

Table S4: Wilcoxon rank sum test results to determine if the pre-mine and post-mine distributions are stochastically different and the null hypothesis, H₀, can be rejected. Data compared to published critical values of z at alpha = 0.05 and fit to a two-tailed test.

Site ID	n1	n2	R	μ_R	σ_R	z	critical value ($\alpha/2$)		p-value	Decision	Effect to Distribution
1	62	90	4212.5	4743.0	266.7	-1.99	0.025	-1.96	0.0466	reject H ₀ at α = 0.05	positive shift
2	73	79	5525.5	5584.5	271.2	-0.22	0.025	-1.96	0.8258	accept H ₀	no change
3	40	80	2262.0	2420.0	179.6	-0.88	0.025	-1.96	0.3788	accept H ₀	no change
4	71	93	3979.0	5857.5	301.3	-6.23	0.025	-1.96	<.01	reject H ₀ at α = 0.01	positive shift
5	67	94	6367.0	5427.0	291.6	3.22	0.025	-1.96	<.01	reject H ₀ at α = 0.01	negative shift
6	116	117	13839.0	13572.0	514.4	0.52	0.025	-1.96	0.6030	accept H ₀	no change
7	43	35	1208.0	1382.5	99.5	-1.75	0.025	1.96	0.0802	accept H ₀	no change
8	44	38	1731.5	1577.0	107.5	1.44	0.025	1.96	0.1498	accept H ₀	no change
9	10	15	89.5	130.0	18.0	-2.25	0.025	-1.96	0.0244	reject H ₀ at α = 0.05	positive shift
10	51	109	5052.0	4105.5	273.1	3.47	0.025	-1.96	<.01	reject H ₀ at α = 0.01	negative shift
11	62	114	6134.5	5487.0	322.9	2.01	0.025	-1.96	0.0444	reject H ₀ at α = 0.05	negative shift
12	48	115	4414.5	3936.0	274.7	1.74	0.025	-1.96	0.0818	accept H ₀	no change
13	45	111	4470.5	3532.5	255.6	3.67	0.025	-1.96	<.01	reject H ₀ at α = 0.01	negative shift
14	82	91	5341.0	7134.0	328.9	-5.45	0.025	-1.96	<.01	reject H ₀ at α = 0.01	positive shift
15	82	105	5289.5	7708.0	367.3	-6.58	0.025	-1.96	<.01	reject H ₀ at α = 0.01	positive shift
16	147	31	3683.5	2774.5	260.7	3.49	0.025	1.96	<.01	reject H ₀ at α = 0.01	positive shift
17	101	39	3704.0	2749.5	215.1	4.44	0.025	1.96	<.01	reject H ₀ at α = 0.01	positive shift
18	131	36	3322.0	3024.0	257.0	1.16	0.025	1.96	0.2460	accept H ₀	no change
19	114	71	8561.0	6603.0	354.2	5.53	0.025	1.96	<.01	reject H ₀ at α = 0.01	positive shift
20	89	66	5632.5	5148.0	276.3	1.75	0.025	1.96	0.0802	accept H ₀	no change
21	62	68	3117.0	4061.0	214.5	-4.40	0.025	-1.96	<.01	reject H ₀ at α = 0.01	positive shift
22	48	67	3547.0	2784.0	176.3	4.33	0.025	-1.96	<.01	reject H ₀ at α = 0.01	negative shift
23	257	72	17175.0	11880.0	713.3	7.42	0.025	1.96	<.01	reject H ₀ at α = 0.01	positive shift
24	118	76	7836.0	7410.0	381.7	1.12	0.025	1.96	0.2628	accept H ₀	no change
25	83	58	4215.5	4118.0	238.7	0.41	0.025	1.96	0.6818	accept H ₀	no change
26	112	57	5227.5	4845.0	300.7	1.27	0.025	1.96	0.2040	accept H ₀	no change
27	85	32	2187.0	1888.0	163.5	1.83	0.025	1.96	0.0672	accept H ₀	no change
28	88	32	2688.0	1936.0	168.5	4.46	0.025	1.96	<.01	reject H ₀ at α = 0.01	positive shift
29	56	62	2538.5	3332.0	185.6	-4.28	0.025	-1.96	<.01	reject H ₀ at α = 0.01	positive shift
30	111	36	3606.5	2664.0	222.0	4.25	0.025	1.96	<.01	reject H ₀ at α = 0.01	positive shift
31	35	100	3285.5	2380.0	199.2	4.55	0.025	-1.96	<.01	reject H ₀ at α = 0.01	negative shift
32	40	104	4428.0	2900.0	224.2	6.82	0.025	-1.96	<.01	reject H ₀ at α = 0.01	negative shift
33	97	64	5448.0	5184.0	289.5	0.91	0.025	1.96	0.3628	accept H ₀	no change
34	130	64	3022.0	6240.0	367.7	-8.75	0.025	1.96	<.01	reject H ₀ at α = 0.01	negative shift
35	188	85	11728.0	11645.0	604.1	0.14	0.025	1.96	0.8886	accept H ₀	no change
36	49	79	2455.0	3160.5	204.0	-3.46	0.025	-1.96	<.01	reject H ₀ at α = 0.01	positive shift
37	61	72	3958.5	4087.0	221.5	-0.58	0.025	-1.96	0.5620	accept H ₀	no change
38	99	70	4107.0	5950.0	313.3	-5.88	0.025	1.96	<.01	reject H ₀ at α = 0.01	negative shift
39	56	59	3494.0	3248.0	178.7	1.38	0.025	-1.96	0.1676	accept H ₀	no change
40	55	48	2387.5	2496.0	151.3	-0.72	0.025	1.96	0.4716	accept H ₀	no change
41	103	34	2308.0	2346.0	200.7	-0.19	0.025	1.96	0.8494	accept H ₀	no change
42	39	31	942.5	1100.5	84.6	-1.87	0.025	1.96	0.0614	accept H ₀	no change
43	109	48	4325.5	3792.0	262.5	2.03	0.025	1.96	0.0424	reject H ₀ at α = 0.05	positive shift
44	108	56	4551.0	4620.0	288.4	-0.24	0.025	1.96	0.8104	accept H ₀	no change
45	128	55	4616.0	5060.0	328.6	-1.35	0.025	1.96	0.1770	accept H ₀	no change
46	39	40	1610.5	1560.0	102.0	0.50	0.025	-1.96	0.6170	accept H ₀	no change
47	39	37	1351.5	1424.5	96.2	-0.76	0.025	1.96	0.4472	accept H ₀	no change
48	31	34	979.0	1023.0	76.1	-0.58	0.025	-1.96	0.5620	accept H ₀	no change
49	30	38	931.0	1035.0	81.0	-1.28	0.025	-1.96	0.2006	accept H ₀	no change
50	104	52	4255.5	4082.0	266.0	0.65	0.025	1.96	0.5156	accept H ₀	no change
51	146	81	8554.5	9234.0	474.0	-1.43	0.025	1.96	0.1528	accept H ₀	no change
52	114	81	8500.5	7938.0	388.4	1.45	0.025	1.96	0.1470	accept H ₀	no change
53	47	74	2607.0	2867.0	188.0	-1.38	0.025	-1.96	0.1676	accept H ₀	no change
54	52	72	2689.0	3250.0	197.5	-2.84	0.025	-1.96	0.0046	reject H ₀ at α = 0.01	positive shift
55	61	66	3501.0	3904.0	207.2	-1.94	0.025	-1.96	0.0524	accept H ₀	no change
56	61	74	3806.0	4148.0	226.2	-1.51	0.025	-1.96	0.1310	accept H ₀	no change
57	48	77	3388.5	3024.0	197.0	1.85	0.025	-1.96	0.0644	accept H ₀	no change
58	23	39	644.0	724.5	68.6	-1.17	0.025	-1.96	0.2420	accept H ₀	no change
59	41	40	1997.0	1640.0	105.9	3.37	0.025	1.96	<.01	reject H ₀ at α = 0.01	positive shift
60	30	45	1117.5	1140.0	92.5	-0.24	0.025	-1.96	0.8104	accept H ₀	no change
61	75	142	8433.0	8175.0	439.9	0.59	0.025	-1.96	0.5552	accept H ₀	no change
62	49	81	3642.0	3209.5	208.2	2.08	0.025	-1.96	0.0376	reject H ₀ at α = 0.05	negative shift
63	45	106	3834.0	3420.0	245.8	1.68	0.025	-1.96	0.0930	accept H ₀	no change
64	29	70	1827.5	1450.0	130.1	2.90	0.025	-1.96	0.0038	reject H ₀ at α = 0.01	negative shift
65	32	63	1432.5	1536.0	127.0	-0.81	0.025	-1.96	0.4180	accept H ₀	no change
66	39	64	2412.0	2028.0	147.1	2.61	0.025	-1.96	0.0090	reject H ₀ at α = 0.01	negative shift
67	95	127	8322.5	10592.5	473.5	-4.79	0.025	-1.96	<.01	reject H ₀ at α = 0.01	positive shift
68	29	57	1865.5	1261.5	109.5	5.52	0.025	-1.96	<.01	reject H ₀ at α = 0.01	negative shift
69	19	51	931.0	674.5	75.7	3.39	0.025	-1.96	<.01	reject H ₀ at α = 0.01	negative shift
70	60	46	2594.0	2461.0	156.9	0.85	0.025	1.96	0.3954	accept H ₀	no change
71	100	61	4710.0	4941.0	287.0	-0.80	0.025	1.96	0.4238	accept H ₀	no change
72	77	62	4183.0	4340.0	236.0	-0.67	0.025	1.96	0.5028	accept H ₀	no change
73	53	54	2927.0	2862.0	160.5	0.40	0.025	-1.96	0.6892	accept H ₀	no change
74	114	45	4444.0	3600.0	261.5	3.23	0.025	1.96	<.01	reject H ₀ at α = 0.01	positive shift
75	137	60	5750.0	5940.0	368.3	-0.52	0.025	1.96	0.6030	accept H ₀	no change
76	118	60	4986.0	5370.0	325.0	-1.18	0.025	1.96	0.2380	accept H ₀	no change
77	117	55	4483.0	4757.5	304.6	-0.90	0.025	1.96	0.3682	accept H ₀	no change
78	53	59	3258.0	2994.5	171.6	1.54	0.025	-1.96	0.1236	accept H ₀	no change
79	84	65	3786.0	4875.0	261.2	-4.17	0.025	1.96	<.01	reject H ₀ at α = 0.01	negative shift
80	88	99	7723.5	8272.0	369.4	-1.48	0.025	-1.96	0.1388	accept H ₀	no change
81	94	124	7565.0	10293.0	461.2	-5.92	0.025	-1.96	<.01	reject H ₀ at α = 0.01	positive shift
82	27	22	348.0	550.0	49.7	-4.06	0.025	1.96	<.01	reject H ₀ at α = 0.01	negative shift
83	27	36	1099.0	864.0	72.0	3.26	0.025	-1.96	<.01	reject H ₀ at α = 0.01	negative shift
84	51	36	1646.0	1584.0	116.0	0.53	0.025	1.96	0.5962	accept H ₀	no change
85	16	37	547.0	432.0	51.6	2.23	0.025	-1.96	0.0258	reject H ₀ at α = 0.05	negative shift
86	86	43	3189.0	2795.0	200.2	1.97	0.025	1.96	0.0488	reject H ₀ at α = 0.05	positive shift
87	153	41	3907.5	3997.5	319.3	-0.28	0.025	1.96	0.7794	accept H ₀	no change
88	84	70	5578.0	5425.0	275.6	0.56	0.025	1.96	0.5754	accept H ₀	no change