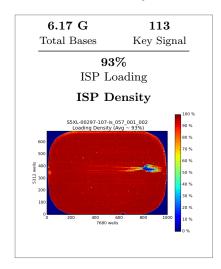
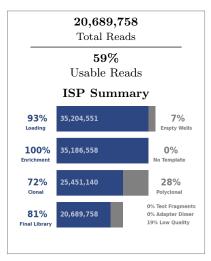
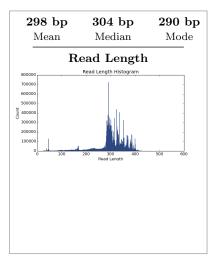
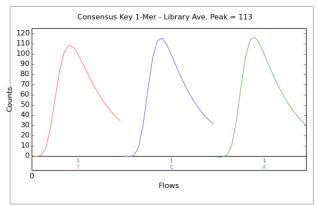
## Run Summary









Addressable Wells	$37,\!849,\!615$	
With ISPs	35,204,551	93.0%
Live	35,186,558	99.9%
Test Fragment	183,319	00.5%
Library	35,003,239	99.5%
Library ISPs	35 003 239	
T.11 TOT		
	<b>35,003,239</b> 9.735,418	27.8%
Library ISPs Filtered: Polyclonal Filtered: Low Quality	9,735,418	27.8% 13.1%
•	, ,	27.8% 13.1% 00.0%

Barcode Name	Sample	Bases	$\geq Q20$	Reads	Mean Read Length	Read Length Histogram
No barcode	none	178,202,758	158,061,385	608,463	292 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_001	none	96,576,442	87,180,555	321,855	300 bp	0 50 100 150 200 250 310 350 400 450 500 550
IonXpress_003	none	90,074,343	81,659,948	303,361	296 bp	0 50 100 150 200 250 10 40 400 450 500 550
IonXpress_004	none	67,244,394	60,803,961	232,827	288 bp	0 50 100 150 200 250 00 350 400 450 500 550
$Ion Xpress\_005$	none	54,197,538	49,353,613	174,078	311 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_007$	none	91,777,560	83,682,141	317,628	288 bp	0 50 100 150 200 250 3 0 350 400 450 500 550
IonXpress_008	none	46,852,347	39,155,064	187,956	249 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_009	none	167,814,753	152,434,608	552,279	303 bp	0 50 100 150 200 250 300 350 400 450 500 550

IonXpress_012	none	120,756,423	109,852,729	403,057	299 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_015	none	181,274,477	160,811,175	570,735	317 bp	0 50 100 150 200 250 300 350 100 450 500 550
IonXpress_016	is_057_001	83,775,732	72,656,984	291,295	287 bp	0 50 100 150 200 250 30 350 400 450 500 550
IonXpress_017	none	130,861,933	119,861,375	409,339	319 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_018	is_057_002	113,832,098	98,929,009	401,359	283 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_019	none	45,098,084	41,019,649	162,495	277 bp	0 50 100 150 200 250 100 350 400 450 500 550
IonXpress_020	none	30,558,695	27,929,887	108,200	282 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_021	none	11,099,104	10,046,446	38,759	286 bp	0 50 100 150 200 250 400 350 400 450 500 550
IonXpress_022	none	146,357,331	130,328,552	502,378	291 bp	0 50 100 150 200 250 30 350 400 450 500 550
IonXpress_023	none	105,897,917	93,508,108	349,399	303 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_025	none	174,594,841	156,958,865	571,681	305 bp	0 50 100 150 200 250 100 351 400 450 500 550
IonXpress_026	none	136,152,817	123,043,624	442,329	307 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_027$	none	41,164,852	38,068,724	170,296	241 bp	0 50 100 150 200 250 200 350 400 450 500 550
IonXpress_028	none	2,912,588	2,650,030	9,754	298 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_029	none	100,044,674	90,142,623	353,616	282 bp	0 50 100 150 200 250 300 350 400 450 500 550
$IonXpress\_030$	none	43,197,077	38,659,118	138,855	311 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_031	none	69,900,215	62,609,135	218,028	320 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_032$	none	53,238,598	47,529,179	193,313	275 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_034	none	159,230,444	144,714,881	525,200	303 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_035$	none	59,083,686	53,274,164	221,829	266 bp	0 50 100 150 200 250 110 350 400 450 500 550
IonXpress_036	none	29,597,116	27,310,691	97,999	302 bp	0 50 100 150 200 250 200 850 400 450 500 550
$IonXpress\_037$	none	51,900,750	47,215,457	177,267	292 bp	0 50 100 150 200 250 100 350 400 450 500 550
$IonXpress\_039$	none	76,609,012	68,227,231	284,815	268 bp	0 50 100 150 200 250 000 350 400 450 500 550
$IonXpress\_040$	none	1,683,172	1,524,177	6,016	279 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_041	none	143,585,900	127,731,970	443,896	323 bp	0 50 100 150 200 250 30 350 400 450 500 550
IonXpress_042	none	129,250,162	117,298,445	404,781	319 bp	0 50 100 150 200 250 300 350 400 450 500 550



IonXpress_043	none	62,298,516	58,340,565	193,423	322 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_044	none	44,562,101	39,151,644	152,430	292 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_046	none	183,187,994	163,476,686	581,733	314 bp	0 50 100 150 200 250 300 350 100 450 500 550
IonXpress_048	none	2,420,823	2,173,908	7,878	307  bp	0 50 100 150 200 250 300 390 00 450 500 550
IonXpress_049	none	109,419,859	98,095,911	367,348	297 bp	0 50 100 150 200 250 300 310 400 450 500 550
$Ion Xpress\_050$	none	144,389,746	130,705,462	474,493	304 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_051	none	77,057,750	68,968,697	279,662	275 bp	0 50 100 150 200 250 30 350 400 450 500 550
$Ion Xpress\_052$	none	106,043,147	96,390,306	334,626	316 bp	0 50 100 150 200 250 300 850 400 450 500 550
$Ion Xpress\_054$	none	28,685,581	25,365,811	112,899	254 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_055$	none	54,574,815	49,762,331	192,942	282 bp	0 50 100 150 200 250 310 350 400 450 500 550
$Ion Xpress\_057$	none	137,131,785	124,634,739	437,488	313 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_058$	none	90,241,442	82,194,007	321,832	280 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_059$	none	97,444,277	88,003,128	297,672	327  bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_060$	none	81,603,621	73,137,927	278,407	293 bp	0 50 100 150 200 250 100 850 400 450 500 550
$Ion Xpress\_061$	none	2,109,002	1,890,322	6,782	310 bp	0 50 100 150 200 250 00 350 400 450 500 550
$Ion Xpress\_062$	none	47,740,282	42,546,343	167,963	284 bp	0 50 100 150 200 250 30 350 400 450 500 550
$Ion Xpress\_063$	none	39,131,983	35,551,019	139,084	281 bp	0 50 100 150 200 250 00 350 400 450 500 550
$Ion Xpress\_064$	none	109,964,980	97,898,855	366,377	300 bp	0 50 100 150 200 250 300 850 400 450 500 550
$Ion Xpress\_065$	none	65,994,840	60,506,392	227,427	290 bp	0 50 100 150 200 250 300 390 400 450 500 550
$Ion Xpress\_066$	none	135,881,634	121,147,611	440,036	308 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_067$	none	64,748,469	57,558,817	225,195	287 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_068$	none	101,039,375	92,192,707	338,747	298 bp	0 50 100 150 200 250 300 B50 400 450 500 550
$Ion Xpress\_069$	none	8,030,007	7,253,760	26,484	303 bp	0 50 100 150 200 250 300 350 400 450 500 550
$Ion Xpress\_070$	none	78,242,726	70,190,632	271,301	288 bp	0 50 100 150 200 250 100 350 400 450 500 550
$Ion Xpress\_073$	none	120,947,513	108,277,891	408,053	296 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_074	none	2,465,794	2,235,297	8,513	289 bp	0 50 100 150 200 250 300 350 400 450 500 550

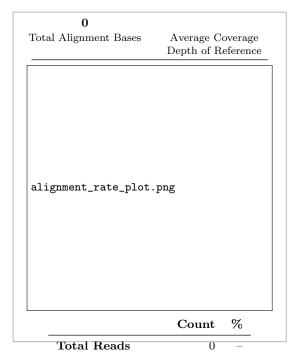


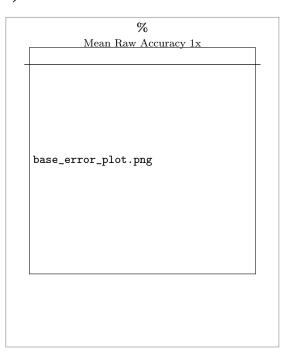
IonXpress_076	none	83,457,743	72,511,130	257,919	323 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_077	none	38,981,025	34,973,658	138,922	280 bp	0 50 100 150 200 250 100 350 400 450 500 550
IonXpress_078	none	57,617,992	50,153,786	193,235	298 bp	0 50 100 150 200 250 300 350 00 450 500 550
IonXpress_079	none	80,800,803	73,090,326	270,747	298 bp	0 50 100 150 200 250 <b>3</b> 00 350 400 450 500 550
IonXpress_080	none	1,323,445	1,214,333	12,170	108 bp	0 100 150 200 250 300 350 400 450 500 550
IonXpress_081	none	29,531,439	26,756,386	106,415	277 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_084	none	138,184,921	127,139,309	468,941	294 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_086	none	41,105,051	38,051,829	144,996	283 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_087	none	124,769,124	112,676,714	412,287	302 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_088	none	87,176,590	77,713,967	280,289	311 bp	0 50 100 150 200 250 100 350 400 450 500 550
IonXpress_089	none	150,573,860	136,341,205	507,835	296 bp	0 50 100 150 200 250 300 350 400 450 500 550
IonXpress_090	none	109,395,554	94,476,007	354,200	308 bp	0 50 100 150 200 250 300 350 00 450 500 550
IonXpress_091	none	33,934,263	30,552,137	113,015	300 bp	0 50 100 150 200 250 300 = 0 400 450 500 550
IonXpress_092	none	630,716	577,046	10,909	57 bp	0 100 150 200 250 300 350 400 450 500 550
IonXpress_094	none	89,314,973	79,854,616	303,338	294 bp	0 50 100 150 200 250 200 350 400 450 500 550
IonXpress_096	none	68,727,419	62,037,415	238,786	287 bp	0 50 100 150 200 250 300 350 400 450 500 550

Test Fragment	Reads	Percent 50AQ17	Read Length Histogram
$\mathrm{TF}_{-}1$	822	70	



# Alignment Summary (aligned to )





	AQ17	AQ20	Perfect
Total Number of Bases [Mbp]	0	0	0
Mean Length [bp]	0	0	0
Longest Alignment [bp]	0	0	0
Mean Coverage Depth			



Filtered_Alignments_Q10.png	Filtered_Alignments_Q17.png	
Filtered_Alignments_Q20.png	Filtered_Alignments_Q47.png	



### **Analysis Details**

Run Name R\_2018\_04\_04\_08\_08\_06\_user\_S5XL-00297-107-is\_057\_001\_002

Run Date | April 4, 2018, 8:09 a.m.

 Run Flows
 850

 Projects
 is\_057

 Sample
 is\_057\_001

Reference

Instrument S5XL-00297 Operation Mode Customer mode

Flow Order TACGTACGTCTGAGCATCGATCGATGTACAGC

Library Key TCAG
TF Key ATCG

Chip Barcode

Chip CheckPassedChip Type530Chip DatatiledChip Lot NumberQPW145Chip Wafer23

Barcode Set IonXpress

Analysis Name Auto\_user\_S5XL-00297-107-is\_057\_001\_002\_292

**Analysis Date** April 4, 2018, 2:36 p.m.

Analysis Flows 0

runID FITMZ

BeadFind ArgsjustBeadFind -args-json /opt/ion/config/args\_530\_beadfind.jsonAnalysis ArgsAnalysis -args-json /opt/ion/config/args\_530\_analysis.jsonPre-BaseCallerBaseCaller -barcode-filter 0.01 -barcode-filter-minreads 10

-phasing-residual-filter=2.0 -wells-normalization on

Calibration Args Calibration –num-calibration-regions 1,1

BaseCaller Args BaseCaller –barcode-filter 0.01 –barcode-filter-minreads 10

-phasing-residual-filter=2.0 -num-unfiltered 1000 -barcode-filter-postpone 1

–qual-filter true –qual-filter-slope 0.040 –qual-filter-offset 1.0

-wells-normalization on

Alignment Args tmap mapall -q 50000 ... stage1 map4

IonStats Args ionstats alignment

Analysis Parameters | default



### Chef Summary

#### Chef Template Prep Information:

Chef Last Updated April 4, 2018, 8:01 a.m. Chef Instrument Name CHEF00391 Chef Operation Mode Customer Mode Sample Position Tip Rack Barcode 46B150068 Chip Type 1 530v1Chip Type 2 530v1Chip Expiration 1 None Chip Expiration 2 None Templating Kit Type Ion 520 amp: Ion 530 Kit-Chef Chef Flexible Workflow Reagent Expiration 180430 Reagent Lot Number 1880068 Reagent Part Number A27756C Reagent Cartridge Serial Number None Solution Lot Number 1850861 Solution Part Number A27754C Templating Protocol Planned (use instrument default) Solution Cartridge Serial Number None Solution Expiration 180228 Templating Protocol Executed (use instrument default) **Chef Script Version** 704 Chef Package Version IC.5.8.0.DEV.7 Start Time April 3, 2018, 3:28 p.m. **Completion Time** April 4, 2018, 8:01 a.m.

### S5 Consumables Summary

Chip Type 530v1 Chip Barcode DADI00927

Product Description	Part Number	Lot Number	Exp. Date	Remaining Uses
Ion S5 Sequencing Reagent	INS1012841B	1916037	2018/12/31	1
Ion S5 Cleaning Solution	100031096	1911361	2018/09/30	2
Ion S5 Wash Solution	100031091B	1911386	2018/09/30	1



# Software Version

${f Torrent\_Suite}$	5.8.0.RC2
host	4JJFW $52$
ion-analysis	5.8.10-1
ion-chefupdates	5.8.1
ion-dbreports	5.8.19-1
ion-gpu	5.8.1-1
ion-pipeline	5.8.2-1
ion-plugins	5.8.12-1
ion-protonupdates	5.8.0
ion-s5updates	5.8.0
ion-torrentpy	5.8.10-1
ion-torrentr	5.8.10-1
S5 Script	0.1.31
LiveView	2348
DataCollect	3548
OIA	5810
OS	34
Graphics	89
T C1 C	TO FOOD DELLE

Ion\_Chef IC.5.8.0.DEV.7

