



EIA’s Proposed Definitions for Natural Gas Liquids

Term	Current Definition	Proposed Definition	Note
Lease condensate	Condensate (lease condensate): A natural gas liquid recovered from associated and non associated gas wells from lease separators or field facilities, reported in barrels of 42 U.S. gallons at atmospheric pressure and 60 degrees Fahrenheit.	Lease condensate: Light liquid hydrocarbons recovered from lease separators or field facilities at associated and non-associated natural gas wells. Mostly pentanes and heavier hydrocarbons. Normally enters the crude oil stream after production.	Includes lease condensate as part of the crude oil stream, not an NGL.
Plant condensate	Plant condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.	Plant condensate: Liquid hydrocarbons recovered at inlet separators or scrubbers in natural gas processing plants at atmospheric pressure and ambient temperatures. Mostly pentanes and heavier hydrocarbons, equivalent to pentanes plus.	Adds temperature and pressure.
Natural gas plant liquids (NGPL)	Natural gas plant liquids: Those hydrocarbons in natural gas that are separated as liquids at natural gas processing plants, fractionating and cycling plants, and in some instances, field facilities. Lease condensate is excluded. Products obtained include liquefied petroleum gases (ethane, propane, and butanes), pentanes plus, and isopentane. Component products may be fractionated or mixed.	Natural gas plant liquids (NGPL): Those hydrocarbons in natural gas that are separated as liquids at natural gas processing plants, fractionating and cycling plants. Products obtained include ethane, liquefied petroleum gases (propane and butanes), and pentanes plus. Component products may be fractionated or mixed. Lease condensate is excluded.	Identifies ethane separate from the LPG and includes it in NGPL. Removes isopentane, since it is part of pentanes plus. A supply definition.

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Field Production	Field production: Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, new supply of other hydrocarbons/oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.	Field production of crude oil: Represents crude oil production on leases, including lease condensate. Excludes plant condensate and other processed liquids.	NGPL production is no longer considered field production.
Pentanes plus	Pentanes plus: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas.	Pentanes plus: A mixture of liquid hydrocarbons, mostly pentanes and heavier, extracted from natural gas in a gas processing plant (i.e., plant condensate) or from crude oil in a refinery. Natural gasoline is the largest component of pentanes plus.	Explicitly includes natural gasoline. A supply term.
Natural gasoline	Natural gasoline: A term used in the gas processing industry to refer to a mixture of liquid hydrocarbons (mostly pentanes and heavier hydrocarbons) extracted from natural gas. It includes isopentane.	Natural gasoline: A commodity product commonly traded in NGL markets, which comprises liquid hydrocarbons (mostly pentanes and hexanes) that generally remain liquid at ambient temperatures and atmospheric pressure. A subset of pentanes plus.	Defines natural gasoline as a subset of pentanes plus. A market term.
Extraction Loss	Extraction Loss: The reduction in volume of natural gas due to the removal of natural gas liquid constituents such as ethane, propane, and butane at natural gas processing plants.	See Natural Gas Plant Liquids (NGPL) Production.	Makes clear that losses are from NGPL production; includes pentanes plus.
Natural gas plant liquids (NGPL) Production	No definition	Natural gas plant liquids (NGPL) Production: The reduction in volume of natural gas due to the removal of natural gas plant liquids constituents such as ethane, propane, butane, and pentanes plus.	New supply term for natural gas surveys.

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Liquefied petroleum gases (LPG)	Liquefied petroleum gases: A group of hydrocarbon-based gases derived from crude oil refining or natural gas fractionation. They include ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene. For convenience of transportation, these gases are liquefied through pressurization.	Liquefied petroleum gases (LPG): A group of hydrocarbon gases, primarily propane, normal butane, and isobutane, derived from crude oil refining or natural gas fractionation. These gases may be marketed individually or mixed. They can be liquefied through pressurization without refrigeration for convenience of transportation or storage.	Removes ethane and olefins. A market term.
Liquefied refinery gases (LRG)	Liquefied refinery gases (LRG): Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. Excludes still gas.	Liquefied refinery gases (LRG): Hydrocarbon gas liquids produced in refineries from processing of crude oil and unfinished oils. They are retained in the liquid state through compression and/or refrigeration. The reported categories include ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene.	Adds the source of LRG. A supply term.
Olefinic hydrocarbons (olefins)	No definition	Olefinic hydrocarbons (olefins): Unsaturated hydrocarbon compounds with the general formula C_nH_{2n} containing at least one carbon-to-carbon double-bond. Olefins are produced at crude oil refineries or petrochemical plants and are not naturally occurring constituents of oil and natural gas. Sometimes referred to as “alkenes” or “unsaturated hydrocarbons.” Excludes aromatics.	Adds definition for olefins.
Paraffinic hydrocarbons (paraffins)	Paraffinic hydrocarbons: Straight-chain hydrocarbon compounds with the general formula C_nH_{2n+2} .	Paraffinic hydrocarbons (paraffins): Saturated hydrocarbon compounds with the general formula C_nH_{2n+2} containing only single-bonds. Sometimes referred to as alkanes or natural gas liquids.	Adds paraffins to the NGL definition. Makes parallel to proposed olefins definition.

Term	Current Definition	Proposed Definition	Note
Natural gas liquids (NGL)	Natural Gas Liquids (NGL): Those hydrocarbons in natural gas that are separated from the gas as liquids through the process of absorption, condensation, adsorption, cooling in gas separators, gas processing, or gas cycling plants. Generally, natural gas liquids include natural gas plant liquids and lease condensate.	Natural gas liquids (NGL): A group of hydrocarbons including ethane, propane, normal butane, isobutane, and pentanes plus. Generally include natural gas plant liquids, and all liquefied refinery gases, except olefins.	Removes lease condensate and the olefins. A market term.
Hydrocarbon gas liquids (HGL)	No definition	Hydrocarbon gas liquids (HGL): A group of hydrocarbons including ethane, propane, butane, isobutane, and pentanes plus, and their associated olefins, ethylene, propylene, butylene, and isobutylene. Equivalent to sum of natural gas plant liquids and liquefied refinery gases on the supply side, and the sum of natural gas liquids and olefins on the market side. Includes propane and normal butane produced at gas-to-liquids plants. Excludes liquefied natural gas (LNG).	Establishes new definition to equivalent to NGPL + LRG on the supply side and NGL + olefins on the market side.
Refinery gas	Refinery gas: Non condensate gas collected in petroleum refineries.	Refinery gas: Still gas consumed as refinery fuel.	Clarify term relative to still gas.
Still gas	Still gas (refinery gas): Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas issued as a refinery fuel and a petrochemical feedstock. The conversion factor is 6 million BTU's per fuel oil equivalent barrel.	Still gas: Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane and ethane. May contain hydrogen and small/trace amounts of ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene. Still gas is typically consumed as refinery fuel or used as petrochemical feedstock.	Identifies use and clarifies composition.

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Gas plant operator	Gas plant operator: Any firm, including a gas plant owner, which operates a gas plant and keeps the gas plant records. A gas plant is 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.	Gas plant operator: Any firm, including a natural gas processing plant owner that operates a gas plant and keeps the gas plant records.	Separates gas plant definition from gas plant operator.