

NELHA Water Quality Laboratory

Well 12A Data Table

1/27/2009 - 6/30/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time (2400)	Depth to H ₂ O (m)	Tide (m) (cycle)	PO ₄ ³⁻ (µM) (µg P/L)	NO ₃ ⁻ & NO ₂ ⁻ (µM) (µg N/L)	NH ₄ ⁺ & NH ₃ (µM) (µg N/L)	Si (µM) (µg Si/L)	Temp. (°C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W12A	-12.19	01/27/09	1004	-5.36	0.09 Ebb	2.63 82	40.1 562	0.20 2.8	504 14155	23.6	7.94	17.85	9,880	3.72	0.16	
W12A	-12.19	02/24/09	1421	-5.34	0.24 Flood	1.74 54	28.8 403	0.15 2.1	423 11884	22.8	7.75	22.93	12,692	2.30	0.18	
W12A	-12.19	03/16/09	1425	-5.56	0.06 Flood	2.19 68	25.8 362	0.13 1.8	379 10643	24.0	7.68	21.57	11,940	2.65	0.11	
W12A	-12.19	04/22/09	941	-5.59	0.00 Flood	1.81 56	19.2 269	0.41 5.7	280 7867	25.7	7.74	21.33	11,807	2.62	0.72	
W12A	-12.19	05/29/09	1308	-5.43	0.12 Low	2.01 62	27.9 391	0.23 3.2	541 15207	21.8	7.35	22.82	12,631	2.47	0.10	
W12A	-12.19	06/19/09	1327	-4.89	0.70 High	1.94 60	20.8 292	0.37 5.2	239 6710	21.8	7.91	22.45	12,427	2.46	0.04	
W12A	-12.19	07/31/09	1341	-4.92	0.64 High	2.29 71	27.4 384	0.48 6.7	315 8861	22.0	7.82	22.53	12,471	2.51	0.02	
W12A	-12.19	08/20/09	1425	-4.93	0.61 Flood	2.38 74	30.6 429	0.77 10.8	491 13781	21.9	7.87	22.10	12,233	2.41	0.03	
W12A	-12.19	09/24/09	1353	-5.30	0.30 Ebb	2.43 75	29.0 406	0.61 8.5	233 6539	22.0	7.95	21.95	12,150	2.64	0.02	
W12A	-12.19	10/23/09	1531	-5.49	0.15 Low	2.29 71	26.0 365	0.60 8.4	200 5631	21.9	7.83	22.40	12,399	2.64	0.05	
W12A	-12.19	11/17/09	1507	-5.47	0.21 Flood	2.59 80	26.7 375	0.89 12.5	436 12253	22.1	7.83	22.42	12,410	2.60	0.02	
W12A	-12.19	12/08/09	1208	-5.23	0.37 Ebb	2.55 79	34.4 482	0.96 13.4	479 13439	22.3	7.80	21.33	11,807	2.80	0.02	
W12A	-12.19	01/06/10	1130	-5.25	0.21 Ebb	2.65 82	34.1 477	0.93 13.0	473 13280	22.5	7.88	18.94	10,484	3.55	0.12	
W12A	-12.19	02/01/10	1116	-5.34	0.00 Ebb	2.65 82	39.6 554	0.57 8.0	445 12500	22.5	7.92	19.35	10,711	3.49	0.08	
W12A	-12.19	03/09/10	1044	-5.51	0.15 Flood	2.55 79	27.6 387	0.86 12.0	443 12454	21.7	7.83	22.62	12,521	2.68	0.03	
W12A	-12.19	04/07/10	822	-5.56	0.09 Flood	2.87 89	29.5 413	1.36 19.0	460 12917	21.5	7.78	22.25	12,316	2.63	0.11	
W12A	-12.19	05/12/10	1023	-5.55	0.06 Flood	2.16 67	26.5 371	2.00 28.0	419 11766	21.7	7.89	22.10	12,233	2.67	0.05	
W12A	-12.19	06/15/10	1607	-5.25	0.46 Flood	1.84 57	23.5 329	2.14 30.0	421 11819	21.3	7.92	23.93	13,246	2.14	0.04	
W12A	-12.19	7/13/10	1516	-4.97	0.46 Flood	2.13 66	27.0 378	0.71 10.0	476 13380	21.6	7.86	22.67	12,548	2.48	0.11	
W12A	-12.19	8/3/10	1632	-5.16	0.30 Ebb	2.36 73	28.5 399	0.62 8.7	487 13669	21.7	7.93	21.90	12,122	2.63	0.05	
W12A	-12.19	9/14/10	1636	-5.29	0.24 Low	2.20 68	28.3 397	1.17 16.4	495 13916	21.5	7.87	22.17	12,272	2.71	0.14	
W12A	-12.19	10/12/10	1659	-5.25	0.18 Low	2.36 73	26.3 369	0.46 6.5	501 14063	21.5	7.88	22.33	12,360	2.53	0.16	
W12A	-12.19	11/16/10	1538	-5.21	0.24 Ebb	2.36 73	30.6 428	0.15 2.1	510 14336	21.6	7.88	21.68	12,000	2.64	0.08	
W12A	-12.19	12/14/10	1607	-5.38	0.06 Ebb	2.45 76	30.9 433	0.33 4.6	512 14392	21.6	7.86	21.50	11,901	2.75	0.08	
W12A	-12.19	1/4/11	1547	-5.32	0.21 Flood	2.42 75	30.1 421	0.36 5.0	487 13683	21.6	7.78	21.43	11,862	2.71	0.10	
W12A	-12.19	4/5/11	1558	-5.05	0.46 Flood	2.36 73	28.3 396	0.15 2.1	454 12756	21.6	7.83	21.49	11,895	2.39	0.03	
W12A	-12.19	7/12/11	1548	-4.92	0.73 Ebb	2.20 68	28.4 398	0.16 2.3	470 13193	21.8	7.86	21.96	12,155	2.39	0.02	
W12A	-12.19	10/11/11	1533	-5.11	0.43 High	2.36 73	27.8 390	0.34 4.7	480 13491	21.8	7.85	22.12	12,244	2.67	0.05	
W12A	-12.19	1/10/12	1635	-5.32	0.24 Flood	2.10 65	27.6 386	0.16 2.2	458 12869	21.9	7.82	22.13	12,250	2.57	0.16	
W12A	-12.19	5/1/12	1612	-5.17	0.30 Ebb	2.62 81	28.8 403	0.25 3.5	511 14350	21.7	7.82	22.41	12,405	2.50	0.02	
W12A	-12.19	7/18/12	1459	-4.92	0.64 Flood	2.26 70	27.0 378	0.57 8.0	462 12977	21.6	7.92	22.99	12,726	2.53	0.04	
W12A	-12.19	10/16/12	1439	-5.25	0.30 Flood	2.20 68	27.8 390	0.24 3.3	471 13227	21.8	7.85	22.66	12,543	2.43	0.19	
W12A	-12.19	1/8/13	1545	-5.39	-0.03 Ebb	2.13 66	24.3 341	0.36 5.1	455 12766	21.4	7.79	24.62	13,628	1.95	0.36	
W12A	-12.19	4/9/13	1534	-5.04	0.55 High	2.52 78	25.7 360	0.24 3.4	467 13125	21.7	7.84	22.74	12,587	2.06	0.76	
W12A	-12.19	7/17/13	1651	-5.23	0.30 Ebb	2.20 68	24.1 338	0.32 4.5	479 13439	22.3	7.81	22.35	12,371	2.58	0.19	
W12A	-12.19	10/15/13	1520	-5.06	0.49 Ebb	2.29 71	28.6 401	0.43 6.0	462 12973	21.8	7.81	22.49	12,449	2.68	0.02	

NELHA Water Quality Laboratory

Well 12A Data Table

1/27/2009 - 6/30/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time (2400)	Depth to H ₂ O (m)	Tide (m) (cycle)	PO ₄ ³⁻ (µM) (µg P/L)	NO ₃ ⁻ & NO ₂ ⁻ (µM) (µg N/L)	NH ₄ ⁺ & NH ₃ (µM) (µg N/L)	Si (µM) (µg Si/L)	Temp. (°C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W12A	-12.19	1/15/14	1521	-5.31	0.15 Flood	2.65 82	29.6 415	0.48 6.7	464 13035	22.1	7.88	22.30	12,344	2.87	0.02	
W12A	-12.19	4/29/14	1729	-4.98	0.61 High	2.03 63	24.3 341	0.39 5.5	421 11812	21.5	7.80	23.97	13,268	2.38	0.02	
W12A	-12.19	7/29/14	1605	-5.08	0.46 Flood	2.55 79	28.1 394	0.21 3.0	492 13817	22.2	7.77	22.45	12,427	2.74	0.03	
W12A	-12.19	11/5/14	1549	-5.03	0.36 Ebb	2.58 80	29.7 416	0.17 2.4	460 12906	22.2	7.86	21.72	12,023	2.81	0.05	
W12A	-12.19	2/10/15	1542	-5.41	0.24 High	5.43 168	71.3 999	0.59 8.2	898 25230	21.9	7.81	21.00	11,624	3.04	0.18	
W12A	-12.19	5/20/15	1025	-5.49	0.00 Ebb	2.50 77	31.1 436	0.14 2.0	431 12116	22.1	7.91	21.78	12,056	2.68	0.02	
W12A	-12.19	8/6/15	1016	-5.26	0.43 Ebb	2.47 77	29.0 407	0.07 1.0	435 12204	23.0	7.75	22.40	12,399	2.65	0.02	
W12A	-12.19	11/13/15	1352	-5.26	0.40 Flood	2.90 90	33.3 466	0.21 3.0	488 13692	22.3	7.87	20.92	11,580	2.78	0.04	
W12A	-12.19	1/27/16	1455	-5.46	0.13 Low	2.99 93	44.4 622	0.06 0.9	491 13795	22.1	7.80	19.61	10,855	3.28	0.02	
W12A	-12.19	4/22/16	1227	-5.37	0.20 Flood	3.00 93	34.3 481	0.33 4.6	449 12605	22.9	7.77	21.15	11,707	2.92	0.06	
W12A	-12.19	7/26/16	1417	-5.23	0.50 Ebb	2.46 76	27.6 386	0.10 1.4	393 11026	22.3	7.91	21.62	11,967	2.71	0.02	
W12A	-12.19	11/7/16	1055	-4.94	0.50 Ebb	2.76 86	31.4 440	0.02 0.3	473 13293	22.0	7.73	20.55	11,375	3.78	0.02	
W12A	-12.19	3/22/17	1041	-5.25	0.23 Flood	2.76 86	31.5 441	0.43 6.0	506 14221	23.6	7.80	20.85	11,541	2.41	0.08	
W12A	-12.19	4/19/17	1004	-5.26	0.21 High	2.61 81	31.2 437	0.23 3.2	509 14295	22.0	7.80	21.02	11,635	2.54	0.02	
W12A	-12.19	8/9/17	1006	-5.34	-0.01 Low	2.46 76	20.7 289	0.06 0.9	483 13566	22.1	7.84	22.37	12,382	2.67	0.04	
W12A	-12.19	10/18/17	1009	-5.33	0.10 Low	2.51 78	31.1 436	0.38 5.3	469 13161	22.2	7.82	21.42	11,857	3.39	0.04	
W12A	-12.19	1/18/18	1113	-5.34	0.10 Low	2.75 85	30.6 429	0.09 1.3	485 13617	22.0	7.75	21.52	11,912	2.83	0.02	
W12A	-12.19	5/10/18	1648	-5.20	0.16 Ebb	2.57 80	31.2 438	0.19 2.7	480 13486	22.3	7.83	22.42	12,410	2.39	0.05	
W12A	-12.19	8/30/18	1051	-5.20	0.24 Ebb	2.33 72	26.9 377	0.29 4.1	478 13432	22.5	7.82	21.90	12,122	7.71	0.08	
W12A	-12.19	10/24/18	1543	-5.01	0.53 High	2.54 79	32.6 457	0.06 0.8	480 13485	22.6	7.82	20.65	11,430	2.57	0.03	
W12A	-12.19	2/8/19	1207	-5.48	0.06 Low	3.18 98	45.8 641	0.12 1.7	537 15070	22.0	7.68	19.73	10,921	3.80	0.05	
W12A	-12.19	5/15/19	1610	-5.07	0.40 Ebb	2.86 89	32.4 454	0.16 2.3	487 13682	22.1	7.70	21.60	11,956	3.00	0.02	
W12A	-12.19	8/28/19	1459	-4.73	0.70 High	2.84 88	29.0 406	0.21 3.0	454 12742	22.2	7.86	22.17	12,272	2.78	0.05	
W12A	-12.19	10/11/19	1401	-4.95	0.55 High	2.79 86	28.5 399	0.31 4.3	458 12866	22.4	7.87	22.09	12,227	2.97	0.03	
W12A	-12.19	1/31/20	1129	-5.27	0.17 Ebb	3.16 98	35.3 495	-0.09 -1.2	471 13228	22.7	8.01	22.31	12,349	3.30	0.02	
W12A	-12.19	6/3/20	1320	-4.82	0.50 Flood	2.35 73	27.7 388	0.16 2.2	437 12281	22.3	7.85	23.03	12,748	2.61	0.02	
W12A	-12.19	8/19/20	1200	-5.31	0.15 Flood	2.64 82	30.1 421	0.21 3.0	440 12351	22.3	7.86	21.00	11,624	2.82	0.02	
W12A	-12.19	12/9/20	1428	-5.04	0.20 Ebb	2.61 81	31.4 441	0.11 1.6	444 12482	22.1	7.78	22.58	12,499	2.78	0.07	
W12A	-12.19	2/18/21	1134	-5.26	0.10 Low	2.55 79	31.6 443	0.20 2.8	429 12048	22.0	7.74	21.88	12,111	3.05	0.02	
W12A	-12.19	4/14/21	1448	-5.26	0.40 Flood	2.24 69	28.4 398	0.09 1.3	453 12715	22.2	7.68	22.71	12,571	2.78	0.04	
W12A	-12.19	7/6/21	1420	-4.98	0.60 High	2.38 74	30.6 429	0.04 0.6	433 12166	22.2	7.68	22.56	12,488	2.78	0.07	
W12A	-12.19	11/5/21	1425	-5.29	0.43 High	2.43 75	29.9 419	0.48 6.7	448 12589	22.3	7.63	22.31	12,349	2.83	0.07	
W12A	-12.19	2/8/22	1128	-5.25	1.30 Ebb	3.37 104	39.0 547	0.06 0.9	535 15019	21.9	7.75	20.81	11,519	3.28	0.04	
W12A	-12.19	4/20/22	1521	-5.44	0.25 Flood	2.11 66	30.4 426	0.20 2.8	488 13710	21.9	7.70	21.69	12,006	3.01	0.05	
W12A	-12.19	7/13/22	1012	-5.66	0.00 Flood	2.48 77	31.5 441	-0.35 -4.9	467 13106	21.9	7.68	22.00	12,178	2.92	0.02	

NELHA Water Quality Laboratory

Well 12A Data Table

1/27/2009 - 6/30/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time (2400)	Depth to H ₂ O (m)	Tide (m) (cycle)	PO ₄ ³⁻ (µM) (µg P/L)	NO ₃ ⁻ & NO ₂ ⁻ (µM) (µg N/L)	NH ₄ ⁺ & NH ₃ (µM) (µg N/L)	Si (µM) (µg Si/L)	Temp. (°C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W12A	-12.19	11/21/22	1010	-5.33	0.30 Flood	2.65 82	35.0 490	0.01 0.2	463 13006	21.9	7.74	21.27	11,773	3.17	0.12	
W12A	-12.19	1/25/23	1549	-5.46	0.20 Flood	2.72 84	38.7 542	0.14 1.9	479 13450	21.9	7.77	20.35	11,264	3.49	0.05	
W12A	-12.19	4/26/23	1053	-5.46	0.06 Low	2.66 82	35.3 494	0.23 3.2	446 12532	21.8	7.75	21.60	11,956	3.11	0.04	
W12A	-12.19	8/14/23	1403	-4.96	0.60 High	2.55 79	32.7 459	-0.06 -0.8	457 12834	22.0	7.68	21.47	11,884	3.11	0.34	
W12A	-12.19	11/15/23	1209	-5.27	0.18 Low	2.43 75	34.6 485	0.17 2.4	426 11952	22.0	7.80	21.44	11,868	3.09	0.08	143.6
W12A	-12.19	1/24/24	956	-5.31	0.36 Low	2.38 74	39.9 560	0.05 0.7	493 13842	21.8	7.77	19.63	10,866	3.71	0.07	189.3
W12A	-12.19	5/3/24	1447	-5.11	0.30 Ebb	2.40 74	35.5 498	0.21 3.0	471 13220	22.1	7.77	20.61	11,408	3.38	0.56	255.5
W12A	-12.19	7/30/24	1432	-4.78	0.60 High	2.50 77	35.6 499	0.72 10.1	431 12110	22.0	7.86	20.99	11,619	3.29	0.12	126.9
W12A	-12.19	12/11/24	945	-5.21	0.30 Flood	2.90 90	43.7 612	0.29 4.0	477 13396	21.9	7.78	19.80	10,960	3.64	0.10	221.1
W12A	-12.19	1/10/25	946	-5.29	0.20 Flood	2.72 84	41.6 583	0.27 3.8	456 12800	22.0	7.78	19.92	11,026	3.62	0.10	150.1
W12A	-12.19	5/13/25	1159	-5.35	0.20 Flood	2.41 75	35.4 496	0.13 1.8	439 12339	21.9	7.80	21.27	11,773	3.21	0.09	176.1
Mean				-5.23	0.31	2.51 78	31.19 437	0.36 5.0	459 12886	22.1	7.81	21.72	12,022	2.89	0.09	180.4
Std. Dev.				0.20	0.22	0.44 14	6.79 95	0.39 5.5	78 2178	0.6	0.09	1.10	611	0.67	0.13	45.7
Maximum				-4.73	1.30	5.43 168	71.33 999	2.14 30.0	898 25230	25.7	8.01	24.62	13,628	7.71	0.76	255.5
Minimum				-5.66	-0.03	1.74 54	19.21 269	-0.35 -4.9	200 5631	21.3	7.35	17.85	9,880	1.95	0.02	126.9
n				82	82	82 82	82 82	82 82	82 82	82	82	82	82	82	82	7