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NEOGENE TECTONIC EVOLUTION OF THE MAGDALENA SHELF AND SOUTHERN GULF OF CALIFORNIA: INSIGHTS FROM DETRITAL ZIRCON U-Pb AGES FROM THE MAGDALENA FAN AND ADJACENT AREAS

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1. Sandstone and modern sand sampling and processing methods

Samples recovered from DSDP cores were typically small (~15 g). Conversely, samples weighing several kg were extracted from strata exposed in outcrops. Generally these consisted of medium-grained, moderately indurated sandstone. Arroyos identified for the collection of modern sands were selected on the basis of catchment areas on the order of 50 km^2 or larger. At each locality, ~20 kg of sand was accumulated from generally 10 or more sample sites in the channel and along cut banks. The composite was thoroughly mixed and sized to obtain the < 1 mm size fraction. Further splitting produced a final sample weighing ~ 2 kg.

Standard crushing and sizing methods were applied to sandstones. In most instances, we found it necessary to ultrasonically treat the crushed materials with dilute (1N) acetic acid to breakdown composite grains and eliminate adhering calcite cement. This procedure was repeated until reaction progress was complete. Modern sands generally did not require any acid treatment. The < 0.25 mm size fraction was washed and subjected to standard density and magnetic methods to concentrate zircon crystals. With the exception of sample 471-05 which produced only a few usable grains, the relatively small DSDP core samples typically yielded on the order of 100 zircons. Most or all of these were selected for analysis. Conversely, hundreds of zircons were recovered from both the sandstone and modern sand samples. Even though we analyzed only a small fraction of the latter, the fact that virtually all grains were colorless and subhedral to euhedral indicates that our selection of grains from these materials was likely sufficiently unbiased effectively to ensure representative results. In addition, we analyzed a wide size range of materials (<50 µm to 250 µm) to guard against size bias.

2. U-Pb Analytical Methods

In this study, we have interchangeably used detrital zircon U-Pb ages produced by two different methods: Ion microprobe or secondary ionization mass spectrometry (SIMS) and laser ablation, multi-collector, inductively coupled plasma mass spectroscopy (LA-MC-ICPMS). Below we summarize the analytical protocols employed in each method. We conclude by presenting results of an intercalibration experiment that confirms the overall validity of our combined method approach.

SIMS Methods Roughly 60% of the U-Pb age measurements were obtained via secondary ionization mass spectrometry (SIMS) using the UCLA Cameca ims 1270 ion microprobe. Grains were hand-selected and mounted on double-sided tape, and potted in epoxy. Grain mounts were sectioned with 4000 grit SiC paper, polished to 0.3 µm with polycrystalline diamond, ultrasonically cleaned in high-purity 1 N HCl followed by double distilled H_2O to remove surficial Pb contamination, dried, and coated with a ~30 nm thickness of Au to maintain charge compensation during sputtering and ion extraction. Uranium-lead ages were obtained in monocollection mode with individual analyses entailing ~9 minutes. A mass-filtered 15 nA $^{16}O^-$ beam with 22.5 kV impact energy was focused to a ~30 mm spot that deepened to ~0.3 µm after 10 min sputtering. The region immediately above the sample surface was flooded with O_2 at a pressure of ~3 10^{-3} Pa. Oxygen flooding has the effect of increasing Pb^+ yields by a factor of ~1.7. Secondary ions were extracted at 10 kV with an energy band-pass of 50 eV. The mass spectrometer was tuned to obtain a mass resolution (~4500) that was sufficient to resolve the most troublesome molecular interferences (i.e., those adjacent to the Pb peaks). Contrasting characteristics of the energy spectra of Th^+, U^+, and UO^+ (relative to the other ions) lead us to apply small energy offsets to these species so that all isotopes could be measured at their maximum intensities.

Each analysis involved 120 seconds of pre-sputtering. During this interval, we performed ion imaging to align the analysis pit with optical axis of the instrument and peak centering to fine tune the mass calibration. Because sputtering proceeds more slowly at the edges of the crater than in the central region, resolvable surface contamination continued to contribute to the measured Pb signal after pre-sputtering had been completed. To further enhance the radiogenic lead yield, we cropped the ion beam with the field aperture (effective 30µm) to permit only ions sputtered from the central portion of the crater to be transmitted through the mass spectrometer. All measurements were performed with the axial electron multiplier. Eight one minute cycles of measurements at $^{94}Zr_2{}^{16}O^+$, $^{204}Pb^+$, $^{206}Pb^+$, $^{207}Pb^+$, $^{208}Pb^+$, $^{232}Th^+$, $^{238}U^+$, and $^{238}U^{16}O^+$ were integrated to calculate a U-Pb age.

Data reduction was carried out using in house software (*ZIPS 2.4*) developed by Chris Coath. The relative sensitivities for Pb and U were determined on reference zircon

AS-3 (Paces and Miller, 1993) using a modified calibration technique described in Compston et al. (1984). Calibration data obtained collected from AS-3 zircon every fifth analysis was used to constrain a linear UO/U vs Pb/U calibration that we employed to estimate Pb/U relative sensitivity for unknowns. For most samples we used ^{208}Pb as a proxy for common Pb (Compston et al., 1984). For discordant analyses or samples with high Th/U we relied upon the ^{204}Pb correction. Periodic analyses of secondary standards indicated a typical precision and accuracy 2-3% (1σ).

LA-MC-ICPMS Methods Zircon U–Pb measurements were performed with the UA GVI Isoprobe multicollector ICPMS. The approach we employed was equivalent to that described in greater detail by Gehrels et a. (2006). To facilitate random sampling, a large fraction of the zircon recovered from a given sample was poured out onto a half circular (5 mm radius) region on double-sided tape. Two such samples were situated within the inner 12 mm diameter region of one inch circular mounts. The zircons were potted in epoxy resin, sectioned, and coarsely polished. Both in house zircon standards (SL zircon, 564 Ma, Dickinson and Gehrels, 2002 and 49127 zircon, 137 Ma, Kimbrough, unpublished TIMS data) and a reference glass (NBS 610) were centrally located between the samples. Analysis pits were formed with a New Wave DUV 193 nm Excimer laser ablation system that was set up to produce a 35 μm diameter, ~15 μm deep crater in 20 seconds. Measurements were carried out with a GVI Isoprobe multicollector ICPMS in a static-mode configuration using $10e^{11}$ Ohm Faraday detectors for ^{206}Pb, ^{207}Pb, ^{208}Pb, ^{232}Th, and ^{238}U, and an ion-counting channel for ^{204}Pb. Each analysis included one 20-second integration on peaks with the laser off (for backgrounds). After lasering was initiated, 5 sec equilibration time was allowed before measuring 15 one-second integrations. This was followed with a 30 second delay to purge the previous sample and prepare for the next analysis. On average we achieved a throughput of ~80 seconds per analysis, ~45 analyses per hour or ~900 analyses per 24 hour session (allowing time for periodic tuning and sample changing). Isotopic fractionation was monitored after every fifth unknown measurement by analyzing SL zircon. Data reduction was carried out using in house software (*Agecalc*) developed by George Gehrels. Relative Pb/U sensitivity factors were established from a calibration constructed from the running mean of 5 standard measurements bracketing a given unknown analysis.

Similar calibrations were constructed for $^{207}Pb/^{206}Pb$ and $^{206}Pb/^{204}Pb$. Analyses performed with a secondary standard (49127) typically indicated a $^{206}Pb/^{238}U$ age precision and reproducibility of 1-2% (1σ) for this early Cretaceous zircon. Measured lead isotopic ratios were corrected for common lead using ^{204}Pb as a proxy and assuming an initial Pb composition from Stacey and Kramers (1975). As in SIMS analysis, we generally used $^{206}Pb/^{238}U$ ages for zircons younger than 1 Ga and $^{206}Pb/^{207}Pb$ values to represent the age of older grains. Concentrations of U and Th were estimated relative to NIST 610 glass.

SIMS and LA-MC-ICPMS Intercalibration Experiment A SIMS and LA-MC-ICPMS intercalibration experiment was carried out with multiple standards of varying age on the same sample mount (Fig. DR1). In this comparison, we found that while both of the methods we employed were capable of producing results of equivalent accuracy (1-2%), the LA-MC-ICPMS approach used tended to consistently yield results that were more precise (Fig. DR1). Another significant advantage of the LA-MC-ICPMS approach is that results are much more efficiently obtained (i.e., 7 times faster; ~80 seconds vs. ~540 seconds). The tradeoff is that about two orders of magnitude more zircon is consumed in LA-MC-ICPMS analyses relative to SIMS. However, while the much greater volume requirements of LA-MC-ICPMS analysis are potentially problematic for polygenetic zircon that can exhibit complex age variation, the vast majority of the detrital zircons we analyzed appeared to possess simple igneous crystallization histories that yielded stable isotopic ratios as ablation proceeded. The only notable problem we encountered was that small grains (i.e., < 35 µm) typically failed to yield usable LA-MC-ICPMS data due to mechanical instability of the grains during laser ablation.

3. Application of Kolmogorov-Smirnov Statistic

Comparison of detrital zircon ages age distributions a fundamental aspect of provenance analysis. While a number of methods have been used to accomplish this (see Fedo et al., 2003), the Kolmogorov-Smirnov test possesses the most readily understood statistical significance. It is a widely applied non-parametric statistical method that has been applied in geological problems for more than fifty years (Miller and Kahn, 1962). The test provides a robust statistical basis to compare detrital age distributions defined by two independent samples of different size. It evaluates the validity of the null hypothesis (i.e., that two populations are not derived from the same distribution). In the past, some authors (Fedo et al., 2003) have criticized the application of K-S method to detrital age distributions for being insensitive to dispersed data and for its failure to take uncertainty in the age distribution into account. We find however, that the K-S method ideally suited to compare relative continuous distributions such as those measured from the Magdalena Fan, southern Baja California, and formerly adjacent mainland Mexico. As we describe below, the K-S approach can be readily generalized to account for age uncertainties by employing the Gaussian kernel probability density function (e.g., Silverman, 1986) instead of the raw age data.

Overview of the Kolmogorov-Smirnov Statistic.

The Kolmogorov-Smirnov statistic measures the maximum absolute deviation (*D*) between two cumulative-frequency distributions (Fig. DR2). Although one can imagine any number of statistics that could be used to measure the overall difference between two cumulative distribution functions (i.e. the absolute value of the area between them), it is the ability to impart statistical significance to the measured vale of *D* for two cumulative probability distributions that identifies the K-S statistic as the comparative measure of choice for many applications. For example, the significance (*PROB)* between two distributions of sizes N_1 and N_2 respectively is given by (Press et al., 1992):

$$PROB(\lambda) = 2\sum_{j=1}^{\infty}(-1)^{j-1}e^{-2j^2\lambda^2}$$

$$\lambda = \left(\sqrt{XN} + 0.12 + 0.11 \big/ \sqrt{XN}\right)D;\ XN = \sqrt{\frac{N_1 N_2}{N_1 + N_2}} \qquad (1)$$

In statistics, a result is considered significant if it is unlikely to have occurred by chance. The null hypothesis establishes that the distributions are resolvable if the calculated *PROB* value is below the significance level. Typically, the significance threshhold is established at the 95% confidence level (i.e., *PROB* = 0.05). Values of *PROB* < 0.05 disprove the null hypothesis at the 95% confidence level while *PROB* values above 0.05 indicate that the null hypothesis cannot be disproven (i.e., the distributions are not resolvable).

Figure DR2A provides an example involving two distributions similar to those that we have generated in the Magdalena fan study. The 95% confidence bands for distribution #1 in Figure DR2B are shown as red dashed lines. Because the probability integral of distribution #2 resides entirely within the 95% confidence intervals of #1 (Fig. DR2B), the null hypothesis cannot be validated. Figure DR2C shows the relationship between the *D* and *PROB* values for this example. At the 95% confidence level, $D_{0.05}$=0.26. In other words, the two distributions would have to be separated by more than 0.26 for them to be resolved at 95% confidence.

K-S Generalization to include age uncertainties

Detrital zircon U-Pb ages typically exhibit large variability in uncertainties depending upon U content, the magnitude of the correction for common Pb, and ability to precisely determine the relative sensitivity factor of Pb relative to U. Consequently, this variability should be taken into account to obtain more robust K-S statistical results. We have accomplished this by generalizing the K-S statistic to employ the Gaussian kernel probability function as described in Silverman (1986). For an age distribution of size N_i and an age distribution $\mu_i \pm \sigma_i$, the Gaussian kernel probability function is defined by:

$$f(t) = \frac{1}{n} \sum_{i=1}^{n} \frac{e^{-\frac{(t-\mu_i)^2}{2\sigma_i^2}}}{\sigma_i \sqrt{2\pi}} \qquad (2)$$

Accordingly, we define the parameter *D* as the maximum absolute deviation between the integrals of the gaussian kernel probability functions as show in Figure DR3. The value of *PROB* may be calculated using equation (1) when *D* is calculated from the two Gaussian kernel probability functions. Moreover, because the continuous integrals of the Gaussian kernel probability functions are smoother than for the discrete cumulative-frequency distributions, the *PROB* values are higher than those produced by traditional K-S method, making evaluation of the null hypothesis more robust.

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FIGURE CAPTIONS

Figure DR1 Comparison of U-Pb zircon results produced by laser ablation-multicollector-inductively coupled mass spectrometry (LA-MC-ICPMS) methods at UA and by ion microprobe secondary ionization mass spectrometry (SIMS) at UCLA. Analyses were performed using the same zircon mount in 2005 using results from SL zircon (564 Ma; Dickinson and Gehrels, 2002) to standardize the measurements. The yellow bands represent ±2σ percent relative errors for the U-Pb ages of the zircons as determined by isotope dilution thermal ionization mass spectrometry. The red symbols represent the percent deviation of the weighted mean $^{206}Pb/^{238}U$ age calculated from 10 analyses obtained via LA-MC-ICPMS from 50 μm diameter, ~15 μm deep ablation pits using (i.e., similar conditions to those employed in this study). The associated error bars represent ±2σ percent relative standard errors. UCLA SIMS results shown in blue are portrayed in the same manner as described above and correspond to 30 μm diameter, ~0.5 μm deep sputter pits. Both the UA LA-MC-ICPMS and the UCLA SIMS results generally agree within 1% of the given ID-TIMS age. In this intercalibration experiement, the average deviation from IDTIMS U-Pb ages was +0.3 ± 0.8% for LA-MC-ICPMS and -0.6 ± 0.7% for SIMS for the 8 zircon standards measured. However, U-Pb ages determined by LA-MC-ICPMS and a 50 μm spot tend to be more precise. Average relative precision was~1.1% (2σ) for LA-MC-ICPMS vs. ~1.5% (2σ) for SIMS.

Figure DR2 Application of Kolmogorov-Smirnov (K-S) statistic. (A) Probability histogram of distributions #1 (red) and #2 (blue). (B) Corresponding probability integrals. Maximum deviation (*D*) is 0.20. Red dashed line is the 95% confidence interval for distribution #1. Because #2 falls entirely within the 95% bands, it cannot be distinguished from #1 at 95% confidence. (C) Relationship between *D* and Probability (*PROB*). The measured value of *D* corresponds to a *PROB* value of 0.15 (i.e., the distributions can be distinguished only at 85% confidence). Distributions #1 and #2 would need to be separated by 0.26 to be resolvable at the 95% confidence level. Note that increasing the number of analyses defining distribution #2 would increase in equation 1 and serve to decrease the value of $D_{0.05}$ required to distinguish the two distributions at the 95% confidence.

Figure DR3 Effect of generalizing the K-S statistic to use Gaussian kernel distributions. (A) Gaussian kernel probability curves for distributions #1 (red) and #2 (blue) corresponding to histograms in Fig. DR2. (B) Probability Integrals for distributions #1 and #2. Note that the value of *D* has decreased from 0.20 to 0.18 while *PROB* has increased from 0.15 to 0.34. Generalizing the K-S statistic to employ Gaussian kernel probability functions makes evaluation of the null hypothesis more robust.

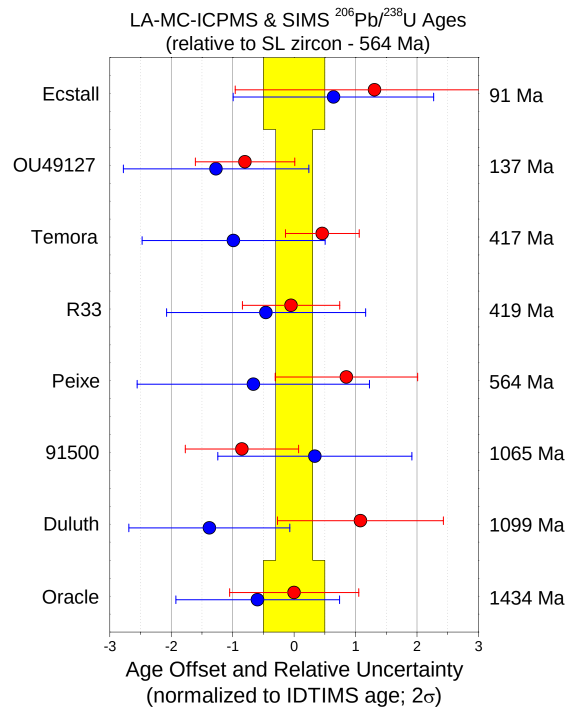
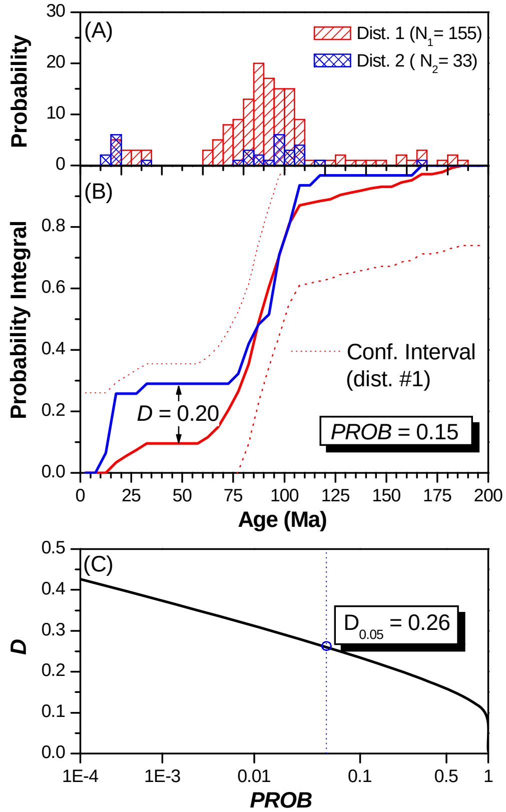
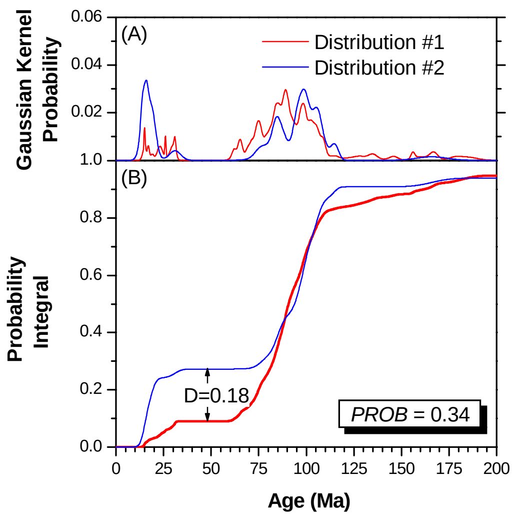

LA-MC-ICPMS & SIMS $^{206}Pb/^{238}U$ Ages
(relative to SL zircon - 564 Ma)
Ecstall
OU49127
Temora
R33
Peixe
91500
Duluth
Oracle
91 Ma
137 Ma
417 Ma
419 Ma
564 Ma
1065 Ma
1099 Ma
1434 Ma
-3
-2
-1
0
1
2
3
Age Offset and Relative Uncertainty
(normalized to IDTIMS age; 2σ)

Figure DR1



(A)
Dist. 1 (N_1= 155)
Dist. 2 (N_2= 33)
Probability
(B)
Probability Integral
Conf. Interval (dist. #1)
D = 0.20
PROB = 0.15
Age (Ma)
(C)
D
$D_{0.05}$ = 0.26
PROB

Figure DR2



Gaussian Kernel Probability
(A)
Distribution #1
Distribution #2
0.06
0.04
0.02
1.0
(B)
0.8
0.6
0.4
0.2
0.0
Probability Integral
D=0.18
PROB = 0.34
0
25
50
75
100
125
150
175
200
Age (Ma)

Figure DR3

Summary of Tabulated U-Th-Pb Detrital Zircon Analyses

Sandstone Samples

Sample	Description	N
471-05	DSDP Site 471, Magdalena Fan	8
471-35R	DSPD Site 471, Magdalena Fan	60
471-50	DSDP Site 471, Magdalena Fan	60
471-72	DSDP Site 471, Magdalena Fan	60
474-37R	DSPD Site 474, Offshore SE Los Cabos block	53
485	DSDP Site 485, Rivera Plate, mouth of Gulf	51
LP03-78	Comondu Group (Magdalena shelf)	76
LC03-08	San Gregorio Formation (Magdalena shelf)	82
LP03-83	Tepetate Formation (Magdalena shelf)	75
LP03-85A	Tepetate Formation (Magdalena shelf)	14
LC0306	Unnamed basal conglomerate (W. Los Cabos bl.)	65
TS0376	Salada Formation (W. Los Cabos block)	61
LC0302	La Calera Formation (E. Los Cabos block)	62

Modern Sand Samples

Sample[1]		N
SG1	Magdalena shelf-Sierra La Giganta	96
SG2	Magdalena shelf-Sierra La Giganta	36
SG3	Magdalena shelf-Sierra La Giganta	26
SG4	Magdalena shelf-Sierra La Giganta	26
SG5	Magdalena shelf-Sierra La Giganta	27
SG6	Magdalena shelf-Sierra La Giganta	25
SG7	Magdalena shelf-Sierra La Giganta	20
SG8	Magdalena shelf-Sierra La Giganta	12
SG9	Magdalena shelf-Sierra La Giganta	12
W1	W. Los Cabos block	11
W2	W. Los Cabos block	11
W3	W. Los Cabos block	10
W4	W. Los Cabos block	10
W5	W. Los Cabos block	10
W6	W. Los Cabos block	10
W7	W. Los Cabos block	10
W8	W. Los Cabos block	10
W9	W. Los Cabos block	10
W10	W. Los Cabos block	10
E1	E. Los Cabos block	4
E2	E. Los Cabos block	5
E3	E. Los Cabos block	5
E4	E. Los Cabos block	5
E5	E. Los Cabos block	5
E6	E. Los Cabos block	5
E7	E. Los Cabos block	10
E8	E. Los Cabos block	17
E9	E. Los Cabos block	9
E10	E. Los Cabos block	10
E11	E. Los Cabos block	10
E12	E. Los Cabos block	12
E13	E. Los Cabos block	10
E14	E. Los Cabos block	25
E15	E. Los Cabos block	20
E16	E. Los Cabos block	30
E17	E. Los Cabos block	95
E18	E. Los Cabos block	10
E19	E. Los Cabos block	10
PV1	Jalisco block	10
PV2	Jalisco block	10
PV3	Jalisco block	10
PV4	Jalisco block	14
PV5	Jalisco block	23
PV6	Jalisco block	101
PV7	Jalisco block	27
PV8	Jalisco block	26
PV9	Jalisco block	10
PV10	Jalisco block	17
PV11	Jalisco block	13
PV12	Jalisco block	10
SM1	S. Sierra Madre Occidental	60
SM2	S. Sierra Madre Occidental	57

<u>Explanation of Tabulated Data</u>

1. LA-MC-ICPMS analyses denoted by "*" after analysis ID
2. Fractionation (U/Pb) in SIMS analyses determined from AS3 standard zircon (1099) Ma; Paces and Miller (1993); U/Pb fractionation LA-MC-ICPMS measurements determined from SL standard zircon (564 Ma; Dickinson and Gehrels, 2002).
3. Correction for common Pb in SIMS analyses based upon measured ^{208}Pb for ages < 1 Ga and ^{204}Pb for ages > 1 Ga and Los Angeles basin anthropogenic Pb ratios (see Schmitt et al., 2003). All LA-MC-ICPMS U-Pb ages calculated using measured ^{204}Pb as a proxy for common Pb and Stacey and Kramers (1975) to estimate common Pb ratios.
4. All uncertainties in ^{206}Pb/^{238}U, ^{207}Pb/^{235}U, and ^{207}Pb/^{206}Pb age (SIMS and LA-MC-ICPMS) are $\pm$ 1σ and use the following decay and relative abundance constants: $\lambda_{235}=9.8485 \times 10^{-10}$, $\lambda_{238}=1.55125 \times 10^{-10}$, $^{238}U/^{235}U = 137.88$.
5. U and Th/U estimated from 91500 in SIMS analyses and NIST 610 Glass in LA-MC-ICPMS measurements.

DSDP 471 (Magdalena Fan) U-Pb detrital zircon ages

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
80 ± 5	87 ± 8	-	1548	0.33	471-05_8
85 ± 5	82 ± 9	-	370	0.30	471-05_12
91 ± 5	90 ± 9	-	399	0.28	471-05_14
98 ± 5	98 ± 9	-	1053	0.29	471-05_17
99 ± 5	91 ± 7	-	1155	0.27	471-05_10
99 ± 6	92 ± 10	-	491	0.28	471-05_11
100 ± 6	110 ± 8	-	887	0.27	471-05_19
1012 ± 69	991 ± 52	945 ± 86	412	0.46	471-05_1
12 ± 0	12 ± 3	-	1206	1.21	471-35R_S2-19
24 ± 1	24 ± 8	-	205	0.63	471-35R_08-10
29 ± 1	25 ± 17	-	616	0.68	471-35R_08-07
65 ± 1	71 ± 12	-	837	0.61	471-35R_06-12
74 ± 2	63 ± 22	-	166	0.38	471-35R_07-06
76 ± 2	58 ± 32	-	722	0.56	471-35R_07-05
78 ± 2	69 ± 9	-	278	0.53	471-35R_07-02
80 ± 2	63 ± 13	-	309	0.62	471-35R_S2-05
81 ± 3	62 ± 28	-	173	0.47	471-35R_07-04
82 ± 3	81 ± 7	-	522	0.44	471-35R_S2-18
83 ± 2	106 ± 21	-	155	0.41	471-35R_S2-06
83 ± 2	92 ± 7	-	528	0.54	471-35R_S2-11
84 ± 1	69 ± 7	-	240	0.61	471-35R_07-03
86 ± 3	90 ± 13	-	203	0.46	471-35R_S2-04
86 ± 2	74 ± 17	-	230	0.51	471-35R_08-03
88 ± 3	80 ± 20	-	172	0.85	471-35R_S2-15
88 ± 2	82 ± 17	-	187	0.69	471-35R_09-01
90 ± 2	92 ± 12	-	291	0.64	471-35R_06-09
90 ± 1	89 ± 14	-	443	0.59	471-35R_09-05
91 ± 2	91 ± 13	-	152	0.43	471-35R_07-07
92 ± 2	86 ± 16	-	265	0.37	471-35R_06-13
93 ± 3	93 ± 8	-	445	0.41	471-35R_S2-09
93 ± 2	103 ± 13	-	135	0.27	471-35R_06-14
94 ± 2	70 ± 15	-	173	0.65	471-35R_06-07
94 ± 3	95 ± 26	-	176	0.51	471-35R_06-11
95 ± 2	100 ± 6	-	209	0.42	471-35R_06-04
96 ± 5	98 ± 16	-	135	0.39	471-35R_S2-20
96 ± 3	86 ± 26	-	98	0.37	471-35R_08-09
96 ± 4	94 ± 15	-	210	0.44	471-35R_S2-13
97 ± 4	92 ± 20	-	116	0.64	471-35R_S2-16
98 ± 2	90 ± 14	-	121	0.52	471-35R_08-06
99 ± 12	109 ± 231	-	196	0.50	471-35R_07-10
99 ± 1	92 ± 6	-	1052	0.53	471-35R_08-04
99 ± 5	101 ± 15	-	155	0.28	471-35R_S2-22
99 ± 2	100 ± 20	-	184	0.35	471-35R_06-06
101 ± 2	116 ± 17	-	117	0.76	471-35R_07-08
101 ± 4	85 ± 16	-	124	0.47	471-35R_S2-12
101 ± 4	86 ± 23	-	95	0.77	471-35R_S2-08

DSDP 471 (Magdalena Fan) detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
101 ± 2	109 ± 10	-	369	0.64	471-35R_S2-02
103 ± 1	109 ± 8	-	540	1.00	471-35R_09-03
103 ± 4	83 ± 28	-	128	0.49	471-35R_S2-23
104 ± 3	103 ± 22	-	59	0.43	471-35R_07-09
105 ± 3	100 ± 6	-	807	0.49	471-35R_S2-01
107 ± 7	122 ± 21	-	101	0.50	471-35R_S2-25
108 ± 2	119 ± 14	-	122	0.80	471-35R_07-01
108 ± 2	94 ± 21	-	339	0.60	471-35R_08-05
108 ± 2	99 ± 11	-	225	0.80	471-35R_06-05
109 ± 1	105 ± 10	-	545	0.99	471-35R_06-10
110 ± 7	113 ± 28	-	180	0.71	471-35R_S2-10
110 ± 5	124 ± 21	-	157	0.63	471-35R_S2-03
112 ± 5	97 ± 13	-	153	0.49	471-35R_S2-14
117 ± 6	139 ± 19	-	154	0.58	471-35R_S2-21
119 ± 6	108 ± 20	-	196	0.38	471-35R_S2-24
123 ± 4	103 ± 33	-	115	0.73	471-35R_08-02
168 ± 5	172 ± 15	-	309	0.50	471-35R_S2-07
184 ± 5	184 ± 15	-	1011	0.47	471-35R_08-08
637 ± 6	768 ± 14	1169 ± 44	551	0.20	471-35R_08-01
1216 ± 37	1242 ± 28	1288 ± 38	219	0.32	471-35R_S2-17
1475 ± 42	1430 ± 32	1363 ± 64	23	1.49	471-35R_06-03
2530 ± 24	2735 ± 11	2891 ± 6	1366	0.37	471-35R_09-04
15 ± 0	14 ± 5	-	375	0.46	471-50_03-07
19 ± 1	17 ± 6	-	516	0.50	471-50_04-21
26 ± 0	28 ± 3	-	1615	1.01	471-50_03-05
30 ± 1	30 ± 6	-	402	1.09	471-50_03-08
31 ± 0	34 ± 5	-	194	0.60	471-50_02-11
31 ± 1	33 ± 5	-	228	0.62	471-50_03-01
62 ± 1	62 ± 5	-	388	0.65	471-50_03-10
64 ± 2	57 ± 12	-	230	0.74	471-50_04-15
65 ± 1	61 ± 15	-	207	0.41	471-50_02-12
66 ± 1	56 ± 14	-	118	0.90	471-50_03-09
69 ± 1	66 ± 5	-	239	0.66	471-50_02-09
71 ± 1	78 ± 8	-	372	0.93	471-50_04-06
73 ± 2	65 ± 12	-	150	0.74	471-50_03-12
74 ± 1	77 ± 9	-	278	0.60	471-50_04-07
75 ± 1	72 ± 3	-	815	0.51	471-50_03-18
75 ± 2	81 ± 8	-	540	0.46	471-50_04-22
76 ± 1	74 ± 8	-	246	0.50	471-50_03-05
79 ± 1	85 ± 13	-	117	0.67	471-50_02-15
83 ± 1	81 ± 4	-	1218	0.99	471-50_03-16
84 ± 1	90 ± 5	-	389	0.69	471-50_02-14
85 ± 2	89 ± 26	-	145	0.39	471-50_03-13
85 ± 1	82 ± 4	-	430	0.36	471-50_02-01
86 ± 1	87 ± 4	-	863	0.50	471-50_02-19
86 ± 1	86 ± 4	-	907	0.44	471-50_02-16

DSDP 471 (Magdalena Fan) detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
87 ± 2	84 ± 7	-	472	0.79	471-50_04-18
88 ± 1	92 ± 8	-	208	0.37	471-50_03-06
88 ± 1	87 ± 4	-	493	0.46	471-50_03-17
89 ± 1	82 ± 7	-	324	0.68	471-50_03-11
89 ± 2	91 ± 10	-	283	0.47	471-50_04-19
90 ± 2	88 ± 6	-	338	0.48	471-50_04-17
92 ± 2	79 ± 12	-	323	0.58	471-50_02-05
92 ± 2	92 ± 4	-	966	0.51	471-50_04-13
97 ± 1	102 ± 9	-	393	0.54	471-50_04-05
97 ± 1	95 ± 3	-	569	0.33	471-50_02-13
98 ± 1	91 ± 4	-	1050	0.52	471-50_02-08
98 ± 3	115 ± 34	-	93	0.52	471-50_04-08
99 ± 2	102 ± 15	-	199	0.48	471-50_04-12
99 ± 1	99 ± 10	-	171	0.66	471-50_02-07
100 ± 2	85 ± 17	-	203	0.77	471-50_02-04
100 ± 3	105 ± 18	-	197	0.93	471-50_04-14
100 ± 2	105 ± 6	-	281	0.46	471-50_03-04
101 ± 2	86 ± 14	-	426	0.73	471-50_02-02
102 ± 1	97 ± 7	-	537	0.79	471-50_04-02
103 ± 3	97 ± 28	-	61	0.88	471-50_02-18
104 ± 1	101 ± 14	-	126	0.72	471-50_02-20
105 ± 1	102 ± 6	-	755	0.48	471-50_04-04
106 ± 1	104 ± 4	-	968	0.74	471-50_03-19
109 ± 2	118 ± 12	-	148	0.95	471-50_02-03
134 ± 2	140 ± 17	-	139	0.41	471-50_03-14
136 ± 2	129 ± 9	-	210	0.51	471-50_04-01
146 ± 2	154 ± 11	-	214	0.33	471-50_04-09
156 ± 1	146 ± 5	-	368	0.13	471-50_03-03
158 ± 3	159 ± 8	-	765	0.34	471-50_04-20
162 ± 4	163 ± 13	-	204	0.21	471-50_04-11
167 ± 2	168 ± 2	-	1268	0.24	471-50_02-06
167 ± 2	170 ± 7	-	277	0.11	471-50_04-03
542 ± 19	553 ± 25	-	282	0.19	471-50_04-16
1026 ± 14	1015 ± 10	992 ± 24	207	0.29	471-50_03-02
1032 ± 16	1028 ± 23	1020 ± 54	99	0.33	471-50_04-10
1370 ± 19	1270 ± 21	1100 ± 43	111	0.81	471-50_02-17
15 ± 1	21 ± 5	-	641	1.03	471-72_02-23
15 ± 1	16 ± 6	-	659	0.72	471-72_02-16
17 ± 0	19 ± 2	-	1187	0.93	471-72_05-12
22 ± 1	16 ± 9	-	172	0.51	471-72_03-08
23 ± 1	14 ± 12	-	425	0.63	471-72_03-13
27 ± 2	24 ± 30	-	397	0.91	471-72_05-08
62 ± 2	50 ± 10	-	434	0.95	471-72_03-20
69 ± 3	61 ± 13	-	247	0.75	471-72_05-05
72 ± 2	64 ± 8	-	361	0.45	471-72_02-18
72 ± 3	72 ± 18	-	384	0.68	471-72_03-16

DSDP 471 (Magdalena Fan) detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
74 ± 3	56 ± 24	-	134	0.68	471-72_05-04
74 ± 2	57 ± 9	-	726	0.55	471-72_03-17
75 ± 2	54 ± 14	-	357	0.62	471-72_03-04
76 ± 2	60 ± 21	-	866	1.65	471-72_02-11
78 ± 3	65 ± 16	-	281	0.51	471-72_05-03
80 ± 2	97 ± 13	-	562	0.62	471-72_05-07
81 ± 2	83 ± 6	-	1281	0.49	471-72_03-10
81 ± 1	82 ± 6	-	525	0.62	471-72_02-01
82 ± 2	87 ± 5	-	515	0.42	471-72_03-14
82 ± 2	69 ± 11	-	931	0.88	471-72_03-15
82 ± 2	79 ± 6	-	700	0.43	471-72_02-22
84 ± 2	81 ± 6	-	746	0.97	471-72_03-22
84 ± 2	53 ± 13	-	662	0.55	471-72_02-04
84 ± 2	91 ± 11	-	613	0.68	471-72_05-06
85 ± 3	82 ± 12	-	428	0.68	471-72_05-01
85 ± 2	102 ± 15	-	244	0.60	471-72_02-06
86 ± 3	85 ± 4	-	1889	0.16	471-72_05-10
88 ± 2	89 ± 7	-	506	0.45	471-72_02-02
88 ± 2	81 ± 6	-	1214	0.46	471-72_02-21
88 ± 4	61 ± 18	-	168	0.64	471-72_03-09
89 ± 6	88 ± 10	-	667	0.55	471-72_05-14
89 ± 3	55 ± 34	-	257	0.52	471-72_02-12
89 ± 1	85 ± 4	-	1347	0.77	471-72_03-01
90 ± 2	68 ± 7	-	496	0.38	471-72_02-03
90 ± 1	88 ± 6	-	1281	0.38	471-72_05-16
90 ± 3	77 ± 14	-	308	0.58	471-72_03-18
92 ± 4	89 ± 32	-	102	0.51	471-72_03-19
92 ± 3	90 ± 11	-	593	0.40	471-72_05-02
92 ± 3	83 ± 18	-	331	0.71	471-72_02-08
94 ± 3	76 ± 15	-	236	0.59	471-72_03-21
95 ± 3	86 ± 15	-	152	0.65	471-72_03-02
97 ± 2	98 ± 8	-	680	0.31	471-72_03-12
97 ± 3	67 ± 12	-	457	0.62	471-72_02-19
100 ± 5	124 ± 47	-	107	0.68	471-72_02-15
102 ± 3	102 ± 17	-	341	0.59	471-72_03-05
102 ± 3	105 ± 10	-	255	0.39	471-72_05-15
103 ± 3	86 ± 15	-	214	0.54	471-72_02-20
103 ± 5	102 ± 30	-	121	0.49	471-72_03-06
105 ± 2	113 ± 17	-	272	0.56	471-72_02-10
106 ± 2	108 ± 6	-	770	0.60	471-72_02-05
114 ± 6	121 ± 27	-	82	0.53	471-72_02-07
115 ± 2	123 ± 23	-	312	0.94	471-72_05-11
128 ± 4	137 ± 18	-	930	1.02	471-72_02-17
129 ± 3	126 ± 6	-	675	0.27	471-72_03-03
143 ± 5	122 ± 22	-	92	0.41	471-72_05-13
166 ± 4	164 ± 12	-	450	0.12	471-72_03-11

DSDP 471 (Magdalena Fan) detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
178 ± 3	182 ± 10	-	521	0.56	471-72_02-13
183 ± 7	189 ± 23	-	174	0.27	471-72_02-09
185 ± 5	170 ± 14	-	531	0.44	471-72_03-07
1790 ± 44	1740 ± 27	1690 ± 25	179	0.70	471-72_02-14

DSDP Site 474 detrital zircon U-Pb ages

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
53 ± 3	61 ± 16	-	55	0.76	474-37R_02-15
68 ± 2	55 ± 8	-	302	0.48	474-37R_01-11
73 ± 1	58 ± 7	-	441	0.75	474-37R_02-02
75 ± 3	59 ± 18	-	52	0.49	474-37R_02-26
75 ± 1	73 ± 8	-	224	0.38	474-37R_02-24
76 ± 2	71 ± 14	-	141	0.35	474-37R_02-18
76 ± 2	71 ± 16	-	180	0.41	474-37R_01-07
76 ± 1	82 ± 7	-	670	1.16	474-37R_02-25
76 ± 3	54 ± 19	-	77	0.40	474-37R_02-38
76 ± 2	82 ± 7	-	261	0.50	474-37R_01-03
76 ± 2	75 ± 19	-	287	0.38	474-37R_02-34
77 ± 2	67 ± 9	-	312	0.39	474-37R_01-04
77 ± 4	68 ± 14	-	132	0.38	474-37R_01-13
77 ± 2	83 ± 6	-	527	0.46	474-37R_01-08
78 ± 2	70 ± 15	-	157	0.44	474-37R_02-21
78 ± 2	80 ± 7	-	406	0.54	474-37R_01-09
78 ± 3	84 ± 11	-	197	0.50	474-37R_01-10
78 ± 2	76 ± 24	-	280	0.47	474-37R_02-16
79 ± 3	64 ± 14	-	60	0.62	474-37R_02-37
79 ± 2	83 ± 6	-	377	0.26	474-37R_01-02
80 ± 5	76 ± 6	-	1432	0.42	474-37R_02-08
80 ± 1	70 ± 7	-	244	0.26	474-37R_02-10
81 ± 2	75 ± 24	-	330	0.41	474-37R_02-20
81 ± 2	81 ± 6	-	413	0.44	474-37R_02-27
82 ± 3	79 ± 8	-	338	0.33	474-37R_01-06
82 ± 1	88 ± 7	-	361	0.36	474-37R_02-39
82 ± 2	82 ± 6	-	443	0.45	474-37R_02-29
82 ± 1	76 ± 6	-	346	0.42	474-37R_02-14
82 ± 1	81 ± 7	-	500	0.42	474-37R_02-22
83 ± 1	84 ± 5	-	459	0.29	474-37R_02-12
83 ± 7	80 ± 10	-	1124	0.37	474-37R_02-23
83 ± 1	85 ± 6	-	348	0.69	474-37R_02-36
83 ± 2	75 ± 16	-	372	0.41	474-37R_02-30
83 ± 2	73 ± 10	-	215	0.50	474-37R_02-06
84 ± 4	92 ± 13	-	176	0.57	474-37R_01-05
84 ± 1	77 ± 5	-	405	0.38	474-37R_02-33
84 ± 1	75 ± 5	-	870	0.35	474-37R_02-19

DSDP Site 474 detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
85 ± 2	80 ± 9	-	448	0.43	474-37R_02-05
85 ± 1	85 ± 6	-	1262	0.31	474-37R_02-13
85 ± 4	73 ± 9	-	132	0.31	474-37R_02-09
85 ± 1	88 ± 4	-	529	0.27	474-37R_02-35
86 ± 1	80 ± 6	-	375	0.55	474-37R_02-06
86 ± 4	92 ± 9	-	287	0.55	474-37R_01-01
86 ± 1	94 ± 5	-	488	0.30	474-37R_02-03
87 ± 5	76 ± 12	-	240	0.54	474-37R_01-14
87 ± 2	86 ± 6	-	303	0.32	474-37R_02-32
90 ± 1	92 ± 10	-	819	0.82	474-37R_02-31
90 ± 2	92 ± 6	-	329	0.46	474-37R_02-04
95 ± 2	94 ± 3	-	2273	0.08	474-37R_02-17
98 ± 2	95 ± 3	-	2241	0.25	474-37R_02-11
151 ± 2	134 ± 5	-	770	0.16	474-37R_02-01
154 ± 6	133 ± 16	-	176	1.53	474-37R_01-12
485 ± 6	583 ± 15	985 ± 65	343	0.25	474-37R_02-28

DSDP Site 485 detrital zircon U-Pb ages

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
23 ± 1	24 ± 9	-	241	0.36	485_03-01
25 ± 1	27 ± 12	-	228	0.70	485_03-42
27 ± 1	26 ± 9	-	429	1.04	485_03-09
27 ± 1	26 ± 7	-	395	0.67	485_03-16
27 ± 1	30 ± 17	-	89	0.74	485_03-50
29 ± 2	21 ± 31	-	118	0.78	485_03-20
30 ± 2	28 ± 14	-	168	0.81	485_03-39
31 ± 1	25 ± 4	-	1056	1.03	485_03-15
31 ± 1	25 ± 4	-	1056	1.03	485_03-15
31 ± 1	25 ± 4	-	1056	1.03	485_03-15
31 ± 1	38 ± 4	-	1670	0.48	485_03-22
31 ± 1	42 ± 6	-	869	1.48	485_03-14
31 ± 1	36 ± 8	-	265	1.01	485_03-25
31 ± 2	14 ± 14	-	176	0.98	485_03-26
32 ± 1	39 ± 20	-	175	1.48	485_03-45
33 ± 1	73 ± 18	-	122	0.71	485_03-23
33 ± 2	59 ± 17	-	177	1.75	485_03-17
33 ± 1	39 ± 7	-	430	0.49	485_03-18
33 ± 2	77 ± 18	-	213	1.08	485_03-24
34 ± 2	34 ± 14	-	256	0.34	485_03-48
36 ± 1	38 ± 9	-	301	0.54	485_03-28
37 ± 1	56 ± 13	-	387	0.70	485_03-27
37 ± 1	31 ± 12	-	339	0.47	485_03-19
38 ± 1	41 ± 15	-	568	1.39	485_03-13
38 ± 2	60 ± 15	-	372	0.61	485_03-31

DSDP Site 485 detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
42 ± 1	52 ± 8	-	406	0.49	485_03-38
48 ± 4	56 ± 48	-	153	0.54	485_03-29
57 ± 1	70 ± 6	-	578	0.87	485_03-05
57 ± 2	60 ± 4	-	566	0.47	485_03-47
57 ± 1	67 ± 3	-	1449	0.26	485_03-08
60 ± 3	60 ± 12	-	2635	1.06	485_03-46
60 ± 1	65 ± 11	-	232	0.40	485_03-03
61 ± 2	62 ± 5	-	738	0.31	485_03-49
63 ± 3	82 ± 13	-	145	0.48	485_03-12
64 ± 1	69 ± 4	-	1460	0.36	485_03-04
65 ± 2	74 ± 5	-	1768	1.03	485_03-10
67 ± 2	69 ± 14	-	810	0.71	485_03-34
67 ± 2	56 ± 5	-	903	0.82	485_03-36
68 ± 2	70 ± 10	-	362	0.37	485_03-32
68 ± 2	68 ± 9	-	607	0.48	485_03-41
70 ± 5	123 ± 59	-	68	0.63	485_03-33
70 ± 3	75 ± 17	-	228	0.61	485_03-40
74 ± 2	82 ± 9	-	365	0.60	485_03-06
80 ± 3	88 ± 21	-	149	0.73	485_03-43
87 ± 2	89 ± 4	-	1050	0.49	485_03-37
92 ± 4	85 ± 21	-	100	0.70	485_03-44
102 ± 2	100 ± 6	-	589	0.31	485_03-35
108 ± 2	108 ± 6	-	709	0.14	485_03-02
135 ± 6	128 ± 38	-	149	0.48	485_03-30
138 ± 3	131 ± 11	-	879	0.82	485_03-11
874 ± 24	884 ± 20	908 ± 37	245	0.11	485_03-21

LC0302 (La Calera Formation) detrital zircon U-Pb ages

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
76 ± 4	93 ± 13	-	334	0.78	LC0302-15*
76 ± 5	79 ± 16	-	287	0.91	LC0302-58*
77 ± 2	81 ± 6	-	444	0.45	LC0302-40*
77 ± 3	94 ± 18	-	562	0.47	LC0302-21*
78 ± 2	91 ± 10	-	387	0.48	LC0302-12*
78 ± 5	66 ± 13	-	252	0.97	LC0302-42*
79 ± 2	114 ± 32	-	563	0.95	LC0302-09*
79 ± 3	93 ± 11	-	173	0.70	LC0302-36*
79 ± 3	91 ± 14	-	147	0.53	LC0302-53*
80 ± 1	77 ± 5	-	495	1.15	LC0302-57*
80 ± 2	83 ± 5	-	760	0.59	LC0302-03*
80 ± 3	85 ± 7	-	455	0.76	LC0302-27*
80 ± 3	86 ± 18	-	210	0.62	LC0302-34*
80 ± 3	76 ± 11	-	307	0.84	LC0302-55*
81 ± 1	85 ± 7	-	496	0.50	LC0302-17*

LC0302 (La Calera Formation) detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
81 ± 2	87 ± 4	-	561	1.01	LC0302-16*
81 ± 2	82 ± 12	-	216	0.50	LC0302-39*
81 ± 2	86 ± 8	-	319	0.35	LC0302-43*
81 ± 2	80 ± 9	-	239	0.41	LC0302-54*
81 ± 2	91 ± 6	-	368	0.68	LC0302-49*
81 ± 3	85 ± 18	-	209	0.66	LC0302-01*
81 ± 4	78 ± 11	-	321	1.20	LC0302-37*
82 ± 1	89 ± 6	-	959	0.59	LC0302-60*
82 ± 2	87 ± 3	-	1472	0.65	LC0302-04*
82 ± 2	87 ± 3	-	1084	0.24	LC0302-11*
82 ± 2	83 ± 12	-	287	0.40	LC0302-22*
82 ± 2	81 ± 7	-	446	0.71	LC0302-44*
82 ± 3	108 ± 9	-	267	0.80	LC0302-18*
82 ± 3	64 ± 17	-	284	0.41	LC0302-38*
82 ± 3	103 ± 13	-	548	1.13	LC0302-48*
82 ± 3	87 ± 23	-	157	0.64	LC0302-65*
82 ± 4	79 ± 16	-	182	0.52	LC0302-29*
82 ± 4	89 ± 12	-	163	0.64	LC0302-30*
82 ± 4	87 ± 12	-	625	0.64	LC0302-59*
83 ± 2	89 ± 6	-	504	0.37	LC0302-05*
83 ± 3	97 ± 16	-	177	0.38	LC0302-08*
83 ± 3	86 ± 7	-	308	0.33	LC0302-26*
83 ± 3	88 ± 8	-	347	0.69	LC0302-52*
84 ± 2	87 ± 11	-	294	0.76	LC0302-33*
84 ± 2	88 ± 9	-	358	0.65	LC0302-56*
84 ± 3	86 ± 13	-	308	0.52	LC0302-23*
84 ± 4	89 ± 6	-	529	0.52	LC0302-41*
84 ± 5	116 ± 17	-	143	0.86	LC0302-10*
85 ± 4	90 ± 9	-	362	0.53	LC0302-45*
86 ± 6	89 ± 8	-	514	0.34	LC0302-47*
87 ± 2	78 ± 8	-	208	0.35	LC0302-61*
87 ± 2	83 ± 20	-	184	0.61	LC0302-62*
89 ± 4	107 ± 12	-	255	0.34	LC0302-28*
90 ± 5	128 ± 29	-	195	0.45	LC0302-64*
91 ± 8	97 ± 11	-	455	0.31	LC0302-14*
93 ± 2	90 ± 19	-	260	0.39	LC0302-24*
93 ± 3	194 ± 26	-	189	0.31	LC0302-63*
100 ± 4	50 ± 37	-	55	0.55	LC0302-13*
103 ± 6	120 ± 28	-	77	0.47	LC0302-07*
110 ± 5	214 ± 25	-	114	0.46	LC0302-35*
111 ± 6	134 ± 24	-	89	0.50	LC0302-32*
158 ± 5	163 ± 12	-	267	0.33	LC0302-46*
166 ± 11	172 ± 17	-	237	0.19	LC0302-02*
167 ± 5	167 ± 17	-	195	0.33	LC0302-50*
169 ± 4	158 ± 18	-	134	0.32	LC0302-06*
976 ± 13	994 ± 15	1036 ± 39	120	0.33	LC0302-51*
1394 ± 61	1459 ± 38	1556 ± 19	164	0.43	LC0302-20*

LC0306 (Un-named basal conglomerate, W. Los Cabos block) detrital zircon U-Pb ages

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
42 ± 1	45 ± 4	-	848	0.83	LC0306-38*
43 ± 1	42 ± 5	-	641	0.79	LC0306-34*
44 ± 1	45 ± 5	-	679	1.04	LC0306-37*
44 ± 1	44 ± 3	-	815	0.71	LC0306-53*
44 ± 2	41 ± 3	-	732	0.76	LC0306-57*
44 ± 3	47 ± 11	-	209	0.65	LC0306-32*
45 ± 1	47 ± 5	-	388	0.81	LC0306-5*
45 ± 1	47 ± 4	-	775	0.81	LC0306-60*
46 ± 2	44 ± 10	-	272	1.03	LC0306-51*
46 ± 4	51 ± 16	-	120	0.84	LC0306-65*
48 ± 2	58 ± 18	-	115	1.05	LC0306-39*
52 ± 3	55 ± 18	-	132	0.61	LC0306-29*
54 ± 1	54 ± 3	-	854	0.64	LC0306-55*
62 ± 2	41 ± 22	-	131	0.61	LC0306-52*
68 ± 2	67 ± 10	-	355	0.67	LC0306-62*
68 ± 3	83 ± 16	-	193	0.59	LC0306-6*
71 ± 1	75 ± 10	-	399	0.82	LC0306-50*
71 ± 3	70 ± 7	-	602	0.64	LC0306-24*
72 ± 1	78 ± 4	-	785	0.64	LC0306-18*
72 ± 4	59 ± 13	-	158	0.6	LC0306-4*
74 ± 1	74 ± 4	-	684	1.07	LC0306-61*
74 ± 2	72 ± 14	-	246	0.63	LC0306-8*
74 ± 6	79 ± 12	-	534	1	LC0306-49*
77 ± 2	82 ± 6	-	432	0.9	LC0306-42*
77 ± 2	81 ± 5	-	677	1.09	LC0306-45*
78 ± 2	84 ± 8	-	454	0.75	LC0306-15*
79 ± 2	85 ± 8	-	383	0.78	LC0306-14*
79 ± 2	80 ± 3	-	983	1.45	LC0306-20*
79 ± 2	82 ± 9	-	335	0.66	LC0306-59*
82 ± 1	88 ± 11	-	371	0.65	LC0306-47*
83 ± 4	82 ± 12	-	393	0.65	LC0306-1*
83 ± 4	91 ± 13	-	149	0.34	LC0306-54*
84 ± 3	91 ± 21	-	200	1.01	LC0306-23*
85 ± 3	79 ± 11	-	180	1.07	LC0306-43*
86 ± 2	93 ± 10	-	412	0.87	LC0306-64*
89 ± 3	102 ± 11	-	340	0.99	LC0306-3*
89 ± 3	101 ± 9	-	288	0.66	LC0306-28*
90 ± 2	82 ± 12	-	283	0.76	LC0306-35*
91 ± 4	96 ± 7	-	809	0.86	LC0306-63*
92 ± 4	120 ± 22	-	212	0.66	LC0306-13*
93 ± 1	91 ± 8	-	337	0.81	LC0306-12*
93 ± 3	113 ± 17	-	144	0.8	LC0306-22*
93 ± 4	98 ± 19	-	167	0.81	LC0306-31*
93 ± 4	95 ± 35	-	83	0.7	LC0306-56*
94 ± 1	101 ± 15	-	164	0.65	LC0306-48*
94 ± 3	102 ± 7	-	501	0.92	LC0306-26*

LC0306 (Un-named basal conglomerate, W. Los Cabos block) detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
95 ± 2	103 ± 32	-	109	0.61	LC0306-25*
95 ± 4	86 ± 17	-	125	0.76	LC0306-11*
96 ± 4	88 ± 18	-	106	0.82	LC0306-21*
97 ± 2	103 ± 11	-	266	0.57	LC0306-2*
97 ± 2	88 ± 13	-	156	0.57	LC0306-19*
97 ± 2	106 ± 15	-	191	0.74	LC0306-41*
98 ± 5	98 ± 15	-	291	0.9	LC0306-58*
99 ± 3	93 ± 12	-	193	0.47	LC0306-17*
100 ± 6	185 ± 25	-	70	0.55	LC0306-30*
100 ± 9	104 ± 11	-	481	0.45	LC0306-10*
102 ± 5	115 ± 35	-	83	0.73	LC0306-44*
105 ± 7	158 ± 34	-	38	0.41	LC0306-40*
111 ± 4	117 ± 12	-	212	0.37	LC0306-36*
136 ± 4	122 ± 13	-	176	0.71	LC0306-27*
137 ± 3	140 ± 11	-	346	0.69	LC0306-16*
138 ± 3	135 ± 22	-	183	0.49	LC0306-7*
267 ± 5	261 ± 10	-	353	0.59	LC0306-9*
404 ± 6	413 ± 10	-	250	0.97	LC0306-46*
1569 ± 65	1604 ± 39	1649 ± 19	197	0.54	LC0306-33*

LP0378 (Comondu Group) detrital zircon U-Pb ages

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
9 ± 1	2 ± 39	-	237	0.38	LP0378-08-11
10 ± 2	38 ± 41	-	554	0.60	LP0378-08-13
12 ± 0	15 ± 4	-	307	0.44	LP0378-08-02
12 ± 1	7 ± 16	-	277	1.03	LP0378-09-06
12 ± 3	9 ± 54	-	525	0.90	LP0378-09-17
13 ± 1	24 ± 18	-	427	0.58	LP0378-08-10
13 ± 1	12 ± 5	-	582	0.80	LP0378-20*
15 ± 2	4 ± 32	-	362	0.69	LP0378-08-27
17 ± 2	34 ± 8	-	706	0.80	LP0378-36*
18 ± 1	13 ± 6	-	508	0.55	LP0378-08-06
18 ± 1	25 ± 7	-	630	0.91	LP0378-02*
43 ± 3	67 ± 47	-	175	1.40	LP0378-09-12
53 ± 3	55 ± 14	-	419	0.60	LP0378-30*
61 ± 4	75 ± 65	-	162	0.81	LP0378-08-12
62 ± 2	64 ± 9	-	350	1.06	LP0378-22*
63 ± 2	76 ± 9	-	641	0.92	LP0378-26*
66 ± 2	69 ± 5	-	716	0.82	LP0378-11*
69 ± 2	85 ± 10	-	316	0.74	LP0378-41*
70 ± 4	64 ± 16	-	265	0.85	LP0378-15*
72 ± 2	75 ± 4	-	1243	0.98	LP0378-07*
72 ± 3	43 ± 18	-	470	1.07	LP0378-14*
74 ± 6	67 ± 32	-	156	0.67	LP0378-34*
76 ± 2	89 ± 17	-	153	0.55	LP0378-33*
77 ± 2	106 ± 14	-	525	0.76	LP0378-37*

LP0378 (Comondu Group) detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
79 ± 2	77 ± 9	-	465	0.76	LP0378-05*
80 ± 12	75 ± 205	-	373	0.61	LP0378-09-16
80 ± 2	85 ± 10	-	602	0.85	LP0378-43*
80 ± 3	74 ± 23	-	188	0.49	LP0378-08-04
83 ± 4	83 ± 8	-	560	0.81	LP0378-17*
84 ± 3	68 ± 30	-	361	0.63	LP0378-09-18
85 ± 3	75 ± 27	-	247	0.53	LP0378-09-04
85 ± 3	53 ± 21	-	186	0.75	LP0378-08-16
86 ± 3	111 ± 12	-	318	0.81	LP0378-39*
87 ± 3	80 ± 15	-	908	0.57	LP0378-08-18
89 ± 2	80 ± 11	-	629	0.42	LP0378-09-05
89 ± 3	88 ± 7	-	421	1.02	LP0378-31*
89 ± 5	91 ± 28	-	107	0.94	LP0378-38*
90 ± 2	89 ± 9	-	635	0.85	LP0378-18*
90 ± 3	87 ± 20	-	365	1.01	LP0378-08-15
91 ± 3	110 ± 9	-	448	0.78	LP0378-29*
91 ± 4	85 ± 43	-	248	0.60	LP0378-09-09
92 ± 2	96 ± 6	-	547	0.41	LP0378-01*
92 ± 3	95 ± 10	-	579	0.91	LP0378-06*
92 ± 3	107 ± 28	-	154	0.56	LP0378-08*
93 ± 3	100 ± 16	-	192	0.48	LP0378-42*
94 ± 3	95 ± 25	-	205	0.72	LP0378-27*
95 ± 4	115 ± 18	-	265	0.94	LP0378-32*
96 ± 2	93 ± 5	-	733	1.28	LP0378-21*
96 ± 4	107 ± 22	-	262	0.62	LP0378-40*
96 ± 8	64 ± 46	-	219	0.30	LP0378-08-28
98 ± 2	121 ± 15	-	242	1.16	LP0378-24*
98 ± 3	99 ± 12	-	269	0.74	LP0378-09*
98 ± 4	104 ± 19	-	164	0.70	LP0378-28*
99 ± 3	102 ± 7	-	873	0.76	LP0378-08-03
100 ± 2	63 ± 12	-	205	0.51	LP0378-08-05
100 ± 3	88 ± 14	-	186	0.58	LP0378-08-01
100 ± 5	110 ± 36	-	187	0.75	LP0378-10*
100 ± 5	122 ± 23	-	131	1.13	LP0378-12*
101 ± 2	99 ± 3	-	2621	0.02	LP0378-08-14
101 ± 4	109 ± 28	-	282	1.07	LP0378-04*
102 ± 3	93 ± 32	-	218	0.44	LP0378-08-09
106 ± 4	111 ± 25	-	213	0.79	LP0378-08-07
106 ± 4	119 ± 7	-	784	0.85	LP0378-13*
109 ± 7	157 ± 61	-	937	0.38	LP0378-08-29
118 ± 7	168 ± 53	-	207	0.51	LP0378-08-26
119 ± 11	185 ± 79	-	58	0.44	LP0378-08-21
134 ± 11	178 ± 38	-	62	0.36	LP0378-08-22
154 ± 6	167 ± 14	-	907	0.47	LP0378-23*
157 ± 5	159 ± 6	-	740	0.10	LP0378-35*
162 ± 4	175 ± 19	-	444	0.19	LP0378-08-08
1580 ± 26	1636 ± 17	1708 ± 18	534	0.83	LP0378-19*
1777 ± 31	1760 ± 19	1740 ± 18	701	0.59	LP0378-25*

LC0308 (San Gregorio Formation) detrital zircon U-Pb ages

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
22 ± 3	2 ± 49	-	135	0.73	LC0308-06-10
24 ± 1	29 ± 8	-	352	0.43	LC0308-05-11
24 ± 1	20 ± 6	-	365	0.66	LC0308-05-01
24 ± 2	4 ± 30	-	114	0.62	LC0308-05-15
24 ± 3	27 ± 26	-	246	0.38	LC0308-06-22-
25 ± 1	6 ± 16	-	320	1.09	LC0308-06-15
25 ± 1	12 ± 9	-	728	0.72	LC0308-05-19
26 ± 1	26 ± 5	-	955	0.52	LC0308-06-08
26 ± 1	43 ± 17	-	774	0.37	LC0308-05-23
26 ± 1	15 ± 8	-	559	0.36	LC0308-06-17
26 ± 1	22 ± 5	-	1691	0.35	LC0308-05-22
26 ± 1	19 ± 13	-	572	0.63	LC0308-06-20
26 ± 2	68 ± 31	-	201	0.40	LC0308-06-12
26 ± 2	36 ± 13	-	358	0.43	LC0308-03*
27 ± 1	25 ± 12	-	965	0.60	LC0308-06-21
27 ± 1	29 ± 7	-	262	0.33	LC0308-05-14
27 ± 1	29 ± 5	-	812	0.31	LC0308-09*
27 ± 1	23 ± 10	-	294	1.27	LC0308-12*
27 ± 1	33 ± 7	-	565	1.02	LC0308-04*
27 ± 1	35 ± 8	-	408	0.53	LC0308-08*
27 ± 2	52 ± 32	-	191	0.50	LC0308-06-11
27 ± 2	48 ± 21	-	170	0.43	LC0308-26*
28 ± 1	29 ± 15	-	649	0.43	LC0308-06-03
28 ± 1	42 ± 13	-	185	0.52	LC0308-06-04
28 ± 1	26 ± 10	-	294	0.65	LC0308-11*
28 ± 2	11 ± 33	-	100	0.45	LC0308-06-14
28 ± 2	28 ± 12	-	383	0.35	LC0308-05-21
28 ± 2	28 ± 8	-	363	0.54	LC0308-28*
28 ± 2	39 ± 8	-	536	0.82	LC0308-34*
28 ± 2	17 ± 11	-	205	0.87	LC0308-05*
28 ± 2	32 ± 7	-	920	1.06	LC0308-32*
29 ± 1	19 ± 9	-	197	0.62	LC0308-05-06
29 ± 1	24 ± 8	-	578	0.57	LC0308-06-02
29 ± 1	46 ± 11	-	1275	0.65	LC0308-06-23
29 ± 1	27 ± 5	-	496	0.35	LC0308-05-05
29 ± 2	13 ± 20	-	89	0.69	LC0308-05-08
30 ± 2	48 ± 14	-	217	0.71	LC0308-05-16
31 ± 1	32 ± 3	-	944	0.37	LC0308-05-07
31 ± 2	38 ± 12	-	476	0.59	LC0308-18*
32 ± 1	37 ± 4	-	1214	0.99	LC0308-22*
32 ± 2	35 ± 14	-	152	0.48	LC0308-05-02
38 ± 1	34 ± 3	-	1238	0.41	LC0308-19*
42 ± 2	31 ± 38	-	449	0.34	LC0308-06-06
48 ± 1	45 ± 4	-	643	1.02	LC0308-16*
56 ± 2	50 ± 16	-	304	1.00	LC0308-27*
58 ± 2	58 ± 8	-	538	0.55	LC0308-05-12

LC0308 (San Gregorio Formation) detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
58 ± 2	71 ± 18	-	271	0.59	LC0308-35*
58 ± 3	53 ± 11	-	201	0.62	LC0308-25*
60 ± 4	81 ± 51	-	172	0.66	LC0308-06-19
61 ± 2	70 ± 11	-	248	0.53	LC0308-15*
62 ± 2	62 ± 17	-	253	0.70	LC0308-33*
63 ± 1	62 ± 2	-	4022	0.49	LC0308-06-05
74 ± 2	68 ± 6	-	468	0.43	LC0308-05-04
74 ± 6	60 ± 55	-	489	1.06	LC0308-05-24
76 ± 4	73 ± 14	-	787	0.58	LC0308-05-18
78 ± 1	82 ± 2	-	1375	0.39	LC0308-40*
79 ± 3	70 ± 10	-	1053	0.66	LC0308-06-16
81 ± 1	80 ± 8	-	452	0.58	LC0308-14*
81 ± 3	82 ± 11	-	385	0.46	LC0308-06-07
81 ± 3	93 ± 6	-	607	0.65	LC0308-31*
82 ± 2	84 ± 5	-	494	0.53	LC0308-36*
82 ± 3	86 ± 6	-	901	0.48	LC0308-29*
82 ± 3	88 ± 13	-	235	0.58	LC0308-30*
83 ± 2	85 ± 6	-	786	0.48	LC0308-07*
83 ± 3	84 ± 8	-	684	0.40	LC0308-13*
84 ± 2	89 ± 10	-	393	0.56	LC0308-10*
84 ± 5	97 ± 17	-	442	0.58	LC0308-05-20
84 ± 5	86 ± 21	-	459	0.51	LC0308-06-18
88 ± 2	88 ± 8	-	372	0.35	LC0308-05-09
88 ± 5	88 ± 7	-	852	1.01	LC0308-24*
89 ± 3	82 ± 13	-	224	0.51	LC0308-05-10
89 ± 3	168 ± 8	1515 ± 85	261	0.68	LC0308-06*
92 ± 6	81 ± 15	-	358	0.46	LC0308-05-17
100 ± 5	121 ± 21	-	161	0.59	LC0308-37*
102 ± 3	117 ± 16	-	367	1.30	LC0308-02*
103 ± 3	97 ± 39	-	170	0.50	LC0308-17*
162 ± 5	152 ± 26	-	219	0.45	LC0308-06-01
1646 ± 22	1654 ± 15	1663 ± 19	212	1.31	LC0308-23*

LP0383 (Tepetate Formation) detrital zircon U-Pb ages

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
52 ± 3	57 ± 11	-	380	0.53	LP0383-03-19.
53 ± 2	41 ± 10	-	372	0.39	LP0383-02-19
53 ± 4	59 ± 8	-	536	1.18	LP0383-24*
54 ± 1	53 ± 8	-	973	0.42	LP0383-02-08
56 ± 5	46 ± 11	-	264	0.59	LP0383-23*
62 ± 1	64 ± 4	-	995	0.28	LP0383-03-05.
74 ± 4	76 ± 20	-	142	0.58	LP0383-03-09
75 ± 3	65 ± 14	-	119	0.65	LP0383-02-05
80 ± 2	71 ± 21	-	958	1.07	LP0383-03-22
80 ± 6	92 ± 60	-	152	0.67	LP0383-03-26
81 ± 1	91 ± 10	-	436	0.68	LP0383-26*

LP0383 (Tepetate Formation) detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
83 ± 2	81 ± 12	-	231	0.62	LP0383-03-06
86 ± 3	87 ± 7	-	682	0.68	LP0383-08*
88 ± 2	85 ± 4	-	858	0.45	LP0383-27*
89 ± 3	82 ± 10	-	300	0.41	LP0383-02-18
90 ± 1	90 ± 5	-	1391	0.44	LP0383-04*
90 ± 4	113 ± 29	-	162	1.02	LP0383-02*
91 ± 3	89 ± 10	-	391	0.99	LP0383-21*
92 ± 1	91 ± 6	-	709	0.57	LP0383-40*
92 ± 6	110 ± 26	-	215	1.24	LP0383-03*
93 ± 1	85 ± 9	-	573	0.84	LP0383-25*
93 ± 2	100 ± 12	-	324	0.84	LP0383-22*
93 ± 3	106 ± 25	-	214	0.85	LP0383-39*
94 ± 4	100 ± 13	-	204	0.70	LP0383-02-10
95 ± 3	114 ± 17	-	278	1.26	LP0383-17*
95 ± 3	89 ± 27	-	177	0.93	LP0383-36*
95 ± 4	90 ± 17	-	91	0.45	LP0383-02-12
95 ± 4	97 ± 15	-	246	0.86	LP0383-14*
96 ± 4	76 ± 12	-	198	0.34	LP0383-02-01
96 ± 4	101 ± 16	-	270	0.79	LP0383-13*
97 ± 2	110 ± 10	-	301	0.50	LP0383-06*
97 ± 4	103 ± 17	-	119	0.71	LP0383-05*
97 ± 5	88 ± 27	-	160	0.66	LP0383-03-27
97 ± 6	103 ± 32	-	63	0.49	LP0383-03-24
98 ± 2	99 ± 8	-	472	0.62	LP0383-34*
98 ± 3	107 ± 7	-	761	1.06	LP0383-01*
98 ± 4	100 ± 10	-	451	0.25	LP0383-02-08
99 ± 3	92 ± 14	-	172	0.58	LP0383-02-04
100 ± 4	103 ± 9	-	313	0.34	LP0383-3-4-1.
100 ± 4	92 ± 19	-	186	0.55	LP0383-12*
101 ± 4	110 ± 13	-	319	0.90	LP0383-32*
101 ± 6	98 ± 36	-	118	1.15	LP0383-37*
102 ± 10	94 ± 10	-	135	0.68	LP0383-02-21
102 ± 5	130 ± 18	-	170	0.65	LP0383-33*
103 ± 2	113 ± 19	-	149	0.88	LP0383-11*
103 ± 4	109 ± 15	-	266	0.90	LP0383-28*
103 ± 5	101 ± 20	-	232	0.78	LP0383-15*
104 ± 3	115 ± 16	-	181	0.82	LP0383-02-11
105 ± 15	39 ± 47	-	61	0.43	LP0383-02-06
106 ± 4	73 ± 11	-	207	0.52	LP0383-03-15
107 ± 3	97 ± 13	-	162	0.39	LP0383-02-07
108 ± 5	106 ± 10	-	457	0.58	LP0383-07*
108 ± 8	131 ± 19	-	44	0.68	LP0383-02-03
111 ± 11	95 ± 39	-	57	0.53	LP0383-02-22
111 ± 4	112 ± 12	-	699	0.84	LP0383-16*
112 ± 11	85 ± 81	-	88	0.46	LP0383-02-13
112 ± 9	120 ± 15	-	667	1.25	LP0383-30*

LP0383 (Tepetate Formation) detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
113 ± 4	113 ± 14	-	136	0.28	LP0383-03-01
114 ± 2	113 ± 8	-	1006	0.96	LP0383-02-15
116 ± 9	125 ± 80	-	219	0.54	LP0383-03-21
119 ± 5	102 ± 25	-	100	0.81	LP0383-03-07
124 ± 5	117 ± 17	-	96	0.68	LP0383-03-14
130 ± 7	109 ± 26	-	299	0.32	LP0383-02-16
150 ± 3	112 ± 35	-	102	0.59	LP0383-19*
152 ± 3	160 ± 9	-	335	0.26	LP0383-38*
154 ± 3	173 ± 12	-	301	0.40	LP0383-20*
162 ± 5	182 ± 22	-	230	1.05	LP0383-10*
169 ± 9	181 ± 26	-	138	0.62	LP0383-29*
254 ± 22	243 ± 47	-	857	0.19	LP0383-02-20
459 ± 10	452 ± 28	-	175	0.56	LP0383-31*
469 ± 16	509 ± 28	-	131	0.39	LP0383-09*
965 ± 33	966 ± 24	967 ± 20	304	0.18	LP0383-18*
1007 ± 20	1041 ± 15	1114 ± 20	218	2.14	LP0383-35*
2324 ± 78	2521 ± 37	2684 ± 23	127	0.40	LP0383-03-02

LP0385A (Tepetate Formation) detrital zircon U-Pb ages

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
51 ± 2	63 ± 16	-	270	0.64	LP0385A-03-14
59 ± 2	65 ± 7	-	685	0.39	LP0385A-02-01
73 ± 2	42 ± 24	-	136	0.54	LP0385A-03-01
81 ± 1	81 ± 4	-	396	0.55	LP0385A_10-06
85 ± 2	104 ± 14	-	153	1.01	LP0385A-03-04
92 ± 2	102 ± 7	-	1139	0.44	LP0385A-03-15
93 ± 1	107 ± 8	-	338	0.78	LP0385A-03-03
93 ± 2	87 ± 14	-	363	0.60	LP0385A-03-05
95 ± 2	122 ± 16	-	232	0.59	LP0385A-03-02
102 ± 2	126 ± 8	-	422	0.24	LP0385A-03-13
117 ± 5	73 ± 43	-	118	0.62	LP0385A-03-07
186 ± 3	214 ± 15	-	347	0.54	LP0385A-03-10
536 ± 18	620 ± 17	939 ± 37	525	0.38	LP0385A-03-12
728 ± 11	827 ± 16	1101 ± 43	44	0.59	LP0385A_10-12

TS0326 (Salada Formation) detrital zircon U-Pb ages

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
71 ± 2	81 ± 15	-	254	0.89	TS0326-63*
76 ± 2	78 ± 18	-	257	1.19	TS0326-35*
77 ± 2	73 ± 21	-	133	0.72	TS0326-46*
77 ± 2	81 ± 14	-	375	0.61	TS0326-54*
77 ± 4	81 ± 15	-	298	0.76	TS0326-52*
77 ± 4	119 ± 14	-	91	0.48	TS0326-18*
78 ± 1	81 ± 10	-	421	0.73	TS0326-53*
78 ± 2	82 ± 8	-	377	0.80	TS0326-01*
79 ± 4	77 ± 12	-	150	0.67	TS0326-37*

TS0326 (Salada Formation) detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
79 ± 2	77 ± 11	-	345	0.74	TS0326-32*
79 ± 1	82 ± 5	-	760	0.68	TS0326-14*
80 ± 2	81 ± 7	-	521	0.67	TS0326-25*
80 ± 4	86 ± 15	-	364	0.81	TS0326-24*
80 ± 3	85 ± 13	-	242	0.75	TS0326-26*
81 ± 7	99 ± 16	-	182	0.45	TS0326-17*
81 ± 2	86 ± 9	-	346	0.63	TS0326-51*
81 ± 2	89 ± 14	-	361	0.78	TS0326-33*
81 ± 3	84 ± 5	-	1389	0.49	TS0326-56*
82 ± 2	86 ± 6	-	455	0.65	TS0326-08*
82 ± 2	91 ± 10	-	459	0.78	TS0326-02*
82 ± 4	86 ± 7	-	552	0.68	TS0326-23*
82 ± 7	95 ± 12	-	533	0.44	TS0326-55*
83 ± 3	85 ± 5	-	688	0.80	TS0326-49*
83 ± 2	95 ± 10	-	306	0.62	TS0326-39*
83 ± 1	89 ± 5	-	660	0.49	TS0326-09*
83 ± 3	94 ± 11	-	417	0.77	TS0326-47*
84 ± 2	93 ± 7	-	702	0.54	TS0326-05*
85 ± 3	88 ± 12	-	442	0.65	TS0326-62*
85 ± 2	88 ± 7	-	450	0.64	TS0326-34*
85 ± 4	75 ± 30	-	77	0.40	TS0326-45*
85 ± 6	179 ± 217	1719 ± 8	65	0.76	TS0326-61*
85 ± 3	86 ± 5	-	1037	1.05	TS0326-22*
86 ± 2	91 ± 7	-	433	1.01	TS0326-64*
86 ± 3	100 ± 12	-	218	0.45	TS0326-15*
87 ± 1	89 ± 2	-	1191	0.63	TS0326-48*
87 ± 3	93 ± 7	-	432	0.42	TS0326-40*
88 ± 3	94 ± 4	-	341	0.67	TS0326-16*
88 ± 4	94 ± 10	-	358	0.56	TS0326-43*
89 ± 1	93 ± 8	-	540	0.52	TS0326-41*
89 ± 3	101 ± 18	-	318	0.43	TS0326-04*
90 ± 4	108 ± 13	-	208	0.77	TS0326-20*
91 ± 3	103 ± 8	-	477	0.50	TS0326-03*
91 ± 3	95 ± 7	-	478	0.57	TS0326-21*
96 ± 2	111 ± 21	-	127	0.82	TS0326-19*
96 ± 3	98 ± 14	-	153	0.69	TS0326-11*
97 ± 7	102 ± 13	-	280	0.42	TS0326-30*
99 ± 3	103 ± 18	-	187	0.56	TS0326-57*
100 ± 2	93 ± 6	-	387	0.41	TS0326-58*
100 ± 2	95 ± 12	-	275	0.67	TS0326-31*
101 ± 2	122 ± 14	-	182	0.70	TS0326-60*
102 ± 3	91 ± 10	-	173	0.63	TS0326-13*
102 ± 4	104 ± 21	-	162	0.82	TS0326-65*
103 ± 2	104 ± 10	-	304	0.63	TS0326-36*
104 ± 3	99 ± 13	-	184	0.81	TS0326-38*
105 ± 2	118 ± 8	-	501	0.70	TS0326-50*

TS0326 (Salada Formation) detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
111 ± 4	112 ± 11	-	309	0.64	TS0326-44*
121 ± 8	121 ± 11	-	394	0.89	TS0326-59*
156 ± 3	174 ± 17	-	411	0.33	TS0326-12*
156 ± 6	168 ± 12	-	395	0.38	TS0326-10*
161 ± 16	179 ± 21	-	246	0.77	TS0326-27*
213 ± 10	224 ± 11	-	439	0.37	TS0326-06*

Magdalena shelf-Sierra La Giganta modern sand detrital zircon U-Pb ages

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
14 ± 1	20 ± 16	-	120	0.32	SG1-02-09
14 ± 1	14 ± 2	-	1346	0.88	SG1-39*
14 ± 2	15 ± 23	-	56	0.55	SG1-02-20
15 ± 1	16 ± 2	-	1317	0.88	SG1-64*
15 ± 2	9 ± 25	-	44	0.45	SG1-02-28
16 ± 1	18 ± 9	-	227	0.76	SG1-02-17
16 ± 1	24 ± 5	-	922	0.63	SG1-53*
17 ± 1	18 ± 1	-	6736	0.43	SG1-52*
17 ± 1	19 ± 4	-	603	0.72	SG1-25*
18 ± 1	20 ± 2	-	910	0.50	SG1-2*
18 ± 1	25 ± 4	-	582	0.65	SG1-22*
18 ± 2	16 ± 19	-	56	0.50	SG1-02-11
18 ± 3	41 ± 59	-	46	0.53	SG1-03-21
19 ± 1	13 ± 6	-	285	0.33	SG1-56*
19 ± 2	10 ± 20	-	45	0.66	SG1-02-24
19 ± 2	18 ± 28	-	287	0.39	SG1-02-16
30 ± 1	33 ± 2	-	1140	0.45	SG1-40*
31 ± 3	19 ± 23	-	99	0.72	SG1-03-05
44 ± 1	49 ± 4	-	1103	0.42	SG1-61*
69 ± 2	78 ± 3	-	912	0.49	SG1-47*
72 ± 2	78 ± 5	-	747	0.39	SG1-12*
76 ± 3	72 ± 20	-	97	0.52	SG1-02-06
79 ± 2	92 ± 5	-	1484	0.70	SG1-55*
81 ± 6	105 ± 15	-	152	0.23	SG1-8*
82 ± 3	72 ± 18	-	166	0.58	SG1-03-06
82 ± 3	93 ± 5	-	928	0.69	SG1-18*
82 ± 8	82 ± 32	-	151	0.56	SG1-02-13
84 ± 2	81 ± 13	-	379	0.63	SG1-02-23
84 ± 2	89 ± 5	-	417	0.69	SG1-36*
85 ± 2	89 ± 18	-	186	0.44	SG1-03-01
85 ± 4	98 ± 7	-	657	0.56	SG1-3*
86 ± 2	108 ± 10	-	967	0.38	SG1-28*
87 ± 4	105 ± 12	-	231	0.35	SG1-69*
88 ± 1	99 ± 3	-	528	0.26	SG1-41*
88 ± 2	81 ± 10	-	393	0.29	SG1-02-25
90 ± 2	99 ± 5	-	823	0.20	SG1-59*
90 ± 3	106 ± 10	-	359	0.45	SG1-17*

Magdalena shelf-Sierra La Giganta modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
91 ± 2	105 ± 3	-	767	0.25	SG1-11*
92 ± 3	98 ± 9	-	241	0.37	SG1-60*
92 ± 6	97 ± 78	-	85	0.40	SG1-02-21
93 ± 3	104 ± 5	-	371	0.66	SG1-9*
94 ± 3	97 ± 9	-	287	0.77	SG1-50*
94 ± 5	107 ± 17	-	148	0.56	SG1-63*
95 ± 2	97 ± 26	-	194	0.41	SG1-03-22
95 ± 3	80 ± 20	-	252	0.62	SG1-02-10
95 ± 3	108 ± 13	-	268	0.62	SG1-5*
95 ± 3	111 ± 9	-	595	0.35	SG1-54*
95 ± 5	107 ± 9	-	786	0.29	SG1-6*
96 ± 3	102 ± 12	-	257	0.18	SG1-15*
97 ± 5	88 ± 11	-	192	0.73	SG1-48*
98 ± 1	107 ± 2	-	1457	0.53	SG1-23*
98 ± 3	100 ± 12	-	246	0.41	SG1-02-18
98 ± 3	114 ± 10	-	247	0.25	SG1-27*
99 ± 2	98 ± 10	-	478	0.48	SG1-02-15
99 ± 3	103 ± 14	-	205	0.40	SG1-02-08
99 ± 3	88 ± 45	-	94	0.46	SG1-03-03
99 ± 4	113 ± 13	-	193	0.40	SG1-51*
100 ± 3	103 ± 5	-	622	0.66	SG1-33*
100 ± 4	118 ± 15	-	180	0.46	SG1-02-19
100 ± 4	120 ± 46	-	111	0.64	SG1-03-07
101 ± 4	99 ± 4	-	1752	0.22	SG1-1*
101 ± 5	107 ± 18	-	134	0.51	SG1-35*
101 ± 7	122 ± 20	-	85	0.28	SG1-30*
102 ± 10	106 ± 23	-	90	0.45	SG1-68*
103 ± 7	73 ± 16	-	117	0.49	SG1-45*
104 ± 3	123 ± 9	-	340	0.63	SG1-31*
104 ± 4	98 ± 34	-	79	0.52	SG1-02-04
105 ± 3	96 ± 12	-	322	0.63	SG1-03-14
105 ± 3	108 ± 6	-	499	0.78	SG1-49*
106 ± 2	104 ± 8	-	276	0.19	SG1-03-08
106 ± 2	116 ± 4	-	486	0.75	SG1-38*
107 ± 3	89 ± 14	-	217	0.33	SG1-02-22
108 ± 4	104 ± 30	-	97	0.49	SG1-02-07
111 ± 7	123 ± 8	-	500	0.51	SG1-44*
113 ± 10	98 ± 22	-	79	0.47	SG1-32*
114 ± 3	124 ± 13	-	178	0.36	SG1-37*
115 ± 2	119 ± 14	-	427	1.29	SG1-02-12
147 ± 7	155 ± 11	-	656	0.21	SG1-57*
150 ± 6	167 ± 8	-	402	0.34	SG1-20*
150 ± 8	158 ± 9	-	399	0.13	SG1-29*
154 ± 5	172 ± 11	-	335	0.27	SG1-16*
155 ± 3	183 ± 10	-	501	0.21	SG1-14*
161 ± 4	204 ± 17	-	324	0.82	SG1-46*

Magdalena shelf-Sierra La Giganta modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
166 ± 8	170 ± 30	-	98	0.38	SG1-03-26
168 ± 3	191 ± 9	-	369	0.62	SG1-42*
210 ± 6	225 ± 7	-	649	0.47	SG1-10*
263 ± 5	286 ± 7	-	435	0.31	SG1-19*
1004 ± 20	1025 ± 16	1071 ± 21	201	0.28	SG1-70*
1156 ± 15	1151 ± 11	1140 ± 15	536	0.08	SG1-03-09
1188 ± 73	1309 ± 68	1513 ± 119	220	0.58	SG1-66*
1372 ± 60	1379 ± 40	1391 ± 35	100	0.62	SG1-02-03
1674 ± 49	1656 ± 45	1633 ± 80	70	0.56	SG1-67*
1702 ± 17	1710 ± 14	1720 ± 23	205	0.59	SG1-21*
1725 ± 29	1711 ± 18	1694 ± 18	787	0.39	SG1-24*
1740 ± 16	1734 ± 12	1727 ± 20	170	0.46	SG1-26*
2654 ± 22	2677 ± 13	2695 ± 17	85	1.28	SG1-13*
15 ± 2	22 ± 10	-	190	0.60	SG2-04-18
15 ± 2	1 ± 41	-	92	0.57	SG2-04-01
17 ± 1	19 ± 14	-	350	0.25	SG2-06-15
18 ± 1	17 ± 10	-	353	0.57	SG2-04-16
18 ± 1	19 ± 7	-	179	0.63	SG2-04-02
19 ± 1	21 ± 9	-	388	0.46	SG2-06-19
19 ± 1	23 ± 6	-	631	0.39	SG2-04-08
19 ± 1	5 ± 17	-	272	0.37	SG2-04-13
19 ± 2	19 ± 38	-	163	0.46	SG2-04-27
20 ± 2	24 ± 23	-	97	0.32	SG2-04-21
21 ± 2	30 ± 27	-	190	0.66	SG2-06-10
21 ± 4	16 ± 62	-	111	0.74	SG2-06-17
21 ± 1	23 ± 4	-	960	0.54	SG2-04-11
22 ± 2	29 ± 25	-	181	0.59	SG2-04-12
23 ± 1	26 ± 16	-	144	0.69	SG2-04-17
23 ± 1	19 ± 15	-	190	0.60	SG2-04-15
24 ± 1	25 ± 7	-	761	0.32	SG2-04-28
29 ± 2	32 ± 20	-	205	0.43	SG2-04-23
29 ± 1	30 ± 6	-	419	0.55	SG2-04-22
30 ± 2	36 ± 20	-	174	0.61	SG2-04-25
31 ± 2	29 ± 18	-	393	0.56	SG2-06-13
31 ± 1	32 ± 7	-	524	0.40	SG2-06-18
32 ± 1	31 ± 15	-	199	0.47	SG2-05-03
33 ± 3	22 ± 35	-	96	0.77	SG2-04-10
71 ± 2	75 ± 11	-	295	0.39	SG2-04-07
83 ± 3	78 ± 9	-	277	0.75	SG2-05-01
92 ± 5	110 ± 29	-	79	0.50	SG2-04-14
98 ± 2	92 ± 5	-	1267	0.23	SG2-06-11
99 ± 1	98 ± 4	-	708	0.12	SG2-04-20
100 ± 3	87 ± 19	-	228	0.41	SG2-06-22
102 ± 4	96 ± 18	-	371	0.55	SG2-05-07
103 ± 2	108 ± 16	-	226	0.51	SG2-06-14
104 ± 6	109 ± 53	-	61	0.49	SG2-04-19
151 ± 4	150 ± 15	-	249	0.56	SG2-04-04

Magdalena shelf-Sierra La Giganta modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
246 ± 4	250 ± 9	-	622	0.32	SG2-04-26
1673 ± 55	1661 ± 32	1646 ± 21	210	0.19	SG2-04-05
20 ± 3	19 ± 44	-	101	0.34	SG3-07-16
20 ± 2	40 ± 26	-	145	0.78	SG3-07-22
20 ± 1	18 ± 3	-	1603	0.23	SG3-07-02
20 ± 1	20 ± 5	-	1630	0.17	SG3-07-10
22 ± 2	35 ± 33	-	134	0.67	SG3-07-24
24 ± 3	35 ± 38	-	80	0.55	SG3-07-09
25 ± 1	29 ± 12	-	637	0.85	SG3-07-19
28 ± 2	29 ± 21	-	133	0.53	SG3-07-21
29 ± 1	31 ± 8	-	499	0.69	SG3-07-23
30 ± 2	39 ± 28	-	128	0.96	SG3-07-07
30 ± 1	27 ± 10	-	574	0.50	SG3-07-26
31 ± 2	21 ± 24	-	216	0.63	SG3-07-12
79 ± 4	76 ± 44	-	144	0.48	SG3-07-18
93 ± 3	88 ± 35	-	157	0.47	SG3-07-28
94 ± 4	87 ± 27	-	127	0.93	SG3-08-01
95 ± 5	95 ± 38	-	103	0.72	SG3-08-02
95 ± 4	100 ± 30	-	178	0.63	SG3-07-25
95 ± 4	90 ± 26	-	251	0.41	SG3-07-15
96 ± 2	107 ± 27	-	177	0.81	SG3-07-30
96 ± 3	98 ± 16	-	225	0.46	SG3-07-17
98 ± 3	90 ± 17	-	206	0.39	SG3-07-04
99 ± 3	94 ± 19	-	198	0.63	SG3-07-03
99 ± 4	95 ± 20	-	172	0.67	SG3-07-13
100 ± 3	103 ± 33	-	236	0.59	SG3-07-20
102 ± 4	100 ± 33	-	65	0.43	SG3-07-01
106 ± 4	94 ± 47	-	123	0.32	SG3-07-11
19 ± 1	19 ± 18	-	209	0.33	SG4-10-11
19 ± 1	16 ± 8	-	327	0.39	SG4-10-29
19 ± 1	20 ± 5	-	782	0.33	SG4-10-04
20 ± 3	15 ± 41	-	81	1.02	SG4-10-18
20 ± 1	24 ± 9	-	392	0.69	SG4-10-07
20 ± 1	22 ± 13	-	296	0.37	SG4-10-09
21 ± 2	15 ± 22	-	112	0.86	SG4-10-26
21 ± 1	24 ± 11	-	319	0.38	SG4-10-02
22 ± 1	22 ± 3	-	1531	0.86	SG4-10-17
22 ± 1	23 ± 12	-	227	0.44	SG4-10-01
22 ± 2	30 ± 35	-	236	0.27	SG4-10-12
22 ± 2	16 ± 16	-	174	0.82	SG4-10-16
23 ± 1	44 ± 24	-	206	0.33	SG4-11-08
23 ± 1	20 ± 10	-	502	0.39	SG4-10-14
24 ± 4	49 ± 47	-	59	0.76	SG4-10-13
28 ± 2	25 ± 22	-	121	0.64	SG4-10-27
30 ± 1	27 ± 9	-	349	0.48	SG4-11-09
31 ± 1	30 ± 10	-	208	0.62	SG4-11-04
31 ± 3	35 ± 55	-	85	0.99	SG4-10-20

Magdalena shelf-Sierra La Giganta modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
82 ± 2	87 ± 21	-	139	0.79	SG4-11-01
92 ± 3	79 ± 26	-	112	0.81	SG4-10-06
96 ± 4	103 ± 37	-	161	0.29	SG4-10-25
98 ± 4	103 ± 12	-	143	0.67	SG4-10-28
110 ± 5	117 ± 45	-	72	0.39	SG4-11-05
147 ± 5	147 ± 13	-	313	0.55	SG4-10-19
1717 ± 65	1685 ± 44	1647 ± 56	129	1.00	SG4-11-06
16 ± 2	60 ± 22	-	33	0.69	SG5-02-05
16 ± 1	18 ± 2	-	577	0.82	SG5-02-15
20 ± 1	25 ± 3	-	950	0.46	SG5-02-02
21 ± 1	23 ± 9	-	283	0.48	SG5-02-01
24 ± 1	26 ± 10	-	209	1.12	SG5-02-22
24 ± 1	26 ± 18	-	139	0.81	SG5-02-07
25 ± 1	12 ± 17	-	135	1.12	SG5-02-18
25 ± 1	24 ± 8	-	259	0.51	SG5-02-24
26 ± 1	31 ± 4	-	792	0.99	SG5-02-12
30 ± 2	20 ± 26	-	88	1.13	SG5-02-04
31 ± 1	39 ± 16	-	215	1.21	SG5-02-26
32 ± 1	36 ± 15	-	201	0.91	SG5-02-21
33 ± 2	37 ± 22	-	112	0.99	SG5-02-17
41 ± 1	43 ± 8	-	376	0.66	SG5-02-20
75 ± 1	82 ± 10	-	426	0.92	SG5-02-25
78 ± 1	73 ± 4	-	988	0.45	SG5-02-23
81 ± 2	70 ± 14	-	215	0.90	SG5-02-10
82 ± 2	79 ± 10	-	511	0.75	SG5-02-11
95 ± 2	89 ± 10	-	445	0.71	SG5-02-14
95 ± 5	101 ± 56	-	65	0.63	SG5-03-02
98 ± 2	99 ± 7	-	870	0.51	SG5-03-01
100 ± 3	101 ± 8	-	477	0.35	SG5-02-03
103 ± 3	112 ± 10	-	180	0.44	SG5-02-16
149 ± 2	157 ± 8	-	466	0.64	SG5-02-19
243 ± 6	232 ± 16	-	221	0.18	SG5-02-09
533 ± 10	567 ± 16	-	260	0.66	SG5-02-06
1733 ± 59	1766 ± 34	1805 ± 39	151	0.49	SG5-02-13
24 ± 2	3 ± 36	-	73	1.41	SG6-05-06
25 ± 1	23 ± 18	-	325	0.67	SG6-06-20
26 ± 2	15 ± 30	-	127	0.46	SG6-05-01
26 ± 1	29 ± 10	-	274	0.70	SG6-05-16
26 ± 2	16 ± 33	-	137	0.61	SG6-06-18
27 ± 1	29 ± 13	-	360	0.61	SG6-05-03
27 ± 2	23 ± 22	-	86	0.77	SG6-05-07
27 ± 2	18 ± 33	-	135	1.09	SG6-05-14
29 ± 2	32 ± 28	-	114	0.77	SG6-05-10
29 ± 3	28 ± 42	-	93	0.87	SG6-06-19
30 ± 1	26 ± 14	-	236	0.62	SG6-06-21
31 ± 2	39 ± 20	-	149	0.53	SG6-05-13
34 ± 2	20 ± 18	-	151	1.17	SG6-05-08

Magdalena shelf-Sierra La Giganta modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
78 ± 2	81 ± 13	-	269	0.54	SG6-05-15
85 ± 2	84 ± 9	-	679	0.47	SG6-05-02
96 ± 3	96 ± 14	-	323	0.77	SG6-06-17
98 ± 3	102 ± 8	-	321	0.56	SG6-06-22
99 ± 3	91 ± 14	-	273	0.60	SG6-06-23
100 ± 2	102 ± 11	-	276	0.70	SG6-05-09
101 ± 2	105 ± 4	-	889	0.24	SG6-06-25
103 ± 2	109 ± 19	-	269	0.46	SG6-05-12
104 ± 4	117 ± 36	-	93	0.89	SG6-05-11
134 ± 3	136 ± 22	-	190	0.64	SG6-06-24
159 ± 4	173 ± 18	-	353	0.55	SG6-05-05
1012 ± 48	1045 ± 57	1115 ± 99	57	1.32	SG6-05-04
15 ± 1	15 ± 10	-	397	0.57	SG7-07-07
20 ± 2	14 ± 17	-	147	0.48	SG7-09-17
23 ± 2	25 ± 28	-	264	0.66	SG7-07-03
26 ± 1	31 ± 11	-	287	0.87	SG7-09-14
34 ± 2	27 ± 23	-	361	0.74	SG7-09-19
37 ± 1	43 ± 6	-	965	1.57	SG7-07-13
38 ± 1	39 ± 2	-	3074	0.49	SG7-07-08
41 ± 2	45 ± 34	-	236	0.68	SG7-07-04
61 ± 2	59 ± 14	-	319	0.43	SG7-07-09
63 ± 2	53 ± 30	-	224	0.64	SG7-07-01
82 ± 4	79 ± 42	-	86	0.57	SG7-09-16
96 ± 3	93 ± 9	-	390	0.21	SG7-07-10
96 ± 3	100 ± 18	-	175	0.27	SG7-07-12
97 ± 4	104 ± 38	-	79	0.63	SG7-07-06
102 ± 5	96 ± 37	-	212	0.67	SG7-07-02
104 ± 11	73 ± 148	-	79	0.51	SG7-09-18
107 ± 3	113 ± 8	-	384	0.53	SG7-09-15
127 ± 3	126 ± 13	-	334	0.35	SG7-07-05
132 ± 9	134 ± 36	-	112	0.64	SG7-07-11
1276 ± 46	1259 ± 29	1230 ± 32	435	0.25	SG7-09-20
18 ± 2	3 ± 27	-	78	0.83	SG8-10-02
19 ± 1	31 ± 16	-	192	1.10	SG8-11-11
92 ± 2	94 ± 15	-	321	0.60	SG8-10-10
93 ± 3	100 ± 20	-	149	0.42	SG8-10-08
94 ± 2	97 ± 15	-	305	0.43	SG8-10-03
97 ± 3	89 ± 15	-	205	0.46	SG8-10-05
100 ± 3	103 ± 32	-	122	0.81	SG8-10-07
100 ± 5	101 ± 30	-	115	0.89	SG8-10-04
102 ± 3	113 ± 38	-	130	0.76	SG8-10-01
105 ± 3	101 ± 12	-	352	0.90	SG8-10-09
106 ± 4	124 ± 23	-	122	0.83	SG8-10-06
157 ± 10	146 ± 78	-	85	0.75	SG8-11-12
15 ± 3	16 ± 60	-	47	0.70	SG9-13-09
64 ± 5	49 ± 24	-	146	0.47	SG9-13-02
78 ± 2	81 ± 18	-	294	0.46	SG9-13-12

Magdalena shelf-Sierra La Giganta modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
79 ± 2	84 ± 29	-	125	0.43	SG9-13-08
82 ± 6	75 ± 50	-	70	0.79	SG9-13-07
94 ± 7	63 ± 67	-	89	0.97	SG9-13-05
97 ± 3	103 ± 17	-	156	0.51	SG9-13-13
101 ± 5	87 ± 43	-	144	0.62	SG9-13-04
105 ± 2	112 ± 10	-	581	0.57	SG9-13-11
106 ± 2	114 ± 13	-	302	0.38	SG9-13-06
360 ± 11	426 ± 35	-	282	0.48	SG9-13-03
1725 ± 41	1747 ± 31	1774 ± 33	150	0.46	SG9-13-10

W. Los Cabos block modern sand detrital zircon U-Pb ages

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
28 ± 1	19 ± 13	-	118	0.68	W1_03-20
75 ± 2	57 ± 8	-	378	0.65	W1_03-01
93 ± 4	83 ± 18	-	98	0.68	W1_03-06
94 ± 4	56 ± 22	-	60	0.64	W1_03-10
97 ± 1	101 ± 7	-	488	0.35	W1_03-02
103 ± 2	106 ± 8	-	379	0.31	W1_03-19
103 ± 3	102 ± 24	-	92	0.77	W1_03-11
104 ± 3	91 ± 15	-	113	0.44	W1_03-17
105 ± 4	110 ± 20	-	84	0.71	W1_03-05
107 ± 3	88 ± 19	-	73	0.54	W1_03-08
112 ± 3	103 ± 26	-	67	0.63	W1_03-18
101 ± 6	125 ± 24	-	53	0.55	W2_09-09
102 ± 3	107 ± 14	-	100	0.38	W2_09-05
103 ± 4	108 ± 19	-	110	0.79	W2_09-02
106 ± 2	108 ± 16	-	113	0.75	W2_09-06
109 ± 2	103 ± 11	-	393	0.40	W2_09-07
93 ± 2	69 ± 12	-	239	0.55	W3_04-09
95 ± 2	88 ± 19	-	159	0.56	W3_04-11
97 ± 3	57 ± 19	-	89	0.69	W3_04-02
99 ± 3	106 ± 22	-	82	0.81	W3_04-04
102 ± 4	91 ± 30	-	30	0.33	W3_04-03
105 ± 8	61 ± 145	-	26	0.42	W3_04-06
106 ± 4	89 ± 21	-	47	0.61	W3_04-08
110 ± 6	108 ± 36	-	48	0.43	W3_04-01
110 ± 6	175 ± 59	-	41	0.82	W3_04-15
112 ± 8	112 ± 85	-	42	0.37	W3_04-16
97 ± 7	69 ± 57	-	52	0.77	W4_05-17
98 ± 3	101 ± 25	-	268	0.49	W4_05-15
98 ± 3	114 ± 14	-	147	0.41	W4_05-10
98 ± 2	110 ± 9	-	388	0.56	W4_05-02
100 ± 5	86 ± 42	-	32	0.67	W4_05-07
103 ± 4	92 ± 30	-	36	0.62	W4_05-01
106 ± 7	90 ± 80	-	58	0.69	W4_05-13
109 ± 8	129 ± 62	-	29	0.38	W4_05-08

W. Los Cabos block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
110 ± 4	135 ± 24	-	77	0.59	W4_05-06
111 ± 5	118 ± 40	-	44	0.57	W4_05-04
99 ± 4	107 ± 35	-	40	0.41	W5_06-03
131 ± 6	190 ± 48	-	83	0.48	W5_06-07
132 ± 5	162 ± 35	-	63	0.69	W5_06-11
136 ± 7	221 ± 101	-	49	0.52	W5_06-17
140 ± 9	199 ± 59	-	62	0.77	W5_06-06
140 ± 6	138 ± 48	-	53	0.69	W5_06-05
142 ± 5	96 ± 57	-	68	0.68	W5_06-18
143 ± 9	121 ± 43	-	41	0.45	W5_06-09
143 ± 6	88 ± 53	-	113	0.76	W5_06-12
1251 ± 31	1247 ± 41	-	113	0.27	W5_06-10
104 ± 2	107 ± 13	-	315	0.20	W6_07-11
105 ± 4	151 ± 51	-	77	0.42	W6_07-06
109 ± 4	109 ± 18	-	158	0.62	W6_07-05
127 ± 8	149 ± 80	-	24	0.59	W6_07-03
140 ± 9	186 ± 89	-	31	0.37	W6_07-02
140 ± 6	156 ± 52	-	134	0.70	W6_07-09
153 ± 8	173 ± 66	-	34	0.42	W6_07-01
163 ± 4	175 ± 24	-	164	0.60	W6_07-10
169 ± 5	185 ± 23	-	127	0.51	W6_07-04
205 ± 4	329 ± 34	1337 ± 215	232	0.29	W6_07-07
87 ± 3	97 ± 22	-	371	0.51	W7_08-08
91 ± 5	142 ± 84	-	85	0.60	W7_08-04
92 ± 5	105 ± 46	-	347	0.28	W7_08-07
95 ± 3	45 ± 30	-	231	0.82	W7_08-03
102 ± 3	125 ± 32	-	88	0.55	W7_08-10
103 ± 2	106 ± 15	-	260	0.58	W7_08-01
103 ± 6	142 ± 40	-	83	0.72	W7_08-09
104 ± 3	117 ± 51	-	64	0.73	W7_08-02
110 ± 12	191 ± 180	-	115	0.94	W7_08-06
114 ± 9	95 ± 109	-	84	0.54	W7_08-05
73 ± 6	14 ± 66	-	72	0.38	W8_06-14
79 ± 6	59 ± 86	-	94	0.45	W8_06-19
83 ± 3	73 ± 34	-	371	0.25	W8_06-08
84 ± 3	70 ± 47	-	167	0.39	W8_05-04
85 ± 6	75 ± 73	-	159	0.44	W8_05-02
85 ± 5	65 ± 68	-	198	0.32	W8_05-06
86 ± 2	84 ± 28	-	513	0.33	W8_06-15
90 ± 6	89 ± 72	-	304	0.36	W8_05-05
167 ± 15	104 ± 178	-	63	0.50	W8_05-08
168 ± 9	177 ± 58	-	340	0.20	W8_05-15
88 ± 5	39 ± 63	-	102	0.49	W9_08-03
81 ± 5	76 ± 55	-	100	0.34	W9_08-13
81 ± 3	69 ± 34	-	186	0.52	W9_09-01
82 ± 3	64 ± 41	-	250	0.20	W9_09-05

W. Los Cabos block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
84 ± 3	85 ± 42	-	217	0.51	W9_08-09
93 ± 6	109 ± 56	-	211	0.31	W9_09-02
98 ± 9	10 ± 107	-	70	0.78	W9_09-13
101 ± 9	22 ± 116	-	57	0.77	W9_09-09
103 ± 3	91 ± 42	-	158	0.47	W9_08-12
246 ± 6	224 ± 33	-	225	0.21	W9_09-10
55 ± 5	87 ± 15	-	263	0.78	W10_12-08
78 ± 3	53 ± 37	-	103	0.44	W10_11-07
78 ± 4	37 ± 43	-	144	0.63	W10_11-10
80 ± 3	73 ± 44	-	170	0.32	W10_12-04
83 ± 2	62 ± 22	-	379	0.46	W10_11-05
83 ± 2	71 ± 23	-	399	0.38	W10_11-04
84 ± 1	74 ± 8	-	698	0.30	W10_12-03
84 ± 4	86 ± 50	-	158	0.20	W10_12-05
84 ± 8	97 ± 132	-	87	0.57	W10_11-17
90 ± 10	81 ± 138	-	66	0.69	W10_12-14

E. Los Cabos block modern sand detrital zircon U-Pb ages

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
99 ± 2	110 ± 25	-	212	0.23	E1_03-04
99 ± 2	99 ± 8	-	327	0.34	E1_03-05
99 ± 2	102 ± 14	-	163	0.37	E1_03-06
102 ± 2	101 ± 12	-	271	0.40	E1_03-03
91 ± 2	90 ± 11	-	250	0.30	E2_04-05
96 ± 3	109 ± 14	-	80	0.60	E2_04-08
97 ± 2	100 ± 9	-	258	0.34	E2_04-06
102 ± 4	122 ± 23	-	121	0.84	E2_04-02
131 ± 3	123 ± 15	-	172	0.66	E2_04-01
93 ± 2	97 ± 12	-	254	0.65	E3_05-05
94 ± 1	91 ± 6	-	350	0.32	E3_05-04
94 ± 3	82 ± 13	-	79	0.48	E3_05-03
86 ± 1	91 ± 7	-	273	0.31	E4_06-01
90 ± 2	85 ± 7	-	246	0.33	E4_06-02
90 ± 2	102 ± 6	-	425	0.44	E4_06-03
99 ± 4	61 ± 14	-	136	0.61	E4_06-05
100 ± 2	88 ± 14	-	224	0.77	E4_06-04
95 ± 2	99 ± 8	-	221	0.58	E5_07-05
96 ± 3	82 ± 29	-	99	0.85	E5_07-04
104 ± 2	107 ± 11	-	514	0.94	E5_07-13
139 ± 3	159 ± 26	-	135	0.98	E5_07-12
166 ± 4	177 ± 9	-	419	0.36	E5_07-08
85 ± 2	86 ± 6	-	439	0.36	E6_08-02
91 ± 2	95 ± 12	-	255	0.54	E6_08-08
93 ± 2	94 ± 11	-	585	0.50	E6_08-03
95 ± 2	95 ± 9	-	304	0.74	E6_08-12
140 ± 5	128 ± 20	-	73	0.36	E6_08-09

E. Los Cabos block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
82 ± 1	87 ± 6	-	285	0.48	E7_02-08
82 ± 2	76 ± 11	-	509	0.49	E7_02-06
84 ± 1	89 ± 8	-	543	0.51	E7_02-01
86 ± 2	85 ± 11	-	402	0.30	E7_02-05
87 ± 1	83 ± 14	-	296	0.47	E7_02-02
92 ± 1	90 ± 5	-	1488	0.39	E7_02-10
93 ± 2	108 ± 12	-	274	0.26	E7_02-04
98 ± 2	98 ± 13	-	407	0.46	E7_02-09
150 ± 5	145 ± 22	-	66	0.51	E7_02-07
163 ± 4	153 ± 17	-	230	0.48	E7_02-03
79 ± 2	69 ± 9	-	219	0.37	E8_02-02
80 ± 2	68 ± 10	-	219	0.36	E8_02-02
87 ± 2	100 ± 8	-	611	0.70	E8_02-06
90 ± 1	82 ± 5	-	1374	0.27	E8_02-16
90 ± 2	108 ± 8	-	611	0.72	E8_02-06
93 ± 1	81 ± 4	-	1636	0.30	E8_02-03
95 ± 2	86 ± 4	-	1636	0.30	E8_02-03
112 ± 8	106 ± 12	-	2453	0.35	E8_02-09
149 ± 7	137 ± 12	-	2533	0.36	E8_02-09
165 ± 6	157 ± 16	-	186	0.37	E8_02-08
167 ± 3	167 ± 8	-	391	0.18	E8_02-12
167 ± 5	155 ± 17	-	186	0.36	E8_02-08
211 ± 5	211 ± 9	-	940	0.06	E8_02-04
215 ± 4	214 ± 8	-	940	0.06	E8_02-04
337 ± 5	258 ± 18	-	627	0.46	E8_02-11
397 ± 11	408 ± 12	-	348	0.13	E8_02-07
400 ± 9	409 ± 11	-	348	0.12	E8_02-07
892 ± 17	691 ± 33	-	439	0.56	E8_02-05
77 ± 3	67 ± 17	-	138	0.43	E9_02-01
82 ± 2	69 ± 16	-	425	0.52	E9_02-02
84 ± 2	67 ± 11	-	491	0.49	E9_02-05
84 ± 3	91 ± 40	-	234	0.28	E9_02-04
85 ± 1	68 ± 8	-	721	0.29	E9_02-05
85 ± 2	73 ± 13	-	382	0.59	E9_02-07
85 ± 3	67 ± 17	-	205	0.50	E9_02-03
87 ± 4	80 ± 38	-	142	0.38	E9_02-08
89 ± 1	83 ± 6	-	1205	0.21	E9_02-10
77 ± 4	85 ± 66	-	249	0.43	E10_05-09
78 ± 9	-8 ± 86	-	74	0.51	E10_05-10
81 ± 12	4 ± 212	-	68	0.32	E10_06-13
85 ± 5	79 ± 98	-	241	0.32	E10_06-15
86 ± 2	82 ± 21	-	352	0.30	E10_05-11
87 ± 5	59 ± 63	-	210	0.35	E10_05-02
88 ± 3	92 ± 44	-	284	0.33	E10_06-11
89 ± 1	91 ± 8	-	1140	0.25	E10_06-09
89 ± 2	121 ± 20	-	282	0.40	E10_05-01

E. Los Cabos block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
91 ± 4	85 ± 47	-	259	0.31	E10_06-05
75 ± 4	44 ± 44	-	138	0.33	E11_09-17
76 ± 3	65 ± 56	-	218	0.41	E11_08-11
77 ± 7	19 ± 121	-	102	0.35	E11_08-10
78 ± 2	75 ± 21	-	314	0.43	E11_08-17
78 ± 4	58 ± 66	-	233	0.35	E11_08-12
78 ± 5	58 ± 56	-	138	0.32	E11_08-14
79 ± 6	105 ± 98	-	80	0.40	E11_09-18
81 ± 5	95 ± 86	-	168	0.39	E11_09-19
83 ± 5	111 ± 49	-	317	0.46	E11_08-03
86 ± 2	84 ± 12	-	1872	0.55	E11_08-05
72 ± 1	54 ± 9	-	298	0.40	E12_11-11
74 ± 2	70 ± 28	-	346	0.38	E12_11-09
75 ± 5	65 ± 80	-	300	0.43	E12_12-19
76 ± 2	91 ± 22	-	271	0.42	E12_11-04
77 ± 3	68 ± 39	-	266	0.25	E12_11-15
77 ± 4	68 ± 61	-	279	0.44	E12_11-13
78 ± 3	88 ± 39	-	326	0.34	E12_11-07
78 ± 4	84 ± 46	-	250	0.47	E12_11-03
79 ± 5	108 ± 64	-	285	0.33	E12_12-16
80 ± 7	87 ± 123	-	194	0.26	E12_12-20
82 ± 5	83 ± 61	-	233	0.29	E12_12-14
87 ± 3	94 ± 42	-	241	0.43	E12_11-06
84 ± 4	73 ± 54	-	254	0.30	E13_14-07
85 ± 3	72 ± 29	-	188	0.49	E13_15-17
86 ± 3	61 ± 28	-	224	0.34	E13_14-05
88 ± 11	50 ± 147	-	56	0.39	E13_15-12
88 ± 3	69 ± 42	-	256	0.49	E13_15-04
88 ± 4	67 ± 42	-	156	0.25	E13_15-03
89 ± 3	68 ± 30	-	270	0.48	E13_15-18
89 ± 5	54 ± 70	-	257	0.55	E13_14-03
91 ± 2	88 ± 27	-	707	0.36	E13_14-01
91 ± 4	90 ± 46	-	370	0.49	E13_14-04
69 ± 3	92 ± 22	-	410	0.48	E14-13*
70 ± 1	66 ± 5	-	842	0.60	E14-08*
70 ± 1	80 ± 8	-	627	0.45	E14-22*
70 ± 2	73 ± 2	-	1041	0.54	E14-06*
72 ± 1	79 ± 13	-	556	0.48	E14-04*
72 ± 3	88 ± 17	-	106	0.41	E14-24*
73 ± 1	67 ± 7	-	325	0.39	E14-25*
73 ± 2	74 ± 5	-	587	0.42	E14-12*
73 ± 2	78 ± 8	-	914	0.68	E14-14*
73 ± 2	74 ± 6	-	625	0.40	E14-24*
73 ± 3	75 ± 11	-	478	0.32	E14-17*
74 ± 2	80 ± 10	-	441	0.29	E14-18*
74 ± 2	73 ± 9	-	511	0.32	E14-20*

E. Los Cabos block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
74 ± 2	72 ± 15	-	291	0.43	E14-23*
74 ± 3	72 ± 16	-	356	0.49	E14-21*
75 ± 1	74 ± 4	-	835	0.91	E14-05*
75 ± 1	73 ± 7	-	890	0.43	E14-15*
76 ± 1	81 ± 11	-	489	0.47	E14-09*
76 ± 2	76 ± 7	-	450	0.62	E14-02*
79 ± 1	107 ± 10	-	546	0.43	E14-03*
79 ± 1	79 ± 7	-	400	0.50	E14-10*
79 ± 2	86 ± 6	-	577	0.33	E14-16*
80 ± 1	85 ± 11	-	461	0.40	E14-07*
80 ± 1	87 ± 15	-	303	0.49	E14-19*
81 ± 3	94 ± 34	-	127	0.49	E14-11*
68 ± 2	73 ± 9	-	487	0.62	E15-04*
69 ± 1	72 ± 8	-	393	0.34	E15-19*
70 ± 1	67 ± 4	-	850	0.58	E15-07*
70 ± 1	72 ± 5	-	543	0.48	E15-15*
70 ± 2	69 ± 11	-	480	0.41	E15-16*
70 ± 3	85 ± 18	-	540	0.50	E15-06*
71 ± 1	73 ± 4	-	565	0.36	E15-01*
72 ± 1	73 ± 6	-	661	0.42	E15-11*
72 ± 2	51 ± 18	-	237	0.31	E15-05*
73 ± 2	75 ± 8	-	668	0.43	E15-03*
73 ± 2	51 ± 20	-	265	0.42	E15-09*
73 ± 2	62 ± 9	-	276	0.36	E15-18*
73 ± 2	77 ± 9	-	275	0.38	E15-20*
73 ± 5	75 ± 19	-	158	0.27	E15-17*
75 ± 2	63 ± 16	-	202	0.43	E15-12*
76 ± 3	92 ± 12	-	291	0.65	E15-02*
77 ± 3	28 ± 29	-	116	0.54	E15-08*
78 ± 2	87 ± 12	-	502	0.37	E15-10*
79 ± 2	80 ± 16	-	436	0.41	E15-13*
79 ± 2	82 ± 7	-	341	0.53	E15-14*
69 ± 2	73 ± 7	-	469	0.42	E16-03*
69 ± 2	67 ± 7	-	399	0.47	E16-25*
71 ± 1	71 ± 5	-	576	0.63	E16-08*
73 ± 1	75 ± 10	-	720	0.42	E16-05*
73 ± 2	83 ± 11	-	486	0.40	E16-06*
73 ± 3	21 ± 22	-	103	0.44	E16-27*
74 ± 1	76 ± 5	-	952	0.97	E16-15*
74 ± 1	72 ± 21	-	304	0.30	E16-29*
75 ± 1	70 ± 11	-	278	0.47	E16-01*
75 ± 1	73 ± 14	-	279	0.32	E16-28*
76 ± 1	76 ± 6	-	443	0.80	E16-23*
76 ± 2	85 ± 16	-	355	0.54	E16-22*
77 ± 1	83 ± 6	-	562	0.33	E16-17*
77 ± 1	79 ± 4	-	996	0.34	E16-19*

E. Los Cabos block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
77 ± 2	67 ± 11	-	194	0.29	E16-26*
77 ± 2	59 ± 12	-	112	0.37	E16-30*
77 ± 4	88 ± 8	-	395	0.48	E16-12*
78 ± 1	77 ± 18	-	357	0.46	E16-21*
78 ± 2	81 ± 5	-	618	0.54	E16-07*
79 ± 2	88 ± 12	-	444	0.51	E16-13*
80 ± 1	78 ± 3	-	1426	0.44	E16-09*
80 ± 1	79 ± 5	-	609	0.41	E16-20*
81 ± 2	87 ± 12	-	561	0.45	E16-14*
82 ± 1	83 ± 7	-	641	0.43	E16-02*
82 ± 1	85 ± 6	-	624	0.28	E16-04*
82 ± 1	79 ± 6	-	364	0.39	E16-11*
83 ± 1	82 ± 2	-	1393	0.26	E16-16*
83 ± 2	80 ± 18	-	418	0.36	E16-24*
87 ± 3	89 ± 6	-	423	0.39	E16-10*
89 ± 1	91 ± 5	-	781	0.35	E16-18*
66 ± 6	67 ± 32	-	579	0.40	E17_17-04
75 ± 2	59 ± 23	-	225	0.40	E17_17-12
77 ± 5	95 ± 7	-	657	0.95	E17-5*
78 ± 2	84 ± 3	-	1793	0.35	E17-52*
78 ± 3	85 ± 8	-	309	0.55	E17-23*
79 ± 2	82 ± 3	-	1799	0.28	E17-51*
79 ± 3	84 ± 26	-	109	0.39	E17_17-03
79 ± 3	89 ± 5	-	699	0.45	E17-43*
80 ± 2	75 ± 15	-	619	0.41	E17_17-16
80 ± 4	99 ± 9	-	344	0.88	E17-40*
80 ± 4	87 ± 4	-	837	0.52	E17-57*
80 ± 6	86 ± 7	-	1143	0.72	E17-58*
80 ± 6	86 ± 11	-	353	0.62	E17-55*
81 ± 1	80 ± 4	-	1018	0.31	E17_18-06
81 ± 2	90 ± 7	-	498	0.60	E17-20*
81 ± 3	51 ± 36	-	169	0.46	E17_17-19
81 ± 4	83 ± 10	-	260	0.50	E17-7*
82 ± 2	43 ± 21	-	216	0.33	E17_18-09
82 ± 2	92 ± 2	-	1105	0.10	E17-19*
82 ± 3	92 ± 8	-	349	0.42	E17-59*
82 ± 5	35 ± 57	-	158	0.42	E17_18-13
82 ± 8	86 ± 108	-	114	0.43	E17_17-05
83 ± 2	77 ± 15	-	177	0.59	E17_18-14
84 ± 1	99 ± 4	-	466	0.43	E17-8*
84 ± 2	90 ± 2	-	1247	0.27	E17-60*
84 ± 2	111 ± 9	-	292	0.39	E17-12*
84 ± 2	98 ± 8	-	480	0.53	E17-62*
84 ± 3	93 ± 36	-	132	0.35	E17_18-16
84 ± 3	93 ± 7	-	296	0.51	E17-50*
84 ± 4	100 ± 10	-	378	0.65	E17-9*

E. Los Cabos block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb*/^{238}U$ Age (Ma)	$^{207}Pb*/^{235}U$ Age (Ma)	$^{207}Pb*/^{206}Pb*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
84 ± 4	86 ± 10	-	211	0.38	E17-33*
84 ± 4	111 ± 13	-	260	0.51	E17-36*
84 ± 5	129 ± 45	-	373	0.69	E17-10*
84 ± 5	98 ± 28	-	326	0.59	E17-61*
85 ± 3	80 ± 34	-	158	0.70	E17_17-02
85 ± 3	74 ± 28	-	216	0.51	E17_17-07
85 ± 3	109 ± 11	-	365	0.16	E17-1*
85 ± 3	91 ± 6	-	683	0.46	E17-4*
85 ± 4	69 ± 49	-	130	0.54	E17_17-08
85 ± 4	93 ± 8	-	207	0.44	E17-27*
85 ± 4	107 ± 16	-	443	0.70	E17-47*
85 ± 5	80 ± 13	-	195	0.49	E17-45*
85 ± 5	96 ± 9	-	405	0.61	E17-11*
85 ± 6	90 ± 13	-	257	0.73	E17-38*
86 ± 3	81 ± 21	-	202	0.51	E17_17-01
86 ± 3	39 ± 33	-	256	0.40	E17_18-21
86 ± 3	90 ± 9	-	408	0.63	E17-56*
86 ± 3	92 ± 6	-	443	0.36	E17-15*
86 ± 3	95 ± 5	-	621	0.31	E17-46*
86 ± 4	106 ± 14	-	171	0.49	E17-29*
86 ± 6	92 ± 9	-	254	0.58	E17-42*
87 ± 1	62 ± 15	-	208	0.25	E17_17-11
87 ± 2	55 ± 24	-	243	0.41	E17_17-09
87 ± 2	66 ± 20	-	313	0.47	E17_18-02
87 ± 2	84 ± 7	-	337	0.36	E17_18-04
87 ± 2	98 ± 16	-	374	0.46	E17_18-15
87 ± 3	74 ± 35	-	211	0.29	E17_18-17
87 ± 3	105 ± 7	-	974	0.35	E17-65*
87 ± 3	89 ± 5	-	417	0.46	E17-39*
87 ± 3	95 ± 6	-	363	0.54	E17-41*
87 ± 3	100 ± 6	-	496	0.35	E17-3*
88 ± 2	98 ± 5	-	470	0.52	E17-64*
88 ± 2	86 ± 2	-	2317	0.94	E17-31*
88 ± 4	91 ± 9	-	318	0.68	E17-6*
89 ± 2	75 ± 9	-	809	0.20	E17_18-20
89 ± 2	89 ± 3	-	2193	1.23	E17-48*
89 ± 2	150 ± 17	-	780	0.29	E17-63*
89 ± 3	89 ± 43	-	137	0.61	E17_17-20
89 ± 3	97 ± 8	-	409	0.29	E17-28*
89 ± 4	94 ± 46	-	133	0.50	E17_17-14
89 ± 4	174 ± 46	-	73	0.66	E17_17-15
89 ± 4	108 ± 12	-	249	0.42	E17-17*
90 ± 2	56 ± 26	-	108	0.59	E17_18-03
90 ± 2	73 ± 22	-	271	0.70	E17_18-10
90 ± 3	75 ± 39	-	110	0.53	E17_18-01
90 ± 3	92 ± 4	-	3616	0.32	E17-21*

E. Los Cabos block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
90 ± 4	219 ± 18	-	286	0.40	E17-37*
91 ± 3	85 ± 22	-	175	0.54	E17_17-06
91 ± 3	89 ± 24	-	319	0.38	E17_17-13
91 ± 5	67 ± 32	-	102	0.63	E17_18-05
92 ± 2	99 ± 17	-	231	0.54	E17_18-08
94 ± 3	192 ± 16	-	380	0.49	E17-26*
94 ± 4	94 ± 36	-	141	0.42	E17_18-07
96 ± 5	100 ± 9	-	455	0.48	E17-22*
99 ± 3	103 ± 6	-	711	0.45	E17-35*
100 ± 4	113 ± 7	-	274	0.33	E17-54*
102 ± 3	116 ± 4	-	769	0.38	E17-34*
103 ± 5	87 ± 13	-	121	0.71	E17-49*
104 ± 2	116 ± 6	-	528	0.52	E17-18*
105 ± 4	121 ± 9	-	384	0.88	E17-2*
108 ± 3	117 ± 6	-	544	0.42	E17-32*
108 ± 5	68 ± 52	-	87	0.48	E17_18-18
108 ± 8	102 ± 12	-	97	0.60	E17-44*
159 ± 6	197 ± 13	-	171	0.57	E17-25*
168 ± 3	184 ± 4	-	537	0.24	E17-16*
75 ± 10	92 ± 57	-	179	0.66	E18_15-09
77 ± 9	57 ± 143	-	37	0.51	E18_14-03
78 ± 3	92 ± 35	-	218	0.70	E18_15-06
79 ± 2	122 ± 23	-	262	0.94	E18_15-11
81 ± 2	74 ± 32	-	284	0.50	E18_14-08
82 ± 9	96 ± 49	-	164	0.13	E18_14-17
83 ± 3	74 ± 26	-	274	0.78	E18_14-09
84 ± 4	70 ± 48	-	164	0.49	E18_14-11
89 ± 4	94 ± 50	-	158	0.46	E18_15-03
90 ± 3	96 ± 41	-	243	0.56	E18_15-08
82 ± 2	116 ± 25	-	206	0.35	E19_09-03
84 ± 2	94 ± 10	-	649	0.31	E19_09-02
84 ± 2	95 ± 11	-	547	0.51	E19_09-10
84 ± 3	114 ± 19	-	321	0.40	E19_09-08
84 ± 4	91 ± 36	-	133	0.55	E19_09-01
85 ± 3	96 ± 17	-	603	0.55	E19_09-07
86 ± 4	92 ± 48	-	201	0.41	E19_09-04
87 ± 2	90 ± 11	-	598	0.22	E19_09-05
87 ± 2	93 ± 18	-	360	0.39	E19_09-06
109 ± 9	173 ± 64	-	343	0.42	E19_09-09

Jalisco block modern sand detrital zircon U-Pb ages

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
71 ± 2	66 ± 18	-	395	0.35	JB1_07-02
75 ± 2	74 ± 23	-	426	0.20	JB1_07-04
75 ± 2	73 ± 18	-	653	0.37	JB1_07-09
77 ± 3	86 ± 41	-	332	0.37	JB1_07-03

Jalisco block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
82 ± 3	77 ± 36	-	312	0.64	JB1_07-05
85 ± 2	90 ± 17	-	601	0.32	JB1_07-06
93 ± 2	104 ± 20	-	632	0.39	JB1_07-07
95 ± 3	95 ± 20	-	359	0.32	JB1_07-01
140 ± 7	133 ± 78	-	128	0.58	JB1_07-10
185 ± 4	228 ± 30	-	491	0.39	JB1_07-08
78 ± 1	72 ± 14	-	464	0.51	JB2_08-03
82 ± 2	82 ± 27	-	291	0.42	JB2_08-04
85 ± 2	85 ± 17	-	738	0.42	JB2_08-05
85 ± 2	80 ± 18	-	560	0.71	JB2_08-06
92 ± 2	94 ± 21	-	303	0.31	JB2_08-07
93 ± 3	112 ± 36	-	181	0.26	JB2_08-08
97 ± 5	102 ± 65	-	109	0.60	JB2_08-09
570 ± 10	580 ± 20	-	387	0.20	JB2_08-10
78 ± 1	74 ± 11	-	678	0.46	JB3_10-07
79 ± 2	77 ± 32	-	206	0.36	JB3_10-04
82 ± 2	85 ± 29	-	232	0.55	JB3_10-01
82 ± 2	84 ± 28	-	210	0.43	JB3_10-02
82 ± 4	75 ± 40	-	182	0.44	JB3_10-09
83 ± 2	94 ± 13	-	434	0.32	JB3_10-03
83 ± 2	90 ± 26	-	264	0.45	JB3_10-05
84 ± 1	82 ± 11	-	809	0.45	JB3_10-06
84 ± 2	85 ± 19	-	548	0.56	JB3_10-08
84 ± 3	77 ± 40	-	154	0.45	JB3_10-10
78 ± 1	86 ± 10	-	334	0.46	JB4_11-14
80 ± 4	73 ± 66	-	158	0.44	JB4_11-11
81 ± 1	87 ± 10	-	693	0.44	JB4_11-01
82 ± 3	95 ± 39	-	368	0.30	JB4_11-08
82 ± 4	99 ± 58	-	165	0.45	JB4_11-12
83 ± 3	85 ± 35	-	310	0.34	JB4_11-03
83 ± 3	74 ± 35	-	247	0.51	JB4_11-10
84 ± 2	87 ± 10	-	522	0.36	JB4_11-02
84 ± 3	92 ± 32	-	269	0.47	JB4_11-04
84 ± 3	93 ± 35	-	283	0.48	JB4_11-05
85 ± 3	93 ± 46	-	195	0.60	JB4_11-06
86 ± 6	96 ± 77	-	165	0.57	JB4_11-07
87 ± 3	96 ± 37	-	276	0.48	JB4_11-13
98 ± 1	98 ± 11	-	1489	0.32	JB4_11-09
60 ± 1	72 ± 15	-	388	0.39	JB5-05-01
74 ± 2	966 ± 13	-	614	0.46	JB5-04-01
75 ± 1	72 ± 4	-	645	0.42	JB5-04-10
75 ± 2	76 ± 7	-	703	0.39	JB5-05-12
76 ± 2	73 ± 8	-	584	0.78	JB5-04-09
79 ± 2	80 ± 7	-	272	0.45	JB5-04-07
81 ± 2	76 ± 6	-	522	0.42	JB5-04-11
81 ± 2	62 ± 13	-	407	0.63	JB5-05-03

Jalisco block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
81 ± 2	90 ± 5	-	1245	0.62	JB5-05-10
81 ± 2	90 ± 5	-	1245	0.62	JB5-05-10
81 ± 2	90 ± 5	-	1245	0.62	JB5-05-10
82 ± 3	85 ± 18	-	630	2.99	JB5-04-01
85 ± 1	70 ± 11	-	733	0.56	JB5-05-02
87 ± 3	94 ± 14	-	386	0.53	JB5-04-01
87 ± 3	83 ± 27	-	261	0.36	JB5-05-05
88 ± 6	96 ± 15	-	415	0.44	JB5-04-06
89 ± 2	1101 ± 12	-	706	0.64	JB5-04-02
89 ± 5	79 ± 44	-	263	0.49	JB5-05-11
90 ± 2	86 ± 4	-	1032	0.54	JB5-05-04
90 ± 2	95 ± 27	-	423	0.50	JB5-05-06
91 ± 2	90 ± 10	-	417	0.39	JB5-04-05
99 ± 2	117 ± 12	-	366	0.56	JB5-05-08
101 ± 3	101 ± 25	-	1083	0.44	JB5-04-08
1 ± 1	-7 ± 18	-	179	0.95	JB6-08-15
19 ± 1	18 ± 10	-	93	0.72	JB6-07-08
20 ± 1	21 ± 4	-	456	0.57	JB6-07-01
41 ± 1	44 ± 5	-	220	0.55	JB6-07-11
52 ± 2	54 ± 8	-	257	0.65	JB6-08-16
54 ± 2	47 ± 18	-	236	0.58	JB6-07-12
54 ± 2	54 ± 15	-	152	0.90	JB6-10*
56 ± 1	50 ± 7	-	768	0.58	JB6-07-10
56 ± 2	62 ± 9	-	578	1.34	JB6-09-03
56 ± 2	57 ± 5	-	657	0.11	JB6-22*
57 ± 1	49 ± 9	-	104	0.71	JB6-07-07
57 ± 2	68 ± 7	-	195	0.66	JB6-07-14
57 ± 2	63 ± 9	-	154	0.49	JB6-07-15
57 ± 2	48 ± 11	-	293	0.53	JB6-09-07
57 ± 2	77 ± 12	-	213	0.99	JB6-15*
58 ± 2	66 ± 7	-	351	0.77	JB6-48*
58 ± 3	74 ± 9	-	202	0.96	JB6-09*
59 ± 2	50 ± 13	-	100	0.49	JB6-07-06
59 ± 4	76 ± 32	-	77	0.63	JB6-38*
61 ± 2	67 ± 8	-	346	1.06	JB6-53*
61 ± 3	59 ± 6	-	589	1.50	JB6-27*
62 ± 2	63 ± 7	-	424	1.33	JB6-03*
62 ± 2	72 ± 11	-	169	1.24	JB6-41*
62 ± 3	69 ± 26	-	138	0.80	JB6-16*
62 ± 4	79 ± 35	-	119	0.70	JB6-12*
63 ± 2	69 ± 11	-	181	0.83	JB6-09-06
63 ± 2	42 ± 10	-	157	0.76	JB6-37*
63 ± 2	71 ± 9	-	270	0.70	JB6-52*
64 ± 1	64 ± 5	-	606	0.70	JB6-13*
64 ± 2	59 ± 10	-	252	0.87	JB6-47*
64 ± 2	66 ± 12	-	338	0.75	JB6-58*

Jalisco block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
65 ± 3	50 ± 18	-	172	0.85	JB6-62*
65 ± 5	60 ± 13	-	224	1.25	JB6-21*
66 ± 2	53 ± 7	-	1368	0.51	JB6-08-01
66 ± 2	61 ± 7	-	423	0.61	JB6-08-10
66 ± 2	78 ± 13	-	869	1.05	JB6-09-02
66 ± 2	63 ± 13	-	196	1.07	JB6-24*
66 ± 2	77 ± 12	-	209	0.77	JB6-39*
66 ± 2	70 ± 15	-	131	0.73	JB6-56*
66 ± 2	70 ± 10	-	386	0.55	JB6-63*
66 ± 3	68 ± 29	-	229	0.54	JB6-08-08
66 ± 5	67 ± 6	-	2425	1.65	JB6-57*
68 ± 1	65 ± 5	-	264	0.34	JB6-07-05
68 ± 2	73 ± 6	-	412	1.13	JB6-01*
68 ± 2	64 ± 11	-	1232	0.17	JB6-08-06
69 ± 2	70 ± 14	-	346	1.25	JB6-35*
70 ± 1	69 ± 6	-	684	0.71	JB6-19*
70 ± 2	79 ± 16	-	118	0.55	JB6-09-04
71 ± 1	56 ± 5	-	1558	1.07	JB6-08-11
71 ± 1	69 ± 8	-	492	1.38	JB6-18*
71 ± 2	76 ± 6	-	530	0.91	JB6-08*
71 ± 2	34 ± 12	-	577	0.95	JB6-09-08
72 ± 1	74 ± 3	-	1354	0.32	JB6-08-14
72 ± 1	74 ± 2	-	1283	0.75	JB6-20*
72 ± 2	73 ± 17	-	239	1.23	JB6-40*
72 ± 5	73 ± 12	-	111	0.48	JB6-59*
73 ± 1	82 ± 9	-	439	1.29	JB6-32*
73 ± 2	76 ± 7	-	577	0.77	JB6-25*
73 ± 2	79 ± 6	-	749	0.83	JB6-26*
73 ± 2	81 ± 5	-	935	0.74	JB6-65*
73 ± 4	72 ± 13	-	322	0.58	JB6-51*
73 ± 4	70 ± 7	-	737	1.14	JB6-60*
74 ± 2	70 ± 6	-	407	0.65	JB6-08-09
74 ± 2	78 ± 6	-	455	0.44	JB6-08-13
74 ± 2	78 ± 3	-	911	0.42	JB6-11*
74 ± 2	79 ± 10	-	250	0.97	JB6-29*
74 ± 2	84 ± 6	-	624	0.53	JB6-45*
74 ± 2	76 ± 5	-	806	1.08	JB6-49*
74 ± 5	65 ± 26	-	185	0.86	JB6-04*
75 ± 1	71 ± 2	-	2830	0.28	JB6-07-09
75 ± 1	76 ± 4	-	515	0.41	JB6-08-04
75 ± 2	79 ± 5	-	725	1.38	JB6-31*
76 ± 1	74 ± 8	-	416	0.57	JB6-30*
76 ± 2	78 ± 6	-	557	0.57	JB6-05*
76 ± 2	77 ± 9	-	306	0.77	JB6-44*
76 ± 3	71 ± 17	-	359	0.47	JB6-09-01
76 ± 3	80 ± 9	-	364	0.60	JB6-36*

Jalisco block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
77 ± 1	59 ± 4	-	1331	0.71	JB6-07-13
77 ± 1	78 ± 6	-	579	0.77	JB6-42*
77 ± 2	74 ± 11	-	270	0.61	JB6-28*
77 ± 2	84 ± 12	-	387	0.71	JB6-54*
77 ± 3	81 ± 6	-	402	0.58	JB6-61*
77 ± 5	92 ± 9	-	287	0.19	JB6-06*
78 ± 1	81 ± 4	-	762	0.53	JB6-55*
78 ± 2	84 ± 10	-	370	0.46	JB6-14*
79 ± 2	62 ± 10	-	530	0.49	JB6-07-02
80 ± 1	71 ± 7	-	401	0.49	JB6-08-12
80 ± 2	91 ± 7	-	366	0.97	JB6-07*
80 ± 2	84 ± 8	-	417	0.43	JB6-09-05
81 ± 3	90 ± 15	-	318	0.45	JB6-34*
83 ± 3	94 ± 9	-	280	0.34	JB6-33*
84 ± 3	75 ± 26	-	117	0.51	JB6-08-05
85 ± 2	76 ± 6	-	570	0.23	JB6-07-03
86 ± 2	73 ± 4	-	2170	0.51	JB6-07-04
88 ± 2	77 ± 17	-	582	0.37	JB6-08-03
88 ± 2	88 ± 5	-	608	0.69	JB6-46*
91 ± 2	84 ± 8	-	827	0.18	JB6-08-02
95 ± 3	83 ± 11	-	581	1.39	JB6-08-07
110 ± 6	87 ± 48	-	56	1.34	JB6-43*
133 ± 3	131 ± 29	-	104	0.72	JB6-17*
1018 ± 12	1040 ± 17	1086 ± 44	155	0.63	JB6-64*
66 ± 2	64 ± 9	-	182	0.65	JB7_02-04
69 ± 1	65 ± 3	-	1119	0.11	JB7_03-02
72 ± 2	-57 ± 14	-	410	0.81	JB7_03-04
74 ± 1	75 ± 3	-	623	1.36	JB7_03-14
75 ± 2	82 ± 7	-	390	0.63	JB7_02-09
77 ± 1	77 ± 5	-	1008	0.30	JB7_03-18
81 ± 2	130 ± 15	-	300	0.87	JB7_03-13
84 ± 1	82 ± 6	-	842	0.61	JB7_03-01
84 ± 1	83 ± 11	-	701	0.44	JB7_03-15
86 ± 2	72 ± 13	-	381	0.62	JB7_02-02
88 ± 3	75 ± 18	-	373	0.40	JB7_03-08
89 ± 2	82 ± 5	-	729	0.32	JB7_02-06
90 ± 2	97 ± 9	-	448	0.56	JB7_03-09
90 ± 3	100 ± 10	-	908	0.42	JB7_03-10
92 ± 2	91 ± 5	-	879	0.68	JB7_02-07
92 ± 3	90 ± 10	-	552	0.22	JB7_03-12
93 ± 2	23 ± 16	-	1519	1.96	JB7_02-05
94 ± 2	99 ± 6	-	782	0.46	JB7_03-03
94 ± 2	-6 ± 14	-	397	0.77	JB7_03-06
94 ± 2	94 ± 9	-	820	0.36	JB7_03-16
96 ± 2	80 ± 3	-	1016	0.36	JB7_02-03
96 ± 3	86 ± 20	-	533	0.51	JB7_03-11

Jalisco block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
97 ± 2	92 ± 9	-	1191	0.86	JB7_03-07
101 ± 3	87 ± 25	-	144	0.62	JB7_02-08
115 ± 3	103 ± 23	-	1134	0.32	JB7_03-17
127 ± 2	98 ± 10	-	1061	0.40	JB7_03-18
196 ± 2	187 ± 3	-	2493	1.55	JB7_02-01
68 ± 5	68 ± 40	-	118	0.31	JB8_12-10
71 ± 4	22 ± 43	-	231	0.56	JB8_12-06
72 ± 5	56 ± 39	-	169	0.40	JB8_12-11
74 ± 3	66 ± 16	-	323	0.31	JB8_11-21
74 ± 3	57 ± 4	-	2088	0.37	JB8_12-09
75 ± 4	-124 ± 41	-	330	0.41	JB8_12-05
78 ± 3	69 ± 17	-	504	0.52	JB8_11-19
78 ± 4	43 ± 45	-	164	0.52	JB8_12-07
80 ± 3	82 ± 10	-	590	0.50	JB8_11-20
83 ± 5	125 ± 21	-	189	0.55	JB8_12-03
85 ± 3	81 ± 8	-	678	0.34	JB8_11-14
85 ± 3	83 ± 13	-	576	0.36	JB8_12-01
86 ± 3	99 ± 18	-	391	0.29	JB8_11-18
86 ± 4	76 ± 21	-	296	0.60	JB8_11-15
87 ± 4	82 ± 19	-	635	0.32	JB8_11-24
88 ± 6	138 ± 24	-	211	0.53	JB8_12-02
89 ± 6	70 ± 75	-	194	0.54	JB8_11-22
90 ± 5	-9 ± 37	-	492	0.59	JB8_12-04
152 ± 11	122 ± 94	-	125	0.61	JB8_11-23
155 ± 6	101 ± 24	-	381	0.55	JB8_12-08
156 ± 6	156 ± 26	-	300	0.57	JB8_11-17
163 ± 7	156 ± 23	-	237	0.44	JB8_11-16
81 ± 1	89 ± 4	-	425	0.39	JB9_03-07
83 ± 3	79 ± 39	-	152	0.66	JB9_03-08
84 ± 2	107 ± 20	-	351	0.70	JB9_03-10
88 ± 2	94 ± 14	-	503	0.66	JB9_03-09
89 ± 4	91 ± 56	-	297	0.33	JB9_03-06
95 ± 10	108 ± 142	-	51	1.17	JB9_03-05
81 ± 1	81 ± 7	-	456	0.50	JB10_02-07
84 ± 4	99 ± 36	-	176	0.77	JB10_02-03
84 ± 9	81 ± 97	-	108	0.58	JB10_02-04
85 ± 3	89 ± 53	-	402	0.65	JB10_02-09
85 ± 3	84 ± 38	-	581	0.55	JB10_02-17
86 ± 3	84 ± 46	-	264	0.54	JB10_02-08
86 ± 4	62 ± 50	-	238	0.50	JB10_02-01
86 ± 7	92 ± 101	-	166	0.55	JB10_02-12
87 ± 5	77 ± 65	-	365	0.46	JB10_02-10
88 ± 4	96 ± 50	-	431	0.82	JB10_02-14
88 ± 4	100 ± 45	-	431	0.46	JB10_02-16
89 ± 7	109 ± 101	-	160	1.09	JB10_02-13
90 ± 5	98 ± 64	-	274	0.44	JB10_02-15

Jalisco block modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
92 ± 12	83 ± 190	-	138	0.58	JB10_02-11
95 ± 9	119 ± 77	-	150	0.65	JB10_02-06
98 ± 11	98 ± 64	-	182	0.84	JB10_02-05
1147 ± 30	1250 ± 31	1432 ± 66	144	0.29	JB10_02-02
80 ± 1	82 ± 13	-	296	0.36	JB11_04-04
82 ± 4	71 ± 39	-	76	0.54	JB11_04-03
85 ± 2	93 ± 13	-	286	0.30	JB11_04-02
87 ± 4	95 ± 55	-	81	0.55	JB11_04-01
87 ± 4	95 ± 55	-	81	0.55	JB11_04-01
88 ± 2	92 ± 15	-	936	0.50	JB11_04-08
88 ± 8	105 ± 125	-	138	0.58	JB11_04-10
90 ± 2	96 ± 13	-	442	0.71	JB11_04-05
90 ± 4	101 ± 41	-	286	0.54	JB11_04-07
90 ± 4	101 ± 41	-	286	0.54	JB11_04-07
90 ± 4	101 ± 41	-	286	0.54	JB11_04-07
90 ± 4	101 ± 41	-	286	0.54	JB11_04-07
91 ± 10	99 ± 160	-	104	0.62	JB11_04-09
81 ± 8	66 ± 109	-	61	0.47	JB12_06-01
82 ± 3	90 ± 57	-	157	0.42	JB12_06-05
86 ± 2	110 ± 24	-	477	1.14	JB12_06-02
86 ± 7	103 ± 74	-	126	0.46	JB12_06-06
87 ± 3	104 ± 32	-	372	0.56	JB12_06-03
89 ± 5	113 ± 67	-	157	1.27	JB12_06-08
90 ± 3	105 ± 33	-	265	0.56	JB12_06-04
90 ± 3	93 ± 19	-	437	0.44	JB12_06-09
90 ± 7	100 ± 95	-	160	0.67	JB12_06-07
124 ± 5	141 ± 71	-	141	0.65	JB12_06-10

S. Sierra Madre Occidental modern sand detrital zircon U-Pb ages

$^{206}Pb^*/^{238}U$ Age (Ma)	$^{207}Pb^*/^{235}U$ Age (Ma)	$^{207}Pb^*/^{206}Pb^*$ Age (Ma)	U (ppm)	Th/U	Analysis ID
18 ± 1	25 ± 3	-	791	0.43	SM1-29*
19 ± 1	21 ± 5	-	496	0.50	SM1-24*
19 ± 1	20 ± 1	-	2104	0.90	SM1-38*
19 ± 1	26 ± 11	-	254	0.61	SM1-35*
19 ± 1	42 ± 9	-	218	0.56	SM1-57*
19 ± 1	17 ± 4	-	781	0.72	SM1-40*
19 ± 1	22 ± 2	-	1496	0.68	SM1-19*
19 ± 1	20 ± 1	-	3196	0.65	SM1-56*
19 ± 1	17 ± 2	-	1777	0.74	SM1-47*
19 ± 1	20 ± 1	-	3683	0.89	SM1-36*
19 ± 1	21 ± 8	-	344	0.72	SM1-22*
19 ± 1	25 ± 4	-	544	0.74	SM1-10*
19 ± 1	20 ± 1	-	3824	0.95	SM1-43*
20 ± 1	17 ± 7	-	409	0.84	SM1-06*
20 ± 1	25 ± 8	-	241	0.61	SM1-01*
20 ± 1	22 ± 1	-	3245	0.72	SM1-17*

S. Sierra Madre Occidental modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
20 ± 1	20 ± 1	-	2340	0.60	SM1-41*
20 ± 1	22 ± 2	-	2189	0.66	SM1-30*
20 ± 1	22 ± 2	-	2093	0.68	SM1-37*
20 ± 1	19 ± 3	-	659	0.84	SM1-09*
20 ± 1	19 ± 1	-	2202	0.65	SM1-16*
20 ± 1	25 ± 9	-	218	0.56	SM1-58*
20 ± 1	18 ± 2	-	2031	0.64	SM1-14*
20 ± 1	21 ± 1	-	2953	0.69	SM1-23*
20 ± 1	20 ± 3	-	1483	0.63	SM1-02*
20 ± 1	20 ± 2	-	1878	0.62	SM1-34*
20 ± 1	22 ± 2	-	1441	0.73	SM1-25*
20 ± 1	22 ± 1	-	4135	0.91	SM1-53*
20 ± 1	20 ± 2	-	2180	0.66	SM1-13*
20 ± 1	20 ± 1	-	2231	0.67	SM1-46*
20 ± 1	21 ± 1	-	2221	0.68	SM1-60*
20 ± 1	23 ± 6	-	489	0.75	SM1-39*
20 ± 1	20 ± 1	-	2432	1.08	SM1-21*
20 ± 1	22 ± 2	-	2182	0.69	SM1-50*
20 ± 1	23 ± 2	-	1580	0.79	SM1-63*
20 ± 1	21 ± 1	-	2864	0.87	SM1-65*
20 ± 2	17 ± 8	-	185	0.60	SM1-05*
20 ± 1	19 ± 5	-	290	0.70	SM1-55*
20 ± 1	24 ± 3	-	1290	0.67	SM1-52*
20 ± 1	26 ± 5	-	466	0.76	SM1-51*
21 ± 1	24 ± 3	-	623	0.63	SM1-59*
21 ± 2	39 ± 15	-	144	0.76	SM1-07*
24 ± 1	26 ± 3	-	1349	0.85	SM1-12*
25 ± 1	22 ± 6	-	321	0.89	SM1-20*
27 ± 1	29 ± 5	-	770	1.21	SM1-32*
27 ± 2	47 ± 15	-	177	0.73	SM1-61*
28 ± 1	37 ± 9	-	332	0.60	SM1-64*
28 ± 2	34 ± 8	-	436	0.60	SM1-44*
28 ± 1	34 ± 3	-	894	0.72	SM1-33*
29 ± 1	32 ± 6	-	309	0.70	SM1-54*
29 ± 1	34 ± 4	-	878	0.43	SM1-18*
29 ± 2	25 ± 10	-	215	0.63	SM1-26*
29 ± 1	48 ± 11	-	213	0.47	SM1-15*
30 ± 1	38 ± 5	-	560	0.49	SM1-42*
30 ± 1	35 ± 2	-	1263	0.69	SM1-08*
31 ± 1	34 ± 3	-	887	0.48	SM1-11*
31 ± 2	41 ± 12	-	198	0.73	SM1-27*
31 ± 1	42 ± 3	-	764	1.01	SM1-45*
57 ± 4	87 ± 21	-	150	0.74	SM1-49*
101 ± 4	102 ± 33	-	130	0.72	SM1-48*
20 ± 1	20 ± 2	-	3354	0.86	SM2-58*
20 ± 1	22 ± 3	-	1037	0.74	SM2-20*
20 ± 1	21 ± 1	-	3163	0.81	SM2-49*

S. Sierra Madre Occidental modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
20 ± 1	22 ± 2	-	1511	0.61	SM2-13*
20 ± 1	20 ± 2	-	3713	1.00	SM2-10*
20 ± 1	34 ± 15	-	248	0.65	SM2-14*
20 ± 1	22 ± 2	-	2222	0.66	SM2-12*
21 ± 1	22 ± 1	-	2671	0.82	SM2-25*
21 ± 1	25 ± 2	-	4468	0.82	SM2-31*
21 ± 1	28 ± 6	-	447	0.78	SM2-07*
21 ± 1	23 ± 4	-	2499	0.82	SM2-18*
21 ± 1	1 ± 1	-	222	0.68	SM2-01*
21 ± 1	19 ± 9	-	287	0.82	SM2-54*
22 ± 1	24 ± 4	-	608	0.72	SM2-46*
22 ± 1	23 ± 4	-	562	0.91	SM2-48*
22 ± 2	54 ± 9	-	297	0.65	SM2-29*
22 ± 2	41 ± 15	-	130	2.56	SM2-05*
22 ± 1	28 ± 2	-	1032	0.77	SM2-15*
22 ± 1	26 ± 3	-	1192	0.87	SM2-59*
22 ± 1	29 ± 9	-	271	0.59	SM2-45*
22 ± 1	22 ± 8	-	226	0.49	SM2-23*
23 ± 1	34 ± 9	-	283	0.69	SM2-33*
23 ± 1	32 ± 7	-	491	1.03	SM2-36*
23 ± 1	28 ± 6	-	484	0.27	SM2-55*
23 ± 1	31 ± 6	-	529	0.56	SM2-41*
24 ± 1	25 ± 7	-	710	1.12	SM2-11*
24 ± 2	31 ± 12	-	143	0.49	SM2-35*
24 ± 1	46 ± 8	-	488	1.17	SM2-30*
24 ± 1	26 ± 4	-	605	0.71	SM2-09*
25 ± 2	28 ± 15	-	212	0.86	SM2-38*
25 ± 1	34 ± 6	-	473	0.76	SM2-04*
25 ± 2	32 ± 12	-	164	0.61	SM2-44*
26 ± 1	30 ± 9	-	437	0.61	SM2-27*
26 ± 1	31 ± 6	-	533	0.41	SM2-03*
26 ± 2	30 ± 5	-	2539	0.74	SM2-34*
27 ± 2	52 ± 23	-	198	0.61	SM2-08*
28 ± 2	24 ± 16	-	242	0.35	SM2-50*
29 ± 1	23 ± 5	-	504	1.52	SM2-21*
29 ± 1	29 ± 8	-	478	0.61	SM2-16*
29 ± 1	35 ± 5	-	505	0.59	SM2-51*
30 ± 1	36 ± 8	-	394	0.51	SM2-24*
30 ± 2	43 ± 11	-	172	0.56	SM2-47*
30 ± 1	34 ± 3	-	806	0.60	SM2-06*
31 ± 1	44 ± 8	-	612	0.43	SM2-40*
31 ± 2	47 ± 11	-	467	0.49	SM2-26*
33 ± 3	45 ± 15	-	360	0.61	SM2-56*
33 ± 1	44 ± 6	-	556	0.69	SM2-37*
33 ± 2	42 ± 5	-	550	0.51	SM2-28*
33 ± 1	35 ± 2	-	2875	0.54	SM2-22*

S. Sierra Madre Occidental modern sand detrital zircon U-Pb ages (cont.)

$^{206}Pb^{*}/^{238}U$ Age (Ma)	$^{207}Pb^{*}/^{235}U$ Age (Ma)	$^{207}Pb^{*}/^{206}Pb^{*}$ Age (Ma)	U (ppm)	Th/U	Analysis ID
33 ± 2	47 ± 9	-	423	0.46	SM2-42*
34 ± 2	38 ± 8	-	123	0.71	SM2-43*
59 ± 1	66 ± 9	-	431	0.84	SM2-57*