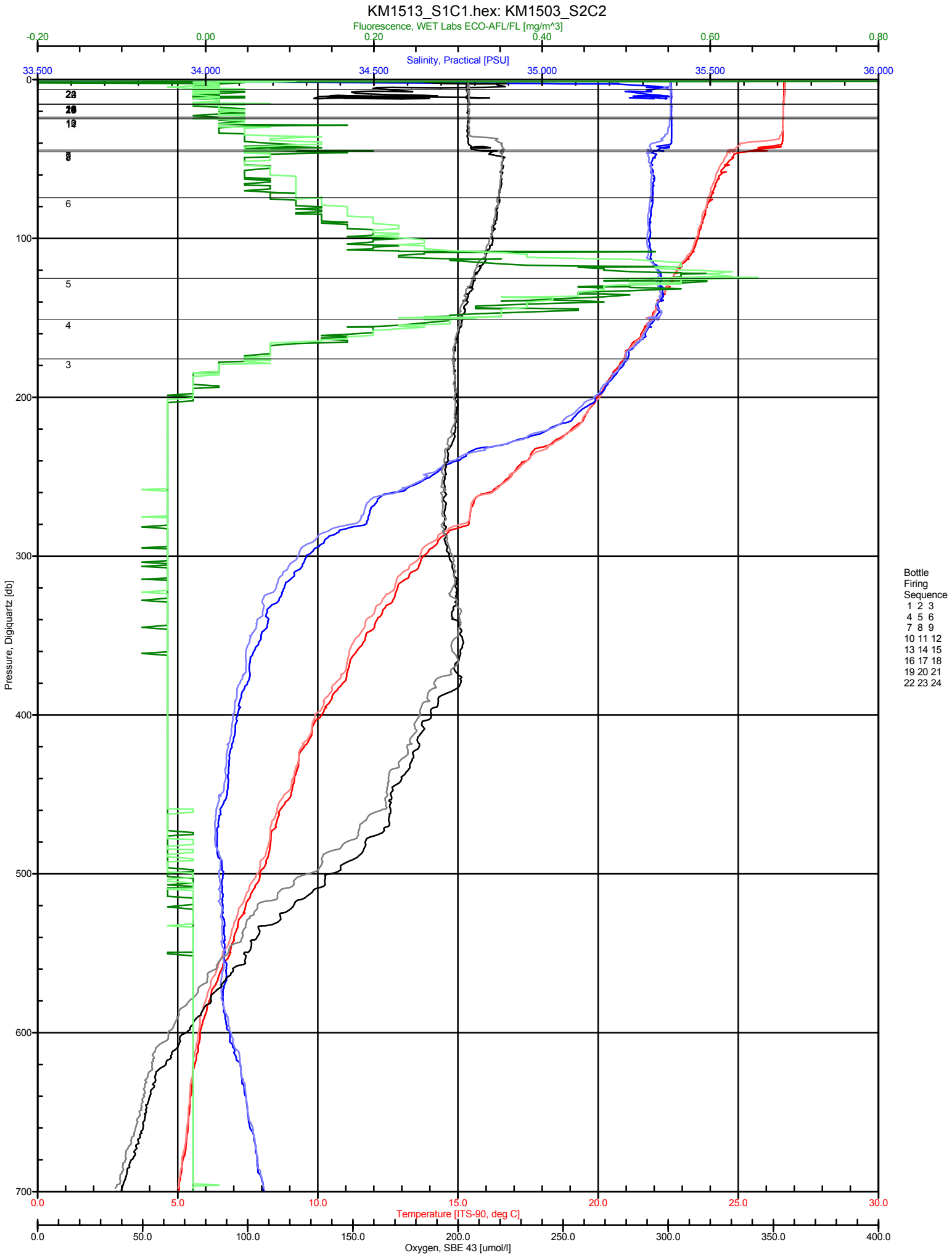
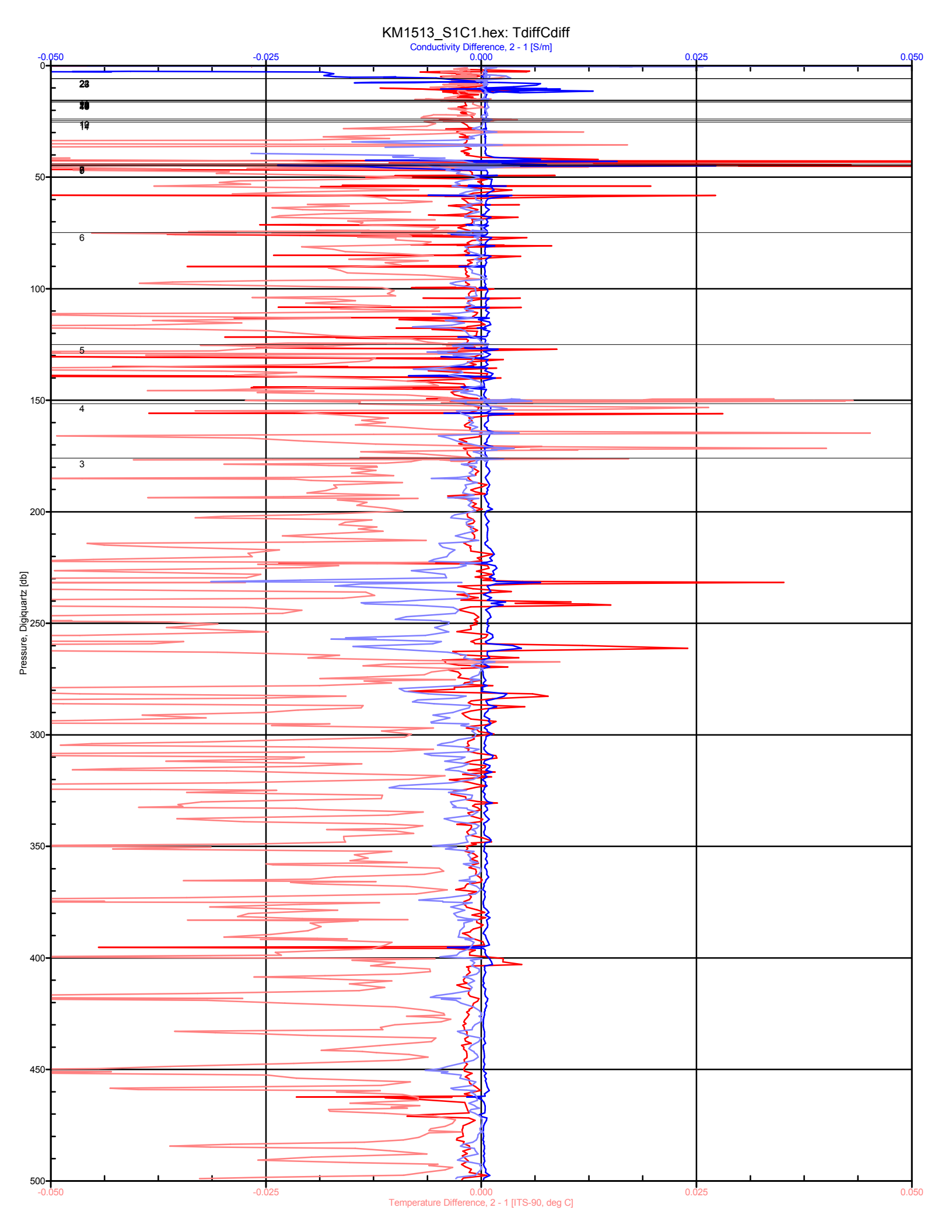
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 1	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 25 Jul**
Time Start Logging HST: 10:13	**Time Start Logging GMT: 20:12**
Pressure on deck	**Time GMT**
Start: 0.359	**In water: 20:23**
End: 0.180	**Out water: 21:06**
Latitude N	**Longitude W**
Start: 24 12.215	**Start: 156 47.695**
End: 24 12.202	**End: 156 47.698**
Max Press: 706	**Operators: AB/SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	700	20:42	704	✓	
2	700	20:43	705	✓	
3	175	20:54	176	✓	
4	150	20:55	150.4	✓	
5	125	20:56	125.4	✓	
6	75	20:57	74.3	✓	
7	45	20:59	44.5	✓	
8	45	20:59	44.8	✓	
9	45	20:59	45.6	✓	
10	25	21:00	23.8	✓	
11	25	21:00	24.7	✓	
12	25	21:00	24.4	✓	
13	15	21:01	15.5	✓	
14	15	21:01	15.2	✓	
15	15	21:01	15.3	✓	
16	15	21:02	16.1	✓	
17	15	21:02	15.4	✓	
18	15	21:02	15.3	✓	
19	15	21:02	14.9	✓	
20	15	21:02	15.5	✓	
21	15	21:02	15	✓	
22	5	21:03	6.5	✓	
23	5	21:04	6.3	✓	
24	5	21:04	5.3	✓	


KM1513_S1C1.hex: KM1503_S2C2
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
100
200
300
400
500
600
700
Bottle Firing Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S1C1.hex: TdiffCdiff
Conductivity Difference, 2 - 1 [S/m]
-0.050
-0.025
0.000
0.025
0.050
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Temperature Difference, 2 - 1 [ITS-90, deg C]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S1C1 Date: 07/25/2015 (HST)

Target Depth (db): 700m CTD Start Time: 0900 (HST)

Rosette Position	Depth (m)	DL	SF	DC	SD	KWB		
1	**700**				X			
2	**700**				X			
3	**175**							
4	**150**			X				
5	**125**			X				
6	**75**			X				
7	**45**			X				
8	**45**					X		
9	**45**					X		
10	**25**					X		
11	**25**					X		
12	**25**							
13	**15**			X				
14	**15**	X						
15	**15**	X						
16	**15**	X						
17	**15**		X					
18	**15**		X					
19	**15**		X					
20	**15**		X					
21	**15**				X			
22	**5**			X				
23	5					X		
24	5					X		

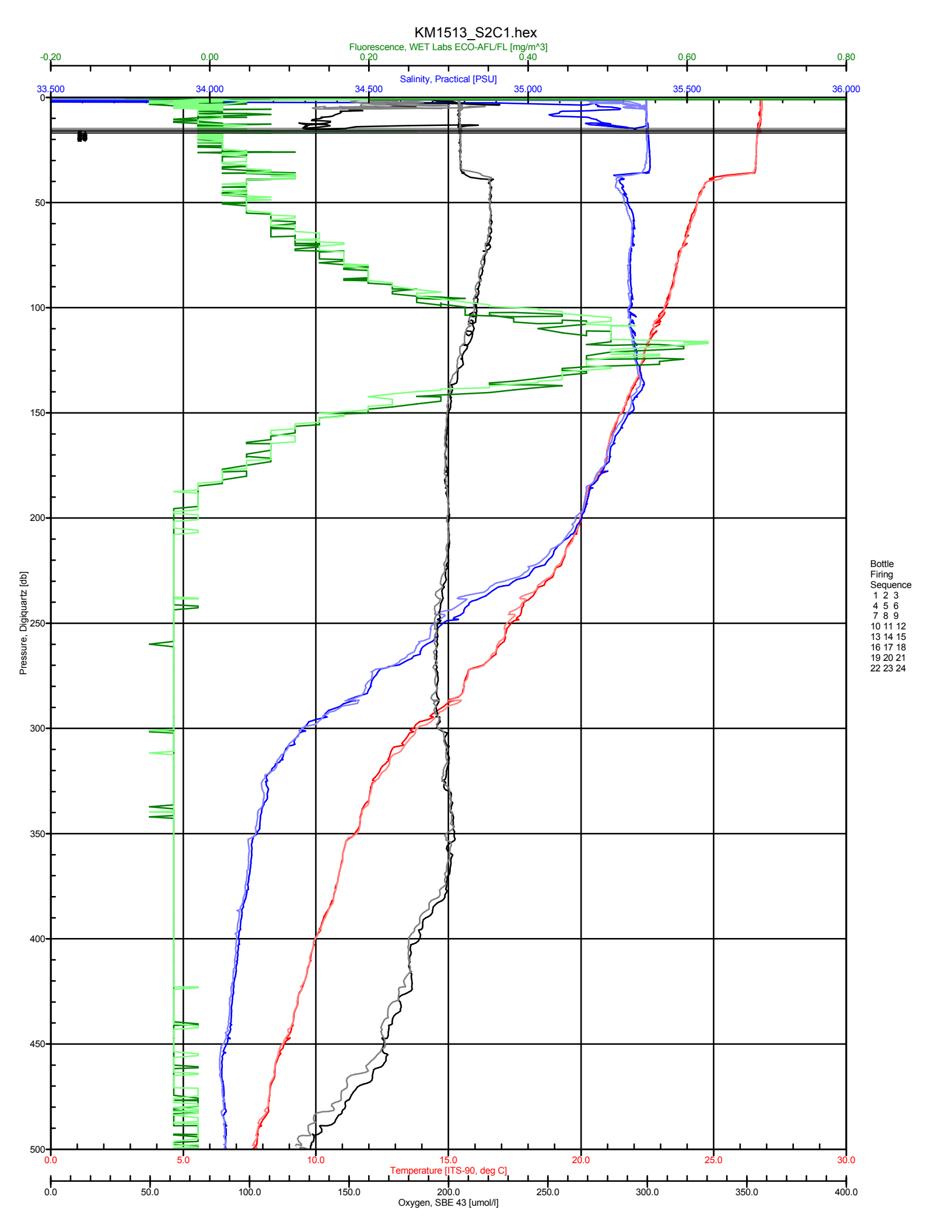
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 2	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 25 Jul**
Time Start Logging HST: 13:13	**Time Start Logging GMT: 23:13**
Pressure on deck	**Time GMT**
Start: 0.197	**In water: 23:24**
End:	**Out water: 00:14**
Latitude N	**Longitude W**
Start: 24 12.210	**Start: 156 47.705**
End: 24 12.206	**End: 156 47.708**
Max Press: 504	**Operators: AB/SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	-CTD to 10m twice -12mins at 15m after firing -Caley crane control error -CTD lowered back into water while engineers address the caley crance control error -End deck pressure not recored
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	23:55	16.3	✓	
2	15	23:55	16.5	✓	
3	15	23:55	16.2	✓	
4	15	23:55	16.7	✓	
5	15	23:55	14.7	✓	
6	15	23:56	16.5	✓	
7	15	23:56	15.6	✓	
8	15	23:56	15.4	✓	
9	15	23:56	16.0	✓	
10	15	23:56	17.0	✓	
11	15	23:56	17.1	✓	
12	15	23:56	15.9	✓	
13	15	23:56	16.5	✓	
14	15	23:57	15.9	✓	
15	15	23:57	16.6	✓	
16	15	23:57	16.9	✓	
17	15	23:57	16.2	✓	
18	15	23:57	16.2	✓	
19	15	23:57	15.7	✓	
20	15	23:57	16.1	✓	
21	15	23:58	16.2	✓	
22	15	23:58	16.7	✓	
23	15	23:58	15.8	✓	
24	15	23:58	15.1	✓	


KM1513_S2C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S2C1 Date: 07/25/2015 (HST)

Target Depth (db): 500m CTD Start Time: 1300 (HST)

Rosette Position	Depth (m)	SD						
1	15	x						
2	15	x						
3	15	x						
4	15	x						
5	15	x						
6	15	x						
7	15	x						
8	15	x						
9	15	x						
10	15	x						
11	15	x						
12	15	x						
13	15	x						
14	15	x						
15	15	x						
16	15	x						
17	15	x						
18	15	x						
19	15	x						
20	15	x						
21	15	x						
22	15	x						
23	15	x						
24	15	x						

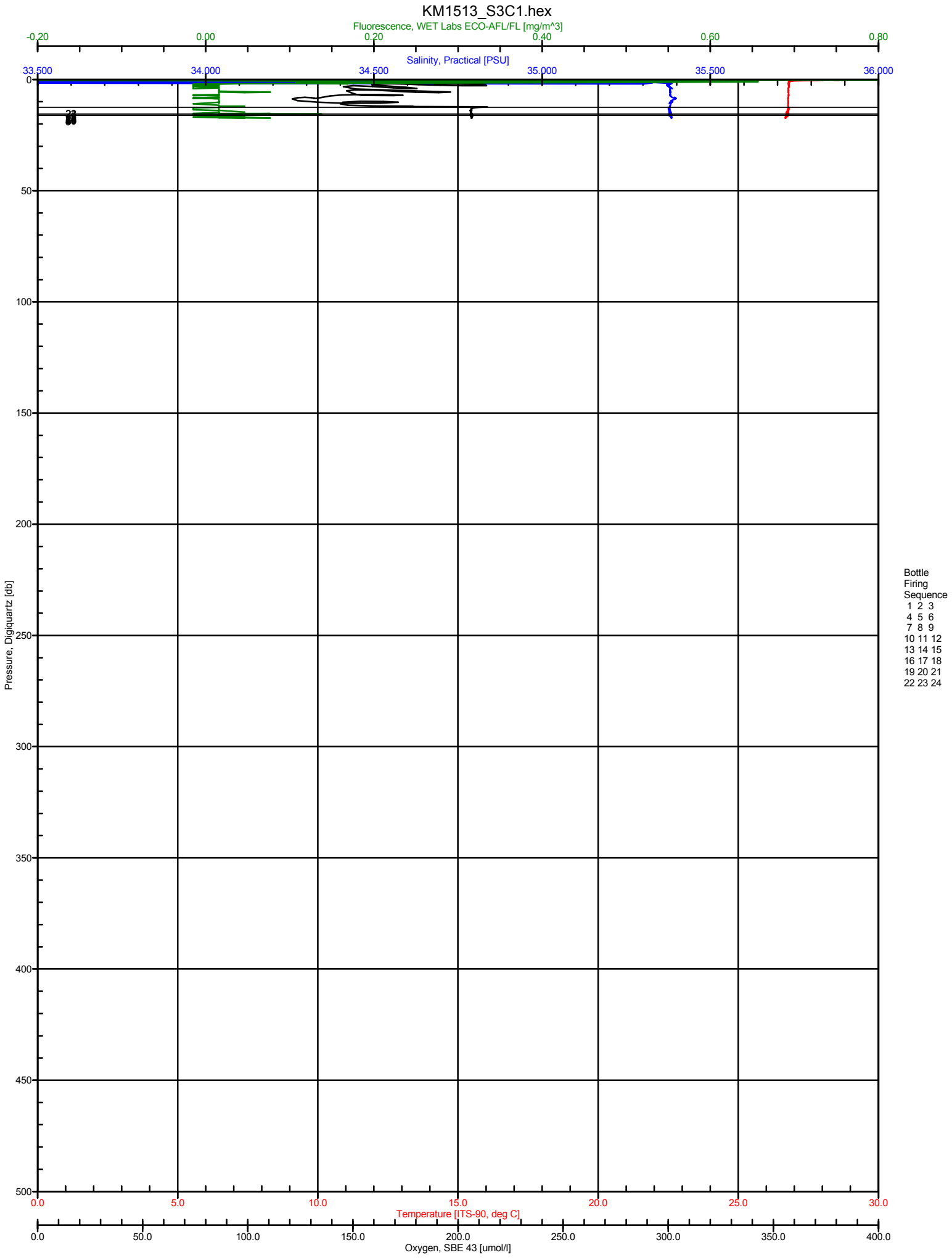
Notes:
Issue with caley crane slew ring, could not recover on deck
Remain station 2 cast 1, next cast station 3 cast 1

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 3	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 26 Jul**
Time Start Logging HST: 16:33	**Time Start Logging GMT: 02:33**
Pressure on deck **Start: 0.190** **End:**	**Time GMT** **In water: 02:34** **Out water: 02:41**
Latitude N **Start: 24 14.327** **End: 24 14.332**	**Longitude W** **Start: 156 48.380** **End: 156 48.378**
Max Press: 17	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	-Electrical error -End pressure on deck not recorded
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	2:36	16.8	✓	
2	15	2:37	16.1	✓	
3	15	2:37	15.6	✓	
4	15	2:37	16.4	✓	
5	15	2:37	16.2	✓	
6	15	2:37	15.6	✓	
7	15	2:37	15.7	✓	
8	15	2:37	15.8	✓	
9	15	2:37	16.0	✓	
10	15	2:37	16.1	✓	
11	15	2:38	15.6	✓	
12	15	2:38	15.8	✓	
13	15	2:38	15.7	✓	
14	15	2:38	15.4	✓	
15	15	2:38	15.6	✓	
16	15	2:38	16.4	✓	
17	15	2:38	15.6	✓	
18	15	2:38	16.0	✓	
19	15	2:38	16.0	✓	
20	15	2:38	15.9	✓	
21	15	2:39	15.7	✓	
22	15	2:39	15.8	✓	
23	15	2:39	15.9	✓	
24	15	2:39	15.7	✓	


KM1513_S3C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S3C1 Date: 07/25/2015 (HST)

Target Depth (db): 15m CTD Start Time: 16:30 (HST)

Rosette Position	Depth (m)	SD						
1	15	x						
2	15	x						
3	15	x						
4	15	x						
5	15	x						
6	15	x						
7	15	x						
8	15	x						
9	15	x						
10	15	x						
11	15	x						
12	15	x						
13	15	x						
14	15	x						
15	15	x						
16	15	x						
17	15	x						
18	15	x						
19	15	x						
20	15	x						
21	15	x						
22	15	x						
23	15	x						
24	15	x						

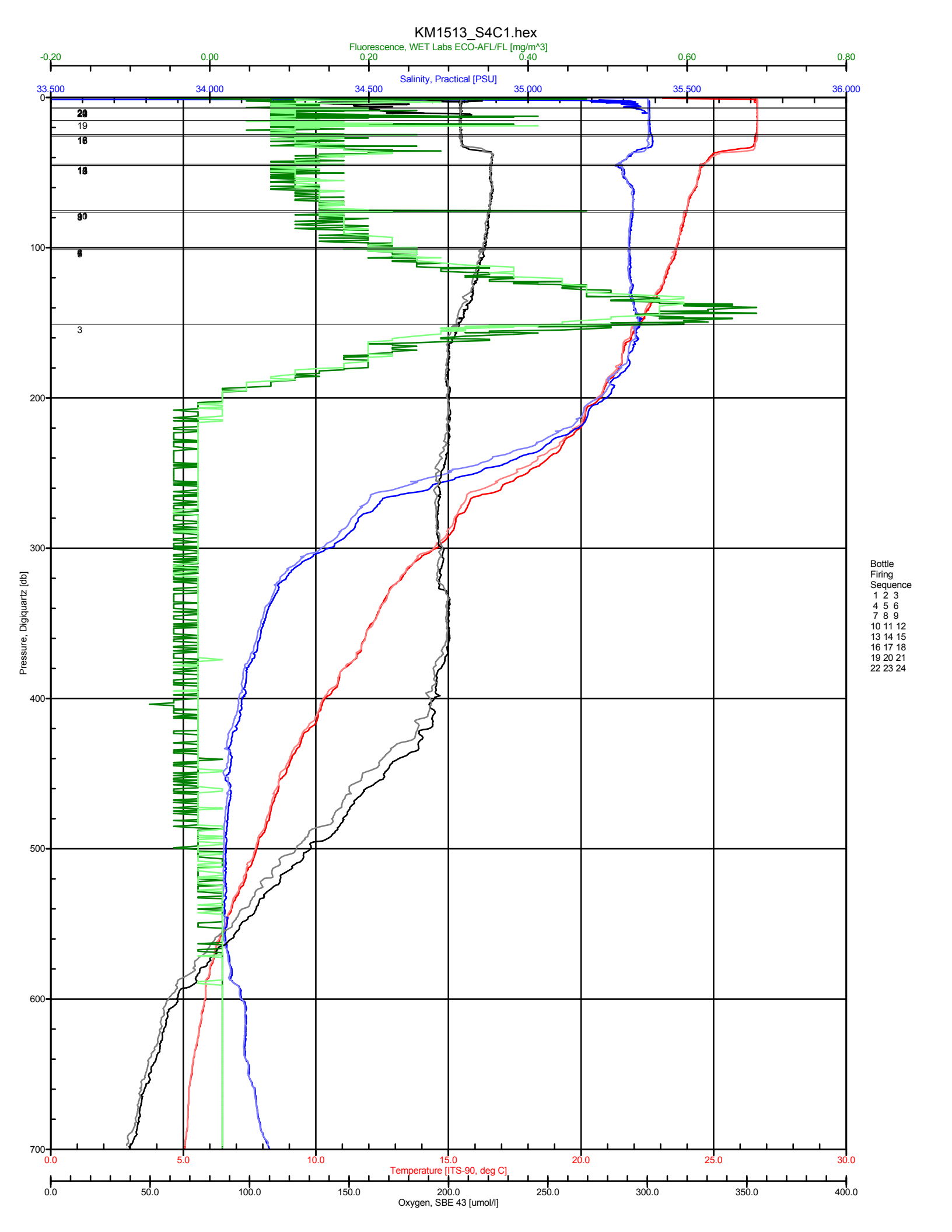
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 4	**1**
Bottom (m): ~4700	**Date (GMT): 26 Jul 15**
Time Start Logging HST: 02:03	**Time Start Logging GMT: 12:03**
Pressure on deck	**Time GMT**
Start: 0.652	**In water: 12:05**
End: -0.064	**Out water: 12:54**
Latitude N	**Longitude W**
Start: 24 17.334	**Start: 156 49.121**
End: 24 17.408	**End: 156 49.094**
Max Press: 705	**Operators: SS**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	**New CTD SBE9 unit SN: P0568** **Short caused by cut cable** **Seapoint now working**
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	700	12:30	705.6	✓	
2	700	12:31	705.3	✓	
3	150	12:42	151.3	✓	
4	100	12:43	100.0	✓	
5	100	12:44	100.7	✓	
6	100	12:44	100.0	✓	
7	100	12:44	100.9	✓	
8	75	12:45	76.0	✓	
9	75	12:45	75.9	✓	
10	75	12:45	75.7	✓	
11	75	12:46	75.8	✓	
12	45	12:47	45.3	✓	
13	45	12:47	45.5	✓	
14	45	12:47	44.8	✓	
15	45	12:47	44.9	✓	
16	25	12:49	25.5	✓	
17	25	12:41	25.5	✓	
18	25	12:50	25.3	✓	
19	25	12:51	15.7	✓	
20	15	12:53	6.8	✓	
21	5	12:53	7.4	✓	
22	5	12:53	7.6	✓	
23	5	12:53	7.6	✓	
24	5	12:53	7.6	✓	


KM1513_S4C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
100
200
300
400
500
600
700
19
3
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S4C1 Date: 07/26/2015 (HST)

Target Depth (db): 700m CTD Start Time: 0200 (HST)

Rosette Position	Depth (m)	SF	SD	18O-Q	18O-P	14C-L	14C-D	
1	**700**		X					
2	**700**		X					
3	**150**		X					
4	**100**		X					
5	**100**	X		15	15	5-3	5-3	
6	**100**	X		14	14	5-2	5-2	
7	**100**	X		13	13	5-1	5-1	
8	**75**		X					
9	**75**	X		12	12	4-3	4-3	
10	**75**	X		11	11	4-2	4-2	
11	**75**	X		10	10	4-1	4-1	
12	**45**		X					
13	**45**	X		9	9	3-3	3-3	
14	**45**	X		8	8	3-2	3-2	
15	**45**	X		7	7	3-1	3-1	
16	**25**	X		6	6	2-3	2-3	
17	**25**	X		5	5	2-2	2-2	
18	**25**	X		4	4	2-1	2-1	
19	**15**		X					
20	**5**		X					
21	**5**	X		3	3	1-3	1-3	
22	**5**	X		2	2	1-2	1-2	
23	**5**	X		1	1	1-1	1-1	
24	**5**							

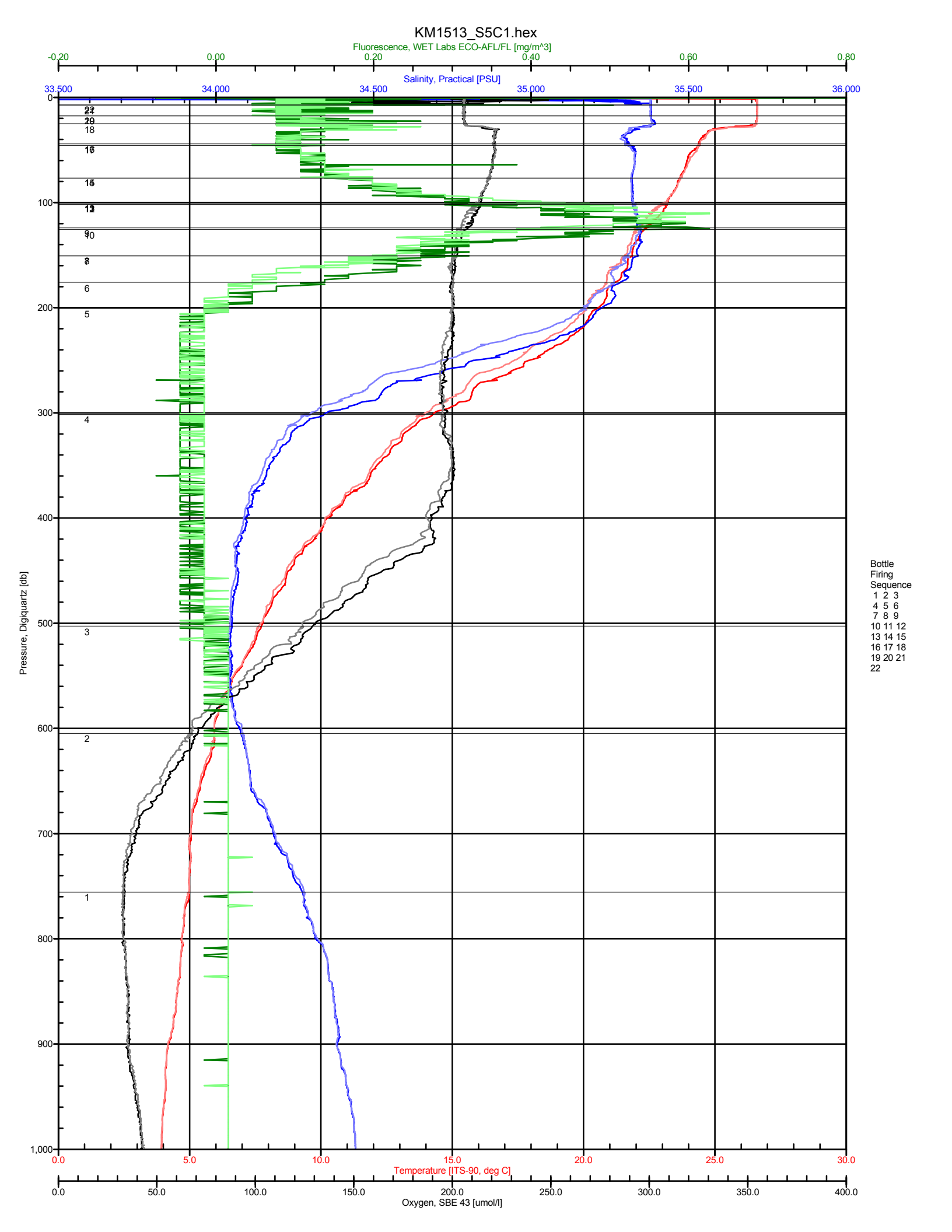
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 5	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/26/2015**
Time Start Logging HST: 04:10	**Time Start Logging GMT: 14:10**
Pressure on deck	**Time GMT**
Start: 0.976	**In water: 14:12**
End: 0.132	**Out water: 15:20**
Latitude N	**Longitude W**
Start: 24 19.063	**Start: 156 48.407**
End: 24 19.096	**End: 156 48.324**
Max Press: 1007	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	750	14:48	755.4	✓	
2	600	14:53	604.5	✓	
3	500	14:57	503.2	✓	
4	300	15:01	301.6	✓	
5	200	15:04	200.8	✓	
6	175	15:06	176.5	✓	
7	150	15:07	151.2	✓	
8	150	15:07	151.4	✓	
9	125	15:09	124.4	✓	
10	125	15:09	125.3	✓	
11	100	15:10	100.4	✓	
12	100	15:11	101.5	✓	
13	100	15:11	101.3	✓	
14	75	15:12	76.1	✓	
15	75	15:12	75.3	✓	
16	45	15:14	45.5	✓	
17	45	15:14	45.1	✓	
18	25	15:15	25.5	✓	
19	15	15:16	17.2	✓	
20	15	15:16	17.4	✓	
21	5	15:18	6.3	✓	
22	5	15:18	6.7	✓	
23					
24					


KM1513_S5C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
100
200
300
400
500
600
700
800
900
1,000
Bottle Firing Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S5C1 Date: 07/26/2015 (HST)

Target Depth (db): 1000m CTD Start Time: 04:00 (HST)

Rosette Position	Depth (m)	O2	temp	PC/PN	CHL	HPLC	Nuts/FCM	SD	
1	**750**	175,149,148	9.6				X		
2	**600**	117,118,119	10.4						
3	**500**	145,146,147	11.0				X		
4	**300**	141,142,143	16.4				X		
5	**200**	138,139,140	20.8				X		
6	**175**		21.3		1		X		
7	**150**		N/A					X	
8	**150**		22.1		2		X		
9	**125**		22.5	PC-20 (1)					
10	**125**		22.5		3	6	X		
11	**100**		N/A					X	
12	**100**		23.4	PC-20 (1)					
13	**100**	135,136,137	23.5		4	7	X		
14	**75**		N/A					X	
15	**75**	132,133,134	24.0	1-4L ■▯	5	8 ▯	X		
16	**45**		N/A					X	
17	**45**	129,130,131	24.5	2-4L▯	6	9	X		
18	**25**	126,127,128	24.9	3-4L○	7	10	X		
19	**15**		N/A					X	
20	**15**	123,124,125	26.3	4-4L○	8	11	X		
21	**5**		N/A					X	
22	**5**	120,121,122	26.3	5-4L◆	9	12	X		
23									
24									

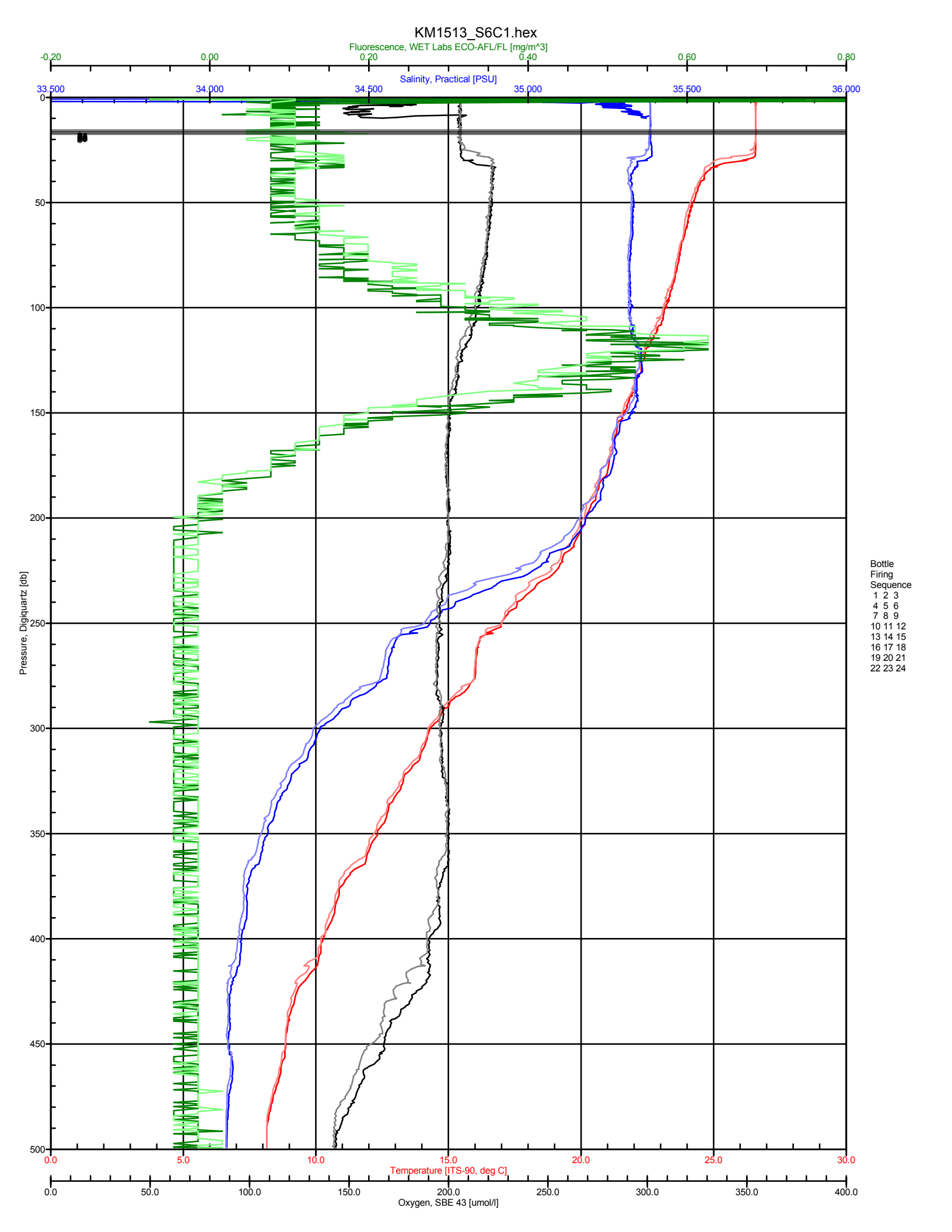
Notes: Niskins 11, 15, 17, 20, 22 ran out of water during HPLC sampling….
Oxygen Flask #145 impossible to open, replaced with #116
■ Only filteed 2.5L ▯ Heavy leaking from caps, losses not quantified ▯ Filtered 3.5L
○ Did not filter the full 4L ◆ Filtered 3.2L from an carboy that was not pre-rinsed

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 6	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/26/15**
Time Start Logging HST: 06:35	**Time Start Logging GMT: 16:35**
Pressure on deck	**Time GMT**
Start: 0.977	**In water: 16:38**
End: -0.061	**Out water: 17:14**
Latitude N	**Longitude W**
Start: 24 20.930	**Start: 156 47.894**
End: 24 20.957	**End: 156 47.836**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	17:10	16.8	✓	
2	15	"	16.3	✓	
3	15	"	16.0	✓	
4	15	"	16.6	✓	
5	15	"	16.6	✓	
6	15	"	16.2	✓	
7	15	"	16.9	✓	
8	15	"	17.5	✓	
9	15	17:11	16.5	✓	
10	15	"	16.8	✓	
11	15	"	15.9	✓	
12	15	"	16.8	✓	
13	15	"	17.0	✓	
14	15	"	16.7	✓	
15	15	"	17.0	✓	
16	15	17:12	16.8	✓	
17	15	"	15.9	✓	
18	15	"	17.2	✓	
19	15	"	17.1	✓	
20	15	"	17.1	✓	
21	15	"	16.1	✓	
22	15	"	16.7	✓	
23	15	17:13	17.1	✓	
24	15	"	16.6	✓	


KM1513_S6C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S6C1 Date: 7/26/2015 (HST)

Target Depth (db): 500 CTD Start Time: 06:00 (HST)

Rosette Position	Depth (m)	AB/LC, AB/LC/DR	AB/LC	FR/BD	SD	FA/AV	DC/PC, DL/DS	Karl Lab
1	**15**	X						
2	**15**	X						
3	**15**		X					
4	**15**		X					
5	**15**		X					
6	**15**		X					
7	**15**		X					
8	**15**			X				
9	**15**			X				
10	**15**			X				
11	**15**			X				
12	**15**			X				
13	**15**			X				
14	**15**				X KWB			
15	**15**				X MJZ			
16	**15**				X DR			
17	**15**				X DR			
18	**15**				X DR			
19	**15**				X CH			
20	**15**					X		
21	**15**						X	
22	**15**							X MJZ
23	**15**							X MJZ
24	**15**							X MJZ

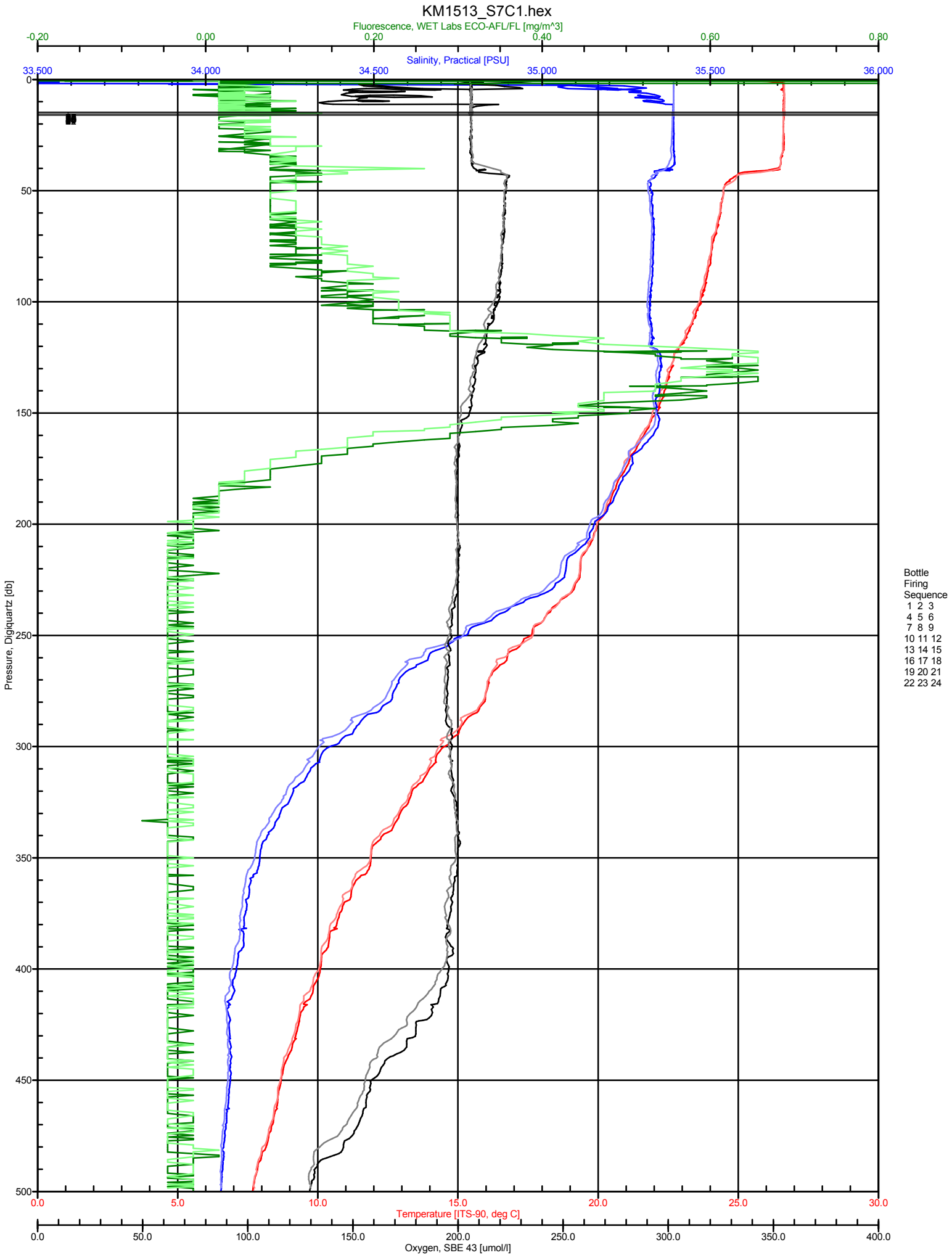
Notes:
SD did not sample so following Niskins were sampled: as above (with new initials)
KWB (#14), MJZ (#'s 15,22,23,24) DR (#'s 16,17,18) CH (# 19)

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 7	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/26/15**
Time Start Logging HST:09:54	**Time Start Logging GMT: 19:54**
Pressure on deck	**Time GMT**
Start: 0.807	**In water: 19:56**
End: -0.039	**Out water: 20:29**
Latitude N	**Longitude W**
Start: 24 22.044	**Start: 156 47.969**
End: 24 22.044	**End: 156 47.970**
Max Press: 500.7	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	20:23	15.2	✓	
2	15		15.2	✓	
3	15		15.6	✓	
4	15		15.8	✓	
5	15	20:24	15.4	✓	
6	15		14.9	✓	
7	15		15.4	✓	
8	15		15.0	✓	
9	15		14.6	✓	
10	15		15.2	✓	
11	15		14.4	✓	
12	15	20:25	14.8	✓	
13	15		15.0	✓	
14	15		15.5	✓	
15	15		15.4	✓	
16	15		14.9	✓	
17	15		14.6	✓	
18	15		14.8	✓	
19	15	20:26	15.0	✓	
20	15		15.3	✓	
21	15		15.5	✓	
22	15		16.3	✓	
23	15		15.8	✓	
24	15		16.0	✓	


KM1513_S7C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S7C1 Date: 7/26/2015 (HST)

Target Depth (db): 500 CTD Start Time: 10:00 (HST)

Rosette Position	Depth (m)	AB/LC, AB/LC/DR	AB/LC	FR/BD	SD	FA/AV	DC/PC, DL/DS	Karl Lab
1	**15**	X						
2	**15**	X						
3	**15**		X					
4	**15**		X					
5	**15**		X					
6	**15**		X					
7	**15**		X					
8	**15**			X				
9	**15**			X				
10	**15**			X				
11	**15**			X				
12	**15**			X				
13	**15**			X				
14	**15**				X KWB			
15	**15**				X KWB			
16	**15**				X KWB			
17	**15**				X DR			
18	**15**				X DR			
19	**15**				X DR			
20	**15**					X		
21	**15**						X	
22	**15**							X
23	**15**							X
24	**15**							X

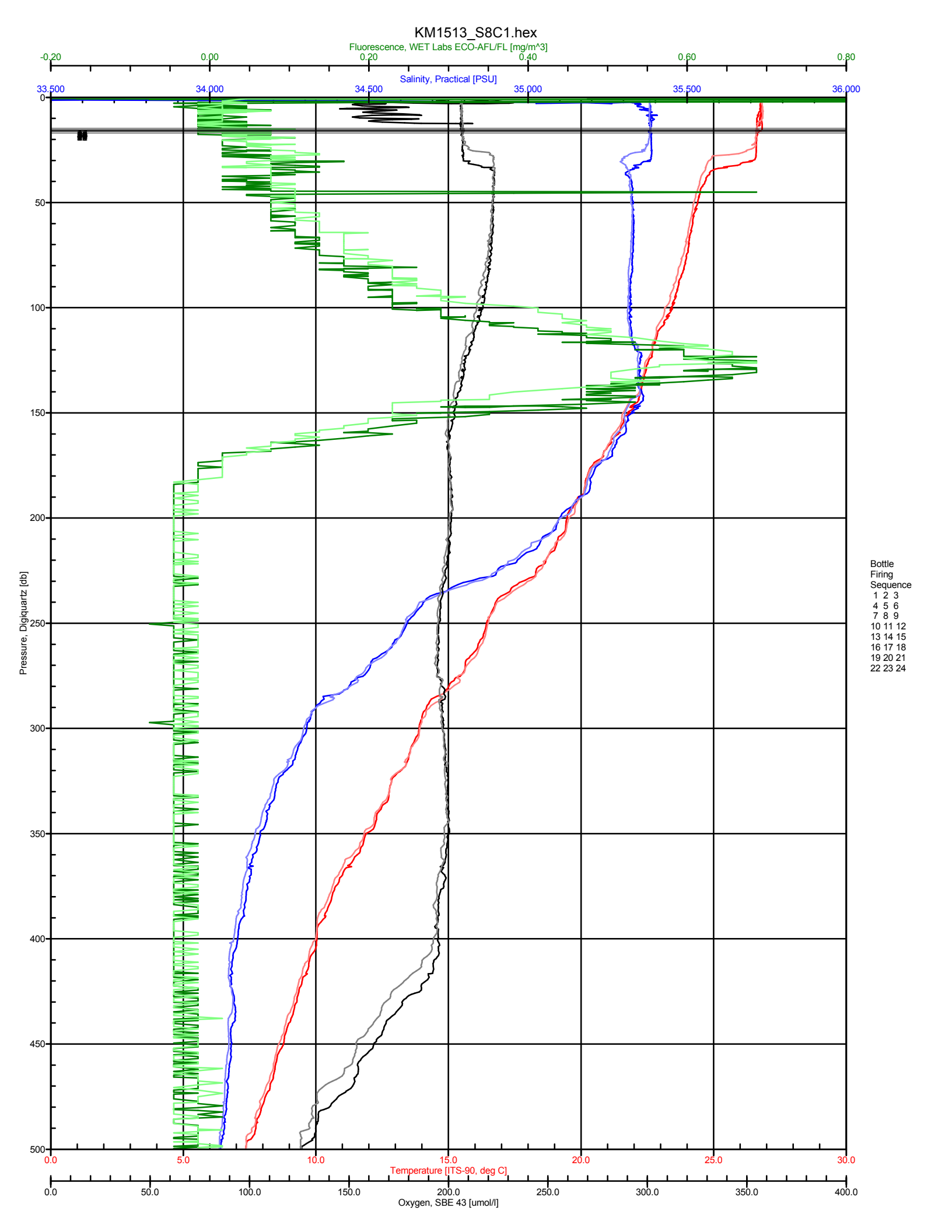
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 8	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/26/15**
Time Start Logging HST: 13:52	**Time Start Logging GMT: 23:52**
Pressure on deck	**Time GMT**
Start: 0.922	**In water: 23:55**
End: 0.028	**Out water: 00:34**
Latitude N	**Longitude W**
Start: 24 23.264	**Start: 156 45.992**
End: 24 23.222	**End: 156 46.018**
Max Press: 500.5	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	- Remote Display Froze @ 300m in Doghouse - No Bottle Fire Confirmation for 3x trips, Steve T. reset Serial Hub
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	00:25	14.8	✓	
2	15	00:27	15.5	✓	
3	15		15.3	✓	
4	15	00:28	15.7	✓	
5	15		15.5	✓	
6	15		15.4	✓	
7	15		15.0	✓	
8	15		15.7	✓	
9	15		15.7	✓	
10	15		15.1	✓	
11	15	00:29	15.5	✓	
12	15		16.4	✓	
13	15		15.3	✓	
14	15		15.5	✓	
15	15		15.4	✓	
16	15		15.8	✓	
17	15		14.6	✓	
18	15	00:31	15.4	✓	
19	15		15.8	✓	
20	15		16.1	✓	
21	15		16.0	✓	
22	15		15.8	✓	
23	15		16.6	✓	
24	15	00:32	15.1	✓	


KM1513_S8C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S8C1 Date: 7/26/2015 (HST)

Target Depth (db): 500 CTD Start Time: 14:00 (HST)

Rosette Position	Depth (m)	AB/LC, AB/LC/DR	AB/LC	FR/BD	SD	FA/AV	DC/PC, DL/DS	Karl Lab
1	**15**	X						
2	**15**	X						
3	**15**		X					
4	**15**		X					
5	**15**		X					
6	**15**		X					
7	**15**		X					
8	**15**			X				
9	**15**			X				
10	**15**			X				
11	**15**			X				
12	**15**			X				
13	**15**			X				
14	**15**				X			
15	**15**				X			
16	**15**				X			
17	**15**				X			
18	**15**				X			
19	**15**				X			
20	**15**					X		
21	**15**						X	
22	**15**							X
23	**15**							X
24	**15**							X

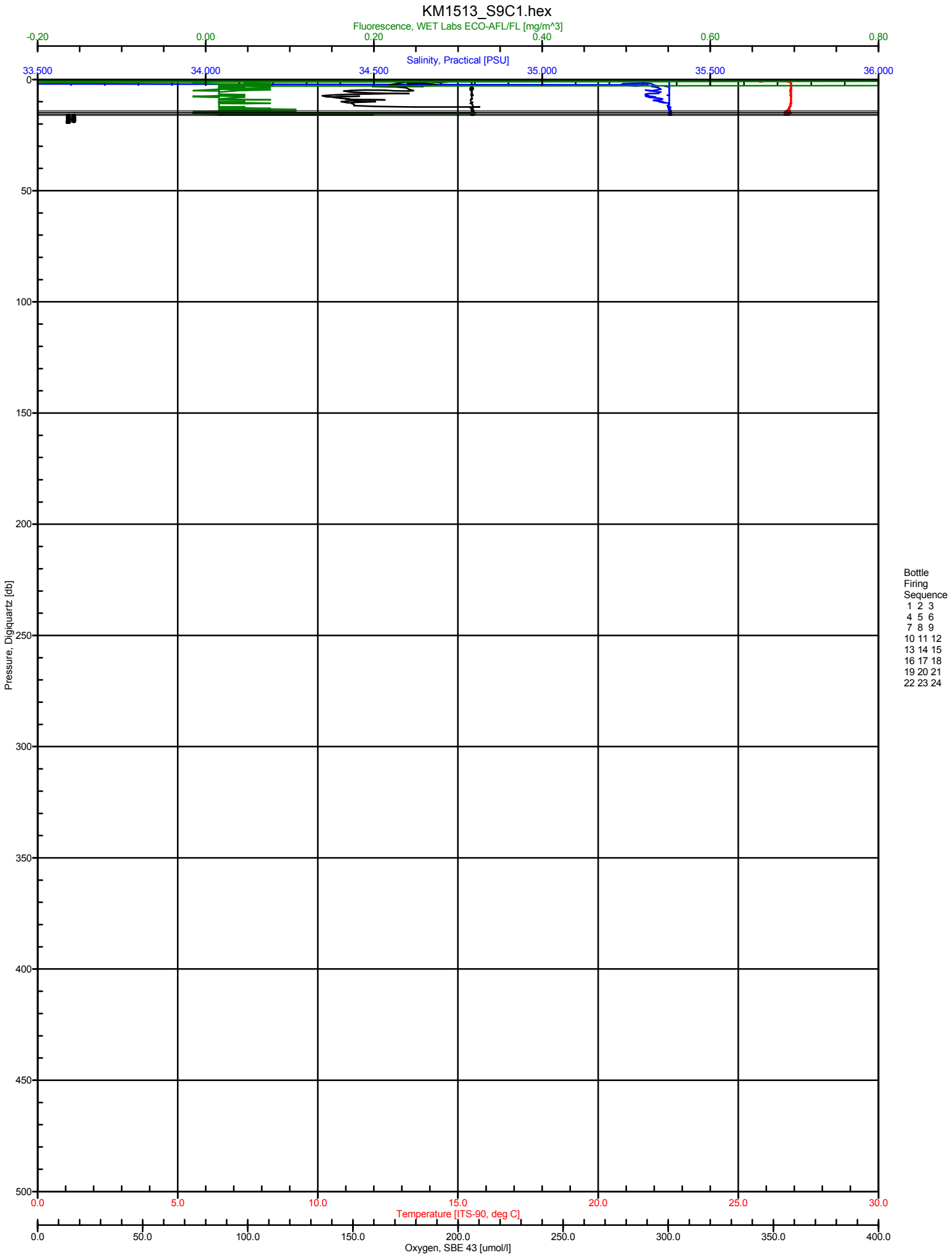
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 9	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7 /27/15**
Time Start Logging HST: 15:15	**Time Start Logging GMT: 01:14**
Pressure on deck	**Time GMT**
Start: 0.964	**In water: 01:17**
End: 0.441	**Out water: 01:24**
Latitude N	**Longitude W**
Start: 24 23.201	**Start: 156 46.030**
End: 24 23.207	**End: 156 46.030**
Max Press: 15	**Operators: SS**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	01:18	15.6	✓	
2	15		15.8	✓	
3	15		15.2	✓	
4	15	01:19	15.9	✓	
5	15		15.5	✓	
6	15		14.7	✓	
7	15		15.2	✓	
8	15		15.0	✓	
9	15		24.7	✓	
10	15	01:20	14.1	✓	
11	15		14.7	✓	
12	15		14.9	✓	
13	15		15.0	✓	
14	15		15.1	✓	
15	15		15.5	✓	
16	15		15.5	✓	
17	15	01:21	15.6	✓	
18	15		15.2	✓	
19	15		15.4	✓	
20	15		14.4	✓	
21	15		15.7	✓	
22	15		15.0	✓	
23	15		15.1	✓	
24	15		15.1	✓	


KM1513_S9C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S9C1 Date: 07/26/2015 (HST)

Target Depth (db): 15m CTD Start Time: 15:00 (HST)

Rosette Position	Depth (m)	SD						
1	15	X						
2	15	X						
3	15	X						
4	15	X						
5	15	X						
6	15	X						
7	15	X						
8	15	X						
9	15	X						
10	15	X						
11	15	X						
12	15	X						
13	15	X						
14	15	X						
15	15	X						
16	15	X						
17	15	X						
18	15	X						
19	15	X						
20	15	X						
21	15	X						
22	15	X						
23	15	X						
24	15	X						

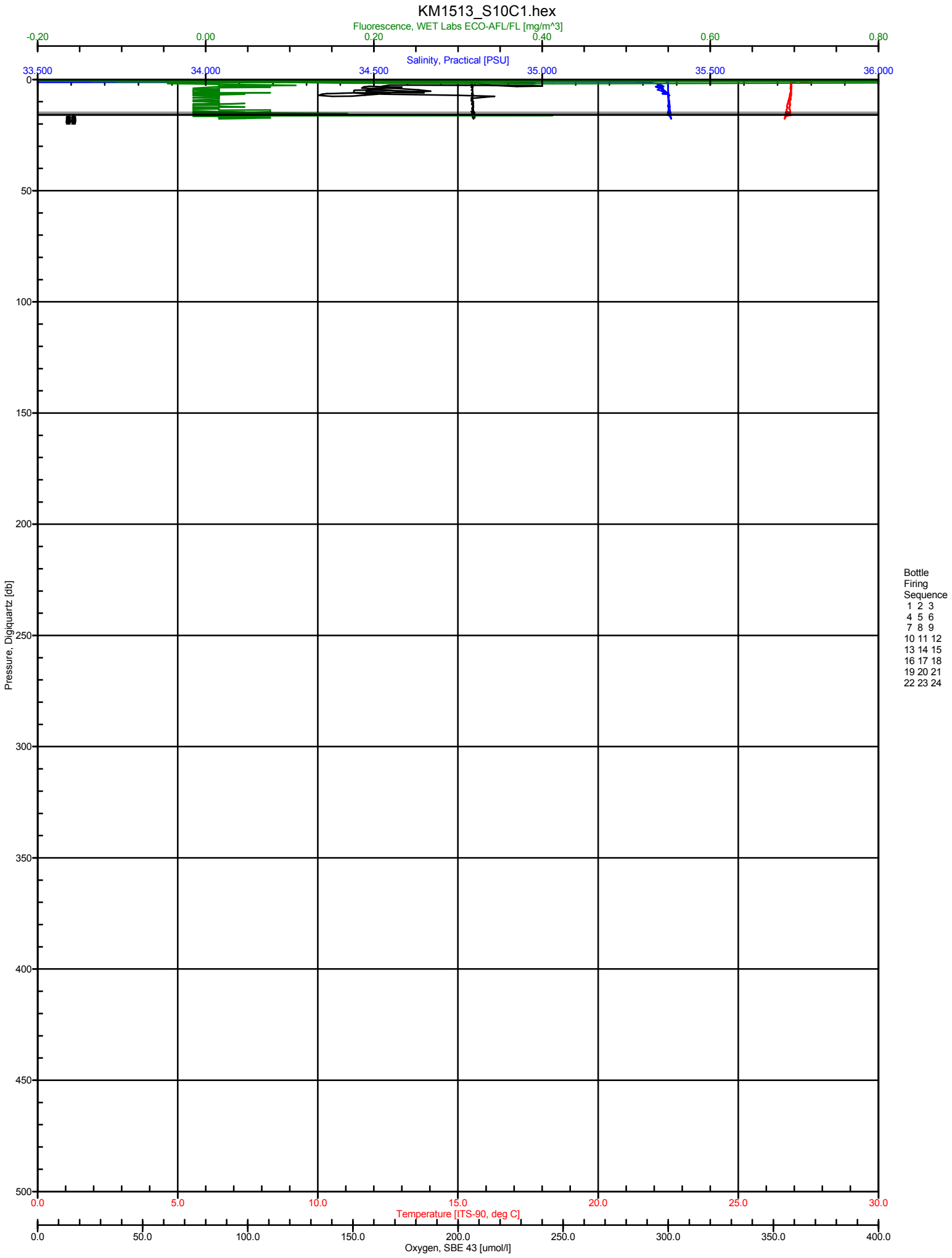
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 10	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/27/15**
Time Start Logging HST: 15:45	**Time Start Logging GMT: 01:45**
Pressure on deck	**Time GMT**
Start: 0.977	**In water: 01:49**
End: 0.340	**Out water: 02:00**
Latitude N	**Longitude W**
Start: 24 23.254	**Start: 156 46.014**
End: 24 23.302	**End: 156 45.992**
Max Press: 15	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	01:52	15.6	✓	
2	15		15.5	✓	
3	15		16.2	✓	
4	15		15.6	✓	
5	15		15.4	✓	
6	15		15.7	✓	
7	15		15.7	✓	
8	15	01:53	15.7	✓	
9	15		15.9	✓	
10	15		15.9	✓	
11	15		15.8	✓	
12	15		16.1	✓	
13	15		15.2	✓	
14	15		15.5	✓	
15	15		14.9	✓	
16	15	01:54	16.0	✓	
17	15		15.6	✓	
18	15		14.8	✓	
19	15		14.9	✓	
20	15		15.6	✓	
21	15		16.0	✓	
22	15		15.1	✓	
23	15	01:55	15.5	✓	
24	15		15.7	✓	


KM1513_S10C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S10C1 Date: 07/26/2015 (HST)

Target Depth (db): 15m CTD Start Time: 16:00 (HST)

Rosette Position	Depth (m)	SD						
1	15	X						
2	15	X						
3	15	X						
4	15	X						
5	15	X						
6	15	X						
7	15	X						
8	15	X						
9	15	X						
10	15	X						
11	15	X						
12	15	X						
13	15	X						
14	15	X						
15	15	X						
16	15	X						
17	15	X						
18	15	X						
19	15	X						
20	15	X						
21	15	X						
22	15	X						
23	15	X						
24	15	X						

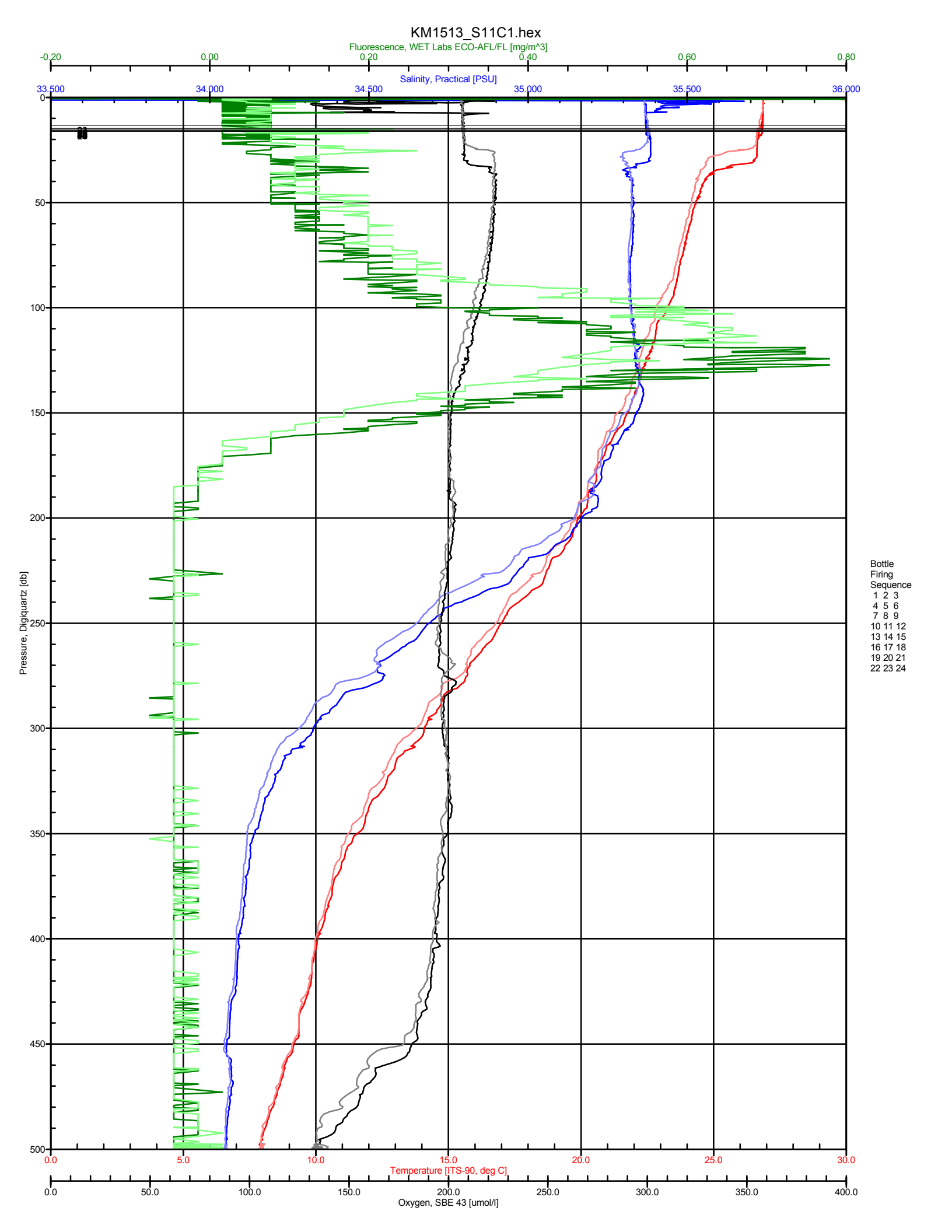
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 11	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 27 Jul**
Time Start Logging HST:17:52	**Time Start Logging GMT: 03:52**
Pressure on deck	**Time GMT**
Start: 0.588	**In water: 03:54**
End: -0.198	**Out water: 04:32**
Latitude N	**Longitude W**
Start: 24 22.428	**Start: 156 47.533**
End: 24 22.519	**End: 156 47. 484**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	04:26	15.2	✓	
2	15	04:26	15.7	✓	
3	15	04:26	15.2	✓	
4	15	04:26	15.6	✓	
5	15	04:27	15.8	✓	
6	15	04:27	15.4	✓	
7	15	04:27	14.7	✓	
8	15	04:27	15.0	✓	
9	15	04:27	15.5	✓	
10	15	04:27	14.8	✓	
11	15	04:27	14.9	✓	
12	15	04:28	16.1	✓	
13	15	04:28	16.2	✓	
14	15	04:28	15.1	✓	
15	15	04:28	15.6	✓	
16	15	04:28	15.6	✓	
17	15	04:28	15.4	✓	
18	15	04:28	15.3	✓	
19	15	04:29	15.0	✓	
20	15	04:29	15.1	✓	
21	15	04:29	15.8	✓	
22	15	04:29	15.0	✓	
23	15	04:29	15.8	✓	
24	15	04:29	15.1	✓	


KM1513_S11C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S11C1 Date: 7/26/2015 (HST)

Target Depth (db): 500 CTD Start Time: 18:00 (HST)

Rosette Position	Depth (m)	AB/LC, AB/LC/DR	AB/LC	FR/BD	SD/DR/ sMJZ	FA/AV	DC/PC, DL/DS	Karl Lab
1	**15**	X						
2	**15**	X						
3	**15**		X					
4	**15**		X					
5	**15**		X					
6	**15**		X					
7	**15**		X					
8	**15**			X				
9	**15**			X				
10	**15**			X				
11	**15**			X				
12	**15**			X				
13	**15**			X				
14	**15**				X			
15	**15**				X			
16	**15**				X			
17	**15**				X			
18	**15**				X			
19	**15**				X			
20	**15**					X		
21	**15**						X	
22	**15**							X
23	**15**							X
24	**15**							X

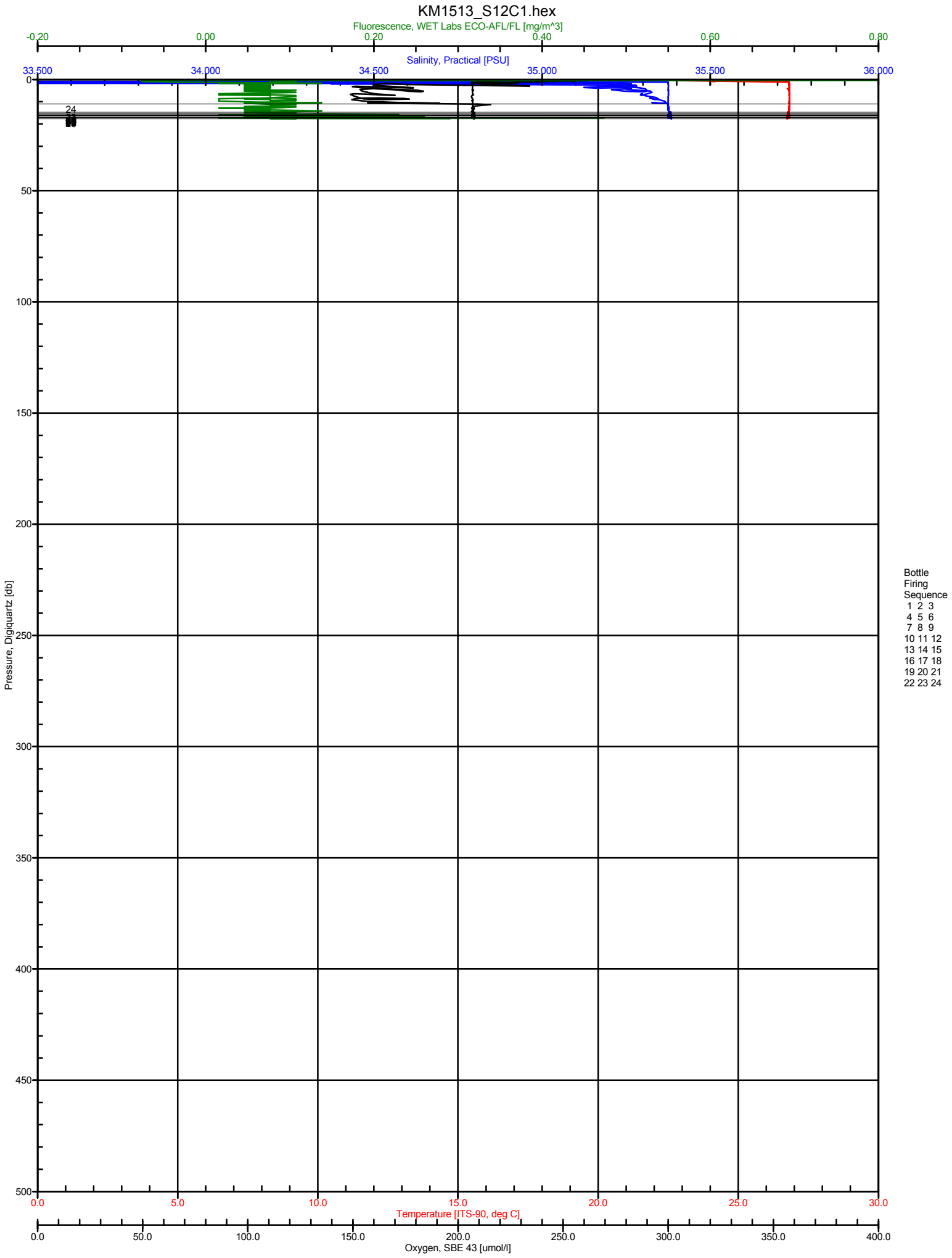
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 12	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 27 Jul**
Time Start Logging HST: 20:04	**Time Start Logging GMT: 06:04**
Pressure on deck	**Time GMT**
Start: 0.351	**In water: 06:05**
End: 0.239	**Out water: 06:13**
Latitude N	**Longitude W**
Start: 24 25. 361	**Start: 156 45. 695**
End: 24 25. 361	**End: 156 45. 695**
Max Press: 15	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	6:09	16.7	✓	
2	15	6:09	16.2	✓	
3	15	6:09	16.3	✓	
4	15	6:09	16.2	✓	
5	15	6:09	16.7	✓	
6	15	6:09	16.2	✓	
7	15	6:09	16.4	✓	
8	15	6:09	16.2	✓	
9	15	6:09	16.3	✓	
10	15	6:10	15.7	✓	
11	15	6:10	15.8	✓	
12	15	6:10	16.4	✓	
13	15	6:10	16.8	✓	
14	15	6:10	15.6	✓	
15	15	6:10	15.7	✓	
16	15	6:10	17.0	✓	
17	15	6:10	16.2	✓	
18	15	6:10	16.3	✓	
19	15	6:11	15.9	✓	
20	15	6:11	15.9	✓	
21	15	6:11	15.7	✓	
22	15	6:11	15.3	✓	
23	15	6:11	15.3	✓	
24	15	6:11	15.7	✓	


KM1513_S12C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
24
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S12C1 Date: 07/26/2015 (HST)

Target Depth (db): 15m CTD Start Time: 20:00 (HST)

Rosette Position	Depth (m)	Dave Caron						
1	**15**	X						
2	**15**	X						
3	**15**	X						
4	**15**	X						
5	**15**	X						
6	**15**	X						
7	**15**	X						
8	**15**	X						
9	**15**	X						
10	**15**	X						
11	**15**	X						
12	**15**	X						
13	**15**	X						
14	**15**	X						
15	**15**	X						
16	**15**	X						
17	**15**	X						
18	**15**	X						
19	**15**	X						
20	**15**	X						
21	**15**	X						
22	**15**	X						
23	**15**	X						
24	**15**	X						

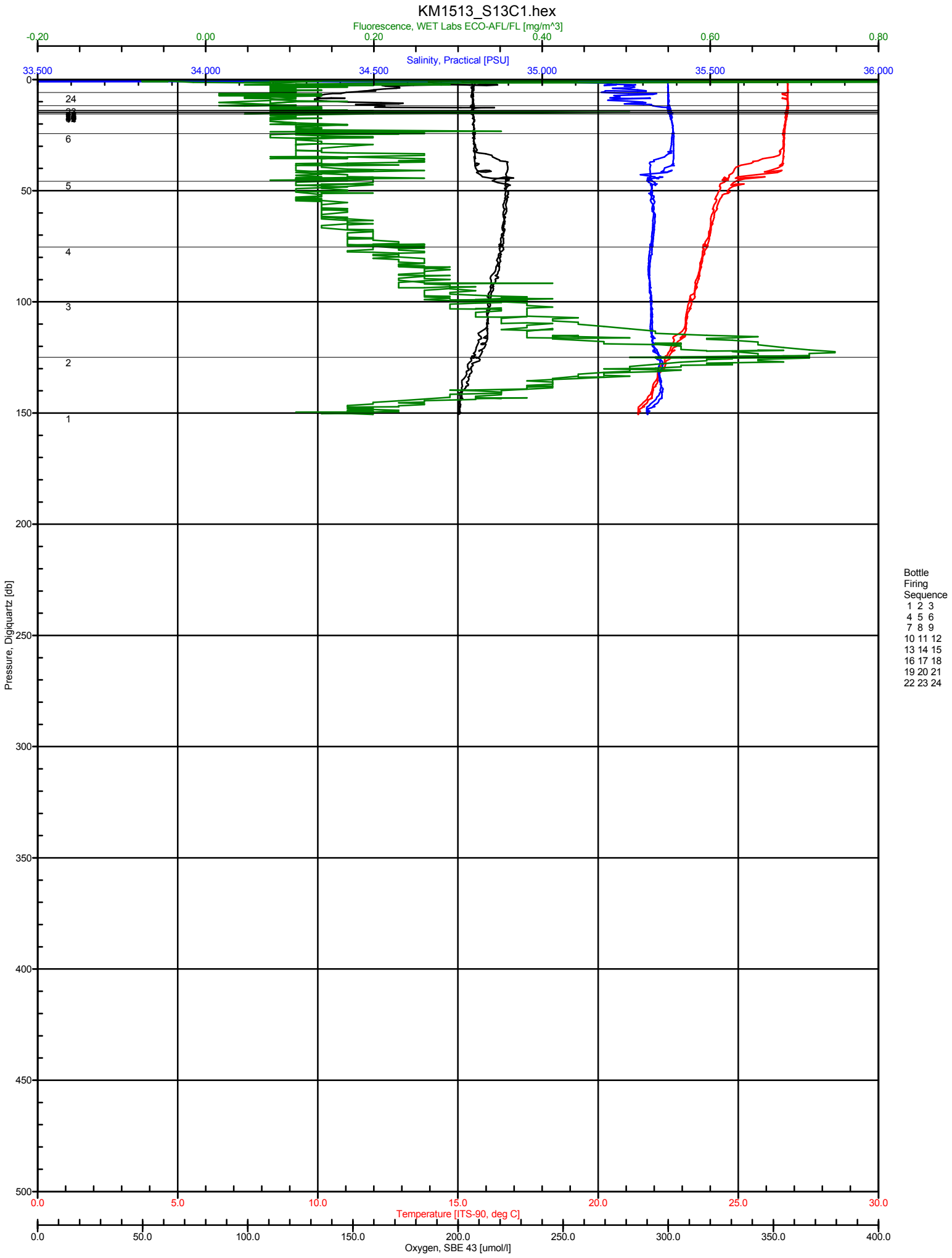
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 13	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 27 Jul**
Time Start Logging HST: 21:01	**Time Start Logging GMT: 07:01**
Pressure on deck	**Time GMT**
Start: 0.490	**In water: 07:04**
End: 0.155	**Out water: 07:26**
Latitude N	**Longitude W**
Start: 24 25. 358	**Start: 156 45. 703**
End: 24 25. 400	**End: 156 45. 691**
Max Press: 150	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	150	7:14	150.1	✓	
2	125	7:15	125.2	✓	
3	100	7:17	99.0	✓	
4	75	7:18	74.6	✓	
5	45	7:19	44.6	✓	
6	25	7:21	24.9	✓	
7	15	7:22	14.4	✓	
8	15	7:22	14.7	✓	
9	15	7:22	13.9	✓	
10	15	7:22	14.2	✓	
11	15	7:22	14.7	✓	
12	15	7:23	14.8	✓	
13	15	7:23	15.4	✓	
14	15	7:23	15.3	✓	
15	15	7:23	15.4	✓	
16	15	7:23	14.2	✓	
17	15	7:23	14.1	✓	
18	15	7:23	14.6	✓	
19	15	7:23	15.1	✓	
20	15	7:24	14.6	✓	
21	15	7:24	14.6	✓	
22	15	7:24	14.8	✓	
23	15	7:24	14.6	✓	
24	5	7:25	6.3	✓	


KM1513_S13C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
24
6
5
4
3
2
1
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S13C1 Date: 07/26/2015 (HST)

Target Depth (db): 150m CTD Start Time: 21:00 (HST)

Rosette Position	Depth (m)	FA	DL					
1	**150**		X					
2	**125**		X					
3	**100**		X					
4	**75**		X					
5	**45**		X					
6	**25**		X					
7	**15**	X						
8	**15**	X						
9	**15**	X						
10	**15**	X						
11	**15**	X						
12	**15**	X						
13	**15**	X						
14	**15**	X						
15	**15**	X						
16	**15**	X						
17	**15**	X						
18	**15**	X						
19	**15**	X						
20	**15**	X						
21	**15**	X						
22	**15**	X						
23	**15**	X						
24	**5**		X					

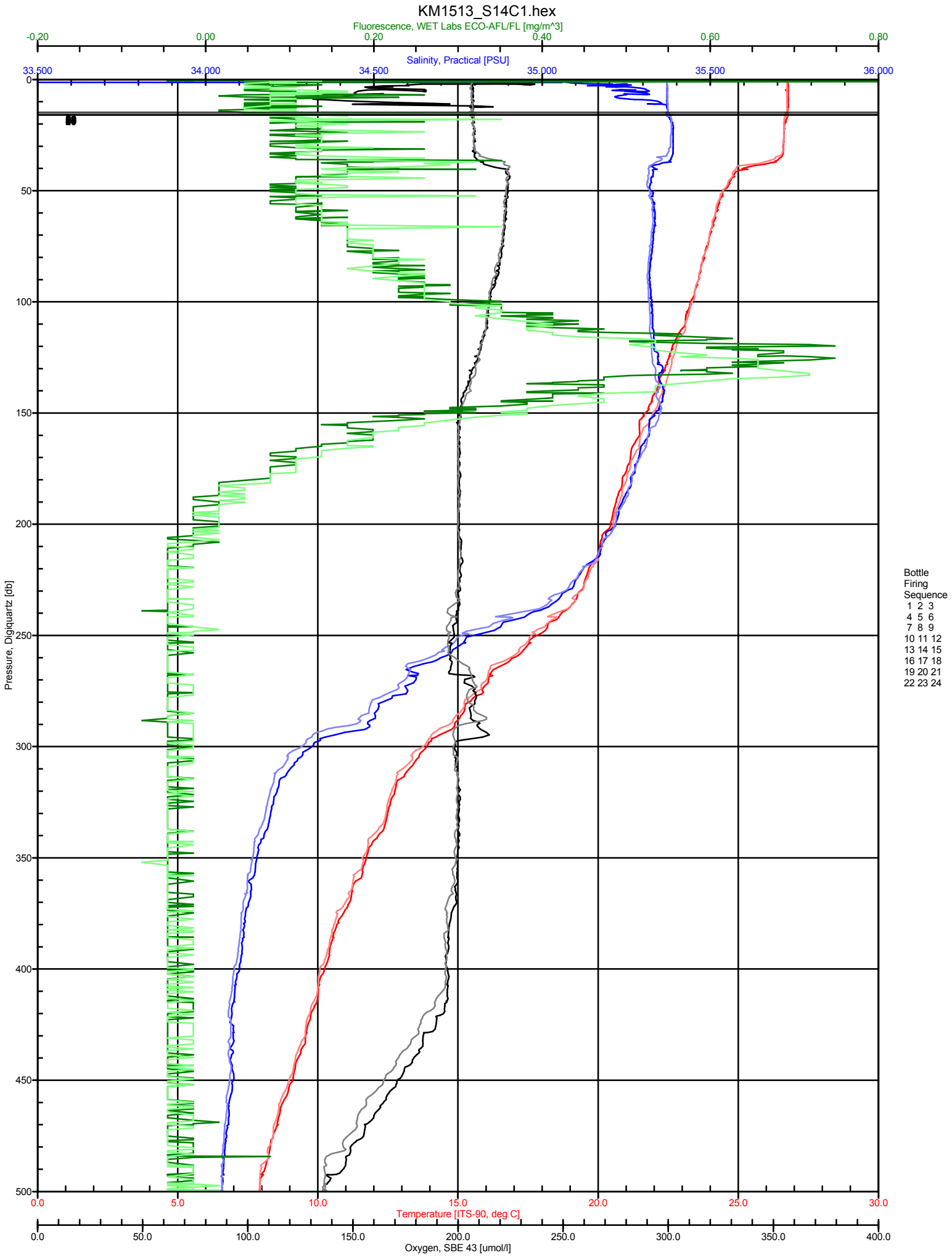
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 14	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 27 Jul**
Time Start Logging HST: 22:13	**Time Start Logging GMT: 08:13**
Pressure on deck	**Time GMT**
Start: 0.885	**In water: 08:16**
End: -0.147	**Out water: 08:50**
Latitude N	**Longitude W**
Start: 24 25. 416	**Start: 156 45. 689**
End: 24 25. 381	**End: 156 45. 697**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	8:45	15.2	✓	
2	15	8:45	15.1	✓	
3	15	8:45	15.6	✓	
4	15	8:45	15.3	✓	
5	15	8:45	16.3	✓	
6	15	8:45	15.7	✓	
7	15	8:45	15.1	✓	
8	15	8:46	15.3	✓	
9	15	8:46	15.1	✓	
10	15	8:46	15.8	✓	
11	15	8:46	15.6	✓	
12	15	8:46	14.7	✓	
13	15	8:46	15.7	✓	
14	15	8:46	15.8	✓	
15	15	8:47	15.3	✓	
16	15	8:47	15.4	✓	
17	15	8:47	15.0	✓	
18	15	8:47	15.8	✓	
19	15	8:47	16.2	✓	
20	15	8:47	15.4	✓	
21	15	8:47	15.3	✓	
22	15	8:48	15.9	✓	
23	15	8:48	16.0	✓	
24	15	8:48	15.3	✓	


KM1513_S14C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S14C1 Date: 7/26/2015 (HST)

Target Depth (db): 500 CTD Start Time: 22:00 (HST)

Rosette Position	Depth (m)	AB/LC, AB/LC/DR	AB/LC/DR	FR/BD	SD	FA/AV	DC/PC, DL/DS	DR/CH/ Karl Lab
1	**15**	X						
2	**15**	X						
3	**15**		X					
4	**15**		X					
5	**15**		X					
6	**15**		X					
7	**15**		X					
8	**15**			X				
9	**15**			X				
10	**15**			X				
11	**15**			X				
12	**15**			X				
13	**15**			X				
14	**15**				X			
15	**15**				X			
16	**15**				X			
17	**15**				X			
18	**15**				X			
19	**15**				X			
20	**15**					X		
21	**15**						X	
22	**15**							X
23	**15**							X
24	**15**							X

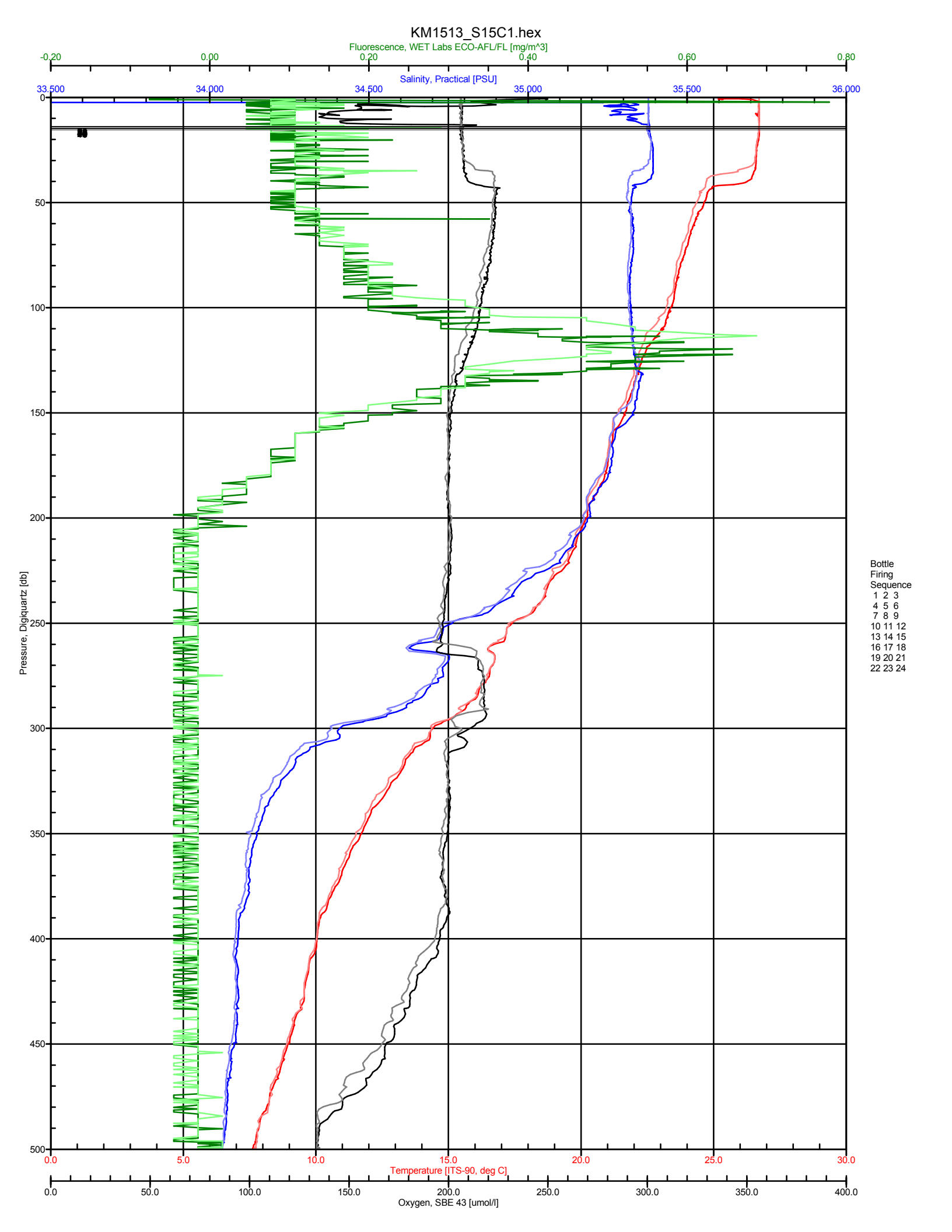
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 15	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 27 Jul**
Time Start Logging HST: 01:57	**Time Start Logging GMT: 11:57**
Pressure on deck	**Time GMT**
Start: 0.924	**In water: 11:59**
End: -0.210	**Out water: 12:31**
Latitude N	**Longitude W**
Start: 24 25. 574	**Start: 156 44. 287**
End: 24 27. 563	**End: 156 44. 297**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	12:26	14.2		
2	15	12:26	14.1		
3	15	12:27	14.4		
4	15	12:27	14.7		
5	15	12:27	14.2		
6	15	12:27	14.5		
7	15	12:27	14.3		
8	15	12:27	13.9		
9	15	12:27	14.2		
10	15	12:27	15.2		
11	15	12:28	14.4		
12	15	12:28	13.8		
13	15	12:28	13.9		
14	15	12:28	14.8		
15	15	12:28	14.5		
16	15	12:28	14.0		
17	15	12:28	14.6		
18	15	12:28	14.1		
19	15	12:29	14.2		
20	15	12:29	14.4		
21	15	12:29	14.0		
22	15	12:29	14.7		
23	15	12:29	14.2		
24	15	12:29	14.5		


KM1513_S15C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S15C1 Date: 7/27/2015 (HST)

Target Depth (db): 500 CTD Start Time: 02:00 (HST)

Rosette Position	Depth (m)	AB/LC	AB/LC/DR	FR/BD	SD	FA/AV	DC/PC, DL/DS	Karl Lab
1	**15**	X						
2	**15**	X						
3	**15**		X					
4	**15**		X					
5	**15**		X					
6	**15**		X					
7	**15**		X					
8	**15**			X				
9	**15**			X				
10	**15**			X				
11	**15**			X				
12	**15**			X				
13	**15**			X				
14	**15**				X			
15	**15**				X			
16	**15**				X			
17	**15**				X			
18	**15**				X			
19	**15**				X			
20	**15**					X		
21	**15**						X	
22	**15**							X
23	**15**							X
24	**15**							X

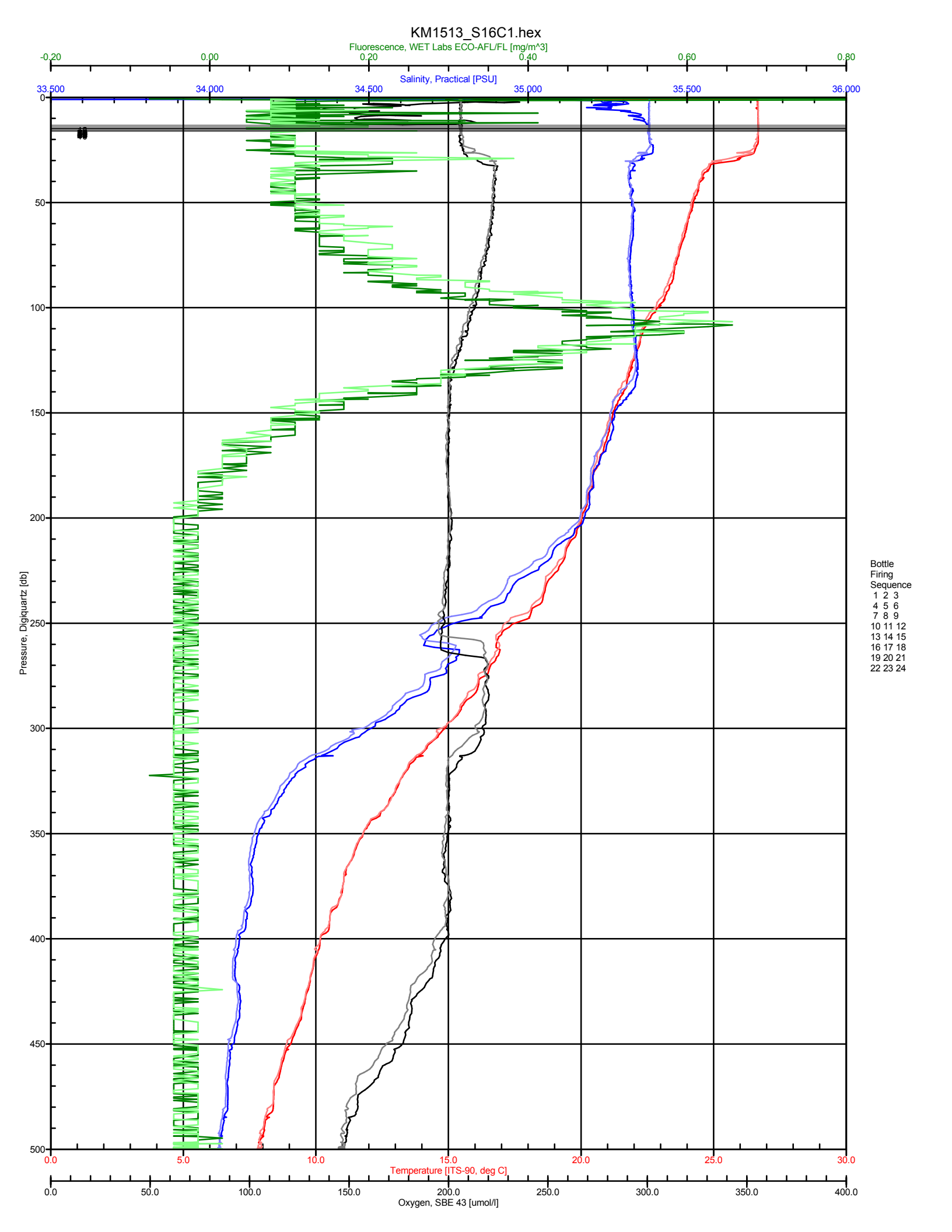
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 16	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/27/15**
Time Start Logging HST: 05:51	**Time Start Logging GMT: 15:51**
Pressure on deck	**Time GMT**
Start: 0.574	**In water: 15:54**
End: -0.185	**Out water: 16:29**
Latitude N	**Longitude W**
Start: 24 28.866	**Start: 156 43.086**
End: 24 28.891	**End: 156 43.087**
Max Press: 499	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	16:24	15.5	✓	
2	15		14.9	✓	
3	15		14.6	✓	
4	15	16:25	14.7	✓	
5	15		14.7	✓	
6	15		14.5	✓	
7	15		15.0	✓	
8	15		15.5	✓	
9	15		14.9	✓	
10	15		15.9	✓	
11	15		15.2	✓	
12	15	16:26	14.5	✓	
13	15		14.8	✓	
14	15		13.9	✓	
15	15		14.5	✓	
16	15		15.3	✓	
17	15		14.9	✓	
18	15		13.2	✓	
19	15		15.3	✓	
20	15	16:27	14.5	✓	
21	15		15.6	✓	
22	15		14.5	✓	
23	15		14.5	✓	
24	15		15.1	✓	


KM1513_S16C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S16C1 Date: 7/27/2015 (HST)

Target Depth (db): 500 CTD Start Time: 06:00 (HST)

Rosette Position	Depth (m)	AB/LC	AB/LC/DR	FR/BD	SD	FA/AV	DC/PC, DL/DS	Karl Lab
1	**15**	X						
2	**15**	X						
3	**15**		X					
4	**15**		X					
5	**15**		X					
6	**15**		X					
7	**15**		X					
8	**15**			X				
9	**15**			X				
10	**15**			X				
11	**15**			X				
12	**15**			X				
13	**15**			X				
14	**15**				X			
15	**15**				X			
16	**15**				X			
17	**15**				X			
18	**15**				X			
19	**15**				X			
20	**15**					X		
21	**15**						X	
22	**15**							X
23	**15**							X
24	**15**							X

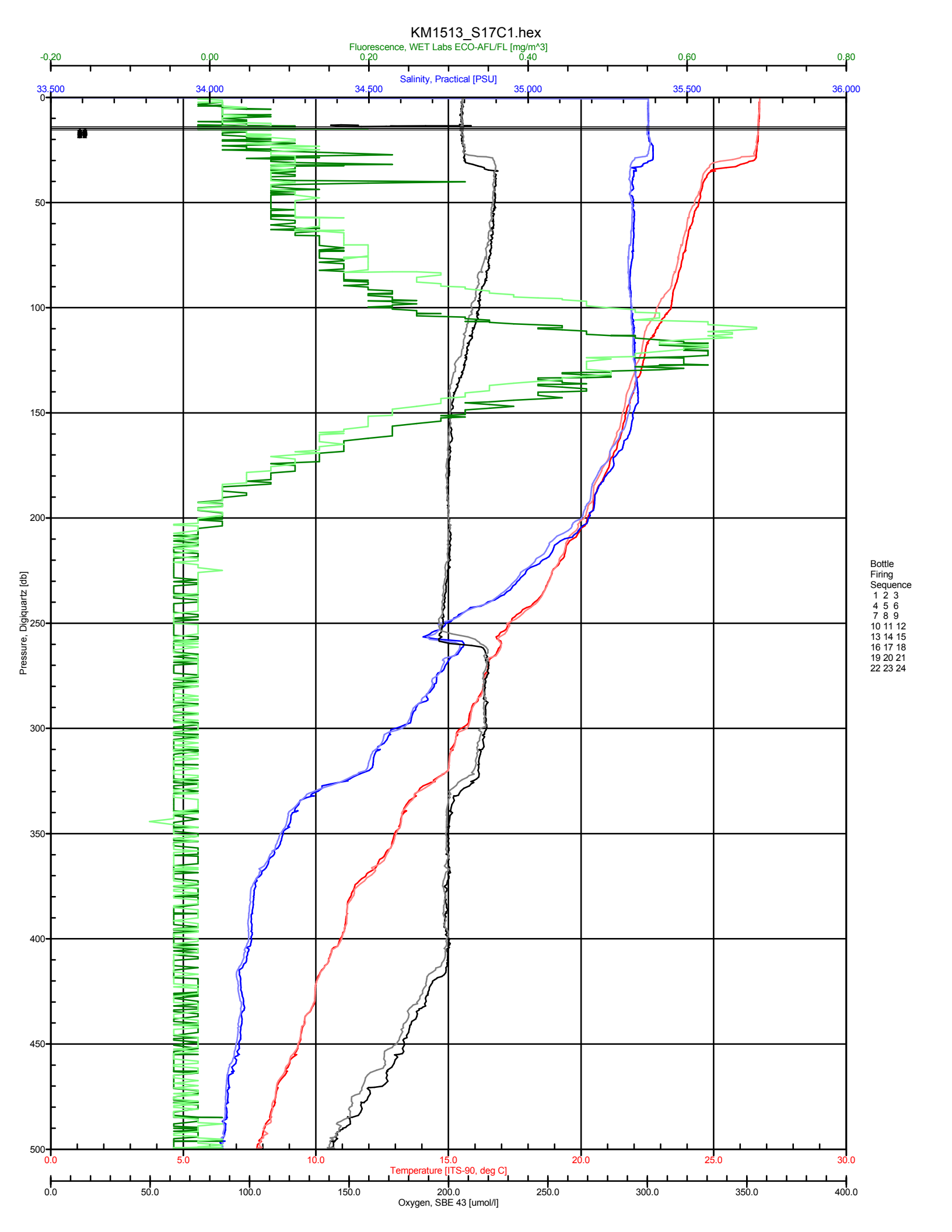
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 17	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/27/15**
Time Start Logging HST: 10:05	**Time Start Logging GMT: 20:05**
Pressure on deck	**Time GMT**
Start: 0.919	**In water: 20:05**
End: -0.281	**Out water: 20:35**
Latitude N	**Longitude W**
Start: 24 29.845	**Start: 156 41.238**
End: 24 29.844	**End: 156 41.251**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	**Remote Pressure Readout froze at 40m, restarted all from surface after Serial Hub restart.**
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	20:30	15.1	✓	
2	15		15.1	✓	
3	15		15.0	✓	
4	15		14.7	✓	
5	15	20:31	14.7	✓	
6	15		14.3	✓	
7	15		14.4	✓	
8	15		14.8	✓	
9	15		14.5	✓	
10	15		14.9	✓	
11	15		14.9	✓	
12	15		14.3	✓	
13	15		14.7	✓	
14	15	20:32	13.8	✓	
15	15		14.9	✓	
16	15		14.5	✓	
17	15		14.2	✓	
18	15		14.9	✓	
19	15		14.8	✓	
20	15		14.3	✓	
21	15	20:33	15.8	✓	
22	15		15.3	✓	
23	15		14.6	✓	
24	15		14.7	✓	


KM1513_S17C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S17C1	
Date:	07/27/2015	(HST)
CTD Start Time:	1000	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

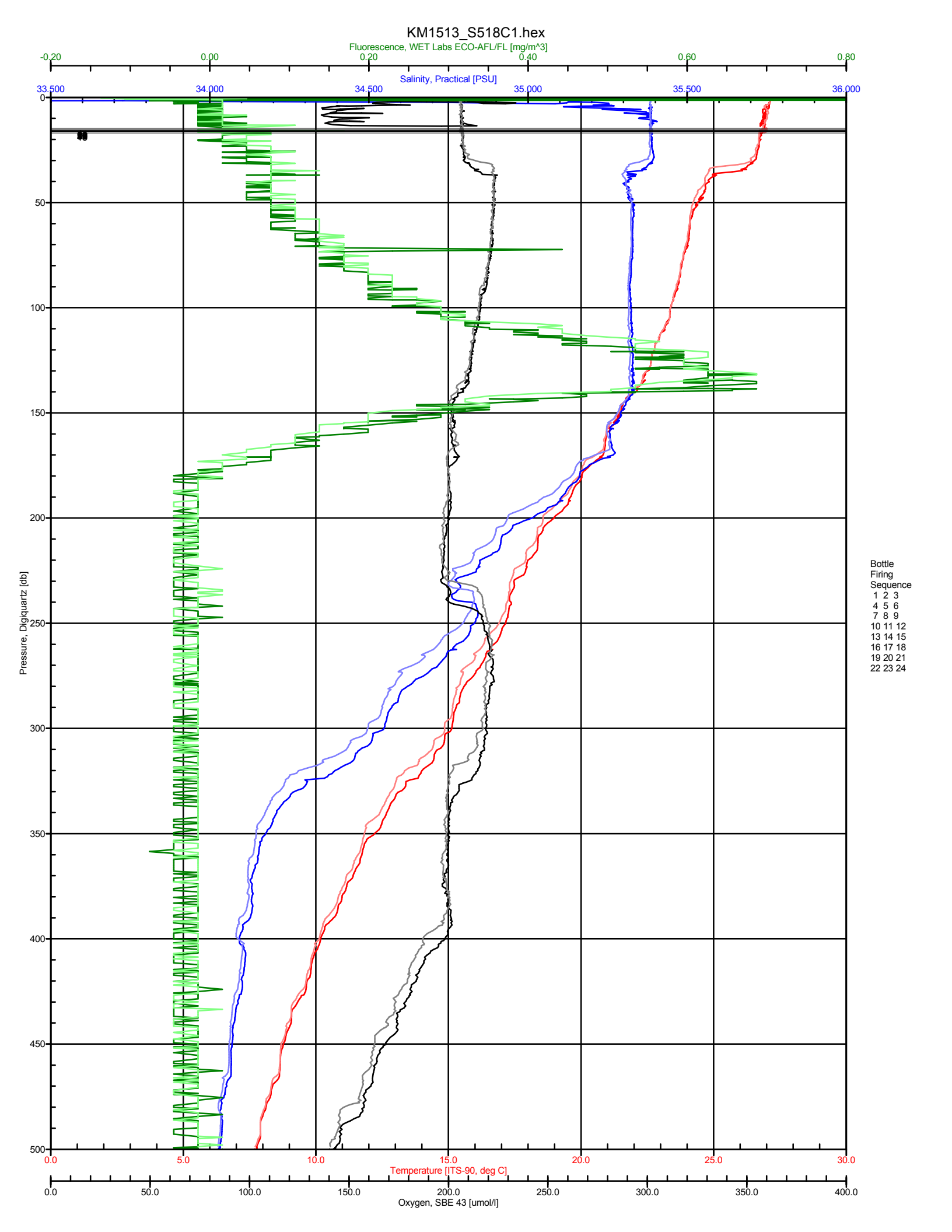
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 18	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/28/15**
Time Start Logging HST: 14:07	**Time Start Logging GMT: 00:07**
Pressure on deck	**Time GMT**
Start: 0.876	**In water: 00:08**
End: -0.192	**Out water: 00:45**
Latitude N	**Longitude W**
Start: 24 32.005	**Start: 156 38.754**
End: 24 31.979	**End: 156 38.753**
Max Press: 504	**Operators: SS**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	**Optode removed to try reset**
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	00:39	15.3	✓	
2	15	00:40	15.7	✓	
3	15		15.4	✓	
4	15		14.9	✓	
5	15		15.7	✓	
6	15		16.0	✓	
7	15		15.9	✓	
8	15		15.7	✓	
9	15		14.5	✓	
10	15		15.4	✓	
11	15	00:41	15.8	✓	
12	15		16.3	✓	
13	15		15.8	✓	
14	15		14.6	✓	
15	15		15.9	✓	
16	15		15.6	✓	
17	15		16.0	✓	
18	15		15.9	✓	
19	15		15.5	✓	
20	15	00:42	15.8	✓	
21	15		15.1	✓	
22	15		15.6	✓	
23	15		15.8	✓	
24	15		15.3	✓	


KM1513_S518C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S18C1	
Date:	07/27/2015	(HST)
CTD Start Time:	1400	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

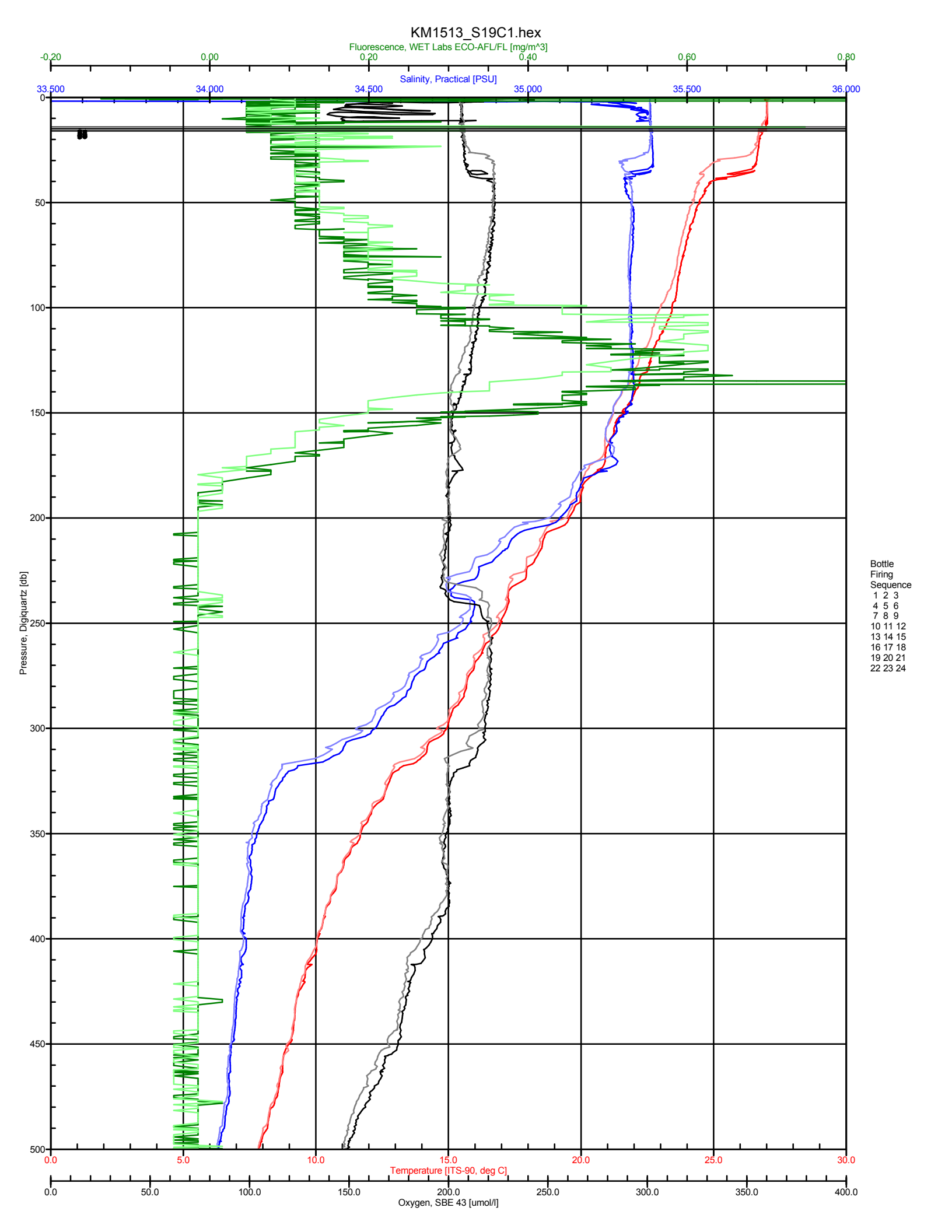
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 19	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 28 Jul**
Time Start Logging HST: 18:02	**Time Start Logging GMT: 04:02**
Pressure on deck	**Time GMT**
Start: 0.845	**In water: 04:04**
End: -0.257	**Out water: 04:38**
Latitude N	**Longitude W**
Start: 24 32. 333	**Start: 156 38. 422**
End: 24 32. 393	**End: 156 38. 213**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	4:34	15.5	✓	
2	15		15.0	✓	
3	15		16.1	✓	
4	15		14.8	✓	
5	15		14.8	✓	
6	15		15.6	✓	
7	15	4:35	15.9	✓	
8	15		14.9	✓	
9	15		16.1	✓	
10	15		15.1	✓	
11	15		14.8	✓	
12	15		15.4	✓	
13	15		15.7	✓	
14	15		15.7	✓	
15	15		15.1	✓	
16	15	4:36	14.4	✓	
17	15		14.4	✓	
18	15		15.8	✓	
19	15		15.7	✓	
20	15		15.3	✓	
21	15		14.4	✓	
22	15		15.6	✓	
23	15	4:37	15.8	✓	
24	15		14.8	✓	


KM1513_S19C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S19C1	
Date:	07/27/2015	(HST)
CTD Start Time:	1800	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

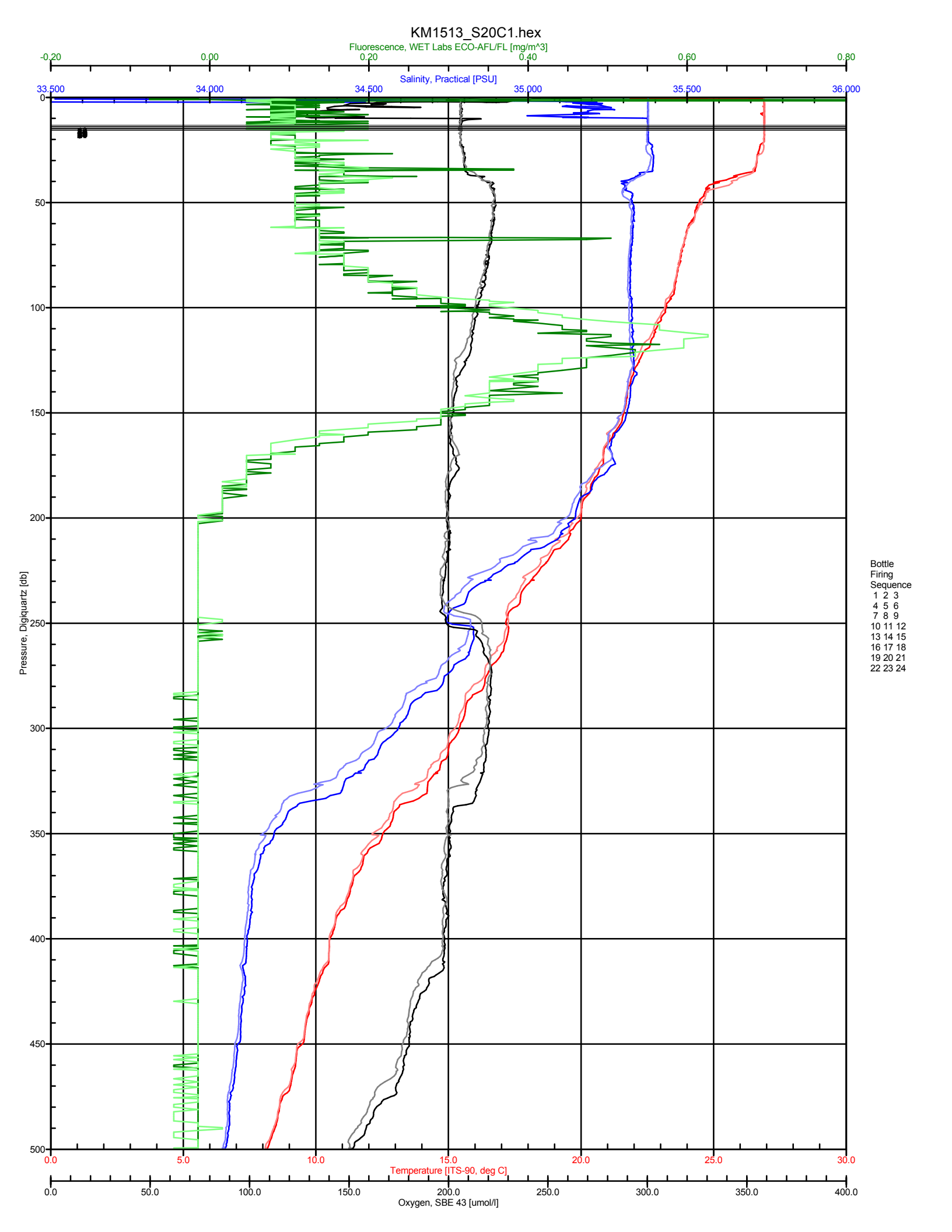
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 20	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 28 Jul**
Time Start Logging HST: 21:58	**Time Start Logging GMT: 07:58**
Pressure on deck	**Time GMT**
Start: 0.887	**In water: 07:59**
End: -0.191	**Out water: 08:32**
Latitude N	**Longitude W**
Start: 24 32. 471	**Start: 156 38. 051**
End: 24 32. 465	**End: 156 38. 048**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	08:26	14.9	✓	
2	15	08:27	15.6	✓	
3	15		15.0	✓	
4	15		14.1	✓	
5	15		15.3	✓	
6	15		14.8	✓	
7	15		14.1	✓	
8	15		15.3	✓	
9	15		14.8	✓	
10	15		14.1	✓	
11	15	08:28	14.5	✓	
12	15		14.7	✓	
13	15		15.4	✓	
14	15		15.3	✓	
15	15		14.5	✓	
16	15		14.5	✓	
17	15		15.1	✓	
18	15		13.6	✓	
19	15		15.1	✓	
20	15	08:29	15.2	✓	
21	15		15.1	✓	
22	15		14.9	✓	
23	15		13.9	✓	
24	15		14.1	✓	


KM1513_S20C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S20C1	
Date:	07/27/2015	(HST)
CTD Start Time:	2200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

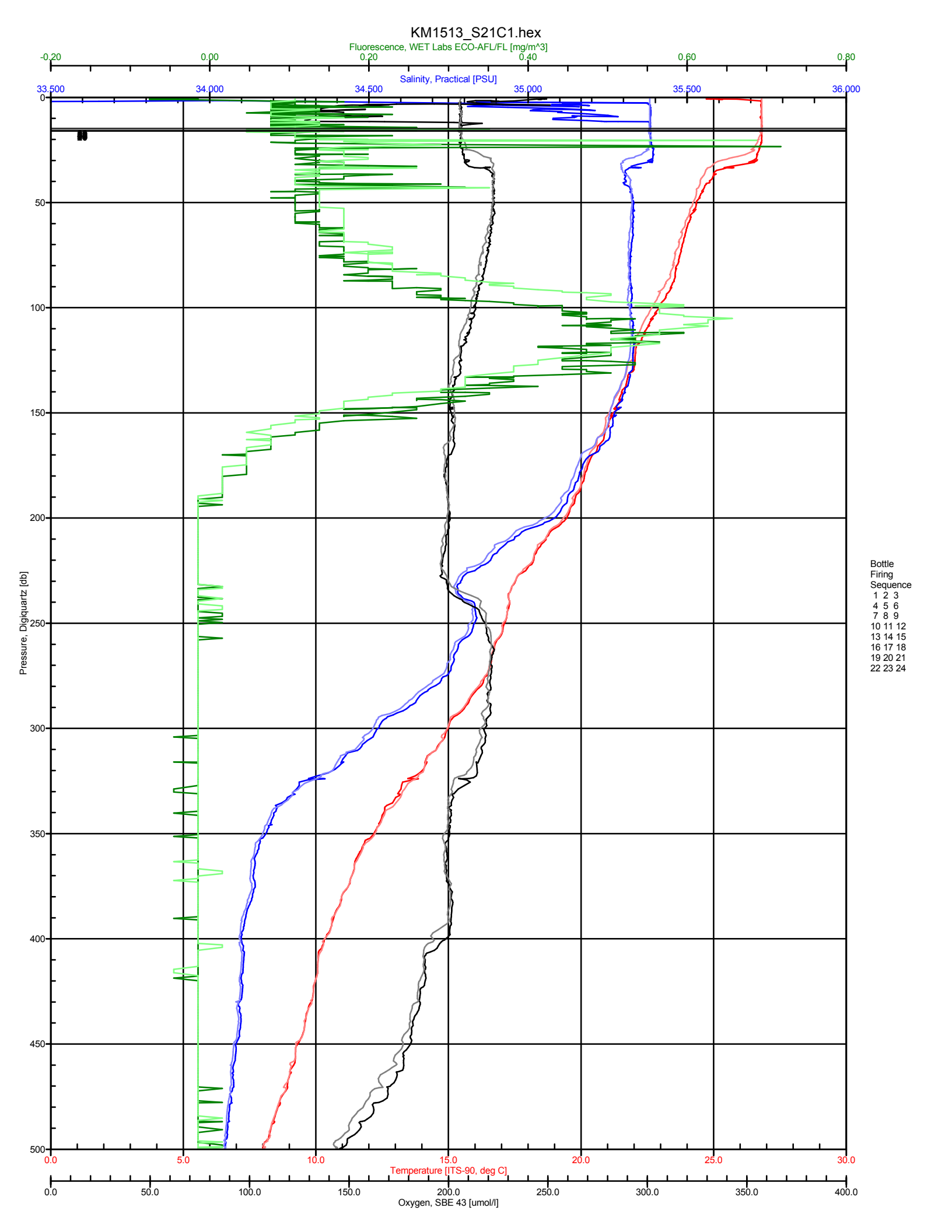
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

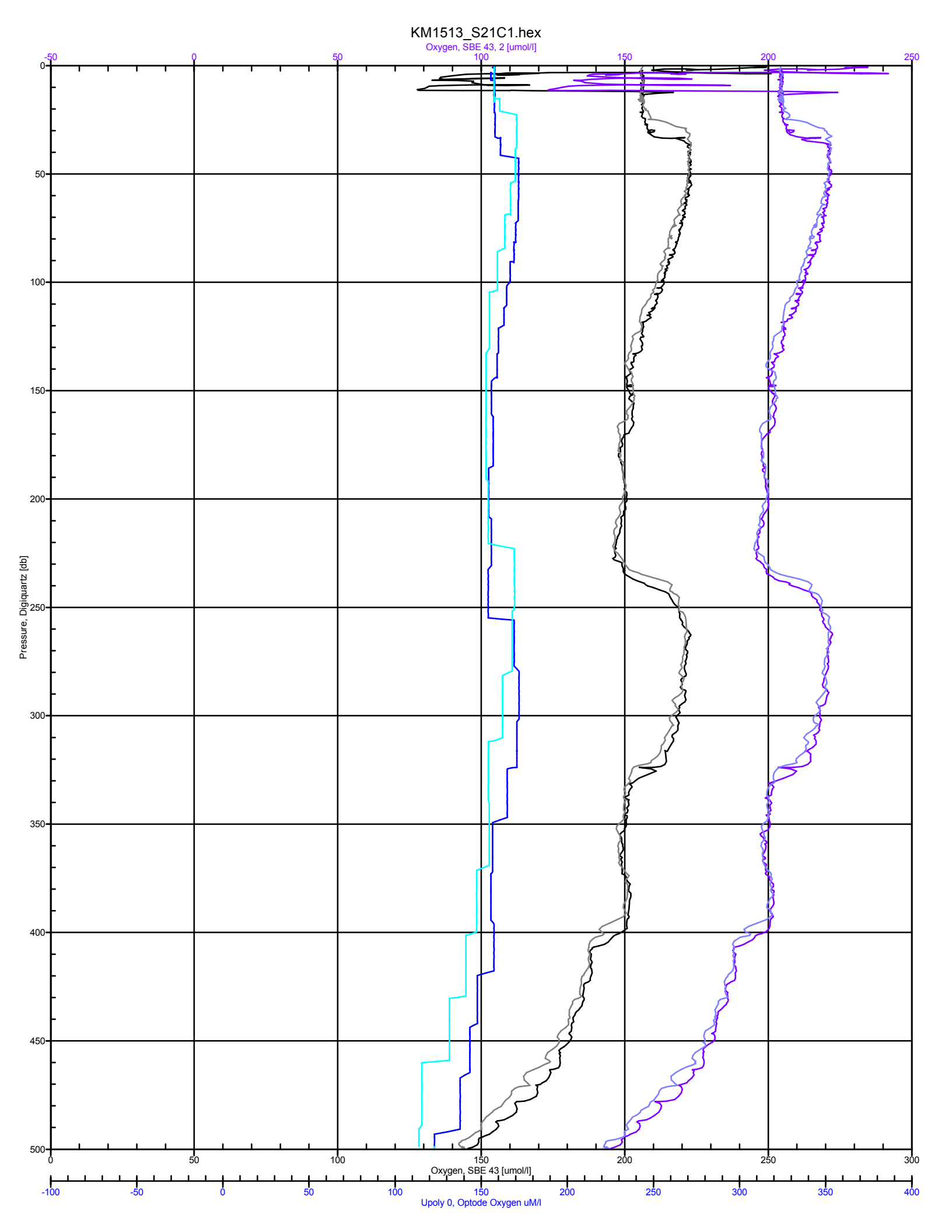
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 21	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 28 Jul**
Time Start Logging HST: 01:59	**Time Start Logging GMT: 11:59**
Pressure on deck	**Time GMT**
Start: 0.970	**In water: 12:01**
End: -0.223	**Out water: 12:33**
Latitude N	**Longitude W**
Start: 24 32. 466	**Start: 156 38. 050**
End: 24 33. 115	**End: 156 34. 876**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	12:29	15.8	✓	
2	15		15.9	✓	
3	15		15.6	✓	
4	15		15.6	✓	
5	15		15.8	✓	
6	15		15.6	✓	
7	15		15.7	✓	
8	15	12:30	15.6	✓	
9	15		16.0	✓	
10	15		15.6	✓	
11	15		14.9	✓	
12	15		15.3	✓	
13	15		15.6	✓	
14	15		15.8	✓	
15	15		15.4	✓	
16	15	12:31	15.6	✓	
17	15		16.3	✓	
18	15		16.4	✓	
19	15		14.6	✓	
20	15		16.5	✓	
21	15		15.8	✓	
22	15		15.1	✓	
23	15		14.8	✓	
24	15		16.1	✓	


KM1513_S21C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S21C1.hex
Oxygen, SBE 43, 2 [umol/l]
-50
0
50
100
150
200
250
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Oxygen, SBE 43 [umol/l]
0
50
100
150
200
250
300
Upoly 0, Optode Oxygen uM/l
-100
-50
0
50
100
150
200
250
300
350
400

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S21C1	
Date:	07/28/2015	(HST)
CTD Start Time:	0200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

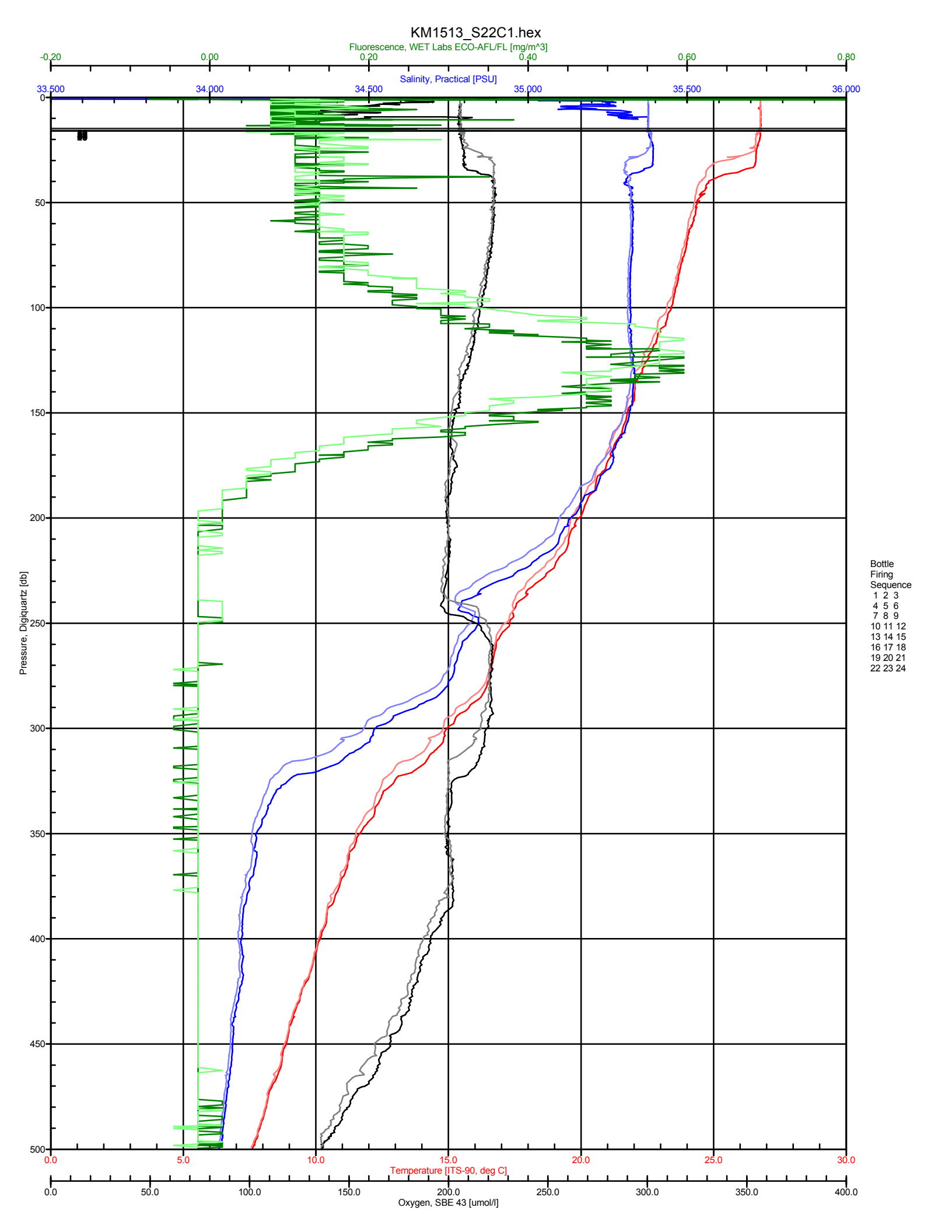
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 22	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/28/15**
Time Start Logging HST: 05:50	**Time Start Logging GMT: 15:50**
Pressure on deck	**Time GMT**
Start: 0.893	**In water: 15:52**
End: -0.193	**Out water: 16:26**
Latitude N	**Longitude W**
Start: 24 33.108	**Start: 156 35.076**
End: 24 33.130	**End: 156 35.064**
Max Press: 503	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	16:22	15.0	✓	
2	15		15.9	✓	
3	15	16:23	15.4	✓	
4	15		15.8	✓	
5	15		15.6	✓	
6	15		15.4	✓	
7	15		14.9	✓	
8	15		16.1	✓	
9	15		15.0	✓	
10	15		15.5	✓	
11	15		15.9	✓	
12	15	16:24	15.4	✓	
13	15		15.6	✓	
14	15		15.6	✓	
15	15		16.5	✓	
16	15		15.0	✓	
17	15		15.7	✓	
18	15		15.7	✓	
19	15		14.7	✓	
20	15		16.8	✓	
21	15	16:25	16.4	✓	
22	15		14.9	✓	
23	15		15.3	✓	
24	15		15.9	✓	


KM1513_S22C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S22C1	
Date:	07/28/2015	(HST)
CTD Start Time:	0600	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

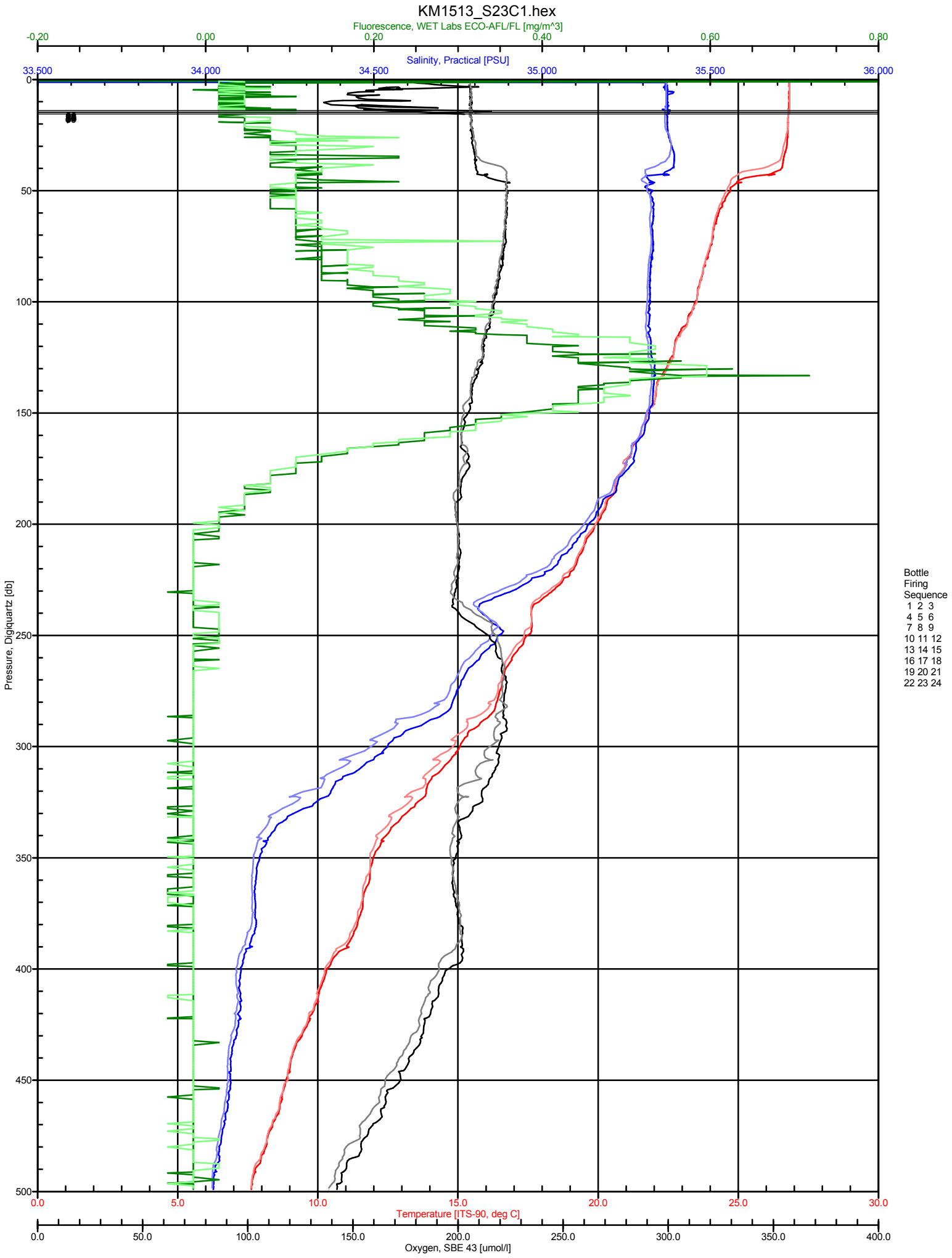
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 23	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/28/15**
Time Start Logging HST: 09:48	**Time Start Logging GMT: 19:50**
Pressure on deck	**Time GMT**
Start: 0.800	**In water: 19:52**
End: -0.146	**Out water: 20:21**
Latitude N	**Longitude W**
Start: 24 33.848	**Start: 156 33.418**
End: 24 33.863	**End: 156 33.409**
Max Press: 505	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	20:17	14.7	✓	
2	15		14.5	✓	
3	15		14.4	✓	
4	15		14.8	✓	
5	15		14.3	✓	
6	15	20:18	15.0	✓	
7	15		15.1	✓	
8	15		14.9	✓	
9	15		14.3	✓	
10	15		14.4	✓	
11	15		14.7	✓	
12	15		14.2	✓	
13	15		14.1	✓	
14	15	20:19	14.0	✓	
15	15		14.3	✓	
16	15		14.0	✓	
17	15		14.6	✓	
18	15		15.0	✓	
19	15		15.0	✓	
20	15		14.7	✓	
21	15	20:20	14.2	✓	
22	15		14.7	✓	
23	15		14.4	✓	
24	15		14.6	✓	


KM1513_S23C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S23C1	
Date:	07/27/2015	(HST)
CTD Start Time:	1000	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

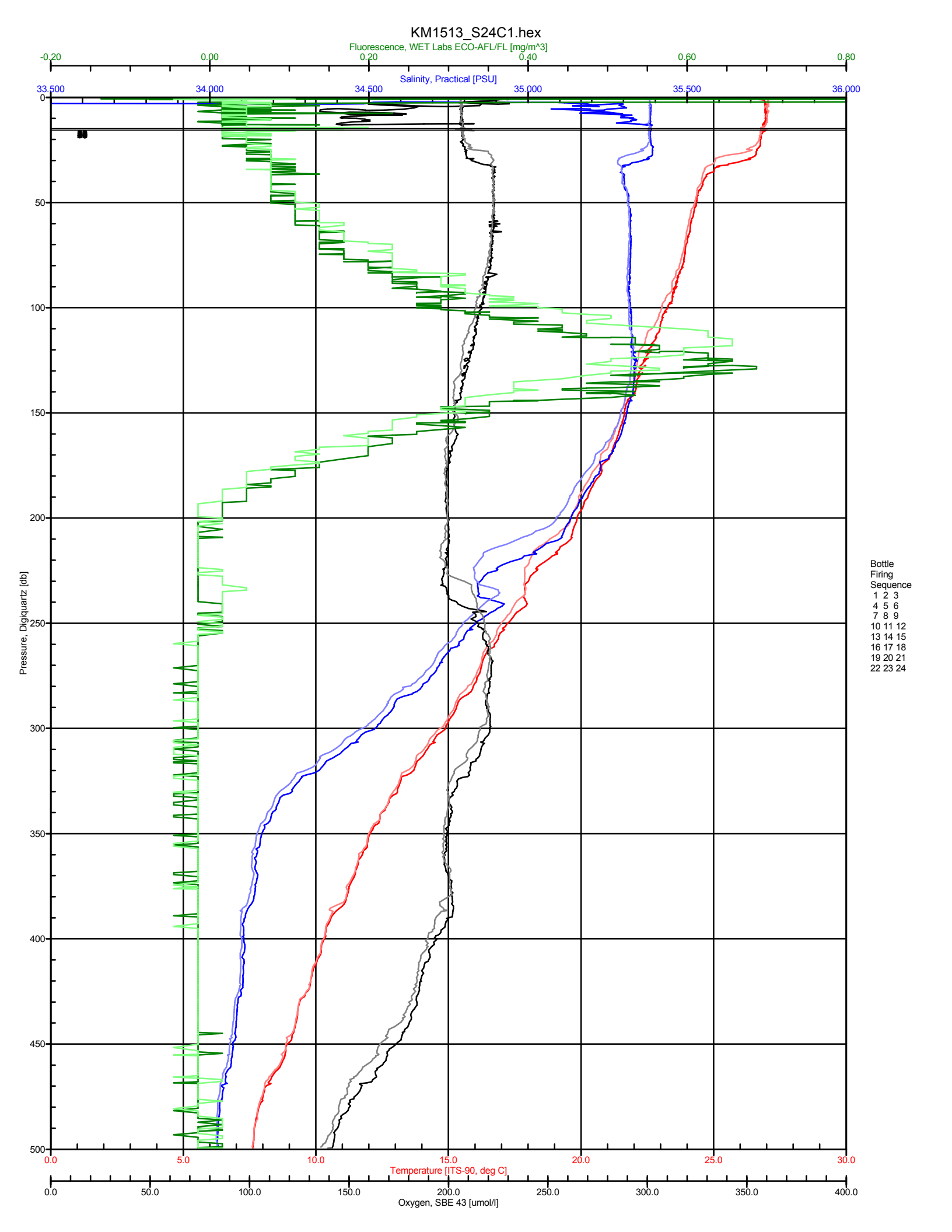
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

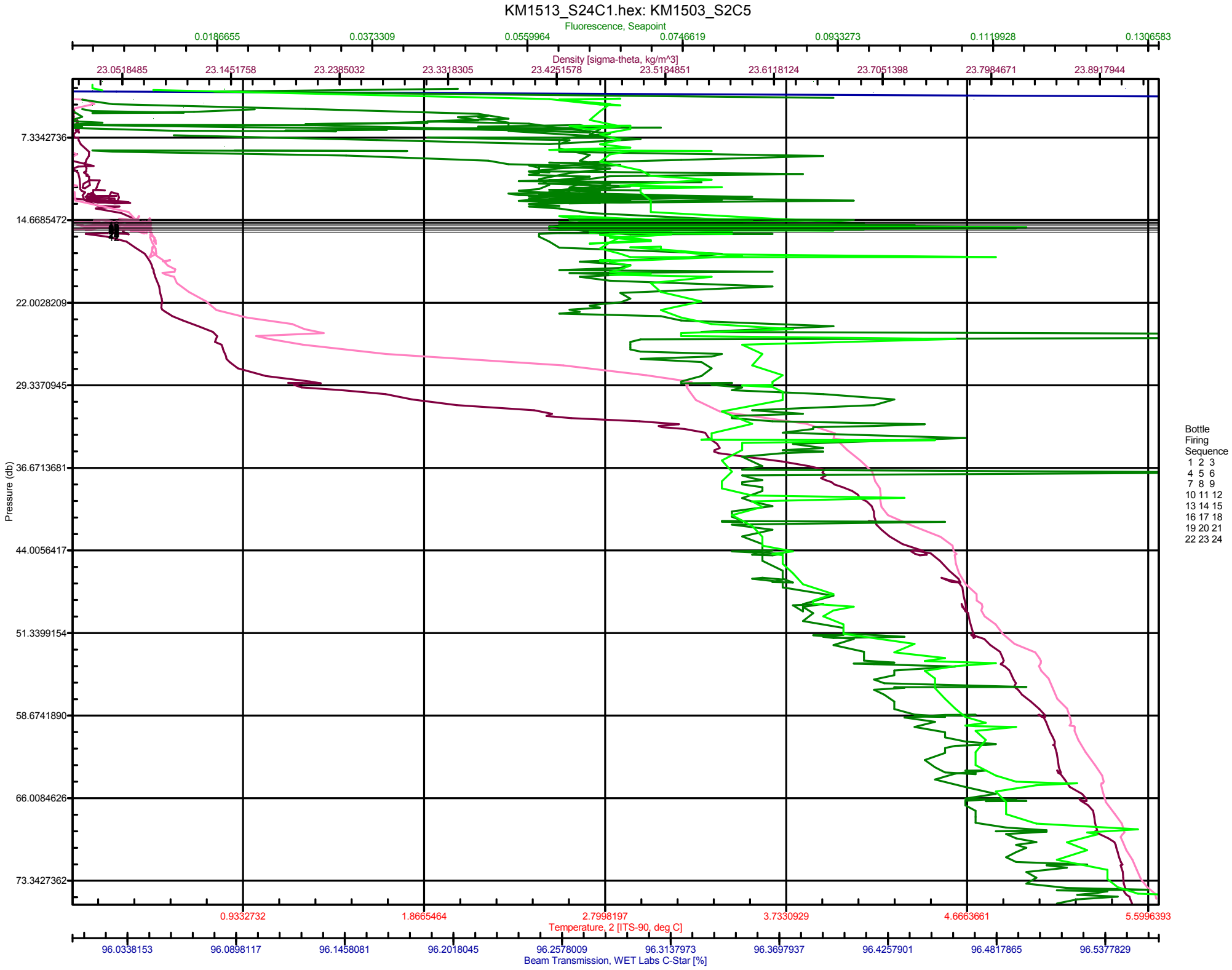
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 24	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/28/15**
Time Start Logging HST:13:58	**Time Start Logging GMT: 23:58**
Pressure on deck	**Time GMT**
Start: 0.998	**In water: 00:01**
End: -0.272	**Out water: 00:36**
Latitude N	**Longitude W**
Start: 24 35.670	**Start: 156 31.428**
End: 24 35.644	**End: 156 31.445**
Max Press: 504	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	00:31	14.9	✓	
2	15	00:32	15.1	✓	
3	15		14.9	✓	
4	15		15.2	✓	
5	15		14.7	✓	
6	15		15.4	✓	
7	15		15.2	✓	
8	15		15.1	✓	
9	15		15.6	✓	
10	15		15.0	✓	
11	15	00:33	15.1	✓	
12	15		15.2	✓	
13	15		14.9	✓	
14	15		14.9	✓	
15	15		15.4	✓	
16	15		14.9	✓	
17	15		15.5	✓	
18	15		15.1	✓	
19	15		14.7	✓	
20	15		15.7	✓	
21	15	00:34	14.9	✓	
22	15		15.3	✓	
23	15		14.8	✓	
24	15		15.4	✓	


KM1513_S24C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S24C1.hex: KM1503_S2C5
Fluorescence, Seapoint
0.0186655
0.0373309
0.0559964
0.0746619
0.0933273
0.1119928
0.1306583
Density [sigma-theta, kg/m^3]
23.0518485
23.1451758
23.2385032
23.3318305
23.4251578
23.5184851
23.6118124
23.7051398
23.7984671
23.8917944
Pressure (db)
7.3342736
14.6685472
22.0028209
29.3370945
36.6713681
44.0056417
51.3399154
58.6741890
66.0084626
73.3427362
Bottle Firing Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.9332732
1.8665464
2.7998197
3.7330929
4.6663661
5.5996393
Temperature, 2 [ITS-90, deg C]
96.0338153
96.0898117
96.1458081
96.2018045
96.2578009
96.3137973
96.3697937
96.4257901
96.4817865
96.5377829
Beam Transmission, WET Labs C-Star [%]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S24C1	
Date:	07/27/2015	(HST)
CTD Start Time:	1400	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

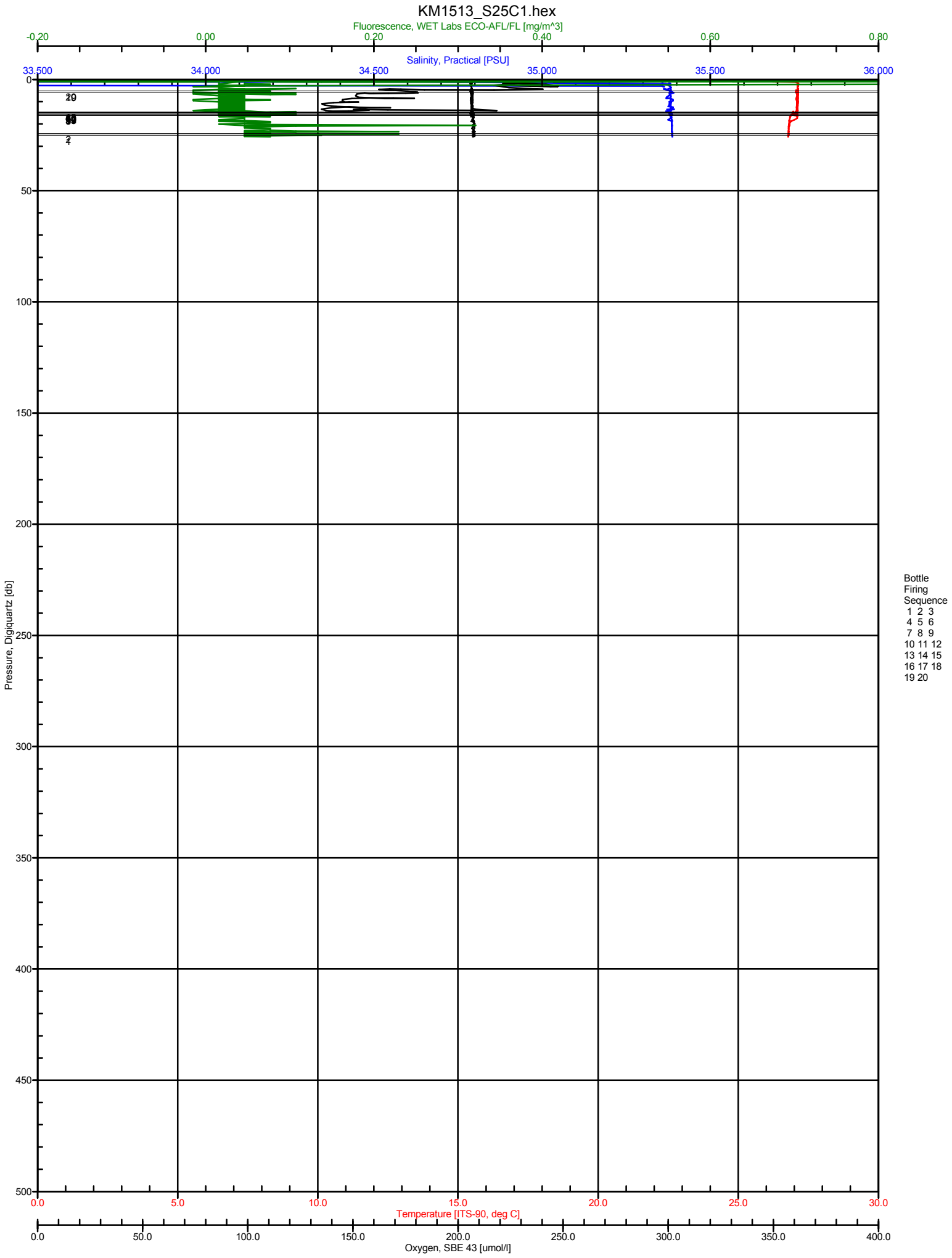
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 25	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 29 Jul**
Time Start Logging HST: 15:58	**Time Start Logging GMT: 01:58**
Pressure on deck	**Time GMT**
Start: 1.013	**In water: 02:00**
End: 0.335	**Out water: 02:14**
Latitude N	**Longitude W**
Start: 24 35. 642	**Start: 156 31. 445**
End: 24 35. 975	**End: 156 30. 427**
Max Press: 25	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	25	2:04	25.1	✓	
2	25		24.6	✓	
3	15	2:06	14.7	✓	
4	15		15.1	✓	
5	15		15.8	✓	
6	15		15.0	✓	
7	15		15.0	✓	
8	15		16.1	✓	
9	15		15.6	✓	
10	15		16.0	✓	
11	15	2:07	15.2	✓	
12	15		15.3	✓	
13	15		14.9	✓	
14	15		15.8	✓	
15	15		15.8	✓	
16	15	2:08	14.9	✓	
17	15		15.6	✓	
18	15		14.7	✓	
19	5	2:11	5.9	✓	
20	5		5.4	✓	
21					
22					
23					
24					


KM1513_S25C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: 25/1 Date: 7/28/15 (HST)

Target Depth (db): 25 CTD Start Time: 1600 (HST)

Rosette Position	Depth (m)	Katie/ Marnie						
1	**25**	X						
2	**25**	X						
3	**15**	X						
4	**15**	X						
5	**15**							
6	**15**							
7	**15**							
8	**15**							
9	**15**							
10	**15**							
11	**15**							
12	**15**							
13	**15**							
14	**15**							
15	**15**							
16	**15**							
17	**15**							
18	**15**							
19	**5**	X						
20	**5**	X						
21								
22								
23								
24								

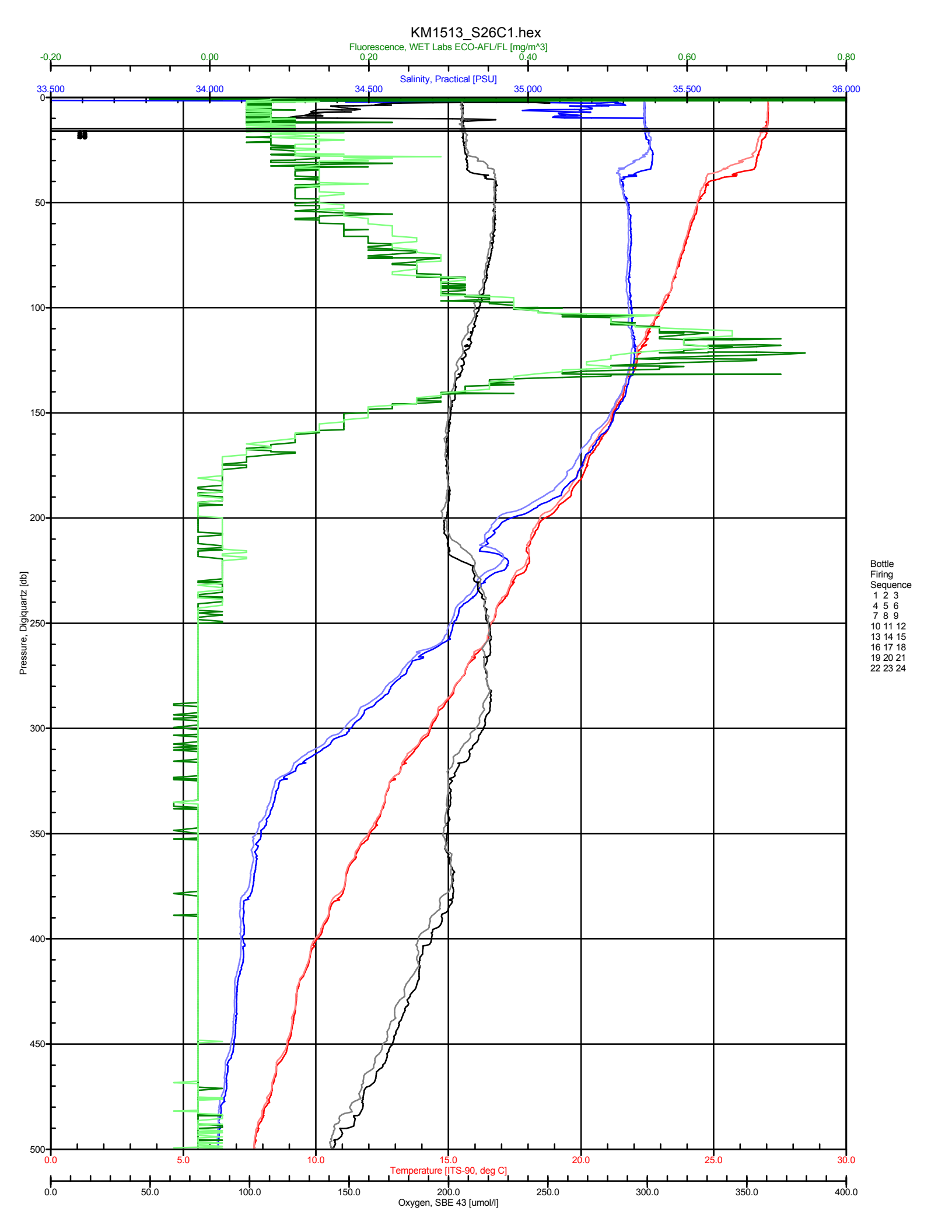
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 26	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 29 Jul**
Time Start Logging HST: 18:04	**Time Start Logging GMT: 04:04**
Pressure on deck	**Time GMT**
Start: 0.982	**In water: 04:06**
End: -0.254	**Out water: 04:42**
Latitude N	**Longitude W**
Start: 24 36. 160	**Start: 156 30. 583**
End: 24 36. 176	**End: 156 30. 575**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	4:35	15.3	✓	
2	15	4:36	15.7	✓	
3	15		15.4	✓	
4	15		15.3	✓	
5	15		15.4	✓	
6	15		15.6	✓	
7	15		14.9	✓	
8	15		15.4	✓	
9	15		15.9	✓	
10	15		15.5	✓	
11	15	4:37	14.9	✓	
12	15		14.5	✓	
13	15		16.1	✓	
14	15		16.0	✓	
15	15		14.9	✓	
16	15		15.9	✓	
17	15		14.7	✓	
18	15		15.9	✓	
19	15		15.4	✓	
20	15		15.3	✓	
21	15	4:38	15.4	✓	
22	15		14.8	✓	
23	15		15.8	✓	
24	15		15.5	✓	


KM1513_S26C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S26C1	
Date:	07/28/2015	(HST)
CTD Start Time:	1800	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

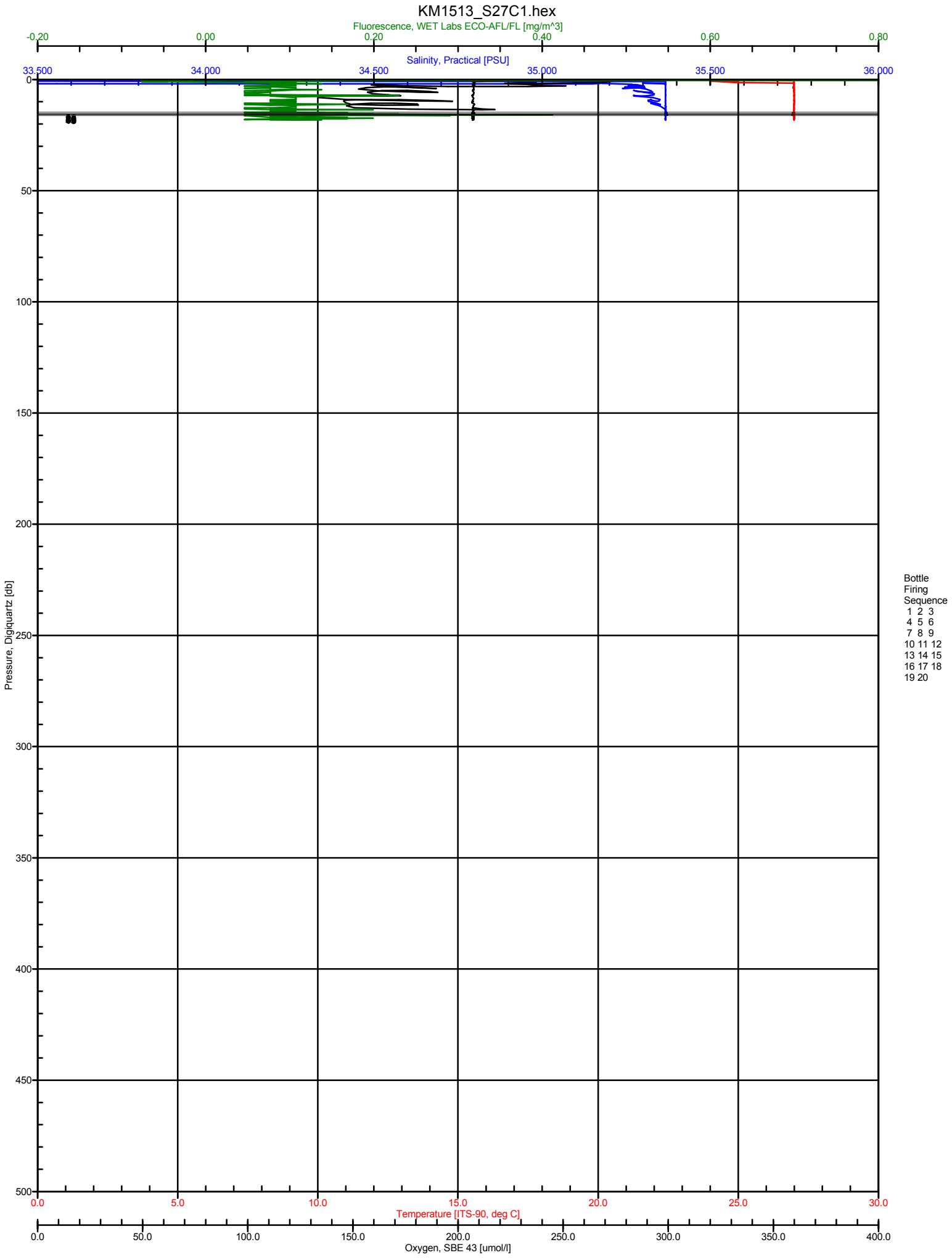
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 27	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 29 Jul**
Time Start Logging HST: 19:41	**Time Start Logging GMT: 05:41**
Pressure on deck	**Time GMT**
Start: 0.970	**In water: 05:43**
End: 0.357	**Out water: 05:50**
Latitude N	**Longitude W**
Start: 24 36. 196	**Start: 156 30. 570**
End: 24 36. 200	**End: 156 30. 569**
Max Press: 15	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	5:46	15.9	✓	
2	15		15.9	✓	
3	15		15.0	✓	
4	15		15.3	✓	
5	15		15.6	✓	
6	15		15.5	✓	
7	15		15.6	✓	
8	15		15.5	✓	
9	15	5:47	15.0	✓	
10	15		15.3	✓	
11	15		15.7	✓	
12	15		15.9	✓	
13	15		15.6	✓	
14	15		15.6	✓	
15	15		15.8	✓	
16	15		15.5	✓	
17	15	5:48	15.6	✓	
18	15		15.7	✓	
19	15		15.5	✓	
20	15		15.3	✓	
21					
22					
23					
24					


KM1513_S27C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: 27/1 Date: 7/28/15 (HST)

Target Depth (db): 15 CTD Start Time: 1900 (HST)

Rosette Position	Depth (m)	DC						
1	**15**	X						
2	**15**	X						
3	**15**	X						
4	**15**	X						
5	**15**	X						
6	**15**	X						
7	**15**	X						
8	**15**	X						
9	**15**	X						
10	**15**	X						
11	**15**	X						
12	**15**	X						
13	**15**	X						
14	**15**	X						
15	**15**	X						
16	**15**	X						
17	**15**	~~X~~						
18	**15**	X						
19	**15**	X						
20	**15**	X						
21								
22								
23								
24								

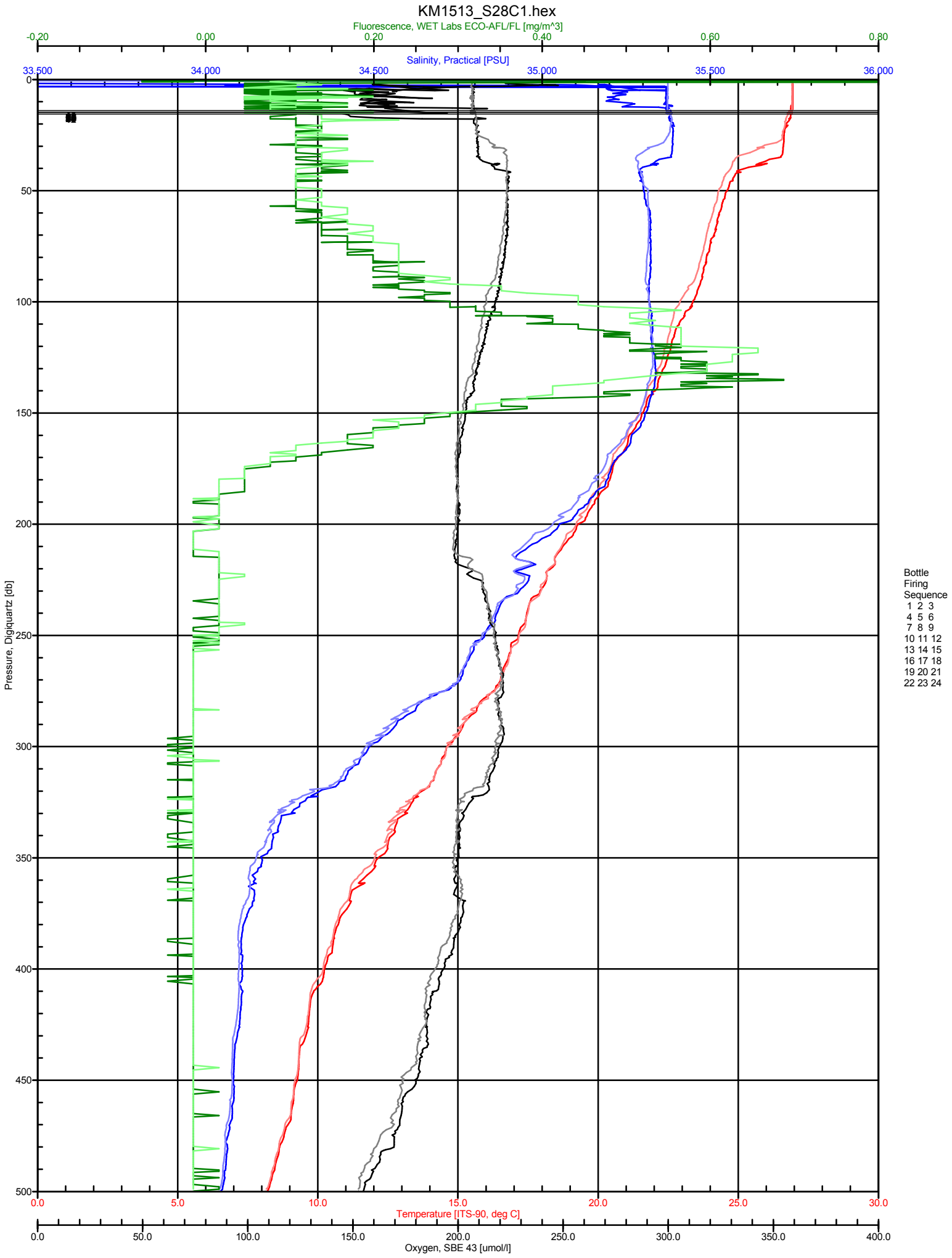
Notes:

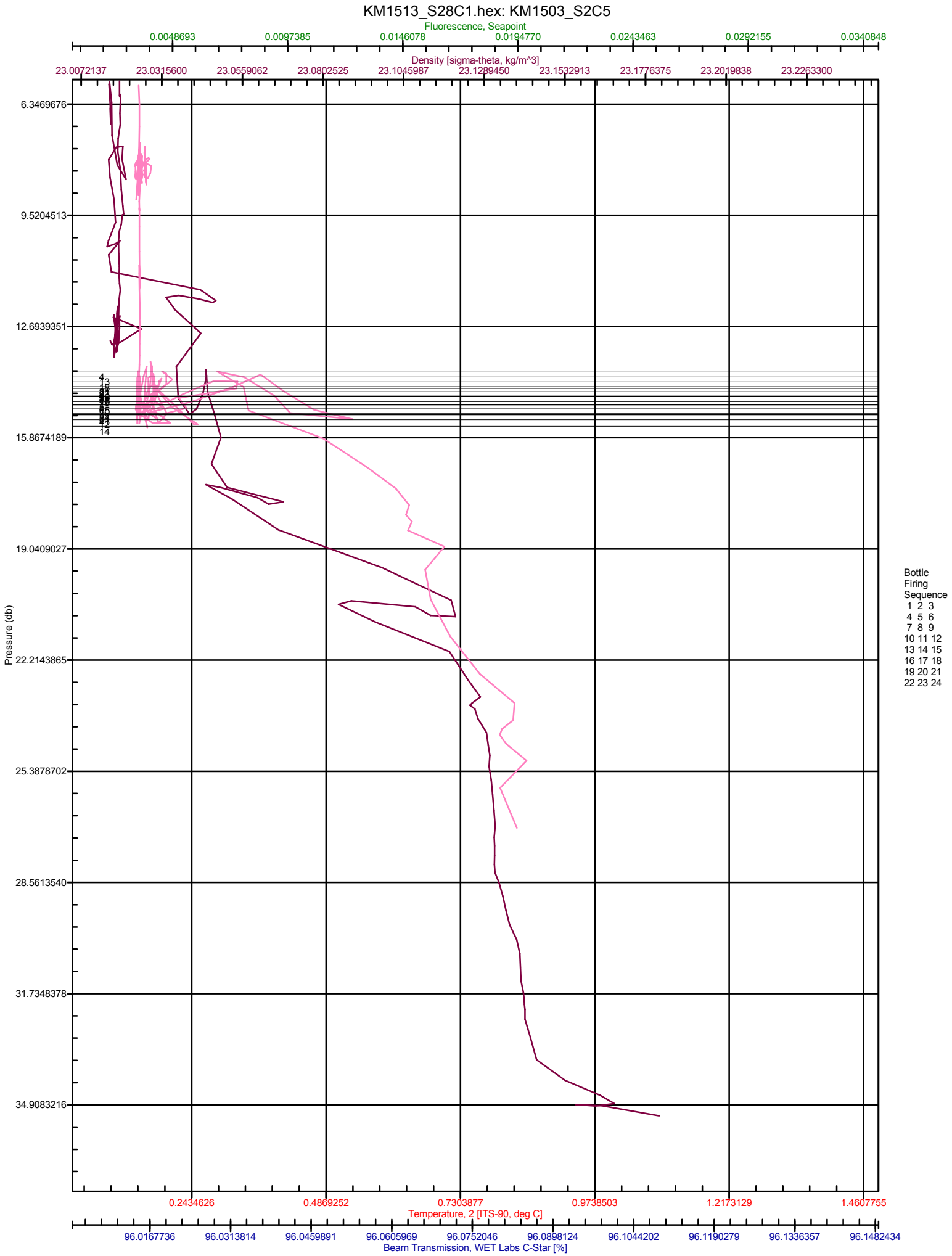
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 28	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 29 Jul**
Time Start Logging HST: 21:53	**Time Start Logging GMT: 07:53**
Pressure on deck	**Time GMT**
Start: 0.942	**In water: 07:55**
End: -0.123	**Out water: 08:31**
Latitude N	**Longitude W**
Start: 24 36. 194	**Start: 156 30. 210**
End: 24 36. 244	**End: 156 30. 244**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	8:25	15.1	✓	
2	15		14.4	✓	
3	15		15.2	✓	
4	15		14.7	✓	
5	15		14.5	✓	
6	15		14.2	✓	
7	15	8:26	15.1	✓	
8	15		14.2	✓	
9	15		15.1	✓	
10	15		14.4	✓	
11	15		14.4	✓	
12	15		15.4	✓	
13	15		14.1	✓	
14	15		15.5	✓	
15	15		14.6	✓	
16	15		14.7	✓	
17	15	8:27	14.7	✓	
18	15		14.3	✓	
19	15		14.5	✓	
20	15		14.5	✓	
21	15		15.2	✓	
22	15		14.4	✓	
23	15		15.0	✓	
24	15		15.2	✓	


KM1513_S28C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S28C1.hex: KM1503_S2C5
Fluorescence, Seapoint
0.0048693
0.0097385
0.0146078
0.0194770
0.0243463
0.0292155
0.0340848
Density [sigma-theta, kg/m^3]
23.0072137
23.0315600
23.0559062
23.0802525
23.1045987
23.1289450
23.1532913
23.1776375
23.2019838
23.2263300
Pressure (db)
6.3469676
9.5204513
12.6939351
15.8674189
19.0409027
22.2143865
25.3878702
28.5613540
31.7348378
34.9083216
Bottle Firing Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.2434626
0.4869252
0.7303877
0.9738503
1.2173129
1.4607755
Temperature, 2 [ITS-90, deg C]
96.0167736
96.0313814
96.0459891
96.0605969
96.0752046
96.0898124
96.1044202
96.1190279
96.1336357
96.1482434
Beam Transmission, WET Labs C-Star [%]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S28C1	
Date:	07/28/2015	(HST)
CTD Start Time:	2200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

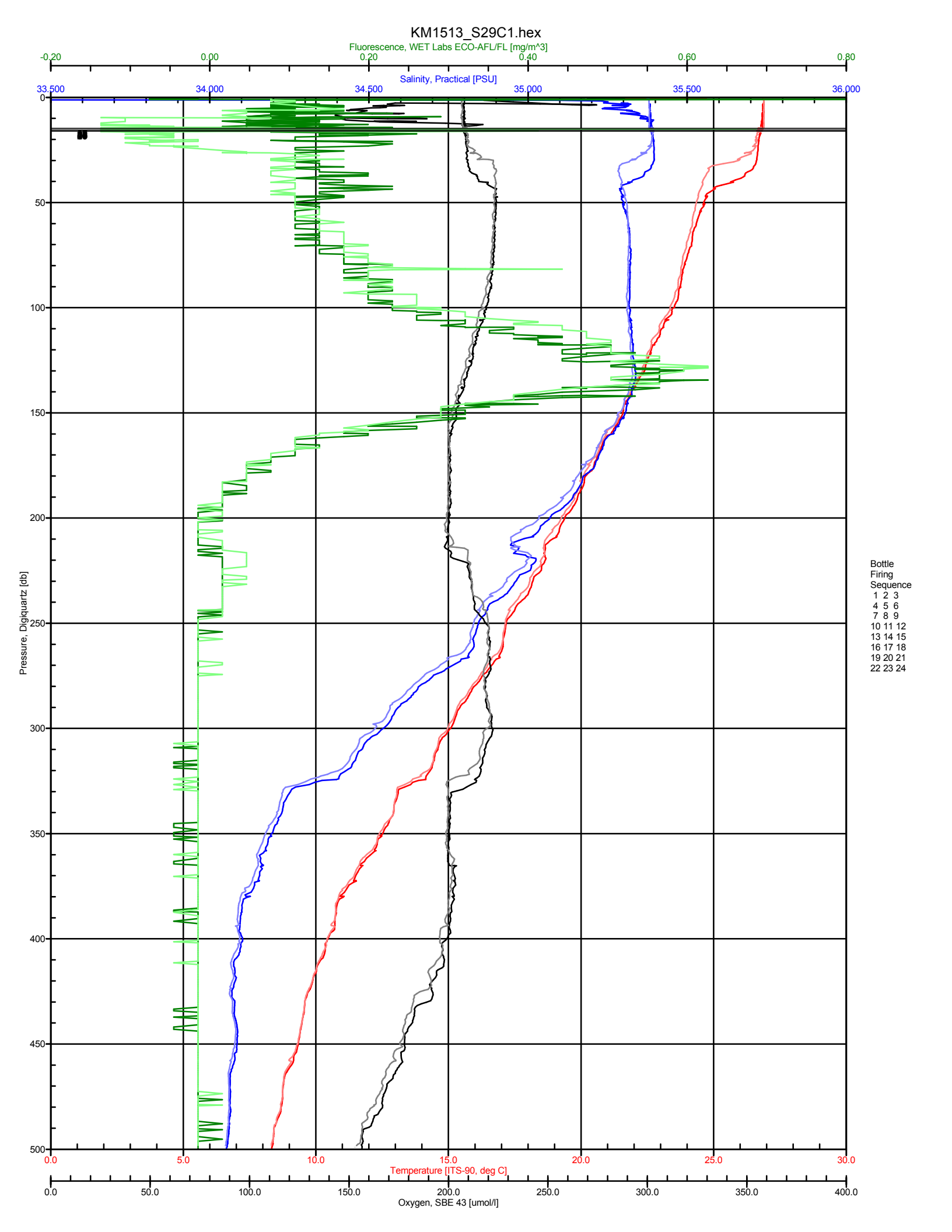
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

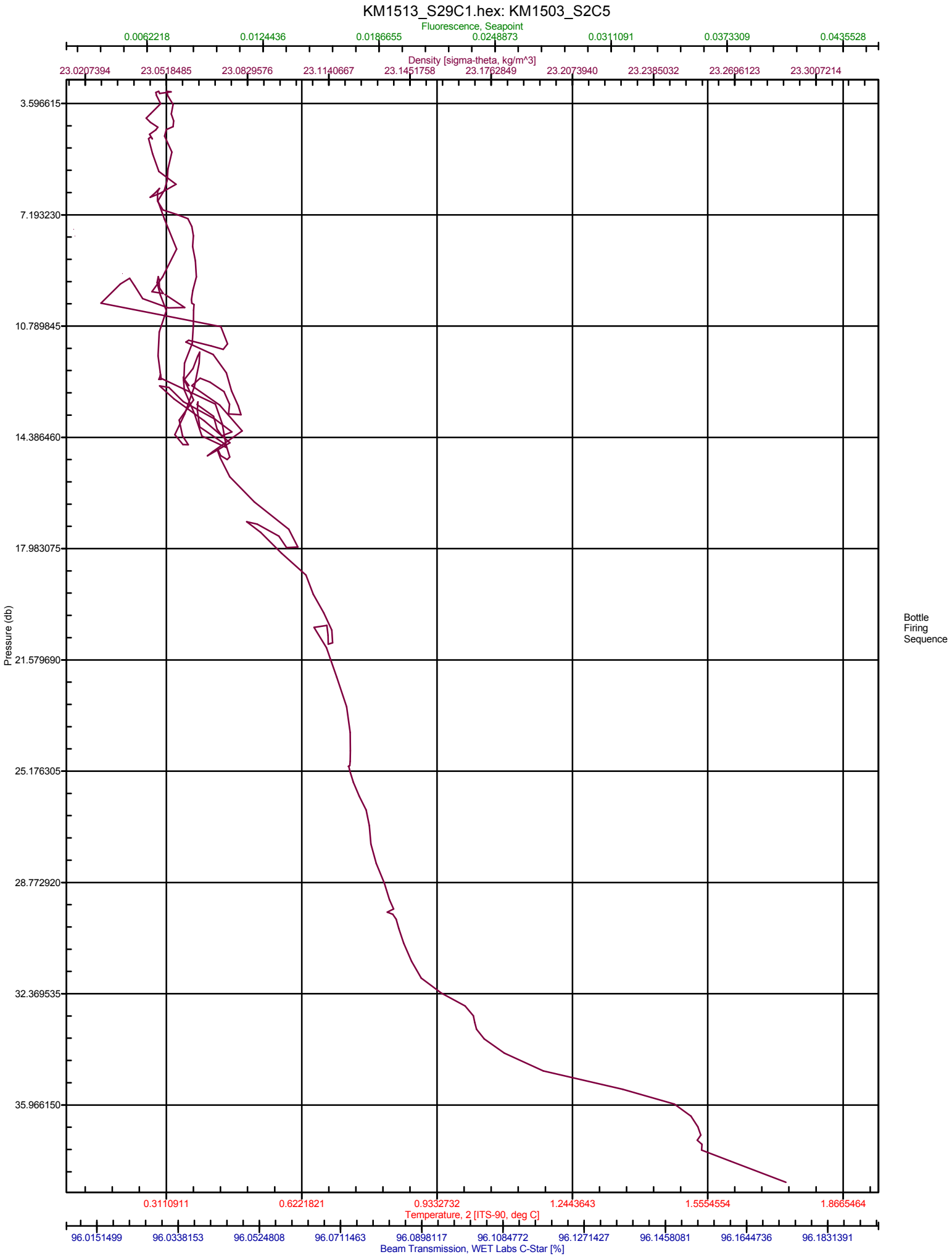
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 29	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 29 Jul**
Time Start Logging HST: 01:59	**Time Start Logging GMT: 11:58**
Pressure on deck	**Time GMT**
Start: 0.965	**In water: 12:01**
End: -0.159	**Out water: 12:35**
Latitude N	**Longitude W**
Start: 24 35. 155	**Start: 156 26. 287**
End: 24 35. 207	**End: 156 26. 276**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	**Optode cap left on**
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	12:30	15.8	✓	
2	15		15.5	✓	
3	15		15.6	✓	
4	15		15.1	✓	
5	15		15.1	✓	
6	15		16.1	✓	
7	15	12:31	14.9	✓	
8	15		15.7	✓	
9	15		15.1	✓	
10	15		15.6	✓	
11	15		15.4	✓	
12	15		15.4	✓	
13	15		15.9	✓	
14	15		14.9	✓	
15	15		15.5	✓	
16	15		15.6	✓	
17	15	12:32	15.0	✓	
18	15		15.8	✓	
19	15		14.9	✓	
20	15		15.9	✓	
21	15		15.5	✓	
22	15		14.8	✓	
23	15		15.6	✓	
24	15		15.0	✓	


KM1513_S29C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S29C1.hex: KM1503_S2C5
Fluorescence, Seapoint
0.0062218
0.0124436
0.0186655
0.0248873
0.0311091
0.0373309
0.0435528
Density [sigma-theta, kg/m^3]
23.0207394
23.0518485
23.0829576
23.1140667
23.1451758
23.1762849
23.2073940
23.2385032
23.2696123
23.3007214
3.596615
7.193230
10.789845
14.386460
17.983075
21.579690
25.176305
28.772920
32.369535
35.966150
Pressure (db)
Bottle
Firing
Sequence
0.3110911
0.6221821
0.9332732
1.2443643
1.5554554
1.8665464
Temperature, 2 [ITS-90, deg C]
96.0151499
96.0338153
96.0524808
96.0711463
96.0898117
96.1084772
96.1271427
96.1458081
96.1644736
96.1831391
Beam Transmission, WET Labs C-Star [%]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S29C1	
Date:	07/29/2015	(HST)
CTD Start Time:	0200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

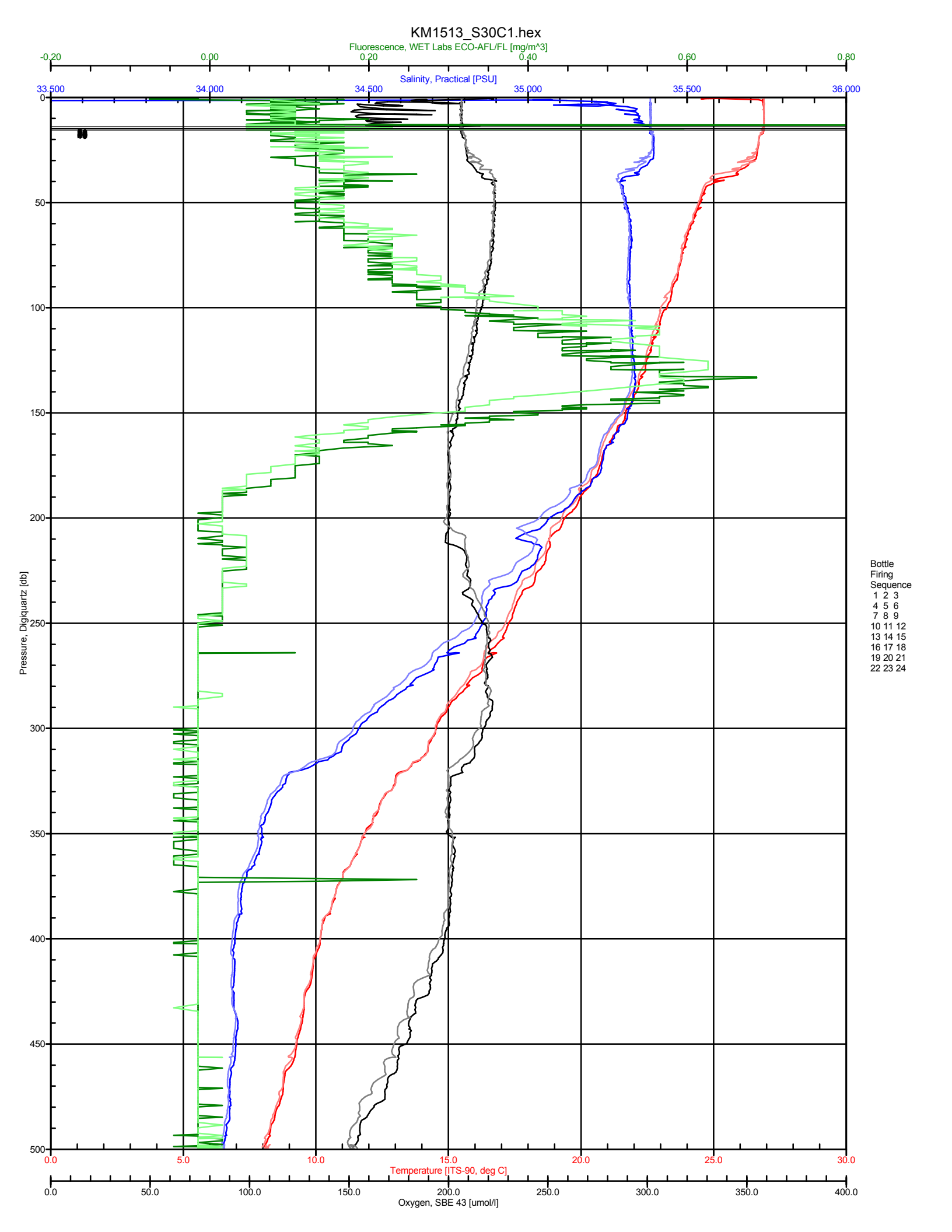
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

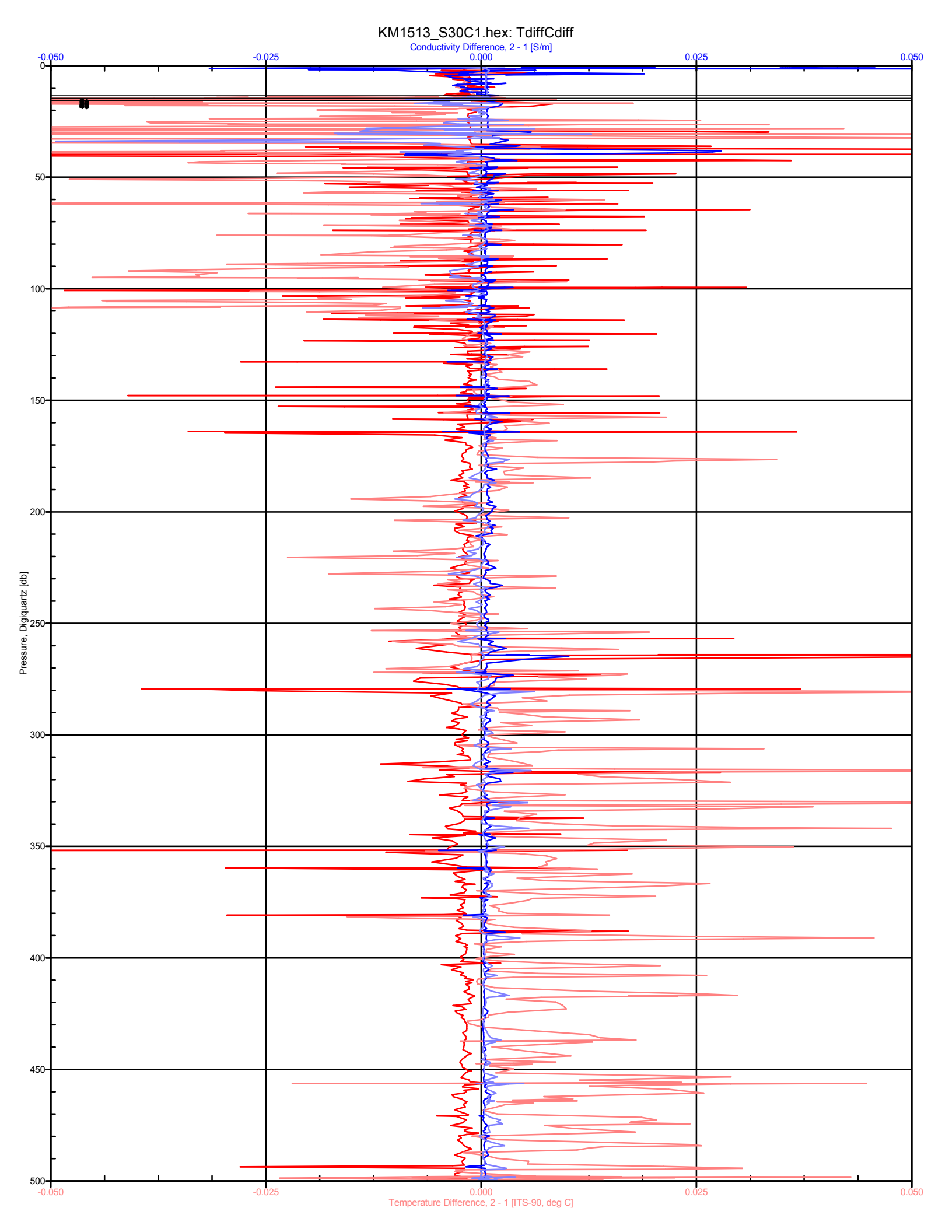
KM1513 CMORE-SCOPE CTD CAST Logsheet

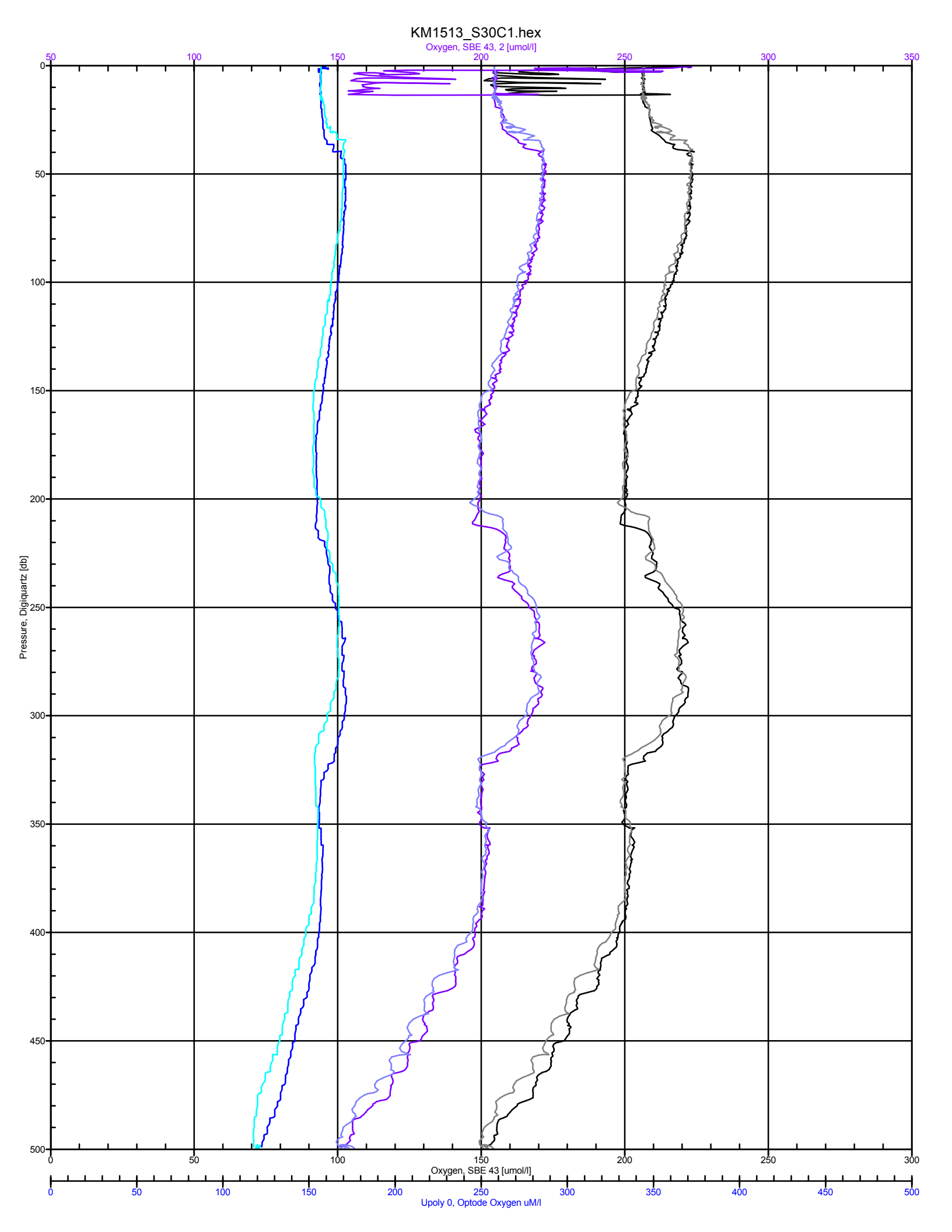
Station: 30	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/29/15**
Time Start Logging HST: 05:51	**Time Start Logging GMT: 15:51**
Pressure on deck	**Time GMT**
Start: 0.766	**In water: 15:52**
End: -0.188	**Out water: 16:25**
Latitude N	**Longitude W**
Start: 24.34.578	**Start: 156 25.214**
End: 24 34.586	**End: 156 25.207**
Max Press: 503	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	16:22	14.8	✓	
2	15		14.8	✓	
3	15		15.1	✓	
4	15		14.4	✓	
5	15		14.7	✓	
6	15		15.0	✓	
7	15	16:23	13.7	✓	
8	15		13.8	✓	
9	15		14.7	✓	
10	15		15.6	✓	
11	15		13.7	✓	
12	15		15.5	✓	
13	15		14.7	✓	
14	15		14.9	✓	
15	15		14.3	✓	
16	15		15.2	✓	
17	15	16:24	15.0	✓	
18	15		14.5	✓	
19	15		14.7	✓	
20	15		14.8	✓	
21	15		15.2	✓	
22	15		14.5	✓	
23	15		15.0	✓	
24	15		14.4	✓	


KM1513_S30C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S30C1.hex: TdiffCdiff
Conductivity Difference, 2 - 1 [S/m]
-0.050
-0.025
0.000
0.025
0.050
0
50
100
150
200
250
300
350
400
450
500
Pressure, Digiquartz [db]
Temperature Difference, 2 - 1 [ITS-90, deg C]


KM1513_S30C1.hex
Oxygen, SBE 43, 2 [umol/l]
50
100
150
200
250
300
350
0
50
100
150
200
250
300
350
400
450
500
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
Oxygen, SBE 43 [umol/l]
0
50
100
150
200
250
300
350
400
450
500
Upoly 0, Optode Oxygen uM/l

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S30C1	
Date:	07/29/2015	(HST)
CTD Start Time:	0600	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

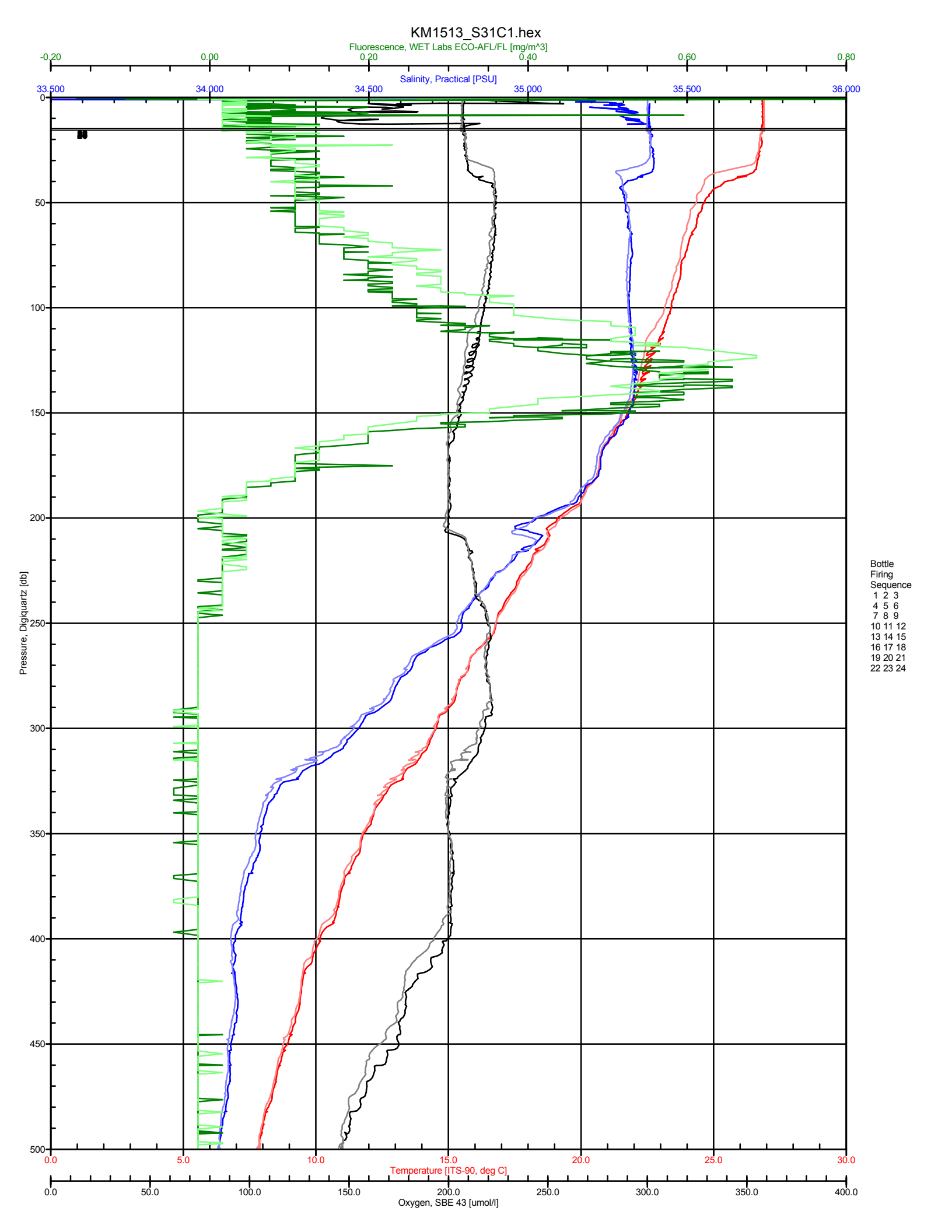
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 31	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/29/15**
Time Start Logging HST: 09:51	**Time Start Logging GMT: 19:51**
Pressure on deck	**Time GMT**
Start: 0.923	**In water: 19:54**
End: -0.204	**Out water: 20:28**
Latitude N	**Longitude W**
Start: 24 34.201	**Start: 156 25.570**
End: 24 34.228	**End: 156 25.550**
Max Press: 501	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	20:24	15.9	✓	
2	15		14.6	✓	
3	15		15.3	✓	
4	15		14.9	✓	
5	15		15.2	✓	
6	15		15.0	✓	
7	15		15.2	✓	
8	15		15.1	✓	
9	15		15.1	✓	
10	15	20:25	15.1	✓	
11	15		15.1	✓	
12	15		15.2	✓	
13	15		14.9	✓	
14	15		15.5	✓	
15	15		15.0	✓	
16	15		15.1	✓	
17	15		15.2	✓	
18	15		15.0	✓	
19	15		14.7	✓	
20	15		15.6	✓	
21	15	20:26	16.0	✓	
22	15		14.3	✓	
23	15		15.5	✓	
24	15		15.3	✓	


KM1513_S31C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S31C1	
Date:	07/29/2015	(HST)
CTD Start Time:	1000	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

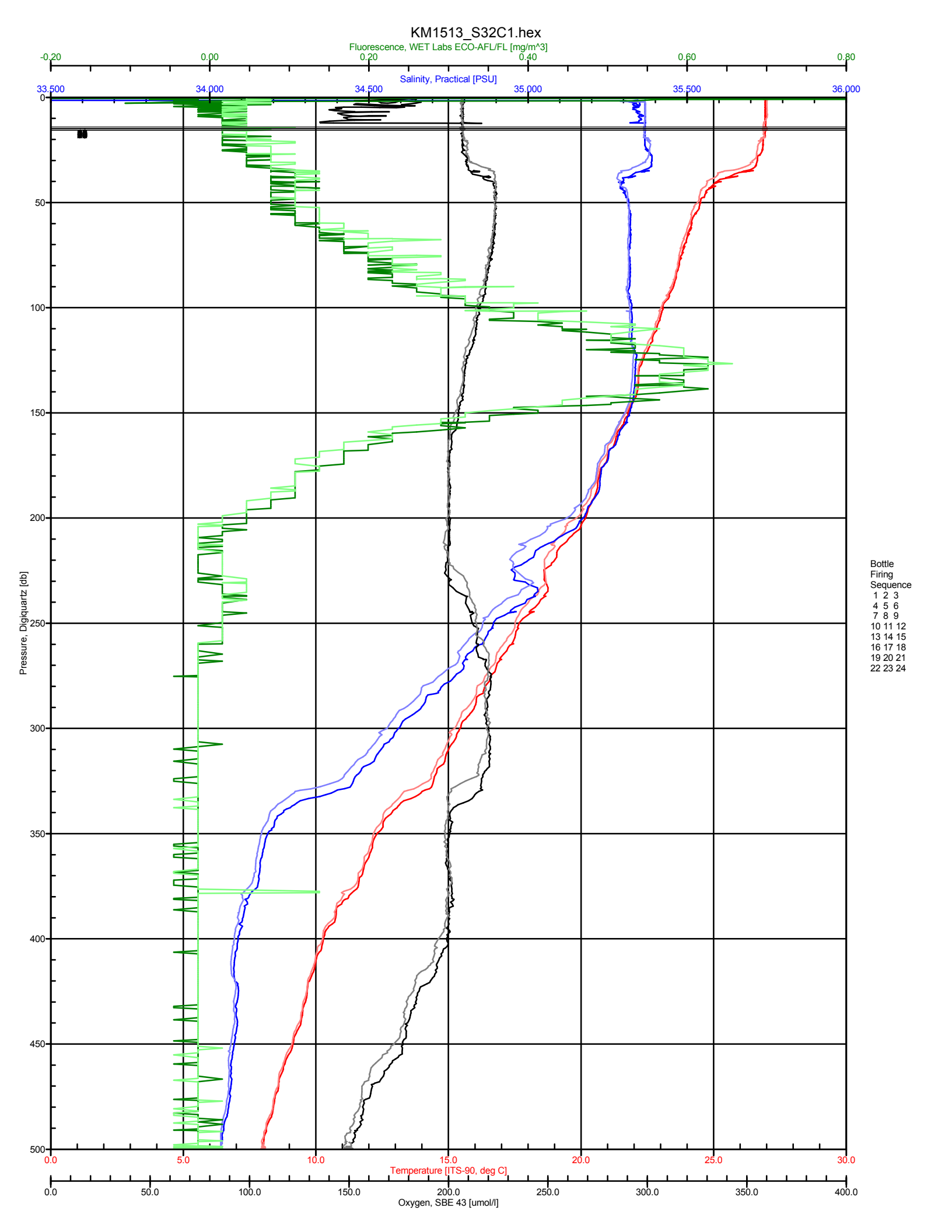
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 32	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/29/15**
Time Start Logging HST: 13:51	**Time Start Logging GMT: 23:51**
Pressure on deck	**Time GMT**
Start: 0.904	**In water: 23:56**
End: -0.149	**Out water: 00:29**
Latitude N	**Longitude W**
Start: 24 34.972	**Start: 156 24.805**
End: 24 34.967	**End: 156 24.806**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	00:25	15.1	✓	
2	15		14.9	✓	
3	15		14.4	✓	
4	15	00:26	15.0	✓	
5	15		15.5	✓	
6	15		14.4	✓	
7	15		15.1	✓	
8	15		14.6	✓	
9	15		15.2	✓	
10	15		14.8	✓	
11	15		14.9	✓	
12	15		14.7	✓	
13	15		15.2	✓	
14	15	00:27	15.0	✓	
15	15		14.6	✓	
16	15		15.1	✓	
17	15		15.1	✓	
18	15		14.2	✓	
19	15		15.5	✓	
20	15		14.6	✓	
21	15		14.6	✓	
22	15		15.6	✓	
23	15	00:28	15.6	✓	
24	15		15.1	✓	


KM1513_S32C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S32C1	
Date:	07/29/2015	(HST)
CTD Start Time:	1400	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

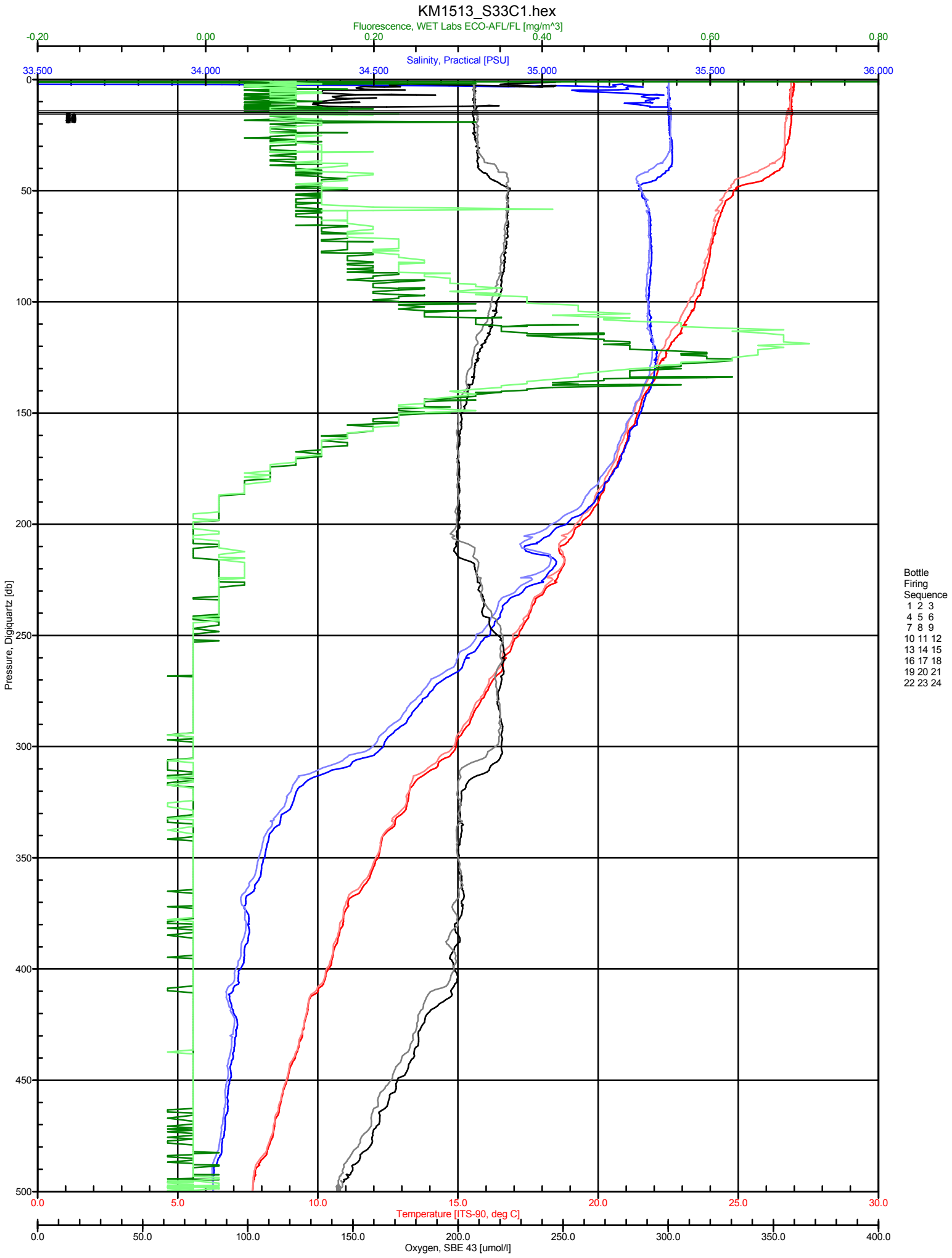
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

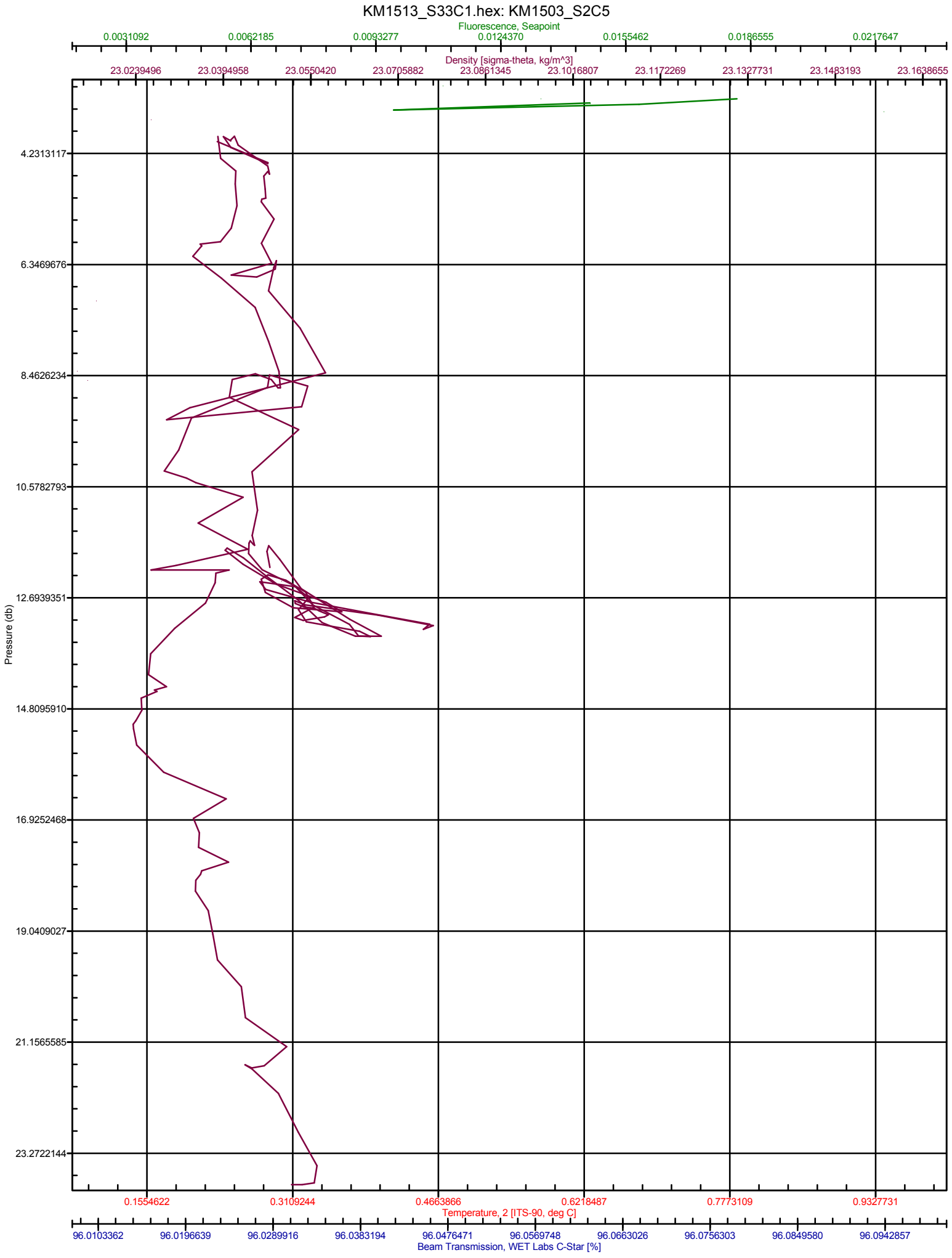
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 33	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/30/15**
Time Start Logging HST: 17:59	**Time Start Logging GMT: 03:59**
Pressure on deck	**Time GMT**
Start: 0.960	**In water: 04:00**
End: -0.254	**Out water: 04:33**
Latitude N	**Longitude W**
Start: 24 34. 560	**Start: 156 23. 215**
End: 24 34. 584	**End: 156 23. 204**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	04:29	15.0	✓	
2	15		14.7	✓	
3	15		15.0	✓	
4	15		15.3	✓	
5	15		15.1	✓	
6	15		14.8	✓	
7	15		14.3	✓	
8	15	04:30	15.6	✓	
9	15		15.4	✓	
10	15		15.2	✓	
11	15		14.4	✓	
12	15		14.9	✓	
13	15		15.3	✓	
14	15		15.0	✓	
15	15		15.2	✓	
16	15		14.9	✓	
17	15	04:31	14.7	✓	
18	15		14.8	✓	
19	15		15.2	✓	
20	15		14.7	✓	
21	15		15.1	✓	
22	15		15.4	✓	
23	15		14.5	✓	
24	15		15.3	✓	


KM1513_S33C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S33C1.hex: KM1503_S2C5
Fluorescence, Seapoint
0.0031092
0.0062185
0.0093277
0.0124370
0.0155462
0.0186555
0.0217647
Density [sigma-theta, kg/m^3]
23.0239496
23.0394958
23.0550420
23.0705882
23.0861345
23.1016807
23.1172269
23.1327731
23.1483193
23.1638655
4.2313117
6.3469676
8.4626234
10.5782793
12.6939351
14.8095910
16.9252468
19.0409027
21.1565585
23.2722144
Pressure (db)
0.1554622
0.3109244
0.4663866
0.6218487
0.7773109
0.9327731
Temperature, 2 [ITS-90, deg C]
96.0103362
96.0196639
96.0289916
96.0383194
96.0476471
96.0569748
96.0663026
96.0756303
96.0849580
96.0942857
Beam Transmission, WET Labs C-Star [%]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S33C1	
Date:	07/29/2015	(HST)
CTD Start Time:	1800	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

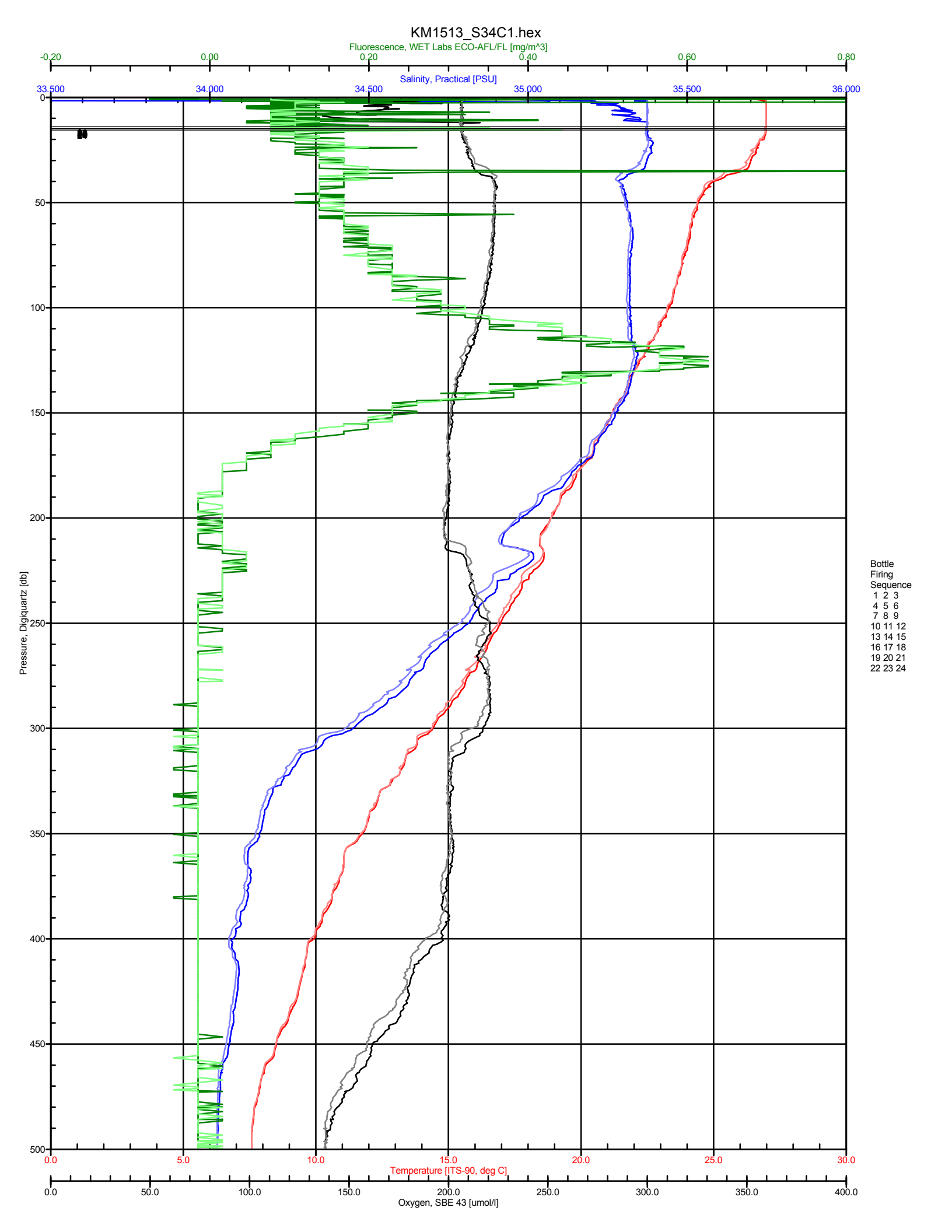
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 34	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/30/15**
Time Start Logging HST: 21:44	**Time Start Logging GMT: 07:44**
Pressure on deck	**Time GMT**
Start: 0.601	**In water: 07:46**
End: -0.177	**Out water: 08:18**
Latitude N	**Longitude W**
Start: 24 34. 580	**Start: 156 22. 871**
End: 24 34. 612	**End: 156 22. 861**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	08:13	15.2	✓	
2	15		15.0	✓	
3	15		14.5	✓	
4	15		15.3	✓	
5	15		14.5	✓	
6	15		14.9	✓	
7	15		14.4	✓	
8	15	08:14	14.6	✓	
9	15		14.7	✓	
10	15		15.4	✓	
11	15		14.4	✓	
12	15		15.2	✓	
13	15		14.7	✓	
14	15		15.4	✓	
15	15		14.6	✓	
16	15		15.0	✓	
17	15		14.7	✓	
18	15		15.0	✓	
19	15	08:15	14.9	✓	
20	15		15.0	✓	
21	15		14.6	✓	
22	15		15.5	✓	
23	15		13.9	✓	
24	15		15.8	✓	


KM1513_S34C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S34C1	
Date:	07/29/2015	(HST)
CTD Start Time:	2200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

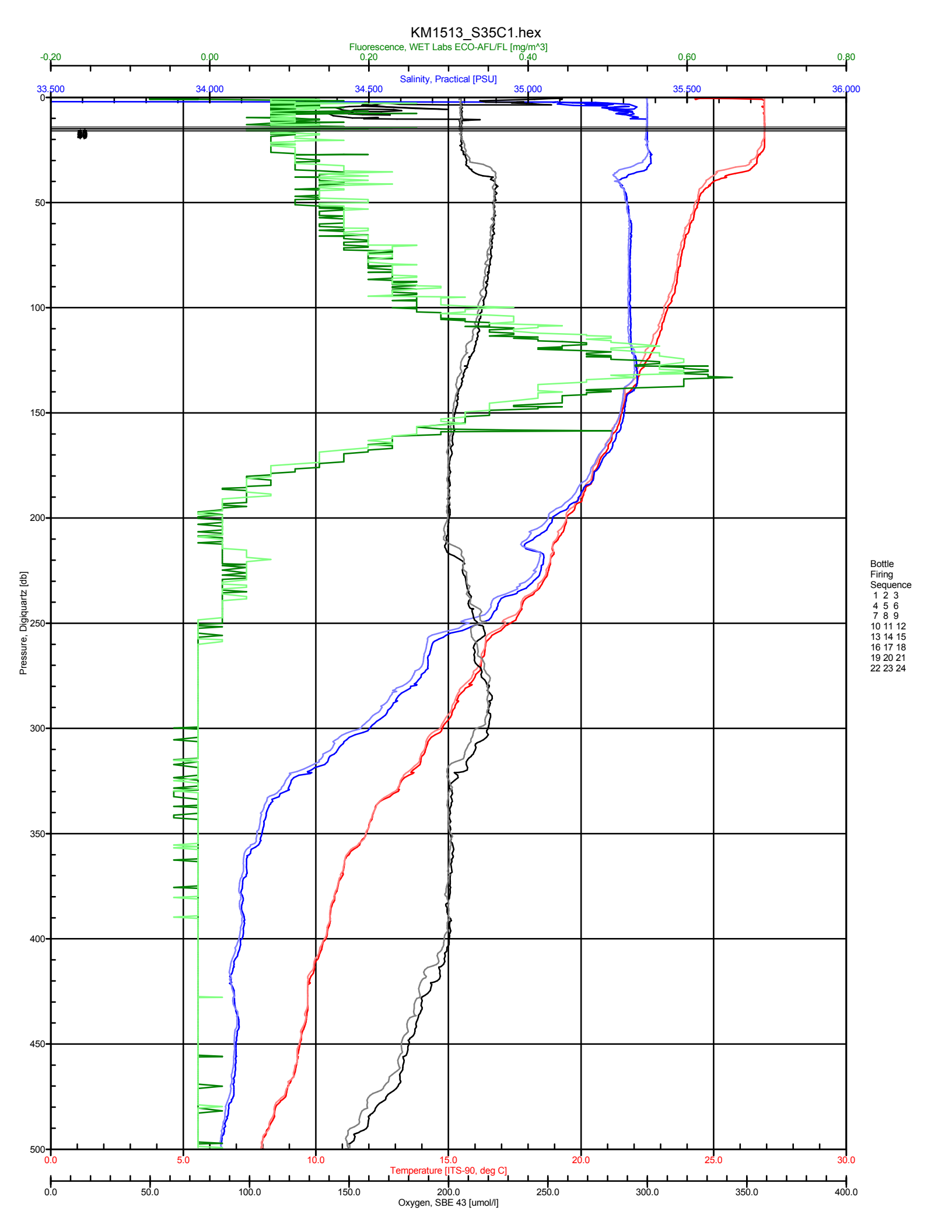
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

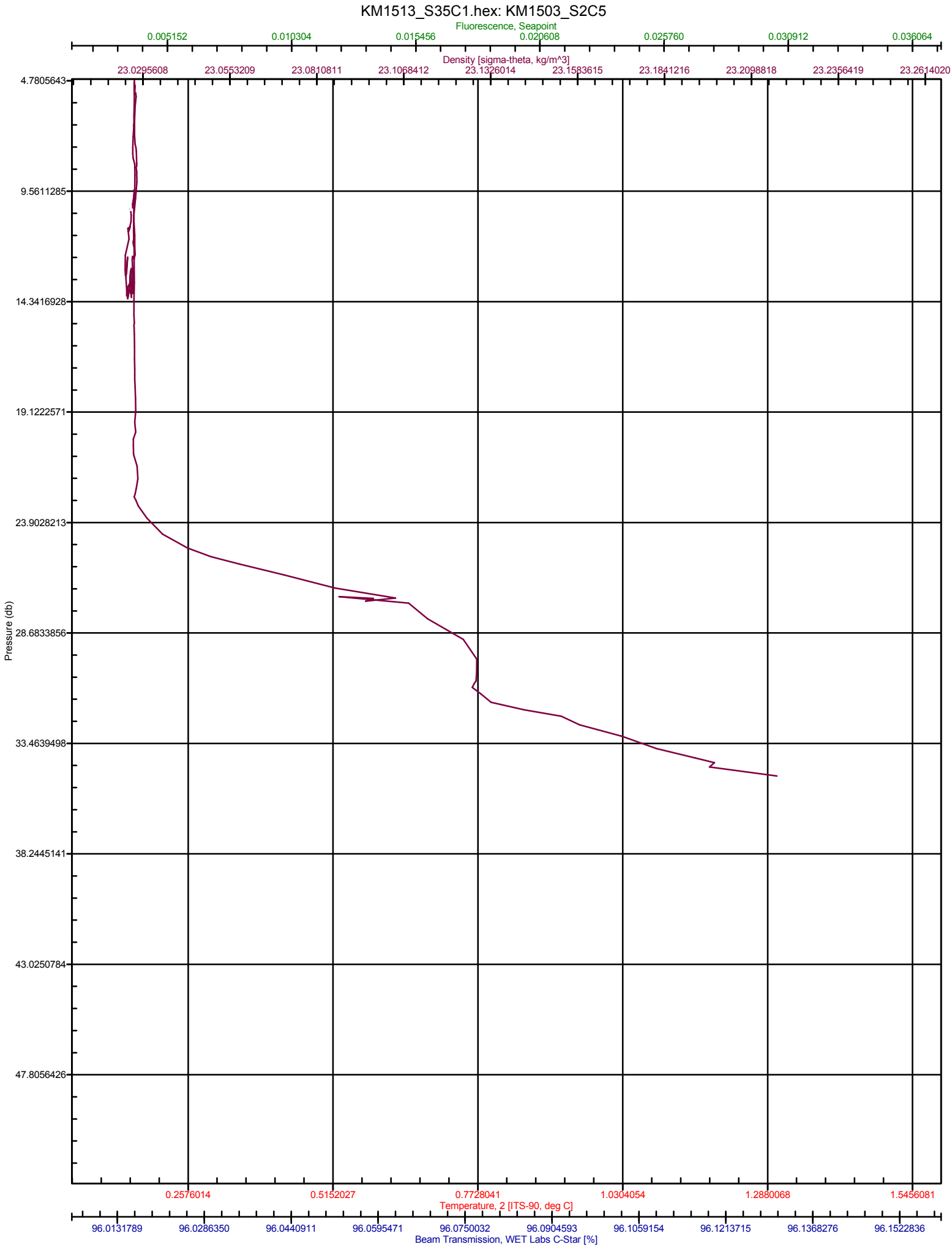
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 35	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/30/15**
Time Start Logging HST: 01:56	**Time Start Logging GMT: 11:56**
Pressure on deck	**Time GMT**
Start: 0.915	**In water: 11:59**
End: -0.141	**Out water: 12:32**
Latitude N	**Longitude W**
Start: 24 35. 000	**Start: 156 21. 820**
End: 24 34. 976	**End: 156 21. 822**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	12:27	14.5	✓	
2	15		14.8	✓	
3	15		15.0	✓	
4	15		15.0	✓	
5	15	12:28	15.1	✓	
6	15		15.2	✓	
7	15		15.3	✓	
8	15		15.6	✓	
9	15		14.2	✓	
10	15		15.2	✓	
11	15		14.4	✓	
12	15		15.1	✓	
13	15		14.6	✓	
14	15	12:29	15.1	✓	
15	15		15.5	✓	
16	15		15.1	✓	
17	15		14.7	✓	
18	15		15.6	✓	
19	15		15.1	✓	
20	15		14.5	✓	
21	15		15.4	✓	
22	15		14.9	✓	
23	15		14.5	✓	
24	15	12:30	14.5	✓	


KM1513_S35C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S35C1.hex: KM1503_S2C5
Fluorescence, Seapoint
0.005152
0.010304
0.015456
0.020608
0.025760
0.030912
0.036064
Density [sigma-theta, kg/m^3]
23.0295608
23.0553209
23.0810811
23.1068412
23.1326014
23.1583615
23.1841216
23.2098818
23.2356419
23.2614020
Pressure (db)
4.7805643
9.5611285
14.3416928
19.1222571
23.9028213
28.6833856
33.4639498
38.2445141
43.0250784
47.8056426
0.2576014
0.5152027
0.7728041
1.0304054
1.2880068
1.5456081
Temperature, 2 [ITS-90, deg C]
96.0131789
96.0286350
96.0440911
96.0595471
96.0750032
96.0904593
96.1059154
96.1213715
96.1368276
96.1522836
Beam Transmission, WET Labs C-Star [%]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S35C1	
Date:	07/30/2015	(HST)
CTD Start Time:	0200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

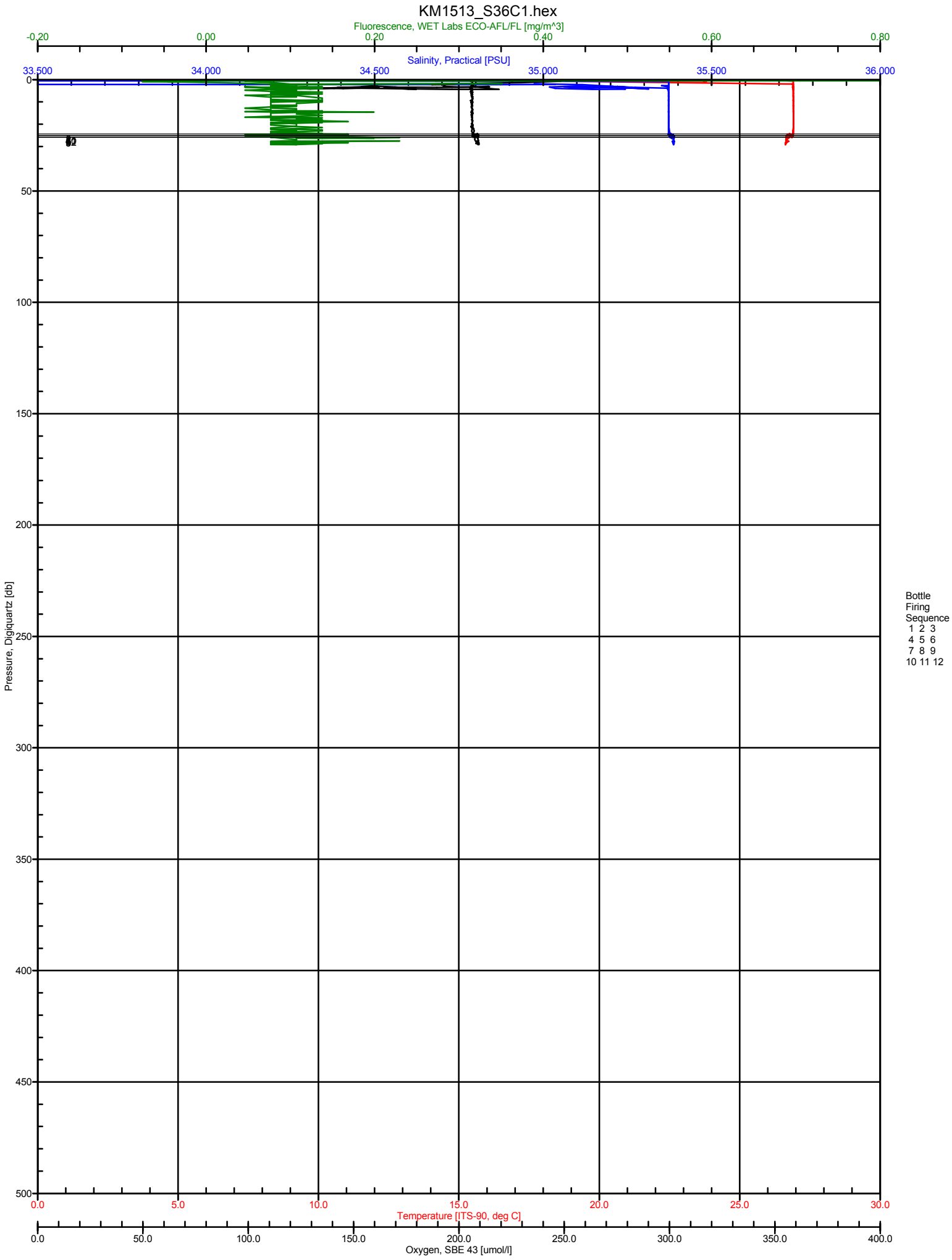
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 36	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/30/15**
Time Start Logging HST: 03:37	**Time Start Logging GMT: 01:37**
Pressure on deck	**Time GMT**
Start: 0.804	**In water: 01:38**
End: 0.370	**Out water: 01:46**
Latitude N	**Longitude W**
Start: 24 35. 955	**Start: 156 21. 823**
End: 24 34. 956	**End: 156 21. 826**
Max Press: 25	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	25	01:43	24.4	✓	
2	25		24.4	✓	
3	25		25.9	✓	
4	25		25.1	✓	
5	25		25.5	✓	
6	25		25.4	✓	
7	25		25.1	✓	
8	25		25.4	✓	
9	25		25.8	✓	
10	25		24.8	✓	
11	25	01:44	25.3	✓	
12	25		25.9	✓	
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					


KM1513_S36C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: 36/1 Date: 7/30/15 (HST)

Target Depth (db): 25 CTD Start Time: 03:00 (HST)

Rosette Position	Depth (m)	Dan/ Katie						
1	**25**	X						
2	**25**	X						
3	**25**	X						
4	**25**	X						
5	**25**	X						
6	**25**	X						
7	**25**	X						
8	**25**	X						
9	**25**	X						
10	**25**	X						
11	**25**	X						
12	**25**	X						
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

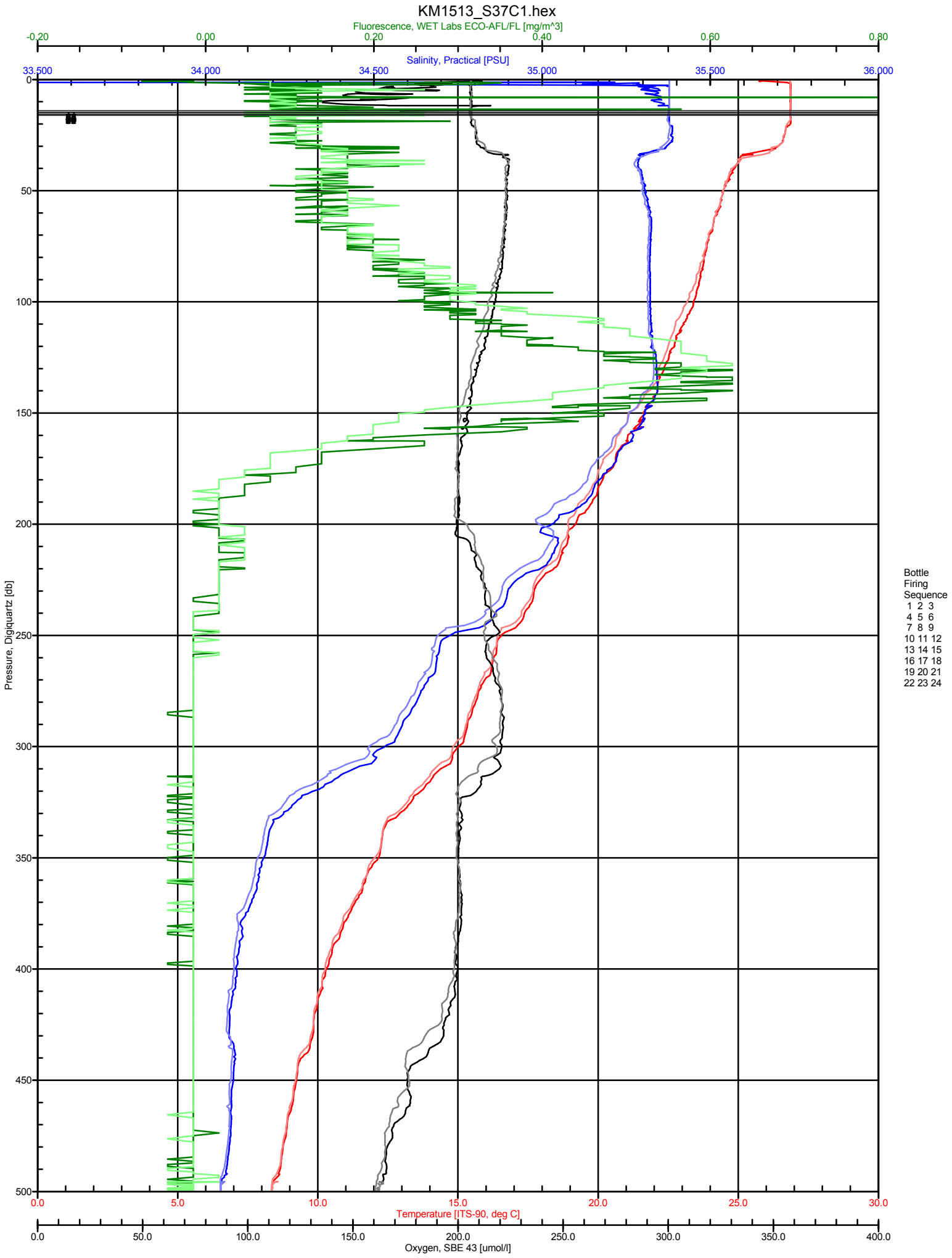
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 37	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/30/15**
Time Start Logging HST: 06:05	**Time Start Logging GMT: 16:05**
Pressure on deck	**Time GMT**
Start: 0.857	**In water: 16:07**
End: -0.251	**Out water: 16:40**
Latitude N	**Longitude W**
Start: 24 34.961	**Start: 156 21.768**
End: 24 34.967	**End: 156 21.762**
Max Press: 501	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	16:36	15.2	✓	
2	15	16:37	15.3	✓	
3	15		14.6	✓	
4	15		15.1	✓	
5	15		15.4	✓	
6	15		14.8	✓	
7	15		14.7	✓	
8	15		15.6	✓	
9	15		15.4	✓	
10	15	16:38	14.7	✓	
11	15		14.6	✓	
12	15		16.2	✓	
13	15		14.1	✓	
14	15		15.7	✓	
15	15		15.0	✓	
16	15		15.2	✓	
17	15		14.7	✓	
18	15		15.5	✓	
19	15	16:39	15.2	✓	
20	15		16.0	✓	
21	15		14.2	✓	
22	15		15.6	✓	
23	15		14.9	✓	
24	15		14.8	✓	


KM1513_S37C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S37C1	
Date:	07/30/2015	(HST)
CTD Start Time:	0600	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			CH							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

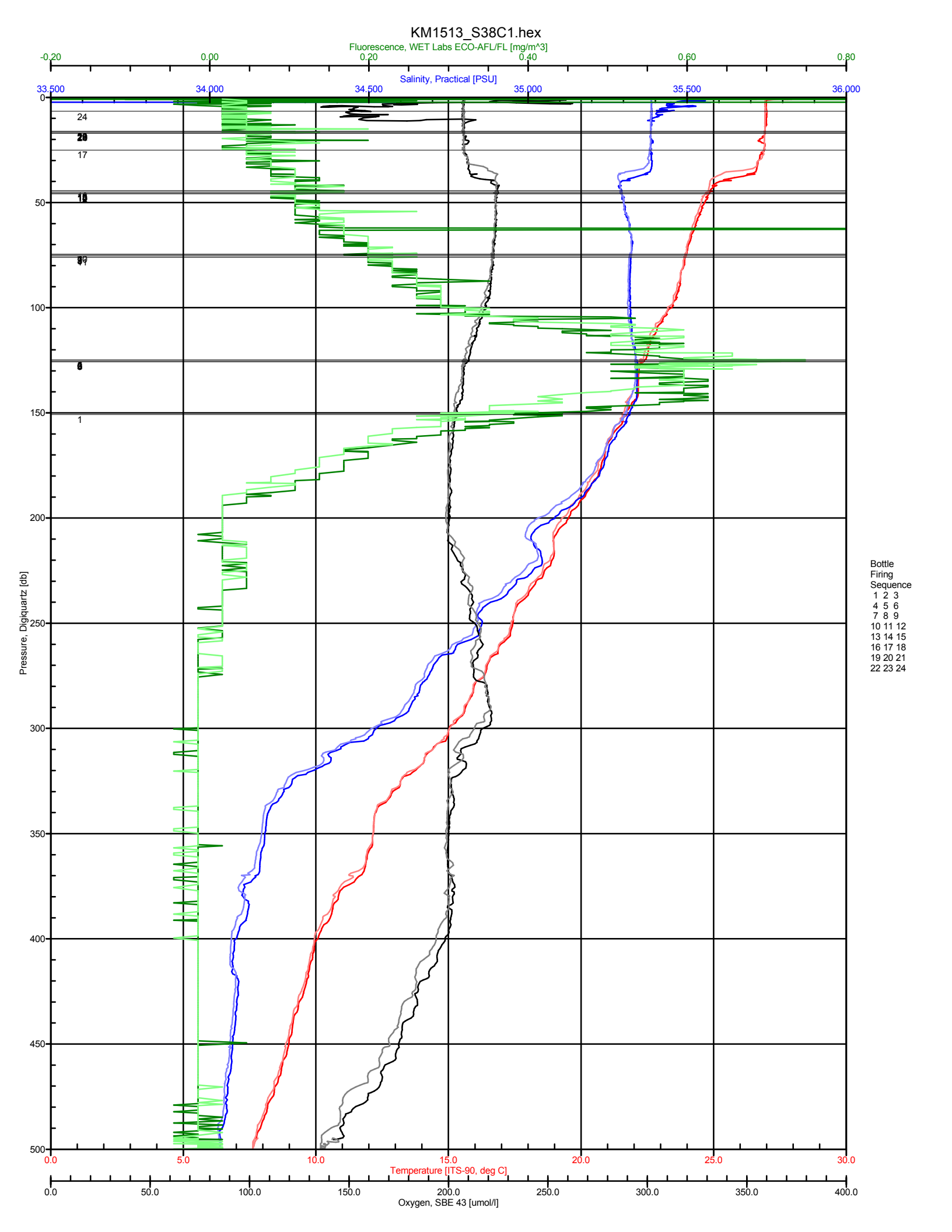
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 38	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/30/15**
Time Start Logging HST: 13:56	**Time Start Logging GMT: 23:56**
Pressure on deck	**Time GMT**
Start: 0.976	**In water: 23:59**
End: -0.110	**Out water: 00:40**
Latitude N	**Longitude W**
Start: 24 32.948	**Start: 156 19.818**
End: 24 32.922	**End: 156 19.824**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	150	00:24	150.3	✓	
2	125	00:26	125.5	✓	
3	125		125.0	✓	
4	125		124.6	✓	
5	125		125.1	✓	
6	125		125.1	✓	
7	75	00:28	75.1	✓	
8	75	00:29	75.7	✓	
9	75		74.6	✓	
10	75		74.9	✓	
11	75		75.7	✓	
12	45	00:31	45.3	✓	
13	45		44.8	✓	
14	45		45.6	✓	
15	45		44.8	✓	
16	45		44.9	✓	
17	25	00:33	24.8	✓	
18	15	00:34	16.5	✓	
19	15		16.4	✓	
20	15		16.3	✓	
21	15		16.9	✓	
22	15	00:35	16.8	✓	
23	15		16.4	✓	
24	5	00:36	6.7	✓	


KM1513_S38C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
24
17
1
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S38C1 Date: 7/30/2015 (HST)

Target Depth (db): 500 CTD Start Time: 1400 (HST)

Rosette Position	Depth (m)	Dave	Laura	Bryn	Sara	Katie		
1	**150**	X						
2	**125**	X						
3	**125**		X					
4	**125**		X					
5	**125**			X				
6	**125**			X				
7	**75**	X						
8	**75**		X					
9	**75**		X					
10	**75**			X				
11	**75**			X				
12	**45**	X						
13	**45**		X					
14	**45**		X					
15	**45**			X				
16	**45**			X				
17	**25**	X				~~X~~		
18	**15**	X						
19	**15**		X					
20	**15**		X					
21	**15**			X				
22	**15**			X				
23	**15**				X			
24	5	X						

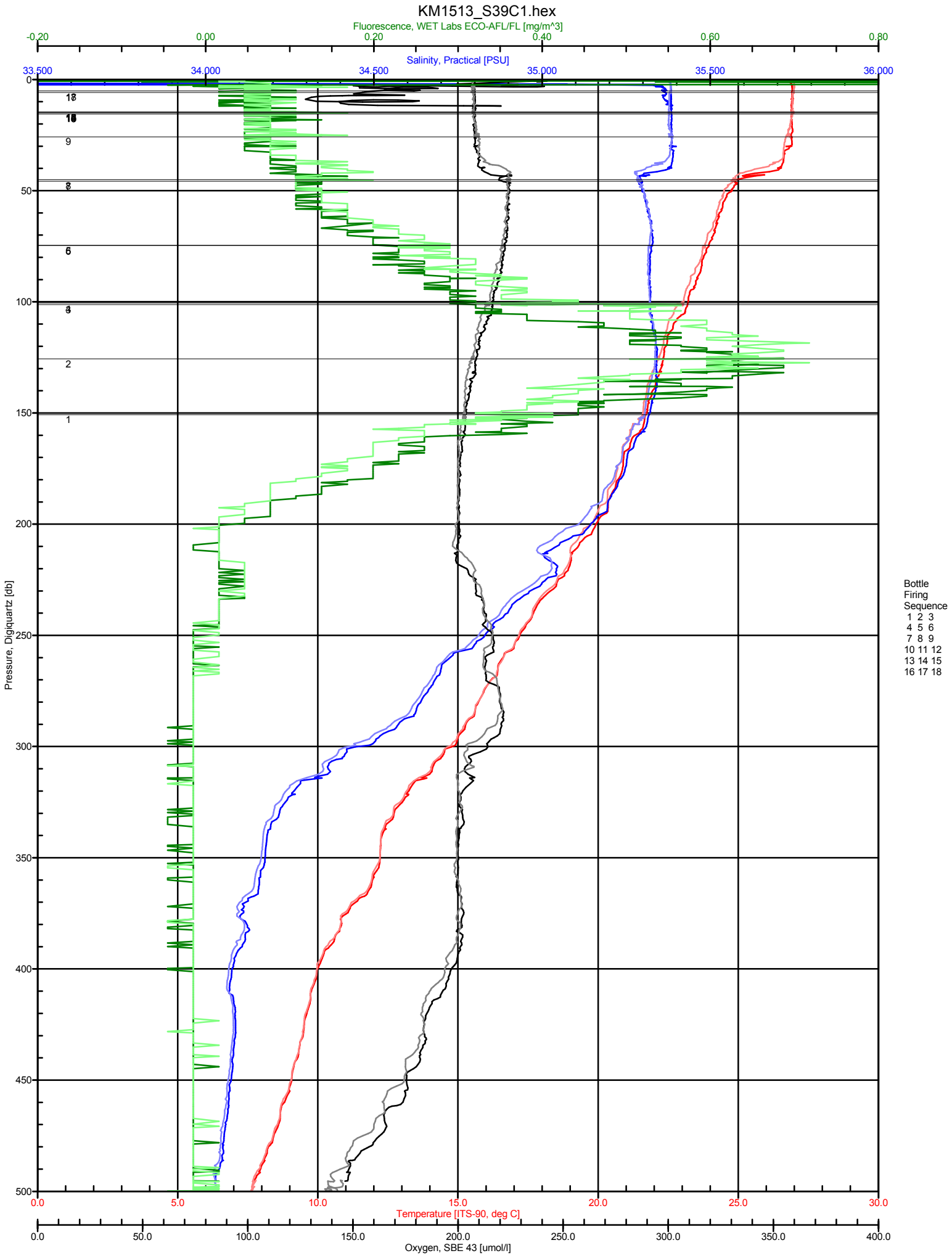
Notes:

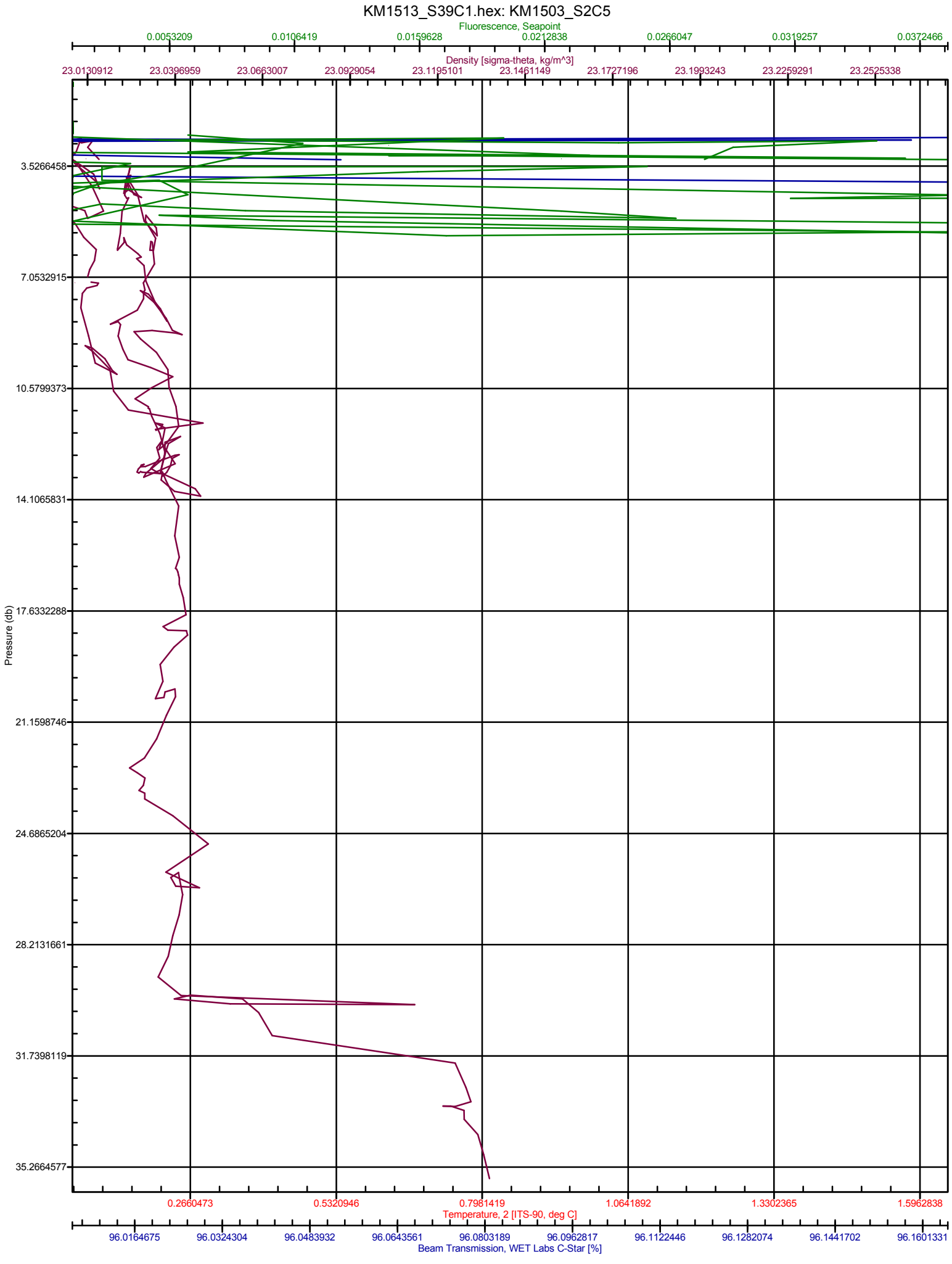
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 39	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/31/15**
Time Start Logging HST: 15:53	**Time Start Logging GMT: 01:53**
Pressure on deck	**Time GMT**
Start: 0.935	**In water: 01:56**
End: -0.065	**Out water: 02:34**
Latitude N	**Longitude W**
Start: 24 32. 879	**Start: 156 19. 831**
End: 24 32. 881	**End: 156 19. 831**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	150	02:21	150.4	✓	
2	125	02:22	125.4	✓	
3	100	02:24	100.9	✓	
4	100		101.1	✓	
5	75	02:25	74.4	✓	
6	75		74.8	✓	
7	45	02:27	45.5	✓	
8	45		45.2	✓	
9	25	02:28	25.4	✓	
10	15	02:30	15.1	✓	
11	15		15.1	✓	
12	15		14.4	✓	
13	15		14.5	✓	
14	15		14.8	✓	
15	15		14.7	✓	
16	15		14.3	✓	
17	5	02:32	5.6	✓	
18	5		5.2	✓	
19					
20					
21					
22					
23					
24					


KM1513_S39C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S39C1.hex: KM1503_S2C5
Fluorescence, Seapoint
0.0053209
0.0106419
0.0159628
0.0212838
0.0266047
0.0319257
0.0372466
Density [sigma-theta, kg/m^3]
23.0130912
23.0396959
23.0663007
23.0929054
23.1195101
23.1461149
23.1727196
23.1993243
23.2259291
23.2525338
Pressure (db)
3.5266458
7.0532915
10.5799373
14.1065831
17.6332288
21.1598746
24.6865204
28.2131661
31.7398119
35.2664577
0.2660473
0.5320946
0.7981419
1.0641892
1.3302365
1.5962838
Temperature, 2 [ITS-90, deg C]
96.0164675
96.0324304
96.0483932
96.0643561
96.0803189
96.0962817
96.1122446
96.1282074
96.1441702
96.1601331
Beam Transmission, WET Labs C-Star [%]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S39/C1 Date: 7/30/15 (HST)

Target Depth (db): 500 CTD Start Time: 1600 (HST)

Rosette Position	Depth (m)	Sonya	Debbie	Sara	DJR			
1	**150**		X					
2	**125**		X					
3	**100**	X						
4	**100**		X					
5	**75**	X						
6	**75**		X					
7	**45**	X						
8	**45**		X					
9	**25**		X					
10	**15**			X				
11	**15**			X				
12	**15**			X				
13	**15**			X				
14	**15**				X			
15	**15**				X			
16	**15**	X			X			
17	**5**	X						
18	**5**		X					
19								
20								
21								
22								
23								
24								

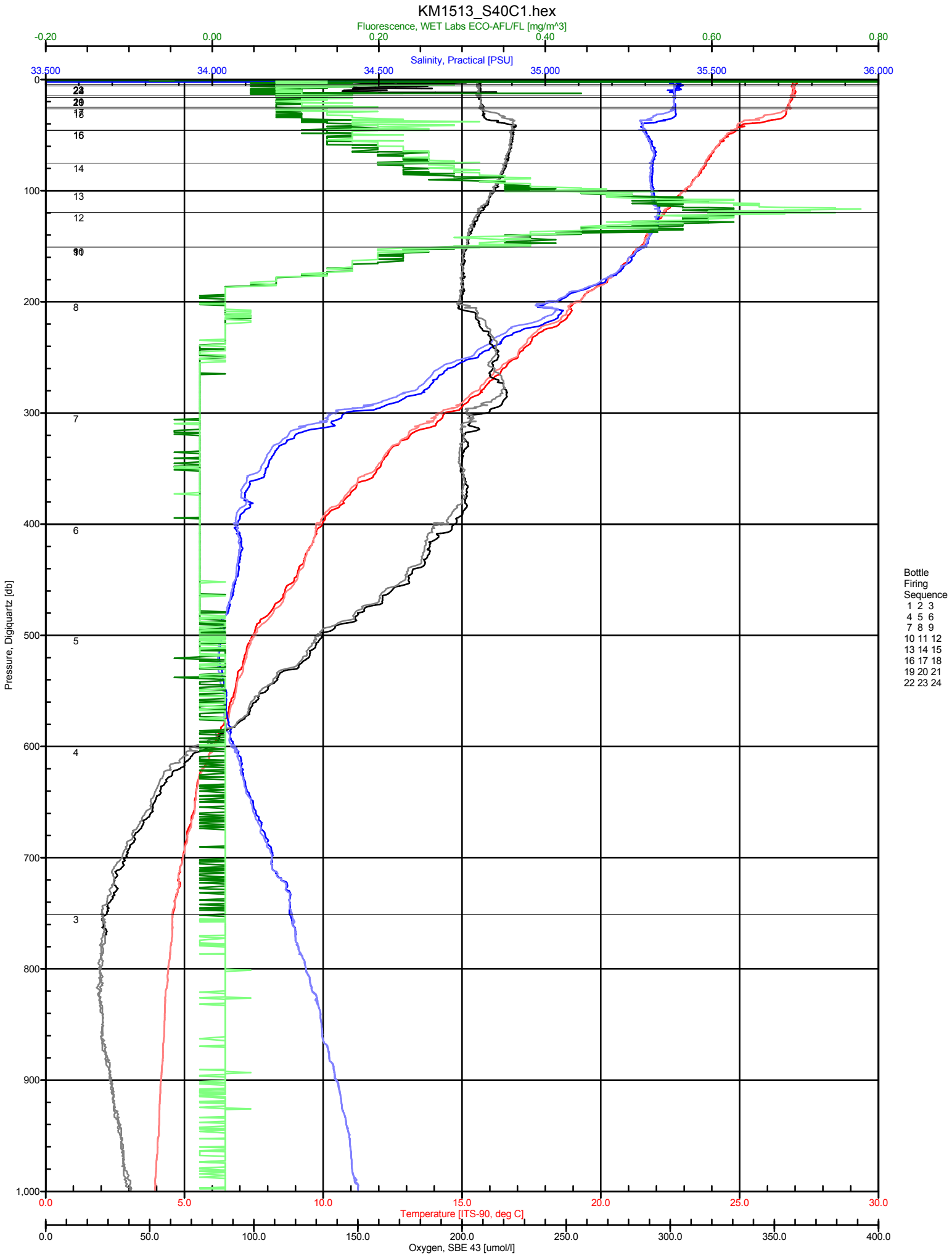
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 40	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/30/15**
Time Start Logging HST: 17:55	**Time Start Logging GMT: 03:55**
Pressure on deck	**Time GMT**
Start: 1.001	**In water: 03:56**
End: -0.027	**Out water: 05:02**
Latitude N	**Longitude W**
Start: 24 32. 992	**Start: 156 19. 907**
End: 24 33. 031	**End: 156 19. 912**
Max Press: 1000	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	1000	04:28	1001.5	✓	
2	1000		1001.6	✓	
3	750	04:34	750.9	✓	
4	600	04:37	600.2	✓	
5	500	04:40	500.0	✓	
6	400	04:43	400.2	✓	
7	300	04:45	300.0	✓	
8	200	04:48	200.3	✓	
9	150	04:50	150.7	✓	
10	150		150.1	✓	
11	150		150.2	✓	
12	119	04:52	119.8	✓	
13	100	04:53	100.4	✓	
14	75	04:54	75.3	✓	
15	45	04:56	45.5	✓	
16	45		45.5	✓	
17	25	04:57	25.3	✓	
18	25		25.6	✓	
19	15	04:58	15.3	✓	
20	15	04:59	15.2	✓	
21	15		15.2	✓	
22	5	05:00	5.2	✓	
23	5	05:01	5.4	✓	
24	5		5.4	✓	


KM1513_S40C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
100
200
300
400
500
600
700
800
900
1,000
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S40/C1 Date: 7/30/2015 (HST)

Target Depth (db): 1000 CTD Start Time: 1800 (HST)

Rosette Position	Depth (m)	O2	temp	Chris	Katie	Dave	Dan & Morgan
1	**1000**		N/A			X	
2	**1000**		N/A			X	
3	**750**	63, 92, 93	10.4				
4	**600**	94, 95, 96	11.4				
5	**500**	97, 98, 99	12.2				
6	**400**	103, 101, 102	13.4				
7	**300**	100, 104, 105	17.0				
8	**200**	106, 107, 108	20.7				
9	**150**	109, 110, 111	22.4				
10	**150**		N/A			X	
11	**150**		N/A			X	
12	**119DCM**		N/A			X	
13	**100**	112, 113, 114	23.6				
14	**75**	115, 116, 117	24.1				
15	**45**		N/A		X		
16	**45**	127, 119, 120	25.1				
17	**25**	DID NOT FIRE					
18	**25**		N/A		X		
19	**15**		N/A	X			
20	**15**		N/A				~~X~~
21	**15**		N/A				X
22	**5**		N/A		X		
23	**5**	124,125,128	26.9				
24	**5**		N/A			X	

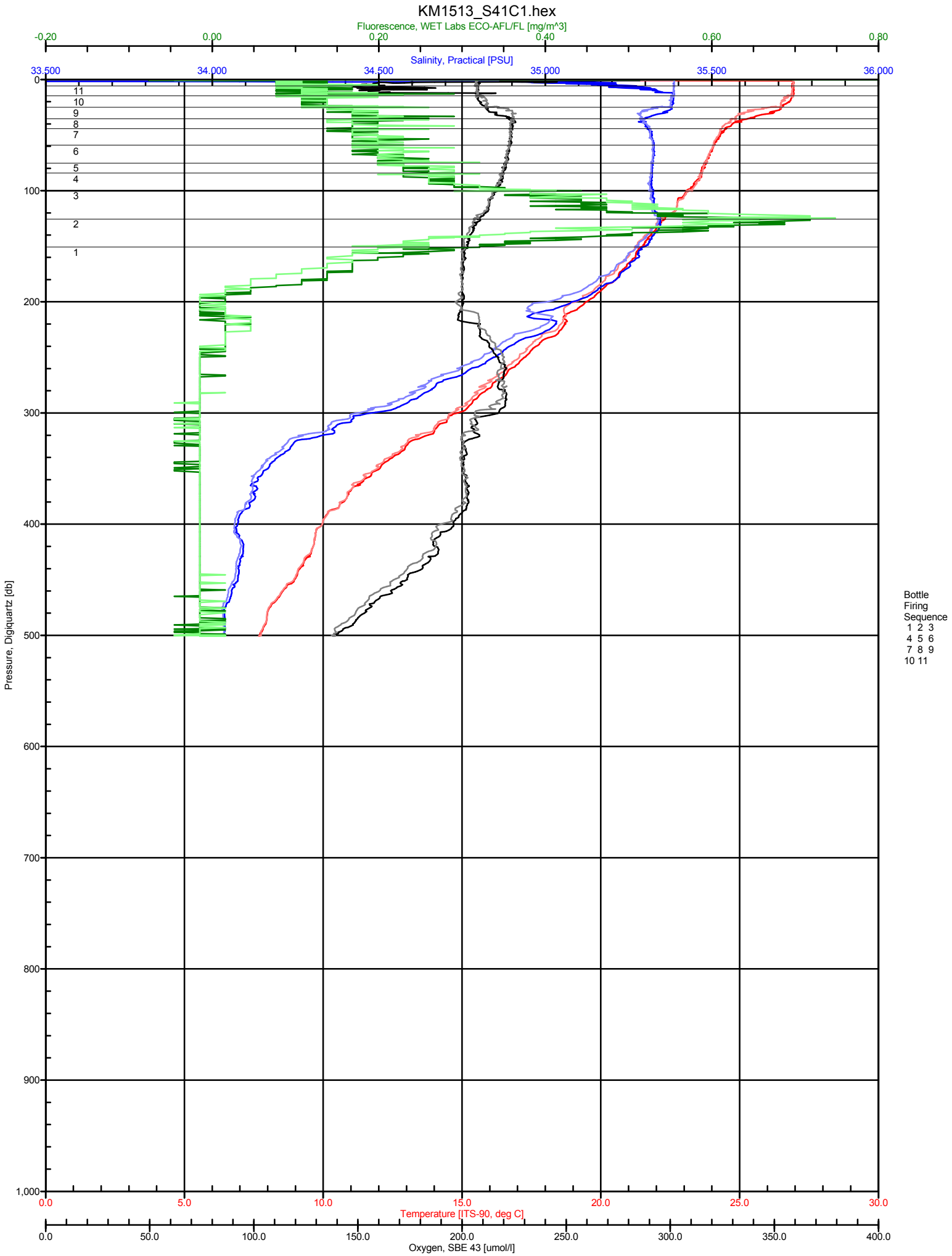
Notes: Niskin 17 did not fire; Some Oxygen Flasks are not properly sequential
Oxygwn bottle #15 is very dark – 2x reagents?

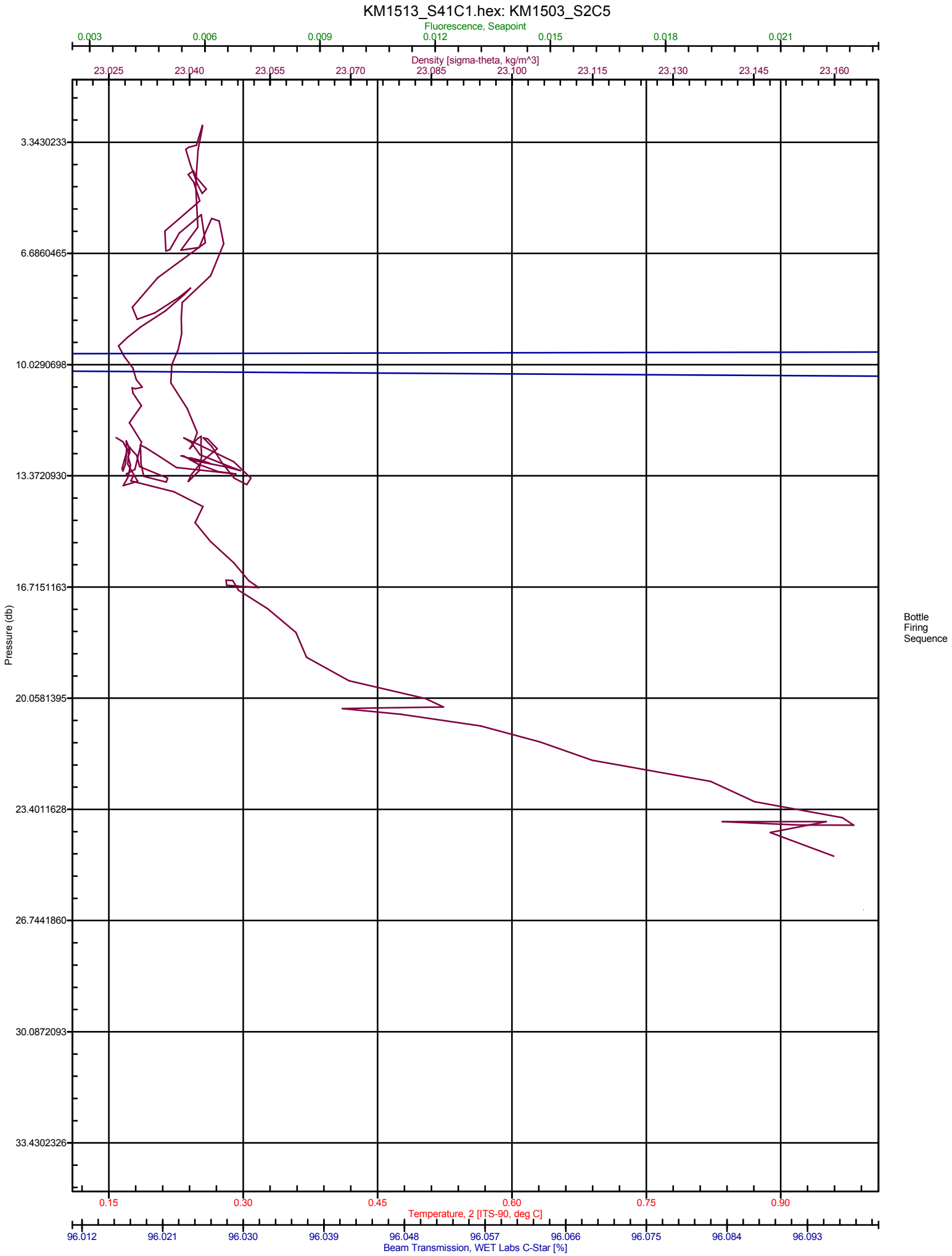
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 41	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/31/15**
Time Start Logging HST:21:51	**Time Start Logging GMT: 07:51**
Pressure on deck	**Time GMT**
Start: 0.900	**In water: 07:54**
End: 0.084	**Out water: 08:35**
Latitude N	**Longitude W**
Start: 24 33. 034	**Start: 156 19. 914**
End: 24 33. 022	**End: 156 19. 912**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	150	08:20	150.2	✓	
2	125	08:21	125.1	✓	
3	100	08:23	100.2	✓	
4	85	08:24	85.1	✓	
5	75	08:25	74.7	✓	
6	60	08:26	59.4	✓	
7	45	08:27	45.1	✓	
8	35	08:28	35.6	✓	
9	25	08:29	25.0	✓	
10	15	08:30	15.0	✓	
11	5	08:31	5.2	✓	
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					


KM1513_S41C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
0
100
200
300
400
500
600
700
800
900
1,000
Pressure, Digiquartz [db]
11
10
9
8
7
6
5
4
3
2
1
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S41C1.hex: KM1503_S2C5
Fluorescence, Seapoint
0.003
0.006
0.009
0.012
0.015
0.018
0.021
Density [sigma-theta, kg/m^3]
23.025
23.040
23.055
23.070
23.085
23.100
23.115
23.130
23.145
23.160
3.3430233
6.6860465
10.0290698
13.3720930
16.7151163
20.0581395
23.4011628
26.7441860
30.0872093
33.4302326
Pressure (db)
Bottle
Firing
Sequence
0.15
0.30
0.45
0.60
0.75
0.90
Temperature, 2 [ITS-90, deg C]
96.012
96.021
96.030
96.039
96.048
96.057
96.066
96.075
96.084
96.093
Beam Transmission, WET Labs C-Star [%]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S41C1 Date: 07/30/2015 (HST)

Target Depth (db): 500 CTD Start Time: 2200 (HST)

Rosette Position	Depth (m)	Sam						
1	**150**	X						
2	**125**	X						
3	**100**	X						
4	**85**	X						
5	**75**	X						
6	**60**	X						
7	**45**	X						
8	**35**	X						
9	**25**	X						
10	**15**	X						
11	**5**	X						
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

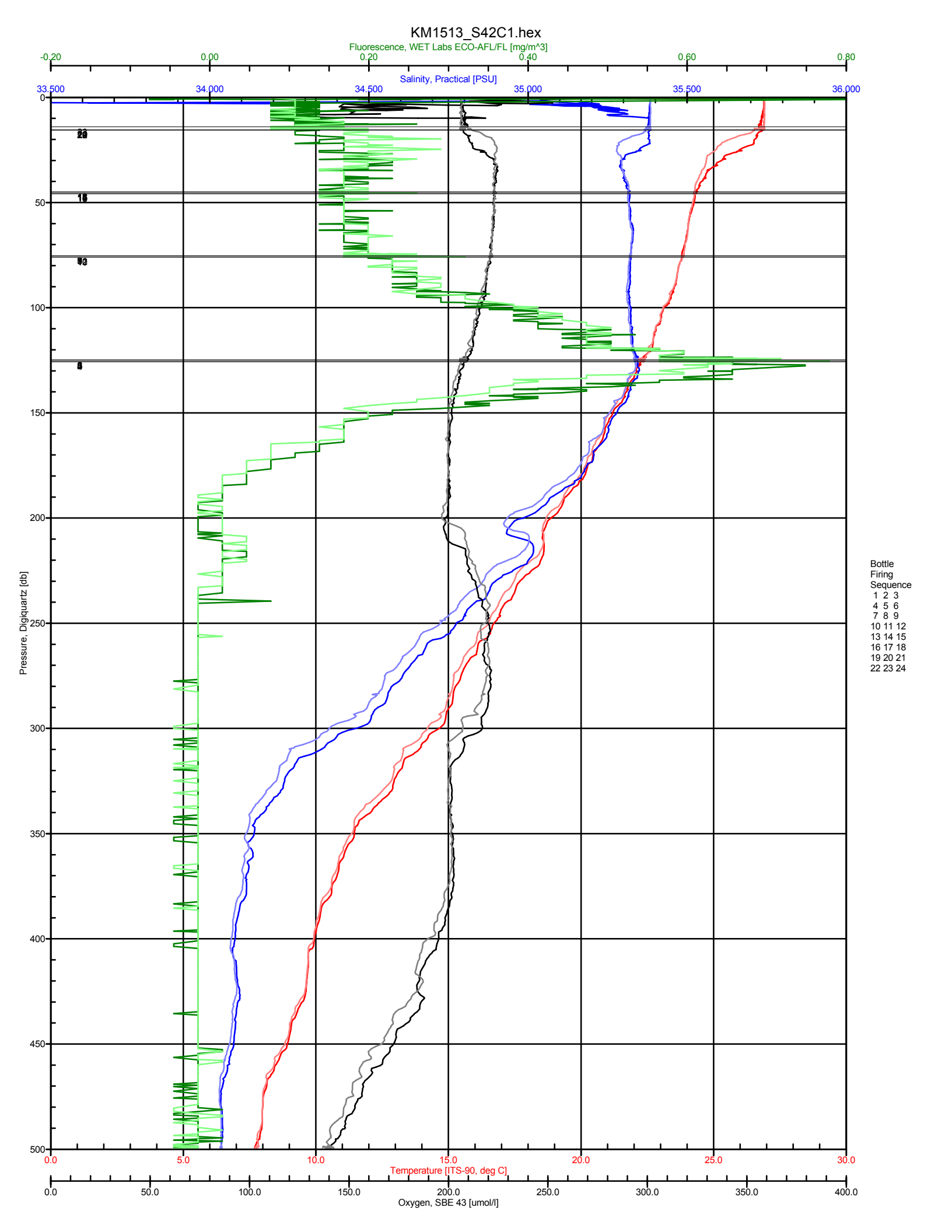
Notes:

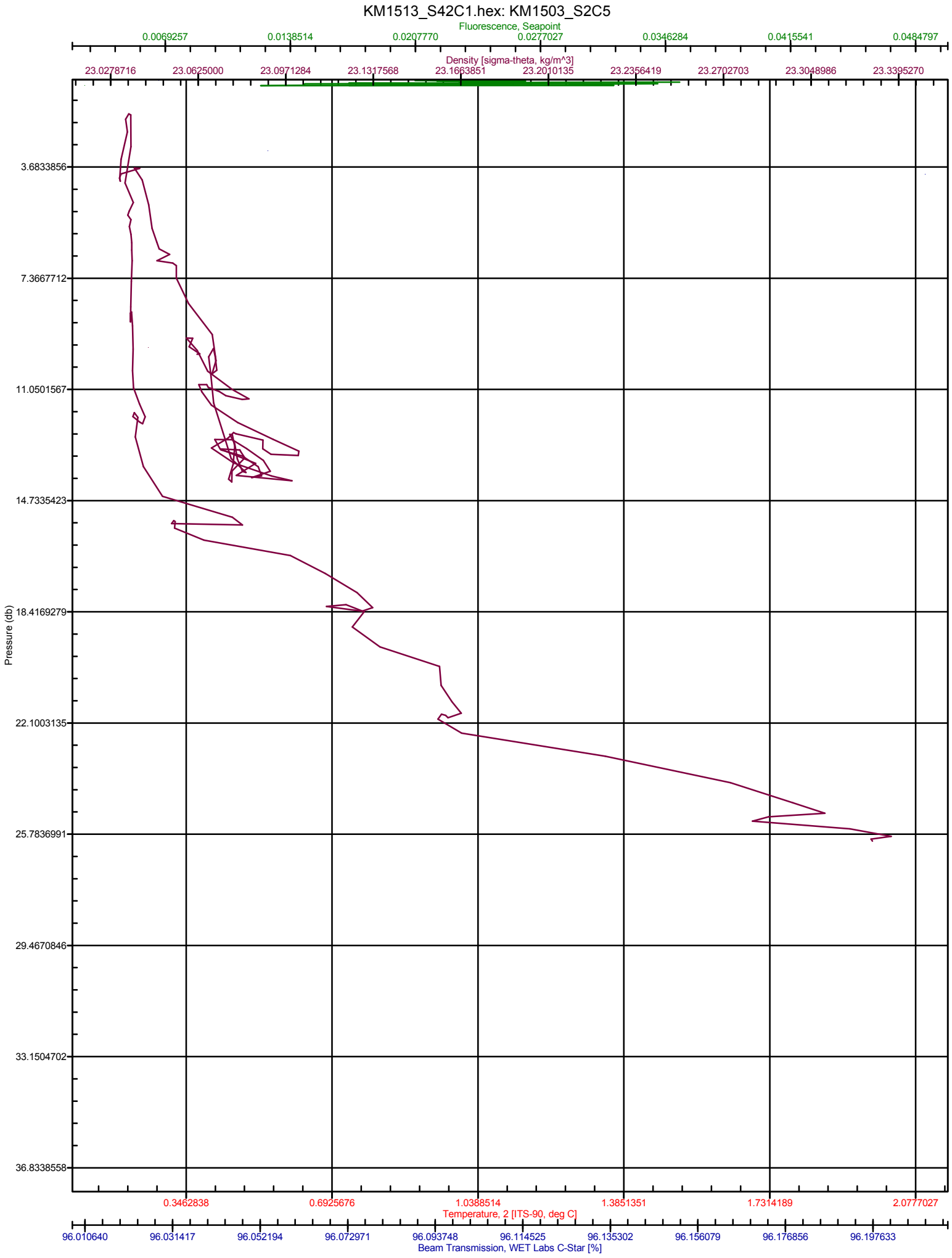
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 42	**Cast: 1**
Bottom (m): ~4700	**Date (GMT):**
Time Start Logging HST: 23:54	**Time Start Logging GMT: 09:54**
Pressure on deck	**Time GMT**
Start: 0.979	**In water: 09:58**
End: -0.107	**Out water: 10:32**
Latitude N	**Longitude W**
Start: 24 33. 287	**Start: 156 19. 787**
End: 24 33. 284	**End: 156 19. 790**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	125	10:22	124.9	✓	
2	125	10:23	124.9	✓	
3	125		124.8	✓	
4	125		125.1	✓	
5	125		124.7	✓	
6	125		125.1	✓	
7	75	10:25	74.8	✓	
8	75		74.8	✓	
9	75	10:26	74.8	✓	
10	75		75.4	✓	
11	75		75.1	✓	
12	75		75.0	✓	
13	45	10:27	44.8	✓	
14	45	10:28	45.5	✓	
15	45		45.1	✓	
16	45		45.0	✓	
17	45		45.5	✓	
18	45		45.4	✓	
19	15	10:30	15.1	✓	
20	15		15.3	✓	
21	15		14.5	✓	
22	15		14.9	✓	
23	15		13.8	✓	
24	15		15.2	✓	


KM1513_S42C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S42C1.hex: KM1503_S2C5
Fluorescence, Seapoint
0.0069257
0.0138514
0.0207770
0.0277027
0.0346284
0.0415541
0.0484797
Density [sigma-theta, kg/m^3]
23.0278716
23.0625000
23.0971284
23.1317568
23.1663851
23.2010135
23.2356419
23.2702703
23.3048986
23.3395270
Pressure (db)
3.6833856
7.3667712
11.0501567
14.7335423
18.4169279
22.1003135
25.7836991
29.4670846
33.1504702
36.8338558
0.3462838
0.6925676
1.0388514
1.3851351
1.7314189
2.0777027
Temperature, 2 [ITS-90, deg C]
96.010640
96.031417
96.052194
96.072971
96.093748
96.114525
96.135302
96.156079
96.176856
96.197633
Beam Transmission, WET Labs C-Star [%]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S42C1 Date: 7/31/2015 (HST)

Target Depth (db): 500 CTD Start Time: 0000 (HST)

Rosette Position	Depth (m)	Bryn	Angie					
1	**125**	X						
2	**125**	X						
3	**125**		X					
4	**125**		X					
5	**125**		X					
6	**125**		X					
7	**75**	X						
8	**75**	X						
9	**75**		X					
10	**75**		X					
11	**75**		X					
12	**75**		X					
13	**45**	X						
14	**45**	X						
15	**45**		X					
16	**45**		X					
17	**45**		X					
18	**45**		X					
19	**15**	X						
20	**15**	X						
21	**15**		X					
22	**15**		X					
23	**15**		X					
24	**15**		X					

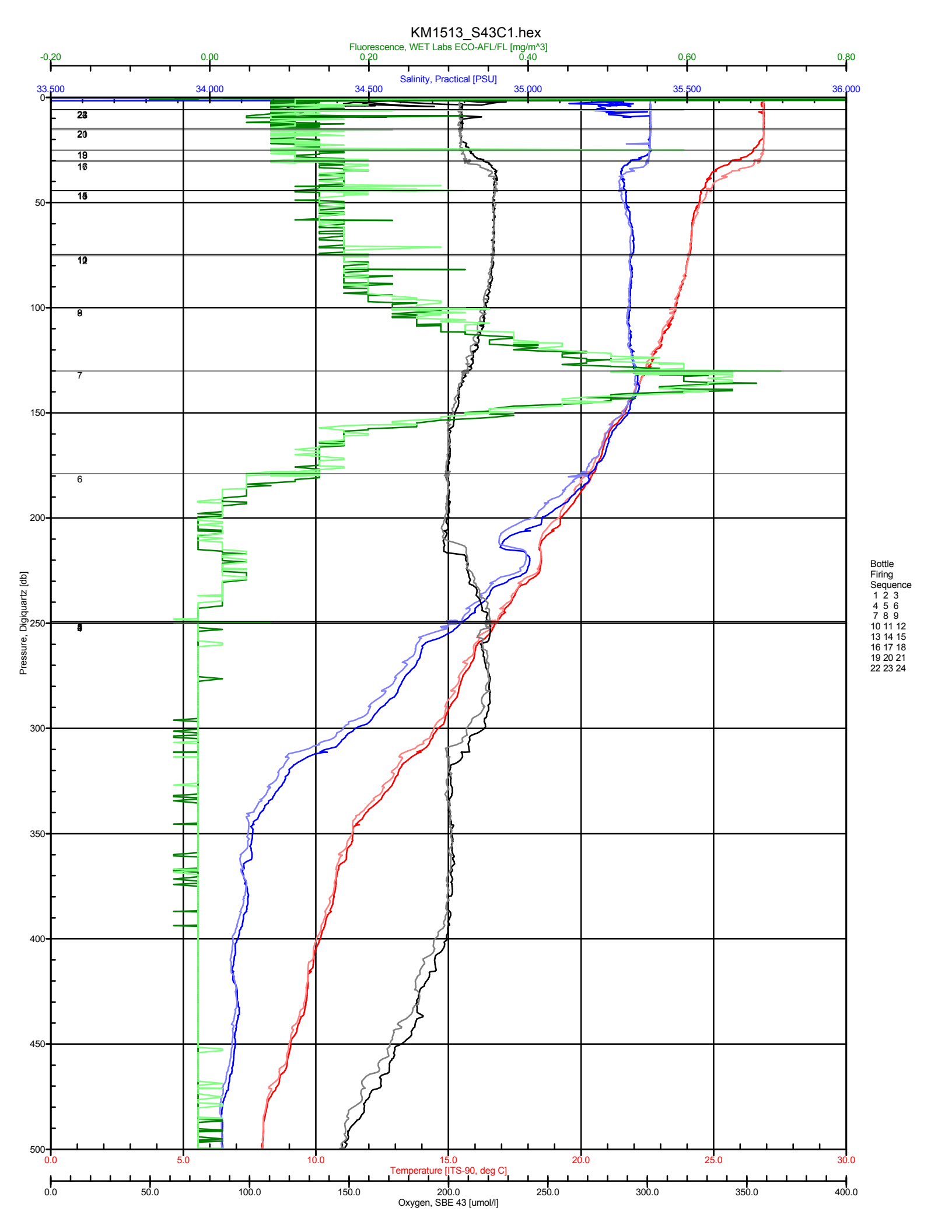
Notes:

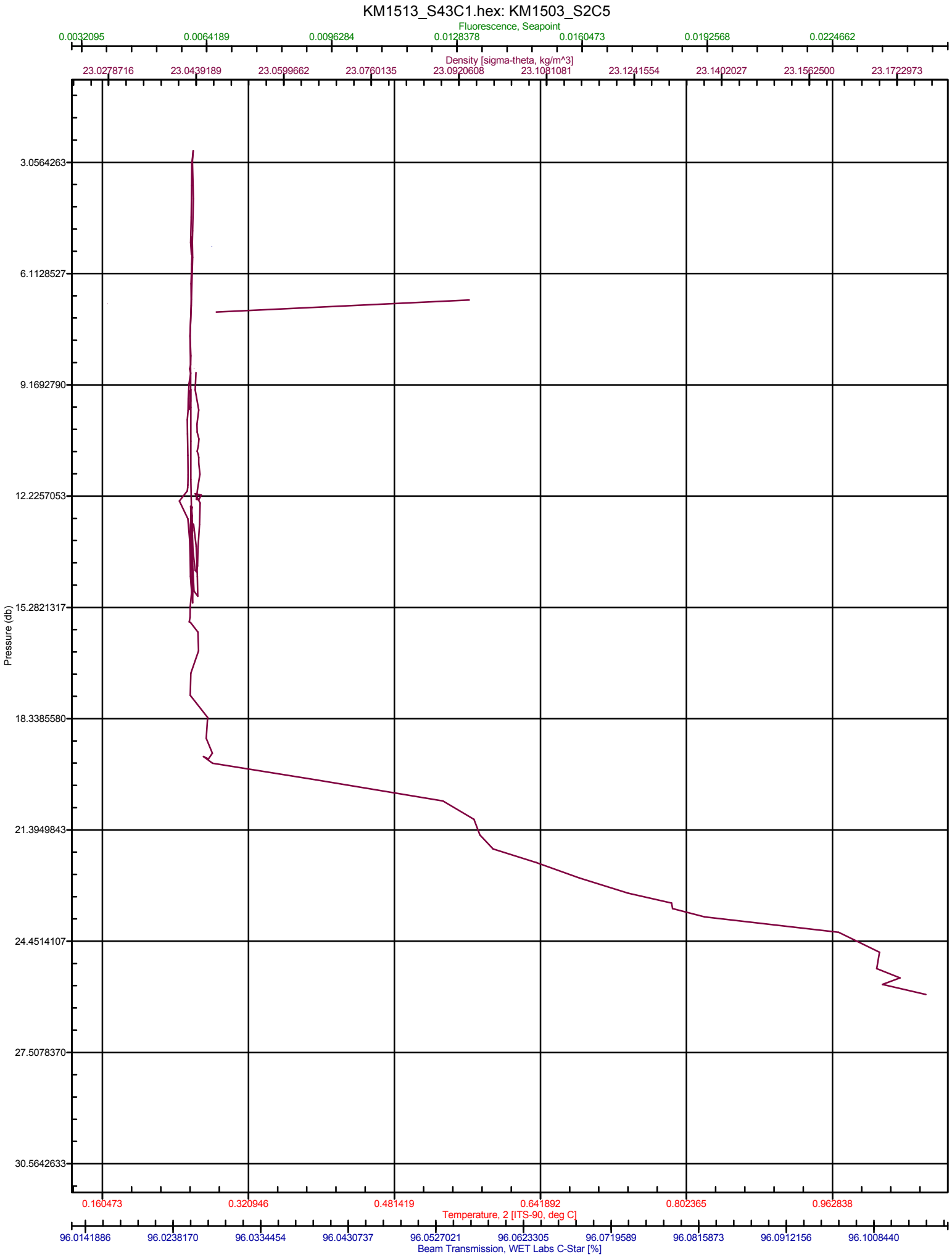
KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 43	**Cast: 1**
Bottom (m): ~4700	**Date (GMT):**
Time Start Logging HST: 01:42	**Time Start Logging GMT: 11:42**
Pressure on deck	**Time GMT**
Start: 0.872	**In water: 11:45**
End: 0.128	**Out water: 12:30**
Latitude N	**Longitude W**
Start: 24 33. 242	**Start: 156 19. 793**
End: 24 33. 167	**End: 156 19. 786**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	250	12:09	250.9	✓	
2	250		249.9	✓	
3	250		249.6	✓	
4	250	12:10	249.5	✓	
5	250		249.5	✓	
6	180	12:14	179.6	✓	
7	130	12:16	130.1	✓	
8	100	12:18	100.3	✓	
9	100		100.3	✓	
10	75	12:20	74.7	✓	
11	75		74.8	✓	
12	75		75.0	✓	
13	45	12:22	44.6	✓	
14	45	12:23	44.5	✓	
15	45		44.5	✓	
16	30	12:24	30.1	✓	
17	30		30.0	✓	
18	25	12:25	24.9	✓	
19	25		24.7	✓	
20	15	12:27	14.9	✓	
21	15		15.1	✓	
22	5	12:29	5.5	✓	
23	5		5.8	✓	
24	5		5.6	✓	


KM1513_S43C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
7
6
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]


KM1513_S43C1.hex: KM1503_S2C5
Fluorescence, Seapoint
0.0032095
0.0064189
0.0096284
0.0128378
0.0160473
0.0192568
0.0224662
Density [sigma-theta, kg/m^3]
23.0278716
23.0439189
23.0599662
23.0760135
23.0920608
23.1081081
23.1241554
23.1402027
23.1562500
23.1722973
Pressure (db)
3.0564263
6.1128527
9.1692790
12.2257053
15.2821317
18.3385580
21.3949843
24.4514107
27.5078370
30.5642633
0.160473
0.320946
0.481419
0.641892
0.802365
0.962838
Temperature, 2 [ITS-90, deg C]
96.0141886
96.0238170
96.0334454
96.0430737
96.0527021
96.0623305
96.0719589
96.0815873
96.0912156
96.1008440
Beam Transmission, WET Labs C-Star [%]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S43C1 Date: 7/31/2015 (HST)

Target Depth (db): 500 CTD Start Time: 0200 (HST)

Rosette Position	Depth (m)	Chris	Sara		Q	P	T0	
1	**250**	X						
2	**250**	X						
3	**250**	X						
4	**250**	X						
5	**250**	X						
6	**180**	X						
7	**130**	X						
8	**100**		X		15	15	15	
9	**100**		X		14	13,14	14	
10	**75**	X						
11	**75**		X		12,13	12	11,12	
12	**75**		X		18	11,10	10	
13	**45**		X		9	9	9	
14	**45**		X		8	8	8	
15	**45**		X		7	7	7	
16	**30**	X						
17	**30**	X						
18	**25**		X		5,6	6		
19	**25**		X		4	4,5	6	
20	**15**	X						
21	**15**	X						
22	**5**		X		17	3	3	
23	**5**		X		16	2	2	
24	**5**		X		1	1	1	

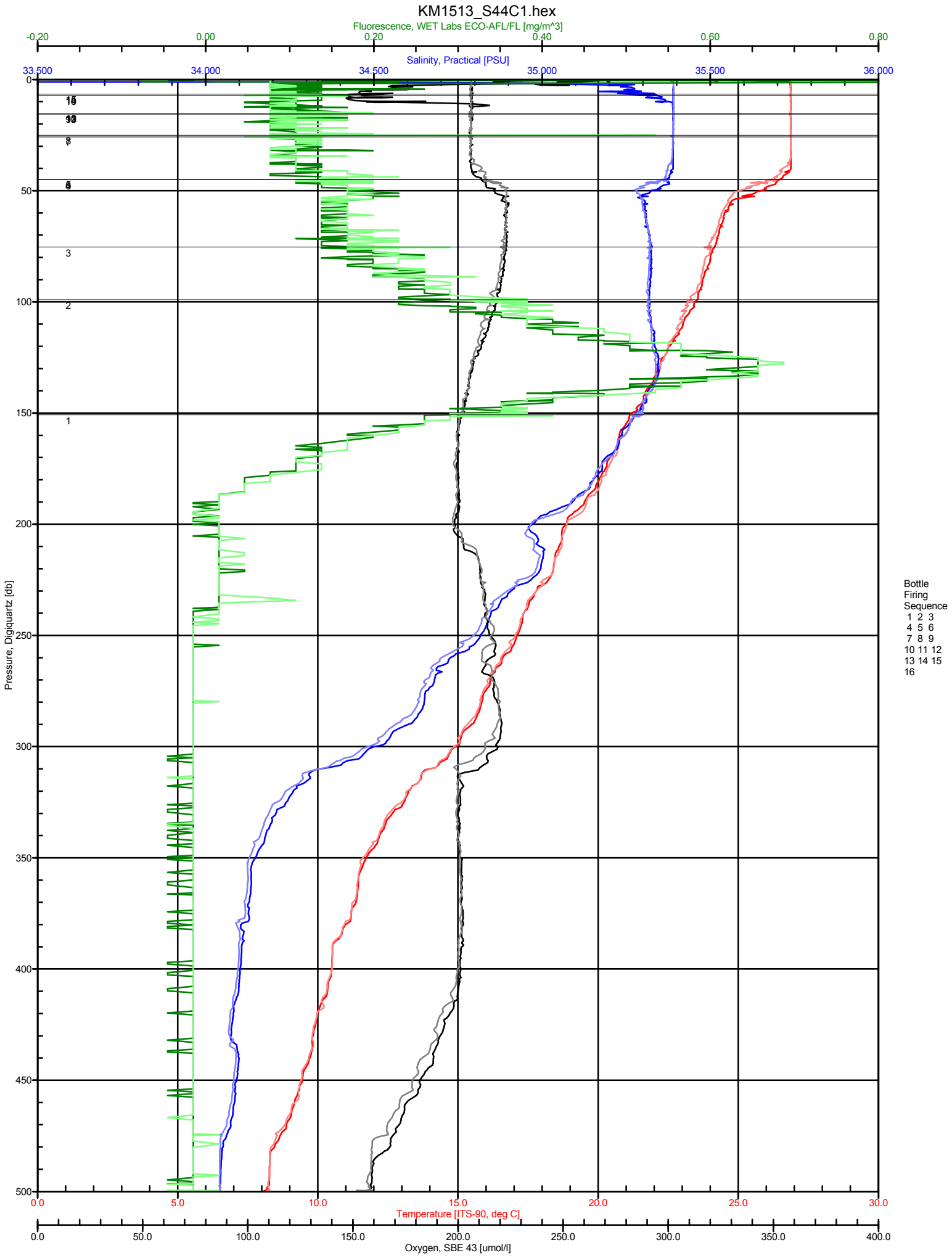
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 44	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/31/15**
Time Start Logging HST: 06:00	**Time Start Logging GMT: 16:00**
Pressure on deck	**Time GMT**
Start: 0.949	**In water: 16:04**
End: 0.068	**Out water: 16:43**
Latitude N	**Longitude W**
Start: 24 32.860	**Start: 156 18.420**
End: 24 32.810	**End: 156 18.415**
Max Press: 499	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	150	16:21	150.9	✓	
2	100	16:31	99.2	✓	
3	75	16:33	75.7	✓	
4	45	16:36	45.2	✓	
5	45	16:36	44.7	✓	
6	45	16:36	45.2	✓	
7	25	16:38	25.4	✓	
8	25	16:39	25.3	✓	
9	15	16:40	16.0	✓	
10	15	16:40	15.1	✓	
11	15	16:40	15.0	✓	
12	15	16:40	15.2	✓	
13	15	16:40	15.3	✓	
14	5	16:42	7.1	✓	
15	5	16:42	6.6	✓	
16	5	16:42	7.2	✓	
17					
18					
19					
20					
21					
22					
23					
24					


KM1513_S44C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S44/C1 Date: 7/31/15 (HST)

Target Depth (db): 500 CTD Start Time: 0600 (HST)

Rosette Position	Depth (m)	Sonya	Katie	Sara	Sara's#	Sara's#	Sara's#	
1	**150**	X						
2	**100**	X						
3	**75**	X						
4	**45**	X						
5	**45**		X					
6	**45**		X					
7	**25**		X					
8	**25**		X					
9	**15**	X						
10	**15**			X	250	192	163	
11	**15**			X	260	233	188	
12	**15**			X	217	126	226	
13	**15**			X	285	122	234	
14	**5**	X						
15	**5**		X					
16	**5**		X					
17								
18								
19								
20								
21								
22								
23								
24								

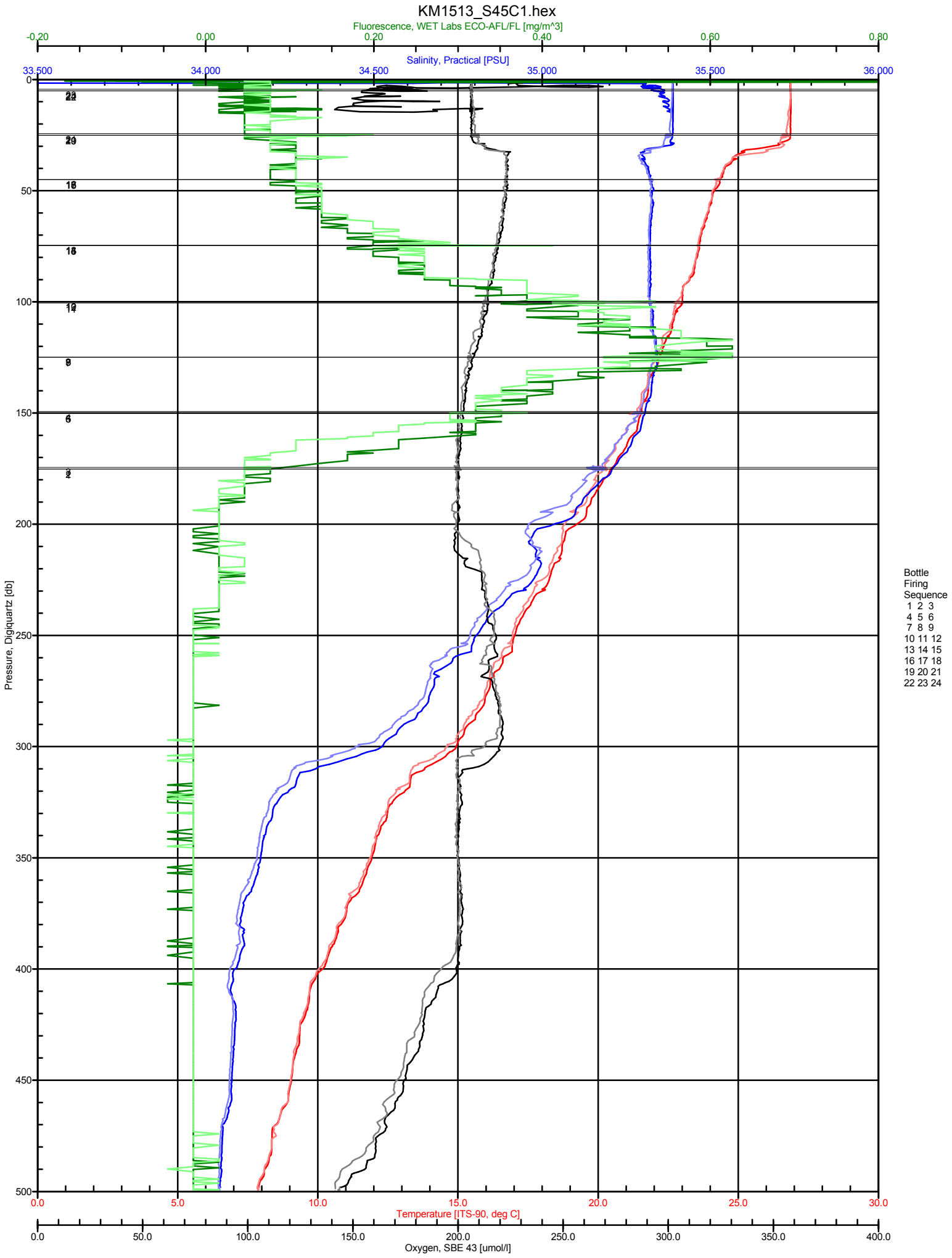
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 45	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 7/31/15**
Time Start Logging HST: 09:54	**Time Start Logging GMT: 19:54**
Pressure on deck	**Time GMT**
Start: 0.970	**In water: 19:56**
End: -0.143	**Out water: 20:33**
Latitude N	**Longitude W**
Start: 24 32.456	**Start: 156 19.188**
End: 24 32.460	**End: 156 19.187**
Max Press: 501	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	175	20:22	175.6	✓	
2	175		174.3	✓	
3	175		174.3	✓	
4	150	20:23	149.5	✓	
5	150		150.0	✓	
6	150		150.2	✓	
7	125	20:24	124.9	✓	
8	125	20:25	124.7	✓	
9	125		124.7	✓	
10	100	20:26	100.1	✓	
11	100		100.5	✓	
12	100		99.6	✓	
13	75	20:27	74.7	✓	
14	75	20:28	74.3	✓	
15	75		74.5	✓	
16	45	20:29	45.2	✓	
17	45		45.0	✓	
18	45		44.8	✓	
19	25	20:30	25.0	✓	
20	25		25.1	✓	
21	25		24.9	✓	
22	5	20:32	4.7	✓	
23	5		4.8	✓	
24	5		5.0	✓	


KM1513_S45C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: 45/1 Date: 7/31/2015 (HST)

Target Depth (db): 500m CTD Start Time: 10:00 (HST)

Rosette Position	Depth (m)	HPLC	PCPN	Nutes	Chl	FCM	O2	Temp
1	**175**	X		X	1	X		
2	**175**		1-10L					
3	**175**						90,89,88	21.1
4	**150**	X		X	2	X		
5	**150**		4-10L					
6	**150**						87,86,85	22.1
7	**125**	X		X	3	X		
8	**125**		5-10L					
9	**125**						83,82,81	22.6
10	**100**	X		X	4	X		
11	**100**		6-10L					
12	**100**						80,79,78	23.4
13	**75**	X		X	5	X		
14	**75**		7-4L					
15	**75**						77,76,75	24.1
16	**45**	X		X	6	X		
17	**45**		9-4L					
18	**45**						73,72,71	24.6
19	**25**	X		X	7	X		
20	**25**		11-4L					
21	**25**						70,69,68	26.9
22	**5**	X		X	8	X		
23	**5**		12-4L					
24	**5**						67,66,62	-

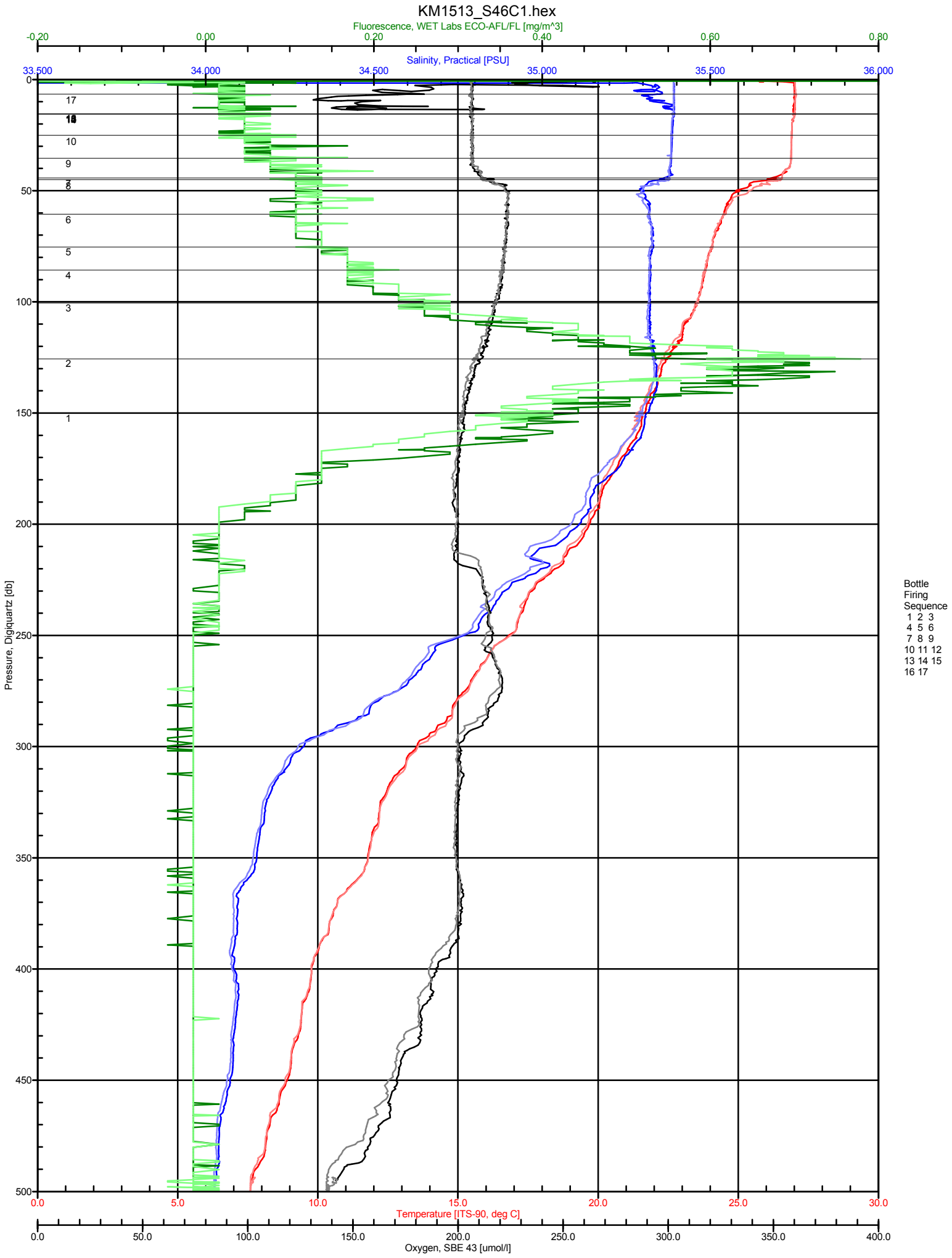
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 46	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 07/31/15**
Time Start Logging HST: 13:55	**Time Start Logging GMT: 23:55**
Pressure on deck	**Time GMT**
Start: 0.991	**In water: 23:57**
End: 0.041	**Out water: 00:39**
Latitude N	**Longitude W**
Start: 24 32.599	**Start: 156 17.940**
End: 24 32.611	**End: 156 17.940**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	150	00:24	149.8	✓	
2	125	00:26	125.0	✓	
3	100	00:27	100.3	✓	
4	85	00:29	85.4	✓	
5	75	00:30	74.7	✓	
6	60	00:31	60.3	✓	
7	45	00:32	44.5	✓	
8	45	00:32	45.2	✓	
9	35	00:34	35.0	✓	
10	25	00:35	25.7	✓	
11	15	00:36	15.2	✓	
12	15	00:36	15.4	✓	
13	15	00:36	15.1	✓	
14	15	00:36	15.7	✓	
15	15	00:36	15.2	✓	
16	15	00:37	15.4	✓	
17	5	00:38	6.2	✓	
18					
19					
20					
21					
22					
23					
24					


KM1513_S46C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
17
10
9
6
5
4
3
2
1
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S46/C1 Date: 7/31/15 (HST)

Target Depth (db): 500 CTD Start Time: 1400 (HST)

Rosette Position	Depth (m)	Sam	Sara	Debbie				
1	**150**	X						
2	**125**	X						
3	**100**	X						
4	**85**	X						
5	**75**	X						
6	**60**	X						
7	**45**	X						
8	**45**			X				
9	**35**	X						
10	**25**	X						
11	**15**	X						
12	**15**		X					
13	**15**		X					
14	**15**		X					
15	**15**		X					
16	**15**			X				
17	**5**	X						
18								
19								
20								
21								
22								
23								
24								

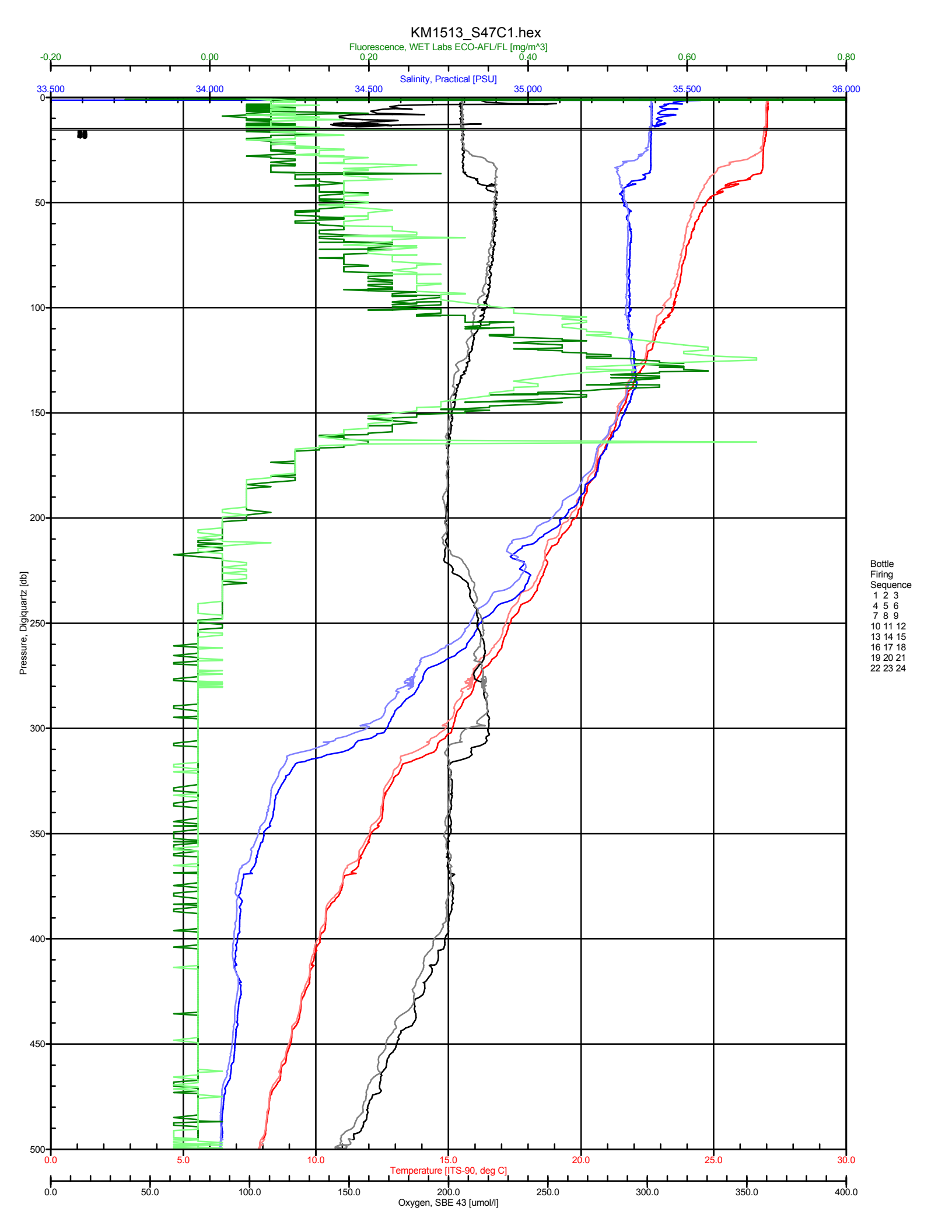
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 47	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 08/01/15**
Time Start Logging HST: 18:09	**Time Start Logging GMT: 04:09**
Pressure on deck	**Time GMT**
Start: 1.043	**In water: 04:10**
End: -0.172	**Out water: 04:46**
Latitude N	**Longitude W**
Start: 24 32. 102	**Start: 156 18. 565**
End: 24 32. 057	**End: 156 18. 564**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	4:40	15.0	✓	
2	15		15.1	✓	
3	15		14.8	✓	
4	15		15.0	✓	
5	15		14.6	✓	
6	15	4:41	15.0	✓	
7	15		14.5	✓	
8	15		14.9	✓	
9	15		14.7	✓	
10	15		15.0	✓	
11	15		15.0	✓	
12	15		14.8	✓	
13	15	4:42	14.8	✓	
14	15		14.9	✓	
15	15		14.8	✓	
16	15		14.8	✓	
17	15		15.0	✓	
18	15		15.5	✓	
19	15		14.6	✓	
20	15		15.2	✓	
21	15		15.2	✓	
22	15	4:43	14.6	✓	
23	15		14.8	✓	
24	15		15.0	✓	


KM1513_S47C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S47C1	
Date:	07/31/2015	(HST)
CTD Start Time:	1800	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

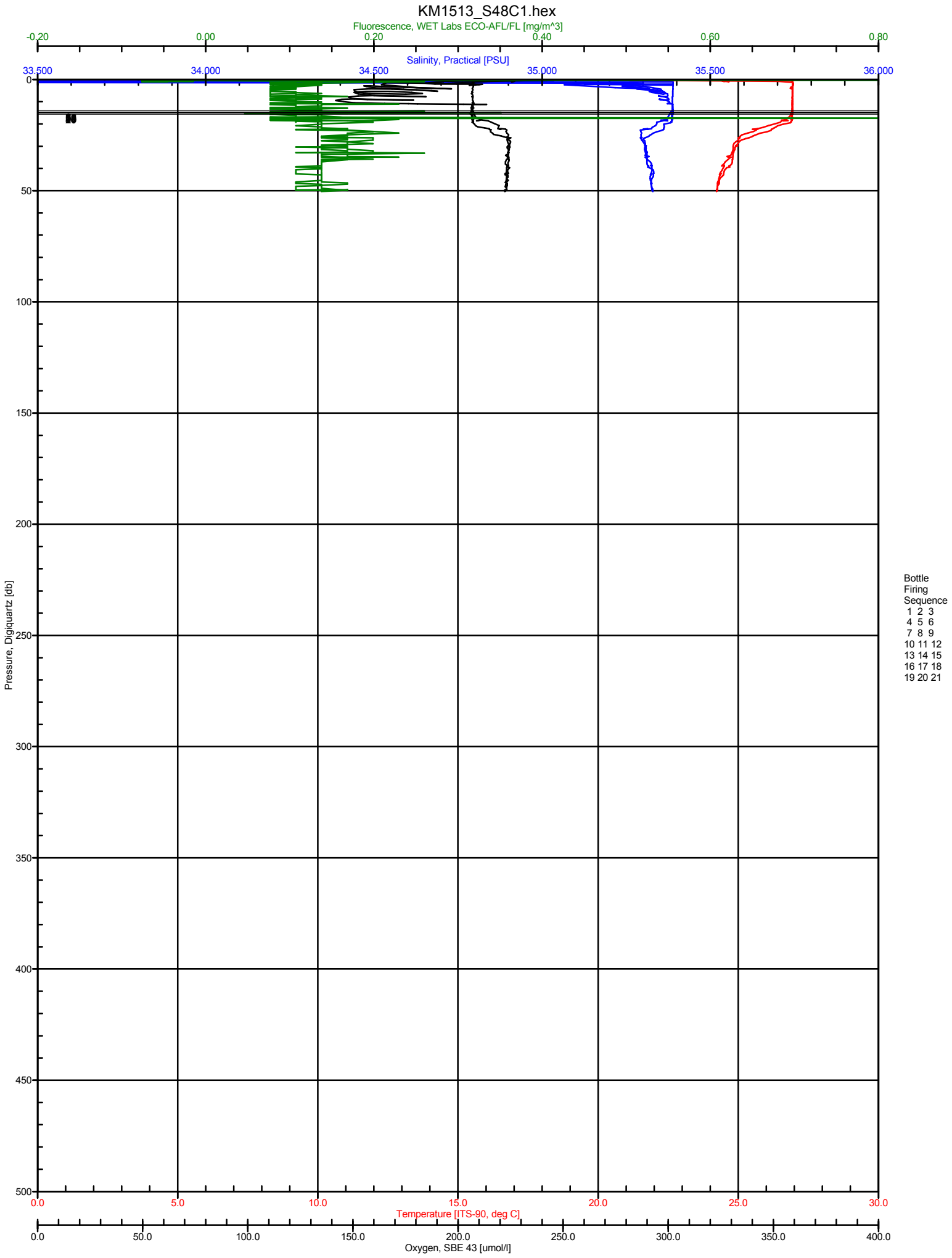
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 48	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 08/01/15**
Time Start Logging HST: 19:52	**Time Start Logging GMT: 05:52**
Pressure on deck	**Time GMT**
Start: 0.490	**In water: 06:03**
End: 0.289	**Out water: 06:15**
Latitude N	**Longitude W**
Start: 24 29. 995	**Start: 156 18. 041**
End: 24 30. 004	**End: 156 18. 043**
Max Press: 50	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	6:09	15.0	✓	
2	15		15.7	✓	
3	15	6:10	15.2	✓	
4	15		15.6	✓	
5	15		14.5	✓	
6	15		14.5	✓	
7	15		14.6	✓	
8	15		15.1	✓	
9	15		15.3	✓	
10	15		15.1	✓	
11	15	6:11	15.0	✓	
12	15		15.0	✓	
13	15		15.0	✓	
14	15		15.1	✓	
15	15		15.1	✓	
16	15		15.4	✓	
17	15		14.9	✓	
18	15		14.7	✓	
19	15		15.1	✓	
20	15	6:12	15.3	✓	
21	15		14.8	✓	
22					
23					
24					


KM1513_S48C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S48/C1 Date: 7/31/15 (HST)

Target Depth (db): 15 CTD Start Time: 2000 (HST)

Rosette Position	Depth (m)	Dave						
1	**15**	X						
2	**15**	X						
3	**15**	X						
4	**15**	X						
5	**15**	X						
6	**15**	X						
7	**15**	X						
8	**15**	X						
9	**15**	X						
10	**15**	X						
11	**15**	X						
12	**15**	X						
13	**15**	X						
14	**15**	X						
15	**15**	X						
16	**15**	X						
17	**15**	X						
18	**15**	X						
19	**15**	X						
20	**15**	X						
21								
22								
23								
24								

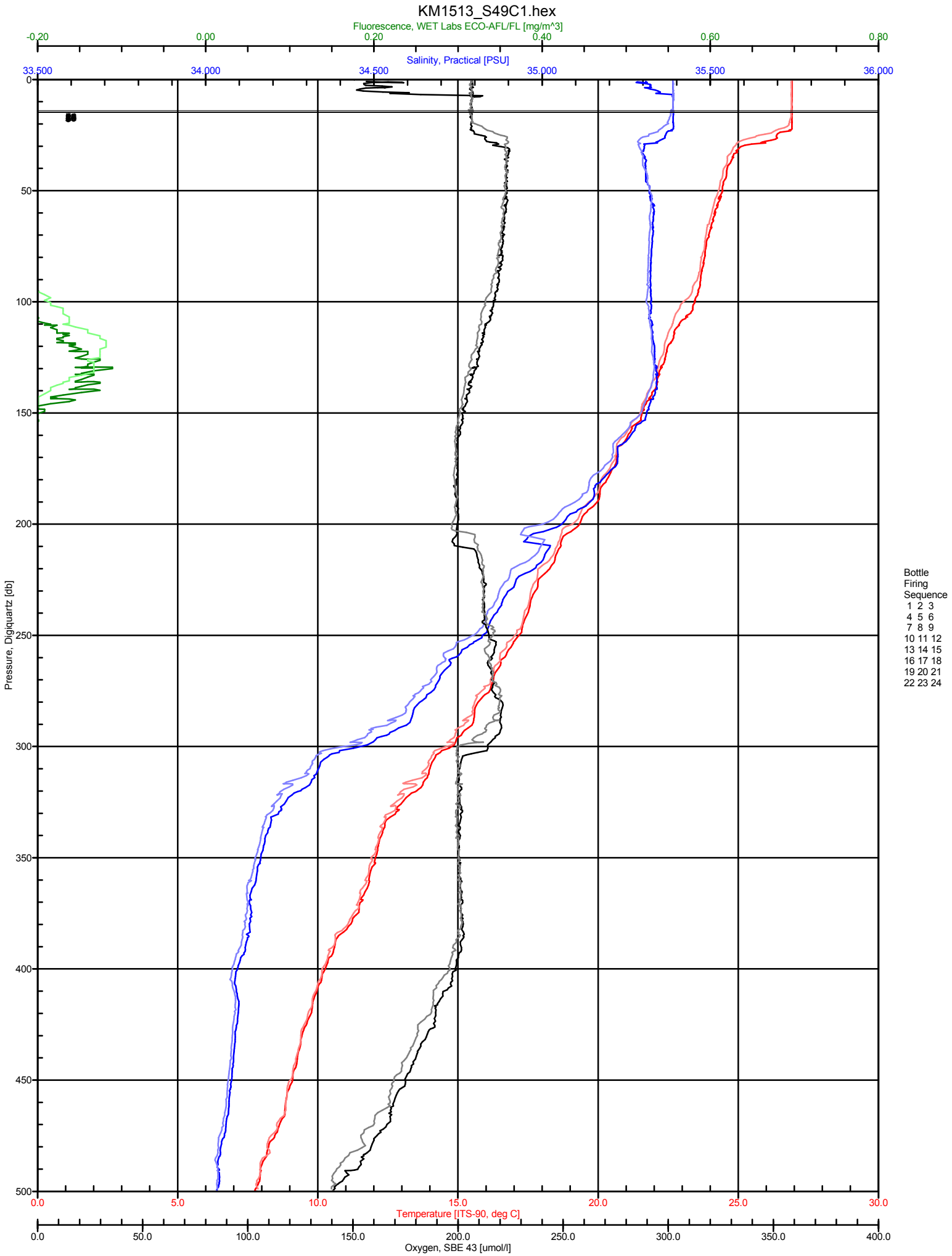
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 49	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/1/15**
Time Start Logging HST: 21:47	**Time Start Logging GMT: 07:47**
Pressure on deck	**Time GMT**
Start: -4.963	**In water: 07:50**
End: -6.474	**Out water: 08:25**
Latitude N	**Longitude W**
Start: 24 29. 828	**Start: 156 18. 432**
End: 24 29. 843	**End: 156 18. 432**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	**Wet labs ECO FLRTD sensor malfunction**
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	8:18	14.9	✓	
2	15	8:19	14.7	✓	
3	15		14.7	✓	
4	15		14.6	✓	
5	15		14.6	✓	
6	15		14.7	✓	
7	15		14.5	✓	
8	15		14.8	✓	
9	15	8:20	14.6	✓	
10	15		14.8	✓	
11	15		14.6	✓	
12	15		14.5	✓	
13	15		14.5	✓	
14	15	8:21	14.4	✓	
15	15		14.6	✓	
16	15		14.4	✓	
17	15		14.6	✓	
18	15		14.6	✓	
19	15		14.6	✓	
20	15		14.6	✓	
21	15	8:22	14.5	✓	
22	15		14.5	✓	
23	15		14.4	✓	
24	15		14.7	✓	


KM1513_S49C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S49C1	
Date:	07/31/2015	(HST)
CTD Start Time:	2200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

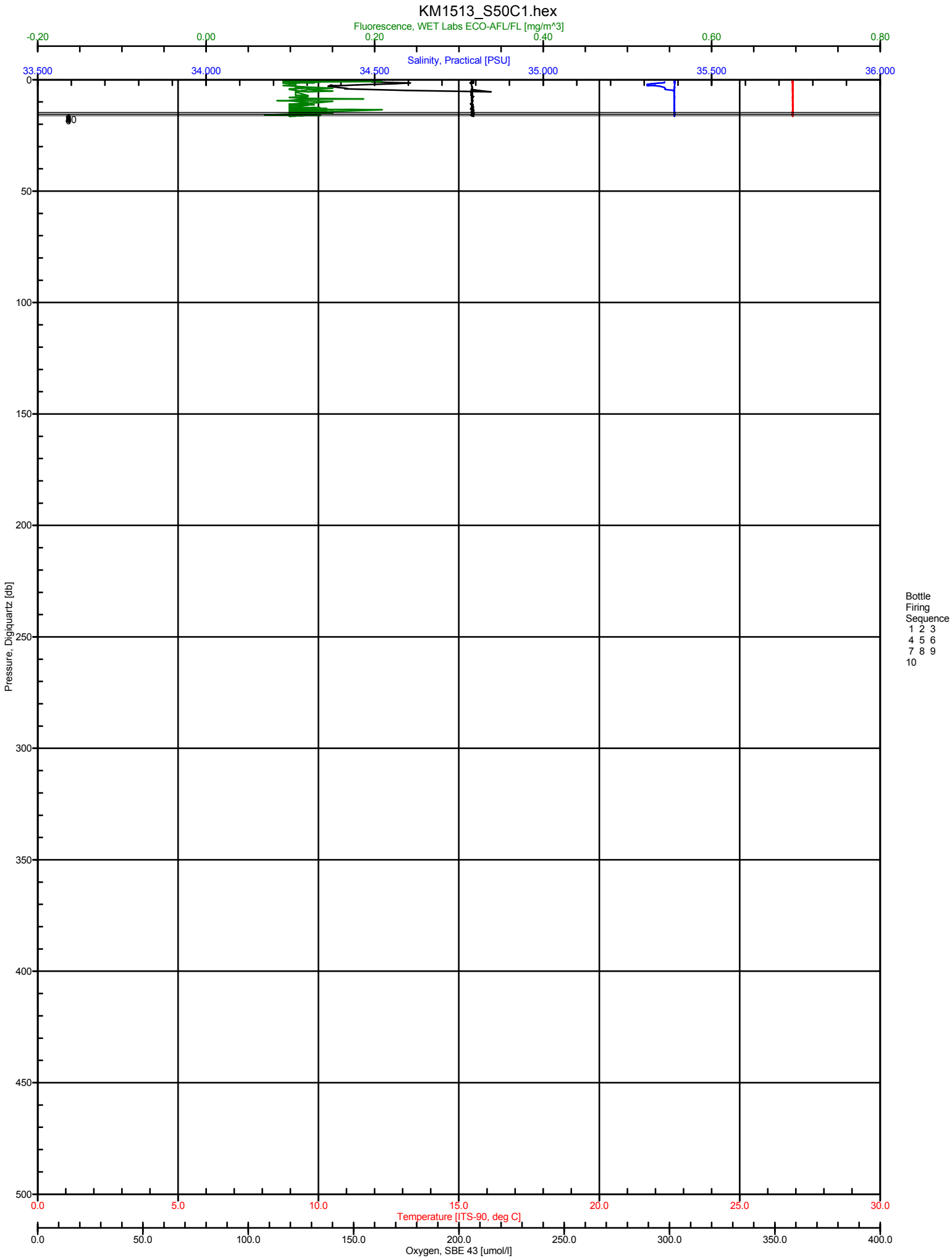
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 50	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/1/15**
Time Start Logging HST: 00:30	**Time Start Logging GMT: 10:32**
Pressure on deck	**Time GMT**
Start: -5.328	**In water: 10:33**
End: -5.660	**Out water: 10:40**
Latitude N	**Longitude W**
Start: 24 29. 939	**Start: 156 18. 714**
End: 24 29. 936	**End: 156 18. 713**
Max Press: 15	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	10:36	15.2	✓	
2	15	10:36	15.8	✓	
3	15	10:36	15.7	✓	
4	15	10:36	15.4	✓	
5	15	10:36	15.9	✓	
6	15	10:36	15.1	✓	
7	15	10:36	15.3	✓	
8	15	10:36	15.0	✓	
9	15	10:36	15.4	✓	
10	15	10:36	14.9	✓	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					


KM1513_S50C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
0
50
100
150
200
250
300
350
400
450
500
Pressure, Digiquartz [db]
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S50C1	
Date:	08/01/2015	(HST)
CTD Start Time:	0000	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

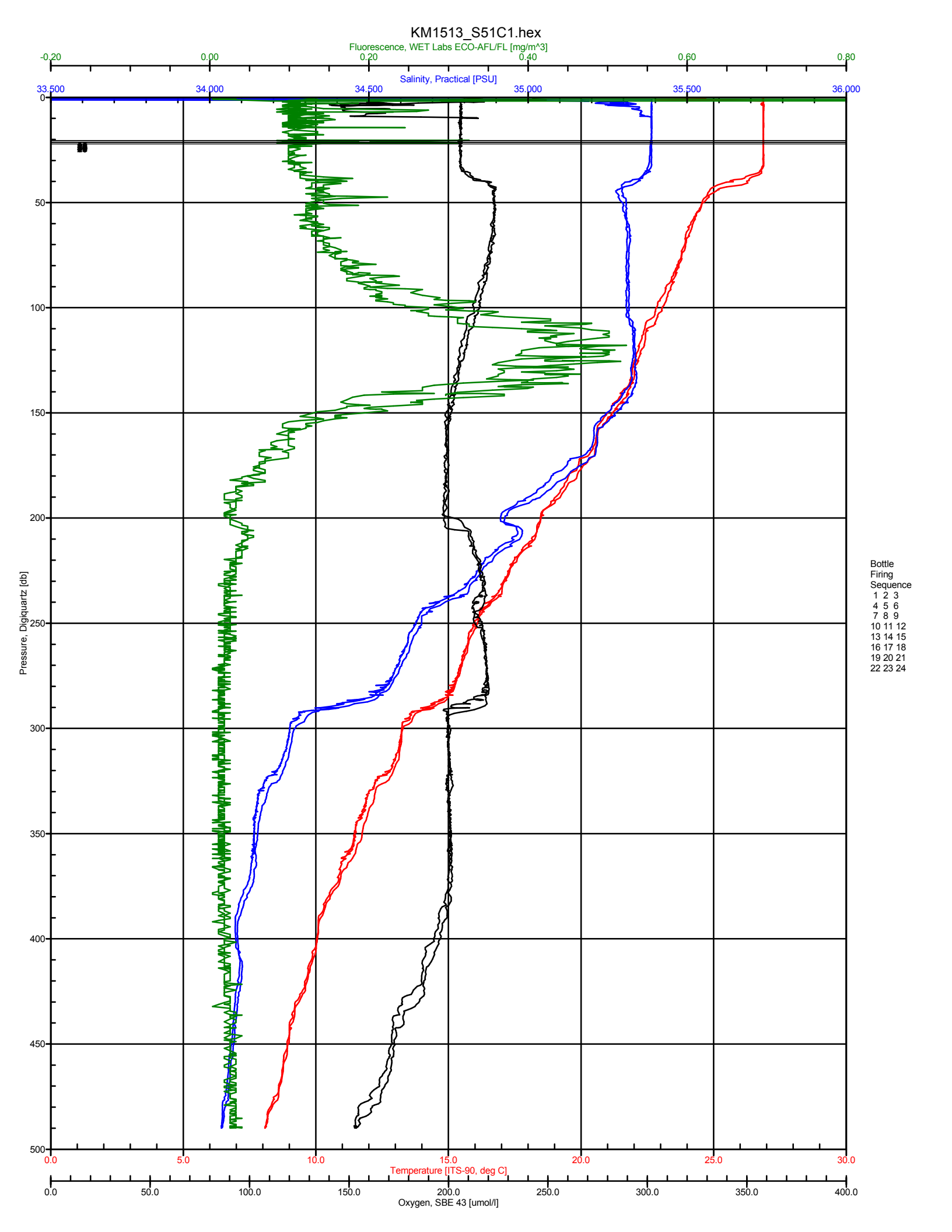
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 51	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/1/15**
Time Start Logging HST: 01:53	**Time Start Logging GMT: 11:53**
Pressure on deck	**Time GMT**
Start: -5.068	**In water: 11:55**
End: -7.028	**Out water: 12:39**
Latitude N	**Longitude W**
Start: 24 29. 978	**Start: 156 18. 715**
End: 24 30. 022	**End: 156 18. 710**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	**New fluorometer Wet Labs FLNTURTD -1303** **Wrong pressure cal. Numbers used**
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	12:33	15.4	✓	
2	15		15.3	✓	
3	15		15.0	✓	
4	15		15.1	✓	
5	15		15.3	✓	
6	15		15.0	✓	
7	15		15.0	✓	
8	15	12:34	15.1	✓	
9	15		15.1	✓	
10	15		15.1	✓	
11	15		15.3	✓	
12	15	12:35	15.4	✓	
13	15		15.0	✓	
14	15		14.9	✓	
15	15		15.0	✓	
16	15		15.2	✓	
17	15		15.2	✓	
18	15		15.4	✓	
19	15		15.0	✓	
20	15	12:36	15.1	✓	
21	15		14.9	✓	
22	15		15.0	✓	
23	15		15.2	✓	
24	15		15.0	✓	


KM1513_S51C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S51C1	
Date:	08/01/2015	(HST)
CTD Start Time:	0200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

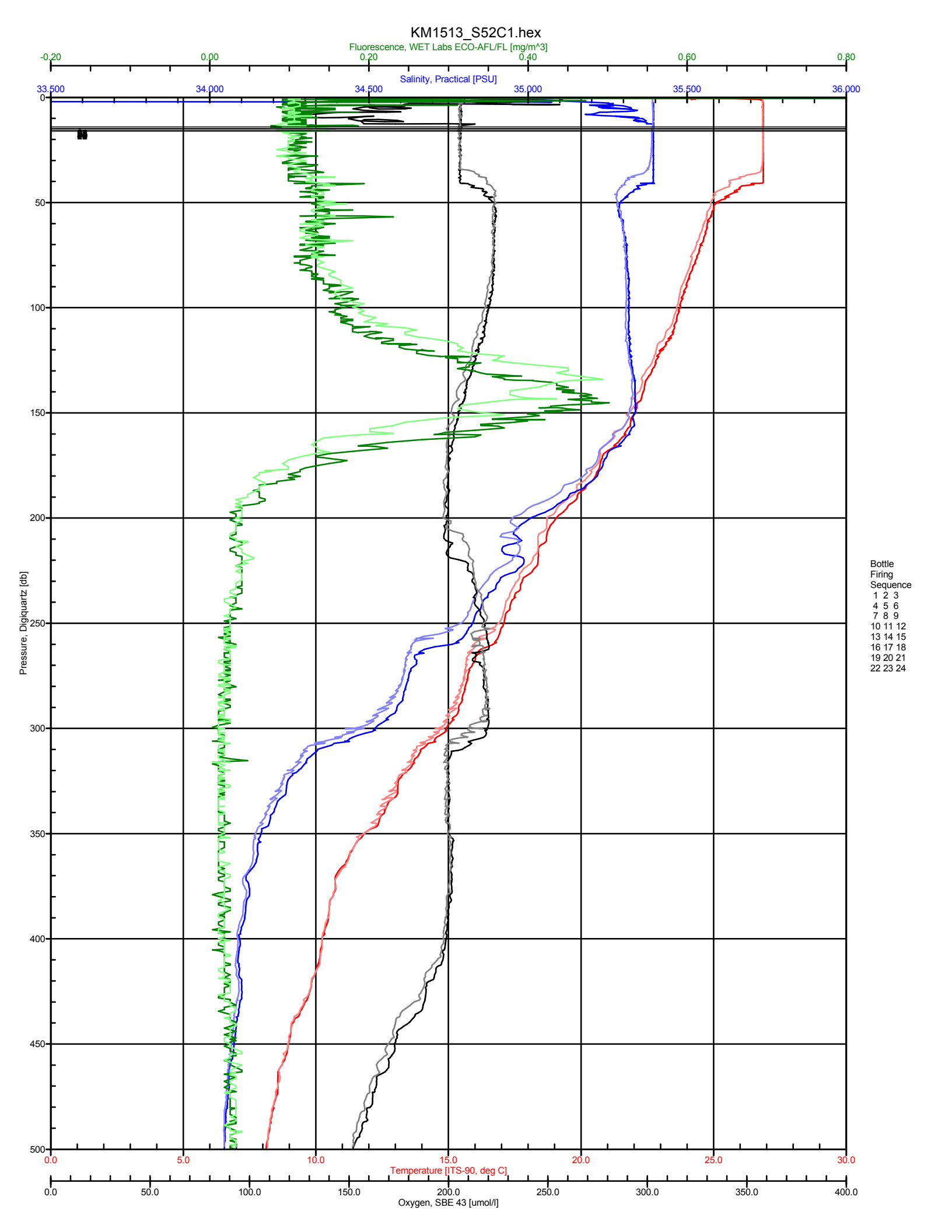
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 52	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 08/01/15**
Time Start Logging HST: 05:57	**Time Start Logging GMT: 15:57**
Pressure on deck	**Time GMT**
Start: 0.923	**In water: 16:01**
End: -0.179	**Out water: 16:39**
Latitude N	**Longitude W**
Start: 24 29.752	**Start: 156 17.862**
End: 24 29.671	**End: 156 17.861**
Max Press: 501	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	16:34	15.7	✓	
2	15		14.5	✓	
3	15		14.6	✓	
4	15		15.7	✓	
5	15		15.3	✓	
6	15		14.8	✓	
7	15		15.0	✓	
8	15	16:35	15.5	✓	
9	15		15.5	✓	
10	15		16.0	✓	
11	15		14.8	✓	
12	15		15.0	✓	
13	15		15.4	✓	
14	15		15.7	✓	
15	15		15.3	✓	
16	15		14.8	✓	
17	15	16:36	15.1	✓	
18	15		14.8	✓	
19	15		15.6	✓	
20	15		15.1	✓	
21	15		14.4	✓	
22	15		15.9	✓	
23	15		14.5	✓	
24	15		15.1	✓	


KM1513_S52C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S52C1	
Date:	08/01/2015	(HST)
CTD Start Time:	0600	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

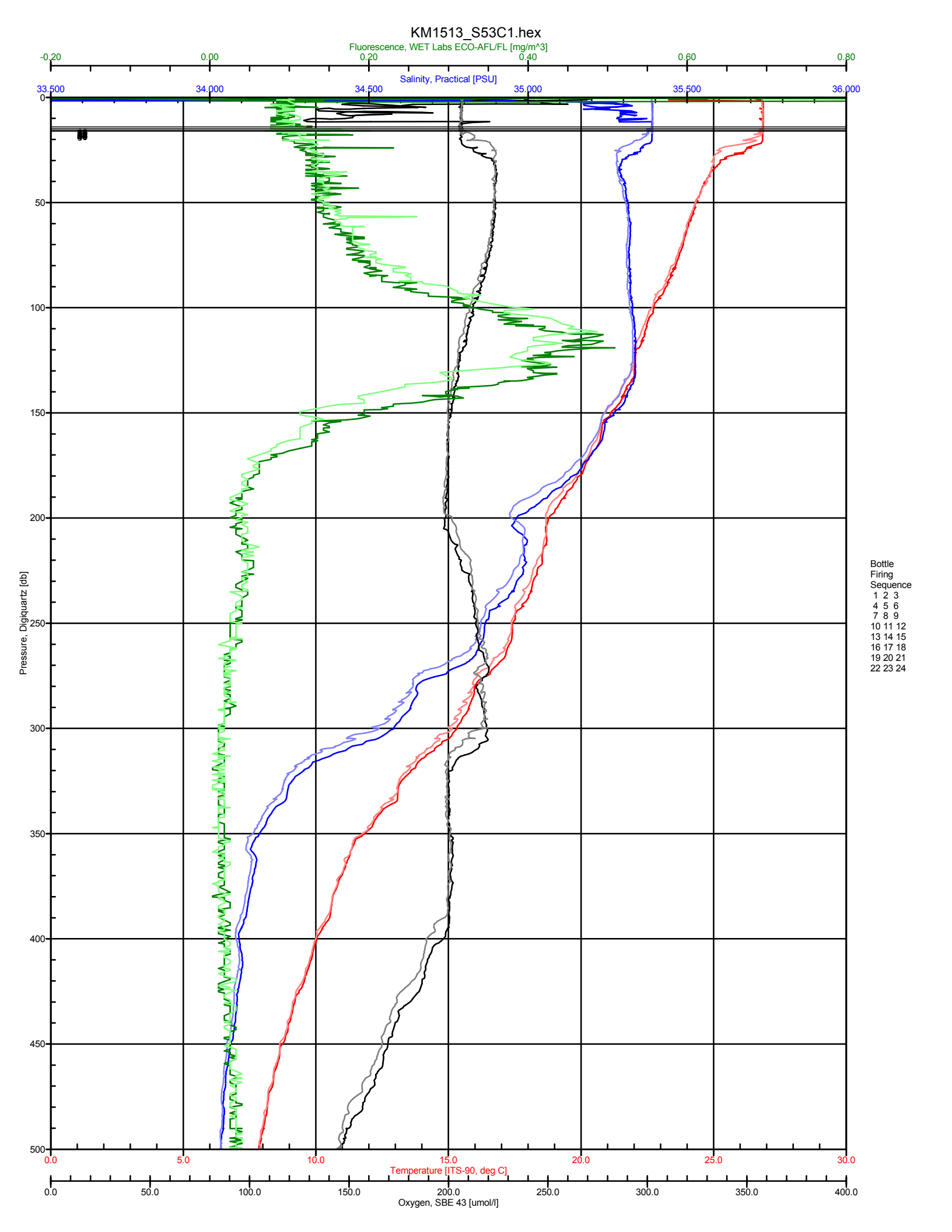
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 53	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 08/01/15**
Time Start Logging HST: 09:54	**Time Start Logging GMT: 19:54**
Pressure on deck	**Time GMT**
Start: 0.941	**In water: 20:00**
End: 0.028	**Out water: 20:35**
Latitude N	**Longitude W**
Start: 24 29.874	**Start: 156 18.114**
End: 24 29.860	**End: 156 18.122**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	**#17 fired, but did not close**
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	20:29	15.5	✓	
2	15	20:30	16.1	✓	
3	15		16.1	✓	
4	15		14.6	✓	
5	15		15.3	✓	
6	15		16.2	✓	
7	15		15.0	✓	
8	15		15.8	✓	
9	15		15.5	✓	
10	15		14.9	✓	
11	15		15.5	✓	
12	15	20:31	15.5	✓	
13	15		16.1	✓	
14	15		14.4	✓	
15	15		14.5	✓	
16	15		16.3	✓	
17	15		15.0	✓	
18	15		15.5	✓	
19	15		15.4	✓	
20	15		14.6	✓	
21	15	20:32	14.8	✓	
22	15		15.5	✓	
23	15		15.2	✓	
24	15		15.5	✓	


KM1513_S53C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S53C1	
Date:	08/01/2015	(HST)
CTD Start Time:	1000	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

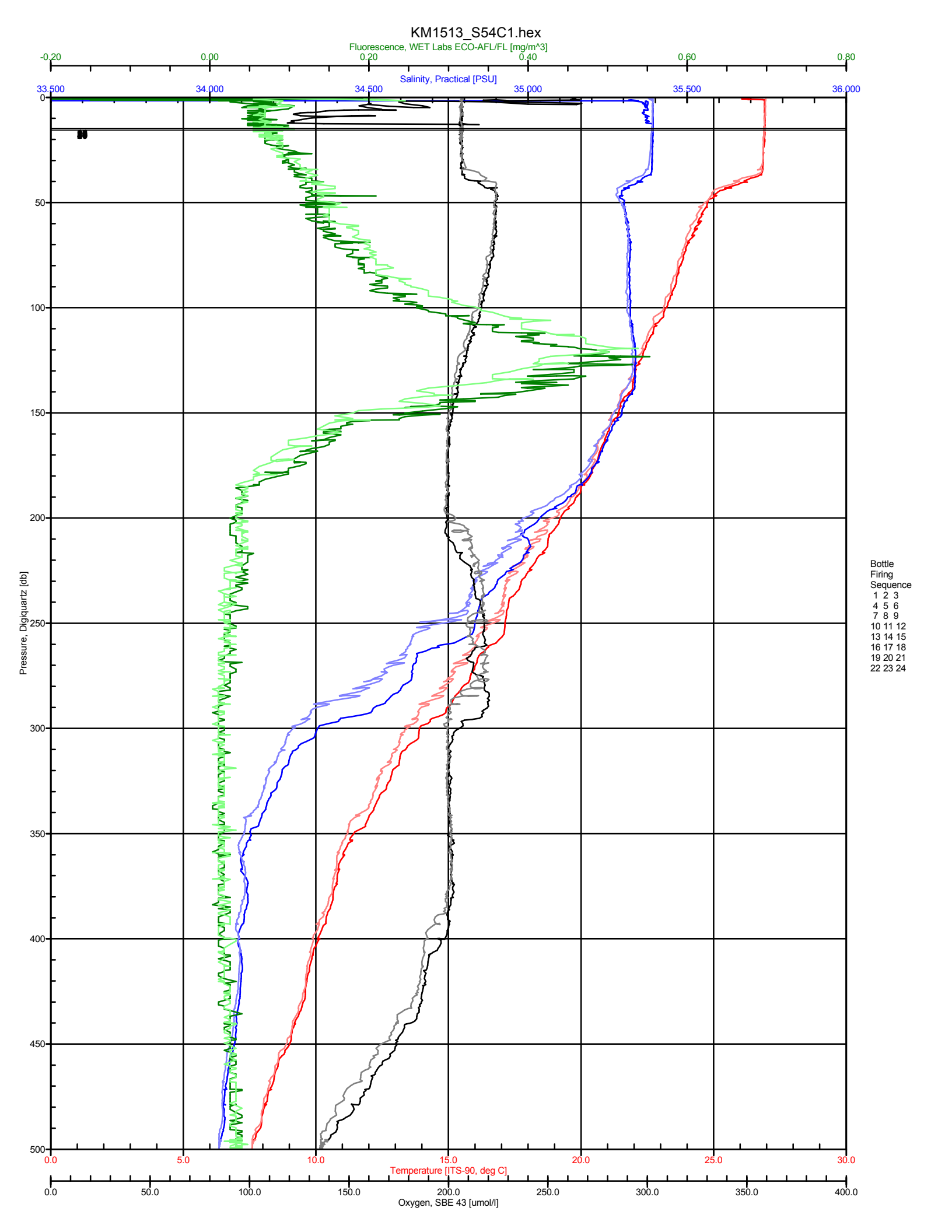
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs #17 DNC

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 54	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 08/01/15**
Time Start Logging HST: 13:58	**Time Start Logging GMT: 23:58**
Pressure on deck	**Time GMT**
Start: 0.971	**In water: 00:00**
End: -0.174	**Out water: 00:39**
Latitude N	**Longitude W**
Start: 24 28.889	**Start: 156 18.043**
End: 24 28.883	**End: 156 18.046**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	00:34	15.5	✓	
2	15		14.4	✓	
3	15		15.4	✓	
4	15		15.6	✓	
5	15		15.5	✓	
6	15		14.6	✓	
7	15	00:35	15.4	✓	
8	15		15.7	✓	
9	15		14.3	✓	
10	15		15.0	✓	
11	15		15.2	✓	
12	15		14.7	✓	
13	15	00:36	15.1	✓	
14	15		14.9	✓	
15	15		15.8	✓	
16	15		16.0	✓	
17	15		14.6	✓	
18	15		15.3	✓	
19	15	00:37	14.9	✓	
20	15		15.1	✓	
21	15		14.7	✓	
22	15		14.7	✓	
23	15		14.8	✓	
24	15		15.5	✓	


KM1513_S54C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S54C1	
Date:	08/01/2015	(HST)
CTD Start Time:	1400	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

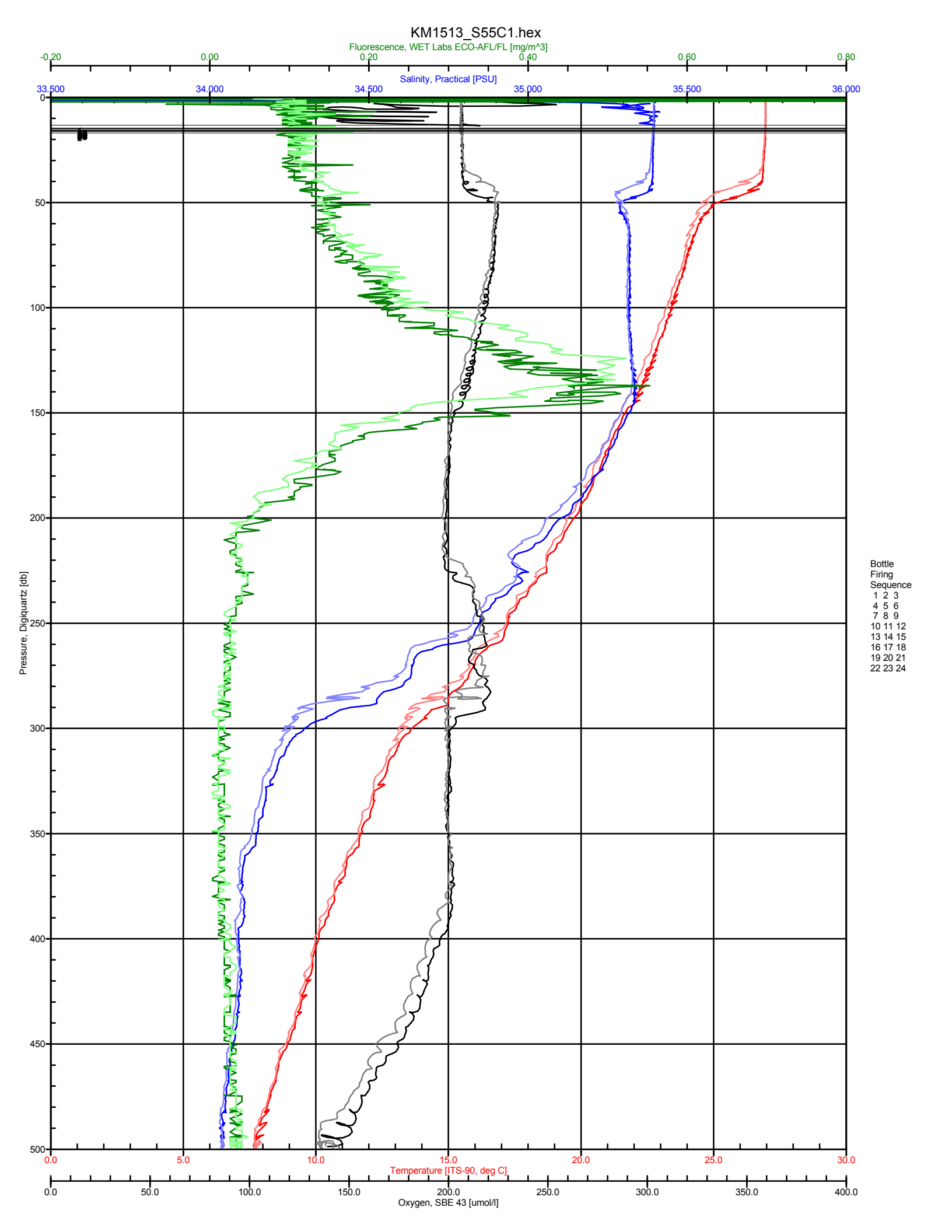
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 55	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/2/15**
Time Start Logging HST:17:53	**Time Start Logging GMT: 03:53**
Pressure on deck	**Time GMT**
Start: 1.038	**In water: 03:56**
End: 0.019	**Out water: 04:17**
Latitude N	**Longitude W**
Start: 24 28. 697	**Start: 156 17. 802**
End: 24 28. 660	**End: 156 17. 790**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	04:25	15.2	✓	
2	15	04:26	15.1	✓	
3	15		15.3	✓	
4	15		15.3	✓	
5	15		15.3	✓	
6	15		15.3	✓	
7	15		14.8	✓	
8	15	04:27	15.1	✓	
9	15		15.6	✓	
10	15		15.6	✓	
11	15		15.3	✓	
12	15		14.8	✓	
13	15		15.3	✓	
14	15	04:28	14.9	✓	
15	15		14.8	✓	
16	15		15.7	✓	
17	15		15.1	✓	
18	15		15.5	✓	
19	15		15.2	✓	
20	15		15.2	✓	
21	15	04:29	15.2	✓	
22	15		15.0	✓	
23	15		15.1	✓	
24	15		15.3	✓	


KM1513_S55C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Temperature [ITS-90, deg C]
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Oxygen, SBE 43 [umol/l]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S55C1	
Date:	08/01/2015	(HST)
CTD Start Time:	1800	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

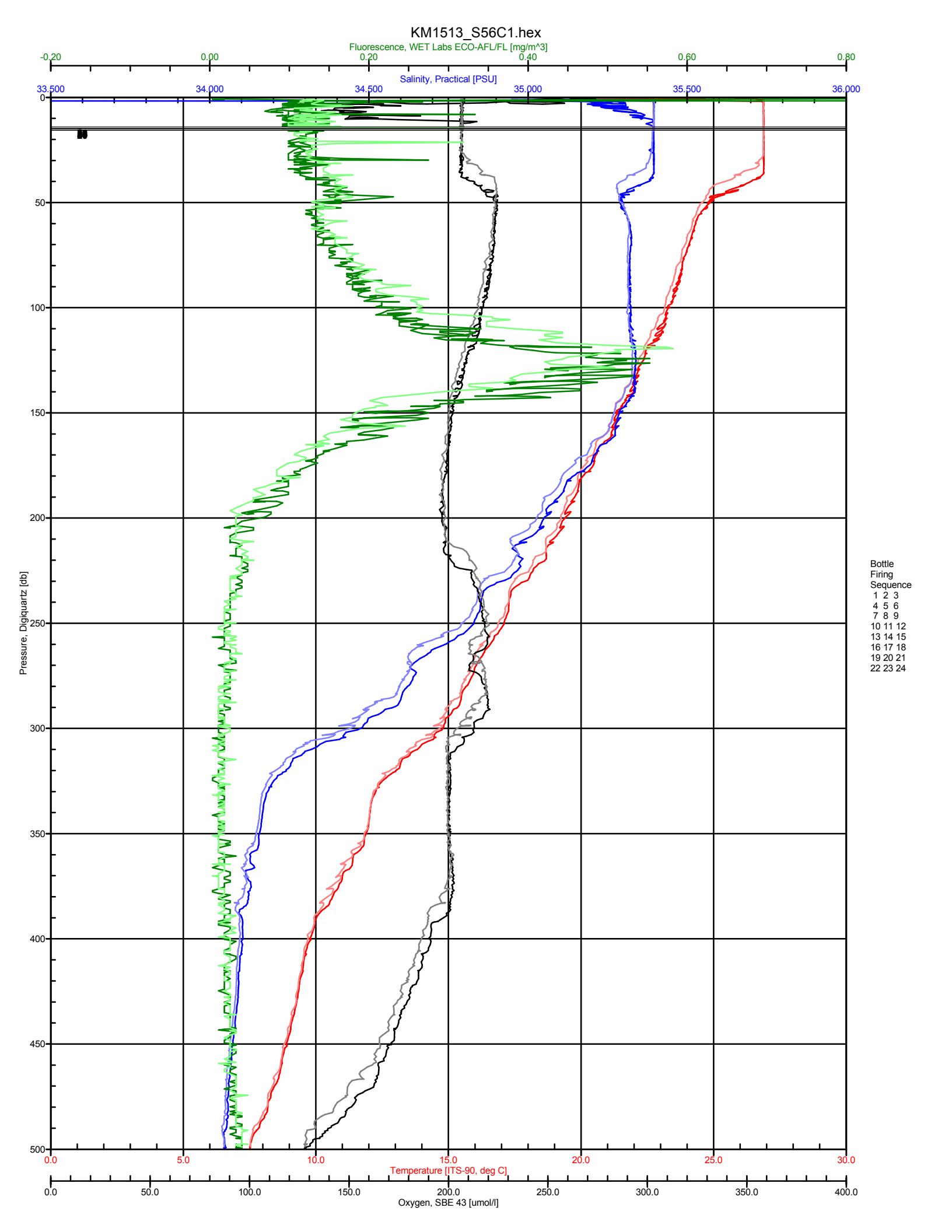
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 56	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/2/15**
Time Start Logging HST: 21:50	**Time Start Logging GMT: 7:50**
Pressure on deck	**Time GMT**
Start: 0.930	**In water: 07:53**
End: 0.077	**Out water: 08:31**
Latitude N	**Longitude W**
Start: 24 28. 370	**Start: 156 17. 574**
End: 24 28. 373	**End: 156 17. 574**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	08:25	14.8	✓	
2	15		15.1	✓	
3	15		15.2	✓	
4	15		15.5	✓	
5	15	08:26	14.8	✓	
6	15		15.0	✓	
7	15		14.9	✓	
8	15	08:27	14.6	✓	
9	15		14.7	✓	
10	15		14.7	✓	
11	15		14.5	✓	
12	15	08:28	14.8	✓	
13	15		14.9	✓	
14	15		15.0	✓	
15	15		14.9	✓	
16	15		14.9	✓	
17	15	08:29	14.6	✓	
18	15		15.0	✓	
19	15		14.9	✓	
20	15		15.1	✓	
21	15		15.1	✓	
22	15		14.8	✓	
23	15	08:30	14.9	✓	
24	15		15.0	✓	


KM1513_S56C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S56C1	
Date:	08/01/2015	(HST)
CTD Start Time:	2200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

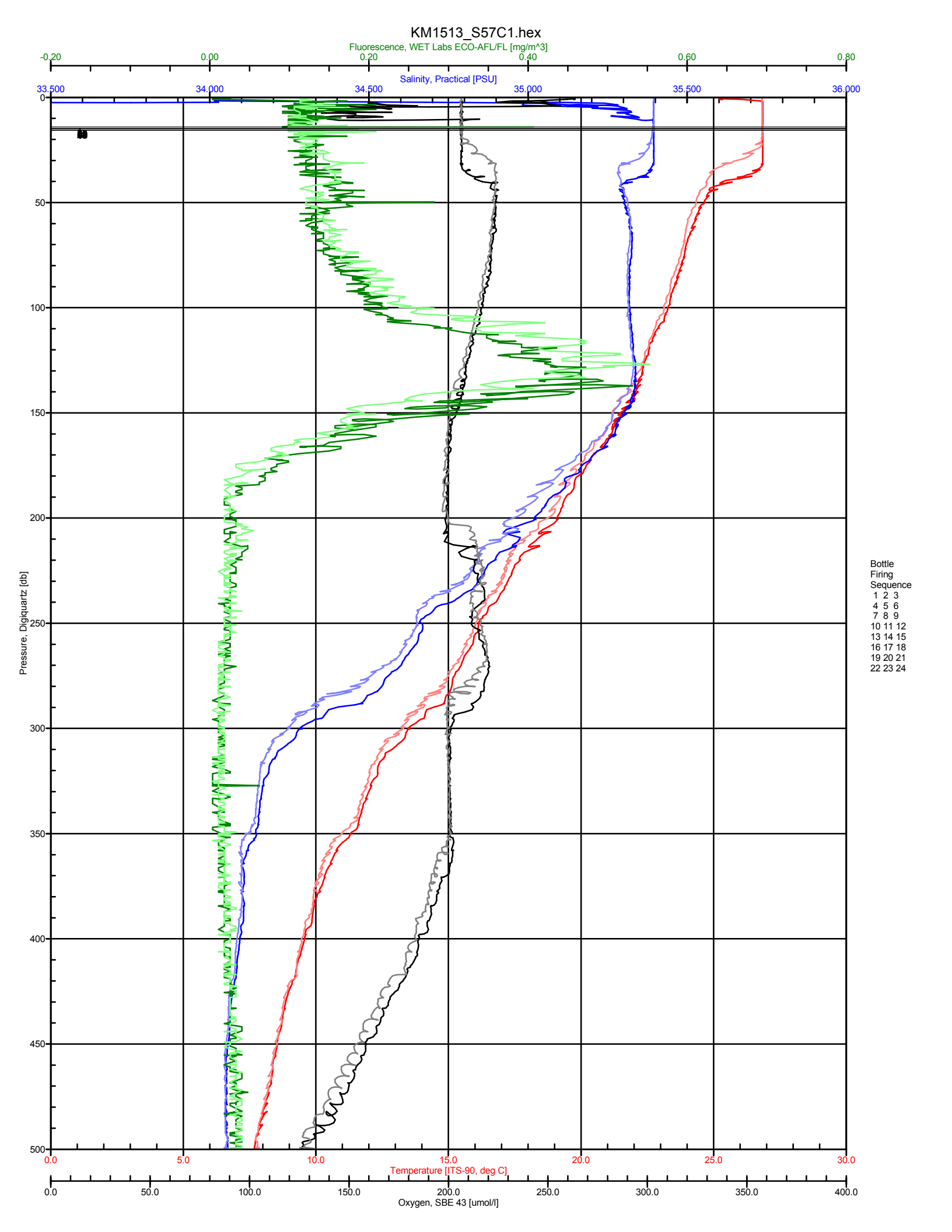
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 57	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/2/15**
Time Start Logging HST: 01:59	**Time Start Logging GMT: 11:59**
Pressure on deck	**Time GMT**
Start: 0.911	**In water: 12:00**
End: -0.097	**Out water: 12:44**
Latitude N	**Longitude W**
Start: 24 24. 917	**Start: 156 18. 835**
End: 24 24. 908	**End: 156 18. 835**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	12:39	14.7	✓	
2	15		15.1	✓	
3	15		14.7	✓	
4	15		14.8	✓	
5	15		14.8	✓	
6	15		14.9	✓	
7	15	12:40	13.9	✓	
8	15		14.7	✓	
9	15		14.7	✓	
10	15		14.0	✓	
11	15		14.9	✓	
12	15		14.9	✓	
13	15		14.5	✓	
14	15	12:41	15.1	✓	
15	15		15.0	✓	
16	15		15.6	✓	
17	15		15.0	✓	
18	15		15.0	✓	
19	15		14.9	✓	
20	15		15.1	✓	
21	15		15.1	✓	
22	15		14.9	✓	
23	15	12:42	14.9	✓	
24	15		15.3	✓	


KM1513_S57C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S57C1	
Date:	08/02/2015	(HST)
CTD Start Time:	0200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

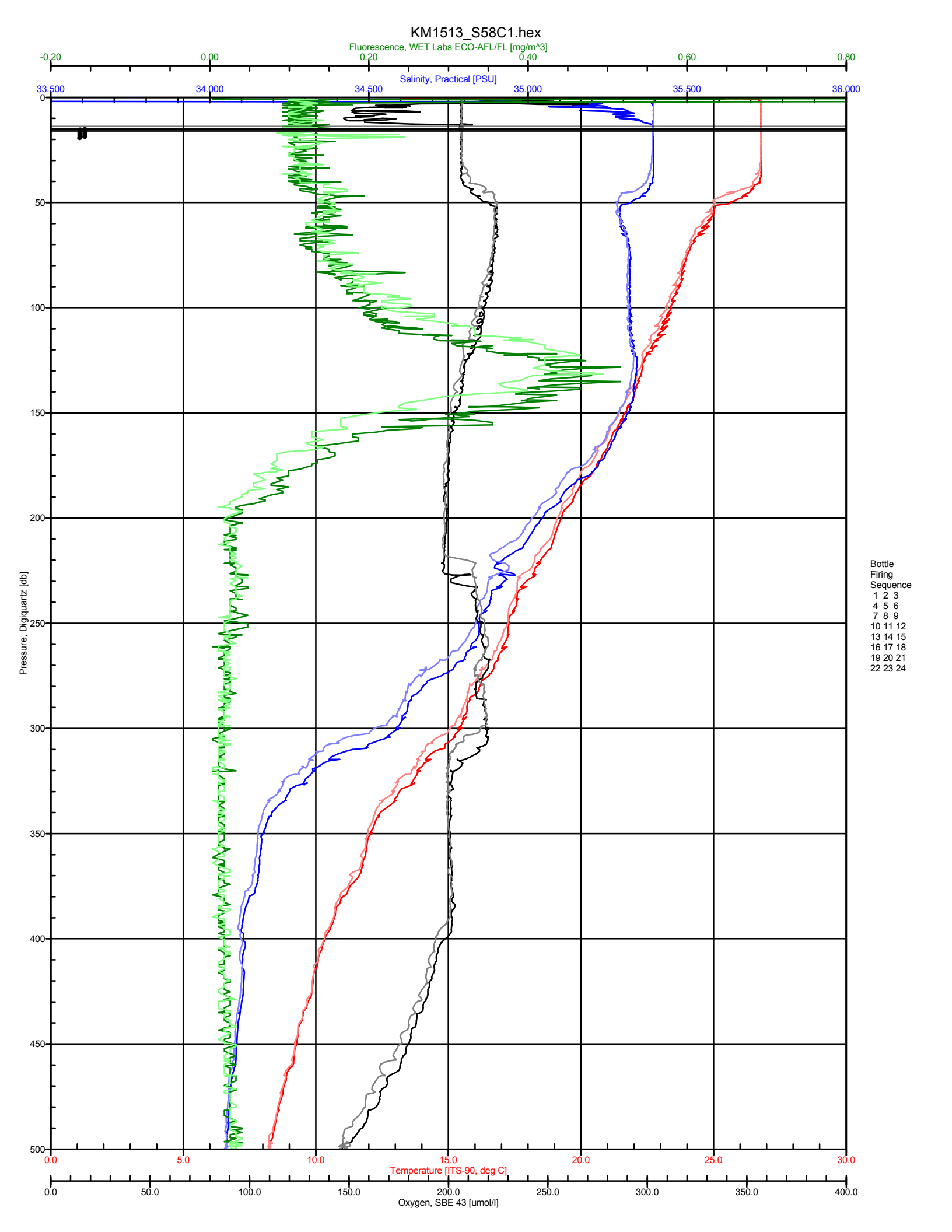
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 58	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/01/15**
Time Start Logging HST: 06:06	**Time Start Logging GMT: 16:06**
Pressure on deck	**Time GMT**
Start: 0.858	**In water: 16:07**
End: -0.117	**Out water: 16:43**
Latitude N	**Longitude W**
Start: 24 24.822	**Start: 156 18.886**
End: 24 24.822	**End: 156 18.886**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	16:39	14.2	✓	
2	15		16.1	✓	
3	15		15.2	✓	
4	15	16:40	13.0	✓	
5	15		15.1	✓	
6	15		14.2	✓	
7	15		14.7	✓	
8	15		15.5	✓	
9	15		15.5	✓	
10	15	16:41	14.3	✓	
11	15		14.5	✓	
12	15		15.5	✓	
13	15		14.2	✓	
14	15		15.9	✓	
15	15		14.6	✓	
16	15		13.3	✓	
17	15		15.6	✓	
18	15	16:42	15.4	✓	
19	15		15.1	✓	
20	15		15.0	✓	
21	15		13.9	✓	
22	15		15.6	✓	
23	15		15.1	✓	
24	15		15.5	✓	


KM1513_S58C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S58C1	
Date:	08/02/2015	(HST)
CTD Start Time:	0600	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

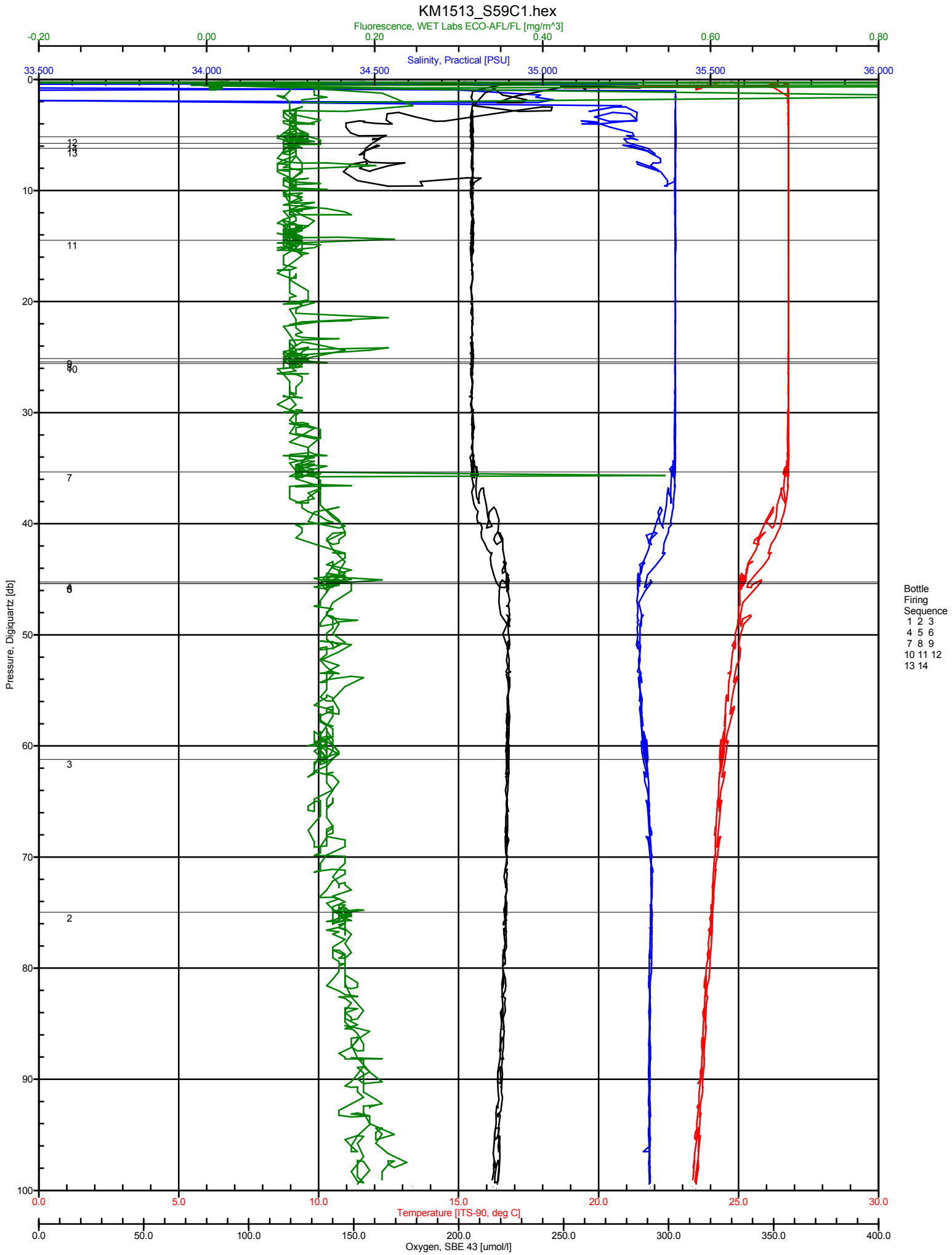
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 59	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/02/15**
Time Start Logging HST: 08:02	**Time Start Logging GMT: 18:02**
Pressure on deck	**Time GMT**
Start: 0.953	**In water: 18:04**
End: 0.296	**Out water: 18:26**
Latitude N	**Longitude W**
Start: 24 24.808	**Start: 156 18.886**
End: 24 24.798	**End: 156 18.889**
Max Press: 105	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	100	18:13	103.7	✓	
2	75	18:16	75.5	✓	
3	60	18:17	60.4	✓	
4	45	18:19	45.1	✓	
5	45		45.6	✓	
6	45		45.3	✓	
7	35	18:21	35.0	✓	
8	25	18:22	25.0	✓	
9	25		24.7	✓	
10	25		25.2	✓	
11	15	18:24	15.0	✓	
12	5	18:25	5.3	✓	
13	5		5.6	✓	
14	5		5.2	✓	
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					


KM1513_S59C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
10
20
30
40
50
60
70
80
90
100
12
13
11
9
10
7
4
6
3
2
Bottle Firing Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S59C1	
Date:	08/02/2015	(HST)
CTD Start Time:	0800	(HST)
Target:	100m	(db)

Rosette Position	Depth (db)	Wilson	Watkins								
1	100	X									
2	75	X									
3	60	X									
4	45	X									
5	45		X								
6	45		X								
7	35	X									
8	25	X									
9	25		X								
10	25		X								
11	15	X									
12	5		X								
13	5		X								
14	5	X									
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

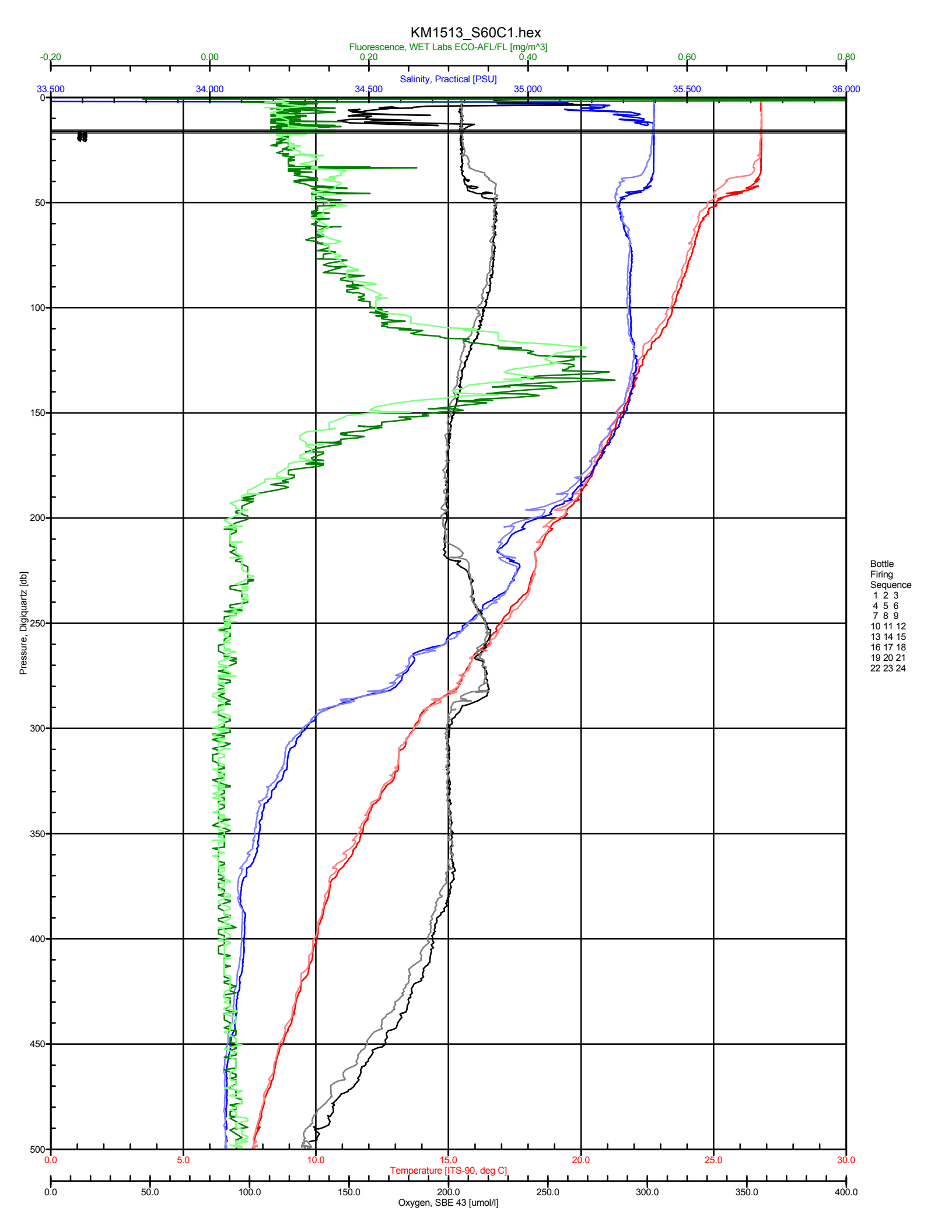
COMMENTS

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 60	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/02/15**
Time Start Logging HST: 09:52	**Time Start Logging GMT: 19:52**
Pressure on deck	**Time GMT**
Start: 0.888	**In water: 19:55**
End: -0.220	**Out water: 20:29**
Latitude N	**Longitude W**
Start: 24 24.798	**Start: 156 18.737**
End: 24 24.755	**End: 156 18.732**
Max Press: 501	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	20:25	16.0	✓	
2	15		15.6	✓	
3	15		16.1	✓	
4	15	20:26	16.4	✓	
5	15		16.4	✓	
6	15		16.4	✓	
7	15		15.7	✓	
8	15		16.1	✓	
9	15		16.3	✓	
10	15		15.5	✓	
11	15		15.8	✓	
12	15		16.4	✓	
13	15	20:27	16.2	✓	
14	15		16.7	✓	
15	15		14.7	✓	
16	15		16.2	✓	
17	15		15.6	✓	
18	15		15.5	✓	
19	15		16.3	✓	
20	15	20:28	15.9	✓	
21	15		16.1	✓	
22	15		16.3	✓	
23	15		15.6	✓	
24	15		15.9	✓	


KM1513_S60C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S60C1	
Date:	08/02/2015	(HST)
CTD Start Time:	1000	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

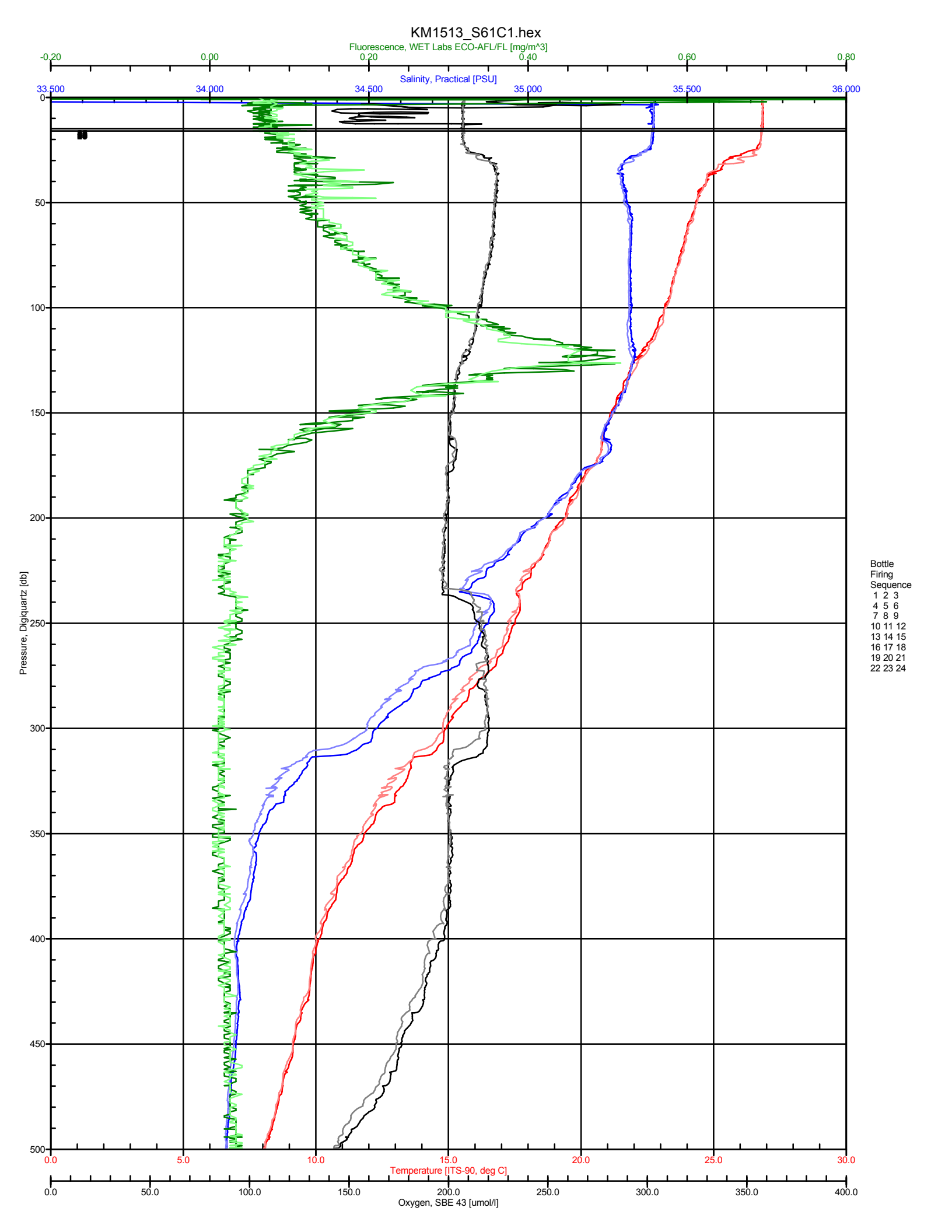
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 61	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/02/15**
Time Start Logging HST: 13:52	**Time Start Logging GMT: 23:52**
Pressure on deck	**Time GMT**
Start: 1.017	**In water: 23:54**
End: -0.235	**Out water: 00:33**
Latitude N	**Longitude W**
Start: 24 24.281	**Start: 156 21.318**
End: 24 24.287	**End: 156 21.320**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	00:29	15.0	✓	
2	15		15.6	✓	
3	15		15.2	✓	
4	15	00:30	14.8	✓	
5	15		15.1	✓	
6	15		15.1	✓	
7	15		15.0	✓	
8	15		15.4	✓	
9	15		15.8	✓	
10	15		15.7	✓	
11	15		15.4	✓	
12	15		15.5	✓	
13	15	00:31	15.8	✓	
14	15		15.8	✓	
15	15		14.7	✓	
16	15		15.8	✓	
17	15		15.1	✓	
18	15		15.4	✓	
19	15		15.6	✓	
20	15		14.7	✓	
21	15	00:32	15.1	✓	
22	15		15.8	✓	
23	15		15.8	✓	
24	15		15.3	✓	


KM1513_S61C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S61C1	
Date:	08/02/2015	(HST)
CTD Start Time:	1400	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

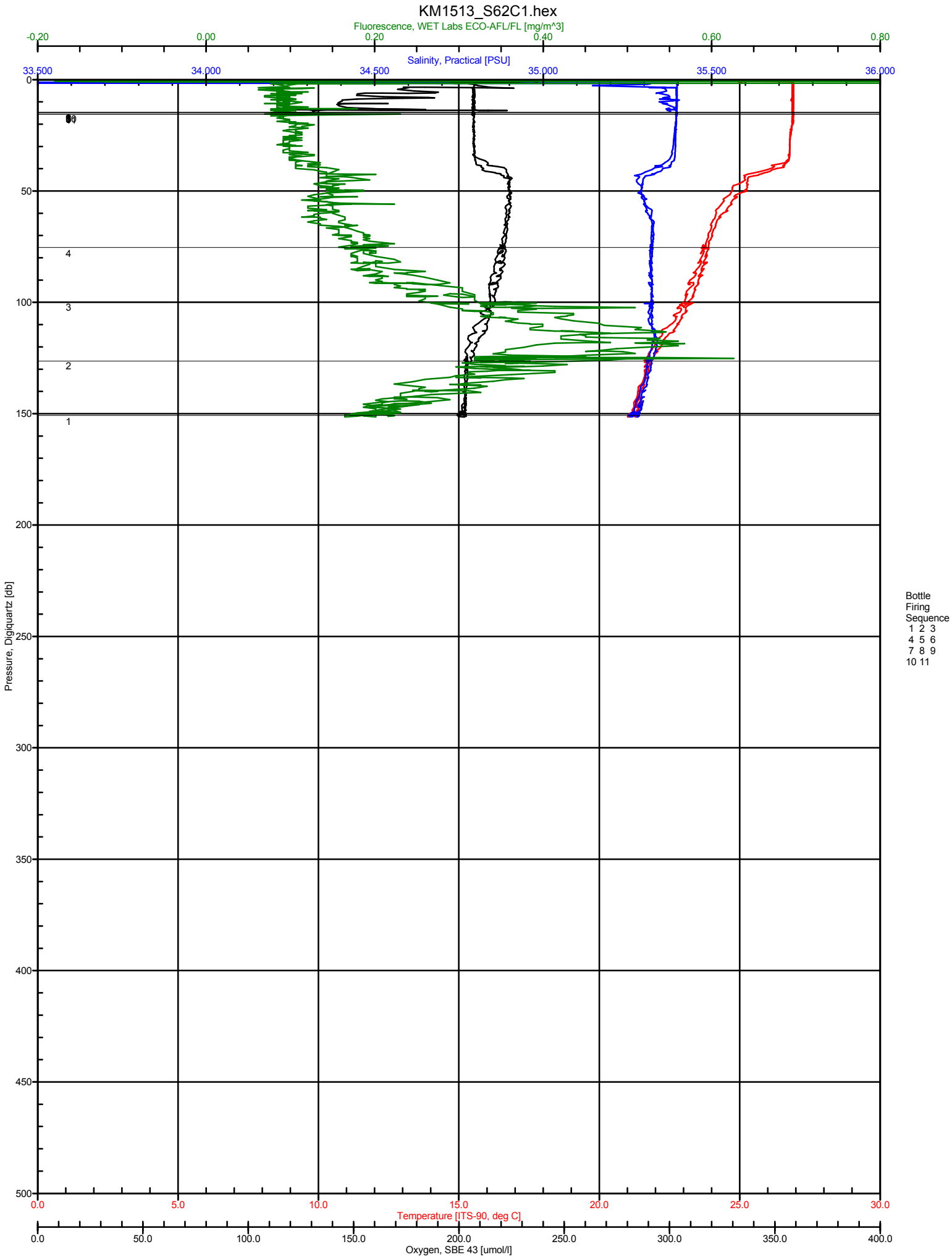
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 62	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/3/15**
Time Start Logging HST: 16:48	**Time Start Logging GMT: 02:48**
Pressure on deck	**Time GMT**
Start: 0.876	**In water: 02:49**
End: 0.144	**Out water: 03:10**
Latitude N	**Longitude W**
Start: 24 23. 968	**Start: 156 21. 223**
End: 24 23. 888	**End: 156 21. 186**
Max Press: 150	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	150	03:00	150.3	✓	
2	125	03:01	126.1	✓	
3	100	03:03	100.1	✓	
4	75	03:04	75.2	✓	
5	15	03:07	15.1	✓	
6	15		14.9	✓	
7	15		15.1	✓	
8	15		15.2	✓	
9	15		15.1	✓	
10	15	03:08	15.2	✓	
11	15		15.2	✓	
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					


KM1513_S62C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
0
50
100
150
200
250
300
350
400
450
500
Pressure, Digiquartz [db]
4
3
2
1
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S62C1	
Date:	08/02/2015	(HST)
CTD Start Time:	1700	(HST)
Target:	150m	(db)

Rosette Position	Depth (db)	Dan									
1	150										
2	125										
3	100										
4	75										
5	15										
6	15										
7	15										
8	15										
9	15										
10	15										
11	15										
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

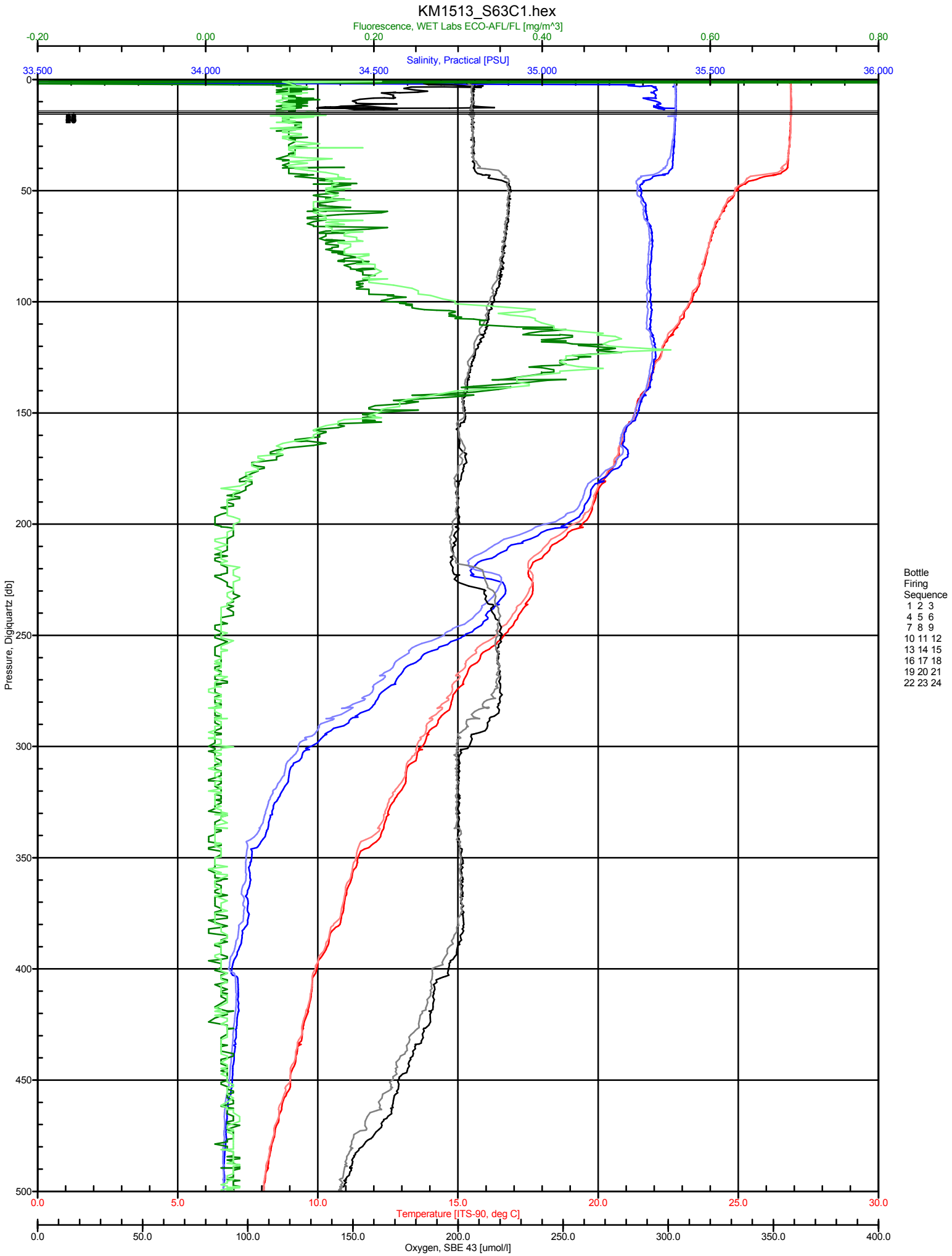
COMMENTS: Dan to sample 150,125,100,75,15 for Jamie Collins (KOK) who couldn't get the water

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 63	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/3/15**
Time Start Logging HST: 18:08	**Time Start Logging GMT: 04:08**
Pressure on deck	**Time GMT**
Start: 1.009	**In water: 04:09**
End: -0.137	**Out water: 04:45**
Latitude N	**Longitude W**
Start: 24 23. 868	**Start: 156 21. 008**
End: 24 23. 900	**End: 156 21. 040**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	04:37	15.3	✓	
2	15		15.3	✓	
3	15	04:38	15.1	✓	
4	15		15.0	✓	
5	15		15.5	✓	
6	15		15.4	✓	
7	15		15.3	✓	
8	15	04:39	15.1	✓	
9	15		15.1	✓	
10	15		14.8	✓	
11	15		15.3	✓	
12	15		15.0	✓	
13	15	04:40	15.2	✓	
14	15		15.3	✓	
15	15	04:41	15.4	✓	
16	15		15.2	✓	
17	15		15.4	✓	
18	15		15.3	✓	
19	15		15.3	✓	
20	15	04:42	15.3	✓	
21	15		15.1	✓	
22	15		15.2	✓	
23	15		15.6	✓	
24	15	04:43	15.3	✓	


KM1513_S63C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S63C1	
Date:	08/02/2015	(HST)
CTD Start Time:	1800	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

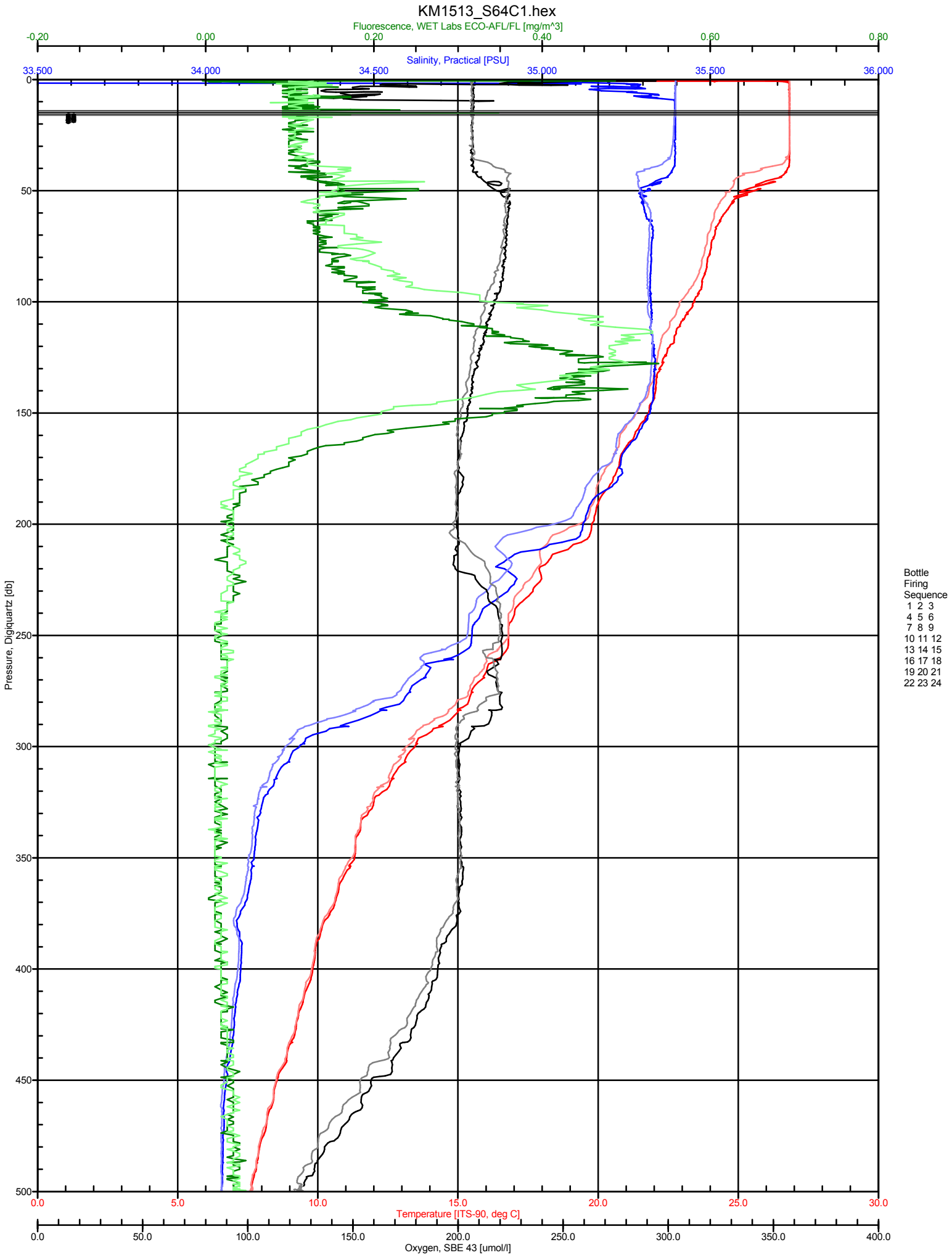
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 64	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/3/15**
Time Start Logging HST: 22:03	**Time Start Logging GMT: 08:02**
Pressure on deck	**Time GMT**
Start: 0.762	**In water: 08:04**
End: -0.145	**Out water: 08:40**
Latitude N	**Longitude W**
Start: 24 21. 701	**Start: 156 20. 598**
End: 24 21. 668	**End: 156 20. 580**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	08:34	15.4	✓	
2	15		15.0	✓	
3	15	08:35	15.3	✓	
4	15		14.8	✓	
5	15		15.1	✓	
6	15		15.2	✓	
7	15		14.8	✓	
8	15		15.3	✓	
9	15		15.2	✓	
10	15		15.1	✓	
11	15		15.1	✓	
12	15	08:36	15.3	✓	
13	15		15.2	✓	
14	15		14.9	✓	
15	15		15.5	✓	
16	15		15.0	✓	
17	15		15.0	✓	
18	15		15.2	✓	
19	15		14.9	✓	
20	15	08:37	15.2	✓	
21	15		14.9	✓	
22	15		15.2	✓	
23	15		15.0	✓	
24	15		14.7	✓	


KM1513_S64C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S64C1	
Date:	08/02/2015	(HST)
CTD Start Time:	2200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

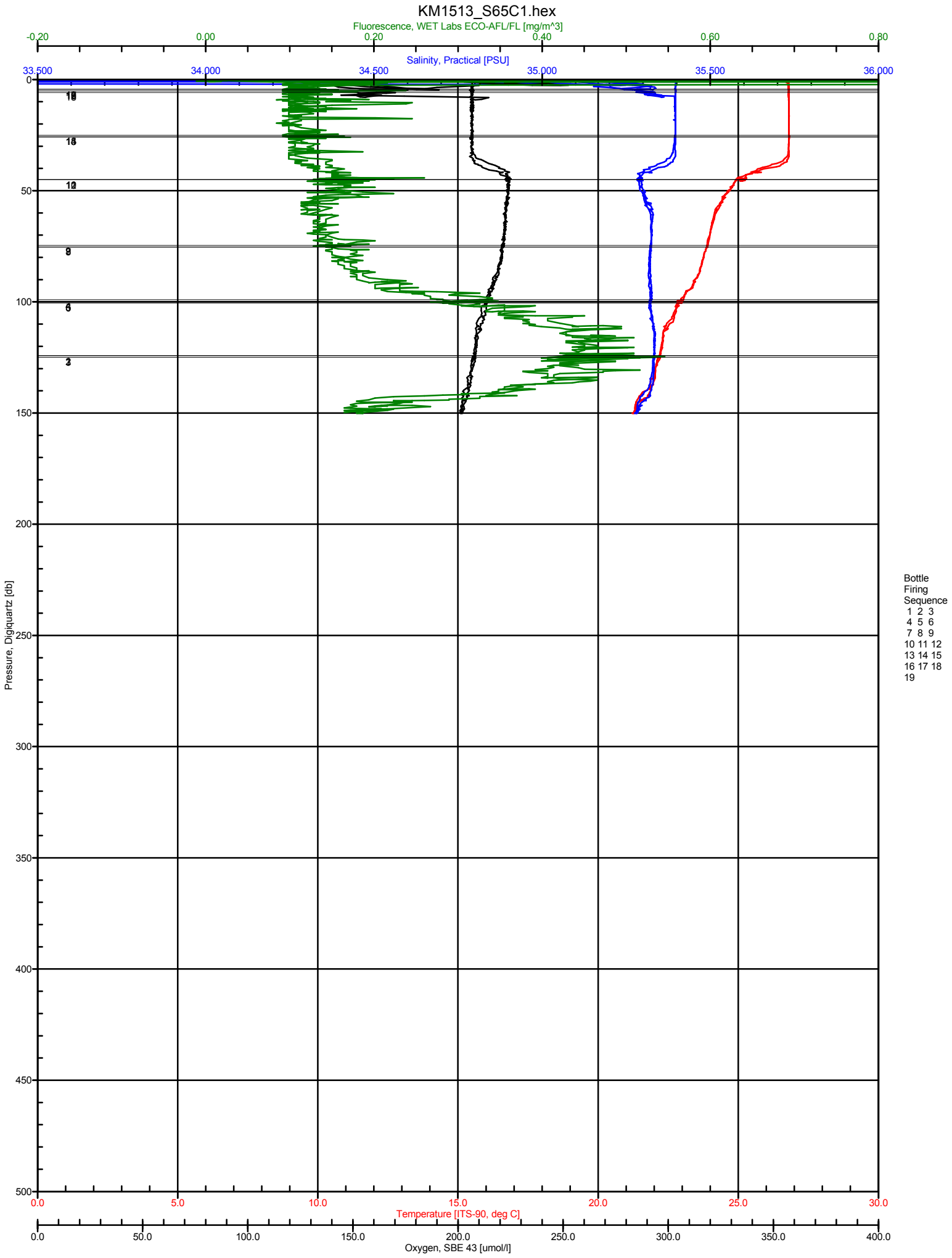
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 65	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/3/15**
Time Start Logging HST: 00:00	**Time Start Logging GMT: 10:00**
Pressure on deck	**Time GMT**
Start: 0.888	**In water: 10:06**
End: 0.237	**Out water: 10:31**
Latitude N	**Longitude W**
Start: 24 20.692	**Start: 156 20. 750**
End:24 20. 717	**End: 156 20. 771**
Max Press: 150	**Operators: AB**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	125	10:18	124.9	✓	
2	125		125.0	✓	
3	125		125.0	✓	
4	100	10:20	99.8	✓	
5	100		100.1	✓	
6	100		100.1	✓	
7	75	10:22	75.0	✓	
8	75		75.0	✓	
9	75		75.2	✓	
10	45	10:23	45.2	✓	
11	45	10:24	45.2	✓	
12	45		44.9	✓	
13	25	10:26	25.8	✓	
14	25		25.3	✓	
15	25		25.1	✓	
16	5	10:28	5.2	✓	
17	5		4.9	✓	
18	5		5.1	✓	
19	5		4.9	✓	
20					
21					
22					
23					
24					


KM1513_S65C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: 65/1 Date: 8/3/15 (HST)

Target Depth (db): 150 CTD Start Time: 0000 (HST)

Rosette Position	Depth (m)	Sara/ John						
1	**125**	X						
2	**125**	X						
3	**125**	X						
4	**100**	X						
5	**100**	X						
6	**100**	X						
7	**75**	X						
8	**75**	X						
9	**75**	X						
10	**45**	X						
11	**45**	X						
12	**45**	X						
13	**25**	X						
14	**25**	X						
15	**25**	X						
16	**5**	X						
17	**5**	X						
18	**5**	X						
19								
20								
21								
22								
23								
24								

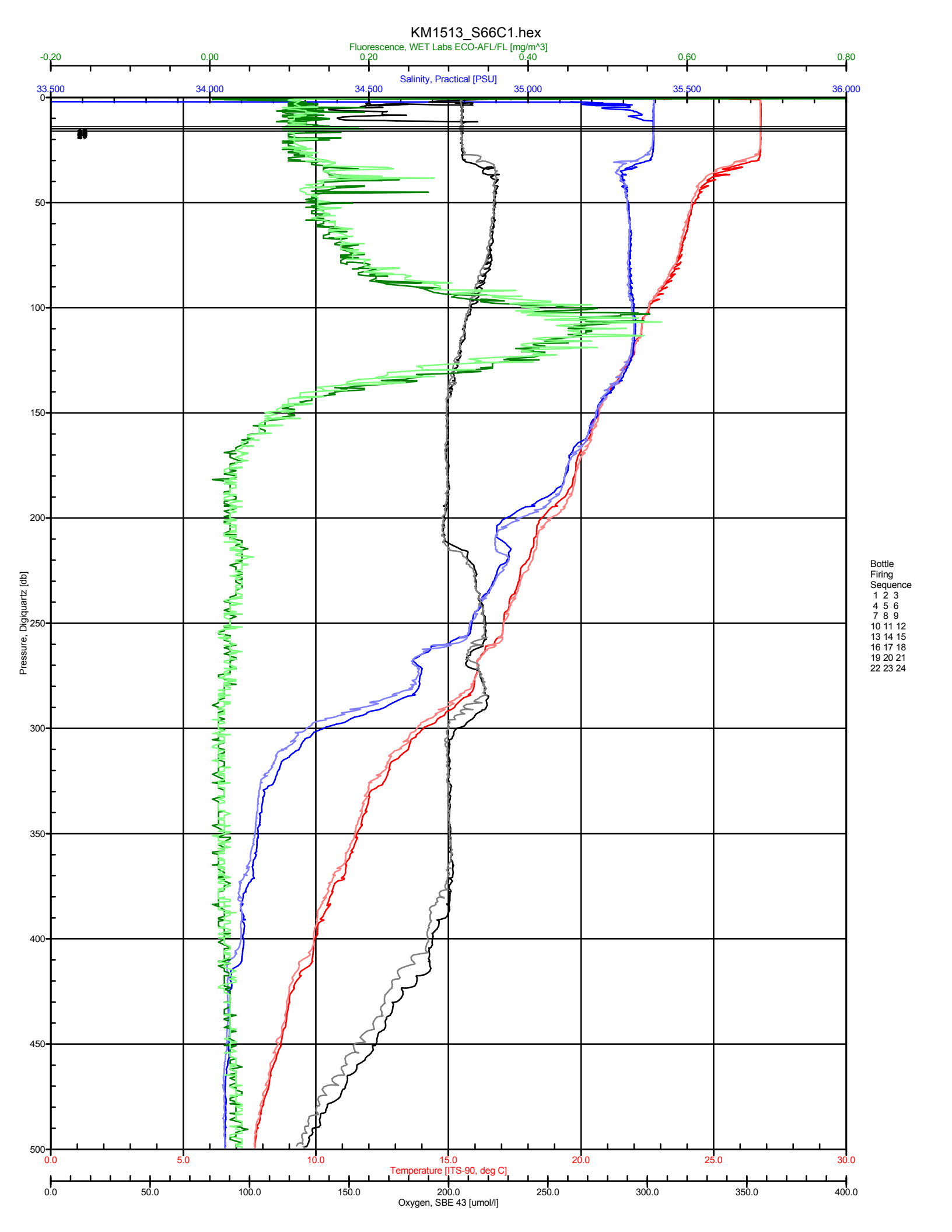
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 66	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/3/15**
Time Start Logging HST: 01:55	**Time Start Logging GMT: 11:55**
Pressure on deck	**Time GMT**
Start: 0.867	**In water: 11:58**
End: -0.111	**Out water: 12:42**
Latitude N	**Longitude W**
Start: 24 20. 768	**Start: 156 20. 802**
End: 24 20. 734	**End: 156 20. 786**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	12:37	15.1	✓	
2	15		14.9	✓	
3	15		15.1	✓	
4	15		14.7	✓	
5	15		14.9	✓	
6	15	12:38	14.9	✓	
7	15		15.1	✓	
8	15		14.9	✓	
9	15		14.8	✓	
10	15		15.4	✓	
11	15	12:39	15.2	✓	
12	15		15.0	✓	
13	15		14.9	✓	
14	15		14.9	✓	
15	15	12:40	14.9	✓	
16	15		14.9	✓	
17	15		15.3	✓	
18	15		14.9	✓	
19	15		15.2	✓	
20	15	12:41	15.0	✓	
21	15		15.3	✓	
22	15		15.1	✓	
23	15		14.8	✓	
24	15		15.1	✓	


KM1513_S66C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S66C1	
Date:	08/03/2015	(HST)
CTD Start Time:	0200	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

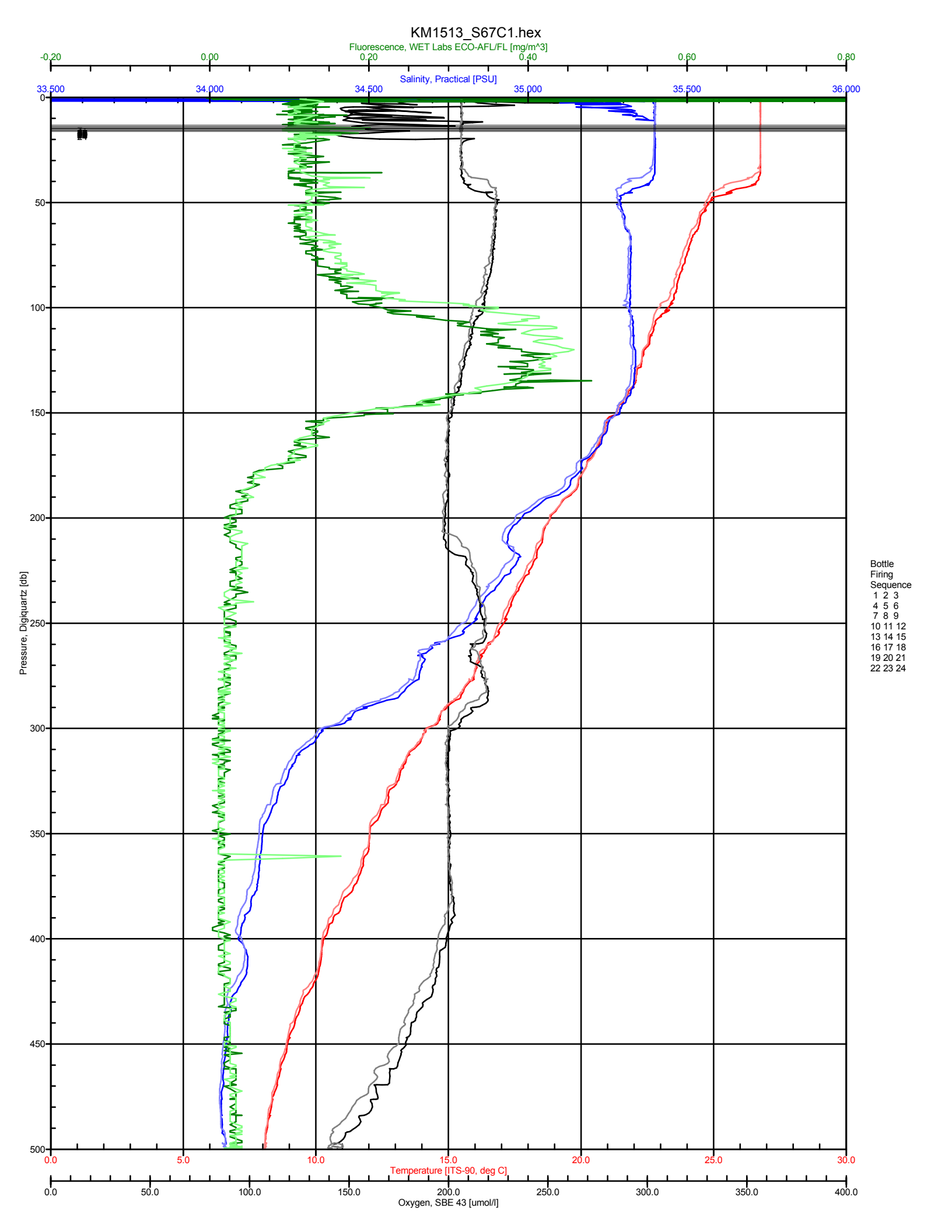
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 67	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/03/15**
Time Start Logging HST: 05:58	**Time Start Logging GMT: 15:57**
Pressure on deck	**Time GMT**
Start: 0.847	**In water: 16:01**
End: -0.232	**Out water: 16:34**
Latitude N	**Longitude W**
Start: 24 20.911	**Start: 156 18.824**
End:24 20.978	**End: 156 18.875**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	16:30	15.2	✓	
2	15	16:31	14.9	✓	
3	15		14.7	✓	
4	15		14.4	✓	
5	15		14.9	✓	
6	15		15.1	✓	
7	15		13.4	✓	
8	15		15.0	✓	
9	15		15.0	✓	
10	15		15.1	✓	
11	15		14.7	✓	
12	15	16:32	14.8	✓	
13	15		14.7	✓	
14	15		14.9	✓	
15	15		14.4	✓	
16	15		14.8	✓	
17	15		15.1	✓	
18	15		15.6	✓	
19	15	16:33	15.0	✓	
20	15		14.3	✓	
21	15		15.4	✓	
22	15		14.9	✓	
23	15		15.0	✓	
24	15		15.7	✓	


KM1513_S67C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S67C1	
Date:	08/03/2015	(HST)
CTD Start Time:	0600	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

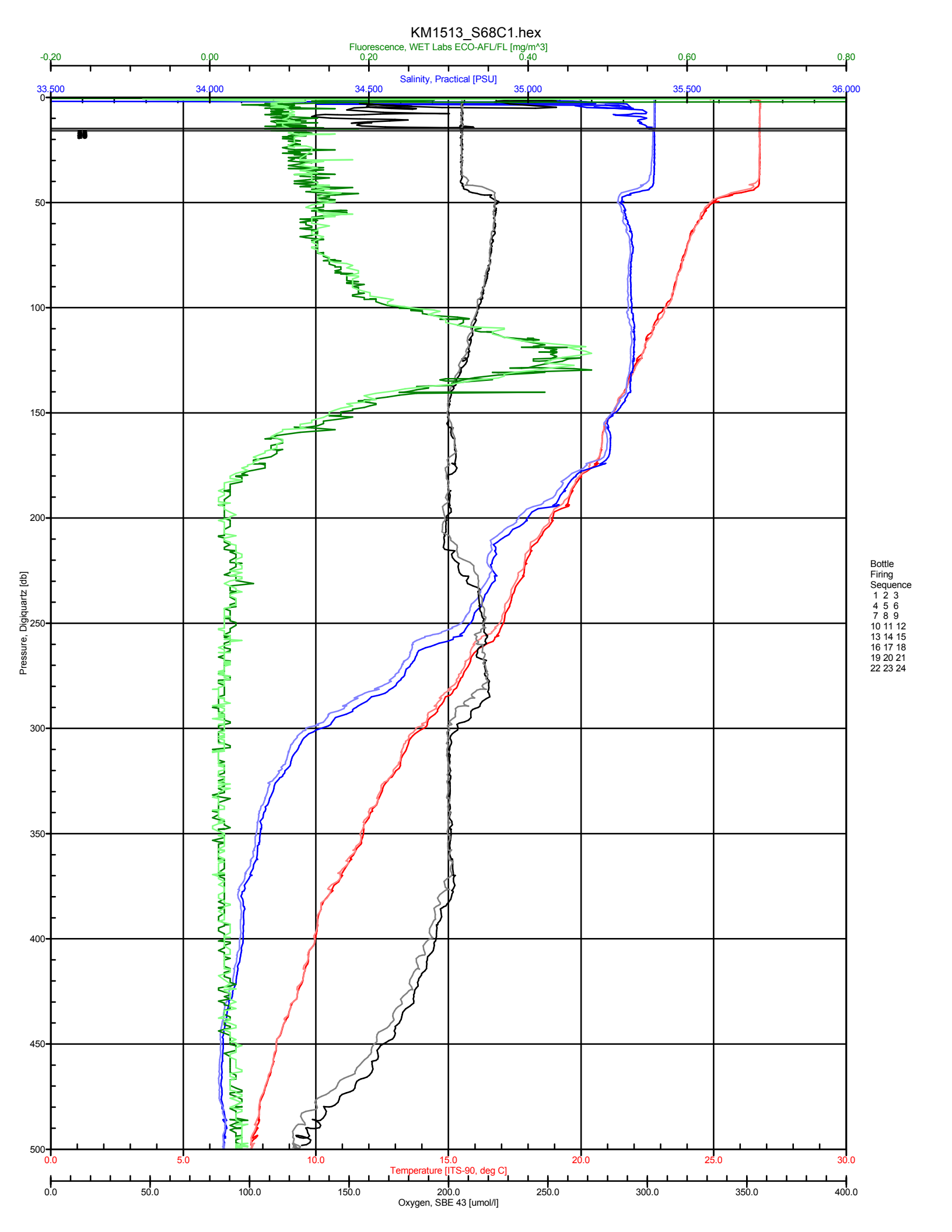
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 68	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/03/15**
Time Start Logging HST: 10:00	**Time Start Logging GMT: 20:00**
Pressure on deck	**Time GMT**
Start: 0.933	**In water: 20:03**
End: -0.245	**Out water: 20:36**
Latitude N	**Longitude W**
Start: 24 17.375	**Start: 156 24.496**
End: 24 17.400	**End: 156 24. 518**
Max Press: 500	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	20:32	15.1	✓	
2	15		15.0	✓	
3	15		14.8	✓	
4	15	20:33	15.4	✓	
5	15		15.2	✓	
6	15		15.4	✓	
7	15		15.6	✓	
8	15		15.0	✓	
9	15		15.0	✓	
10	15		15.3	✓	
11	15		15.6	✓	
12	15	20:34	14.8	✓	
13	15		14.7	✓	
14	15		15.3	✓	
15	15		15.3	✓	
16	15		15.0	✓	
17	15		15.1	✓	
18	15		15.2	✓	
19	15	20:35	15.5	✓	
20	15		14.5	✓	
21	15		15.8	✓	
22	15		15.2	✓	
23	15		15.6	✓	
24	15		14.9	✓	


KM1513_S68C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S68C1	
Date:	08/03/2015	(HST)
CTD Start Time:	1000	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

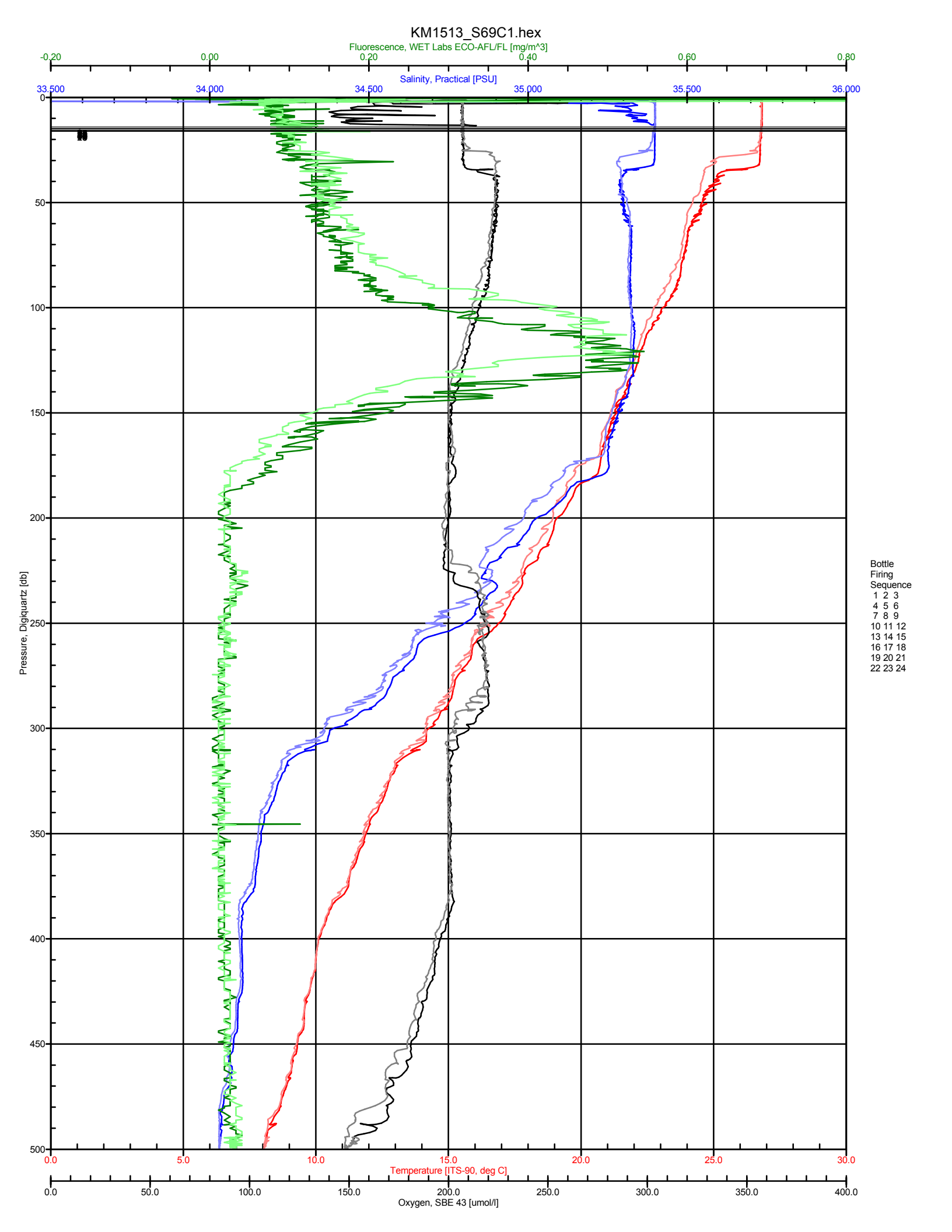
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 69	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/03/15**
Time Start Logging HST: 13:54	**Time Start Logging GMT: 23:54**
Pressure on deck	**Time GMT**
Start: 0.921	**In water: 23:56**
End: -0.097	**Out water: 00:38**
Latitude N	**Longitude W**
Start: 24 17.144	**Start: 156 24.716**
End: 24 17.029	**End: 156 24.637**
Max Press: 501	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	00:32	16.3	✓	
2	15		14.7	✓	
3	15		15.8	✓	
4	15		15.5	✓	
5	15		14.8	✓	
6	15	00:33	15.0	✓	
7	15		15.9	✓	
8	15		15.5	✓	
9	15		14.3	✓	
10	15		16.4	✓	
11	15		15.1	✓	
12	15		15.4	✓	
13	15		16.5	✓	
14	15		15.3	✓	
15	15	00:34	15.5	✓	
16	15		14.8	✓	
17	15		16.1	✓	
18	15		15.2	✓	
19	15		15.2	✓	
20	15		15.5	✓	
21	15	00:35	16.5	✓	
22	15		14.5	✓	
23	15		16.2	✓	
24	15		15.7	✓	


KM1513_S69C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S69C1	
Date:	08/03/2015	(HST)
CTD Start Time:	1400	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

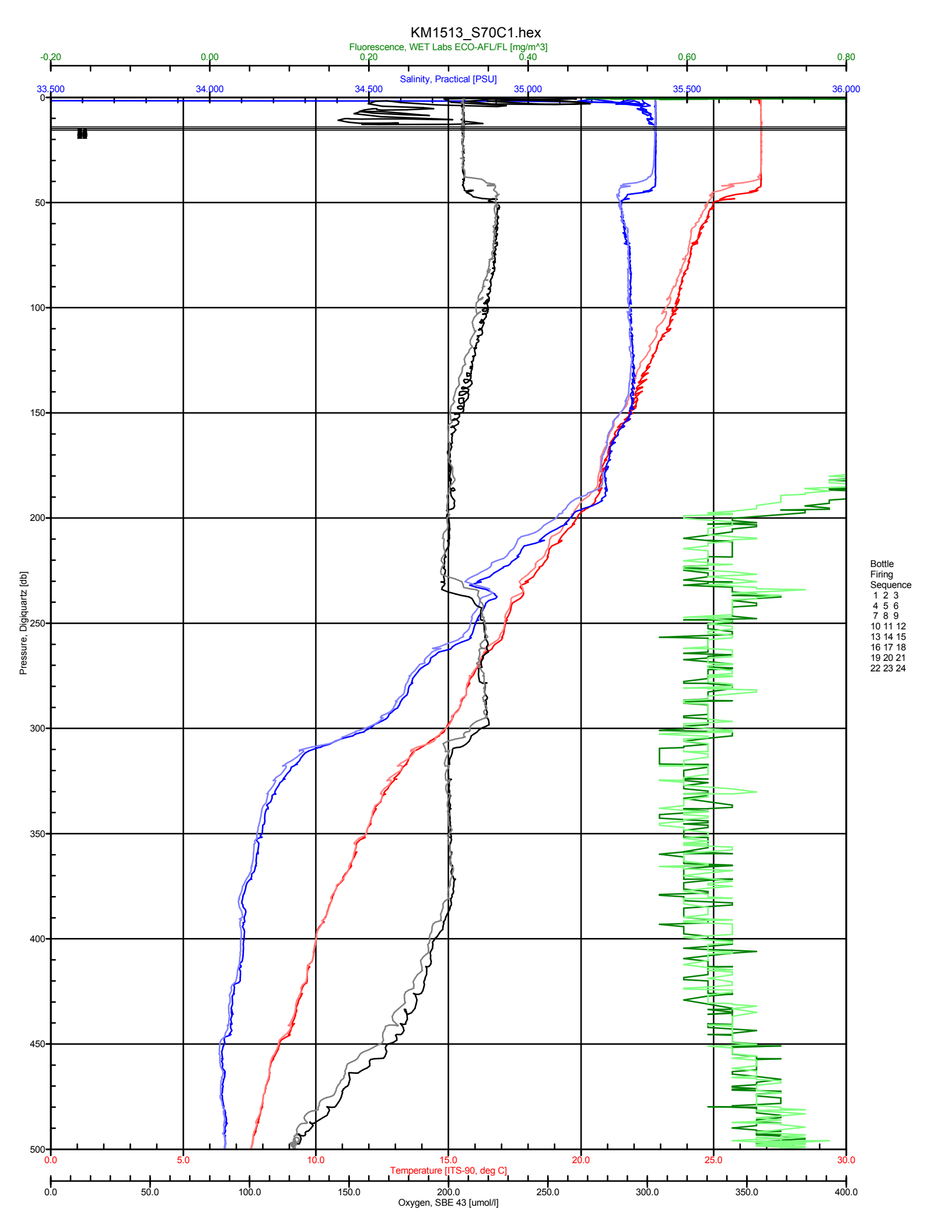
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 70	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/4/15**
Time Start Logging HST: 18:00	**Time Start Logging GMT: 04:00**
Pressure on deck	**Time GMT**
Start: 0.715	**In water: 04:04**
End: -0.175	**Out water: 04:40**
Latitude N	**Longitude W**
Start: 24 16. 990	**Start: 156 23. 242**
End: 24 16. 986	**End: 156 23. 233**
Max Press: 500	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	15	04:34	15.2	✓	
2	15		14.9	✓	
3	15		15.0	✓	
4	15		14.9	✓	
5	15		14.9	✓	
6	15		15.3	✓	
7	15	04:35	14.8	✓	
8	15		15.3	✓	
9	15		15.0	✓	
10	15		15.0	✓	
11	15		14.9	✓	
12	15		15.3	✓	
13	15	04:36	14.9	✓	
14	15		15.0	✓	
15	15		14.8	✓	
16	15		15.0	✓	
17	15		14.8	✓	
18	15	04:37	15.1	✓	
19	15		15.7	✓	
20	15		14.9	✓	
21	15	04:38	15.0	✓	
22	15		15.1	✓	
23	15		14.8	✓	
24	15		15.0	✓	


KM1513_S70C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE

KM1513

CTD SAMPLE Data Sheet

Station/Cast:	S70C1	
Date:	08/03/2015	(HST)
CTD Start Time:	1800	(HST)
Target:	500m	(db)

Rosette Position	Depth (db)	Angie/ Laura	Dan/ Jordan	Francois/ Bryn	Sonya/ Sheean/K	Frank/ Alice	Dave/ Paige	Sara/John MF/ES	Marnie/ Katie	Debbie/ Dror	
1	15	X									
2	15	X									
3	15	X									
4	15	X									
5	15	X									
6	15		X								
7	15		X								
8	15			X							
9	15			X							
10	15			X							
11	15		(X)	X					X		
12	15		(X)	X					X		
13	15		(X)	X					X		
14	15				X						
15	15				X						
16	15				X						
17	15				X						
18	15				X						
19	15				X						
20	15		(X)			X			X		
21	15						X			X	
22	15							X			
23	15							X			
24	15							X			

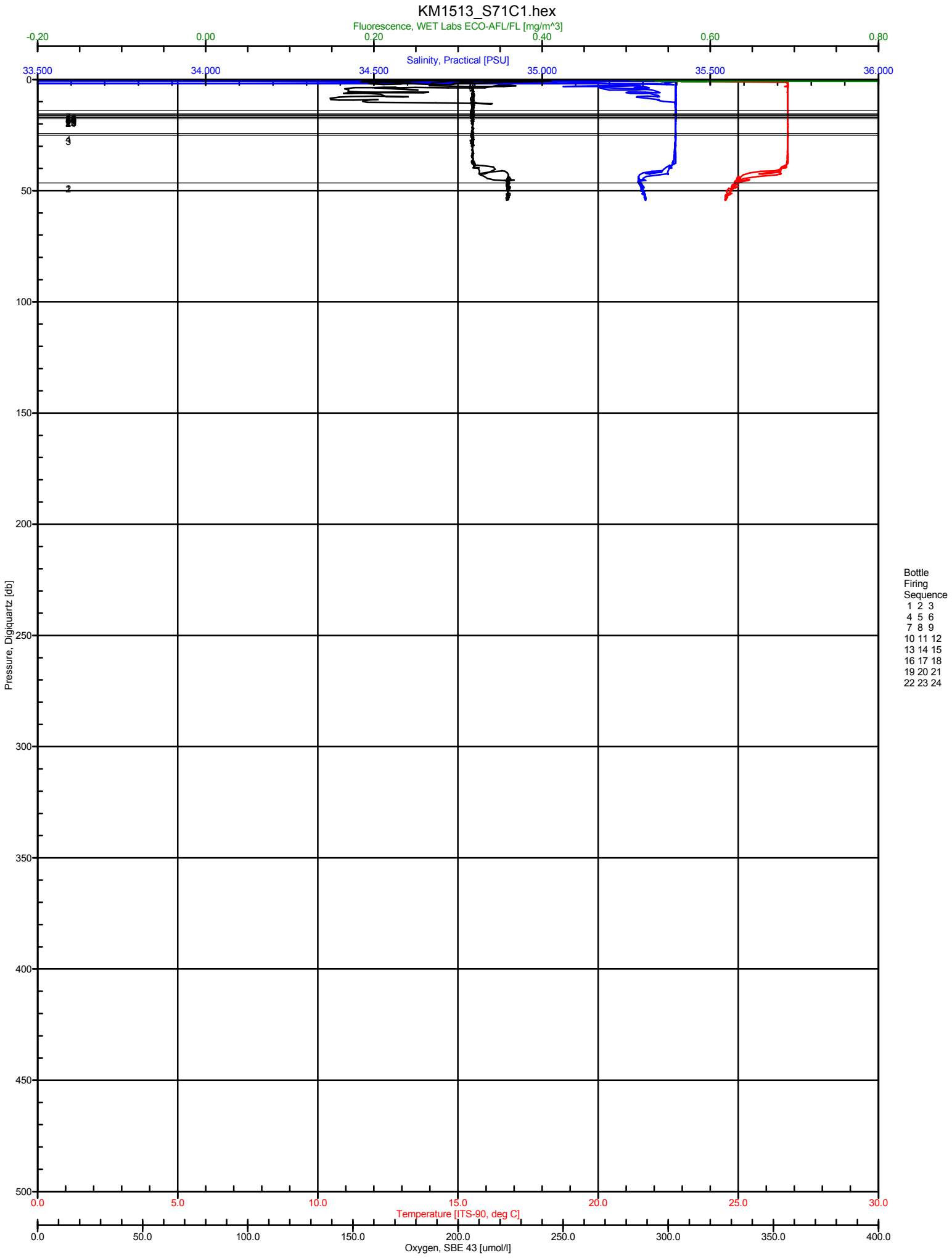
COMMENTS: Dan/Jordan to sample Niskin 20 and if necessary to use remainder of Niskin 11,12,13, at 0200, 1000, 1400, 2000 hrs

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 71	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/4/15**
Time Start Logging HST: 20:21	**Time Start Logging GMT: 06:21**
Pressure on deck	**Time GMT**
Start: 0.853	**In water: 06:22**
End: 0.315	**Out water: 06:42**
Latitude N	**Longitude W**
Start: 24 16. 398	**Start: 156 26. 038**
End: 24 16. 384	**End: 156 26. 017**
Max Press: 50	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	45	06:30	45.2	✓	
2	45		45.3	✓	
3	25	06:32	25.0	✓	
4	25	06:33	24.9	✓	
5	15	06:35	15.3	✓	
6	15		15.3	✓	
7	15		15.1	✓	
8	15		15.4	✓	
9	15	06:36	15.3	✓	
10	15		15.0	✓	
11	15		15.2	✓	
12	15		15.5	✓	
13	15		15.3	✓	
14	15	06:37	15.0	✓	
15	15		15.0	✓	
16	15		15.4	✓	
17	15		15.0	✓	
18	15		15.1	✓	
19	15		14.9	✓	
20	15	06:38	14.8	✓	
21	15		15.0	✓	
22	15		15.5	✓	
23	15		15.0	✓	
24	15		15.3	✓	


KM1513_S71C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S71/C1 Date: 08/03/15 (HST)

Target Depth (db): 100 CTD Start Time: 2000 (HST)

Rosette Position	Depth (m)	Dave	Katie					
1	**45**		X					
2	**45**		X					
3	**25**		X					
4	**25**		X					
5	**15**	X						
6	**15**	X						
7	**15**	X						
8	**15**	X						
9	**15**	X						
10	**15**	X						
11	**15**	X						
12	**15**	X						
13	**15**	X						
14	**15**	X						
15	**15**	X						
16	**15**	X						
17	**15**	X						
18	**15**	X						
19	**15**	X						
20	**15**	X						
21	**15**	X						
22	**15**	X						
23	**15**	X						
24	**15**	X						

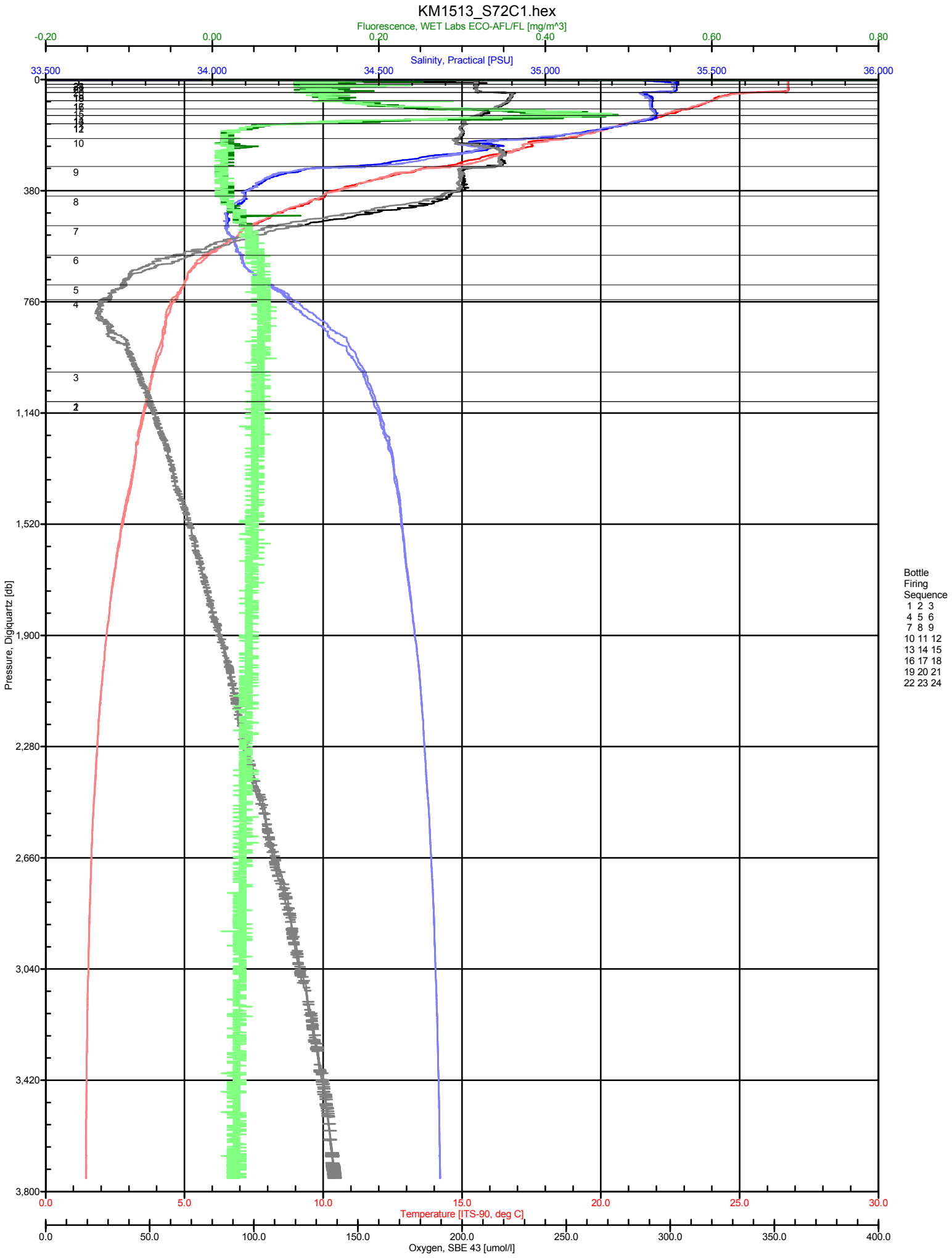
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 72	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/4/15**
Time Start Logging HST: 21:19	**Time Start Logging GMT: 07:19**
Pressure on deck	**Time GMT**
Start: 0.901	**In water: 07:20**
End: 0.8912	**Out water: 10:37**
Latitude N	**Longitude W**
Start: 24 16. 402	**Start: 156 26. 028**
End: 24 16. 444	**End: 156 26. 068**
Max Press: 3000	**Operators: AB**

CTD	Comments:
□ PAR **□ ISUS** **✓Seapoint** **✓C-Star** **✓Optode** **✓ECO-FL**	
Owned by: **OTG**	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	1100	09:52	1100.1	✓	
2	1100		1100.1	✓	
3	1000	09:55	1000.5	✓	
4	750	10:01	749.9	✓	
5	700	10:03	699.9	✓	
6	600	10:06	600.0	✓	
7	500	10:09	500.1	✓	
8	400	10:12	399.4	✓	
9	300	10:17	299.4	✓	
10	200	10:21	199.7	✓	
11	150	10:23	149.7	✓	
12	150		150.0	✓	
13	125	10:25	124.7	✓	
14	125		125.0	✓	
15	100	10:27	100.1	✓	
16	75	10:28	75.0	✓	
17	75		75.1	✓	
18	45	10:30	44.8	✓	
19	45		45.0	✓	
20	25	10:32	25.1	✓	
21	15	10:33	15.2	✓	
22	15	10:34	15.3	✓	
23	5	10:35	5.0	✓	
24	5	10:36	5.1	✓	


KM1513_S72C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
380
760
1,140
1,520
1,900
2,280
2,660
3,040
3,420
3,800
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S72/C1 Date: 8/03/2015 (HST)

Target Depth (db): 4000 CTD Start Time: 2100 (HST)

Rosette Position	Depth (m)	O2	temp	Repeta	Aylward	Caron	Lindell	Dyrhman
1	**1100**		--	X				
2	**1100**		--	X				
3	**1000**		--					(1 L)
4	**750**	91,92,93	9.0 ES					
5	**700**		--					(1 L)
6	**600**		--					
7	**500**	94,95,96	11.3 LC					
8	**400**	97,98,99	12.7 SW					
9	**300**	100,101,102	16.7 LC					X (1 L)
10	**200**	103,104,105	20.0 ES					X (1 L)
11	**150**		--		X	X	X	
12	**150**		--	X (2 L)				
13	**125**	106,107,108	22.6 ES	X (2 L)				
14	**125**		--		X	X	X	
15	**100**	109,110,111	23.6 SW	X (2 L)				X (1 L)
16	**75**		--		X	X	X	
17	**75**	112,113,114	24.1 M	X (2 L)				
18	**45**		--		X	X	X	
19	**45**		--	X (2 L)				
20	**25**		--				X	
21	**15**	115,116,117	26.4 M					X (1 L)
22	**15**		--		X	X	X	
23	**5**		--		X	X	X	
24	**5**	63,119,120	26.3 SW	X (2 L)				

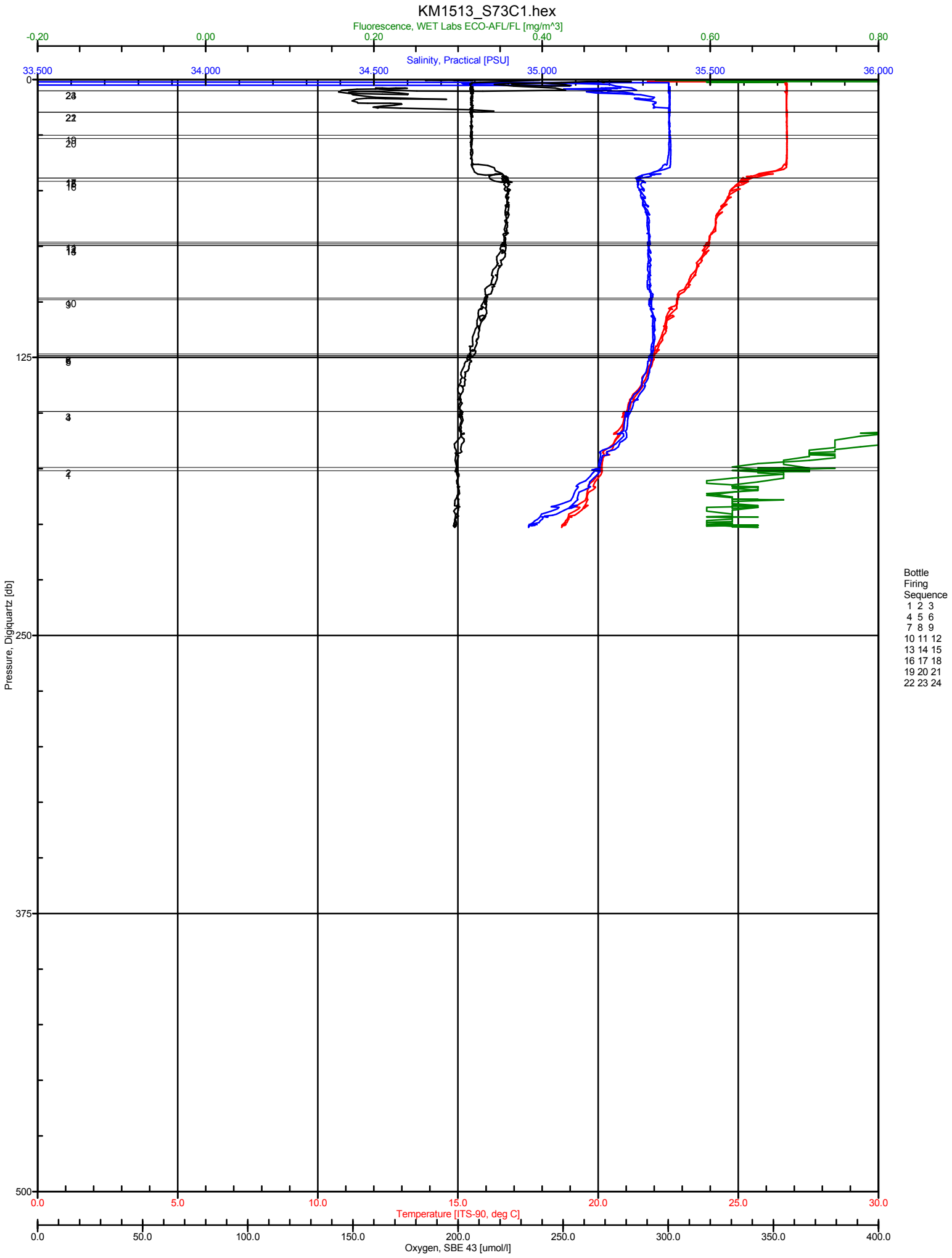
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 73	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/04/15**
Time Start Logging HST: 10:32	**Time Start Logging GMT: 11:32**
Pressure on deck	**Time GMT**
Start: 1.069	**In water: 11:35**
End: 0.412	**Out water: 11:57**
Latitude N	**Longitude W**
Start: 24 16.442	**Start: 156 26.068**
End: 24 16.470	**End: 156 26.077**
Max Press: 200	**Operators: AB/SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	**Found wrong confile, using ECO range 2, not 4. Also Stn 70.**
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	175	11:46	175.6	✓	
2	175		174.9	✓	
3	150	11:47	149.5	✓	
4	150		150.4	✓	
5	125	11:48	124.8	✓	
6	125		124.2	✓	
7	125		124.3	✓	
8	125		123.9	✓	
9	100	11:49	98.8	✓	
10	100	11:50	98.7	✓	
11	75	11:51	73.3	✓	
12	75		74.3	✓	
13	75		75.1	✓	
14	75		74.4	✓	
15	45	11:52	45.4	✓	
16	45		45.9	✓	
17	45		43.9	✓	
18	45		44.1	✓	
19	25	11:53	25.3	✓	
20	25		26.1	✓	
21	15	11:54	14.9	✓	
22	15		15.8	✓	
23	5	11:55	5.3	✓	
24	5		5.3	✓	


KM1513_S73C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
0
125
250
375
500
Pressure, Digiquartz [db]
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S73/C1 Date: 8/04/15 (HST)

Target Depth (db): 500 CTD Start Time: 0000 (HST)

Rosette Position	Depth (m)	Bryn	HPLC	Chl a	Nutes	PC/PN	FCM	
1	**175**					1-10L		
2	**175**	~3.5L	X	1	X		X	
3	**150**					4-10L		
4	**150**	~3.5L	X	2	X		X	
5	**125**					5-10L		
6	**125**	~3.5L	X	3	X		X	
7	**125**	X						
8	**125**	X						
9	**100**					6-10L		
10	**100**	~3.5L	X	4	X		X	
11	**75**					7-4L		
12	**75**	~3.5L	X	5	X		X	
13	**75**	X						
14	**75**	X						
15	**45**					9-4L		
16	**45**	~3.5L	X	6	X		X	
17	**45**	X						
18	**45**	X						
19	**25**					11-4L		
20	**25**	~3.5L	X	7	X		X	
21	**15**	X						
22	**15**	X						
23	**5**					12-4L		
24	**5**	~3.5L	X	8	X		X	

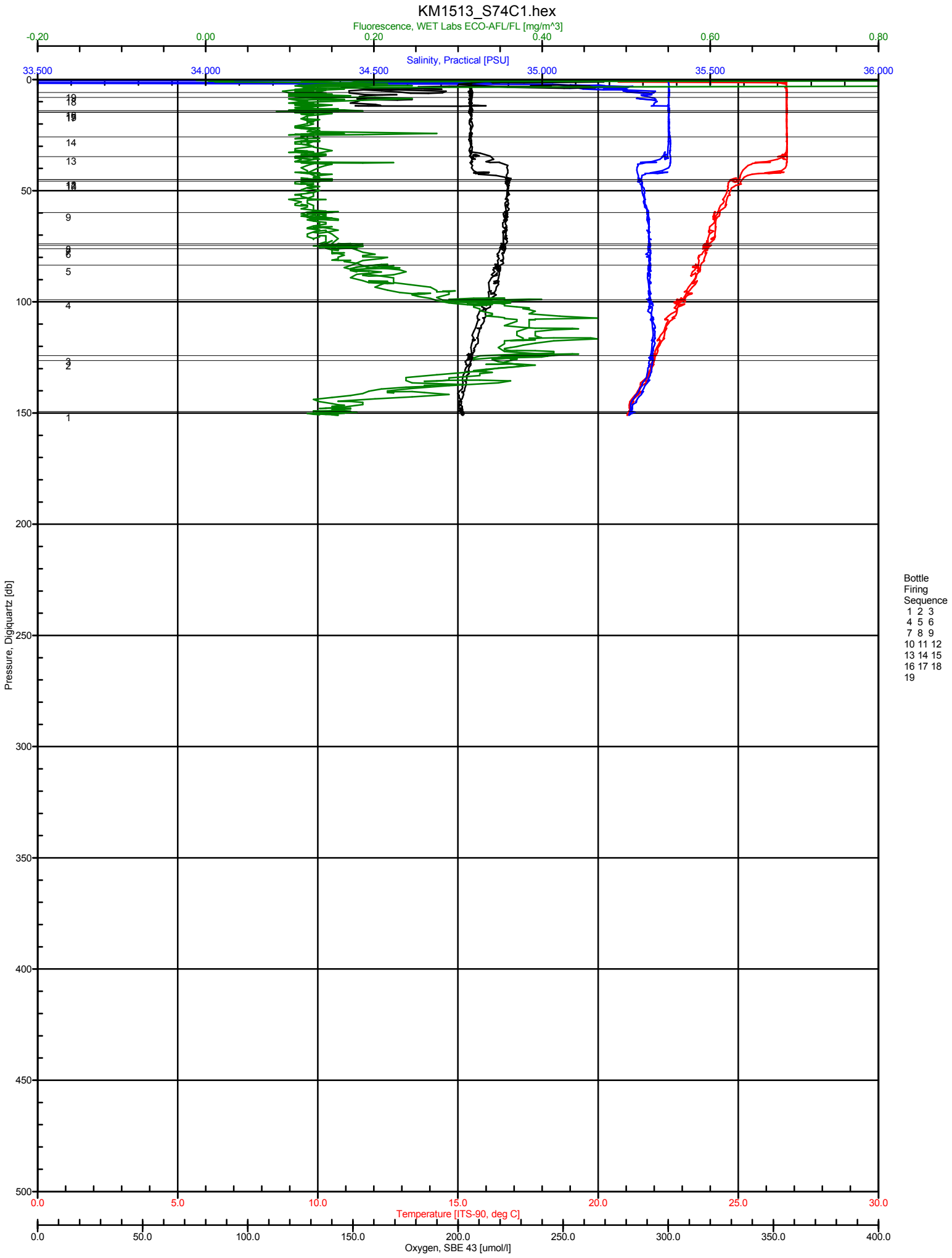
Notes:

KM1513 CMORE-SCOPE CTD CAST Logsheet

Station: 74	**Cast: 1**
Bottom (m): ~4700	**Date (GMT): 8/04/15**
Time Start Logging HST: 02:22	**Time Start Logging GMT: 12:22**
Pressure on deck	**Time GMT**
Start: 0.651	**In water: 12:23**
End: 0.267	**Out water: 12:43**
Latitude N	**Longitude W**
Start: 24 16.510	**Start: 156 26.083**
End: 24 16.535	**End: 156 26.088**
Max Press: 150	**Operators: SS**

CTD	Comments:
□ PAR □ ISUS ✓Seapoint ✓C-Star ✓Optode ✓ECO-FL	
Owned by: OTG	

Niskin	Target (db)	Time Stopped	Pressure	Confirm Trip ✓	Comments
1	150	12:33	149.5	✓	
2	125	12:34	125.8	✓	
3	125		123.6	✓	
4	100	12:35	99.7	✓	
5	85	12:36	83.1	✓	
6	75	12:37	75.5	✓	
7	75		74.3	✓	
8	75		74.4	✓	
9	60	12:38	60.0	✓	
10	45	12:39	46.0	✓	
11	45		44.9	✓	
12	45		45.6	✓	
13	35	12:39	34.0	✓	
14	25	12:40	25.1	✓	
15	15	12:40	14.2	✓	
16	15	12:41	14.0	✓	
17	15		15.0	✓	
18	5	12:42	7.9	✓	
19	5		5.8	✓	
20					
21					
22					
23					
24					


KM1513_S74C1.hex
Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
-0.20
0.00
0.20
0.40
0.60
0.80
Salinity, Practical [PSU]
33.500
34.000
34.500
35.000
35.500
36.000
Pressure, Digiquartz [db]
0
50
100
150
200
250
300
350
400
450
500
Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Temperature [ITS-90, deg C]
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
Oxygen, SBE 43 [umol/l]

CMORE-SCOPE
KM1513

CTD SAMPLE Data Sheet

Station/Cast #: S74C1 Date: 8/04/15 (HST)

Target Depth (db): 150 CTD Start Time: 0200 (HST)

Rosette Position	Depth (m)	Sam	Sonya	Laura				
1	**150**		X					
2	**125**		X					
3	**125**			X				
4	**100**	X						
5	**85**	X						
6	**75**	X						
7	**75**		X					
8	**75**			X				
9	**60**	X						
10	**45**	X						
11	**45**		X					
12	**45**			X				
13	**35**	X						
14	**25**	X						
15	**15**	X						
16	**15**		X					
17	**15**			X				
18	**5**	X						
19	**5**		X					
20								
21								
22								
23								
24								

Notes: