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CERTIFICATE OF ANALYSIS FOR

GOLD ORE REFERENCE MATERIAL

OREAS 62Pb

SUMMARY STATISTICS

Recommended Values, 95% Confidence and Tolerance Intervals

Constituent	Recommended value	95% Confidence interval		Tolerance interval 1-α=0.99, ρ=0.95	
		Low	High	Low	High
Gold, Au (ppm)	11.33	11.16	11.50	11.29	11.37
Silver, Ag (ppm)	21.5	21.0	22.0	20.6	22.4

Prepared by:
Ore Research & Exploration Pty Ltd
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REPORT 02/443E

INTRODUCTION

OREAS certified reference materials (CRMs) are intended to provide a low cost method of evaluating and improving the quality of precious and base metal analysis of geological samples. To the analyst they provide an effective means of calibrating analytical equipment, assessing new techniques and routinely monitoring in-house procedures. To the geologist they provide a means of implementing quality control in analytical data sets generated in exploration, from the grass roots level through to prospect evaluation, and in grade control at mining operations.

As a rule only source materials exhibiting a high level of homogeneity of the element(s) of interest are used in the preparation of these materials. This has enabled Ore Research & Exploration to produce a range of gold ore CRMs exhibiting homogeneity that matches or exceeds that of currently available international reference materials. In certain instances CRMs produced from a single source are sufficiently homogeneous to produce a relatively coarse-grained form designed to simulate drill chip samples. These have a grain size of minus 3mm and are designated with a "C" suffix to the CRM identification number. These standards are packaged in 1kg units following homogenisation and are intended for submission to analytical laboratories in subsample sizes of as little as 250g. They offer the added advantages of providing a check on both sample preparation and analytical procedures while acting as a blind standard to the assay laboratory. The more conventional pulped standards have a grain size of minus 20 to minus 75 microns and a higher degree of homogeneity. These standards are distinguished by a "P" suffix to the standard identification number. In line with ISO recommendations successive batch numbers are now designated by the lower case suffixes "a", "b", "c", "d", etc.

SOURCE MATERIALS

Reference material OREAS 62Pb was prepared from a blend of barren meta-andesite from Cracow, Queensland Australia and gold-bearing meta-andesite from the Gosowong gold mine in Maluku, Indonesia. Both Gosowong and Cracow are epithermal deposits hosted by andesitic volcanics. The barren Cracow material is unmineralised low sulphidation epithermal quartz veining (epithermal quartz, carbonate, adularia and minor sulphides) and unmineralised altered andesites of the Camboon volcanics. The Gosowong ore consists of andesitic volcanic-hosted low sulphidation epithermal quartz veining containing an assemblage of epithermal quartz, carbonate, adularia, kaolin after adularia, chlorite and minor sulphides.

The approximate major and trace element composition of the gold ore standard OREAS 62Pb is given in Table 1. The constituents SiO_2 to Zr are the means of duplicate borate fusion X-ray fluorescence analyses, while the remaining constituents, As to Yb, are instrumental neutron activation analysis (INAA) means of twenty-three representative samples.

COMMINUTION AND HOMOGENISATION PROCEDURES

The Cracow and Gosowong material comprising OREAS 62Pb was prepared in the following manner:

a) jaw crushing to minus 7mm
b) drying to constant mass at 105^{0}C
c) milling of the barren Cracow material to 98% minus 75 micron

d) milling of the Gosowong ore to 100% minus 20 micron
e) blending in appropriate proportions to achieve the desired grade
f) bagging into 25kg sublots

Throughout the bagging stage twenty-three 1kg test units were taken at regular intervals, sealed in laminated plastic bags and set aside for the analytical program.

Table 1. Indicative major and trace element composition of gold ore reference material OREAS 62Pb; SiO_2 to Total and C and S as weight percent; rest in parts per million; SiO_2 to Zr by fusion XRF except C and S by Leco furnace; As to Yb by INAA.

Constituent	Concentration (XRF)	Constituent	Concentration (INAA)
SiO_2	69.0	As	19
TiO_2	0.45	Ce	17
Al_2O_3	12.2	Co	22
Fe_2O_3	5.75	Cr	38
MnO	0.11	Cs	4
MgO	1.70	Eu	<1
CaO	1.89	Hf	2
Na_2O	0.92	La	9
K_2O	3.74	Rb	129
P_2O_5	0.142	Sb	2
LOI	3.31	Sc	16
Total*	100.45	Sm	2
Ba	313	Th	2
C (Leco)	0.15	Yb	1
Ni	26		
S (Leco)	1.24		
V	132		
Zr	67		

* includes S

ANALYSIS OF OREAS 62Pb

At the time of writing seventeen laboratories had reported their results and these respondents are listed in the section headed Participating Laboratories. To maintain anonymity laboratories have been randomly designated the letter codes A through Q (Tables 2 – 4). With the exception of Laboratory A, each received four to five 100g samples with instructions to carry out one 30 to 50g fire assay determination for gold and one aqua regia digest determination for silver using their preferred finish. Apart from Lab E (ICPOES) and Labs G and K (gravimetric), most employed a flame AAS finish. Silver was determined by an AAS, ICPMS or ICPOES reading method.

For each laboratory two 100g subsamples were scoop-split from each of two separate 1kg test units taken during the bagging stage. This two-stage nested design for the interlaboratory programme was amenable to analysis of variance (ANOVA) treatment and enabled a comparative assessment of within- and between-unit homogeneity. In certain instances a fifth randomly chosen sample was included in the batch. For the determination of a statistical tolerance interval for gold, a 10g scoop split was taken from each of the twenty-three random test units and submitted to Lab A for determination via instrumental neutron activation analysis on a reduced analytical subsample weight of 0.5 gram.

Individual gold results for the fire assay and INAA methods are presented in Tables 2 and 3 together with the mean, median, standard deviation (absolute and relative) and bias (PDM^3) for each data set. Interlaboratory agreement of the means of all but one data set is good, lying within 6.0% of the recommended value of 11.33 ppm Au. The exceptions to this is Lab N having a bias of 7.29%. Individual silver results together with

summary statistics for each data set are presented in Table 4. Interlaboratory agreement of the means of all but four data sets are good, lying within 9.8% of the recommended value of 21.5 ppm Ag.

Table 2. Analytical results for gold in Gosowong standard OREAS 62Pb (FA-AAS - fire assay / atomic absorption spectrometry; FA-OES - fire assay / inductively coupled optical emission spectrometry; FA-GRAV - fire assay / gravimetric finish; Std.Dev. and RSD are one sigma values; PDM[3] - percent deviation of lab mean from corrected mean of means; outliers in bold; values in parts per million).

Replicate No.	Lab B1 FA-AAS (50g)	Lab B2 FA-AAS (50g)	Lab B3 FA-AAS (50g)	Lab C1 FA-AAS (50g)	Lab C2 FA-AAS (50g)	Lab C3 FA-AAS (50g)	Lab D1 FA-AAS (50g)	Lab D2 FA-AAS (50g)	Lab D3 FA-AAS (50g)
1	**10.86**	11.15	10.98	11.0	11.5	**9.8**	11.50	11.95	11.04
2	11.62	11.21	10.97	11.0	11.5	10.5	**11.05**	12.36	11.69
3	11.44	10.95	10.98	11.5	11.5	11.0	11.44	12.09	11.38
4	11.38	11.03	11.01	11.5	12.0	11.0	11.54	**11.43**	11.56
5	11.57	10.79	**10.83**	11.0	12.0	11.0	11.51	11.96	12.00
Mean	11.37	11.03	10.95	11.20	11.70	10.66	11.41	11.96	11.53
Median	11.44	11.03	10.98	11.00	11.50	11.00	11.50	11.96	11.56
Std.Dev.	0.30	0.17	0.07	0.27	0.27	0.53	0.20	0.34	0.36
Rel.Std.Dev	2.67%	1.51%	0.65%	2.45%	2.34%	4.95%	1.79%	2.84%	3.10%
PDM[3]	0.30%	-2.77%	-3.40%	-1.23%	3.17%	-6.00%	0.60%	5.43%	1.68%

Table 2. continued

Replicate No.	Lab E1 FA-OES (40g)	Lab E2 FA-OES (40g)	Lab E3 FA-OES (40g)	Lab F1 FA-AAS (50g)	Lab F2 FA-AAS (50g)	Lab F3 FA-AAS (50g)	Lab G FA-GRAV (50g)	Lab H FA-AAS (50g)	Lab I FA-AAS (50g)
1	11.7	11.7	10.9	11.2	12.0	11.3	11.52	11.36	11.4
2	11.6	11.5	11.2	11.8	11.3	11.2	**11.27**	11.27	11.3
3	12.0	11.6	11.0	11.4	11.4	**11.8**	11.48	11.27	11.2
4	11.9	11.7	11.0	11.6	12.1	11.4	11.47	11.33	11.2
5	11.7	11.5	11.3	11.7	12.0	11.5			
Mean	11.76	11.60	11.08	11.54	11.76	11.44	11.44	11.31	11.28
Median	11.70	11.60	11.00	11.60	12.00	11.40	11.47	11.30	11.25
Std.Dev.	0.16	0.10	0.16	0.24	0.38	0.23	0.11	0.05	0.10
Rel.Std.Dev	1.39%	0.86%	1.48%	2.09%	3.22%	2.01%	0.96%	0.40%	0.85%
PDM[3]	3.70%	2.29%	-2.29%	1.76%	3.70%	1.18%	1.14%	0.01%	-0.28%

Table 2. continued

Replicate No.	Lab J FA-AAS (50g)	Lab K FA-AAS (50g)	Lab L FA-AAS (50g)	Lab M FA-AAS (50g)	Lab N FA-AAS (50g)	Lab O FA-AAS (50g)	Lab P FA-AAS (50g)	Lab Q FA-AAS (50g)
1	10.68	**11.30**	10.94	11.4	10.6	**10.20**	11.4	11.62
2	**11.06**	11.05	11.34	11.7	11.1	11.85	11.4	11.64
3	10.68	11.00	11.26	11.65	**9.48**	11.55	11.5	11.55
4	10.83	11.05	11.01	11.55	10.75	11.45	11.5	11.71
5								
Mean	10.81	11.10	11.14	11.58	**10.48**	11.26	11.45	11.63
Median	10.76	11.05	11.14	11.60	10.68	11.50	11.45	11.63
Std.Dev.	0.18	0.14	0.19	0.13	0.70	0.73	0.06	0.07
Rel.Std.Dev	1.64%	1.22%	1.73%	1.14%	6.68%	6.47%	0.50%	0.57%
PDM[3]	-4.38%	-1.83%	-1.49%	2.37%	-7.29%	-0.39%	1.27%	2.87%

STATISTICAL EVALUATION OF ANALYTICAL DATA FOR OREAS 62Pb

Recommended Value and Confidence Limits

Each batch of results was treated as a separate data set in testing for outliers and in determining the consensus mean. A weighting was applied to each batch mean to ensure equal representation for all laboratories irrespective of the number of batches analysed. The recommended value was determined from the mean of means of accepted replicate values of accepted laboratory data sets A to Q according to the formulae

$$\bar{x}_i = \frac{1}{n_i}\sum_{j=1}^{n_i} x_{ij}$$

$$\ddot{x} = \frac{1}{p}\sum_{i=1}^{p} \bar{x}_i$$

where

x_{ij} *is the jth result reported by laboratory i;*

p *is the number of participating laboratories;*

n_i *is the number of results reported by laboratory i;*

$\bar{x}_i$ *is the mean for laboratory i;*

$\ddot{x}$ *is the mean of means.*

The confidence limits were obtained by calculation of the variance of the consensus value (mean of means) and reference to Student's-*t* distribution with degrees of freedom (*p*-1)

$$\hat{V}(\ddot{x}) = \frac{1}{p(p-1)}\sum_{i=1}^{p}(\bar{x}_i - \ddot{x})^2$$

$$\text{Confidence limits} = \ddot{x} \pm t_{1-x/2}(p-1)\left(\hat{V}(\ddot{x})\right)^{1/2}$$

where $t_{1-x/2}(p-1)$ is the 1-x/2 fractile of the t-distribution with (p-1) degrees of freedom.

The distribution of the values are assumed to be symmetrical about the mean in the calculation of the confidence limits. The test for rejection of individual outliers from each laboratory data set was based on *z* scores (rejected if $|z_i| > 2.5$) computed from the robust estimators of location and scale, *T* and *S*, respectively, according to the formulae

$$S = 1.483 \underset{j=1.....n}{\text{median}} / x_j - \underset{i=1.....n}{\text{median}} (x_i) /$$

$$z_i = \frac{x_i - T}{S}$$

where

T is the median value in a data set;
S is the median of all absolute deviations from the sample median multiplied by 1.483, a correction factor to make the estimator consistent with the usual parameter of a normal distribution.

Table 3. Analytical results for gold (ppm) in OREAS 62Pb by instrumental neutron activation analysis on 0.5 gram analytical subsample weights (abbreviations as for Table 2).

Replicate No.	Lab A INAA (0.5g)
1	11.02
2	10.72
3	10.79
4	10.94
5	10.86
6	10.88
7	10.86
8	10.92
9	10.83
10	10.83
11	10.91
12	10.89
13	11.20
14	10.92
15	10.82
16	11.19
17	11.13
18	11.02
19	10.96
20	10.79
21	10.80
22	11.02
23	10.93
Mean	10.97
Median	10.93
Std.Dev.	0.14
Rel.Std.Dev	1.26%
PDM[3]	-3.28%

In certain instances statistician's prerogative has been employed in discriminating outliers. Individual outliers and, more rarely, laboratory means deemed to be outlying are shown in bold and have been omitted in the determination of recommended values.

Statement of Homogeneity

The standard deviation of each laboratory data set includes error due to both the imprecision of the analytical method employed and to possible inhomogeneity of the material analysed. The standard deviation of the pooled individual analyses of all participating laboratories includes error due to the imprecision of each analytical method, to possible inhomogeneity of the material analysed and, in particular, to deficiencies in accuracy of each analytical method. In determining tolerance intervals for silver that component of error attributable to measurement inaccuracy was eliminated by transformation of the individual results of each data set to a common mean (the uncorrected grand mean) according to the formula

Table 4. Analytical results for silver in Gosowong standard OREAS 62Pb (INAA – instrumental neutron activation analysis; AR-AAS - aqua regia digest / atomic absorption spectrometry; AR-OES - aqua regia digest / inductively coupled plasma optical emission spectrometry; AR-MS - aqua regia digest / inductively coupled plasma mass spectrometry; other abbreviations as in Table 2; values in parts per million).

Replicate No.	Lab A INAA	Lab B1 AR-AAS	Lab B2 AR-AAS	Lab B3 AR-AAS	Lab C1 AR-OES	Lab C2 AR-OES	Lab C3 AR-OES	Lab D1 AR-MS	Lab D2 AR-MS
1	21.3	21.7	19.7	20.9	**12**	22	24	20.17	18.09
2	17.1	22.0	19.7	20.3	21	21	24	19.66	18.14
3	20.7	**21.6**	19.5	20.2	21	**26**	24	19.96	18.08
4	15.7	22.1	**19.2**	**19.0**	21	23	24	21.18	**18.62**
5	17.3	22.1	19.7	19.9	22	23	24	20.89	18.22
6	19.9								
7	20.2								
8	19.6								
9	14.3								
10	14.8								
11	16.0								
12	20.5								
13	14.5								
14	19.5								
15	14.3								
16	15.6								
17	17.1								
18	16.5								
19	15.1								
20	18.0								
21	20.0								
22	19.9								
23	20.0								
Mean	**17.73**	21.90	19.56	20.06	19.40	23.00	**24.00**	20.37	**18.23**
Median	17.30	22.00	19.70	20.20	21.00	23.00	24.00	20.17	18.14
Std.Dev.	2.39	0.23	0.22	0.69	4.16	1.87	0.00	0.64	0.22
Rel.Std.Dev	13.46%	1.07%	1.12%	3.46%	21.44%	8.13%	0.00%	3.14%	1.23%
PDM[3]	-17.54%	1.83%	-9.05%	-6.73%	-9.79%	6.95%	11.59%	-5.27%	-15.23%

Table 4 continued

Replicate No.	Lab D3 AR-MS	Lab E1 AR-MS	Lab E2 AR-MS	Lab E3 AR-MS	Lab F1 AR-OES	Lab F2 AR-OES	Lab F3 AR-OES	Lab G AR-AAS	Lab H AR-AAS
1	21.65	22.6	22.9	21.2	20.1	19.8	20.8	**21.9**	21
2	**20.54**	23.3	23.5	21.4	20.8	19.7	20.8	22.4	22
3	20.94	23.6	20.9	21.8	20.7	19.9	20.4	22.4	21
4	21.64	22.4	21.0	21.8	21.4	20.2	19.9	22.4	22
5	21.76	23.0	21.9	21.2	21.2	**21.1**	19.8		
Mean	21.31	22.98	22.04	21.48	20.84	20.14	20.34	22.28	21.50
Median	21.64	23.00	21.90	21.40	20.80	19.90	20.40	22.40	21.50
Std.Dev.	0.54	0.49	1.15	0.30	0.50	0.57	0.48	0.25	0.58
Rel.Std.Dev	2.52%	2.14%	5.21%	1.41%	2.41%	2.82%	2.35%	1.12%	2.69%
PDM[3]	-0.93%	6.85%	2.48%	-0.12%	-3.10%	-6.35%	-5.42%	3.57%	-0.03%

Table 4 continued

Replicate No.	Lab I AR-AAS	Lab J AR-AAS	Lab K	Lab L	Lab M	Lab N	Lab O	Lab P
1	24.8	21.8	21.9	22.0	21.9	22.4	21.2	21.5
2	23.1	21.7	21.3	21.6	21.6	21.6	20.9	21.4
3	23.6	22.6	21.6	21.8	21.8	22.1	21.0	20.8
4	25.9	22.3	21.7	22.1	21.6	22.0	21.0	20.5
5								
Mean	**24.35**	22.10	21.63	21.88	21.73	22.03	21.03	21.05
Median	24.20	22.05	21.65	21.90	21.70	22.05	21.00	21.10
Std.Dev.	1.26	0.42	0.25	0.22	0.15	0.33	0.13	0.48
Rel.Std.Dev	5.16%	1.92%	1.16%	1.01%	0.69%	1.50%	0.60%	2.28%
PDM[3]	13.22%	2.76%	0.55%	1.71%	1.02%	2.41%	-2.24%	-2.12%

Table 5. Recommended values and 95% confidence intervals

Constituent	Recommended value	95% Confidence interval	
		Low	High
Gold, Au (ppm)	11.33	11.16	11.50
Silver, Ag (ppm)	21.5	21.0	22.0

$$x'_{ij} = x_{ij} - \bar{x}_i + \frac{\sum_{i=1}^{p}\sum_{j=1}^{n_i} x_{ij}}{\sum_{i=1}^{p} n_i}$$

where

x_{ij} *is the* j*th raw result reported by laboratory* i;

x'_{ij} *is the* j*th transformed result reported by laboratory* i;

n_i *is the number of results reported by laboratory* i;

p *is the number of participating laboratories*;

$\bar{x}_i$ *is the raw mean for laboratory* i.

The homogeneity of each constituent was determined from tables of factors for two-sided tolerance limits for normal distributions (ISO 3207) in which

$$\text{Lower limit is } \ddot{x} - k'_2(n, p, 1-\alpha)s''_g$$
$$\text{Upper limit is } \ddot{x} + k'_2(n, p, 1-\alpha)s''_g$$

where

n *the number of results*

$1-\alpha$ *is the confidence level;*

p is the proportion of results expected within tolerance limits;
k'_2 is the factor for two-sided tolerance limits (m, α unknown);
s''_g is the corrected grand standard deviation.

The meaning of these tolerance limits may be illustrated for silver, where 99% of the time at least 95% of subsamples will have concentrations lying between 20.6 and 22.4 ppm. Put more precisely, this means that if the same number of subsamples were taken and analysed in the same manner repeatedly, 99% of the tolerance intervals so constructed would cover at least 95% of the total population, and 1% of the tolerance intervals would cover less than 95% of the total population (IS0 Guide 35).

The corrected grand standard deviation, s_g'', used to compute the tolerance intervals is the weighted means of standard deviations of all data sets for a particular constituent according to the formula

$$s''_g = \frac{\sum_{i=1}^{p} \left(s_i \left(1 - \frac{s_i}{s'_g}\right)\right)}{\sum_{i=1}^{p} \left(1 - \frac{s_i}{s'_g}\right)}$$

where

$$1 - \left(\frac{s_i}{2s'_g} \right) \text{ is the weighting factor for laboratory } i \text{ ;}$$

$$s'_g \text{ is the grand standard deviation computed from the transformed (i.e. means - adjusted) results}$$

according to the formula

$$s'_g = \left[\frac{\sum_{i=j}^{p} \sum_{j=i}^{n_i} \left(x'_{ij} - \bar{x}'_i \right)^2}{\sum_{i=1}^{p} n_i - 1} \right]^{1/2}$$

where $\bar{x}'_i$ is the transformed mean for laboratorty i

The weighting factors were applied to compensate for the considerable variation in analytical precision amongst participating laboratories. Hence, weighting factors for each data set have been constructed so as to be inversely proportional to the standard deviation of that data set. Outliers (shown in bold in Table 4) were removed prior to the calculation of tolerance intervals and a weighting factor of zero was applied to those data sets where $s_I / 2s_g' > 1$ (i.e. where the weighting factor $1 - s_I / 2s_g' < 0$). It should be noted that estimates of tolerance by this method are considered conservative as a significant proportion of the observed variance, even in those laboratories exhibiting the best analytical precision, can presumably be attributed to measurement error.

For gold a more simplified procedure was used in the determination of homogeneity. This entailed using the high precision INAA data alone, obtained on an analytical subsample weight of 0.5 gram (compared to 30-50 gram for the fire assay method). By employing a

sufficiently reduced subsample weight in a series of determinations by the same method, analytical error becomes negligible in comparison to subsampling error. The corresponding standard deviation at a 50 gram subsample weight can then be determined from the observed standard deviation of the 0.5 gram data using the known relationship between the two parameters (Ingamells and Switzer, 1973). The homogeneity of gold was then determined from tables of factors for two-sided tolerance limits for normal distributions. The high level of repeatability indicated by the low coefficients of variation in Tables 2 and 3 (particularly the 0.5 gram Becquerel data) is consistent with the very narrow calculated tolerance interval and is confirmation of the excellent homogeneity of gold in OREAS 62Pb.

Table 6. Recommended values and tolerance intervals.

Constituent	Recommended value	Tolerance interval $1-\alpha=0.99$, $\rho=0.95$	
		Low	High
Gold, Au (ppm)	11.33	11.29	11.37
Silver, Ag (ppm)	21.5	20.6	22.4

PARTICIPATING LABORATORIES

Acme Analytical Laboratories, Vancouver, BC, Canada
Activation Laboratories, Ancaster, Ontario, Canada
ALS Chemex, Orange, NSW, Australia
ALS Chemex, Santiago, Chile
ALS Chemex Laboratories Pty Ltd, Val d'Or, Quebec, Canada
ALS Chemex, North Vancouver, BC, Canada
ALS Chemex, Sparks, Nevada, USA
Amdel Laboratories Ltd, Thebarton, SA, Australia
Amdel Laboratories Ltd, Orange, NSW, Australia
Ammtec Limited, Balcatta, WA, Australia
Becquerel Laboratories, Lucas Heights, NSW, Australia
Genalysis Laboratory Services Pty Ltd, Maddington, WA, Australia
Intertek Testing Services, Jakarta, Indonesia
McPhar Geoservices (Phil.) Inc., Makati, Philippines
OMAC Laboratories, Loughrea. Co. Galway, Ireland
Standard and Reference Laboratories, Malaga, WA, Australia
Ultra Trace, Canning Vale, WA, Australia

PREPARER AND SUPPLIER OF THE REFERENCE MATERIAL

The gold ore reference material, OREAS 62Pb has been prepared and certified and is supplied by:

Ore Research & Exploration Pty Ltd
3 London Drive
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AUSTRALIA

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Facsimile	(03) 9762 3808	International	+613-9762 3808
Email	info @ore.com.au	Web	www.ore.com.au

It is available in unit sizes of 60g laminated foil packets.

INTENDED USE

OREAS 62Pb is a reference material intended for the following:

i) for the calibration of instruments used in the determination of the concentration of gold;
ii) for the verification of analytical methods for gold;
iii) for the preparation of secondary reference materials of similar composition;
iv) as an arbitration sample for commercial transactions.

STABILITY AND STORAGE INSTRUCTIONS

OREAS 62Pb has been prepared from sulphide-poor epithermal Au-Ag ore. The robust foil laminate film used to package it is an effective barrier to oxygen and moisture and the sealed CRM is considered to have long-term stability under normal storage conditions.

INSTRUCTIONS FOR THE CORRECT USE OF THE REFERENCE MATERIAL

The recommended values for OREAS 62Pb refer to the concentration levels of gold and silver in packaged form. Drying in air to constant mass at 105^0C has established a hygroscopic moisture content of 1.24%. If the reference material is dried by the user prior to analysis, the recommended value stated herein should be corrected to the moisture-free basis.

LEGAL NOTICE

Ore Research & Exploration Pty Ltd has prepared and statistically evaluated the property values of this reference material to the best of its ability. The Purchaser by receipt hereof releases and indemnifies Ore Research & Exploration Pty Ltd from and against all liability and costs arising from the use of this material and information.

CERTIFYING OFFICER: Dr Paul Hamlyn

ACKNOWLEDGMENTS

Newcrest Mining is thanked for provision of samples used to prepare the CRM. The cooperation of all participating laboratories is gratefully acknowledged.

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