CRUISE NUMBER: 97-033

DAILY LOG
INSTITUTE OF OCEAN SCIENCES
OCEAN PHYSICS

DATE: 22 July 1997

VESSEL: F/V Great Pacific

PROJECT: High Seas Salmon Gulf of Alaska Juv. Migration Project.

Captain: Charles Brenson (rotation) First Officer:

Second Officer: Third Officer:

Cruise Participants / Agencies: NMFS / Auke Bay; DFO / OSAP

Scientific Personnel: Party Chief: Dick Carlson

Name	Watch	Cabin	Name	Watch	Cabin

Second leg of cruise: Party Chief:

Name	Watch	Cabin	Name	Watch	Cabin

Data logging system: Unit no.:

Program Name: Program version:

CTD deck unit make: SeaCat model: 19 serial no.: 2212

NMFS/Auke Bay's CTD & O_2 & Fluorometer

Computer make: model: serial no.:

1st CTD make: SeaCat model: 19-01 serial no.: 1913991- 2212

Temperature sensor model: range 1500 psia serial no.: 178049 tc = 280

coefficients: slope: offset:

Conductivity sensor model: serial no.:

coefficients: slope: offset:

Pressure sensor range: 1500 psi serial no.: 178049

coefficients: FSP: dB offset:

Transmissometer model: serial no.:

coefficients: slope: offset:

Comments: Wetstar Fluorometer: model 960412 SN: WS35-142

O_2 Probe: Model 23-01-B, Part No. 90069, SN: 230601

See notes on graph paper (next page) for full copy of Auke Bay's SeaBird in initial status.

Auke Bay Seabird 19 Initial Status (from E key in TERM 19)

Date: 22 July 97
Local (Alaska) Time: 12:23:51 (Alaska Daylight Savings)

SEACAT PROFILER V 3.1 SN 2712 07/22/97 13:22:17

NOW RESET TO ALASKA Summer Time ** time off by 1 hr.

strain gauge pressure sensor: S/N 178049,
range = 1500 psia, t_c = 280

clk = 32767.633 iop = 160 vmain = 11.9 vlith = 5.4

mode = profile ncasts = 0

sample rate = 1 scan every 0.5 seconds.

min. raw conductivity frequency for pump turn on = 2222 Hz

Pump delay = 45 seconds

samples = 0 free = 87064 1 wait = 0 msec

SW1 = C8 battery cutoff = 7.3 volts

number of voltages sampled = 4

log data = NO.

Summary - This instrument is brand new, & records fluorescence & O_2 as well. This is its first time use.

DO Sensor S/N 230601
WetLabs WetStar Fluorometer S/N WS3S-142
Pump SBE-5T S/N 051565

Frequency 0 = Temperature
Frequency 1 = conductivity
Extnl Volt 0 = Oxygen current
— " — 1 = Oxygen Temperature
— " — 2 = WetLabs WetStar fluorometer
— " — 3 = Spare
Pressure voltage

Note: For consistency, all times are Alaska Summer Time — D. Welch

DAILY LOG — OCEAN PHYSICS — INSTITUTE OF OCEAN SCIENCES

YEAR: 1997 | MONTH: July | SHIP: F/V Great Pacific | CRUISE: 97-033 GOA Juv. Salmon | PAGE 1 OF

DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC) (ADT)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE (°N)	LONGITUDE (°W)	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
22	1	SB19			973300-01	58° 41.538	146° 09.866		>4000	300		Surf.	DAW	Trial Station, off 1st transect
22	2		2329	AKDST	973300-02	58° 48.495	144-36.637		~3822	300				C, S6, Elias → 60nm S
23	3		0201		03	58° 50.445	144-37.444		>3000	300				Current pushing south at 1 ~ 1.5 kt
23	4		02:34		04	58° 53.132	144° 37.858		>4000	300				
23	5		03:10		05	58° 55.724	144° 37.682	GPS	>4000	300				
23	6		04:54		06	58° 57.378 N	144° 37' 491 W		~4000	300				
23	7		07:14		07	59 01 292 N	144 37 355 W			300				
23	8		07:37		08	59° 02' 376 N	144° 37' 181 W			300				
23	9		0806		09	59° 04' 634 N	144° 37' 072 W			300				
23	10		0825		10	59° 07 281 N	144° 36' 466 W			300				
23	11		10:45		11	59° 10' 454 N	144° 35' 870 W			300				
23	12		11:18		12	59° 12' 855	144° 35' 520 W			300				← Start filtering Chl-a Phytoplankton samples with 35 µ mesh before 6/8 filters
23	13		11:49		13	59° 15' 475 N	144° 35' 220 W			300				
23	14		12:15		14	59° 17.956 N	144° 35' 158 W			300				
23	15		14:19		15	59° 21' 591	144° 34.116			300				
23	16		14:47		16	59° 22.807	144° 33' 806			300 EST.				
23	17		15:22		17	59° 25 188	144° 34.214			300				

↑ These #s used for SeaBird Hex file names

CAST TYPE - BOT - bottle cast; CTD - ctd; MOR - mooring; ROS - rosette; NET - net haul; DRF - drifter; USW - sea water loop

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POSITION CODE - RAD - RADAR; GPS - GLOBAL; LOR - LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR 1997 | MONTH July | SHIP F/V GREAT PACIFIC | CRUISE 97-033 GOA Juv Salmon | PAGE 2 OF

DAY (UTC)	STATION ID	CAST TYPE	TIME ~~PDST~~	TIME CODE	STD/HYDRO CONSEC #	LATITUDE (°N)	LONGITUDE (°W)	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
24	18	SB19	0800		973300 18	59 27 426	144 34 437	GPS	142 1 m	300 m				
24	19		0818		19	59 30 135	144 31 757	GPS	570 m	300 m				
24	20		0917		20	59 33.057	144 34 599	GPS	154 m	150 m				
24	21		0944		21	59 35 391	144 35 363	GPS	138 m	130 m				
24	22		1016		22	59 34 757	144 36 063	GPS	139 m	130 m				
24	23		11:44		23	59 37 563	144 35 463	GPS	144 m	140 m				
24	24		12:10		24	59 40 279	144 36.146	GPS	144 m	138 m				
24	25		14 13		25	59 43 939	144 38 158	GPS	98 m	95 m				
24	26		15 16		26	59 48 07	144 37 888	GPS	18 Fms	34 m				
24	27		16 42		27	59 46 326	144 45 470	GPS	66 m	50 m				

End of first transect into Cape St Elias (Kayak I.)

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DAILY LOG STATION/TRANSEC #2 CAPE PUGET OCEAN PHYSICS INSTITUTE OF OCEAN SCIENCES

YEAR	MONTH	SHIP	CRUISE	PAGE OF
1997	July	GREAT PACIFIC	97-033 GOA JUV SALMON	3

DAY (UTC)	STATION ID	CAST TYPE	TIME ~~(UTC)~~	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
25	28	SB19	06:08		28	59° 54' 181 N	148° 27' 777 W	GPS	87m	80m				
25	29		07:07		29	59° 56' 149 N	148° 27' 005 W		50m	45m				
25	30		08:37		30	59° 51' 935 N	148° 25' 360 W		173m	165m				
25	31		08:45		31	59° 51' 482 N	148° 25' 153 W		105m	95m				
25	32		09:07		32	59° 49' 082	148° 22' 987 W		142m	135m				
25	33		09:23		33	59° 46' 887 N	148° 21' 006 W		129m	125m				
25	34		11:23		34	59° 42' 559 N	148° 19' 694 W		175m	170				14.5 off
25	35		11:35		35	59° 41' 867 N	148° 19' 436 W		180m	170m				15.0 off
25	36		11:57		36	59° 39' 512 N	148° 17' 569 W		195m	175m				17.5 off
25	37		12:19		37	59° 37' 789 N	148° 22' 222 W		202m	195m				20mi off
25	38		14:39		38	59° 34' 331 N	148° 18' 122 W		193m	185m				22.6 off
25	39		15:05		39	59° 32' 051 N	148° 16' 307 W		207m	202m				25m off
25	40		15:36		40	59° 29' 754 N	148° 14' 085 W		212m	206m				27.5 off
25	41		16:53		41	59° 27' 514 N	148° 12' 411 W		212m	230				30.0 off
25	42		18:10		42	59° 26' 365 N	148° 10' 876 W		210m	230				31.2m off
25	43		18:44		43	59° 23' 098 N	148° 06' 237 W		183m	183m				35mi off
25	44		19:08		44	59° 20' 937 N	148° 03' 113 W		179m	175m				37.5 off
25	45		19:30		45	59° 18' 787 N	148° 00' 196 W		203	200m				40.0

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DAILY LOG — OCEAN PHYSICS — INSTITUTE OF OCEAN SCIENCES

YEAR	MONTH	SHIP	CRUISE	PAGE OF
1997	July	GREAT PACIFIC	97-033 GOA JUV Salmon	4

DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC) ADT	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
26	46	SB-19	07:30 ~~46~~		46	59° 16' 503 N	147° 58' 615 W	GPS	195 m	190 m				42.0 m off
26	47		09:51 47		47	59° 12' 577 N	147° 57' 719 W		193 m	190 m				45.7 m off
26	48		10:34 48		48	59° 11' 257 N	147° 56' 807 W		196 m	196 m				47.5 m off
26	49		10:59 49		49	59° 08' 638 N	147° 54' 537 W		205 m	220 m				50 m off
26	50		11:20 50		50	59° 06' 618 N	147° 52' 962 W		199 m	210 m				52 m off
26	51		11:42 51		51	59° 04' 401 N	147° 51' 000 W		193 m	200 m				55.0 off
26	52		13:42 52		52	59° 00' 985 N	147° 49' 554 W		427 m	427 m				58.5 m off
26	53		13:59 53		53	59° 00' 093 N	147° 48' 718 W		530	300 m				59.5 off
26	54		14:15 54		54	58° 59' 563 N	147° 48' 365 W		620 m	300 m				60 off
26	55		16:28 ~~55~~		55	58° 57' 585 N	147° 47' 196 W		900 m	800 m				63.3 m off

↑ Original times accidentally escaped over-written by correct CTD cast # while fixing previous screw-up (by me x2) DWW.
Times re-written from computer log.

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DAILY LOG — OCEAN PHYSICS — INSTITUTE OF OCEAN SCIENCES

YEAR	MONTH	SHIP	CRUISE	PAGE	OF
1997	July	Great Pacific	97037	4	

DAY (UTC)	STATION ID	CAST TYPE	TIME ~~(UTC)~~ PDT	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
28	56	BOT	07:27		56	57° 36' 378 N	152° 04' 276 W	GPS	88m	82 m				2.5 off
28	57		07:59		57	57° 37' 097 N	152° 06' .246 W		49m	45m				1.25 off
28	58		08:17		58	57° 37.616 N	152° 07.545 W		39m	35 m				.03 mi off
28	59		09:31		59	57° 34' 346 N	152° 07' 954 W		81	76				5 mi off
28	60		09:53		60	57° 32' 348 N	151° 59' 258 W		62m	60m				7.5 mi off
28	61		10:13		61	57° 30' 383 N	151° 56' 351 W		97m	94m				10 mi off
28	62		12:13		62	57° 28' 681 N	151° 52' 389 W		74m	70m				12.8 mi off
28	63		12:33		63	57° 26' 749 N	151° 50' 114 W		74m	78m				15 mi off
28	64		12:53		64	57° 24' 707 N	151° 47' 585 W		74m	64m				17.5 mi off
28	65		13:12		65	57° 22' 516 N	151° 45' 041 W		67m	64m				20.0 off
28	66		16:04		66	57° 21' 411 N	151° 36' .500 W		67m	63m				24.0 off
28	67		16:13		67	57° 20' 555 N	151° 35' 283 W		70m	65m				25.0 off
28	68		16:30		68	57° 18' 535 N	151° 32' 636 W		69m	65m				27.5 off
28	69		16:50		69	57° 16' 394 N	151° 30' 790 W		75m	70m				30 mi off
7/29/97 29	70		05:21		70	57° 14' 987 N	151° 27' 795 W		81m	77m				32.5 mi off
29	71		07:11		71	57° 11' 368 N	151° 26' 700 W		101 m	100 m				34.9 mi off
29	72		07:32		72	57° 09' 210 N	151° 24' 091 W		122m	119 m				37.5 mi off
29	73		07:53		73	57° 07' 139	152° 21' 436		216m	205m				40.0 mi off

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DAILY LOG | OCEAN PHYSICS | INSTITUTE OF OCEAN SCIENCES

YEAR	MONTH	SHIP	CRUISE	PAGE OF
1997	July	GREAT PACIFIC	97033 GOA Juv. Salmon	5

DAY (UTC) ~~ADT~~	STATION ID	CAST TYPE	TIME ~~(UTC)~~ ~~ADT~~	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
29	74	SB19	0815		74	57° 05' 137 N	151° 18' 881 W		377m	350m				42.15 mi off shore
29	75		0847		75	57° 14' 305 N	151° 14' 949 W		555m	320m				46 mi off
29	76		1059		76	57° 00' 740 N	151° 11' 698 W		637m	300m				48.3 mi off
29	77		1128		77	56° 59' 602 N	151° 09' 817 W		629	300m				50 mi off
29	78		1158		78	56° 57' 673 N	151° 06' 676 W		1017	300m				52.5 mi off
29	79		1217		79	56° 55' 810 N	151° 03' 593 W		960m	300m				55.0 mi off
29	80		1244		80	56° 53' 982	151° 00' 593		1255m	320m				57.5 mi off
29	81		1506		81	56° 53' 029	150° 52' 549		1700m	300m				61.1 mi off

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INSTITUTE OF OCEAN SCIENCES

YEAR: 1997 | MONTH: July | SHIP: F/V Great Pacific | CRUISE: 97033 Goa and Sea Hound | PAGE OF

DAY (UTC) ABT	STATION ID	CAST TYPE	TIME (UTC) ABT	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
30	82		1220		82	55° 09' N	156° 40' W		520 m					YMS Salinometer 78.55 31.7‰, 13.5°C off
30	83		1346		83	55° 13.08 N	156° 48.890 W		135m					73.97 off
30	84		1504		84	55° 12' 205 N	157° 05.11 W		97m					63.12 mi off
30	85		1628		85	55° 24' 165 N	157° 22' 908 W		89m					51.4 off
30	86		1758		86	55° 26' 961 N	157° 32' 505 W		91m					45.57 off
30	87		2000		87	55° 34' 826 N	158° 04' 840 W		133m					25.27 mi off
30	88		2124		88	55° 38' 554 N	158° 11' 624 W		132m					20.4 mi off
30	89		2334		89	55° 49' 648 N	158° 41' 877 W		34m					0.06 mi off bottom
31	90		0100		90	55° 46' 474 N	158° 32' 671		95m					6.09

No CTDs taken, only surface nutrients, Tsa, O18, SST & salinity (latter two by YMS salinometer - needs to be calibrated to Seabird).

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