

5/19/88

R/V POLAR DUKE Echo Sounding Log

Date: 4-May 1988

Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00		0	03:00	4.867	3650	06:00	4.290	3218	09:00	4.750	3563
00:05		0	03:05	4.820	3615	06:05	4.170	3128	09:05	4.680	3510
00:10		0	03:10	4.800	3600	06:10	4.230	3173	09:10	4.770	3578
00:15		0	03:15	4.900	3675	06:15	4.250	3188	09:15	5.070	3803
00:20		0	03:20	4.840	3630	06:20	4.230	3173	09:20	5.040	3780
00:25		0	03:25	4.770	3578	06:25	4.250	3188	09:25	4.500	3375
00:30		0	03:30	4.700	3525	06:30	4.640	3480	09:30	3.900	2925
00:35		0	03:35	4.793	3595	06:35	4.640	3480	09:35	3.530	2648
00:40		0	03:40	4.780	3585	06:40	4.630	3473	09:40	3.500	2625
00:45		0	03:45	4.710	3533	06:45	4.630	3473	09:45	2.810	2108
00:50		0	03:50	4.770	3578	06:50	4.580	3435	09:50	3.350	2513
00:55		0	03:55	4.730	3548	06:55	4.580	3435	09:55	4.240	3180
01:00		0	04:00	4.710	3533	07:00	4.570	3428	10:00	4.940	3705
01:05		0	04:05	4.630	3473	07:05	4.570	3428	10:05	5.105	3829
01:10		0	04:10	4.730	3548	07:10	4.570	3428	10:10	4.795	3596
01:15		0	04:15	4.640	3480	07:15	4.470	3353	10:15	4.680	3510
01:20		0	04:20	4.770	3578	07:20	4.510	3383	10:20	4.580	3435
01:25		0	04:25	4.690	3518	07:25	4.560	3420	10:25	4.305	3229
01:30		0	04:30	4.710	3533	07:30	4.560	3420	10:30	4.350	3263
01:35		0	04:35	4.760	3570	07:35	4.410	3308	10:35	4.610	3458
01:40		0	04:40	4.700	3525	07:40	4.250	3188	10:40	4.640	3480
01:45		0	04:45	4.690	3518	07:45	4.230	3173	10:45	4.195	3146
01:50		0	04:50	4.620	3465	07:50	4.430	3323	10:50	4.680	3510
01:55		0	04:55	4.630	3473	07:55	4.470	3353	10:55	4.475	3356
02:00	4.770	3578	05:00	4.610	3458	08:00	4.470	3353	11:00	4.390	3293
02:05	4.780	3585	05:05	4.470	3353	08:05	4.370	3278	11:05	4.290	3218
02:10	4.770	3578	05:10	4.480	3360	08:10	4.370	3278	11:10	4.610	3458
02:15	4.767	3575	05:15	4.470	3353	08:15	4.420	3315	11:15	4.880	3660
02:20	4.767	3575	05:20	4.420	3315	08:20	4.410	3308	11:20	4.625	3469
02:25	4.807	3605	05:25	4.610	3458	08:25	4.406	3305	11:25	4.790	3593
02:30	4.843	3632	05:30	4.690	3518	08:30	4.320	3240	11:30	4.880	3660
02:35	4.800	3600	05:35	4.690	3518	08:35	4.160	3120	11:35	4.670	3503
02:40	4.750	3563	05:40	4.700	3525	08:40	4.000	3000	11:40	5.511	4133
02:45	4.707	3530	05:45	4.520	3390	08:45	3.900	2925	11:45	5.300	3975
02:50	4.827	3620	05:50	4.410	3308	08:50	4.940	3705	11:50	4.760	3570
02:55	4.840	3630	05:55	4.410	3308	08:55	4.760	3570	11:55	4.760	3570

5/19/88

R/V POLAR DUKE Echo Sounding LogDate: 4-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	4.860	3645	15:00	4.794	3588	18:00	4.954	3716	21:00	5.065	3799
12:05	4.870	3653	15:05	4.856	3642	18:05	5.155	3866	21:05	5.015	3761
12:10	4.900	3675	15:10	4.885	3664	18:10	5.193	3895	21:10	4.935	3701
12:15	4.910	3683	15:15	4.824	3618	18:15	5.045	3784	21:15	4.990	3743
12:20	4.390	3293	15:20	4.898	3674	18:20	5.071	3803	21:20	5.040	3780
12:25	4.260	3195	15:25	4.696	3522	18:25	5.117	3838	21:25	5.133	3850
12:30	4.340	3255	15:30	4.490	3368	18:30	5.144	3858	21:30	4.942	3707
12:35	4.540	3405	15:35	4.240	3180	18:35	5.058	3794	21:35	5.015	3761
12:40	4.740	3555	15:40	4.135	3101	18:40	5.030	3773	21:40	4.967	3725
12:45	4.590	3443	15:45	3.835	2876	18:45	5.068	3801	21:45	4.953	3715
12:50	3.930	2948	15:50	3.850	2888	18:50	5.117	3838	21:50	4.926	3695
12:55	4.120	3090	15:55	4.250	3188	18:55	5.070	3803	21:55	4.847	3635
13:00	4.340	3255	16:00	4.410	3308	19:00	5.135	3851	22:00	4.858	3644
13:05	4.590	3443	16:05	4.485	3364	19:05	5.115	3836	22:05	4.840	3630
13:10	4.805	3604	16:10	4.750	3563	19:10	5.084	3813	22:10	4.840	3630
13:15	4.230	3173	16:15	4.575	3431	19:15	5.038	3779	22:15	4.900	3675
13:20	4.190	3143	16:20	3.685	2764	19:20	5.118	3839	22:20	5.030	3773
13:25	4.280	3210	16:25	3.480	2610	19:25	5.048	3786	22:25	5.120	3840
13:30	4.120	3090	16:30	3.728	2796	19:30	5.119	3839	22:30	5.170	3878
13:35	3.520	2640	16:35	4.680	3510	19:35	5.086	3815	22:35	5.240	3930
13:40	3.540	2655	16:40	4.860	3645	19:40	5.092	3819	22:40	5.310	3983
13:45	3.780	2835	16:45	4.860	3645	19:45	5.173	3880	22:45	5.392	4044
13:50	4.010	3008	16:50	4.775	3581	19:50	5.104	3828	22:50	4.773	3580
13:55	4.240	3180	16:55	4.810	3608	19:55	4.963	3722	22:55	4.708	3531
14:00	4.480	3360	17:00	4.798	3599	20:00	4.989	3742	23:00	4.581	3436
14:05	4.560	3420	17:05	4.796	3597	20:05	4.992	3744	23:05	4.625	3469
14:10	4.650	3488	17:10	4.890	3668	20:10	4.996	3747	23:10	4.753	3565
14:15	4.620	3465	17:15	4.948	3711	20:15	4.988	3741	23:15	5.317	3988
14:20	4.560	3420	17:20	4.946	3710	20:20	4.919	3689	23:20	5.247	3935
14:25	4.530	3398	17:25	4.965	3724	20:25	4.928	3696	23:25	5.278	3959
14:30	4.750	3563	17:30	4.930	3698	20:30	4.993	3745	23:30	5.291	3968
14:35	4.735	3551	17:35	4.940	3705	20:35	5.015	3761	23:35	5.354	4016
14:40	4.760	3570	17:40	4.882	3662	20:40	5.015	3761	23:40	5.408	4056
14:45	4.750	3563	17:45	4.885	3664	20:45	5.015	3761	23:45	5.388	4041
14:50	4.785	3589	17:50	4.968	3726	20:50	4.985	3739	23:50	5.326	3995
14:55	4.767	3575	17:55	4.935	3701	20:55	4.952	3714	23:55	5.226	3920

R/V POLAR DUKE Echo Sounding Log

Date: 5-May
Cruise VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	5.212	3909	03:00	4.850	3638	06:00	5.200	3900	09:00	6.750	5063
00:05	5.221	3916	03:05	4.862	3647	06:05	5.300	3975	09:05	6.395	4796
00:10	5.256	3942	03:10	4.895	3671	06:10	5.405	4054	09:10	6.100	4575
00:15	5.227	3920	03:15	4.898	3674	06:15	5.500	4125	09:15	5.830	4373
00:20	5.264	3948	03:20	4.890	3668	06:20	5.410	4058	09:20	5.660	4245
00:25	5.322	3992	03:25	4.850	3638	06:25	5.000	3750	09:25	5.635	4226
00:30	5.180	3885	03:30	4.815	3611	06:30	5.000	3750	09:30	5.650	4238
00:35	5.090	3818	03:35	4.806	3605	06:35	5.250	3938	09:35	5.545	4159
00:40	5.060	3795	03:40	4.802	3602	06:40	5.030	3773	09:40	5.480	4110
00:45	5.085	3814	03:45	4.855	3641	06:45	5.000	3750	09:45	5.475	4106
00:50	5.085	3814	03:50	4.950	3713	06:50	5.675	4256	09:50	5.300	3975
00:55	5.090	3818	03:55	4.985	3739	06:55	5.900	4425	09:55	5.195	3896
01:00	5.075	3806	04:00	5.025	3769	07:00	6.150	4613	10:00	5.090	3818
01:05	5.010	3758	04:05	5.050	3788	07:05	5.825	4369	10:05	5.050	3788
01:10	4.982	3737	04:10	5.065	3799	07:10	5.690	4268	10:10	4.975	3731
01:15	4.980	3735	04:15	5.307	3980	07:15	5.700	4275	10:15	4.895	3671
01:20	4.949	3712	04:20	5.368	4026	07:20	5.845	4384	10:20	4.820	3615
01:25	4.936	3702	04:25	5.346	4010	07:25	5.960	4470	10:25	4.760	3570
01:30	4.943	3707	04:30	5.350	4013	07:30	6.050	4538	10:30	4.737	3553
01:35	4.906	3680	04:35	5.405	4054	07:35	6.100	4575	10:35	4.745	3559
01:40	4.920	3690	04:40	5.345	4009	07:40	6.080	4560	10:40	4.780	3585
01:45	4.886	3665	04:45	5.290	3968	07:45	6.100	4575	10:45	4.770	3578
01:50	4.880	3660	04:50	5.270	3953	07:50	6.155	4616	10:50	4.690	3518
01:55	4.650	3488	04:55	5.360	4020	07:55	6.230	4673	10:55	4.570	3428
02:00	4.865	3649	05:00	5.417	4063	08:00	6.410	4808	11:00	4.440	3330
02:05	4.875	3656	05:05	5.150	3863	08:05	6.535	4901	11:05	4.325	3244
02:10	4.861	3646	05:10	5.107	3830	08:10	6.664	4998	11:10	4.150	3113
02:15	4.847	3635	05:15	5.090	3818	08:15	6.678	5009	11:15	3.935	2951
02:20	4.833	3625	05:20	5.050	3788	08:20	6.679	5009	11:20	3.800	2850
02:25	4.830	3623	05:25	5.053	3790	08:25	6.705	5029	11:25	3.640	2730
02:30	4.855	3641	05:30	5.075	3806	08:30	6.700	5025	11:30	3.550	2663
02:35	4.845	3634	05:35	5.095	3821	08:35	6.695	5021	11:35	3.488	2616
02:40	4.864	3648	05:40	5.110	3833	08:40	6.695	5021	11:40	3.369	2527
02:45	4.835	3626	05:45	5.118	3839	08:45	6.700	5025	11:45	3.124	2343
02:50	4.830	3623	05:50	5.120	3840	08:50	6.720	5040	11:50	3.095	2321
02:55	4.853	3640	05:55	5.121	3841	08:55	6.750	5063	11:55	3.095	2321

5/19/88

R/V POLAR DUKE Echo Sounding Log

Date: 5-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	3.120	2340	15:00	0.228	171	18:00	0.490	368	21:00	0.398	299
12:05	2.935	2201	15:05	0.238	179	18:05	0.485	364	21:05	0.398	299
12:10	2.842	2132	15:10	0.195	146	18:10	0.480	360	21:10	0.390	293
12:15	2.803	2102	15:15	0.182	137	18:15	0.480	360	21:15	0.390	293
12:20	2.682	2012	15:20	0.198	149	18:20	0.480	360	21:20	0.395	296
12:25	2.715	2036	15:25	0.178	134	18:25	0.480	360	21:25	0.400	300
12:30	2.388	1791	15:30	0.175	131	18:30	0.470	353	21:30	0.397	298
12:35	2.260	1695	15:35	0.170	128	18:35	0.450	338	21:35	0.403	302
12:40	2.160	1620	15:40	0.160	120	18:40	0.450	338	21:40	0.393	295
12:45	2.186	1640	15:45	0.158	119	18:45	0.432	324	21:45	0.395	296
12:50	2.190	1643	15:50	0.164	123	18:50	0.428	321	21:50	0.395	296
12:55	2.160	1620	15:55	0.166	125	18:55	0.428	321	21:55	0.410	308
13:00	2.130	1598	16:00	0.176	132	19:00	0.418	314	22:00	0.405	304
13:05	2.090	1568	16:05	0.205	154	19:05	0.420	315	22:05	0.405	304
13:10	2.080	1560	16:10	0.232	174	19:10	0.420	315	22:10	0.406	305
13:15	2.110	1583	16:15	0.253	190	19:15	0.424	318	22:15	0.410	308
13:20	2.090	1568	16:20	0.289	217	19:20	0.425	319	22:20	0.415	311
13:25	1.251	938	16:25	0.304	228	19:25	0.425	319	22:25	0.417	313
13:30	0.774	581	16:30	0.322	242	19:30	0.428	321	22:30	0.423	317
13:35	0.672	504	16:35	0.330	248	19:35	0.425	319	22:35	0.422	317
13:40	0.545	409	16:40	0.342	257	19:40	0.425	319	22:40	0.429	322
13:45	0.532	399	16:45	0.367	275	19:45	0.424	318	22:45	0.437	328
13:50	0.522	392	16:50	0.412	309	19:50	0.424	318	22:50	0.435	326
13:55	0.520	390	16:55	0.438	329	19:55	0.424	318	22:55	0.440	330
14:00	0.510	383	17:00	0.457	343	20:00	0.410	308	23:00	0.428	321
14:05	0.495	371	17:05	0.475	356	20:05	0.410	308	23:05	0.436	327
14:10	0.485	364	17:10	0.488	366	20:10	0.410	308	23:10	0.447	335
14:15	0.465	349	17:15	0.492	369	20:15	0.396	297	23:15	0.503	377
14:20	0.439	329	17:20	0.493	370	20:20	0.396	297	23:20	0.526	395
14:25	0.406	305	17:25	0.496	372	20:25	0.396	297	23:25	0.532	399
14:30	0.373	280	17:30	0.496	372	20:30	0.410	308	23:30	0.530	398
14:35	0.342	257	17:35	0.490	368	20:35	0.418	314	23:35	0.539	404
14:40	0.332	249	17:40	0.488	366	20:40	0.418	314	23:40	0.537	403
14:45	0.309	232	17:45	0.488	366	20:45	0.415	311	23:45	0.551	413
14:50	0.286	215	17:50	0.490	368	20:50	0.407	305	23:50	0.565	424
14:55	0.252	189	17:55	0.490	368	20:55	0.402	302	23:55	0.568	426

R/V POLAR DUKE Echo Sounding Log

Date: 6-May
Cruise VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	0.575	431	03:00	0.593	445	06:00	0.692	519	09:00	0.419	314
00:05	0.580	435	03:05	0.604	453	06:05	0.699	524	09:05	0.467	350
00:10	0.600	450	03:10	0.604	453	06:10	0.692	519	09:10	0.442	332
00:15	0.640	480	03:15	0.609	457	06:15	0.655	491	09:15	0.428	321
00:20	0.730	548	03:20	0.610	458	06:20	0.660	495	09:20	0.416	312
00:25	0.870	653	03:25	0.620	465	06:25	0.720	540	09:25	0.398	299
00:30	0.630	473	03:30	0.620	465	06:30	0.723	542	09:30	0.392	294
00:35	0.610	458	03:35	0.627	470	06:35	0.737	553	09:35	0.432	324
00:40	0.595	446	03:40	0.619	464	06:40	0.745	559	09:40	0.405	304
00:45	0.587	440	03:45	0.614	461	06:45	0.740	555	09:45	0.402	302
00:50	0.584	438	03:50	0.630	473	06:50	0.725	544	09:50	0.445	334
00:55	0.580	435	03:55	0.642	482	06:55	0.760	570	09:55	0.425	319
01:00	0.560	420	04:00	0.668	501	07:00	0.750	563	10:00	0.375	281
01:05	0.560	420	04:05	0.674	506	07:05	0.752	564	10:05	0.360	270
01:10	0.565	424	04:10	0.680	510	07:10	0.745	559	10:10	0.358	269
01:15	0.565	424	04:15	0.676	507	07:15	0.743	557	10:15	0.345	259
01:20	0.567	425	04:20	0.668	501	07:20	0.735	551	10:20	0.335	251
01:25	0.565	424	04:25	0.660	495	07:25	0.715	536	10:25	0.335	251
01:30	0.568	426	04:30	0.675	506	07:30	0.643	482	10:30	0.390	293
01:35	0.560	420	04:35	0.699	524	07:35	0.590	443	10:35	0.430	323
01:40	0.563	422	04:40	0.715	536	07:40	0.515	386	10:40	0.490	368
01:45	0.558	419	04:45	0.720	540	07:45	0.510	383	10:45	0.843	632
01:50	0.565	424	04:50	0.700	525	07:50	0.540	405	10:50	0.970	728
01:55	0.570	428	04:55	0.640	480	07:55	0.535	401	10:55	1.000	750
02:00	0.570	428	05:00	0.660	495	08:00	0.530	398	11:00	1.000	750
02:05	0.575	431	05:05	0.664	498	08:05	0.530	398	11:05	1.106	830
02:10	0.572	429	05:10	0.659	494	08:10	0.547	410	11:10	1.003	752
02:15	0.585	439	05:15	0.665	499	08:15	0.260	195	11:15	0.844	633
02:20	0.585	439	05:20	0.675	506	08:20	0.295	221	11:20	0.465	349
02:25	0.585	439	05:25	0.678	509	08:25	0.235	176	11:25	0.438	329
02:30	0.590	443	05:30	0.663	497	08:30	0.245	184	11:30	0.402	302
02:35	0.570	428	05:35	0.728	546	08:35	0.360	270	11:35	0.357	268
02:40	0.570	428	05:40	0.720	540	08:40	0.380	285	11:40	0.308	231
02:45	0.580	435	05:45	0.710	533	08:45	0.407	305	11:45	0.265	199
02:50	0.590	443	05:50	0.704	528	08:50	0.424	318	11:50	0.230	173
02:55	0.595	446	05:55	0.706	530	08:55	0.415	311	11:55	0.200	150

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R/V POLAR DUKE Echo Sounding Log

Date: 6-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.187	140	15:00	0.472	354	18:00	2.989	2242	21:00	1.190	893
12:05	0.162	122	15:05	0.411	308	18:05	2.935	2201	21:05	1.133	850
12:10	0.155	116	15:10	0.381	286	18:10	2.846	2135	21:10	0.807	605
12:15	0.137	103	15:15	0.379	284	18:15	2.855	2141	21:15	0.542	407
12:20	0.133	100	15:20	0.393	295	18:20	2.892	2169	21:20	0.542	407
12:25	0.124	93	15:25	0.382	287	18:25	2.898	2174	21:25	0.534	401
12:30	0.114	86	15:30	0.385	289	18:30	2.851	2138	21:30	0.495	371
12:35	0.085	64	15:35	0.415	311	18:35	2.793	2095	21:35	0.482	362
12:40	0.082	62	15:40	0.417	313	18:40	2.721	2041	21:40	0.472	354
12:45	0.089	67	15:45	0.530	398	18:45	2.689	2017	21:45	0.464	348
12:50	0.100	75	15:50	0.654	491	18:50	2.735	2051	21:50	0.456	342
12:55	0.104	78	15:55	0.905	679	18:55	2.212	1659	21:55	0.452	339
13:00	0.108	81	16:00	1.120	840	19:00	1.985	1489	22:00	0.442	332
13:05	0.109	82	16:05	1.166	875	19:05	1.820	1365	22:05	0.435	326
13:10	0.105	79	16:10	1.200	900	19:10	1.487	1115	22:10	0.434	326
13:15	0.104	78	16:15	1.238	929	19:15	1.570	1178	22:15	0.427	320
13:20	0.104	78	16:20	1.075	806	19:20	1.264	948	22:20	0.427	320
13:25	0.100	75	16:25	1.142	857	19:25	1.116	837	22:25	0.431	323
13:30	0.095	71	16:30	0.905	679	19:30	1.020	765	22:30	0.432	324
13:35	0.094	71	16:35	0.632	474	19:35	0.980	735	22:35	0.434	326
13:40	0.094	71	16:40	0.670	503	19:40	0.921	691	22:40	0.438	329
13:45	0.093	70	16:45	0.714	536	19:45	0.846	635	22:45	0.436	327
13:50	0.090	68	16:50	0.815	611	19:50	0.779	584	22:50	0.444	333
13:55	0.089	67	16:55	0.865	649	19:55	0.777	583	22:55	0.455	341
14:00	0.100	75	17:00	0.913	685	20:00	0.789	592	23:00	0.451	338
14:05	0.103	77	17:05	1.062	797	20:05	0.813	610	23:05	0.462	347
14:10	0.100	75	17:10	1.258	944	20:10	0.827	620	23:10	0.464	348
14:15	0.085	64	17:15	1.390	1043	20:15	0.825	619	23:15	0.466	350
14:20	0.076	57	17:20	1.580	1185	20:20	0.845	634	23:20	0.453	340
14:25	0.080	60	17:25	1.820	1365	20:25	0.880	660	23:25	0.494	371
14:30	0.080	60	17:30	2.300	1725	20:30	0.954	716	23:30	0.414	311
14:35	0.075	56	17:35	2.450	1838	20:35	1.072	804	23:35	0.380	285
14:40	0.105	79	17:40	2.830	2123	20:40	1.191	893	23:40	0.386	290
14:45	0.140	105	17:45	2.750	2063	20:45	1.250	938	23:45	0.405	304
14:50	0.300	225	17:50	2.800	2100	20:50	1.259	944	23:50	0.439	329
14:55	0.500	375	17:55	2.920	2190	20:55	1.222	917	23:55	0.415	311

R/V POLAR DUKE Echo Sounding Log

Date: 7-May
Cruise VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	0.425	319	03:00	0.575	431	06:00	3.317	2488	09:00	3.325	2494
00:05	0.474	356	03:05	0.580	435	06:05	3.320	2490	09:05	3.320	2490
00:10	0.476	357	03:10	0.585	439	06:10	3.200	2400	09:10	3.184	2388
00:15	0.530	398	03:15	0.595	446	06:15	3.180	2385	09:15	3.114	2336
00:20	0.850	638	03:20	0.590	443	06:20	3.205	2404	09:20	3.198	2399
00:25	0.945	709	03:25	0.587	440	06:25	3.202	2402	09:25	3.276	2457
00:30	0.891	668	03:30	0.590	443	06:30	3.227	2420	09:30	3.236	2427
00:35	0.798	599	03:35	0.592	444	06:35	3.257	2443	09:35	3.237	2428
00:40	0.750	563	03:40	0.600	450	06:40	3.312	2484	09:40	3.323	2492
00:45	0.748	561	03:45	0.600	450	06:45	3.287	2465	09:45	3.309	2482
00:50	0.735	551	03:50	0.605	454	06:50	3.095	2321	09:50	3.238	2429
00:55	0.716	537	03:55	0.611	458	06:55	3.110	2333	09:55	3.210	2408
01:00	0.699	524	04:00	0.610	458	07:00	3.190	2393	10:00	3.150	2363
01:05	0.699	524	04:05	0.620	465	07:05	3.205	2404	10:05	3.100	2325
01:10	0.681	511	04:10	0.625	469	07:10	3.156	2367	10:10	3.015	2261
01:15	0.670	503	04:15	0.645	484	07:15	3.145	2359	10:15	2.885	2164
01:20	0.652	489	04:20	0.650	488	07:20	3.243	2432	10:20	2.673	2005
01:25	0.645	484	04:25	0.652	489	07:25	3.360	2520	10:25	2.420	1815
01:30	0.645	484	04:30	0.680	510	07:30	3.314	2486	10:30	2.150	1613
01:35	0.625	469	04:35	0.694	521	07:35	3.330	2498	10:35	1.930	1448
01:40	0.605	454	04:40	0.706	530	07:40	3.300	2475	10:40	1.450	1088
01:45	0.607	455	04:45	0.714	536	07:45	3.372	2529	10:45	1.000	750
01:50	0.595	446	04:50	0.730	548	07:50	3.438	2579	10:50	0.814	611
01:55	0.585	439	04:55	0.765	574	07:55	3.391	2543	10:55	0.781	586
02:00	0.585	439	05:00	0.830	623	08:00	3.380	2535	11:00	0.700	525
02:05	0.576	432	05:05	1.100	825	08:05	3.372	2529	11:05	0.779	584
02:10	0.585	439	05:10	1.630	1223	08:10	3.440	2580	11:10	0.774	581
02:15	0.580	435	05:15	1.635	1226	08:15	3.434	2576	11:15	0.760	570
02:20	0.575	431	05:20	1.930	1448	08:20	3.400	2550	11:20	0.760	570
02:25	0.570	428	05:25	2.340	1755	08:25	3.340	2505	11:25	0.773	580
02:30	0.570	428	05:30	2.665	1999	08:30	3.239	2429	11:30	0.780	585
02:35	0.567	425	05:35	2.935	2201	08:35	3.174	2381	11:35	0.782	587
02:40	0.567	425	05:40	3.025	2269	08:40	3.202	2402	11:40	0.800	600
02:45	0.565	424	05:45	3.092	2319	08:45	3.251	2438	11:45	0.818	614
02:50	0.564	423	05:50	3.170	2378	08:50	3.218	2414	11:50	0.825	619
02:55	0.560	420	05:55	3.227	2420	08:55	3.208	2406	11:55	0.830	623

R/V POLAR DUKE Echo Sounding Log

Date: 7-May
Cruise VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.817	613	15:00	0.869	652	18:00	0.760	570	21:00	1.691	1268
12:05	0.813	610	15:05	0.837	628	18:05	0.864	648	21:05	1.661	1246
12:10	0.817	613	15:10	0.845	634	18:10	0.886	665	21:10	1.383	1037
12:15	0.837	628	15:15	1.015	761	18:15	0.912	684	21:15	1.403	1052
12:20	0.849	637	15:20	1.015	761	18:20	0.960	720	21:20	1.415	1061
12:25	0.872	654	15:25	1.025	769	18:25	1.005	754	21:25	1.516	1137
12:30	0.873	655	15:30	1.068	801	18:30	1.015	761	21:30	1.546	1160
12:35	0.864	648	15:35	1.135	851	18:35	1.025	769	21:35	1.497	1123
12:40	0.839	629	15:40	1.152	864	18:40	1.064	798	21:40	1.200	900
12:45	0.832	624	15:45	1.172	879	18:45	1.028	771	21:45	1.196	897
12:50	0.816	612	15:50	1.189	892	18:50	1.046	785	21:50	1.111	833
12:55	0.800	600	15:55	1.208	906	18:55	1.062	797	21:55	1.766	1325
13:00	0.786	590	16:00	1.227	920	19:00	1.095	821	22:00	1.534	1151
13:05	0.785	589	16:05	1.230	923	19:05	1.106	830	22:05	1.306	980
13:10	0.775	581	16:10	1.233	925	19:10	0.980	735	22:10	1.383	1037
13:15	0.762	572	16:15	1.230	923	19:15	0.960	720	22:15	1.376	1032
13:20	0.740	555	16:20	1.290	968	19:20	0.939	704	22:20	1.685	1264
13:25	0.738	554	16:25	1.310	983	19:25	0.878	659	22:25	1.536	1152
13:30	0.702	527	16:30	1.260	945	19:30	0.885	664	22:30	1.392	1044
13:35	0.702	527	16:35	1.220	915	19:35	0.870	653	22:35	1.226	920
13:40	0.702	527	16:40	1.148	861	19:40	0.892	669	22:40	1.049	787
13:45	0.702	527	16:45	1.120	840	19:45	0.913	685	22:45	0.847	635
13:50	0.702	527	16:50	1.106	830	19:50	0.931	698	22:50	0.704	528
13:55	0.702	527	16:55	1.023	767	19:55	0.936	702	22:55	0.626	470
14:00	0.702	527	17:00	0.994	746	20:00	0.946	710	23:00	0.586	440
14:05	0.702	527	17:05	0.942	707	20:05	0.968	726	23:05	0.546	410
14:10	0.702	527	17:10	0.976	732	20:10	1.016	762	23:10	0.536	402
14:15	0.698	524	17:15	0.952	714	20:15	1.050	788	23:15	0.526	395
14:20	0.709	532	17:20	0.947	710	20:20	1.080	810	23:20	0.490	368
14:25	0.723	542	17:25	0.943	707	20:25	1.184	888	23:25	0.526	395
14:30	0.721	541	17:30	0.928	696	20:30	1.222	917	23:30	0.529	397
14:35	0.727	545	17:35	0.916	687	20:35	1.236	927	23:35	0.557	418
14:40	0.744	558	17:40	0.909	682	20:40	1.256	942	23:40	0.607	455
14:45	0.772	579	17:45	0.902	677	20:45	1.347	1010	23:45	0.687	515
14:50	0.772	579	17:50	0.904	678	20:50	1.678	1259	23:50	0.815	611
14:55	0.781	586	17:55	0.912	684	20:55	1.669	1252	23:55	1.000	750

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	1.185	889	03:00	0.606	455	06:00	0.435	326	09:00	1.915	1436
00:05	1.345	1009	03:05	0.590	443	06:05	0.480	360	09:05	1.717	1288
00:10	1.464	1098	03:10	0.565	424	06:10	0.524	393	09:10	1.596	1197
00:15	1.522	1142	03:15	0.550	413	06:15	0.540	405	09:15	1.501	1126
00:20	1.580	1185	03:20	0.515	386	06:20	0.530	398	09:20	1.590	1193
00:25	1.725	1294	03:25	0.454	341	06:25	0.850	638	09:25	1.706	1280
00:30	1.665	1249	03:30	0.452	339	06:30	1.090	818	09:30	1.864	1398
00:35	1.470	1103	03:35	0.440	330	06:35	1.075	806	09:35	1.756	1317
00:40	1.285	964	03:40	0.470	353	06:40	1.085	814	09:40	1.700	1275
00:45	1.380	1035	03:45	0.452	339	06:45	1.000	750	09:45	1.641	1231
00:50	1.385	1039	03:50	0.435	326	06:50	0.945	709	09:50	1.630	1223
00:55	1.300	975	03:55	0.447	335	06:55	0.905	679	09:55	1.355	1016
01:00	1.105	829	04:00	0.445	334	07:00	0.962	722	10:00	1.250	938
01:05	0.880	660	04:05	0.462	347	07:05	0.966	725	10:05	1.426	1070
01:10	0.680	510	04:10	0.458	344	07:10	1.120	840	10:10	1.420	1065
01:15	0.585	439	04:15	0.474	356	07:15	1.019	764	10:15	1.315	986
01:20	0.565	424	04:20	0.416	312	07:20	0.988	741	10:20	1.215	911
01:25	0.560	420	04:25	0.403	302	07:25	1.049	787	10:25	1.164	873
01:30	0.561	421	04:30	0.410	308	07:30	1.094	821	10:30	1.344	1008
01:35	0.594	446	04:35	0.402	302	07:35	1.195	896	10:35	1.328	996
01:40	0.571	428	04:40	0.407	305	07:40	1.230	923	10:40	1.315	986
01:45	0.550	413	04:45	0.407	305	07:45	1.329	997	10:45	1.295	971
01:50	0.559	419	04:50	0.401	301	07:50	1.458	1094	10:50	1.256	942
01:55	0.599	449	04:55	0.409	307	07:55	1.641	1231	10:55	1.222	917
02:00	0.610	458	05:00	0.409	307	08:00	1.789	1342	11:00	1.210	908
02:05	0.600	450	05:05	0.412	309	08:05	1.813	1360	11:05	1.180	885
02:10	0.650	488	05:10	0.405	304	08:10	1.915	1436	11:10	1.240	930
02:15	0.685	514	05:15	0.405	304	08:15	1.990	1493	11:15	1.232	924
02:20	0.805	604	05:20	0.400	300	08:20	2.300	1725	11:20	1.130	848
02:25	0.725	544	05:25	0.398	299	08:25	3.120	2340	11:25	0.990	743
02:30	0.640	480	05:30	0.389	292	08:30	3.120	2340	11:30	0.955	716
02:35	0.620	465	05:35	0.381	286	08:35	3.117	2338	11:35	0.910	683
02:40	0.625	469	05:40	0.378	284	08:40	3.097	2323	11:40	0.746	560
02:45	0.630	473	05:45	0.410	308	08:45	3.097	2323	11:45	0.508	381
02:50	0.655	491	05:50	0.420	315	08:50	2.555	1916	11:50	0.311	233
02:55	0.622	467	05:55	0.425	319	08:55	2.465	1849	11:55	0.516	387

R/V POLAR DUKE Echo Sounding Log

Date: 8-May

5/17/88

Cruise VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.616	462	15:00	1.034	776	18:00	0.633	475	21:00	0.572	429
12:05	0.467	350	15:05	1.128	846	18:05	0.748	561	21:05	0.548	411
12:10	0.312	234	15:10	1.183	887	18:10	0.662	497	21:10	0.537	403
12:15	0.342	257	15:15	1.142	857	18:15	0.617	463	21:15	0.547	410
12:20	0.360	270	15:20	1.152	864	18:20	0.852	639	21:20	0.568	426
12:25	0.347	260	15:25	1.289	967	18:25	1.232	924	21:25	0.601	451
12:30	0.317	238	15:30	1.414	1061	18:30	1.217	913	21:30	0.612	459
12:35	0.258	194	15:35	1.465	1099	18:35	1.152	864	21:35	0.669	502
12:40	0.211	158	15:40	1.621	1216	18:40	1.107	830	21:40	0.743	557
12:45	0.165	124	15:45	1.614	1211	18:45	1.047	785	21:45	0.855	641
12:50	0.143	107	15:50	1.760	1320	18:50	1.010	758	21:50	0.883	662
12:55	0.131	98	15:55	1.700	1275	18:55	0.958	719	21:55	0.787	590
13:00	0.123	92	16:00	1.512	1134	19:00	0.940	705	22:00	0.872	654
13:05	0.115	86	16:05	1.576	1182	19:05	0.883	662	22:05	0.987	740
13:10	0.110	83	16:10	1.337	1003	19:10	0.820	615	22:10	1.065	799
13:15	0.115	86	16:15	1.156	867	19:15	0.779	584	22:15	1.366	1025
13:20	0.126	95	16:20	0.822	617	19:20	0.760	570	22:20	1.647	1235
13:25	0.138	104	16:25	0.878	659	19:25	0.756	567	22:25	1.752	1314
13:30	0.216	162	16:30	0.898	674	19:30	0.741	556	22:30	1.806	1355
13:35	0.332	249	16:35	1.028	771	19:35	0.714	536	22:35	1.842	1382
13:40	0.388	291	16:40	1.062	797	19:40	0.703	527	22:40	2.055	1541
13:45	0.382	287	16:45	1.097	823	19:45	0.700	525	22:45	2.061	1546
13:50	0.374	281	16:50	1.054	791	19:50	0.689	517	22:50	2.102	1577
13:55	0.342	257	16:55	1.147	860	19:55	0.668	501	22:55	2.062	1547
14:00	0.300	225	17:00	1.127	845	20:00	0.564	423	23:00	2.203	1652
14:05	0.256	192	17:05	1.423	1067	20:05	0.554	416	23:05	2.386	1790
14:10	0.255	191	17:10	1.521	1141	20:10	0.510	383	23:10	2.434	1826
14:15	0.286	215	17:15	1.516	1137	20:15	0.507	380	23:15	2.350	1763
14:20	0.331	248	17:20	1.498	1124	20:20	0.476	357	23:20	1.820	1365
14:25	0.371	278	17:25	1.422	1067	20:25	0.476	357	23:25	1.789	1342
14:30	0.391	293	17:30	1.375	1031	20:30	0.490	368	23:30	1.347	1010
14:35	0.538	404	17:35	1.273	955	20:35	0.512	384	23:35	1.408	1056
14:40	0.614	461	17:40	1.100	825	20:40	0.522	392	23:40	1.472	1104
14:45	0.722	542	17:45	0.942	707	20:45	0.530	398	23:45	1.489	1117
14:50	0.842	632	17:50	0.812	609	20:50	0.546	410	23:50	1.508	1131
14:55	0.966	725	17:55	0.862	647	20:55	0.566	425	23:55	1.513	1135

R/V POLAR DUKE Echo Sounding Log

Date: 9-May

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Cruise PD- VI/88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	1.495	1121	03:00	0.878	659	06:00	0.505	379	09:00	1.010	758
00:05	1.507	1130	03:05	0.930	698	06:05	0.443	332	09:05	1.000	750
00:10	1.311	983	03:10	1.010	758	06:10	0.405	304	09:10	0.945	709
00:15	1.131	848	03:15	1.113	835	06:15	0.370	278	09:15	0.810	608
00:20	1.059	794	03:20	1.059	794	06:20	0.335	251	09:20	0.826	620
00:25	1.061	796	03:25	1.056	792	06:25	0.318	239	09:25	0.846	635
00:30	0.975	731	03:30	1.008	756	06:30	0.340	255	09:30	0.931	698
00:35	1.015	761	03:35	0.936	702	06:35	0.456	342	09:35	1.030	773
00:40	0.956	717	03:40	0.890	668	06:40	0.479	359	09:40	1.110	833
00:45	0.968	726	03:45	0.924	693	06:45	0.440	330	09:45	1.175	881
00:50	0.876	657	03:50	1.046	785	06:50	0.425	319	09:50	1.180	885
00:55	0.668	501	03:55	1.275	956	06:55	0.443	332	09:55	1.300	975
01:00	0.605	454	04:00	1.292	969	07:00	0.425	319	10:00	1.500	1125
01:05	0.564	423	04:05	1.530	1148	07:05	0.425	319	10:05	1.760	1320
01:10	0.535	401	04:10	1.849	1387	07:10	0.445	334	10:10	1.280	960
01:15	0.490	368	04:15	1.980	1485	07:15	0.500	375	10:15	1.294	971
01:20	0.454	341	04:20	2.115	1586	07:20	0.543	407	10:20	1.400	1050
01:25	0.455	341	04:25	2.159	1619	07:25	0.578	434	10:25	1.550	1163
01:30	0.457	343	04:30	2.095	1571	07:30	0.578	434	10:30	1.725	1294
01:35	0.450	338	04:35	2.027	1520	07:35	0.587	440	10:35	1.673	1255
01:40	0.465	349	04:40	1.905	1429	07:40	0.603	452	10:40	1.470	1103
01:45	0.495	371	04:45	1.810	1358	07:45	0.687	515	10:45	1.400	1050
01:50	0.514	386	04:50	1.645	1234	07:50	0.710	533	10:50	1.352	1014
01:55	0.580	435	04:55	1.510	1133	07:55	0.789	592	10:55	1.305	979
02:00	0.613	460	05:00	1.374	1031	08:00	0.919	689	11:00	1.390	1043
02:05	0.615	461	05:05	1.260	945	08:05	0.968	726	11:05	1.405	1054
02:10	0.610	458	05:10	1.145	859	08:10	1.013	760	11:10	1.350	1013
02:15	0.715	536	05:15	0.958	719	08:15	1.059	794	11:15	1.314	986
02:20	0.803	602	05:20	0.841	631	08:20	1.022	767	11:20	1.338	1004
02:25	0.849	637	05:25	0.755	566	08:25	0.914	686	11:25	1.224	918
02:30	0.871	653	05:30	0.612	459	08:30	0.750	563	11:30	0.824	618
02:35	0.893	670	05:35	0.573	430	08:35	0.682	512	11:35	0.707	530
02:40	0.920	690	05:40	0.567	425	08:40	0.690	518	11:40	0.697	523
02:45	0.889	667	05:45	0.562	422	08:45	0.748	561	11:45	0.686	515
02:50	0.902	677	05:50	0.602	452	08:50	0.816	612	11:50	0.655	491
02:55	0.899	674	05:55	0.593	445	08:55	0.916	687	11:55	0.647	485

R/V POLAR DUKE Echo Sounding Log

Date: 9-May 1988

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Cruise PD- VI/88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.646	485	15:00	2.500	1875	18:00	0.598	449	21:00	1.338	1004
12:05	0.558	419	15:05	1.840	1380	18:05	0.628	471	21:05	1.269	952
12:10	0.540	405	15:10	1.817	1363	18:10	0.609	457	21:10	1.230	923
12:15	0.569	427	15:15	1.812	1359	18:15	0.624	468	21:15	1.247	935
12:20	0.613	460	15:20	1.789	1342	18:20	0.618	464	21:20	1.308	981
12:25	0.652	489	15:25	1.717	1288	18:25	0.670	503	21:25	1.374	1031
12:30	0.732	549	15:30	1.700	1275	18:30	1.200	900	21:30	1.445	1084
12:35	0.905	679	15:35	1.678	1259	18:35	1.340	1005	21:35	1.517	1138
12:40	1.030	773	15:40	1.656	1242	18:40	1.315	986	21:40	1.615	1211
12:45	1.100	825	15:45	1.528	1146	18:45	1.270	953	21:45	1.767	1325
12:50	1.111	833	15:50	1.398	1049	18:50	1.228	921	21:50	1.844	1383
12:55	1.242	932	15:55	1.441	1081	18:55	1.037	778	21:55	1.877	1408
13:00	1.288	966	16:00	1.400	1050	19:00	0.997	748	22:00	1.942	1457
13:05	1.335	1001	16:05	1.220	915	19:05	0.986	740	22:05	1.990	1493
13:10	1.408	1056	16:10	0.995	746	19:10	0.998	749	22:10	2.043	1532
13:15	1.482	1112	16:15	0.888	666	19:15	1.015	761	22:15	2.126	1595
13:20	1.553	1165	16:20	0.839	629	19:20	1.015	761	22:20	2.220	1665
13:25	1.617	1213	16:25	0.844	633	19:25	1.040	780	22:25	2.335	1751
13:30	1.260	945	16:30	0.955	716	19:30	1.078	809	22:30	2.442	1832
13:35	1.860	1395	16:35	1.070	803	19:35	1.126	845	22:35	2.525	1894
13:40	2.750	2063	16:40	1.096	822	19:40	1.117	838	22:40	2.530	1898
13:45	3.110	2333	16:45	1.077	808	19:45	1.223	917	22:45	2.455	1841
13:50	3.100	2325	16:50	1.032	774	19:50	1.258	944	22:50	2.140	1605
13:55	3.092	2319	16:55	1.010	758	19:55	1.285	964	22:55	2.010	1508
14:00	2.945	2209	17:00	0.982	737	20:00	1.314	986	23:00	1.832	1374
14:05	2.825	2119	17:05	0.931	698	20:05	1.351	1013	23:05	1.650	1238
14:10	2.492	1869	17:10	0.885	664	20:10	1.403	1052	23:10	1.450	1088
14:15	2.268	1701	17:15	0.882	662	20:15	1.407	1055	23:15	1.235	926
14:20	2.300	1725	17:20	0.823	617	20:20	1.548	1161	23:20	1.291	968
14:25	2.550	1913	17:25	0.737	553	20:25	1.585	1189	23:25	1.145	859
14:30	2.800	2100	17:30	0.676	507	20:30	1.590	1193	23:30	0.985	739
14:35	3.050	2288	17:35	0.641	481	20:35	1.598	1199	23:35	1.020	765
14:40	3.100	2325	17:40	0.604	453	20:40	1.556	1167	23:40	1.230	923
14:45	3.100	2325	17:45	0.580	435	20:45	1.485	1114	23:45	1.350	1013
14:50	3.112	2334	17:50	0.568	426	20:50	1.451	1088	23:50	1.800	1350
14:55	3.124	2343	17:55	0.570	428	20:55	1.402	1052	23:55	2.200	1650

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	2.470	1853	03:00	1.055	791	06:00	1.180	885	09:00	1.324	993
00:05	2.681	2011	03:05	0.842	632	06:05	1.102	827	09:05	1.353	1015
00:10	2.700	2025	03:10	0.785	589	06:10	1.085	814	09:10	1.390	1043
00:15	2.660	1995	03:15	0.833	625	06:15	1.082	812	09:15	1.413	1060
00:20	2.624	1968	03:20	1.090	818	06:20	1.285	964	09:20	1.435	1076
00:25	2.534	1901	03:25	1.300	975	06:25	1.340	1005	09:25	1.470	1103
00:30	2.460	1845	03:30	1.260	945	06:30	1.440	1080	09:30	1.510	1133
00:35	2.438	1829	03:35	1.178	884	06:35	1.453	1090	09:35	1.558	1169
00:40	2.427	1820	03:40	1.155	866	06:40	1.395	1046	09:40	1.562	1172
00:45	2.393	1795	03:45	1.155	866	06:45	1.365	1024	09:45	1.595	1196
00:50	2.347	1760	03:50	1.110	833	06:50	1.342	1007	09:50	1.598	1199
00:55	2.280	1710	03:55	1.080	810	06:55	1.146	860	09:55	1.578	1184
01:00	2.187	1640	04:00	1.063	797	07:00	0.650	488	10:00	1.480	1110
01:05	2.105	1579	04:05	1.052	789	07:05	0.358	269	10:05	1.413	1060
01:10	2.142	1607	04:10	1.030	773	07:10	0.359	269	10:10	1.352	1014
01:15	2.198	1649	04:15	1.025	769	07:15	0.386	290	10:15	1.317	988
01:20	2.270	1703	04:20	1.045	784	07:20	0.408	306	10:20	1.335	1001
01:25	2.371	1778	04:25	1.063	797	07:25	0.470	353	10:25	1.357	1018
01:30	2.474	1856	04:30	1.080	810	07:30	1.140	855	10:30	1.388	1041
01:35	2.590	1943	04:35	1.097	823	07:35	1.415	1061	10:35	1.435	1076
01:40	2.668	2001	04:40	1.104	828	07:40	1.457	1093	10:40	1.474	1106
01:45	2.712	2034	04:45	1.114	836	07:45	1.603	1202	10:45	1.504	1128
01:50	2.745	2059	04:50	1.135	851	07:50	1.721	1291	10:50	1.513	1135
01:55	2.778	2084	04:55	1.181	886	07:55	1.668	1251	10:55	1.187	890
02:00	2.834	2126	05:00	1.220	915	08:00	1.621	1216	11:00	0.887	665
02:05	2.882	2162	05:05	1.259	944	08:05	1.585	1189	11:05	0.597	448
02:10	2.926	2195	05:10	1.294	971	08:10	1.520	1140	11:10	0.491	368
02:15	2.886	2165	05:15	1.330	998	08:15	1.490	1118	11:15	0.413	310
02:20	2.887	2165	05:20	1.356	1017	08:20	1.416	1062	11:20	0.340	255
02:25	2.812	2109	05:25	1.380	1035	08:25	1.312	984	11:25	0.210	158
02:30	2.736	2052	05:30	1.357	1018	08:30	1.239	929	11:30	0.157	118
02:35	2.752	2064	05:35	1.379	1034	08:35	1.187	890	11:35	0.156	117
02:40	2.510	1883	05:40	1.375	1031	08:40	1.168	876	11:40	0.157	118
02:45	2.200	1650	05:45	1.338	1004	08:45	1.278	959	11:45	0.182	137
02:50	1.800	1350	05:50	1.306	980	08:50	1.281	961	11:50	0.196	147
02:55	1.225	919	05:55	1.265	949	08:55	1.346	1010	11:55	0.183	137

R/V POLAR DUKE Echo Sounding Log

Date: 10-May
Cruise VI-88

5/17/88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.099	74	15:00	1.276	957	18:00	1.286	965	21:00	1.080	810
12:05	0.100	75	15:05	1.270	953	18:05	1.678	1259	21:05	1.253	940
12:10	0.142	107	15:10	1.245	934	18:10	1.898	1416	21:10	1.420	1065
12:15	0.102	77	15:15	1.178	884	18:15	1.813	1360	21:15	1.591	1193
12:20	0.236	177	15:20	1.123	842	18:20	1.817	1363	21:20	1.740	1305
12:25	0.580	435	15:25	1.106	830	18:25	1.784	1338	21:25	1.930	1448
12:30	1.250	938	15:30	1.140	855	18:30	1.755	1316	21:30	1.930	1448
12:35	1.389	1042	15:35	1.140	855	18:35	1.677	1258	21:35	2.050	1538
12:40	1.010	758	15:40	1.140	855	18:40	1.556	1167	21:40	2.122	1592
12:45	0.812	609	15:45	1.140	855	18:45	1.552	1164	21:45	2.160	1620
12:50	0.906	680	15:50	1.122	842	18:50	1.606	1205	21:50	2.190	1643
12:55	0.967	725	15:55	1.130	848	18:55	1.644	1233	21:55	2.212	1659
13:00	1.010	758	16:00	1.143	857	19:00	1.641	1231	22:00	2.165	1624
13:05	0.855	641	16:05	1.150	863	19:05	1.513	1135	22:05	2.080	1560
13:10	0.816	612	16:10	1.170	878	19:10	1.496	1122	22:10	2.010	1508
13:15	0.837	628	16:15	1.178	884	19:15	1.385	1039	22:15	1.966	1475
13:20	0.896	672	16:20	1.186	890	19:20	1.247	935	22:20	1.952	1464
13:25	1.010	758	16:25	1.200	900	19:25	1.090	818	22:25	1.930	1448
13:30	1.105	829	16:30	1.194	896	19:30	1.180	885	22:30	1.912	1434
13:35	1.283	962	16:35	1.203	902	19:35	1.302	977	22:35	1.889	1417
13:40	1.308	981	16:40	1.220	915	19:40	1.267	950	22:40	1.870	1403
13:45	1.568	1176	16:45	1.237	928	19:45	1.306	980	22:45	1.852	1389
13:50	0.695	521	16:50	1.270	953	19:50	1.260	945	22:50	1.838	1379
13:55	0.428	321	16:55	1.373	1030	19:55	1.203	902	22:55	1.823	1367
14:00	0.443	332	17:00	1.418	1064	20:00	1.458	1094	23:00	1.810	1358
14:05	0.716	537	17:05	1.580	1185	20:05	1.517	1138	23:05	1.793	1345
14:10	0.962	722	17:10	1.658	1244	20:10	1.513	1135	23:10	1.892	1419
14:15	1.050	788	17:15	1.395	1046	20:15	1.487	1115	23:15	1.930	1448
14:20	1.210	908	17:20	1.230	923	20:20	1.268	951	23:20	1.988	1491
14:25	1.505	1129	17:25	1.191	893	20:25	1.295	971	23:25	2.128	1596
14:30	1.749	1312	17:30	1.085	814	20:30	1.309	982	23:30	2.215	1661
14:35	1.742	1307	17:35	0.957	718	20:35	1.105	829	23:35	2.597	1948
14:40	1.700	1275	17:40	0.957	718	20:40	0.960	720	23:40	2.647	1985
14:45	1.502	1127	17:45	1.075	806	20:45	0.801	601	23:45	2.686	2015
14:50	1.352	1014	17:50	1.188	891	20:50	0.809	607	23:50	2.850	2138
14:55	1.298	974	17:55	1.267	950	20:55	0.930	698	23:55	3.120	2340

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	3.125	2344	03:00	3.093	2320	06:00	1.620	1215	09:00	1.307	980
00:05	3.125	2344	03:05	3.099	2324	06:05	1.558	1169	09:05	0.900	675
00:10	3.125	2344	03:10	2.950	2213	06:10	1.214	911	09:10	0.688	516
00:15	3.125	2344	03:15	2.708	2031	06:15	0.875	656	09:15	0.675	506
00:20	3.125	2344	03:20	2.497	1873	06:20	0.690	518	09:20	0.628	471
00:25	3.125	2344	03:25	2.298	1724	06:25	0.593	445	09:25	0.562	422
00:30	3.125	2344	03:30	2.234	1676	06:30	0.620	465	09:30	0.550	413
00:35	3.125	2344	03:35	2.171	1628	06:35	0.652	489	09:35	0.607	455
00:40	3.125	2344	03:40	2.108	1581	06:40	0.710	533	09:40	0.667	500
00:45	3.125	2344	03:45	2.045	1534	06:45	0.934	701	09:45	0.799	599
00:50	3.125	2344	03:50	2.045	1534	06:50	1.076	807	09:50	0.945	709
00:55	3.125	2344	03:55	2.045	1534	06:55	1.338	1004	09:55	1.060	795
01:00	3.125	2344	04:00	2.045	1534	07:00	1.343	1007	10:00	1.259	944
01:05	3.125	2344	04:05	2.045	1534	07:05	1.332	999	10:05	1.550	1163
01:10	3.125	2344	04:10	1.980	1485	07:10	1.326	995	10:10	1.695	1271
01:15	3.125	2344	04:15	1.978	1484	07:15	1.321	991	10:15	1.828	1371
01:20	3.126	2345	04:20	1.978	1484	07:20	1.318	989	10:20	1.807	1355
01:25	3.127	2345	04:25	1.978	1484	07:25	1.315	986	10:25	1.786	1340
01:30	3.128	2346	04:30	1.978	1484	07:30	1.309	982	10:30	1.786	1340
01:35	3.130	2348	04:35	1.975	1481	07:35	1.304	978	10:35	1.789	1342
01:40	3.130	2348	04:40	1.975	1481	07:40	1.293	970	10:40	1.832	1374
01:45	3.130	2348	04:45	1.975	1481	07:45	1.285	964	10:45	1.840	1380
01:50	3.130	2348	04:50	1.975	1481	07:50	1.277	958	10:50	1.840	1380
01:55	3.130	2348	04:55	1.975	1481	07:55	1.276	957	10:55	1.830	1373
02:00	3.130	2348	05:00	1.975	1481	08:00	1.275	956	11:00	1.768	1326
02:05	3.127	2345	05:05	1.975	1481	08:05	1.274	956	11:05	1.695	1271
02:10	3.124	2343	05:10	1.975	1481	08:10	1.266	950	11:10	1.755	1316
02:15	3.121	2341	05:15	1.975	1481	08:15	1.268	951	11:15	1.835	1376
02:20	3.118	2339	05:20	1.975	1481	08:20	1.270	953	11:20	2.025	1519
02:25	3.115	2336	05:25	1.975	1481	08:25	1.272	954	11:25	2.920	2190
02:30	3.112	2334	05:30	2.000	1500	08:30	1.270	953	11:30	2.917	2188
02:35	3.109	2332	05:35	2.010	1508	08:35	1.265	949	11:35	2.912	2184
02:40	3.108	2331	05:40	2.140	1605	08:40	1.264	948	11:40	2.920	2190
02:45	3.107	2330	05:45	2.086	1565	08:45	1.263	947	11:45	2.907	2180
02:50	3.110	2333	05:50	1.777	1333	08:50	1.267	950	11:50	2.903	2177
02:55	3.103	2327	05:55	1.620	1215	08:55	1.330	998	11:55	2.903	2177

R/V POLAR DUKE Echo Sounding Log

Date: 11-May
Cruise VI-88

5/17/88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	2.851	2138	15:00	1.746	1310	18:00	1.090	818	21:00	0.828	621
12:05	2.851	2138	15:05	1.608	1206	18:05	1.084	813	21:05	0.839	629
12:10	2.851	2138	15:10	1.460	1095	18:10	1.065	799	21:10	0.811	608
12:15	2.851	2138	15:15	1.373	1030	18:15	1.045	784	21:15	0.865	649
12:20	2.852	2139	15:20	1.272	954	18:20	1.040	780	21:20	0.892	669
12:25	2.853	2140	15:25	1.243	932	18:25	1.040	780	21:25	0.911	683
12:30	2.854	2141	15:30	1.234	926	18:30	1.048	786	21:30	0.925	694
12:35	2.855	2141	15:35	1.227	920	18:35	1.018	764	21:35	0.922	692
12:40	2.860	2145	15:40	1.225	919	18:40	0.983	737	21:40	0.982	737
12:45	2.860	2145	15:45	1.228	921	18:45	0.967	725	21:45	0.984	738
12:50	2.860	2145	15:50	1.239	929	18:50	0.962	722	21:50	0.925	694
12:55	2.860	2145	15:55	1.244	933	18:55	0.977	733	21:55	0.860	645
13:00	2.882	2162	16:00	1.256	942	19:00	1.005	754	22:00	0.832	624
13:05	2.882	2162	16:05	1.263	947	19:05	1.005	754	22:05	0.804	603
13:10	2.900	2175	16:10	1.246	935	19:10	1.005	754	22:10	0.784	588
13:15	2.900	2175	16:15	1.225	919	19:15	1.005	754	22:15	0.758	569
13:20	2.900	2175	16:20	1.207	905	19:20	1.005	754	22:20	0.736	552
13:25	2.900	2175	16:25	1.192	894	19:25	1.005	754	22:25	0.728	546
13:30	2.900	2175	16:30	1.189	892	19:30	0.974	731	22:30	0.717	538
13:35	2.900	2175	16:35	1.184	888	19:35	0.952	714	22:35	0.705	529
13:40	2.900	2175	16:40	1.189	892	19:40	0.947	710	22:40	0.699	524
13:45	2.900	2175	16:45	1.193	895	19:45	0.952	714	22:45	0.691	518
13:50	2.900	2175	16:50	1.204	903	19:50	0.922	692	22:50	0.684	513
13:55	2.900	2175	16:55	1.195	896	19:55	0.872	654	22:55	0.661	496
14:00	2.911	2183	17:00	1.177	883	20:00	0.781	586	23:00	0.642	482
14:05	2.949	2212	17:05	1.160	870	20:05	0.778	584	23:05	0.642	482
14:10	2.951	2213	17:10	1.137	853	20:10	0.784	588	23:10	0.651	488
14:15	2.874	2156	17:15	1.123	842	20:15	0.842	632	23:15	0.612	459
14:20	2.879	2159	17:20	1.117	838	20:20	0.869	652	23:20	0.630	473
14:25	2.890	2168	17:25	1.114	836	20:25	0.764	573	23:25	0.651	488
14:30	2.942	2207	17:30	1.110	833	20:30	0.802	602	23:30	0.648	486
14:35	3.005	2254	17:35	1.108	831	20:35	0.806	605	23:35	0.651	488
14:40	3.005	2254	17:40	1.106	830	20:40	0.745	559	23:40	0.654	491
14:45	3.048	2286	17:45	1.102	827	20:45	0.772	579	23:45	0.643	482
14:50	2.536	1902	17:50	1.096	822	20:50	0.793	595	23:50	0.651	488
14:55	2.122	1592	17:55	1.094	821	20:55	0.813	610	23:55	0.652	489
1.749			1.09								

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	0.664	498	03:00	0.572	429	06:00	2.384	1788	09:00	2.225	1669
00:05	0.682	512	03:05	0.650	488	06:05	2.382	1787	09:05	2.193	1645
00:10	0.680	510	03:10	0.760	570	06:10	2.367	1775	09:10	2.175	1631
00:15	0.702	527	03:15	1.000	750	06:15	2.315	1736	09:15	2.150	1613
00:20	0.738	554	03:20	1.300	975	06:20	2.210	1658	09:20	2.127	1595
00:25	0.774	581	03:25	1.800	1350	06:25	2.000	1500	09:25	2.090	1568
00:30	0.810	608	03:30	2.100	1575	06:30	1.460	1095	09:30	2.055	1541
00:35	0.848	636	03:35	2.250	1688	06:35	1.400	1050	09:35	2.049	1537
00:40	0.862	647	03:40	2.364	1773	06:40	1.515	1136	09:40	2.050	1538
00:45	0.835	626	03:45	2.361	1771	06:45	1.710	1283	09:45	2.030	1523
00:50	0.832	624	03:50	2.360	1770	06:50	2.015	1511	09:50	2.055	1541
00:55	0.836	627	03:55	2.350	1763	06:55	2.115	1586	09:55	2.130	1598
01:00	0.838	629	04:00	2.335	1751	07:00	2.071	1553	10:00	2.190	1643
01:05	0.830	623	04:05	2.325	1744	07:05	2.080	1560	10:05	2.244	1683
01:10	0.820	615	04:10	2.250	1688	07:10	2.060	1545	10:10	2.278	1709
01:15	0.801	601	04:15	2.150	1613	07:15	2.100	1575	10:15	2.273	1705
01:20	0.785	589	04:20	1.975	1481	07:20	2.090	1568	10:20	2.334	1751
01:25	0.770	578	04:25	1.840	1380	07:25	2.080	1560	10:25	2.430	1823
01:30	0.726	545	04:30	1.940	1455	07:30	2.100	1575	10:30	2.520	1890
01:35	0.735	551	04:35	1.720	1290	07:35	2.100	1575	10:35	2.625	1969
01:40	0.720	540	04:40	1.522	1142	07:40	2.040	1530	10:40	2.620	1965
01:45	0.675	506	04:45	1.685	1264	07:45	2.100	1575	10:45	2.615	1961
01:50	0.621	466	04:50	1.780	1335	07:50	2.167	1625	10:50	2.600	1950
01:55	0.583	437	04:55	2.064	1548	07:55	2.340	1755	10:55	2.560	1920
02:00	0.503	377	05:00	2.120	1590	08:00	2.380	1785	11:00	2.500	1875
02:05	0.459	344	05:05	2.220	1665	08:05	2.424	1818	11:05	2.519	1889
02:10	0.355	266	05:10	2.267	1700	08:10	2.443	1832	11:10	2.419	1814
02:15	0.289	217	05:15	2.280	1710	08:15	2.425	1819	11:15	2.401	1801
02:20	0.259	194	05:20	2.308	1731	08:20	2.405	1804	11:20	2.445	1834
02:25	0.230	173	05:25	2.385	1789	08:25	2.402	1802	11:25	2.490	1868
02:30	0.227	170	05:30	2.380	1785	08:30	2.377	1783	11:30	2.492	1869
02:35	0.238	179	05:35	2.377	1783	08:35	2.385	1789	11:35	2.505	1879
02:40	0.261	196	05:40	2.369	1777	08:40	2.330	1748	11:40	2.410	1808
02:45	0.290	218	05:45	2.378	1784	08:45	2.305	1729	11:45	2.315	1736
02:50	0.396	297	05:50	2.383	1787	08:50	2.270	1703	11:50	2.296	1722
02:55	0.532	399	05:55	2.383	1787	08:55	2.253	1690	11:55	2.323	1742

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	2.336	1752	15:00	2.640	1980	18:00	2.640	1980	21:00	2.626	1970
12:05	2.375	1781	15:05	2.640	1980	18:05	2.640	1980	21:05	2.626	1970
12:10	2.234	1676	15:10	2.640	1980	18:10	2.640	1980	21:10	2.626	1970
12:15	2.255	1691	15:15	2.640	1980	18:15	2.640	1980	21:15	2.626	1970
12:20	2.355	1766	15:20	2.640	1980	18:20	2.639	1979	21:20	2.627	1970
12:25	2.325	1744	15:25	2.640	1980	18:25	2.639	1979	21:25	2.627	1970
12:30	2.235	1676	15:30	2.640	1980	18:30	2.639	1979	21:30	2.627	1970
12:35	2.263	1697	15:35	2.640	1980	18:35	2.638	1979	21:35	2.627	1970
12:40	2.365	1774	15:40	2.640	1980	18:40	2.638	1979	21:40	2.628	1971
12:45	2.335	1751	15:45	2.640	1980	18:45	2.638	1979	21:45	2.628	1971
12:50	2.302	1727	15:50	2.640	1980	18:50	2.637	1978	21:50	2.628	1971
12:55	2.375	1781	15:55	2.640	1980	18:55	2.637	1978	21:55	2.628	1971
13:00	2.570	1928	16:00	2.640	1980	19:00	2.637	1978	22:00	2.629	1972
13:05	2.632	1974	16:05	2.639	1979	19:05	2.636	1977	22:05	2.629	1972
13:10	2.637	1978	16:10	2.639	1979	19:10	2.636	1977	22:10	2.629	1972
13:15	2.635	1976	16:15	2.639	1979	19:15	2.635	1976	22:15	2.629	1972
13:20	2.636	1977	16:20	2.639	1979	19:20	2.635	1976	22:20	2.630	1973
13:25	2.637	1978	16:25	2.639	1979	19:25	2.635	1976	22:25	2.630	1973
13:30	2.640	1980	16:30	2.639	1979	19:30	2.634	1976	22:30	2.630	1973
13:35	2.640	1980	16:35	2.639	1979	19:35	2.633	1975	22:35	2.631	1973
13:40	2.640	1980	16:40	2.639	1979	19:40	2.632	1974	22:40	2.631	1973
13:45	2.640	1980	16:45	2.640	1980	19:45	2.631	1973	22:45	2.631	1973
13:50	2.639	1979	16:50	2.640	1980	19:50	2.630	1973	22:50	2.632	1974
13:55	2.639	1979	16:55	2.640	1980	19:55	2.629	1972	22:55	2.632	1974
14:00	2.639	1979	17:00	2.640	1980	20:00	2.628	1971	23:00	2.633	1975
14:05	2.639	1979	17:05	2.640	1980	20:05	2.627	1970	23:05	2.633	1975
14:10	2.638	1979	17:10	2.640	1980	20:10	2.625	1969	23:10	2.634	1976
14:15	2.638	1979	17:15	2.640	1980	20:15	2.625	1969	23:15	2.636	1977
14:20	2.638	1979	17:20	2.640	1980	20:20	2.625	1969	23:20	2.636	1977
14:25	2.639	1979	17:25	2.640	1980	20:25	2.625	1969	23:25	2.636	1977
14:30	2.639	1979	17:30	2.640	1980	20:30	2.625	1969	23:30	2.636	1977
14:35	2.639	1979	17:35	2.640	1980	20:35	2.625	1969	23:35	2.636	1977
14:40	2.640	1980	17:40	2.640	1980	20:40	2.625	1969	23:40	2.636	1977
14:45	2.640	1980	17:45	2.640	1980	20:45	2.625	1969	23:45	2.636	1977
14:50	2.640	1980	17:50	2.640	1980	20:50	2.625	1969	23:50	2.636	1977
14:55	2.640	1980	17:55	2.640	1980	20:55	2.625	1969	23:55	2.636	1977

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	2.640	1980	03:00	2.646	1985	06:00	2.649	1987	09:00	2.652	1989
00:05	2.640	1980	03:05	2.647	1985	06:05	2.647	1985	09:05	2.654	1991
00:10	2.640	1980	03:10	2.648	1986	06:10	2.649	1987	09:10	2.655	1991
00:15	2.641	1981	03:15	2.649	1987	06:15	2.650	1988	09:15	2.655	1991
00:20	2.641	1981	03:20	2.648	1986	06:20	2.651	1988	09:20	2.655	1991
00:25	2.642	1982	03:25	2.648	1986	06:25	2.652	1989	09:25	2.655	1991
00:30	2.642	1982	03:30	2.647	1985	06:30	2.654	1991	09:30	2.655	1991
00:35	2.642	1982	03:35	2.645	1984	06:35	2.653	1990	09:35	2.655	1991
00:40	2.641	1981	03:40	2.642	1982	06:40	2.653	1990	09:40	2.655	1991
00:45	2.641	1981	03:45	2.640	1980	06:45	2.653	1990	09:45	2.655	1991
00:50	2.640	1980	03:50	2.640	1980	06:50	2.654	1991	09:50	2.655	1991
00:55	2.640	1980	03:55	2.640	1980	06:55	2.654	1991	09:55	2.655	1991
01:00	2.640	1980	04:00	2.640	1980	07:00	2.654	1991	10:00	2.655	1991
01:05	2.641	1981	04:05	2.640	1980	07:05	2.654	1991	10:05	2.655	1991
01:10	2.641	1981	04:10	2.640	1980	07:10	2.654	1991	10:10	2.653	1990
01:15	2.640	1980	04:15	2.640	1980	07:15	2.653	1990	10:15	2.647	1985
01:20	2.645	1984	04:20	2.639	1979	07:20	2.651	1988	10:20	2.643	1982
01:25	2.645	1984	04:25	2.639	1979	07:25	2.651	1988	10:25	2.638	1979
01:30	2.645	1984	04:30	2.638	1979	07:30	2.651	1988	10:30	2.636	1977
01:35	2.645	1984	04:35	2.638	1979	07:35	2.651	1988	10:35	2.571	1928
01:40	2.645	1984	04:40	2.638	1979	07:40	2.651	1988	10:40	2.310	1733
01:45	2.645	1984	04:45	2.637	1978	07:45	2.651	1988	10:45	1.954	1466
01:50	2.645	1984	04:50	2.636	1977	07:50	2.651	1988	10:50	1.380	1035
01:55	2.645	1984	04:55	2.636	1977	07:55	2.651	1988	10:55	1.570	1178
02:00	2.645	1984	05:00	2.636	1977	08:00	2.651	1988	11:00	1.647	1235
02:05	2.645	1984	05:05	2.635	1976	08:05	2.651	1988	11:05	1.280	960
02:10	2.645	1984	05:10	2.635	1976	08:10	2.652	1989	11:10	0.950	713
02:15	2.645	1984	05:15	2.634	1976	08:15	2.652	1989	11:15	0.855	641
02:20	2.645	1984	05:20	2.634	1976	08:20	2.652	1989	11:20	0.776	582
02:25	2.645	1984	05:25	2.635	1976	08:25	2.652	1989	11:25	0.687	515
02:30	2.645	1984	05:30	2.636	1977	08:30	2.652	1989	11:30	0.520	390
02:35	2.645	1984	05:35	2.639	1979	08:35	2.652	1989	11:35	0.285	214
02:40	2.645	1984	05:40	2.641	1981	08:40	2.652	1989	11:40	0.265	199
02:45	2.645	1984	05:45	2.645	1984	08:45	2.652	1989	11:45	0.220	165
02:50	2.645	1984	05:50	2.647	1985	08:50	2.652	1989	11:50	0.220	165
02:55	2.645	1984	05:55	2.648	1986	08:55	2.652	1989	11:55	0.218	164

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.247	185	15:00	2.642	1982	18:00	2.502	1877	21:00	2.148	1611
12:05	0.258	194	15:05	2.638	1979	18:05	2.651	1988	21:05	2.148	1611
12:10	0.288	216	15:10	2.635	1976	18:10	2.648	1986	21:10	2.210	1658
12:15	0.326	245	15:15	2.623	1967	18:15	2.652	1989	21:15	2.232	1674
12:20	0.408	306	15:20	2.615	1961	18:20	2.655	1991	21:20	2.240	1680
12:25	0.326	245	15:25	2.683	2012	18:25	2.655	1991	21:25	2.250	1688
12:30	0.327	245	15:30	2.672	2004	18:30	2.653	1990	21:30	2.251	1688
12:35	0.299	224	15:35	2.521	1891	18:35	2.653	1990	21:35	2.256	1692
12:40	0.281	211	15:40	2.413	1810	18:40	2.652	1989	21:40	2.252	1689
12:45	0.377	283	15:45	2.275	1706	18:45	2.652	1989	21:45	2.251	1688
12:50	0.414	311	15:50	2.121	1591	18:50	2.652	1989	21:50	2.252	1689
12:55	0.459	344	15:55	2.145	1609	18:55	2.649	1987	21:55	2.251	1688
13:00	0.423	317	16:00	2.034	1526	19:00	2.647	1985	22:00	2.251	1688
13:05	0.462	347	16:05	1.960	1470	19:05	2.645	1984	22:05	2.251	1688
13:10	0.642	482	16:10	1.640	1230	19:10	2.642	1982	22:10	2.252	1689
13:15	0.734	551	16:15	1.704	1278	19:15	2.636	1977	22:15	2.253	1690
13:20	0.820	615	16:20	1.780	1335	19:20	2.631	1973	22:20	2.251	1688
13:25	0.987	740	16:25	1.800	1350	19:25	2.616	1962	22:25	2.252	1689
13:30	1.393	1045	16:30	1.900	1425	19:30	2.602	1952	22:30	2.257	1693
13:35	1.699	1274	16:35	2.116	1587	19:35	2.597	1948	22:35	2.258	1694
13:40	1.928	1446	16:40	2.134	1601	19:40	2.593	1945	22:40	2.262	1697
13:45	2.165	1624	16:45	2.175	1631	19:45	2.585	1939	22:45	2.262	1697
13:50	2.318	1739	16:50	2.377	1783	19:50	2.543	1907	22:50	2.180	1635
13:55	2.550	1913	16:55	2.399	1799	19:55	2.510	1883	22:55	1.660	1245
14:00	2.628	1971	17:00	2.350	1763	20:00	2.472	1854	23:00	1.725	1294
14:05	2.653	1990	17:05	2.350	1763	20:05	2.390	1793	23:05	2.123	1592
14:10	2.650	1988	17:10	2.350	1763	20:10	2.391	1793	23:10	2.040	1530
14:15	2.642	1982	17:15	2.450	1838	20:15	2.374	1781	23:15	1.906	1430
14:20	2.465	1849	17:20	2.402	1802	20:20	2.276	1707	23:20	1.930	1448
14:25	2.220	1665	17:25	2.336	1752	20:25	2.264	1698	23:25	1.830	1373
14:30	2.071	1553	17:30	2.312	1734	20:30	2.188	1641	23:30	1.827	1370
14:35	2.445	1834	17:35	2.236	1677	20:35	2.183	1637	23:35	1.965	1474
14:40	2.620	1965	17:40	2.163	1622	20:40	2.164	1623	23:40	2.212	1659
14:45	2.643	1982	17:45	2.288	1716	20:45	2.151	1613	23:45	2.215	1661
14:50	2.642	1982	17:50	2.320	1740	20:50	2.136	1602	23:50	2.207	1655
14:55	2.643	1982	17:55	2.372	1779	20:55	2.127	1595	23:55	2.208	1656

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	2.203	1652	03:00	0.662	497	06:00	0.395	296	09:00	6.725	5044
00:05	2.195	1646	03:05	0.607	455	06:05	0.410	308	09:05	6.735	5051
00:10	2.193	1645	03:10	0.551	413	06:10	0.423	317	09:10	6.725	5044
00:15	2.184	1638	03:15	0.483	362	06:15	0.445	334	09:15	6.689	5017
00:20	2.173	1630	03:20	0.252	189	06:20	0.464	348	09:20	6.420	4815
00:25	2.131	1598	03:25	0.058	44	06:25	0.480	360	09:25	6.200	4650
00:30	2.128	1596	03:30	0.062	47	06:30	0.680	510	09:30	6.147	4610
00:35	2.162	1622	03:35	0.105	79	06:35	1.100	825	09:35	6.105	4579
00:40	2.157	1618	03:40	0.137	103	06:40	1.325	994	09:40	5.890	4418
00:45	2.145	1609	03:45	0.098	74	06:45	1.265	949	09:45	5.790	4343
00:50	2.143	1607	03:50	0.143	107	06:50	1.307	980	09:50	6.080	4560
00:55	2.150	1613	03:55	0.100	75	06:55	1.215	911	09:55	6.077	4558
01:00	2.119	1589	04:00	0.090	68	07:00	1.367	1025	10:00	5.522	4142
01:05	2.110	1583	04:05	0.072	54	07:05	1.185	889	10:05	5.370	4028
01:10	2.094	1571	04:10	0.066	50	07:10	1.300	975	10:10	6.060	4545
01:15	2.046	1535	04:15	0.070	53	07:15	1.540	1155	10:15	5.865	4399
01:20	1.912	1434	04:20	0.074	56	07:20	1.797	1348	10:20	5.550	4163
01:25	1.665	1249	04:25	0.080	60	07:25	2.055	1541	10:25	5.480	4110
01:30	1.372	1029	04:30	0.085	64	07:30	2.345	1759	10:30	5.450	4088
01:35	1.182	887	04:35	0.090	68	07:35	2.595	1946	10:35	5.382	4037
01:40	1.057	793	04:40	0.095	71	07:40	3.000	2250	10:40	5.360	4020
01:45	1.032	774	04:45	0.093	70	07:45	3.315	2486	10:45	5.269	3952
01:50	1.017	763	04:50	0.105	79	07:50	3.577	2683	10:50	5.390	4043
01:55	1.024	768	04:55	0.115	86	07:55	3.680	2760	10:55	5.390	4043
02:00	0.958	719	05:00	0.123	92	08:00	3.621	2716	11:00	5.185	3889
02:05	0.895	671	05:05	0.143	107	08:05	3.651	2738	11:05	5.287	3965
02:10	0.880	660	05:10	0.166	125	08:10	3.805	2854	11:10	5.425	4069
02:15	0.746	560	05:15	0.190	143	08:15	4.125	3094	11:15	5.345	4009
02:20	0.800	600	05:20	0.215	161	08:20	4.424	3318	11:20	5.280	3960
02:25	0.788	591	05:25	0.220	165	08:25	4.675	3506	11:25	5.167	3875
02:30	0.750	563	05:30	0.225	169	08:30	4.471	3353	11:30	5.103	3827
02:35	0.697	523	05:35	0.232	174	08:35	4.597	3448	11:35	5.032	3774
02:40	0.628	471	05:40	0.245	184	08:40	5.085	3814	11:40	4.963	3722
02:45	0.470	353	05:45	0.297	223	08:45	6.678	5009	11:45	4.960	3720
02:50	0.502	377	05:50	0.325	244	08:50	6.758	5069	11:50	4.928	3696
02:55	0.480	360	05:55	0.379	284	08:55	6.734	5051	11:55	5.036	3777

R/V POLAR DUKE Echo Sounding Log

Date: 14-May
Cruise VI-88

5/17/88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	5.043	3782	15:00	5.028	3771	18:00	5.198	3899	21:00	5.315	3986
12:05	5.010	3758	15:05	5.052	3789	18:05	5.184	3888	21:05	5.139	3854
12:10	4.951	3713	15:10	5.055	3791	18:10	5.208	3906	21:10	5.190	3893
12:15	4.976	3732	15:15	5.031	3773	18:15	5.234	3926	21:15	5.582	4187
12:20	4.976	3732	15:20	4.941	3706	18:20	5.220	3915	21:20	5.913	4435
12:25	4.926	3695	15:25	4.951	3713	18:25	5.211	3908	21:25	6.070	4553
12:30	4.911	3683	15:30	4.976	3732	18:30	5.340	4005	21:30	6.068	4551
12:35	4.941	3706	15:35	4.987	3740	18:35	5.234	3926	21:35	6.020	4515
12:40	4.973	3730	15:40	5.001	3751	18:40	5.206	3905	21:40	5.698	4274
12:45	4.905	3679	15:45	5.045	3784	18:45	5.184	3888	21:45	5.771	4328
12:50	4.922	3692	15:50	5.094	3821	18:50	5.166	3875	21:50	5.920	4440
12:55	4.956	3717	15:55	5.153	3865	18:55	5.164	3873	21:55	6.010	4508
13:00	4.959	3719	16:00	5.177	3883	19:00	5.166	3875	22:00	6.087	4565
13:05	4.972	3729	16:05	5.220	3915	19:05	5.186	3890	22:05	6.096	4572
13:10	4.947	3710	16:10	5.280	3960	19:10	5.218	3914	22:10	6.088	4566
13:15	4.952	3714	16:15	5.288	3966	19:15	5.193	3895	22:15	6.107	4580
13:20	4.953	3715	16:20	5.286	3965	19:20	5.234	3926	22:20	6.170	4628
13:25	4.974	3731	16:25	5.300	3975	19:25	5.350	4013	22:25	6.265	4699
13:30	4.959	3719	16:30	5.316	3987	19:30	5.418	4064	22:30	6.475	4856
13:35	4.950	3713	16:35	5.328	3996	19:35	5.405	4054	22:35	6.543	4907
13:40	4.990	3743	16:40	5.349	4012	19:40	5.281	3961	22:40	6.663	4997
13:45	4.970	3728	16:45	5.361	4021	19:45	5.245	3934	22:45	6.676	5007
13:50	4.933	3700	16:50	5.384	4038	19:50	5.283	3962	22:50	6.689	5017
13:55	4.925	3694	16:55	5.376	4032	19:55	5.328	3996	22:55	6.690	5018
14:00	4.912	3684	17:00	5.287	3965	20:00	5.345	4009	23:00	6.684	5013
14:05	4.937	3703	17:05	5.201	3901	20:05	5.364	4023	23:05	6.679	5009
14:10	4.963	3722	17:10	5.170	3878	20:10	5.331	3998	23:10	6.681	5011
14:15	4.943	3707	17:15	5.195	3896	20:15	5.346	4010	23:15	6.686	5015
14:20	4.913	3685	17:20	5.221	3916	20:20	5.410	4058	23:20	6.693	5020
14:25	4.930	3698	17:25	5.264	3948	20:25	5.396	4047	23:25	6.713	5035
14:30	4.935	3701	17:30	5.330	3998	20:30	5.360	4020	23:30	6.736	5052
14:35	4.966	3725	17:35	5.379	4034	20:35	5.498	4124	23:35	6.346	4760
14:40	5.000	3750	17:40	5.339	4004	20:40	5.500	4125	23:40	6.235	4676
14:45	4.971	3728	17:45	5.236	3927	20:45	5.700	4275	23:45	5.886	4415
14:50	4.954	3716	17:50	5.235	3926	20:50	5.800	4350	23:50	5.690	4268
14:55	4.975	3731	17:55	5.226	3920	20:55	5.900	4425	23:55	5.585	4189

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	5.600	4200	03:00	2.825	2119	06:00	0.130	98	09:00	0.490	368
00:05	5.588	4191	03:05	2.838	2129	06:05	0.125	94	09:05	0.475	356
00:10	5.529	4147	03:10	2.795	2096	06:10	0.115	86	09:10	0.465	349
00:15	5.495	4121	03:15	2.710	2033	06:15	0.104	78	09:15	0.459	344
00:20	5.504	4128	03:20	2.455	1841	06:20	0.098	74	09:20	0.457	343
00:25	5.470	4103	03:25	2.370	1778	06:25	0.095	71	09:25	0.450	338
00:30	5.305	3979	03:30	2.505	1879	06:30	0.090	68	09:30	0.447	335
00:35	5.215	3911	03:35	2.503	1877	06:35	0.095	71	09:35	0.400	300
00:40	4.838	3629	03:40	2.530	1898	06:40	0.093	70	09:40	0.635	476
00:45	4.790	3593	03:45	2.569	1927	06:45	0.090	68	09:45	0.923	692
00:50	4.805	3604	03:50	2.450	1838	06:50	0.095	71	09:50	1.150	863
00:55	4.714	3536	03:55	1.350	1013	06:55	0.096	72	09:55	0.935	701
01:00	4.650	3488	04:00	0.870	653	07:00	0.097	73	10:00	0.590	443
01:05	4.617	3463	04:05	0.753	565	07:05	0.104	78	10:05	0.382	287
01:10	4.591	3443	04:10	0.578	434	07:10	0.110	83	10:10	0.374	281
01:15	4.572	3429	04:15	0.430	323	07:15	0.117	88	10:15	0.318	239
01:20	4.550	3413	04:20	0.434	326	07:20	0.120	90	10:20	0.312	234
01:25	4.550	3413	04:25	0.426	320	07:25	0.123	92	10:25	0.286	215
01:30	4.340	3255	04:30	0.410	308	07:30	0.126	95	10:30	0.283	212
01:35	4.518	3389	04:35	0.394	296	07:35	0.130	98	10:35	0.286	215
01:40	4.485	3364	04:40	0.376	282	07:40	0.134	101	10:40	0.290	218
01:45	4.483	3362	04:45	0.370	278	07:45	0.140	105	10:45	0.285	214
01:50	4.185	3139	04:50	0.350	263	07:50	0.143	107	10:50	0.282	212
01:55	3.980	2985	04:55	0.322	242	07:55	0.145	109	10:55	0.285	214
02:00	3.812	2859	05:00	0.293	220	08:00	0.155	116	11:00	0.285	214
02:05	3.778	2834	05:05	0.283	212	08:05	0.177	133	11:05	0.280	210
02:10	3.697	2773	05:10	0.263	197	08:10	0.203	152	11:10	0.270	203
02:15	3.600	2700	05:15	0.218	164	08:15	0.227	170	11:15	0.261	196
02:20	3.468	2601	05:20	0.203	152	08:20	0.295	221	11:20	0.245	184
02:25	3.385	2539	05:25	0.284	213	08:25	0.400	300	11:25	0.242	182
02:30	3.286	2465	05:30	0.260	195	08:30	0.517	388	11:30	0.244	183
02:35	3.185	2389	05:35	0.153	115	08:35	0.514	386	11:35	0.250	188
02:40	3.090	2318	05:40	0.146	110	08:40	0.520	390	11:40	0.255	191
02:45	2.953	2215	05:45	0.139	104	08:45	0.511	383	11:45	0.260	195
02:50	2.895	2171	05:50	0.137	103	08:50	0.510	383	11:50	0.318	239
02:55	2.812	2109	05:55	0.135	101	08:55	0.490	368	11:55	0.615	461

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.653	490	15:00	0.214	161	18:00	0.257	193	21:00	0.219	164
12:05	0.564	423	15:05	0.210	158	18:05	0.254	191	21:05	0.219	164
12:10	0.537	403	15:10	0.206	155	18:10	0.247	185	21:10	0.219	164
12:15	0.520	390	15:15	0.215	161	18:15	0.234	176	21:15	0.219	164
12:20	0.415	311	15:20	0.225	169	18:20	0.214	161	21:20	0.219	164
12:25	0.366	275	15:25	0.239	179	18:25	0.205	154	21:25	0.219	164
12:30	0.304	228	15:30	0.255	191	18:30	0.200	150	21:30	0.219	164
12:35	0.266	200	15:35	0.335	251	18:35	0.199	149	21:35	0.220	165
12:40	0.244	183	15:40	0.503	377	18:40	0.228	171	21:40	0.221	166
12:45	0.226	170	15:45	0.565	424	18:45	0.245	184	21:45	0.220	165
12:50	0.216	162	15:50	0.598	449	18:50	0.237	178	21:50	0.220	165
12:55	0.207	155	15:55	0.405	304	18:55	0.234	176	21:55	0.224	168
13:00	0.196	147	16:00	0.318	239	19:00	0.222	167	22:00	0.225	169
13:05	0.187	140	16:05	0.290	218	19:05	0.198	149	22:05	0.251	188
13:10	0.187	140	16:10	0.255	191	19:10	0.196	147	22:10	0.337	253
13:15	0.193	145	16:15	0.238	179	19:15	0.193	145	22:15	0.370	278
13:20	0.202	152	16:20	0.240	180	19:20	0.185	139	22:20	0.442	332
13:25	0.207	155	16:25	0.252	189	19:25	0.181	136	22:25	0.460	345
13:30	0.210	158	16:30	0.255	191	19:30	0.203	152	22:30	0.325	244
13:35	0.217	163	16:35	0.255	191	19:35	0.262	197	22:35	0.263	197
13:40	0.215	161	16:40	0.195	146	19:40	0.261	196	22:40	0.275	206
13:45	0.223	167	16:45	0.184	138	19:45	0.238	179	22:45	0.262	197
13:50	0.241	181	16:50	0.174	131	19:50	0.330	248	22:50	0.244	183
13:55	0.286	215	16:55	0.164	123	19:55	0.342	257	22:55	0.227	170
14:00	0.383	287	17:00	0.163	122	20:00	0.655	491	23:00	0.212	159
14:05	0.563	422	17:05	0.165	124	20:05	0.657	493	23:05	0.207	155
14:10	0.566	425	17:10	0.166	125	20:10	0.632	474	23:10	0.224	168
14:15	0.546	410	17:15	0.175	131	20:15	0.440	330	23:15	0.249	187
14:20	0.542	407	17:20	0.195	146	20:20	0.272	204	23:20	0.296	222
14:25	0.447	335	17:25	0.262	197	20:25	0.255	191	23:25	0.354	266
14:30	0.357	268	17:30	0.255	191	20:30	0.242	182	23:30	0.424	318
14:35	0.308	231	17:35	0.259	194	20:35	0.226	170	23:35	0.475	356
14:40	0.259	194	17:40	0.257	193	20:40	0.213	160	23:40	0.571	428
14:45	0.238	179	17:45	0.259	194	20:45	0.215	161	23:45	0.616	462
14:50	0.229	172	17:50	0.260	195	20:50	0.218	164	23:50	0.625	469
14:55	0.219	164	17:55	0.263	197	20:55	0.220	165	23:55	0.619	464

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	0.578	434	03:00	0.205	154	06:00	0.258	194	09:00	0.241	181
00:05	0.489	367	03:05	0.210	158	06:05	0.251	188	09:05	0.202	152
00:10	0.325	244	03:10	0.215	161	06:10	0.253	190	09:10	0.181	136
00:15	0.277	208	03:15	0.227	170	06:15	0.252	189	09:15	0.152	114
00:20	0.270	203	03:20	0.241	181	06:20	0.250	188	09:20	0.146	110
00:25	0.262	197	03:25	0.260	195	06:25	0.245	184	09:25	0.141	106
00:30	0.253	190	03:30	0.289	217	06:30	0.236	177	09:30	0.140	105
00:35	0.245	184	03:35	0.340	255	06:35	0.220	165	09:35	0.139	104
00:40	0.232	174	03:40	0.401	301	06:40	0.219	164	09:40	0.139	104
00:45	0.216	162	03:45	0.526	395	06:45	0.219	164	09:45	0.136	102
00:50	0.201	151	03:50	0.540	405	06:50	0.225	169	09:50	0.137	103
00:55	0.201	151	03:55	0.574	431	06:55	0.234	176	09:55	0.137	103
01:00	0.203	152	04:00	0.605	454	07:00	0.247	185	10:00	0.138	104
01:05	0.207	155	04:05	0.580	435	07:05	0.260	195	10:05	0.135	101
01:10	0.210	158	04:10	0.588	441	07:10	0.246	185	10:10	0.135	101
01:15	0.211	158	04:15	0.586	440	07:15	0.270	203	10:15	0.135	101
01:20	0.215	161	04:20	0.583	437	07:20	0.335	251	10:20	0.134	101
01:25	0.220	165	04:25	0.583	437	07:25	0.445	334	10:25	0.135	101
01:30	0.226	170	04:30	0.583	437	07:30	0.475	356	10:30	0.135	101
01:35	0.228	171	04:35	0.583	437	07:35	0.482	362	10:35	0.135	101
01:40	0.238	179	04:40	0.583	437	07:40	0.500	375	10:40	0.135	101
01:45	0.235	176	04:45	0.583	437	07:45	0.505	379	10:45	0.135	101
01:50	0.241	181	04:50	0.583	437	07:50	0.505	379	10:50	0.135	101
01:55	0.242	182	04:55	0.583	437	07:55	0.505	379	10:55	0.135	101
02:00	0.236	177	05:00	0.583	437	08:00	0.508	381	11:00	0.132	99
02:05	0.233	175	05:05	0.581	436	08:05	0.508	381	11:05	0.129	97
02:10	0.237	178	05:10	0.582	437	08:10	0.508	381	11:10	0.125	94
02:15	0.238	179	05:15	0.582	437	08:15	0.510	383	11:15	0.122	92
02:20	0.236	177	05:20	0.582	437	08:20	0.511	383	11:20	0.121	91
02:25	0.233	175	05:25	0.597	448	08:25	0.511	383	11:25	0.102	77
02:30	0.240	180	05:30	0.614	461	08:30	0.511	383	11:30	0.115	86
02:35	0.229	172	05:35	0.643	482	08:35	0.512	384	11:35	0.114	86
02:40	0.218	164	05:40	0.667	500	08:40	0.518	389	11:40	0.109	82
02:45	0.206	155	05:45	0.450	338	08:45	0.510	383	11:45	0.106	80
02:50	0.203	152	05:50	0.275	206	08:50	0.510	383	11:50	0.106	80
02:55	0.201	151	05:55	0.258	194	08:55	0.395	296	11:55	0.105	79

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.107	80	15:00	0.205	154	18:00	0.410	308	21:00	0.153	115
12:05	0.112	84	15:05	0.180	135	18:05	0.358	269	21:05	0.149	112
12:10	0.109	82	15:10	0.172	129	18:10	0.308	231	21:10	0.144	108
12:15	0.109	82	15:15	0.163	122	18:15	0.290	218	21:15	0.143	107
12:20	0.105	79	15:20	0.154	116	18:20	0.266	200	21:20	0.131	98
12:25	0.102	77	15:25	0.146	110	18:25	0.300	225	21:25	0.129	97
12:30	0.101	76	15:30	0.136	102	18:30	0.510	383	21:30	0.136	102
12:35	0.104	78	15:35	0.128	96	18:35	0.715	536	21:35	0.147	110
12:40	0.103	77	15:40	0.123	92	18:40	0.597	448	21:40	0.165	124
12:45	0.104	78	15:45	0.118	89	18:45	0.900	675	21:45	0.180	135
12:50	0.105	79	15:50	0.114	86	18:50	0.910	683	21:50	0.192	144
12:55	0.106	80	15:55	0.111	83	18:55	1.030	773	21:55	0.250	188
13:00	0.108	81	16:00	0.115	86	19:00	1.370	1028	22:00	0.250	188
13:05	0.110	83	16:05	0.117	88	19:05	1.250	938	22:05	0.394	296
13:10	0.112	84	16:10	0.124	93	19:10	1.405	1054	22:10	0.583	437
13:15	0.114	86	16:15	0.129	97	19:15	1.200	900	22:15	0.561	421
13:20	0.116	87	16:20	0.137	103	19:20	1.175	881	22:20	0.546	410
13:25	0.116	87	16:25	0.146	110	19:25	0.805	604	22:25	0.496	372
13:30	0.114	86	16:30	0.154	116	19:30	0.720	540	22:30	0.513	385
13:35	0.117	88	16:35	0.162	122	19:35	0.630	473	22:35	0.527	395
13:40	0.123	92	16:40	0.170	128	19:40	0.412	309	22:40	0.514	386
13:45	0.127	95	16:45	0.178	134	19:45	0.375	281	22:45	0.478	359
13:50	0.136	102	16:50	0.198	149	19:50	0.312	234	22:50	0.434	326
13:55	0.142	107	16:55	0.209	157	19:55	0.304	228	22:55	0.392	294
14:00	0.152	114	17:00	0.227	170	20:00	0.272	204	23:00	0.384	288
14:05	0.162	122	17:05	0.238	179	20:05	0.250	188	23:05	0.434	326
14:10	0.170	128	17:10	0.252	189	20:10	0.249	187	23:10	0.412	309
14:15	0.179	134	17:15	0.305	229	20:15	0.233	175	23:15	0.411	308
14:20	0.195	146	17:20	0.448	336	20:20	0.225	169	23:20	0.396	297
14:25	0.214	161	17:25	0.670	503	20:25	0.207	155	23:25	0.386	290
14:30	0.226	170	17:30	0.656	492	20:30	0.195	146	23:30	0.375	281
14:35	0.234	176	17:35	0.622	467	20:35	0.188	141	23:35	0.365	274
14:40	0.262	197	17:40	0.573	430	20:40	0.178	134	23:40	0.270	203
14:45	0.244	183	17:45	0.556	417	20:45	0.172	129	23:45	0.221	166
14:50	0.233	175	17:50	0.552	414	20:50	0.165	124	23:50	0.212	159
14:55	0.217	163	17:55	0.463	347	20:55	0.158	119	23:55	0.231	173

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Using 2-way sound velocity of: 750 meters per second

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00:00	0.243	182	03:00	0.740	555	06:00	0.711	533	09:00	0.662	497
00:05	0.233	175	03:05	0.730	548	06:05	0.715	536	09:05	0.725	544
00:10	0.232	174	03:10	0.715	536	06:10	0.680	510	09:10	0.792	594
00:15	0.360	270	03:15	0.706	530	06:15	0.689	517	09:15	0.842	632
00:20	0.455	341	03:20	0.721	541	06:20	0.590	443	09:20	0.845	634
00:25	0.445	334	03:25	0.757	568	06:25	0.720	540	09:25	0.857	643
00:30	0.320	240	03:30	0.793	595	06:30	0.812	609	09:30	0.845	634
00:35	0.415	311	03:35	0.804	603	06:35	0.923	692	09:35	0.804	603
00:40	0.372	279	03:40	0.808	606	06:40	0.965	724	09:40	0.790	593
00:45	0.381	286	03:45	0.810	608	06:45	1.130	848	09:45	0.742	557
00:50	0.435	326	03:50	0.848	636	06:50	1.155	866	09:50	0.775	581
00:55	0.550	413	03:55	0.867	650	06:55	1.135	851	09:55	0.780	585
01:00	0.619	464	04:00	0.893	670	07:00	1.055	791	10:00	0.815	611
01:05	0.625	469	04:05	0.916	687	07:05	0.935	701	10:05	0.885	664
01:10	0.627	470	04:10	0.945	709	07:10	0.850	638	10:10	0.927	695
01:15	0.625	469	04:15	0.970	728	07:15	0.815	611	10:15	0.945	709
01:20	0.350	263	04:20	0.945	709	07:20	0.785	589	10:20	0.978	734
01:25	0.310	233	04:25	0.965	724	07:25	0.725	544	10:25	1.020	765
01:30	0.265	199	04:30	0.980	735	07:30	0.685	514	10:30	1.027	770
01:35	0.235	176	04:35	1.000	750	07:35	0.612	459	10:35	1.030	773
01:40	0.224	168	04:40	1.017	763	07:40	0.540	405	10:40	1.030	773
01:45	0.219	164	04:45	1.039	779	07:45	0.530	398	10:45	1.028	771
01:50	0.221	166	04:50	1.042	782	07:50	0.515	386	10:50	0.975	731
01:55	0.245	184	04:55	1.052	789	07:55	0.535	401	10:55	0.900	675
02:00	0.257	193	05:00	1.070	803	08:00	0.579	434	11:00	0.825	619
02:05	0.273	205	05:05	1.117	838	08:05	0.625	469	11:05	0.800	600
02:10	0.292	219	05:10	1.129	847	08:10	0.650	488	11:10	0.750	563
02:15	0.305	229	05:15	1.151	863	08:15	0.640	480	11:15	0.715	536
02:20	0.360	270	05:20	1.170	878	08:20	0.645	484	11:20	0.714	536
02:25	0.440	330	05:25	1.180	885	08:25	0.655	491	11:25	0.705	529
02:30	0.555	416	05:30	1.155	866	08:30	0.660	495	11:30	0.712	534
02:35	0.623	467	05:35	1.084	813	08:35	0.650	488	11:35	0.695	521
02:40	0.645	484	05:40	0.982	737	08:40	0.635	476	11:40	0.690	518
02:45	0.675	506	05:45	0.890	668	08:45	0.645	484	11:45	0.689	517
02:50	0.701	526	05:50	0.744	558	08:50	0.640	480	11:50	0.680	510
02:55	0.725	544	05:55	0.733	550	08:55	0.645	484	11:55	0.668	501

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Using 2-way sound velocity of: 750 meters per second

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12:00	0.648	486	15:00	4.620	3465	18:00	5.100	3825	21:00	5.150	3863
12:05	0.642	482	15:05	4.770	3578	18:05	4.600	3450	21:05	5.200	3900
12:10	0.627	470	15:10	4.810	3608	18:10	4.300	3225	21:10	5.270	3953
12:15	0.601	451	15:15	4.875	3656	18:15	4.450	3338	21:15	5.300	3975
12:20	0.587	440	15:20	4.888	3666	18:20	4.300	3225	21:20	5.320	3990
12:25	0.570	428	15:25	4.965	3724	18:25	4.400	3300	21:25	5.320	3990
12:30	0.562	422	15:30	5.030	3773	18:30	4.370	3278	21:30	5.300	3975
12:35	0.551	413	15:35	5.000	3750	18:35	4.350	3263	21:35	5.300	3975
12:40	0.538	404	15:40	4.992	3744	18:40	4.550	3413	21:40	5.300	3975
12:45	0.529	397	15:45	5.000	3750	18:45	4.620	3465	21:45	5.100	3825
12:50	0.525	394	15:50	5.200	3900	18:50	4.820	3615	21:50	5.000	3750
12:55	0.519	389	15:55	5.465	4099	18:55	5.060	3795	21:55	5.000	3750
13:00	0.511	383	16:00	5.645	4234	19:00	5.040	3780	22:00	4.900	3675
13:05	0.509	382	16:05	5.970	4478	19:05	5.075	3806	22:05	4.870	3653
13:10	0.502	377	16:10	6.005	4504	19:10	5.105	3829	22:10	4.650	3488
13:15	0.519	389	16:15	5.995	4496	19:15	5.240	3930	22:15	4.570	3428
13:20	0.650	488	16:20	5.975	4481	19:20	5.178	3884	22:20	4.415	3311
13:25	0.912	684	16:25	5.900	4425	19:25	5.259	3944	22:25	4.300	3225
13:30	1.070	803	16:30	5.810	4358	19:30	5.267	3950	22:30	4.075	3056
13:35	1.219	914	16:35	5.680	4260	19:35	5.265	3949	22:35	3.910	2933
13:40	1.450	1088	16:40	5.555	4166	19:40	5.245	3934	22:40	3.800	2850
13:45	1.665	1249	16:45	5.508	4131	19:45	5.225	3919	22:45	3.771	2828
13:50	1.755	1316	16:50	5.485	4114	19:50	5.267	3950	22:50	3.713	2785
13:55	1.965	1474	16:55	5.220	3915	19:55	5.261	3946	22:55	3.585	2689
14:00	2.500	1875	17:00	5.085	3814	20:00	5.235	3926	23:00	3.586	2690
14:05	2.468	1851	17:05	5.085	3814	20:05	5.170	3878	23:05	3.563	2672
14:10	2.700	2025	17:10	5.085	3814	20:10	5.101	3826	23:10	3.750	2813
14:15	2.803	2102	17:15	5.065	3799	20:15	5.220	3915	23:15	3.775	2831
14:20	3.100	2325	17:20	4.920	3690	20:20	5.242	3932	23:20	3.780	2835
14:25	3.300	2475	17:25	4.975	3731	20:25	5.205	3904	23:25	3.812	2859
14:30	3.400	2550	17:30	4.900	3675	20:30	5.163	3872	23:30	3.814	2861
14:35	3.700	2775	17:35	5.000	3750	20:35	5.158	3869	23:35	3.822	2867
14:40	3.955	2966	17:40	4.700	3525	20:40	5.177	3883	23:40	3.830	2873
14:45	4.120	3090	17:45	4.800	3600	20:45	5.180	3885	23:45	3.772	2829
14:50	4.280	3210	17:50	4.900	3675	20:50	5.220	3915	23:50	3.726	2795
14:55	4.465	3349	17:55	5.000	3750	20:55	5.150	3863	23:55	3.769	2827

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Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	3.955	2966	03:00	5.010	3758	06:00	5.524	4143	09:00	4.792	3594
00:05	4.065	3049	03:05	5.000	3750	06:05	5.522	4142	09:05	4.585	3439
00:10	4.120	3090	03:10	5.025	3769	06:10	5.534	4151	09:10	4.385	3289
00:15	4.203	3152	03:15	5.052	3789	06:15	5.532	4149	09:15	4.390	3293
00:20	4.300	3225	03:20	5.070	3803	06:20	5.523	4142	09:20	5.550	4163
00:25	3.290	2468	03:25	5.070	3803	06:25	5.591	4193	09:25	5.560	4170
00:30	3.140	2355	03:30	5.075	3806	06:30	5.609	4207	09:30	5.517	4138
00:35	3.085	2314	03:35	5.090	3818	06:35	5.611	4208	09:35	5.430	4073
00:40	3.245	2434	03:40	5.070	3803	06:40	5.614	4211	09:40	5.435	4076
00:45	3.405	2554	03:45	5.030	3773	06:45	5.616	4212	09:45	5.431	4073
00:50	3.715	2786	03:50	5.030	3773	06:50	5.623	4217	09:50	5.344	4008
00:55	4.045	3034	03:55	5.070	3803	06:55	5.637	4228	09:55	5.202	3902
01:00	4.395	3296	04:00	5.095	3821	07:00	5.645	4234	10:00	5.225	3919
01:05	4.740	3555	04:05	5.101	3826	07:05	5.695	4271	10:05	5.254	3941
01:10	4.939	3704	04:10	5.124	3843	07:10	5.745	4309	10:10	5.263	3947
01:15	4.918	3689	04:15	5.145	3859	07:15	5.727	4295	10:15	5.263	3947
01:20	5.015	3761	04:20	5.155	3866	07:20	5.690	4268	10:20	5.255	3941
01:25	5.070	3803	04:25	5.125	3844	07:25	5.680	4260	10:25	5.039	3779
01:30	4.925	3694	04:30	5.125	3844	07:30	5.678	4259	10:30	5.000	3750
01:35	4.849	3637	04:35	5.123	3842	07:35	5.674	4256	10:35	5.180	3885
01:40	5.000	3750	04:40	5.130	3848	07:40	5.672	4254	10:40	5.500	4125
01:45	5.286	3965	04:45	5.160	3870	07:45	5.662	4247	10:45	5.510	4133
01:50	5.285	3964	04:50	5.209	3907	07:50	5.653	4240	10:50	5.350	4013
01:55	5.283	3962	04:55	5.244	3933	07:55	5.643	4232	10:55	5.000	3750
02:00	5.275	3956	05:00	5.219	3914	08:00	5.627	4220	11:00	4.760	3570
02:05	5.250	3938	05:05	5.208	3906	08:05	5.617	4213	11:05	4.657	3493
02:10	5.220	3915	05:10	5.330	3998	08:10	5.618	4214	11:10	4.572	3429
02:15	5.163	3872	05:15	5.401	4051	08:15	5.625	4219	11:15	4.570	3428
02:20	5.105	3829	05:20	5.410	4058	08:20	5.630	4223	11:20	4.820	3615
02:25	5.079	3809	05:25	5.390	4043	08:25	5.632	4224	11:25	4.764	3573
02:30	5.062	3797	05:30	5.335	4001	08:30	5.695	4271	11:30	4.860	3645
02:35	5.061	3796	05:35	5.390	4043	08:35	5.630	4223	11:35	5.055	3791
02:40	5.060	3795	05:40	5.475	4106	08:40	5.480	4110	11:40	5.175	3881
02:45	5.059	3794	05:45	5.511	4133	08:45	5.310	3983	11:45	5.175	3881
02:50	5.045	3784	05:50	5.520	4140	08:50	5.175	3881	11:50	5.102	3827
02:55	5.020	3765	05:55	5.521	4141	08:55	5.040	3780	11:55	5.101	3826

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12:00	5.324	3993	15:00	5.814	4361	18:00	5.630	4223	21:00	6.245	4684
12:05	5.412	4059	15:05	5.122	3842	18:05	5.635	4226	21:05	6.245	4684
12:10	5.410	4058	15:10	5.143	3857	18:10	5.440	4080	21:10	6.248	4686
12:15	5.385	4039	15:15	5.262	3947	18:15	5.365	4024	21:15	6.262	4697
12:20	5.342	4007	15:20	5.380	4035	18:20	5.333	4000	21:20	6.262	4697
12:25	5.298	3974	15:25	5.483	4112	18:25	5.318	3989	21:25	6.260	4695
12:30	5.300	3975	15:30	5.590	4193	18:30	5.522	4142	21:30	6.145	4609
12:35	5.260	3945	15:35	5.677	4258	18:35	5.685	4264	21:35	6.215	4661
12:40	5.231	3923	15:40	5.782	4337	18:40	5.821	4366	21:40	6.211	4658
12:45	5.120	3840	15:45	5.782	4337	18:45	5.942	4457	21:45	6.185	4639
12:50	5.005	3754	15:50	5.830	4373	18:50	6.050	4538	21:50	6.276	4707
12:55	4.947	3710	15:55	5.846	4385	18:55	6.050	4538	21:55	6.195	4646
13:00	4.930	3698	16:00	5.846	4385	19:00	5.955	4466	22:00	6.005	4504
13:05	4.933	3700	16:05	5.803	4352	19:05	5.940	4455	22:05	6.005	4504
13:10	4.925	3694	16:10	5.835	4376	19:10	6.050	4538	22:10	6.112	4584
13:15	4.873	3655	16:15	5.828	4371	19:15	6.140	4605	22:15	6.131	4598
13:20	4.850	3638	16:20	5.836	4377	19:20	6.090	4568	22:20	6.111	4583
13:25	4.915	3686	16:25	5.849	4387	19:25	6.120	4590	22:25	6.071	4553
13:30	4.977	3733	16:30	5.845	4384	19:30	6.060	4545	22:30	5.965	4474
13:35	4.933	3700	16:35	5.845	4384	19:35	6.107	4580	22:35	5.940	4455
13:40	4.872	3654	16:40	5.883	4412	19:40	6.124	4593	22:40	6.010	4508
13:45	4.861	3646	16:45	5.875	4406	19:45	6.101	4576	22:45	5.940	4455
13:50	4.720	3540	16:50	5.805	4354	19:50	6.164	4623	22:50	5.851	4388
13:55	4.610	3458	16:55	5.725	4294	19:55	6.173	4630	22:55	5.882	4412
14:00	4.549	3412	17:00	5.800	4350	20:00	6.180	4635	23:00	5.890	4418
14:05	4.508	3381	17:05	5.830	4373	20:05	5.375	4031	23:05	5.898	4424
14:10	4.548	3411	17:10	5.740	4305	20:10	5.375	4031	23:10	5.943	4457
14:15	4.600	3450	17:15	5.675	4256	20:15	5.375	4031	23:15	6.025	4519
14:20	4.697	3523	17:20	5.725	4294	20:20	5.600	4200	23:20	6.005	4504
14:25	4.780	3585	17:25	5.718	4289	20:25	5.800	4350	23:25	6.005	4504
14:30	4.797	3598	17:30	5.524	4143	20:30	6.174	4631	23:30	6.109	4582
14:35	4.930	3698	17:35	5.750	4313	20:35	6.178	4634	23:35	6.123	4592
14:40	5.075	3806	17:40	5.900	4425	20:40	6.215	4661	23:40	6.126	4595
14:45	5.048	3786	17:45	6.210	4658	20:45	6.210	4658	23:45	6.146	4610
14:50	5.087	3815	17:50	6.085	4564	20:50	6.200	4650	23:50	6.169	4627
14:55	5.226	3920	17:55	5.900	4425	20:55	6.174	4631	23:55	6.222	4667

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R/V POLAR DUKE Echo Sounding LogDate: 19-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	6.297	4723	03:00	6.287	4715	06:00	6.015	4511	09:00	5.510	4133
00:05	6.316	4737	03:05	6.290	4718	06:05	6.030	4523	09:05	5.470	4103
00:10	6.320	4740	03:10	6.286	4715	06:10	6.057	4543	09:10	5.526	4145
00:15	6.325	4744	03:15	6.283	4712	06:15	6.080	4560	09:15	5.525	4144
00:20	6.327	4745	03:20	6.285	4714	06:20	6.085	4564	09:20	5.527	4145
00:25	6.325	4744	03:25	6.280	4710	06:25	6.085	4564	09:25	5.490	4118
00:30	6.325	4744	03:30	6.280	4710	06:30	6.072	4554	09:30	5.530	4148
00:35	6.300	4725	03:35	6.274	4706	06:35	6.055	4541	09:35	5.605	4204
00:40	6.370	4778	03:40	6.266	4700	06:40	6.040	4530	09:40	5.460	4095
00:45	6.330	4748	03:45	6.258	4694	06:45	5.605	4204	09:45	5.260	3945
00:50	6.323	4742	03:50	6.241	4681	06:50	5.465	4099	09:50	5.060	3795
00:55	6.320	4740	03:55	6.232	4674	06:55	5.595	4196	09:55	4.919	3689
01:00	6.319	4739	04:00	6.223	4667	07:00	5.580	4185	10:00	4.894	3671
01:05	6.319	4739	04:05	6.214	4661	07:05	5.955	4466	10:05	4.855	3641
01:10	6.316	4737	04:10	6.213	4660	07:10	6.010	4508	10:10	4.790	3593
01:15	6.315	4736	04:15	6.214	4661	07:15	5.975	4481	10:15	4.720	3540
01:20	6.314	4736	04:20	6.220	4665	07:20	5.940	4455	10:20	4.655	3491
01:25	6.313	4735	04:25	6.218	4664	07:25	5.935	4451	10:25	4.578	3434
01:30	6.313	4735	04:30	6.213	4660	07:30	5.960	4470	10:30	4.570	3428
01:35	6.310	4733	04:35	6.210	4658	07:35	5.910	4433	10:35	4.575	3431
01:40	6.310	4733	04:40	6.210	4658	07:40	5.909	4432	10:40	4.625	3469
01:45	6.310	4733	04:45	6.210	4658	07:45	5.900	4425	10:45	4.678	3509
01:50	6.310	4733	04:50	6.210	4658	07:50	5.897	4423	10:50	4.755	3566
01:55	6.310	4733	04:55	6.100	4575	07:55	5.899	4424	10:55	4.823	3617
02:00	6.309	4732	05:00	5.897	4423	08:00	5.900	4425	11:00	4.880	3660
02:05	6.307	4730	05:05	5.700	4275	08:05	5.903	4427	11:05	4.916	3687
02:10	6.305	4729	05:10	5.550	4163	08:10	5.903	4427	11:10	4.967	3725
02:15	6.301	4726	05:15	5.660	4245	08:15	5.894	4421	11:15	5.020	3765
02:20	6.300	4725	05:20	5.780	4335	08:20	5.875	4406	11:20	5.060	3795
02:25	6.299	4724	05:25	5.940	4455	08:25	5.840	4380	11:25	5.078	3809
02:30	6.297	4723	05:30	6.235	4676	08:30	5.835	4376	11:30	5.164	3873
02:35	6.295	4721	05:35	6.180	4635	08:35	5.835	4376	11:35	5.253	3940
02:40	6.294	4721	05:40	6.180	4635	08:40	5.830	4373	11:40	5.256	3942
02:45	6.290	4718	05:45	6.160	4620	08:45	5.815	4361	11:45	5.315	3986
02:50	6.290	4718	05:50	6.145	4609	08:50	5.825	4369	11:50	5.360	4020
02:55	6.290	4718	05:55	6.025	4519	08:55	5.710	4283	11:55	5.385	4039

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R/V POLAR DUKE Echo Sounding LogDate: 19-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	5.555	4166	15:00	1.050	788	18:00	2.000	1500	21:00	1.880	1410
12:05	5.675	4256	15:05	0.900	675	18:05	1.920	1440	21:05	1.918	1439
12:10	5.600	4200	15:10	0.900	675	18:10	1.840	1380	21:10	1.894	1421
12:15	5.832	4374	15:15	0.680	510	18:15	1.660	1245	21:15	1.855	1391
12:20	5.847	4385	15:20	0.760	570	18:20	1.665	1249	21:20	1.778	1334
12:25	5.858	4394	15:25	0.842	632	18:25	1.725	1294	21:25	1.740	1305
12:30	5.875	4406	15:30	0.865	649	18:30	1.680	1260	21:30	1.712	1284
12:35	5.889	4417	15:35	0.878	659	18:35	1.620	1215	21:35	1.720	1290
12:40	5.899	4424	15:40	0.982	737	18:40	1.590	1193	21:40	1.697	1273
12:45	5.911	4433	15:45	1.072	804	18:45	1.565	1174	21:45	1.675	1256
12:50	5.650	4238	15:50	1.148	861	18:50	1.495	1121	21:50	1.674	1256
12:55	5.232	3924	15:55	1.222	917	18:55	1.400	1050	21:55	1.650	1238
13:00	4.966	3725	16:00	1.241	931	19:00	1.286	965	22:00	1.590	1193
13:05	4.869	3652	16:05	1.326	995	19:05	1.130	848	22:05	1.543	1157
13:10	4.896	3672	16:10	1.376	1032	19:10	0.826	620	22:10	1.525	1144
13:15	4.950	3713	16:15	1.341	1006	19:15	0.635	476	22:15	1.520	1140
13:20	5.050	3788	16:20	1.283	962	19:20	0.632	474	22:20	1.480	1110
13:25	5.050	3788	16:25	1.306	980	19:25	0.626	470	22:25	1.475	1106
13:30	4.825	3619	16:30	1.328	996	19:30	0.550	413	22:30	1.630	1223
13:35	4.755	3566	16:35	1.386	1040	19:35	0.539	404	22:35	1.600	1200
13:40	4.620	3465	16:40	1.344	1008	19:40	0.541	406	22:40	1.675	1256
13:45	4.405	3304	16:45	1.343	1007	19:45	0.546	410	22:45	1.726	1295
13:50	4.176	3132	16:50	1.400	1050	19:50	0.555	416	22:50	1.745	1309
13:55	3.955	2966	16:55	1.470	1103	19:55	0.552	414	22:55	1.590	1193
14:00	3.707	2780	17:00	1.497	1123	20:00	0.555	416	23:00	1.558	1169
14:05	3.500	2625	17:05	1.600	1200	20:05	0.555	416	23:05	1.615	1211
14:10	3.220	2415	17:10	1.745	1309	20:10	0.555	416	23:10	1.572	1179
14:15	2.927	2195	17:15	1.800	1350	20:15	0.557	418	23:15	1.595	1196
14:20	2.735	2051	17:20	2.050	1538	20:20	0.558	419	23:20	1.592	1194
14:25	2.500	1875	17:25	1.930	1448	20:25	0.559	419	23:25	1.500	1125
14:30	2.425	1819	17:30	2.100	1575	20:30	0.563	422	23:30	1.507	1130
14:35	2.000	1500	17:35	2.238	1679	20:35	0.692	519	23:35	1.466	1100
14:40	1.800	1350	17:40	2.120	1590	20:40	0.877	658	23:40	1.435	1076
14:45	1.600	1200	17:45	2.090	1568	20:45	1.215	911	23:45	1.407	1055
14:50	1.400	1050	17:50	2.180	1635	20:50	1.555	1166	23:50	1.375	1031
14:55	1.200	900	17:55	2.170	1628	20:55	1.724	1293	23:55	1.340	1005

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R/V POLAR DUKE Echo Sounding LogDate: 20-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	0.906	680	03:00	0.849	637	06:00	0.601	451	09:00	1.245	934
00:05	0.712	534	03:05	0.880	660	06:05	0.650	488	09:05	1.190	893
00:10	0.800	600	03:10	0.815	611	06:10	0.720	540	09:10	1.149	862
00:15	0.819	614	03:15	0.846	635	06:15	0.760	570	09:15	1.040	780
00:20	0.780	585	03:20	0.600	450	06:20	0.785	589	09:20	1.065	799
00:25	0.749	562	03:25	0.455	341	06:25	0.815	611	09:25	1.030	773
00:30	0.760	570	03:30	0.440	330	06:30	0.820	615	09:30	0.980	735
00:35	0.643	482	03:35	0.560	420	06:35	0.789	592	09:35	0.930	698
00:40	0.573	430	03:40	0.796	597	06:40	0.723	542	09:40	0.880	660
00:45	0.509	382	03:45	0.760	570	06:45	0.670	503	09:45	0.755	566
00:50	0.420	315	03:50	0.770	578	06:50	0.607	455	09:50	0.628	471
00:55	0.415	311	03:55	0.794	596	06:55	0.530	398	09:55	0.539	404
01:00	0.417	313	04:00	0.804	603	07:00	0.461	346	10:00	0.505	379
01:05	0.385	289	04:05	0.812	609	07:05	0.393	295	10:05	0.507	380
01:10	0.362	272	04:10	0.701	526	07:10	0.358	269	10:10	0.511	383
01:15	0.334	251	04:15	0.762	572	07:15	0.317	238	10:15	0.515	386
01:20	0.277	208	04:20	0.815	611	07:20	0.305	229	10:20	0.516	387
01:25	0.223	167	04:25	0.855	641	07:25	0.335	251	10:25	0.515	386
01:30	0.265	199	04:30	0.914	686	07:30	0.359	269	10:30	0.523	392
01:35	0.320	240	04:35	0.912	684	07:35	0.395	296	10:35	0.525	394
01:40	0.517	388	04:40	0.885	664	07:40	0.570	428	10:40	0.524	393
01:45	0.704	528	04:45	0.890	668	07:45	0.684	513	10:45	0.521	391
01:50	0.769	577	04:50	0.924	693	07:50	0.745	559	10:50	0.521	391
01:55	0.765	574	04:55	0.861	646	07:55	0.740	555	10:55	0.521	391
02:00	0.771	578	05:00	0.795	596	08:00	1.040	780	11:00	0.521	391
02:05	0.730	548	05:05	0.705	529	08:05	1.295	971	11:05	0.515	386
02:10	0.700	525	05:10	0.695	521	08:10	1.309	982	11:10	0.509	382
02:15	0.668	501	05:15	0.552	414	08:15	1.308	981	11:15	0.510	383
02:20	0.648	486	05:20	0.500	375	08:20	1.275	956	11:20	0.515	386
02:25	0.645	484	05:25	0.465	349	08:25	1.305	979	11:25	0.512	384
02:30	0.600	450	05:30	0.445	334	08:30	1.315	986	11:30	0.521	391
02:35	0.565	424	05:35	0.528	396	08:35	1.305	979	11:35	0.525	394
02:40	0.526	395	05:40	0.542	407	08:40	1.310	983	11:40	0.530	398
02:45	0.508	381	05:45	0.580	435	08:45	1.310	983	11:45	0.535	401
02:50	0.525	394	05:50	0.542	407	08:50	1.315	986	11:50	0.538	404
02:55	0.590	443	05:55	0.580	435	08:55	1.295	971	11:55	0.535	401

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R/V POLAR DUKE Echo Sounding LogDate: 20-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.531	398	15:00	0.255	191	18:00	0.247	185	21:00	1.901	1426
12:05	0.530	398	15:05	0.260	195	18:05	0.245	184	21:05	1.902	1427
12:10	0.528	396	15:10	0.283	212	18:10	0.237	178	21:10	1.900	1425
12:15	0.515	386	15:15	0.523	392	18:15	0.227	170	21:15	1.874	1406
12:20	0.502	377	15:20	1.055	791	18:20	0.220	165	21:20	1.870	1403
12:25	0.477	358	15:25	1.260	945	18:25	0.222	167	21:25	1.865	1399
12:30	0.463	347	15:30	1.290	968	18:30	0.245	184	21:30	1.847	1385
12:35	0.456	342	15:35	1.245	934	18:35	0.285	214	21:35	1.815	1361
12:40	0.454	341	15:40	1.247	935	18:40	0.290	218	21:40	1.795	1346
12:45	0.447	335	15:45	1.240	930	18:45	0.260	195	21:45	1.806	1355
12:50	0.445	334	15:50	0.835	626	18:50	0.217	163	21:50	1.685	1264
12:55	0.440	330	15:55	0.414	311	18:55	0.215	161	21:55	1.520	1140
13:00	0.441	331	16:00	0.405	304	19:00	0.219	164	22:00	1.360	1020
13:05	0.442	332	16:05	0.400	300	19:05	0.208	156	22:05	1.336	1002
13:10	0.443	332	16:10	0.375	281	19:10	0.200	150	22:10	1.345	1009
13:15	0.445	334	16:15	0.345	259	19:15	0.195	146	22:15	1.276	957
13:20	0.470	353	16:20	0.342	257	19:20	0.206	155	22:20	1.237	928
13:25	0.479	359	16:25	0.330	248	19:25	0.212	159	22:25	1.220	915
13:30	0.495	371	16:30	0.311	233	19:30	0.220	165	22:30	1.187	890
13:35	0.545	409	16:35	0.276	207	19:35	0.230	173	22:35	1.102	827
13:40	0.612	459	16:40	0.230	173	19:40	0.248	186	22:40	0.990	743
13:45	0.675	506	16:45	0.218	164	19:45	0.264	198	22:45	0.940	705
13:50	0.770	578	16:50	0.210	158	19:50	0.281	211	22:50	0.855	641
13:55	0.845	634	16:55	0.204	153	19:55	0.327	245	22:55	0.852	639
14:00	0.810	608	17:00	0.200	150	20:00	0.423	317	23:00	0.985	739
14:05	0.832	624	17:05	0.202	152	20:05	0.525	394	23:05	0.765	574
14:10	0.845	634	17:10	0.200	150	20:10	0.687	515	23:10	0.665	499
14:15	0.872	654	17:15	0.206	155	20:15	0.849	637	23:15	0.645	484
14:20	0.695	521	17:20	0.202	152	20:20	1.000	750	23:20	0.595	446
14:25	0.450	338	17:25	0.208	156	20:25	1.102	827	23:25	0.545	409
14:30	0.352	264	17:30	0.211	158	20:30	1.140	855	23:30	0.570	428
14:35	0.286	215	17:35	0.220	165	20:35	1.177	883	23:35	0.620	465
14:40	0.237	178	17:40	0.226	170	20:40	1.210	908	23:40	0.610	458
14:45	0.245	184	17:45	0.225	169	20:45	1.300	975	23:45	0.575	431
14:50	0.245	184	17:50	0.235	176	20:50	1.600	1200	23:50	0.555	416
14:55	0.257	193	17:55	0.240	180	20:55	1.895	1421	23:55	0.561	421

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R/V POLAR DUKE Echo Sounding LogDate: 21-May
Cruise PD YI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	0.600	450	03:00	0.635	476	06:00	1.223	917	09:00	1.870	1403
00:05	0.652	489	03:05	0.688	516	06:05	1.245	934	09:05	1.895	1421
00:10	0.690	518	03:10	0.699	524	06:10	1.235	926	09:10	1.940	1455
00:15	0.739	554	03:15	0.729	547	06:15	1.270	953	09:15	1.963	1472
00:20	0.765	574	03:20	0.713	535	06:20	1.265	949	09:20	2.015	1511
00:25	0.795	596	03:25	0.690	518	06:25	1.280	960	09:25	2.015	1511
00:30	0.840	630	03:30	0.654	491	06:30	1.256	942	09:30	2.021	1516
00:35	0.625	469	03:35	0.705	529	06:35	1.265	949	09:35	2.030	1523
00:40	0.655	491	03:40	0.733	550	06:40	1.321	991	09:40	2.025	1519
00:45	0.640	480	03:45	0.802	602	06:45	1.329	997	09:45	2.020	1515
00:50	0.618	464	03:50	0.820	615	06:50	1.307	980	09:50	2.015	1511
00:55	0.615	461	03:55	0.828	621	06:55	1.292	969	09:55	1.980	1485
01:00	0.598	449	04:00	0.842	632	07:00	1.344	1008	10:00	1.965	1474
01:05	0.570	428	04:05	0.856	642	07:05	1.357	1018	10:05	2.000	1500
01:10	0.512	384	04:10	0.877	658	07:10	1.366	1025	10:10	1.980	1485
01:15	0.534	401	04:15	0.899	674	07:15	1.360	1020	10:15	1.968	1476
01:20	0.495	371	04:20	0.900	675	07:20	1.372	1029	10:20	1.970	1478
01:25	0.500	375	04:25	0.913	685	07:25	1.371	1028	10:25	1.985	1489
01:30	0.525	394	04:30	0.940	705	07:30	1.356	1017	10:30	1.980	1485
01:35	0.496	372	04:35	0.955	716	07:35	1.334	1001	10:35	1.972	1479
01:40	0.498	374	04:40	0.973	730	07:40	1.305	979	10:40	1.972	1479
01:45	0.507	380	04:45	0.975	731	07:45	1.332	999	10:45	1.970	1478
01:50	0.515	386	04:50	1.050	788	07:50	1.284	963	10:50	1.970	1478
01:55	0.523	392	04:55	1.010	758	07:55	1.200	900	10:55	1.967	1475
02:00	0.539	404	05:00	1.025	769	08:00	1.228	921	11:00	1.970	1478
02:05	0.565	424	05:05	1.050	788	08:05	1.242	932	11:05	1.984	1488
02:10	0.593	445	05:10	1.100	825	08:10	1.245	934	11:10	1.985	1489
02:15	0.617	463	05:15	1.114	836	08:15	1.255	941	11:15	1.970	1478
02:20	0.614	461	05:20	1.134	851	08:20	1.300	975	11:20	1.945	1459
02:25	0.573	430	05:25	1.146	860	08:25	1.340	1005	11:25	2.050	1538
02:30	0.580	435	05:30	1.155	866	08:30	1.426	1070	11:30	1.965	1474
02:35	0.650	488	05:35	1.145	859	08:35	1.375	1031	11:35	1.950	1463
02:40	0.703	527	05:40	1.165	874	08:40	1.335	1001	11:40	2.042	1532
02:45	0.745	559	05:45	1.174	881	08:45	1.680	1260	11:45	2.098	1574
02:50	0.727	545	05:50	1.210	908	08:50	1.765	1324	11:50	2.113	1585
02:55	0.680	510	05:55	1.205	904	08:55	1.830	1373	11:55	2.120	1590

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R/V POLAR DUKE Echo Sounding Log

Date: 21-May

Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	2.131	1598	15:00	1.900	1425	18:00	1.550	1163	21:00	1.200	900
12:05	2.141	1606	15:05	1.950	1463	18:05	1.807	1355	21:05	0.960	720
12:10	2.145	1609	15:10	1.985	1489	18:10	2.030	1523	21:10	0.855	641
12:15	2.152	1614	15:15	2.005	1504	18:15	2.240	1680	21:15	0.785	589
12:20	2.152	1614	15:20	2.052	1539	18:20	2.450	1838	21:20	0.722	542
12:25	2.156	1617	15:25	2.071	1553	18:25	2.575	1931	21:25	0.733	550
12:30	2.154	1616	15:30	2.083	1562	18:30	2.635	1976	21:30	0.757	568
12:35	2.160	1620	15:35	2.128	1596	18:35	2.637	1978	21:35	0.775	581
12:40	2.163	1622	15:40	2.145	1609	18:40	2.647	1985	21:40	0.800	600
12:45	2.157	1618	15:45	2.127	1595	18:45	2.650	1988	21:45	0.809	607
12:50	2.160	1620	15:50	2.093	1570	18:50	2.657	1993	21:50	0.821	616
12:55	2.160	1620	15:55	2.045	1534	18:55	2.658	1994	21:55	0.835	626
13:00	2.164	1623	16:00	1.950	1463	19:00	2.659	1994	22:00	0.865	649
13:05	2.155	1616	16:05	1.965	1474	19:05	2.661	1996	22:05	0.890	668
13:10	2.150	1613	16:10	2.055	1541	19:10	2.662	1997	22:10	0.920	690
13:15	2.152	1614	16:15	1.800	1350	19:15	2.648	1986	22:15	0.915	686
13:20	2.145	1609	16:20	1.800	1350	19:20	2.550	1913	22:20	0.950	713
13:25	2.141	1606	16:25	1.900	1425	19:25	2.488	1866	22:25	1.350	1013
13:30	2.139	1604	16:30	2.173	1630	19:30	2.615	1961	22:30	1.272	954
13:35	2.135	1601	16:35	2.130	1598	19:35	2.655	1991	22:35	1.445	1084
13:40	2.125	1594	16:40	2.216	1662	19:40	2.664	1998	22:40	1.636	1227
13:45	2.100	1575	16:45	2.159	1619	19:45	2.662	1997	22:45	1.755	1316
13:50	2.060	1545	16:50	2.145	1609	19:50	2.660	1995	22:50	1.880	1410
13:55	2.070	1553	16:55	1.700	1275	19:55	2.658	1994	22:55	1.680	1260
14:00	2.030	1523	17:00	1.600	1200	20:00	2.655	1991	23:00	1.915	1436
14:05	2.000	1500	17:05	1.842	1382	20:05	2.650	1988	23:05	1.652	1239
14:10	1.955	1466	17:10	1.696	1272	20:10	2.645	1984	23:10	1.790	1343
14:15	1.930	1448	17:15	1.490	1118	20:15	2.635	1976	23:15	1.915	1436
14:20	1.900	1425	17:20	1.240	930	20:20	2.625	1969	23:20	1.735	1301
14:25	1.885	1414	17:25	1.450	1088	20:25	2.500	1875	23:25	1.790	1343
14:30	1.857	1393	17:30	0.930	698	20:30	2.400	1800	23:30	1.803	1352
14:35	1.797	1348	17:35	0.905	679	20:35	2.210	1658	23:35	1.830	1373
14:40	1.747	1310	17:40	0.885	664	20:40	2.020	1515	23:40	1.793	1345
14:45	1.777	1333	17:45	0.863	647	20:45	1.805	1354	23:45	1.718	1289
14:50	1.846	1385	17:50	0.907	680	20:50	1.605	1204	23:50	1.555	1166
14:55	1.856	1392	17:55	1.190	893	20:55	1.400	1050	23:55	1.440	1080

R/V POLAR DUKE Echo Sounding Log

Date: 22-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	1.393	1045	03:00	2.228	1671	06:00	1.974	1481	09:00	0.967	725
00:05	1.372	1029	03:05	2.223	1667	06:05	1.961	1471	09:05	1.040	780
00:10	1.375	1031	03:10	2.245	1684	06:10	1.958	1469	09:10	1.120	840
00:15	1.555	1166	03:15	2.251	1688	06:15	1.949	1462	09:15	1.170	878
00:20	1.842	1382	03:20	2.250	1688	06:20	1.943	1457	09:20	1.200	900
00:25	2.122	1592	03:25	2.256	1692	06:25	1.945	1459	09:25	1.249	937
00:30	2.390	1793	03:30	2.250	1688	06:30	1.936	1452	09:30	1.245	934
00:35	2.460	1845	03:35	2.258	1694	06:35	1.930	1448	09:35	1.228	921
00:40	2.480	1860	03:40	2.260	1695	06:40	1.928	1446	09:40	1.210	908
00:45	2.525	1894	03:45	2.263	1697	06:45	1.902	1427	09:45	1.204	903
00:50	2.584	1938	03:50	2.263	1697	06:50	1.893	1420	09:50	1.195	896
00:55	2.610	1958	03:55	2.260	1695	06:55	1.905	1429	09:55	1.180	885
01:00	2.615	1961	04:00	2.255	1691	07:00	1.914	1436	10:00	1.185	889
01:05	2.611	1958	04:05	2.241	1681	07:05	1.972	1479	10:05	1.180	885
01:10	2.605	1954	04:10	2.235	1676	07:10	2.000	1500	10:10	1.170	878
01:15	2.596	1947	04:15	2.196	1647	07:15	2.025	1519	10:15	1.158	869
01:20	2.575	1931	04:20	2.204	1653	07:20	2.010	1508	10:20	1.250	938
01:25	2.573	1930	04:25	2.135	1601	07:25	2.015	1511	10:25	1.170	878
01:30	2.485	1864	04:30	1.760	1320	07:30	2.018	1514	10:30	1.150	863
01:35	2.420	1815	04:35	1.669	1252	07:35	1.958	1469	10:35	1.119	839
01:40	2.410	1808	04:40	1.605	1204	07:40	1.922	1442	10:40	1.091	818
01:45	2.270	1703	04:45	1.672	1254	07:45	1.755	1316	10:45	1.016	762
01:50	2.169	1627	04:50	1.800	1350	07:50	1.702	1277	10:50	0.885	664
01:55	1.903	1427	04:55	1.882	1412	07:55	1.764	1323	10:55	0.770	578
02:00	1.495	1121	05:00	1.978	1484	08:00	1.756	1317	11:00	0.713	535
02:05	1.330	998	05:05	1.949	1462	08:05	1.702	1277	11:05	0.693	520
02:10	1.108	831	05:10	1.960	1470	08:10	1.770	1328	11:10	0.799	599
02:15	1.223	917	05:15	1.887	1415	08:15	1.575	1181	11:15	0.780	585
02:20	1.438	1079	05:20	1.910	1433	08:20	1.591	1193	11:20	0.826	620
02:25	1.825	1369	05:25	1.900	1425	08:25	1.495	1121	11:25	0.691	518
02:30	1.859	1394	05:30	1.857	1393	08:30	1.395	1046	11:30	0.654	491
02:35	1.915	1436	05:35	1.775	1331	08:35	1.295	971	11:35	0.621	466
02:40	1.970	1478	05:40	1.834	1376	08:40	1.236	927	11:40	0.600	450
02:45	2.025	1519	05:45	1.809	1357	08:45	1.196	897	11:45	0.522	392
02:50	2.132	1599	05:50	1.977	1483	08:50	1.098	824	11:50	0.460	345
02:55	2.195	1646	05:55	1.978	1484	08:55	1.000	750	11:55	0.396	297

R/V POLAR DUKE Echo Sounding Log

Date: 22-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	0.396	297	15:00	0.130	98	18:00	0.194	146	21:00	1.880	1410
12:05	0.363	272	15:05	0.125	94	18:05	0.202	152	21:05	2.035	1526
12:10	0.344	258	15:10	0.125	94	18:10	0.209	157	21:10	2.050	1538
12:15	0.310	233	15:15	0.118	89	18:15	0.211	158	21:15	2.090	1568
12:20	0.313	235	15:20	0.115	86	18:20	0.225	169	21:20	2.230	1673
12:25	0.302	227	15:25	0.111	83	18:25	0.240	180	21:25	2.400	1800
12:30	0.283	212	15:30	0.110	83	18:30	0.225	169	21:30	2.468	1851
12:35	0.275	206	15:35	0.112	84	18:35	0.230	173	21:35	2.508	1881
12:40	0.270	203	15:40	0.113	85	18:40	0.220	165	21:40	2.415	1811
12:45	0.262	197	15:45	0.105	79	18:45	0.220	165	21:45	2.306	1730
12:50	0.256	192	15:50	0.084	63	18:50	0.220	165	21:50	2.200	1650
12:55	0.267	200	15:55	0.082	62	18:55	0.217	163	21:55	2.230	1673
13:00	0.265	199	16:00	0.083	62	19:00	0.220	165	22:00	2.296	1722
13:05	0.263	197	16:05	0.085	64	19:05	0.215	161	22:05	2.360	1770
13:10	0.265	199	16:10	0.095	71	19:10	0.218	164	22:10	2.400	1800
13:15	0.266	200	16:15	0.100	75	19:15	0.223	167	22:15	2.540	1905
13:20	0.266	200	16:20	0.105	79	19:20	0.232	174	22:20	2.700	2025
13:25	0.266	200	16:25	0.107	80	19:25	0.245	184	22:25	2.860	2145
13:30	0.263	197	16:30	0.090	68	19:30	0.273	205	22:30	3.000	2250
13:35	0.260	195	16:35	0.112	84	19:35	0.300	225	22:35	3.180	2385
13:40	0.260	195	16:40	0.115	86	19:40	0.317	238	22:40	3.325	2494
13:45	0.276	207	16:45	0.115	86	19:45	0.272	204	22:45	3.500	2625
13:50	0.292	219	16:50	0.117	88	19:50	0.267	200	22:50	3.800	2850
13:55	0.335	251	16:55	0.120	90	19:55	0.320	240	22:55	3.955	2966
14:00	0.355	266	17:00	0.122	92	20:00	0.347	260	23:00	4.150	3113
14:05	0.360	270	17:05	0.125	94	20:05	0.405	304	23:05	4.800	3600
14:10	0.367	275	17:10	0.152	114	20:10	0.530	398	23:10	4.700	3525
14:15	0.372	279	17:15	0.160	120	20:15	0.800	600	23:15	4.800	3600
14:20	0.365	274	17:20	0.165	124	20:20	1.132	849	23:20	4.800	3600
14:25	0.342	257	17:25	0.160	120	20:25	1.270	953	23:25	4.800	3600
14:30	0.295	221	17:30	0.170	128	20:30	1.380	1035	23:30	4.900	3675
14:35	0.206	155	17:35	0.172	129	20:35	1.570	1178	23:35	5.120	3840
14:40	0.182	137	17:40	0.178	134	20:40	1.660	1245	23:40	5.180	3885
14:45	0.165	124	17:45	0.181	136	20:45	1.725	1294	23:45	5.290	3968
14:50	0.152	114	17:50	0.186	140	20:50	1.808	1356	23:50	5.480	4110
14:55	0.143	107	17:55	0.194	146	20:55	1.715	1286	23:55	5.715	4286

R/V POLAR DUKE Echo Sounding Log

Date: 23-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	5.920	4440	03:00	6.345	4759	06:00	6.365	4774	09:00	6.305	4729
00:05	5.841	4381	03:05	6.345	4759	06:05	6.365	4774	09:05	6.302	4727
00:10	5.850	4388	03:10	6.346	4760	06:10	6.365	4774	09:10	6.300	4725
00:15	6.430	4823	03:15	6.348	4761	06:15	6.363	4772	09:15	6.300	4725
00:20	6.416	4812	03:20	6.125	4594	06:20	6.360	4770	09:20	6.297	4723
00:25	6.406	4805	03:25	6.050	4538	06:25	6.360	4770	09:25	6.250	4688
00:30	6.395	4796	03:30	5.955	4466	06:30	6.358	4769	09:30	6.155	4616
00:35	6.386	4790	03:35	5.865	4399	06:35	6.355	4766	09:35	6.065	4549
00:40	6.381	4786	03:40	5.785	4339	06:40	6.355	4766	09:40	6.070	4553
00:45	6.375	4781	03:45	5.680	4260	06:45	6.356	4767	09:45	6.048	4536
00:50	6.360	4770	03:50	5.783	4337	06:50	6.352	4764	09:50	6.130	4598
00:55	6.230	4673	03:55	5.929	4447	06:55	6.358	4769	09:55	6.205	4654
01:00	6.066	4550	04:00	6.300	4725	07:00	6.360	4770	10:00	6.240	4680
01:05	6.035	4526	04:05	6.380	4785	07:05	6.344	4758	10:05	6.250	4688
01:10	5.860	4395	04:10	6.378	4784	07:10	6.285	4714	10:10	6.256	4692
01:15	5.810	4358	04:15	6.370	4778	07:15	6.219	4664	10:15	6.255	4691
01:20	5.802	4352	04:20	6.365	4774	07:20	6.120	4590	10:20	6.265	4699
01:25	5.760	4320	04:25	6.360	4770	07:25	6.078	4559	10:25	6.270	4703
01:30	5.735	4301	04:30	6.360	4770	07:30	5.870	4403	10:30	6.260	4695
01:35	5.725	4294	04:35	6.358	4769	07:35	5.865	4399	10:35	6.260	4695
01:40	5.696	4272	04:40	6.355	4766	07:40	6.315	4736	10:40	6.269	4702
01:45	5.665	4249	04:45	6.355	4766	07:45	6.330	4748	10:45	6.270	4703
01:50	5.725	4294	04:50	6.351	4763	07:50	6.330	4748	10:50	6.272	4704
01:55	5.751	4313	04:55	6.350	4763	07:55	6.330	4748	10:55	6.275	4706
02:00	5.834	4376	05:00	6.240	4680	08:00	6.300	4725	11:00	6.277	4708
02:05	5.957	4468	05:05	6.240	4680	08:05	6.325	4744	11:05	6.280	4710
02:10	6.178	4634	05:10	6.145	4609	08:10	6.325	4744	11:10	6.281	4711
02:15	6.165	4624	05:15	6.260	4695	08:15	6.320	4740	11:15	6.281	4711
02:20	6.160	4620	05:20	5.960	4470	08:20	6.320	4740	11:20	6.272	4704
02:25	6.155	4616	05:25	5.881	4411	08:25	6.320	4740	11:25	6.260	4695
02:30	6.147	4610	05:30	5.940	4455	08:30	6.315	4736	11:30	5.620	4215
02:35	6.215	4661	05:35	6.098	4574	08:35	6.317	4738	11:35	5.448	4086
02:40	6.340	4755	05:40	6.200	4650	08:40	6.312	4734	11:40	5.370	4028
02:45	6.335	4751	05:45	6.246	4685	08:45	6.311	4733	11:45	5.302	3977
02:50	6.345	4759	05:50	6.298	4724	08:50	6.309	4732	11:50	5.200	3900
02:55	6.342	4757	05:55	6.370	4778	08:55	6.306	4730	11:55	5.170	3878

R/V POLAR DUKE Echo Sounding Log

Date: 23 MAY
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	5.410	4058	15:00	4.855	3641	18:00	3.980	2985	21:00	1.945	1459
12:05	5.600	4200	15:05	4.710	3533	18:05	3.885	2914	21:05	1.946	1460
12:10	5.815	4361	15:10	4.723	3542	18:10	3.845	2884	21:10	1.776	1332
12:15	5.920	4440	15:15	4.865	3649	18:15	3.800	2850	21:15	1.492	1119
12:20	6.209	4657	15:20	4.872	3654	18:20	3.750	2813	21:20	1.443	1082
12:25	6.261	4696	15:25	4.940	3705	18:25	3.697	2773	21:25	1.312	984
12:30	6.246	4685	15:30	4.940	3705	18:30	3.657	2743	21:30	1.238	929
12:35	6.235	4676	15:35	4.992	3744	18:35	3.660	2745	21:35	1.124	843
12:40	6.223	4667	15:40	5.040	3780	18:40	3.703	2777	21:40	0.928	696
12:45	6.208	4656	15:45	5.115	3836	18:45	3.808	2856	21:45	0.683	512
12:50	6.185	4639	15:50	5.185	3889	18:50	3.962	2972	21:50	0.612	459
12:55	6.197	4648	15:55	5.125	3844	18:55	4.010	3008	21:55	0.591	443
13:00	6.203	4652	16:00	5.096	3822	19:00	4.054	3041	22:00	0.568	426
13:05	6.200	4650	16:05	5.130	3848	19:05	4.034	3026	22:05	0.528	396
13:10	6.050	4538	16:10	5.005	3754	19:10	4.000	3000	22:10	0.527	395
13:15	5.730	4298	16:15	5.060	3795	19:15	3.945	2959	22:15	0.533	400
13:20	5.575	4181	16:20	5.200	3900	19:20	3.891	2918	22:20	0.518	389
13:25	5.700	4275	16:25	5.255	3941	19:25	3.836	2877	22:25	0.512	384
13:30	6.140	4605	16:30	5.330	3998	19:30	3.833	2875	22:30	0.522	392
13:35	6.155	4616	16:35	5.000	3750	19:35	3.959	2969	22:35	0.526	395
13:40	6.160	4620	16:40	4.925	3694	19:40	3.658	2744	22:40	0.546	410
13:45	6.156	4617	16:45	5.000	3750	19:45		0	22:45	0.526	395
13:50	6.170	4628	16:50	4.990	3743	19:50		0	22:50	0.541	406
13:55	6.180	4635	16:55	4.920	3690	19:55		0	22:55	0.546	410
14:00	6.165	4624	17:00	4.840	3630	20:00		0	23:00	0.534	401
14:05	6.168	4626	17:05	4.963	3722	20:05	3.230	2423	23:05	0.522	392
14:10	6.172	4629	17:10	4.635	3476	20:10	3.065	2299	23:10	0.513	385
14:15	6.185	4639	17:15	4.393	3295	20:15	2.749	2062	23:15	0.433	325
14:20	6.205	4654	17:20	4.205	3154	20:20	2.630	1973	23:20	0.493	370
14:25	6.210	4658	17:25	4.286	3215	20:25	2.534	1901	23:25	0.511	383
14:30	6.210	4658	17:30	4.302	3227	20:30	2.431	1823	23:30	0.518	389
14:35	5.650	4238	17:35	4.185	3139	20:35	2.259	1694	23:35	0.492	369
14:40	5.515	4136	17:40	4.035	3026	20:40	2.149	1612	23:40	0.486	365
14:45	5.340	4005	17:45	4.040	3030	20:45	2.178	1634	23:45	0.500	375
14:50	5.060	3795	17:50	4.230	3173	20:50	2.352	1764	23:50	0.488	366
14:55	5.000	3750	17:55	4.260	3195	20:55	2.208	1656	23:55	0.490	368

R/V POLAR DUKE Echo Sounding Log

Date: 24-May

Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	0.507	380	03:00	0.562	422	06:00	0.254	191	09:00		0
00:05	0.500	375	03:05	0.575	431	06:05		0	09:05		0
00:10	0.465	349	03:10	0.582	437	06:10		0	09:10		0
00:15	0.460	345	03:15	0.590	443	06:15		0	09:15		0
00:20	0.452	339	03:20	0.604	453	06:20		0	09:20		0
00:25	0.442	332	03:25	0.642	482	06:25		0	09:25		0
00:30	0.426	320	03:30	0.673	505	06:30		0	09:30		0
00:35	0.407	305	03:35	0.694	521	06:35		0	09:35		0
00:40	0.378	284	03:40	0.713	535	06:40		0	09:40		0
00:45	0.367	275	03:45	0.736	552	06:45		0	09:45		0
00:50	0.342	257	03:50	0.762	572	06:50		0	09:50		0
00:55	0.323	242	03:55	0.759	569	06:55		0	09:55		0
01:00	0.325	244	04:00	0.743	557	07:00		0	10:00		0
01:05	0.318	239	04:05	0.762	572	07:05		0	10:05		0
01:10	0.336	252	04:10	0.772	579	07:10		0	10:10		0
01:15	0.338	254	04:15	0.780	585	07:15		0	10:15		0
01:20	0.345	259	04:20	0.782	587	07:20		0	10:20		0
01:25	0.352	264	04:25	0.780	585	07:25		0	10:25		0
01:30	0.360	270	04:30	0.755	566	07:30		0	10:30		0
01:35	0.372	279	04:35	0.734	551	07:35		0	10:35		0
01:40	0.403	302	04:40	0.657	493	07:40		0	10:40		0
01:45	0.438	329	04:45	0.550	413	07:45		0	10:45		0
01:50	0.464	348	04:50	0.485	364	07:50		0	10:50		0
01:55	0.469	352	04:55	0.452	339	07:55		0	10:55		0
02:00	0.515	386	05:00	0.418	314	08:00		0	11:00		0
02:05	0.535	401	05:05	0.396	297	08:05		0	11:05		0
02:10	0.560	420	05:10	0.373	280	08:10		0	11:10		0
02:15	0.546	410	05:15	0.348	261	08:15		0	11:15		0
02:20	0.526	395	05:20	0.332	249	08:20		0	11:20		0
02:25	0.504	378	05:25	0.324	243	08:25		0	11:25		0
02:30	0.486	365	05:30	0.310	233	08:30		0	11:30		0
02:35	0.490	368	05:35	0.300	225	08:35		0	11:35		0
02:40	0.475	356	05:40	0.292	219	08:40		0	11:40		0
02:45	0.485	364	05:45	0.286	215	08:45		0	11:45		0
02:50	0.511	383	05:50	0.277	208	08:50		0	11:50		0
02:55	0.531	398	05:55	0.262	197	08:55		0	11:55		0

R/V POLAR DUKE Echo Sounding Log

Date: 25-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00		0	03:00	0.580	435	06:00	3.532	2649	09:00	4.304	3228
00:05		0	03:05	0.568	426	06:05	3.662	2747	09:05	4.312	3234
00:10	0.430	338	03:10	0.570	428	06:10	3.390	2543	09:10	4.329	3247
00:15	0.440	330	03:15	0.560	420	06:15	3.130	2348	09:15	4.280	3210
00:20	0.452	339	03:20	0.553	415	06:20	3.176	2382	09:20	4.344	3258
00:25	0.471	353	03:25	0.551	413	06:25	3.410	2558	09:25	4.348	3261
00:30	0.493	370	03:30	0.544	408	06:30	3.441	2581	09:30	4.348	3261
00:35	0.535	401	03:35	0.542	407	06:35	3.567	2675	09:35	4.345	3259
00:40	0.557	418	03:40	0.535	401	06:40	3.627	2720	09:40	4.348	3261
00:45	0.568	426	03:45	0.526	395	06:45	3.650	2738	09:45	4.370	3278
00:50	0.548	411	03:50	0.531	398	06:50	3.706	2780	09:50	4.367	3275
00:55	0.565	424	03:55	0.528	396	06:55	3.747	2810	09:55	4.369	3277
01:00	0.584	438	04:00	0.522	392	07:00	3.763	2822	10:00	4.356	3267
01:05	0.572	429	04:05	0.515	386	07:05	3.782	2837	10:05	4.320	3240
01:10	0.562	422	04:10	0.515	386	07:10	3.801	2851	10:10	4.343	3257
01:15	0.593	445	04:15	0.510	383	07:15	3.782	2837	10:15	4.304	3228
01:20	0.643	482	04:20	0.507	380	07:20	3.803	2852	10:20	4.338	3254
01:25	0.685	514	04:25	0.502	377	07:25	3.886	2915	10:25	4.370	3278
01:30	0.686	515	04:30	0.500	375	07:30	3.962	2972	10:30	4.338	3254
01:35	0.671	503	04:35	0.496	372	07:35	3.986	2990	10:35	4.325	3244
01:40	0.676	507	04:40	0.493	370	07:40	3.953	2965	10:40	4.372	3279
01:45	0.702	527	04:45	0.488	366	07:45	3.937	2953	10:45	4.401	3301
01:50	0.711	533	04:50	0.495	371	07:50	3.990	2993	10:50	4.418	3314
01:55	0.703	527	04:55	0.512	384	07:55	4.054	3041	10:55	4.442	3332
02:00	0.694	521	05:00	0.517	388	08:00	4.121	3091	11:00	4.463	3347
02:05	0.682	512	05:05	0.519	389	08:05	4.125	3094	11:05	4.485	3364
02:10	0.678	509	05:10	0.522	392	08:10	4.147	3110	11:10	4.564	3423
02:15	0.670	503	05:15	0.513	385	08:15	4.207	3155	11:15	4.607	3455
02:20	0.664	498	05:20	0.533	400	08:20	4.245	3184	11:20	4.707	3530
02:25	0.664	498	05:25	0.643	482	08:25	4.246	3185	11:25	4.720	3540
02:30	0.655	491	05:30	1.215	911	08:30	4.245	3184	11:30	4.770	3578
02:35	0.647	485	05:35	2.138	1604	08:35	4.258	3194	11:35	4.817	3613
02:40	0.633	475	05:40	2.842	2132	08:40	4.263	3197	11:40	4.799	3599
02:45	0.623	467	05:45	3.256	2442	08:45	4.273	3205	11:45	4.870	3653
02:50	0.608	456	05:50	3.466	2600	08:50	4.270	3203	11:50	4.815	3611
02:55	0.592	444	05:55	3.507	2630	08:55	4.281	3211	11:55	4.972	3729

R/V POLAR DUKE Echo Sounding Log

Date: 25-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	5.031	3773	15:00	4.000	3000	18:00	4.290	3218	21:00	4.525	3394
12:05	5.221	3916	15:05	4.070	3053	18:05	4.300	3225	21:05	4.475	3356
12:10	5.354	4016	15:10	3.600	2700	18:10	3.980	2985	21:10	4.320	3240
12:15	5.462	4097	15:15	2.250	1688	18:15	3.980	2985	21:15	4.300	3225
12:20	5.478	4109	15:20	2.950	2213	18:20	3.970	2978	21:20	4.420	3315
12:25	5.465	4099	15:25	2.819	2114	18:25	3.960	2970	21:25	4.400	3300
12:30	5.416	4062	15:30	2.520	1890	18:30	3.900	2925	21:30	4.370	3278
12:35	5.415	4061	15:35	2.789	2092	18:35	3.630	2723	21:35	4.400	3300
12:40	5.470	4103	15:40	3.100	2325	18:40	3.520	2640	21:40	4.430	3323
12:45	5.483	4112	15:45	3.770	2828	18:45	3.510	2633	21:45	4.500	3375
12:50	5.371	4028	15:50	4.150	3113	18:50	3.530	2648	21:50	4.500	3375
12:55	5.170	3878	15:55	4.650	3488	18:55	3.580	2685	21:55	4.500	3375
13:00	5.021	3766	16:00	5.380	4035	19:00	3.530	2648	22:00	4.500	3375
13:05	4.832	3624	16:05	5.630	4223	19:05	3.750	2813	22:05	4.650	3488
13:10	4.831	3623	16:10	5.710	4283	19:10	3.450	2588	22:10	4.610	3458
13:15	4.645	3484	16:15	6.020	4515	19:15	3.330	2498	22:15	4.600	3450
13:20	4.440	3330	16:20	5.921	4441	19:20	3.890	2918	22:20	4.550	3413
13:25	4.146	3110	16:25	5.718	4289	19:25	3.930	2948	22:25	4.550	3413
13:30	4.032	3024	16:30	5.715	4286	19:30	3.700	2775	22:30	4.550	3413
13:35	3.396	2547	16:35	5.715	4286	19:35	3.610	2708	22:35	4.500	3375
13:40	3.820	2865	16:40	5.830	4373	19:40	3.665	2749	22:40	4.500	3375
13:45	3.668	2751	16:45	5.855	4391	19:45	3.610	2708	22:45	4.500	3375
13:50	3.620	2715	16:50	4.880	3660	19:50	3.450	2588	22:50	4.600	3450
13:55	3.645	2734	16:55	4.710	3533	19:55	3.630	2723	22:55	4.800	3600
14:00	3.655	2741	17:00	4.530	3398	20:00	3.500	2625	23:00	5.100	3825
14:05	3.682	2762	17:05	4.510	3383	20:05	3.700	2775	23:05	5.100	3825
14:10	3.714	2786	17:10	4.521	3391	20:10	3.770	2828	23:10	4.900	3675
14:15	3.758	2819	17:15	4.512	3384	20:15	3.830	2873	23:15	4.800	3600
14:20	4.340	3255	17:20	4.540	3405	20:20	3.870	2903	23:20	4.550	3413
14:25	4.470	3353	17:25	4.525	3394	20:25	4.000	3000	23:25	4.700	3525
14:30	4.410	3308	17:30	4.500	3375	20:30	4.380	3285	23:30	4.700	3525
14:35	4.430	3323	17:35	4.570	3428	20:35	4.420	3315	23:35	4.820	3615
14:40	4.215	3161	17:40	4.540	3405	20:40	4.250	3188	23:40	4.870	3653
14:45	4.255	3191	17:45	4.480	3360	20:45	4.200	3150	23:45	4.750	3563
14:50	4.164	3123	17:50	4.460	3345	20:50	4.400	3300	23:50	4.850	3638
14:55	4.100	3075	17:55	4.390	3293	20:55	4.500	3375	23:55	4.930	3698

R/V POLAR DUKE Echo Sounding Log

Date: 26-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	3.880	2910	03:00	4.350	3263	06:00	4.070	3053	09:00	4.075	3056
00:05	3.750	2813	03:05	4.680	3510	06:05	4.050	3038	09:05	4.000	3000
00:10	3.430	2573	03:10	4.900	3675	06:10	4.120	3090	09:10	3.840	2880
00:15	3.280	2460	03:15	5.150	3863	06:15	4.100	3075	09:15	3.700	2775
00:20	3.330	2498	03:20	5.520	4140	06:20	4.350	3263	09:20	3.830	2873
00:25	3.580	2685	03:25	5.500	4125	06:25	4.360	3270	09:25	3.500	2625
00:30	3.650	2738	03:30	5.250	3938	06:30	4.780	3585	09:30	3.500	2625
00:35	3.800	2850	03:35	5.150	3863	06:35	4.850	3638	09:35	3.470	2603
00:40	3.950	2963	03:40	5.100	3825	06:40	4.750	3563	09:40	3.670	2753
00:45	3.820	2865	03:45	5.250	3938	06:45	4.670	3503	09:45	3.750	2813
00:50	3.750	2813	03:50	5.440	4080	06:50	4.560	3420	09:50	3.710	2783
00:55	3.580	2685	03:55	5.500	4125	06:55	4.550	3413	09:55	3.720	2790
01:00	3.700	2775	04:00	5.470	4103	07:00	4.610	3458	10:00	3.830	2873
01:05	3.950	2963	04:05	5.230	3923	07:05	4.820	3615	10:05	4.000	3000
01:10	4.080	3060	04:10	4.930	3698	07:10	4.910	3683	10:10	4.120	3090
01:15	3.950	2963	04:15	4.850	3638	07:15	4.620	3465	10:15	4.190	3143
01:20	3.900	2925	04:20	4.670	3503	07:20	5.230	3923	10:20	4.210	3158
01:25	3.930	2948	04:25	4.400	3300	07:25	5.280	3960	10:25	4.360	3270
01:30	4.270	3203	04:30	4.520	3390	07:30	5.260	3945	10:30	4.550	3413
01:35	4.420	3315	04:35	4.280	3210	07:35	5.700	4275	10:35	4.760	3570
01:40	4.350	3263	04:40	4.200	3150	07:40	5.800	4350	10:40	4.850	3638
01:45	4.200	3150	04:45	4.250	3188	07:45	6.100	4575	10:45	4.815	3611
01:50	4.480	3360	04:50	4.280	3210	07:50	5.970	4478	10:50	4.900	3675
01:55	3.400	2550	04:55	4.250	3188	07:55	5.830	4373	10:55	4.680	3510
02:00	3.350	2513	05:00	4.300	3225	08:00	5.815	4361	11:00	4.660	3495
02:05	3.820	2865	05:05	4.220	3165	08:05	5.710	4283	11:05	4.725	3544
02:10	3.880	2910	05:10	4.160	3120	08:10	5.150	3863	11:10	5.420	4065
02:15	3.750	2813	05:15	4.150	3113	08:15	4.760	3570	11:15	5.621	4216
02:20	3.730	2798	05:20	4.140	3105	08:20	4.350	3263	11:20	5.650	4238
02:25	3.850	2888	05:25	4.140	3103	08:25	3.865	2899	11:25	5.760	4320
02:30	3.750	2813	05:30	4.150	3113	08:30	3.810	2858	11:30	5.550	4163
02:35	3.920	2940	05:35	4.150	3113	08:35	3.910	2933	11:35	5.400	4050
02:40	3.680	2760	05:40	4.140	3105	08:40	3.910	2933	11:40	5.350	4013
02:45	3.780	2835	05:45	4.140	3105	08:45	3.890	2918	11:45	5.390	4043
02:50	3.840	2880	05:50	4.100	3075	08:50	4.150	3113	11:50	5.430	4073
02:55	4.220	3165	05:55	4.070	3053	08:55	4.150	3113	11:55	5.450	4088

R/V POLAR DUKE Echo Sounding Log

Date: 26-May

Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
12:00	5.370	4028	15:00	4.005	3004	18:00	5.040	3780	21:00	5.070	3803
12:05	5.200	3900	15:05	3.930	2948	18:05	4.950	3713	21:05	5.010	3758
12:10	5.210	3908	15:10	4.100	3075	18:10	5.020	3765	21:10	4.960	3720
12:15	5.050	3788	15:15	4.130	3098	18:15	5.300	3975	21:15	4.920	3690
12:20	4.850	3638	15:20	4.130	3098	18:20	5.300	3975	21:20	4.900	3675
12:25	4.800	3600	15:25	4.000	3000	18:25	5.260	3945	21:25	4.770	3578
12:30	4.980	3735	15:30	4.280	3210	18:30	5.220	3915	21:30	4.500	3375
12:35	4.750	3563	15:35	4.700	3525	18:35	5.190	3893	21:35	4.370	3278
12:40	4.280	3210	15:40	5.200	3900	18:40	5.150	3863	21:40	4.100	3075
12:45	4.400	3300	15:45	5.300	3975	18:45	5.140	3855	21:45	3.850	2888
12:50	4.600	3450	15:50	6.180	4635	18:50	5.130	3848	21:50	3.500	2625
12:55	4.490	3368	15:55	6.180	4635	18:55	5.120	3840	21:55	3.150	2363
13:00	4.250	3188	16:00	6.180	4635	19:00	5.120	3840	22:00	2.850	2138
13:05	4.200	3150	16:05	5.700	4275	19:05	5.120	3840	22:05	2.550	1913
13:10	4.150	3113	16:10	5.410	4058	19:10	5.130	3848	22:10	2.450	1838
13:15	4.100	3075	16:15	5.680	4260	19:15	5.260	3945	22:15	2.360	1770
13:20	3.900	2925	16:20	5.100	3825	19:20	5.250	3938	22:20	2.370	1778
13:25	3.520	2640	16:25	4.650	3488	19:25	5.230	3923	22:25	2.300	1725
13:30	3.470	2603	16:30	4.630	3473	19:30	5.220	3915	22:30	2.350	1763
13:35	3.560	2670	16:35	4.720	3540	19:35	5.180	3885	22:35	2.120	1590
13:40	3.500	2625	16:40	4.410	3308	19:40	5.130	3848	22:40	2.100	1575
13:45	3.520	2640	16:45	4.230	3173	19:45	5.140	3855	22:45	2.020	1515
13:50	3.700	2775	16:50	4.500	3375	19:50	5.130	3848	22:50	1.920	1440
13:55	4.100	3075	16:55	5.100	3825	19:55	5.130	3848	22:55	1.820	1365
14:00	3.740	2805	17:00	5.450	4088	20:00	5.120	3840	23:00	1.680	1260
14:05	4.300	3225	17:05	5.900	4425	20:05	5.120	3840	23:05	1.650	1238
14:10	4.200	3150	17:10	5.880	4410	20:10	5.130	3848	23:10	1.400	1050
14:15	4.250	3188	17:15	5.600	4200	20:15	5.150	3863	23:15	1.190	893
14:20	4.500	3375	17:20	5.600	4200	20:20	5.160	3870	23:20	2.430	1823
14:25	4.200	3150	17:25	5.450	4088	20:25	5.190	3893	23:25	2.420	1815
14:30	4.100	3075	17:30	5.280	3960	20:30	5.190	3893	23:30	2.590	1943
14:35	4.000	3000	17:35	5.300	3975	20:35	5.190	3893	23:35	2.470	1853
14:40	4.300	3225	17:40	4.340	3255	20:40	5.190	3893	23:40	2.470	1853
14:45	4.330	3248	17:45	4.400	3300	20:45	5.160	3870	23:45	0.820	615
14:50	4.100	3075	17:50	4.600	3450	20:50	5.140	3855	23:50	0.630	473
14:55	4.100	3075	17:55	4.730	3548	20:55	5.120	3840	23:55	0.810	608

R/V POLAR DUKE Echo Sounding Log

Date: 27-May
Cruise PD VI-88

Using 2-way sound velocity of: 750 meters per second

Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)	Time (GMT)	2-way (seconds)	Depth (meters)
00:00	0.780	585	03:00	0.096	72	06:00	0	0	09:00	0	0
00:05	0.900	675	03:05	0.089	67	06:05	0	0	09:05	0	0
00:10	1.045	784	03:10	0.077	58	06:10	0	0	09:10	0	0
00:15	0.750	563	03:15	0.079	59	06:15	0	0	09:15	0	0
00:20	0.800	600	03:20	0.080	60	06:20	0	0	09:20	0	0
00:25	0.830	623	03:25	0.080	60	06:25	0	0	09:25	0	0
00:30	0.830	623	03:30	0.064	48	06:30	0	0	09:30	0	0
00:35	0.908	681	03:35	0.060	45	06:35	0	0	09:35	0	0
00:40	0.728	546	03:40	0.053	40	06:40	0	0	09:40	0	0
00:45	0.420	315	03:45	0.051	38	06:45	0	0	09:45	0	0
00:50	0.264	198	03:50	0.050	38	06:50	0	0	09:50	0	0
00:55	0.164	123	03:55	0.057	43	06:55	0	0	09:55	0	0
01:00	0.160	120	04:00	0.049	37	07:00	0	0	10:00	0	0
01:05	0.152	114	04:05	0.084	63	07:05	0	0	10:05	0	0
01:10	0.150	113	04:10	0.090	68	07:10	0	0	10:10	0	0
01:15	0.150	113	04:15	0.091	68	07:15	0	0	10:15	0	0
01:20	0.144	108	04:20	0.091	68	07:20	0	0	10:20	0	0
01:25	0.136	102	04:25		0	07:25	0	0	10:25	0	0
01:30	0.136	102	04:30		0	07:30	0	0	10:30	0	0
01:35	0.134	101	04:35		0	07:35	0	0	10:35	0	0
01:40	0.138	104	04:40		0	07:40	0	0	10:40	0	0
01:45	0.140	105	04:45		0	07:45	0	0	10:45	0	0
01:50	0.136	102	04:50		0	07:50	0	0	10:50	0	0
01:55	0.132	99	04:55		0	07:55	0	0	10:55	0	0
02:00	0.130	98	05:00		0	08:00	0	0	11:00	0	0
02:05	0.132	99	05:05		0	08:05	0	0	11:05	0	0
02:10	0.128	96	05:10		0	08:10	0	0	11:10	0	0
02:15	0.122	92	05:15		0	08:15	0	0	11:15	0	0
02:20	0.116	87	05:20		0	08:20	0	0	11:20	0	0
02:25	0.112	84	05:25		0	08:25	0	0	11:25	0	0
02:30	0.109	82	05:30		0	08:30	0	0	11:30	0	0
02:35	0.108	81	05:35		0	08:35	0	0	11:35	0	0
02:40	0.105	79	05:40		0	08:40	0	0	11:40	0	0
02:45	0.103	77	05:45		0	08:45	0	0	11:45	0	0
02:50	0.101	76	05:50		0	08:50	0	0	11:50	0	0
02:55	0.100	75	05:55		0	08:55	0	0	11:55	0	0