

Table 4-21 Summary of Mean Standard Error of Land Use Stations

Station	Constituent	No. of Detections	Normal Distribution			Lognormal Distribution			Shapiro-Wilk Normality Test			Mean Standard Error	Is Mean Standard Error Less Than 25%?
			Mean	Standard Deviation	Standard Error	Mean	Standard Deviation	Standard Error	p-value for Normal Distribution	p-value for Lognormal Distribution	Distribution*		
Dominguez	Ammonia	29	0.37	0.21	0.04	0.37	0.23	0.04	0.022	0.982	Lognormal	11.3%	Y
Dominguez	Bis(2-ethylhexyl)phthalate	28	13.87	17.43	3.29	14.37	22.05	3.94	0	0.323	Lognormal	27.4%	N
Dominguez	Dissolved Copper	40	32.59	22.08	3.49	35.47	36.39	5.61	0.002	0.007	Lognormal	10.7%	Y
Dominguez	Dissolved Nickel	10	6.03	1.84	0.58	6.17	2.59	0.82	0.062	0.002	Normal	9.6%	Y
Dominguez	Dissolved Phosphorus	36	0.31	0.19	0.03	0.33	0.27	0.04	0.065	0.103	Normal	9.9%	Y
Dominguez	Dissolved Zinc	40	188.90	115.32	18.23	212.96	239.84	36.68	0.21	0	Normal	9.7%	Y
Dominguez	NH3-N	28	0.32	0.17	0.03	0.32	0.18	0.03	0.015	0.932	Lognormal	10.7%	Y
Dominguez	Nitrate	38	3.01	2.39	0.39	3.04	2.64	0.42	0	0.738	Lognormal	13.8%	Y
Dominguez	Nitrate-N	37	0.81	0.87	0.14	0.81	0.87	0.14	0	0.75	Lognormal	17.2%	Y
Dominguez	Nitrite-N	38	0.09	0.06	0.01	0.10	0.07	0.01	0	0.073	Lognormal	12.2%	Y
Dominguez	TKN	38	1.83	1.11	0.18	1.84	1.16	0.19	0	0.595	Lognormal	10.1%	Y
Dominguez	Total Cadmium	14	1.69	0.80	0.21	1.68	0.65	0.17	0.001	0.082	Lognormal	10.3%	Y
Dominguez	Total Chromium	19	8.06	5.19	1.19	8.16	5.68	1.30	0.006	0.51	Lognormal	15.9%	Y
Dominguez	Total Copper	40	56.16	35.65	5.64	56.18	35.86	5.63	0	0.884	Lognormal	10.0%	Y
Dominguez	Total Lead	25	18.15	18.76	3.75	17.83	17.77	3.49	0	0.226	Lognormal	19.6%	Y
Dominguez	Total Nickel	26	7.59	4.15	0.81	7.85	5.56	1.08	0.107	0.024	Normal	10.7%	Y
Dominguez	Total Phosphorus	36	0.41	0.24	0.04	0.43	0.36	0.06	0.104	0.016	Normal	9.7%	Y
Dominguez	Total Suspended Solids	38	73.55	64.10	10.40	73.13	61.55	9.84	0	0.655	Lognormal	13.5%	Y
Dominguez	Total Zinc	40	304.15	277.38	43.86	299.02	213.17	33.40	0	0.386	Lognormal	11.2%	Y
Project 1202	Ammonia	33	0.56	0.65	0.11	0.59	0.78	0.13	0	0.086	Lognormal	22.0%	Y
Project 1202	Bis(2-ethylhexyl)phthalate	20	10.17	9.70	2.17	10.67	13.88	3.02	0.001	0.228	Lognormal	28.3%	N
Project 1202	Dissolved Copper	27	14.93	9.21	1.77	15.43	11.87	2.26	0.02	0.506	Lognormal	14.7%	Y
Project 1202	Dissolved Nickel	11	4.85	2.42	0.73	5.34	4.80	1.45	0.035	0.002	Lognormal	15.0%	Y
Project 1202	Dissolved Phosphorus	32	0.22	0.17	0.03	0.23	0.22	0.04	0.001	0.743	Lognormal	16.8%	Y
Project 1202	Dissolved Zinc	35	320.43	222.86	37.67	421.50	742.23	115.42	0.122	0	Normal	11.8%	Y
Project 1202	NH3-N	34	0.46	0.53	0.09	0.47	0.59	0.10	0	0.053	Lognormal	20.7%	Y
Project 1202	Nitrate	34	4.37	3.91	0.67	4.37	4.33	0.73	0	0.151	Lognormal	16.6%	Y
Project 1202	Nitrate-N	33	0.97	0.90	0.16	0.98	1.03	0.17	0	0.166	Lognormal	17.9%	Y
Project 1202	Nitrite-N	34	0.09	0.05	0.01	0.09	0.06	0.01	0	0.013	Lognormal	10.7%	Y
Project 1202	TKN	33	2.70	1.60	0.28	2.73	1.80	0.31	0.003	0.338	Lognormal	11.4%	Y
Project 1202	Total Chromium	17	8.35	5.03	1.22	8.59	6.28	1.52	0.265	0.798	Normal	14.6%	Y
Project 1202	Total Copper	35	56.49	163.63	27.66	40.73	50.28	8.17	0	0.006	Lognormal	49.0%	N
Project 1202	Total Lead	21	20.21	16.69	3.64	20.51	19.02	4.10	0.002	0.795	Lognormal	20.0%	Y
Project 1202	Total Nickel	21	8.52	4.60	1.00	8.53	4.48	0.98	0.004	0.544	Lognormal	11.4%	Y
Project 1202	Total Phosphorus	31	0.38	0.30	0.05	0.41	0.47	0.08	0.002	0.194	Lognormal	20.1%	Y
Project 1202	Total Suspended Solids	31	160.84	202.04	36.29	165.89	204.18	35.37	0	0.389	Lognormal	21.3%	Y
Project 1202	Total Zinc	35	439.49	242.78	41.04	470.71	384.60	64.17	0.081	0.001	Normal	9.3%	Y
Project 156	Ammonia	18	0.82	0.72	0.17	0.93	1.30	0.30	0.009	0.49	Lognormal	31.9%	N
Project 156	Dissolved Copper	16	20.39	24.24	6.06	20.71	24.52	6.05	0	0.531	Lognormal	29.2%	N
Project 156	Dissolved Phosphorus	15	0.26	0.24	0.06	0.27	0.28	0.07	0.001	0.723	Lognormal	26.7%	N
Project 156	Dissolved Zinc	16	207.69	231.08	57.77	205.63	197.99	49.09	0	0.539	Lognormal	23.9%	Y
Project 156	NH3-N	18	0.68	0.59	0.14	0.79	1.16	0.27	0.011	0.185	Lognormal	33.6%	N

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			Mean	Standard Deviation	Standard Error	Mean	Standard Deviation	Standard Error	p-value for Normal Distribution	p-value for Lognormal Distribution	Distribution*		
Project 156	Nitrate	13	3.01	1.86	0.52	4.52	8.80	2.44	0.397	0	Normal	17.1%	Y
Project 156	Nitrate-N	13	0.68	0.42	0.12	0.78	0.89	0.25	0.388	0.034	Normal	17.1%	Y
Project 156	Nitrite-N	13	0.13	0.14	0.04	0.13	0.14	0.04	0	0.518	Lognormal	29.7%	N
Project 156	TKN	19	3.11	2.36	0.54	4.01	6.28	1.39	0.021	0.001		17.4%	Y
Project 156	Total Copper	16	29.64	35.40	8.85	27.45	19.93	4.96	0	0.006		29.9%	N
Project 156	Total Phosphorus	15	0.32	0.30	0.08	0.34	0.38	0.10	0.001	0.407	Lognormal	28.6%	N
Project 156	Total Suspended Solids	13	81.85	81.94	22.73	83.50	88.74	24.52	0.001	0.789	Lognormal	29.4%	N
Project 156	Total Zinc	16	323.44	406.95	101.74	294.85	261.85	65.02	0	0.001		31.5%	N
Project 404	Ammonia	17	0.80	0.92	0.22	0.95	1.87	0.43	0	0.174	Lognormal	46.0%	N
Project 404	Bis(2-ethylhexyl)phthalate	11	42.57	64.74	19.52	46.22	120.72	38.97	0	0.261	Lognormal	84.3%	N
Project 404	Dissolved Copper	16	12.15	7.61	1.90	12.15	7.18	1.79	0.006	0.554	Lognormal	14.7%	Y
Project 404	Dissolved Zinc	16	164.06	189.05	47.26	155.15	130.66	32.48	0	0.091	Lognormal	20.9%	Y
Project 404	NH3-N	17	0.67	0.76	0.18	0.76	1.38	0.32	0	0.271	Lognormal	42.3%	N
Project 404	Nitrate	14	7.34	5.53	1.48	7.96	9.14	2.42	0.072	0.245	Normal	20.1%	Y
Project 404	Nitrate-N	14	1.66	1.25	0.33	1.80	2.05	0.54	0.071	0.241	Normal	20.1%	Y
Project 404	Nitrite-N	14	0.16	0.25	0.07	0.14	0.17	0.05	0	0.146	Lognormal	33.0%	N
Project 404	TKN	19	2.80	2.95	0.68	2.68	2.10	0.48	0	0.189	Lognormal	17.9%	Y
Project 404	Total Copper	21	15.20	6.84	1.49	15.21	6.51	1.42	0.006	0.816	Lognormal	9.3%	Y
Project 404	Total Suspended Solids	14	74.14	86.44	23.10	77.31	114.11	30.15	0	0.775	Lognormal	39.0%	N
Project 404	Total Zinc	21	224.52	272.24	59.41	215.25	229.76	49.24	0	0.218	Lognormal	22.9%	Y
Project 474	Ammonia	16	0.31	0.20	0.05	0.34	0.36	0.09	0.369	0.038	Normal	16.4%	Y
Project 474	Bis(2-ethylhexyl)phthalate	10	14.50	15.30	4.84	16.99	30.88	10.17	0.031	0.598	Lognormal	59.9%	N
Project 474	Dissolved Copper	17	20.91	14.54	3.53	20.98	14.57	3.52	0.004	0.745	Lognormal	16.8%	Y
Project 474	Dissolved Phosphorus	13	0.36	0.34	0.09	0.36	0.33	0.09	0.001	0.212	Lognormal	25.7%	N
Project 474	Dissolved Zinc	12	112.83	71.82	20.73	112.08	58.88	16.99	0.001	0.341	Lognormal	15.2%	Y
Project 474	NH3-N	16	0.26	0.16	0.04	0.28	0.27	0.07	0.387	0.057	Normal	15.7%	Y
Project 474	Nitrate	14	2.66	1.83	0.49	2.79	2.40	0.64	0.043	0.43	Lognormal	22.9%	Y
Project 474	Nitrate-N	13	0.56	0.38	0.11	0.56	0.34	0.09	0.003	0.267	Lognormal	16.9%	Y
Project 474	TKN	15	1.73	0.81	0.21	1.73	0.81	0.21	0.076	0.81	Normal	12.1%	Y
Project 474	Total Copper	17	40.82	52.76	12.80	37.32	31.83	7.67	0	0.006		31.3%	N
Project 474	Total Phosphorus	13	0.38	0.27	0.07	0.38	0.29	0.08	0.036	0.783	Lognormal	20.7%	Y
Project 474	Total Suspended Solids	15	98.93	123.41	31.86	112.37	197.96	50.02	0	0.876	Lognormal	44.5%	N
Project 474	Total Zinc	17	222.24	362.97	88.03	192.06	172.79	41.57	0	0.002		39.6%	N
Project 620	Ammonia	15	0.41	0.37	0.10	0.47	0.67	0.17	0.007	0.114	Lognormal	36.5%	N
Project 620	Bis(2-ethylhexyl)phthalate	10	10.67	17.13	5.42	9.98	14.41	4.65	0	0.227	Lognormal	46.6%	N
Project 620	Dissolved Copper	11	11.26	4.77	1.44	11.42	5.46	1.65	0.113	0.186	Normal	12.8%	Y
Project 620	Dissolved Phosphorus	14	0.32	0.13	0.04	0.33	0.18	0.05	0.957	0.067	Normal	11.1%	Y
Project 620	NH3-N	15	0.39	0.31	0.08	0.44	0.58	0.15	0.042	0.066	Lognormal	33.3%	N
Project 620	Nitrate	12	4.94	7.01	2.02	4.54	4.87	1.40	0	0.063	Lognormal	30.9%	N
Project 620	Nitrate-N	12	1.12	1.59	0.46	1.03	1.11	0.32	0	0.092	Lognormal	31.4%	N
Project 620	TKN	17	2.58	1.30	0.31	2.67	1.73	0.42	0.124	0.082	Normal	12.2%	Y
Project 620	Total Copper	17	26.51	17.75	4.30	26.77	19.06	4.60	0.01	0.343	Lognormal	17.2%	Y

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Project 620	Total Lead	10	35.73	24.22	7.66	37.45	30.91	9.80	0.229	0.975	Normal	21.4%	Y
Project 620	Total Phosphorus	14	0.43	0.23	0.06	0.46	0.32	0.08	0.144	0.09	Normal	14.3%	Y
Project 620	Total Suspended Solids	12	112.00	46.38	13.39	122.77	96.36	27.80	0.713	0.002	Normal	12.0%	Y
Project 620	Total Zinc	17	118.00	60.03	14.56	121.38	76.96	18.61	0.525	0.453	Normal	12.3%	Y
Santa Monica	Ammonia	30	6.54	6.46	1.18	8.32	18.85	3.06	0	0.143	Lognormal	36.8%	N
Santa Monica	Dissolved Chromium +6	26	12.28	9.03	1.77	12.57	10.57	2.05	0.002	0.857	Lognormal	16.3%	Y
Santa Monica	Dissolved Copper	26	247.83	590.58	115.82	414.86	3219.04	452.17	0	0.029	Lognormal	46.7%	N
Santa Monica	Dissolved Phosphorus	31	78.17	75.95	13.64	787.73	26264.38	2415.90	0	0	Lognormal	17.5%	Y
Santa Monica	Dissolved Zinc	22	68.15	69.89	14.90	92.22	259.13	49.32	0.003	0.021	Lognormal	21.9%	Y
Santa Monica	NH3-N	27	0.23	0.31	0.06	0.22	0.24	0.05	0	0.17	Lognormal	20.5%	Y
Santa Monica	Nitrate	30	49.40	47.53	8.68	53.60	77.85	13.50	0	0.108	Lognormal	25.2%	N
Santa Monica	Nitrate-N	30	3.55	3.23	0.59	3.55	3.50	0.63	0	0.169	Lognormal	17.6%	Y
Santa Monica	Nitrite-N	27	386.03	371.19	71.44	1943.80	24569.04	3072.04	0.001	0	Lognormal	18.5%	Y
Santa Monica	TKN	32	196.34	216.73	38.31	1009.66	19221.47	1781.57	0	0	Lognormal	19.5%	Y
Santa Monica	Total Cadmium	12	5.59	3.62	1.05	5.73	4.24	1.22	0.038	0.171	Lognormal	21.4%	Y
Santa Monica	Total Chromium +6	26	29.77	19.61	3.85	30.33	23.07	4.49	0.009	0.788	Lognormal	14.8%	Y
Santa Monica	Total Copper	37	714.73	1044.99	171.80	950.54	3720.60	466.62	0	0.063	Lognormal	49.1%	N
Santa Monica	Total Lead	13	42.46	42.08	11.67	42.70	45.55	12.59	0.002	0.225	Lognormal	29.5%	N
Santa Monica	Total Mercury	14	5.20	3.39	0.91	5.46	4.67	1.24	0.071	0.17	Normal	17.4%	Y
Santa Monica	Total Phosphorus	32	5.84	2.80	0.49	12.11	41.12	5.89	0	0	Lognormal	8.5%	Y
Santa Monica	Total Suspended Solids	29	11.30	25.91	4.81	10.07	311.76	33.05	0	0	Lognormal	42.6%	N
Santa Monica	Total Zinc	11	251.73	115.79	34.91	255.29	129.70	39.11	0.303	0.681	Normal	13.9%	Y
Sawpit	Bis(2-ethylhexyl)phthalate	13	29.07	44.91	12.46	27.99	53.49	14.80	0	0.118	Lognormal	52.9%	N
Sawpit	Nitrate	26	5.45	3.39	0.66	5.49	3.70	0.72	0.001	0.106	Lognormal	13.1%	Y
Sawpit	Nitrate-N	26	1.23	0.77	0.15	1.24	0.84	0.16	0.001	0.105	Lognormal	13.2%	Y
Sawpit	Nitrite-N	11	0.04	0.03	0.01	0.04	0.02	0.01	0	0.031	Lognormal	19.2%	Y
Sawpit	TKN	26	1.20	2.58	0.51	0.98	1.06	0.20	0	0.011	Lognormal	42.2%	N
Sawpit	Total Copper	16	18.16	18.58	4.64	19.06	27.51	6.74	0.001	0.178	Lognormal	35.4%	N
Sawpit	Total Phosphorus	15	0.14	0.16	0.04	0.13	0.12	0.03	0	0.005	Lognormal	29.9%	N
Sawpit	Total Suspended Solids	24	85.08	224.40	45.80	54.16	138.93	25.31	0	0.004	Lognormal	53.8%	N
Sawpit	Total Zinc	11	67.55	63.53	19.15	71.79	85.80	26.00	0.013	0.49	Lognormal	36.2%	N

* If a constituent is neither normal nor lognormal, we assume that it is normal.