MSG No. 183.187 $P6'm'm$ [Type III, hexagonal]

Table 1: Wyckoff site: `1a`, site symmetry: `6'm'm`

No.	position	mapping
1	$[0, 0, z]$	`[1,2,3,4,5,6,7,8,9,10,11,12]`

Table 2: Wyckoff site: `2b`, site symmetry: `3m'.`

No.	position	mapping
1	$\left[\frac{1}{3}, \frac{2}{3}, z\right]$	`[1,2,3,10,11,12]`
2	$\left[\frac{2}{3}, \frac{1}{3}, z\right]$	`[4,5,6,7,8,9]`

Table 3: Wyckoff site: `3c`, site symmetry: `2'm'm`

No.	position	mapping
1	$\left[\frac{1}{2}, 0, z\right]$	`[1,5,8,10]`
2	$\left[0, \frac{1}{2}, z\right]$	`[2,6,9,11]`
3	$\left[\frac{1}{2}, \frac{1}{2}, z\right]$	`[3,4,7,12]`

Table 4: Wyckoff site: `6d`, site symmetry: `..m`

No.	position	mapping
1	$[x, 0, z]$	`[1,5]`
2	$[0, x, z]$	`[2,6]`
3	$[-x, -x, z]$	`[3,4]`
4	$[x, x, z]$	`[7,12]`
5	$[-x, 0, z]$	`[8,10]`
6	$[0, -x, z]$	`[9,11]`

Table 5: Wyckoff site: `6e`, site symmetry: `.m'.`

No.	position	mapping
1	$[x, -x, z]$	`[1,11]`
2	$[x, 2x, z]$	`[2,12]`
3	$[-2x, -x, z]$	`[3,10]`
4	$[-x, -2x, z]$	`[4,9]`
5	$[2x, x, z]$	`[5,7]`
6	$[-x, x, z]$	`[6,8]`

Table 6: Wyckoff site: `12f`, site symmetry: `1`

No.	position	mapping
1	$[x,\ y,\ z]$	`[1]`
2	$[-y,\ x-y,\ z]$	`[2]`
3	$[-x+y,\ -x,\ z]$	`[3]`
4	$[-x,\ -x+y,\ z]$	`[4]`
5	$[x-y,\ -y,\ z]$	`[5]`
6	$[y,\ x,\ z]$	`[6]`
7	$[x-y,\ x,\ z]$	`[7]`
8	$[-x,\ -y,\ z]$	`[8]`
9	$[y,\ -x+y,\ z]$	`[9]`
10	$[-x+y,\ y,\ z]$	`[10]`
11	$[-y,\ -x,\ z]$	`[11]`
12	$[x,\ x-y,\ z]$	`[12]`