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APPENDIX

Appendix A HPLC chromatograms of Glycerols and Polyglycerols

Chromatogram

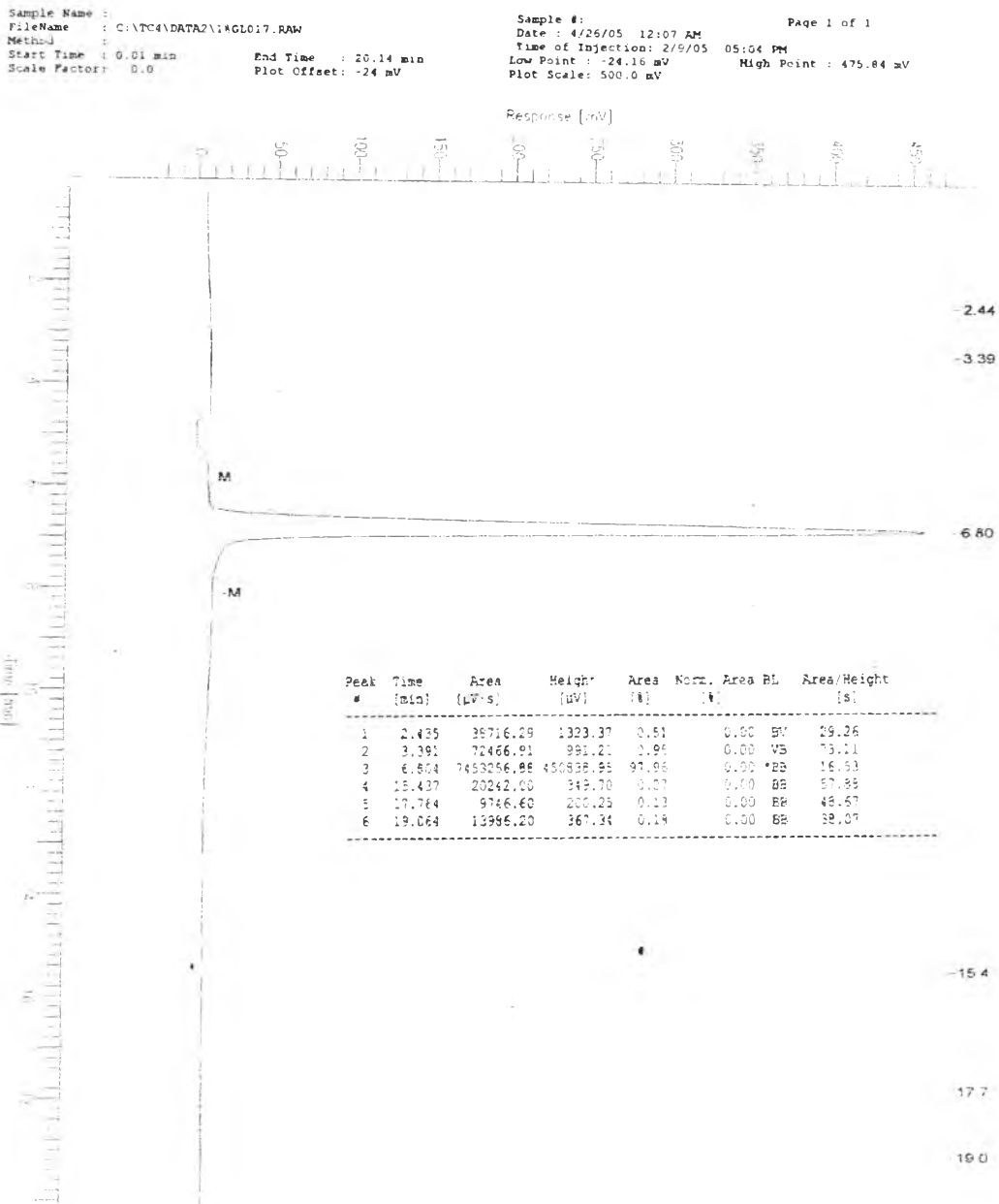


Figure A1 Glycerol reference.

Chromatogram

Sample Name :
 FileName : C:\TC4\DATA2\14DI017.RAW
 Method :
 Start Time : 0.00 min
 Scale Factor: 0.0
 Sample #: 1
 Date : 4/26/05 12:08 AM
 Time of Injection: 2/9/05 05:38 PM
 Low Point : -24.16 mV
 Plot Scale: 500.0 mV
 Page 1 of 1
 High Point : 475.84 mV
 End Time : 25.35 min
 Plot Offset: -24 mV

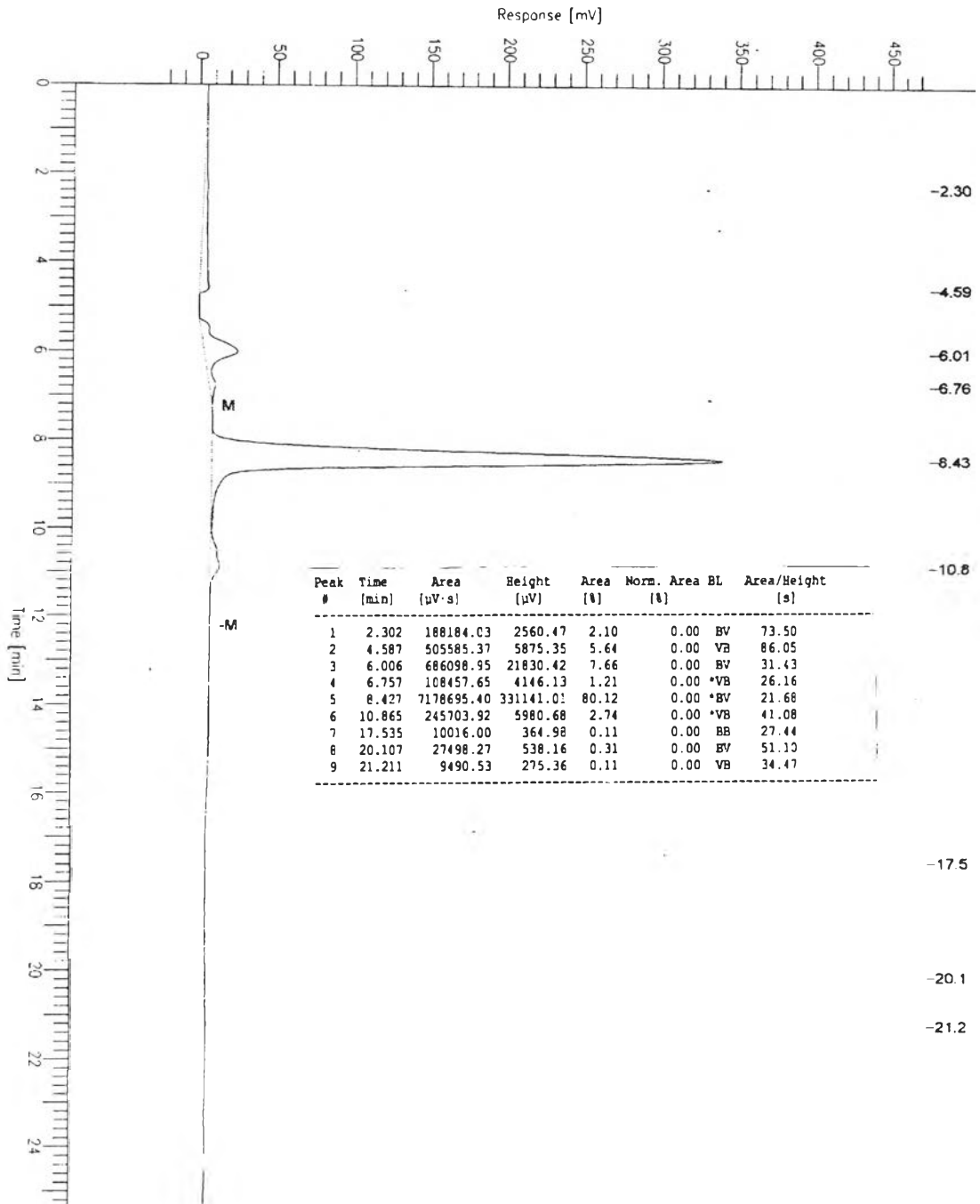


Figure A2 Diglycerol reference.

Chromatogram

Sample Name :
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 Method :
 Start Time : 0.01 min
 Scale Factor: 0.0
 Sample #: 4/26/05 12:15 AM
 Date : 4/26/05 12:15 AM
 Time of Injection: 2/12/05 04:33 PM
 Low Point : -24.16 mV
 Plot Scale: 500.0 mV
 Page 1 of 1
 End Time : 20.14 min
 Plot Offset: -24 mV
 High Point : 475.83 mV

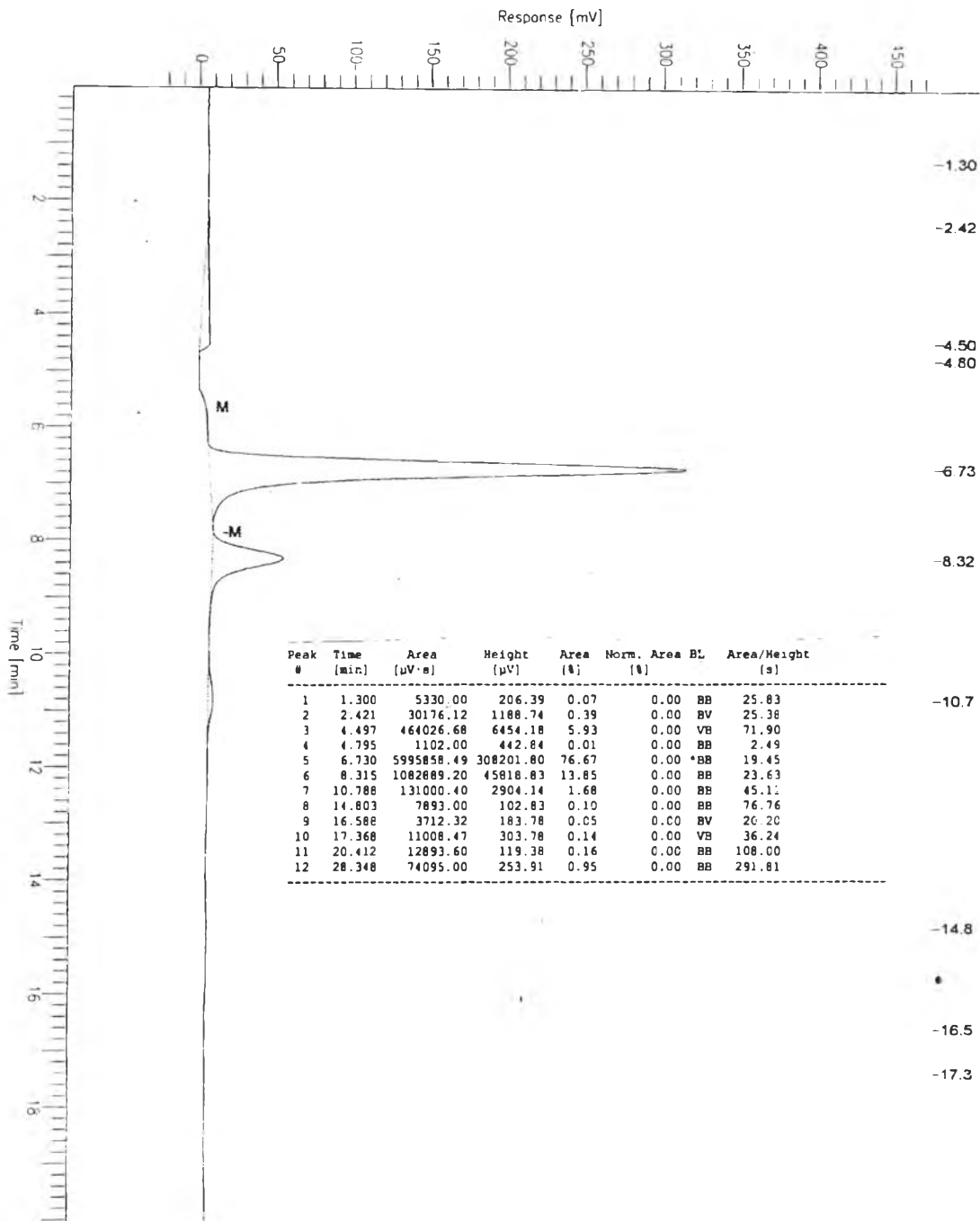


Figure A5 Polymerization with homogeneous catalyst $[\text{Ca}(\text{OH})_2]$.

Condition: 2.5 mol%, 250 °C, 4 hours

Chromatogram

Sample Name :
 FileName : C:\TC4\DATA2\SCA0001.RAW
 Method :
 Start Time : 0.01 min
 Scale Factor: 0.0

End Time : 20.14 min
 Plot Offset: -24 mV

Sample #: Page 1 of 1
 Date : 4/26/05 12:13 AM
 Time of Injection: 2/12/05 06:36 PM
 Low Point: -24.16 mV High Point: 475.83 mV
 Plot Scale: 500.0 mV

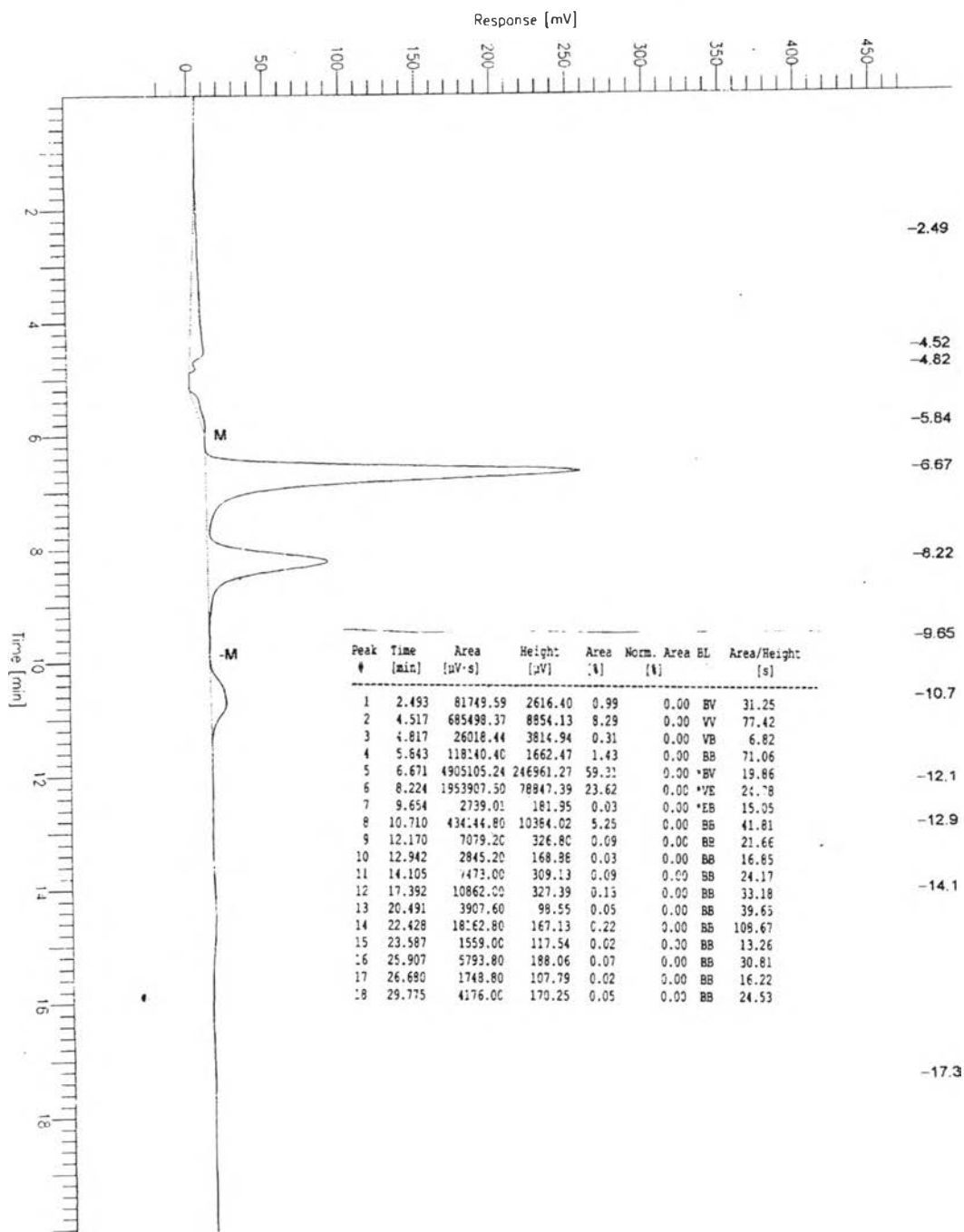


Figure A6 Polymerization with heterogeneous catalyst [CaO].

Condition: 2.5 mol%, 250 °C, 4 hours

Chromatogram

Sample Name : C:\TC4\DATA2\SMG0001.RAW
 File Name : C:\TC4\DATA2\SMG0001.RAW
 Method :
 Start Time : 0.00 min End Time : 29.99 min
 Scale Factor : 0.0 Plot Offset : -24 mV

Sample # :
 Date : 4/26/05 12:17 AM
 Time of Injection: 2/12/05 05:56 PM
 Low Point : -24.16 mV High Point : 475.83 mV
 Plot Scale : 500.0 mV

Page 1 of 1

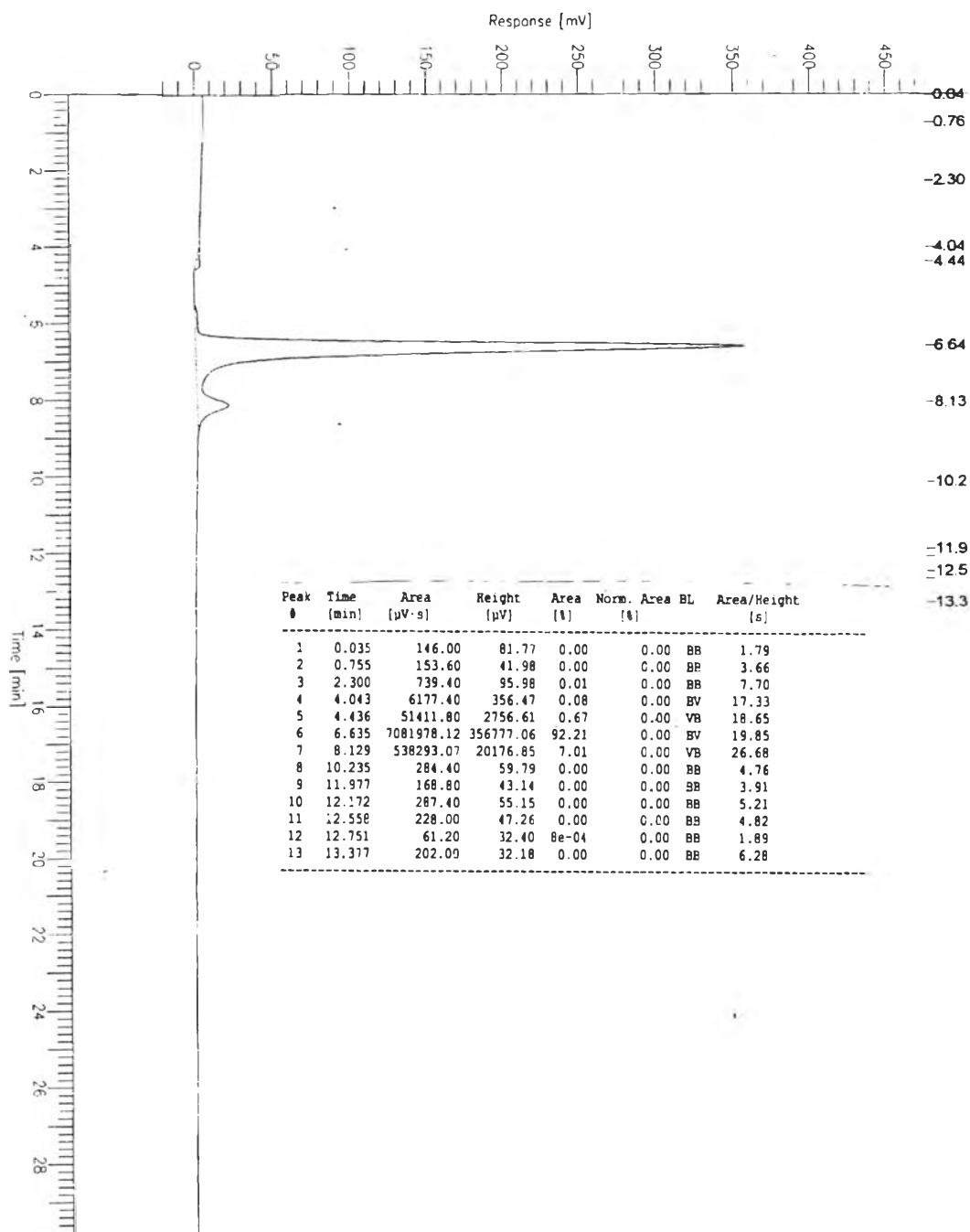


Figure A7 Polymerization with heterogeneous catalyst [MgO].

Condition: 2.5 mol%, 250 °C, 4 hours

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