Shapiro-Wilk Test of Normality
Lead Detected in Glen Rose Formation Limestone
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	36	58	22	0.5739	12.63	3.58	4.06	0.48	0.5739	0.27
2	39	52	13	0.3291	4.28	3.66	3.95	0.29	0.3291	0.09
3	40	51	11	0.2141	2.36	3.69	3.93	0.24	0.2141	0.05
4	42	48	6	0.1224	0.73	3.74	3.87	0.13	0.1224	0.02
5	44	46	2	0.0399	0.08	3.78	3.83	0.04	0.0399	0.00
6	46	44	-2	b=	20.07	3.83	3.78	-0.04	b=	0.44
7	48	42	-6	S=	6.42	3.87	3.74	-0.13	S=	0.140
8	51	40	-11	W^c=	0.977	3.93	3.69	-0.24	W^c=	0.987
9	52	39	-13	W(0.05,10)=	0.842	3.95	3.66	-0.29	W(0.05,10)=	0.842
10	58	36	-22	Normality=	Normal	4.06	3.58	-0.48	Normality=	Lognormal

*** Distribution is lognormal because of the 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