

# Petroleum Hydrocarbon

@wikipedia

Collective term for oil, condensate and natural gas and their mixtures, normally encountered in subsurface reservoirs.

Its composition is dominated by pure hydrocarbons (usually Alkanes, Naphthenes, Aromatics, Asphaltics) and may also include the other organic and inorganic chemical substances (like carbon dioxide, nitrogen, hydrogen sulfide, helium etc.).

**Table 1** – Example of composition of several Petroleum Hydrocarbon (in mol % )

Substance	Dry Gas	Wet Gas	Condensate	Volatile Oil	Black Oil
CO <sub>2</sub>	0.10	1.41	2.37	1.82	0.02
N <sub>2</sub>	2.07	0.25	0.31	0.24	0.34
C <sub>1</sub>	86.12	92.46	73.19	57.60	34.62
C <sub>2</sub>	5.91	3.18	7.80	7.35	4.11
C <sub>3</sub>	3.58	1.01	3.55	4.21	1.01
iC <sub>4</sub>	1.72	0.28	0.71	0.74	0.76
nC <sub>4</sub>		0.24	1.45	2.07	0.49
iC <sub>5</sub>	0.50	0.13	0.64	0.53	0.43
nC <sub>5</sub>		0.08	0.68	0.95	0.21
C <sub>6s</sub>		0.14	1.09	1.92	1.16
C <sub>7+</sub>		0.82	8.21	22.57	56.40
Rs (SCF/STB)		69,000	5965	1465	320
Rv (STB/MMSCF)	0	15	165	680	3125
API gravity		65.0	48.5	36.7	23.6
M <sub>7+</sub>		132	184	240	274
7+		0.750	0.816	0.864	0.920

## See Also

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Petroleum Industry / Upstream / Subsurface E&P Disciplines / Petroleum Geology / Petroleum Reservoir Fluids

## References

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[https://www.engineeringtoolbox.com/hydrocarbon-boiling-melting-flash-autoignition-point-density-gravity-molweight-d\\_1966.html](https://www.engineeringtoolbox.com/hydrocarbon-boiling-melting-flash-autoignition-point-density-gravity-molweight-d_1966.html)