

metals  
- 5a -  
**MATRIX SPIKE SUMMARY**

**client:** Nobis Group **level:** low **sdg no.:** Q2638  
**contract:** NOBI03 **lab code:** ACE  
**matrix:** Solid **sample id:** Q2621-01 **client id:** TR-05-07162025MS

**Percent Solids for Sample:** 94.1 **Spiked ID:** Q2621-01MS **Percent Solids for Spike Sample:** 94.1

| Analyte | Units | Acceptance<br>Limit %R | Spiked<br>Result | C | Sample<br>Result | C | Spike<br>Added | %<br>Recovery | Qual | M  |
|---------|-------|------------------------|------------------|---|------------------|---|----------------|---------------|------|----|
| Mercury | mg/Kg | 80 - 124               | 0.27             |   | 0.027            |   | 0.28           | 85            |      | CV |

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**MATRIX SPIKE DUPLICATE SUMMARY**

|                                   |                    |                   |                 |                                         |                          |
|-----------------------------------|--------------------|-------------------|-----------------|-----------------------------------------|--------------------------|
| <b>client:</b>                    | <u>Nobis Group</u> | <b>level:</b>     | <u>low</u>      | <b>sdg no.:</b>                         | <u>Q2638</u>             |
| <b>contract:</b>                  | <u>NOBI03</u>      |                   |                 | <b>lab code:</b>                        | <u>ACE</u>               |
| <b>matrix:</b>                    | <u>Solid</u>       | <b>sample id:</b> | <u>Q2621-01</u> | <b>client id:</b>                       | <u>TR-05-07162025MSD</u> |
| <b>Percent Solids for Sample:</b> | 94.1               | <b>Spiked ID:</b> | Q2621-01MSD     | <b>Percent Solids for Spike Sample:</b> | 94.1                     |

| Analyte | Units | Acceptance<br>Limit %R | MSD<br>Result | C | Sample<br>Result | C | Spike<br>Added | %<br>Recovery | Qual | M  |
|---------|-------|------------------------|---------------|---|------------------|---|----------------|---------------|------|----|
| Mercury | mg/Kg | 80 - 124               | 0.27          |   | 0.027            |   | 0.28           | 87            |      | CV |

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**- 5a -**  
**MATRIX SPIKE SUMMARY**

**client:** Nobis Group **level:** low **sdg no.:** Q2638  
**contract:** NOBI03 **lab code:** ACE  
**matrix:** Solid **sample id:** Q2638-13 **client id:** OU4-TS-37-071725MS

**Percent Solids for Sample:** 81.2 **Spiked ID:** Q2638-13MS **Percent Solids for Spike Sample:** 81.2

| Analyte   | Units | Acceptance<br>Limit %R | Spiked<br>Result | C | Sample<br>Result | C | Spike<br>Added | %<br>Recovery | Qual | M |
|-----------|-------|------------------------|------------------|---|------------------|---|----------------|---------------|------|---|
| Aluminum  | mg/Kg | 74 - 119               | 13200            |   | 11300            |   | 110            | 1722          |      | P |
| Antimony  | mg/Kg | 79 - 114               | 10.0             |   | 2.76             | U | 44.2           | 23            | N    | P |
| Arsenic   | mg/Kg | 82 - 111               | 41.7             |   | 9.62             |   | 44.2           | 73            | N    | P |
| Barium    | mg/Kg | 83 - 113               | 99.6             |   | 79.6             |   | 11.0           | 182           |      | P |
| Beryllium | mg/Kg | 83 - 113               | 8.42             |   | 0.61             |   | 11.0           | 71            | N    | P |
| Cadmium   | mg/Kg | 82 - 113               | 10.5             |   | 0.53             |   | 11.0           | 90            |      | P |
| Calcium   | mg/Kg | 81 - 116               | 3030             |   | 2620             |   | 55.2           | 742           |      | P |
| Chromium  | mg/Kg | 85 - 113               | 40.7             |   | 22.8             |   | 22.1           | 81            | N    | P |
| Cobalt    | mg/Kg | 85 - 112               | 24.5             |   | 12.8             |   | 11.0           | 107           |      | P |
| Copper    | mg/Kg | 81 - 117               | 85.7             |   | 69.1             |   | 16.6           | 100           |      | P |
| Iron      | mg/Kg | 81 - 118               | 22800            |   | 20400            |   | 170            | 1406          |      | P |
| Lead      | mg/Kg | 81 - 112               | 74.9             |   | 27.8             |   | 55.2           | 85            |      | P |
| Magnesium | mg/Kg | 78 - 115               | 5680             |   | 4960             |   | 110            | 658           |      | P |
| Manganese | mg/Kg | 84 - 114               | 392              |   | 343              |   | 11.0           | 443           |      | P |
| Nickel    | mg/Kg | 83 - 113               | 50.1             |   | 22.1             |   | 27.6           | 102           |      | P |
| Potassium | mg/Kg | 81 - 116               | 4920             |   | 4010             |   | 550            | 166           |      | P |
| Selenium  | mg/Kg | 78 - 111               | 75.2             |   | 1.10             | U | 110            | 68            | N    | P |
| Silver    | mg/Kg | 82 - 112               | 8.02             |   | 4.56             |   | 4.1            | 84            |      | P |
| Sodium    | mg/Kg | 83 - 118               | 226              |   | 78.3             | J | 170            | 87            |      | P |
| Thallium  | mg/Kg | 83 - 111               | 104              |   | 1.26             | J | 110            | 94            |      | P |
| Vanadium  | mg/Kg | 82 - 114               | 47.7             |   | 31.4             |   | 16.6           | 98            |      | P |
| Zinc      | mg/Kg | 82 - 113               | 94.3             |   | 79.7             |   | 11.0           | 133           |      | P |

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**MATRIX SPIKE DUPLICATE SUMMARY**

**client:** Nobis Group **level:** low **sdg no.:** Q2638  
**contract:** NOBI03 **lab code:** ACE  
**matrix:** Solid **sample id:** Q2638-13 **client id:** OU4-TS-37-071725MSD

**Percent Solids for Sample:** 81.2 **Spiked ID:** Q2638-13MSD **Percent Solids for Spike Sample:** 81.2

| Analyte   | Units | Acceptance<br>Limit %R | MSD<br>Result | C | Sample<br>Result | C | Spike<br>Added | %<br>Recovery | Qual | M |
|-----------|-------|------------------------|---------------|---|------------------|---|----------------|---------------|------|---|
| Aluminum  | mg/Kg | 74 - 119               | 12400         |   | 11300            |   | 98.9           | 1074          |      | P |
| Antimony  | mg/Kg | 79 - 114               | 9.17          |   | 2.76             | U | 39.6           | 23            | N    | P |
| Arsenic   | mg/Kg | 82 - 111               | 40.2          |   | 9.62             |   | 39.6           | 77            | N    | P |
| Barium    | mg/Kg | 83 - 113               | 94.4          |   | 79.6             |   | 9.9            | 149           |      | P |
| Beryllium | mg/Kg | 83 - 113               | 8.32          |   | 0.61             |   | 9.9            | 78            | N    | P |
| Cadmium   | mg/Kg | 82 - 113               | 10.4          |   | 0.53             |   | 9.9            | 100           |      | P |
| Calcium   | mg/Kg | 81 - 116               | 2870          |   | 2620             |   | 49.5           | 520           |      | P |
| Chromium  | mg/Kg | 85 - 113               | 39.4          |   | 22.8             |   | 19.8           | 84            | N    | P |
| Cobalt    | mg/Kg | 85 - 112               | 24.1          |   | 12.8             |   | 9.9            | 115           | N    | P |
| Copper    | mg/Kg | 81 - 117               | 83.2          |   | 69.1             |   | 14.8           | 95            |      | P |
| Iron      | mg/Kg | 81 - 118               | 21500         |   | 20400            |   | 150            | 739           |      | P |
| Lead      | mg/Kg | 81 - 112               | 73.2          |   | 27.8             |   | 49.5           | 92            |      | P |
| Magnesium | mg/Kg | 78 - 115               | 5450          |   | 4960             |   | 98.9           | 502           |      | P |
| Manganese | mg/Kg | 84 - 114               | 379           |   | 343              |   | 9.9            | 356           |      | P |
| Nickel    | mg/Kg | 83 - 113               | 49.4          |   | 22.1             |   | 24.7           | 111           |      | P |
| Potassium | mg/Kg | 81 - 116               | 4710          |   | 4010             |   | 490            | 143           |      | P |
| Selenium  | mg/Kg | 78 - 111               | 73.1          |   | 1.10             | U | 98.9           | 74            | N    | P |
| Silver    | mg/Kg | 82 - 112               | 7.56          |   | 4.56             |   | 3.7            | 81            | N    | P |
| Sodium    | mg/Kg | 83 - 118               | 215           |   | 78.3             | J | 150            | 91            |      | P |
| Thallium  | mg/Kg | 83 - 111               | 102           |   | 1.26             | J | 98.9           | 102           |      | P |
| Vanadium  | mg/Kg | 82 - 114               | 45.3          |   | 31.4             |   | 14.8           | 94            |      | P |
| Zinc      | mg/Kg | 82 - 113               | 91.8          |   | 79.7             |   | 9.9            | 123           |      | P |