



Australian Laboratory Services Pty. Ltd.

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ALS Perth is a NATA Accredited Testing Laboratory. Corporate Accreditation

No: 825, Corporate Site No: 23001.

CERTIFICATE AD18177822

This report is for 20 Rock samples submitted to our lab in Adelaide, SA, Australia on 23-JUL-2018.

The following have access to data associated with this certificate:

EARTH AI OPERATIONS

ROMAN TESLYUK

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

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Plus Appendix Pages

Finalized Date: 9-AUG-2018

This copy reported on 16-AUG-2018

Account: EARTOP

SAMPLE PREPARATION

| ALS CODE | DESCRIPTION |
|----------|--------------------------------|
| WEI-21 | Received Sample Weight |
| PUL-QC | Pulverizing QC Test |
| LOG-22 | Sample login - Rcd w/o BarCode |
| CRU-21 | Crush entire sample >70% -6 mm |
| LEV-01 | Waste Disposal Levy |
| PUL-32 | Pulverize 1000g to 85% < 75 um |

ANALYTICAL PROCEDURES

| ALS CODE | DESCRIPTION | INSTRUMENT |
|----------|-------------------------------|------------|
| Au-ICP21 | Au 30g FA ICP-AES Finish | ICP-AES |
| ME-MS41 | Ultra Trace Aqua Regia ICP-MS | |

Signature:

Cameron Brosnan, Laboratory Manager, Perth



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CERTIFICATE OF ANALYSIS AD18177822

| Sample Description | Method Analyte Units LOD | WEI-21 Recvd Wt. kg 0.02 | Au-ICP21 Au ppm 0.001 | ME-MS41 Ag ppm 0.01 | ME-MS41 Al % 0.01 | ME-MS41 As ppm 0.1 | ME-MS41 Au ppm 0.02 | ME-MS41 B ppm 10 | ME-MS41 Ba ppm 10 | ME-MS41 Be ppm 0.05 | ME-MS41 Bi ppm 0.01 | ME-MS41 Ca % 0.01 | ME-MS41 Cd ppm 0.01 | ME-MS41 Ce ppm 0.02 | ME-MS41 Co ppm 0.1 | ME-MS41 Cr ppm 1 |
|--------------------|-----------------------------------|-----------------------------------|--------------------------------|------------------------------|----------------------------|-----------------------------|------------------------------|---------------------------|----------------------------|------------------------------|------------------------------|----------------------------|------------------------------|------------------------------|-----------------------------|---------------------------|
| PC002R | | 0.60 | 0.001 | 0.02 | 1.54 | 44.0 | <0.02 | 10 | 1700 | 0.35 | 0.28 | 0.05 | 0.01 | 4.46 | 1.3 | 9 |
| PC004R | | 0.53 | <0.001 | 0.01 | 1.46 | 30.2 | <0.02 | <10 | 230 | 0.36 | 0.13 | 0.05 | 0.01 | 3.02 | 0.9 | 13 |
| PC007R | | 0.88 | 0.001 | 0.01 | 1.18 | 18.5 | <0.02 | 10 | 330 | 1.18 | 0.42 | 0.03 | 0.01 | 1.68 | 1.0 | 7 |
| PC009R | | 0.72 | 0.001 | <0.01 | 1.11 | 15.0 | <0.02 | 10 | 100 | 1.16 | 0.08 | 0.02 | <0.01 | 2.30 | 1.4 | 9 |
| PC013R | | 0.45 | 0.001 | 0.01 | 1.61 | 45.9 | <0.02 | 10 | 870 | 0.55 | 0.15 | 0.02 | 0.01 | 6.81 | 1.6 | 14 |
| PC044R | | 1.05 | <0.001 | 0.01 | 0.05 | 0.6 | <0.02 | <10 | 160 | <0.05 | 0.22 | 0.01 | <0.01 | 1.56 | 0.4 | 9 |
| PC051R | | 0.96 | <0.001 | <0.01 | 0.22 | 2.2 | <0.02 | <10 | 160 | 0.09 | 0.17 | 0.01 | <0.01 | 4.17 | 0.6 | 14 |
| PC079R | | 1.15 | <0.001 | 0.02 | 0.77 | 121.0 | <0.02 | <10 | 30 | 0.44 | 0.05 | 0.01 | <0.01 | 4.83 | 1.5 | 72 |
| PC087R | | 0.87 | <0.001 | 0.01 | 0.90 | 8.0 | <0.02 | 10 | 270 | 0.86 | 0.81 | 0.04 | 0.01 | 3.40 | 2.6 | 106 |
| PC088F | | 0.48 | <0.001 | 0.02 | 0.11 | 0.8 | <0.02 | <10 | 90 | 0.10 | 0.09 | 0.01 | <0.01 | 4.85 | 0.7 | 12 |
| PC090F | | 0.48 | <0.001 | 0.01 | 0.18 | 0.7 | <0.02 | <10 | 550 | 0.08 | 0.09 | 0.02 | <0.01 | 3.80 | 0.7 | 16 |
| PC109R | | 1.08 | <0.001 | 0.01 | 0.02 | 0.1 | <0.02 | <10 | 160 | <0.05 | 0.03 | 0.01 | <0.01 | 1.99 | 0.6 | 16 |
| PC115R | | 0.60 | <0.001 | 0.01 | 0.05 | 0.3 | <0.02 | <10 | 160 | <0.05 | 0.05 | 0.01 | <0.01 | 2.33 | 0.4 | 13 |
| PC141R | | 1.32 | 0.001 | 0.01 | 0.22 | 0.8 | <0.02 | <10 | 50 | 0.11 | 0.08 | 0.01 | <0.01 | 7.04 | 0.5 | 9 |
| PC145R | | 0.91 | <0.001 | <0.01 | 0.27 | 0.4 | <0.02 | <10 | 80 | 0.07 | 0.05 | <0.01 | <0.01 | 5.19 | 0.4 | 14 |
| PC165R | | 0.84 | <0.001 | <0.01 | 0.31 | 0.4 | <0.02 | <10 | 60 | 0.05 | 0.02 | 0.02 | <0.01 | 11.25 | 0.5 | 8 |
| PC168R | | 0.60 | <0.001 | <0.01 | 0.97 | 22.3 | <0.02 | 10 | 390 | 3.16 | 0.07 | 0.01 | 0.02 | 4.36 | 2.3 | 8 |
| PC174R | | 1.07 | <0.001 | 0.02 | 0.17 | 1.9 | <0.02 | <10 | 60 | 0.06 | 0.03 | <0.01 | <0.01 | 2.44 | 0.5 | 9 |
| PC175R | | 0.74 | <0.001 | 0.02 | 0.48 | 10.0 | <0.02 | <10 | 660 | 0.28 | 0.04 | 0.01 | 0.01 | 4.94 | 1.0 | 8 |
| PC190R | | 0.99 | 0.001 | <0.01 | 1.21 | 14.5 | <0.02 | 10 | 1340 | 0.95 | 0.10 | 0.02 | <0.01 | 3.02 | 1.2 | 9 |
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CERTIFICATE OF ANALYSIS AD18177822

| Sample Description | Method Analyte Units LOD | ME-MS41 Cs ppm 0.05 | ME-MS41 Cu ppm 0.2 | ME-MS41 Fe % 0.01 | ME-MS41 Ga ppm 0.05 | ME-MS41 Ge ppm 0.05 | ME-MS41 Hf ppm 0.02 | ME-MS41 Hg ppm 0.01 | ME-MS41 In ppm 0.005 | ME-MS41 K % 0.01 | ME-MS41 La ppm 0.2 | ME-MS41 Li ppm 0.1 | ME-MS41 Mg % 0.01 | ME-MS41 Mn ppm 5 | ME-MS41 Mo ppm 0.05 | ME-MS41 Na % 0.01 |
|--------------------|-----------------------------------|------------------------------|-----------------------------|----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|---------------------------|-----------------------------|-----------------------------|----------------------------|---------------------------|------------------------------|----------------------------|
| PC002R | | 0.24 | 41.0 | 38.3 | 4.83 | 1.03 | 0.29 | 0.01 | 0.018 | 0.02 | 1.7 | 1.6 | 0.05 | 7 | 2.78 | 0.01 |
| PC004R | | 0.15 | 8.0 | 40.6 | 4.18 | 1.05 | 0.16 | 0.01 | 0.015 | 0.02 | 1.3 | 0.4 | 0.03 | 21 | 2.77 | 0.01 |
| PC007R | | 0.22 | 21.2 | 40.2 | 3.34 | 0.97 | 0.19 | <0.01 | 0.016 | 0.01 | 0.9 | 0.5 | 0.03 | 28 | 1.29 | <0.01 |
| PC009R | | 0.11 | 7.2 | 32.9 | 2.86 | 0.68 | 0.19 | 0.01 | 0.012 | 0.01 | 0.9 | 0.6 | 0.03 | 40 | 2.35 | 0.01 |
| PC013R | | 0.47 | 7.1 | 34.6 | 4.79 | 1.19 | 0.29 | 0.01 | 0.015 | 0.02 | 2.0 | 1.5 | 0.02 | 37 | 5.86 | <0.01 |
| PC044R | | <0.05 | 9.9 | 1.49 | 0.99 | <0.05 | 0.54 | 0.03 | 0.005 | 0.01 | 0.5 | 0.1 | <0.01 | 87 | 0.42 | 0.01 |
| PC051R | | 0.29 | 7.6 | 3.13 | 1.93 | <0.05 | 0.24 | 0.02 | 0.006 | 0.08 | 2.4 | 0.2 | 0.01 | 84 | 0.47 | 0.01 |
| PC079R | | <0.05 | 9.3 | 19.10 | 1.50 | 0.30 | 1.02 | <0.01 | 0.034 | <0.01 | 2.5 | 0.6 | <0.01 | 37 | 0.38 | 0.01 |
| PC087R | | <0.05 | 5.1 | 24.8 | 6.41 | 0.28 | 1.28 | 0.01 | 0.048 | 0.01 | 2.1 | 1.7 | <0.01 | 35 | 1.48 | <0.01 |
| PC088F | | <0.05 | 7.7 | 1.23 | 1.05 | <0.05 | 1.73 | 0.04 | 0.010 | 0.01 | 2.2 | 0.4 | <0.01 | 85 | 0.38 | 0.01 |
| PC090F | | <0.05 | 4.3 | 1.45 | 0.67 | <0.05 | 0.32 | 0.14 | <0.005 | 0.01 | 2.1 | 0.7 | <0.01 | 110 | 0.46 | <0.01 |
| PC109R | | <0.05 | 4.5 | 0.86 | 0.36 | <0.05 | 0.27 | <0.01 | <0.005 | <0.01 | 1.1 | 0.1 | <0.01 | 447 | 0.56 | 0.01 |
| PC115R | | <0.05 | 4.5 | 0.81 | 0.33 | <0.05 | 0.36 | 0.05 | 0.005 | 0.01 | 1.1 | 0.1 | <0.01 | 201 | 0.46 | 0.01 |
| PC141R | | 0.34 | 1.9 | 1.03 | 0.78 | <0.05 | 0.21 | 0.01 | <0.005 | 0.11 | 3.8 | 0.1 | 0.01 | 56 | 0.29 | 0.01 |
| PC145R | | 0.13 | 1.5 | 1.16 | 2.15 | <0.05 | 0.21 | <0.01 | <0.005 | 0.15 | 2.7 | 0.1 | 0.02 | 107 | 0.29 | 0.01 |
| PC165R | | <0.05 | 1.5 | 0.68 | 0.75 | <0.05 | 0.12 | <0.01 | <0.005 | 0.05 | 5.1 | 0.4 | <0.01 | 57 | 0.27 | 0.01 |
| PC168R | | 0.15 | 2.2 | 43.4 | 2.63 | 0.81 | 0.18 | 0.01 | 0.011 | 0.01 | 1.3 | 0.9 | 0.02 | 405 | 4.56 | <0.01 |
| PC174R | | 0.06 | 1.4 | 2.39 | 0.55 | <0.05 | 0.23 | 0.01 | <0.005 | <0.01 | 1.0 | 0.2 | <0.01 | 69 | 0.37 | 0.01 |
| PC175R | | 0.11 | 3.1 | 20.6 | 1.37 | 0.38 | 0.16 | 0.01 | 0.008 | 0.01 | 1.1 | 0.3 | 0.01 | 74 | 0.72 | <0.01 |
| PC190R | | 0.36 | 2.8 | 35.0 | 3.76 | 0.56 | 0.22 | <0.01 | 0.015 | 0.01 | 1.6 | 0.8 | 0.02 | 35 | 1.62 | 0.01 |
| | | | | | | | | | | | | | | | | |



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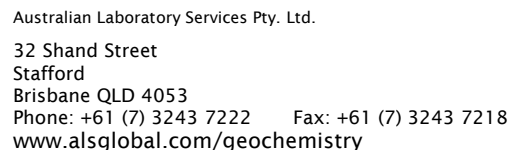
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| Sample Description | Method Analyte Units LOD | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 | ME-MS41 |
|--------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | Nb | Ni | P | Pb | Rb | Re | S | Sb | Sc | Se | Sn | Sr | Ta | Te |
| | | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| | | 0.05 | 0.2 | 10 | 0.2 | 0.1 | 0.001 | 0.01 | 0.05 | 0.1 | 0.2 | 0.2 | 0.2 | 0.01 | 0.01 |
| PC002R | | 0.24 | 4.3 | 560 | 3.4 | 1.6 | <0.001 | 0.08 | 1.03 | 2.9 | 0.7 | 0.6 | 9.8 | <0.01 | 0.01 |
| PC004R | | 0.41 | 2.9 | 4070 | 2.9 | 1.3 | <0.001 | 0.05 | 0.85 | 2.5 | 0.4 | 0.5 | 9.8 | <0.01 | 0.01 |
| PC007R | | 0.24 | 2.8 | 670 | 2.9 | 0.9 | <0.001 | 0.05 | 1.22 | 2.4 | 0.3 | 0.4 | 4.6 | <0.01 | 0.01 |
| PC009R | | 0.18 | 3.1 | 510 | 2.9 | 1.0 | <0.001 | 0.04 | 0.80 | 2.4 | 0.2 | 0.4 | 2.5 | <0.01 | <0.01 |
| PC013R | | 0.33 | 5.4 | 1030 | 3.7 | 1.9 | 0.001 | 0.03 | 0.54 | 3.7 | 0.3 | 0.6 | 4.8 | <0.01 | <0.01 |
| PC044R | | 0.10 | 0.9 | 20 | 5.7 | 0.2 | <0.001 | 0.02 | 0.28 | 0.9 | <0.2 | 0.2 | 6.3 | <0.01 | <0.01 |
| PC051R | | 0.27 | 1.2 | 120 | 3.6 | 4.3 | <0.001 | 0.01 | 0.83 | 0.6 | 0.5 | 0.5 | 6.6 | <0.01 | 0.01 |
| PC079R | | 0.14 | 2.3 | 110 | 9.1 | 0.3 | <0.001 | 0.04 | 2.20 | 1.6 | 3.8 | 0.4 | 4.7 | <0.01 | 0.14 |
| PC087R | | 0.29 | 4.7 | 210 | 30.2 | 0.5 | <0.001 | 0.02 | 6.32 | 5.7 | 1.2 | 1.2 | 19.5 | <0.01 | 0.02 |
| PC088F | | 0.15 | 1.3 | 20 | 3.5 | 0.3 | <0.001 | 0.01 | 0.39 | 1.9 | 0.2 | 0.4 | 7.8 | <0.01 | <0.01 |
| PC090F | | 0.06 | 1.3 | 20 | 3.6 | 0.3 | <0.001 | 0.03 | 0.32 | 0.7 | 0.2 | 0.2 | 30.2 | <0.01 | <0.01 |
| PC109R | | 0.09 | 3.3 | 10 | 3.9 | 0.1 | <0.001 | 0.01 | 0.17 | 0.5 | <0.2 | 0.3 | 9.2 | <0.01 | <0.01 |
| PC115R | | 0.08 | 1.6 | 60 | 5.6 | 0.1 | <0.001 | 0.04 | 0.13 | 1.0 | 0.3 | <0.2 | 19.9 | <0.01 | <0.01 |
| PC141R | | 0.20 | 1.0 | 50 | 3.4 | 5.4 | <0.001 | 0.01 | 1.16 | 0.4 | 0.2 | 0.4 | 19.4 | <0.01 | <0.01 |
| PC145R | | 0.11 | 1.3 | 60 | 2.1 | 7.1 | <0.001 | 0.01 | 0.32 | 0.7 | 0.2 | 0.4 | 4.9 | <0.01 | <0.01 |
| PC165R | | <0.05 | 0.9 | 680 | 1.3 | 0.5 | <0.001 | 0.06 | 0.05 | 0.3 | 0.3 | 0.2 | 51.3 | <0.01 | <0.01 |
| PC168R | | 0.22 | 4.6 | 660 | 3.5 | 1.1 | <0.001 | 0.02 | 3.27 | 2.2 | 0.3 | 0.3 | 3.9 | <0.01 | <0.01 |
| PC174R | | 0.11 | 1.0 | 70 | 1.7 | 0.2 | <0.001 | 0.01 | 0.19 | 0.5 | 0.2 | 0.2 | 3.6 | <0.01 | <0.01 |
| PC175R | | 0.11 | 1.8 | 240 | 2.4 | 0.7 | <0.001 | 0.06 | 0.39 | 1.4 | 0.3 | 0.2 | 5.8 | <0.01 | <0.01 |
| PC190R | | 0.33 | 5.6 | 520 | 4.9 | 1.5 | <0.001 | 0.07 | 0.13 | 2.8 | 0.2 | 0.5 | 6.6 | <0.01 | <0.01 |
| | | | | | | | | | | | | | | | |



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CERTIFICATE OF ANALYSIS AD18177822

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method:

Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).
ME-MS41

ACCREDITATION COMMENTS

Applies to Method:

NATA Accreditation covers the performance of this service but does not cover the performance of ALS Perth Sample Preparation. Corporate Accreditation No: 825, Corporate Site No: 23001. The Technical Signatory is Wendy Wong, Senior QC Chemist
Au-ICP21 ME-MS41

LABORATORY ADDRESSES

Applies to Method:

Processed at ALS Perth located at 31 Denninup Way, Malaga, Australia. Processed at ALS Perth Sample Preparation at 79 Distinction Road, Wangara, WA, Australia
Au-ICP21 ME-MS41

Applies to Method:

Processed at ALS Adelaide located at Unit 1, 1 Burma Road, Pooraka, Adelaide, SA, Australia.
CRU-21 LEV-01 LOG-22 PUL-32
PUL-QC WEI-21