

Grains Which Have Been Removed from Clusters (not shown in the overall cluster images)

This is a list of just the grains that have been removed from each cluster for characterization and /or allocation. All of these clusters have further grains that have not yet been numbered.

L2005 Cluster #12

B 12
B 13 (Unallocated)
B 14
B 15 (Unallocated)
B 16 (Unallocated)
B 17
B 18

L2005 Cluster #13

C 1
C 13
C 25
C 26
C 31
C 34
C 38
*B 1
*B 2
*B 3
AL 1
AL 2
AL 3
AL 4
AL 5
AL 6
AL 7

L2005 Cluster #14

C 2 (Unallocated)
C 3 (Unallocated)
C 14
C 29
C 30
C 33
C 36

L2005 Cluster #15

C 4
C 15
C 27
C 28
C 32
C 35
C 39
C 41
*C 1
*C 2
*C 3
AJ 1
AK 2

L2005 Cluster #16

C 16 (Unallocated)

L2005 Cluster #17

C 17 E
C 19
C 20
C 21
6
7

L2005 Cluster #18

C 5
C 18
C 22
C 23
C 24
C 37
C 40
C 42

L2005 Cluster #19

D 1
D 19
D 25
D 26
D 27
D 35
D 36
8
9

L2005 Cluster #24

D 24 (Unallocated)
D 30
D 32
D 33
D 34
14
15
16
17
18

L2005 Cluster #25

E 1 (Unallocated)
E 2
E 3 (Unallocated)
E 25
E 31
E 32
E 36
E 42

L2005 Cluster #26

E 4
E 26
E 33
E 37
E 38
E 40
E 43
10
11

L2005 Cluster #28

E 28
E 34
E 35
E 39
E 41
12
13

L2005 Cluster #30

E 30

L2005 Cluster #31

F 1
F 2 (Unallocated)
F 3
F 31
F 37
F 38
F 39
F 40
*A 1
*A 2
*A 3
*A 4
19
20
21
22
23

L2005 Cluster #33

F 4 (Unallocated)
F 33

L2006 Cluster #2

A 3
A 4 (Unallocated)
A 19
A 24
A 26
A 27
A 29

L2006 Cluster #3

A 5
 A 6
 A 7
 A 8 (Unallocated)
 A 9 (Unallocated)
 A 10 (Unallocated)
 A 20
 A 25
 A 30

L2006 Cluster #4

A 11
 A 12
 A 13
 A 21
 A 28
 A 31
 A 33
 *A 1
 *A 2
 *B 1
 *B 2
 *B 3
 3
 4
 5
 14
 15
 16

L2006 Cluster #6

A 15
 A 16 (Unallocated)
 A 22
 A 32
 *A 3
 *A 4

L2006 Cluster #9

B 1
 B 2 (Unallocated)
 B 3
 B 4 (Unallocated)
 *A 5
 *A 6

L2006 Cluster #10

B 5
 B 6 (Unallocated)
 B 7
 B 22
 *A 7
 *A 8

L2006 Cluster #11

B 8
 B 19
 12

L2006 Cluster #14

B 15
 B 16
 B 17
 B 18
 B 20
 B 21
 B 23
 *A 9
 *A 10
 6
 7
 8
 9
 10
 11
 13
 17
 18
 19

L2008 Cluster #1

A 1 (Unallocated)

L2008 Cluster #2

A 2
 A 3 (Unallocated)

L2008 Cluster #3

A 4
 A 5 (Unallocated)
 *C 1

L2008 Cluster #4

A 6
A 7
*B 1
*B 2
*C 2

L2008 Cluster #5

A 8
A 9
*A 1
*C 3
1

L2008 Cluster #6

B 1

L2008 Cluster #8

B 3 (Unallocated)
B 4 (Unallocated)

L2008 Cluster #9

B 5 (Unallocated)

L2008 Cluster #10

B 6 (Unallocated)

L2008 Cluster #11

C 1
C 2 (Unallocated)

L2008 Cluster #12

C 3
C 4 (Unallocated)

L2008 Cluster #13

C 5 (Unallocated)
C 6 (Unallocated)

L2008 Cluster #14

C 7 (Unallocated)

L2008 Cluster #16

D 1 (Unallocated)
D 2 (Unallocated)

L2008 Cluster #17

D 3
D 4
D 5 (Unallocated)

L2008 Cluster #19

D 9 (Unallocated)

L2008 Cluster #20

D 10 (Unallocated)
D 11 (Unallocated)

L2009 Cluster #2

A 2
A 10

L2009 Cluster #3

A 3
A 11
*A 1
*D 1
*D 2

L2009 Cluster #4

A 4
A 12
*A 2
*D 3
*D 4

L2009 Cluster #5

A 5
A 6 (Unallocated)
*H 1
*H 2
*H 3

L2009 Cluster #6

A 7 (Unallocated)

L2009 Cluster #7

A 8
 *A 3
 *D 5
 *D 6
 *E 1
 *E 2
 *E 3
 *G 1
 *G 2
 *G 3

L2009 Cluster #8

B 1
 *A 4
 *D 7
 *D 8

L2009 Cluster #9

B 2

L2009 Cluster #10

B 3
 *A 5
 *D 9
 *D 10
 *E 4
 *E 5
 *E 6

L2009 Cluster #11

B 4
 *A 6

L2009 Cluster #12

B 5
 B 8 (Unallocated)
 B 9 (Unallocated)
 *A 7

L2009 Cluster #13

B 6
 O 1
 O 2
 O 3
 O 4
 O 5
 O 6
 O 7
 O 8
 O 9
 O 10
 O 11
 O 12
 O 13
 O 14
 O 15
 O 16
 *C 1
 *D 11
 *D 12
 *F 1
 *F 2
 *F 3
 *I 1
 *I 2
 *I 3
 *I 4

L2009 Cluster #14

B 7 (Unallocated)
 *A 8

L2011 Cluster #1

A 1 (Unallocated)

L2011 Cluster #2

A 2 (Unallocated)

L2011 Cluster #3

A 3
 A 5
 A 7
 A 8
 U 1
 *H 1
 AD 1
 AD 2
 AD 3

L2011 Cluster #5

B 1
 B 5
 B 12
 B 13
 B 14
 B 15
 B 16
 W 1
 *F 1
 *F 2
 *H 2
 AC 1
 AD 5
 AD 6
 AD 7
 1
 2
 3
 4
 5
 6
 7

L2011 Cluster #6

B 2
 B 6
 B 10
 X 1
 *A 1
 *A 2
 *H 3
 AD 8

L2011 Cluster #7

B 3
 B 7
 B 11
 *A 3
 *A 4
 *B 1
 *B 2
 *B 3
 *H 4
 AD 9
 AD 10
 AD 11

L2011 Cluster #8

B 4
 B 8
 B 9
 B 17
 *H 5
 AC 2
 AD 12
 AD 13
 AD 14
 8
 9
 10

L2011 Cluster #9

C 1 (Unallocated)
 C 2 (Unallocated)

L2011 Cluster #10

C 3 (Unallocated)
 C 4 (Unallocated)
 *H 6
 AA 1
 AC 3
 AD 15
 AD 16

L2011 Cluster #11

C 5
 C 6
 C 8
 C 9
 C 10
 C 11
 C 12
 C 13
 *A 5
 *A 6
 *B 4
 *B 5
 *B 6
 *D 1
 *D 2
 *D 3
 *D 4

L2011 Cluster #12

C 7 (Unallocated)

L2011 Cluster #13

D 1 (Unallocated)
 D 2 (Unallocated)

L2011 Cluster #15

D 7
 D 9
 D 10
 *A 7
 *A 8
 *H 7
 AD 17
 AD 18

L2011 Cluster #16

D 6
 D 8
 D 11

L2011 Cluster #17

E 1 (Unallocated)
 E 2 (Unallocated)
 E 8
 E 9
 *G 1
 *G 2
 *H 8
 AD 19
 AD 20

L2011 Cluster #18

E 3 (Unallocated)
 E 4 (Unallocated)

L2011 Cluster #20

E 6 (Unallocated)
 E 7 (Unallocated)

L2011 Cluster #22

F 2
 F 5
 F 7
 *A 9
 *A 10
 *C 1
 *C 2
 *C 3
 *H 9
 AD 21
 AD 22
 AD 23

L2021 Cluster #1

A 1
 J 3
 K 1
 M 1
 N 1
 *C 1
 *C 2

L2021 Cluster #2

A 2 (Unallocated)

L2021 Cluster #3

A 3 (Unallocated)
 A 4 (Unallocated)
 I 1

L2021 Cluster #5

A 6
 J 2
 K 3
 L 2
 M 2
 N 2
 *A 1
 *A 2
 *A 3
 *C 5
 *C 6

L2021 Cluster #6

A 7
 I 2
 J 1
 K 4
 L 3
 M 3
 N 3
 *B 1
 *B 2
 *B 3
 *C 7
 *C 8

L2036 Cluster #1

A 1 (Unallocated)

L2036 Cluster #2

A 2
 A 3
 R 1
 U 4
 V 1
 V 4
 *C 1
 *C 2

L2036 Cluster #3

A 4
 R 3
 *C 3
 *C 4

L2036 Cluster #4

A 5
 A 6 (Unallocated)
 R 2
 T 1
 U 1
 V 5
 V 17
 W 1
 X 1
 X 2
 X 3
 X 4
 X 5
 X 6
 X 7
 X 8
 X 9
 X 10
 *A 1
 *A 2
 *A 3
 *C 5
 *C 6
 AA 1
 AA 2
 AA 3
 AA 4
 AA 5
 AA 6
 AA 7
 AA 8
 AA 9
 AA 10
 AA 11
 AA 12
 AA 13
 AA 14
 AA 15
 AB 1
 AC 1
 AD 1

L2036 Cluster #7

B 1 (Unallocated)
 R 4
 U 5
 V 9
 V 13
 V 18

L2036 Cluster #9

B 3
 B 4 (Unallocated)
 B 5 (Unallocated)
 B 6 (Unallocated)
 B 8
 R 5
 S 1
 V 2
 V 14
 V 19
 W 2
 *D 1
 *D 2
 *D 3
 *D 4

L2036 Cluster #13

C 1
 R 6
 V 6
 V 20

L2036 Cluster #15

C 4 (Unallocated)

L2036 Cluster #16

C 5
 C 6
 R 8
 U 2
 V 7
 V 21
 W 3

L2036 Cluster #17

C 9
 R 9
 U 3
 V 10
 V 15
 V 22
 W 4
 *E 1
 *E 2
 *E 3
 *E 4

L2036 Cluster #18

C 11
 C 13 (Unallocated)
 V 8
 W 5
 Z 1
 Z 2
 Z 3
 Z 4
 Z 5
 *F 1
 *F 2
 *F 3
 *F 4

L2036 Cluster #19

D 2
 R 10
 V 23
 W 6
 Z 6
 Z 7
 Z 8
 Z 9
 Z 10
 *C 7
 *C 8

L2036 Cluster #20

D 3
 D 4
 D 5 (Unallocated)
 R 11
 V 3
 V 24
 *B 1
 *B 2
 *B 3
 *C 9
 *C 10

L2036 Cluster #21

D 6
 V 11
 V 16
 V 25

 W 7
 *H 1
 *H 2
 *H 3
 *H 4

L2036 Cluster #23

D 9 (Unallocated)
 O 8 (Unallocated)

L2036 Cluster #24

D 10
 O 9
 O 10
 R 13
 V 12
 V 26
 *C 11
 *C 12
 *I 1
 *I 2
 *I 3
 *I 4

L2047 Cluster #1

A 1
 G 1

L2047 Cluster #2

A 2
 A 3 (Unallocated)
 G 2

L2047 Cluster #3

A 5
 A 6

U2001 Cluster #1

A 19 (Unallocated)
 D 8

U2001 Cluster #2

A 1 (Unallocated)
 A 2 (Unallocated)
 E 16

U2011 Cluster #1

*A 1 (Unallocated)
 *A 2 (Unallocated)
 *A 3
 *A 4

U2011 Cluster #2

C 2
 C 3
 C 4
 *B 1
 *B 2
 *B 3

U2015 Cluster #1

B 1 (Unallocated)
B 2 (Unallocated)
B 3
B 4
B 5 (Unallocated)
B 6 (Unallocated)
G 1
*A 1 (Unallocated)
*A 2
*A 3 (Unallocated)
*A 4
*A 5
*A 6
*A 7
*B 1
*B 2
*B 3

U2022 Cluster #1

A 3
E 8
G 3

W7013 Cluster #1

A 7
A 8
A 11
B 13
B 14
B 15
B 16 (Unallocated)
B 17
C 2

U2015 Cluster #2

B 9
G 3
*B 1
*B 2
*B 3

U2015 Cluster #3

A 5 (Unallocated)
A 6 (Unallocated)
A 7 (Unallocated)
B 7 (Unallocated)
B 8
B 10

U2015 Cluster #4

A 8

U2015 Cluster #5**U2015 Cluster #6**

B 13

U2015 Cluster #7

W7029 Cluster #1

- *A 1
- *A 2
- *A 3 (Unallocated)
- *A 4 (Unallocated)
- *A 5 (Unallocated)
- *A 6 (Unallocated)
- *A 7 (Unallocated)
- *A 8
- *A 9 (Unallocated)
- *A 10 (Unallocated)
- *A 11 (Unallocated)
- *A 13
- *A 14 (Unallocated)
- *A 15
- *A 16
- *A 17
- *A 18 (Unallocated)
- *A 19 (Unallocated)
- *A 20 (Unallocated)
- *A 21 (Unallocated)
- *A 22
- *A 23
- *A 24
- *A 25
- *A 26
- *A 27
- *A 28
- *A 29
- *A 30
- *A 31
- *A 32
- *A 33
- *A 34

W7029 Cluster #2

- *B 1 (Unallocated)
- *B 2
- *B 3 (Unallocated)
- *B 4
- *B 5
- *B 6
- *B 7
- *B 8 (Unallocated)
- *B 9
- *B 10

W7031 Cluster #1

- *A 1 (Unallocated)
- *A 2
- *A 3
- *A 4
- *A 5

W7031 Cluster #2

- *B 1
- *B 2 (Unallocated)
- *B 3 (Unallocated)
- *B 4
- *B 5

W7066 Cluster #1

- *A 1 (Unallocated)
- *A 2
- *A 3
- *A 4
- *A 5
- *A 6

W7069 Cluster #1

- *A 1 (Unallocated)
- *A 2
- *A 3 (Unallocated)
- *A 4

W7071 Cluster #1

- B 1 (Unallocated)
- *A 1 (Unallocated)
- *A 2 (Unallocated)
- *A 3
- *A 4

W7074 Cluster #1

- D 9 (Unallocated)
- D 10
- D 11

W7074 Cluster #2

- F 6