

Sheet1

FLAG flags pair itself mate proper? aligner?

One of the mate is unmapped

73	1+8+64 73	1	map	+	unmap	
133	1+4+128 133	2	unmap		map	+

89	1+8+16+64 89	1	map	+	unmap	-	
121	1+8+16+32+64	1	map	-	unmap	-	
165	1+4+32+128 165	2	unmap	+	map	-	ssaha
181	1+4+16+32+128	2	unmap	-	map	-	bwa

101	1+4+32+64 101	1	unmap	+	map	-	ssaha
117	1+4+16+32+64	1	unmap	-	map	+	bwa
153	1+8+16+128 153	2	map	-	unmap	+	
185	1+8+16+32+128	2	map	-	unmap	-	

69	1+4+64 69	1	unmap	+	map	+
137	1+8+128 137	2	map	+	unmap	+

Both unmapped

77	1+4+8+64 77	1	unmap	+	unmap	+
141	1+4+8+128 141	2	unmap	+	unmap	+

mapped in correct orientation and within insert size

99	1+2+32+64 99	1	map	+	map	-	y
147	0+1+2+16+128 147	2	map	-	map	+	y

83	1+2+16+64 83	1	map	-	map	+	y
163	1+2+32+128 163	2	map	+	map	-	y

mapped within the insert size but wrong orientation (++ or --)

67	1+2+64 67	1	map	+	map	+	y
131	1+2+128 131	2	map	+	map	+	y

115	1+2+16+32+64 115	1	map	-	map	-	y
179	1+2+16+32+128 179	2	map	-	map	-	y

mapped uniquely but wrong insert size, and could possibly reside in different contigs

81	1+16+64 81	1	map	-	map	+
161	1+32+128 161	2	map	+	map	-

97	1+32+64 97	1	map	+	map	-
145	1+16+128 145	2	map	-	map	+

65	1+64 65	1	map	+	map	+
129	1+128 129	2	map	+	map	+

113	1+16+32+64 113	1	map	-	map	-
177	1+16+32+128 177	2	map	-	map	-

Comment

the insert size.... , orientation do not seem to matter