

Nodal Analysis - Engineering Report

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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:

Based on the provided context, a concise technical paragraph summary for the Nodal Analysis is:

The analysis suggests that the Andijk Geothermie 1/2 system operates with varying fluid rates and bottom-hole pressures over the evaluated period. However, due to missing data (NaN values), the key operating point calculation could not be determined. The text does not provide specific information on reservoir pressure, permeability index (PI), or electric submersible pump (ESP) depth. Nevertheless, it appears that the system's performance is influenced by changing fluid rates and pressures over time.

Note: Since NaN values are present in the data, the key operating point calculation (Q, BHP, Head) could not be determined.

II. Operating Point

Operating Point	
Flowrate (m ³ /hr)	315.79
Bottomhole Pressure (bar)	167.07
Pump Head (m)	268.4

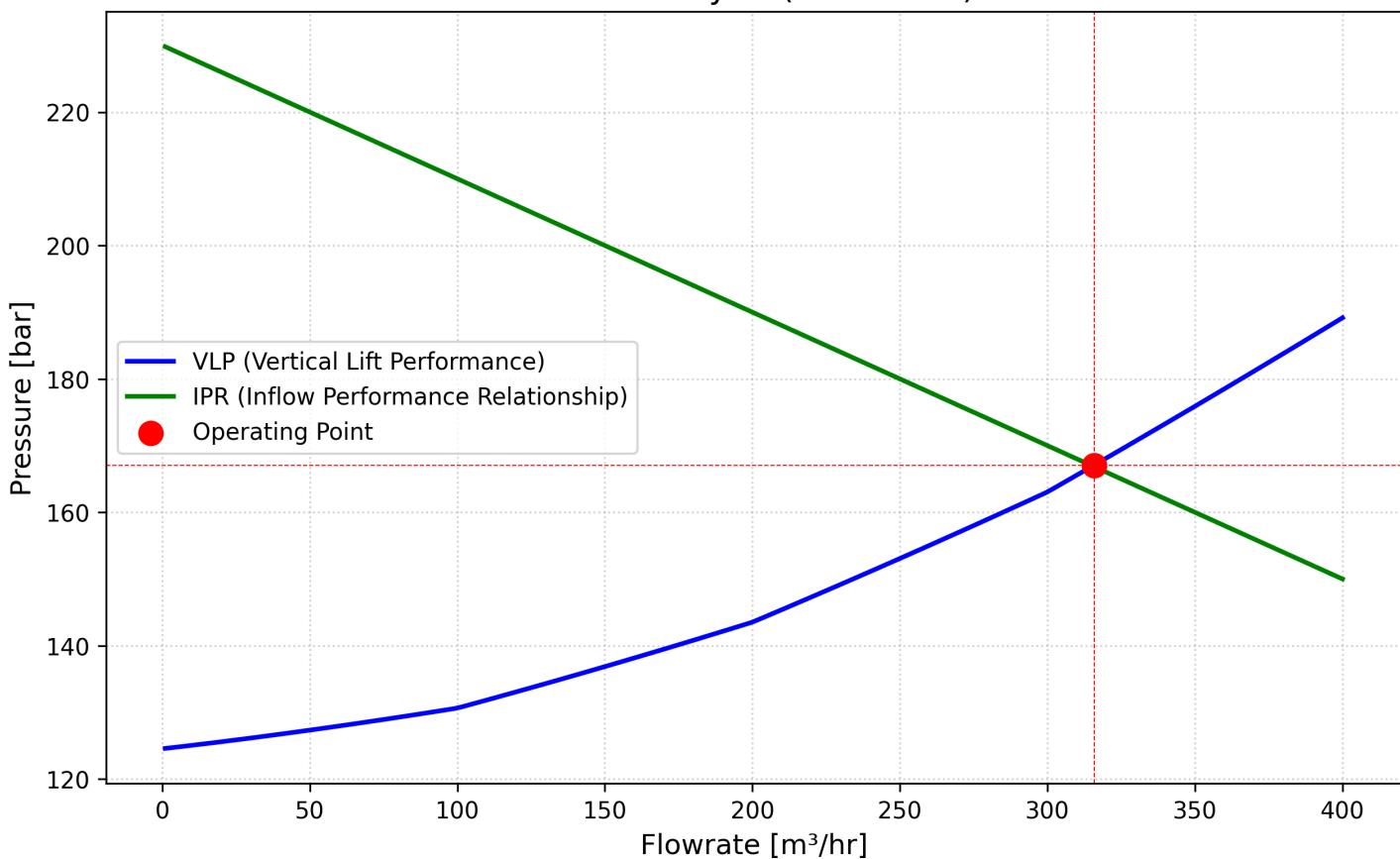
III. Extracted Parameters

Extracted Parameters

Reservoir Pressure (bar)	230.0
Wellhead Pressure (bar)	10.0
Productivity Index ($m^3/\text{hr}/\text{bar}$)	5.0
ESP Depth (m)	500.0
Fluid Density (kg/m^3)	-
Viscosity (cP)	-
Tubing Roughness (mm)	1e-05

IV. Nodal Plot

Nodal Analysis (IPR vs VLP)



V. Supporting Sources

Source 1: pdfFiles/ANDIJK-GT-01_2020_2025.xlsx | Page: N/A

Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2021-11	188258.8
0	77186.1	0
2750	NaN	NaN
Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2021-12	229050
0	93910.5	0
3347	NaN	NaN

Source 2: pdfFiles/ANDIJK-GT-01_2020_2025.xlsx | Page: N/A

Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2020-11	244322.37	
0	100172.2		0
4224.4	NaN	NaN	
Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2020-12	257580.07	
0	105607.8		0
3586	NaN	NaN	

Source 3: pdfFiles/ANDIJK-GT-01_2020_2025.xlsx | Page: N/A

Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2022-05	226448.293	
0	92843.8		0
2591.3	NaN	NaN	
Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2022-06	199786.8	
0	81912.6		0
1992.5	NaN	NaN	

Source 4: pdfFiles/ANDIJK-GT-01_2020_2025.xlsx | Page: N/A

Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2021-09	81635.824	
0	33470.7		0
1192.2	NaN	NaN	
Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2021-10	210407.394	
0	86267		0
2451.8	NaN	NaN	

Source 5: pdfFiles/ANDIJK-GT-01_2020_2025.xlsx | Page: N/A

Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2023-07	132468.26	
0	45039.2		0
1668.4	NaN	NaN	
Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2023-08	64401.35	
0	21896.5		0
811.1	NaN	NaN	

Source 6: pdfFiles/ANDIJK-GT-01_2020_2025.xlsx | Page: N/A

Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2023-11	150334.434	
0	61637.1		0
1893.3	NaN	NaN	
Andijk Geothermie 1/2 ANDIJK-GT-01 ECW Geo Andijk B.V	2023-12	175110.739	
0	70044.3		0
2218.2	NaN	NaN	