

Is $\neg(A \vee B) \models \neg A \wedge \neg B$ valid?

$\neg(A \vee B)$	o	$\neg A \wedge \neg B$	
			(\neg , left)
	o	$\neg A \wedge \neg B, A \vee B$	
			(\vee , right)
	o	$\neg A \wedge \neg B, A, B$	
			(\wedge , right)
o $\neg A, A, B$		o $\neg B, A, B$	
			(\neg , right)
\underline{A} o \underline{A}, B		\underline{B} o \underline{A}, B	
X		X	

Tableau closed, so inference valid.

\Rightarrow Formulas imply each other
 $\Rightarrow \neg(A \vee B)$ and $\neg A \wedge \neg B$ are equivalent.