

Ammonium analysis

Start time of Reaction

End time of reaction

02:00

10:15

Cruise

Date

2016.62
Sept. 3↑ analysis
start

Standards

Conc.

All stock

Raw Fluor

Raw Fluor

S0	0	6.1	6.2
S1	200	111.6	112.2
S2	400	215.7	224.7
S3	600	323.6	329.0
S4	800	402.4	406.4
S5	1000	498.4	502.9

See method for collection of LNSW

WR1

Sample	Station	Raw Fluor	Sample	Station	Raw Fluor	Sample	Station	Raw Fluor
79B	LB12	71.2	2A	LB01	125.0			
79A	LB12	66.2	5B	LB01	32.3			
78B	LB12	145.1	3B	LB01	79.8			
62B	LB11	268.2	2B	LB01	121.6			
62A	LB11	264.8	18B	LB04	173.7			
78A	LB12	122.0	17B	LB04	237.9			
63B	LB11	314.4	16A	LB04	302.1			
63A	LB11	308.8	18A	LB04	181.2			
77A	LB12	216.3	17A	LB04	230.5			
64A	LB11	254.2	27A	LB06	235.133.7			
64B	LB11	257.5	16B	LB04	295.8			
52B	LB09	241.7	26A	LB06	215.6			
77B	LB12	217.8	25A	LB06	309.8			
52A	LB09	230.9	27B	LB06	132.6			
51B	LB09	358.3	26B	LB06	219.9			
50B	LB09	124.3	25B	LB06	301.5			
50A	LB09	127.0	96B	LB14	424.1			
51A	LB09	305.2	96A	LB14	438.6			
37B	LB08	534.7	98B	LB14	63.0			
38A	LB08	388.7	97B	LB14	357.3			
40A	LB08	320.8	97A	LB14	353.8			
37A	LB08	534.0	98A	LB14	64.1			
38B	LB08	383.4						
40B	LB08	329.7						
10A	LB02	48.4						
9A	LB02	45.2						
8A	LB02	100.9						
10B	LB02	50.1						
9B	LB02	32.8						
8B	LB02	107.1						
5A	LB01	35.1						
3A	LB01	81.7						

79 B	79 A	78 B	62 B	62 A	78 B	63 B	63 A
NH4	NH4	NH4	NH4	NH4	NH4	NH4	NH4
LB12	LB12	LB12	LB11	LB11	LB12	LB11	LB11
5 m	5 m	10 m	20 m	20 m	10 m	10 m	10 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 15	Bot 15	Bot 14	Bot 9	Bot 9	Bot 14	Bot 10	Bot 10

77 A	64 A	64	52 B	52 A	51 B	50 B	50 A
NH4	NH4	NH4	NH4	NH4	NH4	NH4	NH4
LB12	LB11	LB11	LB09	LB09	LB09	LB09	LB09
20 m	5 m	5 m	5 m	5 m	10 m	20 m	20 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 13	Bot 11	Bot 1	Bot 9	Bot 9	Bot 8	Bot 7	Bot 7

51 A	37 B	38 A	40 A	37 A	38 B	40 B	10 A
NH4	NH4	NH4	NH4	NH4	NH4	NH4	NH4
LB09	LB08	LB08	LB08	LB08	LB08	LB08	LB02
10 m	20 m	10 m	5 m	20 m	10 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 8	Bot 7	Bot 8	Bot 10	Bot 7	Bot 8	Bot 10	Bot 5

9 A	8 A	10 B	9 B	8 B	5 A	3 A	2 A
NH4	NH4	NH4	NH4	NH4	NH4	NH4	NH4
LB02	LB01	LB02	LB02	LB02	LB01	LB01	LB01
5 m	10 m	5 m	5 m	10 m	5 m	10 m	20 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 4	Bot 3	Bot 5	Bot 4	Bot 3	Bot 5	Bot 3	Bot 2

5 B	3 B	2 B	18 B	17 B	16 A	18 A	17 A
NH4	NH4	NH4	NH4	NH4	NH4	NH4	NH4
LB01	LB01	LB01	LB04	LB04	LB04	LB04	LB04
5 m	10 m	20 m	5 m	10 m	10 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 5	Bot 3	Bot 2	Bot 7	Bot 6	Bot 5	Bot 7	Bot 5

NH4	27 A	26 A	25 A	27 B	26 B	25 B	96 B	96 A
LB04	NH4	NH4	NH4	NH4	NH4	NH4	NH4	NH4
10 m	LB06	LB06	LB06	LB06	LB06	LB06	LB14	LB14
2016-62	5 m	10 m	20 m	5 m	10 m	20 m	5 m	5 m
Bot 5	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
	Bot 8	Bot 7	Bot 6	Bot 8	Bot 7	Bot 6	Bot 16	Bot 16

98 B	97 B	97 A	98 A
NH4	NH4	NH4	NH4
LB14	LB14	LB14	LB14
5 m	5 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62
Bot 18	Bot 17	Bot 17	Bot 18

Ammonium analysis

Start time of Reaction

01:00

End time of reaction

09:30

Cruise

2016-62

Date

Sept. 4

Standards

Conc.

Raw Fluor

Raw Fluor

S0

0

8.6

7.8

S1

200

109.9

113.9

S2

400

205.8

205.2

S3

600

306.0

302.3

S4

800

395.4

394.7

S5

1000

492.0

494.2

See method for collection of LNSW

WRI

Sample	Station	Raw Fluor	Sample	Station	Raw Fluor	Sample	Station	Raw Fluor
149A	LC08	245.6	181A	LC01	58.7			
148B	LC08	270.6	179B	LC01	97.5			
147A	LC08	334.0	180B	LC01	51.0			
149B	LC08	246.5	181B	LC01	61.4			
148A	LC08	287.3	171A	LC02	116.1			
147B	LC08	319.2	172A	LC02	144.7			
137B	LC09	138.0	174A	LC02	151.4			
135A	LC09	300.7	171B	LC02	121.4			
135B	LC09	301.0	172B	LC02	127.3			
137A	LC09	141.2	174B	LC02	142.0			
136B	LC09	208.9	164B	LC04	381.0			
136A	LC09	203.3	165A	LC04	342.6			
119A	LC11	508.9	166A	LC04	287.3			
120B	LC11	663.5	164A	LC04	393.3			
121A	LC11	44.6	165B	LC04	307.3			
119B	LC11	520.4	166B	LC04	297.8			
120A	LC11	671.7	206B	LD08	428.0			
121B	LC11	45.1	207A	LD08	289.7			
154A	LC06	390.6	208A	LD08	247.8			
155A	LC06	34.7	206A	LD08	421.8			
156A	LC06	26.6	207B	LD08	289.3			
154B	LC06	338.2	208B	LD08	248.8			
155B	LC06	25.2	189B	LD04	117.2			
156B	LC06	25.2	190B	LD04	93.2			
186B	LD02	114.0	191A	LD04	67.2			
185A	LD02	91.4	189A	LD04	111.8			
184A	LD02	220.5	190A	LD04	94.8			
186A	LD02	97.3	191B	LD04	90.0			
185B	LD02	92.5						
184B	LD02	216.6						
179A	LC01	93.8						
180A	LC01	51.3						

145 A NH4 LC08 5 m 2016-62 Bot 11	148 B NH4 LC08 10 m 2016-62 Bot 10	147 A NH4 LC08 20 m 2016-62 Bot 9	149 B NH4 LC08 5 m 2016-62 Bot 11	148 A NH4 LC08 10 m 2016-62 Bot 10	147 B NH4 LC08 20 m 2016-62 Bot 9	138 B NH4 LC09 5 m 2016-62 Bot 17 16	135 A NH4 LC09 20 m 2016-62 Bot 14	135 B NH4 LC09 20 m 2016-62 Bot 14	138 A NH4 LC09 5 m 2016-62 Bot 17 16
136 B NH4 LC09 10 m 2016-62 Bot 15	136 A NH4 LC09 10 m 2016-62 Bot 15	119 A NH4 LC11 20 m 2016-62 Bot 17	120 B NH4 LC11 10 m 2016-62 Bot 18	121 A NH4 LC11 5 m 2016-62 Bot 19	119 B NH4 LC11 20 m 2016-62 Bot 17	120 A NH4 LC11 10 m 2016-62 Bot 18	121 B NH4 LC11 5 m 2016-62 Bot 19	154 A NH4 LC06 20 m 2016-62 Bot 5	155 A NH4 LC06 10 m 2016-62 Bot 6
156 A NH4 LC06 5 m 2016-62 Bot 7	154 B NH4 LC06 20 m 2016-62 Bot 5	155 B NH4 LC06 10 m 2016-62 Bot 6	156 B NH4 LC06 5 m 2016-62 Bot 7	186 B NH4 LD02 5 m 2016-62 Bot 5	185 A NH4 LD02 10 m 2016-62 Bot 4	184 A NH4 LD02 20 m 2016-62 Bot 3	186 A NH4 LD02 5 m 2016-62 Bot 5	185 B NH4 LD02 10 m 2016-62 Bot 4	184 B NH4 LD02 20 m 2016-62 Bot 3
179 A NH4 LC01 20 m 2016-62 Bot 5	180 A NH4 LC01 10 m 2016-62 Bot 6	181 A NH4 LC01 5 m 2016-62 Bot 7	179 B NH4 LC01 20 m 2016-62 Bot 5	180 B NH4 LC01 10 m 2016-62 Bot 6	181 B NH4 LC01 5 m 2016-62 Bot 7	171 A NH4 LC02 20 m 2016-62 Bot 5	172 A NH4 LC02 10 m 2016-62 Bot 6	174 A NH4 LC02 5 m 2016-62 Bot 5	171 B NH4 LC02 20 m 2016-62 Bot 5
172 B NH4 LC02 10 m 2016-62 Bot 6	174 B NH4 LC02 5 m 2016-62 Bot 8	164 B NH4 LC04 20 m 2016-62 Bot 8	165 A NH4 LC04 10 m 2016-62 Bot 9	166 A NH4 LC04 5 m 2016-62 Bot 10	164 A NH4 LC04 20 m 2016-62 Bot 8	165 B NH4 LC04 10 m 2016-62 Bot 9	166 B NH4 LC04 5 m 2016-62 Bot 10	206 B NH4 LD08 20 m 2016-62 Bot 15	207 A NH4 LD08 10 m 2016-62 Bot 16
208 A NH4 LD08 5 m 2016-62 Bot 17	206 A NH4 LD08 20 m 2016-62 Bot 15	207 B NH4 LD08 10 m 2016-62 Bot 16	208 B NH4 LD08 5 m 2016-62 Bot 17	189 B NH4 LD04 20 m 2016-62 Bot 3	190 B NH4 LD04 10 m 2016-62 Bot 4	191 A NH4 LD04 5 m 2016-62 Bot 5	189 A NH4 LD04 20 m 2016-62 Bot 3	190 A NH4 LD04 10 m 2016-62 Bot 4	191 B NH4 LD04 5 m 2016-62 Bot 5

Ammonium analysis

Start time of Reaction

01:30

End time of reaction

10:00

Cruise

2016-62

Date

Sept 6

Standards

Conc.

Raw Fluor

Raw Fluor

S0

0

8.1

7.2

See method for collection of LNSW

S1

200

114.5

103.8

S2

400

200.4

202.6

S3

600

279.6

294.7

S4

800

385.3

384.8

S5

1000

483.8

485.0

WRZ

Sample	Station	Raw Fluor	Sample	Station	Raw Fluor	Sample	Station	Raw Fluor
320B	LBP3	207.1	259B	L602	256.3			
321B	LBP3	169.6	261A	L602	208.2			
322A	LBP3	149.9	260A	L602	153.8			
320A	LBP3	234.1	259A	L602	255.9			
321A	LBP3	164.9	266B	L601	166.6			
322B	LBP3	118.6	265B	L601	Broken Tube			
312B	LBP5	37.6	264B	L601	198.0			
311B	LBP5	44.8	264A	L601	190.7			
310B	LBP5	436.7	265A	L601	166.7			
312A	LBP5	38.0	266A	L601	167.2			
311A	LBP5	36.8						
310A	LBP5	425.9						
293B	LBP7	53.8						
292B	LBP7	36.2						
291B	LBP7	42.6						
293A	LBP7	23.6						
292A	LBP7	31.0						
291A	LBP7	46.0						
254B	L604	314.7						
243B	L606	685.0						
243A	L606	686.8						
254A	L604	311.6						
244B	L606	365.2						
244A	L606	355.1						
253B	L604	487.3						
245B	L606	286.4						
245A	L606	243.2						
253A	L604	487.9						
252A	L604	440.8						
252B	L604	426.8						
261B	L602	161.8						
260B	L602	217.6						

320 NH4 B LPB3 20 m 2016-62 Bot 8	321 NH4 B LPB3 10 m 2016-62 Bot 9	322 NH4 A LPB3 5 m 2016-62 Bot 10	320 NH4 A LPB3 20 m 2016-62 Bot 8	321 NH4 A LPB3 10 m 2016-62 Bot 9	322 NH4 B LPB3 5 m 2016-62 Bot 10	312 B NH4 LPB5 5 m 2016-62 Bot 19	311 B NH4 LPB5 10 m 2016-62 Bot 18	310 B NH4 LPB5 20 m 2016-62 Bot 17	312 A NH4 LPB5 5 m 2016-62 Bot 19
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311 A NH4 LPB5 10 m 2016-62 Bot 18	310 A NH4 LPB5 20 m 2016-62 Bot 17	293 B NH4 LPB7 5 m 2016-62 Bot 21	292 B NH4 LPB7 10 m 2016-62 Bot 20	291 B NH4 LPB7 20 m 2016-62 Bot 19	293 A NH4 LPB7 5 m 2016-62 Bot 21	292 A NH4 LPB7 10 m 2016-62 Bot 20	291 A NH4 LPB7 20 m 2016-62 Bot 19	254 B NH4 LG04 5 m 2016-62 Bot 9	243 B NH4 LG06 20 m 2016-62 Bot 15
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243 A NH4 LG06 20 m 2016-62 Bot 15	254 A NH4 LG04 5 m 2016-62 Bot 9	244 B NH4 LG06 10 m 2016-62 Bot 16	244 A NH4 LG06 10 m 2016-62 Bot 16	253 B NH4 LG04 10 m 2016-62 Bot 2	245 B NH4 LG06 5 m 2016-62 Bot 17	245 A NH4 LG06 5 m 2016-62 Bot 17	253 A NH4 LG04 10 m 2016-62 Bot 8	252 A NH4 LG04 20 m 2016-62 Bot 7	252 B NH4 LG04 20 m 2016-62 Bot 7
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261 B NH4 LG02 5 m 2016-62 Bot 7	260 B NH4 LG02 10 m 2016-62 Bot 6	259 B NH4 LG02 20 m 2016-62 Bot 5	261 A NH4 LG02 5 m 2016-62 Bot 7	260 A NH4 LG02 10 m 2016-62 Bot 6	259 A NH4 LG02 20 m 2016-62 Bot 5	266 B NH4 LG01 5 m 2016-62 Bot 5	264 B NH4 LG01 20 m 2016-62 Bot 3	264 A NH4 LG01 20 m 2016-62 Bot 3	265 A NH4 LG01 10 m 2016-62 Bot 4
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266 A
NH4
LG01
5 m
2016-62
Bot 5

Ammonium analysis

Start time of Reaction

13:05

End time of reaction

21:30

Cruise

2016-62

Date

08 Sept. 2016

Standards

Conc.

Raw Fluor

Raw Fluor

S0

0

6.2

6.2

See method for collection of LNSW

S1

200

119.1

104.6

S2

400

196.5

197.6

S3

600

329.6

325.7

S4

800

378.2

371.8

S5

1000

462.4

462.5

WRZ

Sample	Station	Raw Fluor	Sample	Station	Raw Fluor	Sample	Station	Raw Fluor
374A	C506	137.6						
374B	C506	137.9						
375A	C506	131.3						
375B	C506	132.6						
376A	C506	140.7						
376B	C506	131.6						
385A	C509	222.0						
385B		232.6						
386A		128.0						
386B		136.9						
387A		133.2						
387B	↓	113.6						
341A	C500	81.6						
341B		50.4						
342A		33.9						
342B		48.3						
343A		21.3						
343B	↓	22.1						
361A	C502	198.1						
361B		204.3						
362A		288.4						
362B		279.5						
363A		118.1						
363B	↓	129.6						
368A	C504	421.8						
368B		439.2						
369A		429.0						
369B		415.1						
370A		410.5						
370B	↓	418.7						

374 A	374 B	375 A	375 B	376 A	376 B
NH4	NH4	NH4	NH4	NH4	NH4
CS06	CS06	CS06	CS06	CS06	CS06
20 m	20 m	10 m	10 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 4	Bot 4	Bot 5	Bot 5	Bot 6	Bot 6

385 A	385 B	386 A	386 B	387 A	387 B
NH4	NH4	NH4	NH4	NH4	NH4
CS09	CS09	CS09	CS09	CS09	CS09
20 m	20 m	10 m	10 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 4	Bot 9	Bot 10	Bot 10	Bot 11	Bot 11

341 A	341 B	342 A	342 B	343 A	343 B
NH4	NH4	NH4	NH4	NH4	NH4
CS00	CS00	CS00	CS00	CS00	CS00
20 m	20 m	10 m	10 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 18	Bot 18	Bot 19	Bot 19	Bot 20	Bot 20

361 A	361 B	362 A	362 B	363 A	363 B
NH4	NH4	NH4	NH4	NH4	NH4
CS02	CS02	CS02	CS02	CS02	CS02
20 m	20 m	10 m	10 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 18	Bot 18	Bot 19	Bot 19	Bot 20	Bot 20

368 A	368 B	369 A	369 B	370 A	370 B
NH4	NH4	NH4	NH4	NH4	NH4
CS04	CS04	CS04	CS04	CS04	CS04
20 m	20 m	10 m	10 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 5	Bot 5	Bot 6	Bot 6	Bot 7	Bot 7