

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>Ros/KTD 7Be</i>	station: <i>29</i>
leg: <i>TRACER I</i>	cast #: <i>1</i>	depth: <i>27°C</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>01 Aug 05</i>	<i>2001</i>	<i>29-59.98</i>	<i>67-49.53</i>	<i>Ship</i>	<i>Stew's.</i>
On Deck	<i>"</i>	<i>2015</i>	<i>30-00.04</i>	<i>67-49.70</i>		

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Sal Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>27°C</i>	<i>5.6</i>			drop#:
2	23		<i>↓</i>			<i>27.522</i> <i>27.112</i>	
3	22			<i>6.8</i>			
4	21					<i>26.961</i>	
5	20					<i>26.841</i>	
6	19					<i>26.991</i>	
7	18				<i>36.690</i>		
8	17			<i>7.0</i>			
9	16						<i>24.062</i>
10	15					<i>26.890</i>	
11	14				<i>36.699</i>		
12	13					<i>27.006</i>	
13	12					<i>27.007</i>	
14	11			<i>6.4</i>			
15	10					<i>26.951</i>	
16	9				<i>36.708</i>		
17	8						<i>24.032</i>
18	7					<i>26.884</i>	
19	6					<i>26.816</i>	
20	5					<i>26.877</i>	
21	4						<i>24.047</i>
22	3					<i>26.875</i>	
23	2					<i>26.914</i>	
24	1					<i>26.855</i>	

CTD Log Sheet

cruise: 415-2	type:	station: 002
leg:	cast #: A	depth:

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	19 July	1314	30 31.53	67 8.03		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	chl (µg/l) Time Fired (z)	Temp At Bottle Fire	σ-θ (kg/m ³) Remarks-
1	24	S&I 555	700	700.5	0.010	14.181	drop#:
2	23		500	500.3	0.003	17.927	26.476
3	22		300	300.0	0.003	18.633	26.377
4	21		200	200.9	0.003	18.903	26.324
5	20		180	180.5	0.017	18.979	26.312
6	19		160	159.6	0.120	19.046	26.300
7	18		150	150.2	0.157	19.060	26.295
8	17		140	139.7	0.135	19.156	26.281
9	16		130	129.4	0.193	19.181	26.276
10	15		120	119.3	0.398	19.205	26.272
11	14		110	110.0	0.420	19.229	26.266
12	13		105	104.4	1.277	19.271	26.256
13	12		100	100.3	2.713	19.299	26.250
14	11		95	95.4	1.556	19.337	26.239
15	10		90	90.2	0.347	19.407	26.226
16	9		80	80.1	0.293	19.488	26.208
17	8		70	70.8	0.200	19.677	26.162
18	7		60	60.0	0.120	20.045	26.071
19	6		50	50.3	0.105	20.546	25.959
20	5		40	40.6	0.083	20.994	25.861
21	4		30	30.1	0.047	21.925	25.578
22	3		20	19.7	0.029	23.578	25.192
23	2		10	10.1	0.017	26.713	24.260
24	1	Salinity bottle #555	0	2.8	0.025	28.463	23.590

555

CTD Log Sheet

cruise: 415-2 (Tracer 1)	type:	station: 003
leg:	cast #: A	depth: 700

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	19 Jul 05	14 51	30° 31.500	67° 20.96'		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (db) (m)	Chl (mg/L) Time Fired (z)	Temp At Bottle Fire	σ_t (kg/m ³) Remarks
1	24	Sal 556	700	700.3	0.010	14.137	26.850 drop#:
2	23		500	499.7	0.005	17.980	26.474
3	22		300	299.7	0.005	18.606	26.383
4	21		200	199.4	0.003	18.851	26.335
5	20		180	180.6	0.003	18.915	26.324
6	19		160	161.2	0.032	18.987	26.310
7	18		150	149.5	0.047	19.037	26.301
8	17		140	140.8	0.113	19.091	26.292
9	16		130	130.8	0.215	19.126	26.285
10	15		120	120.3	0.406	19.161	26.279
11	14		110	109.5	0.721	19.196	26.273
12	13	tripped @ 100	105	105.4	0.831	19.214	26.269
13	12		100	100.2	2.113(?)	19.240	26.263
14	11		95	95.4	1.314	19.301	26.246
15	10		90	90.6	0.547	19.348	26.235
16	9		80	79.9	0.259	19.448	26.210
17	8		70	70.2	0.149	19.628	26.170
18	7		60	59.8	0.105	19.850	26.118
19	6		50	50.2	0.076	20.425	25.974
20	5		40	39.4	0.061	20.933	25.843
21	4		30	30.2	0.039	21.322	25.739
22	3		20	20.5	0.025	23.185	25.204
23	2		10	10.8	0.017	26.215	24.330
24	1	Salinity bottle #6	0	2.1	0.025	28.645	23.556

CTD Log Sheet

cruise: 415-2 (Tracer 2)	type:	station: 004
leg:	cast #: A	depth: 700m

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	19 Jul 05	16:42	30° 31.426'	66° 55.601'		
On Deck	19 Jul 05	17:37	30.31, 303	66:55.014		

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Chl (µg/l) Time Fired (z)	Temp At Bottle Fire	Remarks
✓ 1	24	Sal 557	700	699.4	0.010	14.69	26.802 drop#:
✓ 2	23		500	500.2	-0.005	17.994	26.471
✓ 3	22		300	299.8	0.003	18.629	26.384
✓ 4	21		200	199.3	-0.012	18.928	26.325
✓ 5	20		180	179.1	-0.003	18.960	26.319
✓ 6	19		160	160.3	0.017	18.963	26.316
✓ 7	18		150	149.8	0.010	18.964	26.315
✓ 8	17		140	139.8	0.047	18.964	26.314 ≈ 10% Pen
✓ 9	16		130	129.8	0.127	18.970	26.312
✓ 10	15		120	119.2	0.281	19.001	26.307
✓ 11	14		110	110.3	0.391	19.016	26.304
✓ 12	13		100	100.0	0.496	19.077	26.291
✓ 13	12		95	94.7	0.823	19.135	26.280
✓ 14	11		90	89.7	5.497 2.356	19.287	26.250
✓ 15	10		85	85.1	0.633	19.353	26.233
✓ 16	9		80	79.5	0.318	19.406	26.221
✓ 17	8		70	69.7	0.179	19.618	26.167
✓ 18	7		60	60.2	0.135	19.769	26.134
✓ 19	6		50	50.2	0.076	19.20.024	26.073
✓ 20	5		40	39.7	0.076	20.479	25.957
✓ 21	4		30	30.4	0.047	21.695	25.628
✓ 22	3		20	19.5	0.025	23.850	25.042
✓ 23	2		10	10.3	0.017	27.686	23.777
✓ 24	1		0	2.7	0.032	29.718	29.23 189

CTD Log Sheet

cruise: OCEANUS 415-2	type: CTD	station: 05
leg: TRACER-1	cast #:	depth: 700M

Position Information

CTD Status	19 JUL 05 Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	1827	1827	30-31.49	66-49.32		Stews.
On Deck	19 JUL 05	1920	30-31.36	66-48.69		

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Chl @ Time-Fired (z)	Temp At Bottle Fire	Remarks
✓1	24	559	700	698.9	0.010	14.986	26.775 drop#:
✓2	23		500	500.6	0.003	17.997	26.471
✓3	22		300	300.2	-0.012	18.651	26.375
✓4	21		200	200.2	0.003	18.953	26.320
✓5	20		180	180.3	0.010	18.979	26.314
✓6	19		160	159.8	0.091	19.004	26.309
✓7	18		150	150.3	0.127	19.014	26.306
✓8	17		140	140.2	0.259	19.029	26.304
✓9	16		130	129.5	0.143	19.070	26.296
✓10	15		120	119.5	0.398	19.087	26.289
✓11	14		110	110.0	0.545	19.149	26.277
✓12	13		100	99.8	0.911	19.231	26.265
✓13	12		95	95.2	3.121	19.271	26.253
✓14	11	dark @ 85m	90	89.5	2.208	19.325	26.243
✓15	10		85	85.1	0.406	19.398	26.225
✓16	9		80	79.6	0.274	19.490	26.203
✓17	8		70	70.4	0.179	19.700	26.151
✓18	7		60	60.2	0.149	19.886	26.112
✓19	6		50	50.9	0.105	20.338	26.012
✓20	5		40	39.8	0.054	21.151	25.815
✓21	4		30	31.5	0.039	22.327	25.471
✓22	3		20	20.2	0.032	24.080	24.997
✓23	2		10	10.1	0.017	27.841	27.787 23.823
✓24	1		0	2.2	0.019	29.655	23.259

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette</i>	station: <i>06</i>
leg: <i>TRACER-1</i>	cast #: <i>1</i>	depth: <i>700</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>19 JUL 05</i>	<i>2002</i>	<i>30-31.38N</i>	<i>66-43.21</i>		<i>Stew 5.</i>
On Deck	<i>11</i>	<i>2047</i>	<i>30-30.83</i>	<i>66-42.91</i>		

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
✓1	24	<i>SS10</i>	700	<i>700.7</i>	<i>0.010</i>	<i>14.774</i>	<i>26.796</i> <i>drop#: 796</i>
✓2	23		500	<i>499.2</i>	<i>0.003</i>	<i>17.973</i>	<i>26.471</i>
✓3	22		300	<i>300.3</i>	<i>0.010</i>	<i>18.647</i>	<i>26.373</i>
✓4	21		200	<i>200.2</i>	<i>0.003</i>	<i>18.988</i>	<i>26.314</i>
✓5	20		180	<i>179.6</i>	<i>0.017</i>	<i>19.031</i>	<i>26.305</i>
✓6	19		160	<i>159.3</i>	<i>0.098</i>	<i>19.087</i>	<i>26.294</i>
✓7	18		150	<i>149.0</i>	<i>0.105</i>	<i>19.095</i>	<i>26.292</i>
✓8	17		140	<i>140.0</i>	<i>0.164</i>	<i>19.120</i>	<i>26.287</i>
✓9	16		130	<i>129.7</i>	<i>0.318</i>	<i>19.173</i>	<i>26.278</i>
✓10	15		120	<i>120.0</i>	<i>0.721</i>	<i>19.212</i>	<i>26.269</i>
✓11	14		110	<i>109.9</i>	<i>0.838</i>	<i>19.240</i>	<i>26.263</i>
✓12	13		100	<i>100.1</i>	<i>0.735</i>	<i>19.291</i>	<i>26.249</i>
✓13	12		95	<i>94.9</i>	<i>0.737</i>	<i>19.382</i>	<i>26.227</i>
14	11✓		90	<i>90.0</i>	<i>0.486</i>	<i>19.423</i>	<i>26.217</i>
15	10✓		85	<i>85.0</i>	<i>0.340</i>	<i>19.493</i>	<i>26.201</i>
16	9✓		80	<i>79.9</i>	<i>0.354</i>	<i>19.569</i>	<i>26.179</i>
17	8✓		70	<i>70.2</i>	<i>0.244</i>	<i>19.744</i>	<i>26.145</i>
18	7✓		60	<i>60.5</i>	<i>0.164</i>	<i>20.125</i> <i>19.125</i>	<i>26.071</i>
19	6✓		50	<i>50.4</i>	<i>0.105</i>	<i>20.646</i>	<i>25.921</i>
20	5✓		40	<i>40.0</i>	<i>0.083</i>	<i>21.466</i>	<i>25.705</i>
21	4✓		30	<i>30.8</i>	<i>0.039</i>	<i>22.700</i>	<i>25.363</i>
22	3✓		20	<i>20.0</i>	<i>0.047</i>	<i>24.603</i>	<i>24.829</i>
23	2✓		10	<i>10.8</i>	<i>0.039</i>	<i>27.060</i>	<i>24.110</i>
24	1		0	<i>2.9</i>	<i>0.032</i>	<i>29.113</i>	<i>23.351</i>

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette</i>	station: <i>07</i>
leg: <i>TRACER 1</i>	cast #: <i>1</i>	depth: <i>700 m.</i>

Position Information

CTD Status	<i>19 Jul 05</i> Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>2131</i>	<i>2131</i>	<i>30-31.37</i>	<i>66-36.87</i>	-	<i>Stew J.</i>
On Deck		<i>2222</i>	<i>30-30.54</i>	<i>66-36.80</i>		-

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	<i>Chl A</i> Time-Fired (z)	Temp At Bottle Fire	<i>50</i> Remarks
✓1	24	<i>SS 11</i>	<i>700</i>	<i>701.1</i>	<i>0.017</i>	<i>14.776</i>	<i>26.794</i> drop#:
✓2	23		<i>500</i>	<i>500.6</i>	<i>0.003</i>	<i>17.841</i>	<i>26.485</i>
✓3	22		<i>300</i>	<i>300.2</i>	<i>0.003</i>	<i>18.657</i>	<i>26.371</i>
✓4	21		<i>200</i>	<i>200.0</i>	<i>0.003</i>	<i>18.991</i>	<i>26.313</i>
✓5	20		<i>180</i>	<i>179.8</i>	<i>0.120</i>	<i>19.037</i>	<i>26.298</i>
✓6	19		<i>160</i>	<i>160.4</i>	<i>0.120</i>	<i>19.141</i>	<i>26.284</i>
✓7	18		<i>150</i>	<i>149.1</i>	<i>0.222</i>	<i>19.179</i>	<i>26.277</i>
✓8	17		<i>140</i>	<i>138.5</i>	<i>0.354</i>	<i>19.205</i>	<i>26.272</i>
✓9	16		<i>135</i>	<i>132.0</i>	<i>0.545</i>	<i>19.235</i>	<i>26.265</i>
✓10	15		<i>130</i>	<i>127.5</i>	<i>1.142</i>	<i>19.265</i>	<i>26.258</i>
✓11	14		<i>125</i>	<i>121.1</i>	<i>1.570</i>	<i>19.318</i>	<i>26.245</i>
✓12	13		<i>120</i>	<i>114.9</i>	<i>1.116</i>	<i>19.341</i>	<i>26.240</i>
✓13	12		<i>110</i>	<i>109.9</i>	<i>0.574</i>	<i>19.392</i>	<i>26.208</i>
✓14	11		<i>100</i>	<i>100.4</i>	<i>0.552</i>	<i>19.496</i>	<i>26.204</i>
✓15	10		<i>90</i>	<i>90.0</i>	<i>0.369</i>	<i>19.696</i>	<i>26.160</i>
✓16	9		<i>80</i>	<i>80.0</i>	<i>0.237</i>	<i>20.029</i>	<i>26.091</i>
✓17	8		<i>70</i>	<i>69.3</i>	<i>0.208</i>	<i>20.299</i>	<i>26.017</i>
✓18	7		<i>60</i>	<i>60.1</i>	<i>0.120</i>	<i>20.920</i>	<i>25.877</i>
✓19	6		<i>50</i>	<i>50.5</i>	<i>0.091</i>	<i>21.360</i>	<i>25.765</i>
✓20	5		<i>40</i>	<i>40.1</i>	<i>0.061</i>	<i>22.175</i>	<i>25.534</i>
✓21	4		<i>30</i>	<i>30.1</i>	<i>0.076</i>	<i>22.850</i>	<i>25.350</i>
✓22	3		<i>20</i>	<i>20.0</i>	<i>0.054</i>	<i>23.909</i>	<i>25.013</i>
23	2		<i>10</i>	<i>10.1</i>	<i>0.054</i>	<i>27.873</i>	<i>23.837</i>
24	1		<i>0</i>	<i>1.6</i>	<i>0.047</i>	<i>28.705</i>	<i>23.589</i>

CTD Log Sheet

cruise: <i>DELANOS 415-2</i>	type: <i>CTD / ROSETTE</i>	station: <i>08</i>
leg: <i>TRACKER I</i>	cast #: <i>1</i>	depth: <i>700m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>18 JUL 05</i>	<i>0042</i>	<i>30-14.55</i>	<i>66-58.02</i>	<i>Ship</i>	<i>Stews</i>
On Deck	"	<i>0128</i>	<i>30-14.03</i>	<i>66-58.05</i>	-	-

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
✓1	24	<i>9912</i>	700	700.7	<i>0.010</i>	<i>15.180</i>	<i>26.760</i> <i>drop#:</i>
✓2	23		500	500.9	<i>0.010</i>	<i>17.982</i>	<i>26.474</i>
✓3	22		300	300.0	<i>0.003</i>	<i>18.601</i>	<i>26.378</i>
✓4	21		200	199.3	<i>0.010</i>	<i>18.987</i>	<i>26.313</i>
✓5	20		180	179.5	<i>0.039</i>	<i>19.059</i>	<i>26.299</i>
✓6	19		160	161.0	<i>0.091</i>	<i>19.112</i>	<i>26.289</i>
✓7	18		150	150.3	<i>0.179</i>	<i>19.155</i>	<i>26.281</i>
✓8	17		140	140.0	<i>0.259</i>	<i>19.185</i>	<i>26.276</i>
✓9	16		130	129.1	<i>0.537</i>	<i>19.206</i>	<i>26.271</i>
✓10	15		120	119.9	<i>0.874</i>	<i>19.231</i>	<i>26.265</i>
✓11	14		115	118.3	<i>1.446</i>	<i>19.260</i>	<i>26.258</i>
✓12	13		110	109.5	<i>1.746</i>	<i>19.300</i>	<i>26.249</i>
✓13	12		105	104.2	<i>0.559</i>	<i>19.334</i>	<i>26.240</i>
✓14	11		100	100.1	<i>0.354</i>	<i>19.406</i>	<i>26.223</i>
✓15	10		90	90.1	<i>0.310</i>	<i>19.484</i>	<i>26.204</i>
✓16	9		80	79.9	<i>0.200</i>	<i>19.647</i>	<i>26.164</i>
✓17	8		70	70.1	<i>0.135</i>	<i>19.879</i>	<i>26.111</i>
✓18	7		60	59.8	<i>0.127</i>	<i>20.362</i>	<i>25.994</i>
✓19	6		50	50.3	<i>0.091</i>	<i>20.602</i>	<i>25.938</i>
✓20	5		40	39.7	<i>0.083</i>	<i>21.188</i>	<i>25.748</i>
✓21	4		30	30.0	<i>0.061</i>	<i>22.629</i>	<i>25.378</i>
✓22	3		20	19.9	<i>0.047</i>	<i>24.237</i>	<i>24.896</i>
23	2		10	10.1	<i>0.054</i>	<i>27.864</i>	<i>23.789</i>
24	1		0	2.5	<i>0.047</i>	<i>29.192</i>	<i>23.414</i>

chl max = 110

CTD Log Sheet

cruise: OCEANUS 415-2	type: CTD/ROSETTE	station: 09
leg: TRACER-I	cast #: 1	depth: 700m

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	20 JUL 05	0212	30-20.040	66-58.06	SHP	STW 5.
On Deck	"	11259	30-19.38	66-57.93	-	-

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
✓1	24	55 B	700	701.5	0.003	15.251	26.750 drop#:
✓2	23		500	500.2	0.003	17.991	26.472
✓3	22		300	299.7	0.003	18.563	26.388
✓4	21		200	199.8	0.003	18.907	26.327
✓5	20		180	179.2	0.010	18.992	26.311
✓6	19		160	159.7	0.039	19.053	26.298
✓7	18		150	150.5	0.047	19.087	26.293
✓8	17		140	140.4	0.098	19.125	26.286
✓9	16		130	129.8	0.164	19.153	26.280
✓10	15		120	119.7	0.332	19.193	26.275
✓11	14		110	109.3	0.420	19.211	26.270
✓12	13		105	104.0	1.072	19.232	26.266
✓13	12		100	98.9	1.973	19.264	26.257
✓14	11		95	94.9	2.054	19.311	26.245
✓15	10		90	90.2	0.442	19.374	26.229
✓16	9		80	79.7	0.171	19.586	26.185
✓17	8		70	70.1	0.193	19.729	26.146
✓18	7		60	60.5	0.105	19.957	26.095
✓19	6		50	50.0	0.105	20.495	25.945
✓20	5		40	39.5	0.076	21.411	25.712
✓21	4		30	30.0	0.054	22.334	25.477
✓22	3		20	19.6	0.039	24.421	24.887
23	2		10	10.2	0.054	28.109	23.636
24	1		0	2.3	0.032	29.172	23.401

CTD Log Sheet

cruise: <i>OCEANUS 415-2</i>	type: <i>CTD/ROSCITE</i>	station: <i>10</i>
leg: <i>TRACER I</i>	cast #: <i>1</i>	depth: <i>700m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>20 JUL 05</i>	<i>0347</i>	<i>30-25.32</i>	<i>66-58.09</i>	<i>SHIP</i>	<i>STOWS</i>
On Deck		<i>0446</i>	<i>30-24.86</i>	<i>66-58.43</i>	-	-

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	<i>ch A</i> Time Fired (z)	Temp At Bottle Fire	<i>Jo</i> Remarks
✓1	24	<i>SS14?</i>	<i>700</i>	<i>700.2</i>	<i>0.009</i>	<i>14.512</i>	<i>26.820</i> drop#:
✓2	23		<i>500</i>	<i>497.0</i>	<i>0.003</i>	<i>17.998</i>	<i>26.470</i>
✓3	22		<i>300</i>	<i>300.8</i>	<i>0.003</i>	<i>18.614</i>	<i>26.390</i>
✓4	21		<i>200</i>	<i>200.1</i>	<i>0.003</i>	<i>18.939</i>	<i>26.322</i>
✓5	20		<i>180</i>	<i>179.4</i>	<i>0.003</i>	<i>18.976</i>	<i>26.314</i>
✓6	19		<i>160</i>	<i>159.2</i>	<i>0.164</i>	<i>19.017</i>	<i>26.306</i>
✓7	18		<i>150</i>	<i>149.6</i>	<i>0.296</i>	<i>19.038</i>	<i>26.303</i>
✓8	17		<i>140</i>	<i>139.8</i>	<i>0.655</i>	<i>19.058</i>	<i>26.296</i>
✓9	16		<i>130</i>	<i>130.1</i>	<i>0.655</i>	<i>19.130</i>	<i>26.282</i>
✓10	15		<i>120</i>	<i>120.2</i>	<i>0.750</i>	<i>19.171</i>	<i>26.277</i>
✓11	14		<i>110</i>	<i>110.3</i>	<i>0.948</i>	<i>19.209</i>	<i>26.271</i>
✓12	13		<i>100</i>	<i>101.4</i>	<i>0.911</i>	<i>19.220</i>	<i>26.266</i>
✓13	12		<i>95</i>	<i>95.1</i>	<i>1.124</i>	<i>19.230</i>	<i>26.264</i>
✓14	11		<i>90</i>	<i>90.9</i>	<i>1.776</i>	<i>19.261</i>	<i>26.257</i>
✓15	10		<i>85</i>	<i>86.4</i>	<i>1.295</i>	<i>19.315</i>	<i>26.244</i>
✓16	9		<i>80</i>	<i>81.6</i>	<i>0.457</i>	<i>19.370</i>	<i>26.231</i>
✓17	8		<i>70</i>	<i>68.8</i>	<i>0.179</i>	<i>19.680</i>	<i>26.154</i>
✓18	7		<i>60</i>	<i>59.7</i>	<i>0.149</i>	<i>19.837</i>	<i>26.117</i>
✓19	6		<i>50</i>	<i>49.7</i>	<i>0.076</i>	<i>20.425</i>	<i>25.962</i>
✓20	5		<i>40</i>	<i>39.8</i>	<i>0.061</i>	<i>21.190</i>	<i>25.767</i>
✓21	4		<i>30</i>	<i>29.2</i>	<i>0.054</i>	<i>23.504</i>	<i>25.114</i>
✓22	3		<i>20</i>	<i>20.2</i>	<i>0.047</i>	<i>26.069</i>	<i>24.346</i>
23	2		<i>10</i>	<i>10.3</i>	<i>0.054</i>	<i>28.560</i>	<i>23.589</i>
24	1		<i>0</i>	<i>3.0</i>	<i>0.047</i>	<i>29.253</i>	<i>23.323</i>

SS14 was probably used for this cast / Jo 28 Jul 05

CTD Log Sheet

cruise: OCEANUS 415-2	type: CTD/ROSETTE	station: 11
leg: TRACER 1	cast #: 1	depth: 700m

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	20 Jul 05	0545	30° 30.901	66° 58.271		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	chl Time Fired (z)	Temp At Bottle Fire	Remarks
1	24	5515	700	700.4	0.010	13.970	26.861 drop#:
2	23		500	499.9	0.003	17.993	26.471
3	22		300	300.6	0.005	18.640	26.383
4	21		200	199.3	0.003	18.833	26.337
5	20		180	180.9	0.010	18.905	26.324
6	19		160	161.0	0.003	18.961	26.316
7	18		150	150.8	0.010	18.983	26.311
8	17		140	139.9	0.017	19.014	26.306
9	16		130	129.9	0.047	19.053	26.298
10	15		120	120.0	0.120	19.103	26.288
11	14		110	110.3	0.325	19.152	26.280
12	13		105	104.9	0.530	19.182	26.274
13	12		100	99.8	0.926	19.202	26.269
14	11		95	95.0	2.398	19.242	26.260
15	10		90	89.7	0.984	19.310	26.243
16	9		80	80.7	0.428	19.361	26.233
17	8		70	69.4	0.135	19.643	26.162
18	7		60	60.2	0.127	19.821	26.118
19	6		50	50.3	0.076	20.265	26.009
20	5		40	40.0	0.098	21.000	25.825
21	4		30	30.4	0.069	21.907	25.580
22	3		20	20.4	0.061	23.343	25.190
23	2		10	10.8	0.047	24.496	24.622
24	1		0	2.1	0.039	29.009	23.435

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette</i>	station: <i>#12</i>
leg: <i>Tracer 1</i>	cast #: <i>A</i>	depth: <i>700m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>20 Jul 05</i>	<i>0722</i>	<i>30°36.413'</i>	<i>66°58.127'</i>		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	<i>chl</i> Time Fired (z)	Temp At Bottle Fire	<i>σ_θ</i> Remarks
1	24	<i>SS 16</i>	<i>700</i>	<i>700.0</i>	<i>0.0</i>	<i>14.334</i>	<i>26.835</i> drop#:
2	23		<i>500</i>	<i>499.7</i>	<i>0.0</i>	<i>17.968</i>	<i>26.472</i>
3	22		<i>300</i>	<i>300.4</i>	<i>0.0</i>	<i>18.652</i>	<i>26.372</i>
4	21		<i>200</i>	<i>200.3</i>	<i>0.010</i>	<i>18.963</i>	<i>26.318</i>
5	20		<i>180</i>	<i>180.1</i>	<i>0.017</i>	<i>19.014</i>	<i>26.308</i>
6	19		<i>160</i>	<i>159.8</i>	<i>0.069</i>	<i>19.053</i>	<i>26.300</i>
7	18		<i>150</i>	<i>150.5</i>	<i>0.105</i>	<i>19.084</i>	<i>26.294</i>
8	17		<i>140</i>	<i>140.3</i>	<i>0.135</i>	<i>19.103</i>	<i>26.290</i>
9	16		<i>130</i>	<i>131.0</i>	<i>0.296</i>	<i>19.137</i>	<i>26.283</i>
10	15		<i>120</i>	<i>120.6</i>	<i>0.596</i>	<i>19.143</i>	<i>26.277</i>
11	14		<i>110</i>	<i>109.9</i>	<i>0.581</i>	<i>19.175</i>	<i>26.265</i>
12	13		<i>105</i>	<i>105.5</i>	<i>0.757</i>	<i>19.218</i>	<i>26.260</i>
13	12		<i>100</i>	<i>100.6</i>	<i>1.573</i>	<i>19.270</i>	<i>26.255</i>
14	11		<i>95</i>	<i>95.2</i>	<i>1.351</i>	<i>19.296</i>	<i>26.250</i>
15	10		<i>90</i>	<i>90.3</i>	<i>0.970</i>	<i>19.345</i>	<i>26.238</i>
16	9		<i>80</i>	<i>80.1</i>	<i>0.340</i>	<i>19.438</i>	<i>26.220</i>
17	8		<i>70</i>	<i>70.0</i>	<i>0.266</i>	<i>19.588</i>	<i>26.185</i>
18	7		<i>60</i>	<i>60.8</i>	<i>0.208</i>	<i>19.783</i>	<i>26.135</i>
19	6		<i>50</i>	<i>50.4</i>	<i>0.127</i>	<i>20.203</i>	<i>26.033</i>
20	5		<i>40</i>	<i>40.6</i>	<i>0.091</i>	<i>21.155</i>	<i>25.794</i>
21	4		<i>30</i>	<i>30.6</i>	<i>0.061</i>	<i>22.303</i>	<i>25.480</i>
22	3		<i>20</i>	<i>20.1</i>	<i>0.069</i>	<i>23.227</i>	<i>25.216</i>
23	2		<i>10</i>	<i>10.5</i>	<i>0.047</i>	<i>26.851</i>	<i>24.104</i>
24	1		<i>0</i>	<i>2.2</i>	<i>0.061</i>	<i>28.507</i>	<i>23.566</i>

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette</i>	station: <i>13</i>
leg: <i>Tracer 1</i>	cast #: <i>A</i>	depth: <i>700m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>20 Jul 05</i>	<i>09:07</i>	<i>30°41.670'</i>	<i>66°57.965'</i>		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	chl ($\mu\text{g/l}$) Time Fired (z)	Temp At Bottle Fire	Remarks
1	24	<i>5517</i>	<i>700</i>	<i>700.2</i>	<i>0.010</i>	<i>14.736</i>	<i>26.795</i> drop#:
2	23		<i>500</i>	<i>500.6</i>	<i>0.0</i>	<i>17.781</i>	<i>26.490</i>
3	22		<i>300</i>	<i>300.1</i>	<i>0.003</i>	<i>18.642</i>	<i>26.374</i>
4	21		<i>200</i>	<i>201.0</i>	<i>0.003</i>	<i>18.962</i>	<i>26.317</i>
5	20		<i>180</i>	<i>180.5</i>	<i>0.039</i>	<i>19.014</i>	<i>26.307</i>
6	19		<i>160</i>	<i>160.3</i>	<i>0.039</i>	<i>19.061</i>	<i>26.298</i>
7	18		<i>150</i>	<i>150.1</i>	<i>0.164</i>	<i>19.076</i>	<i>26.292</i>
8	17		<i>140</i>	<i>140.2</i>	<i>0.230</i>	<i>19.120</i>	<i>26.282</i>
9	16		<i>130</i>	<i>130.3</i>	<i>0.296</i>	<i>19.169</i>	<i>26.270</i>
10	15		<i>120</i>	<i>120.3</i>	<i>0.559</i>	<i>19.238</i>	<i>26.258</i>
11	14		<i>115</i>	<i>115.5</i>	<i>0.574</i>	<i>19.268</i>	<i>26.249</i>
12	13		<i>110</i>	<i>109.8</i>	<i>0.611</i>	<i>19.340</i>	<i>26.236</i>
13	12		<i>105</i>	<i>104.7</i>	<i>0.728</i>	<i>19.399</i>	<i>26.225</i>
14	11		<i>100</i>	<i>99.9</i>	<i>0.735</i>	<i>19.454</i>	<i>26.211</i>
15	10		<i>90</i>	<i>90.7</i>	<i>0.362</i>	<i>19.597</i>	<i>26.185</i>
16	9		<i>80</i>	<i>80.3</i>	<i>0.237</i>	<i>19.850</i>	<i>26.130</i>
17	8		<i>70</i>	<i>70.0</i>	<i>0.164</i>	<i>20.216</i>	<i>26.050</i>
18	7		<i>60</i>	<i>60.3</i>	<i>0.142</i>	<i>20.537</i>	<i>25.977</i>
19	6		<i>50</i>	<i>49.9</i>	<i>0.083</i>	<i>20.976</i>	<i>25.855</i>
20	5		<i>40</i>	<i>40.4</i>	<i>0.098</i>	<i>22.154</i>	<i>25.532</i>
21	4		<i>30</i>	<i>30.3</i>	<i>0.054</i>	<i>23.577</i>	<i>25.103</i>
22	3		<i>20</i>	<i>19.9</i>	<i>0.061</i>	<i>25.400</i>	<i>24.591</i>
23	2		<i>10</i>	<i>10.7</i>	<i>0.054</i>	<i>27.149</i>	<i>24.035</i>
24	1		<i>0</i>	<i>2.5</i>	<i>0.061</i>	<i>28.576</i>	23.637 <i>23.637</i>

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette</i>	station: <i>14</i>
leg: <i>Trocer 1</i>	cast #: <i>A</i>	depth: <i>700 m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>20 Jul 05</i>	<i>1036</i>	<i>30°47.090</i>	<i>66°58.116</i>		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Chl ^{mg/l} Time Fired (z)	Temp At Bottle Fire	Remarks
1	✓ 24		700	700.8	.017	14.91	26.785 drop#:
2	✓ 23	<i>SS 18</i>	500	500.2	.003	17.75	26.490
3	✓ 22		300	300.5	.003	18.62	26.375
4	✓ 21		200	201.	.061	18.972	26.308
5	✓ 20		180	182	.105	19.027	26.297
6	✓ 19		160	160.4	0.193	19.113	26.284
7	✓ 18		150	150.1	0.266	19.154	26.275
8	✓ 17		140	140.3	0.413	19.212	26.265
9	✓ 16		130	129.9	0.559	19.266	26.254
10	✓ 15		120	116.0	0.765	19.302	26.246
11	✓ 14		115	107.5	0.735	19.342	26.239
12	✓ 13		110	102.0	0.574	19.509	26.204
13	✓ 12		105	97.5	0.457	19.570	26.185
14	✓ 11		100	93.7	0.354	19.630	26.168
15	✓ 10		90	88.9	0.318	19.734	26.148
16	✓ 9		80	79.9	0.222	19.961	26.099
17	✓ 8		70	70.1	0.186	20.270	26.021
18	✓ 7		60	59.8	0.120	20.771	25.903
19	✓ 6		50	50.6	0.091	21.439	25.715
20	✓ 5		40	40.1	0.069	22.424	25.475
21	✓ 4		30	29.6	0.054	23.164	25.236
22	✓ 3		20	19.8	0.039	24.487	24.832
23	✓ 2		10	10.3	0.047	28.231	23.755
24	1		0	2.0	0.047	28.868	23.534

CTD Log Sheet

saved in 6c415215.dat

cruise: <i>Oceanus 415-2</i>	type: <i>CTD</i>	station: <i>015</i>
leg: <i>Tracer 2</i>	cast #: <i>A</i>	depth: <i>45m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>20 Jul 05</i>	<i>1522</i>	<i>30°28.717'</i>	<i>66°58.931'</i>		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m) ^(db)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>45</i>	<i>45.5</i>	<i>1523</i>	<i>20.487</i>	drop#:
2	23			"			rolling of ship introduced a spread of ±0.5m in bottle firing depth
3	22			"			
4	21			"			
5	20			"			
6	19			"			
7	18			"			
8	17			"			
9	16			"			
10	15			"			
11	14			"			
12	13			"			
13	12			"			
14	11			"			
15	10			"			
16	9			"			
17	8			"			
18	7			"			
19	6			"			
20	5			"			
21	4			"			
22	3			"			
23	2			"			
24	1			"			

CTD Log Sheet

saved in ocl152156.dat

cruise: <i>Oceanis 415-2</i>	type:	station: <i>015</i>
leg: <i>Tracer 1</i>	cast #: <i>B</i>	depth: <i>35m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>20 Jul 05</i>	<i>1551</i>	<i>30°27.475'</i>	<i>66°58.648'</i>		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>35 m</i>	<i>34.9</i>	<i>15:54</i>		drop#:
2	23						$\sigma_\theta = 25.807$
3	22						$25.65 \approx \sigma_\theta \approx 25.85$
4	21						σ_θ tended to
5	20						decrease over
6	19						course of deployment
7	18						$34.8 \approx \text{depth} \approx 35.2$
8	17						
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1			↓			

CTD Log Sheet

saved as o415215d.dat

cruise: <i>Oceanus 415-2</i>	type:	station: <i>015</i>
leg: <i>Tracer 1</i>	cast #: <i>D</i>	depth:

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>20 3 105</i>	<i>1648</i>	<i>30° 25.721'</i>	<i>66° 58.254'</i>		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>15 m</i>	<i>15.3^{±0.4}</i>			drop#:
2	23						$\sigma_\theta = 24.701$
3	22						$24.7 \approx \sigma_\theta \approx 25.1$
4	21						
5	20						
6	19						
7	18						
8	17						
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1						

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette</i>	station: <i>16</i>
leg: <i>TRACKER 1</i>	cast #: <i>1</i>	depth: <i>700M</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>20 JUL 05</i>	<i>1725</i>	<i>30-25.72</i>	<i>66-59.04</i>	<i>SHIP</i>	<i>Stew 5</i>
On Deck		<i>1873</i>	<i>30-25.66</i>	<i>66-59.13</i>	<i>-</i>	<i>-</i>

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	<i>che a</i> Time Fired (z)	Temp At Bottle Fire	<i>σ_t</i> Remarks
✓1	24		700	700.6	0.010	14.631	26.809 drop#:
✓2	23	<i>5519</i>	500	499.0	0.003	17.990	26.471
✓3	22		300	299.3	0.003	18.602	26.388
✓4	21		200	198.9	0.003	18.878	26.331
✓5	20		180	179.2	0.003	18.922	26.323
✓6	19		160	159.9	0.017	18.967	26.315
✓7	18		150	149.9	0.039	18.987	26.310
✓8	17		140	139.6	0.105	19.001	26.308
✓9	16		130	127.1	0.376	19.031	26.302
✓10	15		120	120.4	0.567	19.064	26.295
✓11	14		110	108.3	0.406	19.102	26.288
✓12	13		100	98.4	0.743	19.176	26.275
✓13	12		95	96.3	1.724	19.225	26.265
✓14	11		90	87.3	3.824	19.283	26.252
✓15	10		85	82.2	0.999	19.334	26.239
✓16	9		80	75.4	0.318	19.428	26.216
✓17	8		70	70.2	0.200	19.473	26.206
✓18	7		60	59.9	0.135	19.718	26.143
✓19	6		50	49.9	0.076	20.117	26.038
✓20	5		40	40.2	0.061	20.551	25.951
✓21	4		30	30.1	0.039	21.834	25.599
✓22	3		20	20.2	0.032	23.549	25.189
23	2		10	10.0	0.017	28.773	23.487
24	1		0	3.2	0.077	29.427	23.253

CTD Log Sheet

cruise: <i>Oceanus 413-2</i>	type: _____	station: <i>17</i>
leg: <i>Tracer 2</i>	cast #: <i>A</i>	depth: _____

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>22 Jul 05</i>	<i>16:21</i>	<i>30°-21.119</i>	<i>67° 8.978</i>		<i>R Dall</i>
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth ^{db} (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>10</i>	<i>10.0 ± 0.7</i>			drop#:
2	23		↓				<i>235500 < 2365</i>
3	22						
4	21						
5	20						
6	19						
7	18						
8	17						
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1						

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type:	station: <i>17</i>
leg: <i>Tracer 2</i>	cast #: <i>B</i>	depth:

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>22 Jul 05</i>	<i>1649</i>	<i>30-21.33</i>	<i>67-8.70</i>		<i>R. Dell</i>
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth ^{db} (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>20 m</i>	<i>20.1 ± 0.5</i>			drop#:
2	23		↓				<i>25.15 σ_θ < 25.25</i>
3	22						
4	21						
5	20						
6	19						
7	18						
8	17						
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1						

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette 7Ae</i>	station: <i>17</i>
leg: <i>Tracer #1</i>	cast #: <i>C</i>	depth: <i>30m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>22 Jul 05</i>	<i>1715</i>	<i>30-21.98</i>	<i>67-09.04</i>	—	<i>Stews</i>
On Deck	11					

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth ^{db} (m)	Time-Fired ^{ch19} (z)	Temp At Bottle Fire	Remarks
✓1	24		<i>30m</i>	<i>30.0</i>	<i>22.08</i>	<i>22.081</i>	<i>25.530</i> drop#:
✓2	23						<i><0.6</i>
✓3	22						<i>25.525</i>
4	21			<i>30.2</i>			<i>25.524</i>
5	20			<i>29.8</i>			<i>25.523</i>
6	19			<i>30.1</i>			<i>25.526</i>
7	18					<i>22.111</i>	<i>25.531</i>
8	17						<i>25.528</i>
9	16					<i>22.094</i>	
10	15						<i>25.535</i>
11	14			<i>29.4</i>			
12	13						<i>25.559</i>
13	12					<i>22.041</i>	<i>25.552</i>
14	11						<i>25.557</i>
15	10			<i>29.5</i>		<i>22.085</i>	
16	9					<i>22.092</i>	
17	8						<i>25.522</i>
18	7					<i>22.152</i>	<i>25.513</i>
19	6					<i>25.158</i>	
20	5						<i>25.518</i>
21	4					<i>22.144</i>	
22	3					<i>22.138</i>	
23	2						<i>25.525</i>
24	1						<i>25.522</i>

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette 7Be</i>	station: <i>17</i>
leg: <i>Tracer # 1</i>	cast #: <i>D</i>	depth: <i>60m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>22 Jul 05</i>					
On Deck	<i>"</i>	<i>1759</i>	<i>30-20.95</i>	<i>67-0883</i>	<i>-</i>	<i>Stews</i>

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth ^{db} (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>60m</i>	<i>60.0</i>		<i>20.053</i>	<i>26.082</i> <i>drop#:</i>
2	23					<i>20.033</i>	<i>< 0 <</i>
3	22					<i>20.000</i>	<i>26</i>
4	21						<i>26.085</i>
5	20			<i>60.2</i>			
6	19						<i>26.091</i>
7	18					<i>19.936</i>	
8	17			<i>60.2</i>			
9	16					<i>19.940</i>	<i>19.940</i> <i>fs</i>
10	15						<i>26.086</i>
11	14			<i>60.6</i>			
12	13					<i>19.942</i>	
13	12						<i>26.083</i>
14	11			<i>60.7</i>			
15	10						<i>26.084</i>
16	9					<i>19.975</i>	
17	8						<i>26.088</i>
18	7			<i>59.8</i>			
19	6					<i>19.950</i>	
20	5						<i>26.089</i>
21	4			<i>60.0</i>			
22	3					<i>19.945</i>	
23	2						<i>26.095</i>
24	1			<i>↓</i>		<i>19.941</i>	

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette</i>	station: <i># 18</i>
leg: <i>Tracer #1</i>	cast #: <i>1</i>	depth: <i>700 m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>22 Jul 05</i>	<i>1815</i>	<i>30-21.08</i>	<i>67-08.72</i>	<i>Ship</i>	<i>R Dell Skus</i>
On Deck	<i>"</i>	<i>1907</i>	<i>30-20.99</i>	<i>67-08.22</i>		<i>26.25 = 102</i>

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	<i>Sal</i> Time Fired (z)	<i>Td</i> Temp At Bottle Fire	<i>σ_θ</i> Remarks
✓1	24		700	700.5	<i>35.955</i>	<i>14.652</i>	<i>26.810</i> drop#:
✓2	23	<i>SS 20</i>	500	<i>498.8</i>	<i>35.533</i>	<i>17.797</i>	<i>26.473</i>
✓3	22		300	<i>300.3</i>	<i>36.607</i>	<i>18.479</i>	<i>26.398</i>
✓4	21		200	<i>200.3</i>	<i>36.654</i>	<i>18.837</i>	<i>26.337</i>
✓5	20		180	<i>179.9</i>	<i>36.666</i>	<i>18.921</i>	<i>26.324</i>
✓6	19		160	<i>160.1</i>	<i>36.674</i>	<i>19.000</i>	<i>26.309</i>
✓7	18		150	<i>149.7</i>	<i>36.680</i>	<i>19.064</i>	<i>26.297</i>
✓8	17		140	<i>140.1</i>	<i>36.687</i>	<i>19.122</i>	<i>26.287</i>
✓9	16		130	<i>129.8</i>	<i>36.692</i>	<i>19.165</i>	<i>26.279</i>
✓10	15		120	<i>120.0</i>	<i>36.696</i>	<i>19.201</i>	<i>26.273</i>
✓11	14		110	<i>110.1</i>	<i>36.698</i>	<i>19.249</i>	<i>26.261</i>
✓12	13		105	<i>104.3</i>	<i>36.698</i>	<i>19.275</i>	<i>26.255</i>
✓13	12		100	<i>101.8</i>	<i>36.698</i>	<i>19.293</i>	<i>26.250</i> <i>249</i>
✓14	11		95	<i>93.7</i>	<i>36.701</i>	<i>19.365</i>	<i>26.232</i>
✓15	10		90	<i>89.5</i>	<i>36.704</i>	<i>19.406</i>	<i>26.222</i>
✓16	9		80	<i>80.0</i>	<i>36.709</i>	<i>19.489</i>	<i>26.205</i>
✓17	8		70	<i>70.0</i>	<i>36.712</i>	<i>19.693</i>	<i>26.151</i>
✓18	7		60	<i>60.1</i>	<i>36.719</i>	<i>19.895</i>	<i>26.114</i>
✓19	6		50	<i>49.8</i>	<i>36.733</i>	<i>20.566</i>	<i>25.934</i>
✓20	5		40	<i>40.0</i>	<i>36.739</i>	<i>20.935</i>	<i>25.842</i>
✓21	4		30	<i>30.0</i>	<i>36.756</i>	<i>21.969</i>	<i>25.554</i>
✓22	3		20	<i>20.1</i>	<i>36.770</i>	<i>23.369</i>	<i>25.144</i>
✓23	2		10	<i>10.1</i>	<i>36.826</i>	<i>28.177</i>	<i>23.726</i>
✓24	1		0	<i>3.1</i>	<i>36.836</i>	<i>28.999</i>	<i>23.666</i>

26.25

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type:	station: <i>19</i>
leg: <i>Tracer 2</i>	cast #: <i>A</i>	depth: <i>700m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>26 Jul 05</i>	<i>12:06</i>	<i>28° 24.338'</i>	<i>66° 33.628'</i>		<i>R. Dell</i>
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m) ^{db}	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		700	701.0	<i>chl</i>	11.62	27.08 drop#: ✓
2	23		500	500.3	<i>chl</i>	15.910	26.69 ✓
3	22		300	300.2	<i>chl</i>	18.085	26.44 ✓
4	21		200	200.5	<i>chl</i>	18.675	26.34 ✓
5	20		180	180.3	<i>chl</i>	18.830	26.32 ✓
6	19		160	159.8	<i>Fluorometer</i>	18.994	26.30 ✓
7	18		150	149.6	<i>Fluorometer</i>	19.057	26.29 ✓
8	17		140	139.9	<i>Fluorometer</i>	19.184	26.27 ✓
9	16		130	130.6	<i>Fluorometer</i>	19.239	26.25 ✓
10	15		120	124.7	<i>Fluorometer</i>	19.261	26.245 ✓
11	14		110	120.1	<i>Fluorometer</i>	19.382	26.22 ✓
12	13		100	114.9	<i>Fluorometer</i>	19.496	26.20 ✓
13	12		105	110.4	<i>Fluorometer</i>	19.588	26.18 ✓
14	11		100	100.1	<i>Fluorometer</i>	19.807	26.14 ✓
15	10		90	89.8	<i>Fluorometer</i>	20.026	26.08 ✓
16	9		80	79.8	<i>Fluorometer</i>	20.275	26.03 ✓
17	8		70	70.1	<i>Fluorometer</i>	20.950	25.93 ✓
18	7		60	60.2	<i>Fluorometer</i>	21.521	25.77 ✓
19	6		50	51.0	<i>Fluorometer</i>	22.264	25.54 ✓
20	5		40	39.6	<i>Fluorometer</i>	22.945	25.31 ✓
21	4		30	30.1	<i>Fluorometer</i>	24.045	24.98 ✓
22	3		20	20.2	<i>Fluorometer</i>	28.070	23.66 ✓
23	2		10	10.2	<i>Fluorometer</i>	29.109	23.65 ✓
24	1		0	2.3	<i>Fluorometer</i>	28.108	23.65 ✓

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type:	station: <i>20</i>
leg: <i>Tracer 2</i>	cast #: <i>A</i>	depth: <i>10m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>26 Jul 05</i>	<i>13:47</i>	<i>28°22.159</i>	<i>66°34.860</i>		<i>R. Dell</i>
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>10m</i>	<i>11m ± 1m</i>		<i>28.186</i>	drop#:
2	23						<i>23.652 ± 0.1</i>
3	22						
4	21						
5	20						
6	19						
7	18						
8	17						
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1			<i>↓</i>			

CTD Log Sheet

cruise: <i>OC 415-2</i>	type:	station: <i>20</i>
leg: <i>Tracer 2</i>	cast #: <i>B</i>	depth:

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>26 30/05</i>	<i>1549</i>	<i>28°19.82</i>	<i>66°35.54</i>		<i>R. Dell</i>
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>25°C</i>	<i>29.5 ± 0.5</i>			drop#:
2	23		<i>temp:</i>	<i>24.4 ± 0.5</i>			<i>24.60 < σ_θ < 24.75</i>
3	22						
4	21						
5	20						
6	19						
7	18						
8	17						
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1						

CTD Log Sheet

cruise: <i>OC 415-2</i>	type:	station: <i>20</i>
leg: <i>Tracer #2</i>	cast #: <i>C</i>	depth: <i>40m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>26 Jul 05</i>	<i>16:18</i>	<i>28° 19.380</i>	<i>66° 35.244</i>		<i>R. Dell</i>
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>40</i>	<i>41.6 ± 1</i>		<i>22.442</i>	drop#:
2	23						<i>25.35 < σ_θ < 25.5</i>
3	22						
4	21						
5	20						
6	19						
7	18						
8	17						
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1						

CTD Log Sheet

cruise: <i>OC 415-2</i>	type:	station: <i>20</i>
leg: <i>Tracer 2</i>	cast #: <i>D</i>	depth: <i>10</i> <i>50m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>26 Jul 05</i>	<i>16:50</i>	<i>28° 18.870</i>	<i>66° 34.895</i>		<i>R. Dell</i>
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth ^{db} (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>50</i>	<i>49.8 ± 1</i>		<i>21.7 ± 0.2</i>	drop#:
2	23						<i>σ_θ = 25.56 ± 1</i>
3	22						
4	21						
5	20						
6	19						
7	18						
8	17						
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1						

CTD Log Sheet

cruise: OC 415-2	type: CTD-Rosette 9Be	station: 20
leg: Tracer 1	cast #: E	depth: 60m

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	26 Jul 05	1718	28-18.35	66-34.58	SMP	Stews
On Deck		1732	28-18.09	66-34.44		

at 60m end 1729 Niskin Information 28-18.48N 66-34.48W

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Sal _n Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		60	60.2	36.736	21.356	25.724 drop#:
2	23				36.740	21.317	25.711
3	22			61.1	36.728	21.308	25.724
4	21			60.0	36.736	21.352	25.720
5	20			60.3	36.736	21.356	25.720
6	19			59.6	36.745	21.353	25.725
7	18			60.0	36.737	21.357	25.729
8	17			59.5	36.720	21.363	25.706
9	16			59.4	36.720	21.360	25.704
10	15			59.6	36.718	21.403	25.706
11	14			60.4	36.714	21.363	25.707
12	13			60.3	36.719	21.363	25.704
13	12			60.6	36.713	21.370	25.692
14	11			59.8	36.718	21.406	25.685
15	10			60.3	36.712	21.386	25.683
16	9			60.7	36.713	21.389	25.681
17	8			60.9	36.708	21.406	25.692
18	7			60.3	36.711	21.422	25.708
19	6			60.6	36.709	21.423	25.683
20	5			60.4	36.708	21.414	25.683
21	4			60.5	.703	.402	.684
22	3			60.7	.702	.398	.683
23	2			60.6	.702	.395	.680
24	1			60.0	36.702	21.386	25.675

26.26 = 77m

CTD Log Sheet

cruise: 00415-2	type: CTD Rosette	station: 21
leg: trans	cast #:	depth:

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	28 Jun 05	15:25	30° 01.529'	67° 28.304'		C. Sellers
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	✓ 24		700	701.2		14.96	26.779 ^{26.779} drop#:
2	✓ 23	SS25	500	500.2		17.996	26.471
3	✓ 22		300	300.4		18.541	26.391
4	✓ 21		200	200.8		18.830	26.339
5	✓ 20		180	180.4		18.907	26.326
6	✓ 19		160	160.0		18.947	26.319
7	✓ 18		150	150.5		18.957	26.316
8	✓ 17		140	140.3		18.971	26.313
9	✓ 16		130	130.4		18.985	26.311
10	✓ 15		120	119.8		19.000	26.307
11	✓ 14		110	109.7		19.040	26.301
12	✓ 13		100	100.1		19.097	26.288
13	✓ 12		90	90.1		19.157	26.277
14	✓ 11		85	85.0		19.168	26.275
15	✓ 10		80	80.4		19.212	26.267
16	✓ 9		75	75.1		19.251	26.258
17	✓ 8		70	70.4		19.278	26.246
18	✓ 7		60	60.0		19.53	26.190
19	✓ 6		50	50.1		19.701	26.144
20	✓ 5		40	40.6		19.982	26.061
21	✓ 4		30	29.3		20.710	26.892
22	✓ 3		20	19.9		21.664	25.462
23	✓ 2		10	10.0		26.237	24.209
24	1		0	2.4		26.628	24.100

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>Rosette CTD 7Be</i>	station: <i># 22</i>
leg: <i>TRACER 1</i>	cast #: <i>A</i>	depth: <i>10m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>28 JUL 05</i>	<i>1725</i>	<i>30-02.11</i>	<i>67-29.06</i>	<i>Ship</i>	<i>Stws.</i>
On Deck	<i>"</i>	<i>1737</i>	<i>30-02.18</i>	<i>67-29.09</i>	<i>-</i>	<i>-</i>

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Sal Time-Fired (z)	Temp At Bottle Fire	sigma θ Remarks
1	24		<i>10m</i>	<i>10.0</i>	<i>36.685</i>	<i>26.446</i>	<i>24.165</i> drop#:
2	23			<i>9.9</i>	<i>36.685</i>	<i>26.446</i>	<i>24.134</i>
3	22			<i>10.0</i>			<i>24.165</i>
4	21			<i>10.0</i>		<i>26.445</i>	
5	20			<i>9.9</i>	<i>36.685</i>		
6	19			<i>9.9</i>		<i>26.447</i>	
7	18			<i>9.8</i>		<i>26.463</i>	<i>24.166</i>
8	17			<i>10.0</i>		<i>26.446</i>	<i>24.164</i>
9	16			<i>9.7</i>			<i>24.164</i>
10	15					<i>36.686</i>	
11	14			<i>9.9</i>		<i>26.444</i>	
12	13			<i>9.6</i>			<i>24.164</i>
13	12			<i>10.0</i>			<i>24.166</i>
14	11			<i>9.9</i>		<i>26.445</i>	
15	10			<i>9.8</i>	<i>36.685</i>		
16	9			<i>9.7</i>		<i>26.443</i>	
17	8			<i>9.7</i>	<i>36.685</i>		<i>24.166</i>
18	7			<i>10.2</i>		<i>26.437</i>	
19	6			<i>9.8</i>			<i>24.166</i>
20	5			<i>9.9</i>	<i>36.685</i>		
21	4			<i>9.3</i>			<i>26.166</i>
22	3			<i>9.7</i>	<i>26.444</i>	<i>26.442</i>	
23	2			<i>10.2</i>			<i>24.166</i>
24	1			<i>10.1</i>	<i>36.1684</i>		

CTD Log Sheet

cruise: <i>OCEANUS 415-2</i>	type: <i>Rosette/CTD 7Be</i>	station: <i>22</i>
leg: <i>TRACON 1</i>	cast #: <i>B</i>	depth: <i>2200</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>28 JUL 05</i>	<i>1757</i>	<i>30-02.32</i>	<i>67-29.15</i>	<i>SHIP</i>	<i>STEW 5</i>
On Deck	<i>n</i>	<i>1810</i>	<i>30-02.40</i>	<i>67-29.18</i>		

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24			<i>24.6</i>	<i>7</i>	<i>22.202</i>	drop#:
2	23					<i>22.294</i>	
3	22					<i>22.267</i>	
4	21					<i>22.186</i>	
5	20					<i>22.056</i>	
6	19					<i>21.956</i>	
7	18					<i>21.620</i>	
8	17					<i>21.526</i>	
9	16					<i>21.629</i>	
10	15			<i>24.9</i>		<i>21.481</i>	
11	14					<i>21.706</i>	
12	13					<i>21.628</i>	
13	12					<i>21.835</i>	
14	11					<i>22.106</i>	
15	10			<i>22.9</i>		<i>22.135</i>	
16	9					<i>22.312</i>	
17	8			<i>23.1</i>		<i>22.408</i>	
18	7					<i>22.270</i>	
19	6					<i>22.359</i>	
20	5			<i>23.1</i>		<i>22.534</i>	
21	4					<i>22.508</i>	
22	3			<i>23.0</i>		<i>22.613</i>	
23	2			<i>23.1</i>		<i>22.516</i>	
24	1					<i>22.570</i>	

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>Rosette/CTD 'Be</i>	station: <i>22</i>
leg: <i>Tracer 1</i>	cast #: <i>C</i>	depth: <i>45M</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>28 JUL 05</i>	<i>1831</i>	<i>30-02.59</i>	<i>67-29.24</i>	<i>SHIP</i>	<i>Stws</i>
On Deck	<i>"</i>	<i>1841</i>	<i>30-02.65</i>	<i>67-29.24</i>	<i>-</i>	<i>-</i>

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	sal Time-Fired (z)	Temp At Bottle Fire	Sigma Theta - Remarks
1	24		<i>45m</i>	<i>45.1</i>			drop#:
2	23					<i>19.752</i>	<i>19.75°</i>
3	22				<i>36.715</i>		
4	21						<i>26.138</i>
5	20		<i>44.7</i>				
6	19					<i>19.761</i>	
7	18				<i>36.715</i>		<i>26.139</i>
8	17		<i>45.0</i>				
9	16					<i>19.757</i>	
10	15		<i>45.1</i>				<i>26.138</i>
11	14					<i>19.736</i>	
12	13		<i>45.4</i>				
13	12					<i>19.744</i>	
14	11				<i>36.714</i>		
15	10		<i>44.8</i>				
16	9		<i>45.0</i>			<i>19.734</i>	
17	8						<i>26.141</i>
18	7					<i>19.740</i>	
19	6						<i>26.142</i>
20	5		<i>44.9</i>				
21	4					<i>19.736</i>	
22	3				<i>36.714</i>		
23	2		<i>46.2</i>			<i>19.736</i>	<i>26.142</i>
24	1						<i>26.142</i>

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>Posidonia 7Be</i>	station: <i>22</i>
leg: <i>Tracer 1</i>	cast #: <i>D</i>	depth: <i>60m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>28 JUL 05</i>	<i>1856</i>	<i>30-02.82</i>	<i>67-29.27</i>	<i>Ship</i>	<i>STEW 5.</i>
On Deck	<i>"</i>	<i>1911</i>	<i>30-03.04</i>	<i>67-29.38</i>	<i>-</i>	<i>-</i>

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Sal Time-Fired (z)	Temp At Bottle Fire	Remarks	
1	24		<i>60m</i>	<i>59.3</i>	<i>36.703</i>		<i>26.217</i> drop#:	
2	23		↓	<i>60.2</i>		<i>19.422</i>		
3	22				<i>19.429</i>			
4	21						<i>26.219</i>	
5	20			<i>60.2</i>				
6	19			<i>59.7</i>				<i>26.220</i>
7	18					<i>36.704</i>	<i>19.414</i>	
8	17			<i>59.6</i>				<i>26.218</i>
9	16			<i>60.0</i>			<i>19.415</i>	
10	15			<i>60.0</i>		<i>36.704</i>	<i>19.415</i>	<i>26.219</i>
11	14						<i>19.415</i>	
12	13			<i>60.1</i>				
13	12			<i>60.2</i>			<i>19.415</i>	<i>26.219</i>
14	11			<i>59.6</i>				
15	10					<i>36.704</i>	<i>19.415</i>	
16	9			<i>60.2</i>				<i>26.219</i>
17	8			<i>60.2</i>			<i>19.415</i>	
18	7						<i>19.417</i>	
19	6			<i>59.9</i>			<i>19.416</i>	
20	5							<i>26.219</i>
21	4			<i>59.3</i>				
22	3			<i>60.4</i>				<i>26.218</i>
23	2					<i>36.703</i>	<i>19.416</i>	
24	1			<i>59.9</i>			<i>19.415</i>	

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type:	station: <i>Z3</i>
leg: <i>TRACER1</i>	cast #:	depth: <i>700</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>30 Jul 05</i>	<i>1528</i>	<i>3002.58</i>	<i>67-34.13</i>		<i>R. Dell</i>
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>700</i>	<i>700.6</i>		<i>15.387</i>	<i>26.75</i> drop#: ✓
2	23		<i>500</i>	<i>499.6</i>		<i>17.985</i>	<i>26.475</i> ✓
3	22		<i>300</i>	<i>300.3</i>		<i>18.431</i>	<i>26.406</i> ✓
4	21		<i>200</i>	<i>200.4</i>		<i>18.808</i>	<i>26.342</i> ✓
5	20		<i>180</i>	<i>180.3</i>		<i>18.915</i>	<i>26.325</i> ✓
6	19		<i>160</i>	<i>159.9</i>		<i>18.966</i>	<i>26.316</i> ✓
7	18		<i>150</i>	<i>150.8</i>		<i>18.973</i>	<i>26.313</i> ✓
8	17		<i>140</i>	<i>140.1</i>		<i>18.985</i>	<i>26.311</i> ✓
9	16		<i>130</i>	<i>130.6</i>		<i>18.994</i>	<i>26.309</i> ✓
10	15		<i>120</i>	<i>120.2</i>		<i>19.011</i>	<i>26.306</i> ✓
11	14		<i>110</i>	<i>109.9</i>		<i>19.020</i>	<i>26.304</i> ✓
12	13		<i>100</i>	<i>100.0</i>		<i>19.044</i>	<i>26.298</i> ✓
13	12		<i>90</i>	<i>90.0</i>		<i>19.104</i>	<i>26.284</i> ✓
14	11		<i>85</i>	<i>85.1</i>		<i>19.130</i>	<i>26.277</i> ✓
15	10		<i>80</i>	<i>80.4</i>		<i>19.156</i>	<i>26.271</i> ✓
16	9		<i>75</i>	<i>75.1</i>		<i>19.242</i>	<i>26.252</i> ✓
17	8		<i>70</i>	<i>69.8</i>		<i>19.361</i>	<i>26.230</i> ✓
18	7		<i>60</i>	<i>60.3</i>		<i>19.594</i>	<i>26.173</i> ✓
19	6		<i>50</i>	<i>49.9</i>		<i>19.785</i>	<i>26.129</i> ✓
20	5		<i>40</i>	<i>40.3</i>		<i>20.409</i>	<i>25.995</i> ✓
21	4		<i>30</i>	<i>29.8</i>		<i>20.958</i>	<i>25.834</i> ✓
22	3		<i>20</i>	<i>20.0</i>		<i>23.686</i>	<i>25.065</i> ✓
23	2		<i>10</i>	<i>9.9</i>		<i>26.227</i>	<i>24.220</i> ✓
24	1		<i>0</i>	<i>2.4</i>		<i>27.651</i>	<i>23.727</i> ✓

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette 7Be</i>	station: <i>24</i>
leg: <i>Tracer 1</i>	cast #: <i>A</i>	depth: <i>27m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>30 Jul 05</i>	<i>1710</i>	<i>30-03.33</i>	<i>67-34.94</i>	<i>Ship</i>	<i>Stews</i>
On Deck		<i>1719</i>	<i>30-03.43</i>	<i>67-35.06</i>	<i>-</i>	<i>-</i>

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Sal Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>27m</i>	<i>27.0</i>		<i>21.180</i>	<i>25.772 drop#:</i>
2	23				<i>36.749</i>		
3	22			<i>27.5</i>			
4	21			<i>26.5</i>		<i>21.169</i>	
5	20				<i>36.743</i>	<i>21.123</i>	
6	19						<i>25.793 dl</i>
7	18						<i>25.793</i>
8	17			<i>27.1</i>			
9	16				<i>36.744</i>	<i>21.129</i>	
10	15				<i>36.744</i>		
11	14						<i>25.793</i>
12	13			<i>27.1</i>			
13	12						<i>25.777</i>
14	11			<i>26.9</i>			
15	10					<i>21.131</i>	
16	9						<i>25.780</i>
17	8			<i>27.4</i>			
18	7					<i>21.143</i>	
19	6			<i>27.0</i>			
20	5			<i>27.0</i>			
21	4					<i>21.171</i>	
22	3					<i>21.175</i>	
23	2				<i>36.744</i>		
24	1			<i>↓</i>			<i>25.771</i>

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette 2Be</i>	station: <i>24</i>
leg: <i>Tracon 1</i>	cast #: <i>B</i>	depth: <i>30m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>30 Jul 05</i>	<i>1733</i>	<i>30-03.53</i>	<i>67-35.16</i>	<i>Ship</i>	<i>SKWS.</i>
On Deck	<i>"</i>	<i>1744</i>	<i>30-03.62</i>	<i>67-35.31</i>	<i>-</i>	<i>-</i>

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Sal Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>30m</i>	<i>29.8</i>			drop#:
2	23				<i>36.745</i>	<i>21.031</i>	<i>2</i>
3	22				<i>36.745</i>		<i>2</i>
4	21						<i>25.810</i>
5	20					<i>21.098</i>	
6	19				<i>36.743</i>		
7	18						<i>25.807</i>
8	17			<i>29.9</i>			
9	16				<i>36.741</i>	<i>36.741</i>	
10	15			<i>29.7</i>			
11	14					<i>21.113</i>	
12	13						<i>25.795</i>
13	12			<i>30.2</i>			
14	11					<i>21.061</i>	
15	10						<i>25.796</i>
16	9			<i>30.0</i>			
17	8					<i>21.026</i>	
18	7				<i>36.744</i>		
19	6			<i>30.0</i>			
20	5					<i>21.094</i>	
21	4			<i>29.8</i>			
22	3					<i>21.018</i>	
23	2						<i>25.819</i>
24	1			<i>30.0</i>			

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>CTD/Rosette 7Be</i>	station: <i>Z4</i>
leg: <i>Tracer 1</i>	cast #: <i>C</i>	depth: <i>35m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>30 Jul 05</i>	<i>1801</i>	<i>30-03.79</i>	<i>67-35.47</i>	<i>ship</i>	<i>stews.</i>
On Deck		<i>1812</i>	<i>30-03.89</i>	<i>67-35.57</i>		

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	sal Time Fired (z)	Temp At Bottle Fire	Remarks	
1	24		<i>35 m</i>	<i>35.0</i>			drop#:	
2	23		↓		<i>20.747</i>	<i>20.747</i>		
3	22				<i>36.740</i>			
4	21							<i>25.888</i>
5	20				<i>34.8</i>			
6	19					<i>36.740</i>		
7	18							<i>25.884</i>
8	17						<i>20.762</i>	
9	16						<i>20.760</i>	
10	15				<i>34.8</i>			
11	14							<i>25.888</i>
12	13					<i>36.740</i>		
13	12						<i>20.758</i>	
14	11				<i>35.1</i>			
15	10							<i>25.885</i>
16	9						<i>20.763</i>	
17	8				<i>35.2</i>			
18	7						<i>20.763</i>	
19	6							<i>25.887</i>
20	5						<i>20.755</i>	
21	4					<i>36.740</i>		
22	3				<i>34.8</i>			
23	2				<i>34.6</i>		<i>36.739</i>	
24	1					<i>36.739</i>	<i>36.739</i>	

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>Rosette/CTD 7Be</i>	station: <i>24</i>
leg: <i>Tracer 1</i>	cast #: <i>D</i>	depth: <i>40m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>30 Jul 05</i>	<i>1828</i>	<i>30-04.07</i>	<i>67-35.76</i>	<i>Ship</i>	<i>Stair</i>
On Deck		<i>1838</i>	<i>30-04.18</i>	<i>67-35.85</i>		

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Sal Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>40m</i>	<i>40.1</i>			drop#:
2	23		↓		<i>36.736</i>		
3	22					<i>20.299</i>	
4	21						<i>26.009</i>
5	20			<i>39.8</i>			
6	19					<i>36.734</i>	
7	18						<i>20.275</i>
8	17						<i>26.016</i>
9	16			<i>39.4</i>			
10	15					<i>36.732</i>	
11	14						<i>20.212</i>
12	13						<i>26.023</i>
13	12			<i>40.4</i>			
14	11						<i>20.182</i>
15	10					<i>36.729</i>	
16	9						<i>26.026</i>
17	8			<i>39.8</i>			
18	7					<i>36.729</i>	
19	6						<i>20.175</i>
20	5						<i>26.026</i>
21	4			<i>39.8</i>			
22	3					<i>36.729</i>	
23	2						<i>20.185</i>
24	1			↓			<i>26.034</i>

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type:	station: <i>25</i>
leg: <i>Tracer 1</i>	cast #: <i>A</i>	depth: <i>30 m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>1 Aug 05</i>	<i>1238</i>	<i>30-08.52</i>	<i>67-37.23</i>		<i>R. Dell</i>
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24		<i>10 m</i>	<i>10.0 ± 0.2</i>		<i>27.05</i>	drop#:
2	23					<i>27.66</i>	<i>Goal: 27°C</i>
3	22					<i>27.55</i>	
4	21					<i>27.65</i>	<i>σ_θ = 23.8 ± 0.04</i>
5	20					<i>27.53</i>	<i>T = 27.5 ± 0.2</i>
6	19					<i>27.48</i>	
7	18					<i>27.61</i>	
8	17					<i>27.30</i>	
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1						

CTD Log Sheet

78m = 26.26

cruise: Oceans 415-2	type:	station: 26
leg: Tracer 1	cast #: 26	depth:

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	2 Aug 05	13:40	30° 1.403' N	67° 40.83' W		C Sellers
On Deck		14:19				

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	σ _θ Remarks
1	24	✓	700	700.1		14.871	26.788 drop#:
2	23	✓	500	500.2		17.984	26.473
3	22	✓	300	299.5		18.58	26.387
4	21	✓	200	200.5		18.863	26.335
5	20	✓	180	180.4		18.943	26.319
6	19	✓	160	160.5		19.021	26.305
7	18	✓	150	149.9		19.058	26.298
8	17	✓	140	140.7		19.094	26.292
9	16	✓	130	130.5		19.123	26.286
10	15	✓	120	120.5		19.166	26.278
11	14	✓	110	109.8		19.195	26.273
12	13	✓	100	100.4		19.227	26.265
13	12	✓	90	90.2		19.373	26.229
14	11	✓	85	84.8		19.388	26.225
15	10	✓	80	80.2		19.462	26.205
16	9	✓	75	75.1		19.528	26.185
17	8	✓	70	69.9		19.681	26.151
18	7	✓	60	59.6		19.994	26.086
19	6	✓	50	49.8		20.103	26.049
20	5	✓	40	40.3		20.612	25.912
21	4	✓	30	30.1		21.190	25.772
22	3	✓	20	20.2		24.5	24.775
23	2	✓	10	10.0		26.590	24.146
24	1	✓	0	2.7		27.734	23.767

CTD Log Sheet

cruise: 0c415-2	type:	station: 27
leg:	cast #:	depth: 30 15m

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	1 Aug 05	15:23	29 53.392	67 40.732		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Time Fired (z)	Temp At Bottle Fire	Remarks
1	24			10.6			Goal T = 27°C drop#:
2	23			10.2			
3	22			10.1			
4	21			10.6			
5	20			10.6			
6	19			9.8			
7	18			10.7			
8	17			10.1			
9	16						
10	15						
11	14						
12	13						
13	12						
14	11						
15	10						
16	9						
17	8						
18	7						
19	6						
20	5						
21	4						
22	3						
23	2						
24	1						

CTD Log Sheet

cruise: <i>Oceanus 415-2</i>	type: <i>Ros/CTD 7Be</i>	station: <i>28</i>
leg: <i>TRACER1</i>	cast #: <i>7</i>	depth: <i>270</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water	<i>01 Aug 05</i>	<i>1801</i>	<i>30-01.17</i>	<i>67-30.93</i>	<i>SHP</i>	<i>STW</i>
On Deck		<i>1810</i>	<i>30-01.22</i>	<i>67-30.99</i>	—	—

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Sal Time Fired (z)	Temp At Bottle Fire	Sigma-t Remarks
1	24	<i>27°C</i>	<i>13.6</i>	<i>13.6</i>			drop#:
2	23		<i>27°C</i>			<i>26.998</i>	
3	22		↓		<i>36.661</i>		
4	21						<i>24.000</i>
5	20			<i>12.5</i>			
6	19						<i>26.947</i>
7	18				<i>36.657</i>		
8	17						<i>23.985</i>
9	16			<i>12.3</i>			
10	15				<i>36.656</i>		
11	14					<i>26.928</i>	
12	13						<i>23.989</i>
13	12			<i>12.3</i>			
14	11				<i>36.654</i>		
15	10					<i>26.916</i>	
16	9						<i>23.991</i>
17	8			<i>13.0</i>			
18	7				<i>36.656</i>		
19	6					<i>26.904</i>	
20	5						<i>23.989</i>
21	4			<i>12.8</i>			
22	3				<i>36.652</i>		
23	2					<i>26.929</i>	
24	1						<i>23.985</i>

CTD Log Sheet

cruise: <i>415-2</i>	type:	station: <i>001</i>
leg:	cast #: <i>A</i>	depth: <i>700 m</i>

Position Information

CTD Status	Date (z)	Time (z)	Latitude	Longitude	System	Remarks
In Water			<i>30 31.8</i>	<i>67 14.8</i>		
On Deck						

Niskin Information

Niskin #on CTD	Niskin Serial #/CTD	Unique Bottle ID	Desired Depth (m)	Actual Depth (m)	Ch1 Time Fired (z)	Temp At Bottle Fire	Remarks
<i>1</i>	<i>24</i>		<i>700</i>	<i>701</i>	<i>.01</i>	<i>14.49</i>	<i>fired #1 as hell drop#: SS 2</i>
<i>2</i>	<i>23</i>		<i>500</i>	<i>500.8</i>	<i>.003</i>	<i>17.8</i>	<i>SS 3</i>
<i>3</i>	<i>22</i>		<i>300</i>	<i>301</i>	<i>.003</i>	<i>18.59</i>	<i>SS 4</i>
<i>4</i>	<i>21</i>		<i>200</i>	<i>201</i>	<i>.003</i>	<i>18.93</i>	
<i>5</i>	<i>20</i>		<i>180</i>	<i>181</i>	<i>.003</i>	<i>18.96</i>	
<i>6</i>	<i>19</i>		<i>160</i>	<i>160.3</i>	<i>.006</i>	<i>19.09</i>	
<i>7</i>	<i>18</i>		<i>150</i>	<i>151</i>	<i>.12</i>	<i>19.123</i>	
<i>8</i>	<i>17</i>		<i>140</i>	<i>140.3</i>	<i>.23</i>	<i>19.169</i>	
<i>9</i>	<i>16</i>		<i>130</i>	<i>130.6</i>	<i>.35</i>	<i>19.2</i>	
<i>10</i>	<i>15</i>		<i>120</i>	<i>120.3</i>	<i>.65</i>	<i>19.26</i>	
<i>11</i>	<i>14</i>		<i>110</i>	<i>110.2</i>	<i>.68</i>	<i>19.3</i>	
<i>12</i>	<i>13</i>		<i>100</i>	<i>100.2</i>	<i>.7</i>	<i>19.4</i>	
<i>13</i>	<i>12</i>		<i>90</i>	<i>90.2</i>	<i>.3</i>	<i>19.5</i>	
<i>14</i>	<i>11</i>		<i>80</i>	<i>80.1</i>	<i>.26</i>	<i>19.67</i>	
<i>15</i>	<i>10</i>		<i>70</i>	<i>70.2</i>	<i>.193</i>	<i>19.93</i>	
<i>16</i>	<i>9</i>		<i>60</i>	<i>60.2</i>	<i>.12</i>	<i>20.38</i>	
<i>17</i>	<i>8</i>		<i>50</i>	<i>50.6</i>	<i>.11</i>	<i>20.75</i>	
<i>18</i>	<i>7</i>		<i>40</i>	<i>39</i>	<i>.67</i>	<i>21.71</i>	
<i>19</i>	<i>6</i>		<i>30</i>	<i>30.3</i>	<i>.05</i>	<i>27.15</i>	
<i>20</i>	<i>5</i>		<i>20</i>	<i>20.0</i>	<i>.03</i>	<i>25.05</i>	
<i>21</i>	<i>4</i>		<i>10</i>	<i>10.1</i>	<i>.04</i>	<i>27.84</i>	
<i>22</i>	<i>3</i>		<i>0</i>	<i>2.8</i>	<i>.02</i>	<i>28.64</i>	<i>mistfire</i>
<i>23</i>	<i>2</i>						
<i>24</i>	<i>1</i>		<i>700</i>				<i>Salt SS 1</i>