NELHA Water Quality Laboratory

Well 3 Data Table

6/27/1989 - 6/30/2025

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)	TDP (µM)	TDP (µg P/L)	TDN (µM)	TDN (µg N/L)	TOC (mgC/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W3	-17.37	6/27/89				1.54	48	24.8	347	0.51	7.1								21.0	7.773	25.220	13,960	4.27		
W3	-17.37	8/10/89	1305			1.51	47	27.6	387	0.58	8.1								20.5	7.618	25.104	13,896	5.42		
W3	-17.37	8/16/89	1400			1.57	49	27.6	387	0.67	9.4								20.5	7.631	25.107	13,897	5.42		
W3	-17.37	8/24/89	1045			1.55	48	27.6	387	0.58	8.1								20.0	7.756	25.159	13,926	4.47		
W3	-17.37	8/29/89	1005			1.58	49	28.1	394	0.58	8.1								20.6	7.704	24.889	13,777	4.70		
W3	-17.37	8/29/89	1005			1.57	49	28.1	394	0.70	9.8														
W3	-17.37	10/30/89	1016			1.51	47	29.1	408	0.01	0.1	380	10672	1.63	50.49	30.6	429	0.35	20.8	7.728	24.981	13,828	4.17		
W3	-17.37	11/16/89	941			1.61	50	29.9	419	0.06	0.8	370	10392	2.13	65.97	59.0	826	0.41	20.5	7.726	24.941	13,805	3.94		
W3	-17.37	12/12/89	950			1.44	45	31.1	436	0.46	6.4	404	11347	1.73	53.58	32.1	450	0.67	20.1	7.767	24.775	13,714	4.94		
W3	-17.37	1/11/90	1036			3.06	95	70.7	990	0.00	0.0	730	20502	3.28	101.59	74.8	1048	0.32	21.7	7.726	24.763	13,707	4.43		
W3	-17.37	2/14/90	1340			1.55	48	28.1	394	0.27	3.8	375	10532	1.82	56.37	28.9	405	0.41	20.5	7.682	25.031	13,855	5.92		
W3	-17.37	3/7/90	1320			1.44	45	29.5	413	0.10	1.4	382		1.70	52.66	29.5	413	0.35	20.4	7.847	24.954	13,813	3.97		
W3	-17.37	4/2/90	1356			1.45	45	28.1	394	0.07	1.0	426	11964	1.73	53.58	28.6	401	0.36	20.9	7.904	25.177	13,936	4.04		
W3	-17.37	5/17/90	933			1.48	46	27.1	380	0.00	0.0	367	10307	1.59	49.25	28.2	395	0.36	20.6	7.841	25.331	14,021	4.73		
W3	-17.37	6/16/90	900			1.58	49	26.8	375	0.00	0.0	366	10279	1.80	55.75	29.1	408	0.41	20.9	7.904	25.513	14,122	3.81		
W3	-17.37	7/17/90	930			1.60	50	25.6	359	0.16	2.2	369	10364	1.90	58.85	27.1	380	0.38	20.8	7.899	25.882	14,326	3.73		
W3	-17.37	8/8/90	1020			1.29	40	26.7	374	0.21	2.9	363	10195	1.77	54.82	27.2	381	0.37	21.9	7.878	26.026	14,406	3.96		
W3	-17.37	9/5/90	939			1.63	50	25.7	360	0.14	2.0			1.63	50.49	26.9	377	0.27	20.7	7.878	26.018	14,402	3.96		
W3	-17.37	10/4/90	940			1.38	43	24.4	342	0.07	1.0	363	10195	1.99	61.64	24.5	344	0.82	20.8	7.877	26.048	14,418	3.58		
W3	-17.37	11/1/90	959			1.39	43	26.4	369	0.07	1.0	361	10125	1.43	44.29	25.6	359	0.34	20.8	7.867	26.273	14,543	3.76		
W3	-17.37	12/10/90	943			1.36	42	29.3	410	0.03	0.4	352	9886	1.75	54.20	30.3	425	0.26	20.8	7.880	25.721	14,237	3.74		
W3	-17.37	1/10/90	800			1.35	42	27.2	381	0.00	0.0	356	9998	1.49	46.15	28.5	399	0.30	20.7	7.874	26.065	14,428	3.84		
W3	-17.37	2/6/91	815			1.12	35	26.6	373	0.00	0.0	307	8622	1.45	44.91	26.8	375	0.54	20.8	7.870	25.446	14,085	3.65		
W3	-17.37	3/7/91	846			1.26	39	27.3	382	0.00	0.0	358	10055	1.32	40.89	27.8	389	0.57	20.5	7.881	25.492	14,110	3.77		
W3	-17.37	4/4/91	814			1.02	32	22.7	318	0.00	0.0	364	10223	1.38	42.74	27.2	381	0.57	20.5	7.883	25.600	14,170	3.79		
W3	-17.37	5/22/91	858			1.17	36	12.9	181	0.14	2.0	417	11712	1.21	37.48	13.5	189	0.32	21.6	7.883	25.680	14,215	3.67		
W3	-17.37	6/26/91	903			1.52	47	27.9	391	0.17	2.4	380	10672	1.63	50.49	28.6	401	0.33	20.6	7.880	25.421	14,071	3.78		
W3	-17.37	7/24/91	936			1.25	39	24.4	342	0.28	3.9	369	10364	1.47	45.53	26.4	370	0.51	18.0	7.879	25.715	14,234	3.71		
W3	-17.37	8/23/91	930			1.19	37	22.2	311	0.32	4.5	387	10869	1.25	38.72	26.1	366	0.38	20.5	7.823	25.758	14,258	3.64		
W3	-17.37	9/24/91	824			1.32	41	26.6	373	0.18	2.5	380	10672	1.44	44.60	28.6	401	0.35	20.5	7.840	25.423	14,072	3.77		
W3	-17.37	10/23/91	833			1.86	58	27.0	378	0.00	0.0	501	14071	1.97	61.02	28.6	401	0.36	20.5	7.864	25.664	14,206	3.73		
W3	-17.37	11/20/91	902			1.62	50	25.9	363	0.15	2.1	424	11908	1.68	52.04	27.0	378	0.28	20.5	7.862	25.441	14,082	3.76		
W3	-17.37	12/11/91	945			1.25	39	27.0	378	0.00	0.0	383	10757	1.28	39.65	28.0	392	0.39	20.5	7.873	25.369	14,042	3.74		
W3	-17.37	1/29/92	938			1.35	42	25.6	359	0.00	0.0	377	10588	1.42	43.98	29.1	408	0.92	20.6	7.882	25.174	13,934	3.83		
W3	-17.37	2/19/92	1008			1.41	44	28.8	403	0.02	0.3	357	10027	1.46	45.22	40.5	567	0.47	20.7	7.887	24.856	13,758	3.89		
W3	-17.37	3/17/92	919			1.34	42	29.0	406	0.00	0.0	380	10672	1.45	44.91	31.4	440	0.56	20.6	7.880	24.860	13,761	3.93		
W3	-17.37	4/8/92	909			1.37	42	28.9	405	0.31	4.3	378	10616	1.48	45.84	31.4	440	0.29	20.7	7.874	24.870	13,766	3.94		
W3	-17.37	5/6/92	922			1.33	41	28.2	395	0.21	2.9	400	11234	1.46	45.22	29.7	416	0.55	20.6	7.865	24.859	13,760	3.94		
W3	-17.37	6/23/92	921			1.35	42	28.2	395	0.33	4.6	405	11375	1.40	43.36	29.9	419	0.57	20.7	7.863	25.068	13,876	3.93		
W3	-17.37	7/29/92	906			1.29	40	28.3	396	ND	0.0	398	11178	1.36	42.12	29.4	412	0.57	20.7	7.843	24.839	13,749	3.91		
W3	-17.37	8/26/92	854			1.47	46	32.9	460	0.16	2.2	418	11740	1.47	45.53	35.1	491	0.42	20.7	7.851	24.681	13,662	3.90		
W3	-17.37	9/22/92	850			1.34	42	22.1	309	0.08	1.1	420	11796	1.61	49.87	21.6	302	0.35	20.7	7.863	24.918	13,793	3.85		
W3	-17.37	10/27/92	915			1.51	47	29.0	406	0.12	1.7	416	11684	1.56	48.32	30.9	433	0.45	20.2	7.861	24.931	13,800	3.89		

NELHA Water Quality Laboratory

Well 3 Data Table

6/27/1989 - 6/30/2025

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)	TDP (µM)	TDP (µg P/L)	TDN (µM)	TDN (µg N/L)	TOC (mgC/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W3	-17.37	11/17/92	928			1.30	40	16.9	236	0.23	3.2	407	11431	1.52	47.08	31.5	441	0.74	20.2	7.874	24.961	13,817	3.91		
W3	-17.37	12/8/92	911			1.76	55	29.0	406	0.29	4.1	413	11599	1.42	43.98	31.8	445	0.54	20.1	7.870	24.748	13,699	3.92		
W3	-17.37	1/26/93	926			1.34	42	28.6	401	0.34	4.8	408	11462	1.40	43.36	31.1	436	0.37	20.6	7.891	24.617	13,626	3.94		
W3	-17.37	2/23/93	857			1.30	40	29.9	419	0.20	2.8	418	11740	1.33	41.20	31.3	438	0.40	20.5	7.897	24.769	13,710	3.92		
W3	-17.37	3/16/93	858			1.33	41	28.8	403	0.08	1.1	418	11751	1.37	42.43	29.9	419	0.41	20.5	7.887	24.848	13,754	3.94		
W3	-17.37	4/27/93	902			1.36	42	28.4	398	0.26	3.6	431	12113	1.43	44.29	29.7	416	0.34	20.6	7.879	24.953	13,812	3.92		
W3	-17.37	5/25/93	855			1.35	42	28.1	394	0.26	3.6	429	12046	1.37	42.43	29.7	416	0.24	20.6	7.871	24.943	13,807	3.88		
W3	-17.37	6/28/93	931			1.28	40	27.9	391	0.13	1.8	419	11768	1.46	45.22	29.7	416	0.40	20.7	7.864	25.089	13,887	3.92		
W3	-17.37	8/9/93	800			1.38	43	28.4	398	0.05	0.7	378	10602	1.40	43.36	31.0	434	0.56	20.9	7.850	24.854	13,757	4.02		
W3	-17.37	WELL SET RELOCATED																							
W3	-17.37	6/21/94	853			0.89	28	19.3	271	2.26	31.7	305	8576	0.89	27.57	25.2	353	0.39	20.5	7.980	25.374	14,045	1.87		
W3	-17.37	8/23/94	919			1.05	33	19.3	270	0.36	5.0	376	10563	1.12	34.69	21.6	303	0.46	20.8	7.960	25.062	13,872	2.37		
W3	-17.37	10/25/94	940			1.14	35	22.1	309	0.55	7.7	333	9352	1.16	35.93	23.7	333	0.33	20.6	7.912	24.884	13,774	3.18		
W3	-17.37	11/28/94	1253			1.22	38	21.6	303	0.48	6.7	326	9142	1.31	40.58	24.2	339		20.8		24.966	13,819			
W3	-17.37	12/13/94	955			1.24	38	23.2	325	0.64	9.0	359	10086	1.35	41.81	24.9	349		20.7		25.125	13,907			
W3	-17.37	1/24/95	935			1.36	42	23.3	327	0.18	2.5	335	9414	1.44	44.60	24.9	349	0.33	20.4	7.891	25.080	13,882	3.42		
W3	-17.37	2/14/95	919			1.29	40	23.3	327	0.14	2.0	341	9583	1.38	42.74	23.8	333	0.39	20.6	7.894	25.208	13,953	3.37		
W3	-17.37	3/14/95	1007			1.27	39	23.4	328	0.18	2.5	342	9605	1.35	41.81	24.6	344	0.29	20.6	7.863	25.204	13,951	3.58		
W3	-17.37	4/25/95	1035			1.39	43	24.2	339	0.28	3.9	334	9389	1.50	46.46	25.7	360	0.28	20.4	7.881	24.898	13,782	3.67		
W3	-17.37	5/9/95	925			1.37	42	25.1	351	0.27	3.8	363	10206	1.41	43.67	26.7	373	0.27	20.6	7.854	24.902	13,784	3.51		
W3	-17.37	6/27/95	937			1.25	39	24.5	344	0.49	6.9	348	9777	1.42	43.98	26.3	369	0.26	20.7	7.868	24.993	13,834	3.61		
W3	-17.37	7/25/95	952			1.23	38	24.8	348	0.09	1.3	351	9852	1.38	42.74	26.0	364	0.28	20.6	7.857	25.077	13,881	3.53		
W3	-17.37	8/22/95	1043			1.27	39	23.1	324	0.34	4.8	355	9965	1.42	43.98	26.2	368	0.27	20.8	7.848	24.911	13,789	3.46		
W3	-17.37	9/12/95	812			1.30	40	25.5	357	0.23	3.2	358	10041	1.32	40.89	26.8	376	0.35	22.7	7.894	25.077	13,881	3.54		
W3	-17.37	10/17/95	956			1.35	42	25.3	355	0.24	3.4	364	10223	1.40	43.36	27.1	380	0.63	20.6	7.880	24.888	13,776	3.59		
W3	-17.37	11/7/95	917			1.40	43	24.5	343	0.43	6.0	347	9757	1.43	44.29	25.9	362	0.38	20.3	7.901	25.095	13,891	3.40		
W3	-17.37	12/6/95	927			1.35	42	25.4	356	0.36	5.0	354	9954	1.38	42.74	26.5	371	0.49	20.5	7.936	24.933	13,801	3.61		
W3	-17.37	1/30/96	1002			1.32	41	27.2	381	0.12	1.7	356	10010	1.36	42.12	27.7	387	0.35	20.4	7.934	24.953	13,812	3.67		
W3	-17.37	2/27/96	1014			1.38	43	25.6	359	0.17	2.4	354	9954	1.47	45.53	26.7	374	0.49	20.7	7.882	24.986	13,830	3.71		
W3	-17.37	3/13/96	1044			1.39	43	25.6	359	0.38	5.3	358	10052	1.45	44.91	27.4	384	0.40	20.8	7.853	24.860	13,761	3.76		
W3	-17.37	4/2/96	857			1.31	41	24.3	340	0.15	2.1	375	10540	1.41	43.67	27.5	385	0.35	20.8	7.864	25.056	13,869	3.72		
W3	-17.37	5/15/96	1011			1.38	43	25.2	353	0.12	1.7	371	10406	1.44	44.60	26.7	374	0.38	21.3	7.838	25.120	13,905	3.69		
W3	-17.37	6/18/96	923			1.40	43	25.1	351	0.10	1.4	362	10172	1.46	45.22	26.8	376	0.49	21.0	7.865	25.009	13,843	3.65		
W3	-17.37	7/17/96	956			1.38	43	25.5	357	0.12	1.7	357	10035	1.40	43.36	27.2	381	0.34	21.0	7.862	24.808	13,732	3.61		
W3	-17.37	8/6/96	1006			1.29	40	27.1	379	0.31	4.3	366	10291	1.38	42.74	28.5	399	0.31	21.2	7.852	24.585	13,608	3.82		
W3	-17.37	9/4/96	952			1.35	42	28.3	396	0.38	5.3	361	10132	1.42	43.98	30.2	423	0.43	21.0	7.864	24.540	13,584	3.83		
W3	-17.37	10/9/96	1005			1.31	41	27	376	0.27	3.8	373	10481	1.38	42.74	28.1	394	0.44	21.1	7.864	24.546	13,587	4.60		
W3	-17.37	11/6/96	952			1.36	42	27	381	0.25	3.5	366	10281	1.51	46.77	30.2	423	0.52	21.0	8.011	24.562	13,596	3.87		
W3	-17.37	12/17/96	949			1.35	42	27	373	0.27	3.8	353	9909	1.42	43.98	29.5	413	0.34	21.0	7.938	24.615	13,625	3.85		
W3	-17.37	1/14/97	1006			1.30	40	27	372	0.10	1.4	368	10330	1.35	41.81	28.5	399	0.35	21.1	7.879	24.519	13,572	3.90		
W3	-17.37	2/10/97	1135			1.50	46	27	373	0.25	3.5	369	10369	1.50	46.46	27.9	391	0.29	21.4	7.872	24.660	13,650	3.88		
W3	-17.37	3/10/97	1130			1.24	38	26	365	0.06	0.8	378	10616	1.34	41.50	26.6	373	0.42	21.3	7.877	24.834	13,746	4.27		
W3	-17.37	4/23/97	952			1.44	45	26	361	0.27	3.8	356	9990	1.56	48.32	28.2	395	0.33	20.8	7.887	24.920	13,794	3.60		

NELHA Water Quality Laboratory

Well 3 Data Table

6/27/1989 - 6/30/2025

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)	TDP (µM)	TDP (µg P/L)	TDN (µM)	TDN (µg N/L)	TOC (mgC/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W3	-17.37	5/28/97	851			1.31	41	27	373	0.06	0.8	348	9760	1.48	45.84	32.1	450	0.35	20.7	7.900	24.927	13,798	3.78		
W3	-17.37	6/17/97	950			1.37	42	26	357	0.19	2.7	360	10119	1.47	45.53	26.5	371	0.37	20.4	7.913	24.940	13,805	3.84		
W3	-17.37	7/15/97	941			1.46	45	27	378	0.10	1.4	349	9802	1.54	47.70	28.1	393	0.33	20.3	7.921	24.775	13,714	3.77		
W3	-17.37	8/26/97	955			1.36	42	26.2	366	0.28	3.9	355	9976	1.46	45.22	27.1	380	0.35	20.7	7.987	24.784	13,719	3.73		
W3	-17.37	9/23/97	1159			1.39	43	26.6	373	0.25	3.5	347	9751	1.44	44.60	27.4	384	0.37	21.7	8.024	24.822	13,740	3.91		
W3	-17.37	10/15/97	918			1.40	43	26.6	373	0.24	3.4	363	10187	1.55	48.01	28.1	394	0.39	21.0	8.040	24.929	13,799	3.72		
W3	-17.37	11/4/97	1035			1.33	41	26.9	376	0.04	0.6	342	9600	1.48	45.84	30.7	431	0.29	20.7	8.050	24.997	13,836	3.89		
W3	-17.37	12/16/97	953			1.45	45	24.5	343	0.02	0.3	362	10170	1.60	49.56	27.8	389	0.30	20.3	8.027	25.211	13,955	3.77		
W3	-17.37	1/5/98	1231			1.40	43	26	360	0.08	1.1	351	9851	1.51	46.77	27.3	382	0.34	20.9	8.028	25.171	13,933	3.83		
W3	-17.37	2/3/98	1048			1.38	43	26	367	0.05	0.7	366	10279	1.56	48.32	28.1	394	0.32	20.8	8.015	25.128	13,909	3.84		
W3	-17.37	3/10/98	1106			1.46	45	25.2	353	0.10	1.4	356	9984	1.56	48.32	27.4	384	0.34	20.9	7.842	25.304	14,006	3.83		
W3	-17.37	4/14/98	932			1.48	46	25	354	0.03	0.4	357	10029	1.55	48.01	29	399	0.35	20.8	7.852	25.378	14,047	3.82		
W3	-17.37	5/12/98	1055			1.46	45	25.0	350	0.11	1.5	354	9928	1.53	47.39	26.8	376	0.33	21.1	7.862	25.565	14,151	3.82		
W3	-17.37	6/2/98	1048			1.38	43	25.2	353	0.05	0.7	356	9984	1.51	46.77	27	376	0.30	20.8	7.858	25.520	14,126	3.84		
W3	-17.37	7/14/98	1058			1.48	46	23.9	335	0.13	1.8	359	10069	1.61	49.87	26	359	0.30	21.1	7.837	25.670	14,209	3.71		
W3	-17.37	8/11/98	1117			1.42	44	24.7	346	0.13	1.8	354	9951	1.53	47.39	26.7	373	0.30	20.8	7.823	25.667	14,207	3.86		
W3	-17.37	9/15/98	1151			1.43	44	25.8	361	0.03	0.4	361	10147	1.59	49.25	28.9	405	0.32	20.7	7.821	25.359	14,037	3.85		
W3	-17.37	10/13/98	1025			1.42	44	25	350	0.05	0.7	393	11035	1.50	46.46	27	374	0.32	21.0	7.838	25.384	14,051	4.10		
W3	-17.37	11/4/98	1058			1.36	42	26	357	0.05	0.7	369	10369	1.39	43.05	27	384	0.37	21.0	7.852	25.409	14,065	3.81		
W3	-17.37	12/16/98	1038			1.31	41	24.7	346	0.07	1.0	352	9886	1.44	44.60	29.0	406	0.49	22.0	7.846	25.358	14,036	3.86		
W3	-17.37	1/12/99	1113			1.33	41	24.5	343	0.16	2.2	353	9917	1.48	45.84	26.3	368	0.36	20.9	7.847	25.516	14,124	3.88		
W3	-17.37	2/3/99	1101			1.34	42	25.2	353	0.09	1.3	352	9875	1.45	44.91	29.2	409	0.46	20.9	7.855	25.719	14,236	3.86		
W3	-17.37	3/2/99	1109			1.35	42	24.0	336	0.06	0.8	350	9833	1.46	45.22	26.9	377	0.36	20.7	7.837	25.859	14,314	4.28		
W3	-17.37	4/6/99	1059			1.34	42	23.8	333	0.06	0.8	362	10161	1.44	44.60	25.6	359	0.43	20.8	7.834	25.770	14,264	3.76		
W3	-17.37	5/4/99	1104			1.32	41	24.1	338	0.05	0.7	351	9850	1.35	41.81	28.1	394	0.31	20.7	7.831	25.791	14,276	3.85		
W3	-17.37	6/2/99	1048			1.39	43	23.7	332	0.12	1.7	347	9746	1.45	44.91	26.3	368	0.31	20.9	7.833	25.799	14,280	3.81		
W3	-17.37	7/7/99	1121			1.37	42	24.1	338	0.04	0.6	356	9984	1.44	44.60	25.7	360	0.29	21.0	7.832	25.705	14,228	3.90		
W3	-17.37	8/25/99	1054			1.29	40	24.7	346	0.04	0.6	355	9970	1.45	44.91	26.9	377	0.30	20.7	7.879	25.759	14,258	3.80		
W3	-17.37	9/8/99	1057			1.31	41	25.2	353	0.04	0.6	364	10232	1.43	44.29	28.2	395	0.30	20.7	7.890	25.695	14,223	3.72		
W3	-17.37	10/6/99	1102			1.45	45	25.3	354	0.06	0.8	344	9647	1.54	47.70	27.2	381	0.33	20.9	7.887	25.650	14,198	3.76		
W3	-17.37	11/3/99	1116			1.39	43	25.4	356	0.07	1.0	352	9883	1.44	44.60	27.6	387	0.28	20.8	7.900	25.454	14,089	3.79		
W3	-17.37	12/15/99	1133			1.40	43	24.8	347	0.09	1.3	355	9965	1.50	46.46	30.3	424	0.36	21.1	7.840	25.699	14,225	3.59		
W3	-17.37	1/11/00	1108			1.31	41	25.9	363	0.18	2.5	349	9810	1.45	44.91	28.9	405	0.35	20.8	7.853	25.616	14,179	3.84		
W3	-17.37	2/14/00	1125			1.40	43	24.3	340	0.17	2.4	343	9619	1.42	43.98	27.9	391	0.35	20.7	7.878	25.882	14,326	3.80		
W3	-17.37	3/22/00	1135			1.35	42	24.7	346	0.12	1.7	350	9838	1.38	42.74	28.4	398	0.44	20.8	7.892	26.045	14,417	3.67		
W3	-17.37	4/12/00	1118			1.37	42	24.6	345	0.11	1.5	354	9937	1.44	44.60	27.6	387	0.39	20.9	7.880	25.933	14,355	3.69		
W3	-17.37	5/17/00	1055			1.36	42	24.2	339	0.02	0.3	347	9746	1.41	43.67	27.0	378	0.37	20.8	7.880	25.975	14,378	3.72		
W3	-17.37	6/6/00	1133			1.34	42	23.7	332	0.03	0.4	347	9757	1.41	43.67	26.5	371	0.34	21.8	7.871	25.905	14,339	3.66		
W3	-17.37	7/31/00	1122			1.38	43	24.0	336	0.06	0.8	344	9673	1.48	45.84	27.3	382	0.57	20.8	7.886	26.017	14,401	3.75		
W3	-17.37	8/30/00	1127			1.37	42	24.8	347	0.03	0.4	344	9659	1.44	44.60	26.0	364	0.31	20.9	7.847	26.061	14,425	3.61		
W3	-17.37	9/6/00	1106			1.36	42	23.8	333	0.04	0.6	350	9838	1.47	45.53	26.0	364	0.32	21.1	7.840	26.092	14,443	3.67		
W3	-17.37	10/25/00	1043			1.37	42	23.0	322	0.16	2.2	358	10046	1.45	44.91	26.7	375	0.33	22.1	7.862	26.056	14,423	4.25		
W3	-17.37	11/14/00	1057			1.24	38	23.4	328	0.31	4.3	347	9740	1.47	45.53	31.0	434	0.41	22.2	7.860	25.943	14,360	3.73		

NELHA Water Quality Laboratory

Well 3 Data Table

6/27/1989 - 6/30/2025

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)	TDP (µM)	TDP (µg P/L)	TDN (µM)	TDN (µg N/L)	TOC (mgC/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W3	-17.37	12/19/00	1048			1.32	41	25.1	352	0.18	2.5	362	10164	1.49	46.15	27.3	382	0.40	21.6	7.873	25.892	14,332	3.72		
W3	-17.37	1/24/01	1042			1.38	43	24.1	337	0.12	1.7	357	10035	1.34	41.50	33.8	473	0.36	21.4	7.929	26.081	14,437	3.52		
W3	-17.37	2/7/01	1111			1.30	40	24.5	343	0.05	0.7	353	9903	1.38	42.74	29.3	410	0.38	21.7	7.884	26.160	14,480	3.70		
W3	-17.37	3/12/01	1056			1.29	40	23.1	324	0.03	0.4	356	9996	1.44	44.60	**27.8**	389	0.47	22.8	7.837	26.166	14,484	3.95		
W3	-17.37	4/18/01	1048			1.38	43	24.7	346	0.04	0.6	360	10111	1.44	44.60	25.0	350	0.33	22.1	7.822	25.975	14,378	3.82		
W3	-17.37	5/14/01	924			2.20	68	24.2	339	0.17	2.4	359	10086	2.52	78.05	25.9	363	0.31	21.9	7.836	26.003	14,393	4.06		
W3	-17.37	6/13/01	1117			1.54	48	24.9	349	0.04	0.6	363	10192	1.70	52.66	26.9	377	0.30	22.4	7.845	25.889	14,330	4.39		
W3	-17.37	7/25/01	1025			1.44	45	24.8	347	0.05	0.7	361	10144	1.50	46.46	27.0	378	0.36	22.1	7.839	25.926	14,351	4.14		
W3	-17.37	8/20/01	1019			1.28	40	24.1	337	0.07	1.0	355	9956	1.39	43.05	27.3	382	0.47	22.1	7.850	25.860	14,314	4.18		
W3	-17.37	9/18/01	1057			1.28	40	24.8	348	0.12	1.7	352	9897	1.30	40.27	26.4	369	0.35	22.7	7.832	25.806	14,284	4.72		
W3	-17.37	10/9/01	1048			1.50	46	26.9	377	0.02	0.3	359	10069	1.60	49.56	30.4	426	0.37	22.6	7.833	25.324	14,017	4.39		
W3	-17.37	11/6/01	1015			1.36	42	27.9	390	0.06	0.8	360	10097	1.42	43.98	32.2	451	0.33	22.7	7.844	25.392	14,055	4.42		
W3	-17.37	12/18/01	1010			1.02	32	25.7	359	0.11	1.5	367	10302	1.16	35.93	29.9	419	0.33	21.8	7.842	25.456	14,091	4.29		
W3	-17.37	1/8/02	1024			1.38	43	25.8	361	0.29	4.1	358	10049	1.57	48.63	30.8	431	0.30	22.0	7.842	25.613	14,177	4.60		
W3	-17.37	2/27/02	1023			1.42	44	25.0	351	0.04	0.6	350	9824	1.46	45.22	29.2	410	0.31	22.0	7.847	25.995	14,389	4.65		
W3	-17.37	3/19/02	1030			1.32	41	25.1	352	0.14	2.0	355	9962	1.44	44.60	26.2	367	0.33	22.2	7.859	25.968	14,374	4.13		
W3	-17.37	4/9/02	1022			1.30	40	25.0	350	0.10	1.4	356	10004	1.54	47.70	27.3	382	0.40	22.3	7.826	25.984	14,383	4.04		
W3	-17.37	5/21/02	1025			1.24	38	23.8	333	0.04	0.6	350	9830	1.30	40.27	27.0	378	0.31	22.6	7.854	26.018	14,402	4.33		
W3	-17.37	6/18/02	1038			1.30	40	25.7	360	0.04	0.6	360	10111	1.42	43.98	27.6	387	0.22	22.6	7.844	25.787	14,274	4.43		
W3	-17.37	7/17/02	1016			1.38	43	26.0	364	0.02	0.3	358	10043	1.44	44.60	25.1	352	0.29	22.8	7.860	25.795	14,278	4.65		
W3	-17.37	8/22/02	1055			1.38	43	24.1	337	0.13	1.8	354	9942	1.46	45.22	24.3	341	0.38	23.4	7.841	25.972	14,376	4.26		
W3	-17.37	9/24/02	1036			1.34	42	25.6	358	0.17	2.4	362	10178	1.48	45.84	24.6	345	0.25	22.3	7.871	25.947	14,362	4.81		
W3	-17.37	10/16/02	1049			1.37	42	27.1	379	0.25	3.5	364	10212	1.55	48.01	30.0	420	0.52	22.7	7.859	25.614	14,178	4.26		
W3	-17.37	11/6/02	1034			1.41	44	28.5	399	0.19	2.7	359	10088	1.49	46.15	23.4	328	0.42	21.9	7.854	25.758	14,258	4.17		
W3	-17.37	12/19/02	1122			1.17	36	25.8	361	0.04	0.6	358	10043	1.44	44.60	23.5	329	0.52	22.0	7.861	25.738	14,247	4.15		
W3	-17.37	1/22/03	1112			1.50	46	23.9	335	0.03	0.4	360	10097	1.62	50.18	27.6	386	0.25	21.7	7.881	25.813	14,288	4.03		
W3	-17.37	2/20/03	1027			1.36	42	26.2	366	0.02	0.3	262	7358	1.44	44.60	27.4	384	0.26	21.5	7.892	25.771	14,265	4.47		
W3	-17.37	3/18/03	1013			1.40	43	22.0	308	0.02	0.3	370	10389	1.47	45.53	24.9	349	0.21	22.3	7.861	25.942	14,360	4.72		
W3	-17.37	4/29/03	1020			1.47	46	24.4	342	0.04	0.6	361	10139	1.57	48.63	27.3	382	0.24	22.8	7.899	25.914	14,344	4.99		
W3	-17.37	5/13/03	1047			1.51	47	23.6	330	0.05	0.7	364	10234	1.65	51.11	25.1	351	0.29	21.9	7.898	25.926	14,351	3.69		
W3	-17.37	6/5/03	1015			1.48	46	23.0	322	0.10	1.4	352	9878	1.54	47.70	27.5	385	0.24	22.3	7.884	25.953	14,366	3.87		
W3	-17.37	7/31/03	1035			1.39	43	24.6	344	0.31	4.3	357	10012	1.53	47.39	27.5	385		22.1	7.861	25.944	14,361	4.97		
W3	-17.37	8/27/03	1053			1.40	43	24.9	348	0.08	1.1	349	9813	1.52	47.08	31.4	440		22.1	7.854	25.827	14,296	4.95		
W3	-17.37	9/17/03	1020			1.52	47	25.4	355	0.03	0.4	362	10173	1.76	54.51	27.2	381		22.9	7.845	25.721	14,237	3.91		
W3	-17.37	10/7/03	1021			1.42	44	25.3	355	0.34	4.8	361	10125	1.46	45.22	29.7	416		22.6	7.849	25.761	14,259	NA		
W3	-17.37	11/4/03	1002			1.42	44	23.0	323	0.34	4.8	360	10105	1.56	48.32	29.1	408		22.7	7.866	25.641	14,193			
W3	-17.37	11/14/03	1138																22.8				3.90		
W3	-17.37	12/16/03	959			1.43	44	25.8	361	0.40	5.6	363	10181	1.42	43.98	30.4	426		22.8	7.854	25.541	14,138	3.98		
W3	-17.37	1/27/04	1020			1.39	43	26.2	367	0.61	8.5	358	10060	1.49	46.15	28.4	398		22.4	7.898	25.681	14,215	4.42		
W3	-17.37	2/10/04	1017			1.36	42	25.6	359	0.15	2.1	341	9563	1.37	42.43	27.6	387		22.3	7.850	25.789	14,275	4.03		
W3	-17.37	3/15/04	1021			1.52	47	26.3	368	0.04	0.6	363	10181	1.62	50.18	26.8	376		22.8	7.877	25.650	14,198	3.56		
W3	-17.37	4/21/04	932			1.37	42	26.9	376	0.15	2.1	362	10153	1.33	41.20	27.7	388		21.6	7.866	25.591	14,165	5.27		
W3	-17.37	5/12/04	927			1.46	45	26.0	364	0.16	2.2	361	10144	1.54	47.70	28.8	403		22.5	7.879	24.95	13,810	5.24		

NELHA Water Quality Laboratory

Well 3 Data Table

6/27/1989 - 6/30/2025

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)	TDP (µM)	TDP (µg P/L)	TDN (µM)	TDN (µg N/L)	TOC (mgC/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W3	-17.37	6/7/04	1002				1.38	43	26.5	371	0.12	1.7	355	9973	1.50	46.46	28.3	397		22.8	7.851	24.90	13,783	4.70		
W3	-17.37	7/8/04	1032				1.44	45	25.9	362	0.20	2.8	368	10338	1.58	48.94	29.4	411	0.26	21.8	7.882	24.76	13,705	3.96		
W3	-17.37	8/24/04	1005				1.40	43	27.1	379	0.19	2.7	358	10063	1.44	44.60	28.2	396		22.2	7.870	24.59	13,611	3.94		
W3	-17.37	9/28/04	1015				1.32	41	26.2	367	0.16	2.2	361	10128	1.36	42.12	28.7	402		22.1	7.842	24.81	13,733	3.85		
W3	-17.37	10/5/04	1105				1.38	43	27.8	389	0.21	2.9	359	10094	1.48	45.84	29.9	418		22.3	7.869	24.61	13,622	3.94		
W3	-17.37	11/8/04	1006				1.40	43	25.6	358	0.23	3.2	357	10018	1.48	45.84	29.3	411		22.2	7.871	24.34	13,473	3.96		
W3	-17.37	12/7/04	1007				1.42	44	27.6	387	0.16	2.2	360	10097	1.44	44.60	30.6	428		22.2	7.902	24.45	13,534	3.94		
W3	-17.37	1/11/05	950				1.34	42	25.8	361	0.16	2.2	376	10557	1.40	43.36	27.9	391		22.6	7.943	25.572	14,155	4.46		
W3	-17.37	2/8/05	955				1.36	42	27.2	380	0.16	2.2	356	10001	1.48	45.84	32.8	460		22.6	7.942	25.714	14,233	4.02		
W3	-17.37	3/16/05	1043				1.32	41	28.7	401	0.29	4.1	353	9900	1.46	45.22	30.2	423	0.22	21.9	7.920	25.775	14,267	4.04		
W3	-17.37	4/18/05	1046				1.46	45	26.6	373	0.19	2.7	362	10175	1.62	50.18	30.8	431		22.9	7.904	25.672	14,210	3.69		
W3	-17.37	5/24/05	1003				1.32	41	26.3	368	0.21	2.9	347	9734	1.42	43.98	32.0	448		22.8	7.855	25.878	14,324	4.14		
W3	-17.37	6/13/05	1024				1.38	43	26.2	366	0.14	2.0	357	10018	1.50	46.46	28.1	394		22.9	7.875	25.669	14,208	3.94		
W3	-17.37	7/11/05	1025				1.52	47	25.5	357	0.18	2.5	359	10080	1.88	58.23	30.9	433		22.2	7.869	25.751	14,254	5.94		
W3	-17.37	8/10/05	940				1.42	44	25.9	363	0.16	2.2	356	10010	1.52	47.08	27.2	381		22.9	7.891	25.674	14,211	3.86		
W3	-17.37	9/21/05	933				1.38	43	26.3	369	0.06	0.8	350	9838	1.54	47.70	28.8	404	0.30	22.8	7.893	25.615	14,179	3.90		
W3	-17.37	10/18/05	958				1.42	44	25.7	361	0.13	1.8	351	9869	1.62	50.18	29.8	417		22.7	7.893	25.791	14,276	3.96		
W3	-17.37	11/3/05	943				1.40	43	26.0	364	0.26	3.6	353	9920	1.56	48.32	26.4	370		22.5	7.904	25.903	14,338	3.96		
W3	-17.37	12/21/05	1030				1.42	44	20.3	284	0.24	3.4	361	10125	1.52	47.08	23.0	322	0.45	22.6	7.896	25.876	14,323	4.63		
W3	-17.37	1/24/06	937				1.40	43	24.8	348	0.31	4.3	356	10001	1.46	45.22	28.9	404		21.9	7.871	26.053	14,421	3.96		
W3	-17.37	2/15/06	935				1.39	43	27.4	384	0.21	2.9	352	9892	1.54	47.70	28.8	404	0.19	22.2	7.880	25.972	14,376	3.94		
W3	-17.37	3/21/06	928				1.34	42	25.7	360	0.17	2.4	354	9942	1.43	44.29	26.5	371	0.21	21.9	7.883	26.208	14,507	3.81		
W3	-17.37	4/26/06	943				1.35	42	23.4	328	0.05	0.7	345	9689	1.47	45.53	21.4	300	0.28	21.3	7.892	26.284	14,549	3.86		
W3	-17.37	5/23/06	1013				1.35	42	25	350	0.09	1.3	350	9830	1.36	42.12	23.4	327	0.36	22.3	7.903	26.195	14,500	4.27		
W3	-17.37	6/27/06	1011				1.52	47	25.8	361	0.14	2.0	355	9970	1.64	50.80	22.7	318	0.22	21.1	7.855	26.296	14,556	3.64		
W3	-17.37	7/18/06	1009				1.35	42	24.8	347	0.14	2.0	347	9746	1.47	45.53	23.6	331	0.36	21.7	7.871	26.141	14,470	3.89		
W3	-17.37	8/8/06	949				1.34	42	24.0	336	0.05	0.7	356	9998	1.45	44.91	20.5	287	0.17	22.2	7.887	26.396	14,611	3.84		
W3	-17.37	9/19/06	1046				1.35	42	24.5	343	0.07	1.0	354	9942	1.47	45.53	23.5	329	0.24	22.0	7.850	26.186	14,495	3.88		
W3	-17.37	10/24/06	1025				1.32	41	24.7	346	0.38	5.3	353	9914	1.42	43.98	23.3	326	0.24	21.3	7.888	26.154	14,477	4.56		
W3	-17.37	11/28/06	1004				1.35	42	25.7	360	0.28	3.9	353	9914	1.50	46.46	23.2	325	0.25	21.3	7.875	25.875	14,322	3.81		
W3	-17.37	12/12/06	956				1.38	43	24.9	349	0.22	3.1	348	9774	1.41	43.67	23.4	328	0.26	21.0	7.867	25.875	14,322	3.75		
W3	-17.37	1/9/07	1024				1.42	44	25.0	350	0.28	3.9	348	9774	1.47	45.53	26.7	374	0.23	20.8	7.900	25.935	14,356	3.89		
W3	-17.37	2/22/07	1010				1.38	43	25.8	361	0.32	4.5	356	9998	1.44	44.60	28.4	397	0.26	21.4	7.879	26.033	14,410	3.81		
W3	-17.37	3/6/07	1035				1.36	42	26.1	366	0.37	5.2	353	9914	1.44	44.60	27.2	381	0.31	22.0	7.894	26.183	14,493	3.82		
W3	-17.37	4/11/07	1157				1.34	42	26.7	374	0.22	3.1	366	10279	1.38	42.74	24.4	341	0.22	21.7	7.882	25.955	14,367	3.71		
W3	-17.37	5/3/07	1010				1.37	42	26.0	364	0.24	3.4	357	10027	1.45	44.91	25.1	351	0.27	21.6	7.892	26.015	14,400	3.67		
W3	-17.37	6/19/07	945				1.42	44	25.6	358	0.28	1.4	368	10335	1.5	46.2	21.6	303	0.16	21.6	7.919	25.953	14,366	3.89		
W3	-17.37	7/26/07	1115	-5.82	0.37	Flood	1.15	36	27.7	388	0.04	0.5	352	9899	1.5	45.9	30.9	432		20.7	7.77	25.80	14,281	3.56		
W3	-17.37	8/28/07	1038	-5.39	0.00	Low	1.49	46	28.7	401	0.04	0.5	409	11479	1.6	50.7	30.8	431		20.8	7.73	25.72	14,237	3.54		
W3	-17.37	9/13/07	1248	-5.26	0.15	Low	1.37	42	24.6	344	2.98	41.8	371	10412	1.6	49.7	33.6	470		21.0	7.85	25.86	14,314	3.51		
W3	-17.37	10/24/07	1215	-5.26	0.30	Flood	1.10	34	28.5	399	1.40	19.5	347	9745	1.4	43.0	31.6	443		21.2	7.88	25.85	14,309	3.38		
W3	-17.37	11/26/07	1504	-4.52	0.09	Flood	1.24	38	27.4	384	0.08	1.1	348	9767	1.1	33.9	31.5	442		21.0	7.82	25.94	14,358	3.40		
W3	-17.37	12/20/07	1141	-5.46	0.23	High	1.34	42	28.3	396	0.70	9.8	345	9694						20.7	7.88	25.48	14,104	3.50		

NELHA Water Quality Laboratory

Well 3 Data Table

6/27/1989 - 6/30/2025

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)	TDP (µM)	TDP (µg P/L)	TDN (µM)	TDN (µg N/L)	TOC (mgC/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W3	-17.37	1/28/08	1517	-6.10	0.06	Low	1.01	31	15.5	217	0.06	0.8	244	6862						21.2	7.73	25.95	14,364	3.33		
W3	-17.37	2/27/08	1256	-4.83	0.06	Low	1.37	42	27.1	380	0.21	3.0	335	9406						20.8	7.70	25.86	14,314	3.65		
W3	-17.37	3/20/08	1238	-5.51	0.12	Flood	1.08	33	26.3	369	0.06	0.8	309	8686						21.2	7.76	25.95	14,364	3.29		
W3	-17.37	4/28/08	1211	-5.59	0.18	High	1.06	33	27.3	382	0.19	2.6	331	9287						21.3	7.75	25.84	14,303	3.72		
W3	-17.37	5/29/08	1036		0.30	Flood	1.12	35	27.2	382	0.12	1.7	341	9564						21.5	7.78	25.86	14,314	3.58		
W3	-17.37	6/19/08	1115	-5.64	0.21	Ebb	1.09	34	25.7	360	0.61	8.5	331	9286						21.6	7.66	26.04	14,414	3.35	1.21	
W3	-17.37	7/24/08	1035	-5.56	0.46	Ebb	1.28	40	29.2	408	0.79	11.1	323	9071						20.6	7.68	25.81	14,287	3.89		
W3	-17.37	8/30/08	1105		0.06	Flood	1.11	34	24.7	346	0.26	3.7	331	9290						20.9	7.78	25.99	14,386	3.59		
W3	-17.37	9/18/08	958	-5.52	0.34	Ebb	0.96	30	18.6	261	0.42	5.9	203	5700						21.7	7.65	26.06	14,425	3.81	0.39	
W3	-17.37	10/28/08	849	-5.74	0.24	Ebb	1.19	37	25.8	362	0.34	4.7	325	9140						22.7	7.47	25.73	14,242	3.41	5.01	
W3	-17.37	11/13/08	1003	-5.73	0.15	Ebb	1.04	32	24.9	348	0.31	4.4	313	8794						23.2	7.73	25.67	14,209	3.59	5.06	
W3	-17.37	12/15/08	1050	-5.63	0.37	Ebb	1.43	44	29.0	406	0.11	1.5	337	9458						22.1	7.99	25.32	14,015	3.94		
W3	-17.37	1/21/09	1000	-5.89	0.12	Low	1.18	36	28.5	399	0.06	0.9	326	9160						22.9	8.01	25.69	14,220	3.67	0.62	
W3	-17.37	2/23/09	1539	-5.76	0.37	High	1.10	34	30.1	421	0.90	12.6	354	9946						21.9	7.76	24.92	13,794	3.86	0.68	
W3	-17.37	3/16/09	843	-5.85	0.18	High	1.21	38	25.5	357	0.13	1.8	333	9360						22.4	7.82	25.27	13,988	3.70	0.28	
W3	-17.37	4/20/09	1423	-5.75	0.40	High	1.69	52	29.1	408	0.73	10.2	296	8310						24.1	7.71	25.90	14,336	3.64	2.09	
W3	-17.37	5/27/09	734	-5.83	0.15	High	1.42	44	26.6	373	0.33	4.6	362	10177						20.7	8.10	25.89	14,331	3.28	0.15	
W3	-17.37	6/18/09	1043	-5.78	0.40	Flood	1.68	52	27.3	382	0.49	6.9	147	4116						20.9	7.81	25.74	14,248	3.66	0.24	
W3	-17.37	7/14/09	850	-5.77	0.37	Flood	1.41	44	24.2	340	0.27	3.8	168	4708						20.6	7.21	25.86	14,314	3.54	0.07	
W3	-17.37	8/19/09	910	-5.93	0.03	Low	1.63	51	26.8	376	0.55	7.7	325	9133						20.9	7.19	25.95	14,364	3.76	0.56	
W3	-17.37	9/22/09	932	-5.55	0.46	Ebb	1.55	48	23.5	329	0.46	6.5	210	5903						20.9	8.27	25.81	14,287	3.63	0.09	
W3	-17.37	10/22/09	1410	-5.88	0.18	Ebb	1.39	43	19.4	271	0.87	12.2	137	3859						20.9	7.89	26.10	14,447	3.81	0.13	
W3	-17.37	11/16/09	1503	-5.87	0.21	High	1.62	50	25.7	360	0.87	12.2	299	8406						20.8	7.86	26.20	14,502	3.50	0.07	
W3	-17.37	12/7/09	1355	-5.92	0.09	Ebb	1.58	49	22.6	317	0.61	8.6	306	8582						21.6	7.80	25.75	14,253	3.70	0.11	
W3	-17.37	1/5/10	1123	-5.65	0.21	Ebb	1.61	50	28.1	393	2.00	28.0	343	9647						21.5	7.83	25.58	14,159	4.06	0.70	
W3	-17.37	2/1/10	1151	-5.87	-0.09	Low	1.58	49	31.0	434	0.86	12.0	302	8493						21.4	7.89	25.65	14,198	3.72	0.43	
W3	-17.37	3/9/10	1146	-5.90	0.15	High	2.07	64	38.0	532	0.29	4.0	430	12073						21.3	7.88	22.20	12,288	3.43	0.16	
W3	-17.37	4/6/10	1100	-5.92	0.15	High	2.03	63	29.0	406	0.29	4.0	353	9928						22.0	7.86	25.70	14,226	3.78	0.56	
W3	-17.37	5/11/10	1127	-5.90	0.21	Flood	1.39	43	25.6	359	1.36	19.0	327	9171						22.9	7.93	25.13	13,910	3.97	0.07	
W3	-17.37	6/15/10	1216	-6.03	0.06	Low	1.39	43	25.5	357	0.57	8.0	346	9715						20.3	7.90	25.61	14,176	4.73	0.09	
W3	-17.37	7/13/10	1128	-5.97	0.00	Low	1.45	45	28.8	403	0.64	9.0	389	10913						20.6	7.88	24.81	13,733	3.88	0.13	
W3	-17.37	8/3/10	1110	-5.52	0.55	High	1.52	47	28.1	394	0.21	3.0	379	10635						22.0	7.91	25.36	14,037	3.60	0.46	
W3	-17.37	9/14/10	1110	-5.48	0.52	Ebb	1.45	45	29.8	417	0.33	4.6	406	11398						20.4	7.87	24.90	13,783	4.00	0.32	
W3	-17.37	10/12/10	1120	-5.52	0.46	Ebb	1.42	44	27.8	389	0.16	2.3	391	10977						20.4	7.88	25.36	14,037	3.75	0.13	
W3	-17.37	11/16/10	1035	-5.66	0.34	Flood	1.52	47	29.8	417	0.17	2.4	400	11244						20.5	7.89	24.98	13,827	3.75	0.07	
W3	-17.37	12/14/10	1116	-5.63	0.34	Ebb	1.55	48	31.1	435	0.34	4.7	409	11474						20.6	7.87	24.04	13,307	3.95	0.03	
W3	-17.37	1/4/11	1105	-5.83	0.03	Low	1.61	50	30.8	431	0.26	3.7	405	11372						20.5	7.82	24.89	13,777	3.74	0.10	
W3	-17.37	4/5/11	1132	-5.97	-0.03	Low	1.71	53	28.6	400	0.03	0.4	379	10640						20.5	7.89	24.77	13,711	3.40	0.15	
W3	-17.37	7/12/11	1118	-5.90	0.30	Flood	1.49	46	27.4	384	0.09	1.3	374	10500						20.5	7.82	25.57	14,154	3.71	0.03	
W3	-17.37	10/11/11	1119	-5.90	0.15	Flood	1.36	42	25.3	355	0.19	2.6	354	9929						20.6	7.82	26.11	14,453	3.81	0.12	
W3	-17.37	1/10/12	1118	-5.91	0.03	Ebb	1.39	43	27.3	383	0.19	2.6	375	10540						20.6	7.83	25.64	14,192	3.76	0.16	
W3	-17.37	5/1/12	1136	-5.67	0.34	Flood	1.65	51	27.3	383	0.13	1.8	381	10707						20.6	7.84	25.83	14,298	3.72	0.07	
W3	-17.37	7/18/12	1030	-5.99	0.03	Flood	1.45	45	27.4	384	0.31	4.4	369	10372						20.7	7.93	26.09	14,441	3.75	0.31	

NELHA Water Quality Laboratory

Well 3 Data Table

6/27/1989 - 6/30/2025

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)	TDP (µM)	TDP (µg P/L)	TDN (µM)	TDN (µg N/L)	TOC (mgC/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W3	-17.37	10/16/12	1116	-5.88	0.09	Low	1.42	44	27.5	385	0.14	1.9	367	10321						20.8	7.79	26.10	14,447	3.60	0.24	
W3	-17.37	1/8/13	1139	-5.81	0.18	Flood	1.65	51	29.5	413	0.31	4.4	415	11661						20.8	7.78	25.83	14,298	3.71	0.25	
W3	-17.37	4/9/13	1123	-5.98	0.00	Flood	1.65	51	26.0	364	0.36	5.1	362	10158						21.1	7.85	26.11	14,453	3.59	0.64	
W3	-17.37	7/17/13	1237	-5.61	0.61	High	1.42	44	24.6	345	0.15	2.1	363	10202						21.0	7.75	26.11	14,453	3.84	0.10	
W3	-17.37	10/15/13	1100	-5.71	0.37	Flood	1.29	40	27.8	389	0.25	3.5	352	9882						21.0	7.82	26.33	14,574	3.78	0.46	
W3	-17.37	1/15/14	1102	-5.87	0.03	Low	1.61	50	27.8	389	0.34	4.8	354	9941						20.9	7.90	26.20	14,502	3.80	0.28	
W3	-17.37	4/29/14	1201	-6.01	0.12	Flood	1.39	43	26.1	366	0.31	4.4	341	9571						21.0	7.81	26.21	14,508	3.96	0.36	
W3	-17.37	7/29/14	1141	-5.91	0.12	Low	1.52	47	25.4	356	0.14	2.0	355	9973						20.8	7.78	26.28	14,547	3.99	0.18	
W3	-17.37	11/5/14	1135	-5.74	0.17	Flood	1.65	51	27.6	387	0.30	4.2	340	9547						21.1	7.85	25.93	14,353	3.91	0.24	
W3	-17.37	2/11/15	1101	-5.70	0.18	Ebb	1.93	59.8	33.1	464	0.46	6.5	408	11470						20.6	7.78	25.97	14,375	3.69	0.35	
W3	-17.37	5/20/15	1226	-6.00	0.00	Flood	1.58	48.8	28.5	400	0.31	4.3	324	9111						21.0	7.88	25.79	14,275	3.76	1.36	
W3	-17.37	7/22/15	1008	-5.73	0.34	Ebb	1.54	47.6	27.1	379	0.19	2.6	339	9518						21.5	7.71	26.79	14,829	3.78	0.09	
W3	-17.37	11/9/15	1520	-5.64	0.40	Ebb	1.83	56.6	29.8	417	0.09	1.2	349	9794						20.9	7.76	25.40	14,060	4.06	0.04	
W3	-17.37	1/27/16	1321	-5.92	0.08	Low	1.53	47.3	35.9	502	0.16	2.2	325	9133						20.8	7.79	25.63	14,187	3.72	0.11	
W3	-17.37	4/22/16	1033	-5.81	-0.05	Low	1.87	57.9	38.9	545	0.30	4.2	335	9395						20.8	7.75	25.97	14,375	3.96	0.13	
W3	-17.37	7/27/16	938	-5.66	0.20	Flood	1.42	43.9	30.9	432	0.06	0.9	319	8958						20.7	7.75	25.65	14,198	3.69	0.02	
W3	-17.37	11/10/16	1040	-5.71	0.50	Flood	1.59	49.4	26.5	372	0.51	7.2	302	8480						21.2	7.65	25.67	14,209	3.73	0.08	
W3	-17.37	3/22/17	1335	-5.67	0.25	High	1.62	50.2	27.6	387	0.19	2.7	369	10368						20.9	7.89	25.81	14,287	3.70	0.13	
W3	-17.37	4/19/17	1227	-5.72	0.17	Ebb	1.47	45.6	26.6	372	0.23	3.2	360	10125						21.3	7.79	26.00	14,392	2.87	0.12	
W3	-17.37	8/8/17	1047	-5.88	-0.04	Low	1.39	42.9	23.1	324	0.06	0.9	358	10041						21.0	7.80	26.44	14,635	3.20	0.08	
W3	-17.37	10/18/17	1301	-5.71	0.50	Flood	1.56	48.2	27.8	389	0.27	3.8	344	9660						21.0	7.78	25.71	14,231	3.73	0.08	
W3	-17.37	1/18/18	1020	-5.64	0.15	Ebb	1.38	42.6	27.0	378	0.19	2.6	336	9449						20.8	7.75	25.87	14,320	3.52	0.05	
W3	-17.37	5/10/18	1035	-5.85	0.25	Flood	1.56	48.2	27.1	380	0.12	1.7	352	9888						19.7	7.78	30.11	16,667	3.92	0.11	
W3	-17.37	8/13/18	1610	-5.68	0.46	Flood	1.58	48.8	25.1	351	0.20	2.8	354	9941						22.2	7.77	25.81	14,287	3.67	0.15	
W3	-17.37	10/25/18	1101	-5.74	0.12	Low	1.32	40.8	26.5	371	0.01	0.2	338	9487						21.9	7.78	25.97	14,375	3.90	0.09	
W3	-17.37	2/8/19	956	-5.67	0.20	Ebb	1.64	50.8	34.0	476	0.02	0.3	352	9894						21.0	7.64	26.04	14,414	4.11	0.08	
W3	-17.37	5/15/19	1442	-5.60	0.52	High	1.75	54.1	27.8	389	0.09	1.3	344	9663						20.8	7.68	26.39	14,608	3.73	0.02	
W3	-17.37	8/28/19	1413	-5.43	0.70	High	1.79	55.3	27.7	388	0.21	2.9	341	9590						21.0	7.81	25.80	14,281	3.94	0.08	
W3	-17.37	10/11/19	1010	-5.76	0.15	Flood	1.66	51.5	22.1	310	0.50	7.0	300	8412						20.9	7.93	25.98	14,381	3.94	0.13	
W3	-17.37	2/4/20	1108	-5.78	0.25	High	1.83	56.8	29.6	414	-0.61	-8.5	335	9414						20.7	7.90	26.21	14,508	3.76	0.08	
W3	-17.37	6/3/20	1141	-5.70	0.35	Flood	1.77	54.9	28.5	400	0.24	3.3	356	10009						21.2	7.68	26.52	14,680	3.68	0.54	
W3	-17.37	8/18/20	1431	-5.45	0.60	Flood	1.82	56.4	30.8	431	0.12	1.7	359	10092						20.9	7.80	22.98	12,720	3.65	0.02	
W3	-17.37	12/10/20	953	-5.63	0.40	Flood	1.74	53.8	30.3	425	0.05	0.7	329	9253						21.0	7.75	26.38	14,602	3.85	0.18	
W3	-17.37	2/18/21	1002	-5.63	0.25	Ebb	1.37	42.5	27.7	387	0.13	1.8	316	8872						20.9	7.74	26.37	14,596	3.90	0.05	
W3	-17.37	4/15/21	1007	-5.83	-0.02	Low	1.38	42.8	29.1	408	0.13	1.8	352	9882						21.0	7.67	26.70	14,779	3.84	0.08	
W3	-17.37	7/6/21	1019	-5.93	0.20	Flood	1.55	48	29.0	407	0.09	1.2	325	9115						21.1	7.69	26.36	14,591	3.87	0.07	
W3	-17.37	11/8/21	1049	-5.54	0.35	Ebb	1.52	47.2	29.1	407	0.36	5.0	347	9758						21.4	7.65	26.10	14,447	3.91	0.12	
W3	-17.37	2/8/22	1012	-5.70	0.25	Ebb	2.84	87.9	33.1	464	0.04	0.6	385	10808						20.8	7.70	25.80	14,281	3.99	0.03	
W3	-17.37	4/21/22	1011	-5.92	0.08	Ebb	1.12	34.6	27.7	387	0.06	0.9	354	9934						20.8	7.68	26.05	14,419	3.94	0.07	
W3	-17.37	7/12/22	1138	-6.00	0.30	Flood	1.49	46.3	30.5	428	-0.35	-4.9	342	9599						20.8	7.71	25.79	14,275	3.95	0.09	
W3	-17.37	11/21/22	1211	-5.74	0.40	High	1.41	43.8	29.8	417	0.03	0.4	311	8721						20.9	7.78	25.58	14,159	4.00	0.42	
W3	-17.37	1/25/23	1429	-5.93	0.10	Flood	1.42	43.9	30.5	428	0.09	1.2	336	9439						20.7	7.71	25.76	14,259	3.99	0.20	
W3	-17.37	4/25/23	1028	-5.94	0.03	Low	1.74	53.8	30.9	433	0.04	0.5	334	9376						20.8	7.74	25.97	14,375	3.97	0.12	

NELHA Water Quality Laboratory

Well 3 Data Table

6/27/1989 - 6/30/2025

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)	TDP (µM)	TDP (µg P/L)	TDN (µM)	TDN (µg N/L)	TOC (mgC/L)	Temp. (˚C)	pH (unit)	Salinity (PSU)	Chloride (mg/L)	DO (ppm)	Turbidity (NTU)	ORP (mV)
W3	-17.37	8/14/23	1057	-5.84	0.20	Flood	3.59	111.1	99.0	1387	-0.07	-1.0	634	17809						20.8	7.72	25.60	14,170	4.02	1.17	
W3	-17.37	11/16/23	956	-5.40	0.40	Low	1.39	43.1	30.9	432	-0.03	-0.4	316	8888						20.8	7.77	25.27	13,988	4.07	0.22	144.9
W3	-17.37	1/23/24	1515	-5.71	0.80	High	1.40	43.5	30.5	427	-0.01	-0.2	326	9156						20.6	7.77	25.35	14,032	4.04	0.40	136.9
W3	-17.37	5/3/24	1218	-5.70	0.37	High	1.17	36.2	30.2	423	-0.05	-0.7	320	8981						20.7	7.77	25.49	14,109	4.03	1.13	150.1
W3	-17.37	7/31/24	1031	-5.73	0.35	Flood	1.40	43.3	32.2	451	0.19	2.6	327	9170						20.8	7.77	25.34	14,026	4.09	0.08	120.6
W3	-17.37	12/10/24	1352	-5.58	0.30	Ebb	1.38	42.6	30.8	431	0.20	2.8	314	8822						20.8	7.79	25.44	14,082	4.12	0.08	173.5
W3	-17.37	1/9/25	1218	-5.65	0.30	High	1.47	45.4	33.9	475	0.26	3.6	324	9108						20.7	7.79	25.44	14,082	4.15	0.10	153.2
W3	-17.37	5/13/25	1515	-5.54	0.60	High	1.37	42.5	32.7	458	0.09	1.3	323	9070						20.7	7.79	25.43	14,076	4.17	0.27	149.6
Mean				-5.72	0.24		1.43	44	27	375	0.22	3.1	357	10014	1.49	46.2	28.1	393	0.36	21.2	7.84	25.55	14,142	3.90	0.38	147.0
Std. Dev.				0.23	0.18		0.24	8	6	79	0.30	4.3	45	1262	0.20	6.3	4.8	68	0.11	0.8	0.10	0.61	339	0.42	0.80	16.1
Maximum				-4.52	0.80		3.59	111	99	1387	2.98	41.8	730	20502	3.28	101.6	74.8	1048	0.92	24.1	8.27	30.11	16,667	5.94	5.06	173.5
Minimum				-6.10	-0.09		0.89	28	13	181	-0.61	-8.5	137	3859	0.89	27.6	13.5	189	0.16	18.0	7.19	22.20	12,288	1.87	0.02	120.6
n				98	100		307	307	307	307	306	307	300	299	206	206	206	206	172	307	304	306	306	303	86	7