NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m) (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	6/27/89				2.47	77	57.6	807	0.51	7.1			22.4	7.796	18.972	10,501	4.87		
W4	-15.24	8/10/89	947			2.32	72	88.0	1233	0.48	6.7			21.2	7.648	18.626	10,310	5.40		
W4	-15.24	8/15/89	1430			2.09	65	75.0	1051	0.67	9.4			21.1	7.696	19.164	10,608	5.19		
W4	-15.24	8/22/89	1410			2.35	73	87.5	1226	0.54	7.6			20.8	7.771	18.827	10,421	6.24		
W4	-15.24	8/30/89	1410			2.34	72	87.0	1219	0.58	8.1			21.4	7.719	18.791	10,401	5.47		
W4	-15.24	8/30/89	1410			2.34	72	88.0	1233	0.54	7.6									
W4	-15.24	10/31/89	1110			2.40	74	46.8	656	0.10	1.4	539	15138	20.9	7.750	18.537	10,261	5.24		
W4	-15.24	11/16/89	1108			2.15	67	40.9	573	0.06	0.8	526	14773	22.4	7.755	18.917	10,471	5.84		
W4	-15.24	12/12/89	1115			6.50	201	71.9	1007	0.93	13.0	456	12807	20.8	8.385	18.554	10,270	5.20		
W4	-15.24	1/11/90	912			2.96	92	48.1	674	1.17	16.4	512	14380	21.2	8.095	18.857	10,438	4.84		
W4	-15.24	2/14/90	1130			2.93	91	51.4	720	0.27	3.8	459	12891	21.6	8.038	18.373	10,170	5.12		
W4	-15.24	3/7/90	1110			2.46	76	50.1	702	0.44	6.2	514		21.1	7.965	18.298	10,128	4.94		
W4	-15.24	4/4/90	1310			2.64	82	45.8	642	1.12	15.7	500	14043	21.4	7.916	19.193	10,624	4.43		
W4	-15.24	5/17/90	1136			2.34	72	44.6	624	0.07	1.0	490	13762	21.3	7.865	18.944	10,486	4.59		
W4	-15.24	6/16/90	1043			2.53	78	43.9	615	0.00	0.0	496	13930	21.3	7.935	19.144	10,597	4.84		
W4	-15.24	7/17/90	1122			2.57	80	41.5	581	0.00	0.0	493	13846	21.4	7.923	19.677	10,892	4.70		
W4	-15.24	8/8/90	1115			1.99	62	51.8	726	0.29	4.1	496	13930	21.4	7.901	19.841	10,983	4.74		
W4	-15.24	9/5/90	1119			2.39	74	42.8	600	0.00	0.0			21.4	7.898	17.356	9,607	4.74		
W4	-15.24	10/4/90	1128			2.24	69	40.5	567	0.00	0.0	496	13930	21.2	7.893	19.640	10,871	4.80		
W4	-15.24	11/1/90	1143			2.16	67	42.6	597	0.04	0.6	494	13874	21.3	7.886	19.799	10,959	4.47		
W4	-15.24	12/10/90	1120			2.26	70	44.2	619	0.13	1.8	537	15082	21.3	7.898	19.239	10,649	4.82		
W4	-15.24	1/10/91	900			2.23	69	45.7	640	0.03	0.4	484	13593	21.4	7.896	19.390	10,733	4.67		
W4	-15.24	2/5/91	1117			2.27	70	40.6	569	0.33	4.6	442	12414	21.3	7.897	19.163	10,607	4.79		
W4	-15.24	3/7/91	745			2.04	63	43.5	609	0.06	0.8	477	13397	21.0	7.901	19.098	10,571	4.92		
W4	-15.24	4/3/91	828			1.90	59	52.2	731	0.00	0.0	473	13284	21.0	7.912	19.304	10,685	4.77		
W4	-15.24	5/22/91	804			1.96	61	21.3	298	0.00	0.0	555	15587	21.2	7.890	19.625	10,863	4.68		
W4	-15.24	6/26/91	810			2.28	71	45.7	640	0.03	0.4	511	14352	21.2	7.906	19.209	10,633	4.74		
W4	-15.24	7/24/91	845			2.07	64	41.7	584	0.15	2.1	498	13987	18.7	7.887	19.580	10,838	4.71		
W4	-15.24	8/23/91	829			2.24	69	43.7	612	0.21	2.9	516	14492	21.1	7.847	19.429	10,754	4.68		
W4	-15.24	9/24/91	751			2.11	65	43.2	605	0.30	4.2	504	14155	21.2	7.855	19.182	10,618	4.84		
W4	-15.24	10/23/91	720			2.58	80	46.1	646	0.00	0.0	739	20755	21.1	7.943	19.450	10,766	4.62		
W4	-15.24	11/20/91	813			2.87	89	42.7	598	0.00	0.0	561	15756	21.1	7.898	19.452	10,767	4.65		
W4	-15.24	12/11/91	840			2.97	92	44.5	623	0.00	0.0	488	13706	21.5	7.947	19.590	10,844	4.43		
W4	-15.24	1/29/92	836			2.63	81	45.4	636	0.00	0.0	490	13762	21.1	7.952	19.091	10,567	4.78		
W4	-15.24	2/19/92	911			2.73	85	44.9	629	0.00	0.0	464	13032	21.7	7.923	19.331	10,700	4.72		

NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m) (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	3/17/92	824			2.24	69	44.8	628	0.00	0.0	496	13930	21.2	7.896	19.066	10,554	4.89		
W4	-15.24	4/8/92	811			2.31	72	45.6	639	0.14	2.0	496	13930	21.2	7.886	18.840	10,428	4.96		
W4	-15.24	5/6/92	821			2.16	67	43.3	606	0.05	0.7	530	14885	21.2	7.869	19.222	10,640	4.94		
W4	-15.24	6/23/92	822			2.31	72	44.2	619	0.28	3.9	537	15082	21.3	7.878	19.191	10,623	5.01		
W4	-15.24	7/29/92	811			2.06	64	43.3	606	ND	0.0	514	14436	21.8	7.857	19.274	10,669	4.92		
W4	-15.24	8/26/92	755			2.29	71	51.4	720	0.14	2.0	543	15250	21.2	7.861	19.058	10,549	4.90		
W4	-15.24	9/22/92	757			2.22	69	41.9	587	0.00	0.0	553	15531	21.2	7.890	19.012	10,524	4.92		
W4	-15.24	10/27/92	813			2.95	91	44.3	621	0.14	2.0	527	14801	21.2	7.901	19.924	11,028	4.60		
W4	-15.24	11/17/92	835			2.34	72	45.6	639	0.19	2.7	522	14661	21.1	7.903	19.469	10,777	4.81		
W4	-15.24	12/8/92	820			2.19	68	46.4	650	0.21	2.9	539	15138	21.2	7.888	19.004	10,519	4.94		
W4	-15.24	1/26/93	832			2.11	65	48.5	679	0.19	2.7	587	16486	21.2	7.905	18.679	10,339	5.03		
W4	-15.24	2/23/93	803			2.15	67	46.9	657	0.05	0.7	554	15565	21.1	7.906	18.944	10,486	4.99		
W4	-15.24	3/16/93	804			2.11	65	46.1	646	0.10	1.4	556	15616	21.1	7.894	18.999	10,516	5.01		
W4	-15.24	4/27/93	808			2.07	64	45.0	630	0.21	2.9	552	15509	21.2	7.878	19.387	10,731	4.93		
W4	-15.24	5/25/93	800			2.07	64	44.3	621	0.21	2.9	557	15635	21.3	7.867	19.382	10,728	4.90		
W4	-15.24	6/28/93	839			2.00	62	44.6	625	0.16	2.2	532	14941	21.3	7.871	19.402	10,740	4.92		
W4	-15.24	8/31/93	836			2.15	67	45.0	630	0.00	0.0	552	15503	21.3	7.864	19.087	10,565	5.05		
W4	-15.24	10/26/93	808			2.16	67	46.2	648	0.32	4.5	526	14773	21.2	7.877	18.883	10,452	5.08		
W4	-15.24	3/1/94	754			2.25	70	46.0	644	0.19	2.7	480	13481	21.1	7.860	19.322	10,695	4.78		
W4	-15.24	6/21/94	744			2.34	72	49.8	697	0.21	2.9	727	20408	21.2	8.917	19.546	10,819	4.87		
W4	-15.24	8/23/94	824			3.95	122	60.2	843	0.18	2.5	528	14840	21.3	8.019	19.850	10,987	5.47		
W4	-15.24	10/25/94	840			2.45	76	45.4	636	0.40	5.6	464	13040	21.2	7.906	19.670	10,888	4.82		
W4	-15.24	11/28/94	1215			2.42	75	44.3	620	0.43	6.0	468	13148	21.3		19.276	10,670	4.87		
W4	-15.24	12/13/94	905			2.36	73	45.2	633	0.00	0.0	184	5162	21.2		19.443	10,762			
W4	-15.24	1/24/95	838			2.31	72	45.1	631	0.14	2.0	473	13277	21.1	7.891	19.320	10,694	4.92		
W4	-15.24	2/14/95	819			2.25	70	45.2	634	0.27	3.8	479	13442	21.2	7.904	19.380	10,727	4.92		
W4	-15.24	3/14/95	913			2.25	70	45.4	636	0.07	1.0	471	13237	21.3	7.859	19.288	10,676	5.01		
W4	-15.24	4/25/95	938			2.22	69	43.4	608	0.25	3.5	476	13369	21.1	7.871	19.668	10,887	4.86		
W4	-15.24	5/9/95	828			2.19	68	46.0	644	0.25	3.5	510	14332	21.4	7.852	19.134	10,591	4.97		
W4	-15.24	6/27/95	846			2.17	67	44.0	617	0.45	6.3	480	13470	21.4	7.859	19.312	10,690	5.01		
W4	-15.24	7/25/95	900			2.06	64	44.5	623	0.15	2.1	482	13546	21.3	7.849	19.272	10,668	4.91		
W4	-15.24	8/22/95	947			2.01	62	43.1	603	0.31	4.3	481	13506	21.4	7.852	19.353	10,712	4.79		
W4	-15.24	9/12/95	657			2.18	68	42.7	598	0.14	2.0	477	13386	21.3	7.899	19.685	10,896	6.36		
W4	-15.24	10/17/95	856			2.14	66	43.7	613	0.16	2.2	488	13700	21.5	7.880	19.250	10,655	4.86		
W4	-15.24	11/7/95	809			2.14	66	43.1	604	0.43	6.0	473	13296	21.3	7.910	19.628	10,865	4.78		

NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m) (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	12/6/95	823			2.10	65	44.4	621	0.29	4.1	483	13551	21.4	7.923	19.239	10,649	4.92		
W4	-15.24	1/30/96	858			2.09	65	44.3	621	0.14	2.0	482	13532	21.0	7.939	19.651	10,877	4.82		
W4	-15.24	2/27/96	905			2.10	65	43.9	615	0.15	2.1	489	13720	21.5	7.889	19.333	10,701	5.02		
W4	-15.24	3/13/96	939			2.14	66	43.9	615	0.31	4.3	481	13509	21.5	7.868	19.166	10,609	4.96		
W4	-15.24	4/2/96	924			2.14	66	40.4	565	0.18	2.5	494	13875	21.9	7.851	19.365	10,719	4.84		
W4	-15.24	5/15/96	910			2.21	68	46.7	655	0.24	3.4	496	13925	21.7	7.840	19.008	10,521	4.98		
W4	-15.24	6/18/96	831			2.17	67	43.1	603	0.15	2.1	493	13837	21.7	7.867	19.782	10,950	6.44		
W4	-15.24	7/17/96	906			2.21	68	45.2	633	0.21	2.9	487	13678	21.7	7.895	19.496	10,792	0.99		
W4	-15.24	8/6/96	915			2.09	65	47.2	661	0.38	5.3	477	13409	22.2	7.881	19.423	10,751	4.89		
W4	-15.24	9/4/96	915			2.26	70	65.3	914	0.36	5.0	482	13542	21.7	7.886	19.041	10,540	4.97		
W4	-15.24	10/9/96	918			2.54	79	62.8	880	0.35	4.9	495	13893	21.7	7.943	18.427	10,200	5.81		
W4	-15.24	11/6/96	906			2.26	70	51	712	0.27	3.8	489	13737	21.7	7.869	18.471	10,224	5.11		
W4	-15.24	12/17/96	905			2.31	72	50	702	0.21	2.9	458	12871	21.8	7.896	19.257	10,659	5.12		
W4	-15.24	1/14/97	930			2.36	73	88	1233	0.18	2.5	451	12658	21.8	7.940	19.517	10,803	5.51		
W4	-15.24	2/10/97	1038			2.40	74	70	980	0.34	4.8	451	12669	21.7	7.903	20.106	11,129	5.38		
W4	-15.24	3/10/97	1041			3.02	94	72	1013	0.06	0.8	462	12976	21.9	7.908	20.165	11,162	5.38		
W4	-15.24	4/23/97	903			2.27	70	64	891	0.46	6.4	463	12992	21.7	7.931	20.317	11,246	4.98		
W4	-15.24	5/28/97	922			2.58	80	45	627	0.06	0.8	418	11726	21.1	7.924	20.833	11,532	4.52		
W4	-15.24	6/17/97	920			2.11	65	52	727	0.39	5.5	440	12366	21.1	7.947	19.934	11,034	4.64		
W4	-15.24	7/15/97	912			2.45	76	67	944	0.05	0.7	435	12228	21.2	7.994	19.865	10,996	4.47		
W4	-15.24	8/26/97	915			2.15	67	43	601	0.30	4.2	440	12346	21.0	8.079	20.537	11,368	4.48		
W4	-15.24	9/23/97	1109			2.06	64	44.4	622	0.23	3.2	431	12116	21.7	8.092	20.512	11,354	4.48		
W4	-15.24	10/15/97	851			2.16	67	43.6	611	0.06	0.8	466	13085	21.5	8.104	20.147	11,152	4.58		
W4	-15.24	11/4/97	1007			2.16	67	44.9	629	0.18	2.5	455	12765	21.5	8.107	20.044	11,095	4.67		
W4	-15.24	12/16/97	910			2.04	63	39.0	546	0.05	0.7	451	12678	21.5	8.060	20.977	11,611	4.60		
W4	-15.24	1/5/98	1204			2.13	66	41.9	586	0.20	2.8	455	12775	21.5	8.074	20.199	11,181	4.69		
W4	-15.24	2/3/98	1021			2.09	65	42	590	0.01	0.1	474	13310	21.5	8.050	19.990	11,065	4.76		
W4	-15.24	3/10/98	1034			2.15	67	43	606	0.11	1.5	473	13290	21.4	7.879	20.029	11,087	4.79		
W4	-15.24	4/14/98	858			5.71	177	676	9467	0.02	0.3	355	9979	21.5	8.757	19.912	11,022	4.28		
W4	-15.24	5/12/98	1028			2.71	84	75	1053	0.14	2.0	453	12711	21.5	8.090	19.721	10,916	4.64		
W4	-15.24	6/2/98	1023			2.44	76	50.7	710	0.14	2.0	455	12789	21.5	7.975	19.993	11,067	4.77		
W4	-15.24	7/14/98	1033			18.01	558	288	4040	7.36	103.1	279	7830	21.7	8.654	20.649	11,430	5.43		
W4	-15.24	8/11/98	1048			7.68	238	74.3	1041	0.23	3.2	376	10546	21.6	8.360	20.797	11,512	4.01		
W4	-15.24	9/15/98	1122			3.39	105	51.3	719	0.09	1.3	412	11568	21.5	8.063	21.673	11,997	4.20		
W4	-15.24	10/13/98	959			3.07	95	41.0	574	0.02	0.3	425	11928	21.8	8.007	21.676	11,998	4.61		

NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m) (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	11/4/98	1032			3.04	94	49	682	0.06	0.8	463	13006	21.9	8.029	20.424	11,305	4.50		
W4	-15.24	12/16/98	1013			2.70	84	58	809	0.09	1.3	459	12891	21.7	7.975	19.612	10,856	4.69		
W4	-15.24	1/12/99	1048			2.48	77	47.9	670	0.05	0.7	458	12855	21.7	7.946	19.884	11,006	4.74		
W4	-15.24	2/3/99	1037			3.28	102	74.7	1046	0.09	1.3	434	12183	21.5	7.987	20.493	11,343	4.29		
W4	-15.24	3/2/99	1039			2.48	77	55.2	773	0.02	0.3	436	12240	21.6	7.981	20.695	11,455	4.82		
W4	-15.24	4/6/99	1032			2.38	74	48.4	678	0.11	1.5	432	12139	21.6	7.969	21.382	11,835	4.39		
W4	-15.24	5/4/99	1037			2.53	78	47.9	671	0.10	1.4	440	12369	21.5	7.959	20.424	11,305	4.55		
W4	-15.24	6/2/99	1020			2.44	76	40.1	562	0.19	2.7	425	11936	21.6	7.928	21.129	11,695	4.50		
W4	-15.24	7/7/99	1055			2.66	82	40.3	564	0.01	0.1	446	12518	21.9	7.926	20.751	11,486	4.59		
W4	-15.24	8/25/99	1021			2.48	77	42.1	590	0.07	1.0	452	12689	22.1	7.970	20.644	11,427	5.03		
W4	-15.24	9/8/99	1031			2.36	73	39.1	548	0.06	0.8	444	12464	21.5	7.957	21.654	11,986	4.49		
W4	-15.24	10/6/99	1038			2.40	74	40.2	562	0.07	1.0	427	11993	21.6	7.956	20.874	11,554	4.67		
W4	-15.24	11/3/99	1052			3.41	106	194	2714	0.13	1.8	377	10585	21.7	8.362	20.529	11,363	4.92		
W4	-15.24	12/15/99	1108			2.66	82	58.8	824	0.10	1.4	427	12001	21.7	8.026	21.058	11,656	4.05		
W4	-15.24	1/11/00	1044			2.31	72	48.2	675	0.14	2.0	448	12582	21.5	7.952	20.298	11,235	4.61		
W4	-15.24	2/14/00	1101			2.31	72	45.3	635	0.05	0.7	445	12504	21.8	7.970	20.339	11,258	4.78		
W4	-15.24	3/22/00	1110			2.20	68	42.2	591	0.06	0.8	449	12610	21.5	7.954	21.111	11,685	4.44		
W4	-15.24	4/12/00	1053			2.25	70	40.2	563	0.03	0.4	465	13051	21.6	7.941	21.119	11,690	4.45		
W4	-15.24	5/17/00	1030			2.05	63	38.0	532	0.11	1.5	433	12155	21.6	7.924	21.777	12,054	7.65		
W4	-15.24	6/6/00	1106			1.94	60	35.2	493	0.03	0.4	427	11987	21.6	7.917	22.335	12,363	7.52		
W4	-15.24	7/31/00	1055			2.08	64	38.2	535	0.09	1.3	436	12231	21.4	7.931	21.244	11,759	4.52		
W4	-15.24	8/30/00	1101			2.01	62	35.7	500	0.05	0.7	429	12051	21.6	7.881	22.266	12,325	4.32		
W4	-15.24	9/6/00	1042			2.00	62	35.0	490	0.01	0.1	435	12217	21.9	7.878	22.183	12,279	4.27		
W4	-15.24	10/25/00	1008			2.01	62	38.3	536	0.24	3.4	452	12683	21.6	7.886	21.825	12,081	4.25		
W4	-15.24	11/14/00	1122			2.10	65	43.5	609	0.17	2.4	437	12265	21.6	7.918	21.515	11,909	4.20		
W4	-15.24	12/19/00	1024			1.88	58	40.0	560	0.13	1.8	454	12759	21.5	7.905	21.299	11,790	4.31		
W4	-15.24	1/24/01	1016			2.08	64	38.3	537	0.17	2.4	529	14852	21.5	7.894	21.525	11,915	4.24		
W4	-15.24	2/7/01	1045			2.13	66	39.9	559	0.14	2.0	462	12984	21.6	7.925	20.931	11,586	4.37		
W4	-15.24	3/12/01	1030			2.03	63	37.2	521	0.03	0.4	441	12386	21.8	7.871	21.373	11,831	4.50		
W4	-15.24	4/18/01	1020			2.14	66	40.7	570	0.04	0.6	368	10341	21.6	7.862	20.888	11,562	4.76		
W4	-15.24	5/14/01	857			3.12	97	39.0	547	0.16	2.2	454	12751	21.5	7.871	21.287	11,783	4.65		
W4	-15.24	6/13/01	1038			2.20	68	43.7	612	0.04	0.6	427	11986	21.6	8.002	21.522	11,913	4.71		
W4	-15.24	7/25/01	957			2.22	69	41.7	584	0.09	1.3	445	12501	21.9	7.934	21.015	11,632	4.70		
W4	-15.24	8/20/01	939			12.3	381	74.9	1049	0.15	2.1	213	5985	21.7	7.907	21.177	11,722	4.83		
W4	-15.24	9/18/01	930			2.14	66	42.5	595	0.19	2.7	457	12824	22.1	7.899	20.880	11,558	4.88		

NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m) (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	10/9/01	1022			2.04	63	39.0	547	0.07	1.0	443	12442	21.8	7.878	21.316	11,799	4.79		
W4	-15.24	11/6/01	930			1.94	60	39.8	558	0.05	0.7	455	12776	22.1	7.879	21.318	11,800	4.80		
W4	-15.24	12/18/01	938			1.65	51	38.5	539	0.18	2.5	368	10335	21.6	7.870	21.195	11,732	4.69		
W4	-15.24	1/8/02	954			2.00	62	37.7	528	0.19	2.7	450	12647	21.5	7.865	21.662	11,990	4.27		
W4	-15.24	2/27/02	952			2.08	64	40.8	572	0.06	0.8	461	12939	21.4	7.878	21.514	11,909	4.51		
W4	-15.24	3/19/02	1004			1.96	61	37.3	522	0.11	1.5	443	12431	21.5	7.904	21.651	11,984	4.34		
W4	-15.24	4/9/02	953			2.00	62	37.5	526	0.03	0.4	441	12386	21.3	7.863	21.613	11,963	4.35		
W4	-15.24	5/21/02	950			1.80	56	37.1	520	0.03	0.4	441	12372	21.7	7.879	21.416	11,854	4.72		
W4	-15.24	6/18/02	1010			2.01	62	38.1	533	0.13	1.8	445	12484	21.5	7.868	21.690	12,006	4.59		
W4	-15.24	7/17/02	949			2.04	63	40.2	563	0.11	1.5	457	12841	21.9	7.887	21.184	11,726	4.81		
W4	-15.24	8/22/02	955			2.00	62	35.4	495	0.13	1.8	434	12181	21.5	7.914	22.370	12,382	4.25		
W4	-15.24	9/24/02	950			2.06	64	42.9	601	0.27	3.8	457	12829	21.8	7.917	21.441	11,868	4.69		
W4	-15.24	10/16/02	1014			2.00	62	36.4	509	0.23	3.2	445	12504	21.6	7.890	21.825	12,081	4.43		
W4	-15.24	11/6/02	1005			2.02	63	39.4	552	0.18	2.5	359	10077	21.9	7.879	21.380	11,834	4.70		
W4	-15.24	12/19/02	1037			1.99	62	37.6	526	0.10	1.4	445	12484	21.5	7.876	21.567	11,938	4.52		
W4	-15.24	1/22/03	1024			1.88	58	29.6	415	0.06	0.8	427	12001	21.4	7.881	23.002	12,732	4.25		
W4	-15.24	2/20/03	951			1.92	59	39.2	550	0.26	3.6	447	12540	21.8	7.885	21.642	11,979	4.54		
W4	-15.24	3/18/03	930			1.96	61	39.8	557	0.11	1.5	463	13006	22.3	7.884	21.092	11,675	4.67		
W4	-15.24	4/29/03	941			2.23	69	43.1	603	0.21	2.9	479	13461	21.8	7.906	20.117	11,135	4.92		
W4	-15.24	5/13/03	1017			2.12	66	39.6	555	0.27	3.8	461	12933	21.9	7.906	20.883	11,559	5.43		
W4	-15.24	6/5/03	940			2.14	66	44.3	620	0.20	2.8	457	12846	22.0	7.912	20.769	11,496	4.74		
W4	-15.24	7/31/03	1003			2.09	65	41.1	576	0.08	1.1	461	12954	21.5	7.883	20.883	11,559	4.71		
W4	-15.24	8/27/03	1008			2.16	67	40.0	560	0.40	5.6	457	12827	21.7	7.905	21.100	11,679	4.71		
W4	-15.24	9/17/03	947			2.58	80	37.6	526	18.9	264.7	441	12394	22.3	7.830	21.970	12,161	4.26		
W4	-15.24	10/7/03	942			2.26	70	46.7	654	0.67	9.4	470	13200	22.3	7.873	20.557	11,379	NA		
W4	-15.24	11/4/03	935			2.18	68	43.0	603	0.48	6.7	462	12984	22.1	7.883	20.547	11,373			
W4	-15.24	11/14/03	1119											22.4				4.61		
W4	-15.24	12/16/03	930			2.11	65	39.7	557	1.00	14.0	453	12714	22.0	7.885	21.325	11,804	4.59		
W4	-15.24	1/27/04	949			2.04	63	43.4	607	0.31	4.3	461	12933	21.8	7.880	20.828	11,529	4.81		
W4	-15.24	2/10/04	940			2.26	70	41.1	576	0.21	2.9	435	12203	21.9	7.870	21.002	11,625	4.56		
W4	-15.24	3/15/04	949			2.44	76	46.6	652	0.11	1.5	465	13049	22.2	7.896	20.671	11,442	4.59		
W4	-15.24	4/21/04	900			2.18	68	41.6	583	0.04	0.6	464	13026	21.2	7.879	21.324	11,803	4.52		
W4	-15.24	5/12/04	855			2.06	64	37.3	522	0.24	3.4	448	12585	21.9	7.892	21.37	11,829	4.67		
W4	-15.24	6/7/04	849			2.06	64	33.9	475	5.21	73.0	427	11993	22.0	7.834	22.27	12,327	4.64		
W4	-15.24	7/8/04	956			2.10	65	37.4	523	0.07	1.0	441	12394	22.2	7.903	21.85	12,095	4.42		

NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m) (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	8/24/04	925			2.28	71	36.3	508	4.7	65.4	427	11978	22.2	7.847	21.66	11,989	4.39		
W4	-15.24	9/28/04	947			2.30	71	39.9	559	5.0	69.3	439	12327	22.3	7.829	21.77	12,050	4.49		
W4	-15.24	10/5/04	1034			1.84	57	35.9	503	0.30	4.2	420	11802	22.2	7.876	22.45	12,427	4.36		
W4	-15.24	11/8/04	925			2.06	64	40.3	565	0.27	3.8	461	12933	22.0	7.868	20.11	11,131	4.95		
W4	-15.24	12/7/04	938			1.94	60	36.7	514	0.19	2.7	429	12046	22.0	7.883	21.86	12,100	4.39		
W4	-15.24	1/11/05	928			2.06	64	44.5	623	0.10	1.4	489	13734	22.2	7.941	20.796	11,511	4.85		
W4	-15.24	2/8/05	932			2.10	65	48.5	679	0.19	2.7	469	13178	22.3	7.944	20.212	11,188	4.94		
W4	-15.24	3/16/05	1004			2.33	72	42.7	598	5.1	70.9	462	12984	22.2	7.883	20.667	11,440	5.10		
W4	-15.24	4/18/05	1019			2.08	64	45.4	636	0.9	12.6	462	12973	22.6	7.934	20.609	11,408	5.48		
W4	-15.24	5/24/05	929			2.26	70	47.2	661	0.20	2.8	466	13074	22.6	7.879	20.120	11,137	4.58		
W4	-15.24	6/13/05	950			2.15	67	43.9	615	5.6	78.3	463	12995	22.8	7.860	20.718	11,468	4.45		
W4	-15.24	7/11/05	945			2.34	72	39.3	551	3.2	44.1	454	12756	22.6	7.844	21.385	11,837	4.52		
W4	-15.24	8/10/05	910			2.48	77	41.8	586	0.11	1.5	459	12883	22.6	7.898	20.776	11,500	6.07		
W4	-15.24	9/21/05	905			3.90	121	43.3	607	1.32	18.5	458	12858	22.3	7.886	20.745	11,483	4.41		
W4	-15.24	10/18/05	931			2.51	78	44.6	624	0.19	2.7	448	12588	22.3	8.383	20.689	11,452	4.57		
W4	-15.24	11/3/05	850			2.20	68	47.2	661	0.43	6.0	450	12647	22.1	7.926	21.177	11,722	4.47		
W4	-15.24	12/21/05	1001			3.72	115	40.5	568	26.8	375.4	439	12338	23.6	7.840	21.978	12,165	3.13		
W4	-15.24	1/24/06	910			3.12	97	44.6	625	17.5	245.1	470	13197	22.4	7.867	20.581	11,392	4.35		
W4	-15.24	2/15/06	903			2.43	75	44.4	622	6.15	86.1	451	12675	22.0	7.879	21.126	11,694	4.44		
W4	-15.24	3/21/06	850			2.38	74	41.8	585	7.70	107.9	464	13032	22.2	7.892	20.973	11,609	7.86		
W4	-15.24	4/19/06	957			2.52	78	42.2	591	8.0	112.1	458	12863	22.1	7.869	21.156	11,710	6.89		
W4	-15.24	4/26/06	905			2.54	79	41.8	585	8.9	124.7	451	12667	21.5	7.874	21.271	11,774	5.94		
W4	-15.24	5/3/06				2.55	79	43.9	615	10	140.1	447	12554	21.6	7.872	21.406	11,849	4.63		
W4	-15.24	5/10/06				2.38	74	42.3	592	6.3	88.2	466	13088	21.9	7.877	21.074	11,665	4.59		
W4	-15.24	5/16/06				2.25	70	42.1	590	4.1	57.4	457	12835	22.0	7.898	21.198	11,734	6.07		
W4	-15.24	5/23/06	937			2.34	72	43.7	612	9.8	137.3	447	12554	21.8	7.856	21.077	11,667	4.64		
W4	-15.24	6/27/06	942			2.76	85	46.3	649	8.1	113.5	440	12358	21.8	7.825	21.842	12,090	4.43		
W4	-15.24	7/18/06	937			2.31	72	41.4	580	4.3	60.2	443	12442	22.3	7.874	21.300	11,790	4.71		
W4	-15.24	8/8/06	915			2.47	77	43.5	609	5.8	81.2	454	12751	21.7	7.852	21.378	11,833	4.63		
W4	-15.24	9/19/06	1015			2.04	63	39.9	559	0.58	8.1	448	12582	22.0	7.856	21.296	11,788	4.58		
W4	-15.24	10/24/06	953			2.02	63	40.3	564	0.37	5.2	454	12751	22.5	7.888	21.174	11,720	4.63		
W4	-15.24	11/28/06	934			2.02	63	38.8	543	0.52	7.3	445	12498	22.0	7.875	21.173	11,720	4.67		
W4	-15.24	12/12/06	929			1.88	58	37.4	524	0.21	2.9	438	12301	22.0	7.88	21.422	11,858	4.55		
W4	-15.24	1/9/07	955			2.02	63	42.4	594	0.28	3.9	441	12386	22.0	7.891	21.074	11,665	4.64		
W4	-15.24	2/22/07	936			1.92	59	40.7	570	0.31	4.3	454	12751	21.9	7.871	21.020	11,635	4.80		

NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m)	Tide (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	3/6/07	953				2.02	63	42.1	590	0.35	4.9	465	13060	22.3	7.894	20.725	11,472	4.90		
W4	-15.24	4/11/07	1106				2.02	63	40.9	573	0.19	2.7	471	13228	22.3	7.925	20.516	11,356	4.76		
W4	-15.24	5/3/07	939				2.14	66	38.8	543	0.23	3.2	472	13256	21.9	7.911	20.637	11,423	4.52		
W4	-15.24	6/19/07	906				2.00	62	41.3	579	0.22	3.1	450	12638	22.2	7.909	21.267	11,772	4.74		
W4	-15.24	7/25/07	1445	-5	0.64	High	1.81	56	41.3	578	5.70	80	468	13143	21.6	7.81	21.69	12,006	4.32		
W4	-15.24	8/28/07	950	-7	0.00	Low	2.41	75	47.5	665	0.04	0.5	594	16676	21.6	7.78	21.03	11,641	4.33		
W4	-15.24	9/13/07	1240	-7	0.15	Flood	1.97	61	41.3	578	1.33	19	491	13789	22.5	7.84	21.28	11,779	4.29		
W4	-15.24	10/24/07	1006	-7	0.09	Low	1.96	61	44.7	627	0.17	2.4	437	12276	21.9	7.82	21.08	11,668	4.07		
W4	-15.24	11/26/07	1329	-8	0.06	Low	1.87	58	44.2	619	0.44	6.1	482	13537	21.9	7.85	21.18	11,724	4.06		
W4	-15.24	12/20/07	1019	-7	0.23	Low	1.40	43	17.3	243	0.74	10	443	12439	21.5	7.87	20.47	11,331	4.28		
W4	-15.24	1/29/08	954	-7	0.24	Ebb	1.97	61	45.3	635	0.04	0.5	341	9580	21.6	7.74	20.38	11,281	4.42		
W4	-15.24	2/27/08	1420	-7	0.06	Low	2.11	65	46.0	644	0.49	6.8	453	12719	22.0	7.76	20.15	11,154	4.55		
W4	-15.24	3/20/08	1432	-7	0.30	Flood	1.39	43	66.7	934	0.26	3.6	197	5534	21.8	7.79	21.19	11,729	4.15		
W4	-15.24	4/29/08	1048	-7	0.18	Flood	1.84	57	42.6	597	0.09	1.2	428	12031	22.2	7.80	20.91	11,574	4.73		
W4	-15.24	5/29/08	1137		0.37	Flood	1.77	55	45.4	636	0.12	1.7	458	12871	22.5	7.83	20.56	11,380	4.58		
W4	-15.24	6/10/08	1038	-7	0.30	Flood	2.75	85	41.6	583	2.31	32	506	14211	22.3	7.78	21.02	11,635	5.20		
W4	-15.24	6/19/08	1241	-7	0.12	Flood	1.69	52	42.6	597	0.72	10	444	12459	22.3	7.70	21.07	11,663	4.65	0.31	
W4	-15.24	7/24/08	1129	-7	0.43	Ebb	1.75	54	45.4	635	0.20	2.8	407	11424	21.6	7.75	21.68	12,000	4.57		
W4	-15.24	8/29/08	1702		0.67	Ebb	1.47	46	36.5	511	0.24	3.3	388	10902	21.6	7.72	21.94	12,144	2.90		
W4	-15.24	9/19/08	1102	-7	0.43	Ebb	1.59	49	37.4	523	0.41	5.8	295	8281	24.7	7.67	21.28	11,779	4.28	0.17	
W4	-15.24	10/28/08	958	-7.14	0.15	Ebb	2.01	62	43.6	611	0.31	4.4	421	11827	23.4	7.55	21.08	11,668	4.22	0.14	
W4	-15.24	11/13/08	1045	-7.2	0.09	Ebb	1.76	54	43.6	611	0.22	3.1	398	11166	24.9	7.94	21.04	11,646	4.14	0.10	
W4	-15.24	12/15/08	1129	-6.94	0.18	Ebb	2.06	64	47.9	671	0.15	2.1	403	11330	23.3	7.98	20.71	11,464	4.46		
W4	-15.24	1/22/09	943	-7.22	0.09	Low	2.01	62	51.1	715	1.44	20	426	11952	23.3	7.92	19.92	11,026	4.59	0.22	
W4	-15.24	2/24/09	857	-7.16	0.09	Ebb	1.80	56	47.7	668	0.69	9.7	455	12781	22.2	7.65	20.24	11,203	4.62	8.10	
W4	-15.24	3/16/09	941	-7.19	0.12	Ebb	1.43	44	36.7	515	0.13	1.8	292	8188	23.1	7.64	20.24	11,203	4.47	0.45	
W4	-15.24	4/20/09	1628	-7.07	0.24	Ebb	2.35	73	43.1	604	0.43	6.0	349	9801	23.4	7.72	20.70	11,458	4.65	1.98	
W4	-15.24	5/21/09	1534	-6.79	0.58	Ebb	1.83	57	36.6	513	0.21	3.0	444	12468	21.5	7.86	22.49	12,449	4.26	0.08	
W4	-15.24	6/18/09	1306	-6.83	0.61	High	1.83	57	33.0	463	0.34	4.8	242	6790	21.6	7.86	23.50	13,008	4.19	0.04	
W4	-15.24	7/14/09	757	-7.18	0.37	Flood	1.70	53	32.7	458	0.16	2.2	174	4895	21.4	7.97	21.44	11,868	4.39	0.05	
W4	-15.24	8/19/09	1021	-7.24	0.09	Flood	2.17	67	41.7	584	0.86	12.1	411	11536	21.7	7.81	21.74	12,034	3.98	0.06	
W4	-15.24	9/24/09	844	-6.9	0.61	High	2.37	73	40.9	573	0.50	7.0	217	6104	21.6	8.23	21.47	11,884	4.28	0.04	
W4	-15.24	10/22/09	1452	-7.21	0.37	Ebb	1.50	47	23.8	334	0.49	6.8	104	2928	21.9	7.86	21.29	11,785	4.04	0.05	
W4	-15.24	11/16/09	1535	-7.16	0.21	High	2.51	78	41.8	586	0.89	12.4	428	12017	21.8	7.88	21.48	11,890	4.06	0.03	
W4	-15.24	12/7/09	1545	-7.36	0.06	Low	2.62	81	56.0	784	0.74	10.4	443	12445	23.0	7.87	20.96	11,602	4.28	0.02	

NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m)	Tide (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	1/5/10	1345	-7.29	0.00	Ebb	1.78	55	33.1	463	1.50	21.0	338	9488	22.0	7.86	24.74	13,694	3.98	0.20	
W4	-15.24	2/1/10	1330	-7.23	0.00	Ebb	1.87	58	36.4	510	0.86	12.0	318	8922	22.0	7.97	24.66	13,650	3.80	0.23	
W4	-15.24	3/9/10	1433	-7.22	0.15	High	1.68	52	31.1	435	0.29	4.0	381	10713	22.8	7.86	24.53	13,578	3.72	0.14	
W4	-15.24	4/6/10	1304	-7.25	0.15	High	2.13	66	31.7	444	0.50	7.0	365	10244	22.9	7.89	24.80	13,727	3.76	0.30	
W4	-15.24	5/11/10	1335	-6.94	0.46	Flood	1.42	44	27.1	379	1.50	21.0	360	10102	22.9	7.93	25.13	13,910	3.97	0.07	
W4	-15.24	6/15/10	1419	-6.86	0.15	Flood	1.52	47	27.3	383	0.57	8.0	358	10051	21.0	7.96	25.38	14,048	3.75	0.13	
W4	-15.24	7/13/10	1319	-7.22	0.15	Flood	1.39	43	28.9	405	0.57	8.0	386	10836	21.0	7.89	25.33	14,021	3.71	0.04	
W4	-15.24	8/3/10	1311	-6.85	0.49	Ebb	1.65	51	29.9	419	0.29	4.0	386	10852	21.2	7.93	24.75	13,700	3.70	0.08	
W4	-15.24	9/14/10	1326	-7.07	0.40	Ebb	1.55	48	31.7	444	0.46	6.4	412	11567	21.0	7.87	24.75	13,700	4.03	0.07	
W4	-15.24	10/12/10	1406	-7.03	0.30	Ebb	1.42	44	28.7	402	0.06	0.9	397	11140	21.0	7.91	25.20	13,949	3.92	0.07	
W4	-15.24	11/16/10	1253	-6.91	0.40	High	1.65	51	31.8	446	0.13	1.8	405	11368	21.0	7.89	24.42	13,517	3.92	0.10	
W4	-15.24	12/14/10	1324	-6.99	0.24	Ebb	1.71	53	35.5	497	0.24	3.3	430	12078	21.1	7.93	23.34	12,919	4.04	0.05	
W4	-15.24	1/4/11	1309	-7.28	0.06	Flood	1.81	56	35.1	492	0.29	4.0	412	11560	21.1	7.87	23.57	13,047	3.89	0.12	
W4	-15.24	2/1/11	1020	-7.17	0.03	Low	1.84	57	35.1	491	0.14	2.0	417	11703	21.2	7.84	23.68	13,107	4.02	0.16	
W4	-15.24	4/5/11	1331	-7.19	0.12	Flood	1.65	51	30.3	425	0.18	2.5	370	10387	21.3	7.82	23.99	13,279	3.42	0.08	
W4	-15.24	7/12/11	1324	-6.92	0.61	Flood	1.49	46	28.3	396	0.10	1.4	375	10541	21.0	7.84	25.49	14,109	3.50	0.02	
W4	-15.24	10/10/11	1503	-6.87	0.46	High	1.39	43	26.3	369	0.09	1.3	355	9976	20.9	7.86	26.07	14,430	3.65	0.05	
W4	-15.24	1/10/12	1358	-7.33	0.03	Flood	1.36	42	28.3	397	0.22	3.1	369	10366	21.2	7.86	25.02	13,849	3.84	0.21	
W4	-15.24	5/1/12	1403	-6.85	0.40	Ebb	1.68	52	28.2	395	0.12	1.7	392	11013	21.6	7.79	25.63	14,187	3.51	0.04	
W4	-15.24	7/18/12	1330	-6.89	0.52	Flood	1.49	46	28.0	392	0.26	3.7	376	10553	21.3	7.90	25.91	14,342	3.70	0.68	
W4	-15.24	10/16/12	1318	-7.15	0.15	Flood	1.42	44	28.8	403	0.34	4.7	373	10483	21.0	7.83	25.87	14,320	3.65	0.07	
W4	-15.24	1/8/13	1409	-7.04	0.21	High	1.29	40	31.5	441	0.42	5.9	427	11991	21.0	7.78	24.99	13,833	3.74	0.05	
W4	-15.24	4/9/13	1345	-7.04	0.30	Flood	1.65	51	27.6	386	0.30	4.2	361	10152	20.8	7.84	25.86	14,314	3.16	0.02	
W4	-15.24	7/17/13	1502	-6.88	0.52	Ebb	1.49	46	26.4	370	0.37	5.2	380	10676	21.8	7.74	25.66	14,203	3.61	0.02	
W4	-15.24	10/15/13	1346	-6.81	0.55	High	1.29	40	28.0	392	0.31	4.3	356	9989	21.2	7.80	26.18	14,491	3.73	0.17	
W4	-15.24	1/15/14	1332	-7.21	0.12	Flood	1.74	54	29.6	415	0.34	4.7	370	10378	21.4	7.87	25.54	14,137	4.20	0.02	
W4	-15.24	4/29/14	1502	-6.97	0.49	Flood	1.49	46	28.7	402	0.40	5.6	364	10218	21.2	7.82	25.39	14,054	4.03	0.06	
W4	-15.24	7/29/14	1430	-7.09	0.30	Flood	1.55	48	27.3	382	0.43	6.0	363	10207	21.7	7.85	26.06	14,425	3.97	0.08	
W4	-15.24	11/5/14	1417	-6.91	0.38	Flood	1.42	44	34.6	485	0.41	5.8	345	9700	21.7	7.81	25.59	14,165	3.98	0.14	
W4	-15.24	2/11/15	1023	-7.01	0.24	Ebb	2.16	67	37.6	526	0.89	12.4	529	14868	21.6	7.76	25.00	13,838	3.82	0.14	
W4	-15.24	5/20/15	1150	-7.22	0.00	Flood	1.73	54	31.5	442	0.59	8.3	347	9751	21.7	7.82	24.55	13,589	3.79	0.02	
W4	-15.24	7/22/15	924	-7.29	0.30	Ebb	1.55	48	34.5	484	0.05	0.7	356	10008	21.9	7.74	25.77	14,264	3.94	0.02	
W4	-15.24	11/9/15	1445	-6.86	0.48	High	2.01	62	31.7	444	0.21	3.0	366	10268	21.5	7.85	24.74	13,694	4.25	0.07	
W4	-15.24	1/27/16	1239	-7.20	0.08	Low	1.85	57	40.6	569	0.16	2.2	370	10382	21.7	7.75	24.61	13,622	3.45	0.09	
W4	-15.24	4/22/16	946	-7.2	-0.05	Low	1.73	54	39.6	554	0.46	6.4	350	9830	21.5	7.81	25.15	13,921	4.09	0.05	

NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m)	Tide (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	7/27/16	859	-7.02	0.10	Flood	1.58	49	28.6	400	0.12	1.7	331	9287	21.4	7.75	24.97	13,822	3.89	0.06	
W4	-15.24	11/10/16	952	-7.02	0.40	Flood	1.63	51	29.0	406	0.18	2.5	333	9364	21.3	7.68	24.90	13,783	3.92	0.02	
W4	-15.24	3/22/17	1251	-6.95	0.25	High	1.70	53	29.0	406	0.21	3.0	379	10647	21.6	7.81	25.10	13,894	3.68	0.07	
W4	-15.24	4/19/17	1134	-7.02	0.20	Ebb	1.49	46	28.5	399	0.38	5.3	379	10632	21.7	7.80	25.17	13,932	2.98	0.02	
W4	-15.24	8/9/17	1355	-7.06	0.30	Flood	1.49	46	23.4	328	0.04	0.6	377	10594	21.7	7.79	25.55	14,143	3.57	0.06	
W4	-15.24	10/18/17	1203	-7.07	0.30	Flood	1.54	48	29.1	408	0.39	5.5	354	9949	21.8	7.77	25.06	13,871	3.95	0.07	
W4	-15.24	1/18/18	930	-6.89	0.20	Ebb	1.55	48	29.3	410	0.49	6.8	353	9920	21.4	7.77	24.87	13,766	3.71	0.05	
W4	-15.24	5/10/18	941	-7.18	0.18	Flood	1.50	47	27.2	381	0.11	1.5	365	10243	20.2	7.75	26.77	14,818	4.00	0.10	
W4	-15.24	8/30/18	1544	-7.01	0.34	Flood	1.39	43	24.7	346	0.43	6.0	331	9290	23.5	7.73	25.76	14,259	3.29	0.12	
W4	-15.24	10/25/18	912	-6.89	0.11	Low	1.41	44	28.5	399	0.26	3.6	355	9968	21.9	7.77	25.00	13,838	3.97	0.05	
W4	-15.24	2/8/19	915	-6.93	0.35	Ebb	2.56	79	77.0	1079	0.06	0.9	322	9052	20.4	7.59	24.44	13,528	7.00	0.09	
W4	-15.24	5/15/19	1358	-6.94	0.40	Ebb	2.21	68	39.0	546	0.22	3.1	304	8538	20.3	7.62	25.76	14,259	5.19	0.04	
W4	-15.24	8/28/19	1333	-6.76	0.65	High	2.02	63	30.1	421	0.20	2.8	336	9431	21.2	7.77	25.36	14,037	4.17	0.05	
W4	-15.24	10/11/19	924	-7.09	0.15	Flood	2.03	63	29.1	407	0.02	0.3	345	9698	21.3	7.78	24.88	13,772	4.17	0.10	
W4	-15.24	2/4/20	1027	-7.11	0.22	Flood	2.13	66	33.3	466	0.29	4.1	360	10104	21.4	7.81	25.18	13,938	3.71	0.54	
W4	-15.24	6/3/20	1059	-7.05	0.35	Flood	1.90	59	29.7	416	0.36	5.1	357	10034	22.1	7.70	25.75	14,253	3.89	0.14	
W4	-15.24	8/18/20	1354	-6.78	0.60	Flood	1.93	60	30.7	430	0.22	3.1	349	9797	21.7	7.83	23.17	12,825	3.73	0.02	
W4	-15.24	12/10/20	912	-6.96	0.30	Flood	1.82	56	33.1	463	0.12	1.7	355	9976	21.5	7.75	25.73	14,242	3.89	0.07	
W4	-15.24	2/18/21	923	-6.93	0.28	Ebb	1.45	45	31.5	441	0.19	2.6	342	9597	21.4	7.74	25.35	14,032	3.99	0.04	
W4	-15.24	4/15/21	917	-7.11	0.05	Ebb	1.49	46	31.5	442	0.13	1.8	371	10409	21.8	7.69	25.23	13,965	4.01	0.05	
W4	-15.24	7/6/21	932	-6.87	0.10	Flood	1.63	51	31.9	447	0.09	1.2	357	10018	21.8	7.72	25.36	14,037	3.94	0.09	
W4	-15.24	11/8/21	1014	-6.8	0.45	Ebb	1.62	50	32.5	455	0.18	2.5	367	10294	21.7	7.68	25.13	13,910	3.99	0.05	
W4	-15.24	2/8/22	937	-7.01	0.28	Ebb	2.82	87	37.0	519	0.14	1.9	405	11382	21.3	7.74	24.76	13,705	4.05	0.06	
W4	-15.24	4/21/22	940	-7.22	0.10	Ebb	1.31	41	29.7	417	0.09	1.3	356	9989	21.3	7.68	25.01	13,844	4.01	0.05	
W4	-15.24	7/12/22	1049	-7.32	0.30	Flood	1.54	48	31.8	445	-0.35	-4.9	360	10115	21.5	7.74	25.32	14,015	3.94	0.06	
W4	-15.24	11/21/22	1134	-7.07	0.38	Flood	1.62	50	34.1	478	0.00	0.0	347	9751	21.5	7.80	25.05	13,866	4.04	0.25	
W4	-15.24	1/25/23	1347	-7.25	0.10	Flood	1.66	51	35.1	492	0.12	1.7	365	10254	21.4	7.71	24.53	13,578	4.13	0.22	
W4	-15.24	4/25/23	939	-7.24	0.10	ebb	1.80	56	33.6	471	0.40	5.6	339	9518	21.4	7.70	25.01	13,844	4.05	0.12	
W4	-15.24	8/14/23	1022	-7.19	0.10	Flood	1.69	52	30.0	420	-0.03	-0.4	350	9816	21.5	7.72	25.34	14,026	4.00	0.11	
W4	-15.24	11/16/23	914	-6.68	0.50	Ebb	1.54	48	32.8	460	0.04	0.5	329	9233	21.4	7.74	24.95	13,810	4.24	0.43	180.8
W4	-15.24	1/23/24	1425	-7.01	0.87	High	3.15	98	82.0	1149	0.14	1.9	490	13748	21.3	7.76	24.66	13,650	4.13	0.17	154.6
W4	-15.24	5/3/24	1126	-7.02	0.30	High	1.32	41	33.0	463	0.05	0.7	346	9726	21.5	7.76	24.68	13,661	4.10	0.24	143.0
W4	-15.24	7/31/24	952	-7.04	0.30	Flood	1.46	45	34.4	482	0.04	0.6	332	9336	21.4	7.76	24.76	13,705	4.10	0.57	136.2
W4	-15.24	12/10/24	1311	-6.88	0.40	High	1.51	47	34.4	482	0.29	4.1	340	9545	21.5	7.79	24.50	13,561	4.19	0.05	196.7
W4	-15.24	1/9/25	1124	-6.98	0.30	High	1.61	50	36.6	513	0.21	3.0	337	9456	21.3	7.79	24.60	13,617	4.14	0.05	160.1

NELHA Water Quality Laboratory

Well 4 Data Table

6/27/1989 - 12/31/2025

Site	Pump Depth (m)	Date (M/D/Y)	Time -2400	Depth to H_2O (m)	Tide (m)	Tide (cycle)	PO_4^{3-} (µM)	PO_4^{3-} (µg P/L)	NO_3 & NO_2 (µM)	NO_3 & NO_2 (µg N/L)	NH_4 & NH_3 (µM)	NH_4 & NH_3 (µg N/L)	Si (µM)	Si (µg Si/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W4	-15.24	5/13/25	1439	-6.87	0.20	Flood	1.48	46	35.3	494	0.04	0.5	337	9468	21.3	7.80	24.65	13,644	7.80	0.12	139.8
W4	-15.24	7/29/25	1112	-6.88	0.14	Low	1.53	47	34.6	484	0.02	0.3	337	9472	21.6	7.75	24.73	13,689	4.19	0.06	153.2
W4	-15.24	12/17/25	1130	-7.02	0.30	High	1.85	57	34.7	487	0.00	0.0	891	25038	21.4	7.77	24.20	13,395	4.30	0.05	156.4
Mean				-7.04	0.27		2.24	69	45.61	639	0.82	11.4	436	12241	21.7	7.88	21.49	11,898	4.57	0.23	157.9
Std. Dev.				0.23	0.18		1.22	38	40.59	569	2.55	35.7	78	2178	0.6	0.14	2.18	1,207	0.69	0.88	19.7
Maximum				-5.49	0.87		18.01	558	676	9467	26.80	375.4	891	25038	24.9	8.92	26.77	14,818	7.86	8.10	196.7
Minimum				-7.52	-0.05		1.29	40	17	243	-0.35	-4.9	104	2928	18.7	7.55	17.36	9,607	0.99	0.02	136.2
n				102	104		317	317	317	317	316	317	310	309	317	314	316	316	314	89	9