## Report for dataset NS2497-ACLU0235-021022-Cell1 (CCS)

### Dataset 4d47f990-dddb-411a-bd4e-7e2336101379

### Summary

NS2497-ACLU0235-021022-Cell1 (CCS)

**Created At** 2022-02-12 15:02:41.559

Number of Records 5265100

**Total Length** 57572456473

**Movie ID** m64219e\_220210\_175238

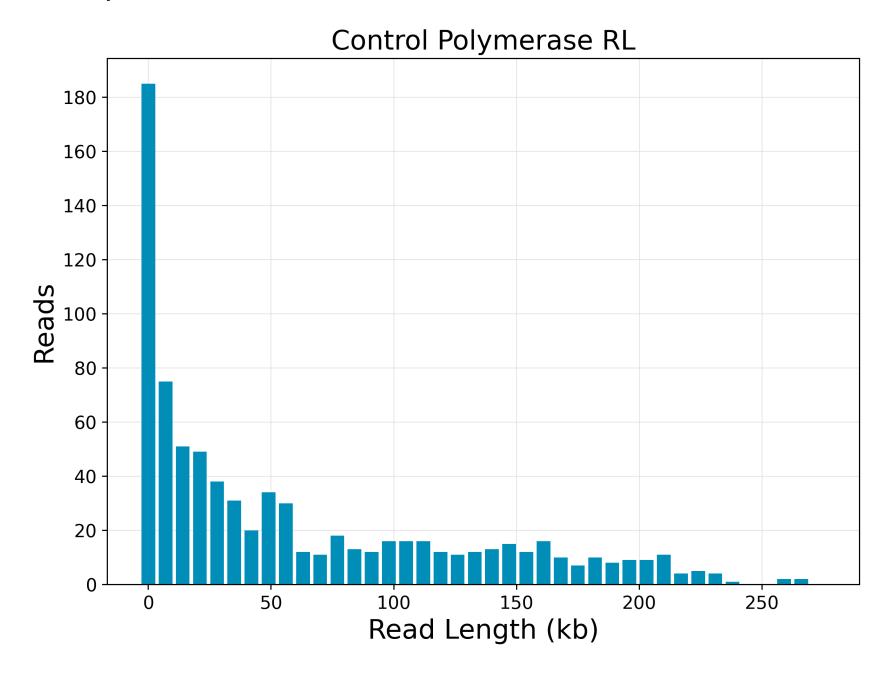
**ICS Version** 10.1.0.119549

Well Sample NS2497-ACLU0235-021022

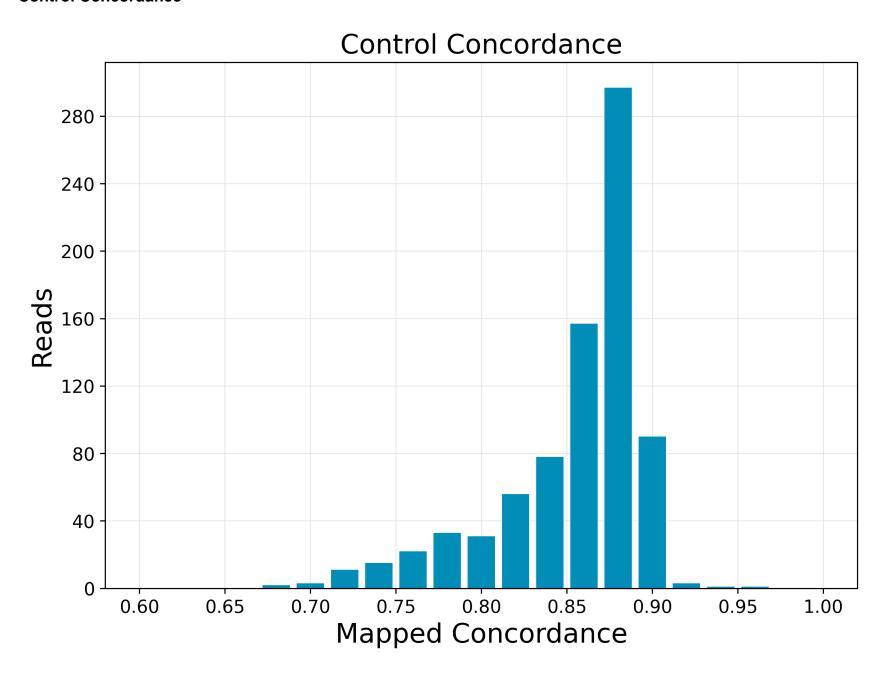
Biological Sample ACLU0235

## **Control Report**

Number of of Control Reads	800
Control Read Length Mean	63,099
Control Read Concordance Mean	0.86
Control Read Concordance Mode	0.89



#### **Control Concordance**



## **CCS Analysis Report**

### **Summary**

HiFi Reads

2,698,938 HiFi Yield (bp) 20,631,192,176 HiFi Read Length (mean, bp) 7,644

HiFi Read Quality (median) Q41 41 HiFi Read Quality (median) **HiFi Number of Passes (mean)** 17

<Q20 Reads 309,715

<Q20 Yield (bp) 2,631,182,424

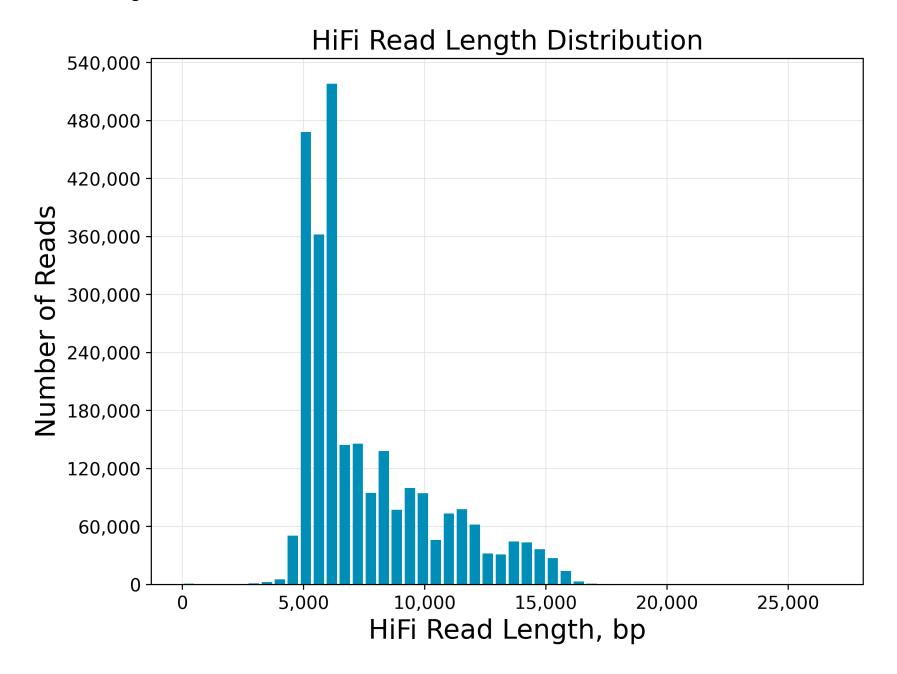
8,495 <Q20 Read Length (mean, bp) Q16 <Q20 Read Quality (median) <Q20 Read Quality (median) 16

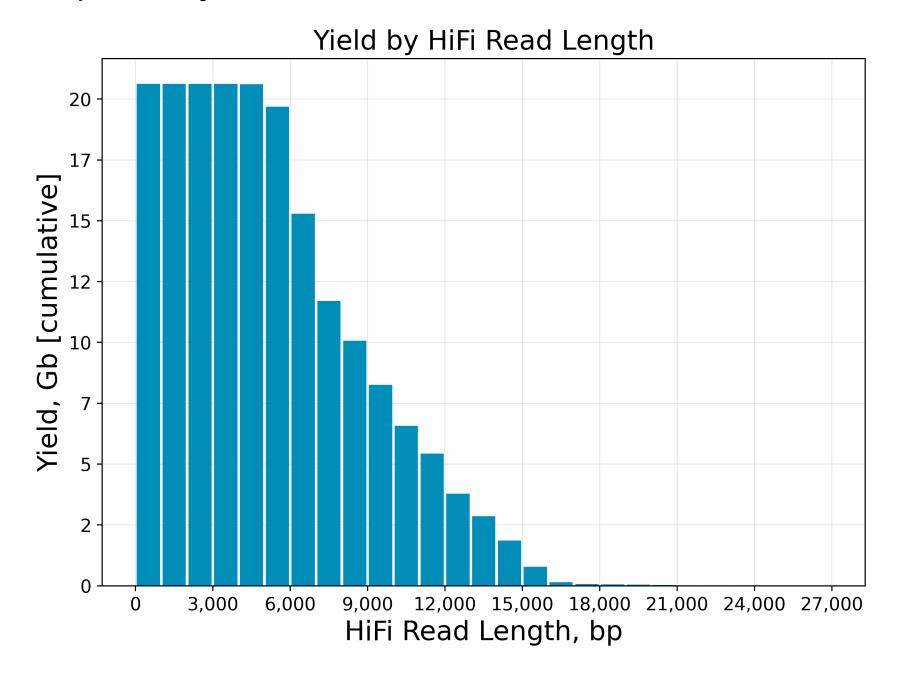
#### **HiFi Read Length Summary**

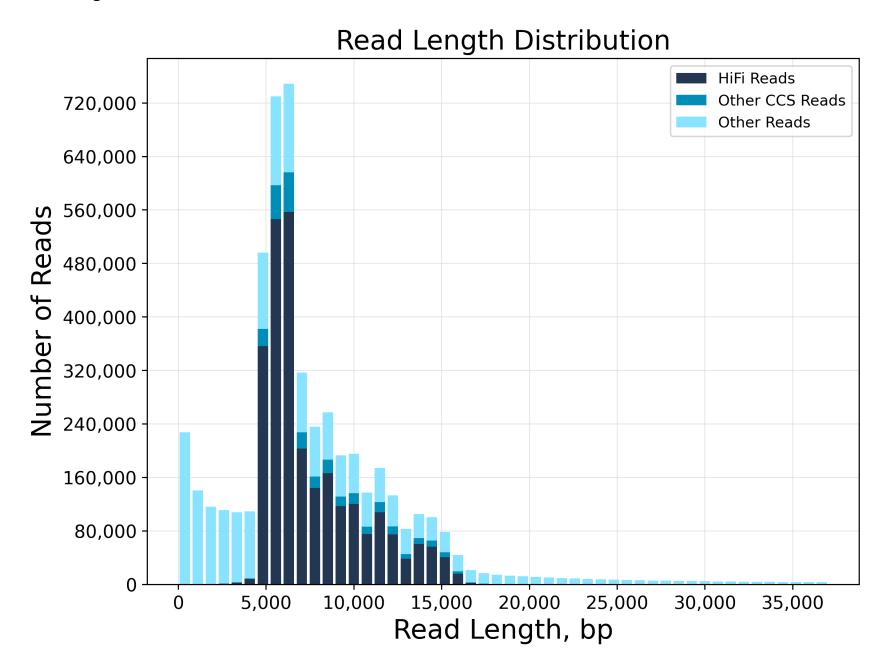
Read Length (bp)	Reads	Reads (%)	Yield (bp)	Yield (%)
0	2698938	100	20631192176	100
5,000	2502502	93	19692259928	95
10,000	524183	19	6565327143	32
15,000	49254	2	779427901	4
20,000	1329	0	31145426	0
25,000	308	0	8749227	0
30,000	83	0	2705806	0
35,000	15	0	558314	0
40,000	1	0	40559	0

### **HiFi Read Quality Summary**

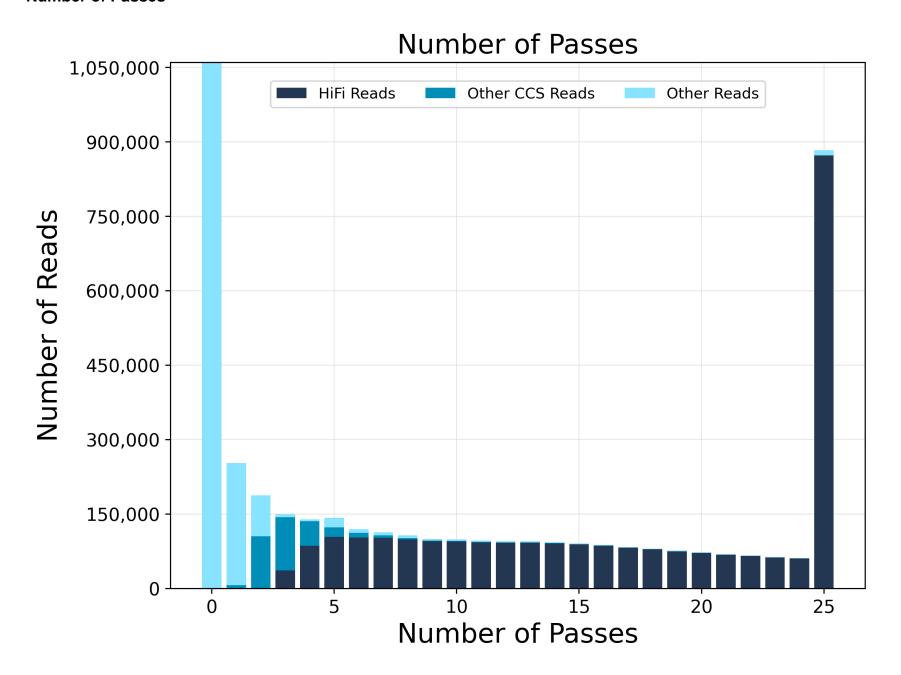
Read Quality (Phred)	Reads	Reads (%)	Yield (bp)	Yield (%)
Q20	2698938	100	20631192176	100
Q30	2184379	81	16330618985	79
Q40	1479519	55	10356615790	50
Q50	846276	31	5326940196	26



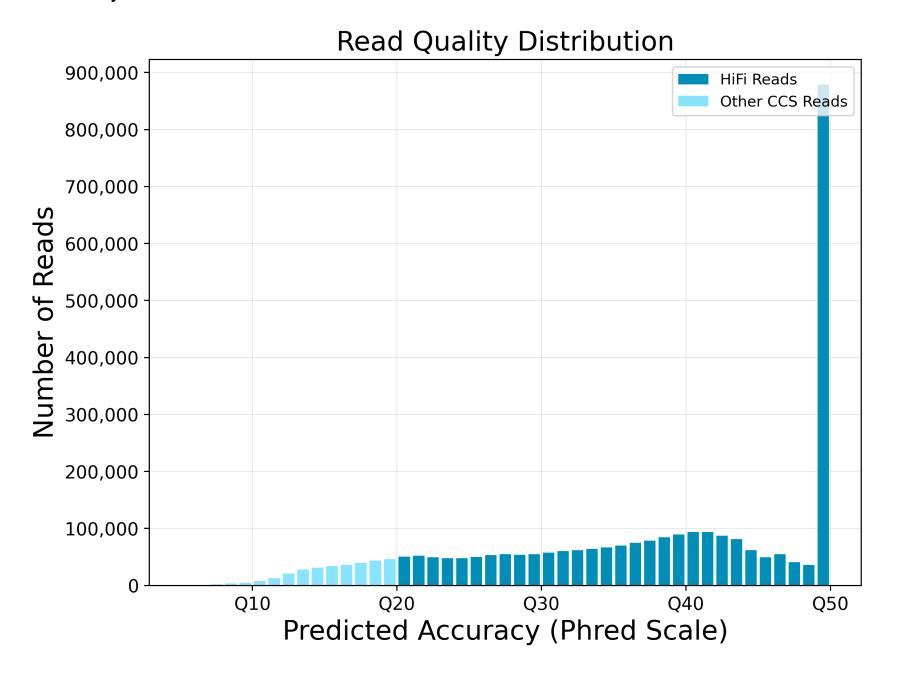




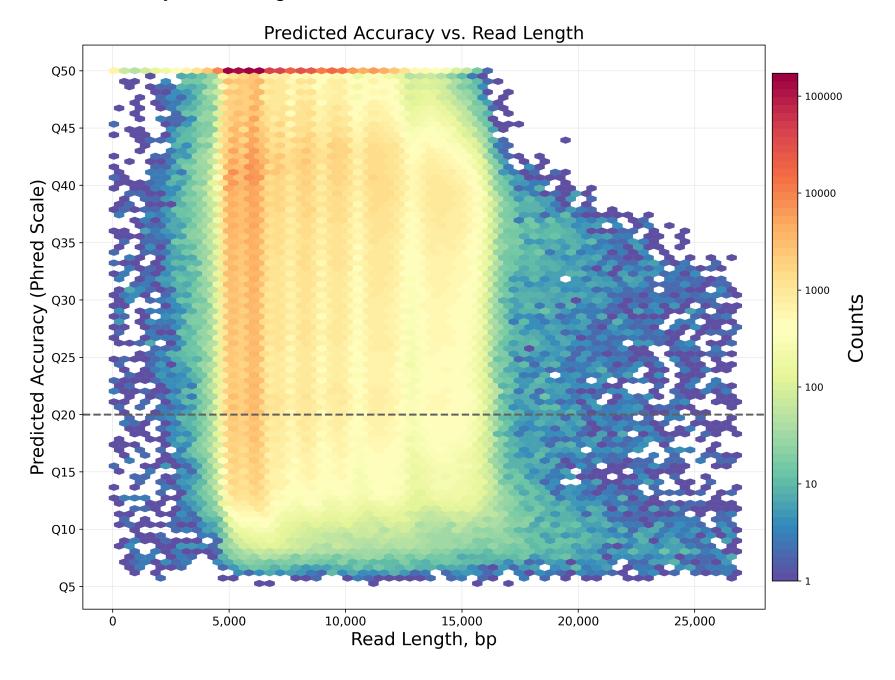
#### **Number of Passes**



#### **Read Quality Distribution**



### **Predicted Accuracy vs. Read Length**



## **Loading Report**

## Summary

 Productive ZMWs
 8,013,871

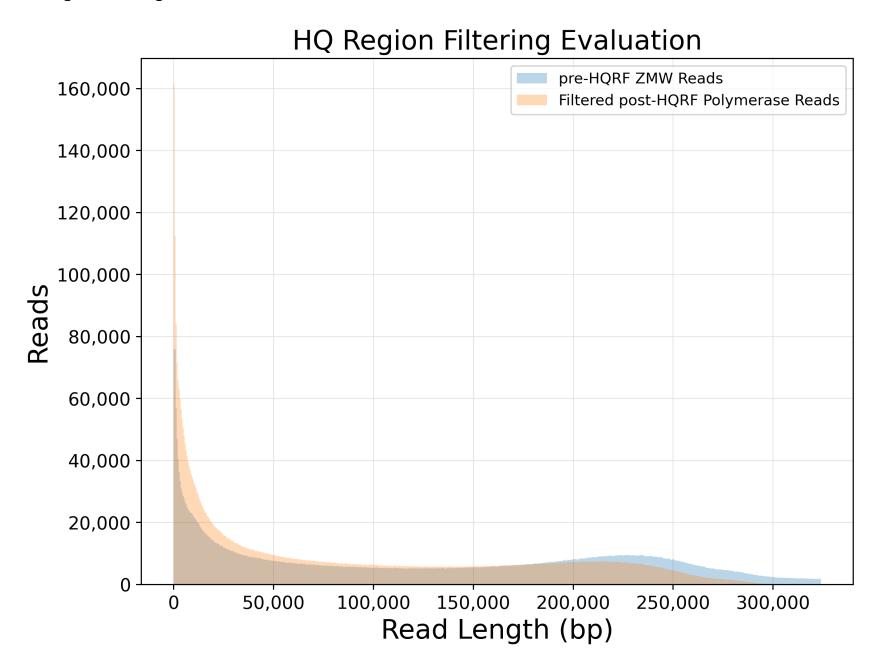
 Productivity 0
 2,386,314

 Productivity 1
 5,266,120

 Productivity 2
 362,237

## **Loading Statistics**

Collection Context	Productive ZMWs	Productivity 0	(%)	Productivity 1	(%)	Productivity 2	(%)	Loading type
m64219e_220210_175238	8013871	2386314	29.77	5266120	65.71	362237	4.52	Diffusion



# **Adapter Report**

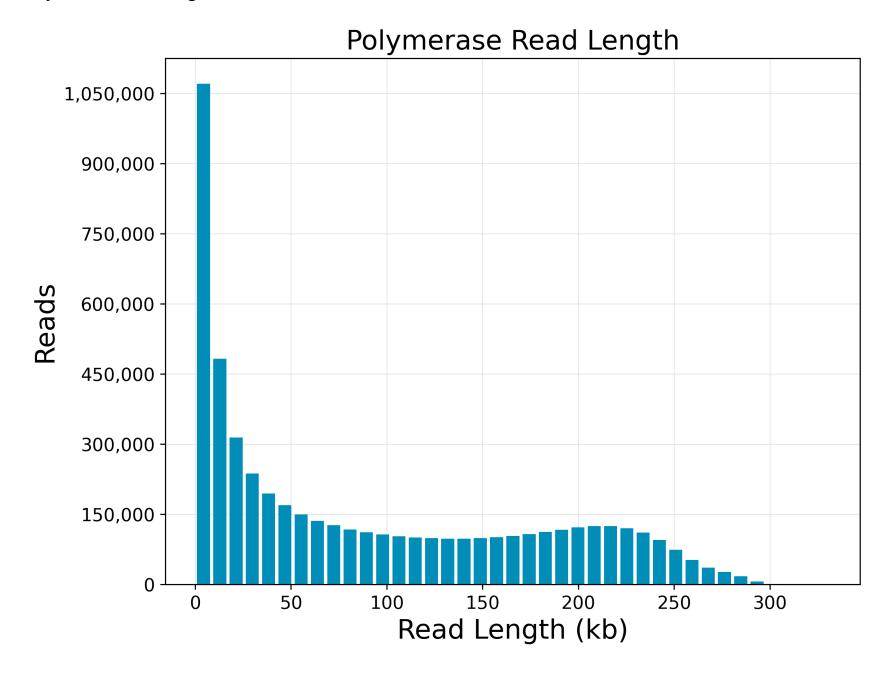
Adapter Dimers (0-10bp) %	0
Short Inserts (11-100bp) %	0.02
Local Base Rate	2.12

# **CCS Processing**

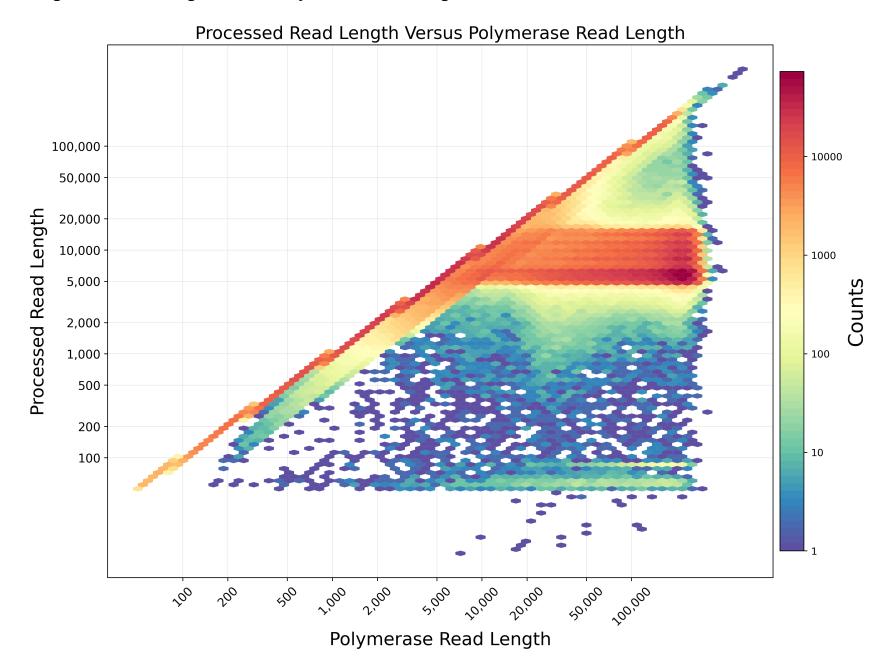
ZMWs input	5,265,100
ZMWs pass filters	3,008,653
ZMWs fail filters	2,256,447
ZMWs shortcut filters	2,048,106
ZMWs with tandem repeats	15,984
Below SNR threshold	53,496
Median length filter	0
Lacking full passes	0
Heteroduplex insertions	23,097
Coverage drops	4,504
Insufficient draft cov	93,074
Draft too different	0
Draft generation error	33,382
Draft abovemax-length	0
Draft belowmin-length	2
Reads failed polishing	1
Empty coverage windows	278
CCS did not converge	507
CCS below minimum RQ	0
Unknown error	0

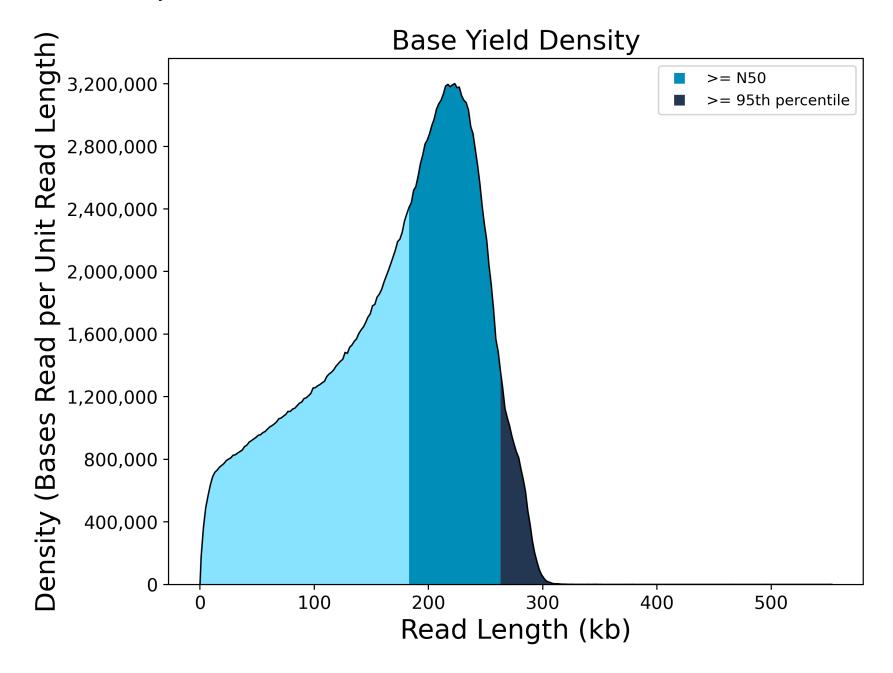
# **Raw Data Report**

Polymerase Read Bases	471,599,969,504
Polymerase Reads	5,265,320
Polymerase Read Length (mean)	89,567
Polymerase Read N50	184,750
Longest Subread Length (mean)	12,512
Longest Subread N50	15,750
Unique Molecular Yield	58,252,566,528



### **Longest Subread Length Versus Polymerase Read Length**





**No Sample Setup found** 

## **Instrument run(s)**

### Run 9438e774-5136-4404-9316-d369274f2427

#### Summary

Name SQ64219e-220210-NS2497-NS2542-NS2561

**Status** COMPLETE

 Created
 2022-02-10 13:53:02.249

 Started
 2022-02-10 17:42:36.836

 Completed
 2022-02-14 17:33:31.012

 Context
 r64219e\_20220210\_170414

Instrument Name64219eInstrument Serial Number64219e

 ICS Version
 10.1.0.119549

 Primary Analysis Version
 10.1.0.119549

 Chemistry Version
 10.2.0.133424

## Parent jobs (1)

### **Job 205**

### Summary

Job Type import-dataset

Pipeline cromwell.workflows.sl\_import\_ccs

Name import-dataset

**Comments** Description for job Import PacBio DataSet

**Created At** 2022-02-12 15:06:51.596

SMRT Link Version 10.2.0.133434

## Child jobs (1)

## Job 200

### Summary

Job Type analysis

Pipeline cromwell.workflows.pb\_export\_ccs

Name Export Reads of NS2497-ACLU0235-021022

Comments

**Created At** 2022-02-10 13:53:02.091

**SMRT Link Version** 10.2.0.133434

### **Output files**

File name	Size	Туре
m64219e_220210_175238.hifi_reads.bam	12,860,572,799	ConsensusReadBamFile
m64219e_220210_175238.hifi_reads.fastq.gz	13,566,946,562	Fastq
m64219e_220210_175238.hifi_reads.fasta.gz	7,250,798,113	Fasta
PacBio.FileTypes.Datastore file	769	Datastore
PacBio.FileTypes.Datastore file	759	Datastore
PacBio.FileTypes.Datastore file	758	Datastore
Analysis Log	10,055	log
SMRT Link Log	6,883	log