e) $p_1 \vee p_6 \overset{?}{\in} \Gamma$ $\qquad$ $\{p_0, \neg(p_1 \to p_2), p_3 \vee p_2\} \subseteq \Gamma$

Probemos que

$\langle \exists \mathcal{D} : \mathcal{D} \in \mathcal{D} : Hip(\mathcal{D}) \subseteq \Gamma \;\&\; concl(\mathcal{D}) = p_1 \vee p_6 \rangle$

$$\mathcal{D} := \dfrac{\dfrac{\dfrac{\dfrac{[\neg p_1]_1 \quad [p_1]_2}{\bot}\to E}{p_2}\bot}{p_1 \to p_2}\to I_2 \qquad \neg(p_1 \to p_2)}{\dfrac{\dfrac{\bot}{p_1}RRA_1}{p_1 \vee p_6}\vee I}\to E$$

luego $\mathcal{D}$ atestigua $\Gamma \vdash p_1 \vee p_6$

Lema 32

$\Gamma \vdash p_1 \vee p_6 \implies p_1 \vee p_6 \in \Gamma$