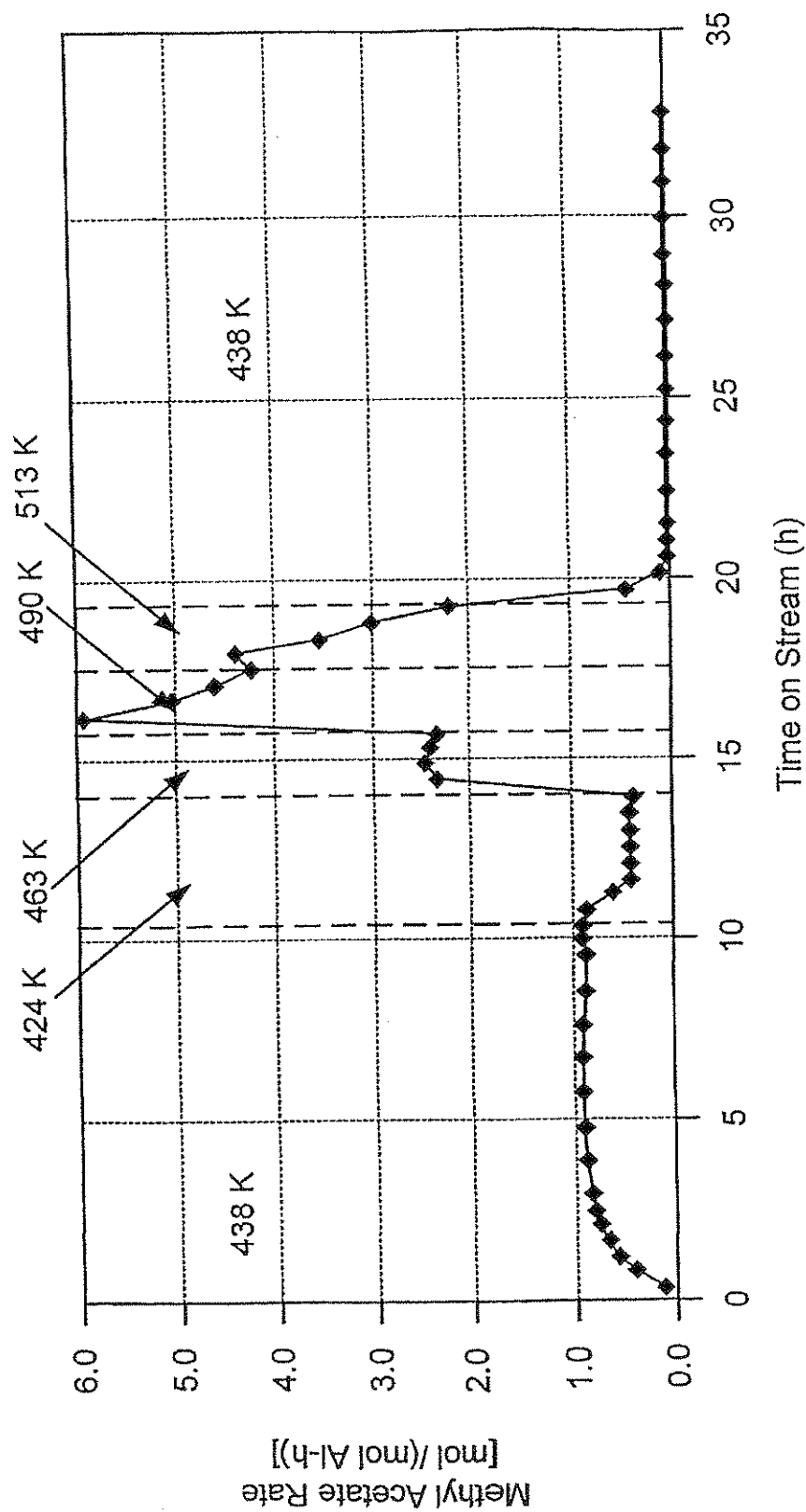


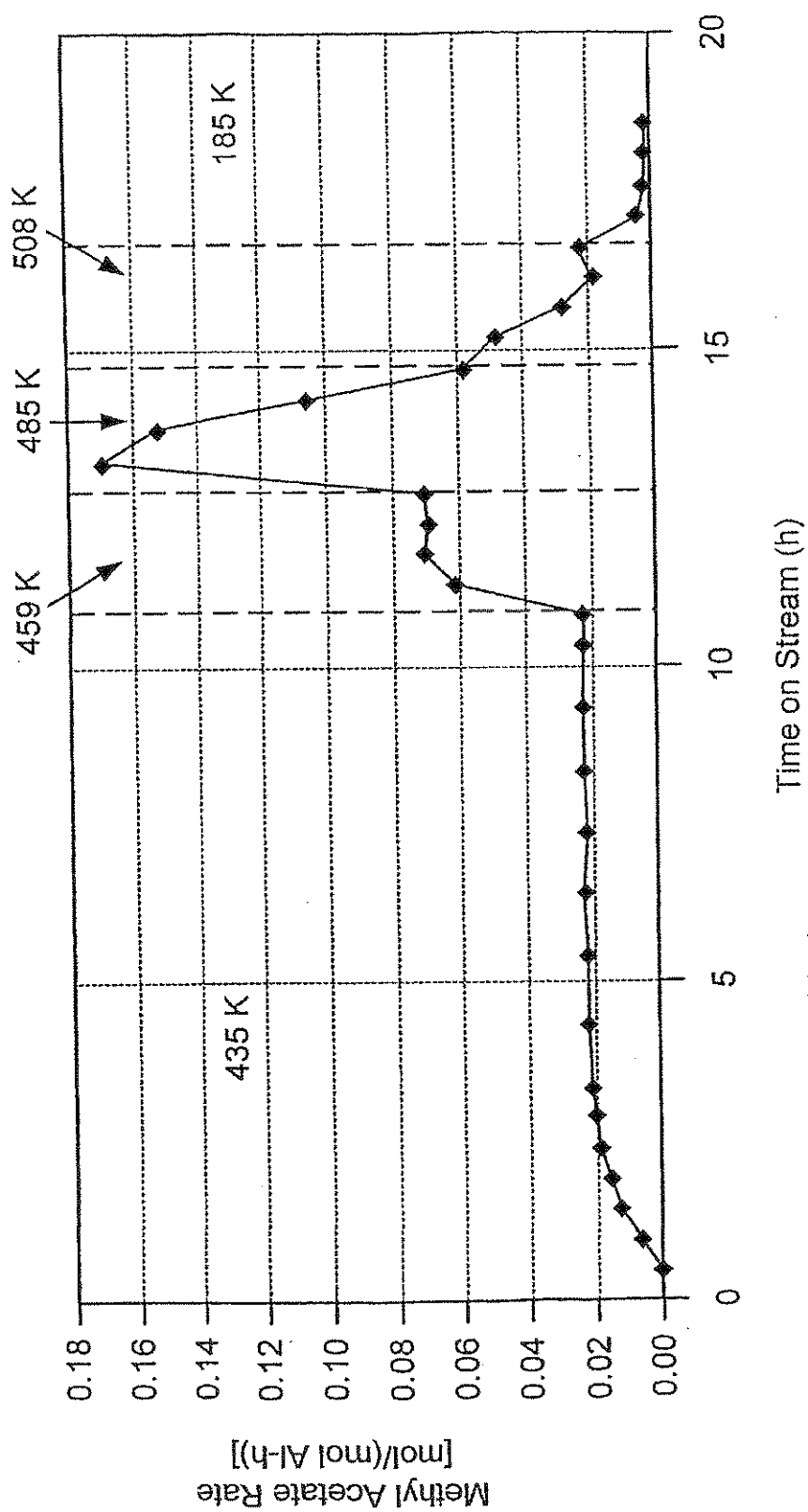
1/9



032705: 930 kPa CO, 20 kPa DME, 50 kPa Ar,
0.425 g HM OR (dehydrated), 100 cc/min total flow

FIG. 1 [a]

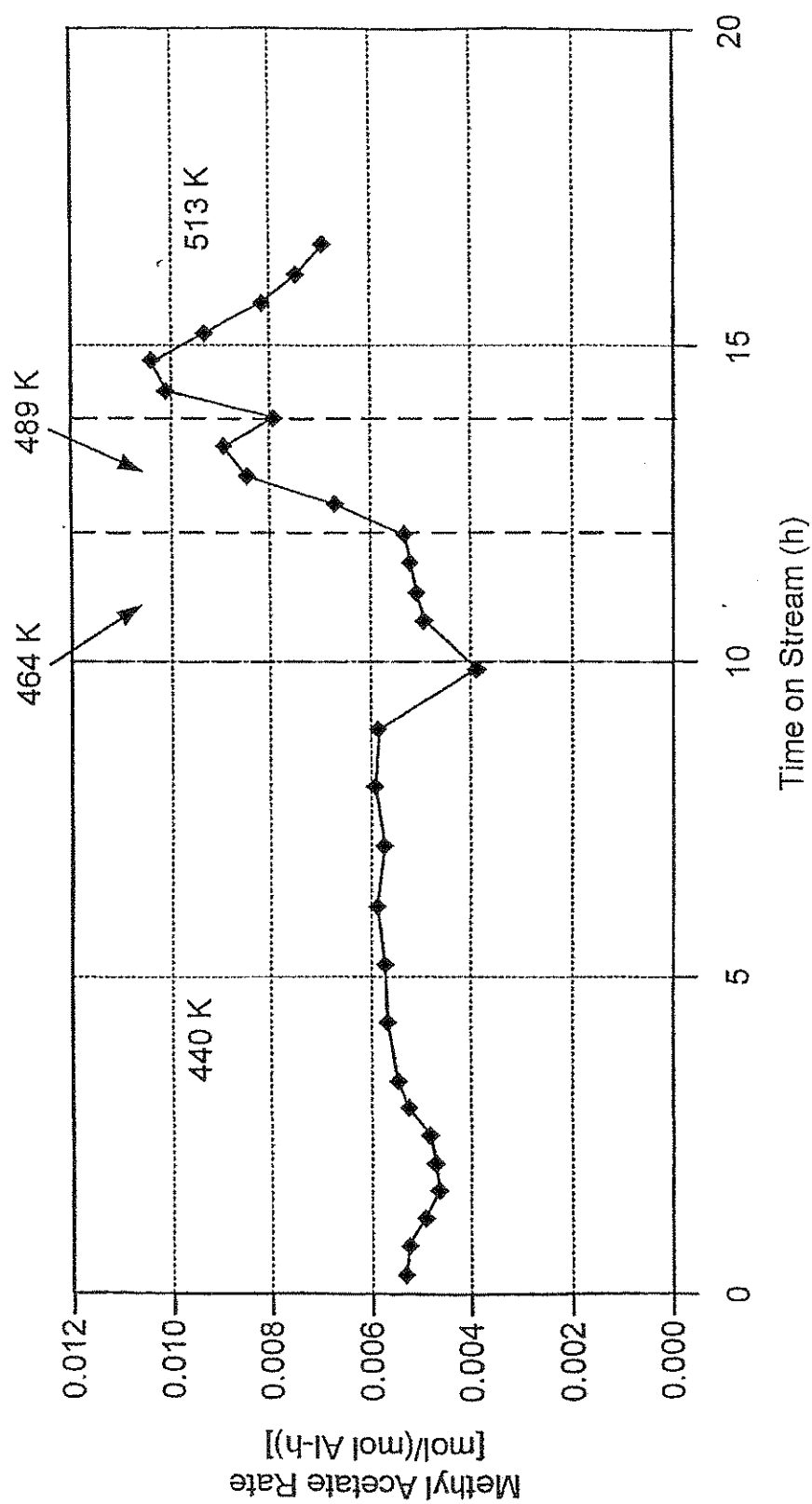
2/9



032905: 930 kPa CO, 20 kPa DME, 50 kPa Ar,
 0.2974 g HZSM 5 (dehydrated), Si/Al2 = 25, 100 cc/min total flow

FIG. 1 [b]

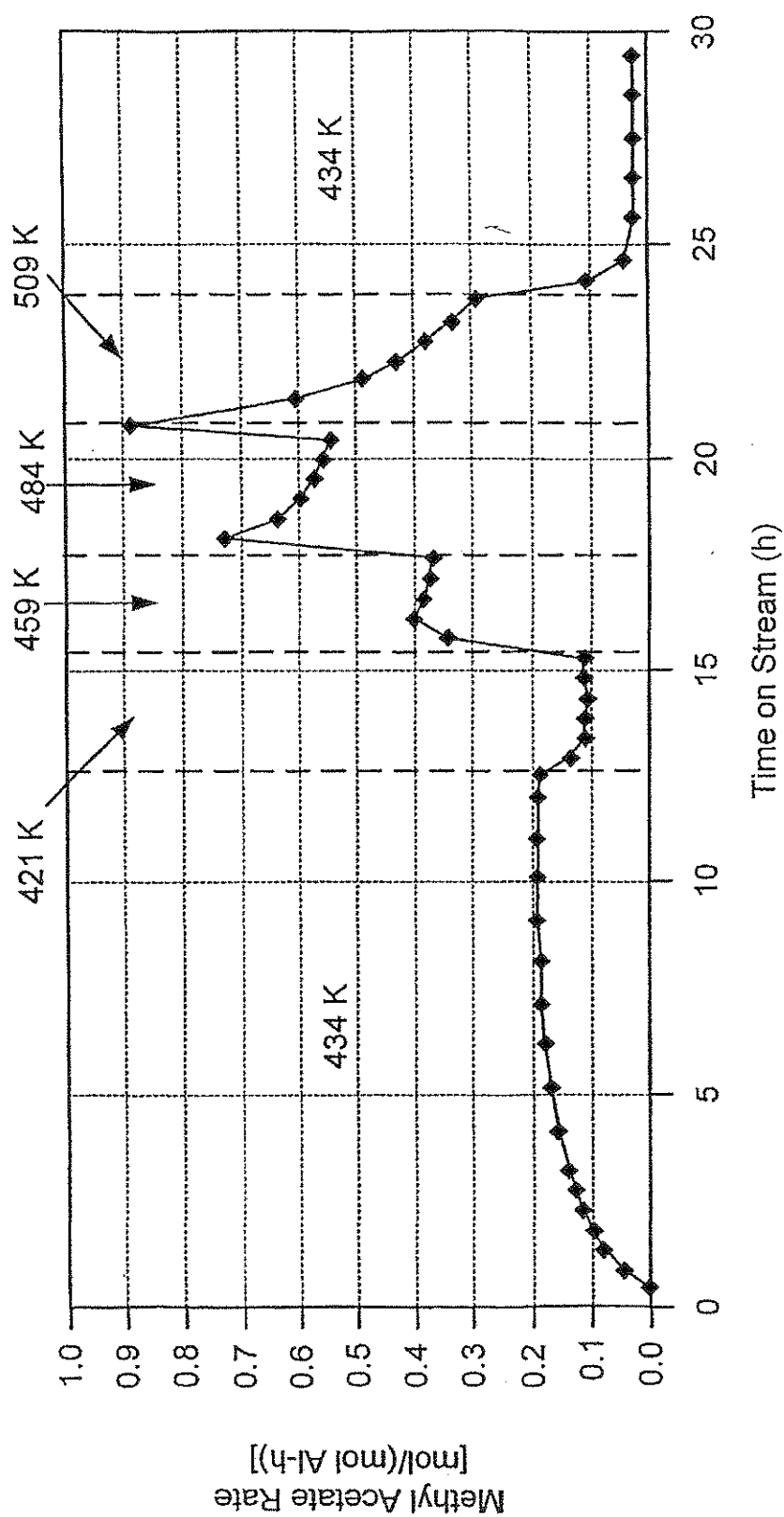
3/9



033105: 930 kPa CO, 20 kPa DME, 50 kPa Ar,
0.1528 g HY (dehydrated), Si/Al2 = 6,100 cc/min total flow

FIG. 1 [c]

4/9

**FIG. 1 [d]**

Methyl acetate formation rates on a) H-MOR (Si/Al = 10), b) H-ZSM5 (Si/Al = 12),
c) H-Y (Si/Al = 3), and d) H-FER (Si/Al = 34) [930 kPa CO, 20 kPa DME, 50 kPa Ar]

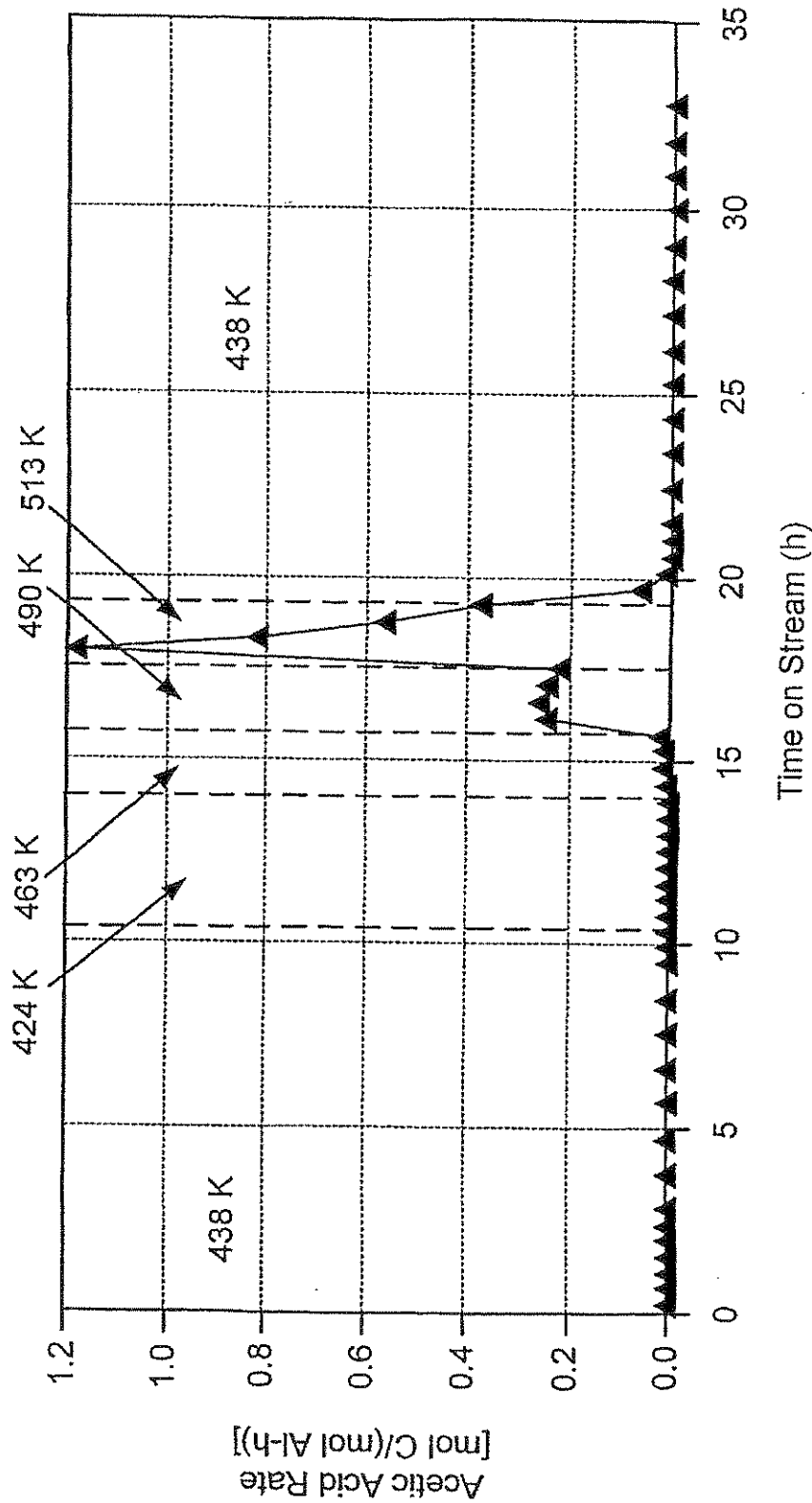
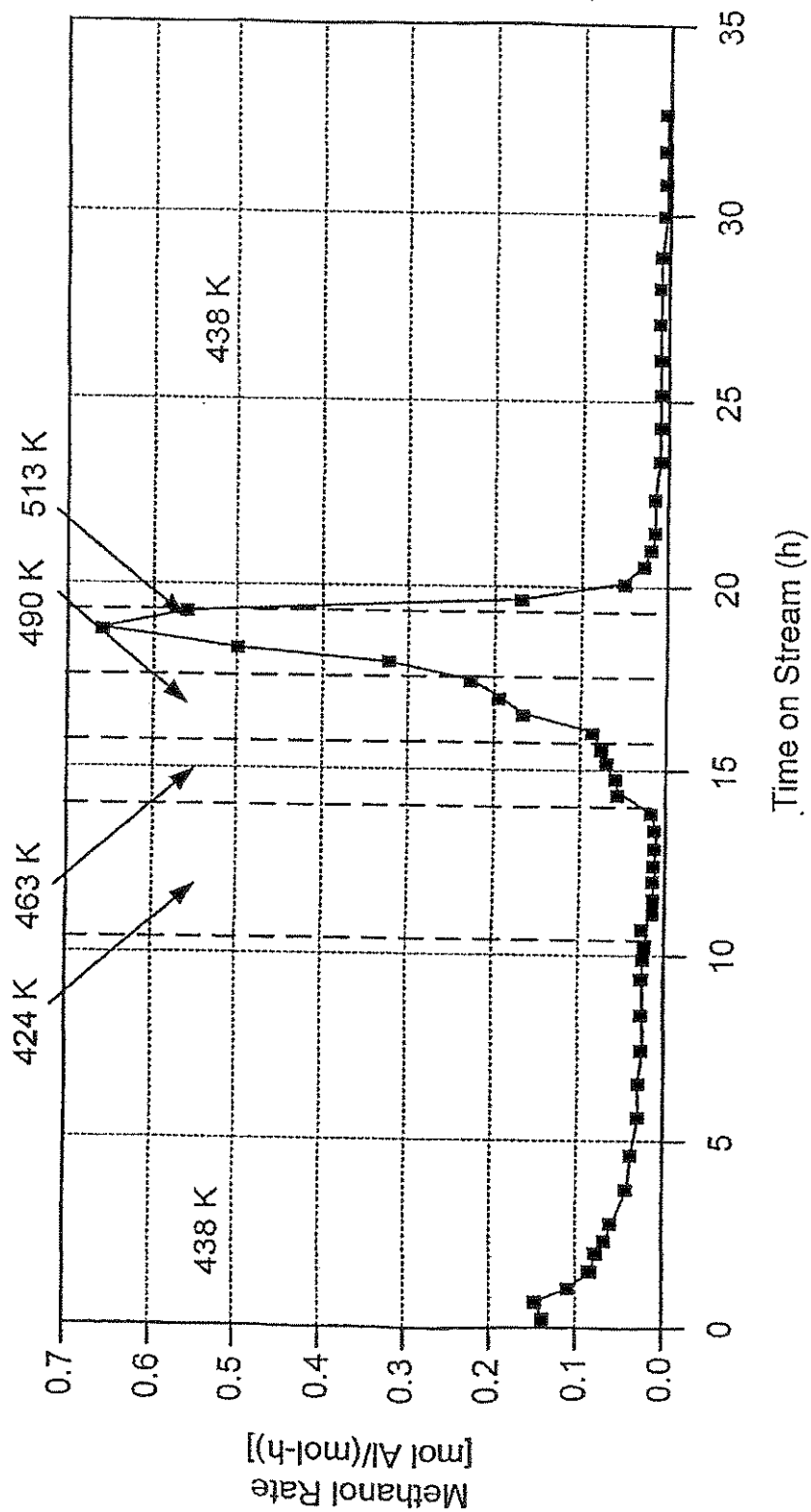


FIG. 2

Acetic acid formation rates on H-MOR (Si/Al = 10) [930 kPa CO, 20 kPa DME, 50 kPa Ar]

6/9

**FIG. 3**

Methanol formation rates on H-MOR ($\text{Si}/\text{Al} = 10$) [930 kPa CO, 20 kPa DME, 50 kPa Ar]

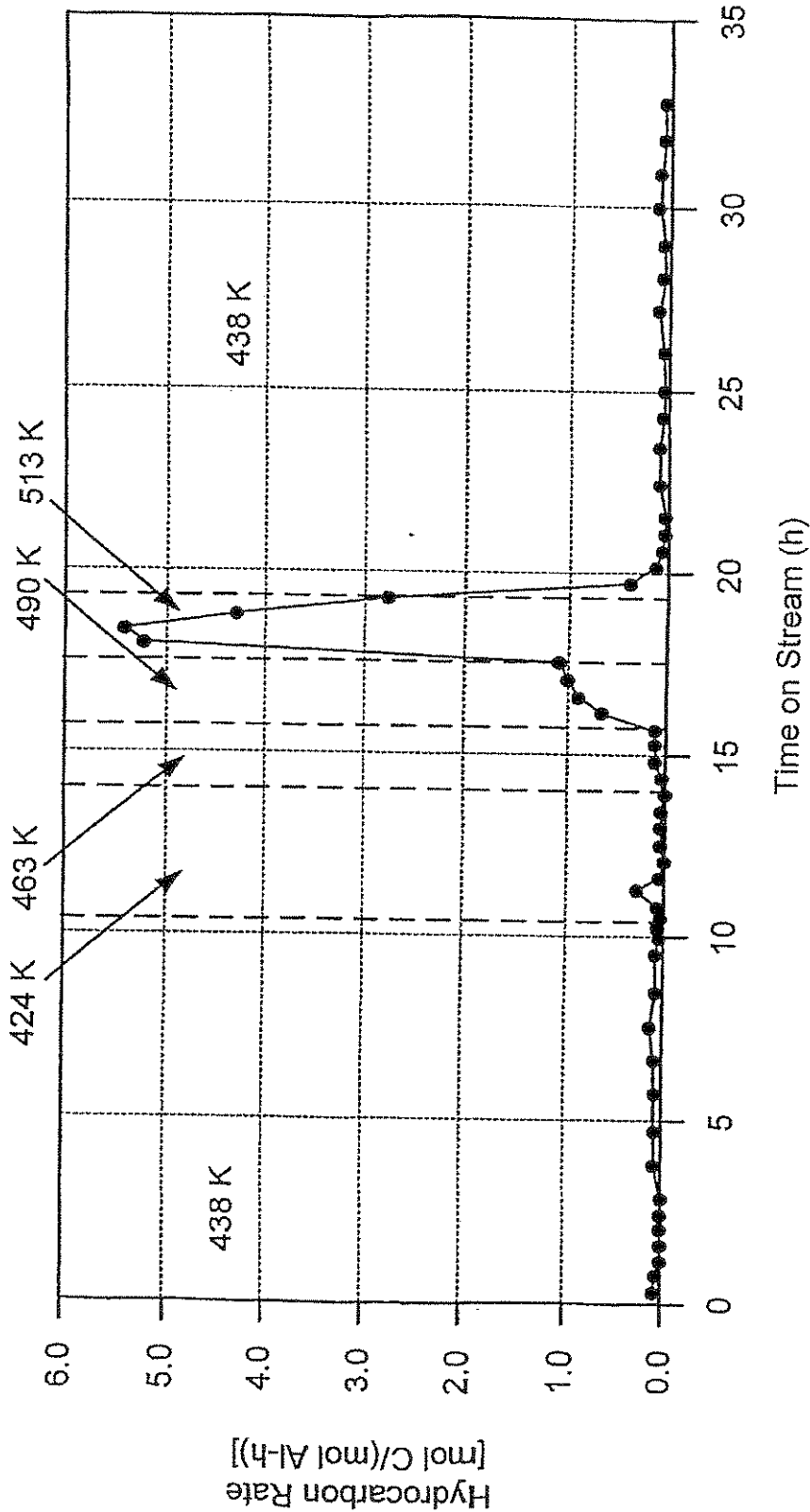


FIG. 4

Hydrocarbon formation rates on H-MOR (Si/Al = 10) [930 kPa CO, 20 kPa DME, 50 kPa Ar]

8/9

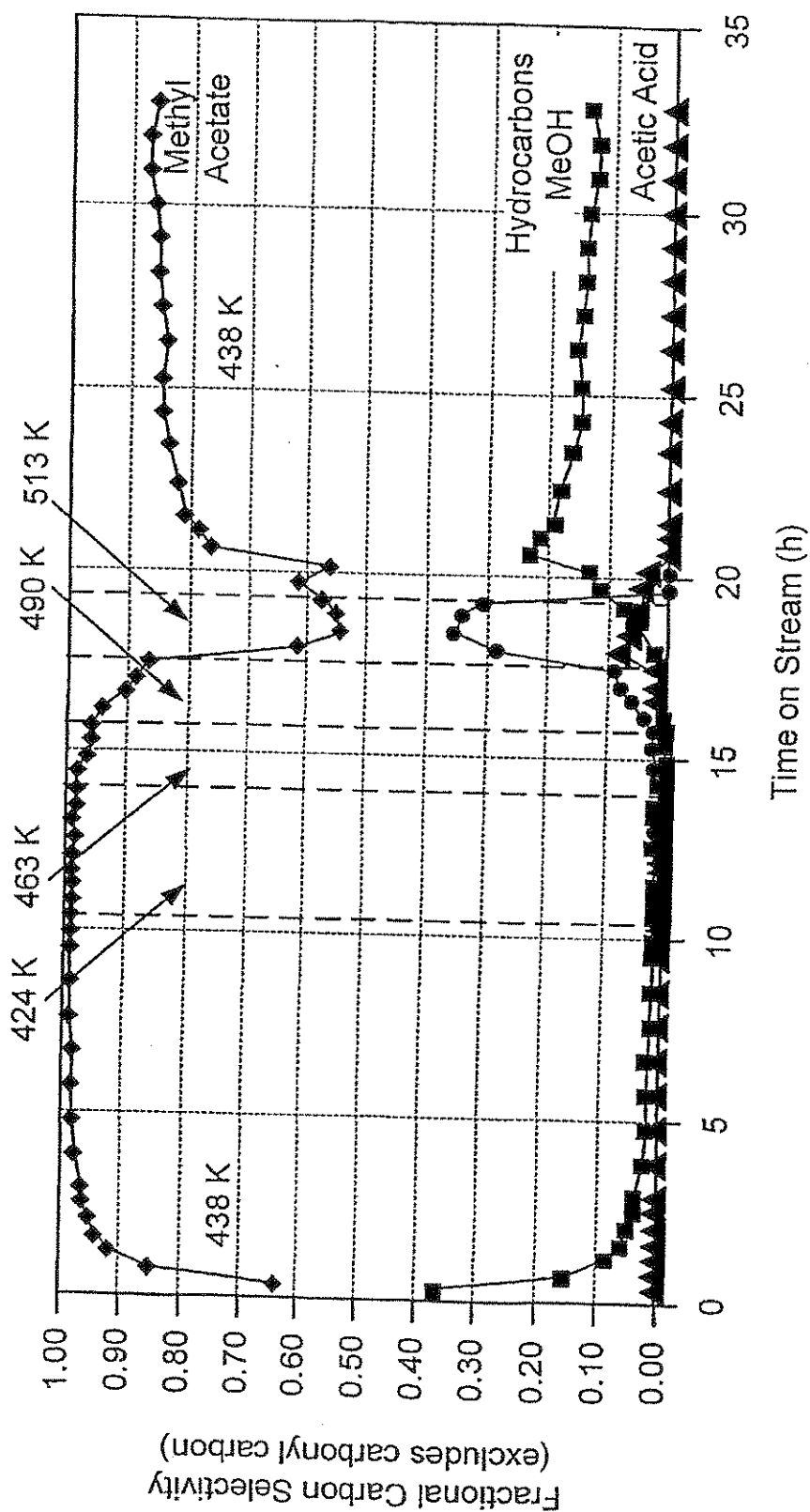
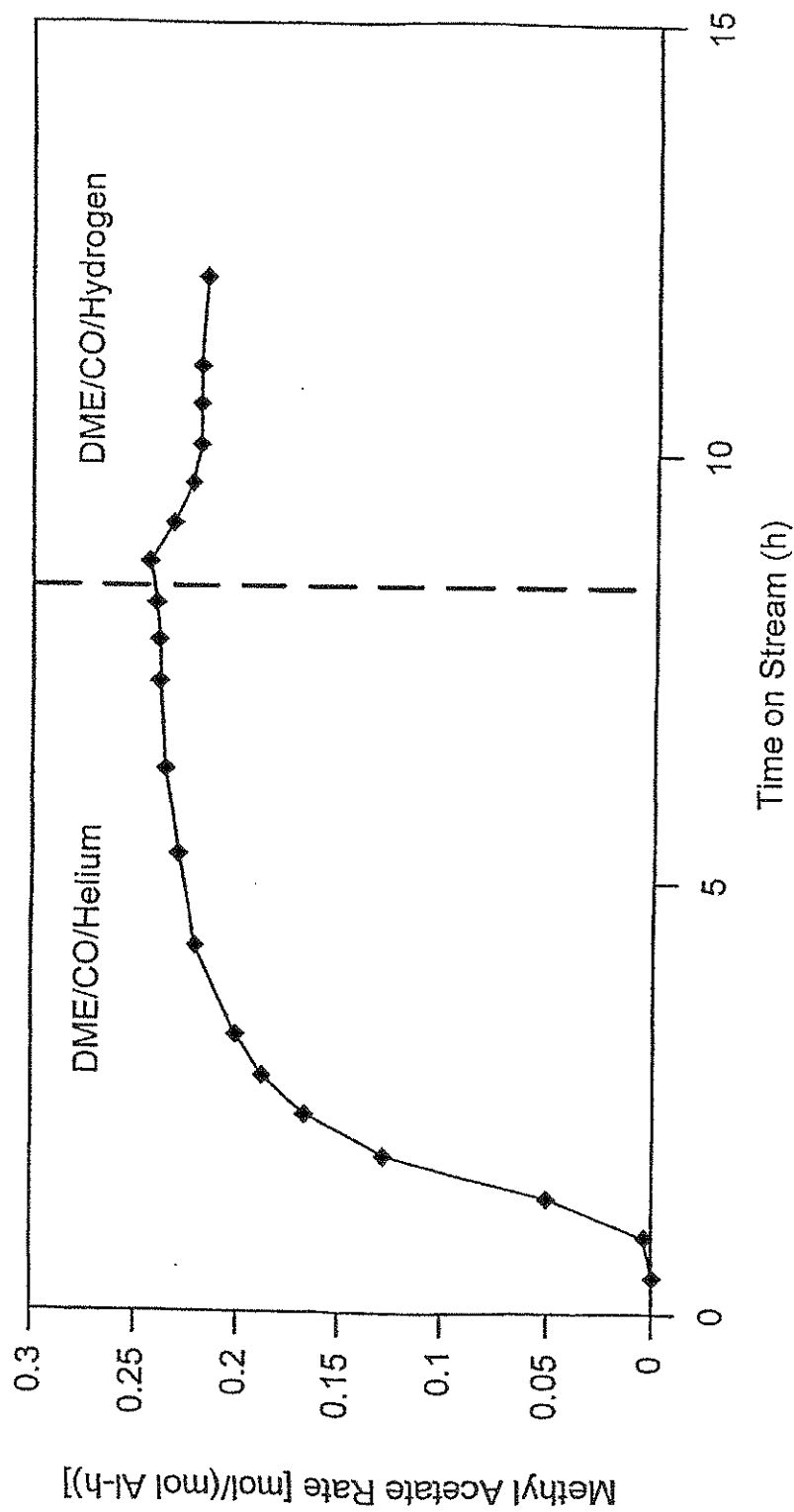


FIG. 5

Product selectivities on H-MOR (Si/Al = 10) [930 kPa CO, 20 kPa DME, 50 kPa Ar]

9/9

**FIG. 6**

Methyl acetate rates on H-MOR (Si/Al = 10) [465 kPa CO, 20 kPa DME, 25 kPa Ar, 500 kPa helium or 500 kPa hydrogen, 438 K]