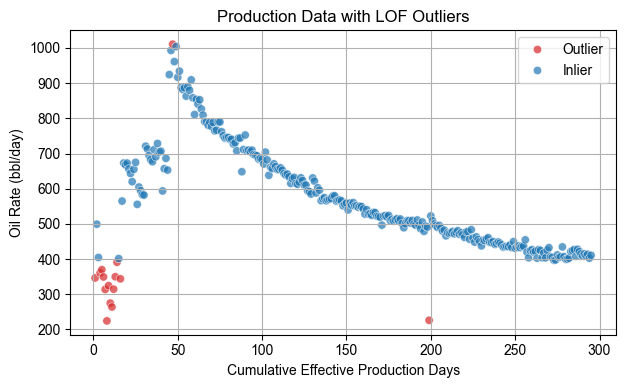
Probabilistic Decline Curve Analysis Report

# 1. Overview

This report summarizes the results of the probabilistic decline curve analysis, including model fitting, probabilistic forecasts, and estimated ultimate recovery (EUR) analysis.

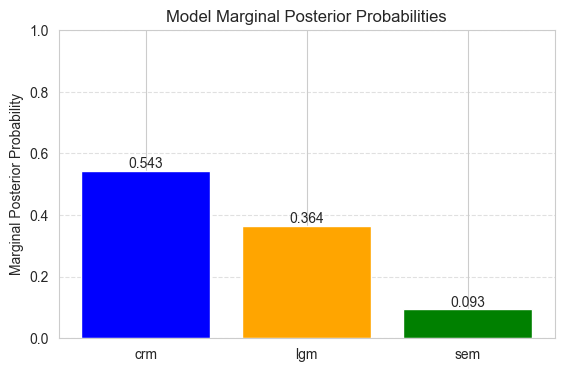
# 2. Initial Production Data & Outlier Detection

## Initial Production Data with LOF Outlier Detection



# 3. Marginal Posterior Probabilities of Models

## Model Posterior Probabilities



# 4. Combined EUR Statistics

## Combined Model EUR Summary

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| p10 | p25 | p50 | p75 | p90 | mean |
| 491055.15877758095 | 506416.0830668812 | 640400.5301659429 | 745129.5520227526 | 812844.7678962131 | 630614.0712523244 |

# 5. Model-Specific EUR Statistics

## Per Model EUR Summary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | p10 | p25 | p50 | p75 | p90 | mean |
| sem | 671068.2933348252 | 674834.5987159836 | 681816.3158199512 | 700160.5327914385 | 778960.967909137 | 700887.1937102498 |
| crm | 475270.84529877343 | 485277.9291161588 | 497865.7567327233 | 510540.7911888528 | 520149.2064301225 | 497535.94428566843 |
| lgm | 550793.1563298857 | 577675.3726663934 | 669174.5486977221 | 774810.3070033726 | 837680.0969983994 | 677799.6445393609 |

# 6. Conclusion

The analysis demonstrates the range of production forecasts and uncertainties associated with the selected decline curve models. Multi-model probabilistic forecasts provide a robust outlook for future production.