**Table 4: Glossary of Terms Used in SRMS[[1]](#footnote-2)**

|  |  |
| --- | --- |
| **Term** | **Definition** |
| **1C:** | Denotes low-estimate scenario of Contingent Storage Resources. |
| **2C:** | Denotes best-estimate scenario of Contingent Storage Resources. |
| **3C:** | Denotes high-estimate scenario of Contingent Storage Resources. |
| **1P:** | Taken to be equivalent to Proved Capacity; denotes low-estimate scenario of Capacity. |
| **2P:** | Taken to be equivalent to the sum of Proved plus Probable Capacity; denotes best-estimate scenario of Capacity. |
| **3P:** | Taken to be equivalent to the sum of Proved plus Probable plus Possible Capacity; denotes high-estimate scenario of reserves. |
| **1U:** | Denotes low-estimate scenario of Prospective Storage Resources. |
| **2U:** | Denotes best-estimate scenario of Prospective Storage Resources. |
| **3U:** | Denotes high-estimate scenario of Prospective Storage Resources. |
| **Accessible Pore Volume:** | Portion of a geologic formation with porosity that is connected and deemed suitable for CO2 storage. Accessible pore volume is a requirement for a mass or volume to be called storable quantity. Accessible may also include access at the surface to the subsurface storable quantity. |
| **Aggregation:** | The process of summing site (or project) level estimates of storage resources to higher levels or combinations such as field, country, or company totals. Arithmetic summation of incremental categories may yield different results from probabilistic aggregation of distributions. Consistent injectate composition is a requirement for aggregation of resources. |
| **Analogous Projects:** | Analogous projects, as used in resources assessments, have similar rock and fluid properties, subsurface conditions (depth, temperature, and pressure), and drive mechanisms, but are typically at a more advanced stage of development than a geologic formation of interest and thus, may provide concepts to assist in the interpretation of more limited data and estimation of storage. |
| **Approved for Development:** | All necessary approvals have been obtained, capital funds have been committed, and implementation of the development project is underway. |
| **Assessment:** | See Evaluation. |
| **Associated Injectants:** | Constituents present in the CO2 stream, other than CO2. |
| **Behind-Pipe Capacity:** | Expected to be stored within geologic formations in existing wells, which will require additional completion work or future recompletion before the start of injection. In all cases, injection can be initiated or restored with relatively low expenditure compared with the cost of drilling a new well. |
| **Best Estimate:** | With respect to resource categorization, this is the estimate of the quantity that will actually be stored by the project. It is the most realistic assessment of storable quantities, if only a single result were reported. If probabilistic methods are used, there should be at least a 50% probability (P50) that the quantities actually stored will equal or exceed the best estimate. |
| **Capacity:** | Capacity refers to those storable quantities anticipated to be commercially stored by application of development projects to known storable quantities from a given date forward under defined conditions. Capacity must further satisfy four criteria: |
| **Chance:** | The probability of gain or success. As risk is generally associated with a negative outcome, the term chance is preferred for general usage to describe the probability of a discrete event occurring (see Risk). |
| **Chance of Commerciality:** | The product of the Chance of Discovery and the Chance of Development. |
| **Chance of Development:** | The chance that the storable quantities will be commercial after they are discovered. |
| **Chance of Discovery:** | The chance that the geologic formation will result in the discovery of storable quantities. |
| **Characterized Geologic Formation:** | Describes the status of an assessment to ascertain the presence of storable quantities in a specific geologic formation. |
| **CO2 Generator:** | Source of CO2; typically anthropogenic industrial sites such as a coal-fired power plant, cement plant, ethanol plant, and natural gas processing. |
| **CO2 Stream:** | Fluid injected that is predominantly CO2. |
| **Commercial:** | When a project is commercial, this implies that the essential social, environmental, and economic conditions are met, including political, legal, regulatory, and contractual conditions. In addition, a project is commercial if the degree of commitment is such that the storage project is expected to be developed and placed on injection within a reasonable timeframe. While five years is recommended as a benchmark, a longer timeframe could be applied where, for example, development of economic projects are deferred at the option of the operator for, among other things, market-related reasons, or to meet contractual or strategic objectives. In all cases, the justification for classification as Capacity should be clearly documented. |
| **Completion:** | Completion of a well. The process by which a well is brought to its final status: |
| **Completion Interval:** | The specific geologic formation(s) or portion of a geologic formation that is (are) open to the borehole and connected to the surface facilities for injection. |
| **Conditions:** | The economic, marketing, legal, environmental, social, and governmental factors forecast to exist and impact the project during the time period being evaluated (also termed Contingencies). |
| **Constant Case:** | Modifier applied to project resources estimates and associated cash flows when such estimates are based on those conditions (including costs and product prices) that are fixed at a defined point in time (or period average) and are applied unchanged throughout the project life, other than those permitted contractually. In other words, no inflation or deflation adjustments are made to costs or revenues over the evaluation period. |
| **Containment:** | Part of the subsurface assessment that controls movement of stored CO2 within a specific area. Necessary criteria for estimating and identifying storable quantities. A projected timeframe (e.g., 1,000 years) should be stated with the assessment. |
| **Contingency:** | See Conditions. |
| **Contingent Storage Resources:** | Those storage quantities, as of a given date, to be potentially stored in geologic formations by application of development projects, but which are not currently considered to be commercial because of one or more contingencies. Contingent Storage Resources are a class of discovered storage resources. |
| **Cost Recovery:** | Under a typical storage-sharing agreement, the contractor is responsible for the field development and all exploration and development expenses. In return, the contractor recovers costs (investments and operating expenses) out of the gross injection stream. The contractor normally receives payment in CO2 storage and is exposed to both technical and market risks. |
| **Cumulative Injection:** | The sum of injection of CO2 to date (see also Injection). |
| **Current Conditions:** | Establishment of current economic conditions should include relevant historical prices, subsidies, tax credits, and associated costs of the project or related project (e.g., an industrial plant, power generation, or a hydrocarbon-producing project); and may involve a defined averaging period. The SPE PRMS guidelines recommend that a one-year historical average of costs and prices be used as the default basis of constant-case resources estimates and associated project cash flows. Where historic data are not available to define economic conditions, these must be assumed by the evaluator and assumptions clearly documented. |
| **Custody Transfer Point:** | See Reference Point. |
| **Decision Gates:** | The boundaries between different levels of project maturity. |
| **Deterministic Method:** | The method of estimation of Capacity or Resources is called deterministic if a discrete estimate(s) is made on the basis of known geoscience, engineering, and economic data. |
| **Developed Capacity:** | Expected to be stored from existing wells, including capacity behind pipe. Developed Capacity may be further subclassified as Injecting or Noninjecting. |
| **Developed Injecting Capacity:** | Expected to be stored from completion intervals that are open and injecting at the time of the estimate. |
| **Developed Noninjecting Capacity:** | Includes shut-in and behind-pipe Capacity. Shut-in Capacity is expected to be stored from: |
| **Development Not Viable:** | Discovered storable quantities for which there are no current plans to develop or to acquire additional data at the time as a result of limited storage potential. A project maturity subclass that reflects the actions required to move a project towards commercial storage. |
| **Development On Hold:** | Discovered storable quantities for which project activities are on hold and/or in which justification as a commercial development may be subject to significant delay. A project maturity subclass that reflects the actions required to move a project toward commercial storage. |
| **Development Pending:** | Discovered storable quantities for which project activities are ongoing to justify commercial development in the foreseeable future. A project maturity subclass that reflects the actions required to move a project towards commercial storage. |
| **Development Plan:** | The design specifications, timing, and cost estimates of the development project including, but not limited to, well locations, completion techniques, drilling methods, processing facilities, transportation, and marketing. (See also Project.) |
| **Development Unclarified:** | Discovered storable quantities in which project activities are on under evaluation and in which justification as a commercial development is unknown on the basis of available information. |
| **Discovered:** | Refers to storable quantities for which one or several exploratory wells have established through testing, sampling, and/or logging the existence of a significant storage quantity. In this context, “significant” implies that there is evidence of sufficient storable quantities to justify estimating the in-place quantity demonstrated by the well(s) and for evaluating the potential for economic storage (see also Discovered Storage Resources and Discovery). |
| **Discovered Storage Resources:** | That quantity of storage that is estimated, as of a given date, to be contained in geologic formations before injection. Discovered Storage Resources may be subdivided into Commercial, Sub-Commercial, and Inaccessible, with the estimated commercially storable portion classified as Capacity, and the estimated subcommercial recoverable portion classified as Contingent Storage Resources. |
| **Discovery:** | One geologic formation, or several collective geologic formations, for which one or several wells have established through testing, sampling, and/or logging the existence of significant storable quantities. (See also Discovered Storage Resources and Discovered.) |
| **Economic:** | In relation to Storage Capacity and Resources, economic refers to the situation in which the income from an operation exceeds the expenses involved in, or attributable to, that operation. |
| **Economic Interest:** | An Economic Interest is possessed in every case in which an investor has acquired any Interest in mineral in place, and secures, by any form of legal relationship, revenue derived from the extraction of the mineral to which he must look for a return of his capital. |
| **Economic Limit:** | The injection rate beyond which the net operating cash flows (after royalties or share of storage owing to others) from a project—which may be an individual well, lease, or entire field—are negative. |
| **Entitlement:** | That portion of future storage (and thus resources) legally accruing to a lessee or contractor under the terms of the development and storage contract with a lessor. |
| **Entity:** | A legal construct capable of bearing legal rights and obligations. In resources evaluations, this typically refers to the lessee or contractor, which is some form of legal corporation (or consortium of corporations). In a broader sense, an entity can be an organization of any form and may include governments or their agencies. |
| **Estimated Ultimate Stored:** | Those storable quantities that are estimated on a given date to be potentially stored, plus those quantities already stored therein. |
| **Evaluation:** | The geosciences, engineering, and associated studies, including economic analyses, conducted on an exploration, development, or storage project resulting in estimates of the quantities that can be stored and the associated cash flow under defined forward conditions. Projects are classified and estimates of derived quantities are categorized according to applicable guidelines. (Also termed Assessment.) |
| **Evaluator:** | The person or group of persons responsible for performing an evaluation of a project. These may be employees of the entities that have an economic interest in the project or independent consultants contracted for reviews and audits. In all cases, the entity accepting the evaluation takes responsibility for the results, including Capacity and Resources and attributed value estimates. |
| **Exploration:** | Prospecting for undiscovered petroleum. |
| **Forecast Case:** | Modifier applied to project resources estimates and associated cash flow when such estimates are based on those conditions (including costs and product price schedules) forecast by the evaluator to reasonably exist throughout the life of the project. Inflation or deflation adjustments are made to costs and revenues during the evaluation period. |
| **Formation Tests:** | Any type of direct injection or production test that is used to ascertain CO2 injection rates. |
| **Geostatistical Methods:** | A variety of mathematical techniques and processes dealing with the collection, methods, analysis, interpretation, and presentation of masses of geoscience and engineering data to (mathematically) describe the variability and uncertainties within any geologic formation, specifically related here to resources estimates, including the definition of (all) well and geologic formation parameters in 1, 2, and 3 dimensions and the resultant modeling and potential prediction of various aspects of performance. |
| **High Estimate:** | With respect to resource categorization, this is considered to be an optimistic estimate of the quantity that will actually be stored by a project. If probabilistic methods are used, there should be at least a 10% probability (P10) that the quantities actually stored will equal or exceed the high estimate. |
| **Hydrocarbons:** | Chemical compounds consisting wholly of hydrogen and carbon. |
| **Inaccessible Storage Resources:** | Storable quantities classified as Discovered or Undiscovered Storage Resources, which are estimated as of a given date, not to be developed for storage. These quantities may be developed for storage in the future if circumstances change. For example, current regulatory restrictions may prohibit storage at the time of the assessment and foreseeable future. |
| **Injection:** | The forcing, pumping, or free flow under vacuum, of substances into a porous and permeable subsurface rock formation. Injected substances can include either gases or liquids (see Cumulative Injection). |
| **Injection-Sharing Contract:** | In an injection-sharing contract between a contractor and a host government, the contractor typically bears all risk and costs for exploration, development, and storage. In return, if exploration is successful, the contractor is given the opportunity to recover the incurred investment from storage, subject to specific limits and terms. Ownership is retained by the host government; however, the contractor normally receives title to the prescribed share of the stored quantities. |
| **Justified for Development:** | Implementation of the development project is justified on the basis of reasonable forecast of commercial conditions at the time of reporting, and there are reasonable expectations that all necessary approvals/contracts will be obtained. A project maturity subclass that reflects the actions required to move a project toward commercial storage. |
| **Known:** | The key requirement to consider storable quantities as known, and thus containing Capacity or Contingent Resources, is that it must have been discovered, that is, penetrated by a well that has established through testing, sampling, or logging the existence of a significant storable quantities. |
| **Known Geologic Formation:** | A geologic formation that has been assessed and presence is verifiable. |
| **Lead:** | A project associated with storable quantities that is currently poorly defined and requires more data acquisition and/or evaluation to be classified as a prospect. A project maturity subclass that reflects the actions required to move a project toward commercial production. |
| **Low/Best/High Estimates:** | The range of uncertainty reflects a reasonable range of estimated storable quantities at varying degrees of uncertainty (using the cumulative scenario approach) for an individual storage project. |
| **Low Estimate:** | With respect to resource categorization, this is considered to be a pessimistic estimate of the quantity that will actually be stored by a project. If probabilistic methods are used, there should be at least a 90% probability (P90) that the quantities actually stored will equal or exceed the low estimate. |
| **Measurement:** | The process of establishing quantity (volume or mass) and quality of storage products delivered to a reference point under conditions defined by delivery contract or regulatory authorities. |
| **Monte Carlo Simulation:** | A type of stochastic mathematical simulation that randomly and repeatedly samples input distributions (e.g., geologic formation properties) to generate a resulting distribution (e.g., storable quantities). |
| **Net Present Value:** | The summation of the discounted cash flows when the cash flows are discounted according to a defined discount rate and time. |
| **Net Storage Resources:** | The incremental storable quantities used by each project. |
| **On Injection:** | The development project is currently injecting. A project status/maturity subclass that reflects the actions required to move a project toward commercial storage. |
| **Operator:** | The company or individual responsible for managing an exploration, development, and/or storage operation of the storage site and project. |
| **P1:** | Equivalent to Proved Capacity. |
| **P2:** | Equivalent to Probable Capacity. |
| **P3:** | Equivalent to Possible Capacity. |
| **Penetration/ Penetrated:** | The intersection of a wellbore with a geologic formations. |
| **Petroleum:** | Petroleum is defined as a naturally occurring mixture consisting of hydrocarbons in the gaseous, liquid, or solid phase. Petroleum may also contain nonhydrocarbon compounds, common examples of which are carbon dioxide, nitrogen, hydrogen sulfide, and sulfur. In rare cases, nonhydrocarbon content could be greater than 50%. |
| **Play:** | A project associated with a prospective trend of potential prospects, but which requires more data acquisition and/or evaluation to define specific leads or prospects. A project maturity subclass that reflects the actions required to move a project toward commercial storages. |
| **Point of Sales:** | See Reference Point. |
| **Possible Capacity:** | An incremental category of estimated storable quantities associated with a defined degree of uncertainty. Possible Capacity is the additional Capacity that analysis of geoscience and engineering data suggest are less likely to be stored than Probable Capacity. The total quantities ultimately stored from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P), which is equivalent to the high-estimate scenario. When probabilistic methods are used, there should be at least a 10% probability that the actual quantities stored will equal or exceed the 3P estimate. |
| **Probability:** | The extent to which an event is likely to occur, measured by the ratio of the favorable cases to the whole number of cases possible. SPE convention is to quote cumulative probability of exceeding or equaling a quantity in which P90 is the small estimate and P10 is the large estimate. (See also Uncertainty.) |
| **Probable Capacity:** | An incremental category of estimated storable quantities associated with a defined degree of uncertainty. Probable Capacity are those additional Reserves that are less likely to be stored than Proved Capacity but more certain to be stored than Possible Capacity. It is equally likely that actual remaining storable quantities will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities stored will equal or exceed the 2P estimate. |
| **Probabilistic Method:** | The method of estimation of Resources is called probabilistic when the known geoscience, engineering, and economic data are used to generate a continuous range of estimates and their associated probabilities. |
| **Project:** | Represents the link between the storable quantities and the decision-making process, including budget allocation. A project may, for example, constitute the development of a single site, or an incremental development in a storage site, or the integrated development of several sites and associated facilities with a common ownership. In general, an individual project will represent a specific maturity level at which a decision is made on whether or not to proceed (i.e., spend money), and there should be an associated range of estimated storable quantities for that project. (See also Development Plan.) |
| **Property:** | A volume of the Earth’s crust wherein a corporate entity or individual has contractual rights to extract, process, and market a defined portion of specified in-place minerals (including petroleum). Defined in general as an area but may have depth and/or stratigraphic constraints. May also be termed a lease, concession, or license. |
| **Prospect:** | A project associated with a undiscovered storable quantities that is sufficiently well defined to represent a viable drilling target. A project maturity subclass that reflects the actions required to move a project toward commercial production. |
| **Prospective Storage Resources:** | Those storable quantities, which are estimated as of a given date, to be potentially stored from undiscovered storage resources. |
| **Proved Capacity:** | An incremental category of estimated storable quantities associated with a defined degree of uncertainty. Proved Capacity are those storable quantities which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially stored, from a given date forward, from known storable quantities and under defined economic conditions, operating methods, and government regulations. If deterministic methods are used, the term reasonable certainty is intended to express a high degree of confidence that the quantities will be stored. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually stored will equal or exceed the estimate. Often referred to as 1P, also as Proven. |
| **Pure-Service Contract:** | An agreement between a contractor and a host government that typically covers a defined technical service to be provided or completed during a specific period of time. The service-company investment is typically limited to the value of equipment, tools, and expenses for personnel used to perform the service. In most cases, the service contractor’s reimbursement is fixed by the terms of the contract with little exposure to either project performance or market factors. |
| **Range of Uncertainty:** | The range of uncertainty of the storable quantities may be represented by either deterministic scenarios or by a probability distribution. (See Resource Uncertainty Categories.) |
| **Reasonable Certainty:** | If deterministic methods for estimating recoverable resource quantities are used, then reasonable certainty is intended to express a high degree of confidence that the estimated quantities will be recovered. |
| **Reasonable Expectation:** | Indicates a high degree of confidence (low risk of failure) that the project will proceed with commercial development or the referenced event will occur. |
| **Reasonable Forecast:** | Indicates a high degree of confidence in predictions of future events and commercial conditions. The basis of such forecasts includes, but is not limited to, analysis of historical records and published global economic models. |
| **Reference Point:** | A defined location within an injection and storage operation where quantities of injected CO2 are measured under defined conditions before injection. This may also coincide with the Custody-Transfer Point. |
| **Remaining Storage Resources:** | The sum of Storage Capacity, Contingent Storage Resources, and Prospective Storage Resources, and inaccessible storage resources, excluding stored (i.e., previously injected) quantities. |
| **Reservoir:** | A subsurface rock formation containing an individual and separate natural accumulation of moveable petroleum that is confined by impermeable rocks/formations and is characterized by a single-pressure system. |
| **Resources:** | As used herein, is intended to encompass all storable quantities (accessible and inaccessible) within geologic formations—discovered and undiscovered—plus those quantities already stored. |
| **Resources Categories:** | Subdivisions of estimates of resources to be stored by a project(s) to indicate the associated degrees of uncertainty. Categories reflect uncertainties in the total storage resources remaining, that portion of the total storage resources that can be used for storage by applying a defined development project or projects, and variations in the conditions that may impact commercial development (e.g., market availability, contractual changes). (See also Proved, Probable, and Possible; 1C, 2C, 3C, 1P, 2P, and 3P.) |
| **Resources Classes:** | Subdivisions of Resources that indicate the relative maturity of the development projects being applied to yield the storable quantities. Project maturity may be indicated qualitatively by allocation to classes and subclasses and/or quantitatively by associating a project’s estimated chance of reaching injecting status. |
| **Resources Uncertainty Categories:** | See Resources Categories. |
| **Risk:** | The probability of loss or failure. As risk is generally associated with the negative outcome; “Chance” is preferred for general use to describe the probability of a discrete event occurring. (See Chance.) |
| **Risked-Service Contract:** | These agreements are very similar to the injection-sharing agreements, with the exception of contractor payment, but risk is borne by the contractor. With a risked-service contract, the contractor usually receives a defined share of revenue rather than a share of the stored quantities. |
| **Royalty:** | Royalty refers to payments that are due to the host government or storage-rights owner (lessor) in return for the operator (lessee/contractor) to have legal access to the storage resources. Many agreements allow for the operator to inject the royalty quantities, sell them on behalf of the royalty owner, and pay the proceeds to the owner. Some agreements provide for the royalty to be taken only in kind by the royalty owner. |
| **Shut-in Capacity:** | Expected to be recovered from completion intervals that are open at the time of the estimate, but that have not started injecting; wells that were shut in for market conditions or pipeline connections; or wells not capable of injection for mechanical reasons. |
| **Significant Quantity:** | Implies that there is evidence of a sufficient quantity of Total Storage Resources to justify estimating the storable quantity (volume or mass) demonstrated by the well(s) and for evaluating the potential for commercial storage. |
| **Storable Quantities:** | Quantities of CO2 that can be stored as part of an estimated pore volume of a geologic formation that is accessible to CO2 via a CO2 injection well (i.e., a storage project) sometime in the future and can be reported as mass or volume of CO2. To be considered a storable quantity, an assessment of the longevity of the storage of the CO2 is required (i.e., containment will be part of the analyses). |
| **Storage Efficiency:** | Fraction of the Storage Capacity, Storage Resource, total pore volume, effective pore volume, bulk volume, and/or storable quantity expected to be used for storage by a specific project. May be based on actual injection, planned project, or a regional assessment. The basis for the storage efficiency must be clearly identified and documented. |
| **Stored:** | A classification that includes the cumulative quantity of CO2 that has been actually injected and retained over a defined time. Any back-produced CO2 quantities or emissions to atmosphere or seabed are deducted. Quantities of CO2 that have migrated beyond the defined boundaries of the project but remain isolated from the atmosphere and hydrosphere may be considered retained.  While all storage-resources estimates and injection are reported in terms of the metered CO2 specifications, raw-injection quantities (including non-CO2 constituents) are also measured to support engineering analyses requiring voidage calculations. |
| **Stored Quantities:** | Part of the Capacity for a geologic formation that has injected and retained CO2 occupying pore volume; it can be reported as mass or volume. |
| **Subcommercial:** | A project is Subcommercial if the degree of commitment is such that the storable quantities are not expected to be developed and placed on injection within a reasonable timeframe. While five years is recommended as a benchmark, a longer timeframe could be applied at the point at which, for example, development of economic projects are deferred at the option of the operator for, among other things, market-related reasons or to meet contractual or strategic objectives. Discovered subcommercial projects are classified as Contingent Storage Resources. |
| **Taxes:** | Obligatory contributions to the public funds, levied on persons, property, or income by governmental authority. |
| **Technical Uncertainty:** | Indication of the varying degrees of uncertainty in estimates of storable quantities influenced by range of storage resources and the range of the storage efficiency of the project being applied. |
| **Total Storage Resources:** | Generally accepted to be all those estimated storable quantities contained in the subsurface, as well as those quantities already stored. |
| **Ultimate Storage Efficiency:** | Defined as the ratio of EUS to a base, which can be the Storage Capacity, Storage Resource, total pore volume, effective pore volume, bulk volume, and/or storable quantity expected to be used for storage by a specific project. May be based on actual injection, planned project, or a regional assessment. The basis for the storage efficiency must be clearly identified and documented. (See Storage Efficiency and Estimated Ultimate Storage.) |
| **Uncertainty:** | The range of possible outcomes in a series of estimates. For Storage Resource assessments, the range of uncertainty reflects a reasonable range of estimated storable quantities for a project. (See also Probability.) |
| **Uncharacterized Geologic Formation:** | A known geologic formation that has inadequate data for estimating storable quantities to be considered discovered. |
| **Undeveloped Capacity:** | Quantities expected to be stored through future investments: |
| **Undiscovered Geological Formation:** | A yet-to-be-discovered geologic formation. |

# Appendix 2: Nomenclature

|  |  |
| --- | --- |
| **3D** | three dimensional |
| **ABEX** | abandonment cost |
| **API** | American Petroleum Institute |
| **bbl** | barrel (42 US gallons) |
| **Bg** | gas formation volume factor, in scf/rcf |
| **BH** | bottom hole |
| **BHA** | bottom hole assembly |
| **Bo** | oil formation volume factor, in rb/stb |
| **Bscf** | thousands of millions of standard cubic feet |
| **C&P** | cased and perforated |
| **CGR** | condensate gas ratio |
| **CO2** | carbon dioxide |
| **CoP** | cessation of production |
| **COS** | geological chance of success |
| **CPI** | computer processed interpretation |
| **d** | day |
| **DCA** | decline curve analysis |
| **DST** | drill stem test |
| **Eg** | gas expansion factor |
| **ELT** | economic limit test |
| **FBHP** | flowing bottom hole pressure |
| **FDP** | field development plan |
| **FMB** | flowing material balance |
| **FPSO** | floating production storage and offloading vessel |
| **ft** | feet |
| **FTHP** | flowing tubing head pressure |
| **FVF** | formation volume factor |
| **FWL** | free water level |
| **GDT** | gas down to |
| **GEF** | gas expansion factor |
| **GIIP** | gas initially in place |
| **GOC** | gas oil contact |
| **GOR** | gas oil ratio |
| **GRV** | gross rock volume |
| **GSA** | gas sales agreement |
| **GWC** | gas water contact |
| **H2S** | hydrogen sulphide |
| **HIIP** | hydrocarbons initially in place |
| **HLV** | Heavy Lift Vessel |
| **HPHT** | high pressure, high temperature |
| **ICV** | interval control valve |
| **kh** | permeability thickness |
| **km** | kilometres |
| **Kr** | relative permeability |
| **LNG** | liquefied natural gas |
| **LPG** | liquefied petroleum gas |
| **LTC** | long term compression |
| **m** | metre |
| **M MM** | thousands and millions respectively |
| **MD** | measured depth |
| **md or mD** | millidarcy |
| **MDRKB** | measured depth below Kelly Bushing |
| **MDT** | modular dynamic tester |
| **MSL** | mean sea level |
| **mss** | metres subsea |
| **N2** | nitrogen |
| **NAG** | non-associated gas |
| **NBP** | National Balancing Point |
| **NPV xx** | net present value at xx discount rate |
| **NTG** | net to gross ratio |
| **NUI** | normally unmanned installation |
| **ODT** | oil down to |
| **OPEX** | operating cost |
| **OWC** | oil water contact |
| **P90** | low case (probabilistic) estimate (there should be a 90% probability of exceeding this estimate) |
| **P50** | mid or best case (probabilistic) estimate (there should be a 50% probability of exceeding this estimate) |
| **P10** | high case (probabilistic) estimate (there should be a 10% probability of exceeding this estimate) |
| **Pb** | saturation, or bubble point, pressure |
| **PBU** | pressure-build-up |
| **Phi** | porosity |
| **Phie** | effective porosity |
| **Phit** | total porosity |
| **PI** | productivity index, in stb/d/psi for oil or MMscf/d/psi or Mscf/d/psi for gas |
| **POD** | plan of development |
| **PSA** | production sharing agreement |
| **PSC** | production sharing contract |
| **psi** | pressure, measured in pounds per square inch |
| **psia** | absolute pressure, measured in pounds per square inch |
| **psig** | gauge pressure which is the pressure above atmospheric pressure, measured in pounds per square inch |
| **PSDM** | post stack depth migration |
| **PSTM** | post stack time migration |
| **PVT** | pressure volume temperature experiment |
| **rb** | reservoir barrels |
| **RCA** | routine core analysis |
| **rcf** | cubic feet at reservoir conditions |
| **RFT** | repeat formation tester |
| **Rs** | solution gas oil ratio |
| **scf** | standard cubic feet measured at 14.7 pounds per square inch and 60 degrees Fahrenheit |
| **SNA** | sum of negative amplitudes |
| **ss** | sub-sea |
| **stb** | stock tank barrel (42 US gallons measured at 14.7 pounds per square inch and 60 degrees Fahrenheit) |
| **STOIIP** | stock tank oil initially in place |
| **Sw** | water saturation |
| **Swc** | connate water saturation |
| **TD** | total depth |
| **THP** | tubing head pressure |
| **TVD** | true vertical depth |
| **TVDSS** | true vertical depth sub-sea |
| **TWT** | two way time |
| **WGR** | water gas ratio |
| **WOR** | water oil ratio |
| **WUT** | water up to |

1. Including Errata reported in the 2022 Additional Guidelines to SRMS [↑](#footnote-ref-2)