

March 31, 2023

## Mineralogical Processing Quality Control Results

### QC Sample AER22TS-5002 (*ODM Batch 2820*)

#### Prepared:

- KIM's selected and photographed by Dean Meek, 2022-Nov-17

#### Blank:

- Brownvale till (~15 kg) – collected in 2022

#### Spike (15 KIMs):

- 0.5-1.0 mm: 3 GP from sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM)
  - 0.25-0.5 mm: 4 GP from sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 2 CR from sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM)
  - 0.25-0.5 mm: 3 CR from sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 1 FO from sample 84B-2003-BS-3005 (K4 area, picked by ODM)
  - 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 2 IM from sample 03MPB-007 (sampled by Beth McClenaghan, K4 area, picked by ODM)

#### Recovery (13/15 KIMs – 87%):

- 0.5-1.0 mm: 3 out of 3 GP (100%) *note: 1 GP grain picked from archive split after review of results*
  - 0.25-0.5 mm: 4 out of 4 GP (100%)
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 2 out of 2 CR (100%) *note: 2 CR grains picked from archive split after review of results*
  - 0.25-0.5 mm: 1 out of 3 CR (33%) *note: 1 CR grain picked from archive split after review of results*
- 
- 0.5-1.0 mm: 1 out of 1 FO (100%) *note: 1 FO grain picked from archive split after review of results*
  - 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 2 out of 2 IM (100%) *note: 1 IM grain picked from archive split after review of results*

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**QC Sample AER22TS-5005 (*ODM Batch 2852*)****Prepared:**

- KIM's selected and photographed by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (11 KIMs):**

- 0.5-1.0 mm: 0 GP
  - 0.25-0.5 mm: 6 GP from Sample 84B-2003-BS-3008 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 2 CR from Sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 3 FO from Sample 84B-2003-BS-3007 (K4 area, picked by ODM)
  - 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 0 IM

**Recovery (11/11 KIMs – 100%):**

- 0.5-1.0 mm: 0 GP
  - 0.25-0.5 mm: 6 out of 6 GP (100%)
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 3 out of 2 CR (150%)
- 
- 0.5-1.0 mm: 3 out of 3 FO (100%)
  - 0.25-0.5 mm: 1 out of 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 0 IM

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**QC Sample AER22TS-5009 (ODM Batch 2848)****Prepared:**

- KIM's selected and photographed by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (13 KIMs):**

- 0.5-1.0 mm: 5 GP from Sample 84B-2003-BS-3006 (K4 area, picked by ODM)
- 0.25-0.5 mm: 3 GP from Sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)

---

- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 2 GO from Sample 84B-2003-BS-3002 (K4 area, picked by ODM)

---

- 0.5-1.0 mm: 0 CR
- 0.25-0.5 mm: 1 CR from Sample 03MPB-006 (sampled by Beth McClenaghan, K4 area, picked by ODM)

---

- 0.5-1.0 mm: 0 FO
- 0.25-0.5 mm: 0 FO

---

- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 1 DC from Sample 03MPB-006 (sampled by Beth McClenaghan, K4 area, picked by ODM)

---

- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 1 IM from Sample 84B-2003-BS-3002 (K4 area, picked by ODM)

**Recovery (8/13 KIMs – 61%):**

- 0.5-1.0 mm: 4 out of 5 GP (80%)
- 0.25-0.5 mm: 2 out of 3 GP (66%)

---

- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 0 out of 2 GO (0%)

---

- 0.5-1.0 mm: 0 CR
- 0.25-0.5 mm: 1 out of 1 CR (100%) *note: 1 CR grain identified from repicking original HMC after review of results*

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- 0.5-1.0 mm: 2 out of 0 FO - *possibly the 2 grains classified as GO by original ODM processing?*
- 0.25-0.5 mm: 0 FO

---

- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 3 out of 1 DC (300%)

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- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 0 out of 1 IM (0%)

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**QC Sample AER22TS-5011 (ODM Batch 2844)****Prepared:**

- KIM's selected and photographed by Dean Meek, 2022-Nov-17

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (12 KIMs):**

- 0.5-1.0 mm: 2 GP from sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 0.25-0.5 mm: 6 GP from sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)

- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO

- 
- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 0 CR

- 
- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO

- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC

- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 4 IM from sample 03MPB-007 (sampled by Beth McClenaghan, K4 area, picked by ODM)

**Recovery (11/12 KIMs – 92%):**

- 0.5-1.0 mm: 0 out of 2 GP (0%)
- 0.25-0.5 mm: 8 out of 6 GP (133%) – *excess grains likely from 0.5-1.0 mm fraction*

- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO

- 
- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 0 CR

- 
- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO

- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC

- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 3 out of 4 IM (75%)

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**QC Sample AER22TS-5014 (*ODM Batch 2849*)****Prepared:**

- True blank prepared by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (0 KIMs):**

- 0.5-1.0 mm: 0 GP
  - 0.25-0.5 mm: 0 GP
- 

- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 

- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 0 CR
- 

- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO
- 

- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 

- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 0 IM

**Recovery (1 KIMs):**

- 0.5-1.0 mm: 0 GP
  - 0.25-0.5 mm: 1 out of 0 GP
- 

- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 

- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 0 CR
- 

- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO
- 

- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 

- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 0 IM

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**QC Sample AER22TS-5022****Prepared:**

- KIM's selected and photographed by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (12 KIMs):**

- 0.5-1.0 mm: 0 GP
- 0.25-0.5 mm: 5 GP from Sample 84B-2003-BS-3005 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 1 GO from Sample 03MPB-006 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 1 CR from Sample 84B-2003-BS-3002 (K4 area, picked by ODM), 1 CR from Sample 03MPB-007 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 0.25-0.5 mm: 0 CR
- 
- 0.5-1.0 mm: 0 FO
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 1 IM from Sample 03MPB-007 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 0.25-0.5 mm: 3 IM from Sample 03MPB-007 (sampled by Beth McClenaghan, K4 area, picked by ODM)

**Recovery (10/12 KIMs – 83%):**

- 0.5-1.0 mm: 0 GP
- 0.25-0.5 mm: 5 out of 5 GP (100%)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 1 out of 1 GO (100%)
- 
- 0.5-1.0 mm: 0 out of 2 CR (0%)
- 0.25-0.5 mm: 0 CR
- 
- 0.5-1.0 mm: 2 out of 0 FO
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 1 out of 0 DC
- 0.25-0.5 mm: 1 out of 0 DC
- 
- 0.5-1.0 mm: 1 out of 1 IM (100%)
- 0.25-0.5 mm: 3 out of 3 IM (100%)

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**QC Sample AER22TS-5036 (*ODM Batch 2846*)****Prepared:**

- True blank prepared by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (0 KIMs):**

- 0.5-1.0 mm: 0 GP
  - 0.25-0.5 mm: 0 GP
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 0 CR
- 
- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 0 IM

**Recovery (0 KIMs):**

- 0.5-1.0 mm: 0 GP
  - 0.25-0.5 mm: 0 GP
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 0 CR
- 
- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 0 IM

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**QC Sample AER22TS-5039 (ODM Batch 2843)****Prepared:**

- KIM's selected and photographed by Dean Meek, 2022-Nov-17

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (11 KIMs):**

- 0.5-1.0 mm: 1 GP from sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM)
  - 0.25-0.5 mm: 3 GP from sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 3 GO from sample 84B-2003-BS-3003 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 2 CR from sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM)
  - 0.25-0.5 mm: 2 CR from sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 0 IM

**Recovery (6/11 KIMs – 55%):**

- 0.5-1.0 mm: 1 out of 1 GP (100%)
  - 0.25-0.5 mm: 3 out of 3 GP (100%)
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 out of 3 GO (0%)
- 
- 0.5-1.0 mm: 3 out of 2 CR (150%) *note: 3 CR grain identified from repicking original HMC after review of results, noted that 1 grain was broken into 2 pieces.*
  - 0.25-0.5 mm: 0 out of 2 CR (0%)
- 
- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
  - 0.25-0.5 mm: 0 IM



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## QC Sample AER22TS-5052 (*ODM Batch 2851*)

### Prepared:

- KIM's selected and photographed by Calla Knudson, 2022-Nov-24

### Blank:

- Brownvale till (~15 kg) – collected in 2022

### Spike (14 KIMs):

- 0.5-1.0 mm: 4 GP from Sample 84B-2003-BS-3006 (K4 area, picked by ODM)
- 0.25-0.5 mm: 5 GP from Sample 84B-2003-BS-3007 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 1 GO from Sample 03MPB-005 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 CR
- 0.25-0.5 mm: 2 CR from Sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 FO
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 2 IM from Sample 84B-2003-BS-3004 (K4 area, picked by ODM)

### Recovery (10/14 KIMs – 71%):

- 0.5-1.0 mm: 4 out of 4 GP (100%) *note: 1 GP grain picked from re-processed table reject fraction after review of results.*
- 0.25-0.5 mm: 5 out of 5 GP (100%)
- 
- 0.5-1.0 mm: 1 out of 0 GO (grain likely from 0.25-0.5 mm fraction – 100%)
- 0.25-0.5 mm: 0 out of 1 GO
- 
- 0.5-1.0 mm: 0 CR
- 0.25-0.5 mm: 0 out of 2 CR (0%)
- 
- 0.5-1.0 mm: 0 FO
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 0 out of 2 IM (0%)

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**QC Sample AER22TS-5061 (ODM Batch 2845)****Prepared:**

- KIM's selected and photographed by Dean Meek, 2022-Nov-17

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (14 KIMs):**

- 0.5-1.0 mm: 1 GP from sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM), 4 GP from sample 84B-2003-BS-3003 (K4 area, picked by ODM)
  - 0.25-0.5 mm: 5 GP from sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 0 CR
- 
- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 2 DC from sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 1 IM from sample 03MPB-006 (sampled by Beth McClenaghan, K4 area, picked by ODM)
  - 0.25-0.5 mm: 1 IM from sample 03MPB-006 [crustal ilmenite – SEM checked] (sampled by Beth McClenaghan, K4 area, picked by ODM)

**Recovery (12/14 KIMs – 85%):**

- 0.5-1.0 mm: 4 out of 5 GP (80%)
  - 0.25-0.5 mm: 5 out of 5 GP (100%)
- 
- 0.5-1.0 mm: 0 GO
  - 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 0 CR
  - 0.25-0.5 mm: 0 CR
- 
- 0.5-1.0 mm: 0 FO
  - 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
  - 0.25-0.5 mm: 3 out of 2 DC (150%)
- 
- 0.5-1.0 mm: 0 out of 1 IM (0%)
  - 0.25-0.5 mm: 0 out of 1 IM (0%)

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**QC Sample AER22TS-5070 (ODM Batch 2850)****Prepared:**

- KIM's selected and photographed by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (13 KIMs):**

- 0.5-1.0 mm: 0 GP
- 0.25-0.5 mm: 6 GP from Sample 84B-2003-BS-3004 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 4 GO from Sample 84B-2003-BS-3003 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 2 CR from Sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 0.25-0.5 mm: 0 CR
- 
- 0.5-1.0 mm: 0 FO
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 1 IM from Sample 03MPB-007 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 0.25-0.5 mm: 0 IM

**Recovery (6/13 KIMs – 46%):**

- 0.5-1.0 mm: 0 GP
- 0.25-0.5 mm: 3 out of 6 GP (50%) *note: 2 GP grains identified from processing archived split after review of results*
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 0 out of 4 GO (0%)
- 
- 0.5-1.0 mm: 1 out of 2 CR (50%) *note: 1 CR grain identified from processing archived split after review of results*
- 0.25-0.5 mm: 2 out of 0 CR – *note: 2 CR grains identified from processing archived split after review of results; likely this was 1 of the 0.5-1.0 mm grains broken into 2 pieces.*
- 
- 0.5-1.0 mm: 0 FO
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 1 out of 1 IM (100%) *note: 1 IM grain identified from processing archived split after review of results*
- 0.25-0.5 mm: 0 IM

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**QC Sample AER22TS-5074 (ODM Batch 2847)****Prepared:**

- KIM's selected and photographed by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (10 KIMs):**

- 0.5-1.0 mm: 0 GP
- 0.25-0.5 mm: 5 GP from Sample 84B-2003-BS-3002 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 2 GO from Sample 84B-2003-BS-3003 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 1 CR from Sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 0.25-0.5 mm: 0 CR
- 
- 0.5-1.0 mm: 1 FO from Sample 84B-2003-BS-3007 (K4 area, picked by ODM)
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 1 IM from Sample 03MPB-007 (sampled by Beth McClenaghan, K4 area, picked by ODM)

**Recovery (7/10 KIMs – 70%):**

- 0.5-1.0 mm: 0 GP
- 0.25-0.5 mm: 5 out of 5 GP (100%)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 0 out of 2 GO (0%)
- 
- 0.5-1.0 mm: 0 out of 1 CR (0%)
- 0.25-0.5 mm: 1 out of 0 CR *note: 1 CR grain identified from processing archive split after review of results; potentially same spiked grain as originally listed in the 0.5 – 1.0 mm fraction listed above.*
- 
- 0.5-1.0 mm: 1 out of 1 FO (100%)
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 1 out of 0 DC
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 0 out of 1 IM (0%)

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**QC Sample AER22TS-5087 (*ODM Batch 2850*)****Prepared:**

- KIM's selected and photographed by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (12 KIMs):**

- 0.5-1.0 mm: 5 GP from Sample 84B-2003-BS-3002 (K4 area, picked by ODM)
- 0.25-0.5 mm: 0 GP
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 3 GO from Sample 84B-2003-BS-3004 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 CR
- 0.25-0.5 mm: 2 CR from Sample 03MPB-002 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 FO
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 1 DC from Sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 1 IM from Sample 03MPB-002 (sampled by Beth McClenaghan, K4 area, picked by ODM)

**Recovery (7/12 KIMs – 58%):**

- 0.5-1.0 mm: 5 out of 5 GP (100%)
- 0.25-0.5 mm: 0 GP
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 0 out of 3 GO (0%)
- 
- 0.5-1.0 mm: 0 CR
- 0.25-0.5 mm: 0 out of 2 CR (0%)
- 
- 0.5-1.0 mm: 0 FO
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 2 out of 1 DC (200%)
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 1 out of 1 IM (100%)

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**QC Sample AER22TS-5093 (ODM Batch 2851)****Prepared:**

- KIM's selected and photographed by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (15 KIMs):**

- 0.5-1.0 mm: 0 GP
- 0.25-0.5 mm: 7 GP from Sample 84B-2003-BS-3006 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 1 GO from Sample 03MPB-005 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 CR
- 0.25-0.5 mm: 3 CR from Sample 03MPB-003 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 2 FO from Sample 84B-2003-BS-3007 (K4 area, picked by ODM)
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 3 DC from Sample 84B-2003-BS-3002 (K4 area, picked by ODM)
- 0.25-0.5 mm: 0 DC
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 0 IM

**Recovery (13/15 KIMs – 87%):**

- 0.5-1.0 mm: 4 out of 0 GP *likely grains from the 0.25-0.5 mm fraction*
- 0.25-0.5 mm: 2 out of 7 GP (86%)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 0 out of 1 GO (0%)
- 
- 0.5-1.0 mm: 2 out of 0 CR –
- 0.25-0.5 mm: 2 out of 3 CR (100%) - *counting one of the grains in the above fraction*
- 
- 0.5-1.0 mm: 2 out of 2 FO (100%)
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 1 out of 3 DC (66%) - *counting one of the grains from the below fraction*
- 0.25-0.5 mm: 1 out of 0 DC – *likely a grain from the 0.5 – 1 mm fraction*
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 0 IM

March 31, 2023

**QC Sample AER22TS-5116 (*ODM Batch 2846*)****Prepared:**

- KIM's selected and photographed by Calla Knudson, 2022-Nov-24

**Blank:**

- Brownvale till (~15 kg) – collected in 2022

**Spike (11 KIMs):**

- 0.5-1.0 mm: 3 GP from Sample 84B-2003-BS-3002 (K4 area, picked by ODM)
- 0.25-0.5 mm: 4 GP from Sample 84B-2003-BS-3002 (K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 0 CR
- 0.25-0.5 mm: 2 CR from Sample 03MPB-004 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 1 FO from Sample 84B-2003-BS-3008 (K4 area, picked by ODM)
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 1 DC from Sample 03MPB-002 (sampled by Beth McClenaghan, K4 area, picked by ODM)
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 0 IM

**Recovery (8/11 KIMs – 70%):**

- 0.5-1.0 mm: 3 out of 3 GP (100%)
- 0.25-0.5 mm: 3 out of 4 GP (75%)
- 
- 0.5-1.0 mm: 0 GO
- 0.25-0.5 mm: 0 GO
- 
- 0.5-1.0 mm: 0 CR
- 0.25-0.5 mm: 1 out of 2 CR (50%)
- 
- 0.5-1.0 mm: 1 out of 1 FO (100%)
- 0.25-0.5 mm: 0 FO
- 
- 0.5-1.0 mm: 0 DC
- 0.25-0.5 mm: 0 out of 1 DC (0%)
- 
- 0.5-1.0 mm: 0 IM
- 0.25-0.5 mm: 0 IM

March 31, 2023

## QC Summary

### Review of Spiked Grain Recovery:

- *Note – calculated recovery does not include grains reported that were not listed as a spiked grain*
- 5002 – 87%
- 5005 – 100%
- 5009 – 61%
- 5011 – 92%
- 5022 – 83%
- 5039 – 55%
- 5052 – 71%
- 5061 – 85%
- 5070 – 46%
- 5074 – 70%
- 5087 – 58%
- 5093 – 87%
- 5116 – 70%
- AVERAGE – 74%

### Review of Blanks:

- 5014 – 1 GP recovered
- 5036 – 0 KIMs recovered