

BASS & KHURY

Casualty Loss Reserve Seminar

2004

Las Vegas, NV

Concurrent Workshop Handout:

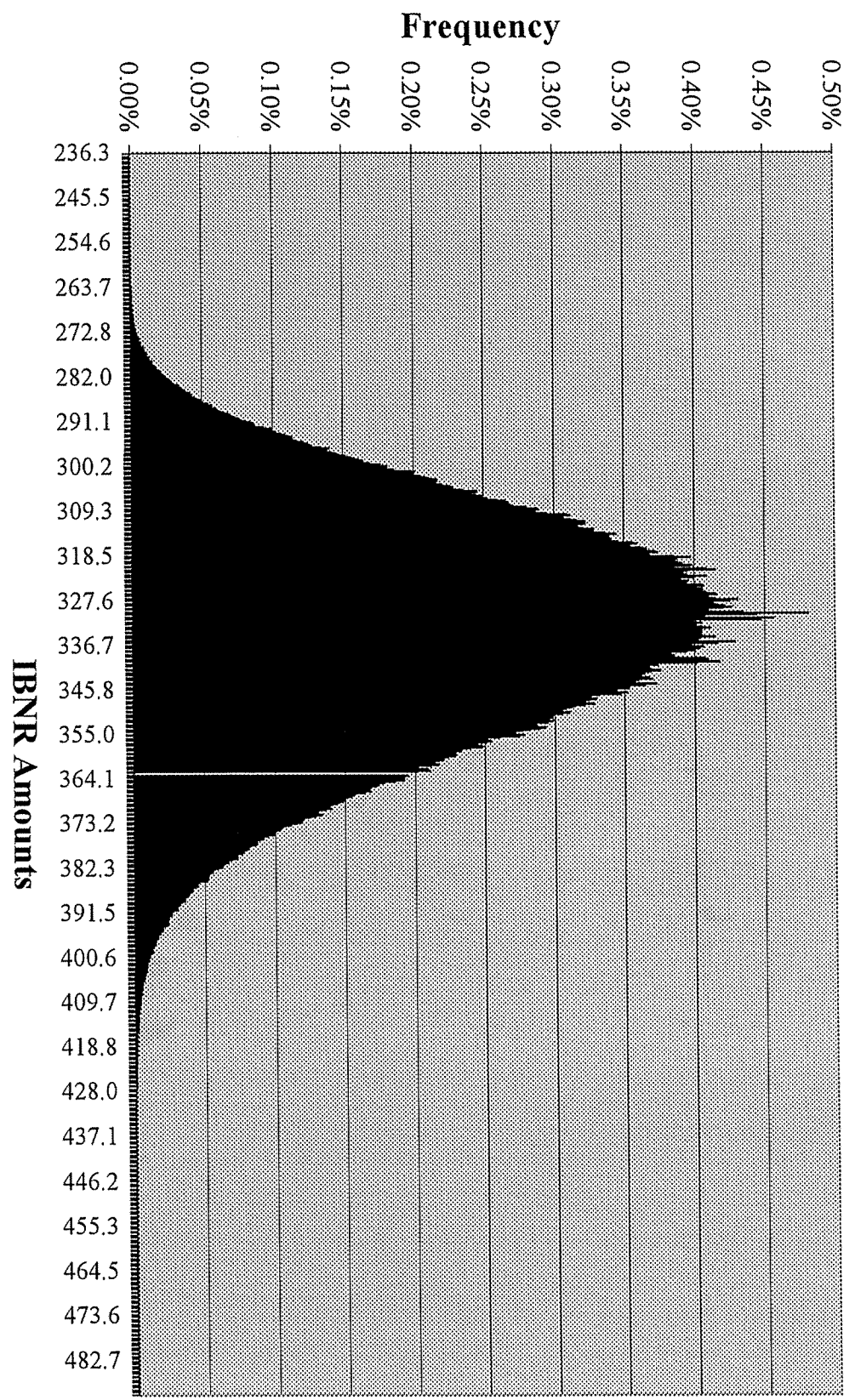
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The Challenge of Reserving: Small v. Large Companies
Focus on Private Passenger Auto Liability Insurance

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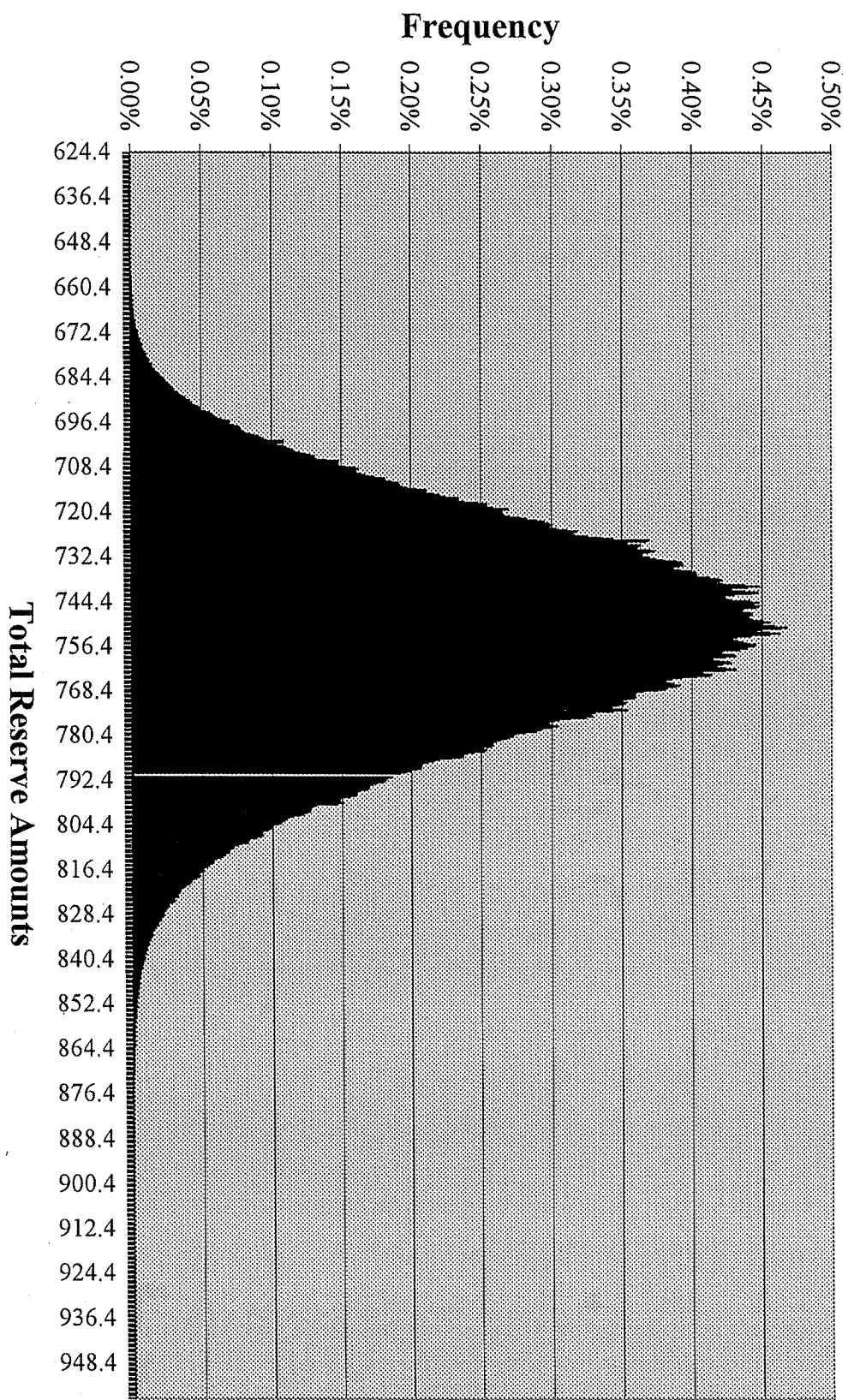
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Company No. 1. PPAL. Very Large Company
 IBNR Distribution of Outcomes Using Unweighted Reported LDF's



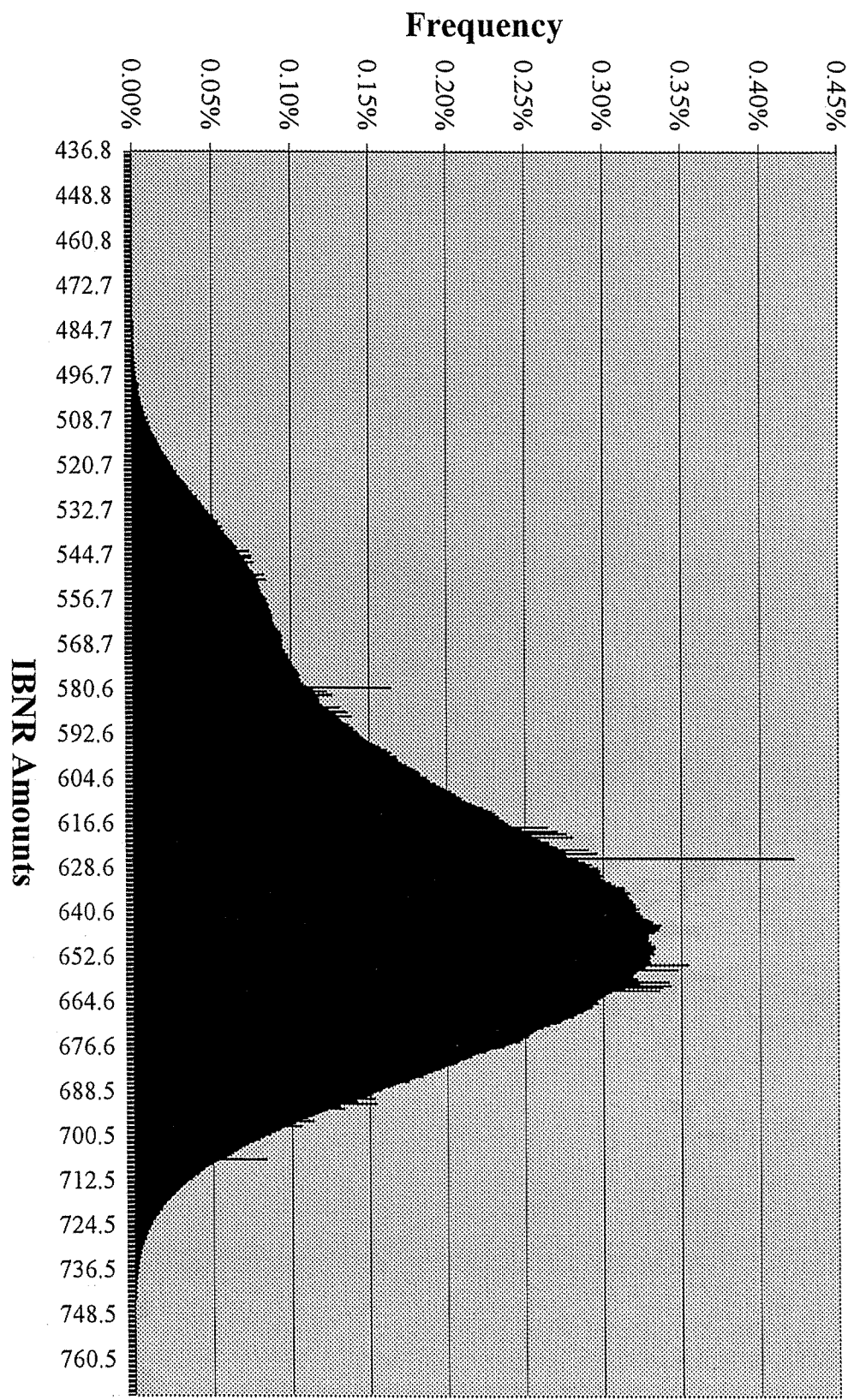
$\mu = 333.6$ $\sigma = 23.5$

Company No. 1. PPAL. Very Large Company.
Total Reserves Distribution of Outcomes Using Unweighted Paid LDF's



$\mu = 752.8$ $\sigma = 29.3$

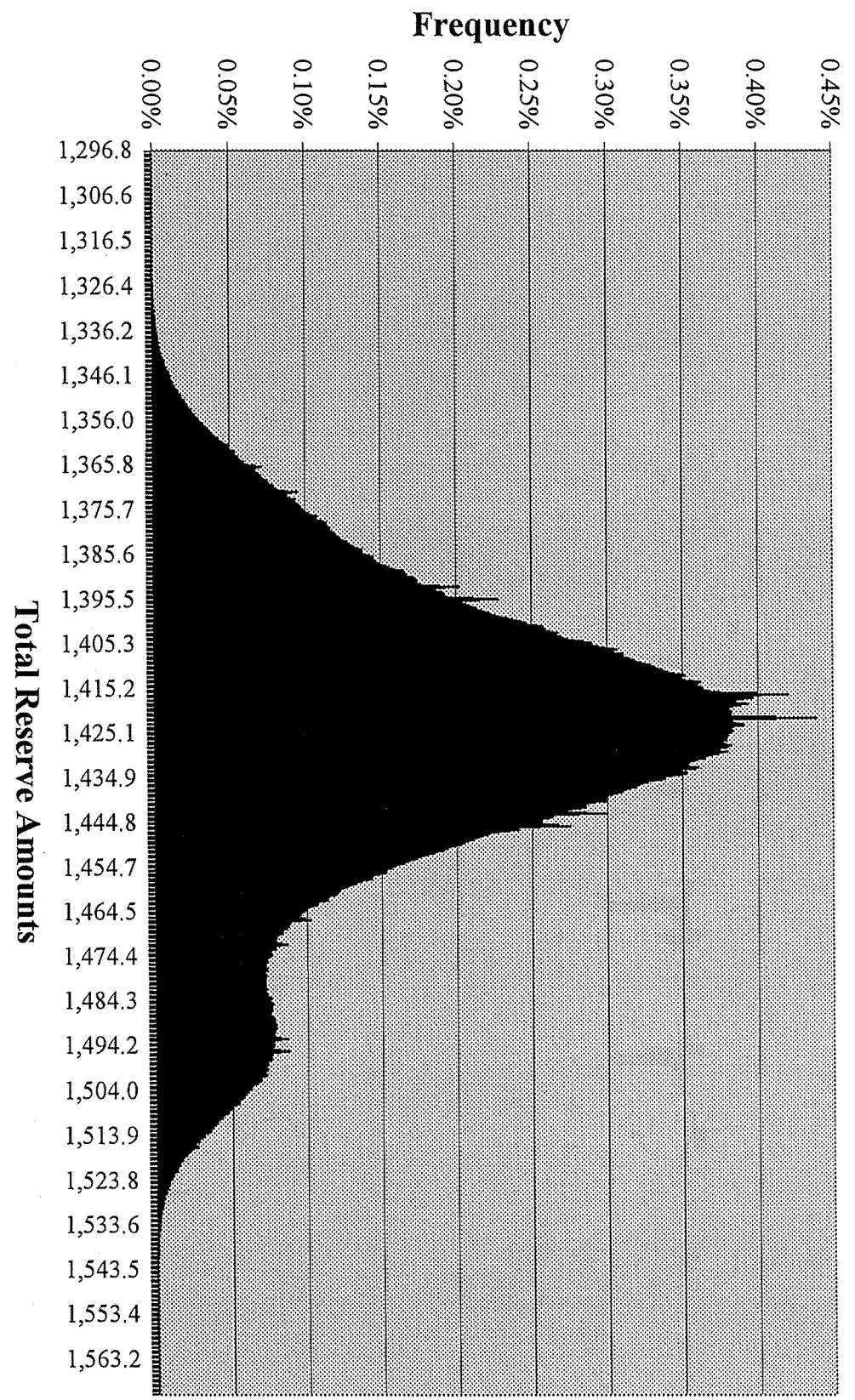
Company No. 2. PPAL. Very Large Company
 IBNR Distribution of Outcomes Using Unweighted Reported LDF's



$\mu = 631.7$ $\sigma = 43.3$

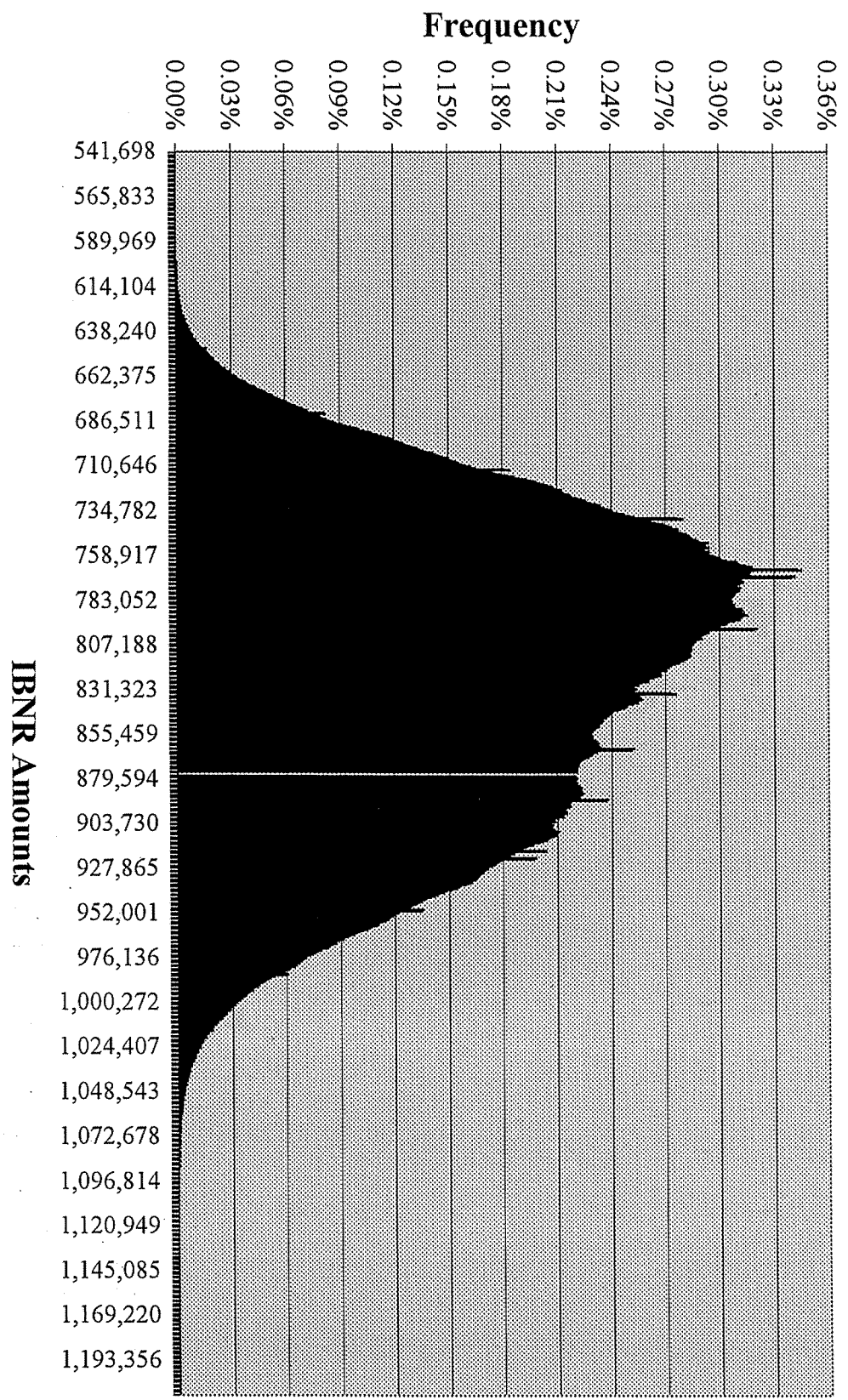
(4)

Company No. 2. PPAI. Very Large Company
Total Reserves Distribution of Outcomes Using Unweighted Paid LDF's



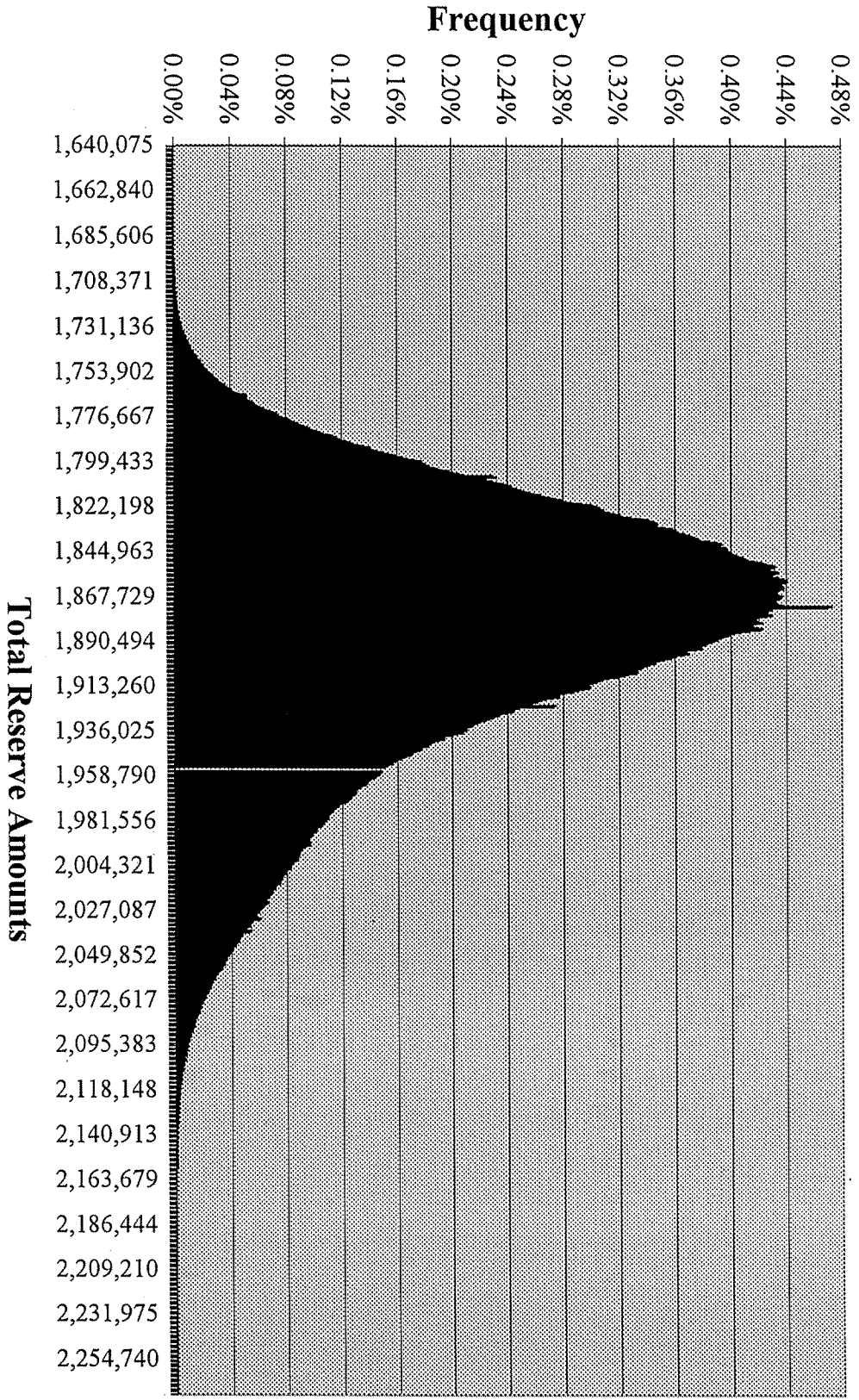
$\mu = 1,427.2$ $\sigma = 34.0$

**Company No. 3. PPAL. Very Large Company
IBNR Distributions of Outcomes Using Unweighted Reported LDF's**



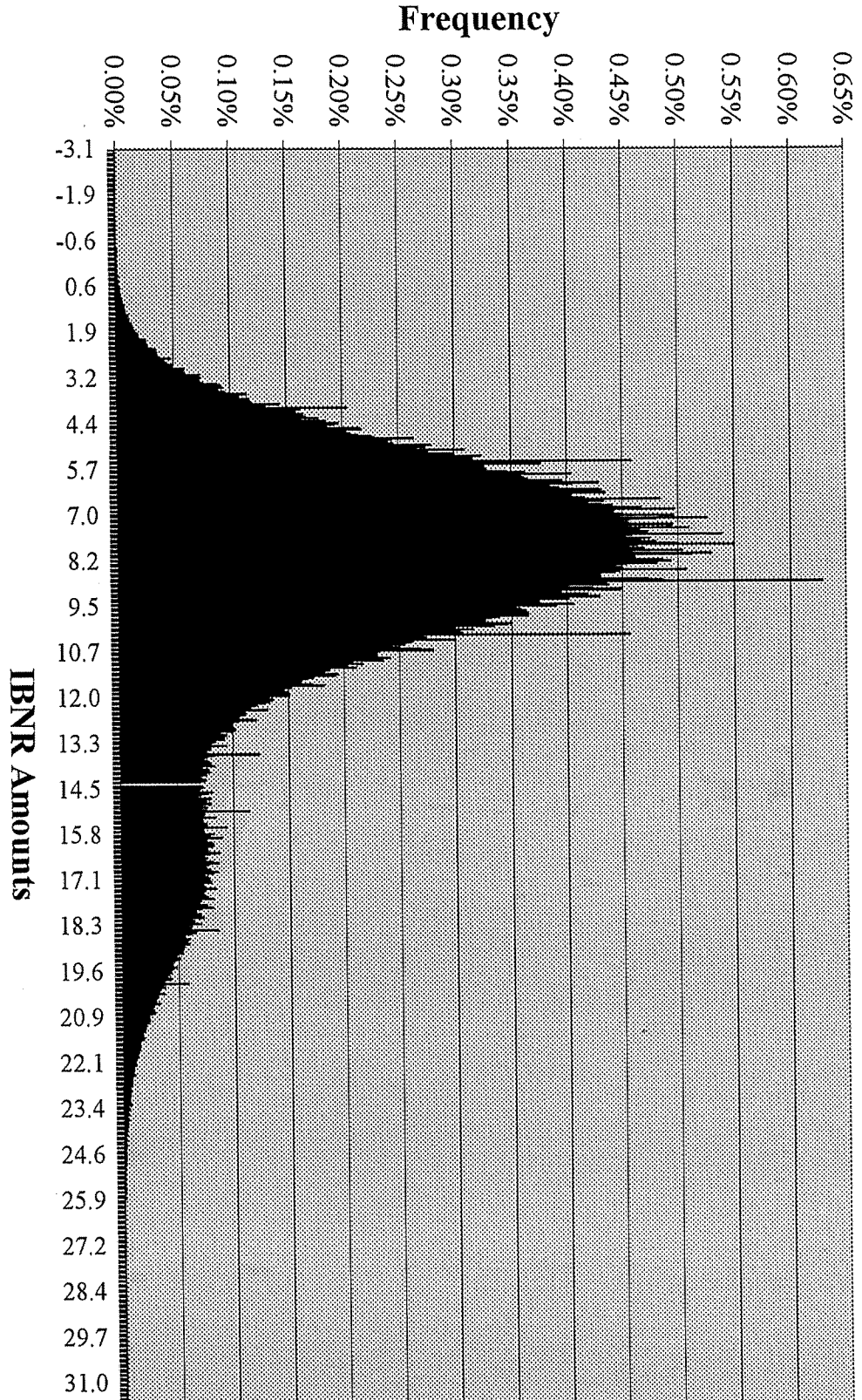
$\mu = 821,677$ $\sigma = 81,236$

**Company No. 3. PPAL. Very Large Company
Total Reserves Distribution of Outcomes Using Unweighted Paid LDF's**



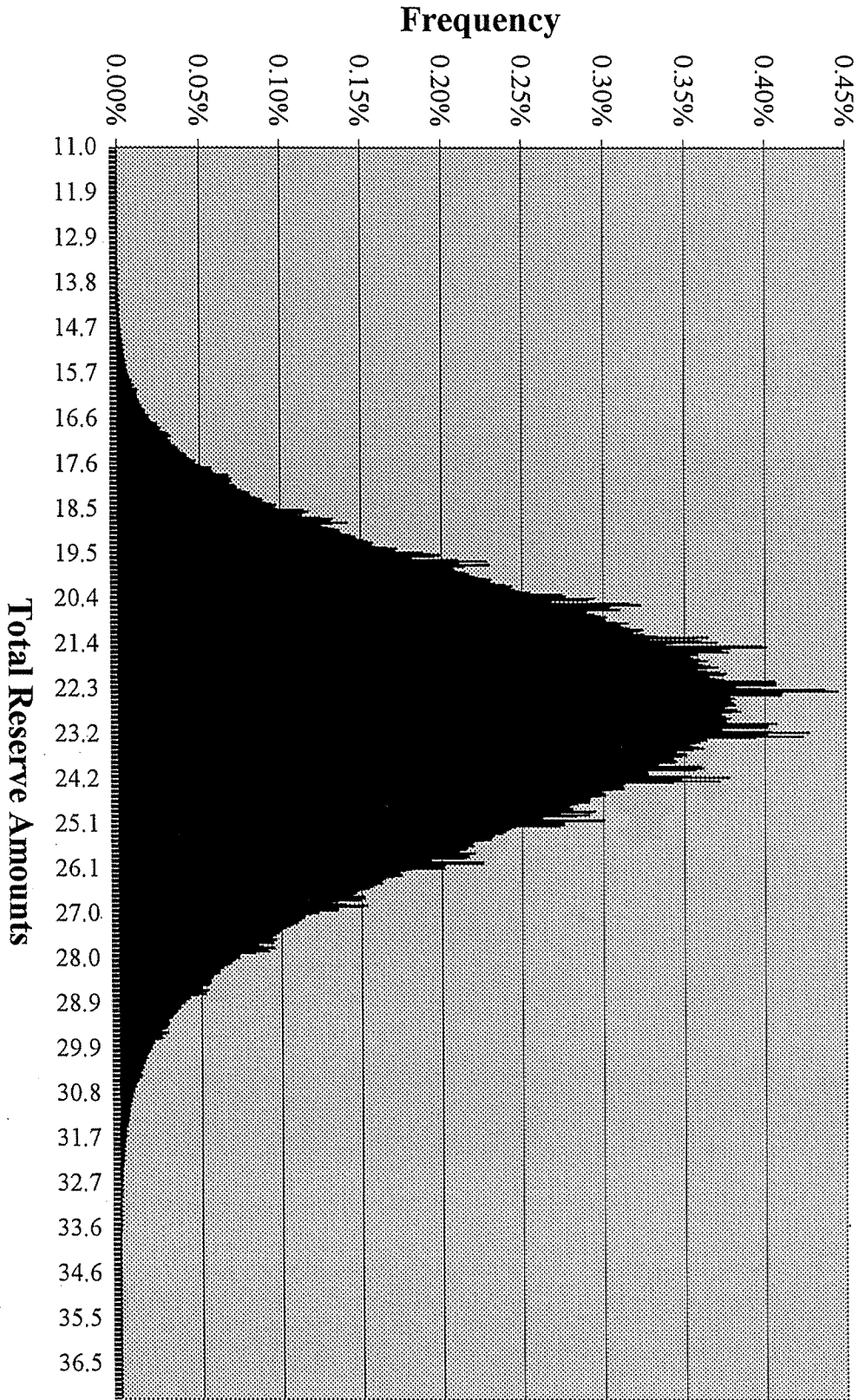
Handwritten: $\mu = 1,885,663$ $\sigma = 65,793$

Company No. 4. PPAL. Small Company
 IBNR Distribution of Outcomes Using Unweighted Reported LDF's



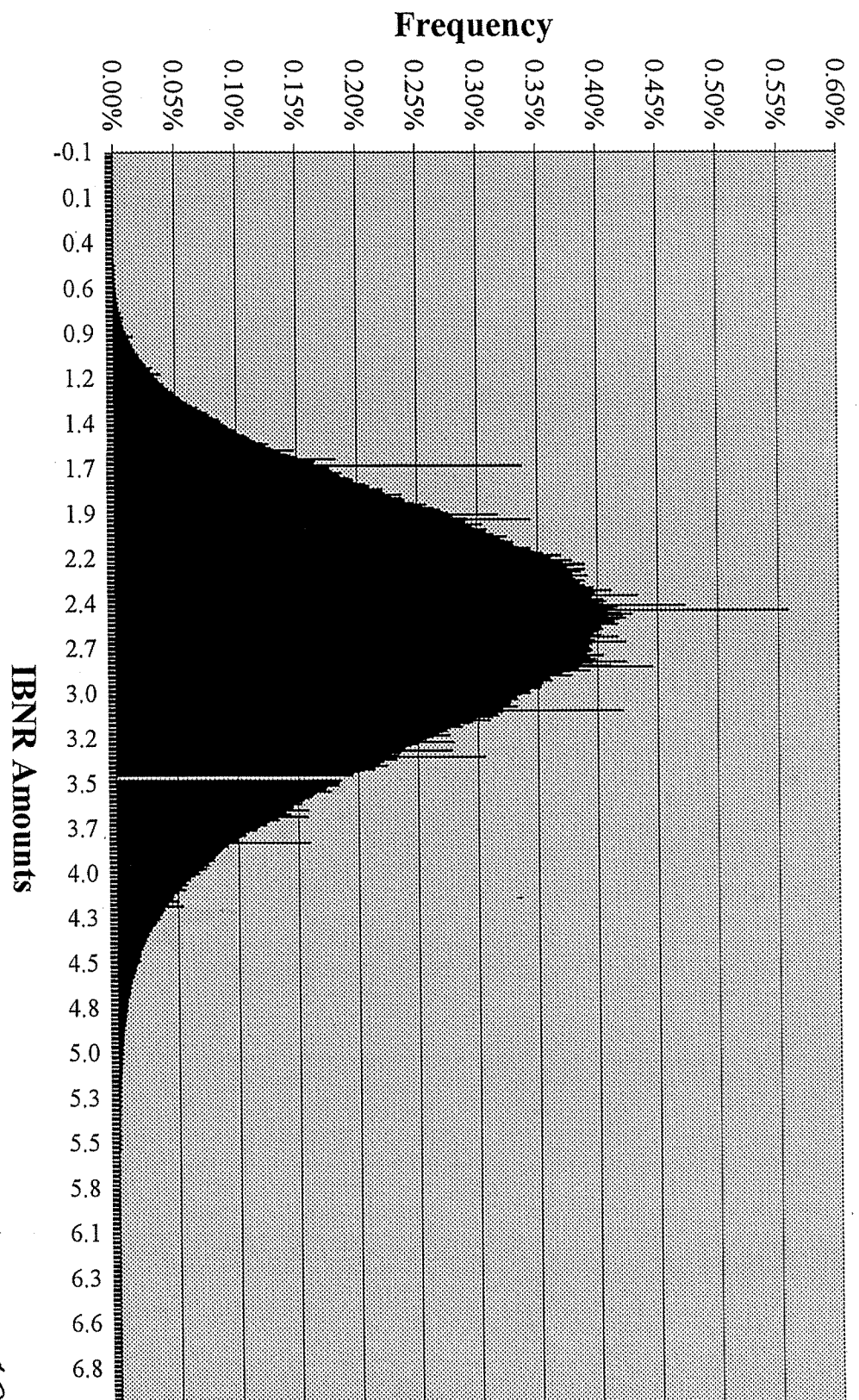
$\mu = 9.2$ $\sigma = 4.0$

Company No. 4. PPAL. Small Company
Total Reserves Distribution of Outcomes Using Unweighted Paid LDF's



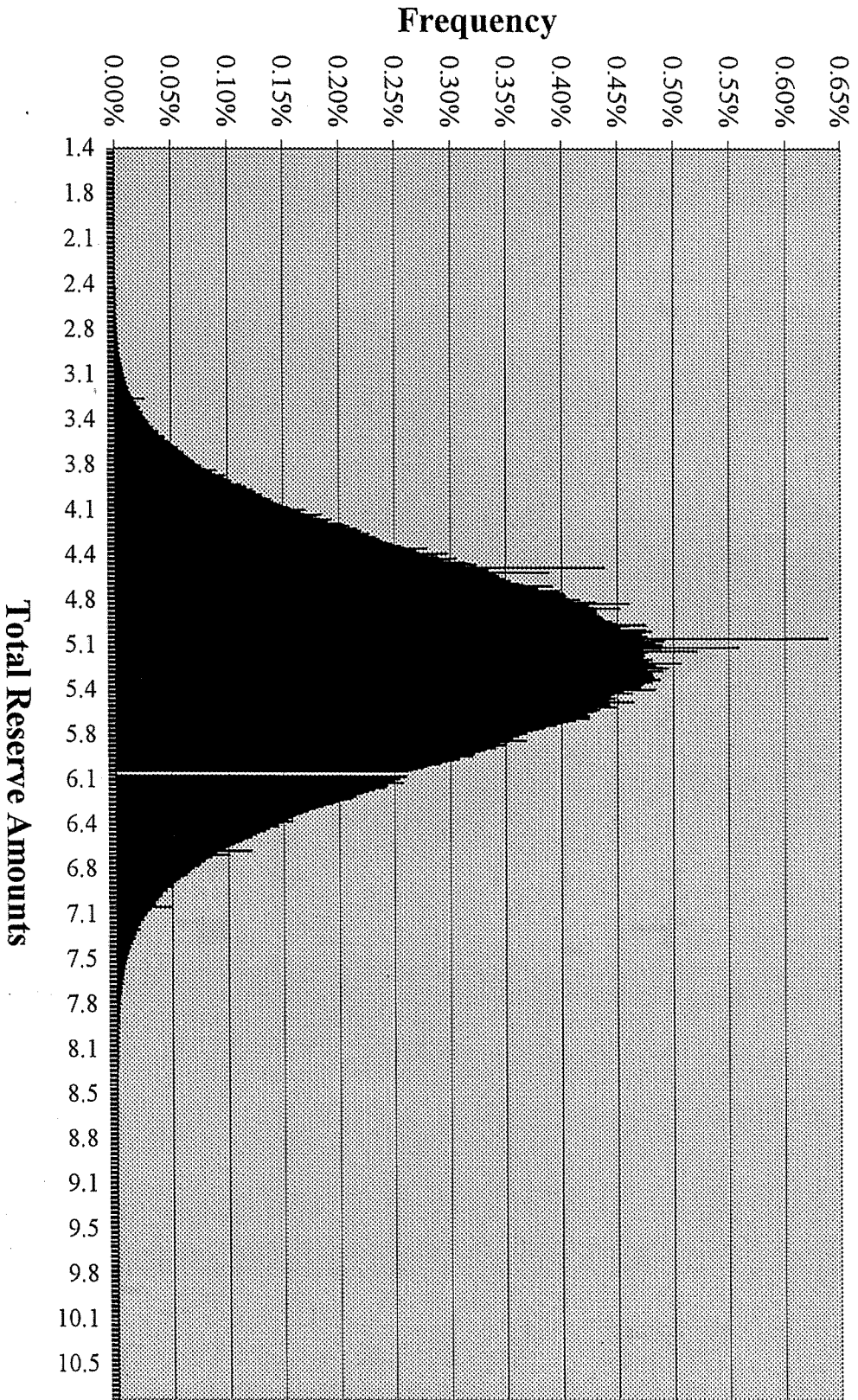
$\mu = 22.9$ $\sigma = 2.7$

Company No. 5. PPAL. Small Company
 IBNR Distribution of Outcomes Using Unweighted Reported LDF's



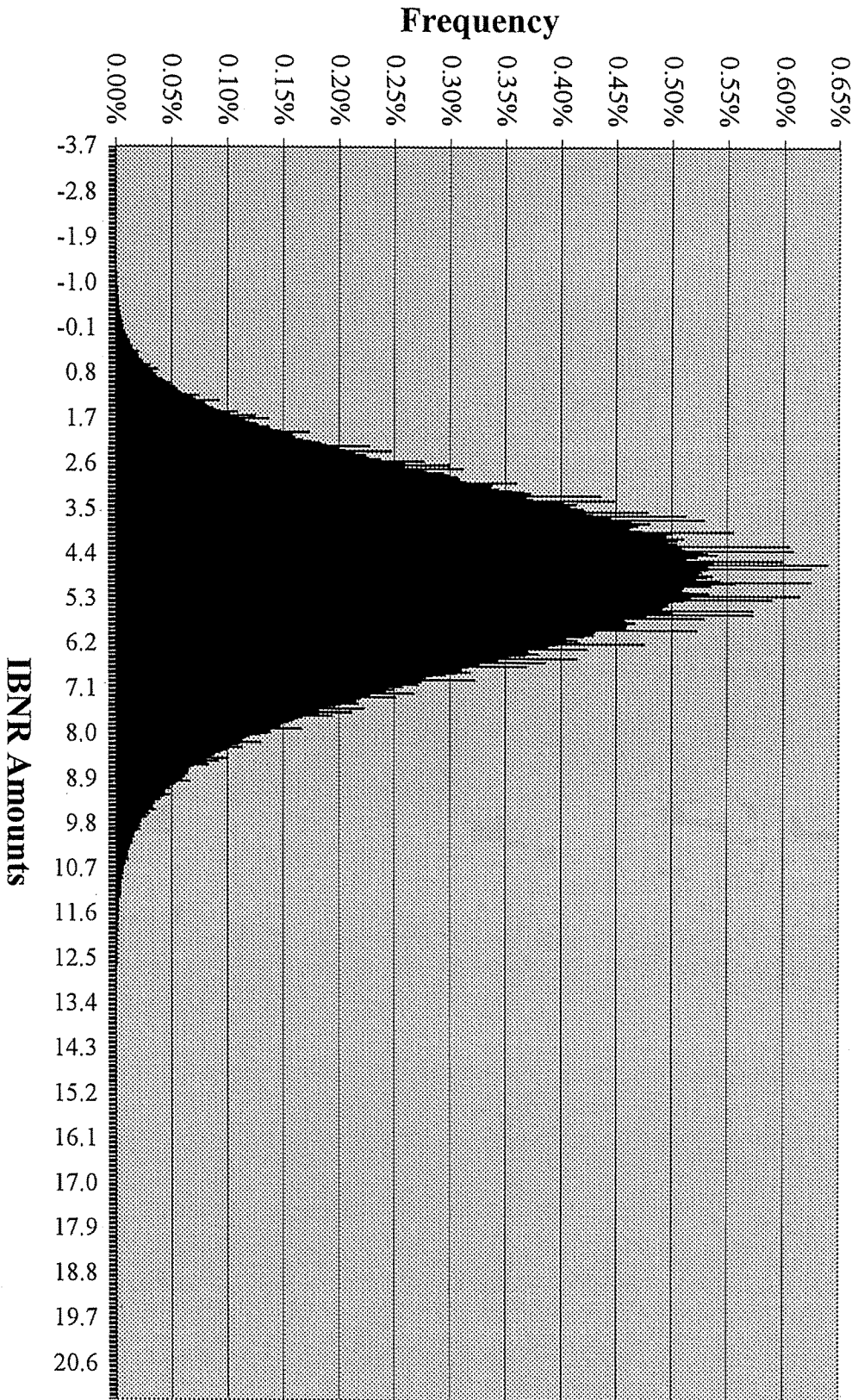
Mean = 2.63
 Standard Deviation = 0.69

Company No. 5. PPAL. Small Company
Total Reserves Distribution of Outcomes Using Unweighted Paid LDF's



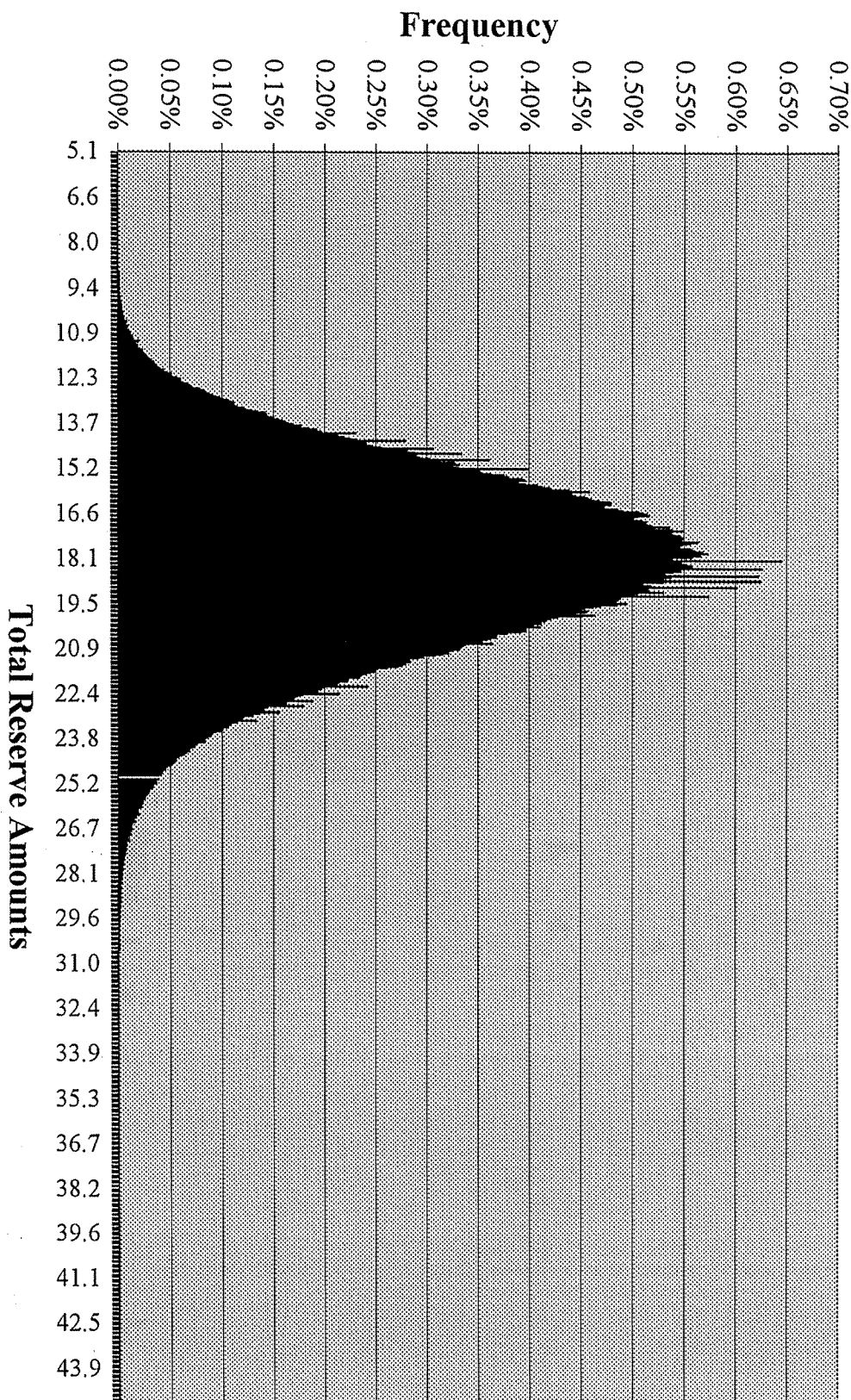
M = 5.24 σ = 0.76

Company No. 6. PPAL. Small Company
 IBNR Distribution of Outcomes Using Unweighted Reported LDF's



$\mu = 4.86$ $\sigma = 1.83$

Company No. 6. PPAL. Small Company
 Total Reserves Distribution of Outcomes Using Unweighted Paid LDF's



$\mu = 18.2$ $\sigma = 2.9$

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Private Passenger Auto Liability

Comparison of CV's of Reserve Distributions

Small vs. Large Companies

	CV of IBNR Distribution Using Reported Data		CV of Tot Res Distrib Using Paid Data	
	Small Co	Large Co	Small	Large
	0.43	0.07	0.12	0.04
	0.26	0.07	0.15	0.02
	0.38	0.10	0.16	0.03
Averages	0.36	0.08	0.14	0.03
Multiple	4.5		4.3	