

Reserves-to-Production Ratio = R/P

Ratio of [Recoverable Hydrocarbon Reserves](#) V_{RHC} over the current production rate of these [reserves](#) q_{HC} :

$$(1) \quad R/P = \frac{V_{RHC}}{q_{HC}}$$

In [Decline Curve Analysis](#) the [R/P](#) equation takes form:

$$(2) \quad RPR(t) = \frac{Q_{max} - Q(t)}{q(t)}$$

where

$q(t)$	Production rate at time t
$Q(t)$	Cumulative production at time t
Q_{max}	Estimated Ultimate Recovery

[R/P](#) is measured in time units and is usually presented in years.

For the green fields the [R/P](#) assumes the ratio of initial recoverable reserves over the initial production rate.

Although [R/P](#) is expressed in time units it does not represent the actual [expected lifetime](#) of the field because production rate is not constant over time.

Usually production rate is declining thus leading to a much longer production time than estimated by [R/P](#).

But in many other cases the initial production rate of the green field is being increased over time due to increase in drilling and advanced completions which leads to contraction of the field lifetime comparing to [R/P](#) estimate.

The [R/P](#) is closely related to [Recovery Pace](#) τ and in case of [Exponential Production Decline](#) they simply match:
 $R/P \equiv \tau$ and stay constant over time.

See Also

[Petroleum Industry](#) / [Upstream](#) / [Petroleum Asset](#) / [Petroleum Asset Summary](#)

[[Petroleum Industry](#) / [Upstream](#) / [Production](#) / [Field Summary](#)]

[[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Petroleum Geology](#) / [Petroleum Reservoir](#) / [Recoverable Hydrocarbon Reserves](#)]

[[Estimated Lifetime \(ELT\)](#)][[Recovery Pace](#)]