

## PRIMARY PRODUCTIVITY CASTS

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 76.7 49.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
35 5.3 N	120 46.7 W	20/02/06	1846 UTC	10 m	1217 - 1820 PST	1217 PST	1819 PST	496.1 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	12.02	33.580	25.483	5.79	94.9	11.5	0.82	8.0	0.24	8.68	0.07	74. A	49.7	51.0	50.3	0.49
7	11.87	33.598	25.525	5.21	85.1	12.6	0.95	9.7	0.25	2.77	0.30	34.	24.4	26.7	25.6	0.26
18	11.49	33.653	25.639	4.38	71.0	16.3	1.28	13.6	0.30	0.87	0.43	6.3	5.9	5.4	5.6	0.14
23	11.19	33.694	25.725	3.78	60.9	19.5	1.55	16.5	0.33	0.62	0.58	2.9	2.3	1.9	2.1	0.12
32	11.10	33.707	25.752	3.65	58.7	20.1	1.60	17.1	0.32	0.62	0.52	0.74	0.46	0.42	0.44	0.13
44	11.02	33.718	25.775	3.53	56.7	20.8	1.63	17.7	0.32	0.49	0.60	0.12	0.14	0.11	0.13	0.04

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 76.7 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
34 3.3 N	122 56.5 W	18/02/06	1632 UTC	26 m	1226 - 1818 PST	1226 PST	1819 PST	182.8 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	14.00	32.857	24.532	6.00	102.0	2.4	0.34	0.0	0.01	0.35	0.17	89. A	0.57	0.57	0.57	0.07
18	13.98	32.855	24.535	6.01	102.1	2.4	0.34	0.0	0.01	0.43	0.14	35.	3.6	3.7	3.7	0.06
31	13.97	32.853	24.536	6.00	101.9	2.5	0.33	0.0	0.01	0.42	0.08					
44	13.98	32.857	24.538	6.00	102.0	2.4	0.33	0.0	0.01	0.31	0.15	7.4	2.9	2.8	2.8	0.06
52	13.99	32.858	24.536	6.00	102.0	2.3	0.33	0.0	0.01	0.34	0.18					
60	13.97	32.890	24.566	5.96	101.3	2.4	0.35	0.2	0.04	0.31	0.18	2.9	1.4	1.5	1.5	0.05
72	14.23	33.240	24.782	5.79	99.1	2.0	0.36	0.5	0.16	0.36	0.21					
82	13.51	33.243	24.933	5.82	98.2	2.3	0.41	1.2	0.06	0.31	0.21	0.79	0.46	0.43	0.44	0.01
93	13.15	33.302	25.051	5.52	92.4	2.7	0.45	2.1	0.02	0.24	0.12					
102	12.31	33.308	25.219	5.32	87.5	4.4	0.62	4.9	0.02	0.14	0.07					
113	11.58	33.339	25.380	5.18	83.9	5.6	0.75	7.1	0.01	0.12	0.05	0.13	0.02	0.03	0.03	0.01

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 80.0 60.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
34 8.9 N	121 9.1 W	16/02/06	1844 UTC	22 m	1219 - 1818 PST	1219 PST	1818 PST	356.2 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	12.79	33.121	24.979	5.83	96.8	5.2	0.62	4.1	0.13	0.73	0.14	87. A	7.2	6.6	6.9	0.12
9	12.79	33.119	24.978	5.82	96.6	5.1	0.62	4.0	0.13	0.65	0.18					
16	12.77	33.120	24.983	5.81	96.4	5.1	0.62	4.1	0.13	0.66	0.18	33.	10.3	10.6	10.5	0.10
26	12.66	33.107	24.995	5.73	94.9	5.3	0.64	4.5	0.12	0.63	0.14					
38	12.54	33.107	25.018	5.65	93.3	5.6	0.68	5.0	0.12	0.51	0.18	7.1	5.5	5.4	5.4	0.06
44	11.95	33.226	25.222	5.34	87.2	8.1	0.91	8.7	0.20	0.48	0.23					
51	10.85	33.226	25.422	4.81	76.7	10.6	1.15	12.9	0.03	0.14	0.10	2.8	0.57	0.52	0.55	0.03
60	10.39	33.269	25.536	4.79	75.6	11.1	1.16	13.3	0.02	0.08	0.07					
70	10.06	33.372	25.672	4.36	68.4	14.5	1.37	16.7	0.02	0.06	0.08	0.76	0.07	0.08	0.08	0.02
83	10.21	33.758	25.949	2.81	44.3	23.4	1.87	23.0	0.01	0.05	0.17					
96	9.47	33.816	26.118	2.86	44.4	26.0	1.93	24.7	0.01	0.03	0.10	0.12	0.01	0.00	0.00	0.02

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 80.0 100.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
32 48.8 N	123 54.1 W	17/02/06	1946 UTC	28 m	1239 - 1830 PST	1230 PST	1829 PST	137.4 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	14.95	33.016	24.454	5.85	101.5	1.9	0.33	0.0	0.00	0.25	0.05	90. A	1.2	1.4	1.3	0.06
11	14.95	33.014	24.453	5.83	101.1	1.8	0.32	0.0	0.00	0.22	0.05					
21	14.94	33.014	24.456	5.88	102.0	1.8	0.33	0.0	0.00	0.22	0.05	32.	2.5	2.5	2.5	0.06
29	14.94	33.013	24.455	5.84	101.3	1.7	0.32	0.0	0.00	0.27	0.02					
38	14.94	33.013	24.455	5.84	101.3	1.7	0.32	0.0	0.00	0.23	0.06					
47	14.93	33.012	24.457	5.86	101.6	1.7	0.32	0.0	0.00	0.22	0.05	7.6	1.5	1.5	1.5	0.05
56	14.92	33.013	24.460	5.84	101.2	1.6	0.32	0.0	0.00	0.24	0.05					
65	14.65	33.116	24.598	5.78	99.7	1.8	0.36	0.2	0.11	0.38	0.26	2.8	1.5	1.4	1.4	0.06
77	13.64	33.175	24.854	5.68	96.0	2.5	0.46	1.6	0.08	0.32	0.24					
89	12.60	33.148	25.039	5.31	87.8	5.0	0.74	6.1	0.02	0.12	0.09	0.76	0.13	0.13	0.13	0.03
100	11.80	33.171	25.209	5.05	82.1	6.8	0.91	8.8	0.03	0.08	0.08					
111	11.05	33.297	25.443	5.03	80.6	7.5	0.91	9.4	0.01	0.06	0.05					
123	10.27	33.379	25.643	4.88	76.9	9.7	1.06	12.1	0.01	0.04	0.04	0.12	0.00	0.00	0.00	0.01

A) INCUBATION LIGHT INTENSITIES WERE 94, 34, 7, 2.9, .75, 0.12 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 83.3 40.6

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
34 13.4 N	119 24.9 W	15/02/06	1839 UTC	7 m	1212 - 1815 PST	1212 PST	1809 PST	321.3 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	mL/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	14.48	33.390	24.843	6.11	105.2	2.6	0.30	0.5	0.01	1.82	0.38	64. A	9.7	12.5	11.1	0.25
5	14.47	33.390	24.845	6.09	104.9	2.7	0.30	0.6	0.01	1.88	0.33	33.	26.2	28.3	27.2	0.29
12	14.36	33.387	24.867	6.01	103.3	2.5	0.34	0.9	0.02	1.92	0.45	7.2	17.8	16.9	17.3	0.28
16	14.01	33.385	24.938	5.84	99.6	4.1	0.42	1.8	0.05	1.87	0.48	3.0	7.9	6.4	7.2	0.22
23	12.93	33.422	25.186	4.84	80.8	8.2	1.13	7.0	0.23	1.70	1.04	0.64	1.3	1.5	1.4	0.14
32	12.81	33.429	25.215	4.74	78.9	8.9	1.23	7.7	0.25	1.31	1.30	0.09	0.11	0.09	0.10	0.15

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 83.3 70.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
33 14.6 N	121 26.7 W	14/02/06	1812 UTC	12 m	1220 - 1830 PST	1220 PST	1811 PST	410.8 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	mL/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	13.55	33.165	24.862	6.10	102.9	4.7	0.51	2.1	0.07	1.40	0.31	77. A	19.8	19.4	19.6	0.15
8	13.53	33.163	24.865	6.10	102.9	4.5	0.52	2.1	0.06	1.33	0.31	36.	19.6	19.8	19.7	0.16
10	13.51	33.168	24.873	6.09	102.7	4.7	0.51	2.2	0.07	1.27	0.32					
20	12.55	33.264	25.137	5.87	97.1	6.3	0.70	5.3	0.17	1.33	0.40	7.7	11.8	10.7	11.2	0.14
28	12.32	33.337	25.238	5.75	94.7	7.2	0.80	6.5	0.20	0.68	0.24	2.8	2.1	2.1	2.1	0.10
39	11.72	33.296	25.319	5.32	86.5	8.4	0.94	8.9	0.20	0.25	0.22	0.68	0.28	0.26	0.27	0.06
46	11.12	33.270	25.409	4.86	78.0	9.5	1.08	11.5	0.09	0.14	0.13					
53	10.88	33.313	25.485	4.73	75.5	10.7	1.15	12.8	0.12	0.09	0.14	0.11	0.03	0.02	0.02	0.04

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 83.3 100.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
32 14.4 N	123 29.9 W	13/02/06	1954 UTC	16 m	1245 - 1820 PST	1228 PST	1817 PST	127.3 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	mL/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
1	15.10	33.067	24.461	5.90	102.7	1.9	0.33	0.0	0.00	0.26	0.02	91. A	1.7	1.7	1.7	0.07
12	15.04	33.066	24.474	5.90	102.6	1.9	0.33	0.0	0.00	0.25	0.03	32.	2.8	2.9	2.8	0.08
20	15.00	33.071	24.487	5.89	102.3	1.9	0.33	0.0	0.00	0.25	0.04					
28	14.96	33.076	24.499	5.90	102.4	1.8	0.33	0.0	0.00	0.36	0.03	6.8	2.5	2.6	2.6	0.10
37	14.75	33.093	24.558	5.94	102.7	2.0	0.33	0.0	0.00	0.42	0.13	2.9	2.3	2.2	2.2	0.09
45	14.51	33.092	24.608	5.93	102.0	2.1	0.33	0.0	0.00	0.51	0.20					
51	14.48	33.095	24.617	5.92	101.8	2.1	0.34	0.0	0.01	0.55	0.20	0.75	1.3	1.2	1.2	0.08
54	14.41	33.096	24.633	5.89	101.1	2.1	0.35	0.0	0.03	0.94	0.04					
60	14.29	33.096	24.658	5.85	100.2	2.2	0.37	0.2	0.07	0.62	0.16					
70	14.02	33.133	24.743	5.68	96.8	2.8	0.45	1.3	0.29	0.27	0.13	0.12	0.11	0.08	0.09	0.03

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 86.7 50.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
33 19.3 N	119 39.9 W	11/02/06	1724 UTC	13 m	1215 - 1808 PST	1213 PST	1809 PST	530.4 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	mL/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	12.75	33.500	25.281	5.99	99.6	6.9	0.74	6.0	0.13	2.08	0.43	79. A	28.9	28.3	28.6	0.21
9	12.59	33.513	25.322	5.66	93.8	8.0	0.83	7.2	0.16	2.11	0.26	35.	29.7	28.5	29.1	0.26
16	12.10	33.540	25.437	5.17	84.8	9.9	1.06	10.6	0.23	0.86	0.65					
22	11.61	33.602	25.577	4.28	69.5	13.7	1.30	13.8	0.23	0.75	0.40	7.4	5.4	5.9	5.7	0.10
30	11.30	33.617	25.646	3.93	63.4	15.2	1.42	15.7	0.21	0.58	0.37	2.9	1.9	1.9	1.9	0.10
41	10.84	33.694	25.788	3.40	54.3	19.2	1.63	18.7	0.25	0.31	0.40	0.79	0.29	0.33	0.31	0.08
49	10.44	33.781	25.926	2.98	47.2	22.8	1.82	21.2	0.25	0.18	0.29					
57	10.41	33.790	25.939	2.95	46.7	23.3	1.83	21.4	0.25	0.19	0.31	0.12	0.00	0.00	0.00	0.08

A) INCUBATION LIGHT INTENSITIES WERE 94, 34, 7, 2.9, .75, 0.12 PERCENT RESPECTIVELY.

## PRIMARY PRODUCTIVITY CASTS

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 86.7 90.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
31 59.1 N	122 23.8 W	12/02/06	1911 UTC	22 m	1224 - 1825 PST	1224 PST	1824 PST	140.3 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	15.02	33.071	24.482	5.87	102.0	1.8	0.32	0.0	0.00	0.23	0.03	87. A	1.8	2.0	1.9	0.07
15	15.01	33.072	24.485	5.88	102.2	1.7	0.32	0.0	0.00	0.24	0.05 B	35.	2.5	2.5	2.5	0.07
26	14.99	33.071	24.489	5.87	102.0	1.7	0.32	0.0	0.00	0.20	0.06					
37	14.92	33.065	24.500	5.87	101.8	1.7	0.32	0.0	0.00	0.24	0.08	7.6	2.1	2.1	2.1	0.08
44	14.75	33.047	24.522	5.88	101.6	1.8	0.32	0.0	0.00	0.40	0.14					
51	14.70	33.049	24.535	5.84	100.8	1.7	0.33	0.0	0.01	0.40	0.15	2.8	2.0	1.9	2.0	0.05
60	14.57	33.102	24.604	5.82	100.2	2.0	0.36	0.2	0.08	0.42	0.20					
70	14.01	33.133	24.745	5.68	96.7	2.8	0.47	1.8	0.22	0.24	0.26	0.76	0.40	0.43	0.42	0.06
79	13.36	33.134	24.879	5.61	94.3	3.0	0.52	2.6	0.14	0.25	0.17					
88	12.60	33.150	25.041	5.33	88.2	4.5	0.69	5.3	0.03	0.17	0.14					
95	11.74	33.176	25.224	5.08	82.5	6.4	0.86	8.2	0.02	0.11	0.12	0.13	0.04	0.03	0.03	0.03

B) SECOND FLUOROMETER READING RECALCULATED BECAUSE ACID RATIO > TAU OF PURE CHL-A.  
 CHLOROPHYLL AND PHAEOPIGMENT CALCULATED WITH ACID RATIO FROM ADJACENT SAMPLES.

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 90.0 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
32 55.2 N	118 56.4 W	09/02/06	1816 UTC	10 m	1210 - 1800 PST	1210 PST	1757 PST	478.3 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	14.10	33.444	24.965	6.31	107.9	4.3	0.45	1.2	0.05	1.74	0.28	74. A	22.7	20.7	21.7	0.30
8	13.98	33.441	24.988	6.30	107.4	4.2	0.45	1.2	0.05	1.66	0.36	29.	25.3	22.3	23.8	0.21
18	13.53	33.443	25.082	5.92	100.0	4.8	0.54	2.9	0.07	1.20	0.43	6.3	14.5	13.8	14.1	0.17
23	12.95	33.468	25.217	5.28	88.2	7.7	0.78	6.5	0.11	1.12	0.40	2.9	7.5	7.3	7.4	0.12
32	12.23	33.509	25.389	4.59	75.5	11.1	1.08	11.0	0.18	0.84	0.31	0.74	2.0	2.0	2.0	0.09
44	11.28	33.556	25.602	3.92	63.2	15.3	1.39	15.9	0.12	0.47	0.24	0.12	0.16	0.13	0.14	0.06

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 90.0 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
31 45.0 N	121 18.7 W	08/02/06	1844 UTC	20 m	1215 - 1825 PST	1214 PST	1810 PST	282.1 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	14.90	33.309	24.691	5.87	101.9	2.3	0.31	0.0	0.00	0.40	0.04	86. A	2.4	2.3	2.3	0.10
8	14.93	33.310	24.685	5.88	102.2	2.3	0.31	0.0	0.00	0.40	0.05					
14	14.84	33.318	24.711	5.88	102.0	2.2	0.31	0.0	0.00	0.38	0.08	34.	5.2	5.3	5.2	0.12
24	14.83	33.314	24.711	5.90	102.3	2.2	0.31	0.0	0.00	0.40	0.10					
34	14.75	33.305	24.721	5.87	101.6	2.1	0.32	0.0	0.01	0.50	0.20	7.4	6.6	6.3	6.5	0.09
46	14.69	33.310	24.738	5.85	101.1	2.2	0.33	0.1	0.02	0.50	0.22	2.9	4.0	4.1	4.1	0.08
56	14.57	33.319	24.771	5.76	99.3	2.5	0.37	0.5	0.08	0.41	0.17					
65	13.65	33.304	24.951	5.24	88.7	4.5	0.65	4.9	0.09	0.18	0.13	0.68	0.60	0.58	0.59	0.05
77	12.33	33.349	25.247	4.51	74.3	8.5	1.04	11.0	0.03	0.14	0.11					
88	11.39	33.430	25.485	3.96	63.9	12.3	1.33	15.7	0.02	0.09	0.08	0.12	0.05	0.04	0.05	0.03

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 90.0 120.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
30 24.5 N	124 0.2 W	07/02/06	1726 UTC	36 m	1228 - 1818 PST	1230 PST	1817 PST	201.8 mg C/m <sup>2</sup>								
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m <sup>3</sup> )			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
3	15.91	33.244	24.418	5.75	101.8	1.5	0.30	0.0	0.00	0.17	0.02	88. A	0.39	0.51	0.45	0.06
13	15.87	33.243	24.427	5.74	101.6	1.5	0.30	0.0	0.00	0.19	0.00					
25	15.87	33.243	24.427	5.73	101.4	1.5	0.29	0.0	0.00	0.18	0.03	34.	2.2	2.2	2.2	0.05
37	15.89	33.249	24.428	5.74	101.6	1.5	0.29	0.0	0.00	0.16	0.03					
49	15.82	33.256	24.449	5.75	101.7	1.5	0.29	0.0	0.00	0.23	0.05					
61	15.52	33.235	24.500	5.79	101.7	1.7	0.31	0.0	0.00	0.40	0.05	7.4	2.3	2.4	2.4	0.06
72	15.02	33.231	24.607	5.74	99.8	2.0	0.36	0.3	0.12	0.58	0.19					
83	14.02	33.209	24.802	5.62	95.8	2.9	0.49	1.9	0.26	0.46	0.20	2.9	2.1	2.0	2.0	0.04
94	13.18	33.194	24.961	5.37	89.9	4.1	0.65	4.6	0.03	0.27	0.13					
105	12.71	33.218	25.073	5.20	86.2	4.9	0.73	6.0	0.02	0.19	0.12					
115	11.98	33.255	25.241	4.92	80.4	7.0	0.91	9.1	0.01	0.12	0.10	0.74	0.22	0.23	0.22	0.02
128	11.07	33.331	25.467	4.50	72.1	10.5	1.17	13.4	0.01	0.06	0.07					
143	9.99	33.454	25.750	4.27	66.9	14.8	1.37	17.1	0.01	0.03	0.05					
157	9.59	33.557	25.897	4.16	64.6	17.2	1.45	18.6	0.00	0.01	0.03	0.12	0.00	0.00	0.00	0.02

A) INCUBATION LIGHT INTENSITIES WERE 94, 34, 7, 2.9, .75, 0.12 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 93.3 35.0

LATITUDE 32 40.8 N LONGITUDE 117 52.5 W DAY/MO/YR 04/02/06 CAST TIME 1937 UTC SECCHI 22 m INCUBATION TIME 1250 - 1759 PST LAN 1205 PST CIVIL TWILIGHT 1754 PST INTEGRATED VALUE 269.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
3	14.95	33.363	24.722	5.94	103.3	2.4	0.31	0.0	0.00	0.54	0.03	81. A	7.9	7.6	7.7	0.11
8	14.96	33.364	24.721	5.93	103.1	2.4	0.30	0.0	0.00	0.48	0.09					
15	14.64	33.378	24.800	6.05	104.5	2.7	0.31	0.0	0.01	0.54	0.13	35.	6.5	6.2	6.3	0.14
26	14.52	33.397	24.841	6.07	104.6	2.8	0.30	0.0	0.01	0.58	0.19					
37	14.45	33.382 D	24.844	6.06	104.3	2.8	0.31	0.0	0.01	0.61	0.21	7.6	3.7	3.6	3.6	0.10
44	14.10	33.381	24.917	5.88	100.5	3.4	0.38	0.7	0.06	0.89	0.06					
51	13.37	33.370	25.058	5.29	89.0	5.7	0.64	4.4	0.19	0.57	0.33	2.8	1.2	1.4	1.3	0.06
60	12.68	33.383	25.205	4.71	78.1	8.2	0.92	8.3	0.25	0.53	0.36					
70	11.76	33.488	25.462	3.78	61.5	13.4	1.35	14.5	0.21	0.46	0.37	0.76	0.29	0.30	0.29	0.06
83	10.60	33.678	25.819	2.97	47.2	20.6	1.75	20.7	0.03	0.13	0.24					
96	9.89	33.670	25.934	3.30	51.7	21.0	1.73	21.4	0.02	0.05	0.13	0.12	0.02	0.02	0.02	0.02

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 93.3 60.0

LATITUDE 31 49.6 N LONGITUDE 119 34.3 W DAY/MO/YR 05/02/06 CAST TIME 1732 UTC SECCHI 21 m INCUBATION TIME 1210 - 1810 PST LAN 1212 PST CIVIL TWILIGHT 1808 PST INTEGRATED VALUE 338.2 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
2	14.67	33.304	24.736	5.88	101.6	2.3	0.34	0.2	0.03	0.53	0.16	86. A	5.9	6.4	6.2	0.08
15	14.64	33.297	24.738	5.86	101.2	2.3	0.34	0.2	0.03	0.54	0.15	33.	8.4	9.1	8.7	0.08
26	14.62	33.296	24.742	5.85	101.0	2.3	0.34	0.2	0.03	0.52	0.16					
36	14.54	33.294	24.757	5.86	101.0	2.4	0.36	0.4	0.04	0.43	0.14	7.2	4.9	5.1	5.0	0.07
42	14.54	33.294	24.758	5.83	100.5	2.5	0.36	0.4	0.04	0.41	0.13					
48	14.54	33.294	24.758	5.85	100.8	2.4	0.36	0.4	0.04	0.41	0.13	3.0	2.5	2.9	2.7	0.07
58	14.48	33.291	24.769	5.81	100.0	2.5	0.37	0.6	0.05	0.39	0.15					
67	14.43	33.288	24.777	5.79	99.6	2.6	0.39	0.8	0.05	0.36	0.12	0.75	0.58	0.58	0.58	0.05
75	14.34	33.284	24.793	5.74	98.5	2.8	0.40	1.0	0.07	0.34	0.12					
83	13.53	33.266	24.947	5.49	92.6	3.8	0.54	3.1	0.11	0.20	0.11					
92	11.48	33.323	25.386	4.59	74.2	9.6	1.08	11.9	0.03	0.13	0.12	0.12	0.04	0.04	0.04	0.04

RV DAVID STARR JORDAN

CALCOFI CRUISE 0602

STATION 93.3 100.0

LATITUDE 30 31.2 N LONGITUDE 122 15.3 W DAY/MO/YR 06/02/06 CAST TIME 1827 UTC SECCHI 24 m INCUBATION TIME 1225 - 1820 PST LAN 1228 PST CIVIL TWILIGHT 1819 PST INTEGRATED VALUE 251.5 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
3	14.99	33.150	24.549	5.86	101.8	2.2	0.32	0.0	0.00	0.37	0.04	83. A	3.6	3.7	3.6	0.09
10	14.86	33.146	24.574	5.91	102.4	2.1	0.33	0.0	0.00	0.46	0.12					
18	14.69	33.149	24.613	5.93	102.4	2.5	0.33	0.0	0.01	0.54	0.06	32.	5.9	5.9	5.9	0.10
29	14.23	33.160	24.719	5.86	100.3	2.5	0.39	0.6	0.09	0.72	0.05					
42	14.27	33.257	24.786	5.89	100.9	2.5	0.37	0.5	0.06	0.56	0.11	6.8	3.7	3.5	3.6	0.06
49	14.14	33.262	24.817	5.91	101.0	2.7	0.38	0.7	0.06	0.53	0.13					
55	13.85	33.242	24.862	5.78	98.2	2.9	0.44	1.5	0.08	0.39	0.11	3.0	1.5	1.5	1.5	0.05
66	13.34	33.204	24.937	5.44	91.4	3.5	0.57	3.5	0.04	0.24	0.10					
77	12.56	33.193	25.082	5.34	88.3	4.3	0.67	5.0	0.03	0.18	0.10	0.73	0.23	0.22	0.22	0.03
91	11.61	33.246	25.302	4.79	77.6	8.5	1.03	11.0	0.02	0.07	0.10					
106	10.80	33.421	25.584	4.04	64.4	13.5	1.37	16.4	0.01	0.05	0.07	0.11	0.01	0.01	0.01	0.03

A) INCUBATION LIGHT INTENSITIES WERE 94, 34, 7, 2.9, .75, 0.12 PERCENT RESPECTIVELY.