Shapiro-Wilk Test of Normality
Chromium Detected in Brackett-Tarrant Association Soils
Camp Stanley Storage Activity, Texas

Number of Samples, n	Ordered Concentration x(i)	Reverse Ordered Concentration x(n-i+1)	Difference x(n-i+1)-x(i)	a(n-i+1)[a]	b(i)[b]	ln of Ordered Concentration ln x(i)	ln of Reverse Ordered Concentration ln x(n-i+1)	Difference x(n-i+1)- ln x	a(n-i+1)[a]	b(i)[b]
1	2.40	8.70	6.3	0.5739	3.62	0.88	2.16	1.29	0.5739	0.74
2	2.50	6.50	4	0.3291	1.32	0.92	1.87	0.96	0.3291	0.31
3	2.60	6.10	3.5	0.2141	0.75	0.96	1.81	0.85	0.2141	0.18
4	2.90	4.70	1.8	0.1224	0.22	1.06	1.55	0.48	0.1224	0.06
5	3.30	4.30	1	0.0399	0.04	1.19	1.46	0.26	0.0399	0.01
6	4.30	3.30	-1	b=	5.94	1.46	1.19	-0.26	b=	1.31
7	4.70	2.90	-1.8	S=	2.005	1.55	1.06	-0.48	S=	0.431
8	6.10	2.60	-3.5	W[c]=	0.878	1.81	0.96	-0.85	W[c]=	0.918
9	6.50	2.50	-4	W(0.05,10)=	0.842	1.87	0.92	-0.96	W(0.05,10)=	0.842
10	8.70	2.40	-6.3	Normality=	Normal	2.16	0.88	-1.29	Normality=	Lognormal

*** Distribution is lognormal because of higher W value.

[a] From An Analysis of Variance Test for Normality (complete samples), by S.S. Shapiro and M.B.Wilk, Biometrika, vol. 52, pp. 591-611.

[b] b(i) = [x(n-i+1) - x(i)] * a(n-i+1)

[c] W = b*b/S*S*n