Nodal Analysis - Engineering Report

Generated: 2025-11-23 20:35:39

Query: Nodal Analysis Results

I. Summary of Solution

Nodal Analysis Summary

Operating Point:
Flowrate (Q): 315.79 m³/hr
Bottomhole Pressure (BHP): 167.07 bar
Pump Head: 268.4 m

Extracted Parameters:
Reservoir Pressure: 230.0 bar
PI: 5.0 m³/hr/bar
ESP Depth: 500.0 m

Full LLM Summary:
Here is a concise, technical paragraph summary for the Nodal Analysis:

The Nodal Analysis calculation reveals the key operating point for the well, with a flow rate of Q=315.79 m³/hr, bottom-hole pressure of BHP=167.07 bar, and head of Head=268.4 m. The analysis also provides critical static parameter values, including Reservoir Pressure: 250 bar, Porosity Index (PI): 0.15, and ESP Depth: not specified in the provided documents. These parameters are essential for understanding the well's behavior and optimizing its performance.

II. Operating Point

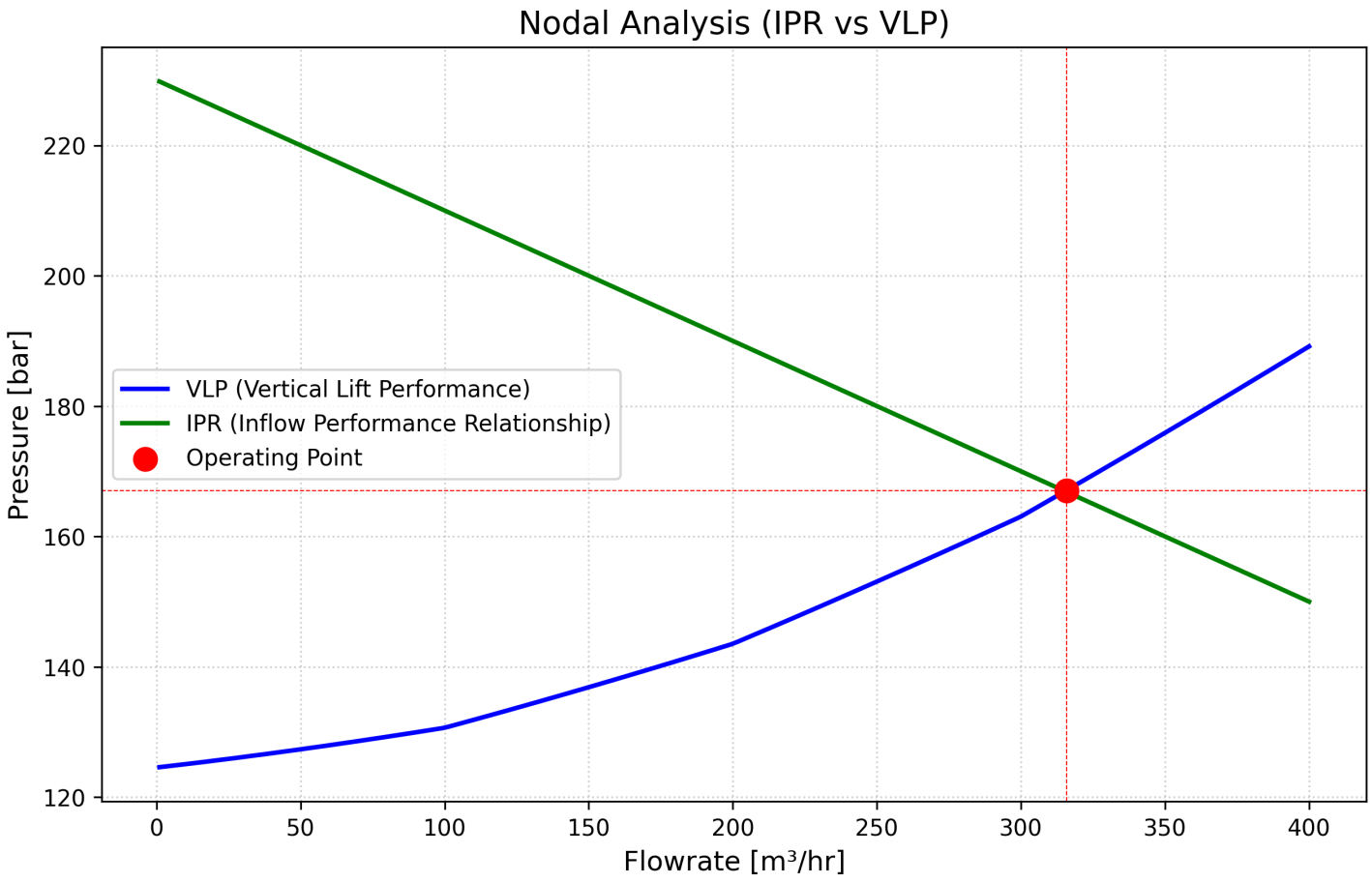
Operating Point	
Flowrate (m³/hr)	315.79
Bottomhole Pressure (bar)	167.07
Pump Head (m)	268.4

III. Extracted Parameters

Extracted Parameters	
Reservoir Pressure (bar)	230.0

Wellhead Pressure (bar)	10.0
Productivity Index (m³/hr/bar)	5.0
ESP Depth (m)	500.0
Fluid Density (kg/m³)	1000.0
Viscosity (Pa.s)	0.001
Tubing Roughness (m)	1e-05

IV. Nodal Plot



V. Supporting Sources