

NELHA Water Quality Laboratory

Well 12 Data Table

1/27/2009 - 12/31/2025

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)
W12	-18.29	01/27/09	1024	-5.37	0.09 Ebb	1.64 51	20.1 282	0.14 1.9	146 4094	24.0	7.90	26.78	14,823	1.53	0.42	
W12	-18.29	02/24/09	1440	-5.32	0.24 Flood	1.40 43	20.4 286	0.15 2.1	319 8965	22.9	7.74	27.75	15,360	1.49	0.10	
W12	-18.29	03/16/09	1440	-5.56	0.06 Flood	1.23 38	13.1 184	0.13 1.8	233 6549	24.0	7.68	21.57	11,940	2.65	0.11	
W12	-18.29	04/22/09	922	-5.58	0.00 Flood	1.81 56	19.2 269	0.41 5.7	280 7867	24.6	7.64	26.68	14,768	1.69	1.81	
W12	-18.29	05/29/09	1324	-5.49	0.12 Low	1.55 48	17.8 249	0.19 2.7	482 13529	21.7	7.73	27.47	15,205	1.60	0.04	
W12	-18.29	06/19/09	1343	-4.89	0.70 High	1.78 55	17.9 251	0.45 6.3	218 6137	21.7	7.86	27.75	15,360	1.52	0.07	
W12	-18.29	07/31/09	1355	-4.90	0.64 High	1.79 55	17.2 241	0.39 5.5	226 6349	21.8	7.80	27.50	15,222	1.54	0.04	
W12	-18.29	08/20/09	1443	-4.91	0.61 Flood	1.82 56	17.3 242	1.12 15.7	287 8067	21.9	7.85	27.70	15,333	1.45	0.02	
W12	-18.29	09/24/09	1413	-5.30	0.30 Ebb	1.99 62	17.5 245	1.01 14.1	242 6800	21.8	8.30	27.79	15,382	1.57	0.05	
W12	-18.29	10/23/09	1606	-5.40	0.15 Low	1.88 58	17.2 241	0.74 10.4	169 4743	21.7	7.80	27.07	14,984	1.80	0.03	
W12	-18.29	11/17/09	1537	-5.51	0.21 Flood	2.40 74	17.2 241	0.86 12.1	283 7951	21.7	7.80	26.91	14,895	1.75	0.11	
W12	-18.29	12/08/09	1150	-5.23	0.37 Ebb	2.49 77	22.8 320	1.06 14.8	367 10317	22.1	7.75	26.40	14,613	1.67	0.02	
W12	-18.29	01/06/10	1121	-5.22	0.21 Ebb	2.23 69	19.1 267	0.71 10.0	333 9363	22.3	7.80	26.50	14,668	1.67	0.04	
W12	-18.29	02/01/10	1105	-5.33	0.00 Ebb	1.90 59	21.2 297	0.43 6.0	347 9736	22.2	7.87	27.02	14,956	2.03	0.10	
W12	-18.29	03/09/10	1058	-5.58	0.15 Flood	1.26 39	14.5 203	0.29 4.0	364 10231	23.2	7.81	26.31	14,563	1.91	0.09	
W12	-18.29	04/07/10	826	-5.50	0.09 Flood	2.20 68	20.4 286	1.36 19.0	341 9584	23.1	7.85	26.66	14,757	1.73	0.08	
W12	-18.29	05/12/10	1028	-5.53	0.06 Flood	1.58 49	17.4 244	1.57 22.0	328 9226	22.9	7.88	26.76	14,812	1.79	0.03	
W12	-18.29	06/15/10	1614	-5.24	0.46 Flood	1.42 44	14.5 203	0.57 8.0	298 8377	21.4	7.91	27.89	15,438	1.48	0.03	
W12	-18.29	7/13/10	1528	-4.96	0.46 Flood	1.61 50	17.9 251	0.01 0.1	363 10183	21.3	7.87	26.97	14,929	1.64	0.06	
W12	-18.29	8/3/10	1624	-5.15	0.30 Ebb	1.78 55	18.8 264	0.38 5.3	364 10236	21.4	7.86	26.71	14,785	1.68	0.04	
W12	-18.29	9/14/10	1630	-5.31	0.24 Low	1.65 51	16.6 233	0.71 10.0	345 9692	21.4	7.86	27.80	15,388	1.52	0.08	
W12	-18.29	10/12/10	1649	-5.27	0.18 Low	1.81 56	16.0 224	0.41 5.7	359 10095	21.4	7.86	27.33	15,128	1.70	0.33	
W12	-18.29	11/16/10	1531	-5.20	0.24 Ebb	1.74 54	19.1 268	0.06 0.9	377 10576	21.4	7.84	26.84	14,857	1.60	0.13	
W12	-18.29	12/14/10	1559	-5.39	0.06 Ebb	1.81 56	19.7 276	0.21 3.0	385 10806	21.4	7.84	26.46	14,646	1.59	0.08	
W12	-18.29	1/4/11	1540	-5.32	0.21 Flood	1.78 55	19.3 271	0.62 8.7	363 10191	21.3	7.76	26.12	14,458	1.68	0.09	
W12	-18.29	4/5/11	1552	-5.05	0.46 Flood	1.90 59	18.3 256	0.02 0.3	337 9473	21.3	7.70	26.41	14,619	1.39	0.07	
W12	-18.29	7/12/11	1556	-4.94	0.73 Ebb	1.68 52	17.2 241	0.09 1.2	334 9381	21.5	7.82	27.29	15,106	1.26	0.09	
W12	-18.29	10/11/11	1523	-5.10	0.43 High	1.65 51	17.2 241	0.22 3.1	339 9525	21.5	7.81	27.30	15,111	1.47	0.03	
W12	-18.29	1/10/12	1646	-5.32	0.24 Flood	1.49 46	17.1 239	0.14 1.9	322 9031	21.5	7.79	26.73	14,796	1.55	0.62	
W12	-18.29	5/1/12	1604	-5.18	0.30 Ebb	1.87 58	17.2 241	0.25 3.5	344 9675	21.4	7.80	27.87	15,427	1.40	0.05	
W12	-18.29	7/18/12	1454	-4.95	0.64 Flood	1.68 52	16.0 224	0.51 7.1	330 9260	21.6	7.92	28.04	15,521	1.49	0.07	
W12	-18.29	10/16/12	1446	-5.25	0.30 Flood	2.20 68	17.7 248	0.23 3.2	343 9630	21.4	7.82	27.29	15,106	1.50	0.10	
W12	-18.29	1/8/13	1545	-5.39	-0.03 Ebb	1.78 55	17.8 250	0.24 3.4	366 10268	21.4	7.77	27.43	15,183	1.48	2.25	
W12	-18.29	4/9/13	1525	-5.03	0.55 High	1.90 59	16.8 235	0.49 6.8	346 9721	21.4	7.82	27.19	15,050	1.37	0.04	
W12	-18.29	7/17/13	1644	-5.24	0.30 Ebb	1.68 52	17.4 244	1.52 21.3	334 9393	21.9	7.78	27.74	15,355	1.45	0.16	

NELHA Water Quality Laboratory

Well 12 Data Table

1/27/2000 - 12/31/2025

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)
W12	-18.29	10/15/13	1512	-5.08	0.49 Ebb	1.65 51	17.0 238	0.26 3.6	327 9187	21.5	7.78	27.91	15,449	1.47	0.16	
W12	-18.29	1/15/14	1513	-5.34	0.15 Flood	1.90 59	17.6 247	0.33 4.6	336 9442	21.9	7.88	27.78	15,377	1.71	0.03	
W12	-18.29	4/29/14	1739	-4.95	0.61 High	1.68 52	18.1 253	0.45 6.3	337 9474	21.5	7.76	27.23	15,073	1.73	0.14	
W12	-18.29	7/29/14	1558	-5.09	0.46 Flood	1.81 56	15.8 222	0.14 2.0	331 9287	22.8	7.75	28.09	15,549	1.96	0.06	
W12	-18.29	11/5/14	1541	-5.05	0.36 Ebb	1.90 59	16.6 232	0.09 1.3	317 8893	21.9	7.77	27.81	15,394	1.40	0.10	
W12	-18.29	2/10/15	1533	-5.40	0.24 High	3.20 99	40.3 564	0.50 7.0	580 16283	21.5	7.73	26.75	14,807	1.54	0.25	
W12	-18.29	5/20/15	1036	-5.56	0.00 Ebb	1.73 54	17.3 242	0.21 3.0	303 8507	21.8	7.85	27.74	15,355	1.35	0.03	
W12	-18.29	8/6/15	1031	-5.18	0.43 Ebb	1.80 56	18.4 258	0.01 0.1	322 9057	21.9	7.74	26.90	14,890	1.48	0.02	
W12	-18.29	11/13/15	1340	-5.15	0.30 Flood	1.86 58	17.4 244	0.26 3.7	362 10181	21.7	7.87	27.55	15,250	1.35	0.06	
W12	-18.29	1/27/16	1505	-5.48	0.13 Flood	1.93 60	25.3 355	0.59 8.3	333 9343	21.6	7.76	26.47	14,652	1.52	0.05	
W12	-18.29	4/22/16	1245	-5.38	0.20 Flood	2.18 68	22.6 317	0.64 9.0	322 9032	22.6	7.74	26.73	14,796	1.66	0.10	
W12	-18.29	7/26/16	1401	-5.25	0.50 Ebb	1.75 54	14.2 199	0.22 3.1	274 7704	21.8	7.87	27.61	15,283	1.41	0.02	
W12	-18.29	11/7/16	1108	-4.95	0.50 Ebb	1.83 57	16.1 225	0.56 7.9	306 8605	21.6	7.70	27.47	15,205	1.63	0.02	
W12	-18.29	3/22/17	1105	-5.25	0.23 Flood	1.87 58	17.2 241	0.73 10.2	346 9723	21.8	7.80	27.29	15,106	1.36	0.05	
W12	-18.29	4/19/17	1016	-5.29	0.21 High	1.77 55	17.7 248	0.26 3.7	349 9794	21.6	7.75	27.29	15,106	1.21	0.03	
W12	-18.29	8/9/17	1023	-5.36	-0.01 Low	1.71 53	10.2 143	0.04 0.5	309 8666	21.8	7.84	29.10	16,108	1.45	0.08	
W12	-18.29	10/18/17	1026	-5.36	0.10 Low	1.79 55	15.5 217	0.35 4.9	312 8749	22.0	7.81	28.10	15,554	1.90	0.03	
W12	-18.29	1/18/18	1127	-5.35	0.10 Low	1.78 55	16.6 233	0.15 2.1	341 9579	21.6	7.77	27.38	15,156	1.42	0.05	
W12	-18.29	5/10/18	1704	-5.15	0.16 Ebb	1.61 50	16.3 229	0.15 2.1	324 9112	21.6	7.80	27.33	15,128	1.33	0.04	
W12	-18.29	8/30/18	1104	-5.21	0.24 Ebb	1.73 54	13.2 185	0.29 4.1	344 9669	22.4	7.80	27.88	15,432	1.50	0.03	
W12	-18.29	10/24/18	1554	-5.05	0.53 High	1.58 49	15.9 223	0.06 0.9	320 8988	22.2	7.81	27.37	15,150	2.67	0.13	
W12	-18.29	2/8/19	1217	-5.50	0.06 Low	1.87 58	22.7 319	0.12 1.7	339 9524	21.6	7.65	26.61	14,729	1.58	0.04	
W12	-18.29	5/15/19	1623	-5.08	0.40 Ebb	1.89 59	16.3 229	0.15 2.1	319 8953	21.7	7.69	28.18	15,598	1.42	0.02	
W12	-18.29	8/28/19	1522	-4.73	0.70 High	1.90 59	14.9 208	0.40 5.6	313 8803	21.8	7.81	28.61	15,836	1.51	0.06	
W12	-18.29	10/11/19	1416	-4.96	0.55 High	1.89 58	14.6 204	0.03 0.4	307 8612	21.9	7.80	27.77	15,371	1.55	0.05	
W12	-18.29	1/31/20	1142	-5.28	0.17 Ebb	2.08 65	18.0 252	0.11 1.5	312 8770	22.5	7.86	29.95	16,578	1.48	0.02	
W12	-18.29	6/3/20	1331	-4.80	0.50 Flood	1.85 57	15.6 219	0.19 2.7	316 8885	21.8	7.83	28.95	16,025	1.37	0.05	
W12	-18.29	8/19/20	1211	-5.33	0.15 Flood	1.93 60	16.5 231	0.16 2.2	304 8538	25.5	7.80	26.60	14,724	2.05	0.55	
W12	-18.29	12/9/20	1443	-5.02	0.20 Ebb	1.91 59	17.3 242	0.23 3.2	319 8961	21.9	7.79	28.78	15,930	1.44	0.11	
W12	-18.29	2/18/21	1147	-5.20	0.10 Low	1.60 50	16.3 228	0.14 2.0	293 8232	21.8	7.73	28.13	15,571	1.48	0.04	
W12	-18.29	4/14/21	1501	-5.25	0.40 Flood	1.57 49	15.8 221	0.16 2.2	312 8758	21.9	7.67	27.26	15,089	1.71	0.05	
W12	-18.29	7/6/21	1434	-4.91	0.60 High	1.66 51	18.2 255	0.08 1.1	300 8413	21.8	7.66	27.44	15,189	1.65	0.04	
W12	-18.29	11/5/21	1435	-5.29	0.43 High	1.69 52	18.1 254	1.19 16.6	330 9279	22.0	7.61	27.18	15,045	1.68	0.05	
W12	-18.29	2/8/22	1142	-5.26	1.30 Ebb	3.25 101	21.3 299	0.04 0.6	371 10428	21.5	7.73	26.95	14,918	1.66	0.09	
W12	-18.29	4/20/22	1532	-5.43	0.25 Flood	1.54 48	18.8 263	0.04 0.5	351 9848	21.5	7.67	26.39	14,608	1.83	0.02	

NELHA Water Quality Laboratory

Well 12 Data Table

1/27/2020 - 12/31/2025

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)
W12	-18.29	7/13/22	1032	-5.68	0.00 Flood	1.69 53	18.2 256	-0.34 -4.8	329 9227	21.6	7.66	27.52	15,233	1.60	0.02	
W12	-18.29	11/21/22	1022	-5.35	0.30 Flood	1.75 54	18.1 253	-0.01 -0.2	309 8675	21.5	7.77	27.58	15,266	1.59	0.17	
W12	-18.29	1/25/23	1602	-5.45	0.20 Flood	1.68 52	18.8 264	0.17 2.4	279 7836	21.4	7.73	26.59	14,718	1.77	0.27	
W12	-18.29	4/26/23	1105	-5.47	0.06 Low	1.92 60	19.8 278	0.34 4.7	318 8926	21.5	7.73	27.20	15,056	1.70	0.15	
W12	-18.29	8/14/23	1416	-4.94	0.60 High	1.77 55	17.4 244	0.05 0.7	311 8727	21.7	7.69	27.80	15,388	1.60	1.02	
W12	-18.29	11/15/23	1222	-5.29	0.18 Low	1.58 49	16.0 224	0.15 2.1	282 7914	21.6	7.82	28.10	15,554	1.52	0.16	116.3
W12	-18.29	1/24/24	1010	-5.30	0.36 Low	1.49 46	19.4 272	0.02 0.3	325 9125	21.6	7.74	26.90	14,890	1.67	0.11	161.4
W12	-18.29	5/3/24	1459	-5.12	0.30 Ebb	1.68 52	18.8 263	0.12 1.7	314 8826	21.5	7.74	27.20	15,056	1.63	0.71	227.5
W12	-18.29	7/30/24	1442	-4.78	0.60 High	1.69 52	16.9 237	-0.03 -0.4	343 9647	21.7	7.85	28.10	15,554	1.56	0.10	122.2
W12	-18.29	12/11/24	959	-5.22	0.30 Flood	1.73 54	19.2 269	0.21 2.9	310 8704	21.5	7.75	26.74	14,801	1.71	0.07	155.9
W12	-18.29	1/10/25	1000	-5.28	0.20 Flood	1.76 55	20.8 291	0.53 7.4	303 8505	21.5	7.76	26.73	14,796	1.70	0.21	126.8
W12	-18.29	5/13/25	1215	-5.36	0.20 Flood	1.67 52	18.9 265	0.13 1.8	311 8733	21.5	7.78	26.93	14,906	1.71	0.29	145.6
W12	-18.29	7/29/25	1027	-5.06	0.20 Low	1.67 52	15.9 223	0.09 1.2	283 7954	21.8	7.77	27.96	15,477	1.52	0.23	136.6
W12	-18.29	12/17/25	1351	-5.18	0.10 Ebb	1.97 61	18.2 255	0.00 0.0	807 22673	21.7	7.75	26.83	14,851	1.71	0.08	152.6
Mean				-5.23	0.30	1.81 56	17.9 251	0.34 4.7	329 9235	21.9	7.79	27.30	15,109	1.61	0.16	149.4
Std. Dev.				0.21	0.22	0.31 9	3.3 47	0.36 5.0	74 2092	0.7	0.09	0.93	516	0.23	0.34	33.2
Maximum				-4.73	1.30	3.25 101	40.3 564	1.57 22.0	807 22673	25.5	8.30	29.95	16,578	2.67	2.25	227.5
Minimum				-5.68	-0.03	1.23 38	10.2 143	-0.34 -4.8	146 4094	21.3	7.61	21.57	11,940	1.21	0.02	116.3
n				84	84	84 84	84 84	84 84	84 84	84	84	84	84	84	84	9