104875

93026 DEMP93-1
NAVIGATION LOG
NOV 1-21, 1993

93026nav

USGS - BAMG

NAVIGATION LOG

SHIP: RV JOHN DEMPSEY

CRUISE: JD1-93

AREA: Long Island Sound

DATES: 11/5/93 -

CHIEF SCIENTIST: Lewis/Poppe/Twichell/Zajac

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931107	311	1237 UTC	SOL1	41°6.5424'	73°6.0674'	72.5	5.2	1	
		1308	FOL1	41°7.3466'	73°2.7016'				EOL is outside of plot, end of line to keep each GMAPS Fig w/ 1 tr line
931107	311	1315	SOL2	41°7.1802'	73°3.0613'	252.5	4.5	1	
		1347	EOL2	41°6.4077'	73°6.3002'				
931107	311	1353	SOL3	41°6.3491'	73°6.1793'	72.5	5.6	1	
		1424	EOL3	41°7.1910'	73°2.1249'				
931107	311	1429	SOL4	41°7.0922'	73°2.7449'	252.5	4.8	1	way points 7 to 8
		1507	EOL4	41°6.2105'	73°6.4275'				
931107	311	1512.30	SOL5	41° 6.1605'	73° 6.250'	71.6	5.1	1	WP 9 to 10
		1546.51	EOL5	41° 7.0020'	73° 2.7371'				
931107	311	1550.31	SOL6	41°6.8970'	73°2.8146'	252.4	5.2	1	WP 11 to 12
		1622.34	EOL6	41°6.0833'	73°6.2317'				

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931107	311	162720 UTC	SOL 7	41° 6.0432'	73° 6.0449'	72.5	5.1	1	wp 13 to 14
		16 58.41	EOL 7	41° 6.8399	73° 26554'				
931107	311	170205	SOL 8	41° 67582'	73° 6.6925'	252.6	5.3	1	wp 15 to 16
		173450	EOL 8	41° 59280	73° 6.1765				
931107	311	173930	SOL 9	41° 5.8943	73° 59488	72.5/69.8	4.7	1	wp 17 To 18
		1815	EOL 9	41° 6.6321	73° 2.8400				
931107	311	185135	SOL 10	41° 6.5841'	73° 2.6796'	252.7	5.1	1	wp 19 to 20
		1923	EOL 10						← Printer Blew Program Nav program ran fill mark was lost
931107	311	1938:30	SOL 11	41° 5.7396	73° 5.8936'	72.5	4.9	1	wp 21 to 22
		20:09:30	EOL 11	41° 16.5329	73° 2.5563				
931107	311	20:12:30	SOL 12	41° 6.445	73° 2.5681	254.2	5.2	1	wp 23 to 24
		20:46:10	EOL 12	41° 5.6165	73° 6.0413				

N

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931107	311	20:50:00	SOL13	41° 5.5838	73° 5.0285	72.9	5.2	1	Last Line of Sunday 11/7/93
		21:22:40	EOL13	41° 6.3905	73° 2.4330				Home for day
931108	312	13:01:30	SOL14	41° 6.2469'	73° 2.6898'	252.8	4.5		WP 27 to 28
		13:39:05	EOL14	41° 5.4619	73° 5.9963				
931108	312	13:43:40	SOL15	41° 5.4375'	73° 5.7110'	72.4	5.9		WP 29 to 30
		14:11:23	EOL15	41° 6.3374	73° 2.3784				
931108	312	14:15:55	SOL16	41° 6.1329'	73° 2.4411'	252.6	4.5		WP 31 to 32
		14:51:20	EOL16	41° 5.3052'	73° 5.9245				
931108	312	14:56:50	SOL17	41° 5.2836'	73° 5.6604	72.5	5.9		33 to 34
		15:26:40	EOL17	41° 6.0753'	73° 2.3528'				
931108	312	15:31:15	SOL18	41° 5.9745	73° 2.4271'	252.4	4.8		WP 35 to 36
		16:12:10	EOL18	41° 5.1588'	73° 5.8277'				

No Depth Data Recorded

Navigation Not Recorded

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931108	312	16 16 [illegible]	SOL19	41° 5.1252	73° 5.6215	72.5	4.5	2	WP 37 to 38
			EOL19	41°	73°				Caught a pod } NAVIGATION NOT RECORDED
931108	312	170151	SOL19a	41° 5.1344	73° 5.5826			2	WP 37 to 38 Restart line 19a
		173845	EOL19a	41° 5.9144	73° 2.2976				
931108	312	174334	SOL20	41° 5.8133	73° 2.3748	252.5		2	WP 39 to 40
		182020	EOL20	41° 4.9756	73° 5.8888				
931108	312	182520	SOL21	41° 4.9303	73° 5.7143	72.5	5.3	2	WP 41 to 42
		155751	EOL21	41° 5.7606	73° 2.1885				
931108	312	190220	SOL22	41° 5.6521	73° 2.3236	252.6	5.3	2	43 to 44
		193355	EOL22	41° 4.8451	73° 5.7342				
931108	312	193755	SOL23	41° 4.7815	73° 5.6290	72.5	4.70	2	WP 45 to 46
		201205	EOL23	41° 5.6189	73° 2.1333				

Broadwake at 18:45:33

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931108	312	201655	SOL24	41° 5.5191′	73° 2.2900′	252.5	5.0	2	wp 47 to 48
		20484K	EOL24	41° 4.6393′	73° 5.8970′				
931108	312	205350	SOL25	41° 4.5755	73° 5.8205	72.7	6.0	2	wp 49 to 50
		21:25:40	EOL25	41° 5.4242	73° 2.1635				
931109	313	12:18:00	SOL26	41° 5.3043	73° 2.3589	252.5	4.7	3	wp 51 to 52
		12:51:31	EOL26	41° 4.5403′	73° 5.6098′				
931109	313	12:54:45	SOL27	41° 4.4984′	73° 5.4026′	72.6	5.8	3	wp 53 to 54
		13:26:40	EOL27	41° 5.2997′	73° 2.0301′				
931109	313	13:30:25	SOL28	41° 5.1814′	73° 2.1685′	252.6	4.8	3	wp 55 to 56
		14:04:05	EOL28	41° 4.4059′	73° 5.3931′				
931109	313	14:08:55	SOL29	41° 4.3889	73° 5.0852	72.4	6.0		wp 57 to 58
		14:35:05	EOL29	41° 5.1464	73° 1.9636				

41° 5.3741′
73° 2.2660′

Abbreviated lines (9.5 km shorter)

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931109	313	143855	SOL30	41° 5.0652′	73° 1.9706′	252.4	4.7	3	wp 59 to 60
		150630	EOL30	41° 4.4174	73° 4.6413′				
931109	313	152520	SOL31	41° 4.3318	73° 4.5644			3	wp 61 to 62
		154855	EOL31	41° 4.9880′	73° 1.9052′				
931109	313	155225	SOL32	41° 4.8878′	73° 1.9922′	251.8	4.6	3	wp 63 to 64
		162215	EOL32	41° 4.2080′	73° 4.7855				
931109	313	162425	SOL33	41° 4.1612′	73° 4.6201′	72.3	5.1	3	65 to 66
		165135	EOL33	41° 4.8337′	73° 1.8210′				
931109	313	165452	SOL34	41° 4.7332	73° 1.8933	252.3		3	wp 67 to 68
		172055	EOL34	41° 4.0550	73° 4.6681				
931109	313	172320	SOL35	41° 3.9971	73° 4.5333′	71.8	4.9	3	wp 69 to 70
			EOL35	41° 4.6343′	73° 1.8916				

Dragged ~ 300 m

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YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931109	313	17:52:25	SOL36	41°4.5323	73°1.9540	252.7	4.6	3	wp 71 to 72
			EOL36	41°	73°				Broke off line Picked up a lobster pot Capt. P. Simpson injured
931110	314	12:39:30	SOL36a	41°45366	73°2.0145	252.6	5.4	4	wp 71 to 72
		130930	EOL36a	41°3.7771'	73°5.2041'				
931110	314	13:12:10	SOL37	41°3.7456	73°4.9723'	72.4	5.5	4	wp 73 to 74
		13:43:20	EOL37	41°45220'	73°1.7213'				
931110	314	13:46:45	SOL38	41°4.3949'	73°1.8099'	252.8	5.0	4	wp 75 to 76
		14:18:15	EOL38	41°3.6097'	73°5.1484				
931110	314	14:21:20	SOL39	41°35596	73°5.0490'	72.6	5.3	4	wp 77 to 78
		14:55:01	EOL39	41°4.3624	73°1.6624'				
931110	314	145550	SOL40	41°2.2919'	73°1.6872'	252.3	5.2	4	wp 79 to 80
		15:36:45	EOL40	41°3.4654'	73°5.1179'				

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931110	314	15:40:20	SOL41	41° 3.4219′	73° 4.9649′	72.4	5.8	4	wp 81 to 82 1.5 km shorter than previous lines
		15:58:25	EOL41	41° 3.9710	73° 2.6124				
931110	314	16:00:41	SOL42	41° 3.9865′	73° 2.6653′	252.4	4.9	4	wp 83 to 84 1.5 km shorter
		16:23:20	EOL42	41° 3.3059′	73° 5.0461′				
931110	314	16:25:55	SOL43	41° 3.3059′	73° 5.0461′	72.7	6.5	4	wp 85 to 86
931110	314	16:46:56	EOL43	41° 3.7947	73° 2.5157′				
931110	314	16:50:20	SOL44	41° 3.7107′	73° 2.6403′	252.5	4.6	4	wp 87 to 89
		17:14:25	EOL44	41° 3.1455′	73° 4.9911′				
931110	314	17:17:30	SOL45	41° 3.1088′	73° 4.7879′	72.5	5.5	4	wp 89 to 90
		17:40:25	EOL45	41° 3.6557′	73° 2.4587′				
931110	314	17:47:40	SOL46	41° 3.5781′	73° 2.4980′	252.4	4.4	4	wp 91 to 92
		18:15:15	EOL46	41° 2.9828′	73° 4.9752′				

1.5 km shorter

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931110	314	181900	SOL47	41° 2.9533'	73° 4.7451'	72.5	5.2	4	wp 93 to 94
		184335	EOL47	41° 3.5161'	73° 2.3903'				
931110	314	184731	SOL48	41° 3.3871'	73° 2.5750'	252.5	4.9	4	wp 95 to 96
		191120	EOL48	41° 2.8434'	73° 4.8437'				
931110	314	191450	SOL49	41° 2.7792'	73° 4.7742'	72.5	4.4	4	wp 97 to 98
		194405	EOL49	41° 3.3510'	73° 2.3604'				1935 fish up- Towfly on RW 1940 fish back down
931110	314	194750	SOL50	41° 3.2500'	73° 2.4299'	252.5	4.6	4	wp 99 to 100
		201501	EOL50	41° 2.6956'	73° 4.8006'				
931110	314	201905	SOL51	41° 2.6379'	73° 4.6449'	72.5	4.5	4	101-102
		204650	EOL51	41° 3.1975'	73° 2.2702'				
			SOL52	41°	73°			4	103-104 May not have any of fish on diskette
			EOL51	41°	73°				

1.5 km shorts

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 11	315	12:28:45	SOL52	41° 3.1800	73° 2.0244	253.3	4.4	5	WP 103 - [illegible]
		13:01:10	EOL52	41° 2.5361	73° 4.7160	253.8	3.9		
93 11 11	315	13:05:15	SOL53	41° 2.4800	73° 4.5950	72.4	4.4	5	WP 105 - 106
		13:32:45	EOL53	41° 3.0469	73° 2.1965	77.6	4.2		
93 11 11	315	13:35:00	SOL54	41° 2.9614	73° 3.3436	253.9	3.9	5	WP 107 - 108
		~13:50							switch to [illegible] lost GPS
		~13:55							switch to GPS [illegible]
		14:07:50	EOL54	41° 2.9822	73° 4.6731	267.1	3.6		
		14:10							dish GPS back on; [illegible] to Portland
93 11 11	315	14:14:45	SOL55	41° 2.3454	73° 4.4853	70.9	4.8		WP 109 - 110
		14:40:00	EOL55	41° 2.8840	73° 2.1824	75.9	4.6		
93 11 11	315	14:43:05	SOL56	41° 2.7786	73° 2.2590	257.1	3.7		WP 111 - 112
		15:20:30	EOL56	41° 2.2269	73° 4.5938	242.8	3.5		
									end of southern part of Housatonic [illegible] lighthouse [illegible]

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YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11	[illegible]	15:40:40	[illegible]	41° 3.9392	73° 4.5898	345.9	4.5	5	[illegible]
		5:49:40	[illegible]	41° 4.5840	73° 4.3167	332.9	[illegible]		
									retrace waypoints
93	[illegible]	16:11:05	[illegible]	41° 4.5126	[illegible]° 4.9100	157.6	5.6		WP 4-3
		6:18:5[illegible]	[illegible]	41° 3.7478	73° 4.6666	[illegible].9	5.9		
93 11	315	16:21:0[illegible]	[illegible]	41° 3.[illegible]	73° 4.7510	350.0	[illegible].0		6-5
		16:28:25	[illegible]	41° 4.[illegible]	73° 5.0094	334.9	[illegible].1		
93 11 11	315	16:30:45	[illegible]	41° 4.[illegible]	73° 5.1007	172.6	5.7		WP 9-7
		6:37:[illegible]	[illegible]	41° 3.7[illegible]	73° 4.8469	120.4	5.9		
									head home [illegible]
									swipe GPS data to [illegible]
AREA	18								
93 11 11	315	17:24:55	SOL 18	41° 10.3069	73° 2.4813	103.5	6.8		WP 1-2
		17:50:20	EOL 18	41° 10.3052	72° 58.7220	95.4	6.4		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93	3[illegible]	17:55:00	[illegible]	41° 10.2264	73° 58.9017	277.0	4.4	5	WP 3-4
		18:25:50	EQ28	41° 10.2217	73° 2.6567	268.3	6.0		
93 11 11	315	18:29:50	SOL 3B	41° 10.1362	73° 2.6316	97.1	6.7	5	WP 5-6
		18:55:30	EQ 3B	41° 10.1429	72° 58.7862	86.7	6.8		
									end of day

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 13	317	13:10:35	SOL 1	41° 3.9717	73° 20.4427	75.2	4.6	6	WP 1-2
		13:33:25	EOL 1	41° 4.2361	73° 17.6592	84.2	5.7		
93 11 13	317	13:36:35	SOL 2	41° 4.1465	73° 17.7912	244.4	5.4	6	WP 3-4
		14:00:55	EOL 2	41° 3.3508	73° 20.5861	251.1	5.6		
93 11 13	317	14:04:25	SOL 3	41° 3.2976	73° 20.4623	71.5	5.2	6	WP 5-6
		14:34:00	EOL 3	41° 4.0893	73° 17.6503	65.6	5.1		
93 11 13	317	14:34:55	SOL 4	41° 3.9973	73° 17.6788	255.4	6.4	6	WP 7-8
		14:56:40	EOL 4	41° 3.2008	73° 20.5138	245.4	6.2		
93 11 13	317	15:00:05	SOL 5	41° 3.1211	73° 20.4571	79.4	5.1	6	WP 9-10
		15:26:15	EOL 5	41° 3.9252	73° 17.6140	73.5	5.1		
93 11 13	317	15:29:20	SOL 6	41° 3.8470	73° 17.6198	254.0	5.6	6	WP 11-12
		15:50:50	EOL 6	41° 3.0442	73° 20.4249	262.3	6.2		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931113	317	15:54:10	SOL 7	41° 3.0002	73° 20.3056	88.4	5.1	6	WP 13 - 14
		16:19:20	EOL 7	41° 3.7818	73° 17.5170	62.0	5.5		15:59 started SPS w/ diff.
931113	317	16:23:00	SOL 8	41° 3.6969	73° 17.5848	216.5	6.4	6	WP 15 - 16
		16:45:35	EOL 8	41° 2.8969	73° 20.3355	242.2	6.4		
931113	317	16:55:40	SOL 9	41° 2.7148	73° 20.7012	74.2	5.9	6	WP 17 - 18
		17:20:45	EOL 9	41° 3.6375	73° 17'4928	84.6	6.5		
931113	317	17:24:25	SOL 10	41° 3.5341	73° 17.5695	242.8	5.8	6	WP 19 - 20
			EOL 10						
931113	317	17:34:40	SOL 10A	41° 3.5232	73° 17.5362	240.7	6.6	6	WP 19 - 20
		17:57:20	EOL 10A	41° 2.7498	73° 20.2596	250.0	6.1		
931113	317	17:59:45	SOL 11	41° 2.6967	73° 20.1680	69.9	7.2	6	WP 21 - 22
		18:21:01	EOL 11	41° 3.4304	73° 17.3561	70.4	6.3		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 13	317	18:24:55	SOL 12	41° 3.3593	73° 17.4257	221.9	5.3	6	WP 23-24
		18:49:55	EOL 12	41° 2.5935	73° 20.1842	257.4	5.3		
93 11 13	317	18:53:25	SOL 13	41° 2.5492	73° 20.0656	69.7	7.1	6	WP 25-26
		19:14:20	EOL 13	41° 3.3708	73° 17.1395	66.0	6.6		
93 11 13	317	19:18:10	SOL 14	41° 3.2550	73° 17.2815	251.8	5.8	6	WP 27-28
		19:42:25	EOL 14	41° 2.4454	73° 20.1137	249	5.7		
93 11 13	317	19:45:30	SOL 15	41° 2.3932	73° 19.9726	75.7	7.3	6	WP 29-30
		20:06:50	EOL 15	41° 3.1784	73° 17.2124	71.0	6.2		end of day
93 11 14	318	13:54:25	SOL 16	41° 3.0887	73° 17.2270	253.6	5.6	7	WP 31-32
		14:19:15	EOL 16	41° 2.2897	73° 20.0349	253.6	5.9		
93 11 14	318	14:22:20	SOL 17	41° 2.2296	73° 19.9719	55.1	5.8	7	WP 33-34
		14:52:00	EOL 17	41° 3.0227	73° 17.1404	63.1	4.0		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93||14	318	14:54:30	SOL 18	41° 2.9373	73° 17.1327	243.2	5.3	7	WP 35-36
		15:19:20	EOL 18	41° 2.1377	73° 19.9687	248.0	5.8		
93||14	318	15:22:30	SOL 19	41° 2.0718	73° 19.8989	67.3	4.8	7	WP 37-38
		15:49:50	EOL 19	41° 2.8728	73° 17.0686	64.1	5.2		
93||14	318	15:52:11	SOL 20	41° 2.7801	73° 17.1142	259.6	6.0	7	WP 39-40
		16:15:35	EOL 20	41° 1.9877	73° 19.8899	247.4	5.9		
93||14	318	16:18:10	SOL 21	41° 1.9246	73° 19.8205	6.6	62.7	7	WP 41-42
		16:41:15	EOL 21	41° 2.7154	73° 16.9991	5.5	66.9		
93||14	318	16:43:15	SOL 22	41° 2.6472	73° 17.0255	6.1	254.9	7	WP 43-44
		17:07:35	EOL 22	41° 1.8341	73° 19.8172	5.6	250.1		
93||14	318	17:10:01	SOL 23	41° 1.7896	73° 19.6970	6.6	72.5	7	WP 45-46
		17:31:25	EOL 23	41° 2.5729	73° 16.9043	6.2	69.1		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 14	318	17:33:40	SOL 24	41° 2.4863	73° 16.9250	249.3	5.6	7	WP 47-48
		17:53:05	EOL 24	41° 1.6855	73° 19.1361	249.8	5.6		
93 11 14	318	18:00:30	SOL 25	41° 1.6457	73° 19.6177	54.2	6.2	7	WP 49-50
		18:22:05	EOL 25	41° 2.4167	73° 16.8349	68.6	6.4		
93 11 14	318	18:27:00	SOL 26	41° 2.3265	73° 16.8513	249.5	6.0	7	WP 51-52
		18:49:21	EOL 26	41° 1.5334	73° 19.6602	247.5	5.5		
93 11 14	318	18:52:15	SOL 27	41° 1.5019	73° 19.4959	60.3	6.0	7	WP 53-54
		19:14:05	EOL 27	41° 2.2673	73° 16.7546	66.4	6.0		
93 11 14	318	19:16:25	SOL 28	41° 2.1847	73° 16.7509	253.8	5.2	7	WP-55-56
		19:43:45	EOL 28	41° 1.3828	73° 19.5905	259.0	5.1		
93 11 14	318	19:46:45	SOL 29	41° 1.3213	73° 19.4991	65.9	7.0	7	WP 57-58
		20:07:55	EOL 29	41° 2.1144	73° 16.6821	63.9	6.2		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 14	318	20:10:40	SOL30	41° 2.0357	73° 16.6596	258.9	5.0	7	WP 59-60
		20:40:00	EOL30	41° 1.2296	73° 19.5040	243.0	4.3		
93 11 14	318	20:41:50	SOL31	41° 1.1820	73° 19.3730	65.9	7.1	7	WP 61-62
		21:06:05	EOL31	41° 1.9610	73° 16.6181	68.5	5.3		END OF DAY
1 start day 93 11 15	319	13:57:30	BOL32	41° 1.8620	73° 16.6897	265.7	5.3	8	start day WP 63-64
		14:22:10	EOL32	41° 1.0836	73° 19.4418	247.0	4.8		
93 11 15	319	14:24:21	BOL33	41° 1.0222	73° 19.3600	73.2	5.5	8	WP 65-66 line 33
		14:55:35	EOL33	41° 1.8064	73 16.5154	68.8	4.7		
93 11 15	319	14:57:25	BOL34	41° 1.7247	73 16.5509	248.4	4.7	8	WP 67-68 line 34
		15:26:45	EOL34	41° 0.9299	73° 19.3581	250.6	4.9		
93/11/15	319	15:29:30	BOL35	41° 0.8871	73° 19.2200	72°	4.9	8	WP 69-70 line 35
		16:00:35	EOL35	41° 1.6538	73° 16.4733	70.8°	4.0		
93/11/15	319	16:03:35	BOL36	41° 1.5683	73° 16.4826	238.8°	4.2	8	WP 71-72 line 36
		16:41:11	EOL36	41° 0.7716	73° 19.2890	244.8°	3.8		
93/11/15	319	16:44:00	BOL37	41° 0.6968	73° 19.2512	67.7	4.8	8	WP 73-74 line 37
		17:14:55	EOL37	41° 1.5000	73° 16.3725	71.3	5.2		
93/11/15		17:18:46	BOL38	41° 1.4067	73° 16.4202	255	4.0	8	WP 75-76 line 38

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
		17:51:40	EOL38	41° 0.6012	73° 19.2040	236.6	4.1		
93/11/15	319	17:55:30	BOL39	41° 0.5803	73° 19.0737	68.4	4.3	8	WP 77-78 line 39
		18:31:21	EOL39	41° 1.3465	73° 16.3677	67.2	3.3		
93/11/15	319	18:33:58	BOL40	41° 12 607	73° 16.3500	249.8	3.9	8	wp 79-80 line 40
			EOL40						caught pot redo # 40
93/11/15	319	18:53:35	BOL40A	41° 12650	73° 16.3250	252.4	3.8	8	WP 79-80 line 40A
		19:34:40	EOL40A	41° 0.4689	73° 19.1274	244.8	3.1		pots all over on this line
93/11/15	319	19:39:35	BOL37A	41° 0.7363	73° 19.1482	74.9	5.8	8	wp 73-74 line 37A
End day →		20:07:20	EOL37A	41° 1.5231	73° 16.3572	66.8	4.7	8/	rerun line 37 to try to improve it End day 11/15/93
93/11/16	320	13:38:15	SOL41	41° 0.3920	73° 19.1076	68.6	5.3	9	WP 81-82
	?	14:05:20	EOL41	41° 1.2016	73° 16.2420	? ←			difficult to read nav. printer - fix ink
93/11/16	320	14:08:00	SOL42	41° 1.0775	73° 16.3123	250.9	5.7	9	WP 83-84
		14:31:05	EOL42	41° 0.3262	73° 19.0096	245.9	5.6	←	bad ink again
93/11/16	320	14:33:05	SOL43	— can't	read printout, replace		cartridge		WP 85-86
		14:58:10	EOL43	41° 1.0490	73° 16.1685	68.9	5.4	9	

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 16	320	14:59:50	SOL 44	41° 0.9559	73° 16.2076	251.0	6.6	9	WP 87-88
		15:23:15	EOL 44	41° 0.0951	73° 19.2303	257.1	4.4		caught pot @ end of line
93 11 16	320	15:37:05	SOL 45	41° 0.0879	73° 18.9556	69.9	5.1	9	WP 89-90
		16:04:41	EOL 45	41° 0.8940	73° 16.0966	60.8	4.9		
93 11 16	320	16:06:30	SOL 46	41° 0.8106	73° 16.0733	241.9	6.8	9	WP 91-92
		16:29:00	EOL 46	41° 0.0123	73° 18.9382	258.7	6.2		
93 11 16	320	16:32:50	SOL 47	40° 59.9545	73° 18.8589	77.7	5.9		WP 93-94
		16:56:50	EOL 47	41° 0.7497	73° 16.0078	69.4	5.9		
93 11 16	320	16:58:41	SOL 48	41° 0.6618	73° 16.0425	263.4	6.3		WP 95-96
		17:21:25	EOL 48	40° 59.8543	73° 18.8771	248.2	6.0		
93 11 16	320	17:24:00	SOL 49	40° 59.8105	73° 18.7214	67.7	5.3		WP 97-98
		17:49:25	EOL 49	41° 0.5906	73° 15.9546	74.8	5.4		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 16	320	17:52:25	SOL 50	41° 0.4693	73° 16.0521	252.2	5.9	9	WP 99-100 one kilometer short off West end due to lobster pots
		18:09:50	EOL 50	40° 59.8836	73° 18.1540	243.0	5.9		
93 11 16	320	18:13:05	SOL 51	40° 59.8289	73° 18.0474	45.7	6.1	9	WP 101-102
		18:30:45	EOL 51	41° 0.4445	73° 18.8545	69.5	6.2		
93 11 16	320	18:33:25	SOL 52	41° 0.3587	73° 15.8642	256.5	6.2	9	WP 103-104
		18:51:15	EOL 52	40° 59.7466	73° 18.0290	250.2	6.2		
93 11 16	320	18:53:10	SOL 53	40° 59.6713	73° 17.9792	81.6	6.4	9	WP 105-106
		19:11:00	EOL 53	41° 0.3042	73° 15.7503	68.7	6.2		
93 11 16	320	19:13:35	SOL 54	41° 0.2097	73° 15.7824	253.6	5.2	9	WP 107-108
		19:33:10	EOL 54	40° 59.5843	73° 17.9847	243.6	6.3		
93 11 16	320	19:37:30	SOL 55	40° 59.5396	73° 17.8663	67.3	8.2	9	WP 109-110
		19:51:45	EOL 55	41° 0.1489	73° 15.6882	67.8	7.6		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 16	320	19:54:00	SOL56	41°0.0618	73° 15.7046	251.7	6.2	9	WP 1[illegible] - 112
		20:11:00	EOL56	40° 59.4678	73° 17.8899	245.3	6.1		
93 11 16	320	20:14:05	SOL57	40°59.3718	73° 17.8245	72.1	7.5		WP 113-114
		20:28:25	EOL57	40° 59.9915	73° 15.6332	69°	7.4		END OF DAY/END OF AREA
93 11 17	321	12:50:15	SOL 1A	41°05.9279	73°05.8172	76.7	6.5	10	WP [illegible] 2
		13:13:15	EOL 1A	41°06.7079	73°02.5363	66.4	5.6		(100 KHz)
93 11 17	321	13:49:55	SOL 2A	41°06.3886	73°06.3646	78.8	5.5	10	WP [illegible] -3; 500 KHz
		14:05:05	EOL 2A	41°6.[illegible]	73°04.5743	69.[illegible]	5.2		
93 11 17	321	14:08:20	SOL 3A	41°06.7120	73°04.[illegible]	245.7	7.0	10	WP [illegible] -5; [illegible] KHz
		14:10:00	EOL 3A	41°06.[illegible]	73°06.3097	245.0	6.9		
93 11 17	321	14:21:20	SOL 4A	41°06.[illegible]	73°06.[illegible]	72.8	5.6		WP 8-7; 500 KHz
		14:34:45	EOL 4A	41°06.[illegible]	73°04.7004	75.1	6.0		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 17	321	14 37 : [illegible]	SOL 5A	41° [illegible]	73° [illegible]	[illegible]	[illegible]	10	WP- [illegible]
		14:46:45	[illegible]	41° [illegible]	[illegible]	[illegible]	5.6		
93 11 17	321	15:00:35	[illegible]	41°06.7734	73° [illegible]	73.4	5.4	10	WP- [illegible]
		15:16:75	E5LA	41° 56.9114	73° 02.7507	76.5	5.2		
93 11 17	321	15:29:35	SOL 12A	41° 05.0530	73° 04.2094	251.0	5.7	10	WP-23-24; 500K Hz
		15:43:36	[illegible]	41° 55.6128	73° 06.0549	252.7	5.7		
93 11 17	321	15:42:30	[illegible]	41° 05. [illegible]	73° 05.8455	74.6	5.7	10	WP-25-26; 500K Hz
		16:[illegible]	E5L 13A	41° 04.9519	73° 3[illegible]	66.7	6.3		
93 11 17	321	16:22:50	SOL 22A	41° 5.2546	73° 3.9651	246.9	5.2	10	WP [illegible]
		16:39:01	E0L 22A	41° 4.8458	73° 5.7150	254.7	6.1		
93 11 17	321	16:42:40	SOL 23A	41° 4.7925	73° 5.6158	69.0	4.5	10	WP-45-46; 500K Hz
		16:56:50	E0723A	41° 5.1117	73° 4.2552	88.6	4.5		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93 11 17	321	17:24.40	Pipeline	41° 6.4538	73° 5.1590	38.0	5.7	10	Pipeline 500 kHz
		17:41:05	EOL Pipe	41° 7.6755	73° 4.4620	335.7	6.0		
		Norwalk		Survey					
93 11 17	321	18:45:20	SOL 26N	41° 2.2585	73° 17.0940	258.8	5.6	10	WP 51-52; 500 kHz
		19:13:05	EOL 26N	41° 1.6268	73° 19.5105	188.4	4.9		terminated due to Lobster pot
93 11 17	321	19:21:10	SOL 19N	41° 2.1216	73° 19.7248	70.9	5.0	10	WP 37-38; 500 kHz
		19:46:01	EOL 19N	41° 2.8232	73° 17.2342	71.3	4.8		
93 11 17	321	19:55:05	SOL 11N	41° 3.3861	73° 17.7101	240.7	5.9	10	WP 22-21; 500 kHz
		20:14:31	EOL 11N	41° 2.7153	73° 20.0671	246.1	6.4		
93 11 17	321	20:16:50	SOL 9N	41° 2.8941	73° 20.0461	65.2	7.6	10	WP 17-19; 500 kHz
		20:33:21	EOL 9N	41° 3.6095	73° 17.5189	61.9	7.1		
93 11 17	321	20:36:05	SOL 7N	41° 3.7077	73° 17.7618	248.1	6.6	10	WP 14 to 13 500 kHz
		20:54:25	EOL 7N	41° 3.0247	73° 20.2073	249.6	6.3		

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93-11-19	323	14[illegible]	L1SP1	41 3.[illegible]	73 20.[illegible]	144.8	5.7	11	[illegible]
		1502 10	L1SP1	41 2.4341	73 18.2146	129.2	5.5		END LINE 1
		1535 31	L1SP2	41 2.3083	73 18.[illegible]	305.6	6.1		START LINE 2
		1521 45	L1SP2	41 3.3552	73 20.5594	311.7	6.3		END LINE 2
		1125 50	L1SP3	41 3.2084	73 20.6335	125.0	6.1		START LINE 3
		1532 15	L1SP3	41 2.8262	73 20.4429	73.9	4.8		END LINE 3 - CUT OFF BY [illegible]
		1540 10	L1SP3A	41 3.2250	73 20.6662	131.0	6.2		START LINE 3A
		1556 25	L1SP3A	41 2.1875	73 19.2547	130.5	5.8		END LINE 3A
		1622 20	L1SP4	41 3.0900	73 21.2669	202.0	6.0		START LINE 4
		1639 [illegible]	L1SP4	41 2.1355	73 21.0523	186.3	5.7		END LINE 4
		1645 40	L1SP5	41 3.0955	73 21.3044	126.3	6.3		START LINE 5
		1655 51	L1SP5	41 2.0539	73 21.1973	178.4	5.9		END LINE 5
		1710 01	L1SP6	41 2.1164	73 21.4122	183.1	6.5		START LINE 6
		1719 55	L1SP6	41 2.[illegible]	73 21.4006	122.6	6.0		END LINE 6

Connecticut River Survey

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931121	325	140225	1	41°16.5233'	72°20.5351'	322	3.9	12	Connecticut River
		140400		41°16.6156'	72°20.5963'	322	4.4		buoy #7
		140800		41°16.8854'	72°20.7704'				
		141030		41°17.0718'	72°20.8828'				
		141431		41°17.4263'	72°21.0157'				very shallow
		141750		41°17.7066'	72°20.9564'		6.8		speed chng
		142630	2	41°18.3071'	72°20.9422'		8.2		500 kHz Heading South
		142941		41°17.9351'	72°20.9679'		6.1		
		143505		41°17.3810'	72°20.9091'		6.2		
		143815		41°17.0685'	72°20.8421'		6.2		
		144320		41°16.5946'	72°20.5757'		6.4		
		144615		41°16.2976'	72°20.4535'		6.3		buoy #5/light house (inner) 11' depth
		144845		41°16.0907'	72°20.4810'	186	4.6		
		145200		41°15.7810'	72°20.5142'		6.5		light house/end of jetty
		145510	3	41°15.7853'	72°20.5222'		5.8		heading N. of light house/end of jetty
		145825		41°16.0975'	72°20.4951'		5.7		north on river
		145945		41°16.2311'	72°20.4650'		4.8		buoy #4 (on east jetty)

100 kHz

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
931121	325	150135	3	41°16.3315	72°20.4465	354.6	3.4		
		151051		41 16 8307	72 20 7832		4.5		
		151305		41 16 9916	72 20.8325				Saybrook Pt marina
		151555		41 17 1908	72 20 8726				
		152145		41 17 6031	72 20 9395				Buoy 17
		152530		41 17 8718	72 20 9720				Buoy 19 10-11' water
		152810		41 18 1205	72 20 9640				Between Buoy 19 & RR Bridge
		153055		41 18 3782	72 20 9484				Just south of Bridge
		153355		41 18 6565	72 20 8990				RR Bridge
		153620		41 18 8581	72 20 7828				Cable crossing
		154015		41 19 1564	72 20 7201				I-95 Bridges
		154330		41 19 4039	72 20 8428				
		154445		41 19 5070	72 20 8894				Sturg
		154650		41 19 6470	72 20 9472				Buoy 20
		154940		41 19 8520	72 21 0591				Marker #22
		155125		41 19 9711	72 21 1522				Buoy 23
		155340		41 20 0745	72 21 3394				way pt.
		155621		41 20 2241	72 21 5210			4,6	way pt

YrMoDy	JulDy	Time+Zone	Line#	Latitude N	Longitude W	Course	Speed	Disk#	Comments
93/11/24	325	160055		41204272	72218793				House on East side
		160310		41204778	72220729				
		160600		41206160	72223030				Bouy 24
		160910		41207590	72225654				
		161235		41209401	72228002				Bouy 26
		161730		41213163	72227957				End Survey Bouy #28