precisely define the collection of seismic data to be assigned to each surface location; e.g., Seismic acquisition Line; Seismic Binned Line. |
| **Seismic Line Multifold Coverage Number** | A number identifying the common depth point (CDP) multiplicity of coverage involving a seismic line; i.e., 24 fold coverage occurs when the same CDP is sampled at 24 offset distances. |
| **Seismic Line Name** | An alphanumeric value assigned to a seismic line to identify the line. |
| **Seismic Line Number** | A numeric value used to uniquely identify a seismic line within an acquisition program. |
| **Seismic Line Projected Deviated Wellbore Path** | Projection of a the wellbore path of a deviated well onto the plane of the seismic line. |
| **Seismic Line Projected Well Surface Location** | Projection of the well surface location on the seismic line. |
| **Seismic Mistie** | The difference in time or depth between two seismic picks which are part of the same seismic feature at a binset intersection. |
| **Seismic Panel** | A two dimensional array of values which is related to a seismic object; e.g., semblance as a function of time and velocity at a bin node. |
| **Seismic Party** | SEE: Seismic Crew. |

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| **Seismic Permit Application Date** | The year, month and day of the Geological and Geophysical (G&G) Permit application. |
| **Seismic Permit Issued Date** | The year, month and day that a Geological and Geophysical (G&G) Permit was issued. |
| **Seismic Permit Number** | The unique identification assigned by a Regulatory Agency to a Geological and Geophysical (G&G) Permit application. |
| **Seismic Pick** | A point of interest on a seismic trace, characterized by a particular amplitude, phase, velocity, or some other feature. The pick is identified by the bin node at which it occurs, by the relationship to a seismic feature, and by the travel time at which the pick occurs. It is usually associated with the arrival of a seismic wavefront. |
| **Seismic Position Network** | A group of nodes with observations defined between these nodes. Most observations define a geometric relationship between two or more nodes. Networks may be processed according to specific, consistent sets of rules, to determine position at the various nodes. |
| **Seismic Position Node** | A reference point fixed on a device whose location may move and may be determined from time to time. One seismic position node may be associated with one or more devices. A seismic position node may be either a seismic device node or a position sensor node. |
| **Seismic Process** | Computer processes applied to seismic line data, including program names and generic process types. A process will create/change/remove either seismic data, information related to the data, or the relationships among these. |
| **Seismic Processing History** | A collection of comments and/or other information describing the process(es) applied to a collection of seismic data. |
| **Seismic Profile** | The series of measurements made from a single source point location into a recording spread. Additional shots from the same general source location into the same spread are considered part of the same profile. However, if the same spread is shot from a different source point location, it is a different profile, or if the same source point location is shot into a different spread, it is also a different profile. |
| **Seismic Receiver** | A device that transforms seismic energy into electrical voltage. Geophone receivers ordinarily respond to one (or more) component(s) of the displacement, velocity, or acceleration involved in the passage of the seismic wave. Previously referred to as Seismic Detector. |
| **Seismic Receiver Group** | An array of geophones deployed at a station which collectively feed a single seismograph channel. |
| **Seismic Receiver Orientation** | Orientation of the seismic receiver with respect to the line. |
| **Seismic Recording Length** | Total length of time of the recorded traces or waveforms. |
| **Seismic Reflection** | The energy or wave from a seismic source which has been reflected (returned) from an acoustic impedance contrast (reflector) or series of contrasts within the earth. |
| **Seismic Reflection Time** | The time required for a seismic wave to propagate from source to receiver, reflecting off a given horizon. |
| **Seismic Reflector** | A geologic interface across which an acoustic impedance contrast occurs which causes incident seismic energy to be reflected. |
| **Seismic Refraction Survey** | A program to map geologic structures using head waves. The objective is to determine the arrival times of head waves in order to map the depth to the refractors in which they traveled. Involves head waves; i.e., involves a travel path in a high velocity medium parallel to the bedding. |
| **Seismic Sample Domain** | The domain frequency value in which the data are sampled; e.g., time; depth. |
| **Seismic Section** | A graphical display of seismic traces that represent a cross section of the earth subsurface. |
| **Seismic Source** | SEE: Source. |
| **Seismic Source Element** | The individual device which generates seismic energy. Usually several of these are combined into a group or array. |
| **Seismic Source Line** | A spatially contiguous collection of single or multiple occurrences of utilization of a seismic source, at stations whose location and identity may be specified. |
| **Seismic Source Orientation** | Orientation of the seismic source with respect to the line. |

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| **Seismic Spread** | A collection of receiver stations that are to receive a seismic signal. Each station has a receiver group that will record a single seismic trace. In marine surveys, the spread also includes the seismic sources. |
| **Seismic Survey** | (1) A program for mapping subsurface geologic structures by creating seismic waves and observing the arrival time of the waves reflected from acoustic impedance contrasts or refracted through high velocity members.(2) The acquisition of seismic data: (a) within a specified time period; (b) at a specific area; (c) tied to a specific prospect; and/or (d) having all accounting expenses tied to a common entity; i.e., a 3D seismic data volume or a collection of 2D seismic lines. |
| **Seismic Survey Line** | An ordered collection of surveyed stations. |
| **Seismic Taper** | A smoothly varying gain function applied to a trace to gradually reduce the amplitude. In filtering, it is used to avoid dependence on high frequencies to represent a signal adequately. |
| **Seismic Tie Line** | The intersection of seismic lines. |
| **Seismic Trace** | The third value on which data is sorted. |
| **Seismic Uphole Time** | The time for the first energy from a buried explosion to reach a receiver located at the surface above the source. |
| **Seismic Velocity** | (1) The propogation rate for a seismic wave without necessarily implying any direction.(2) A rock property that represents the speed at which an elastic wave would propagate in the rock. |
| **Seismic Velocity Analysis** | The process of calculation of subsurface seismic velocity distributions using observed reflection moveout times observed at various source to receiver distances. |
| **Seismic Velocity Gather** | A collection of seismic traces used to analyze seismic velocities for a given surface location |
| **Seismograph** | A device which records vibrations in the earth, detected by geophones. |
| **Seismograph Channel** | A single series of interconnected devices through which data can flow from source (not the seismic source, but the reciever groups) to the recording seismograph. |
| **Selector Control** | A device used to control the flow of liquids or gases from one stream to another. |
| **Selectrograph** | Chart used to select the minimum required length of nonmagnetic drill collars. |
| **Self Potential** | SEE: Spontaneous Potential. |
| **Seller** | The party who has contractual signatory authority and warranty of title to sell product services, the product, or its by-products as a commodity. The seller may have legal authority to sell as agent for or on the behalf of other owners. |
| **Seller Name** | The name of the person, firm, company, or corporation who has entered into a contract or agreement to purchase petroleum products or buy petroleum products. |
| **Selling Arrangement Code** | An indicator of the type of sales contract under which the petroleum product is marketed. |
| **Selling Arrangement Number** | The number identifying the selling arrangement of the product. |
| **Sensing Probe** | Wireline instrument used in connection with Electronic Yaw Equipment. |
| **Sensitive Reservoir** | A reservoir in which ultimate recovery is decreased by high reservoir production rates. A high reservoir production rate is one which exceeds the Maximum Efficient Rate (MER). |
| **Sensitivity** | The ability to detect small differences or discontinuities. |
| **Sensitivity Percentage** | A ratio of the smallest flaw detectable divided by the wall thickness of the pipe being examined. |
| **Sensor** | Any device which monitors operating conditions to detect abnormal or unusual condition and transmit a signal/alarm to perform a specified function or notify designated operating personnel. |
| **Sensor Calibration** | The additive computed minus observed (C-O) and scale computed divided by observed (C/O) correction factors to be applied to (NOT which have been applied to) "raw" measurements. |

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| **Sensor Calibration Addition** | The additive corrected minus observed (C-O) part of a sensor calibration, |
| **Sensor Calibration Scale Factor** | The multiplicative part corrected divided by observed (C/O) of the sensor calibration. |
| **Separate Or Special Allowable Order Number** | The number of an order or permit by the regulatory agency authorizing a well to produce at a separate or special permitted production rate, as an exception to the general rules and regulations regarding such rates. |
| **Separation** | A physical process where gas in solution (associated gas) is removed from crude oil through reduction of pressure. |
| **Separator** | (1) An item of production equipment used to separate free liquid components of the well production stream from gaseous elements. Separation is accompished principally by gravity, the heavier liquids falling to the bottom and the gas rising to the top.(2) A process vessel employed to separate liquids of distinctly different physical properties which result in layering or vapor phasing. |
| **Separator Cone** | SEE: Hydrocyclone. |
| **Separator Gas Oil Ratio** | The ratio of separator gas rate to separator oil (or condensate) rate, expressed as cubic feet of separator gas per barrel of separator oil (or condensate). |
| **Separator Gas Oil Relative Volume Factor** | The volume of separator oil at separator conditions of pressure and temperature divided by the volume of stock tank oil at stock tank conditions. |
| **Separator Liquid Gravity Measurement** | The density of the liquid as it exists at atmospheric conditions in a separator. |
| **Separator Pressure Measurement** | The pressure maintained in a separator during operation. |
| **Separator Temperature** | The operating temperature of the separator. |
| **Separators Count** | The number (count) of separators on a facility. |
| **Sequence Stratigraphy** | The branch of Stratigraphy dealing with rock sequences; i.e., rock relationships within a chronostratigraphic framework of repetitive, genetically related strata bounded by surfaces of erosion or nondeposition, or their correlative conformities. |
| **Sequential Discriminator** | An indicator that distinguishes items in a sequence; e.g., last, second, first, initial, final. |
| **Sequestration** | The formation of a stable, soluble complex by combining a metallic ion, such as calcium, magnesium, or iron, with a suitable agent thereby modifying the action of the ion. Representative sequestering agents are ethelenediamine tetraacetic acid (EDTA) or its sodium salts, pyrophosphates, tripolyphosphates, and citrates. |
| **Serial Register** | An index to filings made under a particular offering for lease or other type of application which is maintained in District Land Offices of the Bureau of Land Management, Regional Offices of the Minerals Management Service, and other agencies of the Department of the Interior, as appropriate. |
| **Serial Register Approval Hour** | The clock time (hour) a lease assignment was approved and documented to the serial register. |
| **Serial Register Approval Minute** | The clock time (minute) a lease assignment was approved and documented to the serial register. |
| **Serialization** | Assignment of a unique code, as required, to maintain proper records. |
| **Service Settlement Type** | Indicates whether the associated service is a charge (cost) or a credit (income) to the company, or is income to the party performing the service with no direct financial effect on the company. |
| **Service Unit** | An organization unit that provides services which aid in maximizing assets, profitability or meeting strategic objectives. |
| **Service Well** | A well drilled or completed for the purpose of supporting production in an existing field; e.g., injection wells, disposal wells, or wells for producing nonhydrocarbon materials. |
| **Serviceability Limit State** | Function of design variables which defines a condition at which a member no longer satisfies functional requirements, although it is still capable of carrying additional loads before reaching an ultimate limit state. |
| **Set Casing** | The well activity of installing of casing in a wellbore. |

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| **Setdown** | The increase in Tension Leg Platform (TLP) draft with offset due to tendon system restraint. |
| **Setting Off Course** | A method of setting the direction of the borehole axis in anticipation of the drill bit walking. Also referred to as: Lead Angle. |
| **Settle** | (1) To sink gradually to the bottom.(2) To become clear by a deposit of sediment or scum.(3) To become compact by sinking. |
| **Settleable Solids** | Bits of debris and fine matter heavy enough to settle out of waste water. |
| **Settled Production** | Production at a regular rate of flow over a substantial period when the decline rate is slow as distinguished from the period of flush production. |
| **Settlement Amount** | The total monetary amount paid to adjust settlement values. |
| **Settlement Option Notice** | The number of days of prior notice required by the seller to effect settlement options. |
| **Settlement Option Type** | The options permitted the seller other than monetary payments for a component product; e.g., in kind; right to purchase. |
| **Settlement Quantity Increment Percentage** | Percentage used in adjusting settlement values based on the quantity of gas received. |
| **Settler** | SEE: Gunbarrel. |
| **Settling Pit** | A tank or open pit where well cuttings and coarse solids settle out of the drilling fluid before the drilling fluid is returned to circulation. |
| **Settling Velocity** | The velocity at which a particle of particular size, type, specific gravity, and concentration will settle in a fluid of a particular specific gravity and viscosity. |
| **Severance Tax Amount** | Production tax on the removal (or severing) of minerals from the ground based on a price per thousand cubic feet (MCF) of gas or barrel of oil or on a percentage of the value. Generally levied by the state or sovereign Indian Nation. |
| **Sewage Treatment System** | A system used to treat accumulated amounts of raw liquids or waste matter. |
| **Sh Wave** | Shear (S-) wave which has a horizontal component of motion only. |
| **Shackle Rod System** | A method of pumping several wells on one lease by means of small rods, or shackle rods, extending from the wells to a central pumping house, and connected to the wells in such a way as to carry the power of the central pump to each well. |
| **Shadow** | A region in a body that cannot be reached by ultrasonic energy traveling in a given direction because of the geometry of the body or a discontinuity in it. |
| **Shaft** | An elongated slender cylindrical form or vertical opening of uniform and limited cross section. |
| **Shake Out** | To spin a sample of oil at high speed to determine its BS&W content. |
| **Shake Out Test** | SEE: Shake Out. |
| **Shale** | A fine grained sedimentary rock composed of silt and clay sized particles. |
| **Shale Density** | The density of a representative shale sample taken from the cuttings, measured using a shale density kit. |
| **Shale Shaker** | A vibrating screen used to remove cuttings from the drilling fluid as it returns to the surface from the wellbore bottomhole. |
| **Shallow Flaw** | A discontinuity which has little depth in proportion to wall thickness and does not exceed critical flaw size of the appropriate specifications. |
| **Shape** | Sedimentology: The spatial or geometric form of the particles in a sediment or sedimentary rock, described in terms of sphericity and roundness. Also referred to as: Particle Shape; Grain Shape. Described as rounded, subrounded, subangular, angular. |
| **Sharp Crest** | The top intersection of the sides when the thread flanks are extended. |

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| **Shaved Thread** | A specific condition of improper thread form exhibiting an excessive narrowness of thread width. Also referred to as: Thin Thread. |
| **Shear** | An action, resulting from applied forces, which causes or tends to cause two contiguous parts of a body to slide relative to each other in a direction parallel to their plane of contact. Also referred to as: Shearing Stress. |
| **Shear Lag** | Shear effects on beams which cause a nonuniform distribution of longitudinal bending stresses across the flange. |
| **Shear Rate** | The rate at which an action, resulting from applied forces, causes or tends to cause two adjacent parts of a body to slide relatively to each other in a direction parallel to their plane of contact. |
| **Shear Ridge** | First year ridge formed primarily by relative motion of two ice sheets in the direction parallel to their common boundary, called a slip page line. Composed of groundup ice chips, water soaked and refrozen. |
| **Shear Strength** | A measure of shear value. The minimum shearing stress that will produce permanent deformation. |
| **Shear Wave** | SEE: S Wave. |
| **Shearometer** | A device used as an alternative method for measuring gel strengths. |
| **Sheath** | Protective casing or covering. Cement sheath is the protective covering around the casing within a wellbore. |
| **Sheave** | (1) A wheel with a grooved circumference over which a rope or a v-belt is turned, either for the transmission of power for hoisting or hauling.(2) Any grooved wheel or pulley. |
| **Sheet Ice** | A region of relatively undisturbed, smooth first year ice that grows continuously throughout the winter season. |
| **Shell** | A horizontal vessel which contains the coil, firetube and heater bath. |
| **Shell Panel** | That portion of a shell which is bounded by two adjacent rings in the longitudinal direction and two adjacent stringers in the circumferential direction. |
| **Shield** | A layer or mass of material used to reduce the passage of ionizing radiation. |
| **Shift** | Refers to a time (or depth) shift on a seismic trace. The movement of the seismic samples either earlier (up) or later (down) in time (depth). |
| **Shipboard Cable** | Cable constructed in accordance with Institute of Electrical and Electronic Engineers (IEEE) Std. 45. |
| **Shipper** | The party who contracts with a transporter to move a product over the transporter's system. |
| **Shock Absorber** | Any of several devices for absorbing the energy of sudden impulses or shocks in machinery or structures;e.g., springs of automobiles. |
| **Shoe** | SEE: Detector Shoe. |
| **Shoe Joint** | The distance between the casing shoe and the float collar, which is usually made up of one or two joints of casing, and is located at the bottom of the casing string. |
| **Shoot** | Pass a short time pulse of high current through a conductor. |
| **Shooting** | The discharge of nitroglycerin at the wellbore bottomhole shatter the reservoir rock and increase production. |
| **Shooting Nipple Assembly** | A fabricated length of pipe equipped with a wireline blowout preventer and packoff installed above the blowout preventer stack to accommodate removal of logging or perforating tools and for protection against unexpected pressure while performing through casing wireline operations. |
| **Shore Base Facility** | An onshore support facility that during drilling, development, maintenance, and producing operations provide such services to the joint property as receiving and transshipment point for supplies, materials, and equipment; debarkation point for drilling and production personnel and services; communication, scheduling, and dispatching center; other associated functions benefiting the joint property. |

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| **Short Hook Up** | Assembly composed of gauge bit, a near bit gauge stabilizer, and one or more drill collars. Used to build angle after an initial kick off. |
| **Short Natural Gas Position** | The circumstance when a company consumes more natural gas in its operations than it produces. |
| **Short String** | In a wellbore with multiple well completions, the short string is the tubing string for the shallower well completion. |
| **Shot** | The measurement taken or the survey reading taken as a picture or as a punched hole on a chart. |
| **Shot Feeder** | A small pot through which liquid (usually chemicals) can be injected into a system under pressure. |
| **Shot Field** | Residual magnetic field induced by a short impulse of magnetizing current. Often it is generated using a battery or capacitor discharge magnetizer. |
| **Shot Gather** | The collection of recorded events from a seismic source (or array), received by a spread of receivers. |
| **Shot Record** | SEE: Seismic Acquisition Record. |
| **Shot Type Code** | Indicates the type of instrument used to conduct the directional survey. |
| **Shotpoint** | The seismic energy source location. General alias for station, although a station may exist without any seismic source being assigned to it. |
| **Shoulder** | A condition where an excess of metal appears adjacent to the last thread in one or more places around the circumference. Usually an excessive amount of black threads appear opposite the shouldered area. Also referred to as: Hooked Threads. |
| **Show** | A trace or indication of oil or gas in a core, cuttings, or circulating drilling fluid, or interpreted from electrical or geophysical logs run in a wellbore. |
| **Show Fluid Type** | The type of product represented by the show; e.g., oil; gas; coal. |
| **Show Source** | Indicates source of the show data; e.g., log; drillstem test; cuttings. |
| **Show Type** | The type of hydrocarbon show; e.g., drilling fluid sensor; fluorescence or jeep; bleeding; condensate stain; gas odor. |
| **Shrinkage** | (1) The reduction in volume of a gas stream due to removal of hydrocarbon products, hydrogen sulfide, or carbon dioxide.(2) The unaccounted loss of products from storage tanks.(3) Loss in crude volume from reservoir when gas is evolved from solution. |
| **Shrinkage Bearer** | Indicates whether shrinkage is borne by buyer, seller or processor. |
| **Shrinkage Factor** | The oil volume divided by the change in oil volume from reservoir conditions to atmospheric pressure. These measurements are all made at reservoir temperature. |
| **Shut- In Bottomhole Pressure Measurement** | A shut- in pressure measurement recorded for a specified depth. |
| **Shut- In Casing Pressure Measurement** | The pressure measurement recorded for the space between the surface casing and the producing casing during a well test shut- in phase. |
| **Shut- In Casing Temperature** | The shut- in temperature that has been recorded for a gas well. |
| **Shut- In Depth** | The depth of the well completion at the time it was shut-in. |
| **Shut- In Formation Pressure Measurement** | SEE: Static Reservoir Pressure. |
| **Shut- In Payment Amount** | The amount of shut- in payment due a given payee prior to the addition of any bank service charge or alien tax adjustment for that payment. |
| **Shut- In Payment Type** | An indicator of the status of the lease; e.g., pay; pay immediately; hold; not applicable. |
| **Shut- In Royalty** | Payment to royalty owners under the terms of a mineral lease which allows the lessee to defer production from a well capable of producing in paying quantities but shut-in for lack of a market or marketing facilities. This type of royalty or some form of rental is usually required to prevent termination of the lease. |

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| **Shut- In Static Column Wellhead Pressure Factor** | The calculation factor resulting from subtracating the static column wellhead pressure squared from the shut- in wellhead pressure squared. |
| **Shut- In Time Interval** | A time interval between two shut-in pressure measurements within a well test shut- in phase. |
| **Shut- In Tubing Pressure Measurement** | A shut- in pressure measurement recorded for the tubing during a well test shut-in phase. |
| **Shut- In Tubing Temperature** | The temperature inside the tubing on a shut- in well. |
| **Shut- In Well Count** | The total number of oil and gas wells in a shut-in, nonproducing, status at a specified level during a specified time period. (Normally at a lease or field level.) |
| **Shut- In Wellhead Pressure Measurement** | A shut- in pressure measurement recorded at the wellhead. |
| **Shut- In Wellhead Pressure Squared Factor** | The square root of the absolute wellhead shut- in pressure, divided by 1000. |
| **Shut Off** | The successful exclusion of flow of any unwanted fluid from the wellbore through the use of packers, cement, mud, plastic, etc. |
| **Shut Off Base Depth** | The deepest depth of the interval being shut off. |
| **Shut Off Top Depth** | The shallowest depth of the interval being shut off. |
| **Shut Off Type Code** | An indicator of the method used to shut off open borehole or perforated intervals at the time the well is completed; e.g., bridge plug; cased off; squeezed; straddle packer. |
| **Shut-in** | The condition of shutting off flow of fluids to or from the reservoir. |
| **Shut-in Date** | The date a well is shut-in. |
| **Shut-in Flag** | An indicator that a well is shut-in. |
| **Shutdown Valve** | An automatically operated valve used for isolating a process component or process system. Commonly abbrevaited as: SDV. |
| **Si Unit Of Measure** | A unit of measure based on the International System of Units (SI) as described in The International System of Units (SI), NBS Special Publication 330, U.S. Dept. of Commerce, National Bureau of Standards, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. (1981) (Order by SD Catalogue number: C13.10:330/3.) Some measurement quantities are added to the SI defined set to deal with measurement quantities used by the petroleum industry but not defined by SI. |
| **Side Door Mandrel** | SEE: Gas Lift Mandrel. |
| **Side Draw** | The removal of a product from some point between the top and the bottom of a vessel. |
| **Side Irons** | The housing and supports for the bearings of a walking beam. |
| **Side Pocket Mandrel** | SEE: Gas Lift Mandrel. |
| **Side Tension** | Tensioning of a screening surface across the direction of material flow. |
| **Sidetrack** | A wellbore segment extending from a wellbore intersection along a wellbore path to a different wellbore bottomhole from any previously existing wellbore bottomholes. |
| **Sidetrack Date** | The date on which sidetrack operation begin. |
| **Sidetracking** | The well activity of drilling a new wellbore segment from a wellbore intersection to a new wellbore bottomhole or target. |
| **Sidetracking Pocket** | An enlargement of one side of the borehole made to facilitate changing the direction of the borehole axis. The borehole enlargement is usually accomplished by use of jetting action. |
| **Sidewall Core Sample Taken Flag** | An indicator of whether a core or rock sample was taken from the wall of an existing borehole by shooting a hollow projectile or by mechanically extracting a sample. |

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| **Sidewall Coring Tool** | A percussion type device; i.e., gun which can be attached to the well logging cable to obtain a sidewall core. |
| **Sidewall Neutron Log** | A well log consisting of an epithermal neutron log made with the neutron source and detector mounted in a skid which is pressed against the borehole wall to minimize borehole effects. |
| **Sieve** | SEE: Testing Sieve. |
| **Sieve Analysis** | A statement by particle size and percentages of the amount of material in various particle size groupings. |
| **Signal** | (1) A response of electronic nondestructive testing (NDT) equipment to a pipe imperfection or defect.(2) That which carries desired information. |
| **Signal To Noise Ratio** | The ratio of the amplitude (power) or the desired energy (signal) to the amplitude (power) of the unwanted energy (noise). Abbreviated as S/N. |
| **Signature Log** | A display of the acoustic wave train in the amplitude time mode wherein the amplitudes of the different acoustic wave forms are shown as a function of time. |
| **Silencer** | A cylindrical vessel constructed with baffles, ports, and acoustical grids to muffle exhaust noise. |
| **Silica Flour** | A fine powder manufactured by grinding sand to a particle size in the range of about 0.074 mm to 0.044 mm. It is added to cementing formulations to prevent cement strength deterioration in high temperature installations within the wellbore. |
| **Silica Gel** | A porous substance consisting of SiO3. Used on occasion as a dehydrating agent in air or gas drilling where small amount of water is encountered. |
| **Silica Sand** | A high purity graded sand of a particle size in the range of about 0.210 mm to 0.088 mm. It is used in cementing formulations where a high density slurry with strength deterioration protection from high temperatures is required. |
| **Silicate** | A compound whose crystal structure contains SiO4 tetrahedra, either isolated or joined through one or more of the oxygen atoms to form groups, chains, sheets or 3-dimensional structures with metallic elements. |
| **Silt** | (1) A clastic sedimentary particle with a diameter between 1/256 and 1/16 millimeter, based on the Wentworth Scale of Measurement.(2) Materials that exhibit little or no swelling whose particle size generally falls between 2 microns and 74 microns (200 mesh). |
| **Silt Class** | The class of silt, based on size using the Wentworth Scale of Measurement. |
| **Simpson's Rule Method** | A borehole survey calculation method which uses the measured angle values to recreate the wellbore path using Simpson's rule for numeric integration, which approximates a path by passing a parabola through three points. |
| **Simultaneous Lke** | A like-kind-exchange (LKE) that happens the same day. |
| **Single** | One joint of drill pipe. |
| **Single Shot Survey** | A measurement of the inclination and direction of the borehole axis at one position with one recording. |
| **Sinistral Fault** | SEE: Left Lateral Strike Slip Fault. |
| **Sinker Bar** | A heavy weight or metal bar run with a wireline tool to add weight to the string so that the tool will readily sink into the wellbore. |
| **Sinking** | A method of controlling oil spills that employs an agent to entrap oil droplets and sink them to the bottom of the body of water. The oil and sinking agent are eventually biologically degraded. |
| **Sintered Carbide** | Most commonly, iron, chromium, or tungsten carbides bonded together with nickel or cobalt. |
| **Sintering** | Property that indicates the degree of bonding of ice blocks as a function of contact pressure, temperature, and time where the voids are either air or snow. |
| **Sise** | Surplus, idle and sub-optimal equipment. |

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| **Skelp** | The rolled steel sheet used in the making of pipe with one longitudinal weld. |
| **Skew** | In seismic recording, the time difference accounting for the slight variance in time (for a given sample) between channels. |
| **Skew Angle** | (1) In ultrasonic testing, the angle by which the beam deviates right or left relative to its normal path in front of the transducer, due to curvature effects.(2) The angular offset of the axis cone from the geometric center of a roller cone drill bit. |
| **Skid** | (1) A prefabricated base for an equipment assembly. Skid mounted equipment is usually readily movable.(2) Also, to move equipment from one location to another without disassembly. |
| **Skimmer Tank** | A produced water processing tank designed to skim oil from the surface of the water. |
| **Skimmer Unit** | A device propelled over water that sucks or skims the hydrocarbon into a collector. |
| **Skimming** | The removal of lighter components while leaving the heavier components behind. |
| **Skimming Pit** | A pit into which oil and water is placed, the oil later being skimmed from the surface. |
| **Skin** | A radial zone of reduced permeability in the rocks surrounding the borehole resulting from damage due to drilling, completion and/or production practices. |
| **Skip Distance** | In ultrasonic testing, the surface distance required for an angle beam to traverse the metal thickness, be reflected from the far side, and return to the original surface. |
| **Slacking Off** | The releasing of tension either on casing, drill pipe, or tubing at the wellhead. |
| **Slag Inclusion** | Nonmetallic solid material entrapped in the weld deposit or between weld metal and base metal. |
| **Slant Hole** | SEE: Slant Type Directional Wellbore. |
| **Slant Hole Rig** | SEE: Slant Rig. |
| **Slant Rig** | Drilling rig specifically designed to drilling a slant type direction wellbore. The mast is slanted and special pipe handling equipment is needed. |
| **Slant Type Directional Wellbore** | (1) Usually refers to a wellbore path having a vertical wellbore segment, an angle build wellbore segment, and an angled but straight wellbore segment, which continues to total depth. (2) Used to define a wellbore path that is nonvertical at its wellbore origin. Also referred to as a Slant Hole. |
| **Slenderness Ratio** | The ratio of the effective length of a member to the radius of gyration of the member. |
| **Slewing** | SEE: Swing. |
| **Slice** | An isotime or isodepth horizontal section through a 3D data volume; e.g., time slice; horizon slice. |
| **Slick Line** | SEE: Solid Wire Line. |
| **Sliding Scale Royalty** | A royalty varying in accordance with the amount of production; i.e., a 1/8th royalty if the production is 100 barrels per day or less, and 3/16th royalty if the production is greater than 100 barrels per day. Difficult problems of interpretation of the sliding scale royalty clause arise when governmental regulations on a unitization agreement limit production on the amount of oil allocated to a particular tract. |
| **Sliding Sleeve Nipple** | A special device placed in a string of tubing which can be operated by a wireline tool to open or close orifices (openings) to permit circulation between the tubing and annulus. It may also be used to open or shut off production from well completions. |
| **Sling** | (1) A flat, wide piece of material used for moving material with a type of hoist, crane, etc.(2) A wire rope loop for use in lifting heavy equipment. |
| **Slip** | A wedge shaped piece of metal with teeth or other gripping elements used to prevent pipe from slipping down into the wellbore or for otherwise holding the pipe in place. Rotary slips fit around the drill pipe and wedge against the master bushing to support the pipe. Power slips are pneumatically or hydraulically actuated devices operated by the driller at this station and which dispenses with the manual handling of slips when making a connection. Packers and other downhole equipment are secured in positi |

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| **Slip Ram Preventer** | A ram blowout preventer with pipe slips that, when engaged, prevent movement of the pipe but does not control flow. |
| **Slip Stream** | A stream which is removed from the main process stream for purposes of sampling, alternate processing, etc. |
| **Slip Tube** | A device for gauging tank cars, trucks, or storage tanks which are under pressure and cannot be opened to atmosphere. |
| **Slip Velocity** | The difference between the annular velocity of the drilling fluid and the rate at which cuttings are carried by the drilling fluid. |
| **Sliver** | An extremely thin elongated piece of metal that has been rolled into the surface of the parent metal to which it is attached usually by only one end. |
| **Slope** | On a shale shaker, the angle with the horizontal made by the first or top deck screen section(s). Must be specified as uphill or downhill. |
| **Slope Angle Measurement** | The angle deviation from the vertical of the horizontal. |
| **Sloughing** | SEE: Caving. |
| **Slow Sand Filter** | A very large filtering unit containing sand. The fluid flows through the sand bed very slowly because of the large bed size. Generally, these filters are too large to be economically practical. |
| **Sludge** | A deposit formed in one place which may be deposited in another place; e.g., low flow rate areas; tanks; vessels; bends in lines. |
| **Sludge Conditioner** | A surface active agent for maintaining sludge in a flocculent condition to facilitate its removal from the system. |
| **Slug** | Any relatively large mass of concentrated liquid, normally in a gas stream. |
| **Slug Catcher** | A coded horizontal or vertical vessel associated with a pipeline system downstream of a pig receiver to catch pipeline condensate in vapor pipelines. |
| **Slug Flow** | SEE: Heading. |
| **Slug The Pipe** | Before hoisting drill pipe, it is desirable to pump into the top section of it a quantity of heavy mud (a slug) which will cause the level of the fluid in the pipe to fall. Thus, when a stand of pipe is unscrewed, the drilling fluid will have been evacuated from it. This prevents crew members and the rig floor from becoming covered with the drilling fluid. |
| **Slurry** | A mixture and/or suspension of solid particles in one or more liquids. |
| **Slurry Density** | SEE: Cement Slurry Density. |
| **Slurry Volume** | SEE: Cement Slurry Volume. |
| **Slurry Weight** | SEE: Cement Slurry Density. |
| **Slush Bucket** | A hollow cylinder used to draw sludge from the bottom of the well. |
| **Slush Pit** | SEE: Settling Pit. |
| **Small Fracture Count** | The number of fractures in a depth interval that are less than 10cm in length. |
| **Smooth Ice** | Any area of sea ice that has not been noticeably affected by ice deformation mechanisms. Also referred to as: Sheet Ice. |
| **Snatch Block** | A block that can be opened up for putting a line over the roller or sheave. |
| **Snubbing** | Pulling or running pipe under pressure through a resilient sealing element where special equipment is used to apply external force to push the pipe into the wellbore or to control the pipe movement out of the wellbore. |

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| **Soap** | The sodium or potassium salt of a high molecular weight fatty acid. When containing some metal other than sodium or potassium, they are called metallic soaps. Soaps are commonly used in drilling fluids to improve lubrication, emulsification, sample size, defoaming, etc. |
| **Socket** | A device fastened to the end of a rope by means of which the rope may be attached to its load. Also referred to as: Rope Socket. |
| **Soda Ash** | SEE: Sodium Carbonate. |
| **Sodium** | One of the alkali metal elements with a valence of 1 and an atomic weight of about 23. Numerous sodium compounds are used as additives to drilling fluids. |
| **Sodium Bichromate** | SEE: Sodium Dichromate. |
| **Sodium Carbonate** | A material used extensively for treating out various types of calcium contamination. It is commonly called soda ash. When sodium carbonate is added to a fluid, it increases the pH of the fluid by hydrolysis. Sodium carbonate can be added to salt (NaCl) water to increase the density of the fluid phase. |
| **Sodium Carboxymethylcellulose** | An organic material used to control filtration, suspend weighting material, and build viscosity in drilling fluids. Used in conjunction with bentonite where low solids drilling fluids are desired. Commonly abbreviated as: CMC. |
| **Sodium Chromate** | An inorganic water soluble chromium compound useful as an inhibitor of iron corrosion caused by oxygen. |
| **Sodium Dichromate** | Sodium chromate in acid systems. A corrosion inhibitor. Its chemical formula is Na2Cr207. Also referred to as: Sodium Bichromate. |
| **Sodium Hydroxide** | Commonly referred to as caustic or caustic soda. A chemical used primarily to impart a higher pH. |
| **Sodium Nitrite** | An inorganic water soluble chemical useful as an inhibitor of iron corrosion caused by oxygen. |
| **Sodium Polyacrylate** | A synthetic high molecular weight polymer of acrylonitrile used primarily as a fluid loss control agent. |
| **Soft Line** | A fiber rope. |
| **Sol** | A general term for colloidal dispersions, as distinguished from true solutions. |
| **Solid Component** | A substance with unique and distinct characteristics that normally occurs as a solid. This does not include chemical components. Examples of solid components are: walnut shells, frac sand, ball sealers, etc. |
| **Solid Organic Matter** | Organic matter in solid form, such as kerogen. |
| **Solid Wire Line** | A special wire line of very strong steel, usually 0.066 to 0.092 inch in diameter. Also referred to as: Slick Line. |
| **Solids** | All particles of matter in the drilling fluid; e.g., drilled formation cuttings; barite. |
| **Solids Concentration** | The total amount of solids in a drilling fluid as determined by distillation includes both the dissolved and the suspended or undissolved solids. The suspended solids content may be a combination of high and low specific gravity solids and native or commercial solids. Examples of dissolved solids are the soluble salts of sodium, calcium, and magnesium. Suspended solids make up the wall cake; dissolved solids remain in the filtrate. |
| **Solids Control Equipment Item** | An equipment item designed to separate out and discharge unwanted drilled solids and contaminants from a drilling fluid system. The mechanism by which this can be achieved can be split into four categories; screen separation, settling, forced centrifugal settling, and degassing. |
| **Solids Discharge** | That stream from a liquid solids separator containing a higher percentage of solids than does the feed. |
| **Solids Discharge Capacity** | The maximum rate at which a liquid solids separator can discharge solids without overloading. |
| **Solids Free Fluid** | A well operations fluid which depends on dissolved salts for its density, rather than suspended inert solids. They are typically used where the use of solids could lead to downhole formation damage or clog up perforations. Their use therefore is mainly for completion/workover activities. The type of salt used determines the maximum densities possible. |

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| **Solids Removal Screen** | Screens used in solids removal equipment. |
| **Solubility** | (1) The quality of being soluble.(2) Capability of being dissolved in a fluid. |
| **Soluble Oil** | A compound which may possess corrosion inhibition properties, is dispersible in water, and is soluble in oil. |
| **Solute** | A substance which is dissolved in another. |
| **Solution** | A mixture of two or more components that form a homogeneous single phase; e.g., solids dissolved in liquid; liquid in liquid; gas in liquid. |
| **Solution Gas** | Gas dissolved under pressure in oil in a reservoir. Also referred to as casinghead gas; dissolved gas. |
| **Solution Gas Drive** | A natural drive mechanism where an oil reservoir derives its energy for production from the expansion of the natural gas in solution in the oil. |
| **Solution Gas Oil Ratio** | The ratio of gas to oil initially dissolved in the reservoir crude oil. |
| **Solvent** | Liquid used to dissolve a substance. |
| **Sonde** | Any instrument package containing both transmitting and receiving devices that can be lowered into the wellbore. |
| **Sonic** | Pertaining to acoustic or P waves in fluids. Sometimes includes other wave modes and hence becomes synonomous with seismic and elastic. |
| **Sonic Log** | An acoustic log of the travel time (interval transit time) of the compression wave over a unit distance; and hence, a record of the reciprocal of the compressional wave velocity. Used to measure porosity. |
| **Sorption** | Includes both adsorption and absorption. Sorption is basic to many processes used to remove gaseous and particulate pollutants from an emission and to clean up oil spills. |
| **Sort** | An arrangement of data by ordered key values or the process of making such an arrangement. Sort order is a description of which keys vary most slowly. The terms prime, secondary, tertiary, etc. are used to define the keys that vary most slowly, second most slowly, etc. |
| **Sorting** | Sedimentology: The spread or range of the particle size distribution within a clastic rock sample. |
| **Sounder** | A device used to determine the fluid level in a wellbore. |
| **Soundness** | A measure of the expansive properties of a cement as determined by the Autoclave Expansion Test given in ASTM C 151. |
| **Sour Crude Oil** | An oil containing free sulphur or other sulphur compounds whose total sulphur content is in excess of one percent. Also referred to as: Sour Crude. |
| **Sour Environment** | Fluids containing water as a liquid and hydrogen sulfide are considered sour environments and may cause sulfide stress cracking of susceptible materials. This phenomenon is affected by complex interactions of parameters including: (1) metal chemical composition, strength, heat treatment, and microstructure;(2) pH; (3) hydrogen sulfide concentration and total pressure;(4) total tensile strength;(5) temperature;(6) time. The user shall determine the environmental conditions in which the metal |
| **Sour Gas** | Natural gas containing chemical impurities, notably hydrogen sulfide (H2S) or other sulfur compounds. Gas is generally considered to be sour if it contains 10 or more grains of H2S or 200 or more grains of total sulfur per mcf. Also referred to as acid gas. |
| **Sour Liquid** | A liquid containing mercaptans or hydrogen sulfide. It is also known as "doctor sour" indicating mercaptan contamination. |
| **Source** | (1) A device (or array of devices) that releases energy for generating seismic waves, e.g., Vibroseis; Dynamite; Air gun. (2) Also, a natural energy source, such as an earthquake. |
| **Source Orientation** | The orientation of the seismic source. The orientation may be given as a textual description (Vertical; Horizontal Inline; Horizontal Crossline) or as a pair of angles. |

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| **Source Payor Name** | The company originally reporting the sales. |
| **Source Potential Generated** | The results of an analysis to determine the potential volume of petroleum generation capacity of a source rock sample. |
| **Source Profile** | SEE: Seismic Profile. |
| **Source Rock** | Rocks rich in organic material and having the potential to generate hydrocarbons. |
| **Souring** | SEE: Fermentation. |
| **Sp** | SEE: Spontaneous Potential. |
| **Space** | SEE: Location. |
| **Spacing** | Aerial distribution of well locations producing from the same reservoir. |
| **Spacing Order Assigned Date** | The date a spacing order is assigned. |
| **Spacing Pattern** | The pattern by which wells are drilled; e.g., 5-spot, 10-spot, etc. if applicable. |
| **Spacing Unit** | A unit formed of one or more parcels of land to comply with spacing requirements and/or integration orders of state or other governmental regulatory bodies, or to conform to operating patterns established by operators in the absence of formal spacing rules. A spacing unit is normally of a size attributable to one well for drainage purposes. Spacing units are generally formed for development wells in a proven field and not for exploratory purposes. |
| **Spacing Unit Order Number** | The number assigned by a regulatory agency to a spacing unit. |
| **Spacing Unit Orientation Type Code** | An indicator of the type of the geographical positioning of the spacing unit; e.g. Stand Up 80 Acreas, Lay Down 80 Acreas. |
| **Spacing Unit Size** | The acreage size of the spacing unit. |
| **Spaghetti** | Very small tubing or pipe. |
| **Spalling** | Flaking off in small chips. |
| **Spark Arrestor** | A device placed on the exhaust of the stack to prevent sparks from being emitted to the outside atmosphere. It normally consists of a metallic wire screen attached across the top diameter of the stack. |
| **Spe** | Society of Petroleum Engineers of AIME. |
| **Spear** | A fishing tool which goes inside lost pipe in a wellbore to obtain a friction grip and permit recovery. It is the male counterpart of an overshot. |
| **Special Process** | Operations which convert or affect material properties. |
| **Special Service** | Those operations utilizing specialized equipment and personnel to perform work processes to support well drilling and servicing operations. |
| **Species** | The biological species classification of a living thing or fossil. |
| **Specific Acoustic Impedance** | A property of a material which is the product of its density and its elastic (or acoustic) wave velocity. A change in impedance will cause a reflection or refraction of the wave, and the magnitude of the change determines the strength of the reflection. |
| **Specific Gravity Measurement** | The ratio of the mass of a given volume of a substance at a given temperature and pressure to the mass of an equal volume of a standard substance at the same temperature and pressure. For vapors, the standard substance is air (dry and free of carbon dioxide) and for liquids, the standard substance is water. |
| **Specific Heat** | The number of calories required to raise 1 g of a substance 1 deg Centigrade. The specific heat of a drilling fluid gives an indication of the fluid's ability to keep the bit cool for a given circulation rate. |

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| **Speed** | (1) Distance traveled per unit of time.(2) The frequency at which a vibrating screen operates, usually expressed in RPM or CPM.(3) The bowl rpm of a decanting centrifuge.(4) The rotor rpm of a perforated cylinder centrifuge. |
| **Sphericity** | Particle sphericity is a measure of how close a sand particle or grain approaches the shape of a sphere. |
| **Spheroid** | Mathematical surface to which coordinates are referenced. Defined by an ellipsoid of revolution which is revolved about its minor axis and which approximates to the earth's surface, devoid of topographic undulations. Examples: Clarke-1866; GRS-80; International-1924. |
| **Spheroid Name** | Reference spheroid and year on which the latitude and longitude are based; e.g., Clarke-1866. |
| **Spheroidized Carbides** | Iron carbides in steel present as tiny round spheres. |
| **Spider** | A solid steel casting designed to hold slips for the purpose of gripping and holding the tubing or casing while connecting another joint to the string. A device to hold a suspended string of casing in a wellbore. |
| **Spinner** | A type of downhole flowmeter consisting of an impeller, inside a protective cage, which is caused to rotate by the motion of borehole fluid past the blades. A survey is made by moving the tool against the flow of fluid, with the flow, or maintained stationary in the borehole. Its primary use is in monophasic flow streams. |
| **Spinning Chain** | A rope or chain coiled around a joint of casing or pipe and drawn around the cathead used in making up or unscrewing a joint of drill pipe or casing during the period that the pipe turns easily. |
| **Spiral Drill Collar** | A drill collar which has spiraled grooves milled around its outer body. This reduces the contact area between drill collar and drilled hole, and reduces the probability of getting stuck. |
| **Spiral Weld Pipe** | Pipe having a helical seam produced by automatic submerged arc welding. |
| **Splash Zone** | (1) (ENGINEERING): The part of the structure subjected to periodic wetting and drying due to tides, waves, and spray.(2) (GEOLOGY): The shoreline area that is affected by the splashing of seawater from breaking waves. |
| **Split Deck** | SEE: Divided Deck. |
| **Split Stream Gas Plant Number** | The number assigned to identify a second plant that processes gas from a split stream well. |
| **Splitter** | A distillation column in which two components of similar molecular weights are separated. |
| **Spoil** | Waste dirt or rock that has been removed from its original location. |
| **Spoke** | For a horizontal well, a spoke is a secondary wellbore segment off a lateral. |
| **Spontaneous Potential** | The difference of potential (DC voltage) between a movable electrode in the borehole and a distant reference electrode usually at the surface. Used to infer permeability and fresh water. Commonly abbreviated as: SP. |
| **Spool** | A short section of pipe with flanged ends, used in Christmas Tree assemblies to separate and support the various valves in the stack. Spools act as spacers for the valves in the blowout preventer. |
| **Spool Head** | A casinghead located between the starting head and tubing head used for hanging additional strings of casing. |
| **Spot Location** | SEE: Quarter-Quarter Spot. |
| **Spot Month** | The month closest to present in which futures contracts are currently trading. |
| **Spot Oil** | To place oil at a selected depth in a well in order to lubricate stuck pipe, clean the formation, or to prepare for acidizing, Hydrafrac treating, etc. |
| **Spot Sale** | Short term sale of gas to an end user, Local Distribution Company (LDC), or pipeline for which the duration varies. |

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| **Spotting** | The technique of placing a quantity of fluid (oil, water, acid, cement, etc.) at a desired position in the wellbore in order to lubricate stuck pipe, clean the borehole wall, or to prepare for acidizing, hydrafracing, treating, etc. |
| **Spray Discharge** | The characteristic underflow of certain hydrocyclones discharging to the atmosphere and not overloaded with separate solids. |
| **Spread** | In the marine survey context, spread includes the seismic energy sources, the receivers and their containing streamers, and all positon sensors therein. In land surveys, the spread is the arrangement of seismic receivers in relation to the source point. |
| **Spreader** | A device or system designed to distribute incoming emulsion as uniformly as practical through the cross section of the vertical or horizontal shell. |
| **Spring Loaded Valve** | A gas lift valve which uses a spring to provide the closing force for the valve. |
| **Springing** | The high frequency vertical vibration of the Tension Leg Platform (TLP) spring mass system excited by cyclic loading at or near the TLP pitch or heave resonant periods. Also referred to as Ringing. |
| **Spud Contractor Name** | The name of the contractor spudding the well. |
| **Spud Date** | The day when the drilling bit penetrates the surface utilizing a drilling rig capable of drilling the well to the authorized total depth. |
| **Spud Time** | The actual time (hours and minutes) when the drilling bit penetrates the surface utilizing a drilling rig capable of drilling the well to the authorized depth. |
| **Spudding In** | The very beginning of drilling operations of a new well. |
| **Square Drill Collar** | A drill collar which has a square external profile, with the four corners chain fered. |
| **Squealer** | A noise maker attached to the end of an exhaust pipe. |
| **Squeeze Additive Name** | The brand name or generic name of the cement squeezing additive, which is combined with the cement to modify properties or characteristics. |
| **Squeeze Additive Volume** | The volume of squeeze additive. |
| **Squeeze Job** | Usually a secondary cementing job where cement is pumped into the rocks below the casing or through perforations to shut off of unwanted fluids. |
| **Squeeze Job Date** | The date the squeeze job well activity was performed. |
| **Squeeze Material Density** | The density of the cement slurry used in the squeeze job. |
| **Squeeze Material Displacement Pressure Measuremer** | The average pressure attained when displacing the squeeze material into the formation. |
| **Squeeze Material Displacement Rate** | The average rate attained when displacing the squeeze material into the formation. |
| **Squeeze Material Trade Name** | The trade name of the squeezing material used in the squeeze job. |
| **Squeeze Material Volume** | The volume of the squeezing material actually mixed; may not all be used in the squeezing process. |
| **Sscsv** | SEE: Subsurface Controlled Safety Valve. |
| **Sssv** | SEE: Subsurface Safety Valve. |
| **Sssv Assembly** | A subsurface safety valve (SSSV) and safety valve lock. This term shall include only the SSSV when referring to tubing retrievable type SSSVs. |
| **Sssv Equipment** | The subsurface safety valve (SSSV), safety valve lock and safety valve landing nipple and related downhole accessories. |
| **Sssv System** | The downhole components, including the subsurface safety valve (SSSV), safety valve lock, landing nipple, flow couplings and any required control components. |

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| **Ssv Usv Actuator** | The device which causes the surface safety valve/underwater safety valve (SSV/USV) valve to open when power is supplied and to automatically close when power is lost or released. |
| **Ssv Usv Valve** | The portion of the surface safety valve/underwater safety valve (SSV/USV) which contains the production fluid stream and shuts off flow when closed. |
| **Stabbing** | The act of guiding the end of a joint of pipe as it enters the coupling of another joint. |
| **Stabbing Board** | A temporary platform erected in the derrick at an elevation of 20 to 40 feet above the derrick floor. The derrickman or other crew member works on this board while casing is being run in a well. |
| **Stability Meter** | An instrument to measure the breakdown voltage of invert emulsions. |
| **Stabilization** | Continuous operation to a time when conditions remain at a constant level, or to a time when fluctuating conditions follow a definite repetitive sequence. |
| **Stabilized** | A well test is considered stabilized when, in the case of a flowing well, the flow rate through a given size of choke remains constant, or, in the case of a pumping well, when the fluid column within the wellbore remains constant in height. |
| **Stabilizer** | An item of equipment with a bladed section which is of a larger diameter than its own body, or is itself a bladed section which can be attached to another drillstem component. Typically the diameter of the stablized section will be the same (or under gauge by a prescribed amount) as that of the borehole in which it is to be placed. These components can be installed within a drillstem for a variety of reasons, some of which are: minimize the contact area between the drillstem and the borehole; centralize |
| **Stabilizer Receiver** | SEE: Stabilizer Unit. |
| **Stabilizer Type** | (1) Rotating Blade: Stabilizer with the largest outside diameter sections composed of narrow blades extending from the stabilizer body; e.g., welded blade; replaceable blade; integral blade.(2) Nonrotating Blade: stabilizer used to center drillstem in the borehole without reaming the borehole. Stabilizer ribs, usually of rubber, will not wear out rapidly since rotation occurs between the sleeve and a mandrel.(3) Full body, Spiral grooved: Full gauge long stabilizer with sets of spiral grooves cut |
| **Stabilizer Unit** | A multi-stage pressure vessel to selectively control liquid composition. |
| **Stack** | (1) Engineering: A vertical pipe on the exhaust end of the firetube which exhausts the products of combustion and creates draft through the firetube.(2) Seismic: The process of adding together a set of traces to produce a single trace. |
| **Stack Datum** | An arbitrary surface to which seismic data is related (shifted) prior to stacking. The stack datum corresponds to zero time on a trace. |
| **Stack Downdraft Diverter** | A device attached to the top of the stack designed to reduce the effects of wind currents on the burner system. |
| **Stack Flame Arrestor** | A device placed on the exhaust of the stack to prevent propagation of flame from inside the firetube to the outside atmosphere. It normally consists of a corrugated aluminum or stainless steel cell mounted in a metal housing which attaches to the top of the stack. |
| **Stack Rain Shield** | A device attached to the top of the stack to prevent rain from falling directly into the stack. It may also serve as a stack downdraft diverter. |
| **Stacking A Rig** | Storing a drilling rig upon completion of a job when the rig is to be withdrawn from operation for a period of time. |
| **Stage** | A period or step in a process whereby one or more batches of a given fluid or slurry are pumped at different time intervals or displaced to different depth intervals within a wellbore. |
| **Stage Separation** | An operation whereby produced fluids are separated into component liquids and gases by passing consecutively through two or more separator. The operating pressure of each succeeding separator is lower than the one preceding it. |
| **Stage Step In Squeezing Process** | The identifier of the individual cementing stage within the squeeze job. A stage is defined as a period or step in the cementing process whereby one or more cement batches are pumped at different depth intervals within the wellbore path. |

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| **Stainless Steel** | (1) Nonmagnetic (austenitic): An alloy of over 16 percent chromium, over 7 percent nickel, and iron. Manganese can be used to partially replace nickel.(2) Magnetic (ferritic): An alloy of over 11 percent chromium and iron. |
| **Stake** | To accurately stake a surveyed location, such as a drill site. |
| **Stand** | (1) Two or more joints of pipe, either tubing or drillstem, screwed together. (2) A frame on which something is placed for support. |
| **Stand Of Pipe** | SEE: Stand. |
| **Stand-off Shooting Distance** | The distance from the perforating gun to the interior casing surface. |
| **Standard Conditions** | A combination of pressure and temperature used as a base for comparison of gas, fluid, or vapor quantities. Usually, a temperature of 60 degrees Fahrenheit and a pressure of 14.7 pounds per square inch absolute (psia). |
| **Standard Deviation** | A statistical measure of dispersion of sample observation values. |
| **Standard Pressure** | The pressure value that is determined by state or Federal regulatory agencies. |
| **Standard Temperature** | Typically 60 degrees Fahrenheit or its equivalent. |
| **Standing Fluid Level** | Stable level of drilling fluid in a wellbore. |
| **Standing Valve** | A stationary valve at the lower end of the working barrel of a sucker rod pump. |
| **Standing Wave** | A wave in which the energy flux is zero at all points. Such waves in elastic bodies result from the interaction of similar trains of waves running in the opposite direction and are usually due to reflected waves meeting those which are advancing. |
| **Standing Wire Rope** | A supporting nonoperating wire rope which maintains a constant distance between the points of attachment to the two components connected by the wire rope. |
| **Standoff** | (1) In well logging, the distance separating a sonde from the wall of the borehole.(2) A device for producing this separation. |
| **Standpipe** | A rig pipe, which is a part of the drilling fluid circulating system, extending up into the derrick to a height suitable for attaching the rotary hose. |
| **Starch** | A group of carbohydrates occurring in many plant cells. Starch is specially processed (pregelatinized) for use in drilling fluids to reduce filtration rate and occasionally to increase the viscosity. |
| **Start Ing Test Time** | The start time in hours, minutes of the test. |
| **Starter** | A device used to begin the rotation of an engine until it reaches a speed at which it will run on its own. (May be electrical, pneumatic or gas.) |
| **Starting Fluid Level** | A distance measured from a permanent datum point down to the top of any liquid in the wellbore prior to swabbing. |
| **Starting Head** | SEE: Casinghead. |
| **Starting Tract Number** | The starting tract number assigned by the Minerals Management Service (MMS) at the time of an OCS lease offering to identify a leasable component as a single bidding entity in a particular lease offering. An OCS tract may be comprised of one block or of portions of several blocks as long as the total acreage in one entity does not exceed 5,760 acres. |
| **State Assigned County Code** | State assigned Department of Revenue county codes for Kansas and state assigned Department of Conservation parish codes for Louisiana. |
| **State Code** | A code that uniquely identifies each state of the United States, and on the Outer Continental Shelf (OCS) areas, as defined in API Bulletin D12A, as amended. |
| **State Name** | The alpha name of each state. |

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| **State Pressure Base** | The official gas pressure base to be used when reporting gas volumes to the state. The state pressure bases are monitored by the Interstate Oil Compact Commission. |
| **State Royalty Exempt Amount** | The monetary amount exempt from taxation that relates to a state royalty exemption. |
| **State Seaward Boundary** | The seaward boundary of the Submerged Lands Act Grant to a coastal state. The boundary is generally located three nautical miles from the baseline, but in the case of the gulf coasts of Florida and Texas, it is located approximately nine nautical miles from the baseline. See Submerged Lands Act, 43USC 1301-1325. |
| **State Standard Volume** | A volume of gas determined in accordance with measurement standards prescibed by state regulations. |
| **Static** | Opposite of dynamic; non-flowing. |
| **Static Column Wellhead Pressure Factor** | The square of the Static Column Wellhead Pressure, divided by 1000. |
| **Static Column Wellhead Pressure Measurement** | This term corresponds to a flowing wellhead pressure, adjusted for the pressure differential required to overcome frictional resistance to the flow of gas in a particular flow string. Determined by a series of equations and used in the calculation of the potential or deliverability of a well. |
| **Static Correction** | A correction (shift) applied to seismic data to compensate for the effects of variations in elevation, weathering layer thickness, weathering velocity, or reference to a datum. |
| **Static Fluid Level** | (1) The depth to which reservoir fluids will rise when the producing conduit is open to atmospheric pressure.(2) The level to which fluid rises within the wellbore when the wellbore is shut in. |
| **Static Pressure Measurement** | The pressure measurement recorded on a static fluid. |
| **Static Pressure Type Code** | An intdicator of the type of pressure integrity test performedi during drilling in completion or production operations. Examples include Blowout Preventer (BOP), casingshoe integrity. |
| **Static Reservoir Pressure** | The reservoir pressure measurement recorded in a small test chamber before reservoir fluids are allowed to flow in quantity in a subsequent well test phase. |
| **Static Reservoir Temperature** | The reservoir temperature measurement recorded in a small test chamber before reservoir fluids are allowed to flow in quantity in a subsequent well test phase. |
| **Statics** | The process of determining time shifts to be applied to seismic data to compensate for the effects of variations in elevation, weathering thicknesses, weathering inhomogeneities, or reference to a datum. A static shift is characterized by an equal time shift's begin applied to every sample on a trace, in contrast to dynamic shifts (NMO) in which different sample points receive different time shifts. |
| **Statics Correction** | Corrections applied to seismic data to eliminate the effects of variations in elevation, weathering thickness, or weathering velocity. |
| **Station** | A surface position in a seismic survey at which may be located a geophone group or a source device. Stations are mapped to absolute ground positions via the survey data. |
| **Stave** | Side section of a tank. |
| **Steady State Phase Flow** | An equation of flow in which the streamlines are invariant with flow. |
| **Steam Chest** | The steam end of a steam operated reciprocating pump. |
| **Steam Injection** | Steam injected into a formation to maintain or restore reservoir pressure to enhance ultimate recovery of hydrocarbons. |
| **Steam Injection Volume** | Volume of steam injected into the well completion. |
| **Steam Rig** | A rotary drilling rig with steam boilers and steam driven equipment. |
| **Steam Trace** | To install a steam line alongside another line or against a vessel under common insulation to prevent low temperature in the line or vessel. |
| **Steamer** | A vessel in which articles are subjected to steam. |

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| **Stearate** | Salt of stearic acid, which is a saturated, 18 carbon fatty acid. Certain compounds, such as aluminum stearate, calcium stearate, zinc stearate, have been used in drilling fluids for one or more of the following purposes: defoamer; lubrication; air drilling in which a small amount of water is encountered, etc. |
| **Steel** | An alloy of iron and carbon having two main constituents iron and iron carbide. |
| **Steering Readout** | Directional instrument indication of the drilling tool alignment taken while drilling. |
| **Step** | A specific condition of improper thread form that exhibits an abrupt machining deviation above or below the normal thread profile. |
| **Step Deck** | A series of screening surfaces, each located in progressively lower parallel planes along the vibrating screen. |
| **Step Out Well** | SEE: Extension Well. |
| **Stepwalk** | A short platform at the end of a stairway to provide access to specific areas. |
| **Stick Plot** | A presentation of dipmeter results where the wellbore is represented by a line according to the projection of the wellbore onto a vertical plane, and the components of dip in this plane are indicated by short line segments. |
| **Stiff Hookup** | (1) A well stabilized, rigid bottomhole assembly to maintain inclination and direction of the borehole axis.(2) Opposite to limber hookup. |
| **Stiff Leg** | A type of derrick or crane. |
| **Stiffened Panel** | Structural component comprising one or two sets of equally spaced uniform stiffeners of equal cross section supporting a thin plate. If there is only one set of stiffeners the panel is uniaxially stiffened, and if there are two the panel is orthogonally stiffened. |
| **Stiffener** | Straight and slender thin walled member of uniform cross section containing at least one plane of symmetry, which serves as a stiffening element for a flat plate structure. |
| **Stiffness** | Quality or state of being rigid, resistance to bending under stresses within the elastic limit. |
| **Stile** | Steps made of walking up and over a fence or other obstruction. |
| **Still** | (1) A fractionator in which recoverable hydrocarbons are removed from rich oil. Open steam rather than reboiler vapor is usually used in the stripping section. Sometimes used synonymously for regenerator, as in amine still. (2) The vertical column in a Lean Oil Process (LOP) where upward flowing vapors remove, or strip, specific components from downward flowing liquids. It has the highest reboil temperature feed to remove heavier hydrocarbons. |
| **Stimulation** | Any process undertaken to enlarge the old channel or create new ones in the reservoir rock. |
| **Stitching** | Variation in the properties of the weld occurring at short regular intervals along the weld line due to repetitive variation in welding heat. The variation in properties gives rise to a regular pattern of light and dark areas visible only when the weld is broken in the weld line. |
| **Sto** | SEE: Stock Tank Oil. |
| **Stock Tank** | A storage tank for treated crude oil. |
| **Stock Tank Gas Oil Ratio** | The ratio of separator gas rate to stock tank oil rate, expressed as cubic feet of separator gas per barrel of stock tank oil. |
| **Stock Tank Liquid Color Type** | The color of the liquid within the stock tank. |
| **Stock Tank Liquid Gravity Measurement** | The density of the liquid as it exists at atmospheric conditions in a storage tank. |
| **Stock Tank Oil** | The saleable oil contained in a storage vessel as oil production from a well or lease and stored until sold to purchaser. |
| **Stopcocking** | The practice of alternately closing and opening a stopcock placed in the tubing near the connection to the flow line to release accumulations of oil and gas under pressure from a well completion. |

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| **Storage Medium** | The means used for storage of bulk data. Types of storage media include: tape, disk, and CD-ROM. |
| **Storage Type Code** | The indicator for whether sales are conducted on a facility. |
| **Stormer Viscometer** | A rotational shear viscometer used for measuring the viscosity and gel strength of drilling fluids. This instrument has been largely superseded by the direct indicating viscometer. |
| **Straddle Packer** | Two packers set above and below a presumed pay zone, thereby isolating it from the rest of the wellbore. Used in drillstem tests. |
| **Straddle Plant** | A gas plant constructed near a transmission company pipeline downstream from the fields where the gas is produced. The gas is sold at the lease/field to the transmission company. The producer and/or plant owner(s) retain processing rights and reimburse the transmission company for the plant volume reduction (PVR), volume and quality, either in cash or in additional gas deliveries. Also referred to as: On line Plants. |
| **Straight Beam** | A vibrating pulse wave train traveling normal to the test surface. |
| **Straight Hole Downhole Motor** | A downhole motor designed to drill straight ahead. Usually a straight hole motor is longer, larger and provides more torque than does a directional downhole motor. |
| **Straight Hole Turbodrill** | SEE: Straight Hole Downhole Motor; Turbodrill. |
| **Straight In Directional Hole** | A wellbore path with a build and a straight locked in wellbore segment. There is no drop off wellbore segment. |
| **Straight Mechanical Drive** | Internal combustion engines connected to leads by clutches which can be slipped a moderate amount. |
| **Straight Wellbore** | Wellbore drilled with the intention to proceed in a nonchanging direction. |
| **Strap** | (1) To calibrate a tank.(2) To measure the drill pipe while pulling out of the wellbore. Used to determine driller's measured depth. |
| **Strata** | The layering of sedimentary rocks, visibly separated by surfaces. |
| **Stratification** | The natural layering or lamination usually characteristic of sediments and sedimentary rocks. |
| **Stratigraphic Classification** | An arbitrary but systematic arrangement, zonation or partioning of the sequence of rock strata into units with reference to any or all of the many different characteristics, properties or attributes which the strata may have. The American Code of Stratigraphic Nomenclature is an example of a formal stratigraphic classification. |
| **Stratigraphic Correlation** | Correlation of indicators of stratigraphy from multiple sources, such as wells, outcrops or seismic. |
| **Stratigraphic Thickness** | The thickness of the stratigraphic unit measured perpendicular to the bedding planes. |
| **Stratigraphic Trap** | A stratigraphic trap is one having a geometrical configuration of reservoir rock and reservoir seal determined by variation rock characteristics. Such variation in porosity and permeability can be caused by; e.g., stratigraphic or facies variation; variation in rock diagenesis. |
| **Stratigraphic Unit** | A stratum or body of adjacent strata recognized as a unit in the classification of a rock sequence with respect to some specified characteristics. |
| **Stratigraphic Unit Name** | The name of a stratigraphic unit. |
| **Stratigraphic Well** | A well drilled to obtain information pertaining to a specific geologic condition. Such wells are drilled usually without any intention of completing them for hydrocarbon production; e.g., C.O.S.T. wells. |
| **Stratigraphy** | The branch of geology dealing with the relationships of rock strata. Stratigraphy includes interpretation of succession and age relationships of rock strata, as well as their internal composition. |
| **Stream Trace** | The trace of a stream bed either on the surface or in a rock. |
| **Streamer** | A marine cable incorporating pressure hydrophones, designed for continuous towing through water. |

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| **Streaming Potential** | The electrokinetic portion of the spontaneous potential (SP) electric log curve which can be significantly influenced by the characteristics of the filtrate and drilling fluid cake of the drilling fluid that was used to drill the wellbore. |
| **Streamline Flow** | SEE: Laminar Flow. |
| **Strength Retrogression** | The decline with age of strength of the hardened cement slurry. This may occur at temperatures above a critical temperature. |
| **Stress** | The load per unit area. |
| **Stress Corrosion Cracking** | The cracking which results from a combination or corrosion and stress when certain susceptible materials are exposed to specific corrosive media. |
| **Stress Relief** | Controlled heating of material to a predetermined temperature for the purpose of reducing any residual stresses after welding. |
| **Stress Relieved** | The residual stresses are significantly reduced by post weld heat treatment. |
| **Stress Reversal** | Change in stress from tension to compression, or vice versa. |
| **Stretch Mill Indentation** | Localized thinning of the pipe body wall usually located on the inside surface. |
| **Strike** | The direction of the line of intersection of a surface with the horizontal; e.g., a bedding or fault surface. Strike direction is a horizontal line perpendicular to dip direction. |
| **Strike Plate** | Extra piece of metal to protect the bottom of a tank from plumb bob at end of gauger's tape. |
| **Strike Price Amount** | The contingency price at which a specific risk management right or option can be exercised. A mechanism for granting authority and setting price limits on transactions. |
| **Strike Slip Fault** | A fault in which the movement of the fault blocks is parallel to the fault's strike. |
| **String** | The entire length of casing, tubing, sucker rods, or drill pipe run into a wellbore. |
| **String Reamer** | Reamer placed within the drillstem assembly to increase the diameter of any keyseat through which it passes; used to remove doglegs and keyseats and to straighten the borehole axis. |
| **String Shot** | An explosive method to back off stuck pipe utilizing primacord. |
| **String Stabilizer** | Stabilizer placed anywhere in the drillstem assembly above the near bit stabilizer. |
| **Stringer Stiffened** | A member with longitudinal stiffeners. |
| **Strip A Well** | To pull sucker rods and tubing from a wellbore at the same time. |
| **Strip Chart** | In lieu of the circular chart for recording gas flow through an orifice meter, strip charts are sometimes used. |
| **Strip Log** | A well log, often presented in colors and symbols, of the lithologies encountered while drilling, indicating shows and well tests. |
| **Stripper** | (1) SEE: Stripper Well.(2) The vertical column in a Lean Oil Process (LOP) upstream of a still with one reboil feed which strips methanes and ethanes from the rich oil. |
| **Stripper Gas** | Production from a well completion which produces gas at a rate not exceeding 60 mcf per day over 90 days. |
| **Stripper Oil** | Oil produced by a well completion efficiently producing less than ten barrels per day. |
| **Stripper Well** | A low capacity well or one having a small productivity and approaching its economic limit of operation. The term is specifically defined in statutes of some states and may vary from state to state. Also referred to as: Marginal Well. |
| **Stripping** | Pulling or running pipe under pressure through a resilient sealing element. |

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| **Stroke** | The distance between the extremities of motion; i.e., the diameter of a circular motion. |
| **Structural Competence** | The ability of the machine and its components to withstand the stresses imposed by applied loads. |
| **Structural Geology** | The branch of geology dealing with the general disposition, attitude, arrangement or relative positions of rock masses of a region, consequent upon deformational processes, such as faulting, folding and intrusion. |
| **Structural Steel Pipe** | A cylindrical tubular member formed from plate steel with longitudinal and circumferential butt welded seams and having a uniform wall thickness. |
| **Structural Trap** | A structural trap is one having an upper boundary that has been made concave, as viewed from below, by local rock deformations, such as folding or faulting, or both, of the reservoir rock. |
| **Structure** | (1) Sedimentary: Large to medium scale features in a sedimentary rock formed in the sediments: (A) during deposition, such as graded bedding, ripple marks and cross stratification; (B) after deposition and before consolidation; e.g., loading and dewatering deformations; (C) biogenic structures, such as bioturbation and trace fossils. (2) Tectonics: The geometrical configuration, attitude, arrangement or relative positions of rock masses of a region, resulting from regional deformation processes; e.g., |
| **Structure Identification Number** | A unique number assigned to a specific structure within a complex. |
| **Stuck Pipe** | Drill pipe, collars, casing, tubing or other downhole equipment that have inadvertently become unmovable in the borehole. |
| **Stuck Point Depth** | A distance measured from a permanent datum point to the top of a tool or piece of junk which is unable to be removed. Can also be where the top of cement is holding pipe to the wellbore. |
| **Studded Connection** | A connection in which thread anchored studs are screwed into tapped holes. |
| **Studded Flange Connection** | A flanged end and outlet connection in which thread anchored studs screwed into tapped holes replace the holes for bolt studs. |
| **Stuffing Box** | (1) A packing gland.(2) A chamber or box to hold packing material around a moving pump rod, valve stem or wireline to prevent the escape of gas or liquid. |
| **Su** | SEE: Service Unit. |
| **Sub** | Short threaded pieces used to adapt parts of the drilling string which cannot otherwise be screwed together because of difference in thread size or design. |
| **Sub Cellar Deck** | A deck located below the cellar deck. Decks below the cellar deck will be designated as Sub Cellar Deck A, Sub Cellar Deck B, etc. |
| **Sub-optimal Equipment** | Equipment not meeting required or anticipated operating demands. |
| **Subject To Plant Size Flag** | An indicator of whether or not a gas settlement should be adjusted for the processing plant size. |
| **Submarine Casing Hanger** | The device inside the submarine housing to support the casing or tubing string. |
| **Submarine Christmas Tree** | The production tree of valves installed on a submarine wellhead. |
| **Submarine Manifold** | The subsea well template may incorporate a subsea manifold when wells are completed with subsea trees. Here, production fluid is conveyed from the trees via pipes on the template to a subsea manifold at the base of a production riser. Production fluid may be commingled at the manifold if the number of subsea wells exceeds the number of production risers available. |
| **Submarine Well Template** | A structural frame which provides location and anchor points for the subsea wellheads, riser systems, and guidance systems. |
| **Submarine Wellhead System** | Describes the general characteristics of the equipment installed on the bottom of the sea to hold the casing, the blowout preventer (BOP) stack, and guide the drilling assembly. |
| **Submerged Arc Welded Pipe** | Pipe having one longitudinal seam formed by automatic submerged arc welding. |

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| **Submerged Lands Act** | The Federal act which declares that the subsoil and seabed of the Outer Continental Shelf (OCS) are subject to the jurisdiction and control of the United States. The Act authorizes the Secretary of the Interior to lease such lands for certain purposes. Refered to as 43USC 1301-1325. |
| **Submerged Zone** | The part of the structure below the splash zone. |
| **Submersibile Pump Protector** | The device that shields the electric motor preventing damage from downhole fluids. |
| **Subprocess** | A series of actions that complete a primary activity of one or more of the steps in a process. |
| **Subsea Depth** | The depth measured below sea level; i.e., sea level is the reference datum. The depth axis is vertical, and positive downward. |
| **Subsea Diverter** | A piping manifold positioned at the top of the drilling riser to divert formation gas and liquid to an acceptable discharge point, preventing flow to working areas. |
| **Substructure** | The foundation on which the derrick and engines sit. Contains space for storage and well control equipment. |
| **Subsurface Controlled Safety Valve** | Commonly abbreviated SSCSV. Subsurface controlled subsurface safety valve, a subsurface safety valve (SSSV) actuated by the pressure characteristics within the wellbore. These devices are usually actuated by differential pressure through the SSCSV (Velocity Type) or by tubing pressure at the SSCSV (High or Low Tubing Pressure Types). |
| **Subsurface Discontinuity** | Any discontinuity that does not open onto the surface (either ID or OD). Also referred to as: Subsurface Imperfection. |
| **Subsurface Equipment** | Equipment put into a wellbore to perform an operation below the wellhead. |
| **Subsurface Lease Parcel** | A specific tract of the Earth defined by areal extent and depth interval. |
| **Subsurface Safety Valve** | A device installed in the production tubing in a wellbore below the wellhead and designed to prevent uncontrolled flow when actuated. These devices can be installed and retrieved by wireline (wireline retrievable) and pump down methods or be an integral part of the tubing string (tubing retrievable). Commonly abbreviated: SSSV. |
| **Subweathering** | A layer immediately below the weathering layer. In a physical sense, the weather/subweathering interface often corresponds to the water table. |
| **Success** | The outcome of drilling a well from which the owners elect to produce hydrocarbons. |
| **Successful Efforts Accounting Method** | An accounting method under which costs incurred in searching for, acquiring, and developing oil and gas reserves should be capitalized if they result directly in reserves. All other costs are expensed. |
| **Successor To An Existing Contract** | Under the Natural Gas Policy Act (NGPA), 1978, as amended, any contract other than a rollover contract entered into on or after November 9, 1978 for the first sale of natural gas which was previously subject to an existing contract. |
| **Sucker Rod** | A metallic rod with screw connection at the ends providing a means for connecting with other rods forming a series or a string of rods used to extend down in a wellbore to the working parts of a pump and to actuate same. |
| **Sucker Rod Hanger** | A device used in the upper part of a derrick from which to suspend stands of sucker rods when they are pulled from the wellbore. |
| **Suggestive Trademark** | A trademark or service mark that suggests or hints at, but does not describe, qualities or characteristics of a product or service. |
| **Sulfide Stress Cracking** | The stress corrosion cracking of high strength steels which results when the corrosive media contains hydrogen sulfide (H2S). |
| **Sulfide Stress Cracking Service** | Process streams which contain water or brine and hydrogen sulfide (H2S) in concentrations high enough to induce stress corrosion cracking of susceptible materials. |
| **Sulfite Test** | A test for determining the concentration of sulfite in water. |

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| **Sulfur Dioxide** | A toxic gas, which may be produced from the oxidation of hydrogen sulfide bearing fluids in operations such as gas flaring or well ignition. This gas is slightly heavier than air. Inhalation at certain concentrations can lead to injury or death. |
| **Sulfur Dioxide Percentage** | The MOL percentage of sulfur dioxide in a flared or burned gas stream. |
| **Sulfur Plant** | A plant which removes hydrogen sulfide from the gas and produces sulfur. |
| **Sun Resistant** | Ability to withstand exposure to direct sunlight as defined by UL Std. 62, Safety Standard for Flexible Cord and Fixture Wire. |
| **Sundry Notice Approval Date** | The date the sundry notice is approved by regulatory agency. |
| **Sundry Notice Received Date** | The date the sundry notice is received from the operator. |
| **Sundry Notice Type Code** | The indicator for the type of Sundry Notice received. |
| **Supercompressibility Factor** | A deviation of natural gas from Boyle's and Charles' Laws for ideal gas. Natural gas is not an ideal gas in that it is a mixture of several gases. As the pressure increases, the volume of space that a given weight of natural gas would occupy becomes increasingly less than the volume calculated by application of Boyle's and Charles' Laws. |
| **Superheater** | That portion of a boiler in which the temperature of the steam is raised above the saturation temperature. |
| **Superposition** | The order in which rocks are placed or accumulated in beds one above another, such that successively younger layers are deposited on lower and older layers. |
| **Supersaturation** | A solution containing a higher concentration of a solute in a solvent than would normally correspond to its solubility at a given temperature. |
| **Supplemental Mailing Address** | Additional information (other than name, street, city, state, zip code) required for a mailing location. |
| **Supplier** | Any individual or organization who furnishes materials, products, or services to another individual or organization. |
| **Support Bar** | Member of the screening surface support frame that forms the crown of the deck. Also referred to as: bar rail; bridge rail; bucker up bar; or longitudinal bar. |
| **Support Frame** | A vibrating frame component which supports the screening surface. |
| **Support Rubber** | Resilient member covering the support bar. |
| **Surety Bond** | A monetary guarantee against a deficit or financial loss to a lessor by noncompliance with the terms of the lease by the lessee. |
| **Surety Bond Amount** | The amount of monetary guarantee against a default or financial loss to a lessor by noncompliance with the terms of the lease by the lessee. |
| **Surety Bond Cancelled Replaced Code** | An indicator that the monetary guarantee against a default or financial loss to a lessor by noncompliance with the terms of the lease by the lessee has been cancelled or replaced. |
| **Surety Bond Number** | The bond number for the monetary guarantee against a default or financial loss to a lessor by noncompliance with the terms of the lease by the lessee. |
| **Surety Bond Type Code** | An indicator of the types of coverage for the monetary guarantee against a default or financial loss to a lessor by noncompliance with the terms of the lease by the lessee. |
| **Surface** | A two dimensional object embedded in a three dimensional space. Usually, a surface is a single valued function of the horizontal coordinates. |
| **Surface Active Materials** | SEE: Surfactant. |
| **Surface Casing** | The shallowest casing string required to protect fresh water zones, to provide sufficient pressure control during drilling operations, and to support the wellhead and subsequent casing strings. It is not to be confused with a drilling conductor pipe nor with a large caisson in an offshore area which encloses several separate and unique surface casings at the surface. |

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| **Surface Casing Depth Authority Code** | An indicator of the method of regulatory casing depth requirements. |
| **Surface Casing Depth Authority Date** | The date the surface casing depth authority was granted. |
| **Surface Commingling** | The surface mixing of production from two or more reservoirs or properties. |
| **Surface Contours** | Lines of equal elevation drawn on a surface map, resulting in a topographic map. |
| **Surface Control System** | The surface equipment including manifolding, sensors, and power source to control the subsurface safety valve. |
| **Surface Controlled Subsurface Safety Valve** | A subsurface safety valve controlled from the surface by hydraulic, electric, mechanical or other means. Commonly abbreviated as: SCSSV. |
| **Surface Discharge Agency Application Date** | The date the operator submits an application for a surface discharge control permit. |
| **Surface Discharge Beneficial Use Flag** | An indicator of whether the surface discharge qualifies for beneficial use. |
| **Surface Discharge Permit Approval Date** | The date a regulatory agency approves an operator's surface discharge permit. |
| **Surface Discharge Permit Number** | The number assigned by a regulatory agency for surface discharge permit. |
| **Surface Distance** | The surface projection of metal path distance. |
| **Surface Equipment** | Equipment used above ground level. |
| **Surface Lease Parcel** | A specific tract of the Earth defined by areal extent. |
| **Surface Location** | The location of a well or facility/measurement point. |
| **Surface Location Method Code** | An indicator of the method (latitude; longitude; metes and bounds; etc.) used to report the surface location of the wellbore/zone. |
| **Surface Location X- Coordinate** | The x-coordinate for a surface location (east-west measurement). |
| **Surface Location Y- Coordinate** | The y-coordinate for a surface location (north-south measurement). |
| **Surface Owner Agreement Flag** | An indicator of whether a surface owner agreement exists regarding mineral development or mineral extraction. |
| **Surface Pipe** | The first string of casing set in a well. On some wells, it is necessary to set a temporary conductor pipe which should not be confused with surface pipe. |
| **Surface Pressure** | SEE: Wellhead Pressure. |
| **Surface Safety Valve** | A device mounted in the wellhead assembly that serves to stop the flow of fluids from the wellbore. |
| **Surface Speed** | In ultrasonic testing, the velocity of transducer shoe over the surface of the pipe. |
| **Surface Temperature Measurement** | The air temperature at ground level (atmospheric temperature). |
| **Surface Tension** | The force acting within the interface between a liquid and its own vapor which tends to maintain the area of the surface at a minimum and is expressed in dynes per centimeter. Since the surface tension of a liquid is approximately equal to the interfacial tension between the liquid and air, it is common practice to refer to values measured against air as surface tension, and to use the term interfacial tension for measurements at an interface between two liquids, or a liquid and a solid. |
| **Surface Tree** | A combination of valves and fittings on the top of a well's production risers to control pressure and divert flow. Also referred to as a Christmas Tree. |
| **Surfactant** | A chemical used to break down the surface tension of a liquid. |
| **Surge** | (1) The motion of a mobile offshore drilling rig in a direction inline with the centerline of the rig.(2) Regarding fluid, it is the long interval variation in velocity and pressure. |

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| **Surge Drum** | SEE: Drum. |
| **Surge Loss** | The flux of fluids and solids which occurs in the initial stages of any filtration before pore openings are bridged and a filter cake is formed. Also referred to as: Spurt Loss. |
| **Surge Tank** | A vessel on a flow line whose function is to receive and cushion sudden rises or fluctuations in the stream of a fluid. |
| **Surplus Broker** | A company that provide the services of recycling, reconditioning, and reselling of used goods. |
| **Surveillance System** | A monitoring system to determine environmental quality. Surveillance systems are established to monitor all aspects of progress toward attainment of environmental standards and to identify potential episodes of high pollutant concentrations in time to take preventive action. |
| **Survey** | (1) To measure and delineate the topography, extent, size, shape or location of a surface or subsurface feature by taking linear and angular measurements relative to references and applying the principles of geometry and trigonometry.(2) Acquiring a set of measurements or observations for a specific objective, as in a geological, geophysical, engineering or environmental. |
| **Survey Calculation Method** | SEE: Borehole Survey Calculation Method. |
| **Survey Data Sheet** | A paper form on which to tabulate the data and results of calculations of a borehole survey. Also referred to as: Calculation Sheet. |
| **Survey Environment** | The physical environment within which the survey is conducted. |
| **Survey Environment Kind** | The common name of the type of seismic survey environment. For example: marine, land, marginal, lagoon, swamp. |
| **Survey Instrument** | An instrument used to measure inclination of the borehole axis and the direction of that inclination from a position within the wellbore. |
| **Survey Meter** | A portable instrument which measures dose rate of exposure of radiation intensity. |
| **Survey Point Measured Depth** | The measured depth from the surface reference point to the survey point. |
| **Survey Point True Vertical Depth** | The true vertical depth from the surface reference point to the survey point. |
| **Surveying Frequency** | The number of feet between survey records. |
| **Survival Capsule** | An emergency vehicle used for evacuating personnel from an offshore platform. |
| **Suspended Load** | Clastic grains, fine sand sized particles suspended in turbulent water; e.g., clay; silt. |
| **Suspended Solid** | A small particle of solid pollutants that contributes to turbidity and that resists separation by conventional means. The examination of suspended solids and the BOD test constitute the two main determinations for water quality performed at waste water facilities. |
| **Suspense Reason Code** | An indicator of why an owner's interest has been suspended. Examples are: Default suspense, Transfer of interest, Deceased, Insufficient address, Unsigned division order, Lien litigation or adverse claim, Owner unknown, Title requirement, General Suspense. |
| **Suspension Effective Date** | The date the terms of the lease or agreement are suspended. The requirements to drill, operate on or produce from a lease or unitized area may be suspended due to uncontrollable delays. These delays may be associated with agency, cultural, economics, weather, etc. |
| **Suspension Termination Date** | The date the suspension of operations or production ends. |
| **Suspension Type Code** | An indicator of the type of suspension; e.g., production, operations, both production and operation, etc. |
| **Suspensoid** | A mixture consisting of finely divided colloidal particles floating in a liquid. The particles are so small that they do not settle but are kept in motion by the moving molecules of the liquid (Brownian movement). |
| **Sv Wave** | Shear (S-) wave energy polarized so that motion is in the vertical plane. |

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| **Swab** | (1) A plunger with flexible rubber cups and sleeves that fits closely inside of tubing or casing that is pulled through the tubing to lift fluid to the surface.(2) To pull such a device through the tubing or casing. |
| **Swab Used Flag** | An indicator of whether a swab was used during the potential test. |
| **Swab Valve** | SEE: Crown Valve. |
| **Swabbing** | Operation of a swab on a line to bring well fluids to the surface. This is a temporary operation to determine whether or not the well can be made to flow or to remove undesirable liquids from the wellbore. |
| **Swage** | (1) A short piece of pipe with one end smaller than the other.(2) A tool for straightening damaged or collapsed tubing in a well. |
| **Swage Nipple** | (1) A pipe fitting having external threads of one size on one end and a different size on the other end.(2) A pipe fitting with one size on one end and another size on the other end designed for a welded connection. |
| **Swamp Buggy** | A vehicle used in exploration activities which is uniquely equipped to navigate marshy areas. |
| **Swap** | A financial product derived from the natural gas futures contract, where there is an exchange of cash flows between two parties, with payment being the differential. In a pure swap arrangement, no physical gas is involved. |
| **Sway** | The motion of an offshore drilling rig in a linear direction from side to side or perpendicular to a line through the centerline of the rig. |
| **Sweep** | The uniform and repeated movement of an electron beam across the Cathode Ray Tube (CRT). |
| **Sweet Crude Oil** | Crude oil containing sulphur compounds not exceeding 1%. |
| **Sweet Gas** | Natural gas containing no significant amount of hydrogen sulfide (H2S). Gas is generally considered to be sweet if it contains fewer than 10 grains of H2S or fewer than 200 grains of total sulfur per mcf. |
| **Swelling** | SEE: Hydration. |
| **Swing** | Rotation of the upperstructure for movement of loads in a horizontal direction about the axis of rotation. |
| **Swing Bearing** | A combination of rings with balls or rollers capable of sustaining radial, axial, and moment loads of the revolving upperstructure with boom and load. |
| **Swing Check Valve** | A type of check valve. |
| **Swing Circle** | SEE: Swing Bearing; Roller Path. |
| **Swing Gear** | External or internal gear with which swing pinion on revolving upperstructure meshes to provide swing motion. |
| **Swing Lease** | A lease from which gas production can be used to eliminate over/under delivery balances under a gas exchange arrangement. |
| **Swing Line** | A vertically suspended rope knotted on the lower end to provide hand grips, hung above the boat landing on an offshore platform, and used to facilitate safe personnel transfer between boat and platform and vice versa. |
| **Swing Mechanism** | The machinery involved in providing dual directional rotation of the revolving upperstructure. |
| **Swinging Square** | A square drill collar located between two round drill collars. |
| **Swivel** | A rotary tool which is hung from the rotary hook and traveling block. Its functions are: (1) To suspend and permit free rotation of the kelly and drillstring.(2) To provide a connection for the rotary hose and a passageway for the flow of drilling fluid into the kelly and drillstring. |
| **Swiveling** | The rotation of the load attachment portion (hook or shackle) or a load block (lower) or hook assembly about its axis of suspension in relation to the load line(s). |

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| **Symmetrical** | (1) Of the same size and shape.(2) Repetition of data or a series of data where one series of events is the same as the immediately preceding series over same period of time. |
| **Syncline** | A structural fold of which the core contains younger rocks and is generally concave upward. |
| **Syneresis** | The separation of liquid from a gel caused by contraction. |
| **Synergism** | The cooperative action of separate substances so that the total effect is greater than the sum of the effects of the substances acting independently. |
| **Synform** | A structural fold whose limbs close downward in strata for which the stratigraphic sequence is unknown. |
| **Synthetic Seismogram** | Seismic data generated on a computer and not recorded during acquisition. The data was generated using outside information, generally a well log or an earth model. |
| **System Supply** | Purchases of natural gas for the purchaser's own system supply requirements. |
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| **Tack Weld** | Noncontinuous weld used to hold members together prior to complete welding. |
| **Tackle Hoist** | Assembly of ropes and sheaves arranged for pulling. |
| **Tadpole Plot** | A plot of dipmeter log or drift results where the dip angle is plotted versus depth as the displacement of a dot. |
| **Tail Chain** | The short length of chain, with a hook attached, on the end of a winch line. |
| **Tail Gate** | The point in a gas processing plant at which the residue gas is metered prior to sale, return of gas to the lease, or return to the gas purchaser. |
| **Tail Out Rod** | To pull the bottom end of a sucker rod away from the wellbore origin when laying rods down. |
| **Tail Pipe** | Pipe run in a wellbore below a packer. |
| **Tail Plug** | The plug in the end of a gas lift valve which is the final seal on the dome. |
| **Tail Swing** | Clearance distance from center of rotation to maximum rear extension of revolving upperstructure. Also referred to as: Rear End Radius. |
| **Take- In- Kind** | The interest owner exercises his interest by taking his share of the product(s) for marketing or disposition rather than receiving his portion of the value. Also referred to as: In-kind. |
| **Take- In- Kind Status** | Identifies whether the take-in-kind option is active or inactive for the associated contract. |
| **Take Or Pay** | The quantity of gas that a gas purchaser agrees to take, or to pay for if not taken. |
| **Taken Or Paid Amount** | The invoice amount paid or credit taken. |
| **Taken-in-kind Interest Owner Name** | The name of the company or individual which identifies the interest owner associated with the taken-in-kind volume. |
| **Taken-in-kind Operator Number** | A number assigned by the regulatory agency to identify the operator associated with the taken in kind volume. |
| **Taken-in-kind Volume** | The volume of production taken in kind. |
| **Tally** | A record of the tubing or casing installed in a wellbore. It records the length of each joint, the number of joints, and the overall length of the string after making allowances for thread makeup. |
| **Tandem Squares** | Two or more square drill collars adjacent in a bottomhole assembly. |
| **Tandem Stabilizers** | Refers to the use of two or more stabilizers at one position in a bottomhole assembly. |

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| **Tangent** | Tangent of the angle between the new equator and the reference meridian for an oblique Mercator projection. |
| **Tangential Method** | A borehole survey calculation method which uses only the inclination and direction angles measured at the lower end of the course length. The wellbore path is assumed to be tangent to these angles throughout the course. |
| **Tangible Casing Cost** | Cost of casing placed in the well, such as surface string, intermediate string, production string, and casing liners. |
| **Tangible Casinghead Cost** | Includes the cost of casinghead, control valves and spools, and flow pipes attached to the top of the casing. |
| **Tangible Christmas Tree Cost** | Costs of the assembly of valves mounted on the casinghead and/or spools through which a well is produced. The christmas tree also contains valves for testing the well and for shutting it in if necessary. Also included are the tubinghead, chokes, gauges, and PVC adapters. |
| **Tangible Retrievable Packer Cost** | Costs associated with the expanding plug used in a well to seal off certain sections of the tubing or casing when cementing, acidizing, or when a production formation is to be isolated. Packers are run in the tubing or the casing, and when in position can be expanded mechanically or hydraulically against the pipe wall or the wall of the wellbore. |
| **Tangible Tubing Cost** | Includes the cost of tubing, tubing nipples, tubing safety joints, tubing size screens, and blank tubing. |
| **Tank** | A cylindrical vessel for holding, measuring or transporting liquids. |
| **Tank ( Air Receiver)** | A vessel used to store air on an air compressor. |
| **Tank Band** | A circular piece of steel used to secure the staves of a bolted steel tank. |
| **Tank Battery** | A series of lease tanks and related equipment close together which are operated by means of common connections. Also referred to as: Battery. |
| **Tank Bottoms** | The accumulation of water and settlings in a tank. |
| **Tank Car** | A railroad car used to transport petroleum or petroleum products. |
| **Tank Car Dome** | The enclosed portion of the top of a railroad tank car where the valves and gauges are located. |
| **Tank Dike** | SEE: Fire Wall. |
| **Tank Farm** | An area embracing a collection of oil storage tanks. |
| **Tank Gauge** | A visual device for determining the height of liquid in a tank. |
| **Tank Gauging** | To determine the quantity of liquid in a tank or vessel by reading the height of liquid. |
| **Tank Hatch** | SEE: Hatch. |
| **Tank Run** | A transfer of crude oil from a stock tank on a production lease to a pipeline gathering system, for transportation to the buyer's facilities. |
| **Tank Strapper** | The person who measures a tank to see how much it will hold at various levels. |
| **Tank Strapping** | Measuring a tank to prepare a Tank Table showing volumes at various heights for that tank. |
| **Tank Table** | A table giving the barrels of fluid contained in a storage tank corresponding to the linear measurement on a gauge line. |
| **Tanks Capacity** | The number of barrels of oil that can be stored on a facility; i.e., the total capacity of all the oil storage tanks on the facility. |
| **Tannic Acid** | The active ingredient of quebracho and other quebracho substitutes; e.g., mangrove bark; chestnut extract; hemlock. |

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| **Tap** | (1) To make a small connection to a vessel or to an existing pipeline;(2) A notched tool used to cut inside threads. |
| **Taper** | (1) Tubular Goods: The change in the pitch diameter of round thread and the change in the root diameter of the buttress thread.(2) Seismic: Reduce the amplitude by applying a gain that goes from full amplitude (gain = 1) to zero amplitude (gain = 0). The taper is applied to account for the Gibb's phenomena. |
| **Target** | (1) Projected three dimensional coordinates for each proposed drilling objective in a well. (2) A bull plug or blind flange at the end of a tee to prevent erosion at a point where change in flow direction occurs. |
| **Target Plan** | A set of targets for a drilling activity. |
| **Target Point** | The coordinates in space considered to be the preferred point within the target area for the wellbore intersection. The planned point, within the target area, for the wellbore to intersect. |
| **Target Reservoir Depth** | The proposed depth of the target reservoir. |
| **Target Reservoir Name** | The name of the reservoir designated as the target of the operations to be performed. |
| **Tariff** | The terms, conditions, and rate information applicable to various types of services. In the case of natural gas, the tariff is filed with and approved by the Federal Energy Regulatory Commission (FERC) or a state regulatory body. |
| **Tattletale** | A device on an instrument control panel to indicate the cause of a system shutdown or alarm signal. |
| **Tax** | An assessment by governmental agencies against profits; e.g., Federal; state; local taxes. |
| **Tax Due Amount** | Calculated tax liability. |
| **Tax Exempt Amount** | The monetary amount exempt from taxation. |
| **Tax Exempt Code** | An agency assigned identifier of the type of exemption claimed. |
| **Tax Exempt Volume** | The volume produced and exempt from taxes. |
| **Tax Free Interest** | (1) An interest in production which does not bear its portion of production taxes levied on production from the property. (2)The tax applicable to this interest is borne by other interest owners in the property. Differs from Exempt Interest. |
| **Tax Liability Flag** | An indicator of whether or not the party is liable for tax. |
| **Tax Partnership Provision** | The operating agreement will state whether the working interest owners elect to report all income and expenses under the partnership section of the internal revenue code. |
| **Tax Rate** | Tax rate for given product. |
| **Tax Rate Classification Code** | An indicator of the classification that may be used to indicate special tax rate. |
| **Tax Reimbursement Amount** | The payments by a gas purchaser to a seller for all or part of the production taxes paid by the seller on the gas sold under the applicable contract. |
| **Taxable Volume** | The volume on which taxes are based. |
| **Taxing Agency Name** | The identifier of a taxing agency; e.g., a school district name. |
| **Taxpayer Name** | The name of the company or individual which identifies the taxpayer. |
| **Td** | SEE: Well Total Measured Depth. |
| **Technical Employee** | An employee having special and specific engineering, geological, geophysical, land, accounting, or other professional and supervisory skills. |
| **Tectonics** | The branch of geology dealing with the broad architecture of the outer part of the Earth; i.e., the regional assembling of structural or deformational features, including their mutual relations, origin and historical evolution. |

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| **Tee** | A pressure containing fitting with three openings. Two openings opposite one another to form the run portion of the tee, and one opening at 90 degrees to the line of the run. Tees may be threaded, flanged, or studded flange. |
| **Tefra** | An abbreviation for the Tax Equity and Fiscal Responsbility Act. This act allows the withholding of 20% from all proceeds going to an individual or company that does not have a valid social security or tax identification number registered with the paying agency so all proceeds can be reported properly to the IRS. This term is commonly used to refer to the monies that are withheld when there is no valid social security number registered with an agency. |
| **Tefra Needed Flag** | An indicator of whether a Tax Equity and Fiscal Responsibility Act (TEFRA) deduction is needed. |
| **Telemetry** | A system for the electronic transmission of data. |
| **Telephone Extension Number** | The telephone extension number, in addition to the area code and primary telephone number. |
| **Telephone Number** | The area code and telephone number. |
| **Telescopic Joint** | Riser joint designed to permit a change in length of the riser to accommodate platform movements. Also referred to as: Slip Joint. |
| **Telescoping Boom** | Consists of a base boom from which one or more boom sections are telescoped for additional length. |
| **Tell-tale** | An opening, with or without a valve, which can be used to detect or to check what is happening in a line or vessel; e.g., a hole drilled in a reinforcing pad to detect leakage behind the pad, a valved connection on a vessel to check liquid level, etc. |
| **Temperature** | An indication of the heat energy that a substance pocesses. |
| **Temperature Bomb** | An instrument lowered into the wellbore to record downhole temperature. |
| **Temperature Controller** | A device which uses temperature to regulate equipment operations. |
| **Temperature Depth** | The measured depth at which the temperature reading was recorded. |
| **Temperature Gradient** | Rate of change in temperature with distance in a specified direction. |
| **Temperature Log** | A well log of temperatures recorded within the borehole, utilizing a temperature sensitive element exposed to the fluid in the borehole. |
| **Temperature Stability** | The chemical characteristics of a material which determine its resistance to thermal decomposition. |
| **Temperature Survey** | An operation to determine temperatures at various depths. Usually run to locate water influx, improper cementing, create isotherm maps, or correct well log parameter surveys. |
| **Template** | SEE: Guide Base. |
| **Temporarily Abandon** | The act of isolating the completed interval or intervals within a wellbore from the surface by means of a cement retainer, cast iron bridge plug, cement plug, tubing and packer with tubing plug, or any combination thereof. |
| **Ten Minute Gel** | SEE: Gel Strength. |
| **Tender** | The barge anchored alongside an offshore drilling platform. Usually contains living quarters, storage space and the mud system. |
| **Tendon** | A system of components which form a link between the Tension Leg Platform (TLP) and the subsea foundation for the purpose of mooring the TLP. |
| **Tendon Access Tube** | A conduit within a platform column between the bottom of the column and the tendon top connector through which a tendon passes. |
| **Tendon Connector** | A device used to connect a tendon to the platform hull (top connector) or to the foundation template (bottom connector). |
| **Tendon Coupling** | A device which connects one tendon element to another or to a specialty component. |

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| **Tendon Element** | Each of the similar or identical but discrete structural components which, when assembled with the flex elements, top and bottom connectors, and any other special components, comprise a complete tendon. |
| **Tensile Strength** | The ability of a material to resist a stress tending to stretch or pull it apart. |
| **Tension** | Actual tension in the pipe due to its own weight plus the product of the drilling fluid pressure and the cross sectional area on which the pressure acts. |
| **Tension Bolt** | Threaded bolt used with tension member. |
| **Tension Leg Platform** | The collective group of tendons associated with one column of the platform. |
| **Tension Member** | A number of devices which engage the edge of the screening surface and pull it taut over the support frame. |
| **Tension Plate** | Type of tension member that is located above the screening surface and closes the gap between the edge of the screening surface and the sideplate. Also referred to as: Board Plate. |
| **Tensioner** | A device, usually pneumatically or hydraulically powered, used to apply tension to tendons or risers. |
| **Tensioner System** | Tensioner units are used to maintain risers in tension as the platform moves in response to wind, waves, and current. Horizontal motions, heave, and setdown of the platform necessitate changes in length of the risers. Tensioners accomodate these movements, as well as relative angular motion between the platform and riser, while maintaining a nearly constant tension on the risers. |
| **Tensioning** | The stretching of the screening surface within the vibrating frame. |
| **Terminal Angle** | In a directional survey, the inclination and direction angles of the lower end of the survey. |
| **Terminal Angle Method** | SEE: Borehole Survey Calculation Method. |
| **Termination Notice Advance Days Count** | The number of days of prior written notice required to terminate a gas contract. |
| **Terminator** | A device used to physically end a SCSI device chain. It can be a set of resistors on a device or a physical terminator plug attached at the end of the SCSI cable. |
| **Terminus** | For horizontal wells, the terminus is the wellbore bottomhole in the reservoir. |
| **Terminus Location** | The closest point distance of the drainhole terminus or bottomhole from a specified lease, unit, or property line. |
| **Tertiary Recovery** | Recovery methods which increase ultimate production beyond that achievable with primary and secondary methods; e.g., alkaline flooding, cyclic steam injection, in situ combustion of reservoir oil, etc. |
| **Tertiary Sort** | The third value on which data is sorted. |
| **Tertiary Waste Water Treatment** | Waste water treatment, beyond the secondary or biological stage, that includes removal of nutrient such as phosphorous, nitrogen, and a high percentage of suspended solids. Tertiary treatment, also known as advanced waste treatment, produces a high quality effluent. |
| **Test Agency** | Any independent third party which owns or otherwise provides a test facility and administers a testing program recognized by the manufacturer and/or operator as being capable of meeting the test requirements. |
| **Test Approval Flag** | Indicates whether a well potential test should be used to establish the Maximum Production Rate (MPR). |
| **Test Block** | Special precision made blocks, used as standards to facilitate rapid calibration of an inspection instrument. |
| **Test Date** | The date that the identified test was run. The tests involved include: drillstem test, production, initial potential, reservoir limits, integrity, etc. |
| **Test Duration** | The time duration of a test. Examples of tests icluded drillstem test, production test, initial potential test, reservoir limits test, etc. |
| **Test Gallons** | SEE: Theoretical Gallons. |

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| **Test Gas Volume** | The volume of gas produced during a test period. |
| **Test Interval Base Depth** | The deepest measured depth of the well test interval. |
| **Test Interval Top Depth** | The shallowest measured depth of the well test interval. |
| **Test Midpoint Perforation Pressure** | The calculated pressure at the midpoint of the perforations. |
| **Test Oil Condensate Volume** | The volume of oil produced during a test period. |
| **Test Period** | The test period of the data being reported. |
| **Test Period Ending Date** | The date that the test was completed or ended. |
| **Test Period Starting Date** | The date that the test began. |
| **Test Pressure Base** | The pressure base at which the gas is to be tested for analysis. |
| **Test Product Code** | Indicates the minerals produced during a well test. |
| **Test Rack** | An arrangement of gas lift receivers, gauges, valving, etc., so that nitrogen gas pressure may be applied to the bellows of a gas lift valve and simultaneously measured to determine the pressure required to open the gas lift valve. |
| **Test Tank** | A receiving vessel used for temporary measurement and storage of produced liquid during a well test. |
| **Test Water Volume** | The volume of water produced during a test period. |
| **Testing Sieve** | A cylindrical or tray like container with a screening surface bottom of standardized apertures. |
| **Texas Abstract Name** | The abstract name for the Texas metes and bounds survey providing the surface location. |
| **Texas Abstract Number** | The abstract number for the Texas metes and bounds survey providing the surface location. |
| **Texas Block Number** | A number assigned to a Texas General Land Office subdivision of a survey and an abstract number. |
| **Texas Block Tract Bearing Survey System** | Description of location based on a subdivision of a Texas survey name and an abstract number. Blocks are subdivided into a variable number of tracts. Distance and bearing are used for positioning. |
| **Texas Block Tract Direction Survey System** | Description of location based on a subdivision of a Texas survey name and an abstract number. Blocks are subdivided into a variable number of tracts. Footage calls are used for positioning. |
| **Texas Labor Number** | A number assigned to a Texas General Land Office subdivision of a league (Spanish land grant). |
| **Texas League Labor Bearing Survey System** | Description of location based on a subdivision of a Texas survey name and an abstract number. Leagues and labors are specified by numbers. Distance and bearing are used for positioning. |
| **Texas League Labor Direction Survey System** | Description of location based on a subdivision of a Texas survey name and an abstract number. Leagues and labors are specified by numbers. Footage calls are used for positioning. |
| **Texas League Number** | A number assigned to a Texas General Land Office subdivision of a survey (Spanish land grant). |
| **Texas Rrc Lease** | A legal document authorized by and approved by the Texas Railroad Commission (RRC). The lease conveys certain rights to a lessee to explore for and to recover specified minerals or materials. The lease covers both standard and commingled leases. |
| **Texas Rrc Lease Number** | Lease number assigned by the Texas Railroad Commission (RRC) for both standard and commingled leases. |
| **Texas Section Number** | The number corresponding to a section within a Texas township. |
| **Texas Survey Name** | The name assigned to a Texas General Land Office land subdivision. |
| **Texas Survey Number** | Legal number associated with a land survey name, used to clarify that name in Texas onshore. Not used for any other state or for Federal survey. |

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| **Texas Survey Primary Type** | The type of primary land division used to describe the well location in Texas; e.g., block; league; township. |
| **Texas Survey Secondary Type** | Indicates the type of secondary land division in Texas and further divides the primary land division; e.g., labor; section. |
| **Texas Township Number** | The number identifying a township subdivision of a Texas survey. |
| **Texas Township Section Bearing Survey** | Description of location based on a subdivision of Texas survey name and abstract number. Townships are subdivided into a variable number of sections. Distance and bearing are used for positioning. |
| **Texas Township Section Direction Survey** | Description of location based on a subdivision of Texas survey name and abstract number. Townships are subdivided into a variable number of sections. Footage calls are used for positioning. |
| **Texas Tract Number** | A number assigned to a Texas General Land Office subdivision of a block. |
| **Texture** | Geometrical aspects of the component particles of the rock sample. Includes: size, shape, sorting and arrangement. |
| **Theoretical Gallons** | The content of liquefiable hydrocarbons in a volume of gas as determined from tests or analyses of the gas. |
| **Theoretical Permeability Ratio** | The theoretical permeability ratio (ki/ko) is the ratio of the ideal perforated permeability to the original effective permeability. |
| **Theoretical Residue Gas Remaining** | The volume of residue which theoretically remains after volume reductions attributable to the processing of a volume of gas in a plant, determined by applying a factor from a table or calculation to the volume of gas delivered to the plant. |
| **Theoretical Residue Method** | Indicates how to determine the calculation method for residue, after gas analysis has been performed and the liquid recovery has been calculated. |
| **Thermal Alteration Index** | An indicator of the geothermal maturity of a sample. |
| **Thermal Anomaly** | Unusual or abnormal temperature differences. |
| **Thermal Conductivity** | The measure of the ability of a material; e.g., tubular, rock or drilling fluid, to transmit heat. |
| **Thermal Cracker** | A vessel that uses a process in which relatively heavy hydrocarbons are broken up by heat into lighter products. |
| **Thermal Cracking** | A cracking process that uses a combination of heat and pressure to break apart the hydrocarbon molecules into smaller molecules. |
| **Thermal Decomposition** | The chemical breakdown of a compound or substance by temperature into simple substances or into its constituent elements. Starch thermally decomposes in drilling fluids as the temperature approaches 300 degrees F. |
| **Thermal Expansion Coefficient** | The change in length of a material as a function of its total length due to a change in temperature. |
| **Thermal Gradient** | SEE: Temperature Gradient; Geothermal Gradient. |
| **Thermal Shield** | A heat sink and insulator used to prolong the life of heat sensitive instruments used in borehole surveys. |
| **Thermowell** | Housing inserted in a pipeline or vessel to accommodate a thermometer. |
| **Theta Angle** | The angle that will correct grid north to true north. |
| **Thick Thread** | A thread that has the appearance of being cut off form. This appearance would have to be substantiated with the use of a thread comparator, lead gauge, and/or depth gauge. |
| **Thickening Time** | SEE: Cement Thickening Time. |
| **Thief** | A small cylindrical vessel designed to take a sample from any depth in a tank. |

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| **Thief Hatch** | An opening provided with a hinged covering on the top of a tank for the pumper or gauger to use in taking a sample of the liquid content or gauging the tank. |
| **Thief Sand** | A rock unit responsible for excess fluid loss during drilling operations. |
| **Thiefing** | Obtaining fluids at different levels in a vessel to determine BS&W content. |
| **Thinner** | Any of various organic agents (tannins, lignites, lignosulfonates, etc.) and inorganic agents (pyrophosphates, tetraphosphates, etc.) that are added to a drilling fluid to reduce the viscosity and/or thixotropic properties. |
| **Thread Angle** | The included angle between the thread flanks. The flank angles of thread shall be defined as the angles between the flanks and a perpendicular to the thread axis. For 60 degree threads, the flank angles are half angles of the thread and therefore equal. For buttress threads, the leading flanks are 10 degrees and the following flanks are 3 degrees. For extreme line threads, the leading flanks are 6 degrees and the following flanks are 6 degrees. |
| **Thread Axis** | The axis of pitch cone of the thread, and the longitudinal central line through the threads. In basic thread design, all length measurements are related to the thread axis. |
| **Thread Engagement Length** | The length of contact between two mated parts measured axially. |
| **Thread Flank** | The surface of a thread that connects the crest with the root. Also referred to as: Thread Side. |
| **Thread Form** | The form of thread is the thread profile in an axial plane for a length of one pitch. |
| **Thread Height** | The distance between the root and crest of the thread measured normal to the thread axis. |
| **Thread Profile Shoulder** | SEE: Step. |
| **Thread Protector** | Plastic or steel protection device placed on the end of the pipe to protect threads and seals from damage. |
| **Thread Run Out On Face** | SEE: Featheredge. |
| **Threaded Flange** | A flange having a sealing face on one side and a female thread on the other for the purpose of joining flanged connections to threaded connections. |
| **Threads Per Inch** | The number of threads in one inch of thread length. |
| **Three Dimensional Radius Of Curvature Method** | SEE: Borehole Survey Calculation Method. |
| **Three Phase Fluid-rock System** | A fluid-rock system characterized by three mobile phases. One phase is characterized as being the wetting phase, a second phase is characterized as being the nonwetting phase, and the third phase is characterized as an intermediate wetting phase. The gas-oil-water system is an example of this fluid-rock system. |
| **Three Phase Separator** | Production vessel capable of separating gas, oil and water, and discharging in three separate streams. |
| **Three Piece Sucker Rod** | A rod whose body and pin or box ends are joined by threaded connections. |
| **Thribble** | A stand of three joints of pipe. |
| **Throttle** | (1) To reduce the rate of flow of a fluid stream by partially closing a valve.(2) Also to lower the rpm of an engine by reduction of the fuel flow. |
| **Through Transmission** | A test method using two transducers in which the ultrasonic vibrations are emitted by one and received by another on the opposite side of the part. The ratio of the magnitudes of vibrations transmitted and received is used as the criterion of soundness. |
| **Throw** | SEE: Stroke. |
| **Thrust Fault** | A reverse fault in which the fault plane is less than 45 degrees from the horizontal, such that the upper fault block is thrust over the lower. |
| **Tide** | The variance (+ /-) in mean water depth. |

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| **Tie Down** | An anchor to prevent movement of equipment, usually the device to which a guy wire or brace is attached. |
| **Tieback String** | A tieback string is used to connect the top of another tubular string back to either the drill floor (for installation or retrieval purposes) or to a subsequently installed wellhead (from a mudline suspension system). |
| **Tight Formation** | (1) A formation of relatively low permeability.(2) A formation about which information is guarded by the operator. |
| **Tight Hole** | (1) A drilling well about which information is guarded by the operator; i.e., depth; stratigraphy encountered; drilling rate. (2) A section of borehole that is under gauged (of smaller than expected diameter). |
| **Tilted Rig** | SEE: Slant Rig. |
| **Time Cycle Controller** | A device that shuts down or starts an operation after a set time period. |
| **Time Depth Function** | The relationship between seismic two way travel time and depth. |
| **Time Interval** | The interval between two time stamps. |
| **Time Stamp** | An instantaneous point in time. |
| **Tip Extension** | SEE: Jib. |
| **Titration** | A method, or the process of using a standard solution, for the determination of the amount of some substance in another solution. The known solution is usually added in a definite quantity to the unknown until a reaction is complete. |
| **To Date** | The date through which the provisions of an entity ceased or were no longer in effect; e.g., a contract; the data attributes associated with an entity or event; the collecting of a well's cumulative production; the making of retroactive billing adjustments. |
| **Tobin Coordinates** | (1) The latitude and longitude coordinates of a lease or well as calculated by the Tobin company.(2) A number from a Tobin map. |
| **Tolerance** | (1) The relative capability of an organism to endure an unfavorable environmental factor.(2) The permissible deviation from the specified value. |
| **Tongs** | The large wrenches used for turning to make up or break out drill pipe, casing, tubing and other pipe; variously called casing tongs, rotary tongs, etc, according to the use for which they are designed. Power tongs are pneumatically or hydraulically operated tools that serve to spin the pipe up tight, and in some instances, to apply final makeup torque. Also commonly used in pipeline construction. |
| **Tool** | An implement or instrument that is used to do work or to make measurements. |
| **Tool Azimuth Angle** | The angle between north and the projection of a tool reference axis onto a horizontal plane, measured positive, clockwise. |
| **Tool High Side Angle** | The angle between the tool reference axis and a line perpendicular to the borehole axis and lying in the vertical plane. |
| **Tool Joint** | A heavy coupling element for drill pipe having coarse, tapered threads and seating shoulders designed to sustain the weight of the drillstem, withstand the strain of repeated makeup and breakout, and provide a leak proof seal. The male section (pin) is attached to one end of a length of drill pipe and the female section (box) is attached to the other end. Tool joints may be welded to the drill pipe, screwed onto the pipe, or a combination of screwed on and welded. |
| **Tool Joint Inside Diameter** | The inside diameter of drill pipe tool joint used in the bottomhole assembly. |
| **Tool Joint Outside Diameter** | The outside diameter of drill pipe tool joint used in the bottomhole assembly. |
| **Tool Mark** | Surface roughness on thread, chamfer, or counterbore surfaces caused by the machining action and condition of the cutting edge of single point, die, or chaser tools; also can occur in the form of a longitudinal ridge across thread crests due to an improperly shaped or adjusted chaser. |

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| **Tool Pusher** | One who has charge of rig builders and a drilling crew. Sometimes superintends the work at two or more wells. Typically employed by the operator. |
| **Top Connection** | The uppermost fitting of a Christmas Tree through which the tubing of the wellbore may be entered with completion or workover tools. |
| **Top Depth** | The measured depth along a wellbore path of a well to the wellbore point that is the top (lesser value of measured depth) point of reference for the interval. |
| **Top Latitude Of Area** | The latitude bounding the top of an area. The northernmost latitude. |
| **Top Lease** | A lease granted by the landowner during the existence of a recorded lease which is to become effective if and when the existing lease expires or is terminated. |
| **Top Of Pay** | The measured depth to the top of a zone containing hydrocarbons penetrated by a borehole. |
| **Topping** | (1) A refinery technique employed to secure complete fractional distillation except a heavy residuum.(2) Sometimes used in a more narrow sense to mean the taking off of the lighter fractions of oil.(3) Refers to the practice of filling a tank to capacity. |
| **Torn Thread** | Thread surfaces which have portions that are chipped, rough, or ragged. Also referred to as: Thread tears. |
| **Torque** | A measure of the force times the distance. On a rotary rig this applies especially to the rotation of the drillstem in its action against the borehole. |
| **Torque Converter** | Auxiliary transmission connected to prime mover which multiples engine torque as load increases with corresponding decrease in speed. |
| **Torsion Balance** | An instrument for measuring force fields, in which the field being measured is opposed by a known force. |
| **Total Adjustment Volume** | Total increase or decrease in previous reported volumes. |
| **Total Advance Rental** | The total amount paid for an advance rental. |
| **Total Assessments Amount** | Total assessment dollars paid. |
| **Total Authorized Cost** | Costs associated with this authorization plus the sum of the costs associated with all previous authorizations. |
| **Total Bonus Paid** | (1) The total amount paid as agreed upon under a bonus agreement.(2) The bonus amount paid after a successful bid on an Outer Continental Shelf (OCS) tract in a Minerals Management Service ( MMS) lease sale. |
| **Total Core Penetration** | The distance from the original core face to the depth probed. It is obtained by subtracting from the total target penetration (TTP), the combined thickness of the steel and Hydromite. Commonly abbreviated as: TCP. |
| **Total Deducted Volume** | Total volume of product deducted before calculation of tax liability. |
| **Total Deduction Amount** | Total Of All Deductions Reported |
| **Total Depth** | SEE: Well Total Measured Depth. |
| **Total Depth Area Code** | Indicates the map area where the borehole bottom is located. |
| **Total Depth Date** | The date drilling on a well reached the final total depth. |
| **Total Federal Area** | The total surface area under the sovereignty and/or jurisdiction of the United States government. |
| **Total Fluid Displaced Volume** | The total amount of fluid that is pumped following the cement slurry in order to force the slurry to surface. |
| **Total Gas Disposition Volume** | The total volume of all gas dispositions. |
| **Total Gas Production Volume** | The total volume of gas produced during the period covered, expressed in barrels, gallons, MCF, etc., depending on the fluid. |

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| **Total Intangible Cost** | Sum of all intangible costs. |
| **Total Lease Production Volume** | The total production reported for a lease. |
| **Total Measured Depth** | SEE: Well Total Measured Depth. |
| **Total Oil/ Condensate Disposition Volume** | The total volume of oil/condensate dispositions. |
| **Total Oil/condensate Production Volume** | The total volume of oil/condensate produced during the period covered, expressed in barrels, gallons, MCF, etc., depending on the fluid. |
| **Total Organic Carbon** | Total organic carbon percentage for a sample. |
| **Total Payment Amount** | The total amount paid or remitted. |
| **Total Penalty Amount** | The amount of penalties from an agency ordered assessment. |
| **Total Production & Acquisition Volume** | Total Gas Acquisitions for field operations as reported for LA State Regulatory production reporting. |
| **Total Recovery Percentage** | The percentage calculated by dividing the volume of the recovered condensate by initial sample volume. |
| **Total Royalty Due Amount** | The total amount of Royalties due. |
| **Total Sale Transfer Volume** | The total sale and/or transfer volume for the facility/ measurement point that has been allocated to each source listed. |
| **Total Sales Volume** | Total volume of oil and gas sold from lease during period covered. |
| **Total Taken-in-kind Volume** | Total volume of production taken-in-kind. |
| **Total Tangible Cost** | The sum of all tangible costs. |
| **Total Target Penetration** | The distance from the exterior steel face of the core target to the probe depth. The probe depth shall be determined by the maximum depth from the exterior steel face to the deepest point that can be probed with a 0.1 inch OD tube using 50 psi air pressure and a probe force not exceeding 10 pounds. Commonly abbreviated as TTP. |
| **Total Tax And Fees Due Amount** | Total calculated tax and fee liability. |
| **Total Tax Due Amount** | The total calculated tax liability. |
| **Total Taxable Volume** | Total volume on which taxes are based. |
| **Total Transportation Cost Amount** | The total amount for transportation charges. |
| **Total True Vertical Depth** | SEE: Well Total True Vertical Depth. |
| **Total Water Disposition Volume** | The total volume of oil/condensate injected during the period covered. |
| **Total Water Production Volume** | The total volume of water produced during the period covered. |
| **Total Working Interest Nonconsensus Percentage** | The total working interest portion that represents the working interest owners' share that elected to not participate in the project or operation. |
| **Totalizer** | A mechanical or electronic measurement device that records the total amount of fluid passing through a line. |
| **Township** | A public land surveying unit of 36 sections or 36 square miles. Numbered in rows north and south from a standard survey base line. |
| **Township Direction** | The township direction, north or south of a surveyed parallel line. |
| **Township Name** | Name of the township or farm. |

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| **Township Number** | The number assigned to a full or partial township division north or south of the survey base line. In the United States, a Congressional township is generally a subdivision of a county consisting of 36 square miles. |
| **Toxic Substance** | A substance or material which can be detrimental to human health or the functional capacity of a person having exposure to it. |
| **Toxicant** | A substance that kills or injures an organism through its chemical or physical action, or by altering its environment; e.g., cyanides; phenols; pesticides; heavy metals. |
| **Toxicity** | The quality or degree of being poisonous or harmful to plant or animal life. |
| **Trace Fossil** | A sedimentary structure consisting of fossilized track, trail, burrow, tube, boring, tunnel or other disturbances of soft sediment resulting from the life activities of organisms where the body is not present. Also referred to as: Ichnofossil. |
| **Traceability** | The ability to determine the product history through markings and records. |
| **Tracer** | A dye or radioactive element introduced into a stream to facilitate study of its flow pattern. |
| **Tracer Log** | A well log used for the purpose of following, locating or monitoring the behavior of a traceable material; e.g., radioactive isotope; boron. |
| **Tract Gross Rental** | Total amount of all rentals payable for a given tract. |
| **Tract Net Rental** | The portion of the tract gross rental which is payable by the indicated company. |
| **Tract Number** | The identifier of a subdivision or section for civil boundaries. Tract level identifiers are Texas section (including section, labor, or tract), city block, and lot. |
| **Tract Portion Percentage** | The percentage that a tract contributes to a unit area, a communitized area or a participating area. |
| **Transaction Code** | An indicator of the type of transaction occurring between business partners. |
| **Transducer** | An instrumentation device for converting a signal from one form to another; e.g., a pressure transducer. |
| **Transfer Mechanism** | A procedure to account for the effects of differences in surface texture, curvature, etc., between calibration block and workpiece. |
| **Transfer Order** | A document whereby participants in a Division Order change the disposition of their share of the proceeds. |
| **Transferred Volume** | Volume of gas transferred to other fields and/or Operators. |
| **Transformation** | SEE: Coordinate Transformation. |
| **Transformer** | An electrical device that converts primary voltage to secondary voltage. |
| **Transition Zone** | The ice region existing between fast ice and the arctic pack, usually heavily deformed. It may vary in width from hundreds of feet to tens of miles depending on seasonal and annual changes. Fast ice may be found in this zone, adjacent to grounded features. Also referred to as: Shear; Stamukhi zone. |
| **Transmission Angle** | The incident angle of the transmitted ultrasonic beam. It is zero degrees when the ultrasonic beam is perpendicular to the test surface. |
| **Transmission Construction Cost** | Costs include construction costs and equipment, such as wiring, poles, transformers, light and power system from point of connection with the plant, and field or public-utility systems. |
| **Transmission Horsepower Loss** | The difference between output and input horsepower. It may conveniently be expressed as percentage of input horsepower. |
| **Transmitter** | A mechanism for converting sound waves into equivalent electric waves. |
| **Transportation Agreement** | An agreement between a shipper and transportation company which defines the terms and conditions of the transportation services and transportation transfer to be provided. |

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| **Transportation Cost Amount** | The rate per unit of measure, rate for transportation charges per unit of measure. |
| **Transportation Deduction Amount** | The amount used to adjust the base residue rate for the transportation of gas in a gas system. |
| **Transportation Type Code** | An indicator of the mode of transportation utilized for a specified activity; e.g., pipeline, truck, barge. |
| **Transporter** | A legal entity which has the capability of providing the service of transporting a specified product. Transporter includes gathering companies, pipeline companies, and local distribution companies (LDCs). |
| **Transporter Code** | The indicator assigned by a regulatory agency to identify the oil transporter. |
| **Transporter Name** | The name of a company transporting a product. |
| **Transporter Tank Number** | An identifier of an oil, condensate, or applicable plant product storage tank or a meter. Numbers are unique by transporter. Tank numbers are assigned by the transporter and meter numbers are the manufacturer's serial number for the meter. |
| **Transverse** | Literally means across, usually signifying circumferential or substantially circumferential in direction. |
| **Transverse Wave** | SEE: S-Wave. |
| **Trap** | A reservoir rock and reservoir seal that has the potential to accumulate, through a hydrocarbon charge, hydrocarbon fluids. Traps include reservoir rock, within which reservoir fluids can potentially accumulate, and reservoir seal(s), which can act as barriers to further migration of hydrocarbon fluids, thus affecting a hydrocarbon charge of the reservoir rock within the trap. Traps are typically classified as structural, stratigraphic, hydrodynamic and combination trap. |
| **Trap Pressure Measurement** | The pressure held at the trap or separator. |
| **Trapezoidal Method** | Uses of the measured inclination and direction angles at both ends of the measured course in a fashion that recreates the borehole path. This is done by a sequence of trapezoidal integration segments using the measured angles as constraints on the integral over the measured course. Results obtained are essentially the same as the Acceleration, Balanced Tangential, and Vector Averaging Methods. |
| **Travel Rate** | The speed of material over the screening surface. |
| **Traveling Block** | The block containing sheaves and provided with clevis and hook which is connected with the load hoisted or lowered in a derrick. |
| **Traveling Block Position** | The block position given in distance above the rotary table at a point in time. |
| **Traveling Cylinder View** | A plat of the wellbore profile within the control cylinder. |
| **Traveling Valve** | A valve in the plunger of a sucker rod pump. |
| **Traverse** | An ordered collection of bin nodes through a 3D seismic data set used to construct a vertical section of panels displaying the earth's subsurface features. May be an inline, crossline or an arbitrary traverse. |
| **Traverse Tables** | Tables of numerical values used in calculating borehole survey results. |
| **Treatable Water Depth** | The distance from zero at the surface to the top of a water table where the water contains total dissolved solids of 10 ppm or less or could be treated to bring the total dissolved solids to 10 ppm or less. |
| **Treated Interval** | That space between two depths, usually the top perforated depth and bottom perforated depth, subjected to a chemical or physical process. |
| **Treater** | A vessel in which undesired components are removed from a fluid stream usually by the use of heat, chemicals, etc. |
| **Treating** | Separation of gas, oil, water and contaminants from emusified well streams by gravity and enhanced means of breaking emulsions such as heating, chemicals and/or coalescing sections. |
| **Treatment** | (1) A process performed to improve the productivity of reservoir rock.(2) A process to clean the borehole or equipment within it. |

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| **Treatment Additive Component Type** | The kind of additive used during the treating operation. |
| **Treatment Additive Name** | The brand name or generic name of the treatment fluid additive. |
| **Treatment Additive Volume** | The volume of the treatment fluid additive used during the treating operation. |
| **Treatment Date** | The date that treating operations were performed on the indicated interval. |
| **Treatment Deduction Value** | Determines the value used to adjust the base residue rate for treatment of gas in a gas system. |
| **Treatment Fluid Injection Pressure Measurement** | The injection pressure of the treatment fluid after breakdown. |
| **Treatment Fluid Injection Rate** | The injection rate of the treatment fluid after breakdown. |
| **Treatment Fluid Material** | The kind of treating fluid used in the drilling operation of a well; e.g., oil; water; acid. |
| **Treatment Interval Classification** | The classification of the condition of the borehole for the interval treated; e.g., perforations; open hole. |
| **Treatment Interval Measured Base Depth** | The measured depth to the base of the interval that is treated. |
| **Treatment Interval Measured Top Depth** | The shallowest measured depth of the interval that is treated. |
| **Treatment Material Type Code** | An indicator of the type of material used to treat a borehole segment; e.g., sand, acid, water, foam). |
| **Treatment Material Volume** | The volume of the treatment fluid used in treating the reservoir rock. |
| **Treatment Type Code** | The kind of treatment operation performed; e.g., acidize, fracture. |
| **Tribal Name** | The officiall Bureau of Indian Affairs recognized name for a tribe. |
| **Tribal Royalty Exempt Amount** | The monetary amount exempt from taxation that relates to a tribal royalty exemption. |
| **Trigger Bit** | A drill bit with a removable center through which surveying instruments are run into the open borehole. Used prior to industry's general acceptance of nonmagnetic drill collars. |
| **Trip** | The operation in rotary drilling of pulling out, trip out, or running in, trip in, the drillstring, as required to replace a worn bit, extract a core, or recover fish. |
| **Trip Gas** | An accumulation of gas which enters the well bore while a trip is made. High pressure trip gas can cause serious problems. |
| **Trip Rate** | The estimated average rate of tripping pipe. |
| **Tripping** | (1) Torsional buckling of stiffener.(2) The pulling out or running in of the drillstring. |
| **True North** | The direction from any geographic location on the earth's surface to the north geographic pole. |
| **True Vertical Depth** | The vertical, straight line depth from the surface datum reference to the subsurface point of interest. Commonly abbreviated as: TVD. |
| **True Vertical Depth Log** | A log computed from well logs obtained from deviated wellbores, in which measured depths have been converted to true vertical depths. |
| **True Vertical Total Depth** | SEE: Well Total True Vertical Depth. |
| **Trunk Line** | SEE: Main Line. |
| **Tts** | Abbreviation for Time To Surface. |
| **Tube Bundle** | The assembly of tubes, baffles and tube sheets in a heat exchanger. |
| **Tubing** | (1) A small diameter removable pipe installed within a larger diameter casing and connected to a well completion; produced fluids are conducted to the surface through tubing.(2) The well activity of installing tubing. |

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| **Tubing Anchor** | A device run into the wellbore of a pumper well as an integral part of the tubing which employs friction or slips between the anchor and the casing to prevent tubing movement with respect to the casing. |
| **Tubing Average Pressure Measurement** | Average pressure measureable within the tubing. |
| **Tubing Catcher** | A device with slips provided to engage the walls of the casing and catch tubing if dropped in a wellbore. |
| **Tubing Collar** | SEE: Collar. |
| **Tubing Coupling** | SEE: Collar. |
| **Tubing Depth** | The measured depth from the well elevation reference point to the bottom of the tubing string. |
| **Tubing Grade** | Grades given to the material properties of tubing that fall within the tolerances set by API specifications; e.g., H40; J55; K55; S80. |
| **Tubing Hanger** | A device included in the wellhead hook up and contained in the tubing head which, by use of a mandrel or slips, suspends and holds the tubing string. |
| **Tubing Head** | The top of the tubing string with control and flow valves attached. |
| **Tubing Head Adapter** | That equipment which adapts the uppermost flange of a tubing head to the lowermost valve of the Christmas Tree. |
| **Tubing Head Spool** | A piece of equipment attached to the uppermost casinghead or smallest casing string which serves to suspend the tubing and to seal the annular space between the tubing and casing. |
| **Tubing Inside Diameter** | The inside diameter of the tubing. |
| **Tubing Job** | SEE: Tubing. |
| **Tubing Maximum Pressure** | The maximum pressure measureable within the tubing. |
| **Tubing Outside Diameter** | The outside diameter of the tubing. |
| **Tubing Pressure Measurement** | The pressure measurable within the tubing. |
| **Tubing Retrievable Gas Lift Valve** | A gas lift valve mounted on a tubing retrievable mandrel. |
| **Tubing Retrievable Mandrel** | Commonly called conventional or standard mandrel. A tubing pup joint with a lug for mounting a conventional or tubing retrievable gas lift valve. The mandrel is an integral part of the tubing string. |
| **Tubing Section** | Identifies a contiguous tubing string segment with identical tubular and connection properties. |
| **Tubing Set Date** | The last date the tubing string was set in the wellbore. The tubing string may have been pulled and reinstalled more than once. |
| **Tubing Temperature Measurement** | The temperature inside the tubing. |
| **Tubing Weight** | The weight of the tubing measured in terms of unit length. |
| **Tubingless Completion** | A method of completing a well in which a small diameter casing is set through the pay zone with no tubing or inner production string employed to bring reservoir fluids to the surface. |
| **Tubular** | SEE: Tubular Assembly. |
| **Tubular Assembly** | Identifies an installation grouping of pipe installed in a well for production or injection. |
| **Tubular Burst Rated Pressure Measurement** | The manufacturer's minimum internal yield pressure rating for a given tubular product. |
| **Tubular Burst Safety Factor Value** | The burst safety factor for a given tubular. |
| **Tubular Capacity** | The volumetric capacity of the given tubular product. |
| **Tubular Coating Type** | The type of coating, existing on the tubular section. |

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| **Tubular Collapse Point** | The stress required to collapse the given tubular product. |
| **Tubular Collapse Rated Pressure Measurement** | The manufacturer's minimum collapse pressure rating for a given tubular product. |
| **Tubular Collapse Safety Factor** | The collapse safety factor for a given tubular. |
| **Tubular Compressive Strength** | The compressive strength of the given tubular product. |
| **Tubular Coupling Type** | The type of coupling used to make up a wellbore tubular string; e.g., short round, long round, buttress. |
| **Tubular Displacement** | The fluid volume displacement of the given tubular product. |
| **Tubular Goods** | Refers to drillpipe, casing, tubing, line pipe, etc. A generic term for any pipe used in the oil fields. |
| **Tubular Grade Code** | An indicator of the grade given to the material properties of tubular that fall within the tolerances set by API specifications; e.g., H40, J55, K55. |
| **Tubular Material Density** | The mass per volume of the given tubular material. For cement this is its fluid density. |
| **Tubular Outside Diameter** | The outside diameter of the tubular. |
| **Tubular Segment Measured Bottom Depth** | The measured depth to the bottom of the tubular segment run into a wellbore. |
| **Tubular Segment Measured Top Depth** | The measured depth to the top of the tubular segment. |
| **Tubular Segment Removed Length** | The length of tubular segment emoved during specified operations (e.g., completion, plugging and abandonment, plug back) |
| **Tubular Segment True Vertical Bottom Depth** | The true vertical depth to the bottom of the tubular segment run into a wellbore. |
| **Tubular Segment True Vertical Top Depth** | The true vertical depth to the top of the tubular segment run into a wellbore. |
| **Tubular Sub** | Tubulars 2 feet to 12 feet in length (pup joint) used to set a production tubing string at the desired depth. |
| **Tubular Tensile Rated Rated Strength Value** | The manufacturer's minimum tensile strength rating for a given tubular product. |
| **Tubular Tensile Strength Safety Factor** | The tensile strength safety factor for a given tubular. |
| **Tubular Test Pressure Measurement** | The minimum acceptable integrity test pressure for a given tubular. |
| **Tubular Type Code** | An indicator of the type of tubular; e.g., casing; liner; drill pipe, line. |
| **Tubular Weight** | The weight of the tubular expressed as weight unit length. |
| **Tugger Line** | A wire rope line powered by a motor (pneumatic, hydraulic, or other) and used for the controlled lifting and lowering of light loads around a rig. |
| **Turbidity** | A measure of the resistance of water to the passage of light caused by suspended and colloidal matter. |
| **Turbine** | A rotating propeller-like motor driven by pressure reduction resulting in horsepower. |
| **Turbodrill** | A turbine driven rotary drill located at the base of a drillstring and utilizing the drilling fluid as a power source. Commonly used in Russia. |
| **Turbolator** | A core of baffles designed to induce turbulence in the return leg of firetubes which enhances heat transfer efficiency. |
| **Turbulent Flow** | Fluid flow in which the velocity at a given point changes constantly in magnitude and the direction of flow. |
| **Turn** | Change in bearing of the borehole axis. Usually spoken of as the right or left turn with orientation that of an observer who views the wellbore course from the surface reference. |
| **Turns Per Inch** | The number of thread turns in one inch of thread length. |
| **Turntable** | SEE: Revolving Upperstructure. |

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| **Tut** | The abbreviation for Tutwiler, Tuteiler, or Tutwiller test. A test for determining the concentration of hydrogen sulfide and mercaptans in a gas. |
| **Tvd** | SEE: True Vertical Depth. |
| **Twin Probe** | SEE: Dual Search Unit. |
| **Twist Angle** | The azimuth change through which the drillstem must be turned to offset the twist caused by the reactive torque of the downhole motor. |
| **Twist Off** | To break the drillstem, usually by torsional stress, while it is in the wellbore. |
| **Twisted-pair Wiring** | Cable comprised of 2-4-6-8 wires with each pair twisted together at the rate of 6 turns per foot to provide electrical self-shielding. |
| **Two Blocking** | The condition when the lower load block or hook assembly comes in contact with the upper load block or boom point sheave assembly. |
| **Two Crystal Method** | In ultrasonic testing, the use of two transducers for sending and receiving. May be send, receive or through transmission method. |
| **Two Phase Fluid-rock System** | A fluid-rock system characterized by two mobile phases. One phase is characterized as being the wetting phase, the other is characterized as being the nonwetting phase. Other phases are immobile. Examples of these are oil-water and vapor-liquid systems. |
| **Two Phase Separator** | Production vessel capable of separating gas from liquid. May also include water knockouts which separate water from oil. |
| **Type A Transportation Deduction Amount** | The actual cost of transportation from the outlet of the initial dehydrator to the inlet of the main transmission line that can be deducted from taxable value. |
| **Type B Transportation Deduction Amount** | When no dehydration is performed, other than within a processing facility, this is the actual cost of transportation from the inlet to the transportation related compressor, custody transfer meter, or processing facility, whichever occurs first, to the inlet of the main processing plant or main transmission line. If there is no dehydration performed in the field and there is no transportation-related compressor or custody transfer meter, then there is no Type B transportation deduction allowed. |
| **Type C Transportation Deduction Amount** | The actual cost of transportation from the inlet of the main transmission line or outlet of the main processing plant to market, where transportation is included in the price. |
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| **Ul** | Underwriters' Laboratories, Inc. |
| **Ultimate Gas Usage** | Identifies the ultimate use of the gas that is sold to the final user; e.g., electrical generation; commercial use. |
| **Ultimate Limit State** | Function of design variables which defines the resistance of a member to failure; i.e., its maximum load carrying capacity at failure. |
| **Ultimate Recovery** | The quantity of oil or gas that a field, or a property will produce. |
| **Ultrasonic** | Pertaining to mechanical vibrations having a frequency greater than approximately 20,000 Hz. |
| **Ultrasonic Absorption** | A dampening of ultrasonic vibrations that occurs when the wave transverses a medium. |
| **Ultrasonic Dead Zone** | The distance from the front surface of the pipe to nearest inspectable depth. |
| **Ultrasonic Inspection** | An examination of materials and fabrication using pulse echo ultrasonic equipment for the purpose of locating and sizing discontinuities in the welds and reporting such findings for evaluation of compliance with the acceptance criteria. |
| **Ultrasonic Inspection Procedure** | The detailed written procedure outlining the specific ultrasonic inspection techniques and criteria to be utilized during the construction of a particular platform. |

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| **Ultrasonic Penetration** | Propagation of ultrasonic energy through an article. |
| **Ultrasonic Presentation** | The method used to show ultrasonic wave information. This may include A, B, or C scans displayed on various types of recorders or cathode ray tube instruments. |
| **Ultrasonic Range** | The maximum ultrasonic path length that can be displayed. Also referred to as: Ultrasonic Sweep. |
| **Ultrasonic Resolving Power** | The measure of the capability of an ultrasonic system to separate in time two discontinuities at slightly different distances. |
| **Ultrasonic Spectrum** | The frequency span of elastic waves greater than the highest audible frequency, generally regarded as being higher than 2.0 x 10(to the 4th power) cycles per second (Cps), to approximately 10(to the 9th power) Cps. |
| **Ultrasonic Test Surface** | That surface of a part through which the ultrasonic energy enters or leaves the part. |
| **Ultrasonic Testing** | A nondestructive method of inspecting materials by the use of high frequency sound waves. |
| **Ultrasonic Velocity** | The speed at which sound waves travel through a medium. |
| **Ultraviolet Light** | Light waves shorter than the visible blue-violet waves of the spectrum. Crude oil, colored distillates, residuum, a few drilling fluid additives, and certain minerals and chemicals fluoresce in the presence of ultraviolet light. These substances, when present in drilling fluid, may cause the fluid to fluoresce. |
| **Umbrella Discharge** | SEE: Spray Discharge. |
| **Unallocated Basis Code** | An indicator of the basis by which unallocated wells are determined. |
| **Unconformity** | The surface of contact between rock units at which is indicate a substantial nonstructural break or gap in the stratigraphic record. At the unconformity, the stratigraphically older rock unit is not succeeded by the next younger unit in the expected stratigraphic sequence. Such breaks are usually indications of extensive periods of erosion, with loss of the intervening rock record. An unconformity can also be formed by an extended period of nondeposition. |
| **Unconformity Stratigraphic Unit Name** | Name of the stratigraphic unit representing an unconformity. |
| **Unconformity Type** | The type of unconformity surface; e.g., angular unconformity; disconformity; paraconformity. |
| **Uncontrolled Sidetrack** | The sidetracking of a wellbore where direction is unimportant and not controlled. |
| **Underbalance** | The condition in the borehole wherein the weight of the drilling fluid exerts a pressure less than the pressure of the fluids in the rocks being drilled. In a condition of underbalance, fluids from the surrounding rocks enter the borehole. |
| **Undercut** | Under cutting on submerged arc welded pipe is the reduction in thickness of the pipe wall adjacent to the weld where it is fused to the surface of the pipe. |
| **Underfill** | Formed during bar rolling when the bar does not completely fill the rolling die. Also formed during rod end forging when there is insufficient material to fill the die. |
| **Underflow** | The discharge stream from centrifugal separators. |
| **Underflow Header** | A pipe, tube, or conduit into which two or more hydrocyclones discharge their underflow. |
| **Underflow Manifold** | An arrangement by which the underflow from one or more hydrocyclones or from one or more underflow headers can be diverted. |
| **Underflow Opening** | The actual opening through which the underflow leaves the centrifugal separator. |
| **Underground Blowout** | An uncontrolled flow of wellbore fluids and/or reservoir fluids into lower pressured subsurface zones. |
| **Underground Injection Control Permit Number** | The number assigned by a regulatory agency to an underground injection control permit. |
| **Underground Storage Well** | A well used for for temporary storage of fluids in artificial or natural caverns or reservoirs. |
| **Underpressure** | Pressure in a process component less than the design collapse pressure. |

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| **Underream** | To enlarge a borehole below the casing. |
| **Underreamer** | An item of equipment which can enlarge an existing hole. Unlike a reamer, the arms on which the cutting structure is mounted are retractable. It can thererfore be passed through a small diameter restriction before the arms are extended and underreaming operations begin. |
| **Undersaturated Fluid** | A liquid capable of holding additional gaseous components in solution or a vapor capable of holding additional liquid components in solution at the specified pressure and temperature. |
| **Undersize** | Material consisting of particles smaller than a specified aperture. |
| **Underwater Completion Count** | The number of underwater completions that have their production processed at this location. |
| **Underwater Safety Valve** | An automatic valve assembly (installed at an underwater wellhead location) which will close upon loss of power supply. Commonly abbreviated as: USV. |
| **Undesirable Event** | An adverse occurrence or situation in a process component or process station which poses a threat to safety; e.g., overpressure; underpressure; liquid overflow. |
| **Undeveloped Gross Acres** | The sum of all undeveloped tract gross acres on a lease. Contains the total number of acres covered by the legal description of the entity in which it is included. |
| **Undeveloped Leasehold Type** | Indicates the type of undeveloped leaseholds that are dedicated under a contract. |
| **Undeveloped Net Acres** | The sum of all undeveloped tract net acres on a lease. Contains the total number of net acres covered by the legal description of the entity in which it is included. |
| **Undivided Agreement** | A type of operating agreement that fixes the sharing of costs and benefits for the life of the unit. |
| **Unencumbered Federal Ocs Area** | The surface area under the jurisdiction of the United States government which is not encumbered by fact of being disputed, deferred, withdrawn, or designated as Section 6, 7, or 8 of the Outer Continental Shelf Lands Act, as amended. |
| **Unfired Process Area** | That area that contains process equipment that does not have a flame. |
| **Uniformitarianism** | The geologic principle that past geologic events can be explained by phenomena and forces observable today. |
| **Uniformity Coefficient** | The ratio of the sieve size that will pass 60 percent of the filter sand, to the effective size. |
| **Unihead** | A casinghead unit capable of hanging multiple casing strings. |
| **Uninterruptable Power Source** | A power source which is utilized as a protective, continuous power supply of unwavering quality for electronic control equipment and/or computers when interruptions in power could be detrimental to the equipment being protected. Abbreviation: UPS. |
| **Union** | A coupling device used to connect pipe without the need to rotate the pipe. The makeup is accomplished by a flanged, threaded collar on the union. |
| **Unique Well Identifier** | The API well number for projects within the United States or an international code associated with the well referenced in the segment. |
| **Unit** | A combination of leases, or portions thereof, usually contiguous, involving potential or producing mineral properties for the purpose of efficient or economic operation. |
| **Unit Abandoment Flag** | Indicates the abandonment or termination of the operator's unit. |
| **Unit Acreage** | The acreage as described in a unit agreement as constituting the land logically subject to development under such an agreement. |
| **Unit Agreement** | An agreement for the recovery of oil and gas, where acreage is treated for operational purposes and for the allocation of costs and benefits as a single consolidated unit without regard to separate ownerships. |
| **Unit Agreement Effective Date** | The effective date of the Unit Agreement. |
| **Unit Agreement Flag** | An indicator of whether a wellbore is in a unit that has a unit agreement. |

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| **Unit Agreement Name** | Name assigned by a regulatory agency to a unit. |
| **Unit Agreement Number** | The identifier assigned to an approved unit agreement. |
| **Unit Agreement Type** | The identifier for the type of unit agreement. |
| **Unit Allocation Basis Code** | The indicator of the method used to determine the percent lease allocation or the percent lease total participation. |
| **Unit Angle** | SEE: Inclinometer. |
| **Unit Completion Flag** | Identifies whether well completions are in a unit agreement. |
| **Unit Field** | A combination of lease parcels, usually contiguous, involving potential or producing mineral properties into a field. It is created for the purpose of efficient or economical operation by a unitization agreement. |
| **Unit Identifier** | A letter assignment of the quarter/quarter sections "A" through "P" and is used to designate the location of a well. |
| **Unit Of Measure Code** | A code specifying the units in which a value is being expressed or manner in which a measurement has been taken. |
| **Unit- Of- Measurement System Code** | A n indicator of the measurement system used throughout the Authorizatrion for Expenditure (AFE); e.g., U.S., Canadian, metric, etc. |
| **Unit Operator** | The company designated to operate unitized properties. |
| **Unit Participating Acreage** | The total surface area that is participating and receiving an allocation from unit production. |
| **Unit Termination Date** | The date that a unitization agreement is terminated. |
| **Unit To Tract Participation Decimal** | The portion that represents a tract's participation in the allocation of production (volume and possibly value) to the tract from a unit. |
| **Unit Tract Number** | The number assigned that uniquely identifies the parcel of land, lease, or portion of a lease in a unitization agreement. |
| **Unitization** | The combined operation of lease interests for the purposes of: (1) Accomplishing cooperative development and operation of oil and gas properties when the primary purpose is to attain maximum production, without waste, and with due regard to the protection of correlative rights.(2) Complying with well spacing requirements of Federal and state regulatory bodies. |
| **Univalent** | Monovalent. |
| **Universal Transverse Mercator** | A system for representing a portion of the curved surface of the earth upon a plane surface. Commonly abbreviated: UTM. |
| **Universal Transverse Mercator Coordinate Location** | The Universal Transverse Mercator (UTM) is one of the systems available for representing a portion of the curved surface of the earth upon a plane surface. Positions are defined in terms of plane-rectangular grid (x-y) coordinates. The grid system is designed for the expression of location between 80 degrees South latitude and 84 degrees North latitude. |
| **Universal Transverse Mercator Method Code** | An indicator of the values and matching descriptions which specify parameters used in the calculation of Universal Transverse Mercator (UTM) distance. |
| **Universal Transverse Mercator Quadrangle** | A description of location using quadrangle subdivisions of UTM zones. |
| **Unload The Hole** | To remove drilling fluid, water or other fluid from the wellbore to induce production. |
| **Unmanned Platform** | A platform where persons may be employed at any one time, but has no living accommodations or quarters. |

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| **Unmet Offset Well** | Any producing well that: (1) Under specific provisions of an offsetting lease agreement, or existing spacing order, constitutes a direct or diagonal offset.(2) Is near enough to company acreage to indicate the possibility that company acreage, independent of whether the acreage is held by production or not, will suffer drainage if the well is not offset.(3) Is near enough to company acreage to qualify as an unmet offset well, but on the basis of prior or preliminary information, indications are tha |
| **Unproved Reserves** | Unproved reserves are based on geologic and/or engineering data similar to that used in estimates of proved reserves; but technical, contractual, economic, or regulatory uncertainties preclude such reserves being classified as proved. |
| **Unusual Drilling Circumstances Encountered Flag** | An indicator that out of the ordinary circumstances were encountered during the drilling. |
| **Update Action Code** | An indicator of whether information should be added, deleted, or modified. |
| **Updip Well** | A well having its wellbore penetrating a reservoir higher on a geologic structure than nearby wells do. |
| **Upper Deck** | Upper or roof deck level consisting of girder, beam and plate elements. |
| **Upperstructure** | SEE: Revolving Upperstructure. |
| **Ups** | SEE: Uninterruptable Power Source. |
| **Upset** | A forged metal pipe end with increased wall thickness and diameter used for threading or welding. |
| **Upset Tubing** | Tubing with a thicker wall and larger outside diameter on both ends of a joint to compensate for cutting the threads. |
| **Upset Underfill** | A depression on the outside or inside surface of an upset caused by insufficient flow of metal to completely fill out the upset to the desired shape. |
| **Upset Wrinkles** | A surface irregularity occurring on pipe upsets in the form of transverse forging lips. |
| **Upstream Pipeline** | The first pipeline to transport natural gas enroute to an interconnect point for delivery to another pipeline. |
| **Upthrown Side** | Side of a fault which appears to have moved upward relative to the other side, the downthrown side. |
| **Upthrown Side Of Fault Formation Name** | The formation penetrated by the wellbore on the upthrown side and adjacent to the fault plane. |
| **Upturned Fiber Imperfection** | SEE: Hook Crack. |
| **Us Offshore Location Survey System** | Subdivision of water bodies in the jurisdiction of U.S. federal and certain Gulf Coast states. |
| **Us Township Range Section Survey System** | A rectilinear system used to locate a block of land in the U.S. Used with Congressional or Jeffersonian type surveys. |
| **Uscg** | United States Coast Guard. |
| **Usgs** | United States Geological Survey, Department of the Interior. |
| **Usgs Formation Code** | An indicator of the formation name (assigned by the United States Geological Survey (USGS) ). |
| **Utm** | SEE: Universal Transverse Mercator. |
| **Utm Coordinate Location** | SEE: Universal Transverse Mercator Coordinate Location. |
| **Utm Method Code** | SEE: Universal Transverse Mercator Method Code. |
| **Utm Quadrangle** | SEE: Universal Transverse Mercator Quadrangle. |
| **V** | |
| **V Door** | An opening in a side of a derrick at the floor level having the form of an inverted v. This opening is opposite the drawworks. It is used as an entry to bring in drill pipe and casing from the pipe rack. |

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| **Vacuum** | Theoretically, a space absolutely devoid of all matter and exerting zero pressure. However, it commonly refers to a condition that exists in a system when pressure is reduced below atmospheric pressure. |
| **Vacuum Stripping** | To remove gases from a liquid by applying a vacuum. |
| **Valence** | (1) A number representing the combining power of an atom; i.e., the number of electrons lost; gained; shared by an atom in a compound.(2) A measure of the number of hydrogen atoms with which an atom will combine or replace; i.e., an oxygen atom combines with two hydrogens; hence has a valence of 2. Thus, there are mono-, tri-, etc., valent ions. Also referred to as: Valency. |
| **Valence Effect** | The higher the valence of an ion the greater the loss of stability to emulsions, colloidal suspensions, etc., these polyvalent ions will impart. |
| **Value Less Tax Amount** | The value of minerals after the deduction of all applicable taxes. |
| **Valve** | Device by which the flow of a liquid or a gas may be regulated or controlled. A movable part within the valve body that opens or obstructs passage. |
| **Valve Bore Sealing Mechanism** | Those internal valve parts which close off the flow through the valve bore, such as gates, balls, plugs, poppets, flappers, and their respective seats. |
| **Valve Drilling Operation** | Drilling of a hole through the blocking element of a valve that is stuck in the closed position with pressure on the wellbore side of the valve. The drilling is accomplished through a lubricator that confines the pressure after the valve is penetrated. |
| **Valve Lifter** | A device for manually unseating a compressor valve to reduce the compressor capacity. |
| **Valve Top Works Pilot** | A mechanical regulating device mounted on or above a valve to assist in opening or closing the valve. |
| **Van Slyke** | A laboratory test for determining the concentration of primary amines and ammonia in amine solutions. |
| **Vanish Point** | That location where the thread tool mark runs out or terminates on the pipe surface. |
| **Vapor Bath** | A vat used in a process lab with a set temperature of 100 degrees Fahrenheit used to raise a sample bomb to a constant temperature. |
| **Vapor Lock** | The occurrence of a pocket of evaporated fuel which inhibits the fuel pump (which can only pump liquids) and causes the engine to stop. |
| **Vapor Pressure Bomb** | A sampling container for determination of vapor pressure. |
| **Vapor Recovery Unit** | A packaged vessel used to capture low pressure vapors from stock or storage tanks and pump them into a pipeline or flare, preventing their loss to the atmosphere. |
| **Vapor Tight Lighting Fixture** | SEE: Enclosed and Gasketed Lighting Fixture. |
| **Variable Density Log** | An acoustic log in which the acoustic wave train is recorded in the variable photographic density or intensity modulated time mode. |
| **Variance** | Sanction granted by a government body for delay or exception in the application of a given law, ordinance, or regulation. |
| **Vector Averaging Method** | A borehole survey calculation method which uses inclination and direction measurements at both ends of the measured course to establish vector space directions. It is then assumed that each of these two vectors is projected for one-half the course length in creating the borehole path. Each half course length segment can be treated tangentially. Results obtained are essentially the same as the Acceleration, Balanced Tangential, and Trapezoidal Methods. |
| **Vee Path** | The angle beam path in materials starting at the search unit examination surface, through the material to the reflecting surface continuing to the examination surface in front of the search unit, and reflection back along the same path to the search unit. The path is usually shaped like the letter V. |
| **Velocimeter** | (1) A device which measures fluid flow.(2) A flowmeter. |
| **Velocity** | (1) Time rate of motion in a given direction and sense.(2) The measure of a fluid flow and may be expressed in terms of linear velocity, mass velocity, volumetric velocity, etc.(3) A material property. |

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| **Velocity Survey Run Flag** | An indicator of whether a velocity survey was run. |
| **Velocity Type** | The type of velocity; e.g., interval; average. |
| **Venn Diagram** | The use of circles and lines to visually depict organizational, technical, and social relationships, power and communication. |
| **Vent** | A pipe or hatch on a vessel that opens to the atmosphere. A vent line might contain a pressure and/or vacuum relief device. |
| **Vented From Gas Wells Volume** | The disposition of gas into the atmosphere from gas wells. |
| **Vented From Oil Wells Volume** | The disposition of gas into the atmosphere from oil wells. |
| **Vented Greater Than 1 Hour Volume** | The disposition of gas into the atmosphere for a period greater than 60 minutes. |
| **Vented Less Than 1 Hour Volume** | The disposition of gas into the atmosphere for a period less than 60 minutes. |
| **Vented Or Flared Code** | An indicator of whether the gas stream is flared (burned) or vented. |
| **Venturi Valve** | A valve with a reduced opening, in which the transformation from the full opening ends to the reduced closure area is well streamlined to reduce pressure loss. |
| **Verified Nomination** | A nomination that has been validated against the conditions specified in the service contract and with any upstream/downstream or third parties involved in the transaction. |
| **Vertical Axis Orientation** | The orientation of a vertical coordinate axis with respect to a coordinate system. This is defined as either "upwards" or "downwards". |
| **Vertical Datum** | A reference surface used as the basis of elevation and depth measurements. |
| **Vertical Depth** | The vertical component of the borehole measured depth. |
| **Vertical Drilling** | Drilling with the intent of maintaining the wellbore path directly vertically below the wellbore origin. |
| **Vertical Hole** | SEE: Vertical Wellbore. |
| **Vertical Limit** | The maximum readable level of vertical indications determined either by an electrical or a physical limit of an A scan presentation. |
| **Vertical Permeability** | Absolute permeability measured on a vertically oriented sample. |
| **Vertical Profile** | A projection of the wellbore path into a vertical plane parallel to the course bearing. |
| **Vertical Section** | SEE: Vertical Profile. |
| **Vertical Seismic Profile** | A collection of seismic traces taken at sequential depths in a wellbore and processed to display direct, reflected, refracted and diffracted waves. It is a correlation tool for relating the well logs and lithologic logs to the field seismograms. Commonly abbreviated as VSP. |
| **Vertical Seismic Profile Receiver Level Count** | The quantity of seismic receiver levels used in the wellbore or the number of receivers on the surface if the vertical seismic profile (VSP) is transposed. |
| **Vertical Seismic Profile Receiver Type** | The type of receiver used in the tool during the vertical seismic profile (VSP); e.g., single component geophone; three component geophone; hydrophone. |
| **Vertical Seismic Profile Source** | The source of seismic energy used to acquire the vertical seismic profile (VSP); e.g., Vibroseis; airgun; watergun; dynamite. |
| **Vertical Seismic Profile Source Offset** | The offset distance of the vertical seismic profile (VSP) source from the wellhead. |
| **Vertical Sum** | Combining (adding) source gathers from several sources at nearly the same earth location without correcting for static or receiver offset differences. |
| **Vertical Sweep Efficiency** | The percentage of vertical section of pay that is swept by the injected fluid. |

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| **Vertical Thickness** | The thickness of the stratigraphic unit measured vertically through the unit. |
| **Vertical Wellbore** | A wellbore path that is nearly vertical from wellbore origin to wellbore terminus. |
| **Vessel Filter** | A vessel containing a porous or mass element through which gas or liquid is passed to screen out foreign matter. |
| **Vessel Heading** | The heading of the seismic vessel, relative to true north, at the time the record is generated. |
| **Vessel Heel Angle** | The mean heel angle of the seismic vessel at the time the record is generated; starboard side down is positive, port side down is negative. |
| **Vessel Mean Draft** | The mean draft of the seismic vessel at the time the record is generated. |
| **Vessel Trim Angle** | The mean trim angle of the seismic vessel at the time the record is generated; bow down is positive, stern down is negative. |
| **Vibrating Screen** | A screen with motion in a vertical plane which operates generally above 600 RPM at less than 1 inch stroke. |
| **Vibration Analyzer** | Diagnostic and monitoring equipment measuring distortional movement on high speed equipment such as turbines. |
| **Vibroseis Sweep** | SEE: Sweep. |
| **Video Presentation** | In ultrasonic testing, the rectified radio frequency (rf) signal. |
| **Vintage** | The term used to indicate the period during which a gas sales contract was made and/or the well spud date. |
| **Viscometer** | A device for measuring viscosity. Also referred to as: Viscosimeter. |
| **Viscosimeter** | SEE: Viscometer. |
| **Viscosity** | (1) The property of a substance offering internal resistance to flow.(2) A measure of the degree of fluidity. |
| **Viscosity Funnel** | SEE: Marsh Funnel. |
| **Viscosity Gel Viscometer** | The name commonly used for the direct indicating viscometer. Also referred to as: VG Meter. |
| **Viscous Flow** | SEE: Laminar Flow. |
| **Visual Examination** | Examination of parts and equipment for visible defects in material and workmanship. |
| **Vitrinite** | A microscopically recognizable coal maceral (organic analog to mineral) composed of humic material that is characteristically found in the coal lithotype vitrane. Vitrinite is the major maceral of most humic coals, and occurs in amorphous, mixed and structured forms. Vitrinitic kerogens and coals have the potential to generate gas. The maceral is used to measure vitrinite reflectance. |
| **Vitrinite Reflectance** | The percentage of vertically incident light reflected from a polished surface of the maceral vitrinite in thin section. An arithmetic mean of reflectance readings on a sample is widely used as a measure of geothermal maturity of the sample, which in turn is used to infer stages of petroleum generation and destruction within the sample rock. |
| **Vitrinite Type** | The form of vitrinite recognized in the thin section sample; e.g., amorphous; mixed; structured. |
| **Void Framework** | The amount of the rock framework that is porous (void), as a percent of the total framework volume. |
| **Volatile** | Evaporating readily at a relatively low temperature. |
| **Volatile Flammable Liquid** | A flammable liquid having a flash point below 100 F (37.8 C), or a flammable liquid whose temperature is above its flash point, or a Class II combustible liquid having a vapor pressure not exceeding 40 psia (276 kPa) at 38 C (100 F) whose temperature is above its flash point. |

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| **Volatile Matter** | Normally gaseous products, except moisture, given off by a substance, such as gas breaking out of live crude oil that has been added to a drilling fluid. In distillation of drilling fluids, the volatile matter is the water, oil, gas, etc., that are vaporized, leaving behind the total solids which can consist of both dissolved and suspended solids. |
| **Voltage** | The unit of potential causing the flow of current. |
| **Volume Tax Amount** | The tax calculated on volume. |
| **Volumetric Efficiency** | In a single pump stroke, the ratio of the actual volume delivered to the volume displaced. |
| **Volumetric Nondestructive Examination** | Examination for internal material defects by methods such as radiography and/or ultrasonic testing. |
| **Vortex Breaker** | A device located on outlet nozzles to prevent vortex formation. |
| **Vortex Finder** | A hollow cylinder extending axially into the barrel of a hydrocyclone forming an annulus into which the feed enters tangentially. The overflow exits from the separating chamber through the vortex finder, and the vortex is centered in the hydrocyclone by the hole in the vortex finder, hence the name. |
| **Vsp** | SEE: Vertical Seismic Profile. |
| **Vug** | Natural cavity formed in certain rocks or veins, caused by leaching out of soluble minerals. |
| W | |
| **Wait Time After Resin Placed** | The time spent waiting for the resin used in the plastic consolidation treatment to cure. |
| **Waiting On Cement Time** | After the casing has been cemented, it is necessary to suspend operations and allow time for the cement to set or harden in the borehole. The time during which operations are suspended is designated as waiting on cement. |
| **Walk Of Bit** | The tendency of the drill bit to turn into the side of the borehole while rotating, which will change the direction of the borehole axis unless corrected. |
| **Walk Of Hole** | The tendency of a borehole to deviate naturally because of the rotating of the bit and the anisotropic nature of the rocks being drilled. |
| **Walking Beam** | (1) An oscillating bar or beam, pivoted at the center, used to actuate a sucker rod pump.(2) In cable tool drilling, the walking beam transmits motion to the drilling tools. Also referred to as: Beam. |
| **Wall Cake** | The solid material deposited along the wall of the borehole resulting from filtration of the fluid part of the drilling fluid or cement slurry into the rocks. |
| **Wall Sticking** | SEE: Differential Pressure Sticking. |
| **Washout** | Excessive borehole enlargement by solvent or erosional action of the drilling fluid. |
| **Washout Percentage** | An estimated percentage of the washout or hole enlargement used in calculations; e.g., real annualar volume divided by the gauge hole volume. |
| **Washover** | A procedure wherein pipe, commonly called wash pipe, larger than the fish is slipped over the fish and usually rotated to bottom with circulation to free the fish. |
| **Waste Water** | Water carrying wastes from homes, businesses, and industries that is a mixture of water and dissolved or suspended solids. |
| **Water Block** | Reduction of the permeability of a formation caused by the invasion of water into the pores (capillaries). The decrease in permeability can be caused by swelling of clays, thereby shutting off the pores, or in some cases by a capillary block of the pores due to surface tension phenomena. |
| **Water Body Depth** | The measured depth of the water body, from a specified datum at a specified location. |
| **Water Bottom** | The interface between a body of water and its underlying lithofacies. |

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| **Water Bottom Zone** | The physical zone of water bottom used in Louisiana (offshore) to identify special allowable area or zone. |
| **Water Cement Ratio** | The ratio by weight of water to cement in a cement slurry. |
| **Water Column** | Thickness of a water layer; e.g., existing in the reservoir rock or refining process, etc. |
| **Water Coning** | SEE: Coning. |
| **Water Current Direction** | The direction, relative to true north, from which the water current is coming. |
| **Water Current Speed** | The average speed of the water current measured. |
| **Water Cut** | The volume fraction of water in the total volume of liquid produced from a well completion. |
| **Water Depth** | The depth of the water at a well/platform location from the water level to the mud line. |
| **Water Disposition Volume** | The volume of water disposed of during a reporting period. |
| **Water Drive** | Reservoir drive mechanism whereby oil is produced from a hydrocarbon reservoir, derived from hydrostatic or hydrodynamic pressure transmitted from the surrounding aquifer. Energy of the drive forces reservoir fluids to the borehole. |
| **Water Flood** | The injection of fluids into an oil reservoir to maintain the reservoir pressure or to extract hydrocarbons from the reservoir beyond what can be recovered by normal methods of flowing or pumping. |
| **Water Flood Kick** | The first indication of increased oil production as the result of a water flood project. |
| **Water Formation** | A zone that contains only water and no hydrocarbons. |
| **Water Hardness** | The hardness of water is due principally to the calcium and magnesium ions present in the water and is independent of the accompanying acid ions. The total hardness is measured in terms of parts per million of calcium carbonate or calcium and sometimes equivalents per million of calcium. |
| **Water Injection** | Water injected into a formation to maintain or restore reservoir pressure to enhance ultimate recovery of hydrocarbons. |
| **Water Knockout** | A baffled vessel designed to remove water from a gas stream or water from oil. |
| **Water Level Depth** | Measured depth to the water contact level in the wellbore. |
| **Water Of Hydration** | The water chemically combined with the solid to form a crystalline compound. |
| **Water Path** | The distance from the transducer to the test surface in immersion or water column testing. |
| **Water Pollution** | The addition of sewage, industrial wastes, or other harmful or objectionable material to water in concentrations or in sufficient quantities to result in measurable degradation of water quality. |
| **Water Quality Criteria** | The levels of pollutants that affect the suitability of water for a given use; generally, water use classification includes: public water supply, recreation, propagation of fish and other aquatic life, agricultural use, and industrial use. |
| **Water Quality Standard** | A plan for water quality management containing four major elements: the use (recreation, drinking water, fish and wildlife propagation, industrial, or agricultural) to be made of the water; criteria to protect those uses; implementation plans (for needed industrial municipal waste treatment improvements); and enforcement plans and an antidegradation statement to protect existing high quality waste waters. |
| **Water Rate Per Well Test Before Work** | The volume of water produced during a well test, calculated over 24 hours, before the proposed work has started. |
| **Water Resistivity** | Measurement of the resistance of water to the passage of electricity. |
| **Water Resistivity Temperature** | The temperature of the water sample at the time its resistivity was measured. |
| **Water Saturation Method Code** | Indicates how the water saturation was determined. |
| **Water Saturation Percentage** | The percentage of the porosity volume that is saturated with water. |

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| **Water Saver** | A chamber may be directly connected to the heater shell to permit the shell to be completely filled with water. The water in this chamber exists at a lower temperature than the heater bath which reduces evaporation losses. It may also be referred to as an economizer or expansion tank. Its capacity should be sufficient to contain the water expansion between ambient and operating temperatures. |
| **Water Siphon** | A piping system for the controlled flow of water from the treater which sets the water/oil interface level within the treater. To accomplish this control the water flows through a vertical loop of piping set at an adjustable level below the treater oil level with the top of the loop equalized in pressure with the gas zone of the treater. Also referred to as: Water Leg. |
| **Water Solids Ratio** | The ratio by weight of water to the total solids in a cement slurry. |
| **Water Source Type Code** | An indicator of the type of water source. |
| **Water Surface Pit Volume** | Water sent to a pit which is utilized for disposal by evaporation or seepage. |
| **Water Table** | The point in the subsurface below which pores of the rock or sediments are filled with water or other fluids. |
| **Water Tanks Count** | The number (count) of water tanks on a facility. |
| **Water Type** | The type of water encountered during the production test; e.g., black water; brackish water; basic sediment & water; fresh water; salt water. |
| **Water Volume** | The total volume of water the well completion or reservoir produced for the specified month. |
| **Water Well** | (1) A well that produces water or yields groundwater samples or engineering data.(2) A regulatory designation of water well by the operator. |
| **Water Well Column** | The portion of a vertical turbine pump through which the shaft operates and fluid is pumped from the reservoir to the surface. |
| **Water Zone Measured Thickness** | The measured thickness (uncorrected) of the water portion of the hydrocarbon zone. |
| **Water Zone True Vertical Thickness** | The corrected true vertical thickness of the water portion of the hydrocarbon zone. |
| **Wave Direction** | The direction, relative to true north, from which the water waves are coming at the time the record is generated. |
| **Wave Front** | A continuous surface drawn through the most forward points in a seismic wave disturbance which have the same phase. |
| **Wave Height** | The average height of local water waves. |
| **Wave Length** | The distance in the direction of propagation of a seismic wave for a complete cycle. |
| **Wave Number** | (1) The number of seismic waves per unit distance perpendicular to a wavefront; i.e., the reciprocal of the wavelength.(2) Spatial frequency, the number of seismic wave cycles per unit of distance in a given direction (direction of spread). |
| **Wave Train Log** | An acoustic log in which the acoustic wave train is displayed in either the intensity modulated time mode or the amplitude time mode. |
| **Wavefilt** | A wavelet (W) or digital filter (F) are differentiated in terms of their effects on a physical process and to data representing it. In seismic, the physical process is a reflection series (R) and the data are the seismic trace values (T). The wavelet is defined by W*R=T and the digital filter by R=F*T, where * represents convolution. A filter is the inverse of a wavelet. Either a wavelet or a filter can be described in terms of both its frequency spectrum and time spectrum. |
| **Wavelet** | The time domain reflection shape from a single positive reflector at normal incidence. |
| **Wavelet Estimation Method** | Method by which the wavelet was determined. |
| **Wavelet High Cutoff Frequency** | The frequency at which a filter response is down to three (3) db in amplitude. |
| **Wavelet Peak Amplitude** | Peak amplitude of the wavelet. |

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| **Wavelet Peak Frequency** | Peak frequency of the wavelet. |
| **Wavelet Phase** | Phase characteristic of the wavelet; e.g., zero phase; minimum phase; degree of angle shift. |
| **Wavy Thread** | A cyclic variation in the helix angle of a thread, and/or its radial location. |
| **Weathered Crude** | Crude oil which has lost an appreciable quantity of its entrained gas due to evaporation during storage. |
| **Weathering** | (1) The stabilization of a hydrocarbon mixture by the evaporation of light ends to the atmosphere.(2) The deterioration of equipment surfaces due to exposure to the elements.(3) The disintegration of rock through physical and chemical processes. |
| **Weathering Layer** | A near surface low velocity layer, usually the portion where air rather than water fills the pore spaces of rock. |
| **Wedge** | A device used to direct ultrasonic energy into the material at an angle. |
| **Weight Indicator** | An instrument that shows the weight suspended from a wireline or hook. |
| **Weight On Bit** | The force placed on the bit during drilling operations. |
| **Weld** | SEE: Welding. |
| **Weld Area Crack** | A crack in or immediately adjacent to the weld line. A stress induced separation of the metal which, without any other influence, is insufficient in extent to cause complete rupture of the material. |
| **Weld Groove** | An area between two metals to be joined that has been prepared to receive weld filler metal. |
| **Weld Joint** | The way components are fitted together in order to facilitate joining by welding. |
| **Welding** | The fusion of materials, with or without the addition of filler materials. |
| **Welding Neck Flange** | A flange with a neck on the side opposite the sealing face prepared with a bevel to weld to corresponding pipe or transition pieces. |
| **Well** | A well is an association context within which are related information and samples obtainable from the process of planning, creating, utilizing and financially accounting for one or more connected holes drilled into the earth (wellbore). A well serves a means for associating, for example, wellbore characteristics, equipment installed or used on the surface or within a well's wellbore, fluids produced or injected, as well as related legal contracts, activities and cost accounting. |
| **Well Abandonment Authorized Cost** | The estimated costs associated with abandoning the well. |
| **Well Action Code** | Tan indicator of the next expected action the operator is planning to take on the petroleum well. |
| **Well Activity Code** | An indicator of the operation being performed on a well or any part thereof; e.g., permitting, location preparation, drilling, well logging; fishing, testing, coring, completing, abandoning. |
| **Well Activity Date** | SEE: Current Well Activity Date. |
| **Well Borehole Log File Identifier** | A unique character, assigned sequentially, which serves to identify Well Log Tape and Disk Files containing different types of data for a single well. |
| **Well Casing Liner** | A string of casing whose top is located below the surface and is used for protecting pressure-producing formations. |
| **Well Change Effective Date** | The date certain changes were made to the well record. |
| **Well Classification Code** | An indicator of the classification of intent of the well by regulatory agencies; e.g., Wildcat, Dry; Exploration Well; Development Well Gas; Development Well Gas Workover; Abandoned Producer; Deeper Pool Wildcat; Corehole; Success; Geothermal Wildcat. |
| **Well Classification System Type** | The system; e.g., Lahee, AAPG Committee on Statistics of Drilling (CSD), used to classify the well. |
| **Well Completion Abandoned Date** | The abandoned date for the indicated zone or well completion. |

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| **Well Completion Base Depth** | The base measured depth depth of the interval of the well completion. |
| **Well Completion Classification Code** | An indicator of the well completion as derived from the major fluid, i.e., oil, gas, water, etc. |
| **Well Completion Count** | The actual number of well completions. . |
| **Well Completion Date** | (1) Oil well or gas well: the date on which the installation of permanent equipment is completed (for the production of oil or gas) as reported to the appropriate agency.(2) Dry hole: the date of abandonment as reported to the appropriate regulatory agency (Synonymous with Abandoned Date).(3) Service well: the date on which the well is equipped to perform the service for which it was intended. |
| **Well Completion Falloff** | The injection rate and duration of any falloff test on a specific well completion. |
| **Well Completion Operation** | SEE: Well Completion Project. |
| **Well Completion Project** | The work conducted upon a well's wellbore to establish production of the resource or injection of fluids after the production casing string has been set, cemented, and pressure tested, including perforating casing, setting packers and tubing, setting the wellhead in place. For a finished well, each completion within its wellbore establishes production from or injection to a single zone, or commingled production from mulitple zones, as allowed by the well's regulatory agency. Statistical summaries involvin |
| **Well Completion Status Code** | An indicator of possible conditions that could affect the well's performance; e.g., active; shut in; intermittent; plugged and abandoned, sold. |
| **Well Completion String** | SEE: Producing String. |
| **Well Completion Substance Code** | An indicator of the primary substance injected into or produced from the well completion. |
| **Well Completion Technique** | The method used for well completion; e.g., open hole, perforated, gravel pack. |
| **Well Completion Test** | A test conducted on a well completion to determine its productivity and engineering characteristics. |
| **Well Completion Test Date** | Date a well completion test was conducted. |
| **Well Completion Test Interval Base Depth** | The base measured depth of the interval of the well completion being tested. |
| **Well Completion Test Interval Top Depth** | The top measured depth of the interval of the well completion being tested. |
| **Well Completion Test Type** | The type of test conducted on a well completion; e.g., buildup, fall off, productivity, injectivity, initial potential. |
| **Well Completion Top Depth** | The top measured depth of the interval of the well completion. |
| **Well Completion Type Code** | An indicator of the type of well completion, e.g., single, dual, triple, commingled. |
| **Well Completion Type Effective Date** | Date the given well completion type was effective. |
| **Well Completion Zone** | The producing interval within a well associated with a reservoir. |
| **Well Completion Zone Name** | The name of the zone assigned the well completion. |
| **Well Connection Date** | The date a well completion zone is connected to a gathering pipeline. The well connection date is required to be known only for the movements of product from the field to a gas processing plant. The date is used to determine the rate the pipeline charges for the transportation of liquids and liquefiables. For wells connected prior to January 1, 1982, one set of rates (based on barrels or MCFs per mile) is applicable. For wells connected after January 1, 1982, a different set of rates (based on barrels o |
| **Well Contract Authorization Date** | The date a well activity was authorized; e.g., drilling, recompletion. |
| **Well Conversion** | Physically changing the function of a well from one use to another. |
| **Well Cored Flag** | An indicator of whether a well was cored |
| **Well Count** | The number of wells in the lease, field, etc. |

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| **Well Days Count** | The total hours operated in month divided by 24. |
| **Well Dedication Type** | Used to identify whether the well was dedicated through the original contract or through an amendment to the contract. Examples include: Amendment; Original contract. |
| **Well Depth** | SEE: Measured Depth. |
| **Well Development/exploration Code** | Classifies the well as exploratory, development, or both. |
| **Well Deviation Depth** | The depth at which the wellbore path deviation measurements were taken. |
| **Well Elevation Height** | The distance above a specified reference datum, commonly the surface of the earth, derrick floor, or Kelly bushing. A positive value denotes a point higher than the reference point. When given without specifying a reference value, it is assumed that the elevation is referenced to mean sea level datum. |
| **Well Gross Volume** | The total quantity of product the well and or reservoir produces for a specified period. |
| **Well Identifier** | The identifier value used to distinguish wells from each other. |
| **Well Identifier System** | The system or convention of the well identifier value; e.g., API Well Number; CPA Number. |
| **Well Identifier Type Code** | A code identifying the international governing body assigning the unique well identifier. |
| **Well Integrity Test Frequency Count** | The approved maximum interval between well integrity tests. |
| **Well Job Type** | SEE: Well Activity. |
| **Well Kind Code** | A code indicating the kind or type that a well or completion zone is or is anticipated to be; e.g., oil, gas, carbon dioxide gas, service, etc. |
| **Well Location** | The location of the well. |
| **Well Location Description** | Narrative description of the well location. |
| **Well Log** | (1) A log of wellbore data for a well; e.g., electric log, drilling fluid log.(2) A log of well activity data; e.g., drilling time log, penetration rate log. |
| **Well Log Interval Measured Bottom Depth** | The measured depth to the bottom of the logged interval. |
| **Well Log Interval Measured Top Depth** | The measured depth of the top of the logged interval. |
| **Well Log Received Date** | The date the well log(s) was/were received. |
| **Well Log Run Date** | The date the petrophysical log was run. |
| **Well Logging** | The well activity producing a well log. |
| **Well Name** | A name assigned to the well; e.g., a special name or one derived from the name of the property with which the well is associated. |
| **Well Name Code** | An iindicator of the well name assigned by a regulatory agency. |
| **Well Number** | A modifying designator assigned to a well and may be associated with the well name; e.g., Jones # 1; B-1. |
| **Well Operation Condition Code** | An indicator which describes well operating conditions and, in some instances, equipment being used in operations; e.g., pump (rod); pump (electric motor); pump (hydraulic); plunger (lift); flowing; service well (active); repair operations (suspended); shut in (lack of market). |
| **Well Operation Method Code** | An indicator of the method of injecting the primary substance into or producing the primary substance from a well completion. |
| **Well Pad** | A site prepared to drill and/or produce one or more wells. |
| **Well Pad Construction Contractor Name** | The name of the contractor constructing the well pad. |

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| **Well Pad Construction Start Date** | The date the operator started construction (surface disturbance) on the well pad. |
| **Well Pad Construction Start Time** | The actual time (to the minute) the operator starts construction (surface disturbance) on the well pad. |
| **Well Permit** | The permit to drill or modify an existing well. |
| **Well Permit Number** | An identifier assigned by regulatory agencies to a well permit. |
| **Well Platform** | SEE: Platform. |
| **Well Product Stream Component Code** | The individual components, component mixtures or compounds that are identifiable and measureable and exist as an integral part of any one of a well's product streams. |
| **Well Profile** | The projection of a wellbore path onto a plane. |
| **Well Serial Number** | SEE: Well Identifier. |
| **Well Servicing** | Maintenance and repair work performed on well facilities to improve or maintain existing production. Well servicing usually involves repairs to installed equipment, such as pumps, rods, gas lift valves, tubing, packers etc. Also refers to businesses doing this work; e.g., a well servicing company. |
| **Well Servicing Rig** | Equipment and machinery used for well servicing activities, such as pulling or running tubulars or sucker rods, recompleting, workover, and abandoning. |
| **Well Shut-in Code** | An indicator of the reason a well is not producing or is temporarily abandoned. |
| **Well Simulation Test** | A test performed in accordance with API Spec 10 under conditions simulating those encountered in wellbores. |
| **Well Site Approval Date** | The date that the well site was restored (all recontouring/seeding done) and approved by a regulatory agency. |
| **Well Site Approval Type Code** | The indicator for the type of approval given for various operational parameters. |
| **Well Spacing** | SEE: Spacing. |
| **Well Split Effective Date** | The effective date when a well record is split from an Inspection Item Identification (IID). |
| **Well Stake** | SEE: Stake. |
| **Well Staked Date** | The date the well location was staked. |
| **Well Status Change Date** | The date that the well status was updated. This applies to both changes resulting from field inspections and changes resulting from a document submitted . |
| **Well Status Code** | An indicator of the operational state of the well reported as a well activity for a time period. Well status requires associated date/time information. |
| **Well Surveying** | The act of running an instrument into a wellbore to obtain a specific kind of information. |
| **Well Test** | The measurement of any factor or factors relating to production or injection of fluids from or into a well's wellbore for a given length of time for an established set of conditions to assist in prediction of production or injection capability. |
| **Well Test Flow Rate** | A flow rate measurement recorded during a well test flowing phase. |
| **Well Test Flowing Phase** | A well test phase within which the test equipment allows the well to flow while other measurements, such as pressure and flow rate, are recorded. |
| **Well Test Injection Phase** | A well test phase within which the test equipment are injecting while other measurements, such as pressure, are recorded. |
| **Well Test Injection Rate** | The measured rate of fluid injection recorded during an injection phase of a well test. |

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| **Well Test Installation Phase** | An optional initiating well test phase, when test equipment is installed within the wellbore, such as the running in of the drillstem for a drillstem test. This well test phase will be absent if the well test uses equipment previously installed, as with most tests of a well completion. Measurements may be recorded during this phase, such as hydrostatic pressure while running in the drillstem. |
| **Well Test Line Pressure** | The back pressure exerted by the pipeline while conducting the well test. |
| **Well Test Phase** | A subset of a well test within which a set of related measurements versus time are recorded while other conditions are kept constant. A well test is bounded by phases within which test equipment is installed and removed. Each well test phase is bounded by initial and final measurements, such as initial shut in pressure for a shut in phase. Initial and final measurements are linked to initial and final time stamps, which bound the well test phase time interval. Measurements within the phase time interva |
| **Well Test Phase Final Time Stamp** | The last well test phase time stamp recorded within a well test phase. |
| **Well Test Phase Initial Time Stamp** | The first well test phase time stamp recorded within a well test phase. |
| **Well Test Phase Sequential Discriminator** | A sequential discriminator associated with a well test phase to differentiate the phase from others of that well test and to place the phase in time sequence with the other well test phases of that well test. |
| **Well Test Phase Time Interval** | The duration between the well phase initial time stamp and the well phase final time stamp. |
| **Well Test Phase Time Stamp** | A time stamp recorded for each measurment within a well test phase. |
| **Well Test Product Disposition** | The method used to dispose of or distribute hydrocarbon and water production recovered during a well test. |
| **Well Test Reason Code** | An indicator of the purpose for which the test is submitted. |
| **Well Test Removal Phase** | An optional terminating well test phase, when test equipment is removed from the wellbore, such as the running out of the drillstem for a drillstem test. This well test phase will be absent if the well test uses equipment previously installed, as with most tests of a well completion. Measurements may be recorded during this phase, such as hydrostatic pressure while running out the drillstem. |
| **Well Test Report Number** | A report number (identifier) for a well test. |
| **Well Test Shut- In Phase** | A well test phase within which the test equipment are shut-in while other measurements, such as pressure, are recorded. |
| **Well Test Static Reservoir Pressure Phase** | The well test phase within which the static reservoir pressure is measured. |
| **Well Test Type Code** | An indicator of the type of well test that was performed; e.g., build up, fall off productivity, injectivity, drillstem test, wireline. |
| **Well Tester** | (1) A unit to measure production from a well.(2) One who performs well tests. The title is usually reserved for one whose duty involves only well tests, or may be one who performs specialized tests; e.g., bottomhole pressure measurement. |
| **Well Total Measured Depth** | The measured depth to the bottom of the borehole as recorded by either the driller or by the wireline method. Often abbreviated as TD or Well TD. |
| **Well Total True Vertical Depth** | The vertical, straight-line depth from the surface datum to the wellbore bottomhole. Often abbreviated as Well TVD. |
| **Wellbore** | Wellbore is the connected network of borehole within the earth. A wellbore has a minimum of one wellbore origin and one wellbore bottomhole. A well has no more than one wellbore. |
| **Wellbore Completion Count Code** | An indicator of the classification of a wellbore based on the number and/or type of completions. i.e. single, dual, triple, multiple, downhole commingle,etc. |
| **Wellbore Evaluation** | Any identifiable process which allows information/samples of a downhole formation to be acquired. The common processes used within the industry are: coring, electric logging, and mud logging. |
| **Wellbore Intersection** | A point within a wellbore where wellbore paths converge or diverge, such as the point at which an existing wellbore is re-entered below the surface by drilling from another wellbore origin, or the point at which sidetrack drilling is initiated within an existing wellbore. |

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| **Wellbore Origin** | A point of initiation of drilling at the earth's surface for a wellbore. A wellbore may have more than one wellbore origin. |
| **Wellbore Path** | A unique, nonoverlapping path within a wellbore from a specific point of inception at the earth's surface (Wellbore Origin) to a specific point of ultimate extent in the subsurface (Wellbore Bottomhole). The wellbore path nominally follows the axis of the physical borehole created by drilling between these two points. Wellbore paths can intersect and can share parts of their extents. |
| **Wellbore Path Basis** | Information about the technique, method or conditions under which a position measurement is recorded along a wellbore path, e.g., logger, operator (counting pipe stands), directional survey, strokes of mud pump. The wellbore path basis can be used to distinguish among multiple measurements from the same wellbore path datum along the same wellbore path. |
| **Wellbore Path Datum** | The origin of the zero point of reference for measuring along a wellbore path to a wellbore point. Ground level, derrick floor and kelly bushing are typical zero point references for linear measurements along a wellbore path (Measured Depth). |
| **Wellbore Point** | A point position within a wellbore. |
| **Wellbore Point Code** | An indicator of the point position within a wellbore; e.g., surface hole location, kickoff point, entry point, exit point, bottomhole location, etc. |
| **Wellbore Segment** | The extent of wellbore between two wellbore points along a wellbore path. |
| **Wellbore Survey Calculation Method** | SEE: Borehole Survey Calculation Method. |
| **Wellbore Terminus** | A wellbore bottomhole is an ultimate extent of borehole penetration for a wellbore. A wellbore may have more than one wellbore bottomhole. |
| **Wellhead** | The equipment used to maintain surface control of a well. A wellhead consists of the casinghead, tubing head, and appropriate valves. The Christmas tree is installed on top of the tubing head. |
| **Wellhead Area** | That area that surrounds the individual wellhead. |
| **Wellhead Assembly** | A term applied to the assembly of valves and fittings at the casinghead and the tubing head. |
| **Wellhead Pressure Measurement** | The shut-in surface pressure of a well completion. |
| **Wellhead Rated Pressure Measurement** | The API maximum wellhead pressure rating. |
| **Wellhead Value** | The value of oil or gas at the mouth of the well. In general, might be considered to be equal to the sales proceeds less the costs of making the production merchantable, such as treating, compression, dehydration, and gathering costs. Precise definition would be based upon provisions of the applicable lease agreement, contract, or tax regulation. |
| **Wentworth Scale Of Measurement** | A logarithmic grade scale for size classification of sediment particles. |
| **Wet Gas** | Gas that contains a significant volume of liquefiable hydrocarbons. |
| **Wet Gas Returned Nonexempt Volume** | The volume of wet gas returned to lease in excess of allowances. |
| **Wet Gas Returned Volume** | The volume of wet gas used on lease for fuel, lift, etc. |
| **Wet Job** | Pulling tubing full of oil or water. |
| **Wet Method** | The magnetic particle inspection method employing ferromagnetic particles suspended in a liquid bath. |
| **Wet Oil** | Oil containing such quantities of water as to render it unmarketable until the water is removed. |
| **Wet Or Dry Facility Flag** | An indicator of whether or not the gas pipeline system has been contractually designated as being open to the receipt of gas containing liquids at the facility. |
| **Wet String** | Refers to a string of tubing from which the standing valve has not been removed so that pulling and unscrewing each stand of tubing releases oil or water on to the derrick floor. May also apply to drill pipe. |
| **Wetting** | The adhesion of a liquid to the surface of a solid. |

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| **Wetting Agent** | A chemical or composition which, when added to a liquid, reduces the surface tension and increases the spreading of the liquid on a surface or the penetration of the liquid into a material. |
| **Whipline** | A secondary rope system usually of lighter load capacity than provided by the main rope system. Also referred to as: Auxiliary Hoist. |
| **Whipstock** | A round steel shaft designed to set in the wellbore at some predetermined depth for the purpose of deflecting the drilling tools. |
| **Whipstock Depth** | The measured depth to the whipstock. Used for the purpose of sidetracking or directional drilling. |
| **Wicker** | A wire like piece of metal peeled from a thread or chamfer surface, and which may be attached to the machined surface at one end. Also referred to as: Whisker. |
| **Wild Well** | A well flowing out of control. |
| **Wildcat Well** | A well drilled in an unproved area to test for a new field, a new pay, a deeper reservoir, or a shallower reservoir. A wildcat well is an exploratory well, but not all exploratory wells are wildcat wells. |
| **Winch** | A machine used for pulling or hoisting that does so by winding a cable around a spool. |
| **Wind Direction** | The direction, relative to true north, from which the wind is coming at the time the record is generated. |
| **Wind Gust Speed** | Maximum wind speed measured. |
| **Wind Speed** | The average wind speed measured. |
| **Windlass** | SEE: Winch. |
| **Window** | (1) A section of casing milled out to provide an opening to sidetrack or kick off.(2) The portion of a seismic data set chosen for consideration, such as designing operators to be used for autocorrelation or frequency analysis. Also referred to as Gate. |
| **Wing Valve** | A valve located on the Christmas Tree, but not in the vertical run, which can be used to shut off flow. |
| **Wiper Pipe** | A disc shaped device with a center hole used to wipe off mud, oil or other liquid from drill pipe or tubing as it is pulled out of a wellbore. |
| **Wire Cloth** | Screen cloth of woven wire. |
| **Wire Rope** | A flexible, multiwired member usually consisting of a core member around which a number of multiwired strands are laid or helically wound. |
| **Wireline** | A cable used to lower instruments into a wellbore for the purpose of wireline logging. |
| **Wireline Cutting Tool** | A special device, usually run on a solid wireline, that is used to cut another wireline that is stuck in a wellbore. |
| **Wireline Log** | A permanent record of one or more physical measurements as a function of depth along a wellbore path, as measured using instruments lowered into the wellbore on a logging cable. Wireline logs are used to identify and correlate underground rocks, and to determine the mineralogy and physical properties of potential reservoir rocks and the nature of the fluids they contain. The record consists of one or more curves, generally displayed as a function of measured depth. Measurement may be electrical, radioact |
| **Wireline Operation** | An operation performed in a wellbore by use of tools which are run and pulled on small diameter slick, braided, or electric wirelines. |
| **Wireline Preventer** | Installed on top of the well or drillstring as a precautionary measure while running wirelines. The preventer packing will close around the wireline. |
| **Wireline Retrievable Mandrel** | A tubular member with an internal receiver for a wireline retrievable gas lift valve. The mandrel becomes an integral part of the tubing string. |
| **Wireline Retrievable Valve** | A gas lift valve mounted inside the tubing that can be installed and recovered by solid wireline operations without disturbing the tubing. |

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| **Wireline Spear** | A special fishing tool fitted with prongs to catch and recover wireline that has been broken and left in a wellbore. |
| **Wireline Test Date** | Date the wireline test was performed. |
| **Wireline Test Type Code** | An indicator of the type of test performed in a wellbore by wireline tool; e.g., pressure sond, flow turbine meter, sidewall core. |
| **Wireline Tool** | Special equipment made to be lowered into and retrieved from the wellbore on a wireline, small diameter steel cable; e.g., packers; swabs; gas lift valves; measuring devices. |
| **Wireline Truck** | A service vehicle or unit on which the spool of wireline is mounted for use in downhole wireline work. Also referred to as: Wireline Unit. |
| **Wireline Unit** | Unit equipped with special tools to be lowered into the well's wellbore on a wireline (small diameter steel cable); e.g., logging tools, packers, swabs, measuring devices, etc. |
| **Wireline Wiper** | A flexible, rubber device used to wipe off mud, oil, or other liquid from a wire line as it is pulled out of a wellbore. |
| **Wireline Work Area** | An area in which wireline work is being performed on a wellbore through a lubricator. |
| **Witness Name** | The name of the person attesting to the accuracy of the submitted activity. |
| **Woodpecker Drill Collar** | SEE: Drill Collar Type. |
| **Work Boat** | A boat or self propelled barge used to carry supplies, tools, and equipment to a job site offshore. |
| **Working Barrel** | The outer shell of a downhole plunger pump run on tubing to receive the travelling valve. |
| **Working Interest** | The rights granted to the lessee of a property to explore for, and produce and own, oil, gas, or other minerals. The working interest owners bear the exploration, development, and operating costs on either a cash, penalty, or carried basis. The term normally implies gross working interest unless the word net appears before the words working interest. |
| **Working Interest After Payout Amount** | The interest of a working interest owner after the payout has occurred. In this situation the owner has either elected to go noninterest in a property or to farm out the acreage in a property. Once the property has paid out (the expenses recovered from the revenue), the owner's interest is automatically reinstated or the owner has the option to convert an overriding royalty interest to a working interest. |
| **Working Interest Area** | An area established for the exploration or development and/or operation of oil and gas properties by pooling of only the working interests in various tracts of land, and the company owns no record ownership in the interest contributed by other parties. |
| **Working Interest Owner Name** | The name of an owner who is obligated to pay proportional costs in return for some percentage of production or revenue. |
| **Working Interest Owner Percentage** | The owner's working interest percent fraction of interest in a lease. This percent designates that owner's specific distribution of proceeds from the lease. |
| **Working Interest Ownership Type Code** | Used to classify each type of working interest ownership into categories based on the nature of the working interest ownership. Used to distinguish between the basic 8/8 working interest ownership as documented in the operating agreement and other working interest ownerships established for billing purposes. Examples are: Basic operating agreement 8/8 working interest; Nonconsent well (company consenting party); Nonconsent well (company nonconsenting party); Investment only. |
| **Working Interest Percentage** | The taxable working interest percentage of gas not run through processing plant. |
| **Working Interest Reserves Type** | Used to classify each type of working interest reserves into categories based on the nature of the working interest ownership. Used to distinguish between the basic 8/8 working interest ownership as documented in the operating agreement and other working interest ownerships established for billing purposes. Examples are: Basic operating agreement 8/8 working interest; Nonconsent well (company consenting party); Nonconsent well (company nonconsenting party); Investment only. |
| **Working Pressure Measurement** | The pressure at which an item of equipment normally operates. |

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| **Workover** | Work performed on a well to sustain or increase production or injection which may physically change the downhole condition of the well. Operations include casing repairs, acidizing, fracture stimulation, perforating, deepening or plugging back to a different zone in the same horizon, sidetracking or whipstocking around junk due to obstructions, running liners, and gravel packing. |
| **Workover Fluid Type Code** | An indicator of the type of fluid used in the workover operation of a well. |
| **Workover Fluid Weight** | The density of the workover fluid. |
| **Workover Type** | The type of workover or stimulation treatment performed on a borehole or well completion. |
| **Wrench Tight** | When thread protector is tightened by hand using strap wrench, pipe wrench or thread protector wrench; i.e., 30-100 foot-pounds torque. |
| **Written Notice Required Flag** | An indicator of whether the contract specifies that written notice is required by a party electing to cancel the contract. |
| **Wrought Product** | A product shaped by means of forging. |
| **Wrought Structure** | A forged product that contains no cast mineral crystallization. |
| **Wye Section** | The wye section is that piping section where the loop joins the vertical tubing bore. |
| X | |
| **X- Ray Diffraction Analysis** | Analysis of the crystal structure of materials by passing X-rays through them and registering the diffraction (scattering) image of the X-rays. |
| **X-coordinate** | The value of the x-axis in a coordinate system. |
| Y | |
| **Y-coordinate** | The value of the y-axis in a coordinate system. |
| **Yaw** | Platform rotation about the vertical axis. |
| **Yaw Mean Period** | The average time elapsing between successive occurrences of yaw, measured over the interval. |
| **Yaw P P Max** | The average of the highest one tenth observations of the yaw of the vessel measured over the interval. |
| **Yaw P P Sig** | The average of the highest one third observations of yaw of the vessel measured over the interval. |
| **Yield** | CEMENT: The number of barrels of a given centipoise slurry that can be made from a ton of the clay. Based on the yield, clays are classified as bentonite, high yield, low yield, etc. |
| **Yield Point** | The maximum elastic point a material can withstand without undergoing permanent deformation. |
| **Yield Strength** | The stress level measured at room temperature, expressed in pounds per square inch of loaded area, at which material plastically deforms and will not return to its original dimensions when the load is released. |
| **Yield Stress** | The yield stress of the material. |
| **Yield Value** | The yield value is the resistance to initial flow, or represents the stress required to start fluid movement. This resistance is due to electrical charges located on or near the surfaces of the particles. The values of the yield point and thixotropy, respectively, are measurements of the same fluid properties under dynamic and static states. The Bingham yield value, reported in lb/100 sq ft, is determined using the direct indicating viscometer by subtracting the plastic viscosity from the 300-rpm re |
| **Yoke** | A C-shaped piece of soft magnetic material, either solid or laminated, around which is wound a coil carrying the magnetizing current. |

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| **Yoke Magnetization** | A magnetic field induced in a pipe, or in an area of a pipe, by means of an external electromagnet shaped like a yoke. |
| Z | |
| **Z-coordinate** | The value of the z-axis in a 3 component coordinate system; e.g., lat-long-z; x-y-z. |
| **Z-coordinate Domain** | Z-coordinate dimensions, commonly depth or time. |
| **Z-factor Value** | The factor which compensates for the deviation of a gas from the ideal gas log when calculating pressure-temperature-volume relations. |
| **Zero** | The act of setting a dial indicating depth gauge for zero depth. Past tense is zeroed. |
| **Zero Lag** | The value of an auto correlation or cross correlation for zero time shift. |
| **Zero Zero Gel** | A condition wherein the drilling fluid fails to form measurable gels during a quiescent time interval (usually 10 min.). |
| **Zeta Potential** | Electrokinetic potential of a particle as determined by its electrophoretic mobility. This potential causes colloidal particles to repel each other and stay in suspension. |
| **Zinc Chloride** | (1) A very soluble salt used to increase the density of water to points more than double that of water. Normally added to a system first saturated with calcium chloride.(2) Will accelerate the thickening time of a cement slurry. |
| **Zip Code** | The U. S. Postal Service assigned code for a mail location. |
| **Zone** | An interval, layer or stratum to which are assigned interpretive attributes, transforming the interval into a zone of specific characteristics; e.g., pay zone; fossiliferous zone; porosity zone. |
| **Zone Name** | A word identifier assigned to an individually named producing or injection stratum within a multi-strata horizon. |