

Chlorophyll Data Sheet

20ml: 51B

Cruise: 2016-05

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Dates of Cruise:

Time and date acetone added: 02 May 2016 11:30 a.m.

Analyst: Tamar

Time and date out of freezer: 03 May 16 9:30 a.m.

Time analysis started: 03 May 16 10:30 a.m.

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	-0.020			
STD			LOW	2-	12.124			
STD			HIGH	4-	65.781			
Blank				6-	-0.016	8- +acid	-0.019	
DF								
1	23A	59	330	10	1-	208.029	2-	115.308 DF=1
2	111A	63		10	3-	78.164	4-	44.012 added 10 ml to entire 10ml
1	61B	72		10	5-	130.722	6-	72.775 DF=1
2	183B	27		10	7-	78.640	8-	48.771 added 10 ml to entire 10ml
2	9A	Stn SI		10	1-	116.778	2-	65.431 added 10ml → 10ml
1	105A	62		10	3-	166.739	4-	93.393 DF=1
2	62A	72		10	5-	76.487	6-	43.041 added 10ml → 10ml
2	170B	39		10	7-	160.047	8-	89.340 added 10ml → 10ml
1	49A	75		10	1-	203.555	2-	114.614 DF=1
1	111B	63		10	3-	143.419	4-	80.655 DF=1
1	104A	62		10	5-	162.660	6-	91.850 DF=1
2	135A	46		10	7-	126.571	8-	69.712 added 10ml → 10ml
1	73B	69		10	1-	184.242	2-	100.894 DF=1
2	122A	56		10	3-	152.392	4-	83.376 added 10 ml → 10ml
1	64B	72		10	5-	133.850	6-	74.269 DF=1
1	199B	2		10	7-	65.937	8-	35.643 DF=1
1	62B	72		10	1-	148.959	2-	83.848 DF=1
1	202A	CFI		10	3-	53.077	4-	33.960 DF=1
1	6B	Stn SI		10	5-	204.026	6-	113.143 DF=1
4	51B	75	20	7-	163.076	8-	85.983	10ml of this soln → add ml 10ml
1	86B	ADCP		10	1-	190.339	2-	104.614 DF=1
1	167B	39		10	3-	37.237	4-	26.411 DF=1
1	6A	Stn SI		10	5-	207.770	6-	115.073 DF=1
1	107B	62		10	7-	154.572	8-	87.069 DF=1
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

73 A	111	91 B	183	9A	105	62 A	170 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Sta 59	63	72	27	Sta 20	62	72	39
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 14	Bot 4	Bot 10	Bot 13	Bot 9	Bot 9	Bot 11	Bot 17
	A		B		A		

49 A	111	104	135 A	73	122 A	64 B	199 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
75	63	62	46	69	56	74	2
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 12	Bot 4	Bot 8	Bot 10	Bot 9	Bot 11	Bot 13	Bot 13
	B	A		B			

62 B	202 A	6 B	51 B	86	167 B	6A	107
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
72	CPF1	Sta SI	75	adcp	39	Sta SI	62
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 11	Bot 1	Bot 6	Bot 14	Bot 10	Bot 14	Bot 6	Bot 11
				B			B

Chlorophyll Data Sheet

Cruise: 2016-05

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153A lost ~1 ml

Dates of Cruise:

Time and date acetone added: 02 May 16 2:08 pm

Analyst: Tamara

Time and date out of freezer: 03 May 16 12:17 pm

Time analysis started: 03 May 16 1:20 pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	-0.022			
STD			LOW	2-	12.000			
STD			HIGH	4-	65.264			
Blank				6-	-0.019	8- +acid	-0.020	
DF								
1	34A	102	330	10	1-	62.724	2-	38.786 DF=1
1	94B	65		10	3-	109.416	4-	63.764 DF=1
1	84B	ADCP		10	5-	197.484	6-	109.636 DF=1
4	153A	42		10	7-	145.175	8-	79.584 10+10 ml = 20 ml; 10 ml of 2% + 10 ml
1	84A	ADCP		10	1-	218.626	2-	120.849 DF=1
1	184B	27		10	3-	58.608	4-	34.128 DF=1
2	170 A	39		10	5-	166.192	6-	92.475 10 ml added → 10 ml
2	203A	CPE1		10	7-	60.197	8-	32.333 10 ml added → 10 ml
2	96A	65		10	1-	130.917	2-	72.058 10 ml added → 10 ml
1	134B	46		10	3-	106.413	4-	64.112 DF=1
1	107A	62		10	5-	161.569	6-	90.186 DF=1
2	151A	42		10	7-	102.236	8-	56.934 10 ml added → 10 ml
2	135B	46		10	1-	123.302	2-	68.268 10 ml added → 10 ml
1	186A	27		10	3-	80.442	4-	47.551 DF=1
1	105B	62		10	5-	152.583	6-	85.875 DF=1
1	151B	42		10	7-	202.591	8-	111.984 DF=1
1	86A	ADCP		10	1-	194.906	2-	106.950 DF=1
1	186B	27		10	3-	74.496	4-	43.973 DF=1
1	83A	ADCP		10	5-	147.959	6-	84.455 DF=1
2	137A	46		10	7-	179.521	8-	98.841 10 ml added → 10 ml
1	76B	69		10	1-	189.992	2-	103.089 DF=1
1	168A	39		10	3-	125.104	4-	79.574 DF=1
1	74B	69		10	5-	167.146	6-	91.766 DF=1
1	109B	63		10	7-	140.455	8-	80.356 DF=1
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

34 A	94	84	153 A	84	184	170	203 A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 102	65	adcp	42	adcp	27	39	CPF1
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 11	Bot 8	Bot 8	Bot 16	Bot 8	Bot 14	Bot 17	Bot 2
	B	B		A	B		

96	134 B	107	151 A	135 B	186	105	151 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
65	46	62	42	46	27	62	42
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 10	Bot 9	Bot 11	Bot 14	Bot 10	Bot 16	Bot 9	Bot 14
A		A			A	B	

86	186	83	137 A	76	168 A	74	109
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
adcp	27	adcp	46	69	39	69	63
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 10	Bot 16	Bot 7	Bot 12	Bot 12	Bot 15	Bot 10	Bot 2
A	B	A		B		B	B

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Cruise: 2016-05

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Dates of Cruise:

Time and date acetone added: 02 May 16 4:40pm

Analyst: Tamar 153B, 76, 7A

Time and date out of freezer: 03 May 16 2:40pm

Time analysis started: 03 May 16 3:43pm

20ml:

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	-0.021			
STD			LOW	2-	12.032			
STD			HIGH	4-	65.034			
Blank				6-	-0.020	8-		
150A	42	330	10	1-	44.494	2-	28.915	DF=1
23B	59		10	3-	210.026	4-	116.609	DF=1
198B	2		10	5-	92.926	6- 55.059	54.933	DF=1
153B	42		20	7-	131.779	8-	72.397	10ml added to 10ml soln.
199A	2		10	1-	70.838	2-	38.377	DF=1
150B	42		10	3-	35.584	4-	23.452	DF=1
76A	69		10	5-	178.309	6-	97.137	DF=1
48A	75		10	7-	54.456	8-	33.085	DF=1
61A	72		10	1-	138.598	2-	77.399	DF=1
7B	51		20	3-	111.841	4-	62.110	10ml added to 10ml soln.
104B	62		10	5-	159.888	6-	90.013	DF=1
30A	59		10	7-	214.174	8-	120.430	DF=1
7A	51		20	1-	110.459	2-	61.048	10ml added to 10ml soln.
37B	102		10	3-	104.582	4-	57.321	10ml added to 5ml soln.
37A	102		10	5-	155.764	6-	86.079	10ml → 10ml 1° soln.
35B	102		10	7-	101.796	8-	57.100	10ml → 10ml 1° soln.
123A	56		10	1-	155.814	2-	92.037	DF=1
203B	CPF1		10	3-	110.070	4-	59.842	DF=1
167A	39		10	5-	36.266	6-	25.948	DF=1
125B	56		10	7-	157.609	8-	87.046	10ml → 10ml 1° soln.
134A	46		10	1-	107.589	2-	65.824	DF=1
96B	65		10	3-	94.472	4-	51.587	10ml added to 5ml soln.
108B	63		10	5-	140.492	6-	82.979	DF=1
73A	69		10	7-	163.376	8-	91.257	DF=1
Stand-by				1-	-0.023			
Std	Low			2-	12.019			
Std	High			4-	64.913			
Blank	by			6-	-0.019	8-	-0.020	

150 A	23 B	198 B	153 B	199 A	150 B	76	48 A
CHL	CHL B	CHL	CHL	CHL	CHL	CHL	CHL
42	Stn 59	2	42	2	42	69	75
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 13	Bot 14	Bot 12	Bot 16	Bot 13	Bot 13	Bot 12	Bot 11

61 A	7 B	104	30 A	7 A	37 B	37 A	35 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
72	Stn SI	62	Stn 59	Stn SI	Stn 102	Stn 102	Stn 102
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 10	Bot 7	Bot 8	Bot 11	Bot 7	Bot 14	Bot 14	Bot 12

123 A	203 B	167 A	125 B	134 A	96	108	73
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
56	CPF1	39	56	46	65	63	69
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 12	Bot 2	Bot 14	Bot 14	Bot 9	Bot 10	Bot 1	Bot 9

Chlorophyll Data Sheet

Cruise: 2016-05

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Dates of Cruise:

Time and date acetone added: 19 May 2016 12:23pm

Analyst: Tamar

Time and date out of freezer: 20 May 16 10:35am

Time analysis started: 20 May 16 11:55am

20ml:
21B, 51A,
9B, 20B,
137B, 122B,
21A, 125A

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.006			
STD			LOW	2-	10.178			
STD			HIGH	4-	65.855			
Blank				6-	0.005	8-	0.004	
21B	Sta 59	330	20	1-	112.086	2-	61.976	no DF
64A	72		10	3-	130.498	4-	71.588	no DF
49B	75		10	5-	211.407	6-	115.263	no DF
108A	63		10	7-	143.778	8-	82.658	no DF
35A	Sta 102		10	1-	210.656	2-	116.320	no DF
51A	75		20	3-	165.251	4-	87.039	10ml soln + 10ml 90% 9.8 no DF
9B	ST		20	5-	121.437	6-	67.619	no DF
20B	59		20	7-	108.665	8-	60.511	no DF
93B	65		10	1-	85.972	2-	51.445	no DF
109A	63		10	3-	152.874	4-	86.291	no DF
137B	46		20	5-	170.656	6-	93.266	no DF
122B	56		20	7-	155.203	8-	83.690	no DF
201A	2		10	1-	37.438	2-	20.486	no DF
198A	2		10	3-	90.906	4-	53.806	no DF
83B	ADCP		10	5-	143.518	6-	81.022	no DF
201B	2		10	7-	37.017	8-	20.166	no DF
184A	27		10	1-	60.758	2-	34.765	no DF
183A	27		10	3-	169.097	4-	101.237	no DF
94A	65		10	5-	113.169	6-	66.562	no DF
93A	65		10	7-	81.556	8-	49.545	no DF
21A	59		20	1-	113.038	2-	63.128	no DF
34B	102		10	3-	61.445	4-	37.512	no DF
74A	69		10	5-	190.090	6-	103.114	no DF
125A	56		20	7-	159.060	8-	86.900	no DF
123B	56		10	1	158.432	2	91.811	no DF
202B	CPF1		10	3	50.667	4	32.943	no DF
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		no DF
168B	39		10	5	122.889	6	79.082	no DF
205A	CPF1		10	7	34.288	8	19.006	no DF

21 B	64 A	19 B	108	35 A	51 A	9 B	20 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Sta 59	Sta 59	Sta 59	Sta 102	Sta 102	Sta 102	Sta 102	Sta 59
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 33	Bot 12	Bot 12	Bot 1	Bot 12	Bot 14	Bot 9	Bot 11
			A				

93	109	137 B	122 B	201 A	198 A	83	201 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
65	63	46	56	2	2	adcp	2
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 7	Bot 2	Bot 12	Bot 11	Bot 15	Bot 12	Bot 7	Bot 15
B	A					B	

184	183	94	93	21 A	34 B	74	125 A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
27	27	65	65	Sta 59	Sta 102	69	56
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 14	Bot 13	Bot 8	Bot 7	Bot 12	Bot 11	Bot 10	Bot 14
A	A	A	A				

123 B	202 B	168 B	205 A
CHL	CHL	CHL	CHL
56	CPF1	39	CPF1
2016-05	2016-05	2016-05	2016-05
Bot 12	Bot 1	Bot 15	Bot 4

Chlorophyll Data Sheet

Cruise: 2016-05

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20ml: 285A
308B

Dates of Cruise:

Time and date acetone added: 19 May 16 3:15pm

Analyst: Tamar + Kenny

Time and date out of freezer: 20 May 16 1:15pm

Time analysis started: 13:05- 14:10 20 May 16

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1- 0.000				
STD			LOW	2- 12.051				
STD			HIGH	4- 65.491				
Blank				6- 0.004		8- 0.003		
226B	BS11	330	10	1-	67.110	2- 8	38.938	no df
227B	BS11		10	3-	98.662	4-	54.383	no df
221A	3		10	5-	33.590	6-	18.072	no df
219A	3		10	7-	51.355	8-	28.086	no df
218B	3		10	1-	76.720	2-	45.151	no df
251B	9		10	3-	36.009	4-	22.086	no df
239A	6		10	5-	52.791	6-	30.128	no df
240A	6		10	7-	87.956	8-	46.524	no DF
242A	6		10	1-	40.581	2-	21.413	no DF
229A	BS11		10	3-	121.077	4-	65.736	no DF
251A	9		10	5-	35.659	6-	22.283	no DF
252B	9		10	7-	42.650	8-	23.849	no DF
254B	9		10	1-	90.584	2-	47.174	no DF
267A	12		10	3-	66.072	4-	37.690	no DF
268B	12		10	5-	188.311	6-	98.476	no DF (..)
268A	12		10	7-	188.292	8-	98.783	no DF (..)
274B	16		10	1-	74.323	2-	40.922	no DF
285A	14		20	3-	115.382	4-	60.720	no DF
282A	14		10	5-	29.686	6-	18.034	no DF
283B	14		10	7-	194.571	8-	103.033	no DF
304A	28		10	1-	28.796	2-	16.123	no DF
298A	22		10	3-	99.464	4-	54.244	no DF
300A	22		10	5-	131.926	6-	69.223	no DF
297A	22		10	7-	27.963	8-	18.365	no DF
296B	16		10	1	106.014	2	55.465	no DF
304B	28		10	3	32.461	4	18.116	no DF
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

302A

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302A	28	10	15	20.853	16	12.648	no DF
301B	28	10	17	17.550	18	13.581	no DF
308B	3004	20	11	168.802	2	91.825	no DF
306A	3004	10	13	226.204	14	125.725	no DF

226 ^B CHL BS11 2016-05 Bot 5	227 ^B CHL BS11 2016-05 Bot 6	221 ^A CHL 3 2016-05 Bot 16	219 ^A CHL 3 2016-05 Bot 14	218 ^B CHL 3 2016-05 Bot 13	251 CHL Stn 9 2016-05 Bot 9 ^B	239 CHL Stn 6 2016-05 Bot 10 ^A	240 CHL Stn 6 2016-05 Bot 11 ^A	242 CHL Stn 6 2016-05 Bot 13 ^A
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229 ^A CHL BS11 2016-05 Bot 8	251 CHL Stn 9 2016-05 Bot 9 ^A	252 CHL Stn 9 2016-05 Bot 10 ^B	254 CHL Stn 9 2016-05 Bot 12 ^B	267 CHL Stn 12 2016-05 Bot 13 ^A	268 CHL Stn 12 2016-05 Bot 14 ^B	268 CHL Stn 12 2016-05 Bot 14 ^A	294 ^B CHL Stn 16 2016-05 Bot 9	285 CHL Stn 14 2016-05 Bot 15 ^A
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282 CHL Stn 14 2016-05 Bot 12 ^A	283 CHL Stn 14 2016-05 Bot 13 ^B	304 ^A CHL Stn 28 2016-05 Bot 4	298 ^A CHL Stn 22 2016-05 Bot 2	300 ^A CHL Stn 22 2016-05 Bot 4	297 ^A CHL Stn 22 2016-05 Bot 1	296 ^B CHL Stn 16 2016-05 Bot 11	304 ^B CHL Stn 28 2016-05 Bot 4	302 ^A CHL Stn 28 2016-05 Bot 2
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301 ^B CHL Stn 28 2016-05 Bot 1	308 CHL Stn SC04 2016-05 Bot 4 ^B	306 CHL Stn SC04 2016-05 Bot 2 ^A
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Chlorophyll Data Sheet

Cruise: 2016-05

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20ml: 283A
308A
285B

Dates of Cruise:

Time and date acetone added: 19 May 16 5:19pm

Analyst: Tamerz

Time and date out of freezer: 20 May 16 3:25pm

Time analysis started: 20 May 16 4:30pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.002			
STD			LOW	2-	12.016			
STD			HIGH	4-	64.915			
Blank				6-	0.002	8-	0.001	
242B	6	330	10	1-	39.491	2-	20.932	no DF
227A	BS11		10	3-	97.320	4-	55.253	no DF
254A	9		10	5-	83.091	6-	43.644	10DF
221B	3		10	7-	31.094	8-	17.056	no DF
252A	9		10	1-	44.842	2-	25.754	no DF
218A	3		10	3-	84.153	4-	49.536	no DF
267B	12		10	5-	60.755	6-	35.430	no DF
219B	3		10	7-	50.322	8-	27.718	no DF
270B	12		10	1-	116.226	2-	60.259	no DF
205B	CPF1		10	3-	35.131	4-	19.507	no DF
294A	16		10	5-	70.798	6-	39.074	no DF
298B	22		10	7-	100.521	8-	54.222	no DF
293A	16		10	1-	49.815	2-	29.746	no DF
239B	6		10	3-	52.772	4-	30.186	no DF
282B	14		10	5-	31.171	6-	18.768	no DF
240B	6		10	7-	82.989	8-	44.038	no DF
283A	14		20	1-	100.550	2-	54.202	no DF
229B	BS11		10	3-	126.863	4-	69.404	no DF
299B	16		10	5-	49.733	6-	27.727	no DF
226A	BS11		10	7-	67.945	8-	39.985	no DF
300B	22		10	1-	132.846	2-	70.307	no DF
270A	12		10	3-	108.286	4-	56.560	no DF
301A	28		10	5-	17.719	6-	13.134	no DF
297B	22		10	7-	28.349	8-	19.245	no DF
308A	SC04		20	1	163.761	2	89.543	no DF
302B	28		10	3	20.957	4	12.845	no DF
Stand-by				1-	0.002			
Std	Low			2-	12.010			
Std	High			4-	64.876			
Blank	by			6-	0.002	8-	0.002	
306B	SC04		10	5	229.591	6	127.671	no DF

296A 16 10 7 96.615 8 forget read Ra no DF

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285B 14 20 11 107.092 12 56.681 no DF

242	227 ^A	254	221 ^B	252	218 ^A	267	219 ^B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 6	BS11	Stn 9	3	Stn 9	3	Stn 12	3
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 13	Bot 6	Bot 12	Bot 16	Bot 10	Bot 13	Bot 13	Bot 14
^B		^A		^A		^B	

270	205 ^B	294 ^A	298 ^B	293 ^A 293A ^{CHL}	239	282	240
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 12	CPF1	Stn 16	Stn 22	Stn 16	Stn 6	Stn 14	Stn 6
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 16	Bot 4	Bot 9	Bot 2	Bot 8	Bot 10	Bot 12	Bot 11
^B					^B	^B	^B

283	229 ^B	293 ^B	226 ^A	300 ^B	270	301 ^A	297 ^B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 14	BS11	Stn 16	BS11	Stn 22	Stn 12	Stn 28	Stn 22
2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
Bot 13	Bot 8	Bot 8	Bot 5	Bot 4	Bot 16	Bot 1	Bot 1
^A					^A		

308	302 ^B	306	296 ^A	285
CHL	CHL	CHL	CHL	CHL
Stn SC04	Stn 28	Stn SC04	Stn 16	Stn 14
2016-05	2016-05	2016-05	2016-05	2016-05
Bot 4	Bot 2	Bot 2	Bot 11	Bot 15
^A		^B		^B