

## **Gold Ore (Frogs Leg Gold Mine, Western Australia), CRM**

Art. ID OREAS-240-60G  
Unit 60 g (powder)  
Deliverydetails No Dangerous Good /not restricted

### Description

OREAS 240 was prepared from a blend of gold-bearing ore and barren greenstone. The ore was sourced from the Frogs Leg Gold Mine located 19km west of Kalgoorlie in Western Australia. The Cambrian greenstone was sourced from a quarry 145km north of Melbourne, Australia.

| Text/Information     | Analyte/Parameter | CAS number  | Concentration/Value | Unit | Method                                                     | Source |
|----------------------|-------------------|-------------|---------------------|------|------------------------------------------------------------|--------|
| ± standard deviation | Gold (Au)         | [7440-57-5] | 5,51 ± 0,139        | ppm  | Pb Fire As<br>say                                          |        |
| ± standard deviation | Gold (Au)         | [7440-57-5] | 5,28 ± 0,246        | ppm  | Aqua Regia<br>Digestion<br>(sample w<br>eights 10-<br>50g) |        |
| ± standard deviation | Gold (Au)         | [7440-57-5] | 5,36 ± 0,158        | ppm  | Cyanide Le<br>ach                                          |        |
| ± standard deviation | Gold (Au)         | [7440-57-5] | 5,23 ± 0,134        | ppm  | X-ray Phot<br>on Assay                                     |        |
| ± standard deviation | Silver (Ag)       | [7440-22-4] | 1,3 ± 0,086         | ppm  | Aqua Regia<br>Digestion                                    |        |
| ± standard deviation | Aluminium (Al)    | [7429-90-5] | 3,35 ± 0,183        | %    | Aqua Regia<br>Digestion                                    |        |
| ± standard deviation | Arsenic (As)      | [7440-38-2] | 64 ± 2,7            | ppm  | Aqua Regia<br>Digestion                                    |        |
| ± standard deviation | Boron (B)         | [7440-42-8] | 19,8 ± 4,6          | ppm  | Aqua Regia<br>Digestion                                    |        |
| ± standard deviation | Barium (Ba)       | [7440-39-3] | 31,8 ± 2,58         | ppm  | Aqua Regia<br>Digestion                                    |        |
| ± standard deviation | Beryllium (Be)    | [7440-41-7] | 0,27 ± 0,03         | ppm  | Aqua Regia<br>Digestion                                    |        |
| ± standard deviation | Bismuth (Bi)      | [7440-69-9] | 0,05 ± 0,001        | ppm  | Aqua Regia<br>Digestion                                    |        |
| ± standard deviation | Calcium (Ca)      | [7440-70-2] | 2,82 ± 0,327        | %    | Aqua Regia<br>Digestion                                    |        |
| ± standard deviation | Cadmium (Cd)      | [7440-43-9] | 0,61 ± 0,021        | ppm  | Aqua Regia                                                 |        |

|                      |                 |             |               |     |            |
|----------------------|-----------------|-------------|---------------|-----|------------|
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Cerium (Ce)     | [7440-45-1] | 10,4 ± 0,57   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Cobalt (Co)     | [7440-48-4] | 28,5 ± 1,81   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Chromium (Cr)   | [7440-47-3] | 20,2 ± 1,01   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Caesium (Cs)    | [7440-46-2] | 0,7 ± 0,054   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Copper (Cu)     | [7440-50-8] | 167 ± 6       | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Dysprosium (Dy) | [7429-91-6] | 2,08 ± 0,26   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Erbium (Er)     | [7440-52-0] | 1,18 ± 0,14   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Europium (Eu)   | [7440-53-1] | 0,41 ± 0,06   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Iron (Fe)       | [7439-89-6] | 5,3 ± 0,232   | %   | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Gallium (Ga)    | [7440-55-3] | 9,68 ± 0,821  | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Gadolinium (Gd) | [7440-54-2] | 1,91 ± 0,23   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Germanium (Ge)  | [7440-56-4] | 0,098 ± 0,019 | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Hafnium (Hf)    | [7440-58-6] | 0,55 ± 0,08   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Holmium (Ho)    | [7440-60-0] | 0,39 ± 0,03   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Indium (In)     | [7440-74-6] | 0,038 ± 0,005 | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Potassium (K)   | [7440-09-7] | 0,147 ± 0,012 | %   | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Lanthanum (La)  | [7439-91-0] | 4,56 ± 0,246  | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Lithium (Li)    | [7439-93-2] | 9,96 ± 0,86   | ppm | Aqua Regia |
|                      |                 |             |               |     | Digestion  |
| ± standard deviation | Lutetium (Lu)   | [7439-94-3] | 0,15 ± 0,02   | ppm | Aqua Regia |

|                      |                   |             |               |     |            |
|----------------------|-------------------|-------------|---------------|-----|------------|
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Magnesium (Mg)    | [7439-95-4] | 1,54 ± 0,047  | %   | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Manganese (Mn)    | [7439-96-5] | 0,072 ± 0,005 | %   | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Molybdenum (Mo)   | [7439-98-7] | 1,6 ± 0,109   | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Sodium (Na)       | [7440-23-5] | 0,269 ± 0,016 | %   | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Neodymium (Nd)    | [7440-00-8] | 6 ± 0,67      | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Nickel (Ni)       | [7440-02-0] | 53 ± 3,8      | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Phosphorus (P)    | [7723-14-0] | 0,039 ± 0,002 | %   | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Lead (Pb)         | [7439-92-1] | 28 ± 1,61     | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Praseodymium (Pr) | [7440-10-0] | 1,36 ± 0,129  | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Platinum (Pt)     | [7440-06-4] | 13,4 ± 1,2    |     | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Rubidium (Rb)     | [7440-17-7] | 6,08 ± 0,475  | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Rhenium (Re)      | [7440-15-5] | 0,002 ± 0,001 | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Sulfur (S)        | [7704-34-9] | 0,4 ± 0,031   | %   | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Antimony (Sb)     | [7440-36-0] | 0,77 ± 0,25   | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Scandium (Sc)     | [7440-20-2] | 6,16 ± 0,563  | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Samarium (Sm)     | [7440-19-9] | 1,56 ± 0,105  | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Tin (Sn)          | [7440-31-5] | 0,65 ± 0,09   | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Strontium (Sr)    | [7440-24-6] | 46,8 ± 6,6    | ppm | Aqua Regia |
|                      |                   |             |               |     | Digestion  |
| ± standard deviation | Tantalum (Ta)     | [7440-25-7] | < 0,050 ± IND | ppm | Aqua Regia |

|                      |                |              |               |     |                         |
|----------------------|----------------|--------------|---------------|-----|-------------------------|
|                      |                |              |               |     | Digestion               |
| ± standard deviation | Terbium (Tb)   | [7440-27-9]  | 0,31 ± 0,03   | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Tellurium (Te) | [13494-80-9] | 0,11 ± 0,01   | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Thorium (Th)   | [7440-29-1]  | 0,89 ± 0,041  | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Titanium (Ti)  | [7440-32-6]  | 0,307 ± 0,053 | %   | Aqua Regia<br>Digestion |
| ± standard deviation | Thallium (Tl)  | [7440-28-0]  | 0,11 ± 0,01   | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Thulium (Tm)   | [7440-30-4]  | 0,17 ± 0,014  | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Uranium (U)    | [7440-61-1]  | 0,22 ± 0,01   | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Vanadium (V)   | [7440-62-2]  | 130 ± 16      | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Tungsten (W)   | [7440-33-7]  | 25,9 ± 3,9    | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Yttrium (Y)    | [7440-65-5]  | 11,4 ± 0,99   | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Ytterbium (Yb) | [7440-64-4]  | 1,11 ± 0,16   | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Zinc (Zn)      | [7440-66-6]  | 129 ± 5       | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Zirconium (Zr) | [7440-67-7]  | 18,5 ± 1,9    | ppm | Aqua Regia<br>Digestion |
| ± standard deviation | Silver (Ag)    | [7440-22-4]  | 1,35 ± 0,077  | ppm | 4-Acid Dig<br>estion    |
| ± standard deviation | Aluminium (Al) | [7429-90-5]  | 6,84 ± 0,169  | %   | 4-Acid Dig<br>estion    |
| ± standard deviation | Arsenic (As)   | [7440-38-2]  | 65 ± 4,6      | ppm | 4-Acid Dig<br>estion    |
| ± standard deviation | Barium (Ba)    | [7440-39-3]  | 129 ± 4       | ppm | 4-Acid Dig<br>estion    |
| ± standard deviation | Beryllium (Be) | [7440-41-7]  | 0,43 ± 0,038  | ppm | 4-Acid Dig<br>estion    |
| ± standard deviation | Bismuth (Bi)   | [7440-69-9]  | 0,053 ± 0,007 | ppm | 4-Acid Dig              |

|                      |                 |             |               |     |            |
|----------------------|-----------------|-------------|---------------|-----|------------|
|                      |                 |             |               |     | estion     |
| ± standard deviation | Calcium (Ca)    | [7440-70-2] | 6,85 ± 0,284  | %   | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Cadmium (Cd)    | [7440-43-9] | 0,63 ± 0,032  | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Cerium (Ce)     | [7440-45-1] | 13,3 ± 0,89   | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Cobalt (Co)     | [7440-48-4] | 39,8 ± 2,6    | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Chromium (Cr)   | [7440-47-3] | 103 ± 11      | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Caesium (Cs)    | [7440-46-2] | 0,97 ± 0,071  | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Copper (Cu)     | [7440-50-8] | 168 ± 5       | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Dysprosium (Dy) | [7429-91-6] | 3,51 ± 0,174  | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Erbium (Er)     | [7440-52-0] | 2,17 ± 0,111  | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Europium (Eu)   | [7440-53-1] | 0,88 ± 0,045  | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Iron (Fe)       | [7439-89-6] | 7,31 ± 0,243  | %   | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Gallium (Ga)    | [7440-55-3] | 15,2 ± 0,51   | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Gadolinium (Gd) | [7440-54-2] | 3,14 ± 0,24   | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Hafnium (Hf)    | [7440-58-6] | 1,7 ± 0,096   | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Holmium (Ho)    | [7440-60-0] | 0,74 ± 0,052  | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Indium (In)     | [7440-74-6] | 0,075 ± 0,005 | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Potassium (K)   | [7440-09-7] | 0,453 ± 0,015 | %   | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Lanthanum (La)  | [7439-91-0] | 5,72 ± 0,385  | ppm | 4-Acid Dig |
|                      |                 |             |               |     | estion     |
| ± standard deviation | Lithium (Li)    | [7439-93-2] | 11,4 ± 0,92   | ppm | 4-Acid Dig |

|                      |                   |             |               |     |            |
|----------------------|-------------------|-------------|---------------|-----|------------|
|                      |                   |             |               |     | estion     |
| ± standard deviation | Lutetium (Lu)     | [7439-94-3] | 0,31 ± 0,02   | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Magnesium (Mg)    | [7439-95-4] | 3,44 ± 0,141  | %   | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Manganese (Mn)    | [7439-96-5] | 0,125 ± 0,004 | %   | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Molybdenum (Mo)   | [7439-98-7] | 1,7 ± 0,128   | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Sodium (Na)       | [7440-23-5] | 1,65 ± 0,05   | %   | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Niobium (Nb)      | [7440-03-1] | 3,37 ± 0,192  | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Neodymium (Nd)    | [7440-00-8] | 8,32 ± 0,363  | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Nickel (Ni)       | [7440-02-0] | 79 ± 4        | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Phosphorus (P)    | [7723-14-0] | 0,04 ± 0,002  | %   | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Lead (Pb)         | [7439-92-1] | 28,5 ± 1,59   | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Praseodymium (Pr) | [7440-10-0] | 1,77 ± 0,08   | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Rubidium (Rb)     | [7440-17-7] | 14 ± 0,7      | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Sulfur (S)        | [7704-34-9] | 0,399 ± 0,017 | %   | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Antimony (Sb)     | [7440-36-0] | 1,48 ± 0,087  | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Scandium (Sc)     | [7440-20-2] | 37,9 ± 1,35   | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Samarium (Sm)     | [7440-19-9] | 2,43 ± 0,134  | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Tin (Sn)          | [7440-31-5] | 1,08 ± 0,13   | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Strontium (Sr)    | [7440-24-6] | 213 ± 10      | ppm | 4-Acid Dig |
|                      |                   |             |               |     | estion     |
| ± standard deviation | Tantalum (Ta)     | [7440-25-7] | 0,23 ± 0,019  | ppm | 4-Acid Dig |

|                      |                |              |               |     |            |
|----------------------|----------------|--------------|---------------|-----|------------|
|                      |                |              |               |     | estion     |
| ± standard deviation | Terbium (Tb)   | [7440-27-9]  | 0,53 ± 0,028  | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Tellurium (Te) | [13494-80-9] | 0,11 ± 0,01   | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Thorium (Th)   | [7440-29-1]  | 1,13 ± 0,074  | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Titanium (Ti)  | [7440-32-6]  | 0,572 ± 0,022 | %   | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Thallium (Tl)  | [7440-28-0]  | 0,23 ± 0,01   | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Thulium (Tm)   | [7440-30-4]  | 0,31 ± 0,016  | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Uranium (U)    | [7440-61-1]  | 0,33 ± 0,04   | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Vanadium (V)   | [7440-62-2]  | 251 ± 8       | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Tungsten (W)   | [7440-33-7]  | 36,9 ± 2,75   | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Yttrium (Y)    | [7440-65-5]  | 19,2 ± 0,98   | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Ytterbium (Yb) | [7440-64-4]  | 2,1 ± 0,139   | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Zinc (Zn)      | [7440-66-6]  | 142 ± 8       | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |
| ± standard deviation | Zirconium (Zr) | [7440-67-7]  | 56 ± 4,1      | ppm | 4-Acid Dig |
|                      |                |              |               |     | estion     |