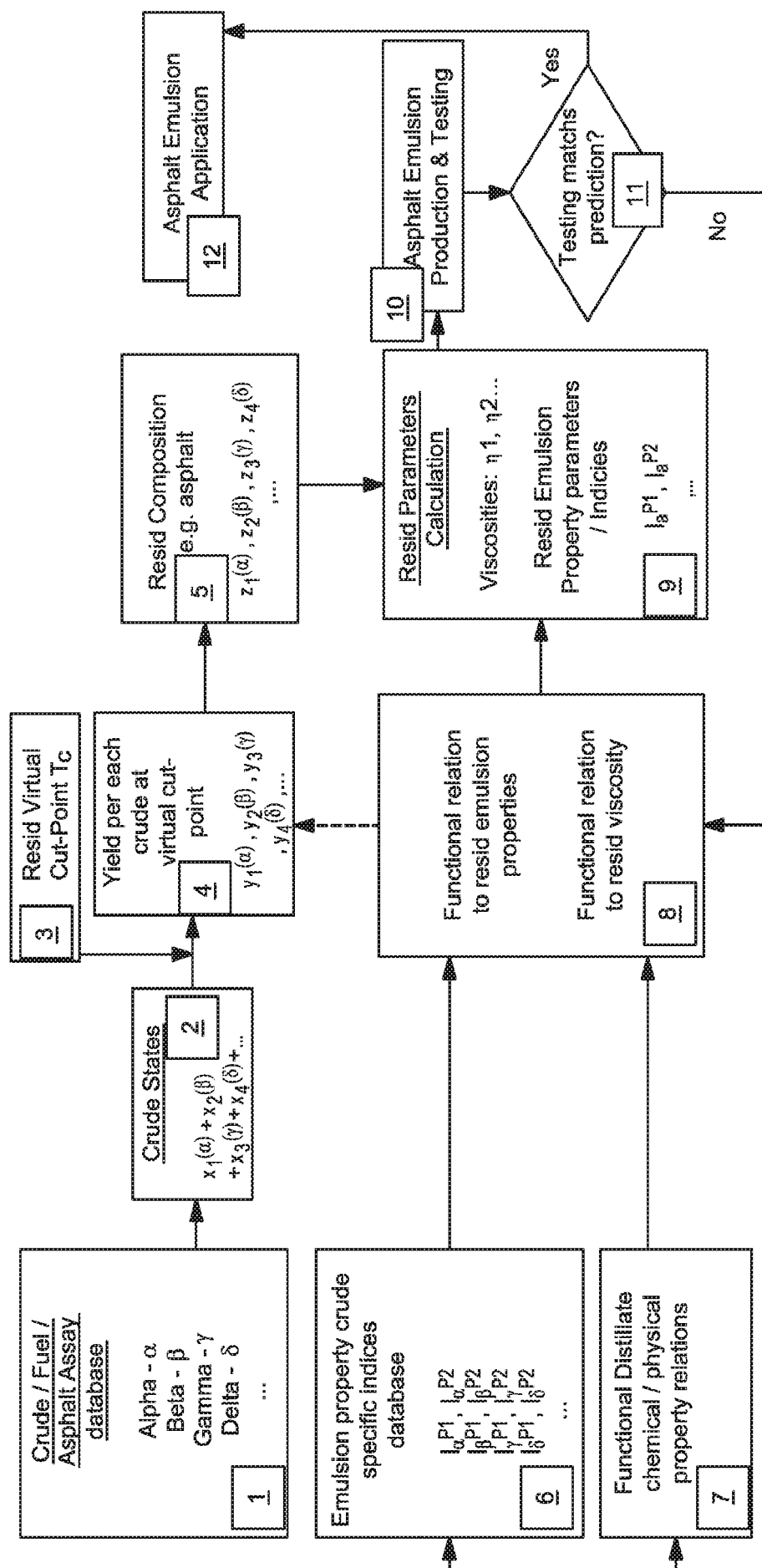


**FIG. 1**

P1: Emulsion property 1
P2: Emulsion property 2
X: Crude proportion in slate

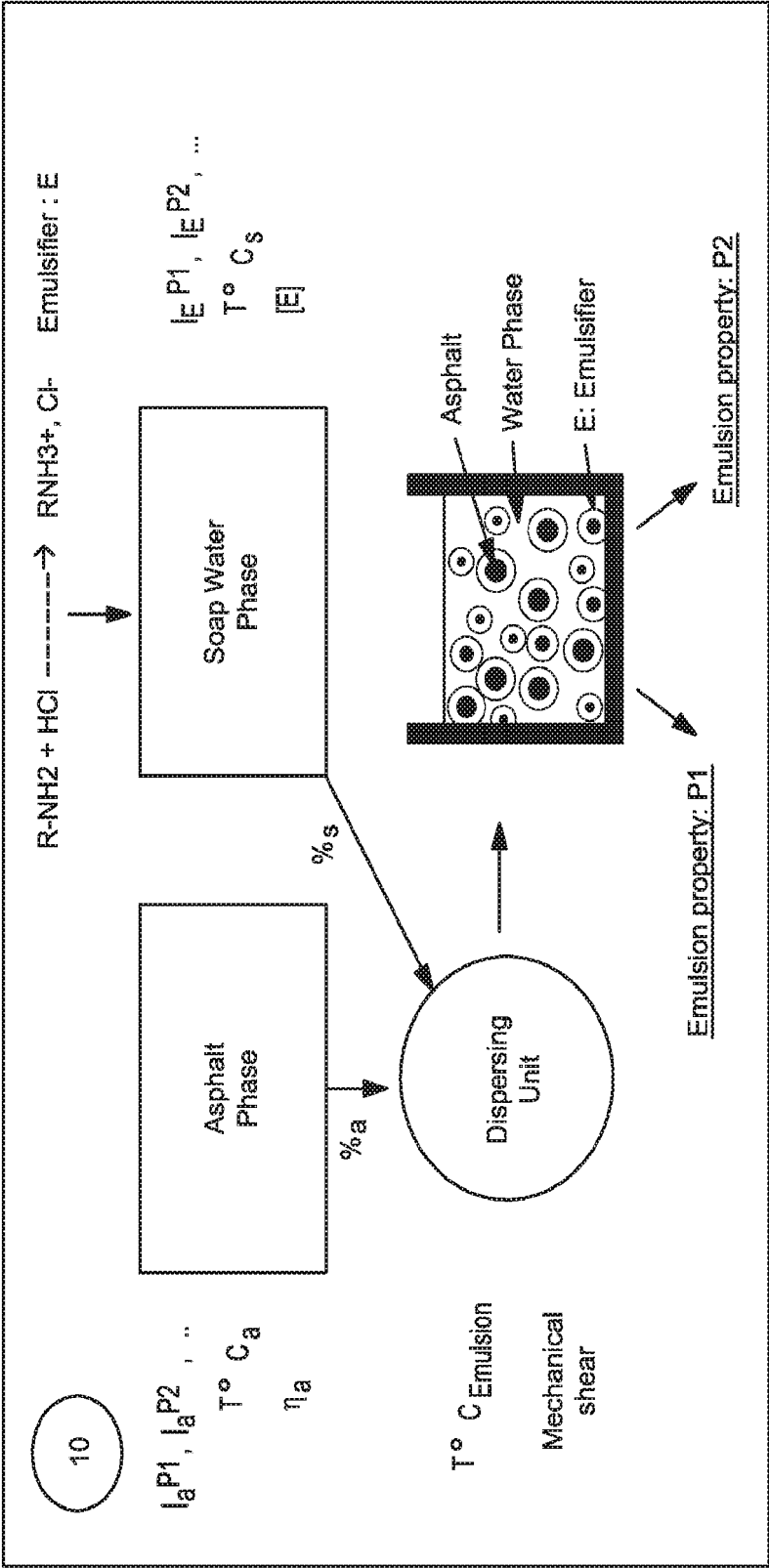
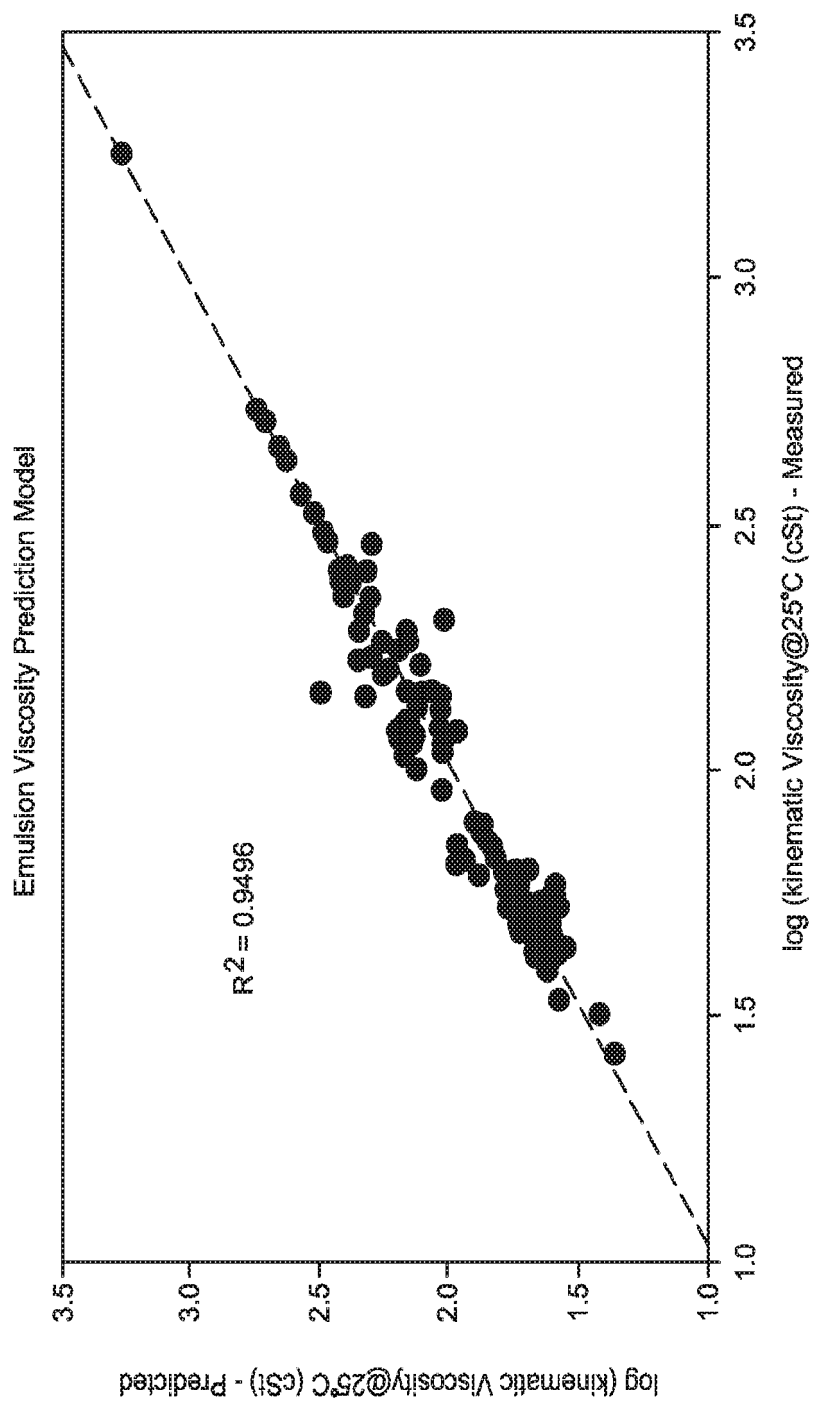


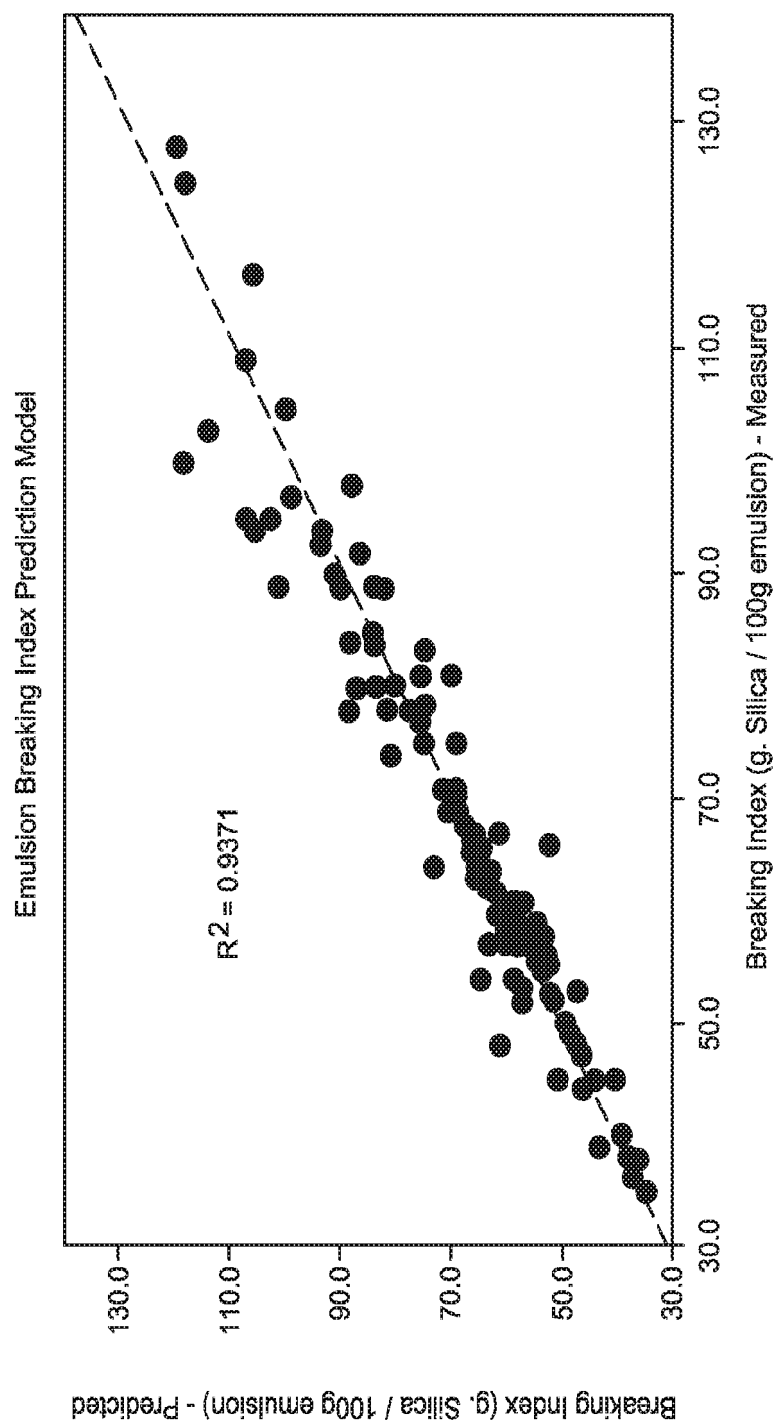
FIG. 2

I_a^{P1} : Asphalt index related to emulsion property 1
 I_a^{P2} : Asphalt index related to emulsion property 2
 I_E^{P1} : Emulsifier index related to emulsion property 1
 I_E^{P2} : Emulsifier index related to emulsion property 2
 $T^\circ C_a$: Asphalt temperature in tank ; $T^\circ C_s$: Soap temperature in tank
 η_a : Asphalt viscosity at $T^\circ C_a$
a: asphalt, s: soap (water + acid + emulsifier)

3/10

**FIG. 3**

4/10

**FIG. 4**

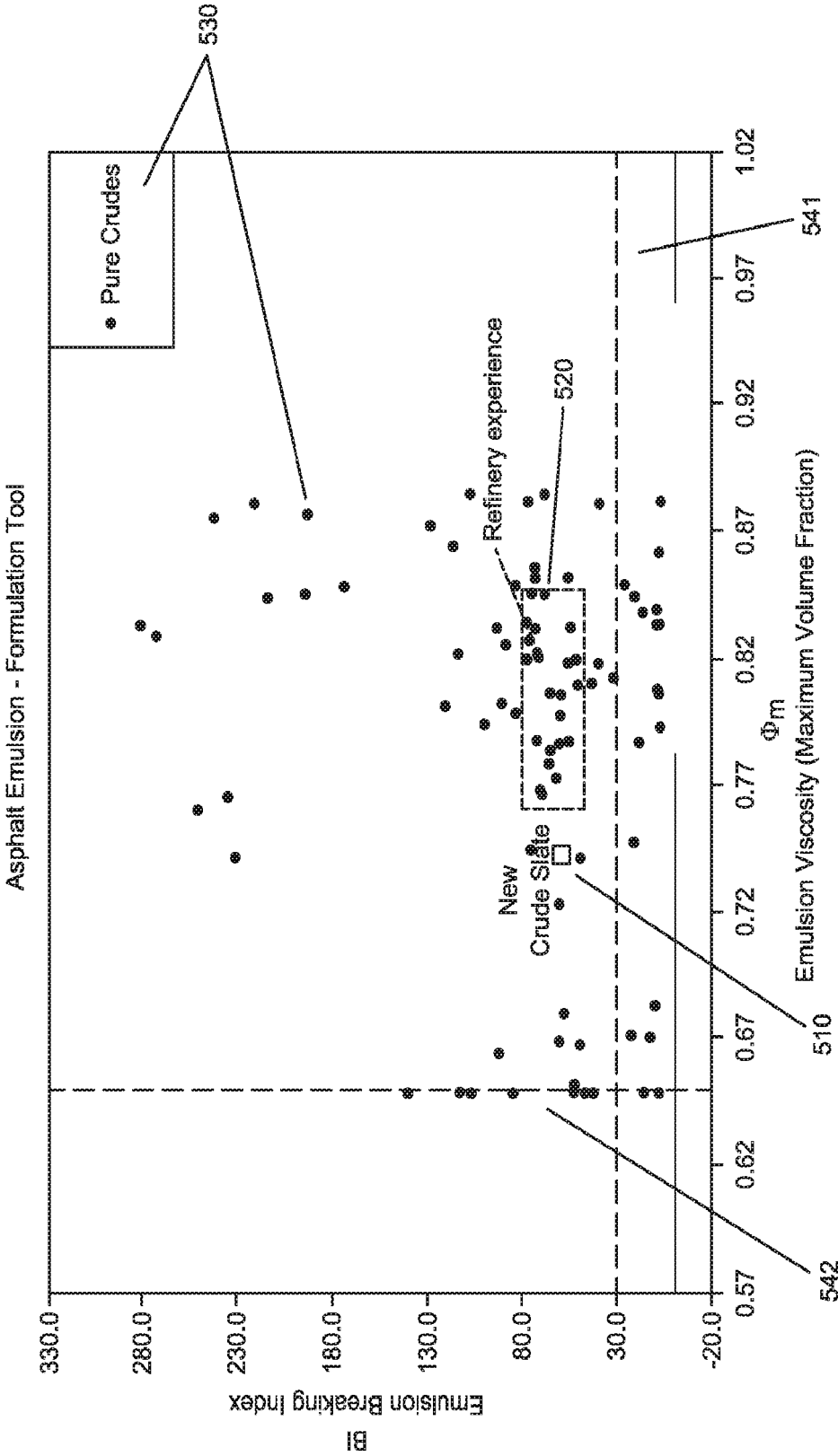


FIG. 5

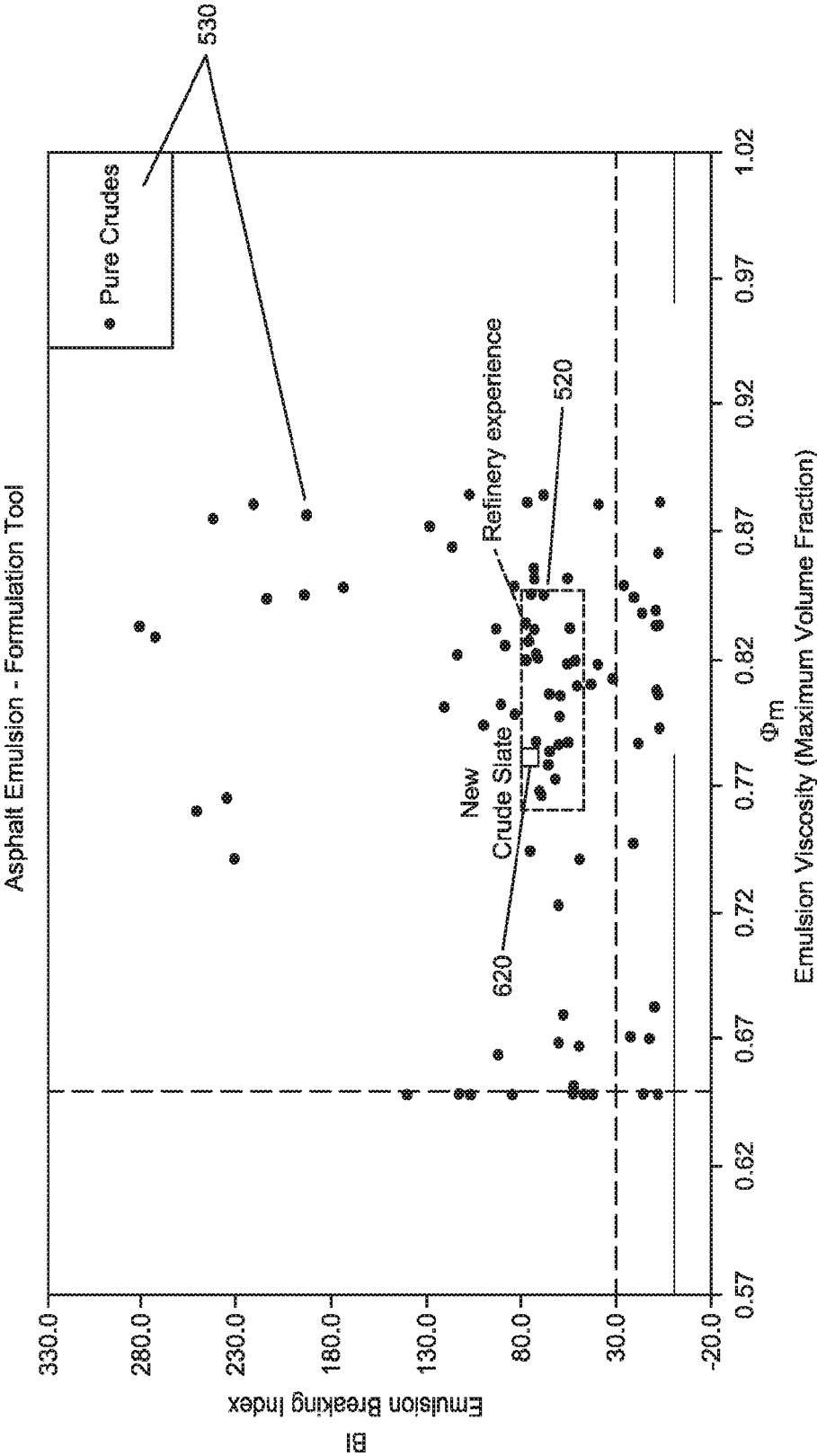


FIG. 6

7/10

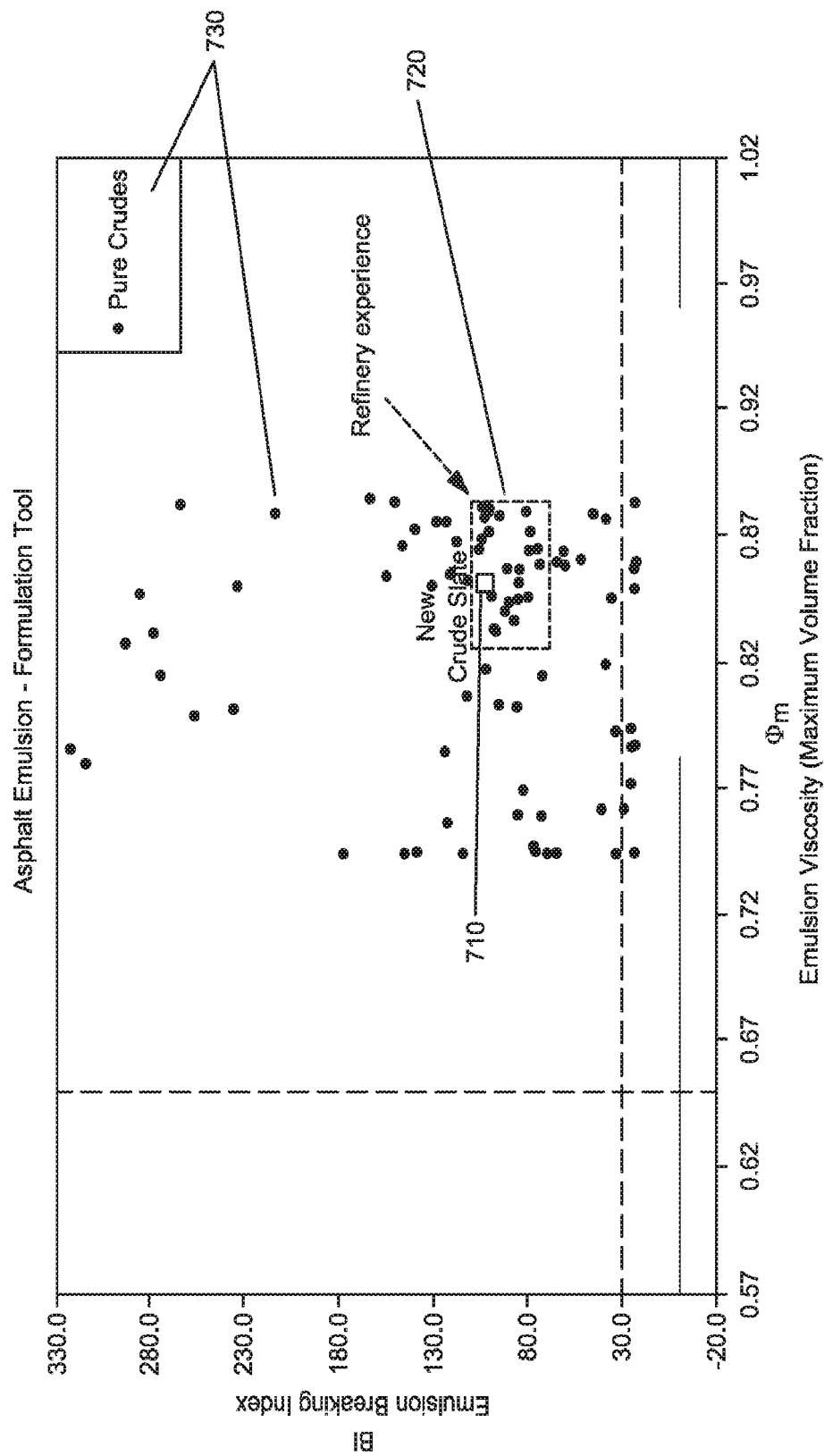


FIG. 7

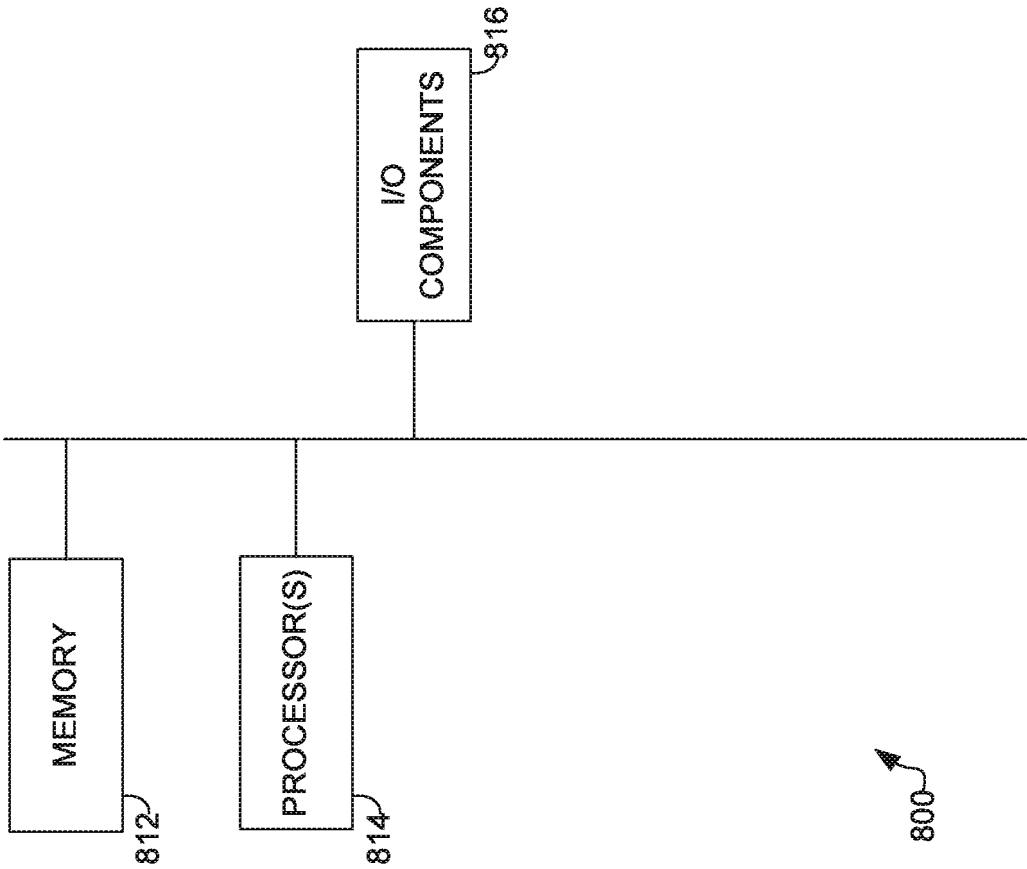


FIG. 8

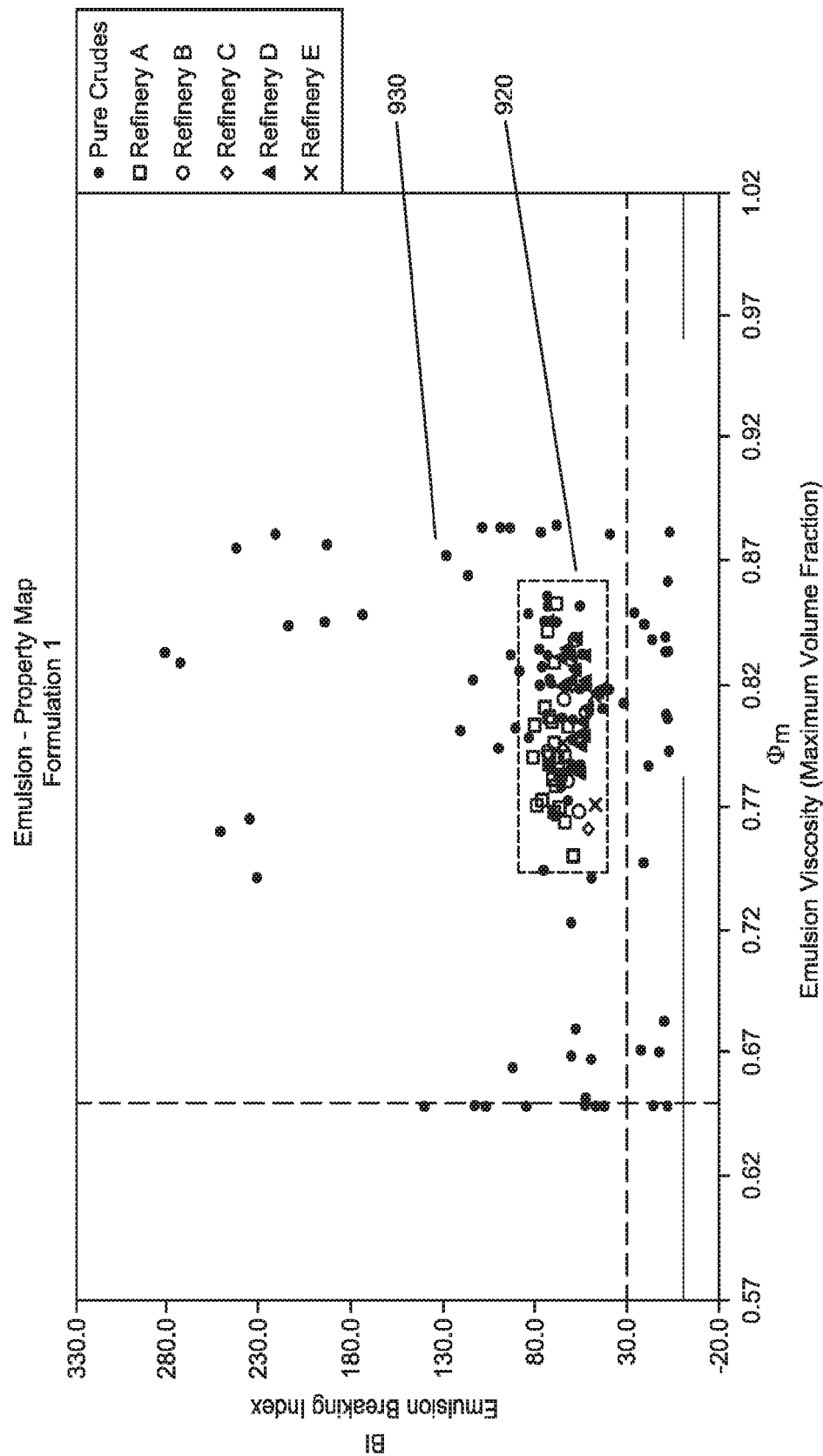


FIG. 9

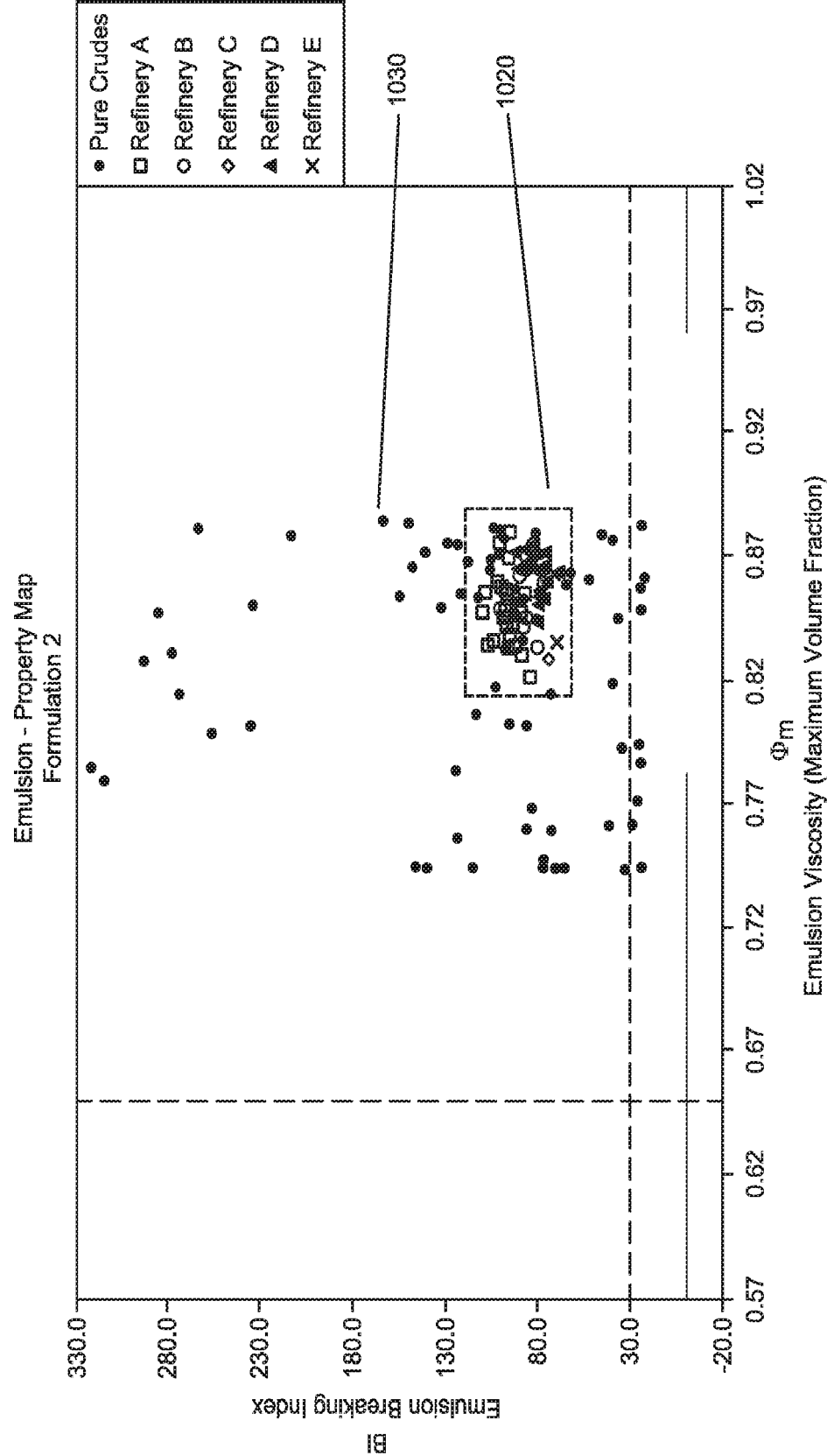


FIG. 10