Obs	Segment_ID	Year_Installed	Current_Age	Leak	Year_Leak	Leak_Age	Diameter	Material_Type
1	1	1941	77	1	1956	62	8	1
2	2	2008	10	1	2010	8	8	2
3	3	2004	14	1	2007	11	10	3
4	4	1997	21	1	2001	17	4	5
5	5	1926	92	1	1944	74	2	2

Obs	Soil_Type	Static_Pressure_Type	cens	time
1	3	2	1	15
2	5	1	1	2
3	3	5	1	3
4	4	2	1	4
5	1	2	1	18

The LIFETEST Procedure

Product-Limit Survival Estimate
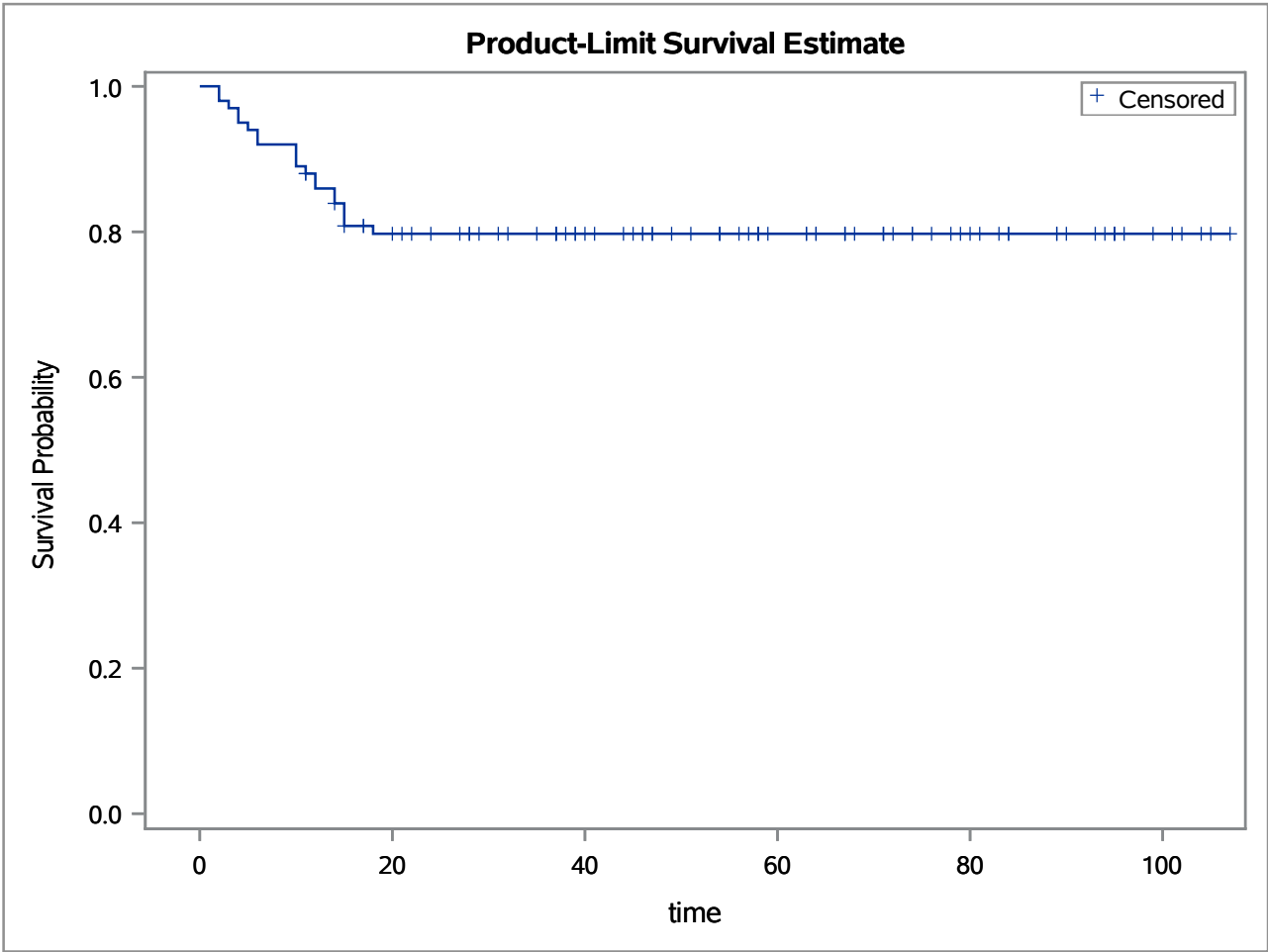
Summary of the Number of Censored and Uncensored Values			
Total	**Failed**	**Censored**	**Percent Censored**
100	20	80	80.00

The FREQ Procedure

Frequency

Table of Diameter by cens			
	cens		
Diameter(Diameter)	0	1	Total
2	2	1	3
4	6	2	8
6	4	2	6
8	5	3	8
10	9	2	11
12	8	3	11
14	12	1	13
16	13	2	15
18	6	3	9
20	15	1	16
Total	80	20	100

Frequency

Table of Material_Type by cens			
	cens		
Material_Type(Material_Type)	0	1	Total
1	14	5	19
2	20	5	25
3	15	4	19
4	17	4	21
5	14	2	16
Total	80	20	100

Frequency

Table of Soil_Type by cens			
	cens		
Soil_Type(Soil_Type)	0	1	Total
1	18	3	21
2	15	4	19
3	19	6	25
4	18	2	20
5	10	5	15
Total	80	20	100

The FREQ Procedure

Frequency

Table of Static_Pressure_Type by cens			
	cens		
Static_Pressure_Type(Static_Pressure_Type)	0	1	Total
1	13	4	17
2	17	9	26
3	15	2	17
4	14	1	15
5	21	3	24
n	0	1	1
Total	80	20	100

The LIFETEST Procedure

Summary of the Number of Censored and Uncensored Values					
Stratum	Material_Type	Total	Failed	Censored	Percent Censored
1	1	19	5	14	73.68
2	2	25	5	20	80.00
3	3	19	4	15	78.95
4	4	21	4	17	80.95
5	5	16	2	14	87.50
Total		100	20	80	80.00

The LIFETEST Procedure

Testing Homogeneity of Survival Curves for time over Strata

Rank Statistics		
Material_Type	Log-Rank	Wilcoxon
1	1.1545	84.000
2	0.0153	5.000
3	0.2187	22.000
4	-0.2803	-29.000
5	-1.1081	-82.000

Covariance Matrix for the Log-Rank Statistics					
Material_Type	1	2	3	4	5
1	3.06621	-0.94605	-0.71773	-0.81272	-0.58972
2	-0.94605	3.69477	-0.93062	-1.05297	-0.76514
3	-0.71773	-0.93062	3.02781	-0.79932	-0.58015
4	-0.81272	-1.05297	-0.79932	3.32144	-0.65644
5	-0.58972	-0.76514	-0.58015	-0.65644	2.59145

Covariance Matrix for the Wilcoxon Statistics					
Material_Type	1	2	3	4	5
1	24975.2	-7705.3	-5849.9	-6627.7	-4792.4
2	-7705.3	30048.4	-7569.3	-8570.2	-6203.5
3	-5849.9	-7569.3	24637.7	-6510.2	-4708.3
4	-6627.7	-8570.2	-6510.2	27039.3	-5331.1
5	-4792.4	-6203.5	-4708.3	-5331.1	21035.3

Test of Equality over Strata			
Test	Chi-Square	DF	Pr > Chi-Square
Log-Rank	0.7827	4	0.9407
Wilcoxon	0.5392	4	0.9696
-2Log(LR)	1.0812	4	0.8973

The LIFETEST Procedure

Product-Limit Survival Estimates
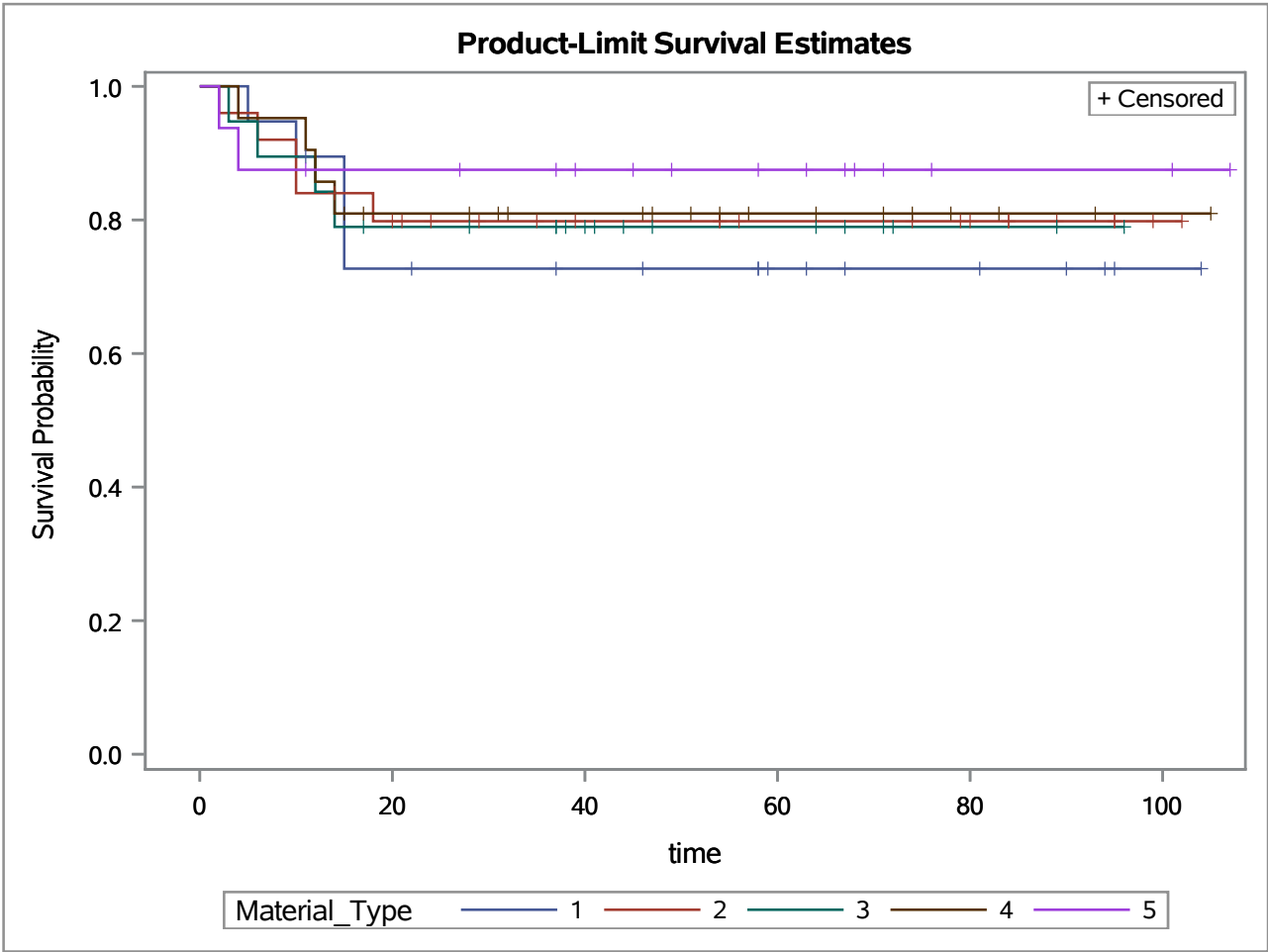
The PHREG Procedure

Model Information	
Data Set	SURVIVAL.LEAKY_PIPES
Dependent Variable	time
Censoring Variable	cens
Censoring Value(s)	0
Ties Handling	BRESLOW

Number of Observations Read	100
Number of Observations Used	100

Summary of the Number of Event and Censored Values			
Total	Event	Censored	Percent Censored
100	20	80	80.00

Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics		
Criterion	Without Covariates	With Covariates
-2 LOG L	179.821	177.482
AIC	179.821	179.482
SBC	179.821	180.478

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	2.3386	1	0.1262
Score	2.4156	1	0.1201
Wald	2.3644	1	0.1241

Analysis of Maximum Likelihood Estimates							
Parameter	DF	Parameter Estimate	Standard Error	Chi-Square	Pr > ChiSq	Hazard Ratio	Label
Diameter	1	-0.06289	0.04090	2.3644	0.1241	0.939	Diameter